

EN

EUROPEAN CENTRAL BANK



EUROPEAN CENTRAL BANK

ECB EZB EKT BCE EKP

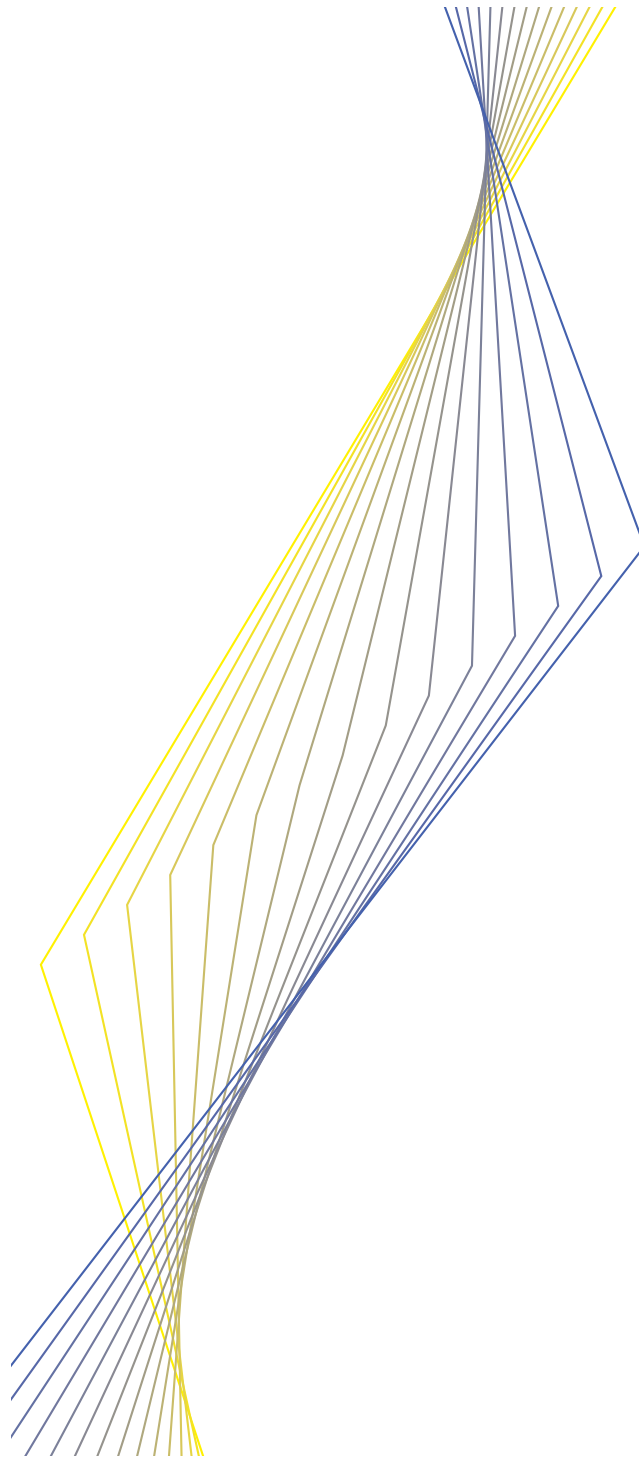
MONTHLY BULLETIN January 2002

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

January 2002



EUROPEAN CENTRAL BANK



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

January 2002

© **European Central Bank, 2002**

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

This Bulletin was produced under the responsibility of the Executive Board of the ECB. Translations are prepared and published by the national central banks.

All rights reserved. Reproduction for educational and non-commercial purposes is permitted provided that the source is acknowledged.

The cut-off date for the statistics included in this issue was 16 January 2002.

ISSN 1561-0136

Contents

Editorial	5
Economic developments in the euro area	9
Monetary and financial developments	9
Price developments	22
Output, demand and labour market developments	27
Exchange rate and balance of payments developments	34
Boxes:	
1 Developments in M3 and its counterparts	13
2 Monetary policy operations and liquidity conditions in the reserve maintenance period ending on 23 December 2001	17
3 Euro cash changeover not expected to have a significant impact on consumer prices at the aggregate level	24
4 The Employment Guidelines for 2002	33
Economic fundamentals and the exchange rate of the euro	41
Euro banknote preparations: from cash changeover to post-launch activities	55
Euro area statistics	1*
Chronology of monetary policy measures of the Eurosystem	81*
Documents published by the European Central Bank (ECB)	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

Since 1 January 2002, euro banknotes and coins have been in the hands of the general public. The cash changeover has been an unprecedented undertaking, directly affecting people in the 12 countries that adopted the euro, as well as many others outside the euro area. Both the acceptance of the euro by consumers and the achievement of the logistical milestones have surpassed all expectations. The European Central Bank wishes to express its gratitude to all actors involved in this undertaking, including the citizens of the euro area, who made possible the smooth changeover to the new banknotes and coins. The Eurosystem is proud of its contribution to this historic event. European central banks have been working hard since 1996, when the competition for the design of the euro banknotes was launched, and especially over the past three years, to ensure the timely production of euro banknotes and a successful euro cash changeover. By mid-January 2002, the vast majority of cash transactions in the euro area were being conducted in euro.

Turning to monetary policy, at its meeting on 3 January 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.

At this meeting, the Governing Council concluded that economic developments were in line with the forward-looking interest rate decisions taken last year. The level of key ECB interest rates was deemed appropriate for the maintenance of price stability over the medium term. This assessment was based on the analysis of the outlook for price stability in the medium term under the two-pillar monetary policy strategy of the ECB.

Starting with the first pillar, the three-month average of the annual growth rates of M3 rose to 7.4% in the period from September to November 2001, from 6.7% in the period from August to October. These high levels of

M3 growth over the past few months reflect a particularly strong preference for liquid holdings by euro area investors in an economic and financial environment characterised by high uncertainty worldwide. This should, in principle, remain a temporary phenomenon and, in this respect, not indicate future inflationary pressures, although at this stage it is very difficult to anticipate when a reversal of past flows into liquid assets will take place. While the analysis related to the first pillar does not point to risks to price stability at present, the recent build-up of liquidity, if not reversed, will call for a thorough analysis of monetary developments in the coming months, in particular when the euro area economy recovers.

Regarding the second pillar, recent information has confirmed the earlier assessment that economic activity in the euro area was weak in the second half of 2001 and will probably remain so in early 2002. There has been some evidence supporting the prospects for a gradual recovery in the course of 2002. For example, recent survey data for the euro area suggest that the general decline in confidence may have come to an end. Some recent developments in financial markets could be seen as supporting this view. As regards external demand, there are some incipient signs of a stabilisation in the outlook for economic growth at the global level. However, uncertainty is still high concerning economic prospects in the United States and in other regions of the world.

One main reason for expecting a recovery in the course of 2002 is that no fundamental economic imbalances have built up in recent years in the euro area which would require a long correction process. Furthermore, financing conditions in the euro area are favourable at present, and the expected further decline in consumer price inflation will lead to higher growth in real disposable income which, in turn, should support domestic demand. While recent data have confirmed the expectation of a gradual recovery in the euro area economy this year, the timing and strength of this upturn

remain uncertain. Therefore, continued close monitoring of incoming information is warranted.

In this economic environment, upward risks to price stability are not likely to materialise over the medium term. Annual consumer price inflation, as measured by the Harmonised Index of Consumer Prices, has declined steadily over the past few months to close to 2% in December 2001, as a consequence of the unwinding of past increases in energy prices and, albeit to a lesser extent, in food prices. Recent information on producer prices supports the view that the decline in consumer price inflation will continue in the course of 2002. However, in the months to come, annual inflation rates may be somewhat erratic on account of base effects relating to price developments in early 2001. In this connection, some short-lived upward movements in the annual rate of inflation cannot be ruled out, but these should not be a cause for concern. Likewise, downward shifts resulting from such base effects later in the spring should not signal a change in the longer-term outlook for price stability.

With regard to the cash changeover, the expectation is that this will not have significant effects on the average price level in the short term, largely owing to strong competition in the retail sector, continued vigilance by consumers and the commitment of governments not to increase the average level of administered prices. However, some uncertainty still surrounds this assessment and a clearer picture will emerge in the months to come. Over the longer term, downward price movements should dominate, as the physical introduction of the euro will strengthen price competition in the euro area.

Overall, on the basis of current information, annual inflation rates should fall safely below 2% this year and remain at levels consistent with price stability over the medium term. This expectation of a favourable outlook for inflation over the medium term is conditional

on the crucial assumption that wage moderation in the euro area will continue. It is therefore important to recall the indispensable role of continued wage moderation in fostering employment and maintaining a favourable outlook for price stability.

In order to maintain favourable prospects for non-inflationary growth in the euro area, it is also important that fiscal policies maintain a medium-term orientation consistent with the Stability and Growth Pact. The current weakness in economic growth undoubtedly poses a particular challenge for those countries which have not yet attained budgetary positions close to balance or in surplus or which have very high public debt-to-GDP ratios. However, rather than hindering a return to sustainable economic growth, the adherence of fiscal policies to their medium-term objectives will strengthen consumer and investor confidence. Countries without fiscal imbalances can, of course, allow automatic stabilisers to operate fully.

However, there is no case for fiscal activism. There is considerable evidence showing that discretionary fiscal policy can make only a small contribution, if any, to stabilising economic activity in the short run, given the lags in the decision-making process and the time needed to fully affect economic activity. Furthermore, it should be kept in mind that any possible short-term demand effect resulting from the conduct of an activist fiscal policy may be outweighed by developments in long-term interest rates, which may react negatively to the risks of a worsening in fiscal prospects.

In view of the still high level of structural unemployment in the euro area, it is important to recall that the key challenge for the euro area remains the strengthening of the productive forces as a prerequisite for expanding the trend output growth of the economy in a decisive manner. This will require an acceleration and deepening of structural reform in the labour and product markets. Likewise, governments should also

resolutely pursue reforms with regard to the size and structure of public expenditure and revenue, in order to create room for further tax cuts and for absorbing the fiscal costs of an ageing population. Together with continued wage moderation, these reforms will foster employment and investment on a lasting basis.

With the ECB pursuing its primary objective of price stability, with governments willing to foster structural reforms and conduct stability-oriented fiscal policies, and with wage developments consistent with job creation

and price stability, the euro – now also in the form of banknotes and coins – will represent an economic area characterised by macroeconomic stability and economic dynamism.

This issue of the Monthly Bulletin contains two articles. The first provides an overview of the fundamental factors underlying the developments in the exchange rate of the euro. The second presents the euro banknote preparations from the cash changeover to post-launch activities.

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 3 January 2002 the Governing Council of the ECB decided to leave the minimum bid rate in the main refinancing operations, conducted as variable rate tenders, at 3.25%. The interest rates on the marginal lending facility and the deposit facility were also kept unchanged, at 4.25% and 2.25% respectively (see Chart 1).

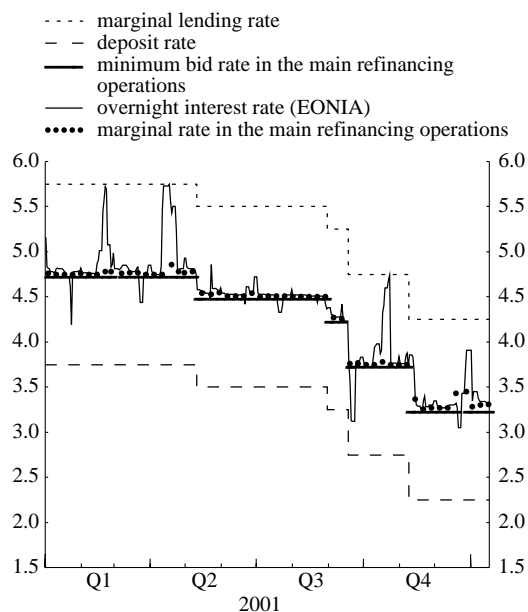
Continued strong dynamics of M3

In the period from September to November 2001, the three-month average of the annual growth rates of M3 increased to 7.4%, from 6.7% in the period from August to October (see Chart 2).

Monetary dynamics continued to be strong in November, as indicated by the seasonally adjusted and annualised six-month growth

Chart 1 ECB interest rates and money market rates

(percentages per annum; daily data)

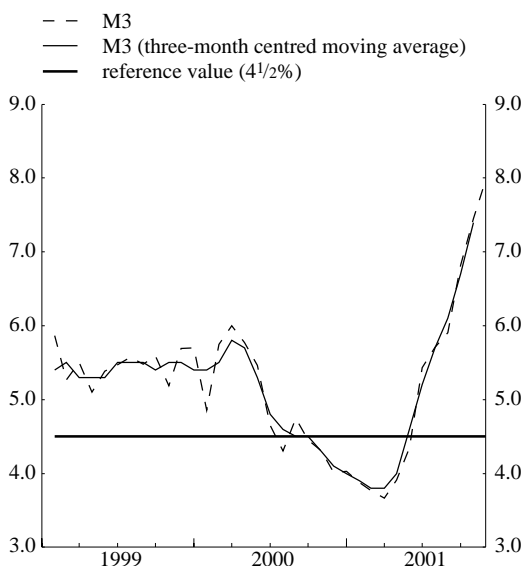


Sources: ECB and Reuters.

Chart 2

M3 growth and the reference value

(annual percentage changes; seasonally and calendar effect adjusted)



Source: ECB.

Note: Series adjusted for non-euro area resident holdings of all negotiable instruments.

rate of M3, which increased to 9.8%, after 9.5% in October. In addition, the seasonally adjusted month-on-month growth in November (0.8%) was only slightly below the high growth in September and October in the aftermath of the terrorist attacks on 11 September. Overall, the marked preference for liquid assets seems to reflect a cautious attitude on the part of investors, adopted in an economic situation characterised by high uncertainty in which investors might perceive alternative investment opportunities worldwide as not being sufficiently profitable.

The further build-up of liquidity in November, however, took place in an environment of diminishing uncertainty in global stock markets. After the sharp increase in uncertainty which followed the terrorist attacks in September, in November implied stock market volatility returned to levels broadly in line with those at the beginning of September (see Chart 12), and the euro area yield curve (the spread between the ten-year

euro area government bond yield and the three-month EURIBOR) steepened. These factors, if they prevail, should lead to a reversal of portfolio shifts over time. It is, however, very difficult to anticipate when such a reversal will take place, owing to lags in the reaction of money demand to financial market developments. Moreover, it has to be kept in mind that nominal short-term market interest rates stood at very low levels in November and thus supported a continued preference on the part of investors for short-term liquid assets included in M3.

This notwithstanding, all in all, the continued acceleration of M3 and the ongoing process of building up liquidity so far do not appear to indicate risks to price stability. However, in particular if the economy recovers and the process of normalisation in financial markets continues, monetary developments will need to be thoroughly analysed in the coming months in order to assess whether there are any signs of inflationary pressures arising under the first pillar.

The annual rate of growth of the narrow monetary aggregate M1 rose to 6.1% in November, from 5.3% in the previous month (see Table I). This was partly due to a base

effect, resulting from the particularly weak M1 growth one year earlier, as well as to strong seasonally adjusted month-on-month growth in November (0.9%). Both the high uncertainty in financial markets and the decrease in short-term interest rates may have contributed to the dynamic growth of M1 during recent months after the slow pace of growth in the second half of 2000 and in early 2001. As, according to empirical evidence, M1 growth has often led the business cycle for some quarters, the recovery of M1 growth may be interpreted – with due caution – as a tentative sign for an economic recovery in the course of 2002.

The increase in the annual growth rate of M1 was due exclusively to the rise of the annual growth rate of overnight deposits to 11.3% in November, from 9.3% in October. Overnight deposits are well suited to parking money for a limited period of time. In addition, owing to the cash changeover, currency holdings were shifted to some extent within M1, thus fuelling overnight deposits. In fact, the seasonally adjusted and annualised six-month rate of change in currency in circulation declined to -30% in November, from -22.1% in October.

Table I
Summary table of monetary variables for the euro area

(annual percentage changes; quarterly averages)

	2001 Q1	2001 Q2	2001 Q3	2001 Aug.	2001 Sep.	2001 Oct.	2001 Nov.
<i>Seasonally and calendar effect adjusted</i>							
M1	2.6	2.4	3.9	3.7	5.1	5.3	6.1
<i>of which: currency in circulation</i>	-1.2	-3.2	-7.5	-8.3	-11.0	-14.6	-19.4
<i>of which: overnight deposits</i>	3.4	3.5	6.3	6.1	8.5	9.3	11.3
M2 - M1 (= other short-term deposits)	3.4	4.4	4.9	4.9	5.0	5.5	5.7
M2	3.0	3.4	4.5	4.3	5.1	5.4	5.9
M3 - M2 (= marketable instruments)	9.2	9.8	15.6	16.7	18.5	21.2	21.7
M3	3.8	4.3	5.9	5.9	6.8	7.4	8.0
<i>Unadjusted for seasonal and calendar effects</i>							
Longer-term financial liabilities (excluding capital and reserves)	3.8	3.1	2.2	1.8	2.2	2.1	3.0
Credit to euro area residents	5.6	5.4	5.5	5.5	5.1	5.0	5.3
Credit to general government	-7.4	-5.3	-1.9	-1.6	-1.2	-1.1	-0.1
<i>of which: loans to general government</i>	-0.1	-1.3	-1.4	-1.3	-0.7	-1.2	-0.3
Credit to other euro area residents	9.8	8.8	7.8	7.6	7.0	6.8	6.8
<i>of which: loans to the private sector</i>	9.1	8.3	7.4	7.2	6.7	6.5	6.6

Source: ECB.

While the prospect of the cash changeover led to an acceleration in the decline in currency holdings before the end of 2001, since 1 January 2002 retailers, in particular, have had to hold additional cash owing to the dual currency period. However, any effect on M3 arising from this can be expected to be rather small as currency in circulation only accounts for around 5% of M3 (as at November 2001) and as the bulk of the increased holdings of banknotes should be financed by reductions in short-term bank deposits, an operation which does not affect M3.

Looking in more detail at the cash changeover, the information about the distribution of euro banknotes to euro area MFIs, which became available in early January 2002, showed a demand for euro banknotes in the first days of 2002 which was stronger than expected on the basis of the indications provided by the amount of frontloaded euro banknotes. The amount of euro banknotes distributed was €201.8 billion on 16 January 2002. On the same day, the total amount of banknotes in circulation was €357.5 billion. Accordingly, the euro progress ratio (EPR), i.e. the value of euro banknotes in circulation divided by the total value of all banknotes in circulation, including the banknotes of the euro legacy currencies issued but not yet redeemed by national central banks, amounted to 56.4%.

However, the above figures on euro banknotes and banknotes of the euro legacy currencies are not directly comparable to standard data on the amount of currency in circulation relevant for the calculation of monetary aggregates. First, in addition to banknotes, official statistics on currency in circulation also include coins. Second, the amount of banknotes issued by the Eurosystem includes banknotes in the hands of MFIs, while this is not the case for official statistics on currency in circulation. At the current stage, the latter factor is of particular importance since in early January 2002 increased amounts of banknotes of the euro legacy currencies were probably held by

credit institutions as, for logistical reasons, the return of banknotes of the euro legacy currencies to the national central banks needed some time. The actual amount of currency in circulation can therefore be expected to be considerably lower than that indicated by banknote figures in early January 2002.

The annual growth rate of short-term deposits other than overnight deposits rose from 5.5% in October to 5.7% in November. In this respect, the annual growth rate of short-term savings deposits (deposits redeemable at a period of notice of up to three months) continued to recover, from 4.0% in October to 6.0% in November. By contrast, the annual growth rate of short-term time deposits (deposits with an agreed maturity of up to two years) declined further, to 6.0% in November, from 7.5% in October. The divergence in trends between these two components reflects the decrease in the spread between the interest rates on short-term time deposits and short-term savings deposits over the past 12 months, from 1.6 percentage points in November 2000 to 0.6 percentage point in November 2001.

Finally, in November 2001, the annual rate of growth of marketable instruments included in M3 rose to 21.7% from 21.2% in October. In line with investors' preference for liquid assets, the shorter-term dynamics of marketable instruments remained high. The seasonally adjusted and annualised six-month rate of growth of marketable instruments stood at 24.9% in November, after 27.2% in October.

Annual growth of loans to the private sector stabilised in November

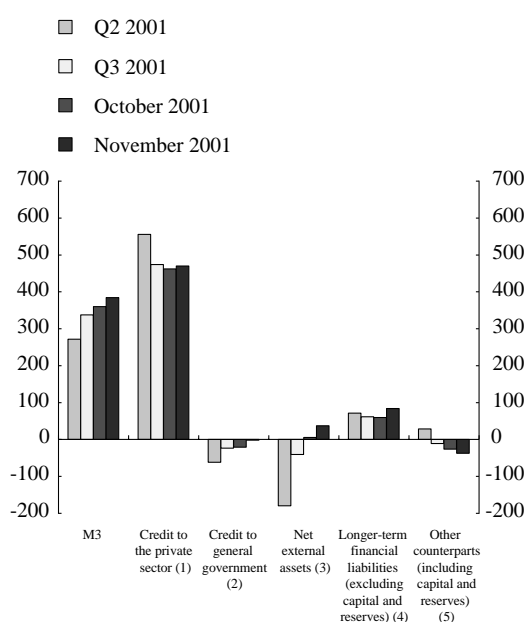
The annual rate of growth of credit to euro area residents increased to 5.3% in November, from 5.0% in October. This rise was due to an increase in the annual rate of change in credit to general government, to -0.1% in November, from -1.1% in October. By contrast, the annual growth rate of credit

to the private sector remained unchanged at 6.8% (see Table 1). Among its components, there was a slight increase in the annual rate of growth of loans granted to the private sector, to 6.6% in November, from 6.5% in October. This slight pick-up is also reflected in the recent shorter-term dynamics of loans to the private sector and could be seen, together with the dynamic growth of the most liquid components of M3, as a tentative indication of a possible turnaround in euro area economic activity.

The annual rate of growth of longer-term financial liabilities (excluding capital and reserves) increased slightly in November, to 3.0% (see Chart 3). This was partly due to a base effect. In addition, the recovery is probably related to the steepening of the yield curve during recent months. By historical standards, however, the growth of longer-term financial liabilities remained low.

Chart 3
Movements in M3 and its counterparts

(annual flows, end of period; EUR billions; not adjusted for seasonal and calendar effects)



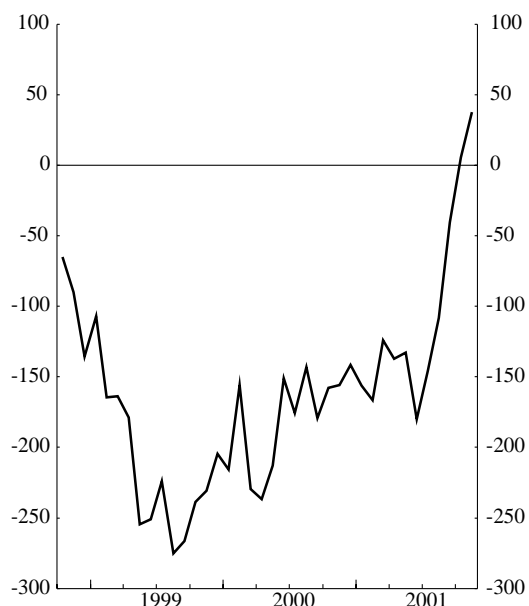
Source: ECB.

Note: Series adjusted for non-euro area residents' holdings of all negotiable instruments.

(M3 = 1 + 2 + 3 - 4 + 5).

Chart 4
Net external assets of the MFI sector

(EUR billions; 12-month flows)



Source: ECB.

Finally, the net external asset position of the euro area MFI sector continued to improve in November 2001. After having declined continuously until May 2001, the net external assets of the MFI sector rose by €173 billion thereafter. As a result, over the 12 months up to November 2001, the net external assets of the euro area MFI sector increased by €37 billion, after €5 billion in the 12 months up to October (see Chart 4). The significant improvement over the past few months is in line with combined net direct investment and portfolio investment inflows into the euro area, as reported in the balance of payments (data available up to October 2001), mainly resulting from net equity inflows into the euro area. This development might have contributed to M3 growth over the past few months. It must be seen against the background of developments outside the euro area, notably the existence of low short-term interest rates leading to a situation of ample liquidity in major economies outside the euro area and a possible perception by investors of limited investment opportunities due to heightened financial and economic uncertainty (see Box 1).

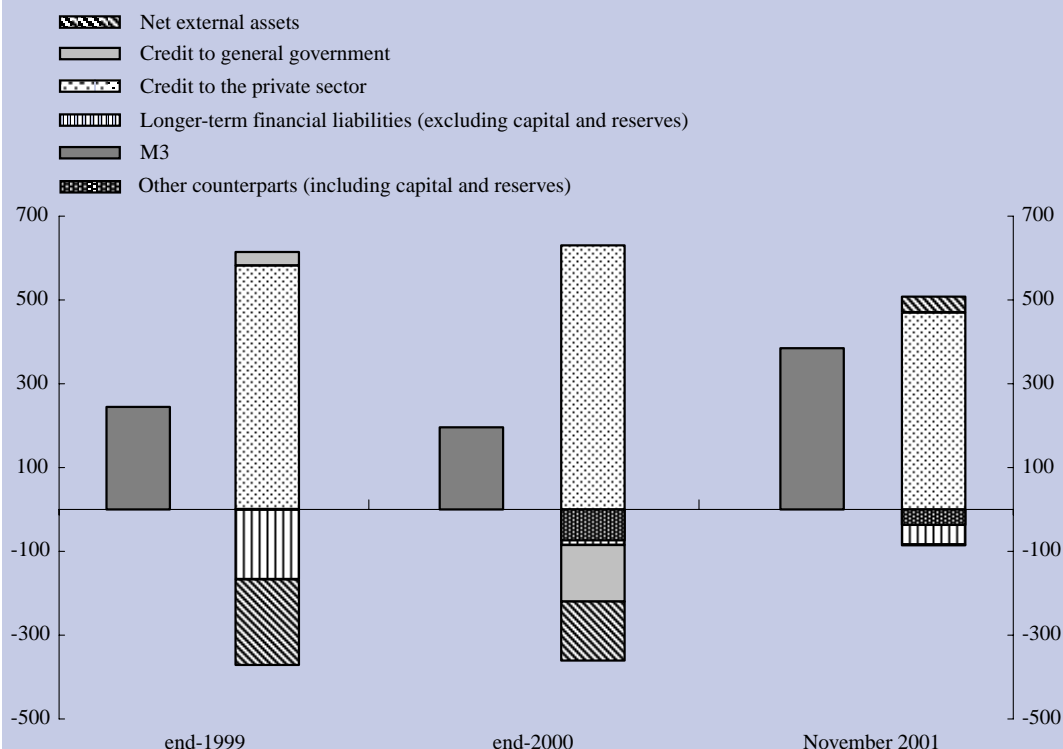
Box I

Developments in M3 and its counterparts

The recent strong M3 growth raises the question of whether risks to price stability might be implied in the medium term or whether there are no grounds for concern as the rise can be expected to be of a transitory nature.¹ In this context, the analysis of the development of M3 and its counterparts in the balance sheet of the MFI sector, compared with past experience, may be helpful.² Movements in M3 are mirrored in the development of the counterparts of M3, in particular credit to euro area residents, longer-term financial liabilities of the MFI sector and net external assets of euro area MFIs. For example, shocks to monetary developments arising from uncertainty in financial markets might reflect portfolio shifts from longer-term financial liabilities into components of M3 and do not necessarily imply upward risks to future price stability. By contrast, risks to price stability in the medium term may result if M3 growth is related to more lasting changes in credit developments, as such changes often have a link to economic activity. Furthermore, the analysis of developments in the external counterparts of M3 may provide indications as to how external factors may influence domestic monetary developments. For the above reasons, the analysis of M3 and its counterparts is typically useful for the identification and assessment of shocks affecting the current economic situation, and thus for the analysis of aggregate spending and risks to price stability in the medium term.

M3 and its counterparts

(annual flows, end of period; EUR billions; not adjusted for seasonal and calendar effects)



Source: ECB.

Note: Series adjusted for non-euro area resident holdings of all negotiable instruments. $M3 = \text{credit to the private sector} + \text{credit to general government} + \text{net external assets} - \text{longer-term financial liabilities} + \text{other counterparts}$.

Current developments in M3 and its counterparts differ significantly from those in 1999 and early 2000

In 1999 and early 2000 rather pronounced M3 growth was paralleled by strong growth of credit granted to the euro area private sector (nearly 90% of which is made up of loans). The latter, in turn, was fuelled by low lending interest rates and the economic recovery in the euro area in the course of 1999. At the same time, there

was a relatively pronounced increase in the annual growth rate of longer-term financial liabilities (excluding capital and reserves) in this period. This reflected a pronounced steepening of the euro area yield curve, which should also have had a dampening impact on M3.

In the course of 2000, M3 growth gradually fell, which was partly related to a substantial decline in credit granted to general government. At the same time, the annual rate of growth of credit to the private sector remained high. This was due to the strong economic growth and intense merger and acquisition activity, in part connected with direct investment outside the euro area, as well as the financing of UMTS licences in the autumn of 2000. The strong growth of credit to the private sector may also have been related to some extent to net portfolio and direct investment outflows from the euro area. These outflows were matched by declining net external assets of the euro area MFI sector. The annual growth rate of longer-term financial liabilities (excluding capital and reserves), while remaining relatively high until August 2000, dropped considerably in the last months of the year, to stand at 3.1% in December 2000. This followed a significant flattening of the euro area yield curve, from 2.4 percentage points in January 2000 to 0.1 percentage point in December 2000.

By contrast with 1999 and early 2000, the strengthening of M3 growth in 2001 was accompanied by a continuous decline in the annual growth rate of credit to the private sector until October 2001. At the same time, the annual rate of growth of longer-term financial liabilities was very weak throughout most of 2001. This development may indicate a substitution of assets included in M3 for longer-term financial liabilities, resulting from a relatively flat yield curve throughout most of 2001 and, notably after the terrorist attacks in September, financial market uncertainty. In the past few months growth in longer-term financial liabilities (excluding capital and reserves) has picked up slightly, to 3.0% (year-on-year) in November 2001, although remaining low by historical standards. This slight recovery was in line with a steepening of the euro area yield curve. Finally, the relatively strong M3 growth in 2001 was accompanied by significant combined net direct investment and portfolio investment inflows into the euro area from June 2001. This was mirrored by a strong increase in net external assets of the euro area MFI sector which might be partly linked to low short-term interest rates in major economies outside the euro area and the possible perception by investors of limited external investment opportunities due to heightened financial and economic uncertainty.

Overall, the movements in M3 and its counterparts during 2001 support the view that the recent strong dynamics of M3 are likely to be related mainly to temporary portfolio shifts from longer-term assets within the euro area and assets abroad into liquid short-term assets. High M3 growth in recent months has not been associated with strong credit demand and is not therefore likely to be closely linked to aggregate spending by euro area residents. This represents a major difference to the episode of strong M3 growth in 1999 and early 2000. At the same time, the ongoing process of building up liquidity, in particular if the economy recovers and the process of normalisation in financial markets continues, will require a thorough analysis of monetary developments in the coming months in order to assess whether there are any signs of inflationary pressures arising under the first pillar.

¹ See the section entitled "Monetary and financial developments" in the December 2001 issue of the Monthly Bulletin.

² See the article entitled "Framework and tools of monetary analysis" in the May 2001 issue of the Monthly Bulletin.

Debt securities issuance continued to decline in October

The average annual growth of the amount outstanding of debt securities issued by euro area residents declined from 6.3% in September 2001 to 5.9% in October. Underlying this was a decrease in the annual growth of the amount outstanding of short-

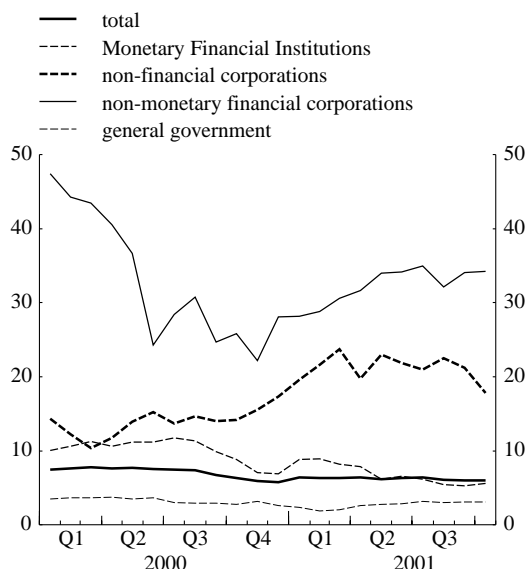
term debt securities from 8.6% in September to 7.4% in October. The annual growth of the amount outstanding of long-term debt securities decreased from 6.0% in September to 5.7% in October (see Chart 5).

The currency breakdown shows that the annual growth of the amount outstanding of euro-denominated debt securities issued by

Chart 5

Amounts outstanding of euro-denominated 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.

euro area residents remained unchanged at 6.0% in October 2001 as compared with the previous month. The share of euro-denominated debt securities issued by euro area residents in gross issuance rose from 92.8% in September to 93.4% in October.

As regards the sectoral breakdown, the annual growth of the amount outstanding of euro-denominated debt securities issued by MFIs went up slightly, from 5.3% in September to 5.6% in October, mainly on account of stronger short-term debt securities issuance. The annual growth of the amount outstanding of debt securities issued by non-monetary financial corporations also increased slightly to 34.3% in October, compared with 34.1% in September, while that of non-financial corporations decreased substantially from 21.3% in September to 17.8% in October. The weaker issuance by non-financial corporations may have reflected the deterioration of issuance conditions in the

securities markets in the aftermath of the terrorist attacks in the United States. Moreover, the increased economic uncertainties may have also played a role, as well as the decline in merger and acquisition activity.

Turning to the general government sector, the annual growth of the amount outstanding of debt securities issued by central government decreased slightly, from 2.6% in September 2001 to 2.5% in October. The annual growth rate of debt securities issuance by other general government increased from 20.6% in September to 22.7% in October.

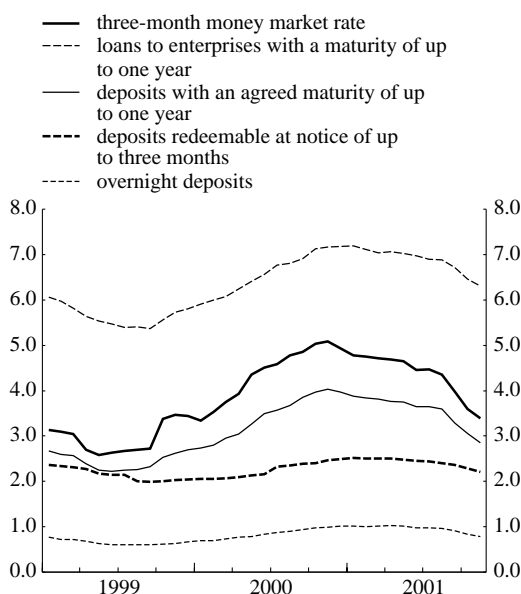
Retail bank interest rates declined further in November

Short-term retail bank interest rates continued their decline in November 2001 in line with developments in money market interest rates (see Chart 6). The average

Chart 6

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

(percentages per annum; monthly averages)



Sources: ECB aggregation of individual country data and Reuters.

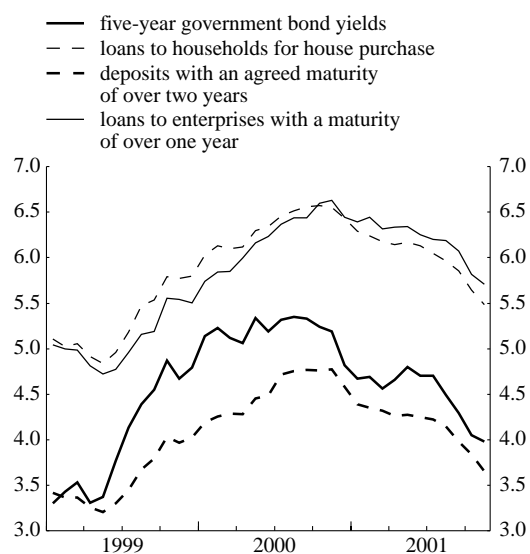
Note: From 1 January 2001 onwards, Greek data are also included.

interest rates on deposits with an agreed maturity of up to one year fell by 20 basis points from October to November, while the average rates on deposits redeemable at notice of up to three months and the average overnight deposit rate decreased by 7 and 5 basis points respectively compared with the previous month. The average interest rate on loans to enterprises with a maturity of up to one year fell 15 basis points from October to November. This compared with a 21 basis point fall in the average three-month money market rate over the same period.

The long-term retail bank interest rates also decreased further in November 2001 (see Chart 7), reflecting the decline in government bond yields as shown by the movement of the average five-year government bond yield. The average interest rate on deposits redeemable at notice of over three months fell by 26 basis points, while the average interest rate on loans to enterprises with a maturity of over one year decreased by 11 basis points from October to November.

Chart 7
Long-term retail bank interest rates and a comparable market rate

(percentages per annum; monthly averages)



Sources: ECB aggregation of individual country data and Reuters.

Note: From 1 January 2001 onwards, Greek data are also included.

The average interest rate on consumer loans and loans to households for house purchase declined by 13 and 17 basis points respectively between October and November.

Short-term money market interest rates stabilised, while they increased at longer maturities around the turn of the year

Money market interest rates at shorter maturities remained broadly stable in December 2001 and the first half of January 2002, while they increased at maturities over six months. As a consequence, the slope of the money market yield curve turned positive in January 2002.

At the very short end of the curve money market rates remained broadly stable for most of the period between end-November 2001 and 16 January 2002, although some volatility was seen at the turn of the year. In the main refinancing operations settled in the first half of December, the marginal and average rates of allotment in the Eurosystem's main refinancing operations did not exceed the minimum bid rate of 3.25% by more than 2 basis points. The EONIA fluctuated close to the minimum bid rate until late in December, but then rose significantly owing to the usual end-of-year effect, which reflects a desire on the part of financial institutions to adjust their balance sheets at the end of the year. The end-of-year effect also influenced the allotment rates in the main refinancing operations settled in the second half of December, when the marginal and average rates were between 18 and 27 basis points above the minimum bid rate.

In early January 2002 the EONIA remained somewhat higher than the minimum bid rate. This was due to relatively tight liquidity conditions generated by the euro cash changeover, given the stronger than expected demand for banknotes and the slower than expected return of national banknotes via credit institutions to the national central banks. In this situation, the Eurosystem

Box 2**Monetary policy operations and liquidity conditions in the reserve maintenance period ending on 23 December 2001**

During the reserve maintenance period under review, the Eurosystem settled four main refinancing operations (MROs), one additional one-week operation and two longer-term refinancing operations (LTROs). Their outcomes are summarised in the table below.

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	28/11/2001	12/12/2001	95.6	71.0	1.35	318	3.25	3.27	3.29
MRO	05/12/2001	19/12/2001	106.6	68.0	1.57	308	3.25	3.27	3.27
MRO	12/12/2001	28/12/2001	109.7	66.0	1.66	292	3.25	3.27	3.27
MRO	19/12/2001	02/01/2002	140.8	57.0	2.47	451	3.25	3.43	3.46
LTRO	29/11/2001	28/02/2001	49.1	20.0	2.46	221	-	3.32	3.34
LTRO	21/12/2001	28/03/2002	38.2	20.0	1.91	215	-	3.29	3.31
Other	28/11/2001	05/12/2001	73.1	53.0	1.38	166	3.25	3.28	3.29

Source: ECB.

At the beginning of the period under review, the difference between the sizes of the two outstanding MROs, maturing on 28 November and 5 December 2001 respectively, was very large (€116 billion and €17 billion) as a consequence of the underbidding in the previous maintenance period. In order to address this difference, the Eurosystem conducted an additional one-week operation in parallel with the first MRO of the maintenance period. The average amount of liquidity provided through monetary policy operations declined towards the end of the maintenance period as the refinancing needs of the banking sector decreased, mainly on account of the lower than usual level of banknotes in circulation, which reflected the forthcoming cash changeover.

Contributions to the banking system's liquidity

(EUR billions)

Daily average during the reserve maintenance period from 24 November to 23 December 2001

	Liquidity providing	Liquidity absorbing	Net contribution
(a) Monetary policy operations of the Eurosystem	195.3	0.8	+ 194.5
Main refinancing operations	122.5	-	+ 122.5
Longer-term refinancing operations	60.0	-	+ 60.0
Standing facilities	0.5	0.8	- 0.3
Other operations	12.4	-	+ 12.4
(b) Other factors affecting the banking system's liquidity	383.7	450.8	- 67.2
Banknotes in circulation	-	298.0	- 298.0
Government deposits with the Eurosystem	-	43.5	- 43.5
Net foreign assets (including gold)	383.7	-	+ 383.7
Other factors (net)	-	109.4	- 109.3
(c) Credit institutions' holdings on current accounts with the Eurosystem (a) + (b)			127.4
(d) Required reserves			126.4

Source: ECB.

Totals may not add up due to rounding.

The EONIA remained in a range of 3.26% to 3.32% for most of the maintenance period, increasing only on 30 November to 3.35%, owing to the regular end-of-month effect. On the last day of the maintenance period, the EONIA fell to 3.05% amid ample liquidity conditions.

Indeed, the maintenance period ended with a total net recourse to the deposit facility of around €10 billion (with a recourse of €3.2 billion to the marginal lending facility and €6.5 billion to the deposit facility from 21 to 23 December 2001). The difference between average current accounts (€127.4 billion) and minimum reserve requirements (€126.4 billion) amounted to €1.0 billion, which was the greatest difference since the first maintenance period of Stage Three in the first half of 1999.

The net liquidity-absorbing impact of the autonomous factors, i.e. the factors not related to monetary policy (item (b) in the table below), on the banking system's liquidity was €67.2 billion on average. The estimates of average liquidity needs stemming from autonomous factors, published together with the tender announcements, ranged between €64.7 billion and €82.9 billion. The actual figures, however, turned out to be lower than the estimates, with a difference between the two of up to €5.3 billion. The larger than usual deviations of the published figures from the actual outcome and the bias of this deviation resulted mainly from a larger than expected decline in national banknotes in circulation in anticipation of the cash changeover.

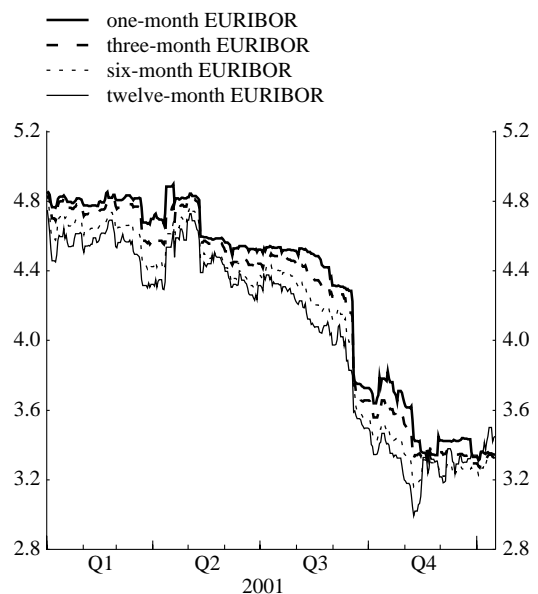
conducted two fine-tuning operations in early January, aimed at providing counterparties with liquidity. These operations helped to restore more normal market conditions and the EONIA gradually stabilised once again at a level slightly above the minimum bid rate in the main refinancing operations. The initially somewhat tight liquidity situation was also reflected in the marginal and average rates in the main refinancing operations settled in the first half of January, which were between 3 and 7 basis points above the minimum bid rate.

The one-month and three-month EURIBOR declined by 8 and 2 basis points respectively between the end of November 2001 and 16 January 2002, to stand at 3.35% and 3.34% on 16 January (see Chart 8). The marginal and average interest rates in the Eurosystem's longer-term refinancing operation settled on 21 December were close to the then prevailing three-month EURIBOR, at 3.29% and 3.31% respectively. For both allotment rates, this was 3 basis points lower than the corresponding rates in the longer-term refinancing operation settled on 29 November.

At the longer end of the money market yield curve, the six-month and the twelve-month EURIBOR increased by 9 and 23 basis points

Chart 8
Short-term interest rates in the euro area

(percentages per annum; daily data)



Source: Reuters.

respectively in the period between end-November and 16 January, to stand at 3.34% and 3.45% respectively. This development, together with the decline in the one-month rate, caused the slope of the yield curve, as measured by the difference between the twelve-month and the one-month EURIBOR, to turn positive, from -21 to 10 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, increased significantly in the course of December and the first half of January. Overall, in the period between end-November and 16 January, the rates implied in futures prices on contracts with delivery dates in March, June and September 2002 increased by 27, 29 and 27 basis points respectively, to stand at 3.29%, 3.32% and 3.50% on 16 January.

Long-term government bond yields increased around the turn of the year

Average ten-year government bond yields in the euro area increased by 17 basis points between the end of November 2001 and 16 January 2002 to a level of around 4.9% (see Chart 9). In the United States, ten-year government bond yields increased by 10 basis points over this period. As a result, the

differential between ten-year government bond yields in the United States and in the euro area changed little overall, remaining at a level of around zero on 16 January.

In the United States, government bond yields fluctuated markedly across the entire maturity spectrum between the end of November 2001 and mid-January 2002, reflecting market participants' frequent reassessments about the outlook for economic activity in the United States. In this volatile environment, ten-year bond yields increased somewhat overall, returning to levels that had prevailed in early September prior to the terrorist attacks. Moreover, the spread between ten-year government bond yields and three-month interest rates in the United States widened by about 40 basis points between 30 November 2001 and 16 January 2002, reaching a level of around 315 basis points. Part of the steepening of the yield curve reflected the Federal Open Market Committee's further reduction of the federal funds target rate by 25 basis points on 11 December 2001. The uncertainty about future developments in US bond yields – as reflected in the implied volatility – decreased slightly between the end of November 2001 and 16 January 2002 to a level of close to 8.0%, after reaching exceptionally high levels around mid-December.

In Japan, ten-year government bond yields changed little overall between the end of November 2001 and 16 January 2002, standing at 1.4% on the latter date. During this period, ten-year bond yields in Japan fluctuated within a narrow range, continuing a pattern that started in summer 2001.

In the euro area, government bond yields with maturities of between two and ten years increased by 15 to 30 basis points between 30 November 2001 and 16 January 2002, with the strongest increases recorded at short to medium-term maturities. The increase brought ten-year bond yields close to levels prevailing shortly before the terrorist attacks in the United States. At the same time, with short-term interest rates in the euro area

Chart 9

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

(percentages per annum; daily data)

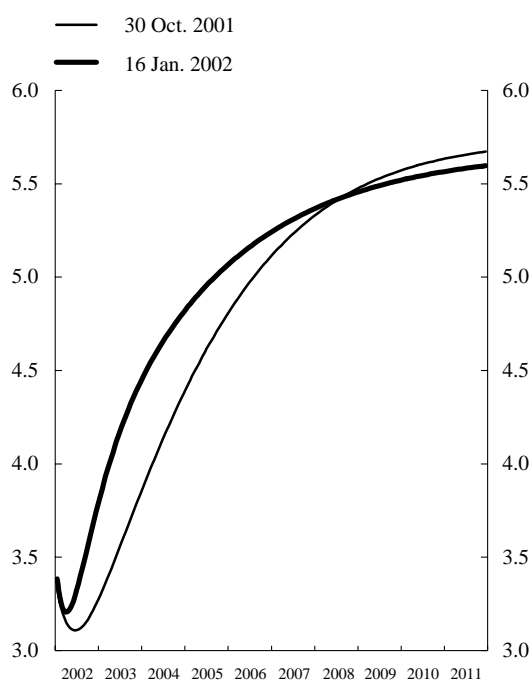


Source: Reuters.

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

basically unchanged, the spread between ten-year government bond yields and the three-month EURIBOR widened by 20 basis points to a level of 160 basis points between end-November 2001 and 16 January 2002. Moreover, the spread between two-year bond yields and the three-month EURIBOR – which turned positive in November 2001 for the first time in a year – increased further to a level of 45 basis points during the same period. These developments in the yield curve suggest that market participants did not expect short-term interest rates to remain as low for as long as they had anticipated previously. This changing view was also reflected in the upward shift of the implied forward overnight interest rate curve for the euro area at short to medium-term maturities between the end of November 2001 and 16 January 2002 (see Chart 10).

Chart 10
Implied forward euro area overnight interest rates



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

These developments in the euro area bond markets seemed to be related to a perception in the market of lower downside risks for economic activity in the euro area. The same factor might also explain the increase in the real yield on ten-year French index-linked bonds of around 10 basis points between the end of November 2001 and 16 January 2002. The corresponding ten-year break-even inflation rate, though increasing by 10 basis points during the same period, remained at low levels, confirming market participants' confidence in the ability of the ECB to maintain price stability in the euro area. In this respect, however, more than usual care should be taken in interpreting recent developments in these bond yields. This is because the French government in November issued a new ten-year bond linked to the euro area HICP excluding tobacco, which may have altered the liquidity of the previously issued bonds linked to French consumer prices.

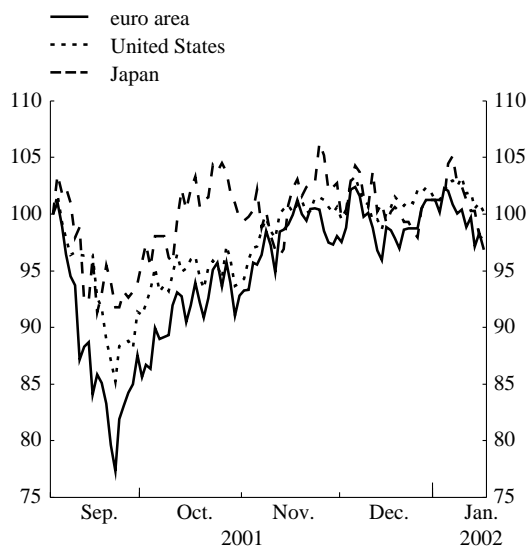
Stock markets broadly stable in December and early January

Stock prices in the euro area and the United States, as measured by the Dow Jones EURO STOXX and the Standard & Poor's 500 indices respectively, remained broadly stable between end-November 2001 and 16 January 2002, while stock prices in Japan, as measured by the Nikkei 225 index, declined slightly over this period (see Chart 11). Uncertainty in all of the aforementioned indices as measured by implied volatility remained broadly stable at levels broadly in line with the average levels of recent years. Overall, these developments suggest that stock markets have returned to more normal conditions after the large swings seen following the September terrorist attacks in the United States.

In the United States, the Standard & Poor's 500 index was unchanged between end-November 2001 and 16 January 2002, bringing the overall decline since the end of 2000 to 18%. Although corporate earnings reported in the course of December 2001

Chart 11
Stock price indices in the euro area, the United States and Japan

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



Source: Reuters.

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

were generally weak by historical standards, they nevertheless seemed to be in line with market expectations. The Nasdaq Composite index, which has a large share of companies in the technology sector, was broadly unchanged overall between end-November 2001 and 16 January 2002, remaining at a level which was 21% below end-2000 levels.

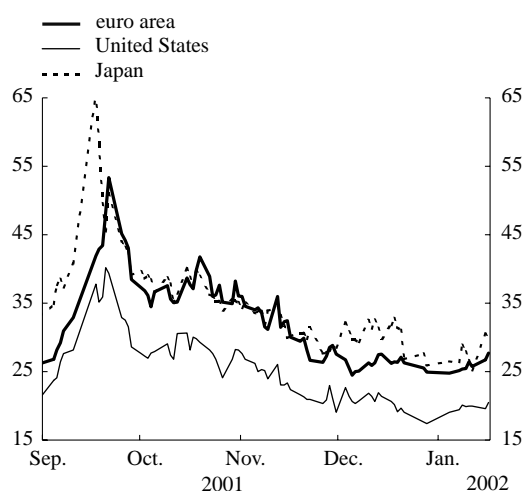
In Japan, the Nikkei 225 index declined by 6% between the end of November 2001 and 16 January 2002, which brought the cumulative decline since the end of 2000 to 26%. Whereas in previous months global stock market developments had played a relatively important role, over the course of December 2001 Japanese stock markets seemed to be influenced more by domestic macroeconomic data and corporate earnings reports. Overall, these data indicated continued weakness in the Japanese economy.

In the euro area, the Dow Jones EURO STOXX index declined by 1% between end-November 2001 and 16 January 2002. By the latter date the index had lost 23% of its value since the end of 2000. As in the United States, earnings reports and macroeconomic data announced between end-November 2001 and 16 January 2002 tended to be in line with market participants' expectations, and did not seem to induce changes in their expectations for future corporate profitability.

Underlying the decrease in the overall index in the euro area, some variation was observed on a sectoral basis. The telecommunications sector stock price index declined by 7% between end-November 2001 and 16 January 2002 owing to worse than expected earnings reports and continued concerns about the profitability of investments in third generation mobile phone licences and technology.

Chart 12
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.

2 Price developments

Energy and unprocessed food price developments behind lower HICP inflation in November 2001

In line with Eurostat's flash estimate, annual HICP inflation in the euro area (excluding Greece from the base period for the calculation) fell to 2.1% in November 2001, down from 2.4% in October. With Greece included in the base period, the observed fall was slightly greater, down from 2.4% in October to 2.0% in November (see Table 2). The lower inflation rate in November compared with October can mainly be explained by lower year-on-year rates of change in energy and unprocessed food

prices. However, in addition, the year-on-year rate of change in the HICP excluding the volatile unprocessed food and energy components (with Greek data included in the base period) declined from 2.5% in October to 2.4% in November. This is the first time since May 2000 that a decline in this measure has been observed.

As regards the shorter-term dynamics of the overall HICP (calculated using seasonally adjusted data), the three-month annualised rate of change in November 2001 was 0.9%, down from 1.8% in the previous three-month period ending in October 2001, and down from 4.7% in May 2001 when this measure

Table 2
Price and cost developments in the euro area

(annual percentage changes, unless otherwise indicated)

	1999	2000	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001
				Q1	Q2	Q3	Q4	July	Aug.	Sep.	Oct.	Nov.	Dec.
Harmonised Index of Consumer Prices (HICP) and its components													
Overall index	1.1	2.4	.	2.6	3.2	2.7	.	2.8	2.8	2.5	2.4	2.0	.
<i>of which:</i>													
Goods	0.9	2.7	.	2.8	3.5	2.7	.	3.1	2.8	2.3	2.1	1.5	.
Food	0.6	1.4	.	3.2	5.0	5.3	.	5.5	5.2	5.2	5.2	4.7	.
Processed food	1.0	1.2	.	2.0	2.8	3.4	.	3.3	3.4	3.5	3.6	3.5	.
Unprocessed food	0.1	1.7	.	5.2	8.4	8.1	.	8.8	7.8	7.8	7.8	6.5	.
Industrial goods	1.0	3.4	.	2.6	2.8	1.5	.	1.9	1.7	0.9	0.6	0.0	.
Non-energy industrial goods	0.7	0.7	.	1.2	1.5	1.6	.	1.5	1.5	1.6	1.6	1.5	.
Energy	2.3	13.4	.	7.3	7.3	1.2	.	2.9	2.1	-1.3	-2.7	-5.0	.
Services	1.6	1.7	.	2.3	2.5	2.6	.	2.6	2.6	2.7	2.8	2.8	.
Other price and cost indicators													
Industrial producer prices ¹⁾	-0.4	5.5	.	4.6	3.7	1.5	.	2.1	1.7	0.7	-0.7	-1.3	.
Unit labour costs ²⁾	1.3	1.1	.	2.2	2.5	2.4	.	-	-	-	-	-	-
Labour productivity ²⁾	0.9	1.4	.	0.2	0.0	0.1	.	-	-	-	-	-	-
Compensation per employee ²⁾	2.3	2.5	.	2.3	2.5	2.5	.	-	-	-	-	-	-
Total hourly labour costs ³⁾	2.2	3.4	.	3.1	2.7	3.3	.	-	-	-	-	-	-
Oil prices (EUR per barrel) ⁴⁾	17.1	31.0	27.8	28.4	31.7	29.0	22.4	29.4	28.7	28.8	23.8	21.7	21.5
Commodity prices ⁵⁾	-5.9	16.7	-7.6	-0.8	-3.0	-10.4	-15.6	-1.8	-10.7	-18.1	-19.3	-15.1	-12.3

Sources: Eurostat, national data, International Petroleum Exchange, HWWA (Hamburg Institute of International Economics) and ECB calculations.

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

1) Excluding construction.

2) Whole economy.

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

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

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

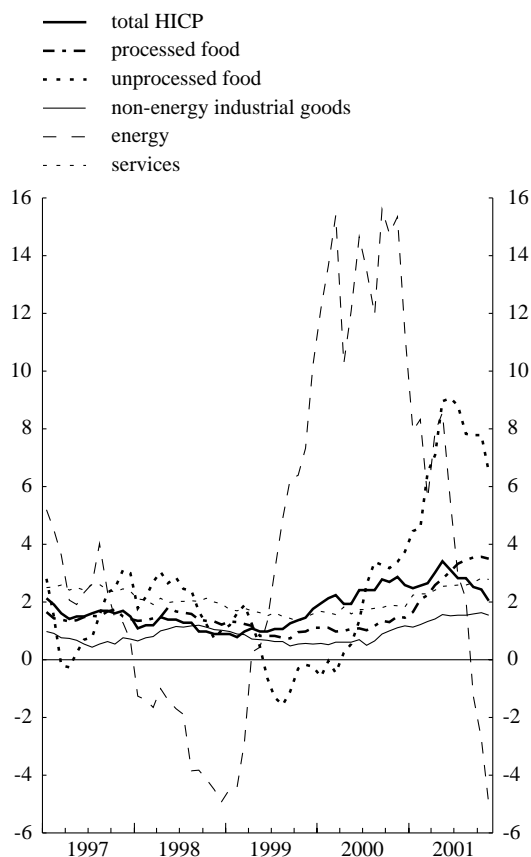
peaked. The three-month annualised rate of change in the seasonally adjusted HICP excluding unprocessed food and energy stood at 2.4% in November, down from 2.9% in October. Hence, shorter-term measures reveal that the latest declines in the year-on-year rates of change in the overall HICP and the HICP excluding energy and unprocessed food not only reflect base effects associated with previous price shocks, but also more recent diminishing price pressures. However, it should be borne in mind that these annualised short-term changes are subject to a high degree of volatility. This easing of price pressures is also reflected in Eurostat's flash estimate for December 2001 (excluding Greek data from the base period), which suggests that the annual rate of change in the HICP was 2.0%, i.e. 0.1 percentage point lower than for November.

The decrease in oil prices observed since mid-September 2001 should, if it continues, further contribute to the decline in overall inflation. In November 2001, the level of energy prices was 5.0% lower than in the corresponding month one year ago (see Chart 13). This is the third consecutive month in which a negative year-on-year rate of change has been recorded. The latest 2.3 percentage point decline in the year-on-year rate of change in energy prices between October and November 2001 reflects, on the one hand, a base effect associated with an increase in the level of energy prices in November 2000 and, on the other hand, a decline in this level in November 2001. The latter was consistent with the observed decline in oil prices from €23.8 per barrel in October to €21.7 in November 2001. In December 2001, oil prices fell slightly further and were on average quoted at €21.5 per barrel.

Primarily reflecting lower vegetable prices, the year-on-year rate of change in unprocessed food prices fell by 1.3 percentage points to 6.5% between October and November 2001. In addition, meat prices declined month-on-month in November for the second consecutive month, which is

Chart 13
Breakdown of HICP inflation in the euro area by component

(annual percentage changes; monthly data)



Source: Eurostat.

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

suggestive of a partial unwinding of the upward impact on food prices from BSE and foot-and-mouth disease. This unwinding is also reflected in the annual rate of change in processed food prices, which fell from 3.6% in October to 3.5% in November. Notably, this is the first time in the course of 2001 that the year-on-year rate of change in processed food prices declined.

The year-on-year rate of change in non-energy industrial goods prices stood at 1.5% in November 2001, which is slightly lower than in October. The annual rate of change in this component has been broadly stable since May 2001. The annual rate of change in services prices was unchanged at 2.8%

between October and November 2001. The upward pressures on overall inflation exerted by services and non-energy industrial goods prices are expected to gradually ease as the indirect effects of previous oil price and exchange rate movements gradually abate.

Although it is very difficult to separate any euro cash changeover effects on prices from other sources of price change, these effects on the overall HICP so far seem to be limited. Box 3 entitled "Euro cash changeover not expected to have a significant impact on

consumer prices at the aggregate level" looks into this issue in more detail by reviewing the general arguments and available empirical evidence.

Looking ahead, annual inflation rates should fall safely below 2% this year and remain at levels consistent with price stability over the medium term. However, the decline may be somewhat erratic, mainly owing to base effects associated with the volatile movements in the prices of energy and unprocessed food.

Box 3

Euro cash changeover not expected to have a significant impact on consumer prices at the aggregate level

On 1 January 2002, the euro banknotes and coins were introduced and all prices in the euro area were converted into euro. Concerns have been raised by the public that the cash changeover could have triggered general price increases, starting already in 2001, as companies may have tried to increase profit margins by rounding up to new "attractive" euro prices. Furthermore, firms may have passed on costs related to the changeover to consumers. In recent months, consumer organisations and the media have reported examples of individual price increases interpreted as being euro-induced, i.e. resulting from the change from prices in legacy currencies to prices in euro. However, the euro cash changeover is not expected to have a significant impact on consumer prices at the aggregate level. Over a longer horizon, downward price movements should dominate, as the physical introduction of the euro will further strengthen competition in the euro area.

General considerations as well as available empirical evidence suggest that the risks of a significant upward impact on consumer prices should remain rather limited. First of all, competition in most markets in the euro area seems to be strong enough to limit any upward rounding. Moreover, downward rounding of prices is also likely. In fact, several euro area companies have taken the cash changeover as an opportunity to reduce prices in order to attract new customers and increase market shares. Second, the cyclical slowdown in euro area demand has also limited the scope for price increases. Third, consumers and consumer organisations have been vigilant and are monitoring the situation closely, also helped by the dual display of prices, making it more difficult for retailers to raise prices. Fourth, several items in the consumer price index should remain largely unaffected by any rounding, as psychological price-setting is less common for them, e.g. petrol, or they are contractually fixed, e.g. rents. Lastly, all central governments have ensured that the conversion of prices, charges and fees administered by them was price-neutral or smoothed in favour of the consumer. Local governments have been requested to follow this example.

In 2001, there were few concrete signs of generalised and sustained price increases owing to the cash changeover. Overall inflation in the euro area in terms of the Harmonised Index of Consumer Prices (HICP) has been falling steadily over recent months and there have been no noticeable movements in the main HICP components that would suggest changeover effects. This is backed up by monitoring exercises in several euro area countries, initiated by national statistical institutes, the Eurosystem and consumer organisations. By monitoring closely the price dynamics of selected consumer goods that are usually offered at attractive prices, these institutions and bodies have tried to estimate the actual impact of the conversion of prices into euro. Although these exercises have confirmed the evidence of euro-induced price increases for some specific products in individual countries, these changes have been negligible in terms of their effect on the overall HICP in the individual euro area countries and in the euro area as a whole. In this context, it should be stressed

that the identification of changeover effects is not straightforward. Any price changes might be due to either the changeover (i.e. rounding of prices or the pass-through of changeover costs), or they might reflect a change in other cost factors (e.g. wages or import prices) or a change in profit margins.

Since the start of this year, more anecdotal evidence of price increases for specific products has become available, which could be related to the cash changeover, but may also simply reflect price changes that are “normal” at the turn of the year. Further price adjustments can thus not be completely ruled out, particularly in markets characterised by a low level of competition and price-inelastic demand. However, even if these price changes were to be individually significant, it is not expected that they would have a strong impact on aggregated price developments in the coming months.

In conclusion, any upward effect on prices stemming from the cash changeover should be limited mainly owing to strong competition in euro area markets, the subdued demand situation and consumer vigilance. However, some uncertainty is still attached to this assessment and a clearer picture will emerge in the months to come. Nevertheless, any possible upward effect on prices will be of a one-off nature, while from a longer-term perspective, the introduction of the euro will increase price transparency across the euro area, which should encourage arbitrage and strengthen competition. Lastly, the permanent gains in terms of reduced transaction and information costs are expected to outweigh the one-off costs of the changeover, which should ultimately benefit consumers.

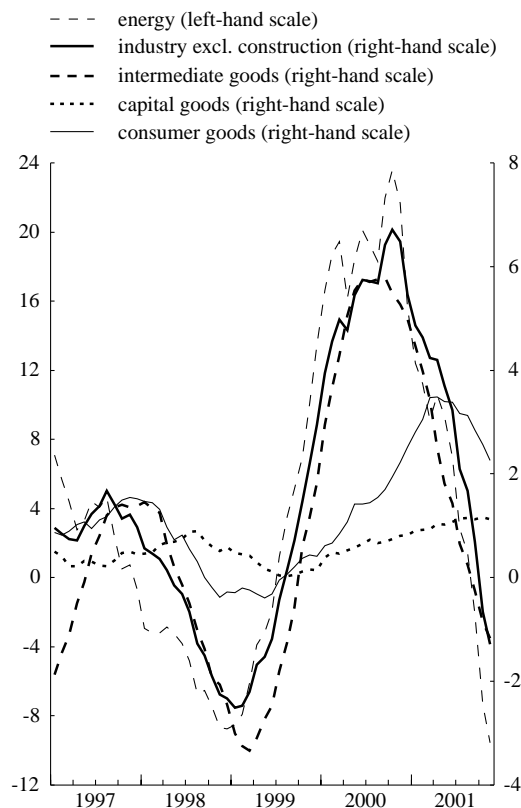
Broadly based decline in producer prices in November 2001

Continuing the trend of declining price pressures in the industrial sector, the latest data for euro area industrial producer prices showed a further increase in the annual rate of decline from 0.7% in October to 1.3% in November 2001 (see Chart 14). Lower year-on-year rates of change in all of the components, in particular energy, underlie this development. As regards capital goods prices, recent developments suggest that the year-on-year rates of change may have reached a turning-point, thereby discontinuing the upward trend observed since mid-1999. This view is also supported by historical analysis, which shows that turning-points in the year-on-year rate of change in capital goods prices tend to lag those for overall industrial prices. The year-on-year rate of change in capital goods prices stood at 1.1% in November 2001, i.e. 0.1 percentage point lower than in the previous month. This is the first time since December 1999 that there has been a decline in the year-on-year rate of change for this component.

The trend of declining price pressures in the industrial sector is likely to have

Chart 14
Breakdown of industrial producer prices for the euro area

(annual percentage changes; monthly data)



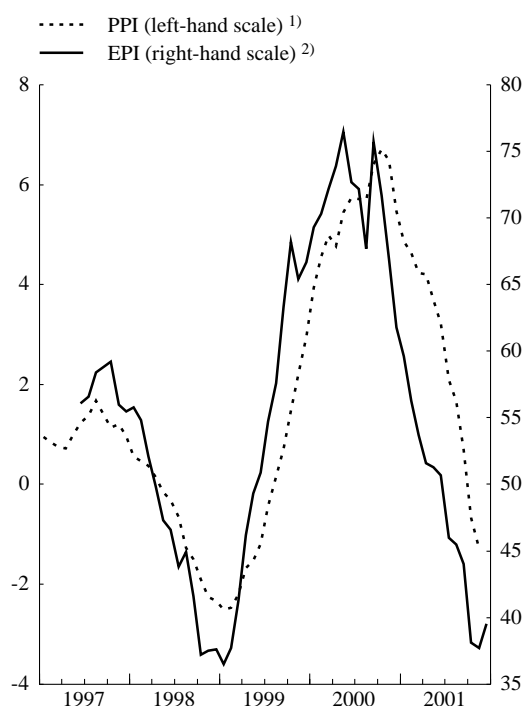
Source: Eurostat.

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

continued in December 2001. This is, for example, reflected in energy and non-energy commodity prices, which fell further between November and December 2001. This view is also supported by information from various surveys. For instance, the Eurozone Price Index remained below 50 in December 2001, and thereby continued to signal a decline in the average price of inputs (see Chart 15).

Chart 15 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.

Wage developments have remained moderate in the third quarter of 2001

Consistent with available information about negotiated wages, first estimates show that the annual growth rate of compensation per employee was unchanged at 2.5% between the second and third quarters of 2001. Hence, wage developments continued to be moderate in the latter part of 2001. In contrast, the first estimate released by Eurostat on total hourly labour costs in the non-agricultural business sector puts annual growth at 3.3% in the third quarter of 2001, up from 2.7% in the second quarter. However, owing to technical factors reflecting changes to wage payment practices (treatment of bonuses, retroactive payments, etc.) in one euro area country, total hourly labour costs are, at the current juncture, judged to overestimate the increase in labour cost growth. Meanwhile, the annual rate of change in labour productivity is estimated to have increased slightly, from 0.0% to 0.1%, between the second and third quarters of 2001. With the annual rate of increase of compensation per employee unchanged, the year-on-year rate of change in unit labour costs is estimated to have decreased by 0.1 percentage point between the second and third quarters of 2001 to 2.4%.

Overall, the continuation of moderate wage developments, together with the observed decline in consumer price inflation and the slowdown in activity and employment growth, suggests that upward pressures on inflation stemming from wages have not increased in the latter part of 2001. However, some concerns as regards forthcoming wage negotiations have emerged and, in this context, it is crucial that social partners continue this process of wage moderation. Against this background, wage developments will be closely monitored by the ECB with a view to assessing any signals of increasing labour cost pressures.

3 Output, demand and labour market developments

Weak economic activity continued into the fourth quarter of 2001

Eurostat's second release of national accounts data for the third quarter of 2001 confirmed that euro area economic activity remained weak, with real GDP growth in the second and third quarters of last year unchanged at 0.1% quarter-on-quarter, while first-quarter growth was revised slightly upwards, to 0.6% quarter-on-quarter (see Table 3). Although the quarter-on-quarter growth rate for real GDP in the third quarter was unchanged compared with the first estimate, there were some revisions at the level of individual expenditure components. Domestic demand is now estimated to have decreased by 0.1% quarter-on-quarter in the third

quarter of 2001, compared with -0.4% in the previous release, while the contribution to growth from net exports was 0.2 percentage point compared with 0.5 percentage point in the previous estimate. The revisions stemmed mainly from investment, the quarter-on-quarter growth rate of which was revised upwards to 0.0% from -0.3%, changes in inventories, contributing -0.2 percentage point to real GDP growth (compared with -0.5 percentage point in the previous estimate), and imports, now estimated to have fallen by 1.4%, instead of 1.9%. Thus, the overall picture of weak domestic demand, declining imports and a positive net trade contribution offset by destocking was somewhat adjusted but remained broadly in place.

Table 3
Composition of real GDP growth in the euro area

(percentage changes, unless otherwise indicated; seasonally adjusted)

	Annual rates ¹⁾								Quarterly rates ²⁾				
	1998	1999	2000	2000 Q3	2000 Q4	2001 Q1	2001 Q2	2001 Q3	2000 Q3	2000 Q4	2001 Q1	2001 Q2	2001 Q3
Real gross domestic product	2.9	2.6	3.4	3.2	2.8	2.5	1.6	1.4	0.4	0.6	0.6	0.1	0.1
<i>of which:</i>													
Domestic demand	3.6	3.2	2.8	2.8	2.2	1.7	1.0	0.8	0.1	0.5	0.2	0.3	-0.1
Private consumption	3.0	3.2	2.6	2.5	1.9	2.0	1.8	1.8	0.1	0.2	0.9	0.5	0.2
Government consumption	1.2	2.1	1.9	1.6	1.6	2.0	2.0	2.1	0.1	0.7	0.7	0.4	0.2
Gross fixed capital formation	5.2	5.4	4.4	3.9	3.3	1.4	-0.4	-1.3	0.9	0.0	-0.4	-0.8	0.0
Changes in inventories ^{3), 4)}	0.4	-0.2	0.0	0.2	0.1	-0.1	-0.3	-0.4	-0.2	0.2	-0.4	0.0	-0.2
Net exports ³⁾	-0.6	-0.5	0.6	0.5	0.6	0.8	0.6	0.6	0.3	0.1	0.4	-0.2	0.2
Exports ⁵⁾	7.3	5.2	11.9	12.2	11.9	8.8	5.2	0.8	3.5	2.4	-0.2	-0.6	-0.7
<i>of which goods</i>	7.3	4.9	12.2	12.2	12.3	9.9	4.6	1.1	3.4	2.4	0.2	-1.5	-0.1
Imports ⁵⁾	9.9	7.2	10.7	11.4	10.7	7.0	3.7	-0.6	2.9	2.2	-1.3	-0.1	-1.4
<i>of which goods</i>	10.4	6.9	11.1	12.1	12.3	7.9	3.8	-1.2	3.6	2.3	-1.8	-0.2	-1.4
Real gross value added:													
Agriculture and fishing ⁶⁾	1.5	2.2	0.1	0.5	-0.6	0.3	0.0	-0.3	1.2	-0.7	-0.5	0.1	0.9
Industry	2.6	1.1	4.1	3.8	3.5	2.7	1.0	0.0	0.6	0.4	1.0	-1.1	-0.3
Services	3.1	3.2	3.5	3.3	3.3	2.9	2.5	2.4	0.6	0.8	0.7	0.5	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.

In October 2001, industrial production (excluding construction) in the euro area declined sharply, by 1.2% month-on-month, following a decline of 0.5% month-on-month in September (see Table 4). This was largely expected, and reflects the impact of the fall in business confidence caused by the events of 11 September. On the basis of a three-month moving average, industrial production fell by 0.2% in the period up to October, compared with the preceding three-month period. Developments in manufacturing production were similar, with a marked decrease of 1.4% month-on-month in October 2001, after a decline of 0.5% month-on-month in September. All the main industrial groupings recorded a month-on-month fall in production in October, as in the previous month. However, a diversified picture at sectoral level is provided by three-month moving average measures, on the basis of which growth in the consumer goods sector remained broadly unchanged in October, whereas growth in the intermediate goods sector declined significantly further in October. In the capital goods sector, by contrast, the three-month moving average growth rate increased in October, after

remaining unchanged in the two preceding months.

Euro area retail sales volumes decreased by 1.1% month-on-month in October 2001, after remaining broadly unchanged in September. They also declined in year-on-year terms in October, by 0.2%, after increasing significantly in the previous two months, by 1.9 % in August and 1.6 % in September. The picture of decreasing retail sales growth from mid-2001 is confirmed by the decline in year-on-year growth rates calculated from the three-month moving averages (see Chart 16). In December 2001, new passenger car registrations increased slightly, by 0.6% year-on-year, after strong increases in the previous two months. On a quarter-on-quarter basis, new passenger car registrations increased by 2.0% in the fourth quarter of last year, after decreasing by 5.2% in the third quarter. Thus, car sales do not appear to have experienced a negative impact from the terrorist attacks in the United States and subsequent international developments, supporting euro area consumption growth in the last quarter of 2001.

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

	1999	2000	2001 Aug.	2001 Sep.	2001 Oct.	2001			2001				
						Aug.	Sep.	Oct.	May	June	July	Aug.	Sep.
						month-on-month			three-month moving averages				
Total industry excluding construction by main industrial groupings:	2.0	5.5	0.9	-0.7	-2.3	1.4	-0.5	-1.2	-0.9	-1.1	-0.3	-0.4	-0.2
Total indus. excl. construction and energy ¹⁾	1.8	5.7	0.6	-0.9	-2.4	2.1	-1.4	-1.1	-1.3	-1.1	0.0	0.0	0.1
Intermediate goods	1.5	5.9	-1.4	-2.1	-3.6	0.4	-0.9	-0.9	-1.5	-1.0	-0.2	-0.4	-0.8
Capital goods	2.4	8.6	2.9	-0.1	-1.1	2.1	-1.1	-0.5	-1.3	-0.9	0.0	0.0	0.4
Consumer goods	1.7	2.3	1.4	0.1	-1.5	1.2	-0.6	-1.2	0.5	-0.2	0.2	0.2	0.1
Durable consumer goods	1.3	5.9	0.1	-4.3	-7.0	3.2	-3.0	-1.9	-1.8	-2.5	-1.8	-2.1	-1.6
Non-durable consumer goods	1.8	1.6	1.6	1.1	-0.4	0.9	-0.1	-1.1	1.0	0.2	0.6	0.6	0.4
Energy	1.6	1.6	1.2	0.8	-0.3	-0.2	0.2	-0.7	1.5	1.2	0.8	0.1	-0.3
Manufacturing	2.0	5.9	0.9	-0.9	-2.6	1.5	-0.5	-1.4	-1.3	-1.5	-0.4	-0.5	-0.2

Sources: Eurostat and ECB calculations.

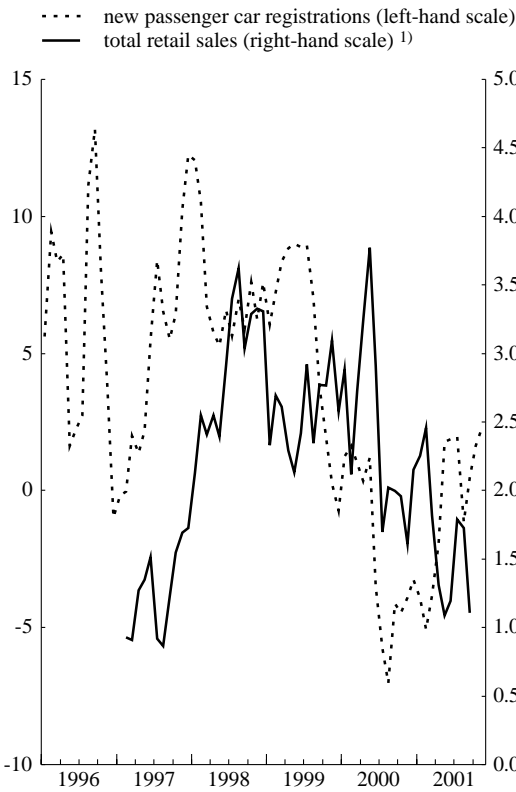
Notes: Annual percentage changes are calculated using data adjusted for variations in the number of working days; percentage changes on the previous month and three-month centred moving averages against the corresponding average three months earlier are calculated using seasonally and working day adjusted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

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.

Some positive signs from confidence indicators at the end of 2001

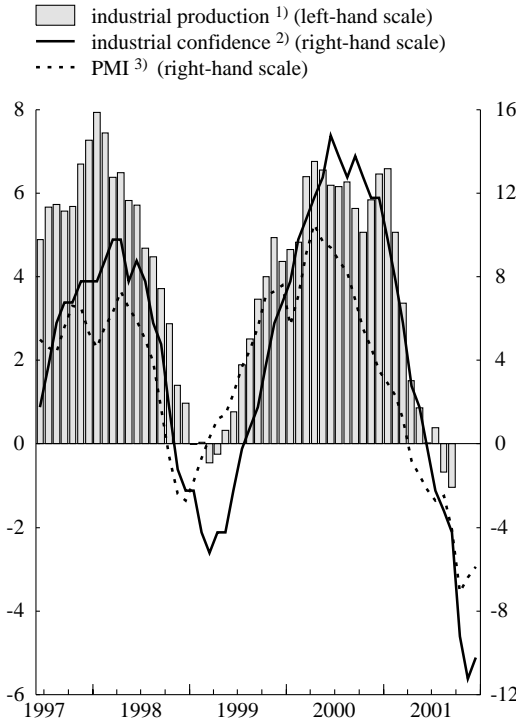
The latest survey indicators suggest that euro area manufacturing production contracted further in the last quarter of 2001, but some positive signs can be detected for December. In particular, industrial confidence according to the European Commission's Business Survey slightly improved in the euro area in that month, having continuously fallen since January 2001, with a particularly sharp decline in October (see Table 5). Despite the improvement recorded in the last month of 2001, the average fall in the last quarter of 2001 was greater than that in the first three quarters of the year. The increase in

December 2001 is due to improved perceived prospects for the economy, as indicated by a rise in production expectations. By contrast, the responses to questions relating to actual developments, both the assessment of order books and stocks of finished products, were broadly unchanged. The Purchasing Managers' Index (PMI) for the euro area manufacturing sector rose slightly further in December 2001 (see Chart 17). However, it remained clearly below the level of 50, indicating that the rates of growth in manufacturing production at the end of 2001 likely remained negative, albeit to a smaller degree than previously. As regards the individual components, the

Chart 17

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

(monthly data)



Sources: Eurostat, European Commission Business and Consumer Surveys, Reuters and ECB calculations.
 Note: When available, data refer to the Euro 12 (including periods prior to 2001).
 1) Manufacturing; annual percentage changes in three-month moving averages; working day adjusted data.
 2) Percentage balances; deviations from the average since January 1985.
 3) Purchasing Managers' Index; deviations from the value of 50; positive deviations indicate an expansion of economic activity.

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

	1999	2000	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001
				Q1	Q2	Q3	Q4	July	Aug.	Sep.	Oct.	Nov.	Dec.
Economic sentiment index ¹⁾	-0.2	2.6	-2.8	-0.6	-1.4	-1.3	-1.5	-0.4	-0.6	0.0	-1.0	-0.5	0.2
Consumer confidence indicator ²⁾	7	12	6	12	9	3	0	5	3	2	1	-1	1
Industrial confidence indicator ²⁾	0	12	-1	8	2	-3	-10	-2	-3	-4	-9	-11	-10
Construction confidence indicator ²⁾	14	21	15	19	17	13	11	13	12	15	12	10	11
Retail confidence indicator ²⁾	0	5	-1	3	-1	-1	-4	1	-3	-1	-4	-4	-5
Business climate indicator ³⁾	-0.1	1.3	-0.2	0.9	0.1	-0.5	-1.2	-0.4	-0.5	-0.6	-1.1	-1.2	-1.2
Capacity utilisation (%) ⁴⁾	81.9	83.9	.	84.0	83.3	82.5	.	83.0	-	-	81.9	-	-

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

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

1) Percentage changes compared with the previous period.

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

3) Units are defined as points of standard deviation.

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

increase in the PMI in December 2001 reflects to a large extent improvements in output and in new orders. The assessments of the other PMI components – employment, stocks of purchased products and suppliers' delivery times – also improved somewhat.

Another positive sign came from consumer confidence, which also increased in December 2001, after falling continuously since April. An improvement in the expectations for the general economic situation and the level of unemployment over the next 12 months were the main reasons for the increase. By contrast, households' assessment of their own financial situation in the future remained broadly unchanged. Overall, consumer confidence did not fall significantly further during the last quarter of 2001, after marked falls in the second, and especially the third, quarter of 2001.

Construction and retail confidence indicators followed a similar pattern in the last quarter of 2001. In particular, both fell significantly in October 2001, but were broadly unchanged in November and December. Overall, both of these confidence indicators fell in the last

quarter of 2001 compared with the previous quarter.

To sum up, the indicators of economic activity suggest that euro area growth remained weak in the last quarter of 2001, but some signs of improvement towards the end of last year can be detected, in particular in the pattern of confidence indicators. Thus, the impact of the events of 11 September seems to have been largely absorbed, but caution is warranted when interpreting recent data, particularly given the volatility of these indicators and the possibility that they only show a correction of an earlier overreaction. The expectation that growth will remain weak in early 2002 but should recover in the course of this year appears to be broadly supported by recent evidence. The timing and strength of this recovery, however, remains uncertain for the time being.

Unemployment rate unchanged at 8.5% in November

The standardised rate of unemployment for the euro area was 8.5% in November 2001,

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

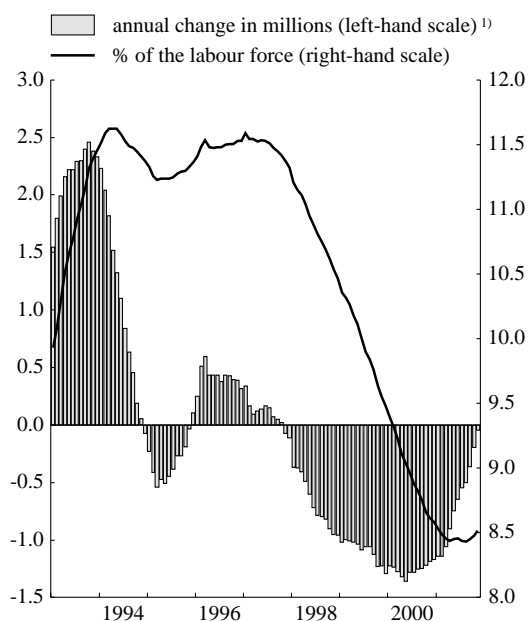
	1998	1999	2000	2000 Q4	2001 Q1	2001 Q2	2001 Q3	2001 June	2001 July	2001 Aug.	2001 Sep.	2001 Oct.	2001 Nov.
Total	10.9	10.0	8.9	8.6	8.5	8.4	8.4	8.5	8.4	8.4	8.5	8.5	8.5
Under 25 years ¹⁾	21.5	19.5	17.5	16.9	16.7	16.7	16.7	16.7	16.7	16.7	16.7	16.9	16.9
25 years and over	9.4	8.6	7.8	7.5	7.4	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.4

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

unchanged from October (see Table 6). However, as a result of a revision to youth unemployment, the overall unemployment rate was revised upwards slightly in 2001, including an upward revision of 0.1 percentage point in October. Following the slowdown in economic activity, the number of unemployed increased for a third consecutive month in November, by 60,500, slightly more than in October (revised upwards to 49,000). As a result of the

increase in recent months, the number of unemployed returned in November to its January 2001 level (see Chart 18).

The unemployment rate for those over 25 years increased to 7.4% in November, compared with 7.3% in October. The rate for those under 25 remained unchanged at 16.9%, following an upward revision of youth unemployment, including a rise of 0.5 percentage point in October. The number of unemployed increased in both age categories.

Chart 18**Unemployment in the euro area***(monthly data)**Source: Eurostat.**Note: Data refer to the Euro 12 (including periods prior to 2001).**1) Annual changes are not seasonally adjusted.***Employment growth remained weak in the third quarter**

Confirming previous estimates, national accounts employment data show that employment growth remained weak but stable in the third quarter of 2001, at 0.2% quarter-on-quarter (see Table 7). The annual rate of growth of employment continued to decline, from 1.6% in the second quarter to 1.3% in the third quarter, reaching its lowest level since the last quarter of 1997.

Employment growth in industry was unchanged in the third quarter, at -0.1% quarter-on-quarter. Excluding construction, however, and in line with weak production data and employment expectations in manufacturing, it continued to deteriorate, falling to -0.2% quarter-on-quarter. Employment growth in construction, which has been historically more volatile than in other sectors, increased strongly in the third

Table 7
Employment growth in the euro area

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

	1998	1999	2000	2000	2000	2001	2001	2001	2000	2000	2001	2001	2001
				Q3	Q4	Q1	Q2	Q3	Q3	Q4	Q1	Q2	Q3
	Quarterly rates ¹⁾												
Whole economy	1.6	1.6	2.1	2.1	2.2	1.9	1.6	1.3	0.5	0.5	0.4	0.2	0.2
<i>of which:</i>													
Agriculture and fishing ²⁾	-1.4	-2.9	-1.5	-1.8	-0.1	-0.3	-0.6	-1.2	0.0	0.3	-0.2	-0.7	-0.7
Industry	1.0	0.3	1.0	1.1	1.3	1.3	0.8	0.4	0.3	0.4	0.3	-0.1	-0.1
Excluding construction	1.1	0.0	0.8	1.1	1.1	1.2	0.8	0.2	0.4	0.2	0.3	-0.1	-0.2
Construction	0.3	1.0	1.6	0.9	1.7	1.4	1.1	1.1	0.3	1.0	0.0	-0.1	0.3
Services	2.2	2.6	2.8	2.8	2.7	2.4	2.0	1.8	0.6	0.6	0.4	0.4	0.4
Trade and transport ³⁾	1.7	2.3	2.8	2.8	2.6	1.9	1.6	1.4	0.7	0.5	0.2	0.2	0.5
Finance and business ⁴⁾	5.0	5.5	5.9	5.9	5.5	4.8	3.9	3.3	1.1	1.1	0.8	0.8	0.4
Public administration ⁵⁾	1.4	1.5	1.3	1.3	1.5	1.7	1.6	1.6	0.2	0.5	0.4	0.4	0.2

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.

quarter, counterbalancing the decline in other industrial sectors. Employment growth in services stood at 0.4% quarter-on-quarter, unchanged from the first two quarters of the year. However, the annual growth rate of employment in services continued to decline (to 1.8%), falling below 2.0% for the first time since the second quarter of 1998. Within the services sector, employment growth was particularly resilient in the sub-sector that includes trade, transport and communication in the third quarter, compared with the first half of 2001.

The outlook for employment remains subdued

Results from the latest European Commission and Purchasing Managers' Surveys indicate that employment expectations improved somewhat in all sectors of the economy in

December. However, the indicators of the Purchasing Managers' Survey remain below 50, continuing to suggest a decline in employment growth in both manufacturing and services. As reported in the December 2001 issue of the Monthly Bulletin, employment expectations for the months ahead in manufacturing as reflected in the European Commission Business Survey declined further in October. Overall, these developments suggest that the slowdown in employment growth is likely to have continued in the fourth quarter, particularly in manufacturing.

The recent increase in unemployment and slower employment growth in the euro area underline the importance of increased momentum for labour market reform. In this context the ECB welcomes the adoption of the Employment Guidelines for 2002, summarised in Box 4.

Box 4

The Employment Guidelines for 2002

The Treaty of Amsterdam in June 1997 and the Luxembourg European Council on Employment in November 1997 established a co-ordinated strategy for raising employment levels in the European Union. According to Article 126 of the Treaty establishing the European Community, Member States are obliged to contribute to a high level of employment through their national employment policies, which must be consistent with the Broad Economic Policy Guidelines¹. To this end, Employment Guidelines are adopted every year by the EU Council and transposed into National Action Plans for Employment (NAPs) by Member States. These NAPs, which also contain information on the implementation of the Employment Guidelines of the previous year, are analysed by the European Commission and the EU Council. The assessment of how Member States have transposed the Employment Guidelines of the current year into their NAPs and how they have implemented the Employment Guidelines of the previous year² feed into a Joint Employment Report (JER) by the EU Council and the Commission, which is submitted to the European Council. On the basis of the JER, the European Council draws conclusions on the employment situation in the Community and on the implementation of the Employment Guidelines. These conclusions, in turn, guide the EU Council in reshaping the previous Guidelines and country-specific Recommendations for Member States' employment policies in the subsequent year, thus initiating a new round of the cycle described above.

The Employment Guidelines for 2002, the fifth annual edition since the Luxembourg Summit, were endorsed at the Laeken Summit in December 2001. They emphasise the goal of strengthening the conditions for full employment in a knowledge-based society, an objective set in the conclusions of the March 2000 Lisbon European Council. This year, the "Lisbon targets" for 2010 (70% for the overall employment rate and 60% for the employment rate of women) have been complemented by the additional targets agreed upon at the Stockholm European Council in March 2001. These are intermediate targets for 2005 of 67% and 57% for men and women respectively, and a new target of 50% for the employment rate of persons aged between 55 and 64, to be reached by 2010. The Guidelines also emphasise the need to ensure "quality in work" in the European Union.

The Employment Guidelines for the Member States are presented in a four-pillar structure.

The *first pillar*, "Employability", asks Member States to actively tackle youth and long-term unemployment. To this end, unemployed people should be offered training or some other re-employment measure before reaching 6 months of unemployment in the case of young people, or 12 months for adults. In addition, Member States are called upon to review their benefit, tax and training systems to make them more employment-friendly and to encourage older people to remain in work. Efforts should be made to improve the quality of educational systems, to reduce the number of young people dropping out of education early and to provide them with the skills needed both in the labour market and to adapt to technological and economic change. The promotion of skill development and lifelong learning remains important for the whole workforce. Member States are asked to step up their efforts to alleviate mismatches between job seekers and vacancies and to prevent and combat emerging labour market bottlenecks. Here, the need to encourage labour mobility across Europe is emphasised. Member States are also requested to combat discrimination and promote social inclusion by improving access to employment.

According to the *second pillar*, "Entrepreneurship", Member States should make it easier to start up and run businesses and exploit the employment potential of a dynamic and enterprising climate. They are asked to pay particular attention to reducing overhead costs and administrative charges for businesses, to promote new sources of employment (including self-employment) and to identify the potential for job creation at a local

¹ See Box 4 on the Broad Economic Policy Guidelines 2001 in the July 2001 issue of the Monthly Bulletin.

² For details of last year's Employment Guidelines, see Box 4 in the January 2001 issue of the Monthly Bulletin.

level. Tax systems should be reformed to make them more employment-friendly and reverse the long-term trend towards higher taxes on labour. Member States are encouraged to set targets for the gradual reduction of the overall tax burden and, where appropriate, for gradually reducing the fiscal pressure on labour and non-wage labour costs, particularly for relatively unskilled and low-paid workers. Such reforms should be undertaken without jeopardising the consolidation of public finances or the financial equilibrium of social security systems.

Under the *third pillar*, “*Adaptability*”, Member States are called upon to promote the modernisation of work organisation and develop a strong partnership between players at all levels. The social partners are invited to negotiate flexible working arrangements with the aim of increasing productivity and competition, while at the same time maintaining the balance between job flexibility and security. In addition, Member States are to examine the possibility of introducing more flexible contract types into their national law.

Under the *fourth pillar*, “*Equal opportunities*”, Member States are to strengthen their policies towards gender equality across all pillars, and to address all conditions influencing women’s decisions to take up employment. Further attention is to be directed towards rectifying the gender imbalance in some sectors and occupations, and tackling gender pay gaps. Member States are requested to improve women’s access to jobs and policies that reconcile work and family life. This includes ensuring adequate provision of good-quality childcare in order to support women’s and men’s entry and continued participation in the labour market and to help workers re-enter the labour market following periods of absence.

The Employment Guidelines lay out wide-ranging recommendations for the achievement of full employment in the EU. In the current environment, it is important that national governments strengthen their efforts to implement structural labour market reforms. The strengthening of the flexibility of European labour markets and the promotion of labour mobility within and between them will not only support the ongoing process of job creation but will also help to alleviate labour market bottlenecks, thus contributing to the maintenance of a favourable outlook for growth and price stability.

4 Exchange rate and balance of payments developments

Euro broadly stable in effective terms in December 2001 and early January 2002

In December 2001 and early January 2002, the foreign exchange markets were characterised by a steady depreciation of the Japanese yen against the euro and the US dollar, reflecting the protracted weakness of the Japanese economy. The euro remained, overall, broadly stable against the US dollar and the Swiss franc, while it depreciated against the pound sterling. In early January, the smooth cash changeover appeared to be associated with a temporary strengthening of the euro vis-à-vis all major currencies.

In December and early January, the US dollar did not, given the persistent uncertainty regarding relative economic prospects in the

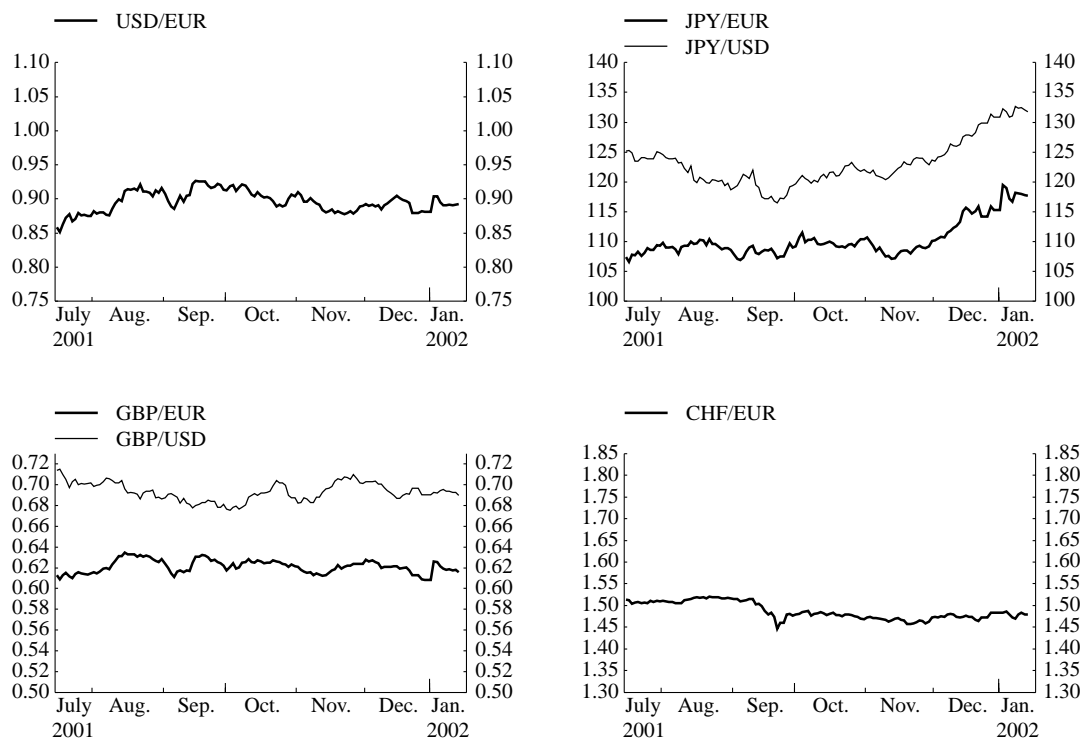
euro area and in the United States, display any major changes vis-à-vis the euro. In the first half of December, the US dollar depreciated against the euro and the pound sterling. Subsequently, while it remained stable against the British currency, it fluctuated somewhat against the euro, albeit within a rather narrow range. On 16 January 2002, the euro was quoted at USD 0.88 (see Chart 19), less than 1% below the level at the end of November and 4.5% below its average value in 2000.

Since November 2001, the Japanese yen has been depreciating against all major currencies amid deteriorating economic conditions in Japan. On 16 January, the euro was quoted at JPY 115.83, 5.2% above its end-November level and 16.4% above its 2000 average. The

Chart 19

Patterns in exchange rates

(daily data)



Source: ECB.

US dollar stood at JPY 131.37, i.e. 6.2% above its level at the end of November.

CHF 1.47 on 16 January, almost 5.6% below its average level in 2000.

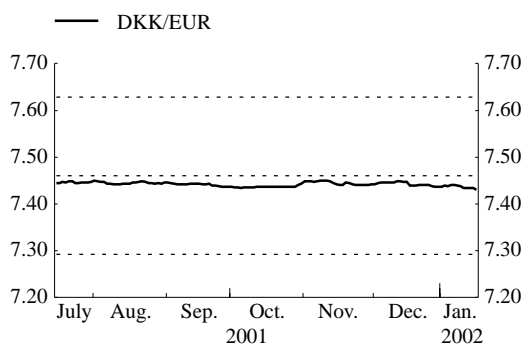
In December and early January, the pound sterling appreciated by almost 1¼% against the euro and ¾% against the US dollar, amid the relative resilience of the UK economy compared with the United States and the euro area. On 16 January, the euro was quoted at GBP 0.61 against the pound sterling, i.e. almost 0.7% above its 2000 average.

The nominal effective exchange rate of the euro, as measured against the currencies of the 12 most important trading partners of

Chart 20

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).

the euro area, remained broadly stable in December and early January. On 16 January, the nominal effective exchange rate was almost 1.8% above its average level in 2000. In real terms, movements in effective exchange rates deflated by CPI, PPI and ULCM continued to follow the trend of the nominal index fairly closely (see Chart 21).

Current account registered a small surplus in October 2001

The current account registered a small surplus of €0.1 billion in October 2001, compared with a deficit of €6.4 billion in

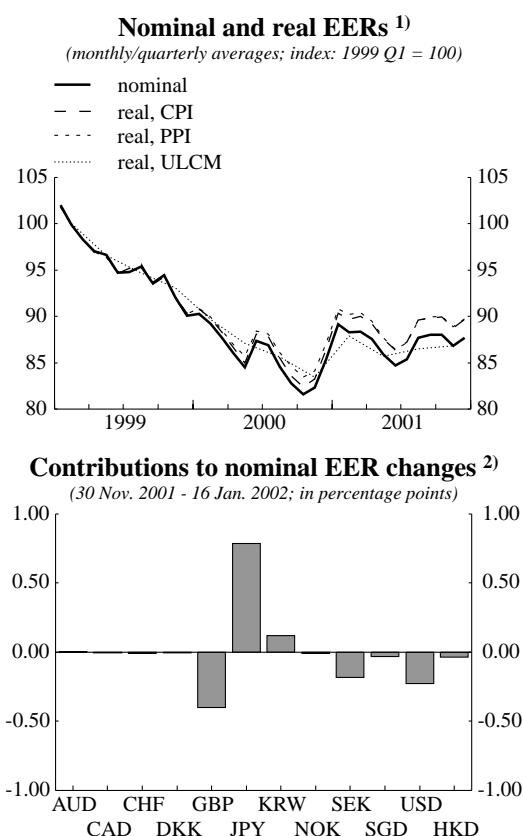
October 2000 (see Table 8). The move into surplus was due mainly to an increase in the goods surplus (up from €2.3 billion to €9.6 billion), combined with a decrease in the deficit for current transfers (down from €6.0 billion to €5.4 billion) and a shift in the services account from a deficit of €0.6 billion to a small surplus of €0.2 billion. These developments were partially offset by an increase in the income deficit, up from €2.1 billion to €4.3 billion.

In the first ten months of 2001 the cumulated current account deficit dropped to less than half that recorded in the same period in 2000 (down to €23.0 billion, compared with €55.4 billion). This largely reflected an increase of €38.8 billion in the cumulated goods surplus (up from €10.8 billion to €49.6 billion), along with a shift in the services item from a deficit of €2.4 billion to a surplus of €2.2 billion, which was only partially offset by an increase of €11.8 billion in the income deficit (up from €25.6 billion to €37.4 billion). Meanwhile, the deficit for current transfers remained virtually unchanged. The rising cumulated goods surplus is explained by the faster growth of export values (8.4%) than of import values (3.6%).

Seasonally adjusted data show that the goods surplus started to increase at the beginning of 2001, primarily owing to a decline in import values (corresponding to a fall in oil prices at the end of 2000 and a deceleration of euro area demand in 2001), while export values remained fairly flat over the same period, largely on account of weak foreign demand (see Chart 22). Although the value of exports of goods declined marginally in both September and October, imports fell by a larger amount as economic activity in the euro area remained subdued and oil prices declined further in October. Export and import values of services have also been on a downward trend in recent months (see Chart 23).

The slowdown in domestic demand, particularly in import-intensive categories such as investment expenditure, seems to be

Chart 21
Effective euro exchange rates



Source: ECB.

1) An upward movement of the index represents an appreciation of the euro. The latest observations for monthly data are December 2001. In the case of the ULCM-based real EER, the latest observation is for Q4 2001 and is partly based on estimates.

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

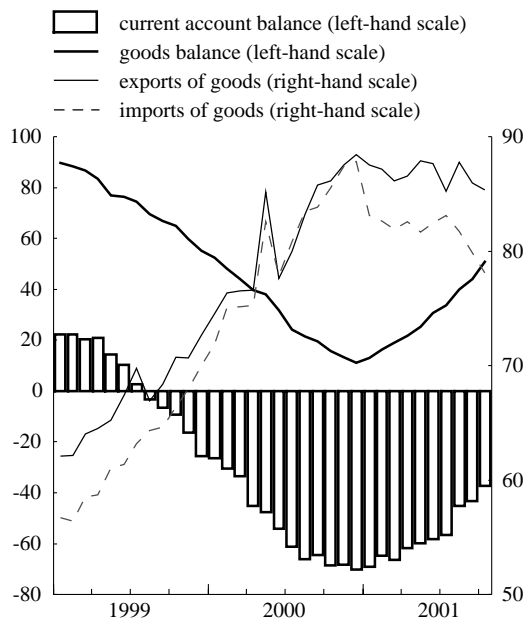
Table 8**Balance of payments of the euro area***(EUR billions; not seasonally adjusted)*

	2000 Jan. - Oct.	2000 Oct.	2001 Jan. - Oct.	2001 Aug.	2001 Sep.	2001 Oct.
Current account balance	-55.4	-6.4	-23.0	4.2	-1.3	0.1
Credits	1312.4	146.5	1416.8	133.4	132.8	146.6
Debits	1367.8	152.9	1439.8	129.2	134.1	146.5
Goods balance	10.8	2.3	49.6	6.0	5.0	9.6
Exports	797.6	93.3	864.5	80.9	82.7	95.1
Imports	786.8	90.9	814.9	74.9	77.8	85.5
Services balance	-2.4	-0.6	2.2	0.8	-0.9	0.2
Exports	241.9	26.6	257.4	27.7	24.3	25.9
Imports	244.3	27.2	255.2	26.9	25.1	25.7
Income balance	-25.6	-2.1	-37.4	0.3	-0.7	-4.3
Current transfers balance	-38.2	-6.0	-37.3	-2.9	-4.7	-5.4
Capital account balance	8.5	0.4	7.9	0.6	0.0	0.3
Financial account balance	74.0	2.4	-35.5	0.3	-29.5	-14.6
Direct investment	10.9	-18.4	-97.7	-6.0	-13.1	5.3
Abroad	-326.9	-35.9	-182.9	-12.2	-19.1	-2.0
Equity capital and reinvested earnings	-249.5	-31.8	-113.5	-5.6	-5.1	-4.6
Other capital, mostly inter-company loans	-77.4	-4.1	-69.5	-6.6	-14.0	2.6
In the euro area	337.8	17.5	85.2	6.2	6.0	7.3
Equity capital and reinvested earnings	274.8	11.1	62.6	4.5	3.7	3.0
Other capital, mostly inter-company loans	63.0	6.4	22.5	1.7	2.3	4.3
Portfolio investment	-115.7	1.0	52.0	17.8	43.0	0.3
Equities	-227.1	-6.4	127.0	12.7	28.3	19.8
Assets	-238.1	-9.1	-68.9	-2.6	13.8	-5.8
Liabilities	11.0	2.6	195.9	15.3	14.5	25.6
Debt instruments	111.4	7.5	-75.0	5.1	14.7	-19.5
Assets	-104.7	-9.0	-125.3	-15.4	13.2	-30.6
Liabilities	216.1	16.5	50.4	20.5	1.4	11.1
Memo item:						
Combined net direct and portfolio investment	-104.8	-17.4	-45.7	11.9	29.9	5.6
Financial derivatives	5.1	-2.1	-14.8	-3.1	-1.0	-3.8
Other investment	166.1	21.2	13.1	-12.6	-56.7	-13.8
Reserve assets	7.7	0.7	11.9	4.1	-1.6	-2.6
Errors and omissions	-27.1	3.6	50.6	-5.1	30.8	14.2

Source: ECB.

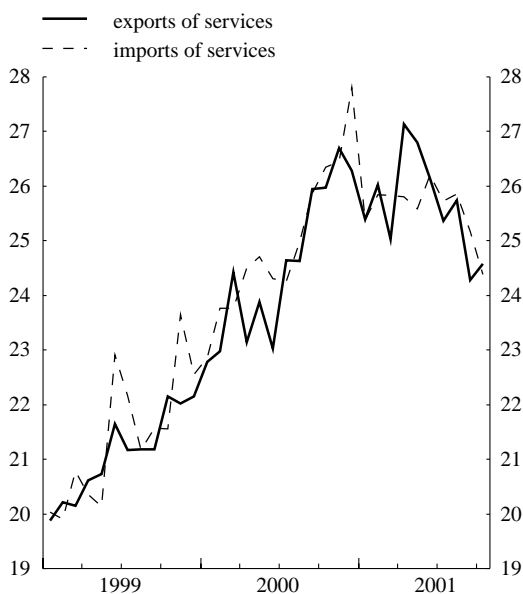
Notes: Figures may not add up due to rounding. For the financial account, a positive sign indicates an inflow, a negative sign an outflow; for reserve assets, a negative sign indicates an increase, a positive sign a decrease. A detailed set of tables on Euro 12 balance of payments data can be found in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



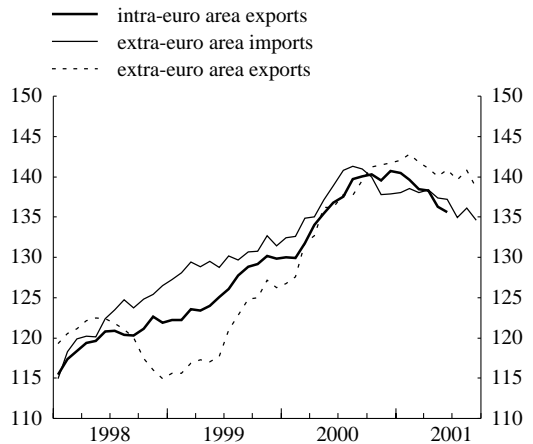
Source: ECB.
 Note: Data refer to the Euro 12. Balances are cumulated over 12 months.

Chart 23
Euro area exports and imports of services
(EUR billions, seasonally adjusted)



Source: ECB.

Chart 24
Intra-euro area and extra-euro area trade volumes¹⁾
(1995 = 100; seasonally adjusted; three-month moving average)



Sources: Eurostat and ECB calculations based on Eurostat data.
 1) All data refer to the Euro 12 (estimated using Euro 11 unit value indices); latest extra-euro area observations are for September 2001; latest intra-euro area observations are for June 2001.

the main factor driving the observed decline both in extra-euro area import volumes and in intra-euro area export volumes (see Chart 24). Meanwhile, the marked slowdown in foreign demand primarily explains the decline in extra-euro area export volumes which has been evident since the start of 2001.

Combined direct and portfolio investment registered net inflows in October 2001

Developments in the financial account in October 2001 were characterised by net inflows of €5.6 billion in combined direct and portfolio investment. This was due almost entirely to net inflows in direct investment (€5.3 billion), as net portfolio investment was close to a balanced position.

Net inflows in direct investment were predominantly accounted for by net inflows of “other capital”, mainly inter-company loans (€6.9 billion). By contrast, direct equity investment registered modest net outflows of €1.6 billion in October.

Within the portfolio investment account, equity portfolio investment continued the pattern already in evidence from May to August 2001, by registering net inflows of €19.8 billion in October, largely driven by the net purchase of euro area equity securities by non-euro area residents (€25.6 billion). Conversely, debt instruments registered total net outflows of €19.5 billion, consisting of €11.6 billion in bonds and notes and €7.9 billion in money market instruments (see Table 8.5 of the “Euro area statistics”

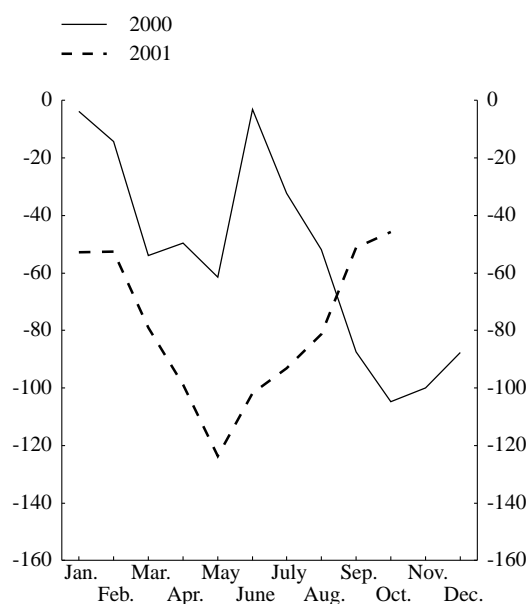
section). Euro area residents invested a net amount of €10.1 billion in money market instruments abroad – the highest net outflow relating to the assets side of this item this year – while non-residents invested a net amount of €2.1 billion in the euro area’s money market instruments – in line with developments observed prior to September 2001.

All in all, the developments in the euro area financial account in October were most likely affected by financial market expectations that the events of 11 September might prolong the slowdown in the United States. This seems to have triggered the strong increase in equity portfolio investment by non-residents in the euro area (€25.6 billion) and the purchase of non-euro area issued debt instruments by euro area residents (€30.6 billion), in particular money market instruments. The net purchases by euro area residents of foreign equities (€5.8 billion) coincided with a recovery in global stock markets after the fall observed in September.

In the first ten months of 2001, combined net outflows in direct and portfolio investment (€45.7 billion) were less than half as high as in the same period in 2000 (€104.8 billion; see Chart 25). This development is explained primarily by a switch in equity portfolio investment (from net outflows of €227.1 billion in the period from January to October 2000 to net inflows of €127.0 billion in the corresponding period in 2001), which was only partially offset by a shift in both direct investment and investment in debt instruments from net inflows in 2000 to net outflows in 2001.

Chart 25
Euro area combined net direct and portfolio investment flows in 2000 and 2001

(EUR billions, cumulated data)



Source: ECB.

Note: A positive (negative) number indicates a net inflow (outflow).

Economic fundamentals and the exchange rate of the euro

This article provides an overview of the possible fundamental factors underlying the development of the exchange rate of the euro. It briefly reviews the empirical approaches applied in this context and discusses the extent to which different models – although all subject to a considerable range of caveats – can serve as a reference point for an exchange rate assessment. Taking a medium to long-term perspective, it becomes apparent that real exchange rates have been subject to significant fluctuations. In theory, a number of possible medium and long-term determinants of the exchange rate have been identified and may thus help to explain some of these movements. While models based on such economic fundamentals are not very successful in explaining short-term exchange rate movements, they are usually able to track quite well the evolution of the actual exchange rate in the medium to long run. Accordingly, they may trace a path for longer-term trends towards which the actual exchange rate converges. However, the uncertainty surrounding this path for the estimated exchange rate equilibrium is typically rather large and the results are often quite sensitive to the underlying assumptions. Therefore, the currently available empirical approaches cannot provide any precise value for an “equilibrium exchange rate”, and the results, consequently, need to be interpreted with considerable caution. Nonetheless, the insights from the empirical approaches discussed in this article may serve as a basis for some more qualitative assessments of the relationship between the exchange rate and economic fundamentals.

I Introduction

The development of the exchange rate of the euro since the start of Stage Three of Economic and Monetary Union (EMU) in 1999 has triggered many thoughts and considerations from various economic perspectives. Any analysis of exchange rate developments based on fundamentals, however, may need to take a somewhat longer-term view, consistent with the time horizon of such approaches. In the absence of historical data for the euro, the literature has generally adopted as a proxy prior to 1999 the so-called “theoretical” or “synthetic” euro.¹ There is, however, an important caveat to the use of such a proxy. While the euro was launched in 1999 under the condition of price stability in the euro area – reflecting a successful convergence process of previous years – the synthetic euro mechanically summarises the evolution of the legacy currencies which developed in the framework of rather heterogeneous monetary environments. This is particularly true as one goes further back in time. Therefore, any judgement on longer-term trends in the *nominal* exchange rate of the euro should be based on a (legacy) currency reflecting a high degree of internal stability, like the Deutsche Mark, for instance. Such a perspective is consistent with the mandate

and the monetary policy strategy of the ECB, both of which are designed to maintain price stability in the euro area.

Most exchange rate analyses based on economic fundamentals, however, focus on the real exchange rate rather than on the nominal exchange rate. For the real exchange rate, differences in inflation rates between countries should be offset in the longer run by corresponding movements in nominal exchange rates. Accordingly, most of the empirical literature has used a “synthetic” surrogate for assessing long-term developments of the euro in *real* terms. It is well documented that real effective exchange rates of the synthetic euro (as well as of major legacy currencies) have been characterised by considerable medium-term swings. Given these swings in real exchange rates, the question arises as to whether these fluctuations in foreign exchange markets can be related to fundamental factors.

In order to examine this question, the article provides first an overview of potential

¹ This concept was described in more detail in “The nominal and real effective exchange rates of the euro”, ECB Monthly Bulletin, April 2000.

fundamental factors underlying the development of the exchange rate of the euro. It then goes on to briefly review the empirical approaches applied in this context

and discusses the extent to which these models can serve as a reference point for an exchange rate assessment.

2 Fundamental factors underlying the exchange rate

Relevant fundamentals, their interaction and the time horizon for analysis

From a theoretical point of view, there are a number of medium to long-term factors underlying developments in exchange rates, such as trends in domestic and foreign prices, lasting changes in relative productivity growth, the international investment position, the terms of trade, fiscal variables and the interest rate differential. The relationship between these fundamentals and the exchange rate is, however, complicated by the fact that some of these factors affect the exchange rate permanently, while others give rise only to temporary or cyclical fluctuations around a long-term path. In essence, the distinction between medium and long-term fundamentals is mainly related to the underlying properties of the fundamentals under consideration rather than to a particular time horizon. In this context, the distinction between medium and long-term relationships may facilitate an intellectual categorisation.

It is also important to emphasise that some of the variables identified as factors underlying exchange rate movements are not necessarily exogenously determined but could actually be interrelated. For instance, developments in (real) long-term interest rates have been associated with fluctuations in the real exchange rate. Yet interest rates themselves are obviously also related to economic policy, the business cycle and stock market performance, which in turn can be influenced by exchange rate developments. In summary, some of the underlying factors may be simultaneously co-determined together with the exchange rate within the overall economic system rather than just being exogenous determinants of the exchange rate.

Before discussing medium and long-term factors in more detail, it is useful to distinguish them from approaches focusing on short-run pricing behaviour. Turning to this time horizon, it has been demonstrated in theoretical work that exchange rate “overshooting” is possible if wages and prices of goods and services adjust only slowly compared with prices in financial markets. Moreover, it has been documented in the literature that actions by foreign exchange traders may be temporarily governed by factors unrelated to fundamental analysis. This has been partly attributed to the existence of transaction costs, including the costs of gathering information, which create a range of values around the fundamental-based “equilibrium” within which the exchange rate can fluctuate without triggering any equilibrating forces. In these circumstances, exchange rates would converge to long-term values only when the deviation from “equilibrium” of fundamentally justified levels exceeds a certain threshold.

Moreover, the mere presence of heterogeneous agents in the foreign exchange markets may influence trends in exchange rates over prolonged periods. While the so-called “fundamentalists” rely more on economic models to predict exchange rate changes, “non-fundamentalist” or “chartist” traders form their expectations on currency prices mainly by extrapolating historical trends. It has been often claimed in the literature that, due to herding behaviour and bandwagon expectations, a predominance of non-fundamentalists, or changing proportions of the two types of traders in the market, can contribute to swings in asset prices that are more accentuated than would be justified by fundamentals. In this context, rather *ad hoc* “explanations” of exchange rate

behaviour have been frequently built on simple correlations between the exchange rate and a number of “explanatory” variables, which, however, generally tend to fail after a while for no apparent reason. In any case, if a consensus gradually emerges among market participants that the exchange rate has moved far away from what can be justified by economic fundamentals, then equilibrating forces should come increasingly into play, pulling it back towards its “equilibrium” level.

The obvious complexity of the relationships between the exchange rate and fundamentals as well as the existence of non-fundamental driving forces suggest that any empirical model attempting a precise quantification of the “fair value” of a currency based on economic fundamentals is characterised by a rather significant degree of uncertainty. Accordingly, while it appears feasible to identify a number of factors underlying exchange rate trends in the medium term, the derivation of a concrete value for the “equilibrium exchange rate” from these insights proves to be very problematic. Apart from significant uncertainties surrounding the available approaches to estimating the “fair value” of a currency, some of these approaches are also rather sensitive to changes in the underlying assumptions. Limited data availability and data uncertainty due to measurement error or to the use of proxies for some fundamentals complicate the issue further. In particular, factors that are difficult to quantify, such as adjustments in the portfolio allocation by investors in reaction to changes in financial market structures, may increase the uncertainty surrounding any estimate of an equilibrium exchange rate. Accordingly, while fundamental-based equilibrium exchange rate models may convey useful information, especially if the various approaches arrive at the same qualitative conclusion, such analyses may serve at best as a rough reference point against which actual developments in foreign exchange markets can be gauged.

The nominal exchange rate and price developments: an important but incomplete link

In exchange rate economics, asset market models of exchange rate determination play a central role. In these models the supply and demand for financial assets determine the medium-term path of the nominal exchange rate. In the context of the so-called monetary approach, the nominal exchange rate is determined by the supply and demand for money. In this framework it is assumed, however, that domestic and foreign assets are perfect substitutes. This assumption has been relaxed in portfolio balance models, which treat domestic and foreign assets as imperfect substitutes. In these models, it is not only the interaction between the money supply and money demand that is important for nominal exchange rate movements, but also the changes in the supply and demand for other financial assets. This approach also incorporates risk premium considerations, which are important in association with the international investment position that is discussed as an exchange rate fundamental below.

The standard monetary model is closely related to the theory of purchasing power parity (PPP) which is the universal starting point for exchange rate analysis. The theory of PPP in its relative version states that nominal exchange rates move in proportion to relative developments in domestic and foreign prices. The monetary model goes one step further by explaining inflation rates through changes in the respective supply and demand for money at home and abroad. Accordingly, both approaches imply that the equilibrium real exchange rate is a constant, at least in the long run, once price levels have completely adjusted. This is a crucial interim result to be pointed to in the context of the analysis presented further below.

Empirically, however, real exchange rates also exhibit prolonged fluctuations. While they often oscillate around a mean “in the long run”, there are protracted deviations from

their PPP-based long-run means. Moreover, the adjustment speed of the exchange rate to any “equilibrium path”, as mapped out by relative price developments, is extremely slow, so that prolonged deviations from purchasing power parity can occur. According to empirical studies, which take either a very long-term perspective by employing correspondingly long data series or use a panel data approach, the adjustment process is typically found to have a half-life of three to six years. This implies that following a shock, which drives the exchange rate away from its long-run PPP value, about half a decade is required for the exchange rate to revert half way back to this level. While some of these fluctuations could be attributed to transaction costs impeding arbitrage transactions in goods markets, the observed medium-term swings in the exchange rate are generally too large to be accounted for by these factors alone. In addition, some currencies, like the Japanese yen, for instance, exhibit a clear trend in their real effective exchange rate, requiring some additional explanation.

The real exchange rate and long-term fundamentals: productivity, external balances, terms of trade and fiscal developments

Owing to these limitations of PPP, several other fundamental determinants have been examined as a means of explaining long-term shifts in the real “equilibrium” exchange rate. These approaches usually focus on the real exchange rate and abstract from issues related to nominal rigidities and the linkages between the monetary and the real side of the economy. Four factors, in particular, have been discussed in the academic literature: (1) differing productivity developments, (2) the net foreign asset position, (3) terms of trade shocks, and (4) government spending.

Productivity advances should be associated with a real appreciation of the domestic currency. In the context of exchange rates between industrial countries, a more medium-

term channel might be the more relevant, since rising overall productivity may support the exchange rate through higher real interest rates and better prospects for economic growth. In the long run, differential productivity developments in the traded goods sector may also lead to a gradual appreciation of the real exchange rate (the so-called Balassa-Samuelson effect), though this argument is likely to be more relevant for explaining trends in exchange rates between emerging market economies and industrial countries rather than between industrial countries. Following the rise in productivity in the traded goods sector, productivity-based real wages will tend to rise in this sector, inducing labour to move from the non-traded to the traded goods sector, until wages between the two sectors have been equalised again. As a result, the price of non-traded goods relative to the price of traded goods will have to rise, which can be achieved through an increase in the price of non-traded goods or a decline in the domestic currency price of traded goods associated with a nominal appreciation of the currency or a combination of both. Although a clear link between productivity developments and the real exchange rate exists in theory, measuring such a relationship appropriately is inherently difficult (see Box I).

A second possible conduit through which fundamental factors may influence the real exchange rate in the long run is related to external balance considerations. According to this framework, the *long-run* equilibrium exchange rate is the exchange rate which ensures a stable long-run international investment position (relative to GDP). In theory, therefore, it can be expected that the equilibrium real exchange rate at each point in time is inversely related to the net external debt position (relative to GDP) of a country. Abstracting from valuation effects, there are, in principle, two channels that may be important for the relationship between the international investment position and the exchange rate: a risk premium and a balance of payments channel.

Box I

Measurement problems

In econometrically-oriented approaches, the length of the time series and the internal consistency of the data are crucial for obtaining robust results. In this context, problems arise in particular in measuring appropriately diverging productivity trends, the international investment position and the real interest rate differential.

As regards *productivity differentials*, three alternative approaches have been followed in the academic literature to derive a proxy variable:

- A relatively direct measure relies on differences in total labour productivity between home and abroad, which is defined as real GDP divided by the number of employees. Since traded and non-traded goods sectors are not treated separately in this variable, this is a very broad economy-wide productivity measure. Limited data availability rules out the use of the more accurate output per hour worked instead of output per employee to account for diverse preferences for part-time work. In addition, the comparability of these data is subject to differences in accounting procedures.
- A proxy measure for total factor productivity rather than only labour productivity has been derived from a standard Cobb-Douglas production function (the so-called Solow residual). While this measure is theoretically plausible, it is very difficult to compile due to problems encountered in quantifying the capital stock adequately – given the issue of how to account for capital depreciation – and specifying the correct functional form for the production function to be employed in the estimation procedure. As a result, it has been used only in a limited number of studies.
- A rather indirect measure taking sectoral developments in the economy into account is based on relative price developments in the traded and the non-traded goods sectors. The relative prices of non-traded and traded goods are, under reasonable assumptions, inversely related to the ratio of productivity gains in the two sectors. However, the dividing line between traded and non-traded goods is at the margin ambiguous. Therefore, as a rather rough measure, prices in the non-traded goods sector have been commonly approximated in most of the literature by the consumer price index, while producer or wholesale prices are used as proxies for the traded goods prices. This method draws on the fact that the proportion of non-traded goods in the basket underlying consumer prices is considerably larger than the proportion in the basket underlying producer prices. A significant drawback of this variable is, however, that changes in taxes – and in particular value added taxes – as well as the effects of domestic demand shocks on prices in non-traded goods sectors may conceal the actual productivity information conveyed by this variable.

Regarding the *international investment position*, data published for the euro area is limited to the last four years, at present, thus hampering its use in econometric models. Accordingly, the net international investment position could, in principle, be approximated by cumulating the current account balance (in relation to GDP) of individual countries (or regions). This procedure also has some important caveats:

- Computing such an aggregate for the euro area before 1997 has to rely on the aggregation of national data, but intra-euro area components of the current account positions, which should cancel out in theory, do not do so in practice.
- It ignores effects of debt reduction and forgiveness, reinvested earnings and, probably even more importantly for the euro area, valuation issues. In the case of debt instruments recorded as assets and liabilities of the economy, the valuation of stocks is strongly affected mainly by changes in the exchange rate but also by changes in prices. For some instruments such as equity in portfolio or direct investment, the quantification of the valuation effect is complex, since determining the current market value of these investments is not straightforward, particularly if unlisted companies are concerned.

- In addition, mis-measurement issues may be relevant in this context owing to the “errors and omissions” item in the balance of payments statistics, which tends to capture unrecorded current account or financial account flows.

Overall, some studies find evidence that, for many industrial countries, the cumulated current account provides a good representation of trends in the net foreign asset position. However, the more accurate international investment position as computed by the ECB for the years from 1997 to 2000, which adjusts for these factors, differs substantially, at least over this short period, from the levels and patterns derived through the accumulated current account approach, suggesting a very cautious interpretation of this variable in empirical applications.

Finally, the computation of the *real interest rate differential* also suffers from several data deficiencies:

- It usually ignores changes in the risk premia among assets, which could have contributed to a persistent and time-varying wedge in the real interest rate differential.
- Since the real interest rate is computed as the difference between the nominal interest rate and expected inflation, it requires an assumption regarding inflation expectations. For analysing the relationship between real interest rate differentials and the real exchange rate, information contained in inflation-indexed bonds can be exploited to this end. While this measure of inflation expectations also has some deficiencies, it should be comparatively uncontroversial, since it is directly extracted from financial market data. However, since these data are not available over a long sample span their use is limited in empirical exchange rate analyses. As a consequence, it has been common practice instead to employ the current rate of inflation or to use a filtering method to calculate inflation expectations on the basis of actual inflation rates. These measures may represent only a rough approximation of inflation expectations, thereby adding again to the uncertainty in the computations.

The first channel is related to portfolio balance considerations. If the international investment position (relative to GDP) of a country deteriorates, internationally diversifying investors will demand – for the associated adjustment of their portfolio structure – a higher yield in order to provide the capital inflow necessary to finance the corresponding current account deficit. At given interest rates, this increase in the risk premium requires a depreciation of the debtor country’s currency. The second channel by which the international investment position can affect the real exchange rate relates to the accumulation of net external debts. The interest that has to be paid on the debt accumulated through “excessive” current account deficits needs to be offset in the long run by a corresponding surplus in the trade balance (in goods and services). This surplus can be achieved through increased international price competitiveness

via a depreciation of the currency, thereby rendering exports more attractive. The proceeds from the higher net exports can then be used to service the higher interest payments.

In this context, one approach to compute a medium to long-term “fair value” of a currency is to determine a sustainable current account deficit which is consistent with such a steady-state international investment position (relative to GDP), but which also takes into account other elements. In this context, factors like the demographic profile and intertemporal consumption preferences of a country may be relevant for determining its long-term or sustainable current account position. The change in the exchange rate necessary for the current account to converge to this position – assuming that the economy operates at its potential level – is derived on the basis of the elasticities of

import and export volumes to changes in exchange rates. The computation of a sustainable current account position in itself entails significant uncertainties. Hence, the resultant “equilibrium exchange rate” might be rather sensitive to the assumptions underlying this computation. As regards the empirical application, the use of data on the international investment position for such purposes raises some difficulties (see Box I). Ultimately, these problems may also account for the failure of the proxies normally used in empirical research for the international investment position – such as the accumulated current account position – to qualify sometimes as an underlying factor of the real exchange rate.

A third possible channel underlying developments in real exchange rates, which is of a more exogenous nature, relates to lasting terms-of-trade shocks. These can affect the real exchange rate via the balance of trade, which is one of the building blocks of the current account balance. A persistent deterioration in the terms of trade of a country – which can, for instance, be associated with a shift in preferences or a lasting change in commodity prices – should result in a lower real exchange rate of that country in order to keep its export sector competitive. While preference shocks are difficult to measure, the effects of terms-of-trade shocks have been commonly captured in the empirical literature by oil price developments. The rationale for this proxy for the terms of trade to have an influence on the exchange rate is that an increase in the price of oil tends to improve the international price competitiveness of a country that is relatively less dependent on oil. It should be kept in mind, however, that oil prices exhibit frequent swings, hence they include a rather strong medium-term component.

A fourth possible channel relates to fiscal variables, which may also have an influence on real exchange rate movements. In the long run, an increase in government spending could weigh on the real exchange rate. To

begin with, a rise in government spending is often assumed to be associated with a simultaneous increase in the budget deficit. Assuming that the private sector does not offset this fall in public savings through increases in its own savings, overall domestic savings will be lowered. Consequently, the current account and the net foreign asset position would deteriorate in parallel, weighing in the longer term – as outlined above – on the real exchange rate. In a broader perspective, unbalanced government spending has been interpreted in the literature as an “economic distortions catch-all” type of variable, having, on balance, a negative impact on the potential for economic growth and the real exchange rate in the long run. This is closely related to the idea that increasing government spending and indebtedness could undermine confidence in a currency because of expectations of possible future distortionary tax increases. Over a shorter time horizon, however, higher government spending could exert an upward impact on the real exchange rate via higher real interest rates as well as via the demand side (see below).

The real exchange rate and medium-term economic fundamentals: real interest rates, growth expectations and stock market valuations

There are also fundamental factors which may give rise to temporary or cyclical fluctuations around the long-term path examined above. Three interrelated factors, in particular, have been discussed in this context: (1) the (real) interest rate differential, (2) relative growth expectations, and (3) stock market developments.

Given the increasingly free flow of capital across national borders, the exchange rate should also be affected by investment decisions driven by international interest rate differentials. Theoretically, this channel is usually represented by the uncovered interest rate parity condition, according to which rising interest rates in one country

temporarily drive up the value of that country's currency. The resulting expectation of a future depreciation will in the end offset the (risk-adjusted) interest rate differential, rendering investment at home and abroad equally attractive. Applied to trends in inflation-adjusted variables, this concept implies a relatively close link between the real exchange rate and the real interest rate differential. Accordingly, the real interest rate differential is then seen as gradually moving the real exchange rate to its long-term equilibrium value. The empirical examination of this relationship is complicated by the fact that the computation of the real interest rate differential suffers from several data deficiencies (as discussed in Box I).

The observed real interest rate differential may, however, reflect more than just asset return arbitrage between different currency areas. The cyclical pattern of this variable over the medium term may display, to some extent, the relative business cycle position of the countries or areas under consideration as well as their relative growth prospects. In view of that, it appears plausible also to examine survey data on expected growth differentials directly. While survey data on expected real GDP growth in different regions indeed appear to portray exchange rate trends over the last three years even better than indicators based on real interest rate differentials, consistent data are not available for a period long enough to draw firm conclusions. Moreover, at the current juncture it is too early to assess to what extent these growth expectations have been driven by cyclical or structural considerations. This distinction is crucial in evaluating currency valuations, however. To the degree that the expected growth differential has reflected temporary differences in the business cycle in the euro area and abroad, the exchange rate would need to revert to its long-term path over the medium term. By contrast, a structural or permanent shift in

economic growth could have required a long-term adjustment in the exchange rate level.

In addition to the variables mentioned above, stock market valuations have been mentioned in association with exchange rate developments. From a supply-side perspective, a favourable economic outlook should be related to rising stock market valuations, possibly along with rising real interest rates. If the improvement in the business conditions, leading to higher expected returns on investment in the long term, is perceived as being a permanent phenomenon, the stock markets may settle at this higher level for the foreseeable future. A rise in equity valuations tends to raise wealth and in general could entail a positive wealth effect on domestic demand, which could increase the current account deficit financed by strong capital inflows. In this context, however, both capital flows and exchange rate adjustments are variables which may be affected endogenously by the same underlying factors, so that any visible correlation between them should not be interpreted in a causal sense. In this respect, an important question relates to the factors underlying equity valuations. In recent discussions, two factors have been mentioned: a decline in equity risk premia, which would be more structural, or an overvaluation of stock prices. Temporarily, both factors could have the same macroeconomic effects, but they would call for completely different interpretations, requiring a generally cautious reading of this argument. On the one hand, a decline in the equity risk premium could imply a reasonable rise in stock prices. On the other hand, an overvaluation of stock prices would suggest that the related decline of the euro could no longer be interpreted as an "equilibrium" phenomenon. In such a case, an imbalance in one market (stock market) would have caused an imbalance in another market (foreign exchange market).

3 Empirical approaches to exchange rate modelling

Advanced concepts for assessing exchange rates use several explanatory variables

Although the preceding discussion has shed light on how movements in the fundamental factors listed above could be linked to the exchange rate of the euro, a variable-by-variable analysis of such relationships is unlikely to be helpful in uncovering the overall effect of individual influences on the exchange rate. If the individual fundamentals suggest different directions for the development of the exchange rate, such an analysis will not even allow a qualitative assessment of the likely development of the exchange rate, as the relative strength of the contribution of the various variables is unknown. For instance, over the past three years, the real interest rate differential between US and euro area bonds has initially narrowed and later moved in favour of the euro area, an occurrence which should have supported the euro. In contrast, given the higher oil dependency of the euro area compared with its major trading partners, the rising oil prices have led to a deterioration in the euro area's terms of trade which has been consistent with the decline of the euro since early 1999. Overall, the evaluation of developments in foreign exchange markets on the basis of simple correlations between individual variables and the exchange rate was at best only temporarily successful and these "relationships" lost their explanatory power before long.

Against this background, the joint interaction of these variables should be analysed using more sophisticated statistical methods. Overall, there are numerous concepts available for assessing the relevance of these factors as exchange rate determinants and for subsequently deriving a "fair value" for the exchange rate. These approaches can be broadly categorised according to the length of the time horizon under consideration. In the following, three broad categories are distinguished: (1) "current" or

"cyclical", (2) medium-term, and (3) long-term.

Regarding the short to medium term, a "current" or "cyclical" "equilibrium exchange rate" can be obtained by combining the theories of purchasing power parity and (real) interest rate parity. Contingent on the actual statistical properties of the real interest rate differential, this approach could be used to explain transitory or more persistent deviations of the exchange rate from its path as mapped out by the inflation differential. Another frequently used framework on which estimates of equilibrium exchange rates are based is the monetary approach to exchange rate determination. According to this model the nominal exchange rate depreciates in the event of a relative increase in the money supply or a decrease in the money demand, both exerting upward pressure on prices. In this connection, monetary aggregates like M1 regularly represent the money supply in academic studies, while base money or currency in circulation are too narrow to qualify as exchange rate fundamentals. In addition, various factors determining the demand for money – such as various income terms, interest rates and the rate of inflation – have been employed as determinants of the exchange rate. Occasionally, this approach has also been broadened to allow for diverging productivity developments at home and abroad.

Also related to this category of "current" and "cyclical" equilibrium exchange rates is the so-called "behavioural equilibrium exchange rate" (BEER) concept. This approach is not based on a specific structural model but encompasses several of the economic relationships outlined above. In the spirit of the "cyclical equilibrium exchange rates", BEER models often include fundamentals that have medium-run effects on the exchange rate, but wash out in the longer run. Such factors include variables reflecting business cycle conditions such as the (real) interest rate differential. More durable shifts in the

underlying economic environment, like differences in productivity, trends in terms of trade or fiscal balances as well as the net foreign asset position have also been used to supplement the analysis in BEER models. These models provide some information about the dynamic path of the exchange rate in relation to actual changes in economic fundamentals, while the question of whether the nature of these changes is transitory or permanent is not directly addressed.

Other approaches are more focused on the medium term and aim at deriving an equilibrium exchange rate on the assumption that the driving variables themselves are at their medium-term level. For policy considerations, such an approach yields a level for the equilibrium exchange rate that is purged of cyclical or transitory influences, as the underlying fundamentals are assumed to be at their medium-term sustainable levels. From a technical point of view, the transition to this medium-term perspective can be accomplished in two ways: (i) through further statistical refinements which aim at extracting the medium-term values of the underlying fundamentals (“statistical approach”), or (ii) by defining explicitly the sustainable levels of these fundamentals on the basis of internal and external balance considerations (“structural approach”).

The “statistical approach” builds on the BEER methodology and decomposes the modelled variables into permanent and transitory components, deriving the so-called “permanent equilibrium exchange rate” (PEER). The “structural approach” to modelling the medium-term equilibrium exchange rate assumes that the economy is at internal and external balance. Internal balance is obtained when a country is operating at a level of output consistent with full employment and low inflation, while external balance corresponds to a sustainable current account position. The so-called “fundamental equilibrium exchange rate” (FEER) approach is in this vein of thinking. Compared with the BEER and the PEER, the FEER methodology places more structure in

a normative sense on the computations and delivers an equilibrium exchange rate that is consistent with “ideal” economic conditions. The macroeconomic balance framework advocated by the IMF could also be considered as a variant of this methodology.

The so-called NATREX (Natural Real Exchange Rate) approach aims at theoretically closing the gap between the medium and the long run as it is founded on a more rigorous modelling of the stock-flow interaction in a macroeconomic growth model. A distinction is made between a medium-term equilibrium, where external and internal balance prevails (equivalent to the FEER approach discussed above), and the long-run equilibrium, where net foreign debt is constant and the capital stock is at its steady state level. In empirical terms, however, a time series approach similar to the BEER discussed above is typically employed, with the most important exogenous factors within the NATREX model being a thrift parameter, capturing consumption preferences – often measured by relative consumption spending ratios – and productivity developments. Recently, however, the NATREX theory has also been estimated within a structural setting.

Empirical applications of models to the euro and caveats

As regards the exchange rate of the euro, many empirical studies applying one or another of these concepts identify a statistically significant association between the exchange rate of the euro and various economic fundamentals (see Box 2). Owing to the above-mentioned limitations of the PPP concept, these studies generally apply more advanced approaches, modelling the real exchange rate as a function of economic fundamentals. Technically speaking, the idea that the real exchange rate should eventually revert to a constant has been replaced by a time-varying equilibrium path of the real exchange rate. Although these empirical applications are built on fairly sophisticated statistical methods, it is well known that all

Box 2

Survey of recent studies on the equilibrium exchange rate of the euro

As there is a wide range of approaches for calculating equilibrium exchange rates, the studies reviewed below are organised according to the equilibrium concept applied. The studies surveyed can be broadly classified in two categories: the first includes those applying time series techniques to empirically establish the relationship between economic fundamentals and the exchange rate and to derive an exchange rate equilibrium on the basis of these links. The second category includes studies which rely more on the presumed theoretical structural relationships and simulate on that basis the exchange rate adjustment needed to reach internal and external equilibrium. For the more structural approaches under this category, the interactions between the variables are often rather complex, so that no explicit reference to driving fundamentals is made.

Study	Methodology	Fundamentals	Reference currency and period	“Equilibrium” rate or under(-)/over(+) valuation
Econometric approaches				
van Aarle et al. (2000)	Monetary model	– Monetary fundamentals	USD, 2000 Q2	Roughly USD/€ 1.07
Chinn, Alquist (2001)	Monetary model	– Monetary fundamentals – Productivity (indirect)	USD, June 2000	USD/€ 1.17 to 1.23
Gern et al. (2000)	BEER, UIP	– Interest rate differential	USD, 2000 Q1	Around USD/€ 1.03
Clostermann, Schnatz (2000)	BEER	– Productivity (indirect) – Interest rate differential – Government spending – Oil prices	USD, 1999 Q4	USD/€ 1.13
Teiletche (2000)	BEER	– Productivity derived from – production function – Government spending – Interest rate differential	USD, June –2000	USD/€ 1.09
Lorenzen, Thygesen (2000)	BEER	– Net foreign assets – Dependency ratio – Productivity (indirect) – R&D expenditures	USD, 1999	Long-term: USD/€ 1.28
		– Interest rate differential (filtered)	USD, end-1999	Medium-term: USD/€ 1.19
		– Output gap – Interest rate differential	USD, mid-2000	Short-term: USD/€ 1.09
Koen et al. (2001)	BEER	– GDP per capita – Dependency ratio – Interest rate differential – Oil prices	effective, second half 2000	-9%
Maeso-Fernandez et al. (2001)	BEER/PEER	– Productivity (direct and indirect) – Interest rate differential – Government spending – Oil prices	effective, 2000 Q4	-3% to -20% depends on the specification
Alberola et al. (1999)	PEER	– Productivity (indirect) – Net foreign assets	USD, end-1998 effective, end 1998	USD/€ 1.26 effective: -4.5%
Hansen, Roeger (2000)	PEER	– Productivity (indirect) – Net foreign assets	effective, 1999 Q3	Around -15%
Stein (2001)	NATREX	– Time preference (consumption to GDP) – Productivity (direct) – Rate of return on investment	USD, 2001 Q1	USD/€ 1.17
Duval (2001)	NATREX	– Interest rate differential – Productivity (direct) – Savings rate	USD, 2000 Q3	USD/€ 1.15

Study	Methodology	Fundamentals	Reference currency and period	“Equilibrium” rate or under(-)/over(+) valuation
Structural approaches				
Wren-Lewis and Driver (1998)	FEER	Internal and External balance	USD, 2000	USD/€ 1.19 - 1.45
Borowski and Couharde (2000)	FEER		USD, effective first half of 1999	USD/€ 1.23 - 1.31 effective: -10%
IMF (2000)	Saving-investment approach		USD, summer 2000	USD/€: -30% or more
			effective, summer 2000	-10 to -20%
Detken et al. (2000)	Various models		effective, end 1999	-3.5 to -30%
Detken and Marin-Martinez (2001)	NATREX (structural)		effective, end-1999	Around -25%

Alberola, E., S. G. Cervero, H. Lopez and A. Ubide (1999) “Global equilibrium exchange rates: euro, dollar, “ins”, “outs” and other major currencies in a panel cointegration framework”, IMF Working Paper, 175. Borowski, D. and C. Couharde (2000) “Euro, dollar, yen; pour une approche multilatérale des taux des change d’équilibre” in *Revue Economique*, 51, 3, 671-680. Chinn, M. and R. Alquist (2000) “Tracking the Euro’s Progress”, in *International Finance*, 3, 3, 357-373. Clostermann, J. and B. Schnatz (2000) “The determinants of the euro-dollar exchange rate: synthetic fundamentals and a non-existing currency”, in *Konjunkturpolitik/Applied Economics Quarterly*, 46, 3, 274-302. Detken, C., A. Dieppe, J. Henry, C. Marin and F. Smets (2000) “Determinants of the effective real exchange rate of the synthetic euro: alternative methodological approaches”, mimeo, ECB, Frankfurt am Main. Detken, C. and C. Marin-Martinez (2001), “The effective euro equilibrium exchange rate since the 70’s: a structural Natrex estimation, mimeo, ECB, Frankfurt. Duval, R. (2000), “Estimation du taux de change reel d’équilibre de long term euro/dollar par une approche dynamique synthétique”, mimeo, Université Paris-I Pantheon. Gern, K.-J., C. Kamps, C. P. Meier, and J. Scheide (2000) “Euroland: peak of the upswing – little evidence of a new economy, Kiel Discussion Papers 369, Kiel. Hansen J. and W. Roeger (2000) “Estimation of real equilibrium exchange rates”, *European Commission Economic Papers*, 144. International Monetary Fund (2000) “Staff Report on the Monetary and Exchange Rate Policies of the Euro Area”; Staff Country Report No. 00/146, Washington D. C. Koen, V., L. Boone, A. de Serres, N. Fuchs (2001) “Tracking the euro”, *OECD Economics Department Working Paper No. 24/2001*. Lorenzen, H. P. and N. Thygesen (2000) “The relation between the euro and the dollar”, paper presented at the EPRU Conference, Copenhagen. Maeso-Fernandez, F., C. Osbat, and B. Schnatz (2001) “Determinants of the euro real effective exchange rate,” *ECB Working Paper No. 85*, Frankfurt am Main. Stein, J. (2001) “The equilibrium value of the euro/\$US exchange rate: an evaluation of research”, *CESifo Working Paper No. 525*, Munich. Teiletche, J. (2000) “La parité/dollar durant les décennies 80 et 90: peut-on trouver une spécification raisonnable et à quel horizon?”, mimeo. van Aarle, B., M. Boss, and J. Hlouskova (2000) “Forecasting the euro exchange rate using vector error correction models”, in *Weltwirtschaftliches Archiv/Review of World Economics*, 136, 2, 232-258. Wren-Lewis, S. and R. Driver (1998) “Real exchange rates for the year 2000”, *Institute for International Economics, Policy Analyses in International Economics*.

the approaches reviewed here have important drawbacks, partly reflecting the inherent difficulty of modelling exchange rate behaviour. Apart from the lack of consensus on the appropriate concept of the “equilibrium exchange rate”, even models belonging to the same category often send conflicting signals, not only with respect to the magnitude, but also with regard to the direction of the perceived divergence from equilibrium.

However, in the few periods when the vast majority of different models indicate a

deviation from “equilibrium” in the same direction, they may support, at least qualitatively, the judgement that the exchange rate was not in line with economic fundamentals. As early as the second half of 1999, the vast majority of these empirical applications recorded some negative deviation of the actual exchange rate of the euro from its measured “equilibrium exchange rate” derived from fundamentals-based models. This assessment was consolidated during 2000, and in autumn 2000 virtually all the models surveyed indicated that exchange rates had moved out of line with

fundamentals. Accordingly, all the models taken together encompass useful information, so that any assessment of, and statement on, the level of exchange rates should initially build to some extent on such a broad-based multi-approach analysis. However, the range of the available estimates – not to mention the additional statistical uncertainty surrounding the estimates in the econometric approaches and the sensitivity of the results to changes in the underlying assumptions in the more structural approaches – precludes any quantitative derivation of the precise extent of the suggested “undervaluation” at that time. No studies have been published that assess these recent developments in terms of exchange rate “equilibria” for 2001.

Another drawback to these approaches is that the models are based on time-series analysis, and thus identify empirical relationships between fundamentals and the exchange rate based on past experience. If

factors which were irrelevant in the past have affected recent exchange rate trends, they could be recognised in such a framework only with a significant delay. Correspondingly, regime shifts or structural breaks in the relationships can also be detected empirically only after some time has passed. In the literature, several other factors relating to more institutional changes brought about by the advent of EMU have been claimed to have an influence on the euro exchange rate. For instance, autonomous sources of portfolio shifts not directly related to macroeconomic data, such as the deepening of the European bond market and the relaxation of regulatory constraints on the asset allocation of institutional investors, could be relevant in this connection. While it cannot be excluded that all these changes in the institutional environment have had an effect on recent exchange rate developments, their magnitude is impossible to quantify at this juncture.

4 Conclusions

In the light of the most relevant theoretical approaches, this article has discussed the potential effects on exchange rates of differentials in inflation performance, (real) interest rates and productivity, as well as the impact of fiscal variables, terms-of-trade shocks, the current account balance and the net foreign asset position. Since explanations for exchange rate developments built on single variables only are not likely to be successful, a number of studies identify an association between trends in exchange rates and several economic fundamentals. However, using these approaches, it is difficult to give a precise figure to what could be considered the “appropriate” level of an exchange rate. In spite of this, the approaches discussed in the article are of interest for the policy maker, as they may support an explanation of exchange rate trends and – in exceptional cases – a qualitative judgement on the position of the exchange rate with regard to developments in economic fundamentals.

Given the wide range of available estimates and the statistical uncertainty surrounding them, the issue of the magnitude of exchange rate overvaluation and undervaluation remains to a large extent a matter of judgement. In addition, it cannot be ruled out that actual exchange rate trends have been driven by factors which are not included in fundamentals-based models, or that recent developments are subject to a structural break or regime changes in the institutional environment. If such changes were believed to be under way, this would point to an even greater degree of uncertainty surrounding estimates of a “fair value” for the euro, as their quantitative impact on the exchange rate as well as the extent to which they are of a permanent or transitory nature is highly uncertain. Assuming the absence of major structural breaks in the underlying relationships, virtually all the models surveyed suggested an undervaluation of the euro in autumn 2000, thereby supporting the qualitative judgement that exchange rates had moved out of line with fundamentals.

Euro banknote preparations: from cash changeover to post-launch activities

The cash changeover on 1 January 2002 was a tremendous event in the history of Europe and will herald a new era, both for the users of euro banknotes and coins and for those responsible for providing the people of Europe with their currency.

Work on the cash changeover on 1 January 2002 has now past its peak, so preparations are under way for the post-launch period. There are new challenges: common banknotes are now circulating throughout the euro area, new banknotes will need to be produced, anti-counterfeit operations will need to be consolidated and business processes to be changed. The ECB continues to be a central controlling and monitoring body which focuses on the sound management of both the production and circulation of banknotes.

I The pre-launch production phase

Production programme

A decentralised approach was taken to the production of the initial supply of euro banknotes. Each national central bank (NCB) was responsible for procuring banknotes to meet its national requirements. The final quantity needed for the launch amounted to around 15 billion banknotes, with a denomination breakdown as shown below. This amounts to a total face value of around €635 billion. Of the 15 billion, less than 10 billion will replace national banknotes and the remainder will serve as logistical stocks. The main objective – to ensure the required quantity of banknotes was produced to the specified quality standards in time for the launch on 1 January 2002 – was achieved.

Table

Denomination breakdown

(as a percentage of the total)

€5	€10	€20	€50	€100	€200	€500
21.5	21.7	22.7	21.9	8.2	1.5	2.5

Starting in July 1999, production at the printing works was regularly stepped up, attaining a peak output of over 1 billion banknotes per month in the summer and autumn of 2001. Output was then scaled down during the remainder of 2001.

A total of 15 printing works have produced the euro banknotes with, roughly speaking, one in each participating Member State (except for

Luxembourg). France has two plants and Germany three. One printing plant in the United Kingdom was also involved. Nine paper mills have manufactured the banknote paper. Including the printing works and paper mills, around 40 suppliers and sub-suppliers of raw materials have played a part in the euro banknote production. The NCBs have tracked the orders that they placed with their designated printing works, while the ECB has been co-ordinating, supporting and supervising operations at the production sites involved. The sites are shown on the map overleaf.

The ECB has closely monitored progress throughout the production phase at all the printing works, in terms of both quality and quantity. In co-operation with the NCBs, the ECB has evaluated the reference standards achieved by each plant and then authorised the start of each of the main steps in the production process. Production standards and processes have been progressively upgraded: the technical specifications have been fine-tuned during start-up and the acceptance mechanisms for the banknote production lots have been steadily refined.

The ECB has also designed and supported the implementation of a common Quality Management System, in accordance with the provisions of the ISO 9000 quality standards, and regularly audited this system.

Security audits of all sensitive materials continue to be performed at all of the manufacturing sites in order to ensure high

security standards for the production, transportation and storage of sensitive raw materials, semi-finished and finished banknotes.

The manufacturers of cash-handling machines also have a special interest in the quality standards of euro banknotes. Together with the ECB, they have participated in an extensive testing programme to help them adjust their sensors and equipment to the new banknotes. They have tested euro banknotes from all production sites, and the tests were successfully concluded during the final stages of the production programme.

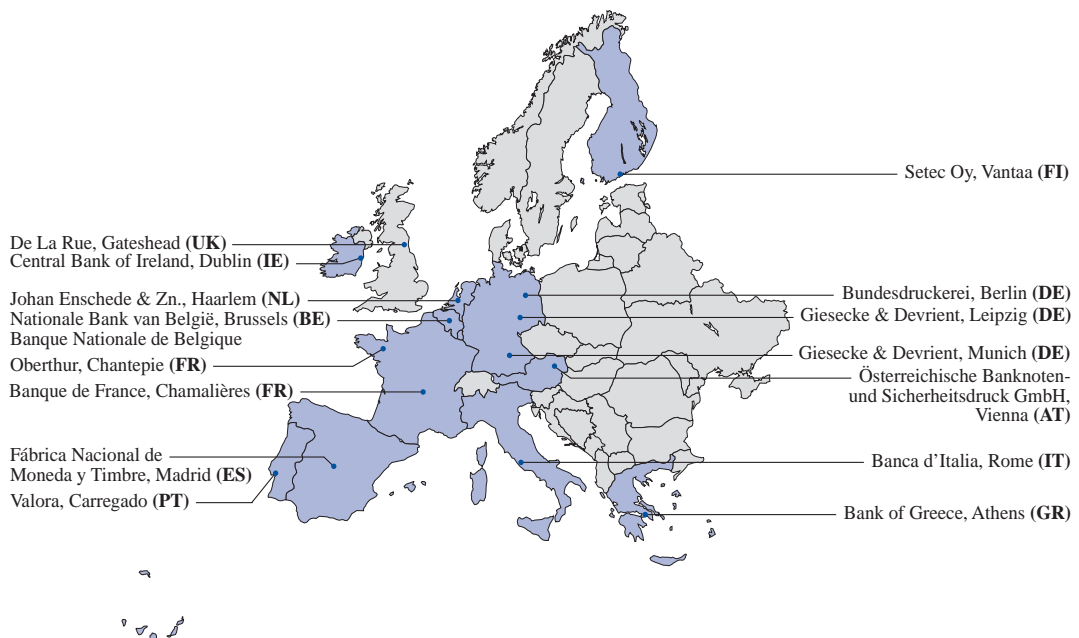
Central Reserve Stock of banknotes

In early 2001 the ECB decided to establish a Central Reserve Stock (CRS) of euro

banknotes as part of a risk reduction strategy. Two major risks were identified: i) that, on account of unforeseen circumstances, the system might not be able to deliver the required volumes, to specification, on time, and ii) that the actual demand for some denominations could be higher than expected. The CRS has been produced in addition to the total launch volume and comprises about 10% of that quantity.

The same production standards have been applied to the CRS as to the rest of the euro banknote production. Banknotes from this stock have already been used to meet additional commercial bank requirements during frontloading, and will help the launch phase to proceed smoothly if demand is higher than expected during the first few months of 2002.

Chart Location of printing works producing the euro banknotes



2 The post-launch production phase

Production volumes for 2002

Having circulated for a while, the euro banknotes will be returned at intervals by credit institutions to the national central banks. The NCBs will sort them and check their authenticity and quality, in order to decide whether they can be recirculated, thus ensuring a clean banknote circulation. In the post-launch phase, it is estimated that about 4.8 billion new banknotes will be required in 2002 to replace banknotes that will be withdrawn from circulation. Thus, banknote production requirements are much lower in 2002 than in 2001. This replacement volume is an operational requirement, but there will also be a need for strategic stocks to cover risks such as an unexpected demand for a particular denomination or an interruption of banknote supply for any reason. The banknotes for the strategic stocks will also be produced during 2002, although the quantity cannot be ascertained until after an initial period of circulation, when the actual demand for banknotes will be known.

Decentralised pooling

The production arrangements for 2002 were planned well in advance to ensure continuity of supply, which is vital in the post-launch period. These arrangements needed, and still need, to take into account both changes in demand and optimum use of the banknote printing facilities. The Governing Council of the ECB has therefore decided that, for 2002, production will take place on a decentralised pooling basis: each denomination will be supplied by a small number of printing works (maximum of four) and each NCB will be responsible for procuring no more than two denominations.

Clearly, a decentralised pooling system offers advantages:

- it enables the Eurosystem to benefit from economies of scale in banknote

production. This is particularly important for the higher denominations, which are required in lower volumes and are inherently more expensive to produce;

- it helps to ensure a supply of consistent-quality banknotes by reducing the number of production sites for each denomination.

The role of the ECB in this respect is to ensure the functioning of the system and to make sure that supply and demand are matched throughout the year. Furthermore, it is expected that, in the light of circulation experience, the NCBs will probably revise their requirements. This is likely to occur in those countries where the values of the euro banknote denominations deviate from those of the former national banknotes; it is difficult to predict how cash usage habits will develop there.

Production process evolution

In line with best-practice industrial production, a management system has been established that covers technical design, quality control, as well as product testing and validation processes of the euro banknotes. This will ensure improvement of their overall quality and homogeneity. The launch production experience will be used as a benchmark and the technical specifications of all seven denominations will be continuously reviewed, with the results being fed back to the production sites.

The quality management systems set up at the printing works and the raw material suppliers will continue to ensure the high visual and technical consistency of the euro banknotes. An extensive auditing programme has been developed for 2002 to permit the timely and efficient introduction of any necessary improvements in the production process. It will also ensure that the continuing development of all of the printing works and suppliers takes place in a co-ordinated manner.

3 Anti-counterfeiting arrangements

Decentralised approach

The decision taken by the Governing Council of the ECB in October 1998 on the handling of counterfeit euro banknotes and coins is in the spirit of “think global, act local” and has resulted in a decentralised but co-ordinated network of counterfeit monitoring centres covering all the Member States of the European Union.

“Think global” means that all the information on counterfeiting in the different Member States should be placed in a single database and that the information should follow common standards to ensure homogeneity. For that reason, all the information on euro counterfeiting will be collected by a single monitoring network and stored in one central database. This database will contain information on both banknotes and coins and will be accessible to authorised users on a need-to-know basis.

“Act local” has the advantages of proximity to the event, which guarantees that the information gathered is timely and not distorted by long communication channels. In this network, information is gathered in a decentralised way in each of the 15 Member States of the European Union. Similarly, law enforcement operations are executed by the national police, but co-ordinated at European level by Europol when they affect more than one country. Similar arrangements have been set up for counterfeit coins.

The central database containing information on euro counterfeiting is now in operation. The National Analysis Centres located in each of the Member States of the European Union enter the data on any euro counterfeit banknotes detected in their countries. They

will also classify the known euro counterfeit types according to their characteristics.

The Counterfeit Analysis Centre (CAC), located at the ECB, will receive the counterfeits that are new and thus unclassified. These new types will be categorised and analysed at the ECB before a detailed technical description of the new counterfeit class is drawn up. The resulting technical data will be entered into the database together with the classification, which will be attributed to the counterfeit for identification purposes. Further counterfeits of the same type can be identified by comparing them with the detailed description contained in the database.

Agreements with Europol and other institutions

The ECB and Europol have signed a co-operation agreement which entails an exchange of the information required by each in order to perform its respective anti-counterfeiting duties. This exchange of information is complemented by mutual assistance and the provision of technical expertise or evidence in judicial proceedings with regard to counterfeiting.

Steps to combat euro banknote counterfeiting include the setting-up of the necessary arrangements within the EU Member States. However, since the euro will become a global currency and will circulate as non-legal, but readily accepted, tender in many other countries, measures have also been taken outside the European Union. Interpol will, for example, forward to the ECB for analysis euro counterfeits it has received from all over the world. Clearly, all arrangements of this type will be consolidated during the post-launch period.

4 Infrastructure changes

For nearly ten years, the preparations for the euro banknotes have moved forward, from the conception of the banknotes through to the launch, on the basis of a series of projects. This project stream has now achieved its ultimate goal and in the subsequent period of change the operating methodology has begun to switch to a “business as usual” mode.

A vital part of “business as usual” is continuous improvement. To achieve this, it is important to obtain feedback from banknote users, i.e. from the general public, professional banknote handlers and from the cash centres of banks and the NCBs. A customer feedback system has been developed to collect, analyse and then

redistribute information obtained from banknote users. The information will feed into production improvements and into the design of future euro banknotes. This system will ensure that any opportunities for improvement will be seized at the earliest moment.

In the post-launch period there will be other information streams in addition to user feedback, such as ongoing production, circulation, technological progress and counterfeiting information. The “business as usual” environment will be promoted and enhanced in order to capitalise on the benefits deriving from the information available.



Euro area statistics



Contents

	Euro area overview table	5*
I	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 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*

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	20.8	4.40	5.44
<i>Euro area enlargement</i>								
2001	.	.	.	-	.	.	4.26	5.03
2001 Q1	2.6	3.0	3.8	-	9.1	23.8	4.75	4.99
Q2	2.4	3.4	4.3	-	8.2	26.1	4.60	5.19
Q3	3.9	4.5	5.9	-	7.4	26.5	4.28	5.12
Q4	.	.	.	-	.	.	3.45	4.81
2001 July	3.6	4.4	5.7	5.7	7.8	26.6	4.47	5.25
Aug.	3.7	4.3	5.9	6.1	7.2	26.4	4.35	5.06
Sep.	5.1	5.1	6.8	6.7	6.7	26.4	3.98	5.04
Oct.	5.3	5.4	7.4	7.4	6.5	24.4	3.60	4.82
Nov.	6.1	5.9	8.0	.	6.6	.	3.39	4.67
Dec.	.	.	.	.	.	.	3.34	4.96

2. Price and real economy developments

	HICP	Industrial producer prices	Hourly labour costs (whole economy)	Real GDP	Industrial production (excluding construction)	Capacity utilisation in manufacturing (percentages)	Employment (whole economy)	Unemployment (% of labour force)
	9	10	11	12	13	14	15	16
2000	2.3	5.5	3.3	3.4	5.5	83.8	2.1	8.9
<i>Euro area enlargement</i>								
2001	.	.	.	.	.	83.2	.	.
2001 Q1	2.5	4.6	3.1	2.5	4.2	84.4	1.9	8.5
Q2	3.1	3.7	3.0	1.6	0.9	83.6	1.6	8.4
Q3	2.7	1.5	3.1	1.4	-0.5	83.0	1.3	8.4
Q4	.	.	.	.	.	81.9	.	.
2001 July	2.8	2.1	-	-	-1.4	-	-	8.4
Aug.	2.7	1.7	-	-	0.9	-	-	8.4
Sep.	2.5	0.7	-	-	-0.7	-	-	8.5
Oct.	2.4	-0.7	-	-	-2.3	-	-	8.5
Nov.	2.1	-1.3	-	-	.	-	-	8.5
Dec.	2.0	.	-	-	.	-	-	.

3. Balance of payments, reserve assets and exchange rates

(EUR billions, unless otherwise indicated)

	Balance of payments (net flows)				Reserve assets (end-of-period positions)	Effective exchange rate of the euro: broad group (1999 Q1 = 100)		USD/EUR exchange rate
	Current and capital accounts	Goods	Direct investment	Portfolio investment		Nominal	Real (CPI)	
2000	-50.2	35.6	17.6	-111.5	378.0	88.2	86.3	0.924
<i>Euro area enlargement</i>								
2001	.	.	.	.	.	91.0	88.1	0.896
2001 Q1	-7.6	5.5	-40.6	-38.5	393.0	91.4	89.0	0.923
Q2	-7.8	15.1	-50.5	27.8	410.0	89.5	86.9	0.873
Q3	-0.2	19.4	-11.9	62.5	393.4	91.2	88.2	0.890
Q4	.	.	.	.	.	92.0	88.4	0.896
2001 July	-3.7	8.5	7.2	1.6	397.1	89.1	86.3	0.861
Aug.	4.8	6.0	-6.0	17.8	381.8	91.8	88.9	0.900
Sep.	-1.2	5.0	-13.1	43.0	393.4	92.6	89.4	0.911
Oct.	0.5	9.6	5.3	0.3	393.6	92.8	89.4	0.906
Nov.	.	.	.	.	396.5	91.3	87.7	0.888
Dec.	.	.	.	.	.	91.9	88.1	0.892

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
2001 17 Aug.	128,312	277,745	22,700	5,401	221,065	160,998	60,001	0
24	128,312	277,546	21,909	5,369	213,062	153,001	60,001	0
31	128,302	275,419	24,783	5,289	213,483	152,999	60,001	0
7 Sep.	128,268	274,275	24,166	5,419	212,066	152,000	60,001	0
14	128,229	274,508	21,487	5,316	206,078	142,999	60,001	0
21	128,229	272,731	22,101	5,264	192,542	132,000	60,001	0
28	128,236	262,282	22,121	5,171	213,410	151,999	60,002	0
5 Oct.	128,236	260,738	21,750	5,134	197,093	136,999	60,002	0
12	128,235	263,821	21,573	5,353	176,542	116,509	60,004	0
19	128,235	264,640	22,147	5,539	203,189	142,510	60,004	0
26	128,234	264,955	21,503	5,582	203,107	143,000	60,001	0
2 Nov.	128,233	264,162	21,770	5,728	187,030	127,001	60,001	0
9	128,233	262,142	21,932	5,895	164,621	104,368	60,001	0
16	128,233	262,623	21,311	5,942	214,783	154,369	60,001	0
23	128,233	264,958	20,997	5,980	193,762	133,002	60,001	0
30	128,233	264,230	21,900	5,956	201,288	88,001	60,001	0
7 Dec.	128,228	266,093	21,572	6,040	199,026	139,001	60,001	0
14	128,228	264,143	23,388	5,823	194,462	134,001	60,001	0
21	128,227	263,756	22,269	5,699	186,228	123,000	60,000	0
28	126,801	264,607	25,200	5,736	203,597	142,000	60,000	0
2002 4 Jan.	126,801	265,809	23,862	6,280	201,109	116,000	60,000	25,000
11	126,801	266,160	23,154	6,413	174,073	114,000	60,000	0

2. Liabilities

	Banknotes in circulation	Liabilities to euro area credit institutions in euro	Current accounts (covering the minimum reserve system)	Deposit facility	Fixed-term deposits	Fine-tuning reverse operations	Deposits related to margin calls	Other liabilities to euro area credit institutions in euro	Debt certificates issued
	1	2	3	4	5	6	7	8	9
2001 17 Aug.	345,581	129,735	129,687	46	0	0	2	4,162	3,784
24	338,873	125,018	124,998	18	0	0	2	4,119	3,784
31	337,682	118,781	118,722	55	0	0	4	4,164	3,784
7 Sep.	338,188	127,999	127,948	34	0	0	17	4,843	3,784
14	334,283	114,049	113,892	143	0	0	14	4,922	3,784
21	329,229	118,922	115,501	3,405	0	0	16	4,934	3,784
28	327,899	131,745	131,705	39	0	0	1	4,802	3,784
5 Oct.	329,095	120,574	120,452	109	0	0	13	5,160	3,784
12	325,194	104,993	104,828	153	0	0	12	5,470	3,784
19	319,984	143,582	143,444	126	0	0	12	5,512	3,784
26	315,159	129,632	129,591	29	0	0	12	5,680	3,784
2 Nov.	316,956	124,952	124,830	110	0	0	12	5,829	2,939
9	312,642	103,687	103,581	94	0	0	12	9,165	2,939
16	306,770	150,156	149,826	311	0	0	19	12,969	2,939
23	300,526	115,953	114,745	1,152	0	0	56	16,850	2,939
30	300,093	131,734	131,577	152	0	0	5	21,096	2,939
7 Dec.	302,095	117,849	117,792	51	0	0	6	24,217	2,939
14	296,918	130,282	130,010	263	0	0	9	27,447	2,939
21	292,780	126,867	120,378	6,485	0	0	4	29,604	2,939
28	278,110	142,595	142,126	465	0	0	4	34,757	2,939
2002 4 Jan.	394,627	131,467	131,338	121	0	0	8	23,657	2,939
11	375,052	129,061	128,927	130	0	0	4	23,771	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	
0	9	57	249	28,280	70,157	86,693	840,603	2001 17 Aug.
0	25	35	260	28,325	70,157	87,419	832,360	24
0	437	46	252	28,371	70,160	87,329	833,389	31
0	43	22	320	28,286	70,160	85,090	828,051	7 Sep.
0	3,060	18	380	28,349	70,160	86,182	820,690	14
0	519	22	387	28,303	70,160	86,387	806,105	21
0	1,373	36	446	28,715	70,163	86,819	817,364	28
0	10	82	294	28,734	70,163	86,708	798,851	5 Oct.
0	12	17	793	28,293	70,166	87,307	782,084	12
0	632	43	830	28,123	70,166	87,569	810,439	19
0	72	34	418	28,371	70,171	87,654	809,996	26
0	3	25	397	28,498	70,171	89,664	795,654	2 Nov.
0	228	24	458	28,464	70,085	90,152	771,984	9
0	393	20	399	28,203	70,085	89,923	821,504	16
0	741	18	525	28,178	70,075	89,781	802,491	23
53,000	276	10	499	28,273	70,088	90,221	810,690	30
0	12	12	421	28,113	70,102	90,264	809,860	7 Dec.
0	454	6	419	28,180	70,000	90,907	805,551	14
0	3,199	29	404	28,210	69,599	91,039	795,432	21
0	1,573	24	487	27,981	68,729	91,523	814,662	28
0	30	79	88,488	27,924	68,603	90,355	899,232	2002 4 Jan.
0	65	8	88,487	27,847	68,611	90,554	872,101	11

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	
51,485	8,466	4,138	15,369	7,183	68,901	141,340	60,459	840,603	2001 17 Aug.
54,847	8,543	3,986	14,679	7,183	69,528	141,340	60,460	832,360	24
62,840	8,459	3,982	15,649	7,183	69,065	141,340	60,460	833,389	31
47,863	8,489	3,978	14,669	7,183	69,255	141,340	60,460	828,051	7 Sep.
49,858	18,713	3,904	12,407	7,183	69,787	141,340	60,460	820,690	14
45,858	9,040	3,941	11,289	7,183	70,123	141,340	60,462	806,105	21
55,876	8,507	2,485	16,349	6,889	73,585	124,991	60,452	817,364	28
49,116	8,225	2,497	14,560	6,889	73,508	124,991	60,452	798,851	5 Oct.
48,132	8,835	2,440	17,391	6,889	73,513	124,991	60,452	782,084	12
40,613	8,495	2,444	19,392	6,889	74,301	124,991	60,452	810,439	19
58,830	8,642	2,475	19,623	6,889	73,839	124,991	60,452	809,996	26
48,019	8,651	2,432	19,477	6,889	74,067	124,991	60,452	795,654	2 Nov.
47,322	8,711	2,433	18,355	6,889	74,397	124,991	60,453	771,984	9
51,757	8,676	2,429	18,082	6,889	75,393	124,991	60,453	821,504	16
67,049	8,460	2,427	20,730	6,889	75,224	124,991	60,453	802,491	23
54,422	8,580	2,524	21,215	6,889	75,754	124,991	60,453	810,690	30
60,080	9,019	2,506	22,848	6,889	75,974	124,991	60,453	809,860	7 Dec.
44,885	9,172	2,410	22,900	6,889	76,264	124,991	60,454	805,551	14
40,300	9,481	2,412	21,389	6,889	77,326	124,991	60,454	795,432	21
50,902	9,446	2,525	20,458	6,967	78,073	125,309	62,581	814,662	28
39,193	10,860	2,670	20,807	6,967	77,594	125,288	63,164	899,232	2002 4 Jan.
36,511	8,471	2,716	20,675	6,967	77,448	125,318	63,173	872,101	11

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

With effect from ¹⁾	Deposit facility		Main refinancing operations			Marginal lending facility	
			Fixed rate tenders	Variable rate tenders			
	Level 1	Change 2	Fixed rate	Minimum bid rate	Change 5	Level 6	Change 7
			Level 3	Level 4			
1999 1 Jan.	2.00	-	3.00	-	-	4.50	-
4 ²⁾	2.75	0.75	3.00	-	...	3.25	-1.25
22	2.00	-0.75	3.00	-	...	4.50	1.25
9 Apr.	1.50	-0.50	2.50	-	-0.50	3.50	-1.00
5 Nov.	2.00	0.50	3.00	-	0.50	4.00	0.50
2000 4 Feb.	2.25	0.25	3.25	-	0.25	4.25	0.25
17 Mar.	2.50	0.25	3.50	-	0.25	4.50	0.25
28 Apr.	2.75	0.25	3.75	-	0.25	4.75	0.25
9 June	3.25	0.50	4.25	-	0.50	5.25	0.50
28 ³⁾	3.25	...	-	4.25	...	5.25	...
1 Sep.	3.50	0.25	-	4.50	0.25	5.50	0.25
6 Oct.	3.75	0.25	-	4.75	0.25	5.75	0.25
<i>Euro area enlargement</i>							
2001 11 May	3.50	-0.25	-	4.50	-0.25	5.50	-0.25
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 ⁷
			Fixed rate	Minimum bid rate	Marginal rate ³⁾	Weighted average rate ⁶⁾	
	1	2	3	4	5	6	7
2001 4 July	104,399	81,000	-	4.50	4.50	4.51	14
11	141,842	73,000	-	4.50	4.51	4.52	14
18	136,104	79,000	-	4.50	4.51	4.52	14
25	126,040	94,000	-	4.50	4.51	4.52	14
1 Aug.	100,746	71,000	-	4.50	4.50	4.51	14
8	132,809	91,000	-	4.50	4.50	4.51	14
15	111,157	70,000	-	4.50	4.50	4.51	14
22	142,012	83,000	-	4.50	4.50	4.51	14
29	72,907	70,000	-	4.50	4.50	4.50	14
5 Sep.	132,696	82,000	-	4.25	4.27	4.28	14
12	118,708	61,000	-	4.25	4.26	4.27	14
19	110,778	71,000	-	3.75	3.76	3.77	14
26	111,927	81,000	-	3.75	3.76	3.77	14
3 Oct.	76,444	56,000	-	3.75	3.75	3.76	14
10	60,510	60,510	-	3.75	3.75	3.75	14
17	143,828	82,000	-	3.75	3.78	3.79	14
24	73,932	61,000	-	3.75	3.75	3.76	14
31	99,611	66,000	-	3.75	3.75	3.76	14
7 Nov.	38,368	38,368	-	3.75	3.75	3.75	14
14	174,732	116,000	-	3.25	3.37	3.40	14
21	63,173	17,000	-	3.25	3.26	3.27	14
28	95,578	71,000	-	3.25	3.27	3.29	14
5 Dec.	106,643	68,000	-	3.25	3.27	3.27	14
12	109,662	66,000	-	3.25	3.27	3.27	16
19	140,810	57,000	-	3.25	3.43	3.46	14
28	105,649	85,000	-	3.25	3.45	3.52	12
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

2. Longer-term refinancing operations

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

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
2000 Nov. ³⁾	10,074.5	5,653.4	130.0	199.9	1,282.2	561.5	2,247.6
Dec. ³⁾	10,071.5	5,711.3	136.7	187.2	1,273.6	528.3	2,234.3
<i>Euro area enlargement</i>							
2001 Jan.	10,164.2	5,712.6	139.2	196.7	1,275.6	574.6	2,265.6
Feb.	10,247.4	5,724.4	145.3	201.2	1,284.7	597.8	2,294.0
Mar.	10,503.6	5,883.5	151.1	203.4	1,292.6	654.7	2,318.3
Apr.	10,554.6	5,924.3	154.5	202.8	1,292.1	657.7	2,323.2
May	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. ⁴⁾	10,795.3	6,071.6	198.9	191.3	1,299.4	656.4	2,377.7

Source: ECB.

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

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

Maintenance period ending in:	Required reserves ²⁾	Actual reserves ³⁾	Excess reserves ⁴⁾	Deficiencies ⁵⁾	Interest rate on minimum reserves ⁶⁾
	1	2	3	4	5
2001 Jan. ⁷⁾	118.5	119.0	0.5	0.0	4.77
Feb.	120.1	120.6	0.5	0.0	4.76
Mar.	120.4	120.9	0.5	0.0	4.77
Apr.	120.8	121.3	0.5	0.0	4.77
May	124.2	124.8	0.7	0.0	4.71
June	125.0	125.6	0.6	0.0	4.52
July	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. ⁴⁾	128.7	.	.	.	.

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

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

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

Source: ECB.

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

2 Monetary developments in the euro area

Table 2.1

Aggregated balance sheet of the Eurosystem

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

1. Assets

	Loans to euro area residents				Holdings of securities other than shares issued by euro area residents				Holdings of shares/other equity issued by euro area residents			External assets ¹⁾	Fixed assets	Re-maining assets	Total
	1	MFIs ¹⁾	General government	Other euro area residents	5	MFIs	General government	Other euro area residents	9	MFIs	Other euro area residents				
1998	225.2	204.6	20.4	0.1	87.8	1.1	86.2	0.5	5.5	1.8	3.7	322.3	7.9	49.4	698.1
1999 Q4	444.6	424.3	19.7	0.5	89.1	1.9	86.1	1.1	14.1	4.3	9.8	400.6	9.9	56.2	1,014.5
2000 Q1	443.4	424.5	18.4	0.5	96.2	2.4	92.7	1.1	14.4	4.3	10.1	439.1	9.8	48.9	1,051.9
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
2000 Nov.	431.5	412.8	18.2	0.5	98.8	2.6	94.9	1.4	15.4	4.4	11.1	402.8	10.3	54.3	1,013.0
Dec.	445.0	427.4	17.1	0.5	97.4	2.5	93.6	1.3	15.3	4.3	11.0	380.7	11.2	56.1	1,005.8
<i>Euro area enlargement</i>															
2001 1 Jan.	457.0	429.3	27.1	0.6	105.3	2.5	101.4	1.3	15.3	4.3	11.0	394.2	11.3	57.4	1,040.4
2001 Jan.	401.5	373.7	27.2	0.6	104.5	2.6	100.8	1.0	15.5	4.7	10.8	390.4	11.4	54.0	977.4
Feb.	398.8	371.0	27.2	0.6	105.2	2.5	101.5	1.2	14.9	4.6	10.3	386.2	11.3	53.7	970.1
Mar.	401.7	373.9	27.2	0.6	105.0	2.7	101.2	1.1	14.7	4.6	10.1	396.8	11.3	54.4	983.9
Apr.	376.1	348.3	27.2	0.6	106.5	2.6	102.7	1.3	14.7	4.6	10.1	390.3	11.7	53.6	953.0
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	983.2
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	396.9	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. ^(p)	370.1	342.4	27.1	0.6	107.3	3.8	102.2	1.2	13.6	4.7	8.9	400.4	12.1	55.0	958.4

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
			3	4	5							
1998	359.1	152.0	94.2	54.4	3.5	13.8	97.1	18.6	57.4	698.1		
1999 Q4	393.4	341.5	279.3	53.4	8.8	7.9	174.3	49.8	47.6	1,014.5		
2000 Q1	366.2	372.1	319.8	43.1	9.1	6.3	186.5	75.1	45.7	1,051.9		
Q2	374.4	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		
2000 Nov.	372.3	334.6	265.6	54.9	14.0	3.8	221.4	29.3	51.7	1,013.0		
Dec.	390.3	327.3	270.4	47.1	9.8	3.8	197.5	29.9	57.0	1,005.8		
<i>Euro area enlargement</i>												
2001 1 Jan.	399.4	346.2	288.0	47.9	10.4	5.6	199.2	30.9	59.1	1,040.4		
2001 Jan.	373.2	313.3	250.9	51.5	10.9	5.5	196.8	30.6	58.0	977.4		
Feb.	370.6	313.1	249.7	52.0	11.4	5.5	194.8	27.9	58.3	970.1		
Mar.	370.6	312.6	253.4	46.8	12.4	5.5	204.6	26.8	63.8	983.9		
Apr.	372.6	289.9	234.8	41.2	13.8	5.5	205.6	25.3	54.1	953.0		
May	369.6	317.5	266.5	36.0	15.1	5.5	212.1	27.6	50.9	983.2		
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. ^(p)	317.5	330.4	277.5	35.2	17.6	4.7	210.1	35.2	60.6	958.4		

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

	Loans to euro area residents			Holdings of securities other than shares issued by euro area residents			Holdings of shares/ other equity issued by other euro area residents	External assets ²⁾	Fixed assets	Remaining assets	Total
	1	2	3	4	5	6					
2000 May	6,615.0	835.9	5,779.1	1,432.0	1,187.9	244.1	535.9	2,355.1	163.0	1,035.9	12,136.9
June	6,681.9	835.6	5,846.3	1,411.0	1,166.8	244.2	504.4	2,346.9	164.2	1,041.3	12,149.6
July	6,708.5	833.9	5,874.6	1,393.1	1,140.7	252.4	509.0	2,374.1	164.9	1,086.5	12,236.1
Aug.	6,715.1	822.0	5,893.1	1,385.2	1,128.6	256.6	510.7	2,419.6	165.2	1,127.2	12,323.1
Sep.	6,796.6	818.1	5,978.5	1,386.6	1,128.4	258.2	513.8	2,462.5	166.0	1,054.9	12,380.3
Oct.	6,841.4	820.0	6,021.4	1,379.8	1,115.5	264.3	514.0	2,515.0	168.0	1,119.0	12,537.3
Nov.	6,883.7	827.0	6,056.7	1,375.9	1,112.2	263.7	515.8	2,487.9	167.7	1,068.0	12,499.1
Dec.	6,926.6	835.9	6,090.7	1,354.6	1,089.4	265.1	521.7	2,406.4	169.9	1,028.8	12,408.0
<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.	7,043.1	858.1	6,185.0	1,416.2	1,145.6	270.6	542.8	2,462.9	171.8	1,083.0	12,719.8
Feb.	7,056.1	849.9	6,206.2	1,435.7	1,156.1	279.6	549.8	2,483.5	172.3	1,072.0	12,769.3
Mar.	7,125.7	852.6	6,273.1	1,452.7	1,165.2	287.6	567.3	2,636.6	172.0	1,116.5	13,070.9
Apr.	7,156.8	844.4	6,312.4	1,465.2	1,171.4	293.8	587.1	2,613.5	173.3	1,127.3	13,123.1
May	7,172.0	839.3	6,332.7	1,491.4	1,191.3	300.1	587.5	2,674.4	174.6	1,147.5	13,247.5
June	7,223.0	836.3	6,386.7	1,506.3	1,205.2	301.0	555.5	2,702.5	175.5	1,146.2	13,308.9
July	7,226.4	833.5	6,392.9	1,514.5	1,200.4	314.1	550.2	2,615.8	176.6	1,091.4	13,174.9
Aug.	7,197.6	829.4	6,368.2	1,512.7	1,190.2	322.6	543.1	2,620.3	176.9	1,081.8	13,132.5
Sep.	7,249.3	830.5	6,418.8	1,520.1	1,195.2	324.9	530.0	2,696.9	177.8	1,141.0	13,315.1
Oct.	7,274.6	828.1	6,446.4	1,514.3	1,186.2	328.1	538.5	2,742.1	178.5	1,168.4	13,416.4
Nov. ⁽¹⁾	7,341.4	842.5	6,498.9	1,521.5	1,190.5	331.0	539.5	2,829.3	179.3	1,159.9	13,570.9

2. Liabilities: levels

	Currency in circulation	Deposits of central government	Deposits of other general government/ other euro area residents	Deposits of other general government/ other euro area residents				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
				Over-night	With agreed maturity	Redeem-able at notice	Repur-chase agree-ments							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
2000 May	337.6	113.9	5,157.0	1,598.0	2,081.3	1,296.6	181.2	326.4	1,627.4	853.6	2,303.6	1,424.8	-7.4	12,136.9
June	341.2	146.0	5,147.9	1,608.7	2,080.7	1,291.3	167.3	319.3	1,634.8	877.6	2,212.2	1,440.9	29.7	12,149.6
July	343.1	134.6	5,150.3	1,605.0	2,088.6	1,284.6	172.0	316.8	1,639.7	893.9	2,256.0	1,475.9	25.9	12,236.1
Aug.	338.0	140.5	5,149.0	1,577.6	2,122.4	1,279.6	169.4	320.4	1,658.0	898.2	2,310.0	1,500.2	8.8	12,323.1
Sep.	339.0	159.2	5,161.8	1,589.5	2,128.7	1,272.3	171.4	310.5	1,663.8	926.3	2,369.7	1,439.4	10.7	12,380.3
Oct.	336.8	172.4	5,165.9	1,590.7	2,141.1	1,263.5	170.6	313.6	1,684.4	932.8	2,437.2	1,481.7	12.5	12,537.3
Nov.	336.9	168.7	5,187.2	1,608.9	2,148.6	1,256.2	173.5	319.9	1,668.5	920.7	2,419.8	1,477.0	0.4	12,499.1
Dec.	347.6	164.5	5,270.2	1,658.7	2,159.7	1,276.8	174.9	300.1	1,661.9	894.4	2,329.2	1,428.2	11.9	12,408.0
<i>Euro area enlargement</i>														
2001 1 Jan.	355.3	166.2	5,395.2	1,673.4	2,198.4	1,328.2	195.2	300.1	1,663.7	911.9	2,219.4	1,455.2	12.1	12,533.7
2001 Jan.	335.3	147.1	5,379.3	1,623.7	2,212.1	1,329.7	213.8	313.3	1,695.6	909.0	2,445.5	1,473.6	21.1	12,719.8
Feb.	334.3	155.6	5,388.2	1,625.5	2,223.5	1,323.4	215.8	322.3	1,710.4	911.3	2,475.1	1,491.2	-19.2	12,769.3
Mar.	335.5	150.3	5,427.8	1,636.2	2,242.9	1,322.8	225.9	333.2	1,719.2	926.9	2,662.8	1,536.7	-21.6	13,070.9
Apr.	335.4	152.5	5,457.1	1,666.9	2,241.6	1,323.8	224.9	341.8	1,719.7	928.1	2,676.2	1,524.4	-12.2	13,123.1
May	332.1	146.9	5,494.7	1,691.7	2,243.2	1,322.4	237.3	351.3	1,720.5	940.0	2,754.7	1,520.4	-13.2	13,247.5
June	332.2	165.5	5,528.1	1,731.9	2,241.0	1,330.7	224.5	349.3	1,739.6	963.9	2,743.0	1,504.1	-16.8	13,308.9
July	327.3	155.5	5,514.8	1,712.6	2,242.3	1,333.5	226.4	358.4	1,734.5	953.3	2,642.1	1,494.6	-5.7	13,174.9
Aug.	318.5	152.4	5,506.9	1,681.2	2,254.6	1,337.2	233.9	369.9	1,726.9	958.0	2,619.4	1,489.2	-8.6	13,132.5
Sep.	308.7	153.7	5,561.2	1,751.8	2,237.9	1,342.2	229.3	374.7	1,746.7	962.2	2,640.7	1,558.8	8.4	13,315.1
Oct.	294.6	153.0	5,581.6	1,752.1	2,240.9	1,351.5	237.1	387.1	1,761.5	972.9	2,661.7	1,604.1	-0.1	13,416.4
Nov. ⁽¹⁾	278.9	150.0	5,634.4	1,798.8	2,241.1	1,364.3	230.2	396.7	1,755.3	973.9	2,728.2	1,648.9	4.5	13,570.9

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		Other euro area residents	Holdings of shares/ other equity issued by other euro area residents	External assets ²⁾	Fixed assets	Remaining assets	Total
	General government	General government		General government	Other euro area residents						
	1	2	3	4	5	6	7	8	9	10	11
2000 June	60.6	-0.5	61.1	-21.5	-22.4	0.9	-31.8	7.8	1.4	6.2	22.7
July	22.2	-1.3	23.5	-18.9	-26.2	7.3	3.1	-3.5	0.7	44.9	48.6
Aug.	7.1	-8.6	15.7	-7.1	-10.5	3.5	1.0	4.1	0.3	40.5	45.9
Sep.	66.9	-4.1	71.0	-0.2	-3.5	3.3	2.4	17.6	0.7	-73.2	14.2
Oct.	40.6	1.9	38.6	-10.2	-17.0	6.8	1.6	10.1	3.2	64.3	109.5
Nov.	49.2	7.2	42.1	-6.3	-5.3	-1.0	0.5	8.0	-0.3	-51.0	0.1
Dec.	60.9	9.8	51.1	-15.6	-19.0	3.4	4.8	6.9	1.2	-29.4	28.9
<i>Euro area enlargement</i>											
2001 Jan.	34.5	2.9	31.6	-12.2	-15.7	3.4	12.5	60.5	-1.0	29.5	123.8
Feb.	14.0	-8.2	22.2	13.4	4.5	8.9	7.4	16.3	0.5	-11.9	39.7
Mar.	61.8	2.3	59.4	11.9	4.2	7.7	17.5	102.4	0.1	46.0	239.7
Apr.	33.2	-8.2	41.4	12.5	6.7	5.8	18.4	-18.5	1.2	9.9	56.8
May	5.1	-5.6	10.7	25.8	21.3	4.5	1.0	4.6	1.4	18.7	56.5
June	55.8	-2.9	58.7	14.3	13.7	0.7	-34.6	26.5	0.9	-1.4	61.6
July	12.2	-2.5	14.6	9.6	-3.2	12.8	-8.5	-45.3	1.1	-50.5	-81.4
Aug.	-19.4	-3.7	-15.6	2.8	-6.1	8.9	-6.1	52.3	0.3	-10.6	19.4
Sep.	50.0	1.0	49.0	-0.2	-1.7	1.6	-7.6	63.1	0.8	56.8	162.9
Oct.	23.9	-2.4	26.3	-6.8	-10.1	3.3	5.1	39.9	0.7	22.8	85.5
Nov. ⁶⁾	66.0	14.3	51.7	8.4	7.1	1.3	-3.3	72.0	1.0	36.4	180.5

4. Liabilities: flows ¹⁾

	Currency in circulation	Deposits of central government	Deposits of other general government/ other euro area residents	Over-night	With agreed maturity	Redeemable at notice	Repurchase agreements	Money market fund shares/ units 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 June	3.6	32.1	-6.0	12.0	1.2	-5.3	-13.9	-8.6	14.6	18.8	-73.0	15.3	25.9	22.7
July	1.9	-11.3	-1.3	-5.0	5.0	-6.1	4.7	-3.0	2.5	15.4	13.2	37.8	-6.5	48.6
Aug.	-5.1	5.8	-5.8	-29.4	31.4	-5.1	-2.7	3.3	10.7	4.9	15.2	31.8	-15.1	45.9
Sep.	1.0	18.8	6.8	10.8	1.3	-7.4	2.0	-8.9	0.4	18.8	44.0	-66.2	-0.5	14.2
Oct.	-2.2	13.2	-1.3	-0.8	9.2	-8.8	-0.8	2.5	12.8	5.0	24.9	45.0	9.6	109.5
Nov.	0.1	-3.6	25.9	20.0	10.1	-7.2	3.0	6.1	-8.6	-11.9	17.5	-12.2	-13.2	0.1
Dec.	10.7	-4.3	96.1	53.8	20.0	20.9	1.5	-9.4	-3.0	-22.0	-11.8	-32.9	5.4	28.9
<i>Euro area enlargement</i>														
2001 Jan.	-20.1	-19.0	-15.5	-49.5	13.9	1.5	18.6	14.6	27.6	-4.2	115.7	18.0	6.6	123.8
Feb.	-1.0	8.7	8.3	1.5	11.2	-6.3	1.9	9.3	14.2	2.8	25.9	11.3	-39.8	39.7
Mar.	1.3	-5.2	33.4	8.7	15.3	-0.8	10.1	12.4	4.3	16.5	139.9	45.3	-8.2	239.7
Apr.	-0.1	2.2	29.6	30.6	-1.0	1.1	-1.1	9.4	-2.7	1.5	18.3	-11.7	10.3	56.8
May	-3.3	-5.6	29.7	21.9	-3.0	-1.7	12.4	10.4	-11.6	8.7	19.4	10.2	-1.3	56.5
June	0.1	18.6	34.5	40.5	-1.5	8.3	-12.8	-0.9	20.7	16.9	-7.3	-17.6	-3.5	61.6
July	-5.0	-10.0	-8.7	-17.7	4.1	3.0	1.9	9.5	0.8	-6.6	-62.4	-10.5	11.5	-81.4
Aug.	-8.8	-3.1	-2.4	-29.7	16.0	3.9	7.5	10.8	-0.6	6.9	25.7	-6.2	-2.9	19.4
Sep.	-9.7	1.2	53.7	70.4	-17.2	5.0	-4.6	4.4	13.0	3.3	21.5	58.4	17.1	162.9
Oct.	-14.2	-0.7	20.5	0.9	2.4	9.2	8.0	12.4	14.1	7.5	9.0	43.8	-7.0	85.5
Nov. ⁶⁾	-15.7	-3.0	50.8	46.0	-1.1	12.8	-6.9	10.3	25.2	2.0	49.4	57.2	4.3	180.5

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⁾				
			3	4	5	6	7	8
2000 May	337.6	1,662.8	2,000.4	111.94	915.8	1,251.9	4,168.1	106.01
June	341.2	1,674.1	2,015.3	112.85	916.4	1,244.6	4,176.3	106.29
July	343.1	1,672.3	2,015.4	112.77	924.0	1,236.8	4,176.2	106.21
Aug.	338.0	1,643.0	1,981.0	110.74	956.5	1,230.4	4,167.9	105.91
Sep.	339.0	1,654.4	1,993.4	111.38	961.5	1,220.3	4,175.3	106.04
Oct.	336.8	1,656.8	1,993.6	111.28	973.1	1,211.1	4,177.7	105.99
Nov.	336.9	1,675.2	2,012.1	112.41	986.3	1,202.0	4,200.4	106.66
Dec.	347.6	1,728.8	2,076.4	116.23	991.8	1,221.0	4,289.2	109.17
<i>Euro area enlargement</i>								
2001 1 Jan.	355.3	1,743.5	2,098.9	-	1,028.6	1,271.1	4,398.6	-
2001 Jan.	335.3	1,692.7	2,028.0	112.31	1,042.1	1,275.0	4,345.1	107.85
Feb.	334.3	1,692.9	2,027.2	112.25	1,054.6	1,269.6	4,351.4	107.99
Mar.	335.5	1,703.3	2,038.8	112.79	1,070.7	1,269.7	4,379.2	108.57
Apr.	335.4	1,735.8	2,071.2	114.58	1,072.0	1,273.3	4,416.6	109.50
May	332.1	1,759.1	2,091.2	115.52	1,072.9	1,273.1	4,437.2	109.83
June	332.2	1,798.4	2,130.7	117.72	1,070.3	1,282.9	4,483.9	111.01
July	327.3	1,780.2	2,107.5	116.52	1,077.2	1,287.1	4,471.8	110.81
Aug.	318.5	1,747.4	2,065.9	114.32	1,092.7	1,292.8	4,451.4	110.41
Sep.	308.7	1,817.8	2,126.6	117.66	1,075.2	1,299.3	4,501.0	111.63
Oct.	294.6	1,818.1	2,112.7	116.93	1,078.3	1,311.2	4,502.1	111.66
Nov. ^(p)	278.9	1,866.1	2,145.0	118.68	1,080.8	1,325.7	4,551.6	112.84

2. Monetary aggregates: flows ⁴⁾

	M2							
	M1				Deposits with agreed maturity up to 2 years	Deposits redeemable at notice up to 3 months	Total	Annual growth rate ³⁾ (%)
	Currency in circulation ¹	Overnight deposits ²	Total	Annual growth rate ³⁾ (%)				
			3	4	5	6	7	8
2000 June	3.6	12.6	16.2	7.1	2.3	-7.3	11.2	4.3
July	1.9	-3.2	-1.3	6.9	5.8	-7.5	-3.0	3.7
Aug.	-5.1	-31.1	-36.3	7.1	30.9	-6.5	-11.9	4.3
Sep.	1.0	10.3	11.4	6.2	3.9	-10.1	5.1	4.2
Oct.	-2.2	0.4	-1.8	5.8	9.3	-9.3	-1.9	3.7
Nov.	0.1	20.2	20.4	5.0	15.1	-9.0	26.5	3.8
Dec.	10.7	57.6	68.3	5.7	11.0	19.3	98.5	3.7
<i>Euro area enlargement</i>								
2001 Jan.	-20.1	-50.6	-70.7	1.6	13.7	3.9	-53.1	2.6
Feb.	-1.0	-0.1	-1.1	2.1	12.3	-5.4	5.8	2.9
Mar.	1.3	8.4	9.7	2.0	13.7	-0.1	23.4	3.2
Apr.	-0.1	32.5	32.4	1.6	1.6	3.7	37.6	3.2
May	-3.3	20.4	17.1	3.2	-3.3	-0.5	13.3	3.6
June	0.1	39.7	39.8	4.3	-1.9	9.8	47.7	4.4
July	-5.0	-16.7	-21.7	3.3	8.9	4.4	-8.4	4.3
Aug.	-8.8	-31.1	-39.9	3.2	18.1	5.9	-15.9	4.3
Sep.	-9.7	70.2	60.5	5.6	-17.7	6.5	49.2	5.3
Oct.	-14.2	0.8	-13.3	5.1	2.7	11.8	1.2	5.3
Nov. ^(p)	-15.7	47.3	31.6	5.6	1.6	14.5	47.7	5.8

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		
181.2	326.4	139.0	4,814.7	107.67		2000 May
167.3	319.3	136.5	4,799.4	107.43		June
172.0	316.8	132.4	4,797.4	107.37		July
169.4	320.4	135.0	4,792.7	107.17		Aug.
171.4	310.5	133.9	4,791.1	107.08		Sep.
170.6	313.6	135.8	4,797.7	107.12		Oct.
173.5	319.9	131.3	4,825.2	107.83		Nov.
174.9	300.1	136.6	4,900.9	109.88		Dec.
<i>Euro area enlargement</i>						
195.2	300.1	136.8	5,030.7	-		2001 1 Jan.
213.8	313.3	140.3	5,012.5	109.52		2001 Jan.
215.8	322.3	146.2	5,035.7	110.02		Feb.
225.9	333.2	142.3	5,080.7	110.91		Mar.
224.9	341.8	142.0	5,125.3	111.85		Apr.
237.3	351.3	136.0	5,161.9	112.47		May
224.5	349.3	146.5	5,204.2	113.42		June
226.4	358.4	142.0	5,198.6	113.39		July
233.9	369.9	142.2	5,197.4	113.47		Aug.
229.3	374.7	147.6	5,252.6	114.52		Sep.
237.1	387.1	150.7	5,277.0	115.04		Oct.
230.2	396.7	153.4	5,331.8	116.27		Nov. 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		
-13.9	-8.6	0.7	-10.6	4.7		2000 June
4.7	-3.0	-1.3	-2.6	4.3		July
-2.7	3.3	2.5	-8.8	4.8		Aug.
2.0	-8.9	-2.2	-4.0	4.5		Sep.
-0.8	2.5	2.0	1.8	4.2		Oct.
3.0	6.1	-3.9	31.7	3.9		Nov.
1.5	-9.4	1.0	91.6	4.1		Dec.
<i>Euro area enlargement</i>						
18.6	14.6	3.5	-16.3	3.6		2001 Jan.
1.9	9.3	5.7	22.7	3.7		Feb.
10.1	12.4	-5.2	40.7	3.9		Mar.
-1.1	9.4	-2.6	43.4	3.9		Apr.
12.4	10.4	-7.7	28.3	4.5		May
-12.8	-0.9	9.4	43.4	5.6		June
1.9	9.5	-4.4	-1.4	5.6		July
7.5	10.8	1.3	3.7	5.9		Aug.
-4.6	4.4	-0.7	48.3	6.9		Sep.
8.0	12.4	2.0	23.6	7.4		Oct.
-6.9	10.3	5.4	56.6	7.8		Nov. 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 3	Index Dec. 98=100 ⁴⁾ 4	Total 5	Index Dec. 98=100 ⁴⁾ 6	7			8
2000 May	338.5	1,662.7	2,001.2	111.99	2,165.8	100.97	4,167.1	105.98	
June	338.7	1,647.6	1,986.3	111.22	2,169.2	101.20	4,155.4	105.76	
July	338.9	1,661.3	2,000.2	111.92	2,171.2	101.22	4,171.4	106.09	
Aug.	339.2	1,676.2	2,015.5	112.67	2,185.8	101.82	4,201.2	106.76	
Sep.	339.5	1,670.8	2,010.4	112.33	2,194.9	102.19	4,205.3	106.80	
Oct.	339.8	1,677.3	2,017.1	112.59	2,200.2	102.33	4,217.3	107.00	
Nov.	337.8	1,679.5	2,017.3	112.70	2,209.9	102.87	4,227.3	107.34	
Dec.	337.1	1,677.2	2,014.4	112.75	2,198.9	102.63	4,213.3	107.23	
<i>Euro area enlargement</i>									
2001 1 Jan.	342.3	1,692.6	2,034.9	-	2,285.6	-	4,320.5	-	
2001 Jan.	341.0	1,688.4	2,029.4	112.39	2,295.7	103.11	4,325.1	107.35	
Feb.	340.0	1,709.5	2,049.5	113.49	2,310.5	103.76	4,360.1	108.21	
Mar.	337.5	1,714.8	2,052.3	113.53	2,329.7	104.51	4,382.0	108.64	
Apr.	336.2	1,725.4	2,061.5	114.04	2,340.0	104.98	4,401.5	109.13	
May	332.4	1,753.4	2,085.8	115.22	2,345.6	105.04	4,431.4	109.69	
June	329.7	1,763.0	2,092.7	115.62	2,361.4	105.78	4,454.1	110.28	
July	324.4	1,772.7	2,097.1	115.95	2,374.1	106.44	4,471.3	110.79	
Aug.	318.0	1,792.8	2,110.8	116.80	2,378.6	106.77	4,489.4	111.35	
Sep.	308.9	1,825.3	2,134.2	118.09	2,391.9	107.35	4,526.1	112.25	
Oct.	296.7	1,844.7	2,141.4	118.52	2,405.3	107.93	4,546.7	112.77	
Nov. ^(p)	278.2	1,883.0	2,161.2	119.58	2,424.9	108.77	4,586.1	113.70	

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 3	Monthly growth rate ⁴⁾ (%) 4	Annual growth rate ⁴⁾ (%) 5	Total 6	Monthly growth rate ⁴⁾ (%) 7	Annual growth rate ⁴⁾ (%) 8				9	10	11
2000 June	0.2	-13.9	-13.7	-0.7	7.3	5.0	0.2	1.7	-8.7	-0.2	4.3
July	0.2	12.4	12.6	0.6	6.5	0.5	0.0	1.2	13.1	0.3	3.7
Aug.	0.3	13.0	13.3	0.7	7.2	12.9	0.6	1.8	26.2	0.6	4.3
Sep.	0.3	-6.5	-6.2	-0.3	6.3	7.9	0.4	2.2	1.8	0.0	4.1
Oct.	0.3	4.4	4.7	0.2	6.0	2.9	0.1	2.0	7.6	0.2	3.9
Nov.	-2.0	4.1	2.1	0.1	5.3	11.7	0.5	2.5	13.8	0.3	3.8
Dec.	-0.7	1.6	0.9	0.0	5.1	-5.3	-0.2	2.1	-4.4	-0.1	3.5
<i>Euro area enlargement</i>											
2001 Jan.	-4.0	-3.2	-7.3	-0.3	2.2	10.9	0.5	3.5	3.7	0.1	2.9
Feb.	-1.0	20.8	19.9	1.0	2.3	14.6	0.6	3.5	34.5	0.8	2.9
Mar.	-2.5	3.3	0.8	0.0	1.6	16.7	0.7	4.3	17.5	0.4	3.0
Apr.	-1.4	10.5	9.1	0.4	1.4	10.5	0.4	4.8	19.6	0.4	3.2
May	-3.8	25.2	21.4	1.0	2.9	1.3	0.1	4.0	22.7	0.5	3.5
June	-2.7	10.0	7.3	0.3	4.0	16.4	0.7	4.5	23.7	0.5	4.3
July	-5.3	11.2	5.9	0.3	3.6	14.9	0.6	5.2	20.8	0.5	4.4
Aug.	-6.4	21.8	15.4	0.7	3.7	7.3	0.3	4.9	22.6	0.5	4.3
Sep.	-9.1	32.3	23.2	1.1	5.1	13.0	0.5	5.0	36.2	0.8	5.1
Oct.	-12.2	20.0	7.8	0.4	5.3	12.9	0.5	5.5	20.7	0.5	5.4
Nov. ^(p)	-18.5	37.7	19.1	0.9	6.1	18.6	0.8	5.7	37.7	0.8	5.9

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
628.1	116.66		4,795.2	107.23	5,787.8	114.17	2000 May
618.1	115.12		4,773.5	106.85	5,823.3	114.75	June
621.7	116.21		4,793.1	107.27	5,858.5	115.35	July
622.7	116.30		4,823.9	107.87	5,917.8	116.46	Aug.
622.4	116.23		4,827.7	107.90	5,991.1	117.62	Sep.
630.1	117.58		4,847.4	108.23	6,035.7	118.41	Oct.
631.0	117.83		4,858.2	108.57	6,067.5	119.17	Nov.
639.1	120.54		4,852.4	108.79	6,075.3	119.66	Dec.
<i>Euro area enlargement</i>							
659.6	-		4,980.1	-	6,130.0	-	2001 1 Jan.
676.4	123.72		5,001.5	109.28	6,179.7	120.47	2001 Jan.
677.9	124.00		5,038.0	110.07	6,212.7	121.13	Feb.
687.1	125.70		5,069.1	110.65	6,263.5	121.98	Mar.
692.1	126.36		5,093.6	111.16	6,303.8	122.80	Apr.
703.6	128.29		5,135.0	111.89	6,340.7	123.34	May
715.0	130.38		5,169.1	112.65	6,361.4	123.83	June
727.9	132.84		5,199.2	113.40	6,377.3	124.30	July
743.3	135.72		5,232.7	114.24	6,396.0	124.84	Aug.
760.5	137.68		5,286.6	115.26	6,430.7	125.49	Sep.
787.9	142.50		5,334.6	116.30	6,461.6	126.07	Oct.
789.4	143.39		5,375.6	117.23	6,509.8	126.99	Nov. ^(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	
-8.3	-1.3	6.8	-17.0	-0.4	4.6	4.8	35.6	0.5	9.4	2000 June
5.9	1.0	8.8	19.0	0.4	4.3	4.6	35.0	0.5	9.1	July
0.5	0.1	7.7	26.7	0.6	4.7	4.5	59.1	1.0	9.5	Aug.
-0.4	-0.1	6.6	1.4	0.0	4.5	4.5	73.3	1.0	10.0	Sep.
7.3	1.2	7.3	14.9	0.3	4.3	4.3	44.5	0.7	9.8	Oct.
1.3	0.2	5.2	15.1	0.3	4.0	4.1	31.9	0.6	9.3	Nov.
14.6	2.3	7.4	10.1	0.2	4.0	4.0	8.1	0.4	9.6	Dec.
<i>Euro area enlargement</i>										
18.1	2.6	10.4	21.7	0.4	3.9	3.9	104.4	0.7	9.3	2001 Jan.
1.5	0.2	9.5	35.9	0.7	3.8	3.8	32.9	0.6	9.0	Feb.
9.3	1.4	8.0	26.8	0.5	3.7	3.8	50.7	0.7	8.7	Mar.
3.6	0.5	8.8	23.2	0.5	3.9	4.0	40.4	0.7	8.4	Apr.
10.6	1.5	10.0	33.2	0.7	4.3	4.6	36.7	0.4	8.0	May
11.5	1.6	13.3	35.2	0.7	5.4	5.2	20.7	0.4	7.9	June
13.5	1.9	14.3	34.3	0.7	5.7	5.7	16.0	0.4	7.8	July
15.8	2.2	16.7	38.4	0.7	5.9	6.1	18.7	0.4	7.2	Aug.
10.7	1.4	18.5	47.0	0.9	6.8	6.7	34.7	0.5	6.7	Sep.
26.6	3.5	21.2	47.3	0.9	7.4	7.4	30.8	0.5	6.5	Oct.
5.0	0.6	21.7	42.7	0.8	8.0	.	48.2	0.7	6.6	Nov. ^(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 aggregates¹⁾ 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 May	1,165.9	114.0	1,488.4	853.6	2,023.7	6,559.2	5,779.1	114.00	51.5	163.0
June	1,164.7	115.5	1,498.3	877.6	2,002.4	6,594.9	5,846.3	115.21	134.7	164.2
July	1,165.1	116.6	1,507.2	893.9	1,974.6	6,636.0	5,874.6	115.67	118.1	164.9
Aug.	1,166.3	118.2	1,523.0	898.2	1,950.6	6,660.4	5,893.1	115.98	109.6	165.2
Sep.	1,167.5	120.5	1,529.9	926.3	1,946.4	6,750.5	5,978.5	117.37	92.9	166.0
Oct.	1,168.4	121.3	1,548.6	932.8	1,935.5	6,799.7	6,021.4	118.13	77.8	168.0
Nov.	1,162.6	122.9	1,537.2	920.7	1,939.2	6,836.2	6,056.7	118.96	68.1	167.7
Dec.	1,168.2	125.4	1,525.2	894.4	1,925.3	6,877.6	6,090.7	119.96	77.1	169.9
<i>Euro area enlargement</i>										
2001 1 Jan.	1,170.0	126.7	1,526.9	911.9	2,009.9	6,952.0	6,154.0	-	183.3	172.9
2001 Jan.	1,170.2	126.8	1,555.3	909.0	2,003.7	6,998.4	6,185.0	120.58	17.4	171.8
Feb.	1,169.2	126.9	1,564.2	911.3	2,006.0	7,035.5	6,206.2	121.01	8.4	172.3
Mar.	1,172.5	126.4	1,576.9	926.9	2,017.7	7,128.0	6,273.1	122.17	-26.3	172.0
Apr.	1,169.7	124.6	1,577.8	928.1	2,015.7	7,193.3	6,312.4	122.97	-62.7	173.3
May	1,170.5	123.2	1,584.5	940.0	2,030.6	7,220.3	6,332.7	123.18	-80.3	174.6
June	1,170.8	122.0	1,593.2	963.9	2,041.5	7,243.2	6,386.7	124.32	-40.5	175.5
July	1,165.2	120.7	1,592.5	953.3	2,033.9	7,257.2	6,392.9	124.61	-26.3	176.6
Aug.	1,161.9	119.5	1,584.7	958.0	2,019.6	7,233.9	6,368.2	124.30	1.0	176.9
Sep.	1,162.7	118.6	1,599.1	962.2	2,025.7	7,273.7	6,418.8	125.26	56.2	177.8
Oct.	1,162.6	116.9	1,610.8	972.9	2,014.4	7,313.0	6,446.4	125.77	80.4	178.5
Nov. ⁴⁾	1,160.3	115.8	1,602.0	973.9	2,033.1	7,369.4	6,498.9	126.78	101.1	179.3

6. Main counterparts of M3: flows⁴⁾

	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 June	-1.0	1.5	13.9	18.8	-22.8	30.1	61.1	9.4	80.8	1.4
July	-0.8	1.4	3.9	15.4	-27.4	33.9	23.5	9.1	-16.7	0.7
Aug.	0.5	1.7	8.2	4.9	-19.1	20.1	15.7	9.5	-11.1	0.3
Sep.	-2.6	2.2	2.6	18.8	-7.6	76.6	71.0	10.0	-26.5	0.7
Oct.	-0.1	0.8	10.8	5.0	-15.0	47.0	38.6	9.8	-14.8	3.2
Nov.	-5.0	1.6	-4.7	-11.9	1.8	41.6	42.1	9.3	-9.5	-0.3
Dec.	9.0	2.5	-3.9	-22.0	-9.2	59.3	51.1	9.5	18.8	1.2
<i>Euro area enlargement</i>										
2001 Jan.	0.1	0.2	24.1	-4.2	-12.8	47.5	31.6	9.3	-55.1	-1.0
Feb.	-1.1	0.1	8.5	2.8	-3.7	38.5	22.2	9.0	-9.7	0.5
Mar.	1.6	-0.5	9.5	16.5	6.6	84.6	59.4	8.7	-37.5	0.1
Apr.	-2.6	-1.9	-0.1	1.5	-1.4	65.6	41.4	8.4	-36.8	1.2
May	0.3	-1.4	-3.9	8.7	15.7	16.2	10.7	8.1	-14.9	1.4
June	0.4	-1.1	11.3	16.9	10.8	24.7	58.7	7.9	33.9	0.9
July	-4.8	-1.4	5.2	-6.6	-5.7	19.0	14.6	7.7	17.1	1.1
Aug.	-2.2	-1.2	-1.9	6.9	-9.8	-12.8	-15.6	7.2	26.6	0.3
Sep.	0.6	-0.9	13.7	3.3	-0.7	42.9	49.0	6.7	41.6	0.8
Oct.	-0.3	-1.7	12.0	7.5	-12.6	34.7	26.3	6.5	30.9	0.7
Nov. ⁴⁾	-2.7	-1.1	19.8	2.0	21.3	49.7	51.7	6.6	22.6	1.0

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			8	State government		Local government				Social security funds
			Over 5 years			Over 5 years	10		11	12				
13	14	13	14	13	14	13	14	13	14	13	14	13	14	
2000 Q1	335.4	207.2	127.9	37.1	25.7	135.1	193.8	291.9	251.3	338.1	306.1	16.0	839.7	99.5
Q2	381.5	246.1	135.7	38.8	29.1	141.3	186.8	290.0	252.1	339.0	306.0	19.7	835.6	99.0
Q3	385.4	247.2	138.8	33.0	25.3	120.4	173.3	288.4	252.4	337.8	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	130.5	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	175.0	294.0	254.9	350.1	312.1	17.2	836.3	97.2
Q3 ⁴⁾	408.7	258.3	149.5	35.6	26.3	130.5	168.2	293.9	254.1	350.7	313.4	17.7	830.5	96.6

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			8	State government		Local government				Social security funds
			Over 5 years			Over 5 years	10		11	12				
13	14	13	14	13	14	13	14	13	14	13	14	13	14	
2000 Q2	20.6	13.8	18.6	1.7	3.5	-4.1	-7.3	-1.8	1.3	0.9	-0.1	3.7	-4.6	-0.3
Q3	8.6	1.1	24.5	-5.7	-3.8	-21.2	-9.9	-2.3	-0.3	-0.5	0.0	-1.2	-13.9	-1.1
Q4	11.2	6.8	18.2	-1.5	-3.5	6.6	0.2	8.8	3.0	12.8	10.3	-3.9	18.0	-0.9
<i>Euro area enlargement</i>														
2001 Q1	28.1	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	-2.2	-1.9	1.6	-16.7	-1.8
Q3 ⁴⁾	-16.9	-22.4	7.7	0.1	-0.4	8.4	-6.3	0.0	-0.7	0.5	1.3	0.6	-5.2	-0.8

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 Q1	900.8	392.8	1,207.8	2,501.4	109.9	89.0	162.5	200.6	452.1	110.0
Q2	918.2	407.1	1,236.9	2,562.1	113.0	93.5	161.5	201.9	456.9	111.7
Q3	953.5	423.6	1,256.9	2,634.0	115.8	96.4	164.9	208.3	469.7	114.4
Q4	967.3	429.3	1,287.8	2,684.4	118.6	98.1	165.4	212.9	476.5	116.1
<i>Euro area enlargement</i>										
2001 1 Jan.	996.0	436.6	1,293.6	2,726.2	-	102.7	166.3	213.0	482.0	-
2001 Q1	1,033.6	445.4	1,313.5	2,792.5	120.9	99.3	168.5	212.7	480.6	115.1
Q2	1,051.2	455.8	1,343.4	2,850.4	123.2	100.6	171.2	217.6	489.4	117.3
Q3 ^(p)	1,028.1	466.6	1,370.2	2,864.9	124.5	101.8	171.6	220.8	494.3	118.5

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 Q2	22.1	16.3	31.1	69.5	9.3	4.5	-0.4	2.8	6.9	7.1
Q3	28.8	16.4	18.1	63.2	11.1	2.1	3.2	5.8	11.1	8.0
Q4	19.3	9.6	36.3	65.2	10.8	1.8	0.5	4.6	6.9	8.0
<i>Euro area enlargement</i>										
2001 Q1	32.8	5.4	13.6	51.8	10.0	-4.4	0.1	0.4	-3.9	4.6
Q2	14.1	12.2	26.6	52.9	9.1	1.2	3.0	4.9	9.1	5.0
Q3 ^(p)	-18.0	14.0	33.6	29.7	7.5	1.5	0.1	3.2	4.9	3.6

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) 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	
20.2	58.8	1,660.4	1,739.4	114.1	140.9	100.4	342.8	584.2	110.7	2,775.6	112.7	39.0	111.8	2000 Q1
21.2	60.6	1,699.2	1,781.0	116.7	144.8	102.1	341.3	588.3	111.9	2,826.2	114.8	37.6	107.8	Q2
22.8	62.9	1,747.7	1,833.5	118.9	142.4	100.8	342.1	585.3	111.7	2,888.4	116.6	37.6	107.7	Q3
23.1	62.3	1,791.6	1,876.9	121.7	146.6	101.8	340.1	588.4	113.1	2,941.8	118.9	38.2	109.3	Q4
<i>Euro area enlargement</i>														
23.1	62.7	1,802.4	1,888.2	-	146.7	101.8	340.1	588.6	-	2,958.8	-	38.2	-	2001 1 Jan.
22.8	61.7	1,832.2	1,916.8	123.6	145.9	104.4	341.9	592.2	114.0	2,989.5	120.1	37.3	106.5	2001 Q1
23.4	62.3	1,868.4	1,954.1	125.7	147.7	100.6	342.7	591.0	115.1	3,034.6	122.1	40.7	116.5	Q2
23.0	61.2	1,901.6	1,985.9	127.8	144.4	100.7	345.2	590.3	115.1	3,070.5	123.6	39.2	112.0	Q3 ^(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	
1.1	1.6	37.2	40.0	10.2	3.9	2.5	-0.2	6.2	5.8	53.0	8.7	-1.4	5.2	2000 Q2
0.0	0.7	32.9	33.6	9.0	-1.7	-0.9	2.0	-0.6	5.0	44.0	8.0	0.0	3.9	Q3
0.2	-0.6	42.5	42.1	8.6	4.5	2.1	0.5	7.0	3.6	56.0	7.4	0.6	2.0	Q4
<i>Euro area enlargement</i>														
-0.4	-0.9	31.2	29.9	8.3	0.2	2.6	1.8	4.5	3.0	30.6	6.6	-1.0	-4.8	2001 Q1
0.6	0.5	32.1	33.2	7.7	1.9	-2.0	5.9	5.8	2.9	48.1	6.3	3.5	8.1	Q2
-0.4	-1.1	33.3	31.8	7.5	-3.3	0.3	3.2	0.1	3.0	36.8	5.9	-1.6	4.0	Q3 ^(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 Q1	438.2	162.2	183.0	87.4	131.0	458.8	35.4	407.1	13.1	110.9	130.2	28.1	58.6	52.7	269.6	102.6
Q2	428.2	164.5	181.6	76.8	129.9	460.7	34.6	411.0	11.6	111.4	146.0	31.7	62.7	59.3	299.6	114.0
Q3	427.3	158.6	187.0	76.6	129.8	464.4	34.1	413.7	12.9	111.6	159.2	30.3	63.2	57.8	310.5	117.8
Q4	431.1	153.6	198.9	74.0	131.0	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.	433.0	153.0	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	133.4	483.5	38.2	423.0	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	136.3	486.1	41.4	424.0	16.9	116.3	164.3	31.5	66.8	60.8	323.4	120.9
Q3 ⁴⁾	456.2	163.0	202.0	86.0	134.1	487.6	39.4	426.7	17.7	116.7	153.7	33.3	67.6	60.6	315.1	117.8

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 Q2	-3.8	2.3	4.9	-10.6	7.2	1.9	0.3	2.8	-1.5	6.9	15.8	3.6	4.1	6.5	30.0	17.7
Q3	-0.1	-5.8	6.1	-0.2	10.1	1.0	-0.7	0.3	1.3	5.7	13.3	-1.4	-0.4	-1.5	10.0	18.2
Q4	3.9	-4.9	11.9	-2.6	8.9	13.2	6.5	4.8	2.4	6.1	5.3	0.4	5.0	-4.6	6.1	12.5
<i>Euro area enlargement</i>																
2001 Q1	7.7	-2.5	-5.9	16.0	1.8	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	4.9	2.8	3.4	1.0	-1.9	4.5	13.9	0.5	1.9	3.6	19.9	6.1
Q3 ⁴⁾	-7.2	-1.3	-1.9	-3.3	3.3	1.5	-1.9	2.7	0.9	4.6	-10.6	1.9	0.7	-0.3	-8.3	0.0

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 Q1	440.2	291.9	24.4	31.1	787.7	101.4	887.1	1,090.7	1,274.7	42.4	3,294.9	102.2
Q2	459.7	307.7	24.1	26.9	818.4	104.6	888.2	1,095.1	1,254.6	46.6	3,284.5	101.8
Q3	464.2	329.5	24.7	25.0	843.4	106.4	874.4	1,109.7	1,235.3	51.6	3,270.9	101.4
Q4	497.4	324.6	24.1	26.3	872.4	111.5	907.1	1,131.5	1,241.4	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	-	910.6	1,154.0	1,292.3	69.6	3,426.6	-
2001 Q1	478.9	349.2	24.1	32.4	884.6	108.9	906.2	1,192.3	1,287.0	78.9	3,464.5	104.6
Q2	514.5	335.7	24.4	32.1	906.7	111.3	947.4	1,198.7	1,293.5	82.5	3,522.0	106.4
Q3 ⁴⁾	515.1	322.1	25.4	35.5	898.1	112.5	964.8	1,203.7	1,304.9	84.5	3,557.8	107.5

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 Q2	19.8	9.5	-0.3	-4.3	24.8	8.2	2.2	4.4	-21.2	4.2	-10.3	1.2
Q3	0.3	14.1	1.3	-2.0	13.7	8.9	-13.8	14.6	-19.6	5.0	-13.8	1.0
Q4	36.8	2.8	-0.6	1.3	40.3	11.1	32.8	22.5	6.4	5.5	67.1	1.1
<i>Euro area enlargement</i>												
2001 Q1	-28.3	6.9	-0.1	1.8	-19.8	7.4	-4.6	37.8	-5.8	9.3	36.7	2.4
Q2	32.9	-13.4	0.3	-0.4	19.4	6.4	41.1	6.4	6.2	3.6	57.4	4.4
Q3 ⁴⁾	4.1	0.5	1.0	3.5	9.1	5.7	17.3	5.0	11.7	2.0	36.0	6.0

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 Q1	943.8	94.0	79.4	405.7	485.1	119.2	1,428.8	101.2	129.4	147.5	291.7	152.1	443.7	106.4	573.2	114.0
Q2	977.7	97.1	81.0	399.0	480.0	118.7	1,457.7	103.3	153.0	152.8	302.8	161.3	464.1	107.8	617.1	116.0
Q3	979.4	94.4	79.3	441.4	520.7	123.3	1,500.0	102.7	168.2	160.9	321.5	175.4	496.9	110.1	665.1	119.5
Q4	945.4	93.4	78.9	445.6	524.5	127.9	1,469.8	103.3	171.1	172.5	290.6	183.7	474.3	109.2	645.4	120.9
<i>Euro area enlargement</i>																
2001 1 Jan.	964.1	-	78.9	449.3	528.2	-	1,492.2	-	171.3	-	296.2	184.0	480.2	-	651.5	-
2001 Q1	1,051.5	100.5	76.3	517.9	594.2	143.1	1,645.7	112.7	188.8	188.1	285.7	204.8	490.4	113.2	679.3	127.1
Q2	1,071.3	100.7	78.9	519.3	598.2	141.1	1,669.5	112.3	205.1	200.5	294.3	208.0	502.3	114.0	707.4	130.0
Q3 ^(p)	1,082.0	104.5	75.4	527.5	602.9	147.0	1,684.9	116.7	204.1	205.5	275.4	209.6	485.0	113.8	689.1	130.8

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 Q2	31.0	-6.4	2.2	-4.1	-2.0	4.3	29.0	-3.1	4.7	9.6	10.1	-4.3	5.8	12.7	10.5	12.1
Q3	-27.3	-2.6	-1.7	20.5	18.8	8.3	-8.6	0.9	8.1	23.2	17.1	-6.9	10.2	13.0	18.3	15.3
Q4	-9.9	3.7	-0.7	19.9	19.2	10.4	9.3	6.0	12.2	26.7	-31.5	27.3	-4.2	7.2	8.0	11.7
<i>Euro area enlargement</i>																
2001 Q1	70.9	6.8	3.7	58.9	62.6	20.1	133.5	11.3	15.4	27.5	5.3	12.1	17.3	6.4	32.8	11.5
Q2	3.0	3.7	2.6	-11.2	-8.6	18.9	-5.6	8.7	12.4	31.2	9.1	-5.6	3.5	5.8	15.9	12.1
Q3 ^(p)	40.1	10.7	-3.5	28.6	25.2	19.2	65.3	13.7	5.2	27.7	-19.5	18.5	-1.0	3.3	4.2	9.5

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	
47.4	198.5	64.4	154.9	111.8	170.5	1,534.6	124.7	71.4	463.4	534.8	127.6	2,069.4	125.5	2000 Q1
50.8	205.0	67.5	160.7	118.3	176.5	1,505.6	122.4	77.2	470.1	547.3	130.7	2,052.9	124.5	Q2
58.0	226.4	81.4	191.2	139.4	203.5	1,578.2	123.5	81.7	526.3	608.0	140.2	2,186.2	127.8	Q3
61.6	241.8	80.0	193.9	141.6	210.9	1,550.8	125.1	84.6	504.0	588.6	139.1	2,139.4	128.7	Q4
<i>Euro area enlargement</i>														
62.3	-	80.2	-	142.5	-	1,553.8	-	85.6	506.6	592.2	-	2,146.0	-	2001 1 Jan.
65.1	252.2	93.9	227.9	159.1	235.8	1,781.6	140.8	89.3	577.1	666.4	154.1	2,448.0	144.2	2001 Q1
61.1	236.5	97.2	234.4	158.3	233.8	1,817.3	140.8	94.8	587.0	681.9	155.0	2,499.2	144.5	Q2
63.5	245.4	90.4	217.3	153.9	226.7	1,717.7	137.6	93.7	581.9	675.6	158.0	2,393.3	142.8	Q3 ^(p)

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	
1.6	41.6	2.4	29.2	4.0	34.0	-29.2	4.3	5.8	7.3	13.1	16.7	-16.2	7.3	2000 Q2
5.3	31.1	12.8	64.4	18.1	49.1	14.5	9.7	4.4	35.5	40.0	22.2	54.4	12.9	Q3
4.0	47.8	1.2	47.1	5.1	47.4	20.1	12.4	3.0	-7.9	-4.9	17.7	15.2	13.8	Q4
<i>Euro area enlargement</i>														
2.7	27.1	14.0	47.1	16.7	38.3	194.9	12.9	3.5	60.1	63.5	20.8	258.4	14.9	2001 Q1
-4.1	15.3	2.7	45.9	-1.4	32.4	0.2	15.1	5.6	-1.5	4.1	18.6	4.3	16.1	Q2
2.3	8.4	-7.1	13.7	-4.8	11.4	-42.0	11.4	-1.1	14.2	13.1	12.7	-28.9	11.7	Q3 ^(p)

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 Q1	3,932.0	3,496.3	55.0	380.8	265.7	32.4	60.5	22.2	5,249.2	5,074.6	30.5	144.1	105.1	17.6	11.9	9.5
Q2	4,055.9	3,620.9	52.8	382.2	265.1	34.7	62.2	20.1	5,291.3	5,111.2	27.9	152.3	113.0	17.1	13.2	9.0
Q3	3,945.3	3,485.3	57.9	402.1	279.2	38.1	64.9	19.9	5,316.4	5,127.4	29.1	160.0	121.0	16.5	12.5	10.1
Q4	3,949.6	3,526.2	47.5	376.0	265.0	34.4	61.0	15.6	5,434.6	5,256.4	27.3	150.9	115.1	14.6	11.3	9.9
<i>Euro area enlargement</i>																
2001 Q1	4,059.5	3,558.8	55.4	445.3	316.6	40.2	67.8	20.7	5,578.1	5,367.8	31.2	179.2	130.8	23.8	12.3	12.2
Q2	4,072.3	3,585.9	52.8	433.6	309.0	40.3	65.4	19.0	5,693.6	5,480.6	30.7	182.2	133.5	24.0	11.6	13.2
Q3 ³⁾	4,092.2	3,613.9	47.7	430.6	302.8	38.7	70.8	18.4	5,714.6	5,515.8	28.1	170.8	125.0	22.6	11.0	12.2

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 Q1	1,534.6	605.0	151.1	778.5	615.6	66.4	65.9	30.6	534.8	244.3	51.4	239.1	195.4	21.6	11.4	10.8
Q2	1,505.6	598.2	134.1	773.2	614.1	61.0	63.2	34.9	547.3	243.5	52.1	251.7	203.8	22.0	15.1	10.7
Q3	1,578.2	611.6	145.6	821.0	661.9	63.3	63.4	32.4	608.0	252.8	61.0	294.2	245.5	23.1	13.8	11.8
Q4	1,550.8	590.9	126.8	833.2	684.3	53.1	65.7	30.1	588.6	254.1	64.0	270.5	225.5	20.5	12.3	12.2
<i>Euro area enlargement</i>																
2001 Q1	1,781.6	698.5	142.6	940.5	776.8	66.4	65.8	31.5	666.4	295.7	70.6	300.1	255.9	17.6	14.2	12.4
Q2	1,817.3	690.0	133.8	993.5	815.3	72.9	73.1	32.2	681.9	286.7	73.2	322.0	274.1	19.3	13.6	14.9
Q3 ³⁾	1,717.7	667.7	136.5	913.2	748.3	59.2	76.2	29.5	675.6	294.4	68.9	312.3	263.0	18.4	15.9	15.0

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 Q1	2,425.6	2,139.7	43.1	242.8	136.3	53.8	33.8	18.8	250.5	226.0	1.8	22.7	14.5	4.6	2.0	1.7
Q2	2,482.6	2,185.5	40.6	256.6	145.5	58.9	33.6	18.6	262.8	234.9	1.4	26.4	17.2	5.4	2.5	1.4
Q3	2,554.8	2,226.6	47.7	280.5	158.2	65.3	37.4	19.7	272.2	233.6	2.2	36.4	26.6	5.7	2.8	1.3
Q4	2,566.9	2,246.0	46.5	274.4	157.3	62.1	35.4	19.7	262.2	215.8	2.4	44.1	34.0	5.6	2.9	1.5
<i>Euro area enlargement</i>																
2001 Q1	2,667.6	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	2,731.2	2,358.2	53.9	319.1	189.2	69.4	39.6	20.8	275.5	227.0	4.3	44.2	35.8	4.7	2.5	1.1
Q3 ³⁾	2,746.5	2,380.3	54.0	312.2	184.4	67.4	39.3	21.1	265.1	217.9	4.3	42.9	34.9	4.5	2.4	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	Euro ²⁾	Other EU currencies	Other currencies					All currencies	Euro ²⁾	Other EU currencies	Other currencies				
					USD	JPY	CHF	Other					USD	JPY	CHF	Other
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
2000 Q1	3,935.1	-	-	-	-	-	-	-	6,528.3	6,261.4	33.9	233.0	128.2	35.1	65.9	3.7
Q2	4,025.6	-	-	-	-	-	-	-	6,681.9	6,388.6	35.4	257.9	144.7	38.4	70.5	4.3
Q3	3,935.6	-	-	-	-	-	-	-	6,796.5	6,485.5	34.8	276.3	155.8	44.4	72.1	4.0
Q4	3,938.0	-	-	-	-	-	-	-	6,926.6	6,622.4	32.4	271.8	151.6	41.2	74.3	4.7
<i>Euro area enlargement</i>																
2001 Q1	4,081.4	-	-	-	-	-	-	-	7,125.6	6,782.4	35.1	308.1	182.3	45.4	74.9	5.6
Q2	4,089.3	-	-	-	-	-	-	-	7,223.0	6,856.8	29.4	336.9	204.6	51.7	74.0	6.5
Q3 ³⁾	4,086.7	-	-	-	-	-	-	-	7,249.3	6,905.6	29.6	314.2	180.9	51.7	75.6	5.9

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

	Issued by MFIs								Issued by non-MFIs							
	All currencies	Euro ²⁾	Other EU currencies	Other currencies					All currencies	Euro ²⁾	Other EU currencies	Other currencies				
					USD	JPY	CHF	Other					USD	JPY	CHF	Other
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
2000 Q1	871.9	834.7	11.6	25.5	16.4	5.0	2.4	1.7	1,449.6	1,417.1	4.8	27.6	14.2	11.3	1.2	0.8
Q2	897.5	858.2	12.5	26.9	17.8	4.9	2.6	1.7	1,411.0	1,377.3	6.0	27.6	14.7	10.5	1.6	0.9
Q3	943.4	898.7	10.6	34.1	24.5	5.3	2.5	1.9	1,386.6	1,353.3	3.6	29.7	16.6	11.0	1.2	0.9
Q4	935.3	895.0	10.8	29.5	19.7	5.9	2.1	1.7	1,354.6	1,320.7	5.6	28.2	16.7	9.7	1.0	0.9
<i>Euro area enlargement</i>																
2001 Q1	971.2	931.2	9.5	30.4	20.6	6.3	1.7	1.8	1,452.7	1,413.1	3.6	36.0	21.2	13.1	1.1	0.6
Q2	993.4	950.7	10.7	32.0	22.1	6.5	1.6	1.8	1,506.3	1,464.7	4.7	36.9	21.7	13.3	1.1	0.8
Q3 ³⁾	1,000.9	961.1	9.9	30.0	20.6	6.2	1.6	1.6	1,517.7	1,478.8	4.2	34.7	20.3	12.5	1.2	0.7

6. Loans to non-residents of the euro area

	Banks ³⁾								Non-banks							
	All currencies	Euro ²⁾	Other EU currencies	Other currencies					All currencies	Euro ²⁾	Other EU currencies	Other currencies				
					USD	JPY	CHF	Other					USD	JPY	CHF	Other
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
2000 Q1	943.8	422.9	95.5	425.4	306.9	49.3	33.0	36.2	485.1	154.7	40.8	289.6	248.9	13.9	20.4	6.3
Q2	977.7	462.7	92.2	422.8	308.2	44.9	33.2	36.4	480.0	149.6	41.6	288.8	246.6	14.1	21.4	6.8
Q3	979.4	445.9	90.9	442.6	331.9	42.1	33.8	34.8	520.7	156.0	46.1	318.5	273.9	14.5	23.3	6.9
Q4	945.4	410.0	89.2	446.2	337.8	44.1	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	1,051.5	468.3	98.6	484.5	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	1,071.3	473.2	103.0	495.2	376.1	47.3	36.7	35.0	598.2	184.4	47.7	366.0	318.4	12.1	26.9	8.6
Q3 ³⁾	1,082.0	485.9	102.8	493.2	377.2	42.7	39.8	33.5	602.9	201.9	46.8	354.2	306.7	12.6	26.0	8.9

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

	Issued by banks ³⁾								Issued by non-banks							
	All currencies	Euro ²⁾	Other EU currencies	Other currencies					All currencies	Euro ²⁾	Other EU currencies	Other currencies				
					USD	JPY	CHF	Other					USD	JPY	CHF	Other
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
2000 Q1	129.4	53.2	8.6	67.6	51.7	7.8	3.0	5.1	443.7	94.9	27.8	321.1	279.3	27.1	5.6	9.1
Q2	153.0	64.8	8.3	79.8	63.7	7.9	2.7	5.5	464.1	95.7	28.3	340.1	299.4	26.9	4.5	9.3
Q3	168.2	62.4	15.3	90.4	75.1	8.2	2.7	4.4	496.9	109.1	32.2	355.6	312.0	30.3	4.2	9.0
Q4	171.1	61.1	19.7	90.3	75.6	7.7	2.4	4.6	474.3	111.5	31.7	331.0	290.6	27.1	3.6	9.7
<i>Euro area enlargement</i>																
2001 Q1	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	205.1	71.9	25.1	108.1	94.1	6.8	2.5	4.8	502.3	121.0	25.7	355.7	315.8	26.9	3.0	9.9
Q3 ³⁾	204.1	77.9	24.7	101.5	89.5	5.9	2.3	3.7	485.0	127.2	26.0	331.6	293.9	26.1	3.8	7.7

3 Financial markets and interest rates in the euro area

Table 3.1

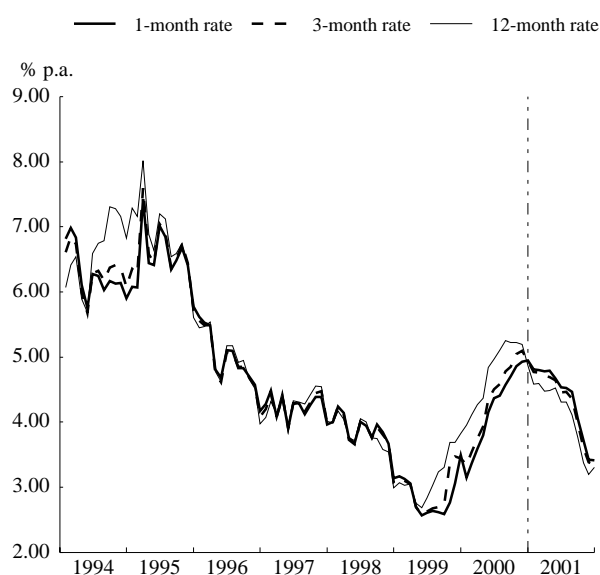
Money market interest rates ¹⁾

(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
2000 Dec.	4.83	4.94	4.93	4.91	4.87	6.54	0.62
<i>Euro area enlargement</i>							
2001	4.39	4.33	4.26	4.16	4.09	3.78	0.15
2001 Jan.	4.75	4.81	4.77	4.68	4.58	5.73	0.50
Feb.	4.99	4.80	4.76	4.67	4.59	5.35	0.41
Mar.	4.78	4.78	4.71	4.58	4.47	4.96	0.19
Apr.	5.06	4.79	4.69	4.57	4.49	4.63	0.10
May	4.65	4.67	4.64	4.57	4.53	4.11	0.07
June	4.54	4.53	4.45	4.35	4.31	3.83	0.07
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
2001 7 Dec.	3.27	3.42	3.37	3.30	3.38	2.00	0.08
14	3.30	3.42	3.35	3.25	3.29	1.90	0.08
21	3.05	3.44	3.34	3.25	3.30	1.90	0.08
28	3.91	3.33	3.29	3.26	3.34	1.88	0.10
2002 4 Jan.	3.45	3.36	3.29	3.27	3.37	1.87	0.09
11	3.34	3.35	3.35	3.35	3.50	1.83	0.09

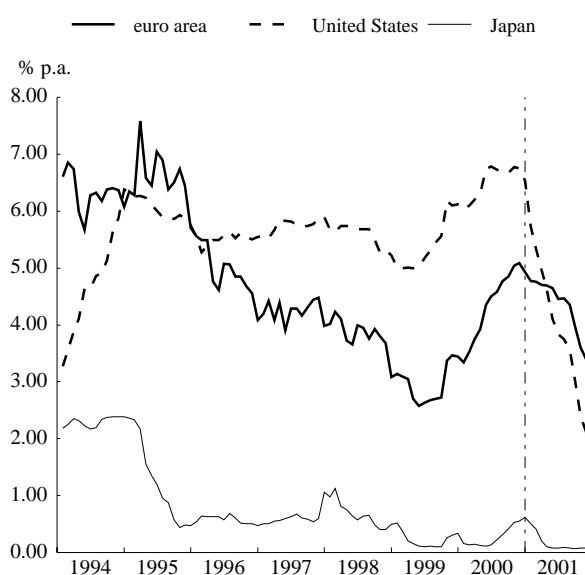
Euro area money market rates

(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

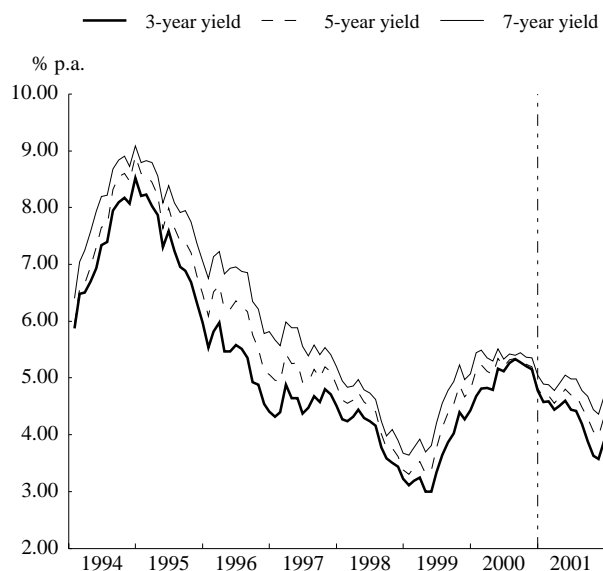
Government bond yields ¹⁾

(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
2000 Dec.	4.74	4.77	4.82	5.05	5.07	5.23	1.62
<i>Euro area enlargement</i>							
2001	4.11	4.23	4.49	4.79	5.03	5.01	1.34
2001 Jan.	4.55	4.57	4.67	4.90	5.01	5.14	1.54
Feb.	4.56	4.59	4.69	4.88	5.02	5.10	1.43
Mar.	4.44	4.44	4.56	4.78	4.94	4.89	1.19
Apr.	4.49	4.51	4.66	4.90	5.10	5.13	1.36
May	4.56	4.60	4.80	5.05	5.26	5.37	1.28
June	4.39	4.44	4.70	4.99	5.21	5.26	1.19
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
2001 7 Dec.	3.77	4.01	4.40	4.77	5.03	5.15	1.37
14	3.66	3.90	4.31	4.66	4.91	5.13	1.34
21	3.67	3.92	4.39	4.73	5.01	5.08	1.32
28	3.72	3.98	4.48	4.84	5.13	5.11	1.37
2002 4 Jan.	3.72	3.99	4.47	4.80	5.07	5.16	1.40
11	3.82	4.01	4.44	4.71	4.95	4.92	1.40

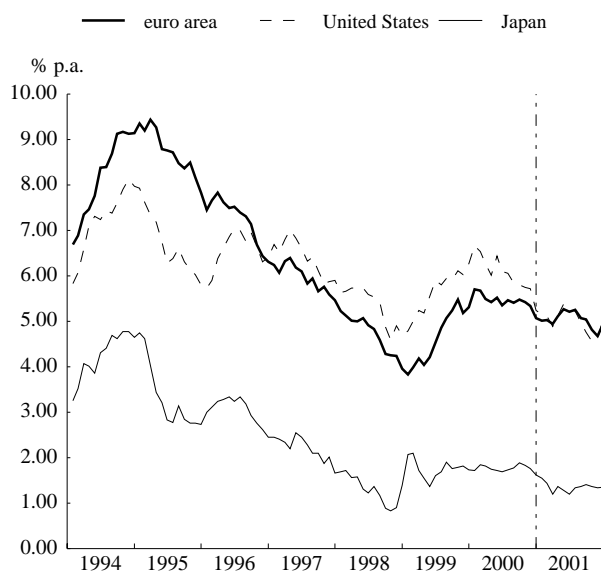
Euro area government bond yields

(monthly)



10-year government bond yields

(monthly)

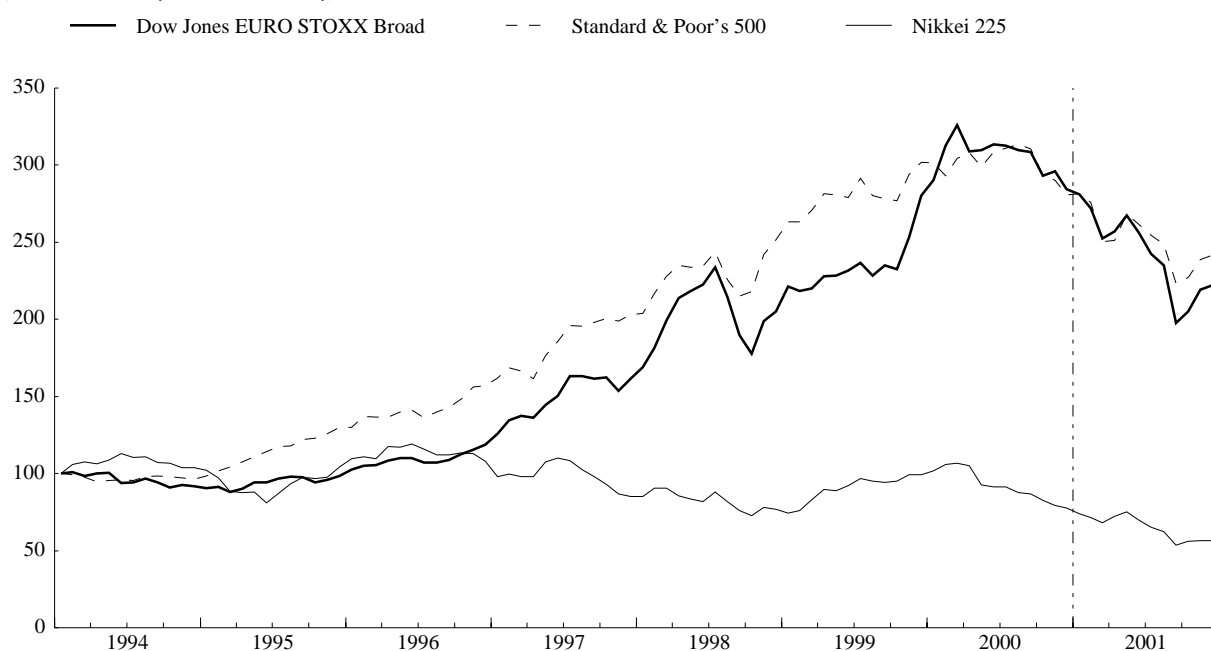


Sources: Reuters, ECB, Federal Reserve and Bank of Japan.

- 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
2000 Dec.	394.5	4,787.1	319.1	257.4	330.2	337.9	365.9	354.3	865.0	326.7	715.4	554.6	1,329.7	14,409.7
<i>Euro area enlargement</i>														
2001	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 Jan.	390.2	4,729.7	317.3	261.6	314.4	339.7	371.9	354.0	792.1	318.7	727.8	524.3	1,334.2	13,739.7
Feb.	377.1	4,525.9	320.2	260.4	319.0	349.5	364.5	355.7	656.6	317.8	654.4	549.5	1,305.5	13,274.1
Mar.	349.9	4,199.2	311.0	241.7	305.7	340.6	334.5	334.5	567.8	300.6	602.9	524.7	1,186.8	12,684.9
Apr.	356.3	4,305.2	308.4	242.6	304.8	352.5	339.4	329.9	587.4	311.5	635.0	534.6	1,189.2	13,436.7
May	370.8	4,481.8	316.5	258.9	312.0	371.8	345.9	345.9	662.4	311.0	623.9	553.2	1,270.7	14,014.3
June	355.1	4,289.7	306.4	241.8	316.9	379.2	341.0	328.6	553.5	320.9	538.3	580.1	1,238.7	12,974.9
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
2001 7 Dec.	315.3	3,792.9	292.5	216.9	289.9	312.5	294.4	290.6	517.7	284.0	499.4	524.1	1,158.3	10,796.9
14	297.8	3,568.7	280.6	200.5	278.4	299.1	278.2	276.9	475.8	283.7	466.5	491.6	1,123.1	10,511.7
21	306.6	3,696.4	281.6	209.0	291.7	316.5	282.9	279.5	489.9	286.2	474.5	527.6	1,144.9	10,335.5
28	312.4	3,778.4	287.4	213.5	295.2	324.3	288.0	281.1	501.3	292.3	480.5	540.5	1,161.0	10,542.6
2002 4 Jan.	317.5	3,820.4	298.1	220.4	290.5	322.2	290.7	290.4	530.6	288.0	497.9	521.9	1,172.5	10,871.5
11	309.5	3,696.7	294.0	213.7	283.7	319.0	285.1	286.2	507.4	288.5	462.1	521.8	1,145.6	10,441.6

Dow Jones EURO STOXX Broad, Standard & Poor's 500 and Nikkei 225*(base month: January 1994 = 100; monthly)*

Source: Reuters.

1) Monthly and yearly values are period averages.

Table 3.4

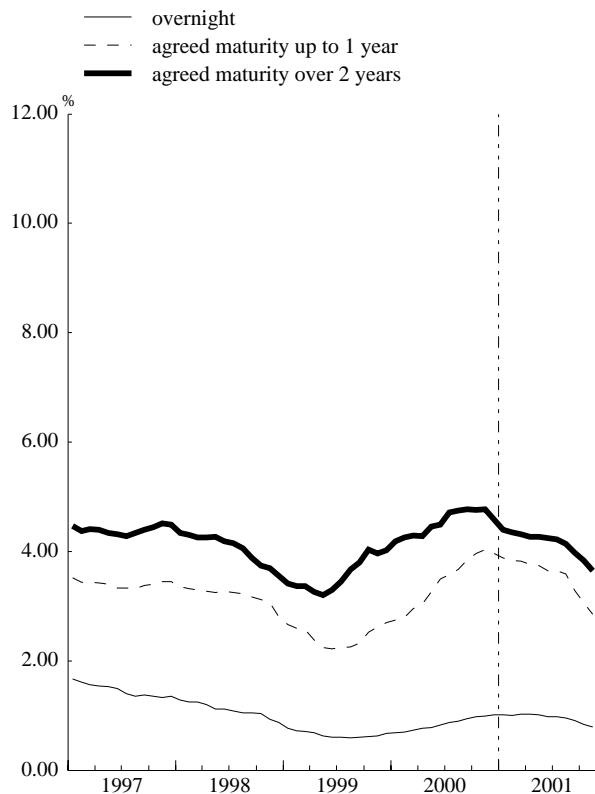
Retail bank interest rates

(percentages per annum; period averages)

	Deposit interest rates						Lending interest rates			
	Overnight 1	With agreed maturity			Redeemable at notice		To enterprises		To households	
		Up to 1 year 2	Up to 2 years 3	Over 2 years 4	Up to 3 months 5	Over 3 months 6	Up to 1 year 7	Over 1 year 8	Consumer lending 9	For house purchase 10
1998	1.10	3.20	3.22	4.06	2.61	3.25	6.73	5.80	10.05	5.87
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	9.86	6.34
2000 Nov.	0.99	4.04	4.03	4.77	2.47	4.25	7.16	6.63	10.20	6.56
Dec.	1.01	3.96	3.96	4.58	2.49	4.21	7.18	6.45	10.19	6.43
<i>Euro area enlargement</i>										
2001 Jan.	1.01	3.88	3.88	4.39	2.52	4.01	7.19	6.40	10.32	6.29
Feb.	1.01	3.84	3.83	4.35	2.50	3.99	7.11	6.44	10.26	6.24
Mar.	1.02	3.82	3.82	4.32	2.50	3.99	7.04	6.32	10.22	6.18
Apr.	1.03	3.76	3.76	4.26	2.50	3.91	7.07	6.34	10.24	6.14
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	6.98	6.25	10.17	6.13
July	0.97	3.65	3.65	4.22	2.44	3.80	6.90	6.20	10.10	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	6.71	6.07	10.08	5.86
Oct.	0.83	3.06	3.06	3.84	2.28	3.01	6.46	5.82	9.99	5.65
Nov.	0.78	2.86	2.85	3.65	2.21	2.75	6.31	5.71	9.86	5.48

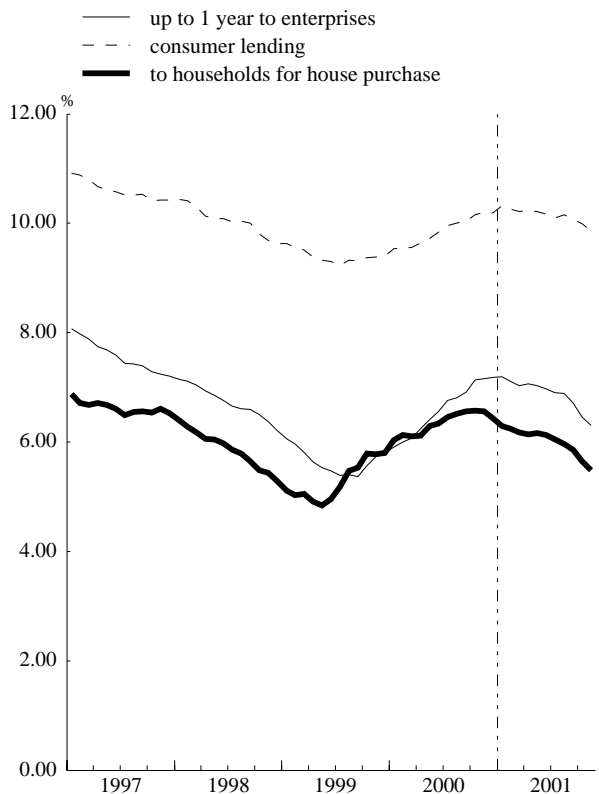
Deposit interest rates

(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	
2000 Oct.	355.2	342.5	12.7	685.9	338.2	330.3	7.9	618.8	17.0	12.1
Nov.	302.1	302.4	-0.3	686.4	283.7	290.1	-6.4	612.7	18.4	12.2
Dec.	246.0	278.6	-32.6	653.5	229.7	264.5	-34.8	578.7	16.3	14.1
<i>Euro area enlargement</i>										
2001 Jan.	376.3	346.8	29.5	687.4	358.6	326.2	32.4	615.9	17.7	20.6
Feb.	404.6	390.7	13.9	702.6	383.9	373.5	10.4	625.9	20.7	17.2
Mar.	452.7	436.5	16.3	722.8	432.6	417.8	14.9	643.2	20.1	18.7
Apr.	441.9	431.8	10.1	733.7	424.2	412.7	11.5	654.4	17.6	19.0
May	478.1	480.7	-2.6	735.7	456.9	460.2	-3.3	652.4	21.2	20.5
June	410.7	418.8	-8.1	726.8	388.0	395.6	-7.6	643.2	22.7	23.2
July	393.2	385.6	7.6	734.8	370.1	365.2	4.9	649.6	23.2	20.5
Aug.	423.0	418.1	5.0	738.4	404.6	400.0	4.6	655.1	18.4	18.1
Sep.	396.4	399.8	-3.5	734.8	374.2	376.3	-2.1	653.4	22.2	23.5
Oct.	498.1	493.9	4.2	742.0	480.0	470.7	9.3	663.0	18.0	23.2

2. Long-term

	By euro area residents									
					In euro ¹⁾				In other	
					Issues	Redemptions	Net issues	Amounts outstanding	Issues	Redemptions	Net issues	Amounts outstanding	Issues	Redemptions
1	2	3	4	5	6	7	8	9	10	
2000 Oct.	127.5	89.6	37.9	6,448.3	102.6	77.1	25.4	5,872.8	25.0	12.5
Nov.	107.3	78.2	29.1	6,465.2	92.7	66.0	26.7	5,898.7	14.7	12.3
Dec.	101.3	103.3	-2.0	6,441.7	88.3	87.6	0.7	5,902.2	13.0	15.7
<i>Euro area enlargement</i>										
2001 Jan.	153.4	144.5	8.9	6,539.9	136.1	132.1	4.0	5,997.1	17.2	12.3
Feb.	139.6	85.6	53.9	6,594.7	117.1	70.5	46.5	6,045.8	22.5	15.1
Mar.	155.9	102.2	53.7	6,658.9	127.8	87.2	40.6	6,088.5	28.1	15.0
Apr.	115.0	74.1	40.9	6,698.6	98.3	64.6	33.7	6,121.8	16.7	9.5
May	134.9	80.8	54.0	6,769.9	117.4	68.0	49.3	6,171.4	17.5	12.8
June	137.5	78.5	59.1	6,824.3	116.5	58.8	57.7	6,227.5	21.1	19.7
July	140.0	98.4	41.7	6,856.4	123.8	85.3	38.5	6,266.2	16.2	13.1
Aug.	89.0	73.7	15.2	6,859.9	75.6	62.6	13.0	6,277.8	13.4	11.1
Sep.	127.7	109.6	18.1	6,879.9	112.2	92.2	20.0	6,298.3	15.5	17.4
Oct.	141.0	106.5	34.5	6,916.7	117.0	91.9	25.2	6,323.8	24.0	14.7

3. Total

	By euro area residents									
					In euro ¹⁾				In other	
					Issues	Redemptions	Net issues	Amounts outstanding	Issues	Redemptions	Net issues	Amounts outstanding	Issues	Redemptions
1	2	3	4	5	6	7	8	9	10	
2000 Oct.	482.7	432.1	50.6	7,134.2	440.8	407.5	33.3	6,491.6	41.9	24.6
Nov.	409.4	380.6	28.8	7,151.6	376.4	356.1	20.3	6,511.4	33.0	24.5
Dec.	347.3	381.9	-34.7	7,095.2	318.0	352.1	-34.1	6,480.9	29.3	29.9
<i>Euro area enlargement</i>										
2001 Jan.	529.7	491.2	38.4	7,227.4	494.7	458.3	36.4	6,613.1	35.0	32.9
Feb.	544.1	476.3	67.8	7,297.3	501.0	444.0	56.9	6,671.7	43.2	32.3
Mar.	608.6	538.7	70.0	7,381.7	560.5	504.9	55.5	6,731.7	48.2	33.7
Apr.	556.9	505.9	51.0	7,432.3	522.6	477.4	45.2	6,776.2	34.3	28.5
May	612.9	561.5	51.4	7,505.6	574.3	528.2	46.0	6,823.8	38.6	33.3
June	548.2	497.3	51.0	7,551.1	504.5	454.4	50.1	6,870.7	43.8	42.8
July	533.3	484.0	49.3	7,591.3	493.9	450.5	43.4	6,915.8	39.4	33.5
Aug.	512.0	491.8	20.2	7,598.2	480.2	462.6	17.6	6,932.9	31.8	29.2
Sep.	524.1	509.5	14.6	7,614.6	486.4	468.5	17.8	6,951.7	37.7	41.0
Oct.	639.1	600.5	38.6	7,658.7	597.1	562.6	34.5	6,986.8	42.0	37.9

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

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

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	
4.8	67.1	12.0	22.7	-10.8	52.7	350.2	353.1	-2.9	671.4	2000 Oct.
6.1	73.7	16.6	8.5	8.1	60.8	300.3	298.6	1.7	673.5	Nov.
2.2	74.8	21.1	7.0	14.0	74.8	250.7	271.5	-20.8	653.5	Dec.
<i>Euro area enlargement</i>										
-2.8	71.5	12.9	29.3	-16.4	58.5	371.5	355.5	16.0	674.4	2001 Jan.
3.5	76.7	12.5	13.1	-0.5	57.9	396.4	386.6	9.9	683.9	Feb.
1.4	79.6	26.3	6.3	20.0	78.0	459.0	424.1	34.9	721.2	Mar.
-1.4	79.3	7.2	29.2	-22.0	55.9	431.4	441.9	-10.5	710.4	Apr.
0.7	83.3	11.8	13.5	-1.7	54.2	468.7	473.7	-5.0	706.7	May
-0.5	83.6	25.1	9.8	15.2	69.5	413.1	405.5	7.6	712.7	June
2.7	85.3	6.2	25.5	-19.3	50.2	376.3	390.6	-14.3	699.8	July
0.3	83.3	9.9	14.7	-4.8	45.4	414.5	414.7	-0.2	700.5	Aug.
-1.3	81.4	22.0	12.0	10.0	55.4	396.2	388.3	7.9	708.8	Sep.
-5.2	79.0									Oct.

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	
12.5	575.5	23.2	4.7	18.4	695.8	125.7	81.9	43.9	6,568.6	2000 Oct.
2.4	566.5	17.2	6.8	10.4	706.2	109.9	72.8	37.1	6,604.9	Nov.
-2.8	539.5	17.0	7.1	10.0	716.1	105.3	94.6	10.7	6,618.3	Dec.
<i>Euro area enlargement</i>										
4.9	542.8	16.3	6.7	9.6	713.0	152.5	138.8	13.6	6,710.1	2001 Jan.
7.4	548.9	36.3	13.0	23.2	736.0	153.3	83.6	69.8	6,781.7	Feb.
13.1	570.4	37.0	8.1	29.0	764.9	164.8	95.2	69.6	6,853.4	Mar.
7.2	576.8	20.0	6.7	13.3	778.1	118.3	71.3	47.0	6,899.8	Apr.
4.7	598.5	27.0	10.4	16.6	794.5	144.3	78.4	65.9	6,965.9	May
1.4	596.8	33.6	8.7	24.8	819.5	150.0	67.5	82.5	7,047.1	June
3.2	590.2	14.8	5.8	9.0	828.8	138.6	91.1	47.5	7,095.0	July
2.2	582.1	12.9	6.0	6.9	835.9	88.5	68.6	19.9	7,113.7	Aug.
-1.9	581.6	8.4	9.0	-0.6	835.3	120.6	101.2	19.4	7,133.5	Sep.
9.3	592.9									Oct.

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	
17.3	642.6	35.1	27.5	7.6	748.5	475.9	435.0	40.9	7,240.0	2000 Oct.
8.5	640.2	33.8	15.3	18.5	766.9	410.2	371.4	38.8	7,278.4	Nov.
-0.6	614.3	38.1	14.1	24.0	790.9	356.0	366.2	-10.1	7,271.9	Dec.
<i>Euro area enlargement</i>										
2.1	614.3	29.3	36.0	-6.7	771.4	524.0	494.3	29.6	7,384.5	2001 Jan.
10.9	625.6	48.8	26.1	22.7	793.9	549.8	470.1	79.7	7,465.6	Feb.
14.4	649.9	63.4	14.4	49.0	842.9	623.8	519.3	104.5	7,574.6	Mar.
5.8	656.1	27.2	35.9	-8.7	834.0	549.7	513.3	36.5	7,610.2	Apr.
5.4	681.8	38.8	23.9	14.9	848.8	613.1	552.1	60.9	7,672.5	May
0.9	680.4	58.6	18.5	40.1	889.0	563.1	473.0	90.2	7,759.8	June
5.9	675.5	21.0	31.3	-10.2	879.0	514.9	481.7	33.2	7,794.8	July
2.6	665.4	22.8	20.7	2.1	881.3	503.0	483.3	19.7	7,814.2	Aug.
-3.2	663.0	30.4	21.0	9.4	890.7	516.8	489.5	27.3	7,842.4	Sep.
4.2	671.9									Oct.

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

	By euro area residents						By non-residents			
	Total	MFIs (including Eurosystem)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations
	1	2	3	4	5	6	7	8	9	10
2000 Oct.	618.8	259.7	4.5	86.3	265.6	2.7	52.7	24.0	16.7	10.0
Nov.	612.7	254.4	4.6	86.9	263.9	3.0	60.8	28.1	20.3	11.0
Dec.	578.7	244.0	4.5	86.0	241.4	2.9	74.8	34.9	23.7	14.2
<i>Euro area enlargement</i>										
2001 Jan.	615.9	257.1	5.0	89.4	261.5	2.9	58.5	30.0	17.0	10.1
Feb.	625.9	260.3	4.9	93.1	265.4	2.2	57.9	30.6	16.0	10.0
Mar.	643.2	265.0	5.1	94.4	276.5	2.2	78.0	37.9	25.8	12.6
Apr.	654.4	269.2	5.5	92.4	285.3	2.2	55.9	26.8	18.5	9.7
May	652.4	261.0	5.5	99.4	284.1	2.4	54.2	26.5	18.0	8.8
June	643.2	261.7	5.2	97.5	276.9	2.0	69.5	32.1	24.7	11.5
July	649.6	259.3	5.1	100.8	280.8	3.6	50.2	25.3	17.3	6.7
Aug.	655.1	254.9	4.4	106.3	285.8	3.6	45.4	23.1	15.7	5.8
Sep.	653.4	252.2	4.1	105.8	287.5	3.7	55.4	27.1	22.2	5.5
Oct.	663.0	262.2	3.8	109.7	284.0	3.3				

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
2000 Oct.	5,872.8	2,173.3	238.8	280.8	3,076.1	103.9	695.8	167.7	210.9	63.8
Nov.	5,898.7	2,175.3	242.7	285.4	3,089.7	105.5	706.2	169.1	220.4	64.6
Dec.	5,902.2	2,175.7	256.0	288.3	3,075.8	106.5	716.1	171.3	221.9	67.2
<i>Euro area enlargement</i>										
2001 Jan.	5,997.1	2,199.8	254.8	285.1	3,150.3	107.1	713.0	172.4	227.8	65.9
Feb.	6,045.8	2,229.9	260.9	289.2	3,157.1	108.8	736.0	183.5	233.3	75.4
Mar.	6,088.5	2,241.0	268.6	299.8	3,168.7	110.5	764.9	195.9	238.6	80.5
Apr.	6,121.8	2,247.8	274.4	303.8	3,183.2	112.7	778.1	198.7	246.1	82.8
May	6,171.4	2,255.8	284.4	312.7	3,205.0	113.4	794.5	204.6	252.3	88.5
June	6,227.5	2,270.7	292.0	320.1	3,231.2	113.5	819.5	212.9	259.0	90.7
July	6,266.2	2,289.5	309.3	322.7	3,229.2	115.5	828.8	215.5	264.5	92.7
Aug.	6,277.8	2,289.4	310.9	329.2	3,230.1	118.3	835.9	216.6	271.4	93.4
Sep.	6,298.3	2,296.1	314.4	327.7	3,237.6	122.4	835.3	217.4	272.2	92.8
Oct.	6,323.8	2,309.2	322.8	323.0	3,241.3	127.5				

3. Total

	By euro area residents						By non-residents			
	Total	MFIs (including Eurosystem)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations
	1	2	3	4	5	6	7	8	9	10
2000 Oct.	6,491.6	2,433.0	243.2	367.1	3,341.7	106.6	748.5	191.7	227.6	73.9
Nov.	6,511.4	2,429.7	247.3	372.3	3,353.6	108.5	766.9	197.2	240.7	75.6
Dec.	6,480.9	2,419.6	260.4	374.3	3,317.2	109.4	790.9	206.2	245.6	81.4
<i>Euro area enlargement</i>										
2001 Jan.	6,613.1	2,457.0	259.8	374.6	3,411.8	110.0	771.4	202.4	244.9	76.0
Feb.	6,671.7	2,490.2	265.8	382.3	3,422.5	111.0	793.9	214.2	249.3	85.4
Mar.	6,731.7	2,506.0	273.7	394.2	3,445.2	112.7	842.9	233.8	264.4	93.1
Apr.	6,776.2	2,517.0	279.8	396.1	3,468.4	114.9	834.0	225.5	264.6	92.5
May	6,823.8	2,516.8	289.9	412.1	3,489.2	115.8	848.8	231.0	270.3	97.3
June	6,870.7	2,532.4	297.2	417.5	3,508.1	115.5	889.0	245.0	283.6	102.2
July	6,915.8	2,548.9	314.3	423.4	3,510.0	119.1	879.0	240.8	281.7	99.4
Aug.	6,932.9	2,544.3	315.3	435.5	3,516.0	121.9	881.3	239.7	287.1	99.2
Sep.	6,951.7	2,548.3	318.6	433.5	3,525.1	126.1	890.7	244.5	294.3	98.3
Oct.	6,986.8	2,571.4	326.6	432.6	3,525.3	130.8				

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	
0.2	1.1	0.6	671.4	283.7	21.1	96.4	265.9	3.8	0.6	2000 Oct.
0.2	0.9	0.3	673.5	282.5	24.9	97.9	264.1	3.9	0.3	Nov.
0.1	1.1	0.8	653.5	278.9	28.2	100.2	241.5	4.0	0.8	Dec.
<i>Euro area enlargement</i>										
0.1	1.0	0.2	674.4	287.2	22.1	99.5	261.6	3.9	0.2	2001 Jan.
0.1	1.1	0.1	683.9	290.9	20.9	103.1	265.5	3.3	0.1	Feb.
0.2	1.0	0.4	721.2	303.0	30.9	107.0	276.7	3.2	0.4	Mar.
0.1	0.8	0.1	710.4	296.0	23.9	102.0	285.3	2.9	0.1	Apr.
0.1	0.8	0.1	706.7	287.5	23.5	108.2	284.2	3.2	0.1	May
0.2	0.8	0.2	712.7	293.7	29.9	109.0	277.1	2.8	0.2	June
0.2	0.7	0.0	699.8	284.6	22.3	107.5	281.0	4.3	0.0	July
0.1	0.6	0.0	700.5	278.0	20.1	112.2	286.0	4.2	0.0	Aug.
0.1	0.5	0.1	708.8	279.3	26.3	111.3	287.7	4.2	0.1	Sep. Oct.

of the euro area			Total							
Central government	Other general government	International organisations	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	International organisations	
11	12	13	14	15	16	17	18	19	20	
100.6	33.2	119.5	6,568.6	2,341.0	449.7	344.6	3,176.7	137.1	119.5	2000 Oct.
100.9	32.9	118.3	6,604.9	2,344.4	463.1	350.0	3,190.6	138.4	118.3	Nov.
100.5	37.9	117.2	6,618.3	2,347.0	477.9	355.5	3,176.3	144.4	117.2	Dec.
<i>Euro area enlargement</i>										
90.2	35.6	121.1	6,710.1	2,372.2	482.6	351.0	3,240.5	142.7	121.1	2001 Jan.
88.3	36.5	118.9	6,781.7	2,413.4	494.2	364.6	3,245.3	145.3	118.9	Feb.
90.8	41.7	117.5	6,853.4	2,436.9	507.2	380.2	3,259.4	152.3	117.5	Mar.
91.6	41.9	116.9	6,899.8	2,446.5	520.5	386.6	3,274.8	154.6	116.9	Apr.
92.6	40.9	115.7	6,965.9	2,460.4	536.7	401.2	3,297.6	154.3	115.7	May
94.5	47.4	115.1	7,047.1	2,483.7	550.9	410.8	3,325.7	160.9	115.1	June
94.0	47.4	114.7	7,095.0	2,505.0	573.8	415.3	3,323.2	162.9	114.7	July
93.8	47.3	113.4	7,113.7	2,506.0	582.3	422.6	3,323.9	165.6	113.4	Aug.
92.0	47.3	113.6	7,133.5	2,513.4	586.6	420.5	3,329.6	169.8	113.6	Sep. Oct.

of the euro area			Total							
Central government	Other general government	International organisations	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	International organisations	
11	12	13	14	15	16	17	18	19	20	
100.8	34.3	120.1	7,240.0	2,624.7	470.8	441.0	3,442.5	140.9	120.1	2000 Oct.
101.1	33.8	118.6	7,278.4	2,626.9	488.0	447.9	3,454.7	142.3	118.6	Nov.
100.7	39.0	118.0	7,271.9	2,625.9	506.0	455.7	3,417.8	148.4	118.0	Dec.
<i>Euro area enlargement</i>										
90.4	36.6	121.3	7,384.5	2,659.4	504.6	450.5	3,502.1	146.6	121.3	2001 Jan.
88.4	37.6	119.1	7,465.6	2,704.4	515.1	467.7	3,510.9	148.6	119.1	Feb.
90.9	42.7	117.9	7,574.6	2,739.8	538.1	487.3	3,536.1	155.4	117.9	Mar.
91.7	42.7	117.0	7,610.2	2,742.5	544.4	488.6	3,560.1	157.5	117.0	Apr.
92.6	41.7	115.8	7,672.5	2,747.8	560.2	509.4	3,581.8	157.5	115.8	May
94.7	48.2	115.3	7,759.8	2,777.4	580.9	519.7	3,602.8	163.7	115.3	June
94.2	48.2	114.8	7,794.8	2,789.7	596.1	522.8	3,604.2	167.3	114.8	July
93.9	47.9	113.5	7,814.2	2,784.0	602.3	534.7	3,609.8	169.8	113.5	Aug.
92.1	47.8	113.7	7,842.4	2,792.7	612.9	531.8	3,617.3	173.9	113.7	Sep. Oct.

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

	By euro area residents						By non-residents			
	Total	MFIs (including Eurosystem)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations
	1	2	3	4	5	6	7	8	9	10
2000 Oct.	338.2	237.8	2.6	60.3	35.5	1.9	12.0	5.6	4.7	1.3
Nov.	283.7	189.7	3.0	55.9	33.6	1.5	16.6	7.4	7.1	1.9
Dec.	229.7	162.1	2.1	45.9	18.0	1.6	21.1	9.3	6.9	4.2
<i>Euro area enlargement</i>										
2001 Jan.	358.6	238.7	3.4	66.9	47.7	1.9	12.9	6.7	4.7	1.2
Feb.	383.9	275.9	2.2	62.9	41.4	1.5	12.5	6.1	4.5	1.7
Mar.	432.6	312.8	3.1	67.0	48.1	1.6	26.3	10.1	12.3	3.5
Apr.	424.2	301.7	3.2	69.4	48.5	1.4	7.2	2.7	3.3	1.1
May	456.9	341.6	2.8	71.3	39.2	1.9	11.8	5.7	5.0	0.8
June	388.0	282.1	2.7	64.6	37.4	1.1	25.1	9.8	11.5	3.3
July	370.1	245.0	2.3	75.3	44.9	2.6	6.2	2.8	2.8	0.6
Aug.	404.6	287.6	1.6	68.6	45.3	1.5	9.9	4.8	4.1	0.9
Sep.	374.2	269.8	2.2	66.2	34.3	1.8	22.0	8.0	11.4	2.2
Oct.	480.0	346.1	2.0	85.7	45.1	1.1				

2. Long-term

	By euro area residents						By non-residents			
	Total	MFIs (including Eurosystem)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations
	1	2	3	4	5	6	7	8	9	10
2000 Oct.	102.6	43.3	7.8	5.7	43.3	2.5	23.2	9.2	8.2	0.2
Nov.	92.7	34.2	8.4	8.1	39.0	3.0	17.2	3.7	10.1	1.0
Dec.	88.3	38.8	19.9	4.5	23.1	2.0	17.0	5.1	3.2	3.3
<i>Euro area enlargement</i>										
2001 Jan.	136.1	56.4	4.0	0.8	72.1	2.8	16.3	3.8	7.5	0.4
Feb.	117.1	57.6	10.0	5.0	42.1	2.4	36.3	12.7	8.8	10.0
Mar.	127.8	45.2	12.0	14.4	53.3	2.8	37.0	14.3	7.3	5.6
Apr.	98.3	41.0	8.5	7.1	39.1	2.6	20.0	5.3	9.1	2.5
May	117.4	38.7	13.2	11.7	52.9	0.9	27.0	8.9	9.7	6.5
June	116.5	44.5	11.0	10.9	49.6	0.5	33.6	11.7	8.7	3.8
July	123.8	51.9	20.7	6.1	42.6	2.5	14.8	4.8	7.1	2.2
Aug.	75.6	29.2	6.1	7.6	29.6	3.0	12.9	3.4	8.5	0.8
Sep.	112.2	35.7	6.3	2.3	63.2	4.6	8.4	4.8	3.0	0.2
Oct.	117.0	56.0	11.1	3.3	40.9	5.7				

3. Total

	By euro area residents						By non-residents			
	Total	MFIs (including Eurosystem)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations
	1	2	3	4	5	6	7	8	9	10
2000 Oct.	440.8	281.1	10.3	66.0	78.8	4.5	35.1	14.8	12.9	1.5
Nov.	376.4	223.9	11.4	64.0	72.6	4.5	33.8	11.2	17.3	2.9
Dec.	318.0	200.9	21.9	50.4	41.1	3.7	38.1	14.4	10.1	7.5
<i>Euro area enlargement</i>										
2001 Jan.	494.7	295.0	7.4	67.7	119.8	4.7	29.3	10.5	12.2	1.6
Feb.	501.0	333.5	12.1	67.9	83.5	3.9	48.8	18.9	13.4	11.7
Mar.	560.5	358.0	15.1	81.4	101.5	4.4	63.4	24.4	19.6	9.1
Apr.	522.6	342.7	11.7	76.5	87.6	4.0	27.2	7.9	12.4	3.7
May	574.3	380.3	16.0	83.0	92.1	2.9	38.8	14.7	14.8	7.3
June	504.5	326.6	13.7	75.5	87.0	1.6	58.6	21.6	20.2	7.0
July	493.9	297.0	23.0	81.3	87.5	5.1	21.0	7.6	9.9	2.9
Aug.	480.2	316.7	7.7	76.3	74.9	4.6	22.8	8.2	12.6	1.7
Sep.	486.4	305.5	8.5	68.5	97.5	6.4	30.4	12.7	14.4	2.4
Oct.	597.1	402.2	13.1	89.0	86.0	6.8				

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	0.2	350.2	243.4	7.3	61.7	35.5	2.0	0.2	2000 Oct.
0.1	0.0	0.0	300.3	197.1	10.1	57.9	33.6	1.5	0.0	Nov.
0.0	0.2	0.4	250.7	171.4	9.0	50.1	18.0	1.8	0.4	Dec.
<i>Euro area enlargement</i>										
0.1	0.0	0.1	371.5	245.4	8.1	68.1	47.8	1.9	0.1	2001 Jan.
0.0	0.1	0.0	396.4	282.0	6.7	64.6	41.4	1.6	0.0	Feb.
0.1	0.1	0.3	459.0	322.9	15.4	70.5	48.2	1.7	0.3	Mar.
0.0	0.1	0.0	431.4	304.3	6.5	70.5	48.5	1.5	0.0	Apr.
0.0	0.2	0.0	468.7	347.4	7.9	72.1	39.3	2.1	0.0	May
0.1	0.1	0.2	413.1	291.9	14.3	67.9	37.5	1.2	0.2	June
0.0	0.0	0.0	376.3	247.8	5.1	75.9	44.9	2.6	0.0	July
0.1	0.0	0.0	414.5	292.3	5.7	69.5	45.4	1.5	0.0	Aug.
0.1	0.4	0.0	396.2	277.7	13.5	68.4	34.3	2.1	0.0	Sep. Oct.

of the euro area			Total							
Central government	Other general government	International organisations	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	International organisations	
11	12	13	14	15	16	17	18	19	20	
1.3	1.0	3.4	125.7	52.4	15.9	5.9	44.6	3.5	3.4	2000 Oct.
1.7	0.1	0.6	109.9	37.9	18.5	9.1	40.8	3.1	0.6	Nov.
0.2	5.0	0.1	105.3	43.9	23.1	7.8	23.3	7.1	0.1	Dec.
<i>Euro area enlargement</i>										
1.2	0.3	3.1	152.5	60.2	11.5	1.2	73.4	3.1	3.1	2001 Jan.
2.8	1.7	0.2	153.3	70.4	18.8	15.0	44.9	4.1	0.2	Feb.
3.2	5.5	1.1	164.8	59.5	19.3	20.0	56.6	8.3	1.1	Mar.
1.3	0.6	1.2	118.3	46.3	17.6	9.7	40.4	3.2	1.2	Apr.
1.7	0.0	0.1	144.3	47.6	22.9	18.2	54.6	1.0	0.1	May
2.0	6.7	0.8	150.0	56.3	19.6	14.6	51.6	7.2	0.8	June
0.5	0.1	0.0	138.6	56.8	27.8	8.3	43.1	2.6	0.0	July
0.1	0.0	0.0	88.5	32.6	14.6	8.5	29.7	3.1	0.0	Aug.
0.1	0.0	0.4	120.6	40.5	9.3	2.5	63.3	4.6	0.4	Sep. Oct.

of the euro area			Total							
Central government	Other general government	International organisations	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	International organisations	
11	12	13	14	15	16	17	18	19	20	
1.3	1.0	3.6	475.9	295.9	23.2	67.6	80.1	5.5	3.6	2000 Oct.
1.8	0.1	0.6	410.2	235.0	28.6	66.9	74.4	4.6	0.6	Nov.
0.2	5.3	0.6	356.0	215.3	32.1	57.9	41.3	8.9	0.6	Dec.
<i>Euro area enlargement</i>										
1.3	0.3	3.3	524.0	305.6	19.6	69.3	121.1	5.1	3.3	2001 Jan.
2.8	1.9	0.2	549.8	352.4	25.5	79.6	86.3	5.7	0.2	Feb.
3.3	5.6	1.5	623.8	382.4	34.7	90.5	104.8	10.0	1.5	Mar.
1.3	0.6	1.2	549.7	350.6	24.1	80.2	88.9	4.6	1.2	Apr.
1.7	0.2	0.1	613.1	395.0	30.8	90.3	93.8	3.1	0.1	May
2.1	6.8	1.0	563.1	348.2	33.9	82.5	89.1	8.4	1.0	June
0.6	0.1	0.1	514.9	304.6	32.9	84.2	88.0	5.2	0.1	July
0.2	0.0	0.1	503.0	324.9	20.3	78.0	75.1	4.6	0.1	Aug.
0.2	0.4	0.4	516.8	318.2	22.8	70.9	97.6	6.7	0.4	Sep. Oct.

Table 3.6 (cont'd)
Euro-denominated securities other than shares by original maturity, residency and sector of the issuer ¹⁾
(EUR billions; transactions during the month; 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
2000 Oct.	7.9	3.8	0.4	5.2	-1.5	-0.1	-10.8	-0.8	-6.1	-3.6
Nov.	-6.4	-5.6	0.1	0.6	-1.8	0.3	8.1	4.0	3.6	0.9
Dec.	-34.8	-11.1	-0.1	-1.1	-22.5	0.0	14.0	6.9	3.4	3.2
<i>Euro area enlargement</i>										
2001 Jan.	32.4	13.1	0.6	3.4	14.9	0.5	-16.4	-4.9	-6.6	-4.2
Feb.	10.4	3.6	-0.1	3.6	3.9	-0.7	-0.5	0.6	-1.1	-0.1
Mar.	14.9	2.7	0.2	1.0	11.1	-0.1	20.0	7.3	9.8	2.6
Apr.	11.5	4.4	0.4	-2.0	8.8	0.0	-22.0	-11.1	-7.3	-3.0
May	-3.3	-9.4	0.1	7.0	-1.1	0.2	-1.7	-0.4	-0.5	-0.9
June	-7.6	2.1	-0.3	-1.8	-7.3	-0.4	15.2	5.6	6.7	2.7
July	4.9	-3.7	-0.2	3.2	4.0	1.6	-19.3	-6.7	-7.4	-4.8
Aug.	4.6	-5.3	-0.7	5.6	5.0	0.0	-4.8	-2.2	-1.6	-0.9
Sep.	-2.1	-3.2	-0.3	-0.5	1.7	0.1	10.0	4.0	6.5	-0.3
Oct.	9.3	9.8	-0.4	3.7	-3.5	-0.4				

2. Long-term

	By euro area residents						By non-residents			
	Total	MFIs (including Eurosystem)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations
	1	2	3	4	5	6	7	8	9	10
2000 Oct.	25.4	9.5	5.4	4.4	4.1	2.1	18.4	7.8	7.0	0.1
Nov.	26.7	2.8	4.0	4.6	13.6	1.6	10.4	1.5	9.3	0.8
Dec.	0.7	-2.5	13.2	2.9	-13.9	0.9	10.0	2.2	1.6	2.6
<i>Euro area enlargement</i>										
2001 Jan.	4.0	22.4	-1.2	-3.2	-14.8	0.8	9.6	0.8	6.4	0.1
Feb.	46.5	28.1	6.1	3.9	6.8	1.7	23.2	11.2	5.5	9.8
Mar.	40.6	9.5	7.2	10.6	11.7	1.8	29.0	12.3	5.3	5.1
Apr.	33.7	7.5	5.5	4.0	14.5	2.2	13.3	2.9	7.6	2.4
May	49.3	7.8	9.9	9.0	21.9	0.7	16.6	5.9	6.2	5.7
June	57.7	16.5	7.6	7.3	26.2	0.0	24.8	8.3	6.6	2.2
July	38.5	18.9	17.3	2.6	-2.3	2.0	9.0	2.5	5.4	2.0
Aug.	13.0	1.2	1.6	6.5	0.9	2.8	6.9	1.1	6.8	0.7
Sep.	20.0	6.2	3.6	-1.5	7.5	4.2	-0.6	0.8	0.8	-0.6
Oct.	25.2	12.8	8.4	-4.7	3.7	5.0				

3. Total

	By euro area residents						By non-residents			
	Total	MFIs (including Eurosystem)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations
	1	2	3	4	5	6	7	8	9	10
2000 Oct.	33.3	13.3	5.8	9.6	2.6	2.0	7.6	6.9	0.8	-3.5
Nov.	20.3	-2.8	4.2	5.2	11.9	1.9	18.5	5.6	13.0	1.7
Dec.	-34.1	-13.6	13.1	1.9	-36.4	0.9	24.0	9.1	5.0	5.8
<i>Euro area enlargement</i>										
2001 Jan.	36.4	35.4	-0.6	0.2	0.1	1.2	-6.7	-4.1	-0.3	-4.1
Feb.	56.9	31.7	6.0	7.4	10.7	1.0	22.7	11.8	4.4	9.7
Mar.	55.5	12.2	7.3	11.6	22.8	1.7	49.0	19.6	15.1	7.7
Apr.	45.2	11.9	5.9	2.0	23.2	2.2	-8.7	-8.2	0.3	-0.6
May	46.0	-1.6	10.0	15.9	20.7	1.0	14.9	5.5	5.7	4.8
June	50.1	18.6	7.4	5.6	18.9	-0.3	40.1	13.9	13.2	4.9
July	43.4	15.2	17.1	5.8	1.7	3.6	-10.2	-4.2	-2.0	-2.8
Aug.	17.6	-4.1	0.9	12.1	5.9	2.7	2.1	-1.1	5.2	-0.2
Sep.	17.8	3.0	3.3	-2.0	9.2	4.3	9.4	4.7	7.3	-0.9
Oct.	34.5	22.6	8.0	-1.0	0.2	4.7				

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	0.0	-0.2	-2.9	3.0	-5.8	1.6	-1.5	-0.1	-0.2	2000 Oct.
0.0	-0.2	-0.3	1.7	-1.6	3.8	1.5	-1.8	0.1	-0.3	Nov.
-0.1	0.2	0.4	-20.8	-4.3	3.3	2.2	-22.6	0.1	0.4	Dec.
<i>Euro area enlargement</i>										
0.0	-0.1	-0.6	16.0	8.1	-6.1	-0.8	14.9	0.3	-0.6	2001 Jan.
0.0	0.1	-0.1	9.9	4.2	-1.2	3.5	3.9	-0.5	-0.1	Feb.
0.1	-0.1	0.3	34.9	10.0	10.0	3.6	11.2	-0.1	0.3	Mar.
-0.1	-0.2	-0.3	-10.5	-6.7	-7.0	-4.9	8.6	-0.2	-0.3	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	7.6	7.7	6.4	0.9	-7.2	-0.3	0.1	June
0.0	-0.1	-0.2	-14.3	-10.4	-7.6	-1.6	3.9	1.5	-0.2	July
0.0	-0.1	0.0	-0.2	-7.5	-2.2	4.7	5.0	-0.2	0.0	Aug.
0.0	-0.1	0.0	7.9	0.8	6.2	-0.8	1.7	0.0	0.0	Sep.
										Oct.

of the euro area			Total							
Central government	Other general government	International organisations	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	International organisations	
11	12	13	14	15	16	17	18	19	20	
0.7	0.7	2.2	43.9	17.2	12.4	4.5	4.8	2.8	2.2	2000 Oct.
0.3	-0.3	-1.2	37.1	4.3	13.4	5.4	14.0	1.3	-1.2	Nov.
-0.4	5.0	-1.0	10.7	-0.2	14.8	5.5	-14.3	5.9	-1.0	Dec.
<i>Euro area enlargement</i>										
1.0	0.0	1.4	13.6	23.2	5.2	-3.1	-13.8	0.8	1.4	2001 Jan.
-2.0	0.9	-2.2	69.8	39.3	11.6	13.6	4.8	2.6	-2.2	Feb.
2.5	5.2	-1.5	69.6	21.8	12.4	15.6	14.2	7.0	-1.5	Mar.
0.9	0.2	-0.6	47.0	10.4	13.1	6.4	15.3	2.3	-0.6	Apr.
1.0	-1.0	-1.1	65.9	13.7	16.1	14.7	22.8	-0.3	-1.1	May
1.9	6.5	-0.6	82.5	24.8	14.2	9.5	28.1	6.5	-0.6	June
-0.5	0.0	-0.4	47.5	21.4	22.7	4.6	-2.8	2.0	-0.4	July
-0.2	-0.1	-1.3	19.9	2.3	8.4	7.2	0.7	2.7	-1.3	Aug.
-1.8	0.0	0.2	19.4	7.0	4.4	-2.0	5.7	4.2	0.2	Sep.
										Oct.

of the euro area			Total							
Central government	Other general government	International organisations	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	International organisations	
11	12	13	14	15	16	17	18	19	20	
0.7	0.7	2.0	40.9	20.2	6.6	6.1	3.3	2.7	2.0	2000 Oct.
0.3	-0.5	-1.5	38.8	2.8	17.1	6.9	12.2	1.4	-1.5	Nov.
-0.5	5.2	-0.6	-10.1	-4.5	18.1	7.7	-36.9	6.1	-0.6	Dec.
<i>Euro area enlargement</i>										
1.0	-0.1	0.8	29.6	31.3	-0.9	-3.8	1.1	1.2	0.8	2001 Jan.
-2.0	1.0	-2.2	79.7	43.5	10.5	17.1	8.8	2.0	-2.2	Feb.
2.6	5.2	-1.1	104.5	31.8	22.4	19.2	25.3	6.9	-1.1	Mar.
0.7	-0.1	-0.9	36.5	3.7	6.2	1.5	24.0	2.1	-0.9	Apr.
1.0	-1.0	-1.1	60.9	3.9	15.7	20.8	21.7	-0.1	-1.1	May
2.0	6.5	-0.5	90.2	32.5	20.6	10.5	20.9	6.2	-0.5	June
-0.6	0.0	-0.6	33.2	11.0	15.1	3.0	1.1	3.6	-0.6	July
-0.3	-0.2	-1.3	19.7	-5.2	6.1	11.9	5.6	2.5	-1.3	Aug.
-1.8	-0.1	0.2	27.3	7.8	10.6	-2.9	7.4	4.2	0.2	Sep.
										Oct.

4 HICP and other prices in the euro area

Table 4.1

Harmonised Index of Consumer Prices ¹⁾

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

1. Total index and goods and services

	Total		Goods		Services		Total (s.a.)		Goods (s.a.)	Services (s.a.)
	Index 1996 = 100		Index 1996 = 100		Index 1996 = 100		Index 1996 = 100	% change on previous period	Index 1996 = 100	Index 1996 = 100
Weight in the total (%) ²⁾	100.0	100.0	61.9	61.9	38.1	38.1	100.0	100.0	61.9	38.1
	1	2	3	4	5	6	7	8	9	10
1998	102.7	1.1	101.8	0.7	104.4	1.9	-	-	-	-
1999	103.8	1.1	102.7	0.9	106.0	1.5	-	-	-	-
2000	106.3	2.3	105.5	2.7	107.8	1.7	-	-	-	-
2000 Q3	106.6	2.5	105.7	2.9	108.5	1.8	106.6	0.8	105.9	108.0
Q4	107.2	2.7	106.8	3.2	108.3	1.8	107.4	0.7	106.8	108.6
<i>Euro area enlargement</i>										
2001 Q1	107.8	2.5	107.1	2.7	109.3	2.2	107.9	0.5	107.2	109.4
Q2	109.2	3.1	108.9	3.5	110.1	2.5	109.1	1.1	108.6	110.2
Q3	109.5	2.7	108.6	2.7	111.3	2.6	109.4	0.3	108.7	110.8
2001 Jan.	107.3	2.4	106.5	2.6	109.0	2.2	107.6	0.1	106.7	109.2
Feb.	107.9	2.6	107.1	2.8	109.5	2.2	107.9	0.3	107.2	109.3
Mar.	108.3	2.6	107.7	2.8	109.5	2.2	108.2	0.3	107.6	109.5
Apr.	108.8	2.9	108.3	3.4	109.9	2.4	108.7	0.5	108.1	110.2
May	109.4	3.4	109.1	3.8	110.0	2.5	109.2	0.4	108.8	110.2
June	109.5	3.0	109.1	3.4	110.4	2.5	109.3	0.1	108.9	110.4
July	109.4	2.8	108.4	3.0	111.3	2.5	109.2	-0.1	108.6	110.6
Aug.	109.4	2.7	108.4	2.7	111.4	2.5	109.3	0.1	108.6	110.8
Sep.	109.7	2.5	108.9	2.3	111.1	2.6	109.7	0.3	109.0	111.0
Oct.	109.6	2.4	108.8	2.1	111.1	2.8	109.7	0.0	108.9	111.4
Nov.	109.5	2.1	108.6	1.6	111.2	2.7	109.6	-0.1	108.6	111.5
Dec. ³⁾	.	2.0	.	.	.	.	.	.	.	.

2. Breakdown of goods and services

	Goods						Services				
	Food ⁴⁾			Industrial goods			Housing	Transport	Communi- cation	Recreation and personal	Miscellane- ous
	Total	Processed food ⁴⁾	Unprocessed food	Total	Non-energy industrial goods	Energy					
Weight in the total (%) ²⁾	20.3	12.3	8.0	41.6	32.1	9.5	10.0	6.2	2.4	13.9	5.6
	11	12	13	14	15	16	17	18	19	20	21
1998	1.6	1.4	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
2000 Q3	1.9	1.2	3.0	3.4	0.7	13.7	1.6	2.6	-4.2	2.5	2.5
Q4	2.2	1.3	3.5	3.8	1.1	13.7	1.8	2.8	-4.6	2.4	2.1
<i>Euro area enlargement</i>											
2001 Q1	3.2	1.9	5.3	2.5	1.1	7.2	1.9	3.2	-4.2	3.1	2.4
Q2	5.0	2.8	8.5	2.8	1.5	7.3	1.8	3.6	-2.8	3.3	2.6
Q3	5.2	3.4	8.1	1.4	1.5	1.2	1.8	3.7	-2.5	3.3	2.8
2001 Jan.	2.7	1.6	4.5	2.5	1.0	7.8	1.9	3.3	-4.5	3.0	2.3
Feb.	3.1	2.0	4.7	2.6	1.1	8.2	1.9	3.2	-4.2	3.1	2.4
Mar.	3.9	2.2	6.7	2.2	1.3	5.6	1.8	3.1	-4.0	3.1	2.5
Apr.	4.4	2.5	7.3	2.8	1.4	7.8	1.8	3.6	-2.8	3.1	2.5
May	5.3	2.8	9.2	3.1	1.5	8.6	1.8	3.6	-2.8	3.5	2.5
June	5.4	3.0	9.0	2.4	1.5	5.5	1.8	3.5	-2.7	3.4	2.6
July	5.4	3.3	8.7	1.8	1.4	2.9	1.8	3.8	-2.4	3.2	2.8
Aug.	5.1	3.4	7.7	1.6	1.4	2.1	1.8	3.7	-2.7	3.3	2.8
Sep.	5.2	3.5	7.7	0.9	1.6	-1.3	1.8	3.6	-2.3	3.5	2.9
Oct.	5.2	3.6	7.7	0.6	1.6	-2.7	1.9	3.8	-1.8	3.7	3.0
Nov.	4.7	3.5	6.5	0.0	1.5	-5.0	1.9	3.7	-2.1	3.6	3.0
Dec.	.	.	.	.	.	.	.	.	.	.	.

Sources: Eurostat and ECB calculations.

- 1) Extended coverage from January 2000 and January 2001. The change affects annual percentage changes during 2000 and 2001, in particular services (miscellaneous). See the general notes for a brief explanation.
- 2) Referring to the index period 2001.
- 3) 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.
- 4) 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⁾									Construc- tion ⁴⁾	Manu- facturing			
	Total		Industry excluding construction and energy						Energy			Total excluding energy		
	Index 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	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	1.2	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	1.1	0.2	15.8	-5.9	17.1
2000	105.7	5.5	2.5	5.0	0.6	1.4	1.4	1.5	19.0	2.3	5.2	50.8	16.7	31.0
2000 Q4	108.0	6.2	3.0	5.2	0.8	2.2	1.7	2.3	20.1	3.0	5.4	36.8	14.2	34.5
2000 Dec.	107.7	5.5	3.0	5.0	0.8	2.5	1.6	2.6	15.6	-	4.5	12.9	6.1	28.8
<i>Euro area enlargement</i>														
2001	.	.	.	.	.	.	.	.	.	.	.	-8.8	-7.6	27.8
2001 Q1	108.3	4.6	2.9	4.0	0.9	3.1	2.0	3.3	10.9	2.2	3.2	4.1	-0.8	28.4
Q2	108.9	3.7	2.3	1.9	1.0	3.4	2.2	3.6	8.9	2.1	2.6	4.6	-3.0	31.7
Q3	108.3	1.5	1.5	0.2	1.1	3.0	2.1	3.2	0.7	.	0.6	-11.3	-10.4	29.0
Q4	.	.	.	.	.	.	.	.	.	.	.	-28.8	-15.6	22.4
2001 Jan.	108.0	4.9	3.0	4.5	0.9	2.8	1.9	2.9	12.4	-	3.6	7.5	0.7	27.3
Feb.	108.3	4.6	2.9	4.0	0.9	3.1	2.0	3.2	11.2	-	3.3	5.9	-0.1	29.9
Mar.	108.5	4.2	2.8	3.4	0.9	3.5	2.2	3.6	9.1	-	2.8	-0.8	-3.0	28.1
Apr.	108.7	4.2	2.6	2.5	1.0	3.5	2.2	3.7	10.6	-	3.0	10.1	-3.7	29.8
May	109.0	3.7	2.3	1.8	1.0	3.4	2.2	3.6	9.3	-	2.7	1.4	-5.9	32.7
June	109.0	3.2	2.1	1.4	1.1	3.4	2.2	3.5	7.0	-	2.1	3.0	0.9	32.5
July	108.3	2.1	1.7	0.6	1.1	3.2	2.1	3.3	2.8	-	1.2	-1.3	-1.8	29.4
Aug.	108.2	1.7	1.6	0.2	1.1	3.1	2.1	3.3	1.4	-	0.8	-10.4	-10.7	28.7
Sep.	108.3	0.7	1.3	-0.3	1.1	2.8	1.9	3.0	-2.1	-	-0.1	-20.7	-18.1	28.8
Oct.	107.6	-0.7	1.0	-0.9	1.2	2.6	1.8	2.7	-7.3	-	-1.2	-30.2	-19.3	23.8
Nov.	107.1	-1.3	0.7	-1.2	1.1	2.3	1.7	2.3	-9.6	-	-1.8	-34.1	-15.1	21.7
Dec.	.	.	.	.	.	.	.	.	.	-	.	-20.6	-12.3	21.5

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	106.4	1.1	1.2	1.1	1.8	1.0	-0.5	-0.1
2000	107.8	1.3	2.5	2.1	1.9	2.6	4.8	8.3
1999 Q4	106.8	0.9	1.7	1.5	2.1	1.4	1.8	4.3
2000 Q1	107.3	1.1	2.3	2.0	2.0	2.3	3.8	7.7
Q2	107.6	1.1	2.2	1.8	1.8	2.6	4.7	8.2
Q3	108.1	1.5	2.6	2.3	1.9	2.5	5.1	8.4
Q4	108.5	1.6	2.7	2.5	2.0	3.0	5.5	8.8
<i>Euro area enlargement</i>								
2001 Q1	109.8	2.1	2.4	2.3	2.0	2.3	3.5	4.4
Q2	110.6	2.5	2.6	2.7	2.3	2.1	2.7	3.1
Q3	110.7	2.0	2.0	2.3	1.7	2.1	0.8	0.7

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	
1996	5,534.9	5,409.3	3,143.5	1,142.4	1,121.8	1.6	125.7	1,655.2	1,529.5
1997	5,649.4	5,500.8	3,201.1	1,150.7	1,138.4	10.6	148.5	1,827.2	1,678.7
1998	5,882.9	5,743.6	3,330.8	1,176.9	1,202.3	33.5	139.3	1,948.8	1,809.5
1999	6,139.7	6,035.5	3,495.4	1,230.7	1,286.7	22.6	104.1	2,053.0	1,948.9
2000	6,429.6	6,358.2	3,661.5	1,277.9	1,376.7	42.0	71.4	2,408.4	2,337.0
2000 Q2	1,601.3	1,583.8	912.4	318.0	342.8	10.6	17.5	588.6	571.1
Q3	1,615.5	1,597.6	920.1	320.3	347.2	10.0	17.9	616.2	598.3
Q4	1,630.2	1,615.3	927.3	324.1	349.6	14.2	14.9	638.4	623.5
<i>Euro area enlargement</i>									
2001 Q1	1,686.1	1,659.5	962.8	332.9	356.6	7.1	26.6	644.1	617.5
Q2	1,698.8	1,675.7	975.9	336.6	355.5	7.8	23.1	644.1	621.0
Q3	1,702.1	1,676.4	980.4	337.4	356.8	1.8	25.7	634.4	608.7

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	
1996	5,384.3	5,263.4	3,045.7	1,112.0	1,106.1	-0.4	120.9	1,635.7	1,514.9
1997	5,509.4	5,354.4	3,093.0	1,126.1	1,132.0	3.3	155.0	1,806.3	1,651.2
1998	5,667.3	5,544.2	3,186.3	1,140.0	1,190.3	27.6	123.0	1,938.6	1,815.6
1999	5,816.5	5,723.7	3,288.1	1,164.6	1,254.4	16.5	92.8	2,039.5	1,946.7
2000	6,011.8	5,883.9	3,372.0	1,186.3	1,308.3	17.3	127.8	2,283.1	2,155.2
2000 Q2	1,500.9	1,471.7	843.8	296.2	326.4	5.3	29.2	561.3	532.0
Q3	1,507.1	1,473.4	844.7	296.5	329.2	3.0	33.6	581.1	547.5
Q4	1,515.8	1,480.6	846.1	298.7	329.2	6.6	35.3	594.9	559.6
<i>Euro area enlargement</i>									
2001 Q1	1,551.4	1,512.4	873.3	304.5	334.0	0.7	39.0	599.8	560.8
Q2	1,552.4	1,516.3	878.1	305.7	331.2	1.3	36.1	596.5	560.4
Q3	1,554.3	1,514.8	879.6	306.4	331.1	-2.3	39.5	592.1	552.5

(annual percentage changes)

1996	1.4	1.0	1.6	1.7	1.2	-	-	4.5	3.2
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	10.0
1999	2.6	3.2	3.2	2.2	5.4	-	-	5.2	7.2
2000	3.4	2.8	2.6	1.9	4.3	-	-	11.9	10.7
2000 Q2	3.9	3.5	3.3	2.2	4.9	-	-	11.7	10.9
Q3	3.2	2.7	2.4	1.6	3.8	-	-	12.3	11.4
Q4	2.8	2.2	1.9	1.6	3.2	-	-	12.0	10.7
<i>Euro area enlargement</i>									
2001 Q1	2.5	1.7	2.0	2.0	1.4	-	-	8.8	7.0
Q2	1.6	1.0	1.8	2.0	-0.4	-	-	5.2	3.7
Q3	1.4	0.8	1.8	2.1	-1.3	-	-	0.8	-0.6

Source: Eurostat.

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

2) Including acquisitions less disposals of valuables.

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

Value added by activity

3. Current prices

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

	Gross value added							Intermediate consumption of FISIM ¹⁾	Taxes less subsidies on products
	Total	Agriculture, hunting, forestry and fishing activities	Manufacturing, energy and mining	Construction	Trade, repairs, hotels and restaurants, transport and communication	Financial, real estate, renting and business activities	Public administration, education, health and other services		
	1	2	3	4	5	6	7	8	9
1996	5,173.4	139.7	1,207.3	300.7	1,059.3	1,334.5	1,131.9	200.5	562.1
1997	5,266.5	138.6	1,227.1	291.8	1,086.9	1,377.7	1,144.4	199.4	582.2
1998	5,467.1	138.7	1,273.5	295.0	1,139.5	1,441.2	1,179.3	199.8	615.5
1999	5,675.7	135.4	1,295.0	311.3	1,183.4	1,526.0	1,224.7	201.0	665.0
2000	5,949.8	137.0	1,373.8	325.9	1,235.8	1,612.1	1,265.2	212.4	692.1
2000 Q2	1,480.9	34.0	342.2	81.2	307.7	400.5	315.3	53.2	173.6
Q3	1,496.4	34.8	346.3	81.3	310.1	406.0	317.9	53.4	172.4
Q4	1,508.5	34.6	349.1	82.1	314.0	409.3	319.4	53.3	175.0
<i>Euro area enlargement</i>									
2001 Q1	1,561.4	37.0	360.6	85.3	327.3	421.3	329.9	54.9	179.6
Q2	1,572.8	37.7	359.4	85.4	330.9	426.6	332.7	55.4	181.5
Q3	1,579.2	37.7	357.8	86.2	334.2	428.4	335.0	56.4	179.3

4. Constant prices

(ECU billions at 1995 prices, seasonally adjusted)

	Gross value added							Intermediate consumption of FISIM ¹⁾	Taxes less subsidies on products
	Total	Agriculture, hunting, forestry and fishing activities	Manufacturing, energy and mining	Construction	Trade, repairs, hotels and restaurants, transport and communication	Financial, real estate, renting and business activities	Public administration, education, health and other services		
	10	11	12	13	14	15	16	17	18
1996	5,041.2	139.6	1,178.3	295.5	1,039.5	1,289.5	1,098.9	200.0	543.1
1997	5,160.6	140.2	1,216.9	290.2	1,072.1	1,331.1	1,110.0	207.1	556.0
1998	5,309.3	142.2	1,253.6	292.0	1,113.7	1,381.8	1,126.0	213.8	571.8
1999	5,443.0	145.1	1,263.7	298.9	1,162.6	1,432.6	1,140.1	221.8	595.2
2000	5,636.2	145.2	1,321.9	304.4	1,211.0	1,495.3	1,158.6	232.4	607.9
2000 Q2	1,405.3	36.2	329.6	75.9	301.9	372.2	289.6	57.7	153.3
Q3	1,413.7	36.6	332.1	75.9	303.5	375.7	289.9	58.4	151.8
Q4	1,422.7	36.4	334.1	75.8	307.0	378.6	290.9	59.1	152.3
<i>Euro area enlargement</i>									
2001 Q1	1,458.1	38.3	341.9	77.4	317.2	386.9	296.5	60.6	153.9
Q2	1,458.6	38.3	338.4	76.4	318.0	389.9	297.5	61.2	155.1
Q3	1,462.1	38.6	337.1	76.4	319.1	392.4	298.4	61.9	154.2
<i>(annual percentage changes)</i>									
1996	1.5	5.5	-0.3	-1.8	1.0	3.7	1.7	2.5	1.4
1997	2.4	0.4	3.3	-1.8	3.1	3.2	1.0	3.5	2.4
1998	2.9	1.4	3.0	0.6	3.9	3.8	1.4	3.2	2.8
1999	2.5	2.1	0.8	2.4	4.4	3.7	1.3	3.7	4.1
2000	3.5	0.0	4.6	1.8	4.2	4.4	1.6	4.8	2.1
2000 Q2	3.9	-0.2	5.0	2.4	4.7	4.5	1.9	5.2	4.5
Q3	3.4	0.5	4.5	1.0	3.7	4.3	1.6	4.3	1.8
Q4	3.2	-0.5	4.2	0.5	4.1	4.0	1.4	4.5	-0.5
<i>Euro area enlargement</i>									
2001 Q1	2.8	0.3	3.7	-1.4	3.7	3.4	1.4	4.3	0.3
Q2	2.0	0.0	1.5	-1.5	2.8	3.3	1.2	4.5	-0.7
Q3	1.7	-0.3	0.4	-1.5	2.6	3.0	1.4	4.3	-0.3

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	3.5	109.3	4.3	4.4	3.5	7.5	2.8	4.6	2.4	1.2	0.3	4.7	
1999	1.9	111.4	1.9	1.8	1.5	2.3	1.7	1.3	1.7	1.4	2.9	1.9	
2000	5.0	117.5	5.5	5.7	5.9	8.6	2.3	6.0	1.6	1.8	2.1	5.9	
2000 Q4	4.5	119.9	5.2	5.5	5.2	8.8	2.1	4.4	1.7	0.0	1.1	5.8	
<i>Euro area enlargement</i>													
2001	.	.	.	.	.	.	.	.	.	.	.	.
2001 Q1	3.1	119.4	4.2	4.4	2.8	8.1	3.0	3.0	2.9	-1.7	-2.1	5.1	
Q2	0.3	118.3	0.9	0.5	-0.2	1.8	0.3	-1.8	0.7	1.1	-2.5	0.9	
Q3	-1.1	117.8	-0.5	-0.8	-1.8	0.1	0.0	-4.1	0.9	0.8	-0.8	-0.7	
Q4	.	.	.	.	.	.	.	.	.	.	.	.
2001 Feb.	3.3	119.8	4.6	4.6	2.9	8.3	3.4	2.0	3.8	-1.5	-1.0	5.4	
Mar.	1.8	119.5	3.1	3.3	1.6	6.3	2.8	3.2	2.8	-2.4	-4.3	3.9	
Apr.	0.0	118.3	0.9	0.4	-0.2	1.4	0.2	-2.0	0.6	0.8	-4.1	0.9	
May	-0.5	117.8	-0.1	-0.4	-1.1	0.8	-0.5	-3.8	0.2	1.9	-3.4	-0.3	
June	1.3	118.9	1.8	1.6	0.6	3.1	1.4	0.2	1.6	0.5	0.0	2.0	
July	-1.0	117.0	-1.4	-1.6	-1.8	-1.9	-0.9	-6.9	0.4	0.3	0.3	-1.7	
Aug.	-1.4	118.6	0.9	0.6	-1.4	2.9	1.4	0.1	1.6	1.2	-0.9	0.9	
Sep.	-0.9	117.9	-0.7	-0.9	-2.1	-0.1	0.1	-4.3	1.1	0.8	-1.7	-0.9	
Oct.	-1.7	116.5	-2.3	-2.4	-3.6	-1.1	-1.5	-7.0	-0.4	-0.3	1.2	-2.6	
Nov.	.	.	.	.	.	.	.	.	.	.	.	.
Dec.	.	.	.	.	.	.	.	.	.	.	.	.

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		Textiles, clothing, footwear			Household equipment
	Index 1995 = 100			Index 1995 = 100								
13	14	15	16	17	18	19	20	21	22			
1998	107.9	3.6	104.5	3.0	2.0	3.6	2.1	4.5	923	7.2		
1999	111.5	3.3	107.2	2.6	3.1	2.5	1.4	3.0	973	5.4		
2000	116.0	4.1	109.7	2.3	1.9	2.3	1.7	4.9	953	-2.1		
2000 Q4	118.1	3.8	110.5	1.6	1.4	1.6	0.8	3.8	924	-3.8		
<i>Euro area enlargement</i>												
2001	.	.	.	.	.	.	.	.	969	-0.7
2001 Q1	119.6	4.6	111.1	2.5	1.9	2.8	3.1	1.4	950	-5.1		
Q2	121.0	4.0	111.4	1.1	0.8	1.2	0.9	-0.3	1,005	1.8		
Q3	122.0	4.4	111.7	1.7	1.7	1.6	2.5	-0.4	952	-1.2		
Q4	.	.	.	.	.	.	.	.	971	2.3
2001 Feb.	119.4	3.6	111.1	1.6	1.6	1.6	0.7	0.4	954	-6.2		
Mar.	119.5	5.0	110.7	2.5	1.7	3.2	2.5	0.3	952	-3.7		
Apr.	120.6	4.0	111.4	1.3	1.0	1.4	1.1	-0.2	969	-1.8		
May	120.8	2.9	111.2	0.1	0.0	0.1	-0.1	-1.4	992	0.0		
June	121.7	5.2	111.5	1.8	1.3	2.0	1.8	0.8	1,053	7.3		
July	121.7	4.4	111.5	1.6	2.2	1.5	0.9	-1.7	936	-1.5		
Aug.	122.1	4.8	111.7	1.9	2.0	1.5	0.4	1.3	961	-0.5		
Sep.	122.2	4.0	111.8	1.6	1.0	1.8	6.4	-0.9	960	-1.2		
Oct.	121.3	2.4	110.6	-0.2	0.3	0.2	-3.8	0.1	964	2.9		
Nov.	.	.	.	.	.	.	.	.	975	3.2
Dec.	.	.	.	.	.	.	.	.	975	0.6

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

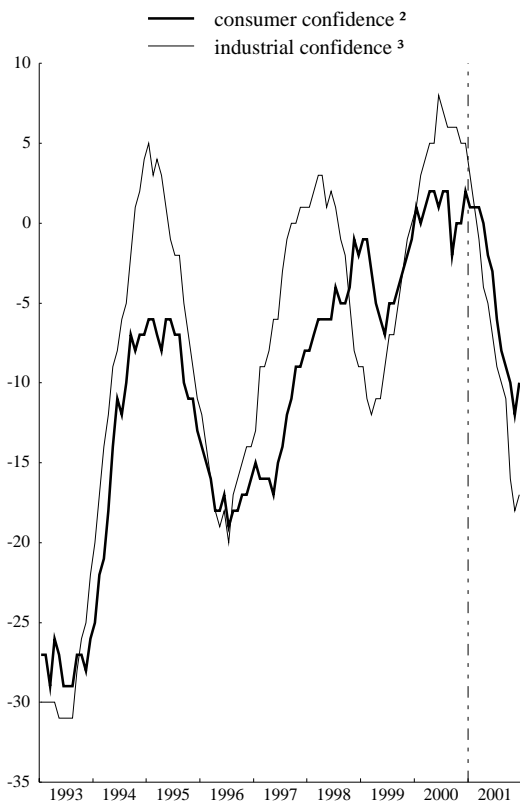
Business and consumer surveys

(percentage balances, seasonally adjusted, unless otherwise indicated)

	Manufacturing industry				Construction confidence indicator 5	Retail trade confidence indicator 6	Consumer confidence indicator ²⁾ 7
	Confidence indicator 1	Production expectations 2	Assessment of order books 3	Capacity utilisation ^{b)} (percentages) 4			
1998	-1	11	-5	83.0	-19	-3	-5
1999	-7	7	-17	81.8	-7	-5	-4
2000	5	17	3	83.8	1	-1	1
2000 Q4	5	18	4	84.7	0	-3	1
<i>Euro area enlargement</i>							
2001	-8	3	-13	83.2	-5	-6	-5
2001 Q1	1	12	-1	84.4	-1	-2	1
Q2	-5	5	-8	83.6	-3	-6	-2
Q3	-10	2	-17	83.0	-7	-6	-8
Q4	-17	-8	-27	81.9	-9	-9	-11
2001 Jan.	3	14	0	-	1	0	1
Feb.	1	12	0	-	-2	0	1
Mar.	-1	9	-3	-	-2	-5	1
Apr.	-4	6	-6	-	-2	-4	0
May	-5	6	-9	-	-2	-7	-2
June	-7	3	-10	-	-5	-7	-3
July	-9	5	-16	-	-7	-4	-6
Aug.	-10	2	-16	-	-8	-8	-8
Sep.	-11	-1	-18	-	-5	-6	-9
Oct.	-16	-8	-25	-	-8	-9	-10
Nov.	-18	-9	-28	-	-10	-9	-12
Dec.	-17	-7	-28	-	-9	-10	-10

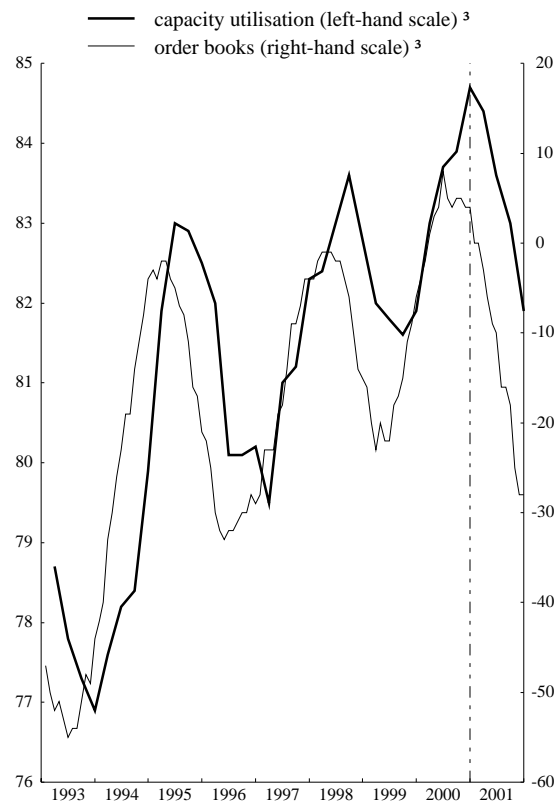
Consumer and industrial confidence indicators

(percentage balances; monthly, seasonally adjusted)



Capacity utilisation and order books

(capacity utilisation, percentages, quarterly; order books, percentage balances, monthly, seasonally adjusted)



Source: European Commission Business and Consumer Surveys.

1) Data on capacity utilisation are collected in January, April, July and October. Annual data are averages of the four quarterly surveys.

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

3) Manufacturing.

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
1996	100.5	0.5	0.4	0.3	-1.3	1.6	14.739	11.6	9.8	23.9
1997	101.3	0.8	0.9	0.1	-0.4	1.5	14.824	11.5	9.9	23.2
1998	102.9	1.6	1.8	0.4	1.1	2.2	14.077	10.9	9.4	21.2
1999	104.6	1.6	2.2	-0.6	0.0	2.6	12.960	9.9	8.6	19.1
2000	106.8	2.1	2.4	0.2	0.8	2.8	11.713	8.9	7.7	17.1
2000 Q3	107.1	2.1	2.4	0.1	1.1	2.8	11.551	8.7	7.6	16.9
Q4	107.6	2.2	2.3	1.2	1.1	2.7	11.302	8.5	7.5	16.5
2000 Nov.	-	-	-	-	-	-	11.295	8.5	7.5	16.4
Dec.	-	-	-	-	-	-	11.252	8.5	7.4	16.4
<i>Euro area enlargement</i>										
2001 Q1	108.0	1.9	2.2	0.5	1.2	2.4	11.628	8.5	7.4	16.7
Q2	108.2	1.6	1.7	0.6	0.8	2.0	11.565	8.4	7.3	16.7
Q3	108.4	1.3	1.5	0.0	0.2	1.8	11.573	8.4	7.3	16.7
2001 Jan.	-	-	-	-	-	-	11.691	8.5	7.4	16.7
Feb.	-	-	-	-	-	-	11.620	8.5	7.4	16.7
Mar.	-	-	-	-	-	-	11.574	8.5	7.3	16.6
Apr.	-	-	-	-	-	-	11.553	8.4	7.3	16.7
May	-	-	-	-	-	-	11.569	8.5	7.3	16.7
June	-	-	-	-	-	-	11.575	8.5	7.3	16.7
July	-	-	-	-	-	-	11.568	8.4	7.3	16.7
Aug.	-	-	-	-	-	-	11.563	8.4	7.3	16.7
Sep.	-	-	-	-	-	-	11.587	8.5	7.3	16.7
Oct.	-	-	-	-	-	-	11.636	8.5	7.3	16.9
Nov.	-	-	-	-	-	-	11.696	8.5	7.4	16.9

2. Labour costs and productivity
(annual percentage changes)

	Unit labour cost in the whole economy, and components (s.a.)			Labour cost indices ³⁾						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	
1996	1.9	3.0	1.1	3.4	3.0	4.4	3.6	4.0	3.6	
1997	0.7	2.2	1.6	2.6	2.6	2.6	2.1	2.8	2.3	
1998	0.2	1.4	1.3	1.7	2.1	0.9	1.6	1.5	2.2	
1999	1.3	2.2	0.9	2.3	2.5	1.5	2.6	1.9	2.7	
2000	1.1	2.5	1.4	3.3	3.6	2.3	3.2	2.9	2.7	
1999 Q3	1.2	2.1	0.9	2.5	2.7	1.7	2.8	2.2	2.9	
Q4	0.4	2.2	1.8	2.8	3.0	1.8	3.0	2.1	2.5	
2000 Q1	0.4	2.5	2.1	3.2	3.5	2.5	3.4	3.0	3.0	
Q2	0.5	2.2	1.7	3.3	3.7	2.5	3.3	3.0	2.8	
Q3	1.4	2.4	1.0	3.3	3.7	2.2	3.2	2.7	2.5	
Q4	1.8	2.2	0.4	3.3	3.7	2.1	3.0	3.0	2.3	
<i>Euro area enlargement</i>										
2001 Q1	2.2	2.3	0.2	3.1	3.5	1.8	2.9	2.7	3.2	
Q2	2.5	2.5	0.0	3.0	3.4	1.7	3.0	2.3	2.8	
Q3	2.4	2.5	0.1	3.1	3.5	2.0	3.2	3.1	.	

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
1997 Q4	4,685.3	320.6	4,072.2	1,158.1	1,466.3	1,322.5	125.3	153.9	138.7	215.8
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	4,211.1	1,282.9	1,463.3	1,386.3	78.6	149.8	141.6	213.0
1999 Q1	4,675.3	317.8	4,075.8	1,239.1	1,464.5	1,306.2	66.0	133.4	148.4	243.9
Q2	4,701.5	324.0	4,114.1	1,321.8	1,418.3	1,315.6	58.4	125.0	138.4	242.7
Q3	4,712.8	327.5	4,112.6	1,324.5	1,416.4	1,313.0	58.7	133.3	139.4	238.6
Q4	4,858.9	350.0	4,214.8	1,370.8	1,457.6	1,323.4	63.0	142.0	152.1	229.7
2000 Q1	4,836.8	334.7	4,222.0	1,379.5	1,462.5	1,303.2	76.8	130.2	150.0	260.6
Q2	4,893.7	341.2	4,256.5	1,409.6	1,485.6	1,282.5	78.9	146.0	150.1	247.2
Q3	4,913.5	339.0	4,265.6	1,396.7	1,523.5	1,263.5	81.9	159.2	149.7	254.1
Q4	5,030.2	347.6	4,361.5	1,464.5	1,542.4	1,269.1	85.6	164.5	156.6	230.9
<i>Euro area enlargement</i>										
2001 Q1	5,145.3	335.5	4,502.3	1,446.2	1,625.7	1,314.5	115.9	150.3	157.1	259.1
Q2	.	332.2	4,587.8	1,526.2	1,621.1	1,321.0	119.6	164.3	.	.
Q3	.	308.7	4,617.4	1,549.4	1,609.2	1,333.3	125.5	153.7	.	.

	Securities other than shares			Shares ⁵⁾				Insurance technical reserves		
	Total	Short-term	Long-term	Total	Quoted shares	Mutual fund shares	Money market fund shares	Total	Net equity of households in life insurance reserves and pension fund reserves	Prepayments of insurance premiums and reserves for outstanding claims
1997 Q4	1,580.9	202.9	1,378.0	2,735.9	1,573.4	1,162.4	184.9	2,384.1	2,129.4	254.7
1998 Q1	1,599.3	194.5	1,404.8	3,260.9	1,937.6	1,323.3	186.5	2,463.8	2,199.6	264.2
Q2	1,549.4	169.2	1,380.2	3,487.4	2,058.5	1,428.9	186.7	2,522.3	2,255.9	266.4
Q3	1,537.3	158.1	1,379.2	3,187.4	1,744.2	1,443.2	187.9	2,567.8	2,298.7	269.1
Q4	1,533.9	157.5	1,376.4	3,513.3	1,991.3	1,522.0	172.8	2,631.5	2,362.4	269.1
1999 Q1	1,574.3	136.7	1,437.5	3,734.8	2,096.4	1,638.4	194.8	2,706.9	2,428.2	278.7
Q2	1,506.5	127.6	1,378.9	3,980.3	2,238.9	1,741.4	211.5	2,774.8	2,494.1	280.7
Q3	1,506.9	116.5	1,390.4	4,068.7	2,317.3	1,751.4	209.2	2,841.0	2,557.5	283.4
Q4	1,550.3	146.5	1,403.8	4,589.6	2,751.4	1,838.2	199.9	2,956.0	2,669.1	286.9
2000 Q1	1,544.6	147.0	1,397.6	4,862.3	2,928.4	1,934.0	209.8	3,086.9	2,786.5	300.3
Q2	1,583.7	147.2	1,436.6	4,796.7	2,884.3	1,912.5	199.0	3,137.7	2,834.7	303.0
Q3	1,643.3	163.1	1,480.2	4,922.5	2,989.6	1,932.9	203.5	3,196.7	2,890.5	306.2
Q4	1,710.9	178.4	1,532.5	5,011.4	3,089.5	1,921.9	205.8	3,208.8	2,900.1	308.7
<i>Euro area enlargement</i>										
2001 Q1	1,767.8	217.6	1,550.1	4,743.8	2,875.3	1,868.6	228.3	3,254.3	2,932.6	321.7
Q2	.	.	.	.	.	.	.	.	.	.
Q3	.	.	.	.	.	.	.	.	.	.

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
1997 Q4	5,834.8	5,315.1	923.5	54.2	869.3	2,404.9	837.2	1,567.7	2,506.4	224.2	2,282.2	141.6
1998 Q1	5,893.7	5,357.3	907.2	35.5	871.7	2,450.3	853.8	1,596.5	2,536.2	223.5	2,312.7	146.9
Q2	6,005.4	5,453.0	902.0	31.8	870.2	2,504.8	878.0	1,626.8	2,598.6	233.1	2,365.5	151.3
Q3	6,080.3	5,524.1	903.1	33.3	869.9	2,528.8	865.0	1,663.7	2,648.4	233.7	2,414.7	147.4
Q4	6,226.8	5,663.4	911.3	36.0	875.2	2,601.1	903.0	1,698.1	2,714.4	240.5	2,473.9	150.8
1999 Q1	6,261.9	5,682.7	903.1	36.1	867.0	2,594.4	920.0	1,674.4	2,764.4	251.5	2,512.9	156.8
Q2	6,424.9	5,817.3	900.5	38.7	861.8	2,686.6	962.4	1,724.2	2,837.7	255.1	2,582.6	183.3
Q3	6,491.0	5,886.3	885.9	37.7	848.2	2,701.3	941.7	1,759.6	2,903.8	255.0	2,648.8	191.4
Q4	6,668.2	6,039.1	900.7	42.1	858.7	2,796.4	980.0	1,816.4	2,971.1	263.8	2,707.3	201.4
2000 Q1	6,813.2	6,155.8	891.3	41.1	850.3	2,895.2	1,037.8	1,857.4	3,026.6	265.3	2,761.2	221.1
Q2	6,961.5	6,261.6	885.6	42.0	843.6	2,997.9	1,090.2	1,907.6	3,078.1	273.9	2,804.2	219.7
Q3	7,098.5	6,378.1	865.7	39.9	825.9	3,101.1	1,145.8	1,955.2	3,131.7	275.7	2,856.0	252.2
Q4	7,270.3	6,500.3	883.0	42.0	841.0	3,198.6	1,160.2	2,038.4	3,188.7	281.6	2,907.1	257.5
<i>Euro area enlargement</i>												
2001 Q1	7,445.8	6,671.8	896.0	41.6	854.4	3,315.5	1,238.7	2,076.7	3,234.3	279.7	2,954.6	282.4
Q2	.	6,762.0	.	.	.	.	.	.	.	.	.	.
Q3	.	6,805.0	.	.	.	.	.	.	.	.	.	.
<i>Securities other than shares issued by</i>												
	Total	General government			Non-financial corporations			Quoted shares issued by non-financial corporations	Deposit liabilities of central government	Pension fund reserves of non- financial corporations		
		Total	Short-term	Long-term	Total	Short-term	Long-term					
	13	14	15	16	17	18	19	20	21	22		
1997 Q4	3,638.0	3,335.1	499.0	2,836.0	302.9	45.8	257.1	1,997.7	135.2	236.2		
1998 Q1	3,762.1	3,442.3	492.5	2,949.8	319.8	55.8	263.9	2,465.0	136.3	239.1		
Q2	3,826.3	3,504.1	491.7	3,012.3	322.2	54.0	268.2	2,705.7	134.2	242.1		
Q3	3,920.1	3,587.1	494.5	3,092.6	333.0	55.6	277.4	2,317.1	133.8	245.1		
Q4	3,927.6	3,594.0	466.5	3,127.5	333.6	55.1	278.5	2,641.8	140.3	248.2		
1999 Q1	3,981.0	3,633.3	462.3	3,171.0	347.7	66.0	281.7	2,734.6	146.9	251.2		
Q2	3,964.6	3,609.6	451.8	3,157.8	355.0	67.1	287.9	2,975.3	136.6	254.3		
Q3	3,950.8	3,581.5	444.8	3,136.7	369.3	75.3	294.0	3,081.5	137.6	257.4		
Q4	3,914.7	3,534.6	419.9	3,114.7	380.1	78.5	301.6	3,947.8	149.8	260.8		
2000 Q1	3,980.8	3,600.9	425.2	3,175.8	379.8	79.2	300.6	4,414.5	147.6	263.6		
Q2	4,019.5	3,621.7	425.4	3,196.4	397.8	89.0	308.8	4,165.7	147.6	266.6		
Q3	4,057.7	3,638.7	421.8	3,216.9	419.0	95.9	323.1	4,044.3	147.2	269.0		
Q4	4,113.6	3,666.1	401.8	3,264.3	447.5	102.4	345.0	3,830.1	153.7	271.4		
<i>Euro area enlargement</i>												
2001 Q1	4,262.3	3,797.4	429.8	3,367.6	464.9	112.2	352.7	3,441.4	154.7	273.8		
Q2	.	.	.	.	.	.	.	.	.	.
Q3	.	.	.	.	.	.	.	.	.	.

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	
1997 Q4	130.5	9.4	111.5	73.9	5.1	37.6	-5.1	3.2	6.4	-13.3
1998 Q1	-45.7	-8.8	-24.1	-25.7	-11.1	20.1	-7.3	-14.5	1.6	29.0
Q2	52.1	3.6	44.8	68.0	-5.9	-0.5	-16.7	8.0	-4.4	-4.9
Q3	-14.7	-3.7	-19.2	-18.0	2.3	-0.3	-3.3	9.0	-0.7	4.0
Q4	148.1	11.6	136.6	98.0	12.7	44.8	-18.9	-6.6	6.5	-23.6
1999 Q1	-39.4	-5.2	-36.8	-19.2	-15.1	10.2	-12.7	-4.2	6.8	21.5
Q2	22.3	6.3	34.4	81.3	-48.7	9.3	-7.6	-8.4	-9.9	-4.4
Q3	13.2	3.4	0.4	3.6	-0.9	-2.6	0.3	8.3	1.0	-1.9
Q4	139.4	22.2	95.8	44.4	36.9	10.3	4.2	8.7	12.7	-14.1
2000 Q1	-28.2	-15.3	1.1	6.4	1.4	-20.4	13.7	-11.9	-2.1	25.4
Q2	51.2	6.7	28.6	31.5	16.9	-21.8	2.1	15.8	0.0	-13.1
Q3	7.4	-2.2	-3.3	-17.0	29.3	-18.5	2.9	13.3	-0.4	-2.0
Q4	128.9	8.6	108.1	71.4	27.2	5.8	3.8	5.3	6.9	-17.4
<i>Euro area enlargement</i>										
2001 Q1	-19.8	-19.8	15.0	-34.3	41.9	-6.1	13.4	-15.6	0.6	11.4
Q2	.	-3.3	82.7	77.3	-4.4	6.3	3.6	13.9	.	.
Q3	.	-23.5	47.5	26.5	2.3	12.7	6.0	-10.6	.	.

	Securities other than shares			Shares ⁵⁾				Insurance technical reserves		
	Total	Short-term	Long-term	Total	Quoted shares	Mutual fund shares	Money market fund shares	Total	Net equity of households in life insurance reserves and pension fund reserves	Prepayments of insurance premiums and reserves for outstanding claims
1997 Q4	5.8	-7.7	13.5	68.7	51.7	17.0	-12.3	53.6	51.8	1.8
1998 Q1	-27.8	-8.4	-19.5	92.7	-6.1	98.9	7.3	66.9	54.6	12.4
Q2	-70.2	-25.0	-45.2	117.4	24.2	93.2	0.0	46.9	44.9	2.0
Q3	-6.0	-11.0	5.0	97.9	12.0	85.8	1.0	43.2	40.6	2.6
Q4	-9.9	-1.6	-8.2	87.4	68.5	18.9	-16.1	50.2	48.2	1.9
1999 Q1	23.8	-13.0	36.7	105.0	3.3	101.7	0.2	70.5	58.1	12.5
Q2	-35.8	-11.2	-24.6	146.6	58.3	88.4	16.7	54.3	51.7	2.7
Q3	-6.2	-9.9	3.6	91.7	53.1	38.6	-2.1	56.6	53.4	3.2
Q4	55.6	25.4	30.2	6.7	39.8	-33.1	-9.4	74.1	71.8	2.4
2000 Q1	-20.4	3.9	-24.3	-8.9	-43.3	34.4	5.4	83.7	70.9	12.8
Q2	47.7	-0.8	48.5	82.6	68.9	13.7	-14.0	53.6	50.9	2.7
Q3	67.7	16.6	51.1	151.8	139.2	12.6	1.2	52.6	49.4	3.2
Q4	13.2	7.8	5.4	253.0	185.9	67.1	-0.8	61.5	59.0	2.5
<i>Euro area enlargement</i>										
2001 Q1	91.0	47.0	44.0	61.6	6.7	54.9	22.1	66.4	53.3	13.1
Q2	.	.	.	.	.	.	.	.	.	.
Q3	.	.	.	.	.	.	.	.	.	.

Source: ECB.

1) 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.

2) BIS international banking statistics. The BIS definition of banks is close to that of MFIs.

3) 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).

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)
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	
1997 Q4	155.8	146.2	21.1	4.4	16.7	68.4	27.7	40.8	66.2	6.7	59.5	-16.4
1998 Q1	67.2	43.9	-15.7	-18.5	2.8	55.0	27.1	27.9	27.9	-0.7	28.7	3.9
Q2	116.8	110.6	-5.5	-3.7	-1.9	54.5	22.1	32.3	67.9	9.5	58.4	6.4
Q3	77.4	81.0	2.6	1.4	1.2	24.8	-15.9	40.7	50.0	0.6	49.5	-0.4
Q4	161.5	150.8	8.8	2.8	6.1	76.3	37.5	38.8	76.4	6.8	69.5	-2.1
1999 Q1	85.1	77.0	-7.0	0.1	-7.1	19.6	22.3	-2.8	72.5	9.1	63.4	1.0
Q2	159.7	133.2	-4.3	2.6	-6.9	89.2	40.4	48.8	74.8	3.6	71.2	23.6
Q3	69.9	71.7	-14.7	-1.0	-13.7	17.6	-16.9	34.5	67.1	-0.2	67.3	8.5
Q4	169.3	147.3	15.0	4.3	10.8	87.9	35.8	52.1	66.3	8.9	57.5	-6.8
2000 Q1	140.2	109.6	-8.0	-0.9	-7.1	90.8	55.1	35.7	57.4	1.6	55.7	14.8
Q2	157.2	116.6	-6.3	0.8	-7.1	109.6	57.4	52.1	53.9	8.5	45.4	-0.9
Q3	123.3	93.3	-16.2	-2.1	-14.1	91.3	48.2	43.1	48.3	0.2	48.1	22.3
Q4	187.7	139.8	17.7	2.1	15.6	110.4	18.9	91.5	59.6	6.1	53.5	11.7
	<i>Euro area enlargement</i>											
2001 Q1	92.6	78.6	-4.9	-0.5	-4.4	66.1	45.9	20.2	31.3	-5.4	36.7	8.7
Q2	.	87.9	.	.	.	.	.	.	.	.	.	.
Q3	.	59.7	.	.	.	.	.	.	.	.	.	.
	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							
	13	Total	Short-term	Long-term	Total	Short-term	Long-term	19	20	21	22	
1997 Q4	-8.8	-4.6	-33.5	28.9	-4.2	-7.5	3.3	44.1	6.9	2.3		
1998 Q1	70.4	59.8	-4.9	64.7	10.5	9.7	0.9	11.0	1.1	2.4		
Q2	54.1	51.2	-0.6	51.7	2.9	-1.8	4.7	37.3	-2.1	2.4		
Q3	62.3	55.1	3.1	51.9	7.3	1.4	5.8	10.7	-0.4	2.4		
Q4	-9.4	-14.8	-30.4	15.6	5.4	0.8	4.7	40.6	6.4	2.2		
1999 Q1	72.8	58.3	1.3	57.1	14.5	10.7	3.8	10.8	6.6	2.5		
Q2	43.5	34.4	-7.7	42.1	9.1	0.9	8.3	36.0	-10.3	2.5		
Q3	52.5	33.9	-10.0	43.9	18.5	8.1	10.4	34.4	1.0	2.5		
Q4	-8.0	-14.9	-27.9	13.0	6.9	3.1	3.8	41.9	12.1	2.6		
2000 Q1	61.2	60.9	11.1	49.8	0.3	0.5	-0.2	-34.9	-2.2	2.4		
Q2	44.0	24.2	-1.2	25.4	19.8	10.1	9.7	29.9	0.0	2.4		
Q3	52.2	27.2	-2.2	29.4	25.0	7.2	17.8	72.4	-0.4	2.4		
Q4	12.1	-16.5	-26.2	9.6	28.6	6.8	21.8	51.9	6.4	2.4		
	<i>Euro area enlargement</i>											
2001 Q1	53.2	30.6	31.9	-1.4	22.6	9.7	12.9	51.0	1.1	2.5		
Q2	.	.	.	.	.	.	.	.	.	.
Q3	.	.	.	.	.	.	.	.	.	.

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)

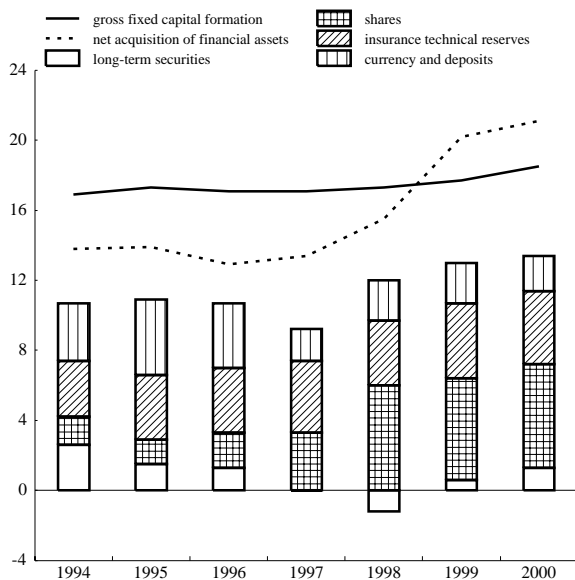
	Euro area saving and investment ¹⁾			Investment of private non-financial sectors ¹⁾²⁾							
	Gross saving	Gross fixed capital formation	Net lending to the rest of the world	Gross fixed capital formation	Non-financial corporations	Net acquisition of financial assets	Currency and deposits	Securities other than shares	Long-term securities	Shares	Insurance technical reserves
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	21.5	20.6	0.2	17.3	10.5	13.9	4.3	1.8	1.5	1.4	3.7
1996	21.2	20.2	0.6	17.1	10.5	12.9	3.7	0.2	1.3	2.0	3.7
1997	21.8	20.1	1.2	17.1	10.5	13.4	1.8	-0.6	0.0	3.3	4.1
1998	21.8	20.3	0.6	17.3	10.8	15.5	2.3	-2.0	-1.2	6.0	3.7
1999	21.8	20.8	-0.1	17.7	11.1	20.2	2.3	0.8	0.6	5.8	4.3
2000	21.9	21.2	-0.5	18.5	11.8	21.1	2.0	2.0	1.3	5.9	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			
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	21.9	12.0	7.4	-1.8	-1.7	1.4	4.8	3.6	6.5	44.6	25.3
1996	21.4	11.8	8.8	0.2	0.0	1.6	5.7	4.8	4.1	43.0	29.1
1997	20.6	11.3	9.5	0.1	0.1	1.3	5.9	4.7	3.9	43.9	31.6
1998	20.2	10.5	12.5	0.4	0.3	2.4	7.6	5.9	3.0	47.3	38.2
1999	19.2	10.0	17.5	0.8	0.4	3.1	9.9	7.6	2.7	53.3	47.7
2000	18.8	9.5	21.1	1.3	0.8	3.7	10.8	7.0	0.0	53.3	52.9

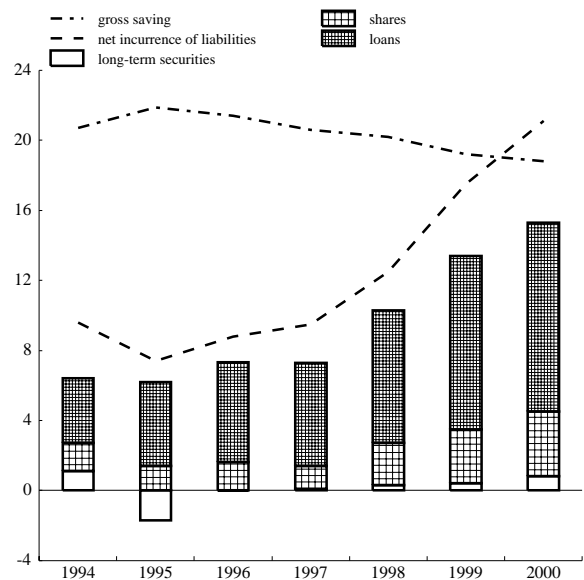
Investment and financing of private non-financial sectors ¹⁾²⁾

(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	Direct taxes			Indirect taxes	Received by EU institutions	Social contributions	Employers		Employees	Sales	Capital revenue	Capital taxes	Memo: fiscal burden ²⁾
			Households	Corporations	Employers				Employees						
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
1991	46.4	46.0	11.8	9.5	2.2	13.0	0.9	16.7	8.5	5.1	2.3	0.4	0.2	41.6	
1992	47.4	46.7	11.9	9.8	2.0	13.0	0.9	17.1	8.6	5.2	2.4	0.7	0.6	42.5	
1993	48.0	47.5	12.1	10.0	2.1	13.2	0.8	17.4	8.6	5.3	2.5	0.5	0.3	43.0	
1994	47.5	47.1	11.6	9.5	2.0	13.5	0.8	17.5	8.5	5.4	2.5	0.4	0.2	42.7	
1995	47.2	46.6	11.6	9.5	2.0	13.3	0.9	17.3	8.4	5.6	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	48.2	47.6	12.2	9.6	2.6	13.5	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	14.4	0.6	16.5	8.5	5.0	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	

2. Euro area – expenditure

	Total	Current expenditure								Capital expenditure	Investment	Capital transfers	Paid by EU institutions	Memo: primary expenditure ⁴⁾	
		Total	Compensation of employees	Inter-mediate consumption	Interest	Current transfers	Social payments ³⁾		Subsidies						Paid by EU institutions
							Social payments ³⁾	Subsidies							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
1991	51.1	46.3	11.2	5.0	5.3	24.9	21.0	2.4	0.6	4.8	3.2	1.6	0.0	45.8	
1992	52.2	47.5	11.4	5.0	5.6	25.5	21.9	2.3	0.5	4.7	3.2	1.5	0.0	46.6	
1993	53.6	49.0	11.6	5.2	5.8	26.5	22.8	2.4	0.6	4.6	3.1	1.6	0.1	47.8	
1994	52.6	48.3	11.3	5.0	5.5	26.5	22.9	2.3	0.5	4.4	2.9	1.5	0.1	47.1	
1995	52.2	47.7	11.2	4.8	5.7	26.1	22.8	2.2	0.6	4.5	2.7	1.8	0.1	46.5	
1996	52.2	48.3	11.2	4.8	5.7	26.6	23.2	2.2	0.6	4.0	2.6	1.4	0.0	46.6	
1997	50.8	47.1	11.0	4.8	5.1	26.2	23.1	2.1	0.5	3.7	2.4	1.3	0.1	45.8	
1998	49.9	46.0	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	25.9	22.6	2.0	0.5	4.1	2.5	1.6	0.1	45.4	
2000	48.6	44.7	10.5	4.7	4.0	25.5	22.2	1.9	0.5	3.9	2.5	1.4	0.1	44.6	

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	Inter-mediate consumption	Transfers in kind via market producers	Consumption of fixed capital	Sales (minus)	Government collective consumption	Government individual consumption
1991	-4.7	-4.6	-0.3	-0.1	0.3	0.6	20.3	11.2	5.0	4.8	1.8	-2.3	8.6	11.7
1992	-4.8	-4.2	-0.3	-0.2	0.0	0.8	20.7	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	0.2	21.1	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	5.1	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	12.0
1996	-4.3	-3.6	-0.4	-0.1	-0.2	1.4	20.6	11.2	4.8	5.2	1.8	-2.5	8.5	12.1
1997	-2.6	-2.3	-0.4	0.1	0.0	2.5	20.3	11.0	4.8	5.1	1.8	-2.5	8.4	12.0
1998	-2.2	-2.2	-0.2	0.2	0.0	2.5	20.0	10.7	4.7	5.1	1.7	-2.5	8.1	11.8
1999	-1.3	-1.6	-0.1	0.1	0.4	2.9	20.0	10.7	4.7	5.1	1.7	-2.4	8.2	11.8
2000	-0.8	-1.3	-0.1	0.2	0.5	3.2	19.8	10.5	4.7	5.1	1.7	-2.4	8.1	11.8

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

	BE	DE	GR	ES	FR	IE	IT	LU	NL	AT	PT	FI
	1	2	3	4	5	6	7	8	9	10	11	12
1997	-2.0	-2.7	-4.0	-3.2	-3.0	1.2	-2.7	3.4	-1.1	-1.9	-2.7	-1.5
1998	-0.8	-2.2	-2.4	-2.6	-2.7	2.3	-2.8	3.5	-0.8	-2.4	-2.4	1.3
1999	-0.6	-1.6	-1.8	-1.1	-1.6	2.3	-1.8	3.7	0.4	-2.2	-2.1	1.9
2000	0.1	1.2	-1.1	-0.3	-1.3	4.5	-0.3	6.1	2.2	-1.1	-1.5	6.9

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 0.3). 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	
1991	57.4	2.6	16.1	9.6	29.1	48.1	24.7	7.4	16.1	9.2
1992	60.9	2.6	16.8	10.1	31.5	50.2	26.4	7.6	16.2	10.7
1993	67.2	2.7	17.6	9.9	37.0	52.5	27.6	8.7	16.2	14.8
1994	69.9	2.9	16.8	10.3	40.0	56.2	29.8	9.9	16.4	13.8
1995	74.2	2.9	18.3	9.8	43.1	58.6	30.5	10.9	17.2	15.6
1996	75.4	2.9	17.8	9.9	44.8	59.2	30.3	13.2	15.8	16.2
1997	74.8	2.8	17.0	8.9	46.1	57.2	29.0	14.4	13.7	17.7
1998	73.1	2.8	15.8	7.9	46.6	53.5	27.0	16.2	10.4	19.6
1999	72.0	2.9	14.8	6.9	47.5	50.1	25.3	14.9	9.9	22.0
2000	69.5	2.7	13.6	6.3	47.0	46.3	22.9	13.4	10.0	23.2

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

	Total	Issued by ⁴⁾				Original maturity			Residual maturity			Currency		
		Central government	State government	Local government	Social security funds	Up to 1 year	Over 1 year	Variable interest rate	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Euro or participating currency ⁵⁾	Non-domestic currency	Other currencies
1991	57.4	46.6	4.5	6.0	0.3	11.8	45.6	4.8	17.7	18.8	20.9	56.2	1.9	1.1
1992	60.9	49.7	4.7	6.1	0.4	12.2	48.7	6.3	17.8	20.9	22.1	59.6	2.2	1.3
1993	67.2	55.2	5.2	6.3	0.6	11.9	55.3	6.7	18.5	24.3	24.5	65.5	2.9	1.7
1994	69.9	57.9	5.4	6.1	0.5	11.2	58.7	7.4	16.6	26.6	26.8	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	26.2	30.3	72.3	2.9	1.9
1996	75.4	62.9	6.1	5.9	0.5	10.2	65.2	6.3	19.2	25.3	30.9	73.5	2.7	1.9
1997	74.8	62.3	6.3	5.6	0.6	8.8	66.0	6.0	18.6	25.2	31.0	72.8	2.8	2.0
1998	73.1	61.0	6.3	5.4	0.3	7.7	65.4	5.5	16.3	25.9	30.9	71.4	3.2	1.7
1999	72.0	60.2	6.2	5.3	0.3	7.0	65.1	5.0	14.4	26.8	30.8	70.2	-	1.8
2000	69.5	58.1	6.1	5.1	0.3	5.6	63.9	4.4	14.5	27.4	27.7	67.7	-	1.8

3. Euro area countries – government debt

	BE	DE	GR	ES	FR	IE	IT	LU	NL	AT	PT	FI
	1	2	3	4	5	6	7	8	9	10	11	12
1997	125.3	61.0	108.2	66.7	59.3	65.1	120.2	6.1	69.9	64.7	58.9	54.1
1998	119.7	60.9	105.0	64.7	59.5	54.8	116.4	6.4	66.8	63.9	54.7	48.8
1999	115.9	61.3	103.9	63.4	58.5	49.3	114.6	6.0	63.1	64.7	54.5	47.3
2000	110.3	60.3	102.7	60.7	57.6	38.6	110.5	5.3	56.1	63.1	53.7	44.0

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

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

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

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

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

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

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

	Total	Source of change				Financial instrument				Holder			
		Borrowing requirement ²⁾	Valuation effects ³⁾	Other changes in volume ⁴⁾	Aggregation effect ⁵⁾	Coins and deposits	Loans	Short-term securities	Long-term securities	Domestic creditors ⁶⁾	MFIs	Other financial corporations	Other creditors ⁷⁾
	1	2	3	4	5	6	7	8	9	10	11	12	13
1991	5.2	5.1	0.0	0.2	-0.1	0.2	1.2	0.0	3.9	.	.	.	.
1992	6.8	5.6	0.4	0.7	0.1	0.1	1.6	1.0	4.0	4.8	3.1	0.7	1.9
1993	8.1	7.5	0.3	0.1	0.1	0.2	1.3	0.1	6.4	3.7	2.0	1.3	4.4
1994	6.1	5.2	0.2	0.7	0.0	0.4	0.0	0.9	4.8	6.3	3.6	1.7	-0.3
1995	7.7	5.5	0.2	2.2	-0.2	0.2	2.4	0.0	5.2	5.2	2.2	1.5	2.5
1996	3.8	4.2	-0.2	0.1	-0.3	0.1	0.2	0.4	3.2	2.7	0.8	2.6	1.1
1997	2.3	2.4	0.2	-0.2	0.0	0.0	-0.1	-0.6	3.0	0.2	-0.1	1.8	2.1
1998	1.6	1.9	-0.2	0.0	0.0	0.1	-0.4	-0.6	2.6	-1.1	-0.8	2.4	2.7
1999	1.6	1.3	0.3	0.0	0.0	0.2	-0.5	-0.7	2.6	-1.5	-0.7	-0.7	3.1
2000	0.8	0.8	0.1	-0.1	0.0	-0.1	-0.5	-0.3	1.7	-1.5	-1.3	-0.7	2.3

2. Euro area – deficit-debt adjustment

	Change in debt	Deficit (-) / surplus (+) ⁸⁾	Deficit-debt adjustment ⁹⁾											
			Total	Transactions in main financial assets held by general government							Valuation effects	Exchange rate effects	Other changes in volume	Other ¹¹⁾
				Total	Currency and deposits	Securities ¹⁰⁾	Loans	Shares and other equity	Privatisations	Equity injections				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1991	5.2	-4.7	0.5	1.1	0.3	0.1	0.4	0.2	-0.1	0.2	0.0	0.1	0.2	-0.8
1992	6.8	-4.8	2.0	0.8	0.2	0.1	0.3	0.2	-0.1	0.2	0.4	0.3	0.7	0.1
1993	8.1	-5.7	2.4	1.3	1.0	0.2	0.3	-0.2	-0.3	0.1	0.3	0.3	0.1	0.6
1994	6.1	-5.1	1.0	0.2	0.0	0.1	0.3	-0.1	-0.4	0.2	0.2	0.0	0.7	-0.1
1995	7.7	-5.0	2.7	0.6	0.0	-0.1	0.5	0.1	-0.4	0.2	0.2	0.0	2.2	-0.3
1996	3.8	-4.3	-0.4	-0.1	-0.1	0.0	0.0	-0.1	-0.3	0.2	-0.2	-0.1	0.1	-0.3
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	-0.6	0.2	0.0	-0.2	-0.6	-0.8	0.1	-0.2	0.0	0.0	0.3
1999	1.6	-1.3	0.3	0.0	0.4	0.2	0.1	-0.7	-0.8	0.1	0.3	0.2	0.0	0.0
2000	0.8	0.3	1.1	1.0	0.9	0.2	0.1	-0.2	-0.4	0.1	0.1	0.0	-0.1	0.1

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

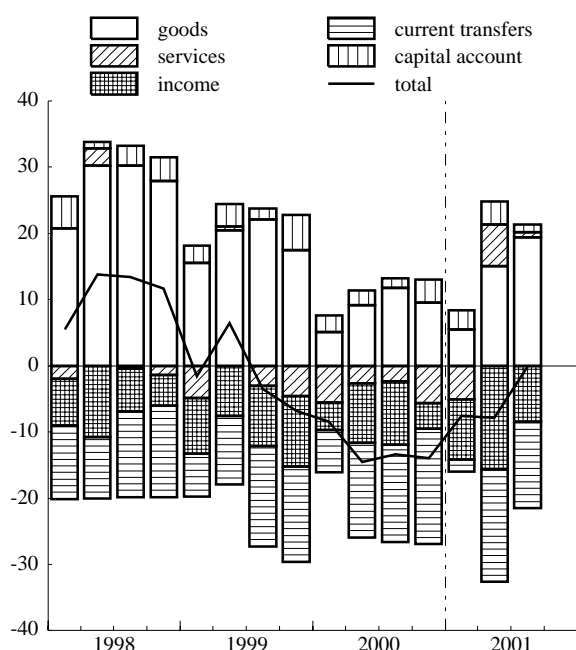
Summary balance of payments ^{1) 2)}

(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
2000 Q3	-14.8	11.8	-2.3	-9.6	-14.6	1.5	-5.3	-87.2	0.3	-0.3	77.2	4.7	18.6
Q4	-17.4	9.5	-5.6	-3.9	-17.4	3.5	25.7	-13.5	12.7	-8.5	24.4	10.7	-11.8
2000 Aug.	-6.7	1.8	-1.2	-1.4	-6.0	0.2	7.0	-35.4	14.0	-0.4	27.9	1.1	-0.6
Sep.	-3.0	2.8	-1.2	-1.8	-2.8	0.8	-7.6	-32.6	-4.0	1.9	23.0	4.0	9.8
Oct.	-5.4	4.3	-1.6	-2.0	-6.2	0.3	0.8	-18.4	0.5	-2.1	19.9	0.7	4.4
Nov.	-5.0	1.9	-0.8	-0.8	-5.2	1.4	3.7	1.4	2.2	-2.5	-5.1	7.7	-0.2
Dec.	-7.0	3.3	-3.2	-1.1	-5.9	1.8	21.2	3.4	9.9	-4.0	9.6	2.3	-16.0
<i>Euro area enlargement</i>													
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	-11.3	15.1	6.2	-15.6	-17.0	3.5	-10.2	-50.5	27.8	0.0	10.0	2.5	18.0
Q3	-1.3	19.4	0.8	-8.4	-13.1	1.1	-41.3	-11.9	62.5	-8.9	-85.3	2.4	41.4
2001 Jan.	-11.1	-3.9	-2.4	-7.5	2.7	1.3	2.3	-9.9	-42.8	-4.6	57.2	2.4	7.5
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	2.9	1.6	-6.8	-4.5	2.2	12.5	0.7	-20.5	1.6	23.7	7.0	-8.0
May	-3.0	4.1	2.7	-4.4	-5.3	0.5	-8.7	-40.9	16.0	3.4	16.3	-3.6	11.2
June	-1.6	8.1	1.9	-4.4	-7.3	0.9	-14.0	-10.4	32.2	-5.0	-29.9	-0.8	14.8
July	-4.1	8.5	0.9	-8.1	-5.4	0.4	-12.0	7.2	1.6	-4.8	-16.0	0.0	15.7
Aug.	4.2	6.0	0.8	0.3	-2.9	0.6	0.3	-6.0	17.8	-3.1	-12.6	4.1	-5.1
Sep.	-1.3	5.0	-0.9	-0.7	-4.7	0.0	-29.5	-13.1	43.0	-1.0	-56.7	-1.6	30.8
Oct.	0.1	9.6	0.2	-4.3	-5.4	0.3	-14.6	5.3	0.3	-3.8	-13.8	-2.6	14.2

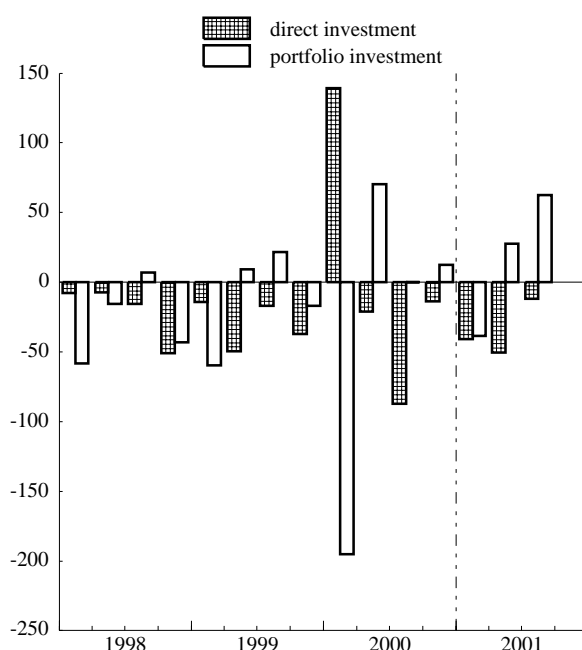
Current and capital accounts

(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
2000 Q3	400.2	415.0	-14.8	246.6	234.8	75.5	77.9	65.7	75.3	12.3	27.0	4.4	2.9
Q4	437.4	454.8	-17.4	274.6	265.1	75.1	80.8	72.7	76.6	14.9	32.3	5.9	2.5
2000 Aug.	126.1	132.8	-6.7	77.4	75.6	24.9	26.1	20.0	21.4	3.8	9.8	1.5	1.3
Sep.	140.1	143.1	-3.0	86.1	83.3	25.0	26.2	24.5	26.2	4.5	7.3	1.7	0.9
Oct.	146.0	151.5	-5.4	94.2	89.8	25.3	26.9	22.9	24.9	3.6	9.8	0.9	0.6
Nov.	145.2	150.2	-5.0	93.9	92.0	24.3	25.1	21.9	22.7	5.1	10.3	2.2	0.8
Dec.	146.2	153.1	-7.0	86.6	83.3	25.5	28.7	27.9	29.0	6.2	12.2	2.9	1.1
<i>Euro area enlargement</i>													
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	432.8	444.1	-11.3	261.2	246.1	82.2	76.0	74.4	90.0	14.9	31.9	5.3	1.8
Q3	414.0	415.3	-1.3	253.7	234.3	80.5	79.7	66.1	74.6	13.7	26.8	2.7	1.6
2001 Jan.	140.4	151.5	-11.1	79.8	83.7	22.4	24.8	22.6	30.1	15.6	12.9	1.8	0.5
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.	138.4	145.1	-6.7	83.2	80.3	26.1	24.5	23.3	30.1	5.8	10.3	2.6	0.4
May	147.1	150.1	-3.0	88.5	84.4	28.1	25.4	25.7	30.1	4.9	10.2	1.4	1.0
June	147.3	148.9	-1.6	89.5	81.4	28.1	26.2	25.5	29.8	4.2	11.5	1.3	0.4
July	147.9	152.0	-4.1	90.0	81.6	28.6	27.7	24.5	32.6	4.8	10.1	1.0	0.6
Aug.	133.4	129.2	4.2	80.9	74.9	27.7	26.9	20.4	20.1	4.4	7.3	1.1	0.5
Sep.	132.8	134.1	-1.3	82.7	77.8	24.3	25.1	21.2	21.9	4.6	9.3	0.6	0.5
Oct.	146.6	146.5	0.1	95.1	85.5	25.9	25.7	21.1	25.4	4.4	9.8	1.0	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
1999 Q3	334.8	340.7	-6.0	209.0	190.0	61.1	64.3	48.7	57.6	15.9	28.8
Q4	353.1	365.0	-11.9	217.5	203.7	64.0	68.3	53.9	64.1	17.8	28.9
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
2000 Aug.	137.2	142.8	-5.6	85.1	81.6	23.4	24.3	23.4	26.8	5.2	10.0
Sep.	142.2	143.3	-1.1	86.9	83.3	24.8	25.9	24.9	26.4	5.6	7.7
Oct.	141.8	146.8	-5.0	87.1	84.8	24.7	26.3	24.7	25.4	5.3	10.3
Nov.	144.6	149.7	-5.0	88.4	86.8	25.4	26.3	24.7	25.8	6.1	10.8
Dec.	145.3	153.1	-7.8	89.4	88.2	25.4	28.3	24.5	25.6	6.1	11.0
<i>Euro area enlargement</i>											
2001 Q1	428.6	436.1	-7.5	260.8	247.6	76.4	77.0	72.1	82.0	19.2	29.4
Q2	429.0	440.6	-11.6	262.1	246.7	80.1	77.6	69.1	82.5	17.7	33.7
Q3	422.6	427.9	-5.3	258.9	244.8	75.4	76.7	70.6	77.7	17.6	28.7
2001 Jan.	144.1	147.1	-3.0	87.5	83.1	25.4	25.4	24.6	29.6	6.5	9.0
Feb.	143.4	143.5	0.0	87.2	82.7	26.0	25.8	24.0	25.4	6.3	9.5
Mar.	141.1	145.6	-4.5	86.1	81.9	25.0	25.8	23.6	26.9	6.3	10.9
Apr.	143.4	147.7	-4.3	86.5	82.6	27.1	25.8	23.1	28.4	6.7	11.0
May	144.4	145.8	-1.5	87.9	81.7	26.8	25.6	24.1	27.5	5.6	11.0
June	141.2	147.0	-5.8	87.7	82.5	26.1	26.2	22.0	26.6	5.5	11.7
July	141.5	149.4	-7.9	85.2	83.1	25.4	25.7	25.0	30.0	5.9	10.5
Aug.	143.5	141.1	2.4	87.8	81.7	25.7	25.9	24.1	25.5	5.9	7.9
Sep.	137.6	137.5	0.2	86.0	79.9	24.3	25.2	21.5	22.2	5.9	10.2
Oct.	139.0	139.1	-0.1	85.3	78.1	24.6	24.4	22.6	26.5	6.5	10.1

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 Q2	66.7	75.7	3.3	1.5	63.4	74.2	16.2	13.8	19.7	32.2	27.5	28.2
Q3	65.7	75.3	3.3	1.5	62.4	73.8	14.3	15.2	18.9	28.7	29.3	29.8
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 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	90.0	3.6	1.5	70.9	88.5	19.3	15.5	20.8	39.4	30.8	33.7

	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 Q2	13.5	12.1	2.7	1.7	5.9	12.8	13.8	19.4
Q3	11.9	13.2	2.4	2.0	3.4	7.6	15.5	21.1
Q4	13.3	14.8	3.3	2.3	3.0	5.5	16.0	18.7
					<i>Euro area enlargement</i>			
2001 Q1	13.1	13.0	2.5	2.4	2.4	7.0	15.4	19.4
Q2	16.7	13.1	2.6	2.4	4.2	16.8	16.6	22.6

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
2000 Q3	-124.8	-117.8	-7.0	37.6	28.6	9.0
Q4	-93.3	-67.9	-25.4	79.7	32.7	47.1
2000 Aug.	-50.4	-56.1	5.7	15.0	4.8	10.2
Sep.	-47.1	-26.4	-20.6	14.4	5.5	8.9
Oct.	-35.9	-31.7	-4.2	17.5	11.1	6.4
Nov.	-35.6	-25.7	-9.9	37.0	24.4	12.6
Dec.	-21.8	-10.5	-11.3	25.2	-2.8	28.0
<i>Euro area enlargement</i>						
2001 Q1	-65.4	-26.5	-38.9	24.7	28.7	-4.0
Q2	-78.2	-59.9	-18.3	27.7	17.3	10.4
Q3	-37.3	-22.5	-14.8	25.4	13.6	11.8
2001 Jan.	-17.4	-11.6	-5.8	7.5	5.1	2.4
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.	-6.7	-9.6	2.9	7.5	3.6	3.9
May	-51.2	-41.1	-10.1	10.3	10.3	0.0
June	-20.3	-9.3	-11.1	10.0	3.4	6.5
July	-6.0	-11.8	5.8	13.2	5.4	7.8
Aug.	-12.2	-5.6	-6.6	6.2	4.5	1.7
Sep.	-19.1	-5.1	-14.0	6.0	3.7	2.3
Oct.	-2.0	-4.6	2.6	7.3	3.0	4.3

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
2000 Q3	-98.4	98.7	-56.9	37.3	-41.4	-34.8	-6.6	61.4	71.8	-10.4
Q4	-78.4	91.1	-59.9	38.4	-18.5	-15.6	-2.9	52.7	59.4	-6.7
2000 Aug.	-26.0	39.9	-20.7	22.4	-5.3	-4.0	-1.4	17.6	18.5	-0.9
Sep.	-35.9	31.9	-11.1	7.9	-24.8	-23.0	-1.8	24.0	27.1	-3.1
Oct.	-19.5	20.0	-9.1	2.7	-10.4	-10.4	0.0	17.4	25.0	-7.6
Nov.	-25.9	28.1	-16.4	7.6	-9.5	-7.5	-2.0	20.6	23.8	-3.2
Dec.	-33.0	42.9	-34.4	28.2	1.4	2.3	-0.9	14.7	10.6	4.1
<i>Euro area enlargement</i>										
2001 Q1	-82.9	44.4	-29.1	18.7	-53.8	-37.2	-16.6	25.7	24.5	1.2
Q2	-71.6	99.3	-36.8	108.9	-34.7	-44.6	9.9	-9.6	-0.4	-9.2
Q3	-3.4	65.8	2.8	42.7	-6.2	-14.7	8.5	23.1	29.4	-6.3
2001 Jan.	-36.9	-5.9	-20.7	-0.4	-16.2	-6.9	-9.3	-5.5	-9.1	3.6
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.	-19.9	-0.6	-14.0	9.9	-5.9	-11.8	5.9	-10.5	-3.2	-7.2
May	-25.9	41.9	-12.0	58.1	-13.9	-15.8	1.9	-16.2	-12.5	-3.7
June	-25.8	58.0	-10.8	40.9	-15.0	-17.0	2.1	17.1	15.4	1.7
July	-12.4	14.0	-8.4	12.8	-4.0	-7.9	3.9	1.2	3.0	-1.8
Aug.	-18.0	35.9	-2.6	15.3	-15.4	-16.3	0.9	20.5	19.4	1.1
Sep.	27.1	15.9	13.8	14.5	13.2	9.5	3.7	1.4	7.1	-5.7
Oct.	-36.4	36.7	-5.8	25.6	-30.6	-20.6	-10.1	11.1	9.0	2.1

2. Assets by instrument and sector of holder

	Equity				Debt instruments							
	Euro-system	General government	MFIs (excl. the Euro-system)	Other sectors	Bonds and notes				Money market instruments			
					Euro-system	General government	MFIs (excl. the Euro-system)	Other sectors	Euro-system	General government	MFIs (excl. the Euro-system)	Other sectors
1	2	3	4	5	6	7	8	9	10	11	12	
1999	0.1	-2.1	-1.5	-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 Q2	0.0	-0.7	1.4	-57.0	0.6	-0.7	-11.5	-13.3	0.0	-0.1	-5.5	-0.3
Q3	-0.1	-0.4	-2.4	-54.1	-2.3	-0.4	-14.8	-17.4	0.5	-1.4	-7.5	1.8
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 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	6.2	-42.3	0.6	0.0	-22.4	-22.9	-0.7	0.0	2.1	8.5

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

Table 8.6**Balance of payments: other investment account and reserve assets**

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

1. Other investment by sector ^{1) 2)}

	Total		Eurosystem		General government		MFIs (excluding the Eurosystem)						Other sectors	
	Assets 1	Liabilities 2	Assets 3	Liabilities 4	Assets 5	Liabilities 6	Total		Long-term		Short-term		Assets 13	Liabilities 14
							Assets 7	Liabilities 8	Assets 9	Liabilities 10	Assets 11	Liabilities 12		
1998	-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
2000 Q3	-31.7	108.9	0.2	-2.0	-5.4	2.7	-17.2	74.9	-12.0	8.4	-5.2	66.5	-9.3	33.3
Q4	-49.5	74.0	-0.9	2.9	5.7	3.4	-63.9	59.5	-22.7	11.8	-41.1	47.6	9.6	8.3
2000 Aug.	-29.9	57.7	0.4	-2.2	-2.1	1.9	-22.5	25.6	-2.0	-1.0	-20.6	26.6	-5.6	32.4
Sep.	-7.0	30.0	0.0	1.7	-5.6	-0.7	-5.3	33.0	-2.8	2.4	-2.5	30.6	3.9	-4.0
Oct.	-8.5	28.4	-0.4	0.7	8.1	1.7	-18.4	25.0	-3.2	6.3	-15.2	18.7	2.1	1.1
Nov.	-51.0	45.9	-0.3	0.9	-2.9	0.6	-50.6	48.0	-6.4	8.1	-44.2	39.9	2.8	-3.7
Dec.	10.0	-0.4	-0.2	1.2	0.4	1.2	5.1	-13.5	-13.2	-2.5	18.3	-11.0	4.6	10.8
<i>Euro area enlargement</i>														
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	6.6	3.4	-0.8	4.3	-0.3	2.7	12.4	-8.5	-10.1	16.9	22.6	-25.4	-4.7	4.9
Q3	-66.0	-19.3	1.0	-0.9	-1.2	0.2	-59.1	-24.2	-7.8	6.1	-51.3	-30.3	-6.7	5.6
2001 Jan.	-45.2	102.4	0.5	1.3	3.6	-6.4	-51.4	108.2	-3.9	-1.9	-47.5	110.1	2.1	-0.7
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.	9.6	14.1	-0.3	-1.6	-0.2	-0.8	14.6	16.3	-0.3	5.5	14.9	10.8	-4.5	0.1
May	1.7	14.6	-0.3	1.6	1.2	2.4	4.8	4.8	-7.3	3.9	12.1	0.9	-4.1	5.8
June	-4.6	-25.3	-0.3	4.2	-1.3	1.2	-7.0	-29.5	-2.5	7.5	-4.4	-37.0	3.9	-1.1
July	45.2	-61.2	0.7	-0.4	-1.5	0.9	48.7	-63.8	-0.6	0.1	49.3	-63.9	-2.7	2.1
Aug.	-35.2	22.6	0.1	-2.4	0.7	-2.6	-34.0	26.6	-3.8	2.9	-30.2	23.7	-2.0	1.0
Sep.	-76.0	19.3	0.1	1.9	-0.4	1.9	-73.8	13.0	-3.4	3.1	-70.3	9.9	-1.9	2.6
Oct.	-26.5	12.7	-0.5	4.5	-0.2	2.1	-22.4	7.1	-4.4	2.9	-18.0	4.2	-3.3	-1.1

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 Q2	-0.3	2.9	2.6	0.0	0.0	0.0
Q3	0.2	-2.0	-1.8	0.0	0.0	0.0
Q4	-0.9	2.9	2.0	0.0	0.0	0.0
<i>Euro area enlargement</i>						
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

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 Q2	0.0	0.0	0.0	1.4	0.6	2.0	-0.5	0.1	-0.3
Q3	0.0	0.0	0.0	-5.1	2.6	-2.5	-0.3	0.1	-0.2
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 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	2.6	2.7	-0.4	0.1	-0.3

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 Q2	-24.8	-17.3	-42.1	0.9	0.8	1.7
Q3	-15.8	74.9	59.1	-1.4	0.0	-1.4
Q4	-62.4	55.1	-7.4	-1.4	4.4	2.9
<i>Euro area enlargement</i>						
2001 Q1	-130.5	257.8	127.3	-4.5	3.9	-0.6
Q2	15.9	-11.3	4.6	-3.4	2.8	-0.6

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 Q2	-3.1	1.9	-1.2	0.1	2.7	2.8	-0.1	-1.1	-1.2
Q3	-4.3	3.0	-1.3	-4.0	30.3	26.3	-1.0	0.0	-1.0
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 Q1	-4.8	4.2	-0.6	3.0	-16.3	-13.3	-2.5	-0.4	-3.0
Q2	-3.6	1.8	-1.8	0.2	3.8	4.0	-1.3	-0.8	-2.1

3. Reserve assets ¹⁾

	Total	Monetary gold	Special drawing rights	Reserve position in the IMF	Foreign exchange							Other claims
					Total	Currency and deposits		Securities			Financial derivatives	
						With monetary authorities and the BIS	With banks	Equity	Bonds and notes	Money market instruments		
1	2	3	4	5	6	7	8	9	10	11	12	
1999	10.1	0.3	1.0	2.0	6.7	12.5	-11.4	0.2	3.5	2.0	-0.1	0.2
2000	17.6	1.0	0.3	2.9	11.6	4.3	2.9	0.0	-5.6	10.1	-0.1	1.7
2000 Q2	3.3	0.0	-0.1	3.3	0.8	-1.7	1.7	0.0	-4.5	5.4	0.0	-0.7
Q3	4.7	0.3	-0.1	0.0	3.6	2.4	3.2	0.0	-5.5	3.5	-0.1	0.8
Q4	10.7	0.0	0.3	-0.6	10.5	1.1	3.8	0.0	0.8	4.7	0.0	0.5
<i>Euro area enlargement</i>												
2001 Q1	9.5	0.3	-0.4	0.2	10.8	7.8	-6.9	-1.1	5.2	5.7	0.0	-1.3
Q2	2.5	-0.1	-0.6	-0.7	5.0	0.2	-0.8	0.0	5.5	0.0	0.0	-1.1

Source: ECB.

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

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

	Total	Direct investment			Portfolio investment					Financial derivatives	Other investment				Reserve assets
		Total	Equity (including reinvested earnings)	Other capital	Total	Equity securities	Debt instruments				Total	Trade credits	Loans/currency and deposits	Other assets/liabilities	
							Total	Bonds and notes	Money market instruments						
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
1997	32.7	177.6	148.6	29.1	-724.7	-358.7	-366.0	-339.8	-26.2	-5.9	222.4	79.8	51.3	91.4	363.3
1998	-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 denomin- ated 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	199.9	12.6	18.3	169.0	0.0	116.6	52.4	0.0	1.3	7.6
1999 Dec.	372.6	116.4	402.762	4.5	24.3	225.1	12.8	21.4	191.1	0.0	134.3	56.7	-0.2	2.4	14.6
2000 Dec.	378.0	117.8	399.537	4.3	20.8	234.2	9.2	20.2	204.2	0.0	153.9	50.3	0.7	0.7	15.8
<i>Euro area enlargement</i>															
2001 1 Jan.	391.2	119.2	404.119	4.3	21.2	245.7	9.2	27.6	208.2	0.0	157.9	50.3	0.7	0.7	16.3
2001 Jan.	385.8	115.0	404.119	4.5	22.3	243.2	11.8	19.9	210.7	-	-	-	0.8	0.8	20.9
Feb.	383.8	116.5	404.119	4.8	21.3	240.5	10.4	21.7	207.8	-	-	-	0.6	0.6	21.2
Mar. ⁴⁾	393.0	117.6	403.153	4.9	21.4	246.9	9.7	27.3	209.5	-	-	-	0.5	2.1	20.2
Apr.	386.3	119.5	403.153	4.9	21.1	240.2	11.5	23.7	204.6	-	-	-	0.4	0.6	23.4
May	408.4	127.2	403.153	5.6	22.3	251.5	10.6	25.7	215.0	-	-	-	0.2	1.8	22.9
June ⁴⁾	410.0	128.6	403.089	5.7	22.9	249.6	9.8	28.4	211.2	-	-	-	0.2	3.2	22.7
July ⁴⁾	397.1	122.3	402.639	5.5	22.7	242.7	8.5	32.7	201.2	-	-	-	0.4	3.9	23.8
Aug. ⁴⁾	381.8	120.0	402.430	5.5	21.9	232.4	8.3	26.3	197.3	-	-	-	0.5	2.0	23.7
Sep. ⁴⁾	393.4	129.0	401.904	5.4	25.8	232.0	10.2	24.7	196.7	-	-	-	0.4	1.2	21.9
Oct. ⁴⁾	393.6	123.9	401.902	5.4	24.9	237.4	8.6	31.2	197.1	-	-	-	0.5	2.1	22.0
Nov. ⁴⁾	396.5	124.4	401.903	5.4	24.7	240.1	7.9	31.8	199.9	-	-	-	0.4	1.9	22.2
European Central Bank ⁵⁾															
1999 Dec.	49.3	7.0	24.030	0.0	0.0	40.6	0.3	6.0	34.3	0.0	27.7	6.5	0.0	1.7	2.6
2000 Dec.	44.7	7.0	24.030	0.0	0.0	36.9	0.6	6.1	30.0	0.0	19.8	10.2	0.3	0.7	3.8
<i>Euro area enlargement</i>															
2001 Jan.	45.7	7.0	24.656	0.0	0.0	37.9	0.7	2.6	34.3	-	-	-	0.3	0.7	3.5
Feb.	46.2	7.1	24.656	0.0	0.0	38.4	0.6	3.9	33.9	-	-	-	0.1	0.6	3.0
Mar.	46.3	7.2	24.656	0.0	0.0	37.0	0.6	5.2	31.1	-	-	-	0.0	2.1	3.9
Apr.	44.8	7.3	24.656	0.0	0.0	37.0	0.8	5.2	31.0	-	-	-	0.0	0.5	3.6
May	49.6	7.8	24.656	0.0	0.0	40.0	0.8	5.2	34.0	-	-	-	0.0	1.8	2.7
June	50.7	7.9	24.656	0.1	0.0	40.0	0.9	6.8	32.3	-	-	-	0.0	2.8	3.1
July	49.8	7.5	24.656	0.1	0.0	38.4	1.0	7.8	29.6	-	-	-	0.0	3.9	2.9
Aug.	45.5	7.3	24.656	0.1	0.0	36.1	1.1	4.2	30.8	-	-	-	0.0	2.0	3.5
Sep.	44.5	7.9	24.656	0.1	0.0	35.4	1.4	3.4	30.6	-	-	-	0.0	1.1	3.9
Oct.	47.9	7.6	24.656	0.1	0.0	38.5	0.9	5.5	32.1	-	-	-	0.0	1.8	2.8
Nov.	48.3	7.6	24.656	0.1	0.0	38.7	0.9	4.2	33.6	-	-	-	0.0	1.9	3.2

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: Manufac- tures 10 Oil 11	Exports 12	Imports 13	
	1	Inter- mediate 2	Capital 3	Consump- tion 4		6	Inter- mediate 7	Capital 8	Consump- tion 9				
Values (EUR billions (ECU billions to end-1998); 1995=100 for columns 12 and 13)													
1997	762.8	357.3	168.3	202.3	661.0	674.2	389.3	104.8	161.4	481.9	62.6	122.5	119.8
1998	797.1	369.6	179.8	213.6	697.8	711.4	393.3	122.9	175.8	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	1,010.1	480.7	221.3	264.7	880.0	1,002.9	576.7	178.4	217.0	725.7	118.5	162.3	178.2
2000 Q2	248.4	118.7	55.2	63.7	216.4	244.5	140.5	43.9	52.7	178.9	26.3	157.7	172.8
Q3	251.0	120.8	53.7	65.8	218.6	246.3	143.0	41.8	54.2	176.6	31.8	165.8	184.2
Q4	279.8	130.9	63.9	73.3	243.8	278.8	159.7	52.0	57.8	199.4	34.3	173.8	195.5
<i>Euro area enlargement</i>													
2001 Q1	258.8	121.7	56.2	67.9	226.7	260.5	148.5	47.4	54.4	190.5	27.0	173.1	182.2
Q2	265.7	121.9	58.5	68.3	232.6	258.1	145.4	44.2	54.0	186.7	28.0	172.6	182.5
Q3	255.6	115.7	54.9	69.0	223.6	237.9	131.9	37.3	54.6	170.7	27.6	172.0	177.5
2001 May	90.8	42.1	19.7	23.4	79.3	87.9	50.1	14.9	18.2	63.7	9.3	172.3	179.3
June	91.6	41.8	20.2	24.0	80.6	86.4	48.7	14.4	18.6	62.4	10.0	175.4	185.6
July	91.8	41.8	19.5	24.8	80.9	83.3	46.4	12.9	18.9	59.7	9.4	169.5	180.0
Aug.	81.3	36.7	18.1	21.2	70.9	76.6	41.8	11.6	18.0	54.7	9.4	176.5	180.2
Sep.	82.5	37.2	17.3	23.0	71.8	78.1	43.7	12.7	17.8	56.2	8.8	170.1	172.5
Oct.	94.5	.	.	.	.	86.8	.	.	.	.	.	167.7	170.7
Volumes (annual percentage changes; 1995=100 for columns 12 and 13) ³⁾													
1997	10.8	9.1	12.0	10.6	12.0	7.2	8.3	13.1	6.7	10.7	2.4	115.9	110.3
1998	3.6	4.2	5.9	3.6	4.0	11.6	8.1	21.8	7.6	13.4	-4.5	120.1	123.1
1999	2.2	2.9	-0.8	3.5	1.4	6.1	3.5	13.0	7.8	7.1	6.0	122.7	130.6
2000	12.0	12.1	12.5	12.4	13.2	5.3	6.2	11.1	3.9	8.2	4.3	137.6	137.6
2000 Q2	14.5	13.8	13.4	14.2	15.5	6.2	6.8	12.9	4.4	10.0	0.2	135.6	137.3
Q3	9.8	9.3	10.2	12.1	10.8	5.9	7.0	10.5	3.2	8.1	5.5	139.1	140.9
Q4	9.7	11.0	13.9	8.2	11.2	3.1	3.8	10.5	0.8	4.4	6.3	142.3	139.7
<i>Euro area enlargement</i>													
2001 Q1	6.4	4.2	11.6	6.0	7.3	1.6	0.7	5.6	-4.3	1.0	-3.1	142.8	138.3
Q2	2.6	-1.8	4.3	2.3	3.3	-1.7	-3.9	-5.4	-5.4	-2.7	-3.0	140.3	136.6
Q3	-0.2	-4.7	1.3	0.1	0.5	-4.1	-6.8	-14.3	-4.9	-6.4	-3.7	140.0	136.2
2001 May	-3.0	-5.9	-4.7	-1.7	-2.5	-7.2	-8.4	-13.3	-10.3	-7.6	-11.0	140.2	134.2
June	3.6	-0.8	6.1	4.1	4.6	-2.3	-5.1	-7.3	-3.2	-3.2	-2.4	142.1	137.5
July	4.9	2.2	1.1	2.9	6.2	-1.3	-3.6	-9.6	-1.5	-2.0	-3.0	138.0	133.4
Aug.	1.8	-5.3	10.7	1.2	2.7	-3.9	-7.2	-16.6	-3.3	-6.4	-2.9	144.0	137.8
Sep.	-6.8	-10.9	-6.9	-3.7	-7.1	-7.1	-9.3	-16.2	-9.6	-10.2	-5.1	138.0	137.2
Oct.	.	.	.	.	.	.	.	.	.	.	.	.	.
Unit values (annual percentage changes; 1995=100 for columns 12 and 13) ³⁾													
1997	2.8	2.6	3.5	3.5	2.7	5.8	5.4	5.5	4.8	4.9	4.2	105.7	108.6
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
2000 Q2	6.8	9.5	8.3	3.9	5.7	21.5	28.7	10.9	8.1	12.5	101.4	116.3	125.9
Q3	9.1	12.7	7.5	4.4	8.5	20.0	26.6	10.4	7.9	12.5	71.0	119.2	130.8
Q4	10.0	11.4	7.7	7.4	8.8	23.9	28.3	15.1	12.6	18.1	53.1	122.1	140.0
<i>Euro area enlargement</i>													
2001 Q1	6.6	6.4	5.6	5.4	6.5	8.8	9.1	8.5	8.0	9.3	3.2	121.3	131.8
Q2	5.8	5.3	4.0	6.7	5.7	6.0	6.1	5.2	7.2	6.1	4.2	123.0	133.6
Q3	3.1	1.1	2.3	6.5	3.0	-0.3	-2.2	2.9	5.1	2.3	-12.4	122.9	130.4
2001 May	5.6	4.5	4.5	6.6	5.6	5.8	5.8	4.8	6.6	5.1	6.9	122.9	133.6
June	5.7	4.9	3.0	8.2	5.9	5.4	5.2	5.7	7.0	5.8	0.9	123.5	135.0
July	3.9	1.2	6.3	8.4	3.3	5.0	3.4	7.6	7.4	6.6	-4.5	122.8	134.9
Aug.	3.1	1.4	1.3	7.1	3.1	0.2	-2.2	2.0	5.7	2.8	-10.8	122.6	130.7
Sep.	2.2	0.8	-0.8	4.3	2.5	-5.6	-7.5	-0.9	2.3	-2.4	-21.1	123.2	125.7
Oct.	.	.	.	.	.	.	.	.	.	.	.	.	.

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.)													
1997	762.8	-	141.7	29.2	19.4	90.2	46.8	102.6	26.5	132.7	43.1	38.1	92.4
1998	797.1	-	150.2	31.5	20.5	101.5	51.1	119.9	23.9	114.9	49.7	42.4	91.5
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	1,010.1	-	188.9	38.6	23.1	130.7	63.2	171.0	34.1	150.8	55.9	46.5	107.2
2000 Q2	248.4	244.7	46.6	9.7	5.7	32.4	15.5	41.0	7.9	36.8	14.6	11.0	27.1
Q3	251.0	257.2	46.2	9.1	5.5	32.7	15.5	43.1	8.7	37.8	13.6	12.1	26.8
Q4	279.8	269.6	50.8	10.5	6.3	36.9	17.0	48.0	9.3	43.3	15.4	13.4	29.0
Euro area enlargement													
2001 Q1	258.8	265.4	49.3	9.7	6.1	33.3	17.0	45.1	9.2	39.8	14.3	12.1	22.9
Q2	265.7	264.6	50.7	9.0	7.2	34.0	16.6	45.1	8.3	40.4	15.3	12.7	26.4
Q3	255.6	263.8	49.1	7.9	5.9	31.9	16.0	43.5	8.2	39.7	14.2	12.0	.
2001 May	90.8	88.1	16.8	3.0	3.2	11.9	5.8	15.2	2.7	13.9	5.2	4.3	8.7
June	91.6	89.6	18.0	3.0	2.0	11.7	5.5	15.5	3.0	14.0	5.1	4.5	9.3
July	91.8	86.6	17.2	2.4	1.9	11.4	5.6	16.6	2.8	14.5	5.1	4.7	9.5
Aug.	81.3	90.2	14.9	2.6	2.0	10.1	5.1	13.6	2.6	13.2	4.8	4.0	.
Sep.	82.5	86.9	17.0	2.9	2.0	10.4	5.3	13.3	2.8	12.1	4.4	3.3	.
Oct.	94.5	85.7	.	.	.	.	.	.	.	.	.	.	.
% change versus previous year													
2001 Oct.	-1.6	-	.	.	.	.	.	.	.	.	.	.	.
Imports (c.i.f.)													
1997	674.2	-	117.7	27.1	16.9	60.2	36.9	94.3	43.3	124.8	49.7	28.4	74.8
1998	711.4	-	122.3	30.8	17.3	71.6	40.9	104.8	48.5	132.0	45.8	29.3	68.0
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	1,002.9	-	155.5	37.5	21.7	100.8	49.8	139.7	64.6	210.9	72.1	39.5	110.9
2000 Q2	244.5	242.0	37.4	9.6	5.2	24.6	12.2	35.2	16.7	49.9	16.7	10.6	26.4
Q3	246.3	257.9	36.6	8.6	5.2	25.0	11.9	33.8	15.1	54.5	17.8	10.0	27.9
Q4	278.8	273.8	43.8	10.2	6.1	27.7	13.2	38.8	17.0	59.4	20.9	10.2	31.5
Euro area enlargement													
2001 Q1	260.5	257.2	38.7	8.9	5.2	29.0	13.5	37.5	16.1	53.8	19.8	9.8	28.3
Q2	258.1	257.5	39.0	8.6	5.1	29.3	13.1	36.0	15.7	51.9	18.9	11.1	29.5
Q3	237.9	250.5	34.8	7.6	5.1	27.8	11.9	30.7	12.7	49.4	17.7	9.9	.
2001 May	87.9	84.3	13.4	2.9	1.7	9.9	4.5	12.1	5.4	17.6	6.3	3.9	10.2
June	86.4	87.3	13.0	2.9	1.7	10.1	4.3	12.1	4.8	17.5	6.4	3.8	9.9
July	83.3	84.7	11.7	2.4	1.7	9.9	4.5	10.7	4.6	16.8	6.4	3.5	11.1
Aug.	76.6	84.7	11.0	2.4	1.7	8.6	3.4	10.7	4.1	16.6	5.6	3.2	.
Sep.	78.1	81.1	12.2	2.8	1.7	9.3	4.0	9.3	4.1	16.1	5.7	3.2	.
Oct.	86.8	80.3	.	.	.	.	.	.	.	.	.	.	.
% change versus previous year													
2001 Oct.	-9.5	-	.	.	.	.	.	.	.	.	.	.	.
Balance													
1997	88.6	-	23.9	2.1	2.5	30.0	9.9	8.3	-16.9	8.0	-6.5	9.7	17.5
1998	85.7	-	27.8	0.7	3.2	29.9	10.2	15.1	-24.6	-17.2	3.9	13.1	23.5
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	7.2	-	33.4	1.1	1.4	29.9	13.4	31.3	-30.5	-60.1	-16.1	7.1	-3.6
2000 Q2	3.9	2.7	9.2	0.1	0.5	7.8	3.3	5.9	-8.8	-13.1	-2.1	0.4	0.7
Q3	4.6	-0.7	9.6	0.5	0.3	7.7	3.5	9.3	-6.3	-16.7	-4.2	2.1	-1.1
Q4	1.0	-4.2	7.0	0.3	0.2	9.1	3.8	9.2	-7.7	-16.1	-5.5	3.1	-2.5
Euro area enlargement													
2001 Q1	-1.8	8.2	10.7	0.8	0.9	4.4	3.5	7.6	-7.0	-14.0	-5.5	2.3	-5.4
Q2	7.7	7.1	11.7	0.5	2.1	4.7	3.4	9.1	-7.3	-11.5	-3.6	1.6	-3.1
Q3	17.7	13.2	14.3	0.3	0.8	4.2	4.1	12.8	-4.6	-9.7	-3.4	2.1	.
2001 May	2.9	3.7	3.5	0.2	1.5	2.0	1.3	3.1	-2.6	-3.7	-1.1	0.4	-1.5
June	5.2	2.3	5.0	0.1	0.3	1.6	1.2	3.3	-1.8	-3.5	-1.3	0.7	-0.6
July	8.5	2.0	5.6	0.0	0.2	1.5	1.1	5.8	-1.8	-2.3	-1.3	1.3	-1.5
Aug.	4.7	5.4	3.9	0.2	0.3	1.5	1.6	2.9	-1.5	-3.4	-0.8	0.7	.
Sep.	4.4	5.8	4.8	0.1	0.3	1.2	1.3	4.1	-1.3	-4.0	-1.3	0.1	.
Oct.	7.6	5.4	.	.	.	.	.	.	.	.	.	.	.

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	100.0	90.4	96.6	1.134	137.1	1.644	0.692
1998	101.5	101.3	101.6	99.6	96.6	99.1	1.121	146.4	1.622	0.676
1999	95.7	95.7	95.7	96.1	96.6	95.8	1.066	121.3	1.600	0.659
2000	85.7	86.5	87.0	86.5	88.2	86.3	0.924	99.5	1.558	0.609
1999 Q1	100.0	100.0	100.0	100.0	100.0	100.0	1.122	130.7	1.599	0.687
Q2	96.1	96.0	96.0	96.6	96.5	96.0	1.057	127.7	1.600	0.658
Q3	94.6	94.7	94.6	94.7	95.5	94.6	1.049	118.7	1.602	0.655
Q4	92.2	92.2	92.2	93.1	94.2	92.6	1.038	108.4	1.600	0.636
2000 Q1	89.0	89.6	89.8	89.7	91.1	89.5	0.986	105.5	1.607	0.614
Q2	86.0	86.6	87.0	87.1	88.4	86.6	0.933	99.6	1.563	0.610
Q3	84.7	85.7	86.3	85.6	87.3	85.3	0.905	97.4	1.544	0.612
Q4	83.0	84.0	84.9	83.5	85.9	83.6	0.868	95.3	1.516	0.600
1999 Jan.	102.0	101.8	101.8	-	101.4	101.4	1.161	131.3	1.605	0.703
Feb.	99.9	99.9	99.8	-	100.0	100.1	1.121	130.8	1.598	0.689
Mar.	98.3	98.3	98.4	-	98.7	98.6	1.088	130.2	1.595	0.671
Apr.	97.1	96.9	97.0	-	97.5	97.2	1.070	128.2	1.602	0.665
May	96.6	96.5	96.4	-	96.9	96.4	1.063	129.7	1.603	0.658
June	94.7	94.7	94.7	-	95.1	94.5	1.038	125.3	1.595	0.650
July	94.8	95.2	94.8	-	95.0	94.4	1.035	123.7	1.604	0.658
Aug.	95.4	95.6	95.4	-	96.3	95.5	1.060	120.1	1.600	0.660
Sep.	93.6	93.4	93.4	-	95.2	93.8	1.050	112.4	1.602	0.647
Oct.	94.4	94.2	94.3	-	96.3	94.7	1.071	113.5	1.594	0.646
Nov.	92.0	92.0	92.1	-	94.0	92.4	1.034	108.2	1.605	0.637
Dec.	90.1	90.4	90.3	-	92.2	90.7	1.011	103.7	1.601	0.627
2000 Jan.	90.2	90.8	90.9	-	92.4	90.7	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	83.5	-	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	89.0	89.2	86.7	91.0	88.1	0.896	108.7	1.511	0.622
2001 Q1	88.6	90.0	90.5	87.9	91.4	89.0	0.923	109.1	1.533	0.633
Q2	86.0	87.7	87.9	85.7	89.5	86.9	0.873	106.9	1.528	0.614
Q3	87.0	88.9	88.9	86.5	91.2	88.2	0.890	108.3	1.507	0.619
Q4	87.5	89.5	89.5	86.8	92.0	88.4	0.896	110.5	1.473	0.621
2001 Jan.	89.2	90.3	90.8	-	91.7	89.1	0.938	109.6	1.529	0.635
Feb.	88.3	89.7	90.2	-	91.0	88.6	0.922	107.1	1.536	0.634
Mar.	88.4	90.0	90.4	-	91.4	89.1	0.910	110.3	1.535	0.629
Apr.	87.6	89.2	89.5	-	91.0	88.5	0.892	110.4	1.529	0.622
May	85.9	87.6	87.7	-	89.3	86.7	0.874	106.5	1.533	0.613
June	84.7	86.4	86.4	-	88.1	85.4	0.853	104.3	1.522	0.609
July	85.4	87.3	87.2	-	89.1	86.3	0.861	107.2	1.514	0.609
Aug.	87.7	89.6	89.5	-	91.8	88.9	0.900	109.3	1.514	0.627
Sep.	88.0	89.8	89.9	-	92.6	89.4	0.911	108.2	1.491	0.623
Oct.	88.0	90.0	90.0	-	92.8	89.4	0.906	109.9	1.479	0.624
Nov.	86.8	88.8	88.9	-	91.3	87.7	0.888	108.7	1.466	0.618
Dec.	87.7	89.7	89.7	-	91.9	88.1	0.892	113.4	1.475	0.620
% ch. vs. ⁴⁾ prev. month										
2001 Dec.	1.0	1.0	1.0	-	0.6	0.5	0.5	4.3	0.6	0.3
% ch. vs. ⁴⁾ prev. year										
2001 Dec.	-	-	-	-	-	-	-0.6	12.7	-2.6	1.1

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
8.98	7.44	8.60	1.696	1.770	8.69	1,342.6	1.911	1999 Q1
8.90	7.43	8.24	1.557	1.618	8.19	1,258.8	1.810	Q2
8.71	7.44	8.22	1.558	1.613	8.14	1,252.8	1.772	Q3
8.65	7.44	8.19	1.528	1.613	8.07	1,217.4	1.737	Q4
8.50	7.45	8.11	1.434	1.564	7.68	1,109.8	1.674	2000 Q1
8.28	7.46	8.20	1.381	1.585	7.27	1,042.0	1.608	Q2
8.40	7.46	8.10	1.341	1.576	7.06	1,009.5	1.569	Q3
8.60	7.45	8.04	1.325	1.632	6.77	1,011.6	1.516	Q4
9.08	7.44	8.65	1.765	1.839	8.99	1,362.4	1.950	1999 Jan.
8.91	7.44	8.65	1.679	1.751	8.68	1,330.2	1.905	Feb.
8.94	7.43	8.51	1.651	1.726	8.43	1,336.2	1.881	Mar.
8.91	7.43	8.32	1.594	1.668	8.30	1,292.2	1.834	Apr.
8.97	7.43	8.23	1.553	1.605	8.24	1,272.1	1.820	May
8.83	7.43	8.17	1.524	1.580	8.05	1,212.6	1.775	June
8.74	7.44	8.18	1.540	1.576	8.03	1,229.4	1.756	July
8.75	7.44	8.26	1.583	1.645	8.23	1,269.1	1.779	Aug.
8.63	7.43	8.23	1.552	1.619	8.15	1,260.1	1.781	Sep.
8.73	7.43	8.29	1.581	1.641	8.32	1,289.9	1.793	Oct.
8.63	7.44	8.19	1.516	1.618	8.04	1,215.9	1.727	Nov.
8.59	7.44	8.10	1.491	1.580	7.86	1,149.6	1.694	Dec.
8.60	7.44	8.12	1.469	1.542	7.89	1,145.9	1.697	2000 Jan.
8.51	7.45	8.10	1.427	1.564	7.65	1,110.8	1.674	Feb.
8.39	7.45	8.11	1.408	1.583	7.51	1,076.1	1.654	Mar.
8.27	7.45	8.15	1.389	1.588	7.38	1,051.4	1.620	Apr.
8.24	7.46	8.20	1.355	1.570	7.06	1,015.3	1.566	May
8.32	7.46	8.25	1.402	1.597	7.40	1,061.1	1.641	June
8.41	7.46	8.18	1.389	1.598	7.33	1,047.9	1.636	July
8.39	7.46	8.10	1.341	1.557	7.05	1,007.6	1.556	Aug.
8.41	7.46	8.03	1.295	1.575	6.80	973.2	1.517	Sep.
8.52	7.45	8.00	1.292	1.618	6.67	965.1	1.498	Oct.
8.63	7.46	8.00	1.320	1.639	6.68	990.6	1.497	Nov.
8.66	7.46	8.13	1.368	1.642	7.00	1,089.6	1.558	Dec.
<i>Euro area enlargement</i>								
9.26	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
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.
0.2	0.0	0.9	-0.5	1.0	0.4	0.8	0.8	% ch. vs. ⁴⁾ prev. month 2001 Dec.
8.9	-0.2	-1.7	2.9	5.6	-0.6	5.3	5.2	% ch. vs. ⁴⁾ prev. year 2001 Dec.

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	Standard- ised unemploy- ment rate as a % of labour force (s.a.) 10	Broad money ⁵⁾ 11	3-month interest rate ¹⁾ as a % per annum 12
Denmark												
1998	1.3	1.1	55.6	4.94	7.50	-0.9	2.3	2.5	2.2	5.2	5.4	4.27
1999	2.1	3.1	52.0	4.91	7.44	1.7	3.0	2.3	1.8	5.2	-0.2	3.44
2000	2.7	2.8	46.1	5.64	7.45	1.6	1.4	3.0	6.3	4.7	1.8	5.00
2001	2.3	.	.	5.08	7.45	.	.	.	.	.	.	4.70
2000 Q3	2.6	-	-	5.69	7.46	3.6	0.4	3.1	8.1	4.7	1.2	5.84
Q4	2.6	-	-	5.42	7.45	1.4	1.1	2.7	6.1	4.7	-0.1	5.48
2001 Q1	2.3	-	-	5.03	7.46	4.7	2.4	2.0	5.2	4.6	3.0	5.26
Q2	2.5	-	-	5.27	7.46	2.4	3.5	0.9	0.9	4.6	4.1	5.06
Q3	2.3	-	-	5.18	7.44	4.4	3.0	1.2	1.7	4.5	6.4	4.73
Q4	2.0	-	-	4.83	7.44	.	.	.	.	.	.	3.77
2001 July	2.3	-	-	5.32	7.44	-	-	-	5.5	4.5	6.1	4.93
Aug.	2.5	-	-	5.12	7.45	-	-	-	2.5	4.4	5.6	4.81
Sep.	2.1	-	-	5.11	7.44	-	-	-	-1.8	4.4	7.6	4.43
Oct.	2.0	-	-	4.86	7.44	-	-	-	0.6	4.4	7.6	3.96
Nov.	1.7	-	-	4.67	7.45	-	-	-	2.4	4.4	9.9	3.70
Dec.	2.1	-	-	4.97	7.44	-	-	-	.	.	.	3.63
Sweden												
1998	1.0	1.9	71.8	4.99	8.92	3.7	0.9	3.6	3.8	8.3	3.5	4.36
1999	0.6	1.8	65.2	4.98	8.81	2.7	-1.0	4.5	1.8	7.2	6.8	3.32
2000	1.3	4.1	55.6	5.37	8.45	3.2	5.5	3.6	7.8	5.9	6.2	4.07
2001	.	.	.	5.11	9.26	-	.	.	.	.	.	4.11
2000 Q3	1.3	-	-	5.30	8.40	2.7	5.1	3.9	9.2	5.7	5.1	4.14
Q4	1.5	-	-	5.09	8.60	4.3	6.6	2.4	8.1	5.4	2.2	4.06
2001 Q1	1.6	-	-	4.83	9.00	3.4	2.4	2.3	5.6	5.2	0.2	4.10
Q2	3.0	-	-	5.20	9.13	2.3	4.4	1.1	-2.5	5.0	1.1	4.15
Q3	3.1	-	-	5.28	9.41	3.2	.	0.4	-2.0	4.9	2.6	4.34
Q4	.	-	-	5.12	9.48	.	.	.	.	.	.	3.85
2001 July	2.9	-	-	5.42	9.26	-	-	-	-3.0	4.9	2.2	4.44
Aug.	3.0	-	-	5.16	9.31	-	-	-	-1.3	4.9	2.5	4.40
Sep.	3.3	-	-	5.26	9.67	-	-	-	-1.9	5.0	3.1	4.14
Oct.	2.9	-	-	5.17	9.58	-	-	-	-5.0	5.1	4.9	3.86
Nov.	2.9	-	-	4.96	9.42	-	-	-	.	5.0	6.2	3.81
Dec.	.	-	-	5.24	9.44	-	-	-	.	.	.	3.88
United Kingdom												
1998	1.6	0.4	48.1	5.60	0.676	-0.5	2.8	3.0	0.9	6.3	9.7	7.42
1999	1.3	1.3	45.7	5.01	0.659	-2.0	3.8	2.1	0.8	6.1	5.4	5.54
2000	0.8	1.9	42.8	5.33	0.609	-1.7	1.9	3.0	1.7	5.5	6.6	6.19
2001	.	.	.	5.01	0.622	.	.	.	.	.	.	5.04
2000 Q3	0.8	1.7	42.0	5.31	0.612	-1.7	1.6	3.0	1.0	5.4	8.2	6.21
Q4	0.9	0.2	42.2	5.09	0.600	-1.6	2.0	2.7	1.3	5.3	8.4	6.07
2001 Q1	0.9	6.5	39.9	4.90	0.633	-0.5	2.6	3.0	1.3	5.1	9.0	5.72
Q2	1.5	-1.8	39.8	5.18	0.614	-1.0	3.5	2.7	-1.7	5.0	7.4	5.30
Q3	1.5	2.1	38.8	5.13	0.619	.	.	2.2	-2.9	5.2	7.6	5.00
Q4	.	.	.	4.82	0.621	.	.	.	.	.	.	4.16
2001 July	1.4	6.9	39.2	5.30	0.609	-	-	-	-2.7	5.1	7.6	5.25
Aug.	1.8	1.0	39.0	5.07	0.627	-	-	-	-2.0	5.2	7.1	5.00
Sep.	1.3	-1.7	38.8	5.02	0.623	-	-	-	-3.9	5.2	8.1	4.73
Oct.	1.2	5.6	38.5	4.86	0.624	-	-	-	-4.4	.	8.2	4.43
Nov.	0.8	-5.3	38.2	4.67	0.618	-	-	-	.	.	.	4.00
Dec.	.	.	.	4.94	0.620	-	-	-	.	.	.	4.05

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

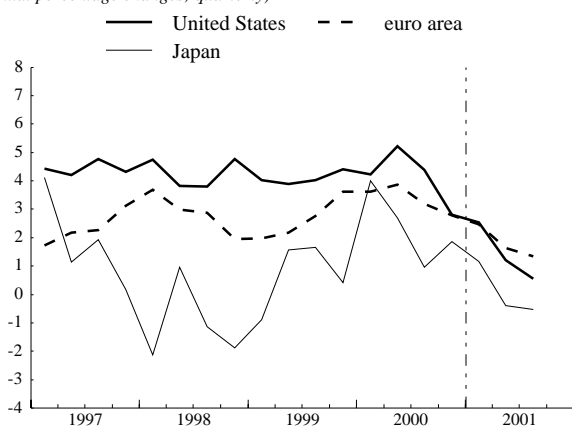
Economic and financial developments

(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	44.9
2001	.	.	.	.	4.8	8.7	3.78	5.01	0.896	.	.
2000 Q3	3.5	0.5	4.4	5.1	4.0	6.0	6.70	5.89	0.905	1.9	45.6
Q4	3.4	4.1	2.8	2.3	4.0	6.1	6.69	5.56	0.868	1.7	45.0
2001 Q1	3.4	6.7	2.5	-1.0	4.2	7.1	5.35	5.04	0.923	1.5	45.1
Q2	3.4	8.0	1.2	-4.2	4.5	8.1	4.19	5.25	0.873	1.1	43.5
Q3	2.7	6.5	0.5	-5.5	4.8	9.4	3.46	4.98	0.890	-0.9	44.2
Q4	.	.	.	.	5.6	10.2	2.15	4.74	0.896	.	.
2001 July	2.7	.	.	-4.9	4.5	8.7	3.75	5.23	0.861	-	-
Aug.	2.7	.	.	-5.3	4.9	8.8	3.56	4.97	0.900	-	-
Sep.	2.6	.	.	-6.3	5.0	10.5	3.03	4.76	0.911	-	-
Oct.	2.1	.	.	-6.6	5.4	9.9	2.40	4.55	0.906	-	-
Nov.	1.9	.	.	-6.3	5.6	10.4	2.10	4.61	0.888	-	-
Dec.	.	.	.	.	5.8	10.3	1.92	5.07	0.892	-	-
Japan											
1998	0.7	6.3	-1.1	-7.1	4.1	4.4	0.66	1.30	146.4	-10.3	.
1999	-0.3	-2.5	0.7	0.8	4.7	3.7	0.22	1.75	121.3	-10.4	.
2000	-0.7	-6.5	2.4	5.9	4.7	2.1	0.28	1.76	99.5	.	.
2001	.	.	.	.	.	2.8	0.15	1.34	108.7	.	.
2000 Q3	-0.6	-6.1	1.0	5.5	4.6	1.9	0.32	1.79	97.4	.	.
Q4	-0.8	-5.3	1.9	4.9	4.8	2.0	0.56	1.73	95.3	.	.
2001 Q1	-0.4	-0.2	1.2	-1.1	4.8	2.4	0.37	1.38	109.1	.	.
Q2	-0.7	3.7	-0.4	-5.7	4.9	2.7	0.08	1.28	106.9	.	.
Q3	-0.8	9.4	-0.5	-11.1	5.1	3.1	0.07	1.36	108.3	.	.
Q4	.	.	.	.	.	3.2	0.08	1.35	110.5	.	.
2001 July	-0.8	6.8	.	-8.8	5.0	3.0	0.08	1.33	107.2	-	-
Aug.	-0.7	10.4	.	-11.7	5.0	3.0	0.08	1.36	109.3	-	-
Sep.	-0.8	11.0	.	-12.8	5.3	3.3	0.06	1.40	108.2	-	-
Oct.	-0.8	9.4	.	-11.8	5.4	3.0	0.08	1.36	109.9	-	-
Nov.	-1.0	.	.	-13.2	5.5	3.2	0.08	1.33	108.7	-	-
Dec.	.	.	.	.	.	3.4	0.08	1.35	113.4	-	-

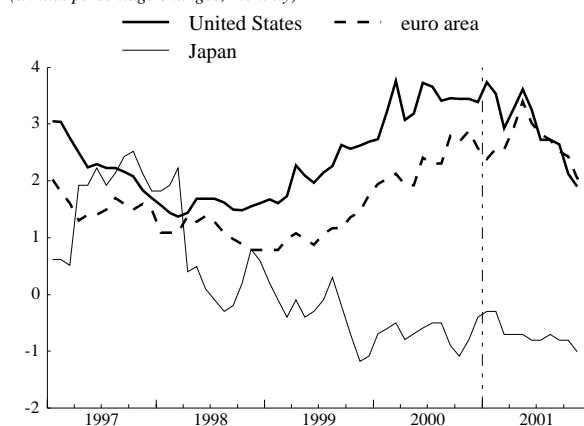
Real gross domestic product

(annual percentage changes; quarterly)



Consumer price indices

(annual percentage changes; monthly)



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

1) Manufacturing.

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

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

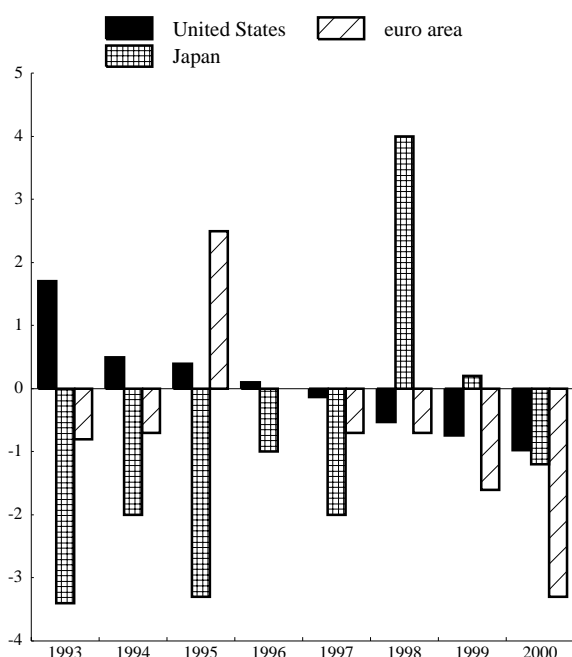
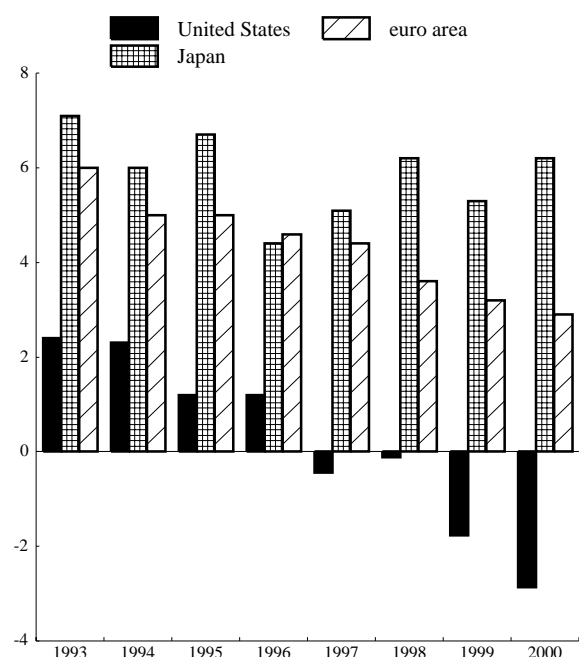
4) For more information, see Table 10.

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

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

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

	National saving and investment			Investment and financing of non-financial corporations						Investment and financing of households ¹⁾			
	Gross saving	Gross capital formation	Net lending to the rest of the world	Gross capital formation	Gross fixed capital formation	Net acquisition of financial assets	Gross saving	Net incurrence of liabilities	Securities and shares	Capital expenditure	Net acquisition of financial assets	Gross saving	Net incurrence of liabilities
	1	2	3	4	5	6	7	8	9	10	11	12	13
United States													
1997	18.1	19.9	-1.5	9.4	8.6	3.3	8.7	3.4	2.1	11.8	4.1	12.1	4.6
1998	18.8	20.7	-2.3	9.7	8.8	6.5	8.1	7.0	1.6	12.3	5.5	12.8	5.6
1999	18.4	20.9	-3.3	9.9	9.3	7.2	8.1	7.9	3.2	12.9	4.7	11.4	6.5
2000	18.1	21.1	-4.4	9.9	9.5	6.3	8.0	7.3	2.8	13.0	2.9	10.4	5.8
1999 Q4	18.1	21.2	-3.7	10.0	9.2	5.5	8.2	6.3	3.5	12.9	4.6	10.7	6.6
2000 Q1	17.8	21.0	-4.1	9.8	9.4	7.7	7.9	8.8	5.6	13.3	4.5	10.4	7.9
Q2	18.3	21.4	-4.2	10.1	9.3	6.6	8.1	7.6	3.1	13.0	3.5	10.6	5.8
Q3	18.2	21.2	-4.5	10.2	9.6	6.9	8.2	8.0	2.4	12.9	2.8	10.3	5.8
Q4	18.0	21.0	-4.5	9.8	9.4	4.0	8.0	4.9	0.4	12.8	0.8	10.4	3.7
2001 Q1	17.3	20.2	-4.1	9.1	9.4	2.2	7.5	3.0	2.0	12.8	4.1	10.3	3.9
Q2	17.2	19.7	-4.0	8.6	8.9	0.1	7.5	0.8	2.8	12.8	4.5	10.5	6.7
Q3	17.1	19.1	-3.4	8.2	8.7	1.3	7.6	1.4	1.3	12.8	8.4	12.4	8.3
Japan													
1997	30.2	28.7	2.2	16.6	16.1	3.2	13.8	1.2	0.1	6.0	6.9	11.3	0.7
1998	29.1	26.9	2.6	15.6	15.6	-6.0	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	-2.0	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
1999 Q4	.	26.9	.	.	.	19.1	.	13.7	4.0	.	12.7	.	1.4
2000 Q1	.	26.3	.	.	.	15.5	.	4.4	-1.2	.	-0.7	.	5.3
Q2	.	24.8	.	.	.	-25.0	.	-17.2	2.5	.	8.8	.	-7.5
Q3	.	27.1	.	.	.	12.7	.	1.8	-0.2	.	0.6	.	1.4
Q4	.	27.1	.	.	.	6.8	.	13.7	2.7	.	7.9	.	-0.5
2001 Q1	.	27.5	.	.	.	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	.	.	.	-3.0	.	-7.8	-0.6	.	-3.4	.	-5.7

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

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

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

As a general rule, the cut-off date for the statistics included in the ECB Monthly Bulletin is the day preceding the first meeting in the month of the Governing Council of the ECB. For this issue it was 16 January 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

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

money market funds located in the euro area and ii) money market paper and debt securities issued with a maturity of 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 2002 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 Eurosystem) comprises the ECB and the national central banks of Member States in the euro area (S.121) and other monetary financial institutions (S.122); non-monetary financial corporations comprises other financial intermediaries (S.123), financial auxiliaries (S.124) and insurance corporations and pension funds (S.125); non-financial corporations (S.11); central government (S.1311); other general government comprises state government (S.1312), local government (S.1313) and social security funds (S.1314).

Prices and real economy indicators

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

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

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

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

the range of available euro area data. 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 the Commission Regulation (EC) No. 586/2001 of 26 March 2001.

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

Employment data (Table 5.4) are based on the ESA 95. Whenever coverage of the euro area is incomplete, some data 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 separately presented. The information on financial investment (assets) is currently less detailed than that on financing, especially since a breakdown by sector is not possible. While both levels and transactions may throw light on economic developments, the latter are more likely to be the focus of attention.

The quarterly data are based on euro area MFI and securities issues statistics, government finance statistics, quarterly national financial accounts, and BIS

international banking statistics. While all euro area countries contribute to the euro area statistics, Ireland and Luxembourg, as yet, do not provide quarterly national financial accounts data.

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

General government fiscal position

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

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

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

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

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

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

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

The outstanding amounts of the Eurosystem's international reserves and related assets are shown in Table 8.7.2 with the corresponding reserves and related assets held by the ECB. The data in Table 8.7.2 are in line with the recommendations for the IMF/BIS template

on international reserves and foreign currency liquidity. Earlier data are revised on an ongoing basis. Reserve assets data before end-1999 are not fully comparable with later observations. A publication on the statistical treatment of the Eurosystem's international reserves is available on the ECB's website.

Table 9 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, the Slovak Republic, 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 the Greek drachma. On adopting the euro in January 2001, Greece ceased to be a partner country in the effective exchange rate of the euro and the weighting scheme has been adjusted accordingly. In addition, the broad group includes the following countries: Algeria, Argentina, Brazil, China, Croatia, Cyprus, the Czech Republic, Estonia, Hungary, India, Indonesia, Israel, Malaysia, Mexico, Morocco, New Zealand, the Philippines, Poland, Romania, Russia, the Slovak Republic, 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.

Documents published by the European Central Bank (ECB)

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

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

Annual Report

"Annual Report 1998", April 1999.

"Annual Report 1999", April 2000.

"Annual Report 2000", May 2001.

Convergence Report

"Convergence Report 2000", May 2000.

Monthly Bulletin

Articles published from January 1999 onwards:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

“TARGET and payments in euro”, November 1999.

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

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

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

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

“Consolidation in the securities settlement industry”, February 2000.

“The nominal and real effective exchange rates of the euro”, April 2000.

“EMU and banking supervision”, April 2000.

“The information content of interest rates and their derivatives for monetary policy”, May 2000.

“Developments in and structural features of the euro area labour markets”, May 2000.

“The switch to variable rate tenders in the main refinancing operations”, July 2000.

“Monetary policy transmission in the euro area”, July 2000.

“Population ageing and fiscal policy in the euro area”, July 2000.

“Price and cost indicators for the euro area: an overview”, August 2000.

“The external trade of the euro area economy: stylised facts and recent trends”, August 2000.

“Potential output growth and output gaps: concept, uses and estimates”, October 2000.

“The ECB’s relations with institutions and bodies of the European Community”, October 2000.

“The two pillars of the ECB’s monetary policy strategy”, November 2000.

“Issues arising from the emergence of electronic money”, November 2000.

“The euro area after the entry of Greece”, January 2001.

“Monetary policy-making under uncertainty”, January 2001.

“The ECB’s relations with international organisations and fora”, January 2001.

“Characteristics of corporate finance in the euro area”, February 2001.

“Towards a uniform service level for retail payments in the euro area”, February 2001.

“The external communication of the European Central Bank”, February 2001.

“Assessment of general economic statistics for the euro area”, April 2001.

“The collateral framework of the Eurosystem”, April 2001.

“The introduction of euro banknotes and coins”, April 2001.

“Framework and tools of monetary analysis”, May 2001.

“The new capital adequacy regime – the ECB perspective”, May 2001.

“Financing and financial investment of the non-financial sectors in the euro area”, May 2001.

“New technologies and productivity in the euro area”, July 2001.

“Measures of underlying inflation in the euro area”, July 2001.

“Fiscal policies and economic growth”, August 2001.

“Product market reforms in the euro area”, August 2001.

“Consolidation in central counterparty clearing in the euro area”, August 2001.

“Issues related to monetary policy rules”, October 2001.

“Bidding behaviour of counterparties in the Eurosystem’s regular open market operations”, October 2001.

“The euro cash changeover in markets outside the euro area”, October 2001.

“The information content of composite indicators of the euro area business cycle”, November 2001.

“The economic policy framework in EMU”, November 2001.

“Economic fundamentals and the exchange rate of the euro”, January 2002.

“Euro banknote preparations: from cash changeover to post-launch activities”, January 2002.

Occasional Paper Series

1 “The impact of the euro on money and bond markets” by Javier Santillán, Marc Bayle and Christian Thygesen, July 2000.

Working Paper Series

- 1 “A global hazard index for the world foreign exchange markets” by V. Brousseau and F. Scacciavillani, May 1999.
- 2 “What does the single monetary policy do? A SVAR benchmark for the European Central Bank” by C. Monticelli and O. Tristani, May 1999.
- 3 “Fiscal policy effectiveness and neutrality results in a non-Ricardian world” by C. Detken, May 1999.
- 4 “From the ERM to the euro: new evidence on economic and policy convergence among EU countries” by I. Angeloni and L. Dedola, May 1999.
- 5 “Core inflation: a review of some conceptual issues” by M. Wynne, May 1999.
- 6 “The demand for M3 in the euro area” by G. Coenen and J.-L. Vega, September 1999.
- 7 “A cross-country comparison of market structures in European banking” by O. De Bandt and E. P. Davis, September 1999.
- 8 “Inflation zone targeting” by A. Orphanides and V. Wieland, October 1999.

- 9 “Asymptotic confidence bands for the estimated autocovariance and autocorrelation functions of vector autoregressive models”, by G. Coenen, January 2000.
- 10 “On the effectiveness of sterilized foreign exchange intervention”, by R. Fatum, February 2000.
- 11 “Is the yield curve a useful information variable for the Eurosystem?” by J. M. Berk and P. van Bergeijk, February 2000.
- 12 “Indicator variables for optimal policy” by L. E. O. Svensson and M. Woodford, February 2000.
- 13 “Monetary policy with uncertain parameters” by U. Söderström, February 2000.
- 14 “Assessing nominal income rules for monetary policy with model and data uncertainty” by G. D. Rudebusch, February 2000.
- 15 “The quest for prosperity without inflation” by A. Orphanides, March 2000.
- 16 “Estimating the implied distribution of the future short-term interest rate using the Longstaff-Schwartz model” by P. Hördahl, March 2000.
- 17 “Alternative measures of the NAIRU in the euro area: estimates and assessment” by S. Fabiani and R. Mestre, March 2000.
- 18 “House prices and the macroeconomy in Europe: results from a structural VAR analysis” by M. Iacoviello, April 2000.
- 19 “The euro and international capital markets” by C. Detken and P. Hartmann, April 2000.
- 20 “Convergence of fiscal policies in the euro area” by O. De Bandt and F. P. Mongelli, May 2000.
- 21 “Firm size and monetary policy transmission: evidence from German business survey data” by M. Ehrmann, May 2000.
- 22 “Regulating access to international large-value payment systems” by C. Holthausen and T. Rønde, June 2000.
- 23 “Escaping Nash inflation” by In-Koo Cho and T. J. Sargent, June 2000.
- 24 “What horizon for price stability” by F. Smets, July 2000.
- 25 “Caution and conservatism in the making of monetary policy” by P. Schellekens, July 2000.
- 26 “Which kind of transparency? On the need for clarity in monetary policy-making” by B. Winkler, August 2000.
- 27 “This is what the US leading indicators lead” by M. Camacho and G. Perez-Quiros, August 2000.
- 28 “Learning, uncertainty and central bank activism in an economy with strategic interactions” by M. Ellison and N. Valla, August 2000.

- 29 “The sources of unemployment fluctuations: an empirical application to the Italian case” by S. Fabiani, A. Locarno, G. Oneto and P. Sestito, September 2000.
- 30 “A small estimated euro area model with rational expectations and nominal rigidities” by G. Coenen and V. Wieland, September 2000.
- 31 “The disappearing tax base: Is foreign direct investment eroding corporate income taxes?” by R. Gropp and K. Kostial, September 2000.
- 32 “Can indeterminacy explain the short-run non-neutrality of money?” by F. De Fiore, September 2000.
- 33 “The information content of M3 for future inflation in the euro area” by C. Trecroci and J. L. Vega, October 2000.
- 34 “Capital market development, corporate governance and the credibility of exchange rate pegs” by O. Castrén and T. Takalo, October 2000.
- 35 “Systemic Risk: A survey” by O. De Bandt and P. Hartmann, November 2000.
- 36 “Measuring core inflation in the euro area” by C. Morana, November 2000.
- 37 “Business fixed investment: evidence of a financial accelerator in Europe” by P. Vermeulen, November 2000.
- 38 “The optimal inflation tax when taxes are costly to collect” by F. De Fiore, November 2000.
- 39 “A money demand system for euro area M3” by C. Brand and N. Cassola, November 2000.
- 40 “Financial structure and the interest rate channel of ECB monetary policy” by B. Mojon, November 2000.
- 41 “Why adopt transparency? The publication of central bank forecasts” by P. M. Geraats, January 2001.
- 42 “An area-wide model (AWM) for the euro area” by G. Fagan, J. Henry and R. Mestre, January 2001.
- 43 “Sources of economic renewal: from the traditional firm to the knowledge firm”, by D. Rodriguez Palenzuela, February 2001.
- 44 “The supply and demand for Eurosystem deposits – The first 18 months”, by U. Bindseil and F. Seitz, February 2001.
- 45 “Testing the rank of the Hankel Matrix: A statistical approach”, by G. Camba-Méndez and G. Kapetanios, March 2001.
- 46 “A two-factor model of the German term structure of interest rates” by N. Cassola and J. B. Luís, March 2001.

- 47 “Deposit insurance and moral hazard: does the counterfactual matter?” by R. Gropp and J. Vesala, March 2001.
- 48 “Financial market integration in Europe: on the effects of EMU on stock markets” by M. Fratzscher, March 2001.
- 49 “Business cycle and monetary policy analysis in a structural sticky-price model of the euro area” by M. Casares, March 2001.
- 50 “Employment and productivity growth in service and manufacturing sectors in France, Germany and the US” by T. von Wachter, March 2001.
- 51 “The functional form of the demand for euro area M1” by L. Stracca, March 2001.
- 52 “Are the effects of monetary policy in the euro area greater in recessions than in booms?” by G. Peersman and F. Smets, March 2001.
- 53 “An evaluation of some measures of core inflation for the euro area” by J.-L. Vega and M. A. Wynne, April 2001.
- 54 “Assessment criteria for output gap estimates” by G. Camba-Méndez and D. Rodríguez Palenzuela, April 2001.
- 55 “Modelling the demand for loans to the private sector in the euro area” by A. Calza, G. Gartner and J. Sousa, April 2001.
- 56 “Stabilization policy in a two country model and the role of financial frictions” by E. Faia, April 2001.
- 57 “Model-based indicators of labour market rigidity” by S. Fabiani and D. Rodríguez Palenzuela, April 2001.
- 58 “Business cycle asymmetries in stock returns: evidence from higher order moments and conditional densities” by G. Pérez-Quirós and A. Timmermann, April 2001.
- 59 “Uncertain potential output: implications for monetary policy” by M. Ehrmann and F. Smets, April 2001.
- 60 “A multi-country trend indicator for euro area inflation: computation and properties” by E. Angelini, J. Henry and R. Mestre, April 2001.
- 61 “Diffusion index-based inflation forecasts for the euro area” by E. Angelini, J. Henry and R. Mestre, April 2001.
- 62 “Spectral based methods to identify common trends and common cycles” by G. C. Mendez and G. Kapetanios, April 2001.
- 63 “Does money lead inflation in the euro area?” by S. Nicoletti Altimari, May 2001.
- 64 “Exchange rate volatility and euro area imports” by R. Anderton and F. Skudelny, May 2001.

- 65 “A system approach for measuring the euro area NAIRU” by S. Fabiani and R. Mestre, May 2001.
- 66 “Can short-term foreign exchange volatility be predicted by the Global Hazard Index?” by V. Brousseau and F. Scacciavillani, June 2001.
- 67 “The daily market for funds in Europe: Has something changed with the EMU?” by G. Pérez-Quirós and H. Rodríguez Mendizábal, June 2001.
- 68 “The performance of forecast-based monetary policy rules under model uncertainty” by A. Levin, V. Wieland and J. C. Williams, July 2001.
- 69 “The ECB monetary policy strategy and the money market” by V. Gaspar, G. Pérez-Quirós and J. Sicilia, July 2001.
- 70 “Central bank forecasts of liquidity factors: Quality, publication and the control of the overnight rate” by U. Bindseil, July 2001.
- 71 “Asset market linkages in crisis periods” by P. Hartmann, S. Straetmans and C. G. de Vries, July 2001.
- 72 “Bank concentration and retail interest rates” by S. Corvoisier and R. Gropp, July 2001.
- 73 “Interbank lending and monetary policy transmission – evidence for Germany” by M. Ehrmann and A. Worms, July 2001.
- 74 “Interbank market integration under asymmetric information” by X. Freixas and C. Holthausen, August 2001.
- 75 “Value at risk models in finance” by S. Manganelli and R. F. Engle, August 2001.
- 76 “Rating agency actions and the pricing of debt and equity of European banks: What can we infer about private sector monitoring of bank soundness?” by R. Gropp and A. J. Richards, August 2001.
- 77 “Cyclically adjusted budget balances: an alternative approach” by C. Bouthevillain, P. Cour-Thimann, G. van den Dool, P. Hernández de Cos, G. Langenus, M. Mohr, S. Momigliano and M. Tujula, September 2001.
- 78 “Investment and monetary policy in the euro area” by B. Mojon, F. Smets and P. Vermeulen, September 2001.
- 79 “Does liquidity matter? Properties of a synthetic divisia monetary aggregate in the euro area” by L. Stracca, October 2001.
- 80 “The microstructure of the euro money market” by P. Hartmann, M. Manna and A. Manzanares, October 2001.
- 81 “What can changes in structural factors tell us about unemployment in Europe?” by J. Morgan and A. Mourougane, October 2001.

- 82 “Economic forecasting: some lessons from recent research” by D. Hendry and M. P. Clements, October 2001.
- 83 “Chi-squared tests of interval and density forecasts, and the Bank of England’s fan charts” by K. F. Wallis, November 2001.
- 84 “Data uncertainty and the role of money as an information variable for monetary policy” by G. Coenen, A. Levin and V. Wieland, November 2001.
- 85 “Determinants of the euro real effective exchange rate: a BEER/PEER approach” by F. Maeso-Fernandez, C. Osbat and B. Schnatz, November 2001.
- 86 “Rational expectations and near rational alternatives: how best to form expectations” by M. Beeby, S. G. Hall and S. B. Henry, November 2001.
- 87 “Credit rationing, output gap and business cycles” by F. Boissay, November 2001.
- 88 “Why is it so difficult to beat the random walk forecast of exchange rates?” by L. Kilian and M. P. Taylor, November 2001.
- 89 “Monetary policy and fears of financial instability” by V. Brousseau and C. Detken, November 2001.
- 90 “Public pensions and growth” by S. Lambrecht, P. Michel and J.-P. Vidal, November 2001.
- 91 “The monetary transmission mechanism in the euro area: more evidence from VAR analysis” by G. Peersman and F. Smets, December 2001.
- 92 “A VAR description of the effects of the monetary policy in the individual countries of the euro area” by B. Mojon and G. Peersman, December 2001.
- 93 “The monetary transmission mechanism at the euro-area level: issues and results using structural macroeconomic models” by P. McAdam and J. Morgan, December 2001.
- 94 “Monetary policy transmission in the euro area: what do aggregate and national structural models tell us?” by P. van Els, A. Locarno, J. Morgan and J.-P. Villetelle, December 2001.
- 95 “Some stylised facts on the euro area business cycle” by A.-M. Agresti and B. Mojon, December 2001.
- 96 “The reaction of bank lending to monetary policy measures in Germany” by A. Worms, December 2001.
- 97 “Asymmetries in bank lending behaviour. Austria during the 1990s” by S. Kaufmann, December 2001.
- 98 “The credit channel in the Netherlands: evidence from bank balance sheets” by L. De Haan, December 2001.
- 99 “Is there a bank lending channel of monetary policy in Spain?” by I. Hernando and J. Martínez-Pagés, December 2001.

- I00 “Transmission of monetary policy shocks in Finland: evidence from bank level data on loans” by J. Topi and J. Vilmunen, December 2001.
- I01 “Monetary policy and bank lending in France: are there asymmetries?” by C. Loupias, F. Savignac and P. Sevestre, December 2001.
- I02 “The bank lending channel of monetary policy: identification and estimation using Portuguese micro bank data” by L. Farinha and C. Robalo Marques, December 2001.
- I03 “Bank-specific characteristics and monetary policy transmission: the case of Italy” by L. Gambacorta, December 2001.
- I04 “Is there a bank lending channel of monetary policy in Greece? Evidence from bank level data” by S. N. Brissimis, N. C. Kamberoglou and G. T. Simigiannis, December 2001.
- I05 “Financial systems and the role of banks in monetary policy transmission in the euro area” by M. Ehrmann, L. Gambacorta, J. Martínez-Pagés, P. Sevestre and A. Worms, December 2001.
- I06 “Investment, the cost of capital, and monetary policy in the nineties in France: a panel data investigation” by J.-B. Chatelain and A. Tiomo, December 2001.
- I07 “The interest rate and credit channel in Belgium: an investigation with micro-level firm data” by P. Butzen, C. Fuss and P. Vermeulen, December 2001.
- I08 “Credit channel and investment behaviour in Austria: a micro-econometric approach” by M. Valderrama, December 2001.
- I09 “Monetary transmission in Germany: new perspectives on financial constraints and investment spending” by U. von Kalckreuth, December 2001.
- I10 “Does monetary policy have asymmetric effects? A look at the investment decisions of Italian firms” by E. Gaiotti and A. Generale, December 2001.
- I11 “Monetary transmission: empirical evidence from Luxembourg firm level data” by P. Lünemann and T. Mathä, December 2001.
- I12 “Firm investment and monetary transmission in the euro area” by J.-B. Chatelain, A. Generale, I. Hernando, U. von Kalckreuth and P. Vermeulen, December 2001.
- I14 “Monetary transmission in the euro area: where do we stand?” by I. Angeloni, A. Kashyap, B. Mojon and D. Terlizzese, January 2002.
- I15 “Monetary policy rules, macroeconomic stability and inflation: a view from the trenches” by A. Orphanides, December 2001.
- I16 “Rent indices for housing in west Germany 1985 to 1998” by J. Hoffmann and C. Kurz, January 2002.
- I17 “Hedonic house prices without characteristics: the case of new multiunit housing” by O. Bover and P. Velilla, January 2002.

Other publications

- “The TARGET service level”, July 1998.
- “Report on electronic money”, August 1998.
- “Assessment of EU securities settlement systems against the standards for their use in ESCB credit operations”, September 1998.
- “Money and banking statistics compilation guide”, September 1998.
- “The single monetary policy in Stage Three: General documentation on ESCB monetary policy instruments and procedures”, September 1998.
- “Third progress report on the TARGET project”, November 1998.
- “Correspondent central banking model (CCBM)”, December 1998.
- “Payment systems in the European Union: Addendum incorporating 1997 figures”, January 1999.
- “Possible effects of EMU on the EU banking systems in the medium to long term”, February 1999.
- “Euro area monetary aggregates: conceptual reconciliation exercise”, July 1999.
- “The effects of technology on the EU banking systems”, July 1999.
- “Payment systems in countries that have applied for membership of the European Union”, August 1999.
- “Improving cross-border retail payment services: the Eurosystem’s view”, September 1999.
- “Compendium: collection of legal instruments, June 1998 – May 1999”, October 1999.
- “European Union balance of payments/international investment position statistical methods”, November 1999.
- “Money and banking statistics compilation guide, addendum I: money market paper”, November 1999.
- “Money and banking statistics sector manual”, second edition, November 1999.
- “Report on the legal protection of banknotes in the European Union Member States”, November 1999.
- “Correspondent central banking model (CCBM)”, November 1999.
- “Cross-border payments in TARGET: A users’ survey”, November 1999.
- “Money and banking statistics: Series keys for the exchange of balance sheet items time series”, November 1999.
- “Money and banking statistics: Handbook for the compilation of flow statistics”, December 1999.
- “Payment systems in the European Union: Addendum incorporating 1998 figures”, February 2000.
- “Interlinking: Data dictionary”, Version 2.02, March 2000.
- “Asset prices and banking stability”, April 2000.

“EU banks’ income structure”, April 2000.

“Statistical information collected and compiled by the ESCB”, May 2000.

“Correspondent central banking model (CCBM)”, July 2000.

“Statistical requirements of the European Central Bank in the field of general economic statistics”, August 2000.

“Seasonal adjustment of monetary aggregates and HICP for the euro area”, August 2000.

“Improving cross-border retail payment services”, September 2000.

“Statistical treatment of the Eurosystem’s international reserves”, October 2000.

“European Union balance of payments/international investment position statistical methods”, November 2000.

“Information guide for credit institutions using TARGET”, November 2000.

“The single monetary policy in Stage Three: General documentation on Eurosystem monetary policy instruments and procedures”, November 2000.

“EU banks’ margins and credit standards”, December 2000.

“Mergers and acquisitions involving the EU banking industry: facts and implications”, December 2000.

“Annual report on the activities of the Anti-Fraud Committee of the European Central Bank”, January 2001.

“Cross-border use of collateral: A user’s survey”, February 2001.

“Price effects of regulatory reform in selected network industries”, March 2001.

“The role of central banks in prudential supervision”, March 2001.

“Money and banking statistics in the accession countries: Methodological manual”, April 2001.

“TARGET: Annual Report”, May 2001.

“A guide to Eurosystem staff macroeconomic projection exercises”, June 2001.

“Payment and securities settlement systems in the European Union”, June 2001.

“Why price stability?”, June 2001.

“The euro bond market”, July 2001.

“The euro money market”, July 2001.

“The euro equity markets”, August 2001.

“The monetary policy of the ECB”, August 2001.

“Monetary analysis: tools and applications”, August 2001.

“Review of the international role of the euro”, September 2001.

“The Eurosystem’s policy line with regard to consolidation in central counterparty clearing”, September 2001.

“Provisional list of MFIs of the accession countries (as at the end of December 2000)”, October 2001.

“TARGET: the Trans-European Automated Real-time Gross settlement Express Transfer system – update 2001”, November 2001.

“European Union balance of payments/international investment position statistical methods”, November 2001.

“Fair value accounting in the banking sector”, November 2001.

“Towards an integrated infrastructure for credit transfers in euro”, November 2001.

Information brochures

“TARGET: facts, figures, future”, September 1999.

“The ECB payment mechanism”, August 2000.

“The euro: integrating financial services”, August 2000.

“TARGET”, August 2000.

“The European Central Bank”, April 2001.

“The euro banknotes and coins”, May 2001.

“TARGET – update 2001”, July 2001.

“The euro and the integration of financial services”, September 2001.

