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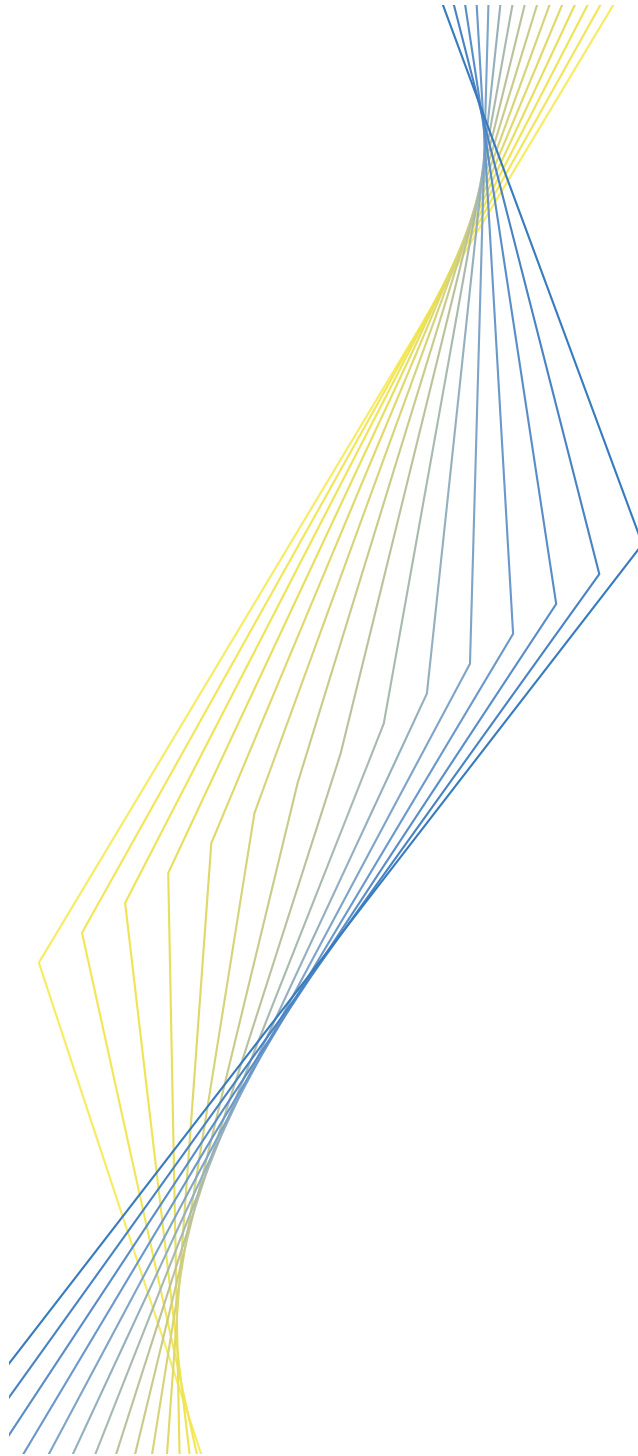
MONTHLY BULLETIN June 2003

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

June 2003



EUROPEAN CENTRAL BANK



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The cut-off date for the statistics included in this issue was 4 June 2003.

ISSN 1561-0136 (print)

ISSN 1725-2822 (online)

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Abbreviations

Countries

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

Others

BIS	Bank for International Settlements
BPM5	IMF Balance of Payments Manual (5th edition)
CDs	certificates of deposit
c.i.f.	cost, insurance and freight at the importer's border
CPI	Consumer Price Index
ECB	European Central Bank
ECU	European Currency Unit
EER	effective exchange rate
EMI	European Monetary Institute
EMU	Economic and Monetary Union
ESA 95	European System of Accounts 1995
ESCB	European System of Central Banks
EU	European Union
EUR	euro
f.o.b.	free on board at the exporter's border
GDP	gross domestic product
HICP	Harmonised Index of Consumer Prices
ILO	International Labour Organization
IMF	International Monetary Fund
MFIs	monetary financial institutions
NACE Rev. 1	Statistical classification of economic activities in the European Community
NCBs	national central banks
PPI	Producer Price Index
repos	repurchase agreements
SITC Rev. 3	Standard International Trade Classification (revision 3)
ULCM	Unit Labour Costs in Manufacturing

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

Editorial

At its meeting on 5 June 2003, the Governing Council of the ECB decided to reduce the minimum bid rate on the main refinancing operations of the Eurosystem by 50 basis points to 2.0%. The interest rates on the marginal lending facility and the deposit facility were also reduced by 50 basis points, to 3.0% and 1.0% respectively.

This decision reflects the Governing Council's assessment that the outlook for price stability over the medium term has improved significantly since interest rates were last lowered in March this year. The decision is in line with the ECB's monetary policy strategy, including the aim of maintaining inflation rates below, but close to, 2% over the medium term. At the same time, the interest rate reduction takes into account downside risks to economic growth. The Governing Council made it clear that it will continue to monitor carefully all factors relevant to its assessment.

As regards the economic analysis underlying this assessment, the latest data releases on real GDP growth have confirmed that economic activity in the euro area remained subdued in the first quarter of this year. This outcome also reflects the negative impact of the Iraq crisis on both the global economy and the euro area. However, survey evidence for April and May does not suggest immediate improvement after the resolution of this conflict. Accordingly, economic growth in the first half of 2003 is likely to be very weak, and expectations for annual average growth for this year and next have had to be scaled down.

The Eurosystem staff macroeconomic projections, which are presented in this issue of the Monthly Bulletin, see euro area real GDP growth at between 0.4% and 1.0% in 2003, increasing to between 1.1% and 2.1% in 2004. These projections are conditional on a set of technical assumptions which were derived from information available up to 22 May 2003. Owing to different assumptions, the Eurosystem staff projections are typically not strictly comparable with the forecasts of other institutions. At the current juncture,

all available forecasts as well as recent financial market developments seem to reflect a similar assessment of the outlook for euro area economic activity. This outlook implies a gradual strengthening of real GDP growth in the course of 2003 and 2004, supported by both external and domestic factors.

On the external side, the expected upturn in extra-euro area demand should compensate for the dampening effect of the appreciation of the euro exchange rate. Evidently, the significant and rapid appreciation of the euro over recent months will dampen external price competitiveness. However, the current level of the euro's real effective exchange rate, and thereby the international price and cost competitiveness of euro area exporters, is very close to longer-term averages. More generally, when put into perspective, current euro exchange rate levels are in line with economic fundamentals and with the ECB's interest in a strong and stable euro.

On the domestic side, private consumption growth should recover from the second half of 2003 onwards. This would reflect growth in real disposable income supported by positive terms of trade effects and lower rates of inflation. Moreover, there are no significant imbalances in the household sector as a whole that would hinder such a recovery. At the same time, the contribution of investment to growth is likely to remain modest, although an improvement in the global economic environment and the historically low level of interest rates should contribute to an upswing.

There continue to be downside risks to economic growth. Notably, risks stem from the past accumulation of macroeconomic imbalances outside the euro area, while there is still uncertainty surrounding the economic impact of the SARS virus. A degree of uncertainty also remains as to the extent of the adjustment still needed in the euro area corporate sector to enhance productivity and profitability, and its potential impact on employment growth and thus private consumption.

Given this environment, the outlook for price developments has become more favourable. Following Eurostat's flash estimate of HICP inflation for May of 1.9%, annual inflation rates are expected to hover broadly around this level for the remainder of 2003 and to fall significantly in 2004. The Eurosystem staff macroeconomic projections see average annual HICP inflation declining from 2.3% in 2002 to between 1.8% and 2.2% in 2003, and then to between 0.7% and 1.9% in 2004. This projection is based on the assumption of favourable import price trends, reflecting both oil price developments and the higher euro exchange rate, as well as on the expectation of lower domestic price pressure in the context of a moderate economic recovery. In particular, broadly stable wage growth coupled with productivity gains should result in a moderation of the rate of growth in unit labour costs.

Turning to the monetary analysis, growth in the broad monetary aggregate M3 remained strong. Consequently, the euro area economy has continued to accumulate liquidity significantly above the amount needed to sustain non-inflationary growth.

There are, however, several considerations that counterbalance concerns that this ample liquidity will lead to inflationary pressures over the medium term. In particular, monetary developments continue to be fostered by portfolio shifts, reflecting a sustained preference on the part of investors for liquid and secure assets. This is confirmed by evidence from both the components and counterparts of M3. Indeed, loans to the private sector increased at a much more moderate pace than M3. Moreover, higher monetary growth was accompanied by a significantly lower net acquisition of foreign equity by non-MFI euro area residents, also implying portfolio reallocations away from riskier assets. It should be assumed that the portfolio shifts that have affected M3 growth over the past two years will unwind over time. In addition, the prospect that the recovery in economic activity will remain moderate reduces the likelihood of excess

liquidity giving rise to increased spending. Nevertheless, the low level of interest rates also contributed to strong monetary growth. Therefore monetary developments need to be closely monitored with respect to their implications for price stability over the medium to long term.

Summing up, the economic analysis indicates that inflation rates should decline to below 2% over the medium term, following recent movements in the exchange rate of the euro and given the sluggish growth performance of the euro area. The monetary analysis indicates that the strong expansion of M3 should not, for the time being, adversely affect this outlook. Hence cross-checking the information from the two pillars led the Governing Council to conclude that the outlook for price stability over the medium term has become more favourable.

With regard to the debate about the hypothetical risk of deflation, the Governing Council noted that, in the euro area as a whole, overall HICP inflation has been hovering around 2% for quite some time and that there are currently no forecasts indicating any deflationary risks. The ECB's monetary policy aims at inflation rates of below, but close to, 2% over the medium term. In this respect, inflation expectations should remain well anchored at this level, irrespective of shorter-term developments in prices. At the regional level, a period of relatively low price increases or even price level declines will improve a region's competitiveness within the currency area. Within a monetary union, deflation is not a meaningful concept when applied to individual regions.

At this juncture, it may be particularly warranted to stress that monetary policy cannot by itself solve the problems underlying the growth and employment performance in the euro area. This calls for appropriate structural measures that address fundamental weaknesses and tackle urgent adjustment requirements. In this respect, fiscal policies have a great potential for fostering confidence

and thereby supporting activity, even in the short run. The establishment of a well designed, medium-term reform strategy, including appropriate consolidation efforts in countries currently struggling with fiscal imbalances, would make a major contribution in this direction. This would imply comprehensive and growth-friendly measures including, in particular, a courageous reform of the structure and level of public expenditure. Curbing spending growth would eventually also create further room for manoeuvre to address future pressure arising from population ageing and scope for future tax cuts. Procedurally, it is crucial to underpin the fiscal policy framework with a decisive and consistent implementation of the rules of the Treaty and of the Stability and Growth Pact, and rigorous monitoring and peer pressure amongst Member States.

Similarly, bold structural reforms in the labour and product markets would not only increase the euro area's growth potential and enhance its ability to better withstand economic shocks, but it would also eliminate a great deal of the uncertainty currently overshadowing long-term planning and perspectives. This, in turn, would also have positive effects over the shorter term. In particular, renewed momentum in the process of structural reform would foster consumer and investor confidence, thereby greatly facilitating spending and investment decisions in the euro area.

This issue of the Monthly Bulletin contains an article that reviews in detail the outcome of the Governing Council's evaluation of the ECB's monetary policy strategy, which was announced on 8 May 2003.

Economic and monetary developments in the euro area

I Monetary and financial developments

Monetary policy decisions of the Governing Council of the ECB

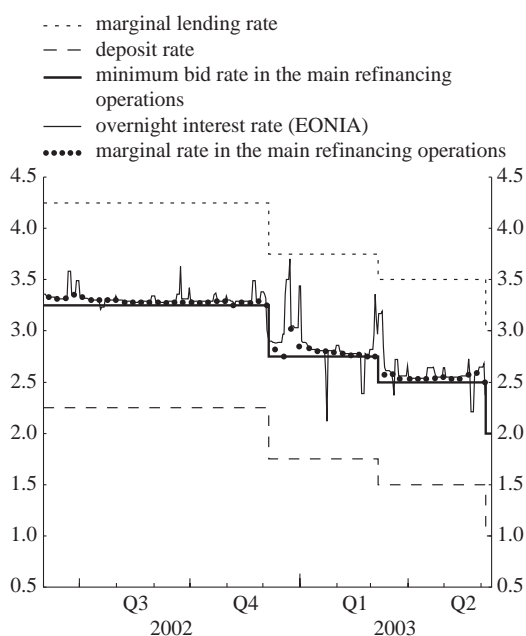
At its meeting on 5 June 2003, the Governing Council of the ECB decided to reduce the minimum bid rate in the main refinancing operations, conducted as variable rate tenders, by 50 basis points, to 2.0%, starting from the operation to be settled on 9 June 2003. The interest rates on both the marginal lending facility and the deposit facility were also reduced by 50 basis points, to 3.0% and 1.0% respectively, in both cases with effect from 6 June 2003 (see Chart 1).

M3 growth rose further in April

Recent data suggest a continuation of the trend of high monetary growth in the euro area which has been observed over the past two years. In April 2003, the annual rate of growth of M3 rose to 8.7%, from 7.9% in the previous month. The three-month average of

Chart 1 ECB interest rates and money market rates

(percentages per annum; daily data)

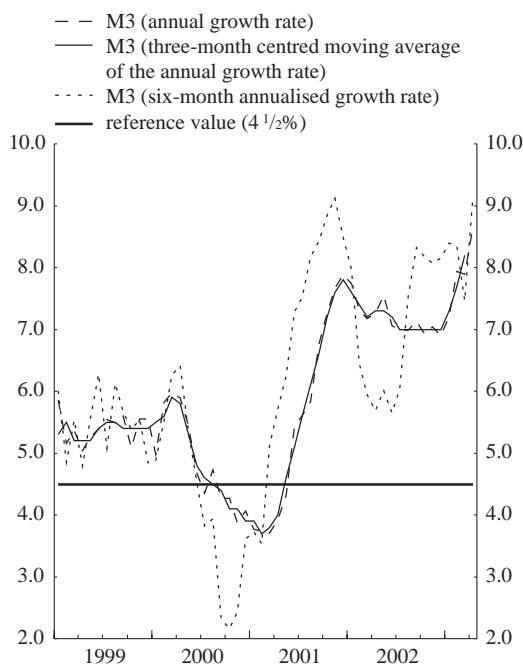


Sources: ECB and Reuters.

Chart 2

M3 growth and the reference value

(adjusted for seasonal and calendar effects)



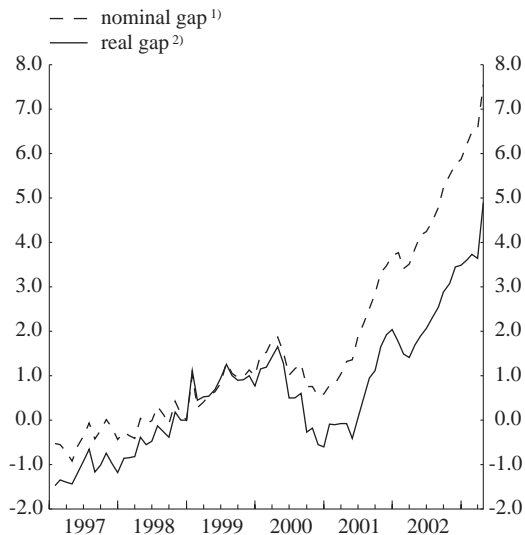
Source: ECB.

the annual growth rates of M3 was 8.2% in the period from February to April 2003, compared with 7.7% in the period from January to March 2003 (see Chart 2).

The persistent strong dynamics of M3 up to March should be related to an increased preference on the part of investors for short-term liquid assets in the context of high economic, financial market and geopolitical uncertainties. However, despite the significant decrease in both equity market and geopolitical uncertainty in April, the data for April demonstrate that a process of correction has not yet started. In fact, it may be too early for the dampening effect of the decline in financial and geopolitical uncertainties in April to be reflected in monetary data, as it may take more time for economic agents to rebalance their portfolios (particularly in the case of fixed-term assets). In addition, the low level reached by long-term bond yields in April may also have fostered shifts away from these instruments

Chart 3
Estimates of the nominal and real money gaps

(as a percentage of the stock of M3)



Source: ECB.

- 1) Deviation of the actual stock of M3 from the level consistent with monetary growth at the reference value, taking December 1998 as the base period.
- 2) Nominal money gap minus the deviation of consumer prices from a level compatible with the definition of price stability, taking December 1998 as the base period.

and into short-term liquid assets. Finally, the low level of short-term interest rates should have continued to support the growth of the most liquid components of M3, notably M1.

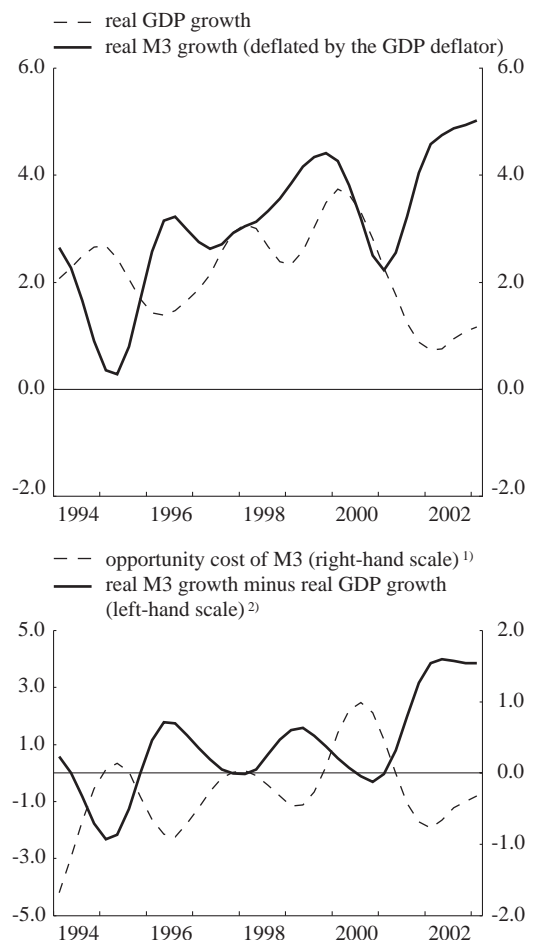
The protracted period of strong monetary growth has resulted in the accumulation of more liquidity in the euro area than needed to finance sustainable non-inflationary growth. The nominal money gap measure shown in Chart 3 refers to the difference between the actual level of M3 and the level of M3 which would have resulted from growth at the reference value (4½% p.a.) since December 1998. The real money gap measure shows the difference between the actual level of M3 deflated by the HICP and the level of M3 in real terms which would have resulted from nominal M3 growth at the reference value and HICP inflation in line with the definition of price stability – again using December 1998 as the base period. The strong increase in M3 growth in recent months has led to a significant accumulation of excess liquidity, with both the nominal and real money gaps

reaching their highest levels since the start of Stage Three of Economic and Monetary Union.

The annual growth rate of M3 in the first quarter of 2003 continued to be above a level which would have been in line with its fundamental determinants, as shown by the significant gap between real M3 growth and real GDP growth (see Chart 4). The lower panel of Chart 4 indicates that the low

Chart 4
Real M3, real GDP and opportunity costs

(four-quarter moving averages of annual percentage changes; seasonally adjusted)



Source: ECB.

Note: The annual growth rates of GDP and the GDP deflator in the first quarter of 2003 are assumed to be equal to those in the fourth quarter of 2002.

- 1) The opportunity cost of M3 is defined as the difference between the three-month money market rate and the own rate of return on M3.
- 2) Calculated as the difference between M3 growth deflated by the GDP deflator and real GDP growth.

opportunity cost of M3 in recent months can only explain part of the strength of M3 growth. The substantial discrepancy between the high growth of M3 and the contribution of its fundamental determinants in the first quarter of 2003 confirms the significant influence of portfolio shifts in connection with the high degree of financial, economic and geopolitical uncertainty. The upward effect on annual M3 growth of the portfolio shifts from equity to M3 has been estimated at between 2½ and 3 percentage points in the first quarter of 2003 (see the box entitled “Estimating the size of portfolio shifts from equity to money” on page 11 of the May 2003 issue of the ECB’s Monthly Bulletin”).

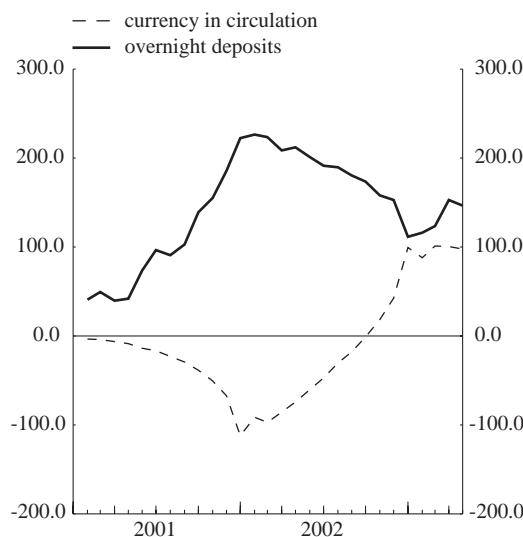
Particularly strong growth in M1 and marketable instruments

The strong dynamics of M3 in the last few months have mainly been driven by developments in M1 and marketable instruments (see Table 1). The annual growth rate of M1 continued to rise, reaching 11.1% in April, which compares with 10.1% in the first quarter of the year and 8.8% in the last quarter of 2002. The increasing pace of growth of M1 seems to reflect the low opportunity costs of holding currency and overnight deposits. In addition, the uncertainties referred to above probably led to an increase in the demand for very liquid assets.

Within M1, the annual growth rate of currency in circulation remained at high levels (37.5% in April). It is likely that the strong growth of currency in circulation reflects a continuing process of rebuilding of currency holdings and also stronger demand for euro banknotes on the part of non-euro area residents.

Having declined over 2002 in connection with the rebuilding of currency holdings, the annual growth of overnight deposits has recovered over recent months (see Chart 5). In April, the annual growth rate of overnight deposits was 7.6%, compared with 5.8% at the end of

Chart 5
Currency in circulation and overnight deposits
 (annual flows, EUR billions)



Source: ECB.

2002. The strong demand for overnight deposits in early 2003 probably reflected the low level of interest rates and the climate of high uncertainty, which offset the dampening effect of the rebuilding of currency in circulation.

The downward trend in the growth of other short-term deposits observed since the end of 2001 appears to have come to an end. The annual rate of growth of these short-term deposits rose to 5.1% in April, up from 4.3% in the first quarter of 2003 and 4.9% in the last quarter of 2002. Within these deposits, deposits with an agreed maturity of up to two years continued to record a subdued annual growth rate, while the annual growth rate of deposits redeemable at a period of notice of up to three months remained strong. These different dynamics probably reflect a narrowing of the spread between the retail interest rates on these types of deposit in recent months, which made time deposits less attractive than savings products.

The pronounced preference on the part of euro area non-MFI investors for safe and liquid instruments included in M3 is also reflected in the renewed strengthening of the

Table 1**Components of M3***(annual percentage changes; quarterly averages)*

	2002 Q1	2002 Q2	2002 Q3	2002 Q4	2003 Q1	2003 Apr.
<i>Adjusted for seasonal and calendar effects</i>						
M1	6.2	6.6	7.6	8.8	10.1	11.1
<i>of which: currency in circulation</i>	-28.0	-20.0	-7.6	12.9	39.1	37.5
<i>of which: overnight deposits</i>	13.0	11.7	10.3	8.1	6.4	7.6
M2 - M1 (= other short-term deposits)	6.8	6.4	5.5	4.9	4.3	5.1
M2	6.5	6.5	6.5	6.7	7.0	7.9
M3 - M2 (= marketable instruments)	14.1	12.4	10.3	8.6	10.5	13.1
M3	7.5	7.3	7.0	7.0	7.5	8.7
<i>Not adjusted for seasonal and calendar effects</i>						
Currency in circulation	-27.9	-19.7	-7.7	12.9	39.1	37.4
Overnight deposits	13.0	11.7	10.4	8.3	6.1	7.3
Deposits with an agreed maturity of up to 2 years	3.6	2.9	1.4	1.3	0.5	-0.0
Deposits redeemable at notice of up to 3 months	9.1	9.4	8.9	7.8	7.4	9.4
Repurchase agreements	4.6	2.3	2.9	2.3	8.4	6.3
Money market fund shares/units	29.5	25.1	22.4	18.6	16.7	16.9
Debt securities issued with a maturity of up to 2 years	-6.1	-3.1	-9.5	-8.8	-5.4	11.5

Source: ECB.

growth of marketable instruments. After slowing down to 8.6% in the last quarter of 2002, the annual growth rate of marketable instruments rose to 10.5% in the first quarter of the year, and to 13.1% in April 2003. The strong pace of growth of marketable instruments to a large extent reflects the continuing robust growth of money market fund shares/units, which – like overnight deposits – are often used to “park” funds in times of high uncertainty. In April, the strong increase in the growth of marketable instruments was also due to a significant rebound in the growth of short-term debt securities issued by MFIs, which may have resulted from an increased demand for these instruments from institutional investors, perhaps triggered by fears of a possible decline in bond prices.

Stabilisation of growth in loans to the private sector

The annual rate of growth of total credit granted by MFIs to euro area residents increased to 4.7% in April 2003, after having remained stable – at a rate of around 4.2% (see Table 2) – from the third quarter of 2002. The rise in the annual growth rate of

credit to euro area residents in April is due to an increase in the annual growth of both credit to the general government and credit to the private sector.

As regards credit to general government, after having remained around 2% in the fourth quarter of 2002 and the first quarter of 2003, the annual growth of credit to general government rose to 3.5% in April. As for the instrument breakdown, after having been negative from March 2002, the annual rate of change in MFI loans to general government became slightly positive in April 2003. Moreover, the growth of general government debt securities held by MFIs continued on the rising trend which began in the third quarter of 2002.

The recent data on loans to the private sector suggest that the slowdown in these loans may have come to an end, as the annual growth rate appears to be stabilising (4.6% in April and 4.9% in the first quarter of 2003). In real terms, the annual rate of growth of loans to the private sector is at present only somewhat below its long-term average. Thus, loan growth dynamics are not unusually low compared with other periods of weak economic growth. The sustained growth of

Table 2**Counterparts of M3***(annual percentage changes; quarterly averages; not adjusted for seasonal and calendar effects)*

	2002 Q1	2002 Q2	2002 Q3	2002 Q4	2003 Q1	2003 Apr.
Longer-term financial liabilities (excluding capital and reserves)	3.1	4.0	5.1	5.2	5.0	5.0
Deposits with an agreed maturity of over 2 years	0.2	0.9	1.9	2.7	3.3	3.5
Deposits redeemable at notice of over 3 months	-11.5	-13.2	-11.1	-9.0	-6.4	-8.9
Debt securities issued with a maturity of over 2 years	6.5	7.7	8.8	8.1	7.0	7.1
Credit to euro area residents	5.1	4.5	4.2	4.1	4.2	4.7
Credit to general government	1.7	1.8	1.1	1.9	2.1	3.5
Securities other than shares	3.5	3.8	2.5	4.1	4.3	5.8
Loans	-0.8	-0.9	-0.9	-1.2	-1.1	0.1
Credit to other euro area residents	6.1	5.2	5.0	4.7	4.8	5.0
Securities other than shares	22.3	14.8	7.5	6.8	8.5	13.8
Shares and other equities	2.1	-3.5	1.0	3.0	0.9	3.4
Loans	5.7	5.6	5.2	4.8	4.9	4.6

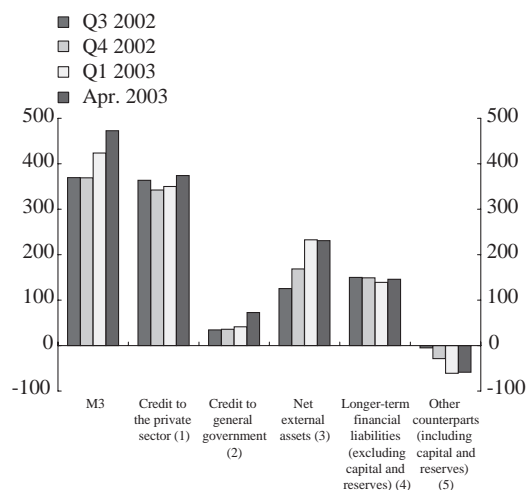
Source: ECB.

loans to the private sector in 2003 reflects the positive effects stemming from the low level of retail bank lending rates in the euro area, offsetting negative effects stemming from weak economic activity and high uncertainty.

The sectoral breakdown of loans to the private sector shows that the annual growth of loans to non-financial corporations recovered somewhat in the first quarter of 2003 (see Table 4). The recovery was due to a strong increase in the annual rate of change in short-term loans to non-financial corporations, which became positive in the first quarter of 2003, having been negative in all quarters of 2002. Given that these loans are typically more sensitive to the business cycle, this might be indicative of an improvement in the economic situation of the corporate sector relative to the previous quarter. The annual growth rate of loans to households remained broadly unchanged in the first quarter of 2003, at a relatively robust level. Sectoral loan trends are analysed in more detail below in the context of the overall debt financing of the non-financial sectors.

Among the other counterparts of M3, the annual growth rate of longer-term financial liabilities (excluding capital and reserves) of

MFIs was 5.0% in April and in the first quarter of 2003, which is slightly below the level of growth in the fourth quarter of 2002. Within this counterpart of M3, longer-term deposits continued to grow at a slow pace, which contrasts with the strong pace of growth in debt securities issued with an initial maturity of over two years. It should be noted that debt securities with a maturity of over two years include non-resident holdings. Thus, the

Chart 6**Movements in M3 and its counterparts***(annual flows, end of period; EUR billions; not adjusted for seasonal and calendar effects)*

Source: ECB.

$$M3 = 1 + 2 + 3 - 4 + 5$$

strong growth of longer-term debt securities issued by MFIs may also be related to purchases by non-residents, which would be in line with balance of payments data on foreign purchases of euro area debt securities.

Over the twelve months up to April, the net external assets of the euro area MFI sector increased by €231 billion, compared with a rise of €233 billion over the twelve months up to March. The continued large positive annual flow of the net external assets of the euro area MFI sector in combination with the evidence from the monetary presentation of the euro area balance of payments (see Box 1), which is published for the first time in this Monthly Bulletin, provides further background to the portfolio shifts which were behind the strong M3 growth in recent months. In particular, in the first quarter of the year, euro area non-MFIs reduced investments in foreign equities, while non-euro area residents seem to have increased their holdings of euro area debt securities.

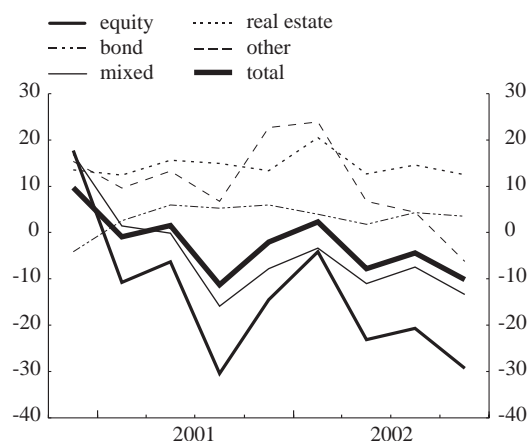
Liquidity in the euro area is very ample

M3 continued to grow at a high pace in the first quarter of 2003 and in April. The protracted period over which M3 growth has remained strong has led to the accumulation of more liquidity than would be necessary to finance non-inflationary growth in the medium term. It has to be taken into account, however, that monetary developments continue to be fostered by portfolio shifts, reflecting a sustained preference on the part of investors for liquid and secure assets. This is confirmed by evidence from both the components and counterparts of M3. In addition to the portfolio shifts driven by increased demand for monetary assets for precautionary reasons, the low level of interest rates has also contributed to strong monetary growth. Against this background, monetary developments will need to continue to be monitored closely with respect to their

Chart 7

Annual growth in the value of total assets of investment funds in the euro area, broken down by investment policy

(annual percentage changes; end-of-period stock data)



Source: ECB.

implications for price stability in the medium to long term.

Growth in investment fund assets declined in the fourth quarter of 2002

The annual rate of change in the balance sheet total of euro area investment funds stood at -10.2% at the end of the fourth quarter of 2002, compared with an annual rate of change of +4.4% at the end of the previous quarter (see Chart 7). Underlying this decline in total investment fund assets were diverging trends for the assets of investment funds depending on the investment policy. The trends were in turn largely driven by developments in financial asset prices. Indeed, the annual rate of decline in investment fund holdings of equity funds stood at 29.3% at the end of the fourth quarter of 2002, while the annual declines in the Dow Jones EURO STOXX index and Standard and Poor's 500 index over the same period were 34.5% and 24.3%, respectively. At the same time, the annual growth in the balance sheet total of euro area bond funds was 3.5%, partly due to rising bond prices.

Box I

Monetary presentation of the euro area balance of payments

A monetary presentation of the euro area balance of payments is published for the first time in this issue of the Monthly Bulletin (see Table 8.7 of the “Euro area statistics” section).

External transactions by euro area resident non-MFIs have a direct impact on the external assets and liabilities of the MFI sector, to the extent that they are settled via resident banks.¹ For instance, the purchase of a bond by a euro area non-MFI resident from a non-resident can translate into an increase in the external liabilities of a euro area bank if the seller of the bond holds the proceeds in an account with this bank. For this reason, the resulting changes in the net external asset position of the MFI sector as a whole are associated with the external transactions of the resident non-MFI sector.

The monetary presentation therefore aims to distinguish, in the balance of payments, the external transactions of the MFI sector from those of the non-MFI sector. The following table summarises this approach.

Monetary presentation of the euro area balance of payments

	Current account
+	Capital account
+	Balance of financial transactions by the non-MFI sector
+	Errors and omissions
=	Balance of payments of the non-MFI sector
=	– Balance of payments of the MFI sector ¹⁾
=	Change in the net external assets of the MFI sector

1) External transactions of the MFI sector recorded in the current account or the capital account, or errors and omissions corresponding to the external transactions of this sector, may be comparatively small.

Moreover, the monetary aggregate M3 is linked by an accounting identity to its counterparts in the MFI balance sheet, as shown by the following relationship:

$M3 \equiv \text{credit to euro area residents} + \text{net external assets of euro area MFIs} - \text{longer-term financial liabilities} + \text{other counterparts.}$

Therefore, monitoring the net external assets of MFIs contributes (together with the monitoring of other domestic counterparts) to an understanding of monetary developments. The monetary presentation of the balance of payments in turn is an appropriate tool for identifying the sources of change in the external counterpart of M3.

In practice, a perfect identity between the balance of payments and the corresponding flows derived from the consolidated MFI balance sheet is not always observed, owing to differences in both compilation systems and methodology. For instance, the b.o.p. data for the MFI sector are, in some countries, directly reported by the MFIs on the basis of *transactions*, while monetary statistics transactions are derived indirectly from the differences in *stock* data through adjustments for reclassifications, foreign exchange changes and price revaluations. The methodological frameworks for the monetary statistics and b.o.p. statistics also differ in respect of their reliance on business accounting rules. In addition, the item “errors and omissions” represents some “non-explained” b.o.p. transactions. Notwithstanding these qualifications, the monetary presentation provides useful information to analyse the changes in the external counterpart of M3.

During recent years, external transactions have played a major role in the monetary dynamics of the euro area. The significant rise in M3 growth since the second quarter of 2001 has been associated with a sizeable

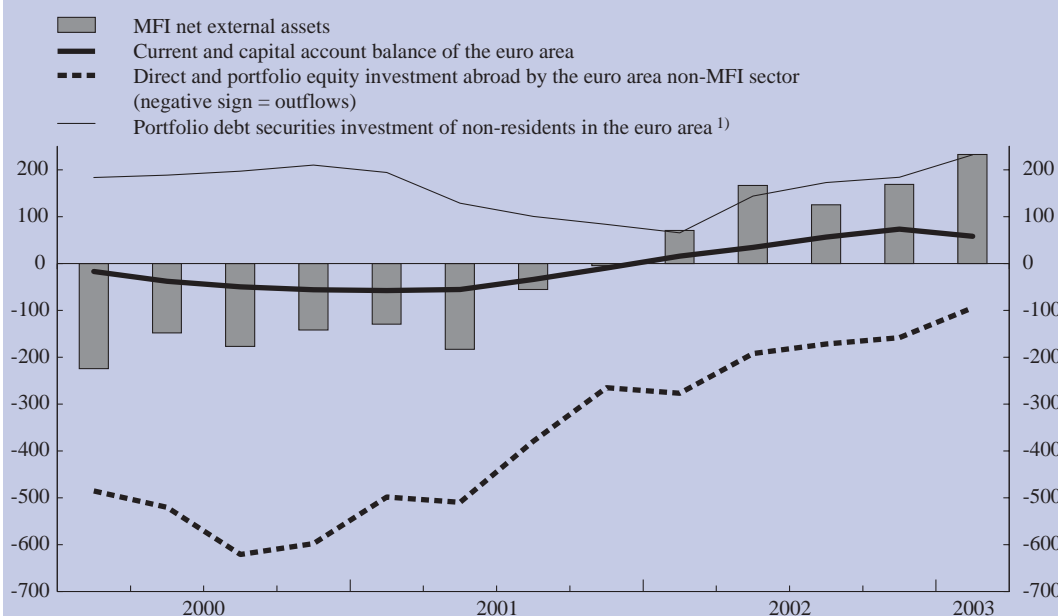
1 See the article “The balance sheets of the MFIs of the euro area in early 1999” in the August 1999 issue of the ECB’s Monthly Bulletin.

increase in the net external assets of the MFI sector. The monetary presentation of the balance of payments shows that in 2001 this development was mainly related to a decline in the net acquisition of foreign equities by euro area non-MFIs, reflecting shifts by euro area investors out of foreign equity into liquid assets in the euro area² (see the chart below). In addition, since the second quarter of 2002, the external counterpart of M3 has been bolstered by a significant increase in the purchases of euro area debt securities by non-residents (by far exceeding the purchase of foreign debt securities by non-MFI euro area residents). Furthermore, the current and capital account balance has improved, implying a further increase in domestic liquidity derived from external transactions.

² See also the box entitled "Estimating the size of portfolio shifts from equity to money" on pages 11 to 14 of the May 2003 issue of the ECB's Monthly Bulletin.

Main external transactions underlying the changes in MFI net external assets

(annual flows, end of period; EUR billions)



Source: ECB.

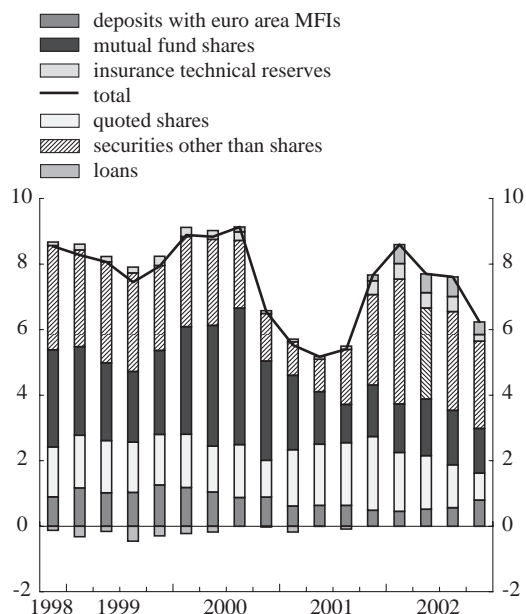
1) Excluding debt securities with a maturity of up to two years and issued by MFIs.

Financing and financial investment of insurance corporations and pension funds registered lower growth rates in the fourth quarter of 2002

On the basis of transactions data, growth in both financing and financial investment of insurance corporations and pension funds in the euro area declined in the fourth quarter of 2002. As regards the financing of this sector, the annual growth rate of insurance technical reserves, which constituted 95% of its sources of finance, fell to 7.1% in the fourth quarter of 2002, from 7.9% in the previous quarter. The growth rate of the

funds allocated by households to life insurance and pension funds therefore remained high.

Turning to the financial investment of this sector, the annual growth rate of the main financial assets of insurance corporations and pension funds declined to 6.2% in the fourth quarter of 2002, from 7.6% in the third quarter. The decrease in the growth rate of financial investment was reflected, in particular, in lower annual growth rates for the acquisition of quoted shares and loans granted (see Chart 8). The annual growth rate of loans granted by this sector declined

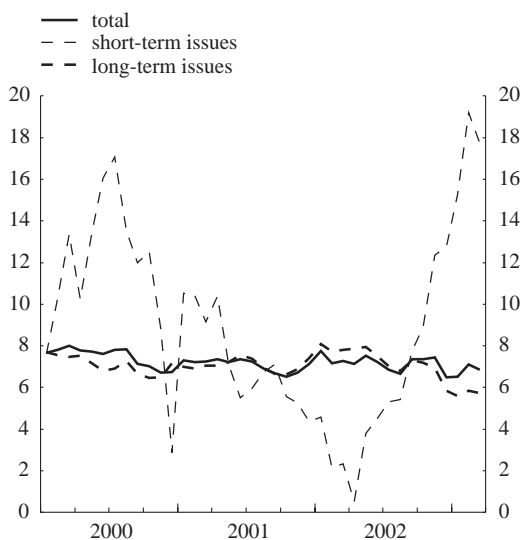
Chart 8**Financial investment of insurance corporations and pension funds in the euro area***(annual growth rates; contributions in percentage points)*

Source: ECB.

to 4.2% in the fourth quarter, from 6.3% in the third quarter. Likewise, the annual growth rate of investment in quoted shares decreased from 6.4% in the third quarter to 3.9% in the fourth quarter. By contrast, the annual growth rate of deposits increased from 3.8% in the third quarter to 5.5% in the fourth quarter. This change in the asset portfolio of this sector thus implies a move into more liquid as well as less risky financial investments in late 2002.

Slight decline in the growth of debt securities issuance in the first quarter

In the first quarter of 2003 the average annual growth in the amount outstanding of debt securities issued by euro area residents declined slightly to 6.8%, from 7.1% in the fourth quarter of 2002 (see Chart 9). Underlying this development were a decrease in the average annual growth rate of the amount outstanding of long-term debt securities, by 1 percentage point to 5.7%, and

Chart 9**Annual growth of debt securities issued by euro area residents***(percentage changes)*

Source: ECB.

Note: Annual growth rates are based on financial transactions and are corrected for reclassifications, revaluations, exchange rate variations and other changes that do not arise from transactions.

a strong increase in that of the amount outstanding of short-term debt securities, by 6 percentage points to 17.4%. The latter development was mainly driven by strong issuance in the MFI sector.

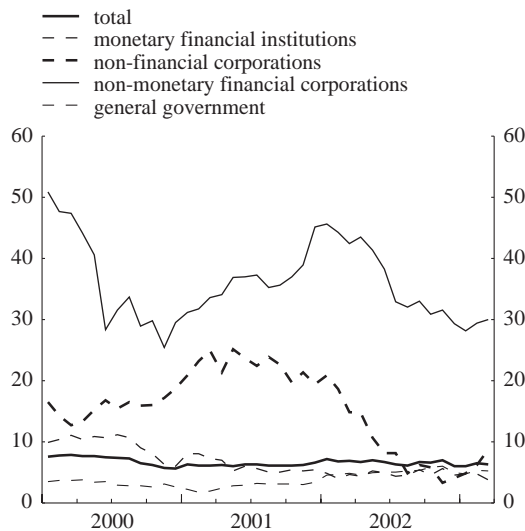
The breakdown by currency shows that the average annual growth in the amount outstanding of euro-denominated debt securities issued by euro area residents decreased by 0.3 percentage point to 6.3% in the first quarter. Similarly, the annual growth in non-euro-denominated debt securities issued by euro area residents decreased by 0.3 percentage point to 12.3%.

Turning to the sectoral breakdown of euro-denominated debt securities issuance, the average annual growth in the amount outstanding of debt securities issued by MFIs was 4.5% in the first quarter, compared with 5.0% in the fourth quarter of last year (see Chart 10). An analysis of the underlying dynamics reveals strong issuance of short-term debt securities, confirming the trend

Chart 10

**Annual growth of
euro-denominated debt securities
issued by euro area residents**

(percentage changes)



Source: ECB.

Note: Annual growth rates are based on financial transactions and are corrected for reclassifications, revaluations, exchange rate variations and other changes that do not arise from transactions.

that started in the third quarter of 2002. A substantial part of the short-term debt securities issuance, however, reflects the balancing of liquidity within the MFI sector rather than net financing of the MFI sector as a whole.

As regards non-financial corporations, the average annual growth in the amount outstanding of debt securities issued increased by 2.1 percentage points from the previous quarter to 6.6% in the first quarter of 2003. It is still too early to say whether this represents a turnaround with respect to the downward trend that started at the end of 2001. There was little support for an increase in issuance from the general economic conditions in the first quarter of 2003, which was characterised by uncertainty about the war in Iraq and sluggish economic activity. However, the fall in corporate bond spreads in the first quarter may have attracted many borrowers. A feature of the corporate debt securities markets is the significant contrast between strong long-term and weak

short-term issuance. Many companies have made efforts to reduce short-term liabilities in an attempt to protect themselves from financial turbulence (see also Box 2). At the same time, short-term markets have generally been more difficult for borrowers to access. While there is still a substantial difference between the average annual growth rates in the amounts outstanding of short-term and long-term debt securities, the difference between these growth rates has narrowed since the third quarter of 2002. The average annual growth in the amount outstanding of long-term debt securities issued by corporations declined from 10.8% in the fourth quarter of 2002 to 9.4% in the first quarter of 2003. At the same time, the annual rate of change for outstanding short-term debt securities issued by corporations was still negative in the first quarter (-3.3%), but the decline was 12.5 percentage points smaller than in the previous quarter.

Concerning non-monetary financial corporations, the average annual growth rate in the amount outstanding of debt securities remained high despite declining from 30.6% in the fourth quarter of last year to 29.2% in the first quarter of 2003. The strong issuance in this sector also reflects a shift from direct bond issuance by corporations to indirect issuance, e.g. via special purpose vehicles (SPVs). In the first quarter of 2003 some companies in the automobile, energy, oil and telecommunications sectors issued almost two-fifths of their securities via their financial subsidiaries, which are classified in the non-monetary financial sector.

As regards the general government sector, the average annual growth in the amount outstanding of debt securities issued by central government decreased from 4.8% in the fourth quarter of 2002 to 4.2% in the first quarter of 2003. The central government sector increased its borrowing through the issuance of short-term debt securities, for which the annual rate of growth increased markedly to 21.5% in the first quarter. At the same time, the average annual growth rate in the amount outstanding of debt securities

issued by other general government sub-sectors increased from 28.1% in the fourth quarter of 2002 to 30.5% in the first quarter of 2003. The issuance of this sector is limited to a few countries, and the high growth rates reflect an increase in the issuance from these countries.

Growth of debt financing by non-financial corporations increased in the first quarter of 2003

Overall, the annual growth of debt financing by the non-financial sectors (households, non-financial corporations and general

government) in the first quarter of 2003 is estimated to have increased somewhat, to 5½%, after it had stabilised in the fourth quarter of 2002 and declined considerably in 2001 and most of 2002 (see Table 3). Although difficult to assess at this stage, this might indicate that the downward trend has come to a halt. The increase was broadly based across the non-financial sectors (see Chart 11).

The annual growth of debt financing of households is estimated to have risen slightly further in the first quarter of 2003 to around 7% (from 6.6% in the fourth quarter of 2002). While the annual rate of growth in loans for

Table 3
Financing of euro area non-financial sectors

	Outstanding amount as a percentage of (sector) financing ¹⁾	Annual growth rates									
		2000 Q4	2001 Q1	2001 Q2	2001 Q3	2001 Q4	2002 Q1	2002 Q2	2002 Q3	2002 Q4	2003 Q1 ²⁾
Non-financial sectors	100	6.4	6.5	6.6	5.9	5.2	4.7	4.2	4.0	3.8	.
of which: long-term financing ³⁾	85.0	5.7	5.6	5.9	5.5	5.0	5.0	4.6	4.6	4.1	.
Debt financing ⁴⁾	84.6	7.2	7.4	7.2	6.7	6.1	5.5	5.2	4.8	4.8	5½
of which: short-term debt financing	15.0	11.1	13.1	11.1	8.5	6.6	2.6	1.5	0.7	2.2	5¾
of which: long-term debt financing	69.6	6.4	6.1	6.3	6.3	6.0	6.2	6.0	5.7	5.4	5½
Households ^{4),5)}	23.0	7.4	7.1	7.0	6.4	6.3	5.9	6.2	6.3	6.6	7
of which: short-term debt financing	8.1	6.3	5.5	4.0	2.5	1.0	-0.6	1.1	1.2	2.9	1½
of which: long-term debt financing	91.9	7.5	7.2	7.3	6.8	6.8	6.5	6.7	6.8	7.0	7½
Non-financial corporations	43.6	8.8	9.3	9.1	7.9	6.2	4.5	3.4	2.7	2.4	.
of which: long-term financing	80.6	6.9	7.4	7.8	7.3	6.1	5.3	4.8	4.2	3.4	.
Debt financing ⁴⁾	64.6	14.5	15.6	14.1	12.4	9.8	6.8	5.7	4.2	4.2	5½
of which: short-term debt financing	19.4	20.3	21.3	16.8	10.9	6.9	0.7	-3.0	-3.6	-2.6	2½
of which: long-term debt financing	45.3	11.9	12.9	12.8	13.2	11.3	9.9	10.2	8.1	7.3	6½
of which: loans	53.1	15.1	15.1	13.1	11.3	8.5	5.8	5.4	3.8	4.1	4¾
of which: securities other than shares	7.8	16.1	25.9	27.8	25.3	23.1	15.2	8.6	6.7	4.0	8¾
of which: pension fund reserves	3.7	4.9	5.0	5.1	5.2	4.8	4.8	4.9	5.1	5.4	5
Quoted shares	35.4	4.1	4.5	5.1	3.9	2.8	1.9	0.9	0.7	0.2	.
General government ⁴⁾	33.4	1.8	1.4	2.0	2.3	2.8	4.2	4.0	4.3	4.2	4½
of which: short-term debt financing	14.0	-2.6	1.5	3.4	6.2	8.4	8.1	11.6	9.8	11.7	13½
of which: long-term debt financing	86.0	2.4	1.4	1.7	1.7	2.0	3.6	2.9	3.4	3.0	3½
of which: loans	17.0	-1.5	-1.0	-2.2	-1.1	0.1	1.0	-0.1	-0.5	-1.6	-3¼
of which: securities other than shares	79.4	2.5	1.9	2.8	2.9	3.2	4.6	4.6	5.0	5.2	6¼
of which: central government deposit liabilities	3.6	2.6	4.9	5.1	5.5	7.7	12.9	13.5	14.0	12.0	9

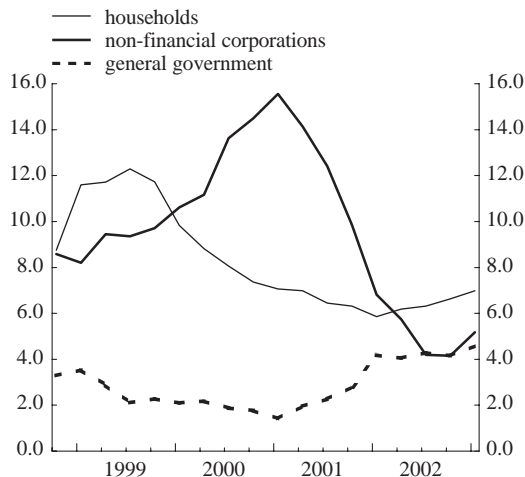
Source: ECB.

Note: For details, see footnote in Table 6.1 in the "Euro area statistics" section.

- 1) As at the end of the fourth quarter of 2002. Short-term and long-term (debt) financing and sector financing as a percentage of financing. Sector short-term and long-term (debt) financing and financing instruments as a percentage of sector financing. Figures may not add up exactly due to rounding.
- 2) Figures for the most recent quarter shown in the table have been estimated on the basis of transactions reported in money and banking statistics and in securities issues statistics.
- 3) Long-term financing with an original maturity of over one year, includes long-term loans, long-term debt securities issued, quoted shares issued and pension fund reserves of non-financial corporations.
- 4) Debt financing includes loans, debt securities issued, pension fund reserves of non-financial corporations and deposit liabilities of central government. Short-term debt financing with an original maturity of up to one year, includes short-term loans, short-term debt securities issued and deposit liabilities of central government. Long-term debt financing equals long-term financing excluding quoted shares issued.
- 5) Including non-profit institutions serving households.

Chart 11 Debt financing by the non-financial sectors

(annual percentage changes)



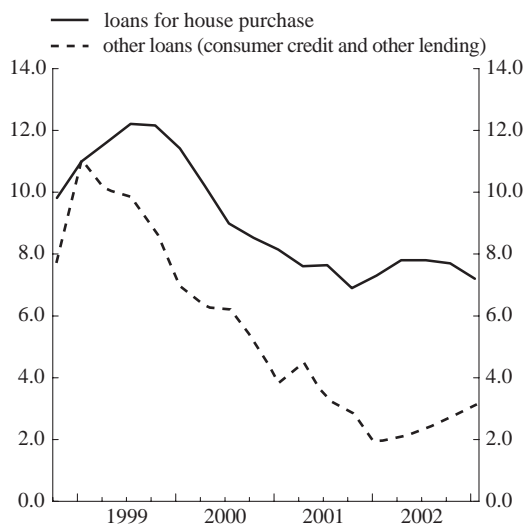
Source: ECB.

Note: For details, see Table 3.

house purchase fell slightly, to 7.2% in the first quarter (see Chart 12 and Table 4), the annual growth of long-term borrowing by households (mostly housing loans) is estimated to have increased, reflecting the assumption of an ongoing securitisation of housing loans. Favourable long-term mortgage terms in the euro area have probably been an important

Chart 12 Breakdown of loans to households by purpose

(annual percentage changes)



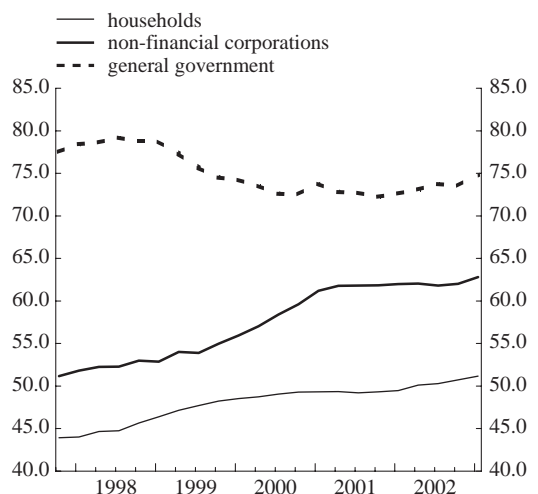
Source: ECB.

factor behind the high level of growth of long-term borrowing by households. In addition, the steady annual growth in house prices in the euro area, which had broadly stabilised at around 6¾% in 2002, may also have contributed to this development. By contrast, the annual growth of consumer credit declined to 2.9% in the first quarter, in line with weak aggregate demand and consumer confidence. As a result of recent financing developments, the ratio of household debt to GDP continued to rise slightly, reaching 51% in the first quarter of 2003 (see Chart 13).

The annual growth of debt financing of non-financial corporations is estimated to have increased in the first quarter of 2003 to 5¼% (from 4.2% in the fourth quarter of 2002). This was due to both a rise in the annual rate of growth of loans and a considerable increase in the annual growth of debt securities issued. With regard to maturities, the annual rate of change in short-term debt financing by non-financial corporations, which

Chart 13 Ratio of debt to GDP of the non-financial sectors

(in percentages)



Source: ECB.

Note: For details, see Table 3. Compared with the annual financial accounts, the ratio of debt to GDP is somewhat lower on the basis of the quarterly financial accounts, mainly due to the fact that loans granted by non-financial sectors and by banks outside the euro area are not included. The debt-to-GDP ratio of general government differs somewhat from the Maastricht definition owing to differences in valuation, coverage and treatment of accrued interest.

Table 4**MFI loans to households and non-financial corporations***(end of quarter; not adjusted for seasonal and calendar effects)*

	Outstanding amount as a % of total ¹⁾	Annual growth rates					
		2001 Q4	2002 Q1	2002 Q2	2002 Q3	2002 Q4	2003 Q1
Non-financial corporations	47.2	6.2	5.0	4.4	3.5	3.6	4.0
Up to 1 year	34.3	2.0	-1.6	-3.1	-2.6	-2.6	2.7
Over 1 year	65.7	8.6	8.8	8.8	6.9	6.9	4.7
Over 1 and up to 5 years	16.7	12.7	12.3	12.2	8.9	6.4	3.6
Over 5 years	48.9	7.2	7.7	7.6	6.2	7.0	5.1
Households²⁾	52.8	5.2	5.3	5.7	5.8	5.9	5.8
Consumer credit ³⁾	14.7	3.0	3.7	3.0	3.2	3.8	2.9
Lending for house purchase ³⁾	66.0	6.9	7.3	7.8	7.8	7.7	7.2
Other lending	19.3	1.7	0.6	1.4	1.7	1.7	3.3

Source: ECB money and banking statistics.

Note: For further details, see footnotes to Table 2.5 in the "Euro area statistics" section and the relevant technical notes.

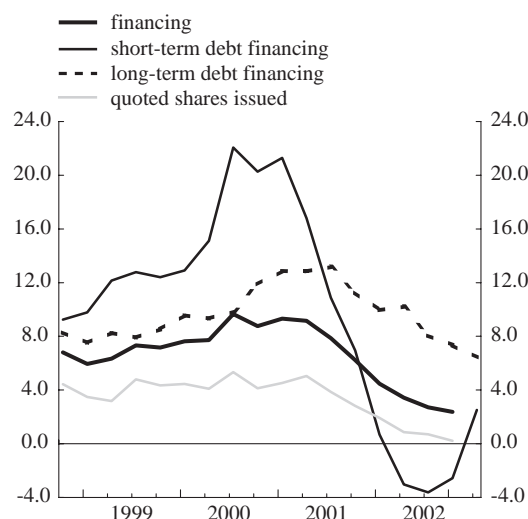
- 1) As at the end of the first quarter of 2003. Sector loans as a percentage of total MFI loans to the non-financial private sector; maturity breakdown and breakdown by purpose as a percentage of MFI loans to the respective sector. Figures may not add up exactly due to rounding.
- 2) Including non-profit institutions serving households.
- 3) The definitions of consumer credit and lending for house purchase are not fully consistent across the euro area.

is generally relatively sensitive to the business cycle, is estimated to have risen to 2½%, from -2.6% in the fourth quarter. At the same time, the annual growth of long-term debt financing by non-financial corporations is estimated to have continued to decline to 6½% in the first quarter, from 7.3% in the previous quarter.

The estimated increase in the annual growth of debt financing by non-financial corporations took place in an environment of very low interest rates. At the same time, however, weak demand and general economic uncertainty partly offset the supportive impact of the low level of interest rates (see Box 2). As a consequence of recent debt financing developments, the ratio of non-financial corporations' debt to GDP increased to 63% in the first quarter of 2003, after having stabilised in 2002 (see Chart 13).

Data on equity financing (and thus on total financing) by non-financial corporations are only available up to the fourth quarter of 2002. In that quarter, the annual growth of overall financing by non-financial corporations continued to decline, falling to 2.4% from 2.7% in the third quarter, as the annual growth of quoted shares issued by non-

financial corporations fell to 0.2%, from 0.7% in the previous quarter (see Chart 14). According to private databases, there was some rebound in secondary public offering activity in early 2003, but initial public offering (IPO) activity remained weak. The relatively high cost of equity financing

Chart 14**Short-term and long-term financing by non-financial corporations***(annual percentage changes)*

Source: ECB.

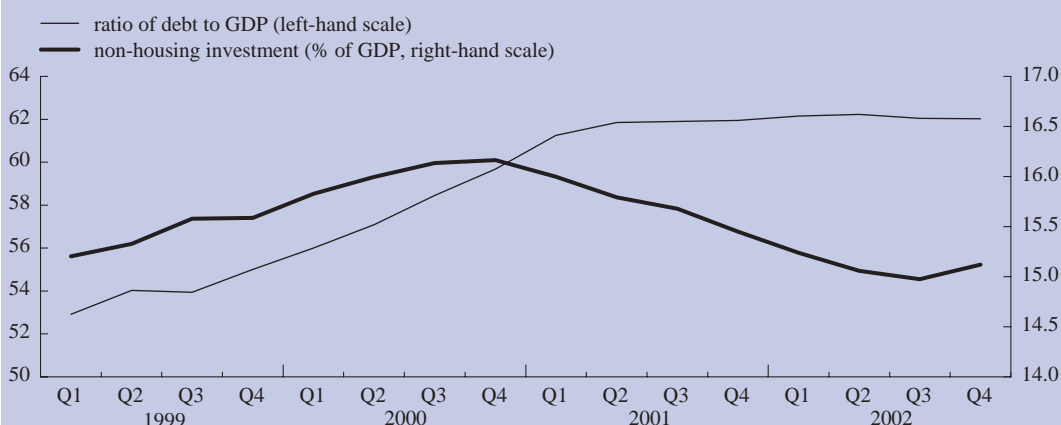
Note: For details, see Table 3.

Box 2

The impact of financial factors on corporate investment in the euro area

Gross fixed capital formation in the euro area has been subdued over the past two years. The weakness in investment mainly seems to have been attributable to the economic slowdown (see the box entitled “Factors behind the weakness in investment by type of product” on page 43 of the March 2003 issue of the ECB’s Monthly Bulletin for a discussion of the factors behind this weakness in investment). Despite a significant fall in interest rates, other financial developments may have played a role in holding back corporate investment. In fact, although the level of interest rates has been relatively low from an historical perspective, the fall in total investment in the euro area in recent years has followed a period of deteriorating financial positions of euro area non-financial corporations (see Chart A) and has, at the same time, coincided with worsening financing conditions. This box aims to assess whether certain financial factors, such as the cost of financing, corporate balance sheet positions and/or reduced access to financing sources have contributed to bringing down investment spending over the past few years.

Chart A: Non-housing investment as a percentage of GDP and the debt-to-GDP ratio of non-financial corporations in the euro area



Source: ECB.

Corporate finance theory suggests that the financial situation of borrowers may have an effect on corporate investment spending. A fall in the value of borrowers’ financial assets – which can be used as collateral – generally increases the “external finance premium” demanded by lenders to compensate for informational asymmetries. Thus a decline in the net worth of borrowers leads to higher costs of external financing. If the net worth deteriorates during an economic downturn, this can lead to an amplification of the business cycle (i.e. the so-called financial accelerator mechanism) and to persistently weak economic growth. Empirical studies provide evidence of the fact that the impact of financial factors follows an asymmetrical and counter-cyclical pattern and is most prominent during economic downturns. In addition, these factors also influence the situation in the banking sector and, hence, could also affect banks’ ability and willingness to lend.

The financial position of non-financial corporations

The financial position of non-financial corporations provides an indication of their creditworthiness and can, therefore, influence lenders’ pricing and supply of funds. At the same time, firms themselves may aim for a particular level and composition of debt.

During the 1990s and up to the year 2000, the expansion both of investment in fixed capital and of mergers and acquisitions by euro area non-financial corporations led to a significant increase in their indebtedness,

a development which was particularly pronounced during the second half of the 1990s. This increase was particularly high in some economic sectors, e.g. in the telecommunications industry. Given the buoyant behaviour of stock prices until 2000, some leverage indicators (e.g. debt in relation to financial and total assets) did not deteriorate immediately, while other measures, such as the ratios of debt to operating surplus and GDP, began to reflect the increased reliance on external finance much earlier.

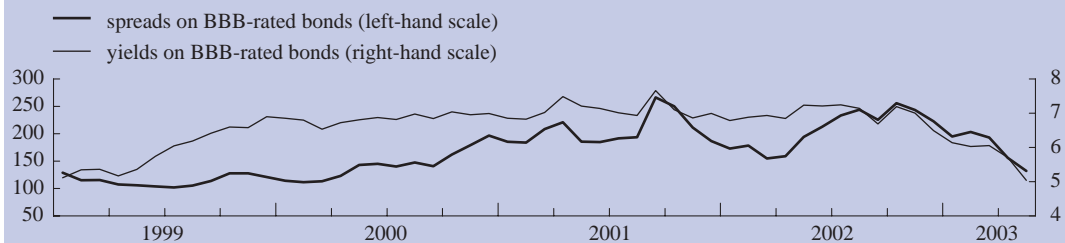
In parallel with the downward correction of stock prices, which got under way after March 2000, the high levels of indebtedness translated into a significant deterioration of all debt ratios, against a background of weakening corporate profits and lower economic activity. This was accompanied by an increase in the interest payment burden of non-financial corporations, which remained significantly below the levels seen in the early 1990s, however. In 2002 consolidation efforts by corporations and a significant decline in the annual growth of debt financing (see Chart D) contributed to broadly stabilising debt-to-GDP ratios, while further declines in asset prices caused the ratio of debt to financial assets to increase. In addition, the interest payment burden of non-financial corporations seems to have stabilised in 2002.

Debt financing conditions

The decline in interest rates to the current low levels has, all other things being equal, improved the debt financing conditions for non-financial corporations in the sense that debt finance has become cheaper. However, the rise in the debt-to-GDP ratios of euro area non-financial corporations up to early 2002 was

Chart B: Yields and spreads on BBB-rated corporate bonds in the euro area

(corporate bond yields as a percentage, corporate bond spreads in basis points; monthly data)



Sources: Reuters, Bloomberg and Merrill Lynch.

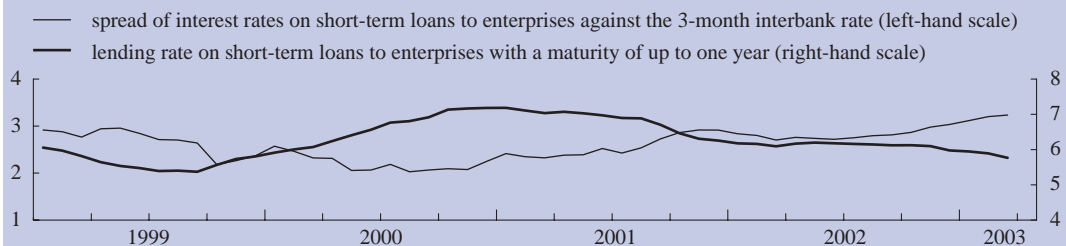
accompanied by a significant rise in spreads that corporate borrowers are obliged to pay for credit as opposed to government borrowers. This increase in spreads was most pronounced in the corporate bond market where spreads, while being volatile, reached very high levels in late 2001 and the summer of 2002 (see Chart B). At the same time, the spread of retail bank interest rates on short-term loans to enterprises against the three-month interbank rate also increased over this period (see Chart C).

Indicators of recent developments in bank financing conditions suggest that credit risk continues to be an important factor (see the box on page 15 of the May 2003 issue of the ECB's Monthly Bulletin on the results of the ECB's bank lending survey). Indeed, spreads of short-term loans to enterprises (with a maturity of up to one year) against the three-month interbank rate rose further in early 2003, indicating that lenders' perception of credit risk remains high.

By contrast, over recent months, financing conditions for corporate issuers in the bond market have improved considerably, as BBB-rated corporate bond spreads have fallen by some 130 basis points since October 2002. This decrease in spreads may, to some extent, reflect market perceptions of balance sheet restructuring in many euro area companies. However, it also reflects a correction of the extraordinarily high spread levels seen

Chart C: Retail bank interest rates on short-term loans to enterprises with a maturity of up to one year and the spread of retail bank interest rates on short-term loans to enterprises against the three-month interbank rate (EURIBOR)

(in percentage points; monthly data)



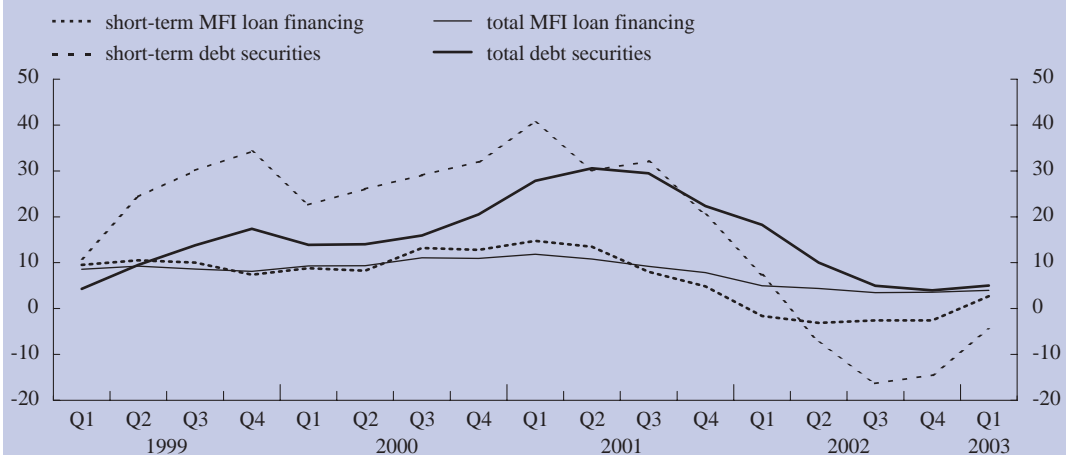
Source: ECB.

in 2002, as well as some portfolio shifts of institutional investors owing to risk retrenchment as a result of financial uncertainty and other more technical factors (see the box on page 17 of the April 2003 issue of the ECB's Monthly Bulletin).

Credit risk has been of some importance for corporate financing conditions, with short-term debt financing falling substantially in 2002, partly reflecting corporations' lengthening of the maturity of their debts. However, in part supported by the historically low level of interest rates, the growth rate of corporate borrowing is not exceptionally low compared with previous periods of subdued economic activity. In fact, corporate debt financing grew by 4-5% on an annual basis in most of 2002 and early 2003. Thus, although conditions may have differed across countries, there is little evidence of there having been widespread credit constraints in the euro area as a whole in 2002 and early 2003.

Chart D: Debt financing by non-financial corporations in the euro area

(annual growth rates)



Source: ECB.

Financing conditions in the market for equity capital

In the stock markets, financing conditions have generally been unfavourable. The dividend yield, which is defined as the annual dividend as a percentage of the share price and which may be used as a proxy for the cost of equity capital, has increased. Data from Datastream, a private financial data provider, indicate that this

increase was quite substantial in 2002 and the beginning of 2003 as stock prices tumbled. In fact, despite the rebound in stock prices in late March and early April 2003, measures of the dividend yield currently hover around the highest levels seen since the early 1990s, thereby indicating that equity financing has remained very costly. Moreover, the significant volatility observed in the stock markets until mid-March may have created considerable difficulties in timing public offerings, thereby further limiting firms' access to equity capital.

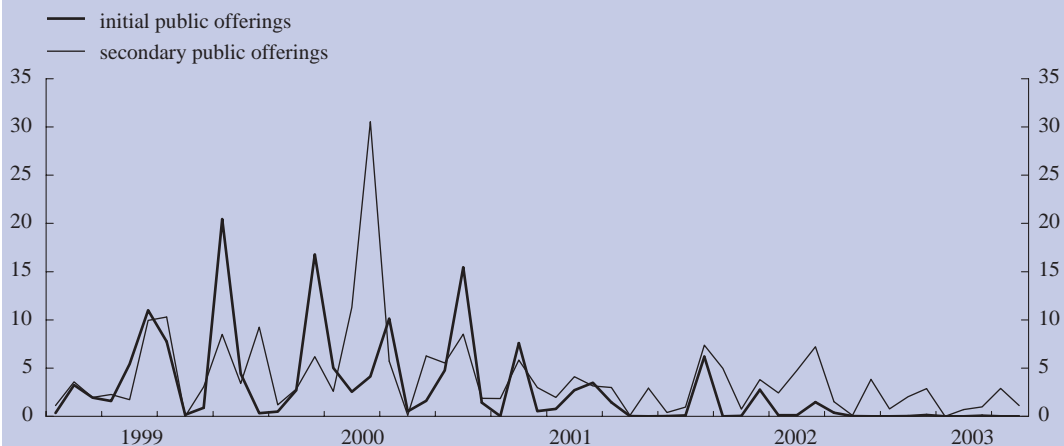
Consequently, equity financing almost dried up in the euro area in late 2002 and early 2003 (see Chart E and also the box on page 21 in the March 2003 issue of the ECB's Monthly Bulletin). Although there have been a few secondary public offerings (SPOs) lately, initial public offerings (IPOs) have been almost non-existent during this period, possibly reflecting the prevailing high cost of equity capital.

Overall assessment

In sum, there are some indicators which suggest that financial factors for non-financial corporations in the euro area may have contributed to the recent weakness in corporate investment spending. The general financial and economic uncertainty that prevailed in 2002 and early 2003 is likely to have enhanced the significance of financial factors in this respect and to have counterbalanced, to some extent, the effects of generally low interest rates. In a forward-looking perspective, the recent normalisation in financial markets after the end of the Iraq war has contributed to improving financing conditions in the bond markets and probably also in the equity markets. Furthermore, the historically low level of interest rates should contribute to an upswing in investment. At the same time, uncertainty remains as to the adjustment still needed in the euro area to enhance productivity and profitability.

Chart E: Equity issuance in the euro area

(EUR billions)



Source: Dealogic Bondware.

compared with the low levels of interest rates might contribute to explaining the rise in the annual growth of debt financing by non-financial corporations in the recent past.

High preference of investors for short-term assets continued in the fourth quarter of 2002

For financial investment by non-financial sectors, financial accounts are only available up to the fourth quarter of 2002. In that quarter, the annual growth rate of financial investment declined somewhat to 4.6%, from 4.9% in the third quarter (see Table 5). In their financial investment, non-financial sectors generally continued to prefer short-term over long-term assets, and relatively safe over risky financial instruments. This mirrored the risk aversion of investors in view of the high volatility prevailing in the stock and bond markets in the euro area in the fourth quarter of 2002. The high risk

aversion may also reflect the substantial holding losses on financial investment since the first quarter of 2000 (see Chart 15). In fact, despite continued annual net financial investment of around 10% in relation to GDP, non-financial sectors' financial wealth at the end of 2002 stood at broadly the same level in relation to GDP as at the beginning of 1998.

In detail, the rise in the annual growth of short-term financial investment to 5.9% in the fourth quarter of 2002, from 5.6% in the previous quarter (see Chart 16), was due to both an increase in the annual growth of non-financial sector holdings of currency and deposits and to a further recovery of the annual growth of their investment in short-term debt securities. In addition, the annual growth of investment in money market fund shares remained at a high level. These developments support the assessment that M3 developments in late 2002 were to a large extent driven by portfolio shifts.

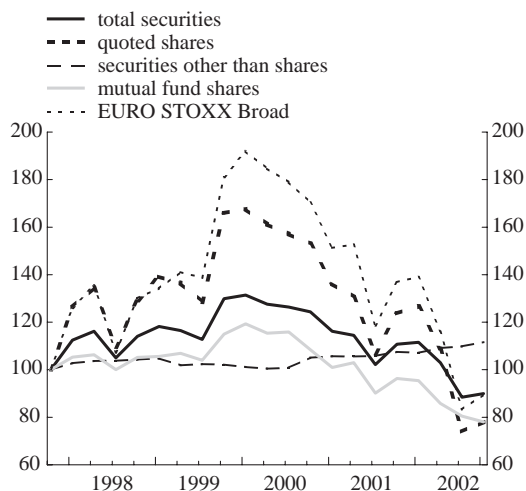
Table 5
Financial investment of euro area non-financial sectors

	Outstanding amount as a percentage of financial investment ¹⁾	Annual growth rates									
		2000 Q4	2001 Q1	2001 Q2	2001 Q3	2001 Q4	2002 Q1	2002 Q2	2002 Q3	2002 Q4	2003 Q1
Financial investment	100	6.3	8.0	7.7	7.0	5.6	4.9	4.7	4.9	4.6	.
<i>of which: short-term financial investment²⁾</i>	43.5	3.8	6.9	7.0	7.4	7.5	4.9	5.1	5.6	5.9	.
<i>of which: long-term financial investment³⁾</i>	55.5	7.7	8.6	8.1	7.0	4.9	4.9	4.7	4.5	3.8	.
Currency and deposits	38.3	3.2	5.7	6.5	6.5	6.6	4.8	4.9	4.9	5.3	.
Securities other than shares	14.1	9.1	15.2	12.1	8.9	7.6	5.2	4.8	5.1	4.7	.
<i>of which: short-term</i>	1.7	32.0	53.8	30.1	14.5	4.2	-5.4	-9.7	2.7	5.6	.
<i>of which: long-term</i>	12.4	6.3	10.3	9.8	8.1	8.1	7.0	6.9	5.4	4.6	.
Mutual fund shares	11.6	6.2	5.9	5.3	6.2	5.6	5.5	5.7	5.9	4.9	.
<i>of which: mutual fund shares, excluding money market fund shares</i>	9.5	7.0	6.1	4.8	5.0	3.7	3.3	3.9	4.2	3.6	.
<i>of which: money market fund shares</i>	2.1	0.0	4.0	9.5	16.9	21.3	20.9	18.0	16.4	13.1	.
Quoted shares	12.1	7.4	9.6	9.3	7.0	1.3	1.7	0.9	0.6	-0.3	.
Insurance technical reserves	23.9	8.7	7.7	7.6	7.3	7.2	7.4	7.1	7.1	6.8	.
M3 ⁴⁾		4.1	3.7	5.4	6.7	7.9	7.2	7.1	7.1	6.9	7.9

Source: ECB.

Note: For details, see footnote in Table 6.1 in the "Euro area statistics" section.

- 1) As at the end of the fourth quarter of 2002.
- 2) Short-term financial investment includes currency and deposits (excluding central government deposits), short-term debt securities and money market fund shares. Due to the exclusion of central government deposits, short-term and long-term financial investment do not add up to 100%. When interpreting these figures, it should be kept in mind that both short-term and long-term deposits are included in short-term investment as no maturity breakdown is available so far.
- 3) Long-term financial investment includes long-term debt securities, mutual fund shares excluding money market fund shares, quoted shares and insurance and pension products.
- 4) End of quarter. The monetary aggregate M3 includes monetary instruments held by euro area non-MFIs (i.e. the non-financial sector and non-monetary financial institutions) with euro area MFIs.

Chart 15**Gains and losses on holdings of securities by the non-financial sectors***(1997 Q4 = 100)**Source: ECB.*

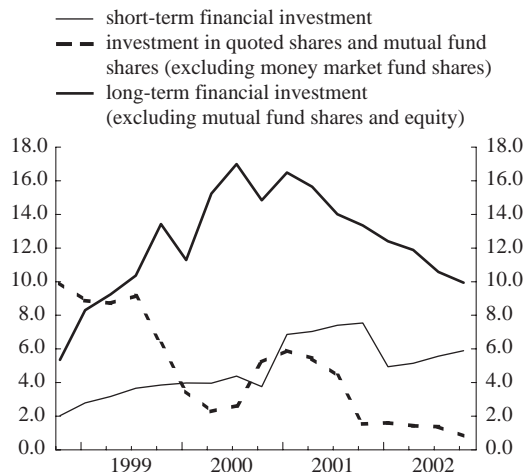
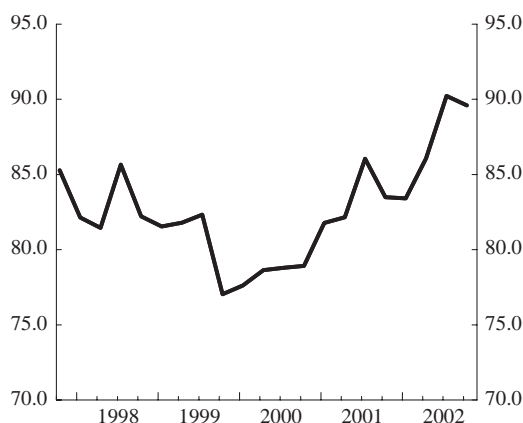
By contrast, the annual growth of long-term financial investment by the non-financial sectors declined further to 3.8% in the fourth quarter, from 4.5% in the third quarter. This was due to declines in all long-term financial investment categories. The fall in the annual growth of investment in long-term debt

securities to 4.6%, from 5.4% in the third quarter, probably reflected the considerable uncertainty in bond markets, as well as the relatively low level of long-term interest rates in the fourth quarter of 2002. The annual growth of investment in insurance and pension products also declined somewhat, but remained relatively sustained at around 7%. Investment in quoted shares by the non-financial sectors, by contrast, shrank in the fourth quarter.

Debt-to-financial asset ratio of the non-financial sectors broadly stabilised in the fourth quarter of 2002

The ratio of debt to financial assets of the non-financial sectors broadly stabilised in the fourth quarter of 2002 (see Chart 17). This followed a relatively long period in which the decline in the value of financial assets had caused this ratio to rise.

The level of the ratio of debt to financial assets at the end of 2002 was slightly higher than that at the end of 1997, but overall does not appear exceptional, despite its considerable rise over past quarters.

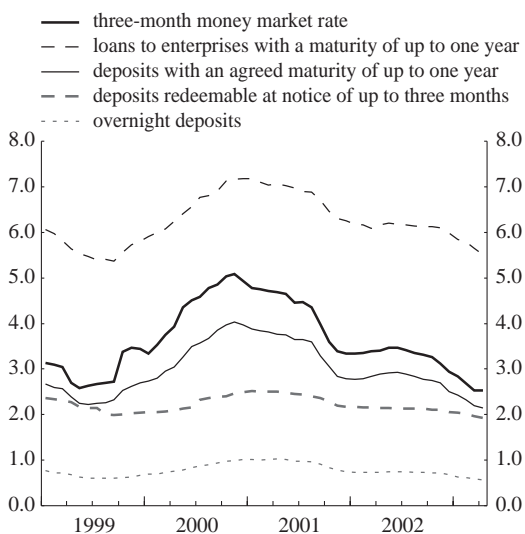
Chart 16**Short-term and long-term financial investment by the non-financial sectors***(annual percentage changes)**Source: ECB.**Note: For definitions, see Table 5.***Chart 17****Ratio of debt to financial assets of the non-financial sectors***(in percentages)**Source: ECB.*

Short-term retail bank interest rates fell slightly in April

Short-term retail bank interest rates declined slightly in April 2003, continuing the downward trend that started in May 2002. These declines ranged from around 5 to around 15 basis points. From May 2002 until April 2003 the average retail interest rate on deposits with an agreed maturity of up to one year declined by 80 basis points. Over the same period, the average retail interest rate on loans to enterprises with a maturity of up to one year fell by around 70 basis points, bringing it back to levels last seen in the second half of 1999 (see Chart 18). These decreases were broadly in line with the fall of around 75 basis points in money market rates over the same period. For other short-term interest rates, such as the rate on deposits redeemable at a period of notice of up to three months, however, the declines have been smaller. Reflecting the fact that this interest rate typically reacts in a more

Chart 18 Short-term retail bank interest rates and a comparable market rate

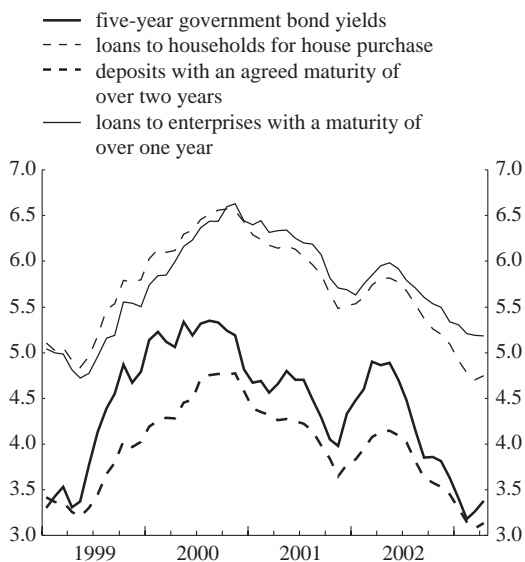
(percentages per annum; monthly averages)



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

Chart 19 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 January 2001, data include Greece.

sluggish fashion to market interest rate developments, it only declined by about 20 basis points between May 2002 and April 2003.

In an environment characterised by some wide swings in long-term bond yields between March and April 2003, long-term retail bank interest rates remained broadly unchanged in April, temporarily halting the downward trend seen since May 2002 (see Chart 19). In April 2003 mortgage rates for households and long-term lending rates for enterprises were still around 110 and 80 basis points lower respectively than in May 2002. These declines compare with a fall of 150 basis points in the average five-year government bond yield over that period. Recent developments indicate that from a long-term perspective, the pass-through from market rates to most short-term and long-term retail bank interest rates over recent months seems to be broadly in line with historical patterns.

Money market interest rates have declined over the past few months

After a temporary stabilisation in longer-term money market interest rates in March and the first half of April, these rates subsequently resumed the downward trend under way since mid-May 2002 (see Chart 20). This development reflected a downward adjustment of market participants' expectations with regard to future short-term interest rate movements. As shorter-term money market rates also fell substantially, the slope of the money market yield curve, as measured by the difference between the twelve-month and the one-month EURIBOR, has remained broadly unchanged and slightly negative.

In April and May, the overnight interest rate, as measured by the EONIA, fluctuated around a level slightly above the minimum bid rate of 2.50% in the Eurosystem's main refinancing operations, with a few short-lived exceptions, notably at the end of the reserve maintenance

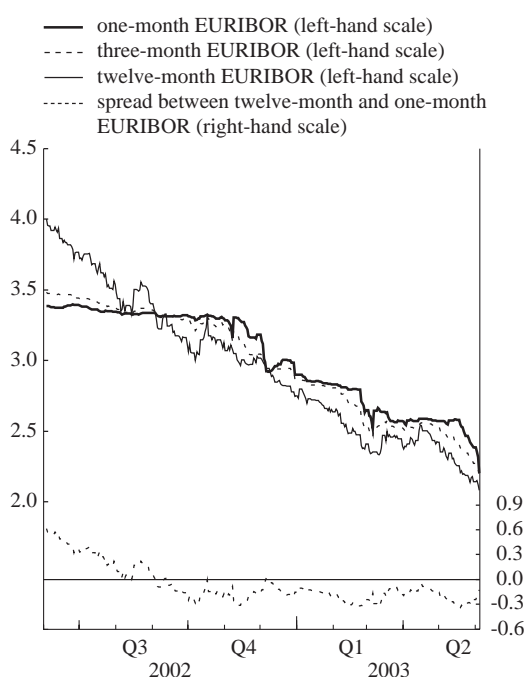
periods. The marginal and average rates of allotment in the Eurosystem's main refinancing operations were, on average, respectively 4 and 5 basis points above the minimum bid rate in May and early June (see Box 3). Due to significant recourse to the marginal lending facility shortly before the end of the reserve maintenance period on 23 May, a liquidity-absorbing fine-tuning operation was conducted by the ECB on that date in order to restore neutral liquidity conditions. In the Eurosystem's main refinancing operation settled on 4 June 2003, some underbidding of counterparties was recorded because the Governing Council's decision of 5 June to reduce the key ECB interest rates had been widely anticipated.

Between end-April and 4 June, the one-month and three-month EURIBOR decreased by 36 and 34 basis points respectively, to stand at 2.21% and 2.19% on the latter date. Developments in the three-month EURIBOR have, as usual, been reflected in the interest rates of allotment in the longer-term refinancing operations of the Eurosystem. In the operation settled on 29 May, the marginal and average rates of allotment were 2.25% and 2.27% respectively, around 25 basis points lower than the rates in the longer-term refinancing operation settled on 30 April.

As noted above, over the past few months interest rates at the longer end of the money market yield curve have declined. More recently, between end-April and 4 June, the six-month and twelve-month EURIBOR decreased by 32 and 34 basis points respectively, to stand at 2.14% and 2.08% on the latter date. On the same day, the slope of the money market yield curve, as measured by the difference between the twelve-month and the one-month EURIBOR, was -13 basis points, broadly unchanged from the end of April.

The expected path of the three-month EURIBOR, as implied in the futures prices on contracts with delivery dates in 2003 and early 2004, has moved downwards over the past few months, indicating that market

Chart 20
Short-term interest rates in the euro area and the slope of the money market yield curve
(percentages per annum; percentage points; daily data)



Source: Reuters.

Box 3**Monetary policy operations and liquidity conditions in the reserve maintenance period ending on 23 May 2003**

During the reserve maintenance period under review, the Eurosystem conducted five main refinancing operations (MROs), one longer-term refinancing operation (LTRO) and one fine-tuning operation.

Open market 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	Fixed rate
MRO	29/04/2003	14/05/2003	106.01	38.0	2.79	270	2.50	2.55	2.55	-
MRO	06/06/2003	21/05/2003	120.8	76.0	1.59	255	2.50	2.53	2.54	-
MRO	06/06/2003	14/05/2003	67.4	53.0	1.27	124	2.50	2.53	2.54	-
MRO	14/05/2003	28/05/2003	126.9	97.0	1.50	264	2.50	2.53	2.54	-
MRO	21/05/2003	04/06/2003	157.0	96.0	1.64	274	2.50	2.57	2.58	-
LTRO	29/04/2002	31/07/2002	35.1	15.0	2.34	164	-	2.50	2.51	-
Fine-tuning	23/05/2002	26/05/2002	3.9	3.9	1.00	12	-	-	-	2.50

Source: ECB.

In all the MROs, the spread between the marginal and the weighted average rate was either zero or one basis point. On 6 May, a split operation, consisting of two simultaneous MROs with one and two-week maturities, was carried out, with the aim of rebalancing the sizes of the two outstanding MROs. On 23 May 2003, a liquidity-absorbing fine-tuning operation was conducted in order to restore balanced liquidity conditions after large recourse to the marginal lending facility on the two preceding days. The fine-tuning operation was conducted as a collection of fixed-term deposits with a fixed interest rate of 2.50%, overnight maturity, and an allotment amount of €3.9 billion.

From the beginning of the reserve maintenance period until 19 May, the EONIA remained stable in a range of 2.54% to 2.56%, with the exception of Thursday, 30 April, when it increased to 2.64% due to the end-of-month effect. After the allotment of the last MRO of the reserve maintenance period on 20 May, the overnight

Contributions to the banking system's liquidity

(EUR billions)

Daily average during the reserve maintenance period from 24 April to 23 May 2003

	Liquidity providing	Liquidity absorbing	Net contribution
(a) Monetary policy operations of the Eurosystem	222.3	0.2	+222.1
Main refinancing operations	177.1	-	+177.1
Longer-term refinancing operations	45.0	-	+45.0
Standing facilities	0.4	0.2	+0.2
Other operations	-0.1	-	-0.1
(b) Other factors affecting the banking system's liquidity¹⁾	333.1	424.3	-91.2
Banknotes in circulation	-	366.2	-366.2
Government deposits with the Eurosystem	-	42.6	-42.6
Net foreign assets (including gold)	333.1	-	+333.1
Other factors (net)	-	15.5	-15.5
(c) Credit institutions' holdings on current accounts with the Eurosystem (a) + (b)			130.9
(d) Required reserves			130.3

Source: ECB.

Note: Totals may not add up due to rounding.

¹ The published estimates of the average liquidity needs stemming from autonomous factors ranged between €83.3 billion and €102.5 billion. The largest deviation between the published estimate and the actual figure could be observed in the first week of the maintenance period and amounted to €2.8 billion.

rate increased, as the market perceived the liquidity conditions to be tight, and the EONIA rose to 2.73% on 21 May. However, on the morning of 22 May, after a recourse of €9 billion to the marginal lending facility on the preceding day had been published by the ECB, the overnight rate fell, and the EONIA on that day was 2.57%. On 23 May, the last day of the maintenance period, the EONIA dropped further to 2.20%, as the market continued to perceive liquidity conditions to be ample after the fine-tuning operation. The reserve maintenance period ended smoothly with a small net recourse to the deposit facility of €0.6 billion.

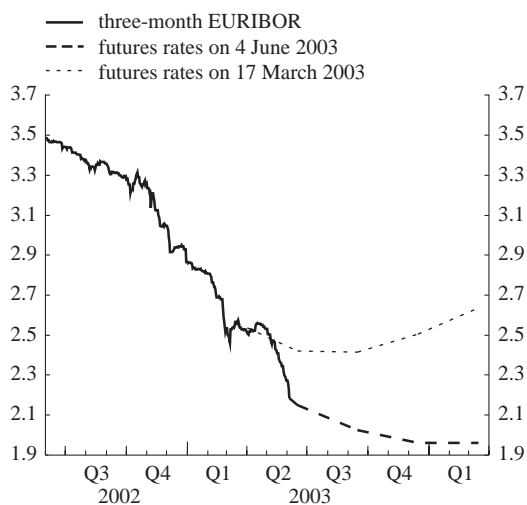
The average difference between current account holdings of credit institutions with the Eurosystem and minimum reserve requirements was €0.60 billion.

participants have adjusted their expectations with regard to future short-term interest rates downwards (see Chart 21). More recently, between end-April and 4 June, the implied futures rates on contracts with delivery dates in June, September and December 2003 and March 2004 decreased by between 19 and 35 basis points. On 4 June they stood at 2.15%, 2.03%, 1.96% and 1.96% respectively.

The volatility of the three-month EURIBOR implied in options on futures contracts maturing in September 2003, which reflects the uncertainty that market participants attach to the three-month EURIBOR for mid-September 2003, decreased in recent months,

Chart 21 Three-month interest rates and futures rates in the euro area

(percentages per annum; daily data)

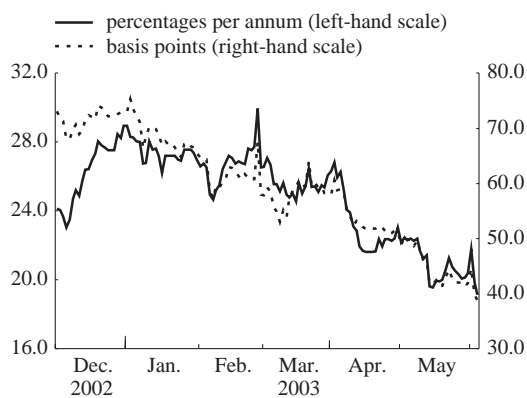


Source: Reuters.

Note: Three-month futures contracts for delivery at the end of the current and next three quarters as quoted on Liffe.

Chart 22 Implied volatilities from options on three-month EURIBOR futures maturing in September 2003

(percentages per annum; basis points; daily data)



Sources: Bloomberg and ECB calculations.

Note: The basis point measure is obtained as the product of implied volatility in percentages and the corresponding interest rate (see also the box entitled "Measures of implied volatility derived from options on short-term interest rate futures" on pages 13-16 of the May 2002 issue of the ECB's Monthly Bulletin).

reaching a relatively low level in May (see Chart 22).

Long-term government bond yields fell in May

Long-term bond yields in the euro area and the United States recently resumed their overall downward trend that generally prevailed throughout 2002 and early 2003. In May and early June long-term government bond yields in the euro area fell markedly in tandem with government bond yields in the United States after a sharp rebound in late March and a stabilisation in April. Between the end of April and 4 June, ten-year

government bond yields in the euro area and the United States declined by 40 and 60 basis points to 3.7% and 3.3% respectively, which are very low levels by historical standards (see Chart 23). Long-term bond yields on both sides of the Atlantic thus dropped below the previous troughs reached at around mid-March, when geopolitical uncertainties had peaked and war-related risks had depressed bond yields and stock prices simultaneously. Due to stronger declines in long-term interest rates in the United States, the negative differential between US and euro area ten-year government bond yields widened somewhat in May and stood at a level of -40 basis points on 4 June.

In the United States, government bond yields dropped sharply across the entire maturity spectrum in May. As a consequence, ten-year government bond yields reached levels not seen since the late 1950s. The gradual decline of bond yields in the course of May seemed to be triggered by the Federal Open Market Committee's statement on 6 May which led market participants to expect that the Federal

Reserve System would keep short-term interest rates at very low levels for longer than previously anticipated.

The decline in long-term bond yields seemed to mainly reflect market participants' gloomier perception of future economic activity rather than expectations of lower rates of inflation. This is suggested by the fact that the real yield on ten-year US government index-linked bonds declined by about 50 basis points between the end of April and 4 June, while the corresponding ten-year break-even inflation rate – which is measured as the yield differential between comparable nominal and index-linked government bonds – remained broadly stable over the same period. At a level of 1.5% on 4 June, the real yield on US government index-linked bonds was well below available survey-based measures of long-term real GDP growth expectations. This, in turn, might indicate that market participants' continued strong preference for safer assets such as government bonds remained an important factor in holding down nominal and real long-term bond yields in the United States.

Chart 23
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.

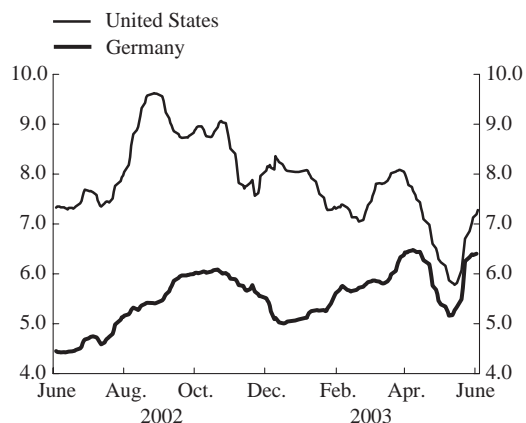
Possibly related to the low levels of bond yields, market participants became more uncertain about future bond yield movements in the United States. Such higher uncertainty among investors is suggested by the fact that the ten-day moving average of implied volatility on ten-year US Treasury futures contracts increased by 0.8 percentage point between the end of April and 4 June, to a level of 7.1%. The implied volatility was, however, still somewhat lower than average implied volatility over the past two years (see Chart 24).

In Japan, ten-year government bond yields declined further, falling by about 10 basis points between the end of April and 4 June, to a level of about 0.5% on the latter date. This brought the accumulated decline in ten-year government bonds yields since the end of 2002 to around 40 basis points. The new record low for ten-year Japanese government bond yields reached in May seemed to mainly

Chart 24

Implied volatility for futures contracts on the ten-year German Bund and the ten-year US Treasury note

(percentages per annum; ten-day moving average of daily data)



Source: Bloomberg.

Note: The implied volatility series represent the nearby implied volatility on the near-contract generic future, rolled over 20 days prior to expiry, as defined by Bloomberg. This means that 20 days prior to expiry of the contracts, a change in the choice of contracts used to obtain the implied volatility is made, from the contract closest to maturity to the next contract.

reflect market participants' more pessimistic views about the short-term and long-term prospects for the Japanese economy, including its persistent deflationary tendencies. The gloomier outlook for the Japanese economy, as perceived by market participants, probably reflected the recent appreciation of the Japanese yen vis-à-vis the US dollar as well as concerns over the SARS epidemic and its potential impact on Asian economies.

In the euro area, government bond yields fell strongly across the entire maturity spectrum in May, closely following bond yield movements in the US market. While movements in euro area bond yields over the first three months of 2003 were dominated by market participants' reactions to changes in the geopolitical environment (including, in particular, developments in Iraq), the most recent developments in the euro area bond market seemed to be mainly driven by investors' concerns about the conjunctural situation in the euro area and the world economy.

Apparently, emerging fears among market participants of protracted economic weakness in the US economy in particular and the world economy in general spilled over to some extent to the euro area bond market and contributed to the strong decline in euro area ten-year government bond yields in May. Market concerns about growth prospects in the euro area may have been reinforced by mixed economic data releases in the euro area and the continued appreciation of the euro, in particular vis-à-vis the US dollar. The pessimistic mood in the bond market is also indicated by the fact that the real yield on ten-year French index-linked bonds (linked to the euro area HICP excluding tobacco) declined by around 30 basis points between the end of April and 4 June, to a level of 1.9%, which is quite low by historical standards (see Chart 25).

At the same time, market participants seemed to have adjusted their average long-term inflation expectations for the euro area downwards slightly, as indicated by a 10 basis point decline in the ten-year break-even inflation rate derived from the difference

Chart 25

Euro area real bond yield and break-even inflation rate

(percentages per annum; daily data)



Source: Reuters.

Note: Real bond yields are derived from the market prices of French government bonds which are indexed to the euro area HICP (excluding tobacco prices) and which mature in 2012. The method used to compute the break-even inflation rate was outlined on page 16 of the February 2002 issue of the Monthly Bulletin.

between ten-year nominal bond yields and ten-year index-linked bond yields (indexed on the euro area HICP excluding tobacco), between end-April and 4 June (see Chart 25).

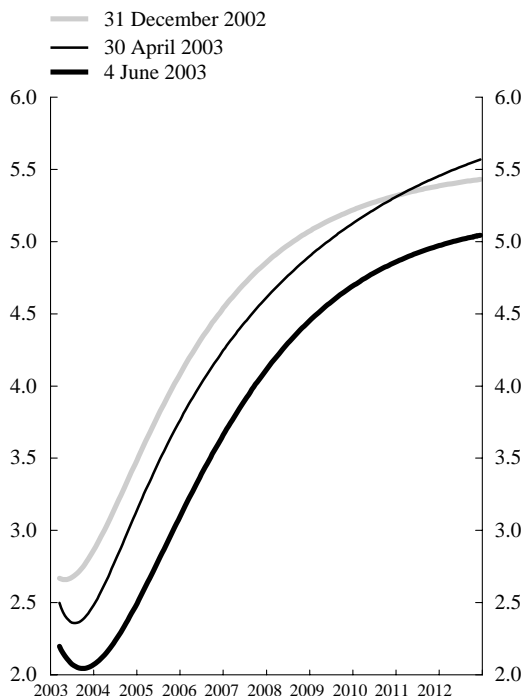
Based on information extracted from the euro area yield curve, the general decline in bond yields seemed to mainly reflect emerging expectations among market participants that short-term interest rates in the euro area would stay at lower levels for longer than had been anticipated at the end of April. This was indicated by the marked downward shift of the entire implied forward overnight interest rate curve in the euro area (see Chart 26).

Similar to developments in the US market, the degree of uncertainty prevailing in the euro area bond market, as measured by the

implied volatility of options on futures contracts on German long-term government bonds, increased quite markedly in May. Notably, the ten-day moving average of implied volatility increased by 0.9 percentage point between end-April and 4 June, to a level of 6.4%, which was quite high by historical standards.

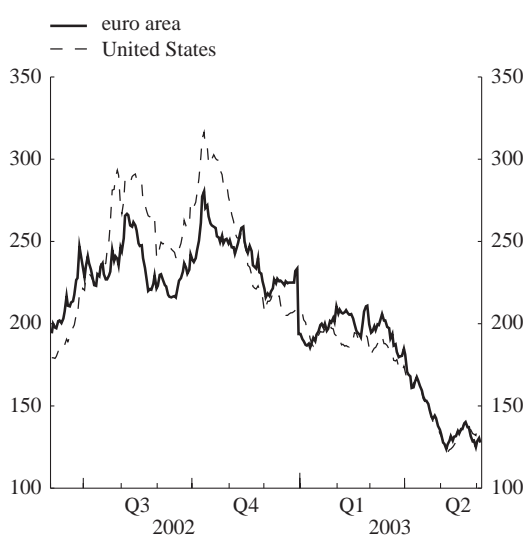
Following developments in the market for government bonds, long-term corporate bond yields also declined strongly in May, continuing a trend that started in the autumn of 2002. For example, the yields on bonds issued by BBB-rated corporations decreased by 50 basis points between the end of April and 4 June, while the decline compared with levels at the end of 2002 amounted to 120 basis points. The relative cost of corporate bond financing, as measured by the differential vis-à-vis comparable government bond yields, stabilised in the course of May, following substantial declines since the autumn of 2002, most notably in the segments with lower bond ratings (see Chart 27). The differential between the yields on bonds

Chart 26
Implied forward euro area overnight interest rates
(percentages per annum; daily data)



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

Chart 27
Corporate bond spreads in the euro area and the United States
(in basis points; daily data; BBB rating)



Sources: Bloomberg and ECB calculations.
 Note: Corporate bond spreads are calculated as the difference between seven to ten-year corporate bond yields and seven to ten-year government bond yields.

issued by BBB-rated corporations and government bond yields in the euro area was about 70 basis points lower on 4 June 2003 than at the end of 2002. The current level of about 130 basis points of the spread of BBB-rated corporate bonds over government bonds was last seen in May 2000. Hence, the corporate bond market in the euro area seems to be providing quite favourable financing conditions for domestic corporations. (See also Box 2 “The impact of financial factors on corporate investment in the euro area”.)

Stock markets in May largely continued the upward trend seen in recent months

The fading of uncertainty after the end of the war in Iraq helped sustain a rebound in the euro area and US stock price indices, which have increased by more than 20% since mid-March, bringing them back to broadly the levels prevailing in late 2002. By 4 June, most of the losses observed in the first quarter of 2003 had thus more or less been recouped. After the strong rallies in late March and April, stock markets seemed to stabilise somewhat in May and to enter a period of normalisation, which was also reflected in a marked decline in implied volatility to levels far below those seen earlier in the year. Moreover, generally better-than-expected corporate earnings announcements for the first quarter of 2003 seemed to add to the strong performance of stock markets observed since late March. In addition, the strong decline in bond yields in May may have been a supporting factor behind the recent weeks’ rise in stock prices.

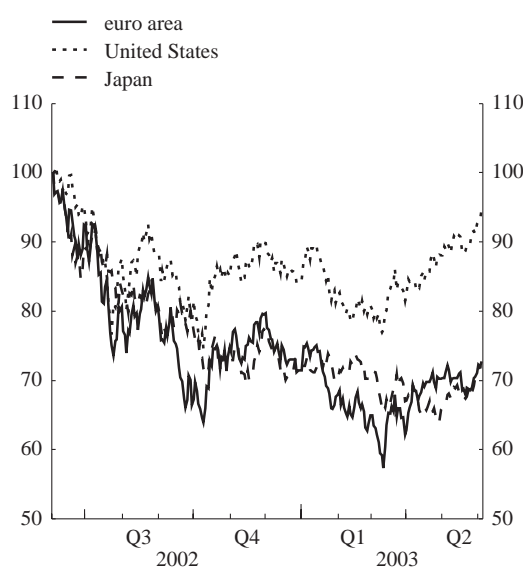
All in all, between the end of April and 4 June, stock prices in the euro area, as measured by the broad Dow Jones EURO STOXX index, increased by 4%. Stock prices in the United States, as measured by the Standard & Poor’s 500 index, rose by 8% and the Japanese Nikkei 225 index increased by 10% over the same period. Taking a longer perspective, by 4 June, stock prices in the euro area were up slightly by 2% compared with end-2002. In the same period, US stock

prices were up by 12% and Japanese stock prices were largely unchanged.

In the United States, following the strong rallies in late-March and April, stock market prices continued to increase in May, although at a more modest pace. This development was mainly attributable to the disappearance of the “war risk premium” associated with the end of military operations in Iraq and to the fact that corporate earnings announcements for the first quarter of 2003 exceeded analysts’ expectations. The end of the war reduced uncertainty, as measured by the implied volatility derived from options on the Standard & Poor’s 500 index, which had been very high in the first three months of the year. Thus, by 4 June, the ten-day moving average of implied volatility stood at 19%, significantly lower than the high of around 30% in mid-March and 6 percentage points lower than its average for the past two years.

In recent months US stock markets seemed to have been driven primarily by market fundamentals, such as corporate profit

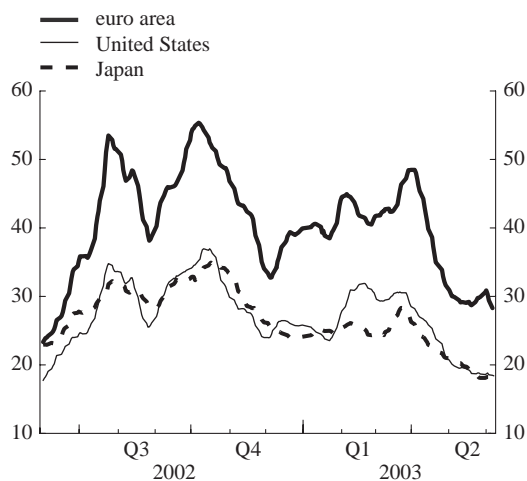
Chart 28
Stock price indices in the euro area, the United States and Japan
(index: 1 June 2002 = 100; daily data)



Source: Reuters.
 Notes: Dow Jones EURO STOXX broad (stock price) index for the euro area, Standard & Poor’s 500 for the United States and Nikkei 225 for Japan.

Chart 29
Implied stock market volatility in the euro area, United States and Japan

(percentages per annum; ten-day moving average of 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.

developments and the economic outlook. With regard to the former, private data sources (i.e. Thomson First Call, in which 94% of all S&P 500 companies are represented) reported that quarter-on-quarter corporate earnings growth stood at around 12% in the first quarter. As regards macroeconomic developments, recent data releases continued to be seen as rather mixed. By the end of May, the US Congress had passed an economic stimulus package, including a reduction of the dividend and capital gains taxation rates, which may have further spurred the upward movement in stock prices. The increase in US stock prices over recent months was particularly pronounced for technology-based corporations. By 4 June, the Nasdaq Composite index had risen by 12% since the end of April and by 22% since the beginning of the year.

In Japan, stock prices have followed a different pattern from the other major stock markets in recent months. General economic developments had a mixed impact on stock

prices, while the stock prices of Japanese exporters have been adversely affected by the strengthening of the Japanese yen vis-à-vis the US dollar since the beginning of the year. During the last two weeks of May, however, Japanese stock markets rebounded strongly against the background of sound corporate earnings reports and possible spillover effects from the US stock market. By contrast, the economic outlook remained subdued, and concerns about the impact of the SARS epidemic continued to linger. Uncertainty in the Japanese stock market, as measured by the ten-day moving average of implied volatility extracted from options on the Nikkei 225 index, has been subdued throughout the first months of 2003 and stood at around 18% by early June, its lowest level during the past two years.

In the euro area, stock price developments in recent months continued to be highly correlated with movements in US stock markets. However, both in May and overall in 2003, stock prices in the euro area underperformed those of the United States. Notably, the appreciation of the euro, which might squeeze the profits of euro area exporters, may have caused market participants to post a less positive bias on euro area stocks. Furthermore, recent macroeconomic data releases were perceived by market participants to be mixed. As in the United States, uncertainty in the euro area (as measured by the ten-day moving average of the implied stock market volatility extracted from options on the Dow Jones EURO STOXX 50 index) continued the decline that began in mid-March. Thus, by 4 June 2003, implied volatility stood at 28%, which was much lower than the 50% level of February/March and some 5 percentage points below its two-year average.

Euro area stock market developments in May were somewhat diverse across the economic sectors (see Table 6). On the positive side, stock prices of energy corporations showed a strong rise following first-quarter corporate earnings statements that were positively affected by surging oil prices. On the negative

Table 6**Price changes and historical volatility in the Dow Jones EURO STOXX economic sector indices***(price changes as percentages of end-of-period prices; historical volatility as percentages per annum)*

	Basic materials	Consumer cyclical	Consumer non-cyclical	Energy	Financial	Healthcare	Industrial	Technology	Telecommunications	Utility	EURO STOXX
Share of sector in market capitalisation <i>(end-of-period data)</i>	4.8	11.9	7.6	12.1	27.9	4.5	5.9	9.4	9.5	6.4	100.0
Price changes <i>(end-of-period data)</i>											
2002 Q1	8.5	2.1	1.6	10.4	4.1	-10.1	7.8	-3.2	-10.0	-0.4	1.6
2002 Q2	-6.4	-17.1	-7.6	-8.5	-13.8	-14.4	-11.4	-36.3	-33.9	-7.8	-16.5
2002 Q3	-28.8	-29.3	-18.0	-21.0	-36.7	-22.7	-27.8	-35.6	-11.7	-23.8	-28.2
2002 Q4	4.0	2.9	-1.2	3.8	13.6	-0.9	0.8	21.4	21.8	-3.4	7.6
2003 Q1	-19.6	-15.8	-16.0	-12.9	-14.9	-16.4	-9.0	-9.4	-4.1	-7.8	-11.8
April	16.2	13.8	8.1	0.7	18.9	12.0	10.8	19.3	12.4	11.5	13.0
May	-3.7	0.7	-2.2	5.4	0.3	2.9	1.5	0.2	2.0	3.3	1.1
End-March to 4 June 2003	15.7	16.5	7.2	10.3	22.9	19.1	14.2	22.4	15.5	17.0	17.0
Volatilities <i>(period averages)</i>											
2002 Q1	13.0	20.7	10.3	18.3	18.8	20.2	14.1	38.7	26.7	12.8	17.6
2002 Q2	16.4	24.9	14.5	23.6	22.2	27.5	14.5	44.3	36.3	17.2	20.9
2002 Q3	38.4	46.0	32.2	46.5	51.2	49.5	28.0	59.7	48.0	39.7	43.4
2002 Q4	34.2	40.7	20.8	31.1	44.3	30.6	28.8	61.1	35.7	29.8	34.9
2003 Q1	37.2	37.8	29.3	32.1	40.3	36.5	25.6	44.9	35.0	33.3	33.8
April	31.8	38.5	23.1	27.7	27.4	26.9	18.8	41.4	26.5	27.3	26.2
May	23.8	23.5	12.9	18.2	26.1	21.9	17.8	32.2	21.2	17.4	20.5
End-March to 4 June 2003	27.6	30.7	18.2	22.8	26.7	23.9	18.2	36.5	23.5	22.2	23.2

*Sources: STOXX and ECB calculations.**Notes: Historical volatilities are calculated as the annualised standard deviation of daily index level changes over the period. Sector indices are shown in the "Euro area statistics" section of this issue of the Monthly Bulletin.*

side, stock price developments were more subdued in the financial corporations sector, since these corporations posted mixed first-quarter results, and in the technology and basic material sectors, which were among

those most affected by the euro's appreciation. Overall, for the year to date, the stock prices of telecommunications corporations have fared best in the euro area.

2 Price developments

HICP inflation is estimated to have declined further in May 2003

According to Eurostat's flash estimate, euro area HICP inflation declined further in May 2003, to 1.9% from 2.1% in April (see Table 7). Although no detailed breakdown is available for this estimate, the decline is most likely due to lower energy price inflation and to a decrease in services price inflation, after the temporary hike in April.

Euro area HICP inflation fell to 2.1% in April 2003, from 2.4% in March. This fall was the result of a strong decline in the year-on-year rate of change in energy prices. The annual rate of change in the HICP excluding unprocessed food and energy increased by 0.2 percentage point in April, to 2.2%, mainly

reflecting an increase in services price inflation which should prove to be transitory.

The year-on-year rate of change in energy prices fell sharply to 2.2% in April, from 7.5% in March (see Chart 30). This decline is due to the downward trend in oil prices since mid-March, combined with a favourable base effect. In April, as a result of an unfavourable base effect in vegetable prices, unprocessed food prices rose by 1.0% year-on-year, compared with 0.8% the previous month.

The increase in the annual rate of change in the HICP excluding unprocessed food and energy prices went against the general downward movement observed since mid-2002. This upturn was mainly a result of an increase in services price inflation, which rose

Table 7
Price and cost developments in the euro area

(annual percentage changes, unless otherwise indicated)

	2000	2001	2002	2002	2002	2002	2003	2002	2003	2003	2003	2003	2003	2003
				Q2	Q3	Q4	Q1	Dec.	Jan.	Feb.	Mar.	Apr.	May	
Harmonised Index of Consumer Prices (HICP) and its components														
Overall index ¹⁾	2.1	2.3	2.3	2.1	2.1	2.3	2.3	2.3	2.1	2.4	2.4	2.1	1.9	
<i>of which:</i>														
Goods	2.5	2.3	1.7	1.4	1.3	1.8	2.0	1.9	1.6	2.1	2.2	1.5	.	
Food	1.4	4.5	3.1	2.9	2.3	2.3	2.0	2.2	1.5	2.1	2.3	2.4	.	
Processed food	1.2	2.9	3.1	3.2	2.9	2.7	3.2	2.7	2.9	3.3	3.3	3.4	.	
Unprocessed food	1.8	7.0	3.1	2.5	1.4	1.7	0.2	1.3	-0.6	0.3	0.8	1.0	.	
Industrial goods	3.0	1.2	1.0	0.7	0.8	1.6	2.0	1.7	1.7	2.2	2.2	1.1	.	
Non-energy industrial goods	0.5	0.9	1.5	1.6	1.3	1.2	0.7	1.2	0.6	0.7	0.8	0.8	.	
Energy	13.0	2.2	-0.6	-2.3	-0.7	2.9	7.0	3.8	6.0	7.7	7.5	2.2	.	
Services	1.5	2.5	3.1	3.1	3.3	3.1	2.7	3.0	2.8	2.7	2.6	2.9	.	
Other price and cost indicators														
Industrial producer prices	5.3	2.1	0.0	-0.7	0.0	1.2	2.4	1.6	2.2	2.6	2.4	1.7	.	
Unit labour costs	1.3	2.7	2.1	2.1	1.8	1.3	.	-	-	-	-	-	-	
Labour productivity	1.3	0.1	0.4	0.3	0.6	1.0	.	-	-	-	-	-	-	
Compensation per employee	2.6	2.8	2.5	2.4	2.4	2.3	.	-	-	-	-	-	-	
Total hourly labour costs	3.2	3.4	3.5	3.3	3.4	3.5	.	-	-	-	-	-	-	
Oil prices (EUR per barrel)	31.0	27.8	26.5	27.8	27.2	26.5	28.4	27.1	28.3	29.8	27.2	22.9	21.9	
Commodity prices (EUR)	16.7	-7.6	-1.7	-5.5	-1.6	4.4	-4.2	2.1	-1.5	-3.7	-7.2	-6.7	-8.7	

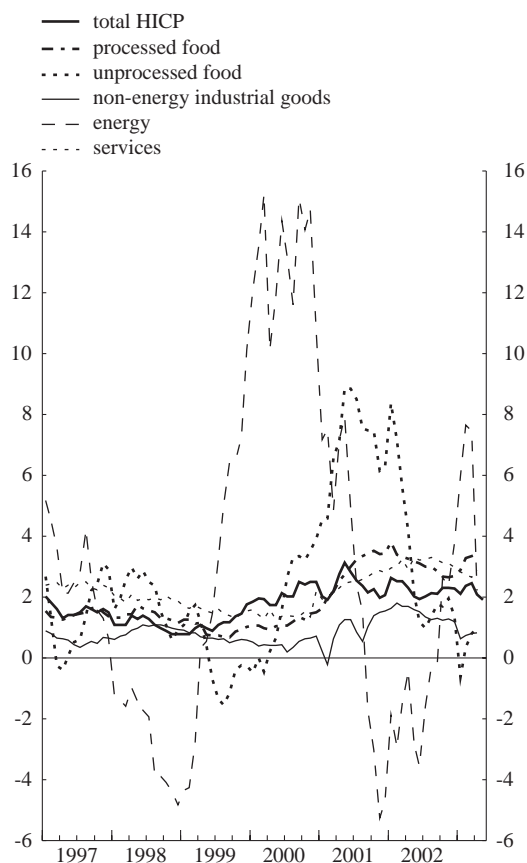
Sources: Eurostat, national data, Thomson Financial Datastream, HWWA (Hamburg Institute of International Economics) and ECB calculations.

Note: For periods prior to 2001, HICP data do not include Greece. The other price and cost indicators include Greece for periods prior to 2001. For further details on the data, see the "Euro area statistics" section.

1) HICP inflation in May 2003 refers to Eurostat's flash estimate.

Chart 30
Breakdown of HICP inflation in the euro area by component

(annual percentage changes; monthly data)



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

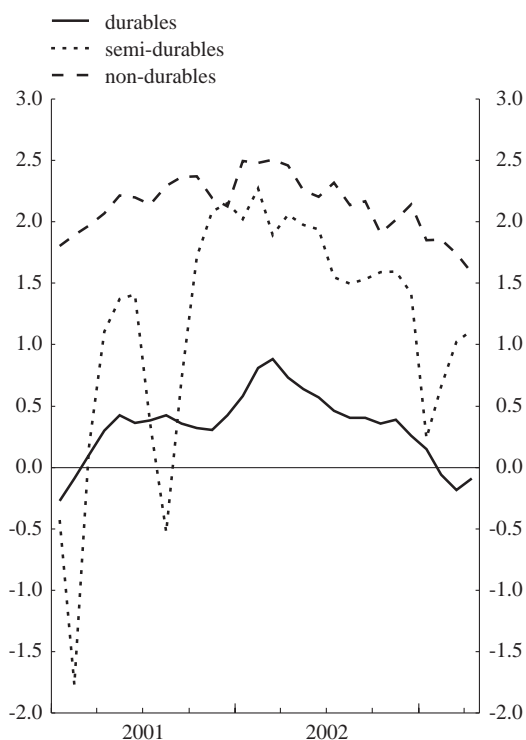
to 2.9% in April from 2.6% in March, the first increase in this component since August 2002. Package holiday prices and – to a lesser extent – travel prices were the main reasons behind this increase, owing to the lateness of the Easter holidays this year. Therefore, the April increase does not necessarily signal an end to the declining rates of services price inflation. In particular, the decline in oil prices and the appreciation of the euro are expected to have a benign effect on services price inflation, mainly through their effect on transport services.

With regard to the other components, the year-on-year rate of change in processed food prices increased slightly to 3.4% in April, from 3.3% the previous month, mainly as a result of an increase in the year-on-year rate of

change in tobacco prices. Finally, the inflation rate of non-energy industrial goods prices remained unchanged in April at 0.8%, although this conceals offsetting effects in some sub-items. From a longer-term perspective, however, the annual rate of change in non-energy industrial goods prices has been declining since early 2002, reflecting mainly the unwinding of indirect effects of earlier import price increases and the downward impetus caused by the euro appreciation. The downward movement was broadly based, as shown by the breakdown of this component into durable, semi-durable and non-durable consumer goods prices (see Chart 31). The appreciation of the euro is expected to put further downward pressure on this component in the near future. It should be recalled that the strong decline in the annual rate of change in non-energy industrial goods prices from December 2002 to January 2003

Chart 31
Developments in prices of non-energy industrial goods in the euro area

(annual percentage changes; monthly data)



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

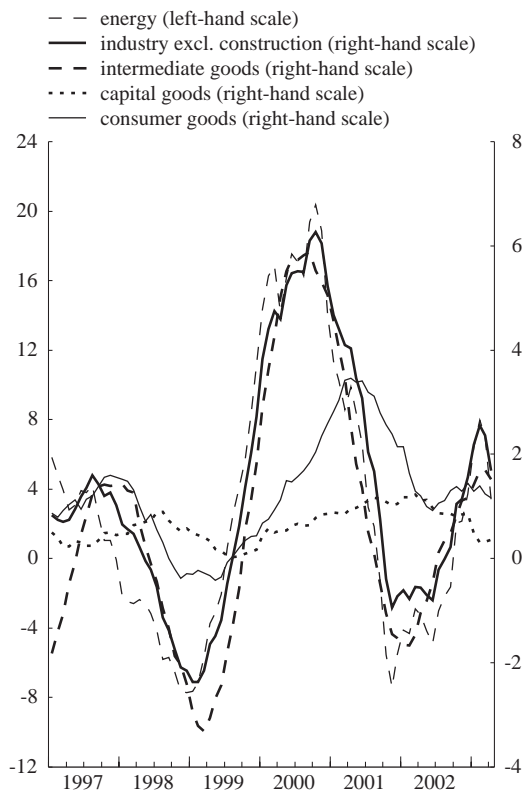
was closely related to the subdued domestic demand, which led to aggressive price cutting during the winter sales season. As a result, greater reductions were offered on clothing prices at the beginning of 2003 than in previous years.

Annual rate of change in industrial producer prices declined further in April

The annual rate of increase in euro area industrial producer prices declined to 1.7% in April, from 2.4% in March (see Chart 32). This development resulted mainly from a lower rate of increase in energy prices (3.4% in April, after 7.0% in March), owing to the decline in oil prices observed from mid-March onwards. The year-on-year rate of change in

Chart 32 Breakdown of industrial producer prices for the euro area

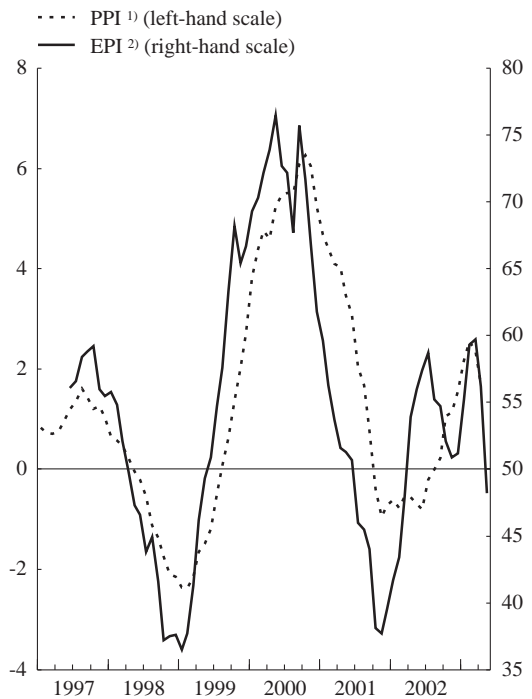
(annual percentage changes; monthly data)



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

Chart 33 Overall producer prices and manufacturing input prices for the euro area

(monthly data)



Sources: Eurostat and Reuters.

- 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. For periods prior to 2001, EPI data do not include Greece.

producer prices excluding energy fell only marginally (by 0.1 percentage point) to 1.1%, owing to a small decline in intermediate goods price inflation.

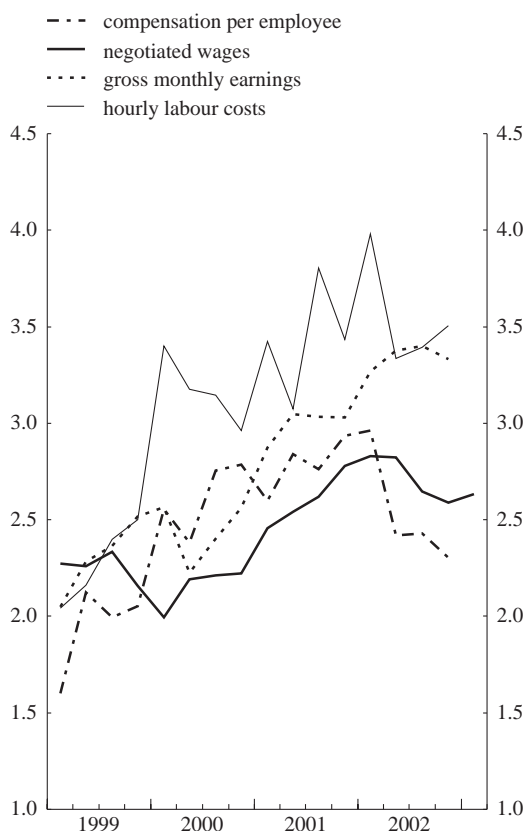
Looking ahead, survey indicators point to a further decline in the annual rate of increase in producer prices. The Eurozone Price Index (EPI) from the Purchasing Managers' Survey fell to 48.2 in May from 56.2 in April, pointing to the first decline since March 2002 (see Chart 33). Falling raw material prices in manufacturing owing to weak demand, and lower oil and import prices due to the euro appreciation seem to be the main factors behind this development.

Annual growth in compensation per employee slightly declined in the fourth quarter of 2002

Most indicators of labour cost growth showed signs of stabilisation in the course of 2002 (see Box 4 on developments in euro area labour cost indicators in the period 1999-2002 for a more detailed description of these indicators). With the third release of national accounts data for the fourth quarter of 2002, the annual rate of change in compensation per employee is now estimated to have decreased slightly to 2.3% in the last quarter of 2002, down from 2.4% in the third quarter (see Chart 34). Newly released sectoral data on compensation per employee for the fourth quarter of 2002 show that the downward movement was broadly based across sectors (see Chart 35). Over 2002 as

Chart 34 Selected labour cost indicators for the euro area

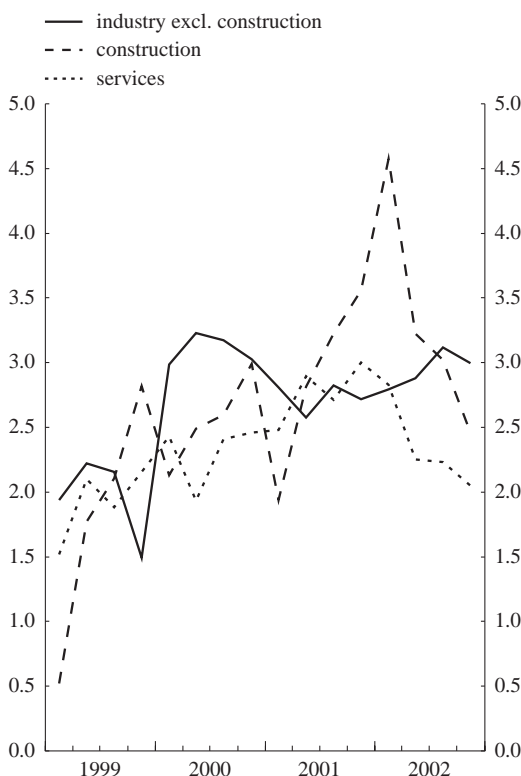
(annual percentage changes)



Sources: Eurostat, national data and ECB calculations.

Chart 35 Sectoral compensation per employee in the euro area

(annual percentage changes; quarterly data)



Sources: Eurostat and ECB calculations.

a whole, compensation of employees in the agriculture, industry excluding construction, and construction sectors grew by 3.3%, 3.0% and 3.3% respectively. The annual growth rates in the services sectors were significantly lower (2.2%-2.4%), resulting in an annual growth rate for overall compensation of employees of 2.5% in 2002, down from 2.8% in 2001.

The annual rate of change in total hourly labour costs in the non-agricultural business sector continued to increase slightly in the fourth quarter to 3.5%, following the strong decline observed at the beginning of 2002. By contrast, but more in line with the latest indications on compensation per employee, the annual growth rate of gross monthly earnings showed a slight decline in the fourth quarter. Negotiated wage growth remained broadly unchanged in the fourth quarter of

2002 and the first quarter of 2003, following a decline in the third quarter.

Labour productivity growth recovered in 2002, mainly driven by the sector industry excluding construction, which has a stronger exposure to cyclical movements (see also Section 3). As a result of this recovery whole economy unit labour cost growth fell from 1.8% year on year in the third quarter to 1.3% in the fourth. For 2002 as a whole, unit labour cost growth declined to 2.1%, from 2.7% in 2001. The decline was broadly based across sectors, except for the finance and business services sector, for which unit labour cost growth was slightly higher in 2002 than in 2001.

Euro area inflation is expected to ease further ahead

Following the estimate for inflation in May of 1.9%, inflation rates in the short term are likely to hover around this level. In 2004, inflation rates are expected to fall significantly, due to favourable import price trends, reflecting both oil price developments and the higher euro exchange rate, as well as lower domestic price pressure in the context of a moderate economic recovery. This outlook also presupposes that wage moderation will prevail in 2004. Coupled with productivity gains, this should therefore result in a moderation of unit labour cost growth. For further details, see Section 5 (Eurosystem Staff macroeconomic projections for the euro area) of this Monthly Bulletin.

Box 4

A comparison of the available labour cost indicators in the euro area: conceptual differences and their behaviour in the period 1999-2002

This box discusses some of the key characteristics of the available labour cost indicators for the euro area. In so doing, it attempts to provide a thorough assessment of the way in which these indicators have developed, in particular in the period 1999-2002.

Available nominal labour cost indicators for the euro area

As part of the regular monitoring of indicators of (future) inflationary pressures, the ECB Monthly Bulletin reports on recent developments in the four available indicators of nominal labour costs in the euro area: compensation per employee, gross monthly earnings, the index of negotiated wages compiled by the ECB, and hourly labour costs. These indicators provide a measure of the growth in nominal labour costs. It is important to bear in mind that while the first three indicators refer to the cost of labour measured by person employed, the latter refers to the labour cost measured per hour worked. In addition, another widely-used indicator is unit labour costs, which are calculated as the ratio of compensation per employee to labour productivity (i.e. output per employed person), thus providing a measure of the labour cost of producing a standard unit of product. However, this indicator is not considered here. An overview of the main characteristics of the current set of euro area nominal labour cost indicators is presented in Table A below.

As described in Table A, the available indicators differ in terms of sectoral coverage and in the concept of labour costs that they measure. It is important to be aware of these differences in definition and coverage among labour cost indicators because they can help identify the causes behind divergent developments.

The chart below summarises the key conceptual differences among the four labour cost indicators. The difference between growth rates in compensation per employee and gross monthly earnings may reflect changes in employers' social security contributions. In addition, the difference between compensation per employee and hourly labour cost growth may reflect changes in the number of hours worked.

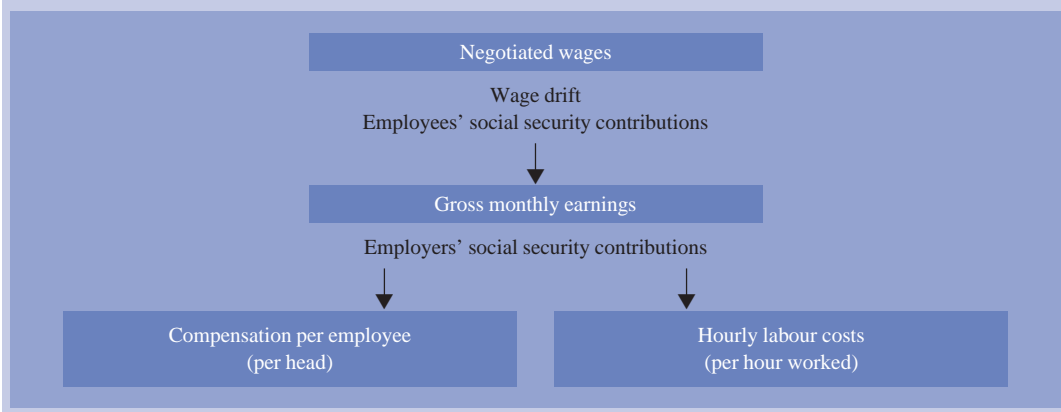
Table A: Euro area labour cost indicators

	Conceptual definition and availability	Coverage
Compensation per employee <i>(ECB calculations on the basis of Eurostat national accounts)</i>	Total compensation ¹⁾ divided by the total number of employees. Includes employees' direct earnings (wages, salaries and bonuses of any kind) and all indirect compensation (employers' social security contributions). Currently available around 100 days after the reference quarter. However, improvements in timeliness are planned, eventually reducing the lag to around 70 days.	Covers all sectors of the economy as well as all euro area countries (quarterly estimates used for missing countries).
Gross monthly earnings <i>(Eurostat)</i>	Total earnings divided by all employees. Earnings includes all payments made to the employee (wages, salaries and bonuses of any kind), but not employers' social security contributions. Available around 80 days after the reference quarter.	Mainly covers the non-agricultural business sector (i.e. the public sector is not covered) and all countries except Greece and Portugal. There are, however, differences in sector coverage between countries.
Index of negotiated wages <i>(ECB calculations)</i>	Refers to collectively agreed wage increases (i.e. excluding wage drift). Suffers from lack of harmonisation in terms of coverage and definition ²⁾ (bonuses not always included), but is both available at monthly frequency and very timely. Available around 70 days after the reference quarter.	Constructed by the ECB as a (weighted) average of national indices. Mainly covers the non-agricultural business sector (although the public sector is covered in some countries).
Hourly labour costs (Labour cost index) <i>(Eurostat)</i>	Total labour costs (i.e. total compensation) for all employees divided by all hours worked by these employees (including overtime). Currently suffers from a lack of harmonisation and some statistical problems, but should be improved significantly by the gradual implementation of Regulation EC No. 450/2003 of 27 February 2003. Available around 80 days after the reference quarter.	Primarily covers the non-agricultural business sector and all countries except Greece (although there are differences in sector coverage between countries).

1) Total compensation is defined as the total remuneration, in cash or in kind, payable by an employer to an employee in return for work done by the latter during the accounting period. It is based on harmonised national accounts data, which are supposed to correct the results of the quarterly national wage surveys for several effects (black economy, small firms not included in the survey sample, etc.) using various administrative sources and estimates. However, as some information is only available on an annual basis, the quarterly series are often revised with the release of the annual national accounts.

2) While for some countries data refer to the stock of all contracts already signed and in place in the reference period, for others they only refer to the flow of new contracts signed in the period. Moreover, sector coverage and the treatment of bonuses differs across countries. Ireland, Greece, Luxembourg and Finland are not covered, and for France gross monthly earnings are used as a proxy. For further details, see Box 5 entitled "Monitoring wage developments: an indicator of negotiated wages" in the September 2002 issue of the ECB's Monthly Bulletin.

Theoretical linkages among labour cost indicators



In relation to sectoral coverage, for example, compensation per employee refers to developments in all sectors of the economy, whereas hourly labour costs, gross monthly earnings and negotiated wages currently cover, *in principle*, only the non-agricultural business sector (about 65% of total employees), although the precise coverage differs from country to country. This implies that public and public-related services (such as public administration, education and health) as well as agriculture are generally excluded from the latter three indicators.

Developments in labour cost indicators in the period 1999-2002

In the period 1999-2002 all four indicators moved reasonably close to one another in terms of their average growth, but there is a noticeable difference between growth in negotiated wages and compensation per employee on the one hand and gross monthly earnings and hourly labour costs on the other. Compensation per employee increased by 2.5% per year on average in this period, very much in line with the average increase in negotiated wages, at 2.4% (see Table B). However, in the same period the average rate of increase of the other two indicators, namely gross monthly earnings, at 2.8%, and hourly labour costs, at 3.1%, was higher. These divergences became more pronounced in 2002. While developments in negotiated wages and compensation per employee remained roughly in line (averaging 2.7% and 2.5% respectively), the rate of growth of gross monthly earnings and hourly labour costs was, respectively, 0.8 and 1.0 percentage point higher than that of compensation per employee.

Table B: Annual average growth rate in nominal labour cost indicators

(in percentages)

	1999	2000	2001	2002	Average 1999-2002
Negotiated wages	2.2	2.2	2.6	2.7	2.4
Gross monthly earnings	2.3	2.4	3.0	3.3	2.8
Compensation per employee	1.9	2.6	2.8	2.5	2.5
Hourly labour costs	2.3	3.2	3.4	3.5	3.1
<i>memo item:</i>					
HICP inflation	1.1	2.1	2.3	2.3	2.0

Accounting for the differences in labour cost indicators

These differences may in principle reflect either the differences in sectoral coverage or the conceptual differences discussed above, i.e. changes in employers' social security contributions, changes in hours worked and developments in the wage drift.

First, with regard to the sectoral coverage of the indicators, agricultural and non-market-related sectors are excluded from the calculation of gross monthly earnings. From compensation of employees data available from Eurostat, a breakdown of compensation per employee by main activity sector can now be computed.¹ These data suggest that the exclusion of these sectors from gross monthly earnings cannot explain the higher growth rates in this indicator as compared with compensation per employee, other things being equal, as wage growth in the agricultural and non-market related sectors (2.6% on average for both sectors between 1999-2002) was broadly similar to that in the non-agricultural business sectors.

Second, as shown in the chart above, compensation per employee includes indirect labour costs, which are mainly social security contributions paid by employers. These contributions are excluded from gross monthly earnings and negotiated wages. This could be an important factor of divergence, as many euro area countries have made substantial cuts in employers' social security contributions in the past few years, as part of their

¹ For further details, see Box 6 entitled "Developments in compensation per employee and unit labour costs in the main euro area sectors" in the March 2003 issue of the ECB's Monthly Bulletin.

policies to improve the employment prospects of the low-skilled or low-wage earners. Indeed, on the basis of national accounts data, accounting for developments in employers' social security contributions does help bring the average growth rate of compensation per employee over the four-year period in question more into line with that of gross monthly earnings. The remaining difference between the developments in the two indicators is most probably the result of statistical discrepancies and the lack of harmonisation among the country data used for gross monthly earnings.

Third, changes in usual hours worked should help explain the difference between the rates of growth of compensation per employee and hourly labour costs in the period 1999-2002. While the former experienced an average rate of growth of 2.5%, growth for the latter was 3.1% on average.² The reduction in usual hours worked reflects the reduction in legal working time implemented in France from 1999-2000 and, in many euro area countries, by the gradual decline in working time embodied in collective agreements. In addition, the continuing developments in part-time employment, although at a lower pace than in the early 1990s, also contributed to the reduction in usual working time in the period under consideration.³ Accounting for these changes in usual hours worked as measured by the EU's Labour Force Survey explains a significant part of the difference (around 0.4 of 0.6 percentage point) between the average growth in hourly labour costs and that in compensation per employee. Any remaining difference is likely to reflect some additional statistical discrepancies between hourly labour costs and compensation per employee over the period 1999-2002, which are not easy to interpret.

Finally, as indicated in the chart, accounting for differences in the indicators can also provide an estimate of the so-called "wage drift", i.e. the extent to which actual paid wages (commonly called "gross wages") differ from the increase agreed in collective (or individual) bargaining. This may occur as a result of bonuses, overtime, promotions, etc. To a lesser extent, it may also comprise some residual catch-up for unexpected inflation, insofar as this is not already included in contractual clauses for (partial) indexation of wages to ex-post inflation outcomes, which should then be part of negotiated wages. This wage drift can be either negative or positive. Measuring the wage drift in the euro area implies dealing with a number of statistical issues to ensure conceptual comparability between the negotiated wage and the actual outcome, so these results should be interpreted with some caution. The euro area indicator of negotiated wages – aside from the caveat of aggregating non-harmonised but broadly similar national data – is assumed to provide a useful statistical representation of wage settlements. Given its higher reliability, the indicator of compensation per employee is considered as a prime measure of actual wage growth. As highlighted in the chart above, part of the difference between developments in compensation per employee and negotiated wages is due to changes in employers' and employees' social security contributions. After correction for these changes on the basis of the available information from the national accounts, an estimation of the wage drift suggests that it added an average of around 0.4 percentage point to wage cost growth in the period 1999-2002. Moreover, it exhibited a very cyclical pattern in the period 1999-2002, peaking in 2000 and gradually declining towards a slightly negative value in 2002.

This box has shown that taking into account conceptual differences among the available labour cost indicators for the euro area makes it easier to understand the developments in these indicators over the period under review. However, the remaining statistical discrepancies, and the drawbacks of some indicators notably in terms of harmonisation, call for some caution when interpreting the divergences in short-term movements in the individual indicators. In this regard, improvements in the availability of compensation per employee data as well as those scheduled for hourly labour costs will allow for a closer monitoring of labour costs developments in the euro area.

² *The presence of "calendar effects" may also have a significant effect on the annual average of hourly labour costs in a particular year, but is unlikely to affect the average difference between the two indicators over the whole period 1999-2002. In addition, these two indicators also differ in their sectoral coverage, although we have already argued that this factor does not seem to have played a substantial role.*

³ *The fact that part-time employment in the euro area is growing more rapidly than full-time employment normally implies a higher wage growth per hour than per worker.*

3 Output, demand and labour market developments

Real GDP growth was zero in the first quarter of 2003

According to Eurostat's first estimate, released on 5 June, quarter-on-quarter growth in euro area real GDP in the first quarter of 2003 was zero (see Table 8). This confirms the result of the flash estimate published in mid-May (see Box 5 for more information). Where past data is concerned, the first estimate also confirms the quarter-on-quarter rate of growth of 0.1% in the fourth quarter of 2002. It thus points to a small further deceleration in overall activity between the fourth quarter of last year and the first quarter of this year.

As regards the components of real GDP, private consumption growth in the first quarter of 2003 was estimated to be slightly lower than in the fourth quarter of last year,

and fixed capital formation saw a renewed strong decline following a small increase in the previous quarter. In addition, while imports grew at a somewhat slower pace than in the previous quarter, the fact that exports declined more strongly than before implied a reduced contribution to GDP growth from net exports. However, these negative effects on quarter-on-quarter real GDP growth in the first quarter were almost offset by strongly rising contribution from changes in inventories.

The unusually high contribution to growth from inventory changes of 0.5 percentage point in the first quarter of 2003 coincides with the change from a continuous depletion of stocks over the past one and a half years to a restocking. However, the latest developments in stockbuilding should be interpreted with caution, as experience shows

Table 8
Composition of real GDP growth in the euro area
(percentage changes, unless otherwise indicated; seasonally adjusted)

	Annual rates ¹⁾								Quarterly rates ²⁾				
	2000	2001	2002	2002 Q1	2002 Q2	2002 Q3	2002 Q4	2003 Q1	2002 Q1	2002 Q2	2002 Q3	2002 Q4	2003 Q1
Real gross domestic product	3.5	1.5	0.8	0.4	0.8	1.0	1.2	0.8	0.4	0.4	0.3	0.1	0.0
<i>of which:</i>													
Domestic demand	2.9	1.0	0.2	-0.1	-0.3	0.4	0.9	1.4	0.0	0.2	0.3	0.4	0.5
Private consumption	2.5	1.8	0.5	0.5	0.2	0.6	0.9	1.5	-0.2	0.3	0.5	0.4	0.3
Government consumption	2.1	2.2	2.7	2.6	3.0	2.9	2.4	1.6	1.0	0.8	0.4	0.2	0.2
Gross fixed capital formation	4.9	-0.6	-2.6	-2.8	-3.3	-2.6	-1.7	-2.4	-0.7	-1.3	0.2	0.1	-1.4
Changes in inventories ³⁾	0.0	-0.4	-0.1	-0.3	-0.3	0.1	0.2	0.7	0.1	0.1	-0.1	0.1	0.5
Net exports ³⁾	0.6	0.5	0.6	0.5	1.0	0.6	0.4	-0.5	0.4	0.2	0.1	-0.4	-0.5
Exports ⁴⁾	12.6	3.0	1.2	-2.7	1.0	3.0	3.7	3.3	-0.2	2.1	2.0	-0.2	-0.6
<i>of which: goods</i>	12.6	3.0	1.5	-2.5	0.7	3.5	4.4	.	0.1	1.7	2.8	-0.2	.
Imports ⁴⁾	11.3	1.7	-0.4	-4.3	-1.8	1.7	3.0	5.1	-1.4	1.6	2.0	0.8	0.6
<i>of which: goods</i>	11.4	1.0	-0.4	-4.5	-2.5	1.8	3.7	.	-1.3	1.4	2.4	1.3	.
Real gross value added:													
Agriculture and fishing	-0.6	-1.3	-0.7	-0.2	-0.1	-1.1	-1.4	0.1	-0.6	-0.2	0.1	-0.7	0.8
Industry	3.7	0.8	0.5	-1.0	0.7	0.9	1.4	0.4	0.9	0.7	0.2	-0.4	-0.1
Services	4.0	2.3	1.6	1.6	1.6	1.6	1.7	1.3	0.5	0.5	0.3	0.4	0.1

Sources: Eurostat and ECB calculations.

Note: Data refer to the Euro 12 (including periods prior to 2001). For further details on the data, see the "Euro area statistics" section.

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

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

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

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

Box 5

New flash estimates of quarterly real GDP for the euro area

On 15 May 2003, Eurostat published for the first time a flash estimate of euro area and EU GDP, referring to developments in the first quarter of 2003. GDP flash estimates provide information on quarter-on-quarter growth in real GDP as a whole. This box discusses the motivation for, and the estimation methodology of, the flash estimates. As described below, GDP flash estimates provide useful additional information for the analysis of conjunctural developments in euro area activity.

GDP flash estimates improve the availability of euro area national accounts data for business cycle analysis. The publication of GDP flash estimates was foreseen in the September 2000 Action Plan on EMU Statistical Requirements (EMU Action Plan), established by the European Commission (Eurostat) in close co-operation with the ECB. With a publication delay of 45-48 days after the end of the reference quarter, the release of GDP flash estimates for the euro area follows a similar timetable to the publications for several euro area countries and is a significant step towards the “first-for-Europe” principle¹. It also brings the timeliness of euro area statistics closer to the situation prevalent in the United Kingdom and the United States, where preliminary national accounts estimates are released after 30 days.

In respect of the underlying methodology, Eurostat follows the same practice for the compilation of GDP flash estimates as for traditional euro area national accounts. It uses data, transmitted by the Member States, which comprise two main elements. First, annual euro area GDP, computed as the sum of national GDPs for the twelve euro area countries. Second, information about the quarterly profile of the series is derived from available quarterly data for a sub-set of Member States. More specifically, a regression is carried out between annual euro area GDP and the quarterly indicators. The estimated relationship is used to infer a quarterly series for euro area GDP. In the case of euro area GDP flash estimates, the set of quarterly indicators comprises early GDP results produced by the national statistical institutes for Germany, Greece, Italy and the Netherlands (which account for around 55% of euro area GDP), as well as related indicators, mainly industrial production indices, for France and Spain.

The reliability of the new euro area flash estimates depends on two factors: first, how reliable national flash estimates are; second, how closely the quarterly profile indicated by the national flash estimates and the French and Spanish indicators matches that of euro area GDP. With regard to the first point, greater timeliness of national GDP flash estimates compared with national accounts data may be achieved by relying on a more limited information set. Their track record so far is satisfactory. However, publication of national flash estimates is generally relatively recent and it is too early to be able to assess confidently the degree of accuracy of these data. Turning to the second point, the coverage of the euro area flash estimates will increase when additional countries start publishing results in time for the euro area estimation, as is planned. In order to provide an indication of the reliability of euro area flash estimates, Eurostat has carried out a number of simulations. Over the period from the fourth quarter of 2000 to the fourth quarter of 2002, the difference in quarter-on-quarter growth between the flash estimate computed according to the flash methodology and the national accounts releases would not have exceeded 0.1 percentage point. As regards the latest release, the national accounts data for the first quarter of 2003 confirmed the growth rate in GDP indicated by the flash estimate three weeks earlier.

While a welcome complement to statistics on the euro area economy, GDP flash estimates are not intended to be a substitute for euro area national accounts releases. First, information on the composition of GDP growth continues to be available from the national accounts release only, i.e. about 65-70 days after the end of the quarter. Statistical information from either national sources or euro area-wide indicators that would allow for estimates of GDP components at an earlier date with sufficient reliability are currently not available. Second, unlike national accounts releases, GDP flash estimates do not provide information about revisions to past quarters.

¹ See the article entitled “Developments in general economic statistics for the euro area” in the April 2003 issue of the ECB’s Monthly Bulletin.

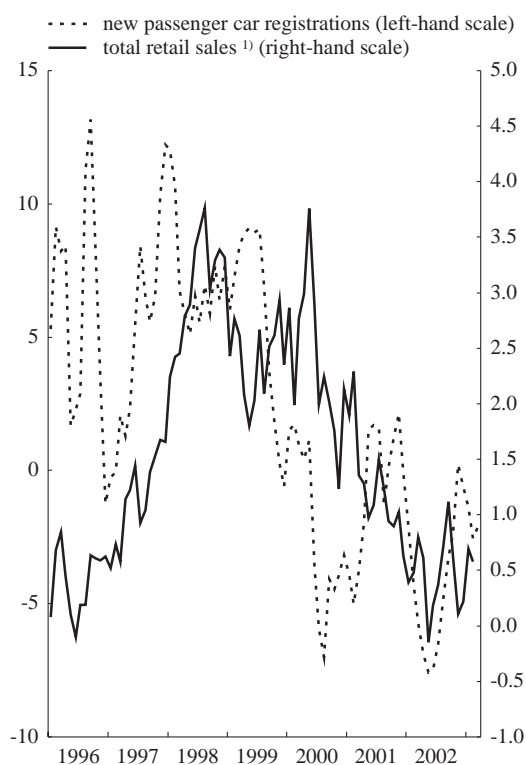
that data on changes in inventories can be revised significantly in subsequent releases of national accounts data. Lasting positive contributions to growth from inventory changes in the period ahead are likely to depend on a further dissipation of the uncertainty surrounding the outlook for growth in domestic and foreign demand (see Box 6 for an analysis of the role that inventory changes play in the economic cycle).

The outcome of continued weak quarter-on-quarter real GDP growth in the first quarter of 2003 contrasted somewhat with earlier information provided by monthly indicators. Most prominently, euro area industrial production (excluding construction) increased by 0.2% quarter on quarter in the first quarter, following a decline of 0.2% in the fourth quarter of 2002 (see Table 9). However, this rise in growth mainly reflects the strong increase in January, which was probably distorted upwards by the fact that the standard adjustment methods did not fully account for the working day effects at the end of last year. Considering that industrial production decreased considerably in March 2003, a smoother profile in the two-month period from December to January would probably have given rise to a decline rather than a rise in quarter-on-quarter production

Chart 36

New passenger car registrations and retail sales in the euro area

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



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

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

1) Calculated using seasonally adjusted data.

Table 9

Industrial production in the euro area

(annual percentage changes, unless otherwise indicated)

	2001	2002	2003	2003	2003	2003	2003	2003	2002	2002	2002	2003	2003
			Jan.	Feb.	Mar.	Jan.	Feb.	Mar.	Oct.	Nov.	Dec.	Jan.	Feb.
							month-on-month			three-month moving averages			
Total industry excluding construction by main industrial groupings:	0.5	-0.6	1.2	2.1	0.2	1.2	0.4	-1.0	0.2	-0.2	-0.1	-0.3	0.2
Total indus. excl. construction and energy	0.3	-0.8	1.1	1.1	0.1	1.0	0.1	-0.4	0.1	-0.1	0.0	-0.5	0.0
Intermediate goods	-0.6	0.3	2.6	1.4	1.5	1.9	-0.1	0.4	0.4	-0.4	0.0	-0.3	0.9
Capital goods	1.6	-2.1	0.9	2.6	-0.4	0.3	0.6	-1.6	-0.1	0.2	0.2	-0.4	-0.6
Consumer goods	0.3	-0.8	-1.2	-0.8	-1.6	0.2	0.1	-0.4	0.3	0.1	-0.1	-0.8	-0.6
Durable consumer goods	-1.7	-5.6	-4.6	-5.1	-7.0	1.7	-1.3	-1.5	-0.8	-1.9	-1.5	-2.8	-1.9
Non-durable consumer goods	0.7	0.2	-0.5	0.1	-0.3	0.0	0.3	-0.2	0.5	0.5	0.2	-0.4	-0.3
Energy	1.0	0.8	1.1	8.1	2.7	2.2	3.6	-3.5	-0.8	-0.7	-0.8	1.7	2.8
Manufacturing	0.4	-0.8	1.0	1.1	0.6	0.6	0.2	-0.4	0.2	-0.2	-0.1	-0.5	0.0

Sources: Eurostat and ECB calculations.

Note: Data refer to the Euro 12 (including periods prior to 2001). For further details on the data, see the "Euro area statistics" section.

growth between the fourth quarter of 2002 and the first quarter of 2003. In March the month-on-month decline in industrial production excluding construction was widespread across all the main industrial categories and was particularly marked in industries producing capital goods and energy.

As was the case for industrial production, quarter-on-quarter growth in retail sales volumes turned from negative in the fourth quarter of 2002 to positive in the first quarter of 2003. However, this also reflected unusually strong month-on-month growth in January, and sales volumes declined again in February and March. The latest data do not, therefore, point to a change in the underlying strength of household spending after the turn of the year. New passenger car registrations showed an opposite pattern to the one followed by retail sales volumes, with quarter-on-quarter growth turning from positive in the fourth quarter of 2002 to negative in the first quarter of 2003. This reflects in particular the fact that the incentives arising from tax measures introduced in Italy towards the end of last year started to fade out, and this also appears to account for much of the further decline in car

registrations in April 2003. In year-on-year terms, growth in both retail sales volumes and passenger car registrations remained relatively low at the end of the first quarter and the start of the second quarter (see Chart 36).

Survey data point to ongoing weakness in the second quarter of 2003

Survey data for the manufacturing sector suggest that industrial activity remained subdued after the end of the first quarter. While some of the uncertainty associated with the geopolitical tensions should have dissipated after the end of military operations in Iraq, this appears to have had no lasting impact on the assessment of business conditions in the industrial sector. The European Commission's industrial confidence indicator was unchanged in April 2003 but declined again in May (see Table 10). The indicator has now been on a broad downward trend since the end of last year. The decline in May was prompted by a renewed deterioration in production expectations, which had temporarily turned less negative in April. The assessment of total order books

Table 10

Results from European Commission Business and Consumer Surveys for the euro area

(seasonally adjusted data)

	2000	2001	2002	2002	2002	2002	2003	2002	2003	2003	2003	2003	2003
				Q2	Q3	Q4	Q1	Dec.	Jan.	Feb.	Mar.	Apr.	May
Economic sentiment index ¹⁾	2.4	-2.9	-1.7	0.4	-0.5	-0.3	-0.6	-0.2	-0.2	0.1	-0.6	0.3	-0.1
Consumer confidence indicator ²⁾	12	6	0	3	1	-3	-8	-5	-7	-8	-10	-8	-9
Industrial confidence indicator ²⁾	12	-2	-4	-3	-4	-3	-4	-3	-4	-4	-5	-5	-6
Construction confidence indicator ²⁾	16	10	1	3	-2	-3	0	-2	-1	0	0	0	-2
Retail trade confidence indicator ²⁾	5	0	-9	-11	-10	-8	-10	-9	-12	-6	-11	-10	-7
Services confidence indicator ²⁾	10	-5	-19	-15	-21	-24	-25	-25	-24	-24	-27	-24	-22
Business climate indicator ³⁾	1.3	-0.2	-0.5	-0.4	-0.5	-0.3	-0.4	-0.2	-0.3	-0.3	-0.7	-0.5	-0.7
Capacity utilisation (%)	84.4	82.9	81.4	81.4	81.5	81.5	81.1	-	81.3	-	-	80.8	-

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

Note: Data refer to the Euro 12 (including periods prior to 2001). For further details on the data, see the "Euro area statistics" section.

1) Percentage changes compared with the previous period.

2) Percentage balances; data shown are calculated as deviations from the average over the period since April 1995 for the services confidence indicator, since July 1986 for the retail trade confidence indicator, and since January 1985 for the other confidence indicators.

3) Units are defined as points of standard deviation.

was unchanged in May, but this conceals a further deterioration in the assessment of export order books (the latter is based on both extra-euro area and intra-euro area export orders). These results suggest that, following the partial dissipation of geopolitical uncertainties, the more fundamental economic conditions continued to have an influence on developments in business confidence.

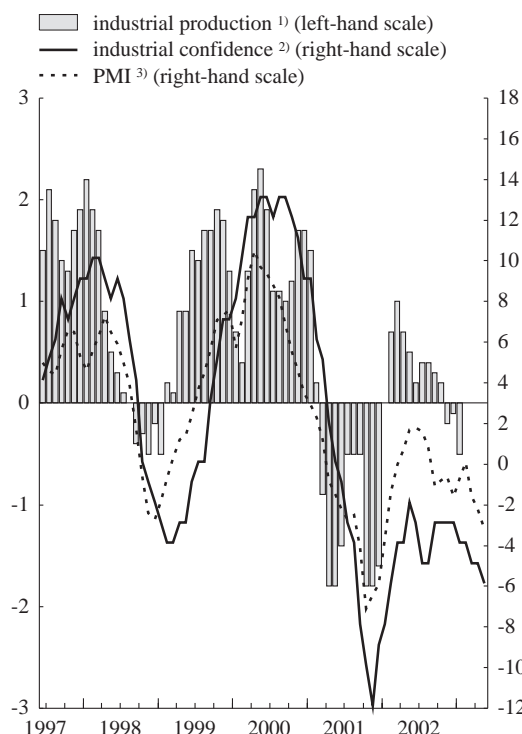
The Purchasing Managers' Index (PMI) for the manufacturing sector continued to decline in May 2003, falling to 46.8 and thus well below the benchmark for zero growth in manufacturing production. The decline in May was the third in a row, and the latest developments point to a deceleration in industrial activity in the second quarter (see

Chart 37). All of the individual components of the PMI deteriorated in May, but the decline in new orders accounted for almost half of the decline in the overall PMI, apparently reflecting in particular the dampening impact of the euro appreciation on export demand.

The European Commission's confidence indicator for the construction sector declined somewhat in May after remaining unchanged in the previous two months, but the relationship between this indicator and actual developments is not sufficiently close to draw firm inferences from the results for individual months. Confidence improved somewhat in the services sector, owing mainly to the fact that survey participants adopted a less negative view of the business climate. Moreover, while expectations of future demand have improved somewhat, this was not sufficient to compensate for the strong deterioration recorded in the previous months of this year.

In the face of geopolitical uncertainty, households' expectations with regard to the general economic environment had turned more pessimistic in early 2003 and the European Commission's consumer confidence indicator had continued to decline in the first quarter. However, the end of military action in Iraq and the associated reduction in geopolitical uncertainty did not lead to a lasting recovery in consumer confidence, which improved somewhat in April but then deteriorated again in May. In particular, unemployment expectations turned considerably more negative again and there was also a partial reversal of the earlier improvement in general economic expectations. These developments suggest that while geopolitical uncertainties have probably receded somewhat, the more fundamental domestic factors, such as deteriorating labour market conditions, continue to influence household sentiment. By contrast with the household sector, confidence in the retail trade sector continued to improve slightly in May 2003. However, given the much higher month-on-

Chart 37
Industrial production, industrial confidence and the PMI for the euro area
(monthly data)



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

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

month volatility in this indicator, it is too early to judge whether or not this implies positive signals for retail trade and private consumption.

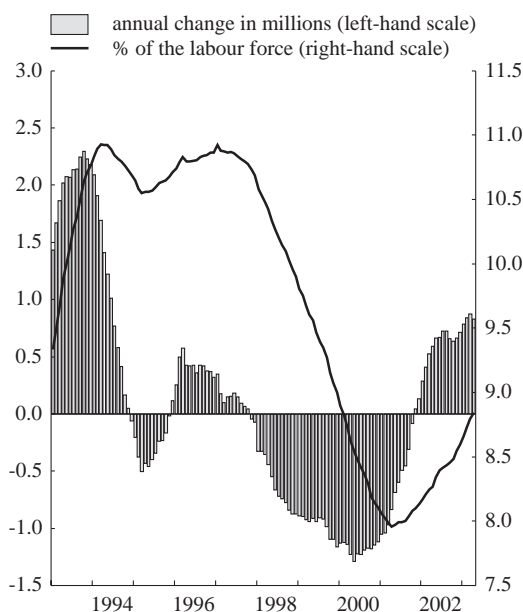
Labour market conditions remained subdued

In April 2003 the standardised rate of unemployment stood at 8.8%, unchanged compared with the previous month. As regards the breakdown according to age, the rate of unemployment among people aged 25 and over increased somewhat in April, while it remained unchanged for those under 25 years (see Table 11). At the same time as the April data were released, the figures for the euro area-wide rate of unemployment in 2002 and the first quarter of 2003 were revised upwards by 0.1 percentage point compared with the previous release, although the underlying month-on-month pattern remained unchanged. The unchanged unemployment rate in April conceals the fact that the actual number of unemployed continued to increase. However, at 70,000 persons, the increase was somewhat smaller than the 100,000 or so recorded in each of the months from January to March 2003. In year-on-year terms, the change in the number of unemployed continued to rise, amounting to 870,000 in April (see Chart 38).

As reported in the last issue of the Monthly Bulletin, the level of total employment in the euro area remained broadly unchanged in the course of the second half of last year (see

Chart 38 Unemployment in the euro area

(monthly data; seasonally adjusted)



Source: Eurostat.

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

Table 12). The national data available for the first quarter of 2003 suggest that euro area employment growth remained subdued after the turn of the year. This would be in line with the sluggish economic activity recorded in the fourth quarter of last year and the first quarter of this year. In particular, quarter-on-quarter productivity growth was zero in the fourth quarter of last year, following only small positive rates of growth in the previous quarters (see Chart 39). In order to restore productivity, businesses may have increasingly

Table 11 Unemployment in the euro area

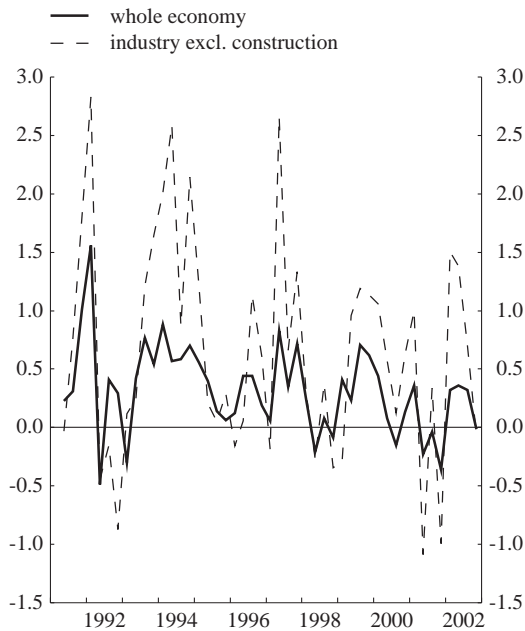
(as a percentage of the labour force; seasonally adjusted)

	2000	2001	2002	2002	2002	2002	2003	2002	2002	2003	2003	2003	2003
				Q2	Q3	Q4	Q1	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.
Total	8.5	8.0	8.4	8.3	8.4	8.5	8.7	8.5	8.6	8.7	8.7	8.8	8.8
Under 25 years ¹⁾	16.6	15.7	16.3	16.2	16.3	16.6	17.0	16.6	16.7	16.9	17.0	17.1	17.1
25 years and over	7.4	7.0	7.4	7.3	7.4	7.5	7.7	7.5	7.5	7.6	7.7	7.7	7.8

Source: Eurostat.

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

1) In 2002 this category represented 22.4% of total unemployment.

Chart 39**Labour productivity in the euro area***(quarterly percentage changes; seasonally adjusted)*

Source: Eurostat.

resorted to shedding labour, considering that there was still high uncertainty with regard to demand prospects. In the industrial sector excluding construction, which tends to be more heavily exposed to developments in

foreign demand, the pressure to restore productivity is likely to have remained greater owing to the appreciation of the euro.

Survey data show a slight improvement in employment conditions between the fourth quarter of last year and the first quarter of this year, but the data for April and May suggest that this improvement did not continue into the second quarter. As regards the manufacturing sector, the employment index of the PMI recorded a strong decline in May and, at 45.1, was at its lowest level since late 2001/early 2002. The European Commission Business Survey points to employment expectations in April and May 2003 that are more negative than the average for the first quarter of the year, and thus to a stronger decline in industrial employment growth in the second quarter, both in year-on-year and quarter-on-quarter terms (see Chart 40). In the construction and services sectors employment expectations displayed a similar pattern, with a small improvement in the first quarter followed by a renewed deterioration in the April-May period. By contrast, employment expectations in the retail sector deteriorated further in the first quarter before improving somewhat in April-

Table 12**Employment growth in the euro area***(annual percentage changes, unless otherwise indicated; seasonally adjusted)*

	2000	2001	2002	2001	2002	2002	2002	2002	2001	2002	2002	2002	2002
				Q4	Q1	Q2	Q3	Q4	Q4	Q1	Q2	Q3	Q4
	Quarterly rates ¹⁾												
Whole economy	2.1	1.4	0.4	0.8	0.7	0.5	0.3	0.2	0.2	0.1	0.0	0.0	0.1
<i>of which:</i>													
Agriculture and fishing ²⁾	-1.6	-0.6	-2.0	-1.3	-2.0	-1.9	-1.8	-2.2	-0.4	-0.2	-0.5	-0.7	-0.8
Industry	0.9	0.3	-1.2	-0.5	-1.0	-1.1	-1.3	-1.4	-0.2	-0.4	-0.3	-0.4	-0.4
Excluding construction	0.6	0.3	-1.2	-0.5	-1.0	-1.2	-1.2	-1.4	-0.2	-0.4	-0.3	-0.4	-0.4
Construction	1.8	0.4	-1.1	-0.4	-0.8	-1.0	-1.4	-1.3	-0.3	-0.5	-0.2	-0.4	-0.2
Services	2.9	1.9	1.2	1.5	1.6	1.3	1.1	1.0	0.4	0.3	0.2	0.2	0.3
Trade and transport ³⁾	3.1	1.6	0.7	1.2	1.5	0.9	0.3	0.2	0.3	0.2	-0.2	0.0	0.2
Finance and business ⁴⁾	5.7	3.8	1.9	2.9	2.2	2.0	1.7	1.6	0.6	0.2	0.6	0.3	0.5
Public administration ⁵⁾	1.6	1.3	1.4	1.1	1.4	1.4	1.5	1.4	0.4	0.4	0.3	0.3	0.3

Sources: Eurostat and ECB calculations.

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

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

2) Also includes hunting and forestry.

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

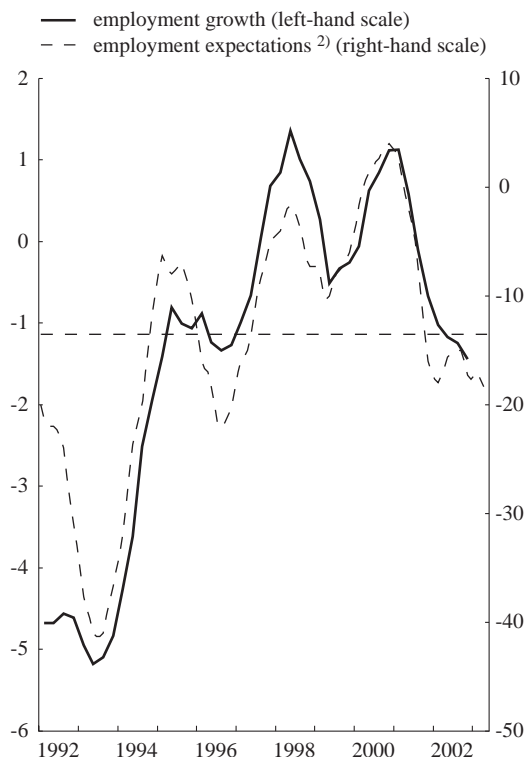
4) Also includes real estate and renting services.

5) Also includes education, health and other services.

Chart 40

Employment growth and employment expectations in industry in the euro area¹⁾

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



Sources: Eurostat and European Commission Business and Consumer Surveys.

Note: The horizontal line is the average of employment expectations since 1985.

1) Excluding construction.

2) Employment expectations refer to manufacturing only.

May 2003 (see Chart 41). All indicators of employment expectations are currently well below their longer-term averages, indicating that employment prospects remain subdued.

Prospects remain for a modest recovery, albeit from low levels of activity

The euro area economy began 2003 with continued weak activity in the first quarter, and survey data suggest that this weakness may have carried over into the second quarter.

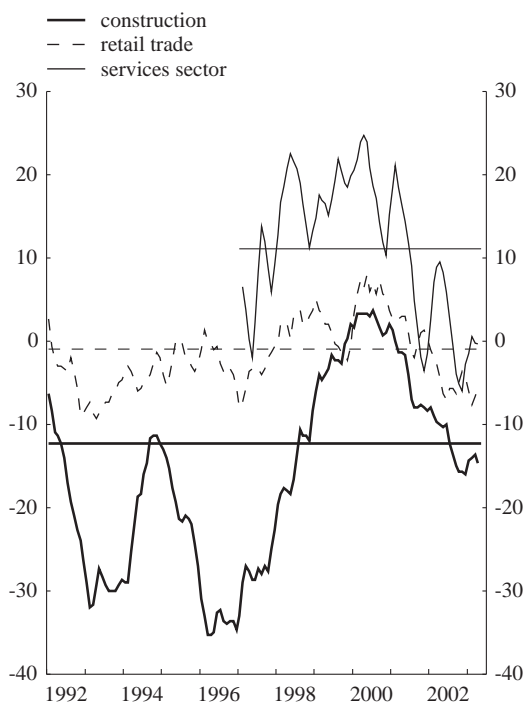
However, in the second half of this year economic growth should benefit from a number of factors. These include the

expected upturn in foreign demand, which on balance should compensate for the dampening effect of the appreciation of the euro. On the domestic side, private consumption should expand in line with the growth in real disposable income, supported by positive terms-of-trade effects. Fixed capital formation should be supported by the low level of interest rates and some impulses from foreign demand, although it might be slowed by ongoing consolidation needs with regard to balance sheets in the corporate sector. Overall, the main scenario is that of a gradual recovery from the second half of 2003 onwards, despite some downside risks arising from both global imbalances and the potentially higher adjustment needs of the corporate sector than currently foreseen. (For further details, see Section 5, which is entitled “Eurosystem staff macroeconomic projections for the euro area”.)

Chart 41

Employment expectations in the euro area

(percentage balances; three-month centred moving averages; seasonally adjusted)



Sources: European Commission Business and Consumer Surveys.

Note: The horizontal lines are averages of the employment expectations since January 1985 for construction, since April 1985 for retail trade, and since January 1997 for the services sector.

Box 6

The contribution of inventory changes to business cycle fluctuations

Inventory changes often play an amplifier role in economic cycles. For instance, a marked downward adjustment of inventories was an important feature of the slowdown in economic growth in 2001, cutting real GDP growth by around 0.4 percentage point. In 2002 the negative contribution of inventory changes to GDP growth was smaller, but destocking continued throughout the year. The extent of destocking in the current cycle is relatively substantial and comparable with that observed during the 1993 slowdown. Following that slowdown, however, inventory changes made a significant contribution to the recovery in economic growth in 1994 and 1995. This box first discusses the reliability of the data on inventory changes, and then examines some aspects of euro area inventory cycles in more detail.

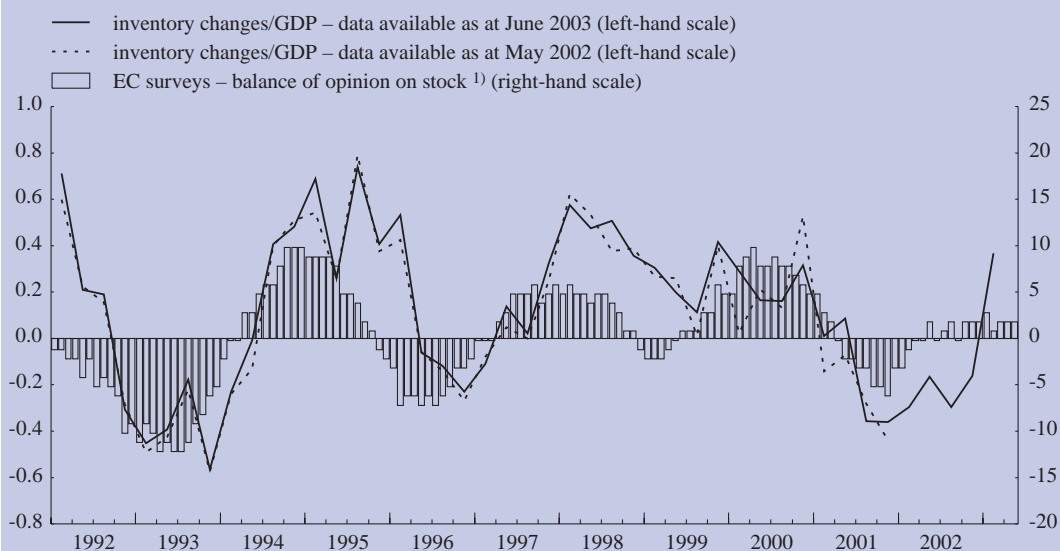
How reliable are national accounts data on inventory changes?

Conceptually, national accounts data on inventory changes are measured by the value of entries less the value of withdrawals and the value of any recurrent losses of goods held in inventories. However, statistical sources are often incomplete or become available with considerable delay. Moreover, when inventory changes are measured as a residual of gross value added and the components of the expenditure approach, the resulting estimates for inventories may also include statistical discrepancies due to the separate compilation of the output and expenditure side of GDP. Finally, euro area estimates for changes in inventories also include estimates for acquisitions less disposals of valuables, since separate data for the latter is often not available.

Reflecting updated estimates of all other components of GDP, inventory changes are often revised significantly between releases of quarterly national accounts. The quarterly national accounts data are also revised following the release of more complete annual national accounts data, in which the statistical coverage of inventories is generally better. Over the last five years, revisions to the contribution of inventory changes to quarterly real GDP growth have been around 0.1 percentage point from the first to the second release of the national accounts data, increasing to up to 0.2 percentage point after four releases.

Inventory changes/GDP and EC surveys on manufacturing stocks

(percentage)



Sources: Eurostat, European Commission Business and Consumer Surveys.

1) Inverted – deviation from mean.

Despite sizeable revisions to the quarterly profile of the data, the overall pattern of the inventory cycle tends to remain broadly unaffected. In particular, the ratio of inventory changes to GDP, which measures the degree of restocking or destocking in the economy, seems to display clear cycles which are not markedly affected by ex post revisions. For example, compared with the national accounts data of May 2002, the ratio of inventory changes to GDP according to the June 2003 data displays a broadly unchanged pattern over the period 2000 to 2001 (see chart). The information content of the national accounts data is also evident from the correlation, of around 65%, between the ratio of inventory changes to GDP and the balance of opinions on manufacturing stocks (see chart). The correlation is negative and survey results appear to lead the evolution of inventory changes by around a quarter, reflecting the fact that when a growing proportion of businesses consider stocks as too high, stockbuilding is reduced subsequently.

The contribution of inventories to cyclical fluctuations

With regard to the impact of inventory changes on activity, it is useful to distinguish between contributions to real GDP growth over the medium to long term and contributions to short-term fluctuations in output.

Over the medium to long term, the contribution of inventories to real GDP growth should, on average, be close to zero, although the average contribution could deviate from zero for a protracted period of time. This might reflect technological changes and developments in the sectoral distribution of activity. In particular, the introduction of just-in-time production techniques and the growing importance of services sector activity are two elements that may imply a trend negative contribution of inventory changes. Indeed, the average contribution to both quarterly and annual real GDP growth was zero or slightly negative from 1993 to 2002. With regard to the contribution of inventory changes to short-term fluctuations in output, changes in inventories appear to be an important factor driving output volatility in the short term. The contribution of inventory changes to the standard deviation of output growth is significant, despite their small average contribution to output growth. For instance, over the last decade inventory changes accounted for around 15% of the standard deviation of quarterly output growth, despite the fact that they accounted on average for only around 0.5% of real GDP. The contribution to quarterly output volatility remained roughly unchanged in the 1990s, but the average contribution to the volatility of annual output growth seems to have decreased in the second half of the 1990s.

Turning to recent developments, opinions on the appropriateness of stocks have remained broadly unchanged in recent months, indicating a relatively neutral contribution of inventory changes to economic activity at the current juncture. However, business sentiment is marked by a high degree of uncertainty regarding the outlook for growth in the euro area, and elsewhere. Once this uncertainty declines and a recovery starts, conditions should be in place for more lasting positive contributions by inventory changes to growth.

4 Fiscal developments

Budget balances to improve marginally as of 2004

According to the latest forecasts published by the European Commission, the average general government budget deficit ratio of the euro area is expected to continue to deteriorate for the third year in a row, from 2.2% of GDP in 2002 to 2.5% of GDP in 2003 (see Table 13). In 2004, it is forecast to improve marginally to 2.4% of GDP. Germany, France, Italy and Portugal are expected to report deficit ratios near or above the 3% threshold over the forecasting horizon, while the other countries are expected to maintain sound public finances or post less significant imbalances. The primary surplus ratio is expected to decline by 0.4 percentage point to 1.1% of GDP in 2003, and to remain constant in 2004. These figures are in line with OECD forecasts.

The Commission forecasts for the euro area deficit ratio deviate significantly from the more optimistic targets set on average in the updated stability programmes, which were submitted at the end of 2002 and the beginning of 2003. The difference amounts to 0.7 and 1.3 percentage points of GDP in 2003

and 2004 respectively. It concerns most Member States but, in particular, those countries with significant fiscal imbalances. The less favourable forecasts, as compared with the updated stability programmes' targets, are partly due to the operation of automatic stabilisers, but they also reflect a lack of well-specified measures and less-than-planned consolidation efforts in some countries.

Economic environment largely determines budgetary developments

The Commission forecasts indicate a broadly neutral fiscal stance for the euro area average over 2003 and 2004. The cyclically adjusted primary balance ratio, which nets out the effect of the macroeconomic environment and interest expenditure, is expected to remain broadly stable until the end of 2004. Adverse cyclical effects in 2003 and more favourable ones in 2004 are the main driving force behind the changes in the aggregate balance over those two years. Chart 42 confirms this picture by graphically disentangling consolidation efforts from cyclical factors and changes in interest expenditure.

Table 13
Forecasts of fiscal developments in the euro area

(as a percentage of GDP)

		2002	2003	2004
Budget balance	European Commission ¹⁾	-2.2	-2.5	-2.4
	OECD ²⁾	-2.3	-2.5	-2.4
	Stability programmes ³⁾	-2.2	-1.8	-1.1
Cyclically adjusted budget balance	European Commission ¹⁾	-2.2	-2.0	-2.0
	OECD ^{2), 4)}	-1.9	-1.6	-1.6
	Stability programmes ³⁾	-1.9	-1.3	-0.8
Primary budget balance	European Commission ¹⁾	1.5	1.1	1.1
	Stability programmes ³⁾	1.5	1.9	2.5
Gross debt	European Commission ¹⁾	69.2	69.9	69.6
	Stability programmes ³⁾	69.7	68.7	66.8

Note: In 2002 the proceeds from the sale of UMTS licences in the euro area as a whole are included. However, such proceeds are very limited and do not affect the figures reported in the table.

1) *European Economy 2/2003, Economic Forecasts, spring 2003.*

2) *Economic Outlook, preliminary edition, April 2003.*

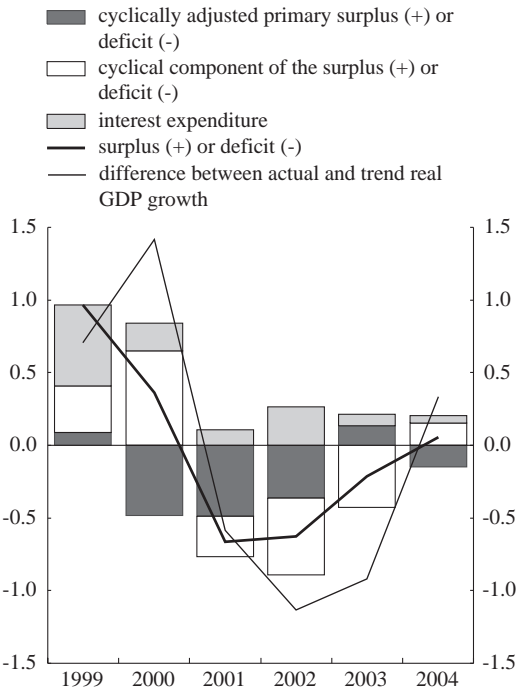
3) *European Commission figures on the basis of Member States' updated stability programmes, May 2003.*

4) *Excluding Luxembourg.*

Chart 42

Annual changes in the average euro area budgetary position and underlying factors

(in percentage points of GDP)



Sources: European Commission, spring 2003, and ECB calculations.

Note: Positive values indicate a contribution to a decrease in deficits, while negative values indicate a contribution to their increase. Data exclude proceeds from the sale of UMTS licences.

Cyclical effects also determine much of the change in the revenue and primary expenditure ratios in 2003 (see Chart 43). Revenue is expected to grow rather modestly, in line with nominal GDP, while the ratio of primary expenditure to GDP is expected to increase mainly as a result of higher social payments. In 2004 stronger economic activity, together with government plans to keep expenditure under control, are expected to influence budget balances favourably. At the same time, further income tax cuts in some countries will affect the euro area revenue and budget balance ratios somewhat unfavourably. Four countries, however, plan to raise taxes, all of which have experienced either major imbalances or a marked deterioration of public finances over the past two years. Restraint of current expenditure

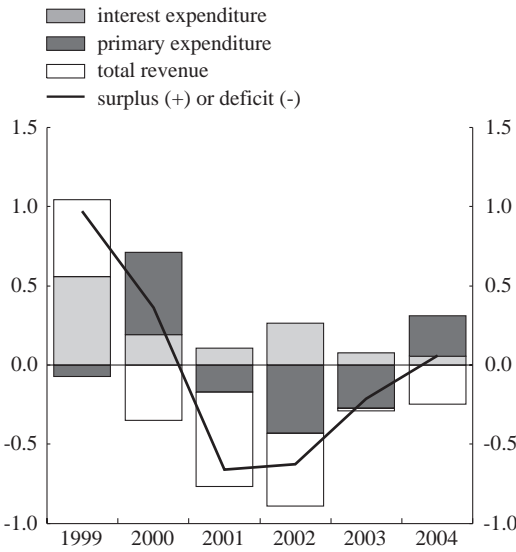
also differs significantly across countries, with more ambitious efforts being projected for some of the countries with fiscal imbalances.

The euro area government debt ratio is expected to increase slightly in 2003 for the first time since the start of Monetary Union. This contrasts with the continued gradual decline over the projection period anticipated in the latest updated stability programmes. The debt ratio is expected to increase by 0.7 percentage point to 69.9% of GDP at the end of 2003, before declining marginally again in 2004. Both the deterioration of budget balances and the slowdown in nominal GDP growth explain these unfavourable debt developments. In 2004, seven countries are expected to report debt ratios above the 60% of GDP Maastricht Treaty threshold, as compared with four countries in 2001. This reflects significant cumulative debt increases in Germany, France and Portugal.

Chart 43

Annual changes in the average euro area budgetary position: contributions of revenue, primary expenditure and interest expenditure

(in percentage points of GDP)



Sources: European Commission, spring 2003, and ECB calculations.

Note: Positive values indicate a contribution to a decrease in deficits, while negative values indicate a contribution to their increase. Data exclude proceeds from the sale of UMTS licences.

Key challenges for fiscal policies

The European Commission's forecasts point to two key challenges for fiscal policies in the euro area in the near future. First, commitments to sound public finances are not entirely satisfactory in a number of cases. Disappointing fiscal performance has followed insufficient consolidation efforts during the last period of strong GDP growth, aggravated by the adverse fiscal effects of the recent economic slowdown, unexpected revenue shortfalls and, in some instances, further structural relaxation. As a consequence, excessive deficits have been posted in Germany, France and Portugal and sizeable imbalances are also being reported for Italy. So far, this has had a considerable negative impact on the overall deficit of the euro area in recent years, although the efforts made by the majority of countries have partly counterbalanced adjustment failure in others. According to the forecasts, deficits above 3% of GDP are again likely this and even next year in some of the countries posting fiscal imbalances, and some imbalances are also anticipated for a few of the other countries (see Box 7 for further details on the excessive deficit procedure). These forecasts partly reflect insufficient fiscal consolidation in the majority of the countries reporting imbalances. The medium-term outlook is further clouded by the inadequate quality of adjustment and insufficient structural fiscal reforms holding back confidence and growth.

Second, the persistence of imbalances points not only to weak commitments in some countries' medium-term plans, but also to challenges as regards the implementation of the fiscal policy framework. The Stability and Growth Pact aims to prevent unsound fiscal policies by promoting budgetary positions close to balance or in surplus over the medium term through multilateral surveillance and policy co-ordination. However, the co-ordination of fiscal policies to attain sound budgetary positions has not materialised as originally planned. Peer pressure has not always weighed heavily enough on countries with rising imbalances and deficient compliance with data requirements has, in some instances, hampered budgetary surveillance.

These two challenges are closely interlinked. They both need to be addressed effectively so that sustainable public finances contribute to macroeconomic stability, automatic stabilisers cushion the impact of economic fluctuations on aggregate demand, and growth-enhancing reforms reduce disincentives to work and invest and increase flexibility on the supply side. In European fora, a consensus has emerged that a renewed commitment to maintaining or achieving sound public finances together with a strict implementation of the Stability and Growth Pact by all countries are indispensable to attain these objectives. Box 8 summarises how sound fiscal policies can contribute to stability and growth in the euro area.

Box 7

The excessive deficit procedure

The excessive deficit procedure as part of the European fiscal policy framework

The European fiscal policy framework establishes rules ensuring fiscal discipline and preserving the stabilising role of public finances. It consists of the fiscal provisions laid down in the Maastricht Treaty, including notably the excessive deficit procedure (EDP). The latter defines, inter alia, the reference values for the general government deficit ratio (3% of GDP) and public debt ratio (60% of GDP). The framework also includes the Stability and Growth Pact, which promotes economic policy co-ordination and defines the conditions under which to apply the EDP. Peer pressure and sanctions are the main mechanisms employed under the EDP in order to dissuade governments from incurring unsustainable deficits.¹

¹ *The Stability and Growth Pact strengthens the surveillance process "to prevent, at an early stage, the occurrence of excessive general government deficits and to promote [...] the co-ordination of economic policy" (Council Regulation No. 1466/97) "[...] and to deter excessive general government deficits and, if they occur, to further their prompt correction" (Council Regulation No. 1467/97).*

The two stages of the excessive deficit procedure

In accordance with the Pact, two basic stages can be distinguished in the implementation of the EDP. First, there is the assessment stage, which triggers the EDP procedure. In this stage, the European Commission prepares a report whenever a given country breaches the reference values or is at risk of an excessive deficit, and then decides on whether it should address an opinion to the Council on the existence or risk of an excessive deficit. The ECOFIN Council decides whether the country's deficit is indeed excessive or not. In the event of an affirmative decision, the Council also recommends measures to put an end to this situation and sets a time frame for its correction, which is the year following its identification at the latest.

Second, there is a follow-up stage, which includes the possibility of imposing sanctions. If the Council decides that the given country has fully implemented the recommended measures, the procedure is suspended until the Council decides that the excessive deficit has been corrected in time. However, should the country not adopt the necessary measures to correct its excessive deficit in a timely manner, or should the measures prove insufficient, further procedural steps follow. Ultimately, if there is continued non-compliance, the Council may impose a pecuniary sanction on that country. The sanction takes the form of a non-interest-bearing deposit of up to 0.5% of GDP that could turn into a fine if excessive deficits persist.

Flexibility of the procedure and challenges

The implementation of the formal procedure is spelled out in great detail in the Stability and Growth Pact, but it nevertheless provides some flexibility. At the assessment stage, deficits above 3% of GDP may not be considered excessive if they result from an unusual event outside the control of the government, or a severe economic downturn. In its report, the European Commission should also take into account, amongst other things, the public investment share and the medium-term position of public finances when assessing whether a deficit above 3% is excessive. At the follow-up stage, special circumstances may extend the time period a given country has to correct an excessive deficit. Moreover, pecuniary sanctions are to be applied as a rule rather than unconditionally.² The flexibility of the procedure is important because it prevents an overly rigid and mechanical approach from being taken in applying the EDP. Allowing for exceptions is appropriate because it is impossible to cover all economic and political contingencies with a simple rule relying solely on numerical values. However, the scope for flexibility also presents a challenge as it needs to be used with caution. Too lenient an implementation of the EDP would bear the risk that countries in excessive deficits do not undertake the necessary corrective action and others are not sufficiently dissuaded from incurring such imbalances.

² See Council Regulation No. 1467/97, Article 2 (1) and (2), Article 3 (4) and Articles 11 and 14, as well as Article 104 (3) of the Maastricht Treaty.

Consolidation efforts as part of a comprehensive strategy needed in several countries

Of most concern are the four countries reporting sizeable deficit ratios close to or above 3% of GDP. The ECOFIN Council has requested a consolidation effort of 1% of GDP for Germany, and a significantly larger than currently planned improvement in the cyclically adjusted deficit for France in 2003. This has to be followed by further adjustment in 2004, in line with the requirements of the

Eurogroup agreement. In Portugal's case, the Council has urged compliance with earlier commitments. This should allow Portugal to prevent the re-emergence of an excessive deficit in 2003, while Germany and France should be able to correct their excessive deficits by 2004 at the latest. Moreover, these adjustments are needed to reverse the recent trend of increasing debt ratios. Finally, Italy has been requested to prioritise consolidation and comply with the Eurogroup agreement, as well as to ensure a sufficiently diminishing debt ratio.

The case of Germany illustrates the need to strike an appropriate balance between confidence-enhancing consolidation and the avoidance of unduly pro-cyclical policies in an environment of significant imbalances and weak growth. Germany has adopted consolidation measures of the recommended size and is allowing automatic stabilisers to operate in 2003, even though this may imply a renewed deficit above the 3% threshold. However, the operation of automatic stabilisers would not justify a delay in the correction of the excessive deficit beyond 2004.

Fiscal consolidation should be part of a comprehensive strategy to restore confidence and enhance growth and stability. Past experiences too often reveal excessive reliance on ad hoc tax increases and one-off measures as the main ingredients of countries' consolidation efforts. This type of consolidation may not only fail to produce the desired short-term fiscal effects, but it also fails to address the fiscal costs of population ageing and low trend growth. By embedding fiscal consolidation in a well-designed and comprehensive medium-term strategy that is based on expenditure restraint and reform, countries can confront all of these challenges. Such a strategy facilitates consolidation in the short run, helps finance further tax cuts and makes expenditure and benefit systems more employment and growth-friendly. This enhances flexibility in the economy and reinvigorates growth, which in turn builds confidence in the achievement of fiscal targets and in the functioning of the fiscal policy framework.

According to the Commission forecasts, budgetary adjustments are mostly not in compliance with the required consolidation efforts and current strategies risk failure. Only Germany plans to undertake the necessary adjustment and its deficit is expected to fall marginally below the reference value in 2004. By contrast, the efforts planned in France, Italy and Portugal do not meet requirements (with the EDP giving France until October to implement the

appropriate measures). Furthermore, Portugal and Italy are expected to continue taking recourse to temporary measures which do not provide for lasting consolidation. At the same time, these four countries are not being seen as making sufficient progress with structural fiscal reforms. Finally, the persistence of significant imbalances until the end of the forecasting period puts at risk the time frame for a return to sound budgetary positions as laid down in the stability programmes and requested by the ECOFIN Council. It is imperative that these countries step up their efforts in order to make progress with consolidation and put an end to their excessive deficits. Moreover, any improvement in the budgetary position from better than expected economic growth should be used to accelerate the reduction in deficits.

There is also some concern that a few other countries will not comply with the objective of a budgetary position close to balance or in surplus in at least one year of the 2003-04 period. Although Austria is expected to undertake sufficient consolidation measures in 2003 and it anticipates a sound budgetary position in 2004, planned tax cuts in forthcoming years could result in renewed imbalances if they are not accompanied by sufficient expenditure restraint. The Netherlands is expected to experience imbalances as of 2004, unless further consolidation measures, of the type recently announced by the Dutch government, are quickly implemented. Greece does not envisage sufficient budget consolidation this year and, given the very high public debt ratio, its adjustment efforts should be more ambitious than the minimum of 0.5% of GDP. If consolidation strategies in these countries are appropriate, automatic stabilisers should be allowed to operate. However, excessive deficits must be avoided.

Finally, on a more reassuring note, it is worth acknowledging that around half of the euro area countries are expected to report sound budgetary positions in 2003 and 2004. These countries should allow automatic stabilisers

to operate fully, thereby contributing to economic stabilisation. A neutral fiscal stance is the best way of preventing a resurgence of

budgetary imbalances, and fiscal activism for reasons of demand management is not warranted.

Box 8

Sound fiscal policies for stability and growth in the euro area

The debate on strengthening the co-ordination of budgetary policies

In autumn 2002 the European Commission initiated a debate on the appropriate interpretation and role of the Stability and Growth Pact, which led to the Eurogroup agreement of October 2002 and the ECOFIN report on strengthening the co-ordination of budgetary policies in March 2003. In this report, Member States agreed to leave the rules unchanged, while at the same time providing some clarification for the assessment of fiscal policies, which should result in an appropriate balance between discipline and flexibility when implementing the Stability and Growth Pact. Most notably, countries with fiscal positions which are not close to balance or in surplus are requested to improve their cyclically adjusted positions by a minimum of 0.5% of GDP per year (thereby confirming the earlier agreement made in the Eurogroup). Moreover, the report stresses the importance of undertaking consolidation as part of a comprehensive strategy, of avoiding pro-cyclical policies, of creating sufficient budgetary safety margins and of attaining sustainable public finances. At the same time, it grants the ECOFIN Council some discretionary leeway in the implementation of the Stability and Growth Pact.

Sound policies

There is a broad consensus that the following elements are the basic ingredients for sound fiscal policies aimed at securing sustainable public finances and enhancing stability and growth in the euro area:

- Governments have reaffirmed their commitments to fiscal discipline. In this respect, the October 2002 Eurogroup agreement on achieving budgetary positions close to balance or in surplus in the medium term is an appropriate strategy, combining progress in fiscal consolidation with a certain degree of flexibility.
- Public finance plans should be part of a medium-term-oriented strategy including ambitious and comprehensive, expenditure-based structural reform. This will reinvigorate confidence and growth, while facilitating the attainment of fiscal objectives.
- When these requirements are fulfilled and consolidation strategies are adequate, countries can rely on the operation of automatic stabilisers to contribute to macroeconomic stability and growth. However, the operation of automatic stabilisers in a weak economic environment cannot be used as an ex ante justification for breaching the reference value of 3% of GDP for the deficit. This could give rise to moral hazard problems, weakening the necessary diligence required to prevent excessive deficits and to correct them within the time frame set by the ECOFIN Council.
- In order to succeed in their strategies, all governments need to exercise and accept appropriate peer pressure, in particular, by means of a rigorous, though prudently flexible, implementation of the excessive deficit procedure. This would also imply a willingness to impose sanctions and enforce sufficient debt reduction where needed.
- High-quality and timely data reporting followed by a careful assessment of budgetary developments, in particular as regards compliance with consolidation requirements, are essential prerequisites.

5 Eurosystem staff macroeconomic projections for the euro area

On the basis of the information available up to 22 May 2003, Eurosystem staff have prepared projections for macroeconomic developments in the euro area. These projections were produced jointly by experts from both the ECB and the euro area national central banks in line with established procedures.¹ They are a biannual input into the Governing Council's assessment of economic developments and the risks to price stability.

The staff projections are based on a series of assumptions with regard to interest rates, exchange rates, oil prices, world trade outside the euro area and fiscal policies. In particular, the technical assumption is made that short-term market interest rates and bilateral exchange rates will remain unchanged over the projection horizon. The technical assumptions with regard to long-term interest rates and both oil and non-energy commodity prices are based on market expectations, whereas fiscal policy assumptions are based on national budget plans and other information concerning budgetary developments in the individual euro area member countries.²

To express the uncertainty surrounding projections, ranges are used to present the results for each variable. The ranges are based on the differences between actual outcomes and previous projections carried out by euro area central banks over a number of years. The width of the ranges is twice the average absolute value of these differences.

Assumptions with regard to the international environment

The assumptions made with regard to the international environment imply that world economic activity should gradually recover in the remainder of this year, after a muted first half of 2003. The upturn is assumed to continue over the projection horizon.

World economic growth is estimated to have remained at the level observed in late 2002 in

the first half of this year and is expected to gradually increase over the remainder of the horizon. The decline in consumer and business confidence in industrialised economies associated with the military operation in Iraq is likely to have had a negative impact on world demand. The partial resolution of geopolitical uncertainties should therefore support global economic activity. In the United States, real GDP growth is expected to strengthen in the second half of 2003 and to remain stable in 2004, albeit at rates below those observed in the late 1990s. The prospects for higher growth rates in the United States are expected to be tempered by weak corporate finances and the gradual correction of macroeconomic imbalances. Over the course of the projection horizon, these constraints to growth are expected to diminish. Some recovery in economic activity is also expected for Japan, while growth in non-Japan Asia is expected to remain resilient. The EU acceding countries and other transition economies are projected to continue to grow at a relatively strong pace, given the improvement in the external environment and the continued resilience of domestic demand. Overall, *world real GDP growth outside the euro area* is projected to reach around 3.5% on average in 2003, about the same growth rate as that observed in 2002. It is projected to increase to 4.5% in 2004.

Growth in world trade is assumed to follow a pattern similar to that of world real GDP. After a rate of 2.8% in 2002, growth in *the euro area's external export markets* is projected

¹ More information on the procedures and techniques used to derive the projections is given in "A guide to Eurosystem staff macroeconomic projection exercises", ECB, June 2001.

² Short-term interest rates as measured by the three-month Euribor are assumed to remain unchanged at slightly below 2.4% over the projection horizon. The technical assumption of constant exchange rates implies that the EUR/USD exchange rate will stay at 1.16 over the horizon and that the effective exchange rate of the euro will be 14% higher than the average of 2002. Market expectations of euro area ten-year nominal government bond yields imply a slightly rising profile, from 3.8% to 4.0% towards the end of the horizon. Based on the path implied by futures markets, oil prices are assumed to decline to USD 23.0 per barrel towards the end of the horizon, from the peak of USD 31.0 per barrel observed in the first quarter of 2003. By contrast, it is assumed that non-energy commodity prices will increase moderately in both 2003 and 2004.

to pick up gradually in the course of 2003, resulting in an average annual growth rate of around 4.5% in that year. It is expected to increase further to about 7% in 2004. *Inflation rates* declined in most industrialised countries outside the euro area last year, but are assumed to increase somewhat in 2003, and to remain broadly unchanged in 2004.

Real GDP growth projections

A moderate recovery in euro area economic activity is projected for the second half of this year, initially triggered by the projected upturn in foreign demand. Real GDP growth is thus projected to be between 0.4% and 1.0% on average in 2003, and then to increase to between 1.1% and 2.1% in 2004. The assumed strengthening in euro area foreign demand is projected to lead to a gradual upturn in export growth, despite the impact of the recent appreciation of the euro. Euro area domestic demand is projected to pick up gradually, driven by a recovery in investment and supported mainly by resilience in private consumption. Inventory investment is also projected to provide a small positive contribution to real GDP growth over the horizon.

Among the domestic expenditure components, quarterly growth in *private consumption* remained relatively resilient in the second half of 2002. Some moderation is estimated for the first half of 2003, before a gradual recovery takes place as of the second half of the year. Average annual growth in private consumption is thus projected to increase to between 1.2% and 1.6% in 2003, and to be in a range of 1.1% to 2.4% in 2004. Consumption expenditure is projected to develop broadly in line with growth in real disposable income, which is supported by lower inflation and by a positive contribution of net fiscal transfers in both 2003 and 2004. Weak employment developments, however, are projected to somewhat restrain labour income growth over the horizon. On the basis of current budget plans, it is assumed that the contribution of *government*

consumption to real GDP growth will decline over the projection horizon.

Total fixed investment is projected to recover somewhat as from the second half of 2003. The average annual rate of change is projected to be between -1.3% and 0.9% in 2003, and between 0.5% to 3.7% in 2004. This gradual recovery in total investment results mainly from *business investment*, which is supported by the improvement in the global economic environment and by the low level of real interest rates. Nevertheless, the contribution of business investment to growth is projected to remain modest over the horizon, due to the absence of capacity constraints and the ongoing consolidation in corporate finances. The latter arises from the impact of both the prolonged period of slow growth and the past decline in equity prices on corporate balance sheets.

The average annual rate of change in exports – including intra-euro area trade – is projected to be between 0.5% and 3.4% in 2003 and to strengthen further to between 3.0% and 6.2% in 2004. The projection for exports mainly reflects the expected increase in export market growth, although a decline in the euro area's external market share is expected as a consequence of the recent appreciation of the euro. The average annual rate of change in imports – including intra-euro area trade – is projected to be between 1.6% and 5.0% in 2003 and to reach 3.5% to 6.9% in 2004, reflecting the profile of total final expenditure in the euro area, but also some upward impact of the appreciation of the euro. As a result, the contribution of net exports to GDP growth, which was strongly positive at 0.6 percentage point in 2002, is projected to turn slightly negative over the horizon.

After showing some resilience until mid-2002, *total employment* growth declined in the second half of the year, as the protracted weakness in economic activity led firms to increasingly adjust their labour force. Some downward adjustment is projected for 2003, before employment growth starts to recover

in 2004, following the cyclical pattern of activity with the usual lag. Labour supply is projected to rise as a result of increasing participation rates, although at a slower pace than in recent years owing to less favourable labour market conditions. The projections for labour supply and employment imply that the unemployment rate will increase somewhat over the horizon.

Price and cost projections

The average rate of increase in the overall *Harmonised Index of Consumer Prices (HICP)* is projected to decline to between 1.8% and 2.2% in 2003, after 2.3% in 2002. It is projected to decline further to between 0.7% and 1.9% in 2004. After the reversal of the temporary spike in oil prices, as occurred in the first quarter of 2003, the energy component is projected to decelerate markedly and to contribute negatively to HICP inflation in 2004. This largely reflects the assumed decline in oil prices in euro terms. By contrast, the rate of increase in the non-energy component is projected to remain broadly unchanged in the remainder of 2003, close to the level observed in the first quarter of the year. In 2004 it is projected to decline as a result of a reduction in domestic cost pressures and the delayed impact of lower import prices.

The annual rate of change in import prices remained negative in the course of 2002, reflecting weak external inflationary pressures

and the appreciation of the euro since spring 2002. Import prices are expected to decline further in 2003, as a consequence of the recent appreciation of the euro and the fall in oil prices. They are projected to remain broadly unchanged in 2004.

Taking into account current wage settlements, the growth in nominal compensation per employee is assumed to remain broadly unchanged over the horizon. The projections for *unit labour costs* are thus largely driven by the cyclical recovery in labour productivity. Labour productivity picked up in the course of 2002 and unit labour cost growth started to decline, as employment growth weakened. As economic activity picks up, labour productivity growth is projected to strengthen further, moving back to rates close to the long-term average towards the end of the horizon. As a result, unit labour cost growth is projected to decline in 2004. In the context of weak economic activity and the recent appreciation of the euro, *profit margins* are projected to remain restrained in 2003, but to widen somewhat in 2004 as the recovery gathers momentum.

As a result of the factors mentioned above, the rate of increase in the *GDP deflator at market prices* – which reflects the behaviour of unit labour costs, profit margins and indirect taxes – is projected to decline to between 1.9% and 2.1% in 2003, after 2.4% in 2002. It is projected to be between 1.2% and 2.0% in 2004.

Table 14

Macroeconomic projections

(average annual percentage changes)¹⁾

	2002	2003	2004
HICP	2.3	1.8-2.2	0.7-1.9
Real GDP	0.9	0.4-1.0	1.1-2.1
Private consumption	0.6	1.2-1.6	1.1-2.4
Government consumption	2.8	0.7-1.6	0.5-1.5
Gross fixed capital formation	-2.7	-1.3-0.9	0.5-3.7
Exports (goods and services)	1.2	0.5-3.4	3.0-6.2
Imports (goods and services)	-0.5	1.6-5.0	3.5-6.9

1) For each variable and horizon, ranges are based on the average absolute difference between actual outcomes and past projections by euro area central banks.

Box 9**Comparison with December 2002 Projections**

The major change to the projection assumptions compared with the Eurosystem staff macroeconomic projections published in the Monthly Bulletin in December 2002 is the higher nominal effective exchange rate of the euro, reflecting the appreciation of the euro by some 11% since November 2002. Further important changes in assumptions are the downward shift by about 90 basis points in both short-term rates and in market expectations for long-term interest rates. Furthermore, the assumptions regarding growth in the euro area external export markets have been revised downwards by about 1 percentage point for 2003 and by about 0.5 percentage point for 2004.

The ranges projected for real GDP growth have now been shifted downwards for both 2003 and 2004. The revisions are explained by a combination of two main factors. The first factor is the changes in the projection assumptions for the euro exchange rate and world trade, which imply lower extra-euro area export demand and thereby also reduced investment growth, notwithstanding the lower assumptions on interest rates. The second factor is the lower outturn for economic activity in early 2003 compared with the December 2002 projections. In this context, the projections now embody somewhat larger balance-sheet consolidation in the corporate sector.

The range projected for the annual rate of increase in the overall HICP has been shifted downwards for 2004. This is largely explained by the upward shift in the assumption on the nominal effective exchange rate of the euro and by the downward revisions to the projections for euro area domestic demand. The revisions to the annual average rates of increase in the overall HICP are also affected by the energy component of the HICP. The temporary spike in oil prices in the first quarter of 2003 mechanically raises the average annual rate of change in the energy component in 2003, but reduces it in 2004. The revisions to domestic cost factors in the euro area remain limited. Taking into account current wage settlements, growth in nominal compensation per employee has only been revised slightly downwards compared with the December 2002 projections. In combination with lower labour productivity growth, the projections for unit labour cost growth in 2003 have therefore been revised slightly upwards.

Comparison of macroeconomic projections

(average annual percentage changes)

	2002	2003	2004
HICP – June 2003	2.3	1.8-2.2	0.7-1.9
HICP – December 2002	2.1-2.3	1.3-2.3	1.0-2.2
Real GDP – June 2003	0.9	0.4-1.0	1.1-2.1
Real GDP – December 2002	0.6-1.0	1.1-2.1	1.9-2.9

Box 10**Forecasts by other institutions**

A number of forecasts for the euro area are available from various institutions, both international organisations and those in the private sector, including the results of the ECB's own Survey of Professional Forecasters. However, these forecasts are not strictly comparable with one another, or with the Eurosystem staff macroeconomic projections, as they are based on different assumptions and were finalised at different points in time (resulting in different cut-off dates for the inclusion of the latest available information). In contrast to the Eurosystem staff macroeconomic projections, other forecasts are typically not conditioned on the assumption that short-term interest rates will remain unchanged over the projection horizon. Moreover, the forecasts differ with respect to their assumptions for financial and external variables. The forecasts covered by the Consensus Economics Forecasts and the Survey of Professional Forecasters use a variety of unspecified assumptions.

Despite different assumptions, there is a consensus among the forecasts currently available from other institutions that euro area economic activity will gradually recover in the course of 2003, leading to average annual GDP growth of close to 1%. For 2004, the international organisations predict annual GDP growth of 2.3% to 2.4%, whereas the Consensus Economics Forecasts and the Survey of Professional Forecasters display somewhat lower growth rates of 2.0% and 2.1% respectively. For both years of the horizon, the available forecasts are at the upper end of the ranges predicted by Eurosystem staff projections. It should be noted that these forecasts were finalised earlier than the Eurosystem staff projections. Hence, they are based on more limited information on economic activity in the first half of 2003, while forecasts from the OECD, the IMF and the European Commission also assume a smaller appreciation of the euro. In addition, the European Commission forecast reports non-working-day-adjusted annual growth rates, which will be around 0.3 percentage point higher in 2004 than the working-day-adjusted growth rates used in the Eurosystem projections. The other forecasts do not specify whether they report working-day-adjusted or non-working-day-adjusted data.

Table A: Comparison of forecasts for euro area real GDP growth*(annual percentage changes)*

	Date of release	2002	2003	2004
European Commission	Apr. 2003	0.9	1.0	2.3
IMF	Apr. 2003	0.8	1.1	2.3
OECD	Apr. 2003	0.9	1.0	2.4
Consensus Economics Forecasts	May 2003	0.8	1.0	2.0
Survey of Professional Forecasters	Apr. 2003	0.9	1.0	2.1

Sources: European Commission Economic Forecasts Spring 2003; IMF World Economic Outlook April 2003; OECD Economic Outlook No 73; Consensus Economics Forecasts and the ECB's Survey of Professional Forecasters.

All forecasts show a decrease in consumer price inflation in 2003, with average annual inflation ranging between 2.0% and 2.1%. For 2004, all available forecasts expect the inflation rate to decline to a level of between 1.5% and 1.7%.

Table B: Comparison of forecasts for euro area overall HICP inflation*(annual percentage changes)*

	Date of release	2002	2003	2004
European Commission	Apr. 2003	2.2	2.1	1.7
IMF	Apr. 2003	2.3	2.0	1.5
OECD	Apr. 2003	2.4	2.0	1.6
Consensus Economics Forecasts	May 2003	2.3	2.0	1.6
Survey of Professional Forecasters	Apr. 2003	2.2	2.0	1.7

Sources: European Commission Economic Forecasts Spring 2003; IMF World Economic Outlook April 2003; OECD Economic Outlook No 73; Consensus Economics Forecasts and the ECB's Survey of Professional Forecasters.

6 The global macroeconomic environment, exchange rates and the balance of payments

World economic activity remains subdued

World real GDP growth in the first half of 2003 is estimated to have remained at the levels observed in late 2002, and an increase is projected only for the second half of the year. In the large industrialised countries, real GDP growth is expected to remain below trend in 2003 for the third year in a row. Moreover, the recovery does not yet appear to be self-sustained. In particular, growth in the United States has lost momentum, as private domestic demand is retrenching. Despite tight trade relations with an overall weaker industrialised world, the resilience of non-Japan Asia must be increasingly recognised as one of the major factors supporting world economic activity (see Chart 44).

With regard to the outlook for economic growth, it is important for all industrialised countries to ascertain the timing of a recovery of investment, the muted pace of which has so far been a determining factor in the sluggish recovery of the global economy. The ongoing correction of imbalances accumulated during the last period of strong growth, including significant overcapacity and over-leveraging, will – together with the aftermath of the bursting of the stock market bubble – continue to have a bearing on investment in the short term.

Concerning the risks to global economic growth, while geopolitical risks appear to have declined, there are concerns about the potential impact of SARS on the Asian economies. Furthermore, the existence of twin deficits in the United States adds to the uncertainty.

Turning to individual countries, in the United States advance data indicate that the pace of economic expansion at the beginning of 2003 continued to be moderate. Real GDP grew by 1.6% in the first quarter of 2003 (quarter

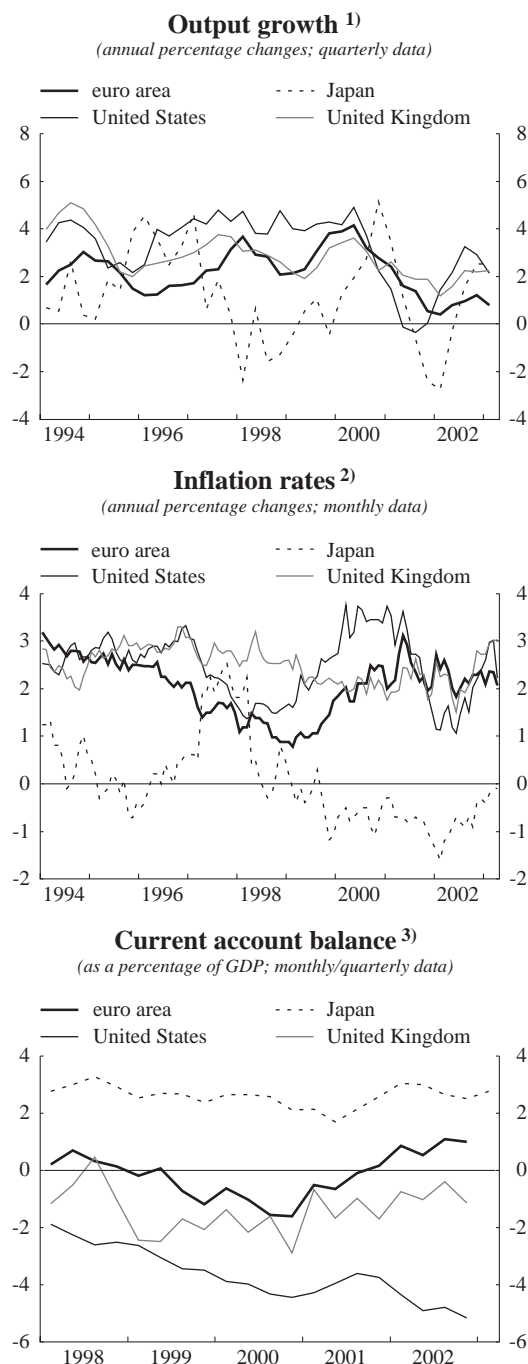
on quarter, annualised) with the main contributor to growth being a significant drop in imports that outweighed the decline in exports. Increases in personal consumption expenditures, residential fixed investment and government spending also contributed to real GDP growth, albeit to a lesser extent.

In the first four months of 2003, the US government recorded a fiscal deficit of USD 93 billion, which is more than three times higher than the deficit recorded over the same period of 2002. At the end of May, Congress approved a fiscal package whose cost is estimated at USD 350 billion over the next ten years and which is expected to provide a fiscal stimulus of around USD 70 billion (0.7% of GDP) in 2003 and USD 150 billion (1.5% of GDP) in 2004.

Looking ahead, the limited data available at this stage, which already incorporate the effects of a lifting of geopolitical uncertainty related to the war in Iraq, remain mixed. Concerning business expenditure, business confidence as measured by the Institute for Supply Management (ISM) indices improved slightly in May but did not signal a significant rebound in capital spending. Furthermore, industrial production in April declined by 0.5% (month on month) and capacity utilisation reached record lows, suggesting that there are no incentives for corporate firms to expand their production capacity. However, the improvement in US firms' financial conditions, including their successful efforts to contain costs and some gains in pricing power owing to the US dollar depreciation, are positive factors that should support capital spending once domestic demand strengthens.

Regarding private consumption, recent data releases suggest that household spending is unlikely to accelerate significantly in the short term. While consumer confidence – as measured by both the University of Michigan consumer sentiment index (following the end

Chart 44
Main developments in major industrialised economies



Sources: National data, BIS, Eurostat and ECB calculations.

- 1) Eurostat data are used for the euro area and the United Kingdom; for the United States and Japan national data are used.
- 2) Data for the euro area up to 1995 are estimates for the HICP based on national CPI data; after 1995 HICP data are used. The RPIX index is used for the United Kingdom.
- 3) ECB and Eurostat data are used for the euro area and the United Kingdom; for the United States and Japan national data are used. For all countries, figures refer to seasonally adjusted data for both GDP and the current account.

of the war in Iraq) and the Conference Board's index – has rebounded significantly from its pre-war lows, labour market conditions have weakened further. The unemployment rate increased to 6% in April and non-farm payrolls posted their third consecutive monthly decline, which has resulted in a total loss of around 500,000 jobs since January 2003. The recent slowdown in household real wage growth, together with subdued consumer credit growth, is likely to reinforce the moderate trend growth in private consumption.

As a result of the sharp drop in energy prices, annual CPI inflation declined by 0.8 percentage point to 2.2% in April, thus reversing the upward trend which had begun in October 2002. CPI inflation excluding food and energy continued its declining trend and reached 1.5% in April. The low capacity utilisation and moderate wage growth are expected to contribute to relatively subdued inflationary pressures in the medium term. Some additional pass-through of lower oil prices may also contribute to this development.

Concerning monetary policy, at its meeting on 6 May the Federal Open Market Committee decided to maintain its target for the federal funds interest rate at 1¼%, its level since November 2002.

In Japan, economic activity continued to slow further on the back of weakening export momentum. In the first quarter of 2003, quarter-on-quarter real GDP growth came to a halt, following positive growth of 0.5% in the fourth quarter of 2002. This slowdown is largely the result of a marked decline in quarter-on-quarter export growth, from +4.5% in the fourth quarter of 2002 to -0.5% in the first quarter of 2003. This largely reflects weakening exports to the United States, especially of automobiles, while exports to Asia remained relatively robust. Net external demand subtracted 0.2 percentage point from the overall growth in Japanese GDP, while domestic demand added 0.2 percentage point. Private consumption

and investment spending continued to make positive growth contributions, with the former being supported by a further decline in the savings rate. By contrast, public investment declined strongly (-3.5% quarter on quarter), reflecting attempts to curtail traditional public works spending.

Looking ahead, the Japanese economy is expected to remain relatively weak in the near term, with some moderate growth increase possibly occurring later in the year, mainly driven by an improvement in external demand, spilling over only gradually into domestic demand. However, the outlook is clouded by a number of risks, including inter alia the uncertainties surrounding the US economy and the potential impact of SARS on demand in the Asian region. Furthermore, fragility in the financial sector – illustrated by the recent injection of capital by the government into a large bank, which was unable to meet minimum capital requirements at end-March – continues to weigh on the prospects for the Japanese economy.

Regarding price developments, deflationary pressures continue to plague the Japanese economy. In April, the annual rate of change of the CPI excluding fresh food stood at -0.4%, after an average of -0.7% in the previous three months. At the same time, the GDP deflator declined by 3.5% year on year in the first quarter of 2003, thereby continuing the negative trend observed throughout 2002.

Against this background, the Bank of Japan decided on two additional quantitative easing steps on 30 April and 20 May, bringing the target range for the outstanding balance of current accounts held at the Bank of Japan to around JPY 27-30 trillion. In addition, on 25 March the Bank of Japan raised the maximum amount of equities it will purchase from commercial banks from JPY 2 trillion to JPY 3 trillion. Furthermore, at its meeting on 8 April it announced that it will examine – as a temporary measure – the possible purchase of asset-backed securities for its money

market operations, with a special emphasis on securities backed by assets of small and medium-sized enterprises. In an effort to avoid turbulence in financial markets, on 17 May the Bank of Japan agreed to provide liquidity to a large bank after the Financial Services Agency took prompt corrective action.

In the United Kingdom, quarter-on-quarter real GDP growth slowed to 0.2% in the first quarter of 2003, to stand 2.2% higher than a year earlier. Household spending decelerated rather abruptly to 0.4% quarter-on-quarter, following a prolonged period of buoyant growth. This development seems to be a reflection of the recent slowdown in real disposable income growth and an incipient cooling of the housing market, whereas the decline in equity prices over the past years may have dampened private consumption as well. Gross fixed capital formation declined marginally during the first quarter of the year, despite some improvement in business investment. Exports remained unchanged during the first quarter, following a sharp contraction in the last quarter of 2002. The poor performance of UK exports seems to reflect the weakness in the global economy.

Inflation as measured by the Retail Price Index excluding mortgage interest payments (RPIX) has been above the target of 2.5% since November 2002. Following an average increase of 2.9% in the first quarter, the RPIX rose at an annual rate of 3.0% in April. This rise above target mainly reflects an increase in petrol prices and house price depreciation, associated with earlier surges in oil and house prices. In addition, a much larger increase in Council Tax in April this year than in 2002 also contributed to the rise in RPIX inflation. Annual HICP inflation, which stood at 1.5% in April, was considerably lower than RPIX inflation, mainly owing to a different treatment of components related to housing. Since its interest rate cut on 6 February 2003 (by 0.25 percentage point to 3.75%), the Bank of England's Monetary Policy Committee (MPC) has left its repo rate unchanged.

Looking ahead, output growth may be supported by a higher contribution of net foreign trade, robust growth in public expenditure and possibly a gradual upturn in investment, whereas private consumption growth is likely to moderate. There are still uncertainties surrounding the global economic outlook and the impact of the depreciation of the pound sterling on future output and inflation. Downside risks relate to the prospects for consumer spending and house price developments.

In Denmark, quarter-on-quarter real GDP grew by 0.4% in the first quarter of 2003, up from 0.1% in the fourth quarter of 2002. This development was mainly driven by positive changes in inventories as well as continuously increasing net exports. After an average increase of 2.8% in the first quarter of 2003, HICP inflation declined to an annual rate of 2.5% in April, mainly owing to decreases in oil prices.

In Sweden, quarter-on-quarter real GDP rose by 0.6% in the first quarter of 2003, compared with 0.4% in the fourth quarter of 2002, resulting in an annual real GDP growth rate of 2.2%. Output growth was driven by domestic demand (including stocks), while the contribution from net exports also turned positive. As energy prices declined, annual HICP inflation fell to 2.3% in April 2003, compared with an average of 2.9% in the first quarter of the year.

In Switzerland, recent data releases have confirmed the current weakness in economic activity. After a contraction of 0.7% (quarter on quarter, annualised) in the fourth quarter of 2002, real GDP decreased by 1% in the first quarter of 2003 owing to a further decline in investment and a significant fall in exports. Moreover, leading indicators and confidence indices are not pointing to any improvement in the short term. Regarding price developments, the recent decline in oil prices has contributed to a significant decrease in inflation. In May the year-on-year rate of inflation was 0.4%, compared with 0.7% in April and 1.3% in March.

While considerably affected by the economic weakness in the euro area, growth in the larger EU acceding countries has remained relatively robust. Domestic demand continues to be the main factor underpinning growth, with expansionary fiscal policies remaining an important factor in terms of explaining the current buoyancy in private consumption growth. Following the appreciation of the euro against the dollar and the fall in oil prices, inflationary pressures have abated considerably in most acceding countries.

At country level, real GDP growth in Hungary increased slightly in the fourth quarter of last year, sustained by strong growth in private consumption. Growth is likely to remain driven by domestic demand in 2003, as the currently planned fiscal adjustment is expected to have a limited impact this year. Despite the strength in domestic demand, inflationary pressures have diminished considerably, owing to lower oil prices and imported inflation. In the Czech Republic, real GDP growth declined somewhat in the second half of 2002. There could be a gradual recovery in economic activity in 2003. The main uncertainties relate to the current international environment and to the future pace of consolidation in the fiscal deficit. As a result of several factors, including low imported inflation and a sharp decline in agricultural producer prices, annual consumer price inflation remained negative for the first four months of 2003, although it is expected to rebound moderately later in the year. In Poland, real GDP growth increased further in the fourth quarter of 2002 in line with earlier expectations, prompted by strong private consumption and good performance in the exporting sector. Signs of improvement in the corporate sector may anticipate a rebound of investment demand. Inflationary pressures have continued to fall sharply, with annual consumer price inflation down to 0.3% in April 2003.

In Turkey, the recovery gathered further momentum in the fourth quarter of 2002 and in the early part of 2003. The rebound in economic activity is increasingly

broad-based, as suggested by the acceleration in private and public consumption as well as a sizeable recovery in gross fixed capital formation. Annual inflation, after having declined consistently in the second half of last year, has currently stabilised at levels just below 30%.

In Russia, economic growth increased further in the fourth quarter of 2002 and in the early part of 2003, as high oil prices in the run-up to the Iraq war had a positive impact on the Russian economy, strengthening the outlook. Several indicators point to greater economic activity, including robust growth in retail sales and industrial production in the first quarter of 2003. With regard to prices, annual inflation declined to slightly below 15% in the first quarter of the year, although it nonetheless remained above the target range envisaged for 2003.

In non-Japan Asia, preliminary evidence has shown that the outbreak of SARS has started to have a negative impact on economic activity, particularly in the areas of tourism and retail sales. The economies potentially most affected by the disease are those of Hong Kong SAR, Singapore and China. Meanwhile, the latest macroeconomic data releases indicate that the region's economic performance has remained strong, driven by export growth. However, there are increasing signs that in some countries domestic demand strength has started to moderate.

China remains the fastest growing country in the region. Real GDP expanded by 8.9% year on year in April 2003, after 9.9% in the first quarter. In that month, strong growth in exports and fixed asset investment (33.3% and 28.9% year on year, respectively) were the main contributors to this performance. Deflationary pressures continued to ease in 2003 as consumer prices in April rose for the fourth consecutive month to 1% year on year, up from 0.9% in March.

The Korean government estimates that real GDP growth will reach 4% year on year in the first quarter of 2003, down from 6.8%

year on year in the last quarter of 2002. Exports have continued to drive the expansion in the first quarter of this year, growing by 17.5% year on year in March. However, domestic demand has continued to decelerate, partly in response to heightened geopolitical tensions with North Korea, which weigh on both consumer and investment expenditure. In Singapore and Taiwan, real GDP growth in the first quarter slowed to 1.6% and 3.2% year on year, respectively. This deceleration in economic growth was largely related to a moderation in the pace of domestic demand, as exports continued to expand rapidly in the first quarter. More recently, in both countries retail sales have been negatively affected by SARS, while export growth seems to have lost momentum.

While the economic outlook for non-Japan Asia in general remains positive for 2003, the balance of risks to economic activity remains on the downside, with SARS in particular having the potential to worsen short-term economic performance. Other adverse external factors include tensions with North Korea and risks of a deceleration in foreign demand.

In Latin America, recent information confirms an ongoing improvement in economic conditions. Mexico's real GDP registered 2.3% year on year growth in the first quarter of 2003 – the highest rate since the economy pulled out of a recession around a year before. The economic recovery has permitted labour market conditions to stabilise, with the rate of unemployment remaining below 3% in the first quarter of this year. These positive developments notwithstanding, the evolution of the Mexican economy remains largely dependent on the US economy, while the moderation of oil prices and the strengthening of the peso represent downward risks to the country's outlook. In Brazil, the economy appears to have slowed down somewhat from the strength displayed in the last quarter of 2002, with industrial production growing by only 1.1% year on year in March. In Argentina, the economic

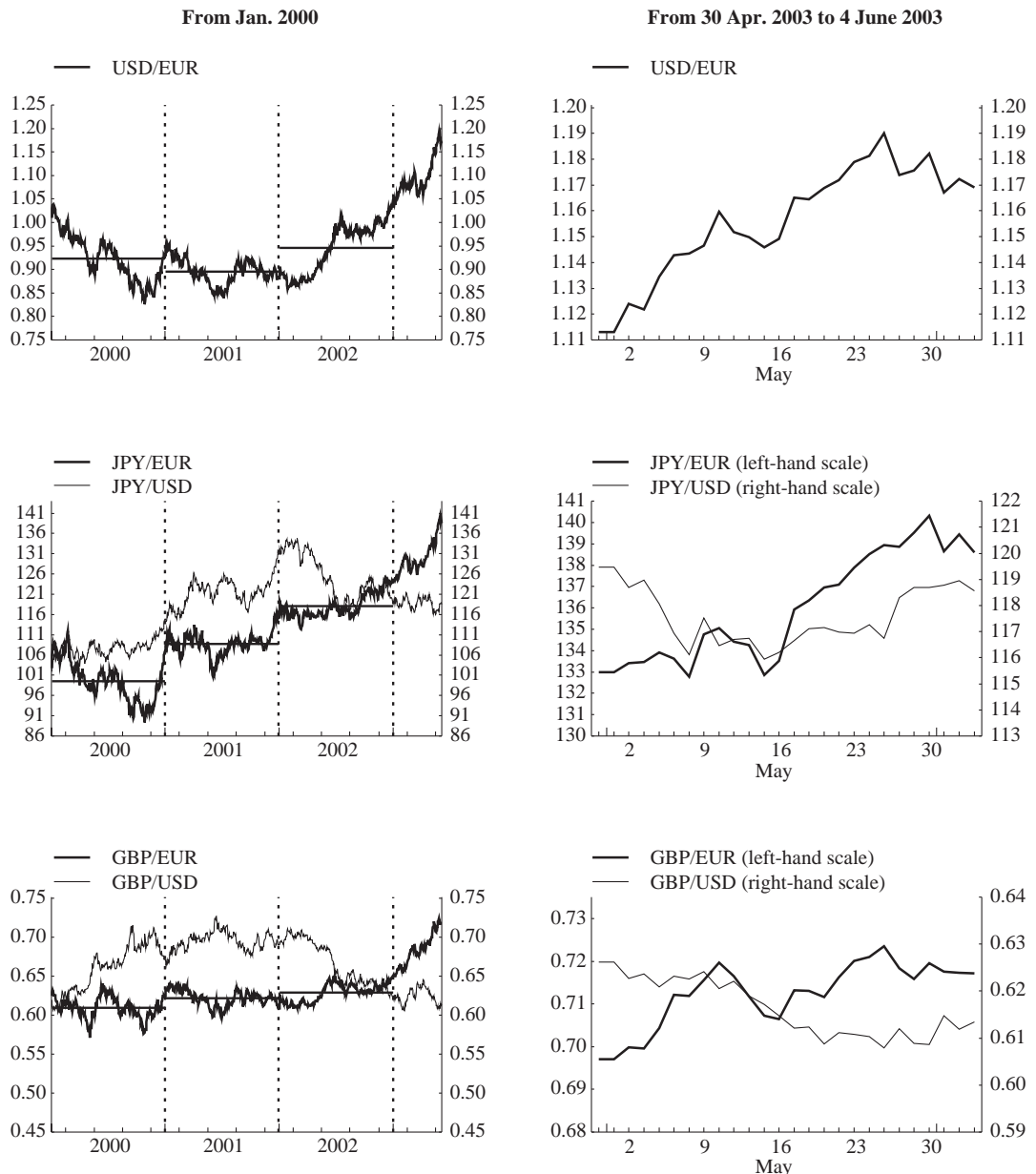
recovery seems to be under way, with manufacturing production growing for the sixth consecutive month in April, when it posted 20.1% year on year growth. It remains to be seen whether this recovery, which has been driven by exports following last year's sharp exchange rate depreciation, will be sustained over the coming months.

Euro strengthened in May

In May the euro witnessed a broad-based appreciation against the currencies of all its major trading partners and in particular vis-à-vis the US dollar. Towards the end of the month and in early June the single currency fluctuated around its launch levels against most major currencies.

Chart 45
Patterns in exchange rates

(daily data)



Source: ECB.

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

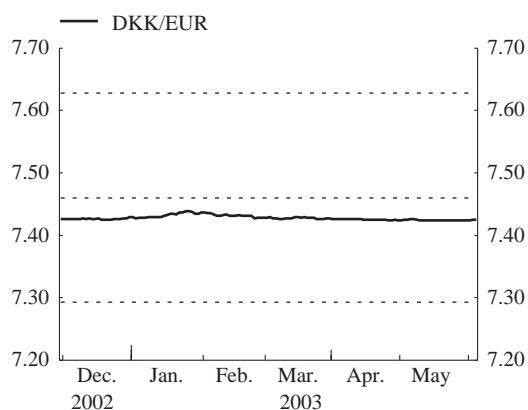
The euro strengthened vis-à-vis the US dollar in May (see Chart 45). In the course of May, market participants seemed to concentrate on signs of a sluggish pace of the economic recovery in the United States, as reflected in mixed macroeconomic data releases, against the background of a persistent current account deficit and an increasing fiscal deficit. In early June, the US dollar stabilised on the back of better-than-expected US data releases, notably on investors' sentiment. On 4 June the euro exchange rate stood at USD 1.17, i.e. 5% above its level at end-April 2003 and 23.6% higher than its average level in 2002.

The Japanese yen depreciated against the euro in May, mainly reflecting evidence of a continuing slowdown of Japanese economic growth, partly as a consequence of sluggish global demand weighing on Japanese exports (see Chart 45). Against the US dollar, the Japanese currency appreciated moderately. On 4 June the euro was quoted at JPY 138.60, 4.2% stronger than at the end of April and 17.4% higher than on average in 2002.

The euro also strengthened vis-à-vis the pound sterling against the background of a deceleration of economic activity in the United Kingdom, as suggested by

Chart 46
Patterns in exchange rates within ERM II

(daily data)

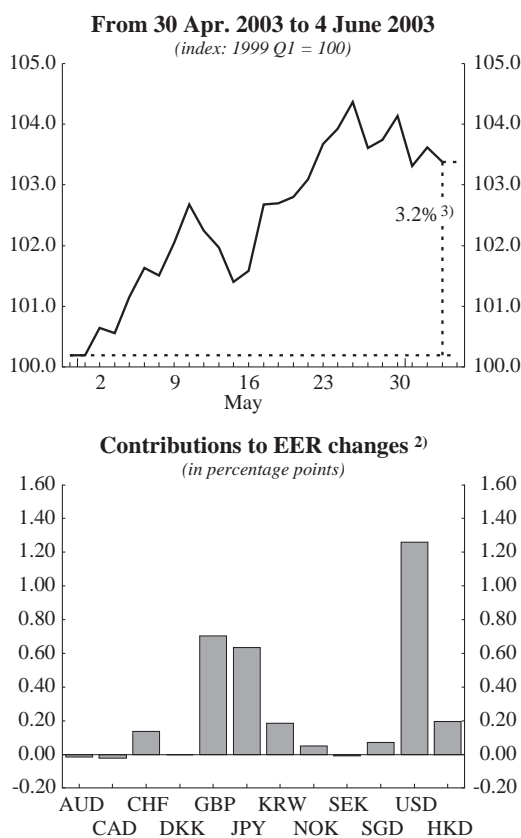


Source: ECB.

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

Chart 47
The effective euro exchange rate and its decomposition¹⁾

(daily data)



Source: ECB.

- 1) An upward movement of the index represents an appreciation of the effective exchange rate against 12 partner currencies.
- 2) Changes are calculated, using trade weights, against 12 major trading partners.
- 3) This figure denotes the effective appreciation of the euro EER index in the reference period.

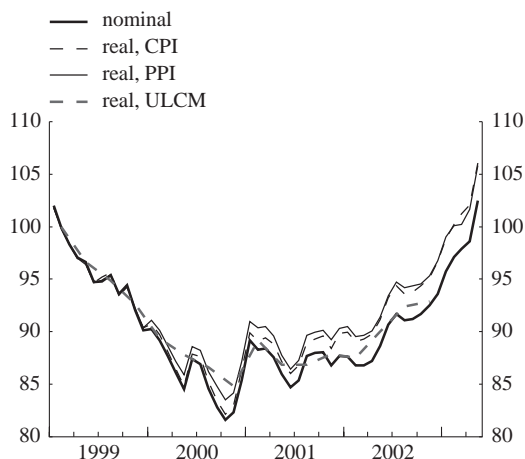
macroeconomic data releases notably on household spending and export performance. On 4 June the euro traded at GBP 0.72 against the pound sterling, i.e. 2.9% higher than at the end of April and 14.1% above its average in 2002.

Regarding other European currencies, the Danish krone continued to fluctuate in a narrow range slightly below its central parity in ERM II (see Chart 46). Since the end of April, the euro has remained broadly stable vis-à-vis the Swedish krona and appreciated by 1.6% relative to the Swiss franc.

Chart 48

Nominal and real effective euro exchange rates¹⁾

(monthly/quarterly data; index: 1999 Q1 = 100)



Source: ECB.

1) An upward movement of the index represents an appreciation of the euro. The latest observations for monthly data are for May 2003. In the case of the ULCM-based real EER, the latest observation is for Q4 2002 and is partly based on estimates.

On 4 June, reflecting the appreciation of the euro against the currencies of all its major trading partners, the nominal effective exchange rate of the euro – as measured against the currencies of 12 major trading partners of the euro area – was 3.2% stronger than the level at the end of April and around 15% above its average level in 2002 (see Chart 47). The real effective exchange rates of the euro, deflated by the CPI, PPI and ULCM, continued to track nominal effective exchange rate developments quite closely (see Chart 48). If seen in a historical perspective, these developments have brought the real effective exchange rate indices of the euro back to around their long-term averages, as is shown in more detail in Box II.

Box II

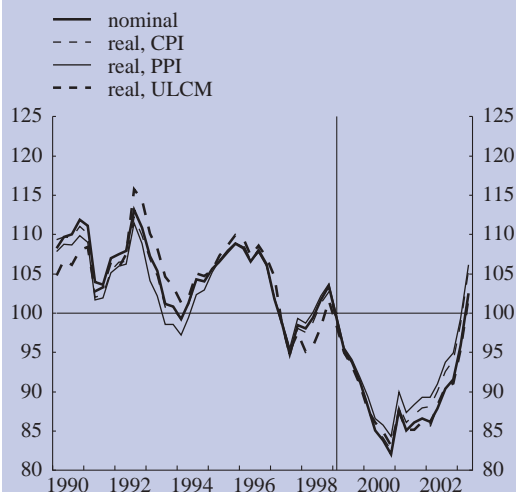
Euro effective exchange rate developments from a historical perspective

The exchange rate of the euro has appreciated fairly steadily since reaching historic lows in October 2000 – most notably in the course of 2002 and in the first half of 2003. This appreciation has been particularly pronounced vis-à-vis the currencies of the euro area's three most important trading partners, namely the United States, the United Kingdom and Japan. More specifically, compared with the average levels of 2002, the euro has appreciated by more than 23.5% against the US dollar, by almost 17.5% against the Japanese yen and by around 14% against the pound sterling, and on 4 June 2003 traded around its launch levels against these currencies. The euro has also strengthened significantly against the Asian currencies included in the euro effective exchange rate index for the "narrow group" of 12 major trading partners of the euro area. Overall, these developments translated into a nominal effective appreciation of around 15% compared with the 2002 average.

In order to properly understand the significant magnitude of these recent exchange rate movements, they are best assessed from a broader historical perspective. In this context, the appreciation of the euro thus far appears to be a correction from rather low levels, and as such was widely expected. This notion is confirmed by looking at long-term euro effective exchange rate developments, both in nominal and real terms. Chart A displays the nominal effective exchange rate of the euro since 1990 as well as three real effective exchange rates, deflated respectively by the CPI, PPI and Unit Labour Costs in Manufacturing (ULCM) indices. These indicators – calculated vis-à-vis the currencies of the narrow group – show that the international price and cost competitiveness position of euro area firms has recently reached a level corresponding to its average since 1990. This holds irrespective of the price (CPI or PPI) or cost (ULCM) index used.

Chart A: Historical nominal and real effective euro exchange rates¹⁾

(quarterly data; index: average (1990 Q1 - 2003 Q1) = 100)

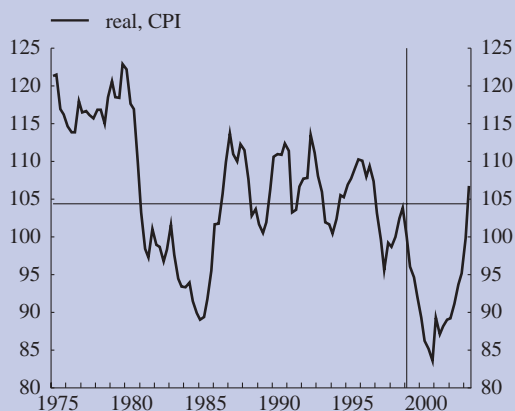


Source: ECB.

1) An upward movement of the index represents an appreciation of the euro. The latest observation is for Q2 2003. For the real EER indices the latest observation is an estimate, an exception being the ULCM-based real EER for which the last two observations are estimates.

Chart B: Historical real effective euro exchange rate¹⁾

(quarterly data; index: 1999 Q1 = 100)



Source: ECB.

1) An upward movement of the index represents an appreciation of the euro. The latest observation is for Q2 2003 and is an estimate. The horizontal line indicates the average since 1975.

Chart B further corroborates this finding by taking a longer-term perspective that covers the period since 1975. The current level of the (CPI-deflated) real effective exchange rate of the euro is also close to its average over this longer period, while the level observed in October 2000 corresponds to the long-term historical low.

Overall, when considered against past experiences, which have sometimes included rather dramatic exchange rate adjustments, it would appear that the appreciation has brought the euro into a range of levels that is broadly consistent with long-term averages.

Current account turned to a deficit in the first quarter of 2003

The euro area current account registered a surplus of €1.2 billion in March 2003, compared with €7.4 billion in March 2002. The lower surplus resulted from a €8.9 billion decrease in the goods surplus, which was only partially offset by a lower deficit for current transfers and a shift in the balance for services from a deficit to a surplus (see Table 15).

In the first quarter of 2003, the current account recorded a deficit of €2.1 billion, compared with a surplus of €12 billion in the first quarter of 2002. This reflected a decline in the goods surplus (from €26.7 billion in

the first quarter of 2002 to €14.3 billion in the first quarter of 2003) and an increase in the income deficit (from €7.4 billion to €13.8 billion). The shift in the services balance from a deficit (€4.7 billion) to a small surplus (€0.3 billion) partly offset these developments. The change in the goods balance in the first quarter of 2003 was due to a 4.2% annual increase in the value of goods imports, partly related to the significant rise in oil prices over this period, combined with a decrease of 1.1% in the value of exports.

Turning to month-on-month developments on the basis of seasonally adjusted data, the current account recorded a deficit of €1.7 billion in March 2003, compared with a

Table 15
Balance of payments of the euro area

(EUR billions; not seasonally adjusted)

	2002 Jan. - Mar.	2002 Mar.	2003 Jan. - Mar.	2003 Jan.	2003 Feb.	2003 Mar.
Current account balance	12.0	7.4	-2.1	-6.5	3.2	1.2
Credits	416.5	142.0	410.6	143.3	130.8	136.5
Debits	404.6	134.5	412.7	149.7	127.6	135.3
Goods balance	26.7	13.5	14.3	0.8	8.9	4.6
Exports	254.9	91.8	252.0	81.8	83.1	87.2
Imports	228.2	78.3	237.7	80.9	74.2	82.6
Services balance	-4.7	-0.8	0.3	-0.4	-0.1	0.8
Exports	72.5	25.1	74.2	25.2	22.9	26.1
Imports	77.3	25.9	73.9	25.6	23.0	25.2
Income balance	-7.4	-0.8	-13.8	-10.1	-2.6	-1.2
Current transfers balance	-2.6	-4.4	-2.9	3.1	-3.0	-3.1
Capital account balance	3.2	0.3	1.9	2.1	-0.9	0.7
Financial account balance	-8.2	17.9	-26.3	-15.6	-13.8	3.1
Direct investment	-16.0	-8.1	-6.1	-0.9	2.8	-8.0
Abroad	-55.5	-27.4	-31.7	-10.9	-5.4	-15.3
Equity capital and reinvested earnings	-41.6	-27.9	-16.0	-6.7	-5.0	-4.3
Other capital, mostly inter-company loans	-13.9	0.5	-15.7	-4.2	-0.4	-11.0
In the euro area	39.5	19.3	25.6	10.0	8.2	7.3
Equity capital and reinvested earnings	26.3	20.2	16.6	8.4	5.5	2.7
Other capital, mostly inter-company loans	13.1	-0.9	9.0	1.6	2.7	4.7
Portfolio investment	-35.8	6.4	14.4	-5.5	-0.8	20.7
Equities	2.3	1.9	16.7	16.2	2.7	-2.1
Assets	-32.1	-9.9	8.6	2.0	-0.1	6.7
Liabilities	34.5	11.7	8.1	14.1	2.8	-8.8
Debt instruments	-38.1	4.5	-2.4	-21.7	-3.5	22.8
Assets	-42.9	-19.0	-59.1	-24.7	-20.4	-14.0
Liabilities	4.8	23.5	56.7	3.0	16.9	36.8
Memo item:						
Combined net direct and portfolio investment	-51.8	-1.7	8.3	-6.4	2.0	12.7
Financial derivatives	2.5	-2.9	0.4	-1.0	1.0	0.4
Other investment	44.1	22.7	-47.0	-9.6	-22.3	-15.0
Reserve assets	-3.1	-0.2	12.0	1.5	5.4	5.0
Errors and omissions	-6.9	-25.6	26.6	20.0	11.6	-4.9

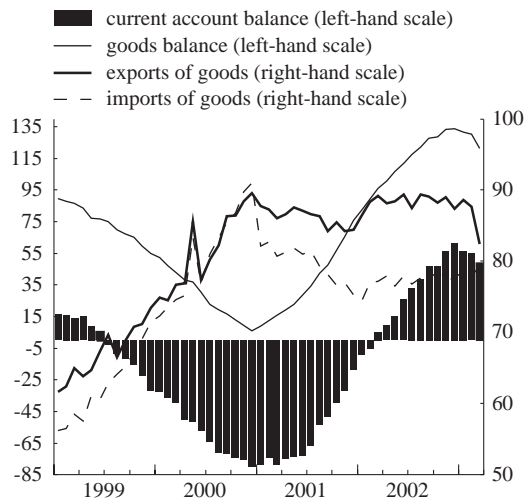
Source: ECB.

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 on the ECB's website.

Chart 49

The euro area current account balance, the goods balance and exports and imports of goods

(EUR billions; seasonally adjusted)



Source: ECB.

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

surplus of €1.9 billion the month before. The goods surplus decreased significantly (from €9.7 billion in February to €3.2 billion in March), largely reflecting a sizeable fall in export values (from €87.7 billion to €82.4

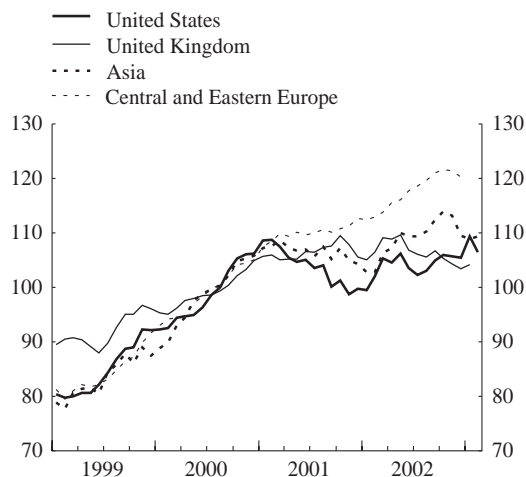
billion) combined with a small rise in imports, while the deficits for both income and current transfers were somewhat smaller than in the previous month.

The significant decline in export values of goods in March follows the marginal decline in export values observed in the second half of last year (see Chart 49). However, the extent of the fall in the value of exports in March is difficult to interpret and should be evaluated with some caution. This is because developments in March might have been influenced by the possible temporary impact on external demand of the geopolitical uncertainty stemming from the Iraqi crisis. Taking a longer-term view, extra-euro area export volumes have remained fairly flat since the second half of last year, coinciding with weak foreign demand and the loss in price competitiveness resulting from the euro appreciation. Latest trade volumes data up to February 2003 show that export volumes to many of the larger euro area export markets have been falling recently or have remained subdued (see Chart 50). With regard to commodities, export volumes of capital, consumer and intermediate goods have also been weak in recent months (see Chart 51).

Chart 50

Extra-euro area export volumes to selected trading partners¹⁾

(2000 = 100; seasonally adjusted; three-month moving averages)



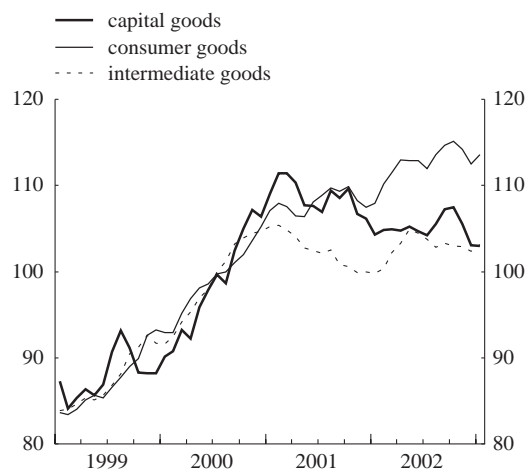
Sources: Eurostat and ECB calculations.

1) Latest observations are for February 2003.

Chart 51

Extra-euro area export volumes for selected commodities¹⁾

(2000 = 100; seasonally adjusted; three-month moving averages)



Sources: Eurostat and ECB calculations.

1) Latest observations are for January 2003.

Meanwhile, over the same period, export prices declined, suggesting that euro area exporters cut profit margins in an effort to partially offset the loss in price competitiveness resulting from the euro appreciation.

At the same time, the value of goods imports has also remained sluggish, reflecting both subdued import volumes and a slight decline in import prices. It seems that weak euro area demand, especially for the import-intensive categories of expenditure, such as investment and exports, could have offset the upward impact on import volumes that, *ceteris paribus*, should result from the euro appreciation. Meanwhile, the downward pressure on import prices due to the euro appreciation seems to have been partly compensated for by rising oil prices during the first quarter of 2003. However, looking ahead, significant downward pressure on import prices should materialise over the remainder of 2003 as a result of the lagged impact of the appreciation of the euro combined with the recent fall in oil prices, if sustained.

Net inflows in portfolio investment in the first quarter of 2003

Combined direct and portfolio investment recorded net inflows of €12.7 billion in March 2003 (see Table 15). These reflected net inflows in portfolio investment (€20.7 billion),

since direct investment recorded net outflows of €8 billion, mostly from transactions in direct investment abroad.

The developments in portfolio investment were mainly due to substantial net purchases (€36.2 billion) by non-resident investors of euro area bonds and notes, which more than offset sizeable net purchases of foreign bonds and notes by euro area investors. In March 2003 cross-border flows in money market instruments were subdued. With regard to equity securities, transactions of both resident and non-resident investors show a repatriation of funds towards home markets, which was possibly a result of the geopolitical uncertainty generated by the Iraqi crisis during this period.

Overall, the flows in combined direct and portfolio investment turned from net outflows in the first quarter of 2002 (€51.8 billion) into net inflows in the first quarter of 2003 (€8.3 billion). This shift resulted mainly from developments in debt instruments, which experienced a decline in net outflows from €38.1 billion to €2.4 billion over this period, as foreign investors increased their purchases of euro area debt instruments. This development is in line with the shift observed in 2002 among foreign investors towards increased purchases of euro area debt instruments. Conversely, cross-border equity flows have been shrinking owing to the fall in equity prices worldwide.

The outcome of the ECB's evaluation of its monetary policy strategy

In October 1998 the Governing Council of the ECB announced the main elements of its stability-oriented monetary policy. The strategy consists of a quantitative definition of price stability and a two-pillar framework for assessing risks to price stability. After more than four years, the Governing Council felt it would be useful to evaluate its strategy in the light of its experience. On 8 May 2003 it confirmed the definition of price stability as a year-on-year increase in the Harmonised Index of Consumer Prices (HICP) for the euro area of below 2%. Price stability is to be maintained over the medium term. The Council also clarified that, in the pursuit of price stability, it aims to maintain inflation rates below, but close to, 2% over the medium term. Furthermore, the Governing Council confirmed that its monetary policy decisions will continue to be based on a comprehensive analysis of the risks to price stability, comprising an economic analysis and a monetary analysis. It thereby retains the two-pillar approach to the organisation, assessment and cross-checking of policy-relevant information. The President's Introductory Statement to the ECB's monthly press conference has been restructured to better reflect this approach. Furthermore, the Governing Council decided to no longer review the monetary reference value on an annual basis.

I Introduction

On 8 May 2003 the Governing Council of the ECB announced the outcome of its evaluation of the ECB's monetary policy strategy.¹ This evaluation, which was carried out after more than four years of successfully conducting monetary policy for the euro area, took into account the public debate and a series of studies performed by ECB staff.² The outcome of the Governing Council's evaluation confirmed the main elements of the strategy originally announced in 1998, namely its quantitative definition of price stability and the two pillars underlying the overall assessment of the risks to price stability.³ However, the Governing Council also chose to clarify to the public some aspects of the strategy.

The Governing Council confirmed its definition of price stability "as a year-on-year increase in the Harmonised Index of Consumer Prices (HICP) for the euro area of below 2%", and that "price stability is to be maintained over the medium term". In addition, the Governing Council clarified the focus of its monetary policy within the definition by stating that in the pursuit of price stability the ECB aims to maintain the inflation rate below, but close to, 2% over the medium term. With this clarification, the Council underlined its commitment to maintain a sufficient safety margin to guard against the risks of deflation, while taking into account all other relevant considerations.

The Governing Council also confirmed that its monetary policy decisions will continue to be based on a comprehensive analysis of the risks to price stability founded on a two-pillar framework. The two pillars are: *economic analysis* to identify short to medium-term risks to price stability; and *monetary analysis* to assess medium to long-term trends in inflation, given the close relationship between money and prices over extended horizons. The Governing Council emphasised that, in seeking to make a unified judgement of the risks to price stability, it would continue to cross-check the information arising from these two approaches. As regards the monetary analysis, the Governing Council also decided to no longer review the reference value on an annual basis in order to stress the longer-term nature of the reference value for monetary growth

1 See the ECB press release entitled "The ECB's monetary policy strategy", 8 May 2003.

2 On the day of the announcement, the ECB published on its website a number of background studies prepared by its staff, which had served as input into the Governing Council's reflections on the ECB's monetary policy strategy. A note entitled "Overview of the background studies for the reflections on the ECB's monetary policy strategy" summarises the main conclusions from the background papers.

3 See the ECB press release entitled "A stability-oriented monetary policy strategy for the ESCB", 13 October 1998; the article entitled "The stability-oriented monetary policy strategy of the Eurosystem" in the January 1999 issue of the ECB's Monthly Bulletin; the article entitled "The two pillars of the ECB's monetary policy strategy" in the November 2000 issue of the ECB's Monthly Bulletin; and the book entitled "The Monetary Policy of the ECB", European Central Bank, 2001.

as a benchmark for assessing monetary developments.

The President of the ECB emphasised on 8 May that these decisions reflect the overall successful experience with the ECB's monetary policy strategy since its inception and ensure full continuity with the past conduct of monetary policy. Most notably, as Chart 1 shows, longer-term inflation expectations have been firmly anchored at levels in line with the definition of price stability since January 1999, remaining in a range between 1.7% and 1.9%. This is a remarkable result against the background of considerable adverse price shocks, such as a substantial increase in oil prices between 1999 and 2000, a significant depreciation of

the euro exchange rate between July 1999 and October 2000 and strong food price increases in 2001.⁴

The general public's understanding of the ECB's monetary policy strategy has improved over time. This reflects the communication efforts made by the Eurosystem, the experience gained from the practical conduct of monetary policy, and the analytical progress made in underpinning and refining elements of the strategy. However, some aspects of the strategy have proved difficult to communicate effectively and have generated some controversy among observers. The Governing Council therefore also examined these aspects as part of its strategy review.

2 The quantitative definition of price stability

The main aspects of the definition

Article 105.1 of the Treaty establishing the European Community assigns to the ECB the primary and overriding objective of maintaining price stability in the euro area. In October 1998 the Governing Council of the ECB announced its quantitative definition of price stability as a key element of its monetary policy strategy.

By referring to "an increase in the HICP of below 2%", the definition of price stability makes clear that both inflation and deflation are incompatible with price stability. The upper bound was set clearly above zero, at 2%, in order to incorporate a safety margin against deflation. This insures the economy against the possibility of monetary policy reaching a situation where it can no longer adequately respond with its policy rate to negative shocks owing to the zero lower bound on nominal interest rates. The definition of price stability announced in October 1998 did not specify a lower bound for inflation rates, reflecting the uncertainty surrounding the size of a potential bias in HICP inflation and its possible variation over time. However, by setting the upper bound for inflation clearly

above zero, the policy takes into account the possibility of HICP inflation slightly overstating true inflation as a result of a small but positive measurement bias in the price index. At the same time, the upper bound of 2% is low enough to reap the benefits of price stability.

A fundamental aspect of the ECB's monetary policy is that it aims to pursue price stability over the medium term. This means that the ECB recognises that monetary policy cannot, and therefore should not, attempt to fine-tune price developments at short horizons. As Box 1 explains, the medium-term orientation also allows monetary policy to take into account concerns about output fluctuations, without prejudice to attaining the primary objective.

The Governing Council's decision to publish the quantitative definition of price stability provided a quantitative benchmark for the general public to form inflation expectations, and for the setting of prices and wages. As noted above, this has been conducive to a

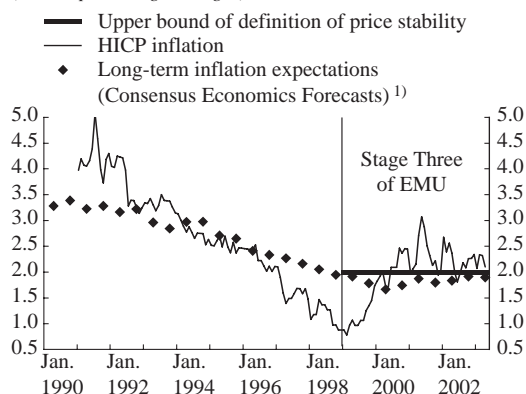
⁴ See the box entitled "The clustering of shocks to HICP inflation since the start of Stage Three of EMU" in the June 2002 issue of the ECB's Monthly Bulletin, p. 34.

Chart I

Euro area longer-term inflation expectations and inflation

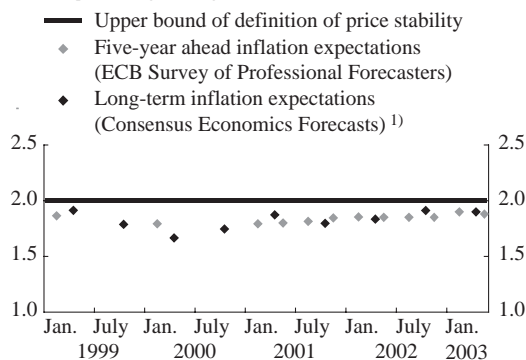
Panel A: Longer-term inflation expectations and inflation (1990-2003)

(annual percentage changes)



Panel B: Longer-term inflation expectations (1999-2003)

(annual percentage changes)



Sources: Eurostat, Consensus Economics Forecasts and ECB Survey of Professional Forecasters.

1) Until December 2002, weighted average of five largest euro area countries, accounting for more than 80% of euro area GDP.

firm anchoring of inflation expectations in the euro area at levels that are very stable and in line with the definition of price stability (see Chart I). This firm anchoring of longer-term inflation expectations has contributed to the smooth functioning of monetary policy.

The clarification of 8 May 2003

In its announcement of 8 May 2003, the ECB's Governing Council confirmed its definition of price stability. At the same time, it made clear that, within the definition, it aims to maintain inflation rates "close to 2% over the medium term". With this clarification the Governing

Council underlined that this focus of monetary policy, i.e. below, but close to, the upper bound of the definition, "provides a safety margin to guard against the risk of deflation". The safety margin "also addresses the issue of the possible presence of a measurement bias in the HICP and the implications of inflation differentials within the euro area".

This clarification makes explicit the ECB's commitment to maintaining inflation below, but close to, 2% over the medium term. It is fully in line with the past conduct of monetary policy and is also consistent with the markets' understanding of the ECB's past monetary policy, as reflected in long-term inflation expectations in the euro area at levels below, but close to, 2% since 1999.

The elements in the evaluation of the definition of price stability

To reach its decision of 8 May, the ECB's Governing Council evaluated the experience with and the main aspects underlying the quantification of the price stability objective: the choice of the appropriate price measure for monetary policy, the costs of inflation, and the arguments for tolerating small rates of positive inflation.

The choice of the price index

For the purpose of setting a quantitative objective for monetary policy, a price index should have a number of essential properties. These include the credibility and transparency of the index (e.g. it should be easily understood by the general public) and a high level of reliability (e.g. it should be subject to only infrequent revisions). It should also be a precondition that the index is provided with sufficient timeliness and frequency. To choose a price index that meets these criteria for the euro area as a whole, in 1998 the ECB decided to use Eurostat's headline HICP for defining price stability, i.e. the overall consumer price index which has been harmonised across EU countries.

Box I

The medium-term orientation of the ECB's monetary policy

The economy is continuously subject to largely unforeseeable shocks that also affect price developments. At the same time, monetary policy can only affect price developments with significant time-lags.¹ Moreover, such lags are variable (e.g. they depend on the prevailing economic circumstances) and, like most economic relationships, highly uncertain. Therefore, it would be impossible for any central bank to keep inflation at a specific point target at all times or even to bring it back to a desired level in a very short time. Monetary policy is ill-equipped to fine-tune economic developments or control prices at short horizons. Instead, monetary policy needs to act in a forward-looking manner and can only maintain price stability over longer periods of time. This is the core of the ECB's medium-term orientation.

Against this background, the choice of a pre-specified, fixed horizon for the conduct of monetary policy would be arbitrary since the transmission mechanism spans a variable, uncertain period of time. Furthermore, the choice of a fixed horizon is problematic as the optimal monetary policy response to ensure price stability always depends on the specific nature and size of shocks affecting the economy. For a wide variety of shocks (e.g. demand shocks, moving output and prices in the same direction) a prompt reaction by monetary policy will not only preserve price stability but will also help to stabilise the economy. However, in the case of some other economic shocks (e.g. of a cost-push nature) output and prices tend to move in opposite directions. An excessively aggressive policy response to restore price stability in a very short span of time may, in these circumstances, risk imparting a significant cost in terms of output and employment volatility. In these cases, it is widely recognised that a gradual response of monetary policy is appropriate to avoid unnecessarily high volatility in real activity. Thus, the medium-term orientation gives the ECB the flexibility required to respond in an appropriate manner to the different economic shocks. In particular, it helps to avoid introducing unnecessary volatility into the economy and embodies a concern for and a contribution to the stabilisation of output and employment.

1 For recent estimates for the euro area see the article entitled "Recent findings on monetary policy transmission in the euro area" in the October 2002 issue of the ECB's Monthly Bulletin.

The HICP is the index that most closely approximates the changes over time in the price of a representative basket of consumer goods and services purchased by euro area households. The use of this index makes transparent the Eurosystem's commitment to the full and effective protection against losses in the purchasing power of money.

It is sometimes argued that central banks should use measures of "core" or "underlying" inflation to define their primary objective.⁵ These measures remove the more volatile components and/or temporary factors from headline inflation, with a view to uncovering more fundamental trends in price movements. However, choosing a measure of underlying inflation to define price stability would not be in line with the criteria for adequate price indices for monetary policy, particularly that of transparency.

Furthermore, it would be rather arbitrary, as there is no unique or uncontroversial method of deriving such measures.

In any case, it should be clear that, by defining the price stability objective in terms of headline inflation, the ECB is in no way paying excessive attention to short-term price developments in its monetary policy deliberations. The medium-term orientation of the ECB's monetary policy strategy ensures that the Governing Council will duly discount any short-term price volatility when taking decisions.

All the above reasons combine to confirm that headline HICP is the appropriate measure for defining price stability. At the same time, it is

5 For a more detailed discussion, see the article entitled "Measures of underlying inflation in the euro area" in the July 2001 issue of the ECB's Monthly Bulletin.

important for the ECB to continue, as part of its regular analysis, to look at the subindices of the HICP and at measures of “underlying inflation” as indicator variables. This may sometimes help to identify the nature of shocks driving price developments and longer-trend price dynamics. At the same time, this indicator role should not be confused with the role of the HICP as the relevant price index for specifying the quantitative definition of price stability.

The costs of inflation and the arguments for tolerating small positive inflation rates

Choosing a quantitative specification of the objective to be pursued by the central bank over the medium term requires striking a balance between the costs of inflation and the possible arguments for tolerating small positive inflation rates.

The costs of inflation

Inflation entails considerable welfare costs through a variety of channels.

- Inflation distorts the signalling role of relative prices, particularly in the presence of “nominal rigidities”, thus reducing the efficiency of market allocations.
- A higher rate of inflation may increase inflation uncertainty and thus the associated risk premia and welfare costs.
- As fiscal systems do not normally allow for the indexation of tax rates to the inflation rate, increases in inflation amplify the distortionary effects of taxation.
- Inflation increases the “shoe-leather” costs incurred by agents when looking for a way of storing value other than holding money balances, in order to protect themselves against real wealth losses.
- For certain goods and services, “menu costs” are incurred whenever prices are

changed, and higher rates of inflation require a higher frequency of price changes.

- As some groups of society have more limited possibilities for hedging against inflation, inflation has effects on the distribution of income and wealth (e.g. redistribution effects from creditors to debtors). In this respect, it is usually the weakest groups of society that suffer the most from inflation.

Empirical estimates of the size of inflation costs vary, but the evidence and available studies consistently confirm that inflation implies substantial welfare costs. More recent studies suggest that the costs of inflation may be higher than previously thought and show that even moderate rates of inflation could entail significant costs. There is therefore wide consensus that, barring the factors which caution against maintaining inflation close to zero (see below), there would be a strong case for literal price stability (i.e. zero inflation).

Arguments for tolerating small positive inflation rates

Despite the significant costs of inflation, a number of considerations suggest that maintaining a moderate positive rate of inflation would be desirable. Three main arguments are generally considered: the risks of deflation and the zero lower bound for nominal interest rates; the possibility of an upward measurement bias in measured inflation; and the presence of downward nominal rigidities in prices and labour compensation. In addition, if real convergence between regions in a currency union is incomplete, structural inflation differentials across the regions comprising the union may arise. In principle, such inflation differentials could exacerbate concerns for the smoothness of the adjustment process in some regions. The following sections explain the underlying arguments further.

The zero lower bound of nominal interest rates and the risks of deflation

Many of the sources of inflation-related costs, such as distortions in relative prices, are also relevant if there is a sustained decline in the level of prices. However, situations of protracted deflation – although very unlikely in economies exhibiting no major macroeconomic imbalances – could entail specific risks for the stability of economic developments. Most notably, a protracted period of deflation at a time of faltering growth may constrain the central bank in the conduct of its monetary policy, since nominal interest rates cannot be reduced below zero. Indeed, any attempt to bring the nominal interest rate significantly below zero would fail, as the public would prefer to hold cash rather than to lend or hold deposits at a negative rate. In a deflationary situation, the existence of a lower bound for nominal interest rates limits the room for manoeuvre of the central bank to reduce real interest rates in order to stimulate demand and counteract deflationary pressures. Deflation may in addition increase the real burden of debt of households and firms and thereby augment the risks of financial instability.

Although various monetary policy actions are possible even at zero nominal interest rates and different solutions for escaping from a deflationary trap have been proposed, the effectiveness of these alternative policies is not certain. This indicates that monetary policy is well advised to maintain a safety margin against deflation by aiming at a small positive rate of inflation rather than at zero inflation.

A number of studies have tried to assess the likelihood of hitting the zero lower bound for nominal interest rates and for various levels of inflation targeted by the central bank. Most of the studies show that this likelihood decreases to very low levels when the central bank aims to maintain the inflation rate above 1% over the medium term.⁶

Measurement bias in the price index

For various reasons, consumer price indices may be subject to measurement errors. Such errors may arise if prices are not adequately adjusted for changes in quality or if relevant transactions remain systematically out of the sample used to construct the index. In the past, these systematic errors (or *bias*) have usually been estimated as positive but small for some industrialised countries, suggesting that a rate of measured inflation at zero could imply a slight decline in the actual price level.

Evidence of a measurement bias in the euro area HICP remains scarce, reflecting its short history. Some studies indicate that the size of the bias is likely to be limited, even though the level of uncertainty that still surrounds the estimates of the measurement bias would advise against pointing to a specific figure. In addition, taking into account the continuous improvements in the HICP's properties by Eurostat, the bias is likely to further decline in the future. Overall, the possibility of there being a measurement bias is of minor importance for setting a safety margin for inflation rates above zero when viewed against considerations relating to the risks of deflation.

Downward nominal rigidities in prices and labour compensation

Movements of relative prices are a key element for the efficient allocation of resources in a market economy. The economic adjustment of relative prices to shocks could become too sluggish if wages and prices were subject to downward nominal rigidities, i.e. a resistance to accept nominal reductions in prices and wages. In this respect, it has been argued that some inflation may actually “grease” the adjustment of relative prices and thus also the real adjustment of the economy to various shocks.

⁶ Other studies come to different results but seem to overestimate the risk of hitting the zero lower bound for nominal interest rates, as they assume a real equilibrium interest rate that appears unrealistically low or assume that monetary policy does not react optimally when faced with deflationary risks.

However, the importance in practice of downward nominal rigidities is highly uncertain and the empirical evidence is not conclusive, particularly for the euro area. The analysis is considerably clouded by several factors, most notably the scarcity of evidence due to the rarity of prolonged periods of low inflation in most countries.

On the price-setting side, evidence based on the distribution of changes in euro area price indices indicates that nominal price cuts are relatively frequent. On the wage-setting side, the results of empirical studies generally find some concentration of wage changes around the zero mark, but also show a substantial portion of wage earners taking wage cuts. The latter probably reflects the increasing importance of flexible components in workers' compensation (e.g. a more widespread use of performance-based systems of compensation, or overtime payments), which should soften the stringency of any downward nominal rigidities. Moreover, the assessment of such rigidities should take into account the effect of positive productivity growth on unit labour costs. A positive trend in productivity growth enables firms to reduce labour costs per unit of output without necessarily cutting nominal wages. Furthermore, it may be argued that these rigidities could tend to decline and even vanish in the context of a permanent and credible move to a low inflation environment.

Finally, even if certain downward nominal rigidities still exist, "accommodating" them with a higher inflation rate could risk this undesirable structural feature of some economies becoming even more entrenched. On the contrary, it is crucial that structural reforms seek to increase the flexibility of product and labour markets and to fully reap the benefits of price stability in all euro area countries.

These considerations combine to suggest that the relevance of downward nominal rigidities should not be overemphasised as regards their impact on the safety margin for tolerable rates of inflation.

Sustained inflation differentials in a monetary union

In principle, inflation differentials across regions are and should be considered a normal feature of any monetary union.⁷ They are an integral part of the adjustment mechanism resulting from demand and supply shocks in the regions' economies. In any currency area – be it a currency union or a single country – monetary policy cannot and should not try to reduce inflation differentials across regions or cities. Instead, depending on the sources and causes of the inflation differentials, regional remedies may be needed to prevent them from resulting in developments that are harmful for the regions concerned.

Despite this, inflation differentials may have a structural component in every currency union, e.g. due to differences in income levels and an ongoing process of catching-up in standards of living. Given these unavoidable inflation differences, it has been argued that monetary policy should aim to achieve over the medium term an inflation rate for the area as a whole that is high enough to prevent regions with lower inflation rates from facing significant costs of downward nominal rigidities or entering periods of a protracted decline in prices. In assessing sustained inflation differentials in the euro area, much prominence is often given to the Balassa-Samuelson hypothesis⁸. This hypothesis argues that, under certain conditions, sustained inflation differentials between two regions can be caused by differences in the relative rate of productivity growth in each region's tradable and non-tradable goods sectors. Such differentials in productivity growth may result from a process of convergence of living standards within the euro area. The Balassa-Samuelson effect thus

7 In the euro area, the current dispersion of inflation rates across countries is broadly comparable to that observed across large regions in the United States. See the box entitled "The dispersion of inflation rates across the euro area countries and the US metropolitan areas" in the April 2003 issue of the ECB's Monthly Bulletin, pp. 22-24.

8 See Balassa, B., "The purchasing power parity doctrine: a reappraisal", *The Journal of Political Economy*, 72, 584-596, December 1964; and Samuelson, P., "Theoretical notes on trade problems", *Review of Economics and Statistics*, 46, 1964.

reflects an “equilibrium phenomenon” which, in principle, would not call for corrective action by economic policies.

Empirical studies for the euro area suggest that the scale of the Balassa-Samuelson effect, although difficult to estimate with great precision, is limited. Most empirical estimates of the Balassa-Samuelson effect indicate that the average inflation rate in lower-inflation countries would be, at most, half a percentage point lower than the average inflation rate for the euro area as a whole. In addition, the size of the Balassa-Samuelson effect in the current euro area regions is likely to gradually diminish over time, given the ongoing convergence in per capita GDP among countries.

Looking forward to a possibly enlarged euro area, the overall relevance of this effect is also likely to remain limited, not least given the small relative weight of acceding countries’ economies in an enlarged euro area. In addition, acceding countries will have to fulfil the convergence criteria in order to

adopt the euro. This requires them to demonstrate that they have converged sufficiently and meet the conditions needed to sustain a low inflation environment prior to the adoption of the euro.

Moreover, it appears highly unlikely that a single country or region in the euro area would fall into a situation of a persistent decline in prices while the euro area as a whole exhibits price stability. Such a situation in a single region or country would lead to significant gains in its competitiveness. The ensuing positive effects on demand for its products would then counteract contemporaneous downward price pressures, thereby dispelling any expectations that such a situation could be sustained over time. From this point of view, a period of falling prices in a country within a monetary union should be mainly seen as an adjustment of relative prices within the currency union. In this respect, the concern for the conduct of monetary policy is to avoid situations where there are risks of deflation in the area as a whole.

3 The analysis of risks to price stability

The main aspects of the framework

The ECB has always explained that its approach to organising, evaluating and cross-checking the information relevant for assessing the risks to price stability was based on two analytical perspectives, referred to as the “two pillars”. This framework made a distinction between, on the one hand the monetary analysis, and on the other hand the analysis of other indicators to arrive at a comprehensive assessment of the outlook for price developments. Within the monetary pillar, which gives a prominent role to money, a reference value for the growth of a broad monetary aggregate was announced. The two-pillar framework has become a distinguishing feature of the strategy, in conjunction with the medium-term orientation of the ECB’s monetary policy conduct. The public’s understanding of this approach has significantly improved over time.

The clarification of 8 May 2003

Nevertheless, on 8 May the Governing Council decided to clarify some aspects of the two-pillar approach that had posed certain challenges for communication in the past. It confirmed that its monetary policy decisions would continue to be based on a comprehensive analysis of the risks to price stability, organised, as in the past, on the basis of two complementary perspectives on the functioning of the economy: the “two pillars” of the ECB’s monetary policy strategy. These two perspectives would henceforth be referred to as “economic analysis” and “monetary analysis”. The Governing Council stated that, over time, analysis under both pillars of the monetary policy strategy had been deepened and extended in line with increasing availability of euro area data and ongoing improvements in technical tools, and would continue to be developed in the future.

The Governing Council also clarified the way in which it integrates the indications stemming from these two complementary types of analysis as it seeks to come to a unified overall judgement on the risks to price stability. In particular, it indicated that monetary analysis mainly serves as a means of cross-checking, from a medium to long-term perspective, the short to medium-term indications coming from economic analysis.

To properly reflect the two-pillar approach and the cross-checking role of monetary analysis in public communication, the Governing Council announced that the President's Introductory Statement to the ECB's monthly press conference would henceforth follow a new structure. It will start with a broadly based economic analysis to identify short to medium-term risks to price stability. In the second section, the statement will proceed to monetary analysis to assess medium to long-term trends in inflation in view of the close relationship between money and prices over extended horizons. The end of the statement will then provide a cross-check of the information from these two complementary perspectives and include an overall conclusion on the risks to price stability.

To underscore the longer-term nature of the reference value for monetary growth as a benchmark for the assessment of monetary developments, the Governing Council also decided to no longer conduct a review of the reference value on an annual basis. The rationale for these decisions is considered below.

The two-pillar approach

In 1998 the ECB's monetary policy strategy was designed to ensure that in the assessment of risks to price stability no relevant information would be lost and that appropriate attention would be paid to different perspectives. The two-pillar approach is a way of conveying to the public the notion of a diversified analysis and of

ensuring robust decision-making based on different analytical perspectives.

An important argument in favour of adopting the two-pillar approach relates to the difference in the time perspectives for analysing price developments. The inflation process can be broadly decomposed into two components, one associated with the interplay between demand and supply factors at a high frequency, and the other connected to more drawn-out and persistent trends (see Box 2). The latter component is empirically closely associated with the medium-term trend growth of money.

The short to medium-term economic analysis – with its focus on real activity and financial conditions – is well equipped to study shorter-run deviations of inflation from its long-term trend. However, it often fails to track the mechanisms by which monetary factors act over extended horizons and thus to pin down such trends. There is, therefore, a need for monetary policy to explicitly take information from monetary developments, which might otherwise risk being overlooked or underestimated, into due account in policy considerations. In this sense, the two-pillar approach constitutes a commitment device on the part of the ECB to make sure that, while responding to economic developments as and when they arise, the fundamental factor driving prices over extended horizons – the rate of money growth – remains consistently under observation.

The rest of this section discusses the way in which the two complementary perspectives on the process of price determination – offered by economic and monetary analysis – are integrated into the final judgement of the risks to price stability.

Economic analysis

The economic analysis focuses mainly on the assessment of current economic and financial developments and the implied short

to medium-term risks to price stability from the perspective of the interplay between supply and demand in goods, services and factor markets at those horizons. In this respect due attention is paid to the need to identify the nature of shocks hitting the economy, their effects on cost and pricing behaviour and the short to medium-term prospects for their propagation in the economy.

The economic and financial variables that are the subject of this analysis include, for example: developments in overall output; aggregate demand and its components; fiscal policy; the formation and cost of capital; labour market conditions; a broad range of price and cost indicators; developments in the exchange rate, the global economy and the balance of payments for the euro area; financial markets; and the balance sheet positions of euro area sectors. All these factors help to assess the dynamics of real activity and the likely development of prices over shorter horizons.

The ECB's economic analysis has been significantly extended and enriched over the past few years, largely as a result of the progress made in the production of euro area real and financial data and in the statistical and analytical processing of such information. Furthermore, several models have been developed to better assess and understand past and ongoing developments, to make more reliable short-term forecasts and to underpin the regular macroeconomic projection exercises for the euro area economy. In this context, with the improved availability of financial accounts statistics for the euro area, increasing attention has also been paid to indicators of households' and corporations' financial and net wealth positions, as relevant driving factors in shaping consumption and investment choices. By monitoring incoming data and using all the available analytical tools, a comprehensive assessment of the economic situation and the outlook for the euro area is conducted and updated continuously.

The Eurosystem's staff macroeconomic projection exercises have played and will continue to play an important role in the economic analysis, as input into the considerations of the Governing Council.⁹ The projections help to structure and synthesise a large proportion of economic data and ensure consistency across different sources of economic evidence. In this respect, they are a principal element in sharpening the assessment of economic prospects and the short to medium-term fluctuations of inflation around its trend. Despite this, they are not an all encompassing tool for the conduct of monetary policy, as they do not contain all relevant information. In particular, information from monetary aggregates is not easily integrated into the framework used to produce the projections.

The ECB has confirmed that its monetary policy should not react exclusively to a forecast at a fixed horizon. Instead, monetary policy needs to be tailored to the nature of the shocks hitting the economy, and their size, source and potential for propagation. On this basis, the key ECB interest rates must evolve in such a way that the path of future inflation remains in line with the ECB's objective of price stability over the medium term (see Box I). A further consideration relates to the fact that the degree to which forecasts prove reliable tends to fall significantly as the distance to the forecasting horizon increases. On some occasions, notably in the face of uncertainty about the sustainability of asset price movements, it may be advisable for a central bank to set interest rates with a view to a time frame extending well beyond conventional forecast horizons.

Furthermore, forecast exercises are based on models which, by definition, cannot provide a full description of economic events. The indications yielded by such procedures generally depend on a number of conditions that can only be imperfectly controlled. An essential element of the policy process is

⁹ See the box entitled "The role of macroeconomic forecasts and projections under the second pillar" in the November 2000 issue of the ECB's Monthly Bulletin, pp. 43-44.

therefore to evaluate and compare the robustness of the information stemming from various sources. To fully assess the economic situation and the outlook for price stability, the Governing Council must be able to call on a variety of techniques and policy simulations based on various models, and must use its own judgement, with particular regard to the likelihood that certain hypothetical scenarios will eventually materialise. In this respect, an exclusive focus on an inflation forecast would neither do justice to the intrinsic complexity of the decision-making process, nor would it provide a transparent means of communicating this complexity. An articulated analysis of the economic forces at work in the economy is thus preferable to the use of a single summary indicator.

Monetary analysis

In 1998 the ECB decided to single out money from within the set of the selected key indicators that it would monitor and study closely. This decision was made in recognition of the fact that monetary growth and inflation are closely related in the medium to long run. This undisputed relationship was acknowledged to provide monetary policy with a firm and reliable nominal anchor beyond the horizons conventionally adopted to construct inflation forecasts. Therefore, assigning money a prominent role in the strategy was also a tool to underpin its medium-term orientation.

More than four years later, the economic foundations on which the prominent status of money was based remain solid. As already mentioned, the fact that longer-term trend movements in broad money serve to identify inflation trends in the euro area continues to be a robust result of the quantitative evaluation exercises conducted both within and outside the ECB (see Box 2). Furthermore, the Governing Council's experience in actually conducting policy has lent support to the notion that taking policy decisions and evaluating their consequences

on the basis not only of the short-term indications stemming from the analysis of economic and financial conditions, but also of money and liquidity considerations, allows a central bank to see beyond the transient impact of the various shocks and not be tempted to take a more activist course.

The analysis of money has been extended over time beyond the assessment of M3 growth in relation to the reference value. The framework for monetary analysis builds on the ECB's expertise in the institutional features of the financial and monetary sector. In its regular monitoring of the monetary conditions in the euro area, the ECB draws on a range of small-scale money demand and monetary indicator models which have been developed and published by ECB staff and academics. The monetary analysis uses a comprehensive assessment of the liquidity situation based on information from the components and counterparts of M3, in particular loans to the private sector, and from various money gap measures and concepts of excess liquidity. A detailed analysis of the structure of M3 growth is helpful for extracting a signal from monetary developments that is relevant for identifying the longer-run trend in inflation. In this context, the most liquid components of M3 – most notably M1 – receive particular attention as they more closely reflect the transaction motives for holding money, and are thus the most tightly related to aggregate spending. At the same time, gaining a thorough understanding of the interdependencies between M3 and its counterparts in the consolidated balance sheet of the MFI sector is instrumental in judging whether observed changes in money growth can be traced to portfolio shifts which, in turn, may or may not bear implications for price trends. The analysis of the balance sheet positions of the non-financial sector, which also contain information on the holding of assets outside the MFI sector, has been particularly important in identifying such portfolio shifts that have affected monetary developments since mid-2001.

Box 2

Money and prices in the long run

The medium to long-term link between money and inflation in the euro area has been the subject of a number of recent studies, using a range of different technical approaches. Broadly speaking, these studies can be classified into three groups.¹

The first group of studies tackled the issue of the relationship between money growth and inflation from the perspective of assessing whether the inflation process in the euro area can (at least partly) be traced to factors related to money growth. On the basis of statistical methodologies suited to breaking down a time series into the relative contributions of components acting at different time horizons, it has been found that long-term variations in inflation are closely associated with long-term movements in money. Furthermore, it has been found that euro area inflation can be described by means of a Phillips curve relationship – i.e. a relationship explaining inflation in terms of indices of economic slack – augmented by a term capturing low-frequency movements in money. This relationship has been interpreted as being indicative in that, whereas fluctuations of inflation in the euro area are driven by factors associated with the state of activity in relation to its long-term potential, the long-term average of inflation is highly correlated with money growth. More consistent evidence in favour of a causal link between money and inflation in the euro area at longer-term horizons has been found by constructing a core inflation measure on the basis of the common persistent – or “long-memory” – component of inflation and excess nominal money growth.

All these results (which confirm the principle that, in the long run, money only affects prices and not output growth) have received support from a second strand of literature, aimed at uncovering money’s indicator properties with respect to future price movements. From this perspective, there appears to be compelling evidence that the growth of broad monetary aggregates helps to predict inflation, notably at horizons exceeding two years. At the same time, various monetary indicators can indirectly offer information about risks to price stability through their impact on economic variables other than prices, which in due course can influence price formation. For example, narrow monetary aggregates have leading-indicator properties for demand conditions and thus cyclical developments. Moreover, growth rates of money and credit in excess of those sufficient to sustain economic growth at a non-inflationary pace may, under certain conditions, signal the emergence of financial imbalances or speculative asset price bubbles. Such information may indicate, at an early stage, the build-up of destabilising forces with adverse implications for activity and, in the medium term, prices.

A third strand of literature has undertaken empirical investigations on the basis of money demand models. Money demand models are a tool for quantifying how the demand for real money holdings is affected by its fundamental determinants – such as, in particular, real GDP, and measures of the opportunity cost of holding money. At the same time, these models can be used to isolate the quantitative impact of transient shocks to the preference for liquidity and temporary instabilities in the mechanisms by which agents adjust their money holdings to the equilibrium conditions mapped out by the fundamental determinants. The long-term stability in the relationship between real money balances and their long-run fundamental determinants in the euro area has been interpreted as a confirmation that a stable relationship exists between nominal money balances and prices in the medium to long term. It has also been seen as a precondition for the announcement of a reference rate for M3 growth.

¹ References to these studies can be found in the note entitled “Overview of the background studies for the Reflections on the ECB’s monetary policy strategy”, the background studies cited therein and further relevant papers, all of which are available on the ECB’s website (<http://www.ecb.int/pub/strategy/strategy.htm>).

The ECB's reference value for M3 growth is a benchmark for analysing the information content of monetary developments. In this respect, the reference value has also constituted an instrument for the construction of quantity-based indices of longer-term monetary imbalances, such as measures of the money gap, which have proved useful for the conduct of a comprehensive medium term-oriented monetary analysis. The ECB has always emphasised the fact that, owing to the medium to long-term nature of the monetary perspective, there would be no direct link between short-term monetary developments and monetary policy decisions. Monetary policy would not therefore react mechanically to deviations of M3 growth from the reference value. Rather, the reference value performs an important role as a medium to long-term quantitative benchmark for assessing monetary developments. It constantly reminds the central bank of the fundamental principle that, while responding to economic developments, it must never lose sight of the fact that over sufficiently extended horizons the rate of money growth must be consistent with the price stability objective.

As already noted, the Governing Council decided to no longer review the reference value for M3 on an annual basis. In the past, at the end of each year, the Governing Council had reviewed the assumptions about the medium-term trends in potential output growth and the income velocity of M3 underlying the derivation of the reference value for M3. However, these medium-term trend assumptions are not expected to change frequently. Therefore, the decision to discontinue the regular annual review is more in line with the medium-term nature of the assumptions underlying the computation of the reference value. It may also help to dispel occasional misperceptions that the former practice implied a reference value that was specifically applicable – like a monetary target – to the year ahead. The Governing Council will, however, continuously monitor the validity of the conditions and assumptions

underlying the reference value and communicate any changes to the underlying assumptions, as soon as they become necessary.

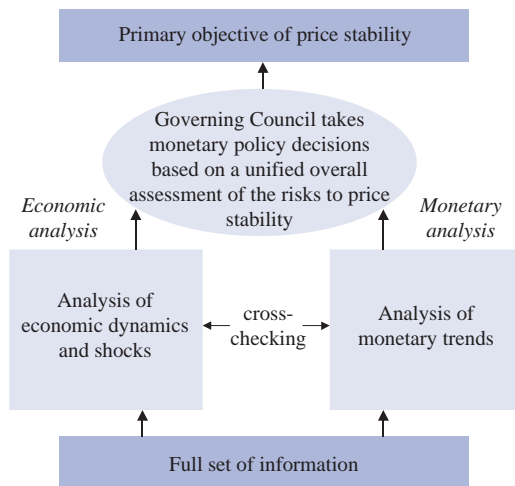
A condition for setting a reference value for M3 growth is the long-run stability of money demand. While M3 has grown significantly faster since mid-2001 than can be estimated using available money demand models,¹⁰ there is to date no compelling evidence to suggest that these developments may have altered the long-run relationship between money and its long-term determinants.

Recent developments in the demand for M3 have been associated with a heightened preference for liquidity induced by an exceptionally prolonged period of asset price volatility. This appears to have led to portfolio shifts from less liquid (and more risky) assets to instruments included in the definition of M3, which are perceived as a more secure store of value. However, these are likely to be temporary phenomena, as there is little evidence of structural changes in the euro area economy to suggest that the relative attractiveness of holding instruments included in M3 as opposed to other financial instruments has been fundamentally altered in recent years. Historically, when money demand instability occurred over longer periods of time, this was primarily due to financial innovation or tax changes affecting the opportunity cost of holding money assets. However, there have been no significant changes in any of these factors recently to justify expectations of continued instability in euro area money demand.

Nevertheless, looking ahead, two issues will require careful monitoring. One concerns the duration of the current period of volatility in the financial markets. A second source of uncertainty concerns possible future structural changes in financial markets and in the composition of wealth due to the increased sophistication of private investors.

¹⁰ See the box entitled "Estimating the size of portfolio shifts from equity to money" in the May 2003 issue of the ECB's *Monthly Bulletin*, p.11.

Chart 2
The stability-oriented monetary policy strategy of the ECB



Both issues make it necessary to closely monitor the stability properties of money demand and ensure the appropriate definition of the broad monetary aggregate. This, in turn, means using the appropriate statistical tools to identify and model such developments, as well as utilising the Eurosystem's detailed knowledge of the institutional features of the euro area's financial and monetary sector.

4 Conclusions

With its announcement of 8 May 2003, the Governing Council has confirmed and clarified the ECB's monetary policy strategy. In this respect, the Governing Council's indication of a medium-term focus for monetary policy on inflation rates below, but close to, 2% reflects full continuity with the past conduct of monetary policy. At the same time, changes to the presentation of the two-pillar framework seek to explain the conduct of

The cross-checking

In order to assess the indications about the appropriate stance of monetary policy, the two-pillar approach provides a cross-check of the information that stems from the shorter-term economic analysis with that from the monetary analysis, which mainly provides information about the medium to long-term determinants of inflation. As noted above, the cross-check ensures that monetary policy maintains a firm medium-term orientation beyond the conventional projection horizon, helping to discourage excessive policy activism and overly ambitious attempts to fine-tune economic developments.

The two-pillar structure does not partition the information set, or allocate indicators rigidly to one pillar or another. As in the past, all complementarities between information variables under the two pillars will be exploited, as this is the best way to ensure that all the relevant information for assessing price prospects is used in a consistent and efficient manner, facilitating both the decision-making process and its communication (see Chart 2).

monetary policy more clearly to the general public, thus helping to eliminate any remaining uncertainty in the public's understanding of this aspect of the framework.

With its decision to confirm and clarify the main elements of its stability-oriented monetary policy strategy, the ECB has also ensured that price stability is maintained in a credible and lasting manner in the euro area.



Euro area statistics



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

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What's new ?

The monetary presentation of the euro area balance of payments (b.o.p.) is presented in Table 8.7. For a comprehensive description see Box I in this issue. A detailed methodological note on the monetary presentation of the euro area b.o.p. is also available on the statistics section of 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⁾				
2001	3.6	4.2	5.3	-	7.8	27.6	4.26	5.03
2002	7.3	6.5	7.2	-	5.3	22.0	3.32	4.92
2002 Q2	6.6	6.5	7.3	-	5.6	24.4	3.45	5.26
Q3	7.6	6.5	7.0	-	5.2	18.0	3.36	4.77
Q4	8.8	6.7	7.0	-	4.8	16.2	3.11	4.54
2003 Q1	10.1	7.0	7.5	-	4.9	16.4	2.69	4.16
2002 Dec.	9.8	6.6	6.9	7.0	4.8	15.5	2.94	4.41
2003 Jan.	9.4	6.5	7.2	7.3	4.9	15.4	2.83	4.27
Feb.	10.3	7.3	7.9	7.7	5.1	16.7	2.69	4.06
Mar.	11.7	7.9	7.9	8.2	4.7	18.5	2.53	4.13
Apr.	11.1	7.9	8.7	.	4.6	.	2.54	4.23
May	.	.	.	.	.	.	2.41	3.92

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
2001	2.3	2.1	3.4	1.5	0.5	82.9	1.4	8.0
2002	2.3	0.0	3.5	0.8	-0.6	81.4	0.4	8.4
2002 Q2	2.1	-0.7	3.3	0.8	-0.7	81.4	0.5	8.3
Q3	2.1	0.0	3.4	1.0	0.0	81.5	0.3	8.4
Q4	2.3	1.2	3.5	1.2	1.2	81.5	0.2	8.5
2003 Q1	2.3	2.4	.	0.8	1.1	81.1	.	8.7
2002 Dec.	2.3	1.6	-	-	-0.5	-	-	8.6
2003 Jan.	2.1	2.2	-	-	1.2	81.3	-	8.7
Feb.	2.4	2.6	-	-	2.1	-	-	8.7
Mar.	2.4	2.4	-	-	0.2	-	-	8.8
Apr.	2.1	1.7	-	-	.	80.8	-	8.8
May	1.9	.	-	-	.	-	-	.

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)	
2001	-9.8	75.5	-102.8	64.7	392.7	91.0	87.7	0.896
2002	73.5	133.3	-45.5	110.6	366.1	95.6	91.7	0.946
2002 Q2	5.7	31.3	-9.2	72.2	367.0	93.9	90.2	0.919
Q3	25.3	38.5	-12.0	35.7	380.9	97.9	93.8	0.984
Q4	27.3	36.8	-8.3	38.4	366.1	99.4	94.9	0.999
2003 Q1	-0.3	14.3	-6.1	14.4	339.1	104.1	99.3	1.073
2002 Dec.	10.0	10.7	-1.7	-2.6	366.1	100.4	96.0	1.018
2003 Jan.	-4.4	0.8	-0.9	-5.5	363.4	103.0	98.1	1.062
Feb.	2.3	8.9	2.8	-0.8	352.2	104.4	99.4	1.077
Mar.	1.8	4.6	-8.0	20.7	339.1	105.1	100.2	1.081
Apr.	.	.	.	.	332.4	105.2	100.3	1.085
May	.	.	.	.	.	109.1	103.7	1.158

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 and debt securities up to 2 years.

I Monetary policy statistics

Table 1.1
Consolidated financial statement of the Eurosystem

(EUR millions)

1. Assets

	Gold and gold receivables	Claims on non-euro area residents in foreign currency	Claims on euro area residents in foreign currency	Claims on non-euro area residents in euro	Lending to euro area credit institutions in euro	Main refinancing operations	Longer-term refinancing operations	Fine-tuning reverse operations
	1	2	3	4	5	6	7	8
2002 27 Dec.	130,858	248,634	19,881	4,020	236,589	191,501	45,000	0
2003 3 Jan.	130,739	236,765	19,948	4,030	225,117	180,000	45,000	0
10	130,702	237,058	16,585	4,085	219,066	174,001	45,000	0
17	130,686	235,409	15,565	4,369	208,613	160,999	45,000	0
24	130,664	231,755	16,584	4,378	215,343	169,999	45,000	0
31	130,641	233,338	18,335	4,924	219,190	174,001	45,000	0
7 Feb.	130,641	231,438	17,498	5,305	214,019	169,000	45,000	0
14	130,640	229,822	17,331	5,690	206,155	161,000	45,000	0
21	130,314	228,010	17,686	6,230	216,190	170,001	45,000	0
28	130,314	228,349	17,331	5,926	223,186	178,001	45,000	0
7 Mar.	130,314	227,928	17,384	6,164	182,175	137,090	45,000	0
14	130,314	226,868	17,048	5,511	270,123	225,091	45,000	0
21	130,314	223,947	17,725	5,121	234,917	189,001	45,000	0
28	130,314	224,146	16,800	5,202	232,049	187,000	45,000	0
4 Apr.	122,728	216,872	17,072	4,783	220,040	174,999	45,000	0
11	122,728	215,994	16,736	4,496	217,097	172,000	44,973	0
18	122,728	215,786	16,528	4,551	223,000	177,998	44,973	0
25	122,274	215,757	16,919	4,575	247,011	201,999	44,973	0
2 May	122,274	214,456	16,721	4,597	207,989	163,001	44,979	0
9	122,274	214,120	17,116	4,821	211,999	166,992	44,979	0
16	122,274	215,054	16,946	4,493	218,054	173,001	44,979	0
23	122,274	216,212	17,234	3,656	238,095	192,998	44,979	0

2. Liabilities

	Banknotes in circulation	Liabilities to euro area credit institutions in euro	Current accounts (covering the minimum reserve system)	Deposit facility	Fixed-term deposits	Fine-tuning reverse operations	Deposits related to margin calls	Other liabilities to euro area credit institutions in euro	Debt certificates issued
	1	2	3	4	5	6	7	8	9
2002 27 Dec.	374,600	129,305	129,146	159	0	0	0	15	2,029
2003 3 Jan.	354,528	130,012	129,938	74	0	0	0	15	2,029
10	346,293	133,539	133,441	89	0	0	9	15	2,029
17	341,636	132,870	132,748	118	0	0	4	15	2,029
24	338,201	127,180	127,168	9	0	0	3	15	2,029
31	339,517	126,760	126,631	128	0	0	1	62	2,029
7 Feb.	342,781	133,194	133,161	33	0	0	0	62	2,029
14	342,890	128,006	127,947	59	0	0	0	61	2,029
21	341,561	131,392	128,951	2,441	0	0	0	61	2,029
28	345,414	125,405	125,346	59	0	0	0	62	2,029
7 Mar.	350,078	89,529	89,431	98	0	0	0	62	2,029
14	350,014	177,351	177,262	89	0	0	0	15	2,029
21	350,482	128,616	127,972	623	0	0	21	15	2,029
28	351,783	129,392	129,356	23	0	0	13	15	2,029
4 Apr.	357,775	131,573	131,477	90	0	0	6	76	2,029
11	360,186	128,359	128,321	29	0	0	9	76	2,029
18	367,559	132,655	132,436	216	0	0	3	15	2,029
25	363,873	147,509	147,427	80	0	0	2	15	2,029
2 May	367,432	122,600	122,512	87	0	0	1	15	2,029
9	368,111	129,360	129,284	75	0	0	1	15	2,029
16	366,888	128,610	128,532	77	0	0	1	15	2,029
23	365,344	126,340	121,748	741	3,850	0	1	15	2,029

Source: ECB.

Structural reverse operations	Marginal lending facility	Credits related to margin calls	Other claims on euro area credit institutions in euro	Securities of euro area residents in euro	General government debt in euro	Other assets	Total	
							9	10	11	12	13	14	15	16
0	40	48	109	33,098	66,306	93,062	832,558	2002 27 Dec.
0	45	72	120	27,824	44,486	105,962	794,992	2003 3 Jan.
0	10	55	103	27,919	44,475	106,625	786,619	10
0	2,575	39	174	28,016	44,485	105,949	773,267	17
0	299	45	238	28,522	44,485	106,893	778,863	24
0	170	19	296	29,054	44,485	106,466	786,730	31
0	3	16	330	30,675	44,436	107,701	782,044	7 Feb.
0	110	45	326	31,685	44,355	109,365	775,370	14
0	1,145	44	250	32,602	44,355	109,171	784,809	21
0	148	37	552	33,484	44,355	107,151	790,649	28
0	50	35	938	33,495	44,340	107,218	749,960	7 Mar.
0	2	30	473	36,694	44,342	107,546	838,923	14
0	889	27	276	37,823	44,345	107,801	802,273	21
0	10	39	275	38,149	44,344	107,391	798,674	28
0	3	38	289	38,760	44,318	109,563	774,429	4 Apr.
0	109	15	164	39,658	44,322	109,351	770,550	11
0	14	15	134	39,785	44,279	109,666	776,461	18
0	30	9	116	40,185	44,273	109,529	800,643	25
0	1	8	111	40,295	44,273	109,631	760,351	2 May
0	0	28	195	40,543	44,274	109,789	765,135	9
0	53	21	197	40,996	44,270	109,580	771,868	16
0	90	28	158	42,348	44,266	109,647	793,894	23

Liabilities to other euro area residents in euro	Liabilities to non-euro area residents in euro	Liabilities to euro area residents in foreign currency	Liabilities to non-euro area residents in foreign currency	Counterpart of special drawing rights allocated by the IMF	Other liabilities	Revaluation accounts	Capital and reserves	Total	
								10	11	12	13	14	15	16	17	18
55,085	8,810	1,232	20,067	6,567	64,121	106,307	64,420	832,558	2002 27 Dec.
47,408	11,555	1,126	20,996	6,339	73,817	82,844	64,323	794,992	2003 3 Jan.
48,541	8,278	1,147	19,714	6,339	73,640	82,844	64,240	786,619	10
42,522	8,346	1,136	17,259	6,339	74,025	82,844	64,246	773,267	17
58,993	8,872	1,125	14,978	6,339	74,217	82,844	64,070	778,863	24
65,146	9,426	1,054	15,759	6,339	73,719	82,848	64,071	786,730	31
52,197	8,473	1,017	15,776	6,339	73,256	82,848	64,072	782,044	7 Feb.
51,338	8,543	1,017	15,195	6,339	72,734	82,848	64,370	775,370	14
58,968	8,421	1,025	14,113	6,339	74,543	82,840	63,517	784,809	21
70,147	8,704	1,024	14,054	6,339	70,187	82,840	64,444	790,649	28
60,226	8,659	1,050	14,772	6,339	69,932	82,840	64,444	749,960	7 Mar.
60,064	8,607	1,054	16,093	6,339	70,055	82,840	64,462	838,923	14
72,700	8,441	1,076	14,706	6,339	70,565	82,840	64,464	802,273	21
73,624	8,395	1,071	14,490	6,339	64,227	82,840	64,469	798,674	28
53,949	8,858	1,081	15,366	6,168	65,081	68,005	64,468	774,429	4 Apr.
51,602	8,717	1,005	14,572	6,168	65,227	68,005	64,604	770,550	11
44,996	9,172	1,045	14,304	6,168	65,907	68,005	64,606	776,461	18
59,278	8,455	1,048	14,132	6,168	65,475	68,005	64,656	800,643	25
40,143	9,506	1,048	12,990	6,168	65,853	67,910	64,657	760,351	2 May
37,661	8,904	1,032	13,626	6,168	65,634	67,910	64,685	765,135	9
46,332	8,803	1,029	13,644	6,168	65,729	67,910	64,711	771,868	16
69,296	9,551	987	16,002	6,168	65,231	67,910	65,021	793,894	23

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

With effect from ¹⁾	Deposit facility		Main refinancing operations			Marginal lending facility	
			Fixed rate tenders	Variable rate tenders			
			Fixed rate	Minimum bid rate			
	Level ₁	Change ₂	Level ₃	Level ₄	Change ₅	Level ₆	Change ₇
1999 1 Jan.	2.00	-	3.00	-	-	4.50	-
4 ²⁾	2.75	0.75	3.00	-	...	3.25	-1.25
22	2.00	-0.75	3.00	-	...	4.50	1.25
9 Apr.	1.50	-0.50	2.50	-	-0.50	3.50	-1.00
5 Nov.	2.00	0.50	3.00	-	0.50	4.00	0.50
2000 4 Feb.	2.25	0.25	3.25	-	0.25	4.25	0.25
17 Mar.	2.50	0.25	3.50	-	0.25	4.50	0.25
28 Apr.	2.75	0.25	3.75	-	0.25	4.75	0.25
9 June	3.25	0.50	4.25	-	0.50	5.25	0.50
28 ³⁾	3.25	...	-	4.25	...	5.25	...
1 Sep.	3.50	0.25	-	4.50	0.25	5.50	0.25
6 Oct.	3.75	0.25	-	4.75	0.25	5.75	0.25
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
2002 6 Dec.	1.75	-0.50	-	2.75	-0.50	3.75	-0.50
2003 7 Mar.	1.50	-0.25	-	2.50	-0.25	3.50	-0.25
6 June	1.00	-0.50	-	2.00	-0.50	3.00	-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⁾²⁾***(EUR millions; interest rates in percentages per annum)***1. Main refinancing operations ³⁾**

Date of settlement	Bids (amount)	Allotment (amount)	Fixed rate tenders		Variable rate tenders		Running for (...) days
			Fixed rate	Minimum bid rate	Marginal rate ⁴⁾	Weighted average rate ⁶⁾	
	1	2	3	4	5	6	7
2003 8 Jan.	133,781	82,000	-	2.75	2.83	2.84	14
15	120,349	79,000	-	2.75	2.80	2.81	14
22	123,705	91,000	-	2.75	2.80	2.81	14
29	114,931	83,000	-	2.75	2.79	2.81	14
5 Feb.	115,836	86,000	-	2.75	2.78	2.79	14
12	100,544	75,000	-	2.75	2.76	2.78	14
19	125,104	95,000	-	2.75	2.77	2.78	13
26	110,698	83,000	-	2.75	2.75	2.76	14
4 Mar.	54,090	54,090	-	2.75	2.75	2.75	15
12	126,251	106,000	-	2.50	2.57	2.63	13
12	75,870	65,000	-	2.50	2.55	2.64	7
19	129,827	83,000	-	2.50	2.58	2.59	14
25	115,518	104,000	-	2.50	2.53	2.55	15
2 Apr.	112,031	71,000	-	2.50	2.53	2.54	14
9	133,547	101,000	-	2.50	2.53	2.53	14
16	126,889	77,000	-	2.50	2.53	2.54	14
23	156,979	125,000	-	2.50	2.54	2.55	14
30	106,071	38,000	-	2.50	2.55	2.55	14
7 May	120,843	76,000	-	2.50	2.53	2.54	14
7	67,356	53,000	-	2.50	2.53	2.54	7
14	145,595	97,000	-	2.50	2.53	2.54	14
21	157,067	96,000	-	2.50	2.57	2.58	14
28	184,856	106,000	-	2.50	2.59	2.61	12
4 June	72,372	72,372	-	2.50	2.50	2.50	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 ⁴⁾	Weighted average rate	5	
	1	2	3	4	5	6	8
2001 28 June	44,243	20,000	-	4.36	4.39	91	
26 July	39,369	20,000	-	4.39	4.42	91	
30 Aug.	37,855	20,000	-	4.20	4.23	91	
27 Sep.	28,269	20,000	-	3.55	3.58	85	
25 Oct.	42,308	20,000	-	3.50	3.52	98	
29 Nov.	49,135	20,000	-	3.32	3.34	91	
21 Dec.	38,178	20,000	-	3.29	3.31	97	
2002 31 Jan.	44,547	20,000	-	3.31	3.33	84	
28 Feb.	47,001	20,000	-	3.32	3.33	91	
28 Mar.	39,976	20,000	-	3.40	3.42	91	
25 Apr.	40,580	20,000	-	3.35	3.36	91	
30 May	37,602	20,000	-	3.45	3.47	91	
27 June	27,670	20,000	-	3.38	3.41	91	
25 July	28,791	15,000	-	3.35	3.37	98	
29 Aug.	33,527	15,000	-	3.33	3.34	91	
26 Sep.	25,728	15,000	-	3.23	3.26	88	
31 Oct.	27,820	15,000	-	3.22	3.24	91	
28 Nov.	38,644	15,000	-	3.02	3.04	91	
23 Dec.	42,305	15,000	-	2.93	2.95	94	
2003 30 Jan.	31,716	15,000	-	2.78	2.80	90	
27 Feb.	24,863	15,000	-	2.48	2.51	91	
27 Mar.	33,367	15,000	-	2.49	2.51	91	
30 Apr.	35,096	15,000	-	2.50	2.51	92	
29 May	30,218	15,000	-	2.25	2.27	91	

3. Other tender operations

Date of settlement	Type of operation	Bids (amount)	Allotment (amount)	Fixed rate tenders		Variable rate tenders			Running for (...) days
				Fixed rate	Minimum bid rate	Marginal rate ⁴⁾	Weighted average rate	7	
	1	2	3	4	5	6	7	8	
2000 5 Jan. ⁵⁾	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	
18 Dec.	Reverse transaction	28,480	10,000	-	2.75	2.80	2.82	6	
2003 23 May	Collection of fixed-term deposits	3,850	3,850	2.50	-	-	-	3	

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) With effect from April 2002, split tender operations, i.e. operations with one-week maturity conducted as standard tenders in parallel with a main refinancing operation, are classified as main refinancing operations. For split tender operations conducted before this month, see Table 1.3.3.

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.

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

5) 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 ³⁾	Deposits (over 2 years' agreed maturity and notice period)	Repos	Debt securities over 2 years' agreed maturity
	1	2	3	4	5	6
2002 Apr.	11,076.4	6,176.1	404.9	1,355.1	699.1	2,441.2
May	11,111.6	6,150.4	410.5	1,355.8	741.7	2,453.2
June	11,009.1	6,083.3	407.5	1,355.3	699.2	2,463.9
July	10,999.6	6,069.3	408.6	1,368.0	691.0	2,462.7
Aug.	10,952.0	6,010.3	401.5	1,359.7	703.2	2,477.2
Sep.	11,054.3	6,055.4	405.0	1,373.5	747.6	2,472.7
Oct.	11,113.6	6,052.0	414.2	1,379.1	790.5	2,477.8
Nov.	11,207.0	6,142.9	426.9	1,365.2	784.2	2,487.7
Dec.	11,116.8	6,139.9	409.2	1,381.9	725.5	2,460.3
2003 Jan.	11,100.8	6,048.5	426.0	1,385.7	773.9	2,466.7
Feb.	11,214.2	6,092.6	434.0	1,396.4	808.2	2,483.0
Mar.	11,229.9	6,117.2	427.4	1,404.1	782.7	2,498.5
Apr. ^(p)	11,292.8	6,152.3	429.1	1,404.9	813.2	2,493.4

Source: ECB.

- 1) Liabilities vis-à-vis other credit institutions subject to the ESCB's minimum reserve system, the ECB and participating national central banks, are excluded from the reserve base. If a credit institution cannot provide evidence of the amount of its issues of debt securities with a maturity of up to two years 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 money market paper. For further details, see the general notes.

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
2002 June	131.0	131.7	0.7	0.0	3.33
July	130.7	131.3	0.6	0.0	3.32
Aug.	129.3	129.7	0.5	0.0	3.29
Sep.	129.0	129.5	0.5	0.0	3.28
Oct.	127.7	128.2	0.5	0.0	3.28
Nov.	128.7	129.2	0.5	0.0	3.28
Dec.	128.8	129.4	0.7	0.0	3.06
2003 Jan.	130.9	131.4	0.6	0.0	2.87
Feb.	130.4	131.0	0.6	0.0	2.78
Mar.	128.9	129.5	0.6	0.0	2.67
Apr.	130.0	130.5	0.5	0.0	2.53
May	130.3	130.8	0.5	0.0	2.54
June ^(p)	131.2	.	.	.	.

Source: ECB.

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

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

Maintenance period ending in:	Liquidity-providing factors					Liquidity-absorbing factors					Credit institutions' current accounts ⁴⁾	Base money ⁵⁾
	Monetary policy operations of the Eurosystem					Deposit facility	Other liquidity-absorbing operations ²⁾	Banknotes in circulation	Central government deposits with the Eurosystem	Other factors (net) ³⁾		
	Eurosystem's net assets in gold and foreign currency ¹⁾	Main refinancing operations	Longer-term refinancing operations	Marginal lending facility	Other liquidity-providing operations ²⁾							
1	2	3	4	5	6	7	8	9	10	11	12	
2002 Apr.	395.4	112.7	60.0	0.4	0.0	0.2	0.0	285.9	55.9	95.3	131.2	417.3
May	397.7	110.6	60.0	0.1	0.0	0.3	0.0	293.7	49.2	93.5	131.7	425.6
June	396.2	112.6	60.0	0.5	0.0	0.4	0.0	300.8	45.1	91.2	131.8	433.0
July	369.1	130.4	60.0	0.2	0.0	0.2	0.0	313.4	54.4	60.3	131.4	445.0
Aug.	360.0	139.2	55.2	0.1	0.0	0.1	0.0	322.8	50.9	50.8	129.9	452.8
Sep.	362.3	140.9	50.8	0.1	0.0	0.2	0.0	323.6	49.1	51.7	129.6	453.4
Oct.	370.0	146.1	45.3	0.1	0.0	0.1	0.0	329.2	45.6	58.2	128.3	457.6
Nov.	372.1	147.5	45.0	0.1	0.0	0.1	0.0	334.0	42.8	58.6	129.3	463.4
Dec.	371.5	168.1	45.0	1.1	2.0	0.2	0.0	350.7	51.7	55.5	129.5	480.5
2003 Jan.	360.9	176.3	45.0	0.5	0.0	0.3	0.0	353.9	43.7	53.3	131.6	485.8
Feb.	356.4	168.6	45.0	0.3	0.0	0.3	0.0	340.7	50.2	48.0	131.1	472.2
Mar.	352.5	179.5	45.0	0.2	0.0	0.1	0.0	347.8	59.1	40.6	129.6	477.5
Apr.	337.4	179.4	45.0	0.1	0.0	0.2	0.0	358.5	52.1	20.5	130.6	489.3
May ⁴⁾	333.1	177.1	45.0	0.4	0.0	0.2	0.1	366.2	42.6	15.5	130.9	497.3

Source: ECB.

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

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

3) Remaining items in the consolidated financial statement of the Eurosystem.

4) Equal to the difference between the sum of liquidity-providing factors (items 1 to 5) and the sum of liquidity-absorbing factors (items 6 to 10).

5) Calculated as the sum of the deposit facility (item 6), banknotes in circulation (item 8) and credit institutions' current account holdings (item 11).

2 Monetary developments and investment funds 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 ²⁾				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					11	12	13	14	15
2000	445.0	427.4	17.1	0.5	97.4	2.5	93.6	1.3	15.3	4.3	11.0	380.7	11.2	56.1	1,005.7	
<i>Euro area enlargement</i>																
2001 Q2	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	
Q3	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	54.8	971.7	
Q4	412.7	386.4	25.7	0.6	107.0	3.8	101.8	1.3	13.8	4.6	9.2	399.0	11.9	54.3	998.6	
2002 Q1	381.3	354.9	25.8	0.6	106.5	4.1	101.0	1.4	13.8	4.7	9.1	414.4	11.9	101.5	1,029.4	
2002 Apr.	344.2	317.8	25.8	0.6	107.5	5.0	101.4	1.1	13.5	4.7	8.8	401.2	12.0	103.3	981.7	
May	356.1	329.7	25.7	0.6	107.0	4.9	101.0	1.0	13.3	4.7	8.6	394.4	12.0	105.4	988.2	
June	387.7	361.3	25.7	0.6	107.9	4.9	101.6	1.4	12.9	4.7	8.2	372.7	12.0	108.8	1,001.9	
July	364.0	337.7	25.7	0.6	108.8	5.3	101.9	1.7	12.7	4.7	7.9	377.9	12.1	110.4	985.9	
Aug.	363.4	337.5	25.3	0.6	110.8	5.4	103.3	2.1	12.8	4.8	8.0	377.9	12.1	110.8	987.8	
Sep.	365.6	339.6	25.3	0.6	112.5	5.8	104.6	2.2	12.3	4.8	7.5	386.0	12.1	112.4	1,000.9	
Oct.	370.8	344.8	25.3	0.6	113.5	6.5	106.1	0.9	13.0	4.8	8.2	379.9	12.1	115.1	1,004.4	
Nov.	377.3	351.3	25.3	0.6	115.0	7.0	107.1	0.9	13.5	4.8	8.6	379.0	9.8	119.2	1,013.8	
Dec.	416.2	391.3	24.2	0.6	94.5	7.6	86.0	0.8	13.2	4.8	8.3	374.8	11.9	132.3	1,042.8	
2003 Jan.	412.3	387.5	24.2	0.6	96.7	8.5	87.4	0.8	13.0	4.9	8.1	373.3	12.1	116.9	1,024.8	
Feb.	410.2	385.4	24.1	0.6	100.7	9.1	90.8	0.8	12.9	5.0	7.9	363.3	12.0	121.1	1,020.5	
Mar.	411.8	387.0	24.1	0.6	105.2	9.5	94.8	0.8	12.5	5.1	7.5	349.7	11.9	123.6	1,015.1	
Apr. ^(p)	369.6	344.9	24.1	0.6	107.6	9.6	97.1	0.8	13.0	5.1	7.9	341.0	12.0	128.2	971.9	

2. Liabilities

	Currency in circulation		Deposits of euro area residents		Central government	Other general government/other euro area residents	Debt securities issued ²⁾	Capital and reserves	External liabilities ¹⁾	Remaining liabilities	Total
	1	2	3	4								5	6	7	8	9	10
2000	390.2	327.3	270.4	47.1	9.8	3.8	197.5	29.9	57.0	1,005.7	
<i>Euro area enlargement</i>											
2001 Q2	368.8	342.2	274.1	51.8	16.3	5.6	223.7	32.6	54.2	1,027.2	
Q3	346.1	323.6	269.4	37.6	16.6	5.5	209.2	30.0	57.3	971.7	
Q4	285.9	391.9	342.4	35.1	14.4	4.6	209.8	35.6	70.8	998.6	
2002 Q1	309.1	355.1	282.4	56.3	16.4	4.6	217.8	36.9	105.9	1,029.4	
2002 Apr.	311.2	323.5	254.8	50.8	17.9	4.6	212.7	32.4	97.2	981.7	
May	319.6	326.6	268.4	40.7	17.4	4.6	207.9	31.6	98.0	988.2	
June	329.3	354.3	285.2	51.5	17.5	4.6	182.3	31.0	100.5	1,001.9	
July	340.1	316.0	247.4	52.9	15.6	4.6	183.7	35.1	106.6	985.9	
Aug.	342.3	318.7	255.8	47.3	15.6	4.6	186.4	31.0	104.9	987.8	
Sep.	347.0	317.6	258.9	41.7	17.0	4.6	190.2	32.5	109.1	1,000.9	
Oct.	355.3	313.5	254.4	40.8	18.3	4.6	187.9	31.4	111.9	1,004.4	
Nov.	360.8	319.3	255.2	46.2	17.9	3.6	185.7	31.5	112.9	1,013.8	
Dec.	392.9	328.4	283.3	29.5	15.6	3.6	165.9	32.9	119.1	1,042.8	
2003 Jan.	352.1	348.3	284.1	49.3	15.0	3.6	164.2	30.2	126.4	1,024.8	
Feb.	358.1	346.0	276.9	54.2	14.9	2.8	159.5	28.6	125.5	1,020.5	
Mar.	365.4	345.8	279.0	50.7	16.2	2.7	149.2	28.7	123.3	1,015.1	
Apr. ^(p)	378.7	292.1	233.2	42.0	16.9	2.7	144.6	27.6	126.1	971.9	

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.

2) Includes money market paper. For further details, see the general notes.

Table 2.2

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

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

1. Assets

	Loans to euro area residents				Holdings of securities other than shares issued by euro area residents ¹⁾				Money market fund shares/units	Holdings of shares/other equity issued by euro area residents		External assets	Fixed assets	Remaining assets	Total	
	MFIs	General government	Other euro area residents	MFIs	General government	Other euro area residents	MFIs	Other euro area residents								
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
2000	10,419.8	3,510.4	817.8	6,091.5	2,311.5	1,051.4	995.9	264.2	23.3	750.9	240.2	510.8	2,026.2	158.7	1,015.2	16,705.6
<i>Euro area enlargement</i>																
2001 Q2	10,894.4	3,698.3	808.5	6,387.6	2,529.2	1,123.3	1,104.9	300.9	32.9	799.3	251.3	548.0	2,290.1	163.5	1,128.3	17,837.7
Q3	10,953.2	3,729.3	802.6	6,421.3	2,543.2	1,123.5	1,093.3	326.4	36.1	771.6	245.1	526.4	2,300.6	165.7	1,115.8	17,886.2
Q4	11,134.7	3,794.0	822.0	6,518.7	2,535.9	1,122.9	1,077.4	335.6	38.5	810.8	251.9	559.0	2,408.8	168.1	1,129.5	18,226.3
2002 Q1	11,210.8	3,778.4	826.8	6,605.5	2,646.9	1,173.5	1,128.1	345.3	46.6	811.4	260.0	551.4	2,430.8	164.5	1,031.1	18,342.2
2002 Apr.	11,264.9	3,817.7	806.7	6,640.6	2,653.2	1,183.6	1,127.8	341.8	47.5	825.4	267.5	557.9	2,425.3	164.2	1,011.2	18,391.8
May	11,329.0	3,866.4	803.4	6,659.1	2,673.9	1,188.7	1,141.2	343.9	50.8	826.0	265.7	560.3	2,451.4	164.4	984.6	18,480.1
June	11,334.7	3,839.8	804.4	6,690.5	2,675.0	1,195.9	1,137.5	341.7	58.3	819.0	263.4	555.6	2,358.6	164.3	1,002.3	18,412.2
July	11,339.5	3,844.7	802.8	6,691.9	2,671.9	1,192.8	1,135.5	343.6	60.5	808.1	266.9	541.2	2,378.8	164.6	1,025.6	18,449.0
Aug.	11,321.2	3,836.8	792.7	6,691.7	2,657.6	1,187.0	1,131.7	338.9	60.9	816.7	265.5	551.1	2,367.3	165.6	1,011.0	18,400.2
Sep.	11,406.6	3,885.0	795.5	6,726.1	2,687.2	1,190.0	1,148.6	348.6	62.1	805.1	263.6	541.5	2,427.5	166.2	1,057.9	18,612.6
Oct.	11,463.5	3,926.4	795.1	6,742.0	2,680.0	1,185.5	1,142.3	352.2	63.7	819.5	266.0	553.5	2,483.6	167.1	1,021.1	18,698.6
Nov.	11,592.2	4,034.5	803.9	6,753.9	2,706.7	1,203.5	1,147.3	355.8	65.6	822.9	264.7	558.2	2,558.2	167.1	1,055.3	18,968.1
Dec.	11,613.1	4,019.7	812.6	6,780.9	2,671.2	1,170.0	1,135.0	366.2	62.4	827.6	263.3	564.4	2,465.5	167.6	1,051.8	18,859.3
2003 Jan.	11,657.8	4,049.0	804.7	6,804.1	2,780.7	1,218.6	1,188.2	373.9	65.3	815.5	256.0	559.5	2,478.6	164.2	1,015.5	18,977.9
Feb.	11,734.1	4,099.3	804.1	6,830.6	2,815.9	1,227.8	1,207.8	380.3	66.4	812.1	255.9	556.2	2,545.6	162.9	1,042.1	19,179.2
Mar.	11,725.7	4,064.8	805.6	6,855.4	2,831.2	1,235.5	1,213.3	382.3	66.8	815.3	258.7	556.6	2,544.9	161.0	1,032.6	19,177.5
Apr. ^(p)	11,790.7	4,099.7	800.4	6,890.6	2,851.1	1,224.6	1,228.1	398.5	69.9	836.1	260.2	575.9	2,564.6	159.0	1,046.2	19,317.6

2. Liabilities

	Currency in circulation	Deposits of euro area residents	MFIs	Central government	Other general government/other euro area residents	Overnight	With agreed maturity	Redeemable at notice	Repurchase agreements	Money market fund shares/units ²⁾	Debt securities issued ¹⁽²⁾	Capital and reserves	External liabilities	Remaining liabilities	Total	
																1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
2000	0.0	9,057.1	3,679.3	117.4	5,260.5	1,648.9	2,159.8	1,276.9	174.9	323.3	2,712.9	940.5	2,299.5	1,372.2	16,705.6	
<i>Euro area enlargement</i>																
2001 Q2	0.0	9,424.1	3,805.6	113.7	5,504.8	1,715.9	2,236.6	1,330.8	221.5	390.2	2,861.3	998.1	2,713.8	1,450.1	17,837.7	
Q3	0.0	9,484.8	3,839.0	110.2	5,535.5	1,733.7	2,233.5	1,342.6	225.7	417.3	2,875.5	1,011.1	2,613.4	1,484.1	17,886.2	
Q4	0.0	9,696.6	3,829.6	103.9	5,763.1	1,882.1	2,257.5	1,405.0	218.5	436.5	2,882.9	1,041.9	2,687.4	1,480.9	18,226.3	
2002 Q1	0.0	9,695.4	3,852.1	101.2	5,742.1	1,823.1	2,266.3	1,423.0	229.6	477.9	2,966.1	1,057.6	2,754.4	1,390.7	18,342.2	
2002 Apr.	0.0	9,742.5	3,871.8	106.7	5,763.9	1,852.1	2,269.0	1,414.7	228.1	485.0	2,969.4	1,064.1	2,741.5	1,389.4	18,391.8	
May	0.0	9,810.7	3,920.5	108.3	5,781.9	1,852.8	2,278.8	1,415.5	234.8	493.4	2,994.0	1,071.3	2,723.4	1,387.2	18,480.1	
June	0.0	9,836.4	3,926.6	103.5	5,806.3	1,898.8	2,256.3	1,421.7	229.6	497.5	2,984.6	1,071.6	2,589.0	1,433.2	18,412.2	
July	0.0	9,818.1	3,932.1	99.0	5,787.1	1,870.1	2,263.8	1,424.3	228.8	510.7	2,989.6	1,081.4	2,613.1	1,436.1	18,449.0	
Aug.	0.0	9,779.9	3,918.3	93.6	5,768.0	1,836.2	2,265.4	1,429.8	236.5	524.3	3,002.0	1,088.2	2,585.3	1,420.5	18,400.2	
Sep.	0.0	9,870.6	3,960.8	104.6	5,805.2	1,891.3	2,242.8	1,432.8	238.3	522.5	3,004.3	1,094.1	2,642.2	1,478.9	18,612.6	
Oct.	0.0	9,942.0	4,020.2	111.0	5,810.8	1,873.5	2,263.8	1,438.1	235.6	526.4	3,010.4	1,097.0	2,666.5	1,456.3	18,698.6	
Nov.	0.0	10,092.3	4,127.2	101.3	5,863.8	1,925.7	2,259.8	1,448.7	229.6	542.8	3,038.1	1,100.1	2,706.2	1,488.6	18,968.1	
Dec.	0.0	10,198.9	4,136.5	106.9	5,955.5	1,984.6	2,264.5	1,479.6	226.9	532.9	2,992.7	1,108.8	2,594.3	1,431.7	18,859.3	
2003 Jan.	0.0	10,200.1	4,162.2	105.4	5,932.5	1,933.2	2,266.2	1,500.1	233.0	600.3	3,017.2	1,113.0	2,632.7	1,414.6	18,977.9	
Feb.	0.0	10,297.4	4,220.3	121.6	5,955.5	1,932.9	2,275.2	1,513.5	233.8	613.8	3,037.2	1,110.7	2,686.0	1,434.2	19,179.2	
Mar.	0.0	10,307.7	4,197.3	120.2	5,990.3	1,969.0	2,276.9	1,521.2	223.2	617.7	3,045.6	1,116.8	2,664.9	1,424.9	19,177.5	
Apr. ^(p)	0.0	10,340.0	4,196.7	113.9	6,029.4	1,987.5	2,282.0	1,527.4	232.6	633.4	3,066.3	1,117.8	2,687.0	1,473.1	19,317.6	

Source: ECB.

1) Includes money market paper. For further details, see the general notes.

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

Table 2.3

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

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

1. Assets: levels

	Assets						External assets ³⁾	Fixed assets	Remaining assets	Total	
	Loans to euro area residents	General government	Other euro area residents	Holdings of securities other than shares issued by euro area residents ²⁾	General government	Other euro area residents					
	1	2	3	4	5	6	7	8	9	10	11
2001 Oct.	7,278.8	827.2	6,451.6	1,516.6	1,186.8	329.9	543.7	2,742.5	178.3	1,164.2	13,424.2
Nov.	7,345.2	843.3	6,501.9	1,524.1	1,191.0	333.1	544.6	2,827.6	179.1	1,153.9	13,574.5
Dec.	7,367.0	847.7	6,519.3	1,516.1	1,179.2	336.9	568.1	2,807.8	180.0	1,137.6	13,576.7
2002 Jan.	7,379.2	844.8	6,534.4	1,548.3	1,206.3	341.9	568.1	2,829.6	177.5	1,164.8	13,667.3
Feb.	7,396.2	847.5	6,548.7	1,557.7	1,207.8	349.9	566.7	2,833.2	176.6	1,126.8	13,657.2
Mar.	7,458.8	852.6	6,606.1	1,575.7	1,229.1	346.6	560.5	2,845.2	176.4	1,077.7	13,694.3
Apr.	7,473.6	832.4	6,641.2	1,572.2	1,229.3	342.9	566.8	2,826.5	176.2	1,065.0	13,680.2
May	7,488.9	829.2	6,659.7	1,587.2	1,242.3	345.0	568.9	2,845.8	176.4	1,044.3	13,711.5
June	7,521.2	830.1	6,691.1	1,582.0	1,239.0	343.0	563.9	2,731.2	176.2	1,067.6	13,642.2
July	7,521.1	828.5	6,692.6	1,582.7	1,237.4	345.3	549.1	2,756.7	176.7	1,092.7	13,679.1
Aug.	7,510.4	818.0	6,692.3	1,576.0	1,235.0	341.0	559.1	2,745.3	177.7	1,080.6	13,649.1
Sep.	7,547.5	820.8	6,726.8	1,603.9	1,253.2	350.8	549.1	2,813.5	178.3	1,130.0	13,822.2
Oct.	7,563.1	820.4	6,742.7	1,601.6	1,248.5	353.1	561.6	2,863.5	179.3	1,094.8	13,863.9
Nov.	7,583.7	829.2	6,754.5	1,611.1	1,254.4	356.7	566.9	2,937.2	177.0	1,135.1	14,010.9
Dec.	7,618.3	836.8	6,781.5	1,588.1	1,221.0	367.1	572.7	2,840.3	179.5	1,132.2	13,931.1
2003 Jan.	7,633.6	828.9	6,804.7	1,650.3	1,275.5	374.8	567.5	2,851.9	176.3	1,092.5	13,972.8
Feb.	7,659.5	828.3	6,831.3	1,679.7	1,298.6	381.1	564.1	2,908.9	174.9	1,124.4	14,112.0
Mar.	7,685.7	829.7	6,856.0	1,691.3	1,308.1	383.2	564.1	2,894.6	172.9	1,117.9	14,127.0
Apr. ^(p)	7,715.7	824.5	6,891.2	1,724.5	1,325.2	399.3	583.8	2,905.7	171.0	1,131.9	14,233.1

2. Liabilities: levels

	Liabilities											Total		
	Currency in circulation	Deposits of central government	Deposits of other general government/ other euro area residents	Over-night	With agreed maturity	Redeemable at notice	Repurchase agreements	Money market fund shares/units ⁴⁾	Debt securities issued ²⁾⁴⁾	Capital and reserves	External liabilities ³⁾		Re-maining liabilities	Excess of inter-MFI liabilities
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
2001 Oct.	295.5	153.3	5,574.8	1,750.3	2,237.6	1,351.9	235.1	392.3	1,767.9	981.1	2,665.2	1,588.7	5.5	13,424.2
Nov.	279.7	150.2	5,628.1	1,798.1	2,239.2	1,365.0	225.9	400.8	1,760.3	982.6	2,729.9	1,632.4	10.4	13,574.5
Dec.	239.7	139.0	5,777.6	1,896.2	2,257.9	1,405.0	218.5	398.0	1,760.8	995.2	2,723.0	1,551.8	-8.5	13,576.7
2002 Jan.	246.5	148.9	5,736.9	1,847.8	2,254.1	1,418.8	216.2	416.6	1,775.9	1,007.5	2,759.4	1,573.6	2.0	13,667.3
Feb.	240.3	155.7	5,736.7	1,843.3	2,251.4	1,420.9	221.1	427.0	1,778.2	1,011.5	2,768.0	1,538.8	1.1	13,657.2
Mar.	254.3	157.5	5,758.5	1,839.1	2,266.7	1,423.0	229.6	431.2	1,793.1	1,010.7	2,791.3	1,496.6	1.3	13,694.3
Apr.	261.7	157.5	5,781.8	1,869.7	2,269.3	1,414.7	228.1	437.5	1,785.5	1,004.6	2,774.0	1,486.6	-8.9	13,680.2
May	273.8	149.0	5,799.3	1,869.8	2,279.1	1,415.5	234.8	442.6	1,805.0	1,008.8	2,755.1	1,485.2	-7.3	13,711.5
June	285.8	155.0	5,823.9	1,916.0	2,256.6	1,421.7	229.6	439.2	1,788.3	985.8	2,619.9	1,533.6	10.7	13,642.2
July	296.8	151.9	5,802.6	1,885.4	2,264.1	1,424.3	228.8	450.3	1,796.1	993.4	2,648.1	1,542.7	-2.9	13,679.1
Aug.	301.1	141.0	5,783.6	1,851.6	2,265.7	1,429.8	236.5	463.4	1,814.3	1,004.3	2,616.3	1,525.4	-0.2	13,649.1
Sep.	306.7	146.3	5,822.2	1,908.0	2,243.1	1,432.8	238.3	460.4	1,813.0	1,015.9	2,674.8	1,588.0	-5.0	13,822.2
Oct.	313.9	151.8	5,829.1	1,891.4	2,264.1	1,438.1	235.6	462.7	1,823.0	1,014.0	2,697.9	1,568.2	3.3	13,863.9
Nov.	321.4	147.5	5,881.7	1,943.2	2,260.2	1,448.7	229.6	477.1	1,831.1	1,016.2	2,737.8	1,601.5	-3.4	14,010.9
Dec.	341.2	136.4	5,971.1	1,999.8	2,264.8	1,479.6	226.9	470.6	1,818.6	1,006.5	2,627.2	1,550.8	8.8	13,931.1
2003 Jan.	312.1	154.7	5,947.4	1,947.9	2,266.5	1,500.1	233.0	535.0	1,793.6	1,016.3	2,662.9	1,541.1	9.7	13,972.8
Feb.	319.3	175.8	5,970.4	1,947.5	2,275.5	1,513.5	233.8	547.3	1,803.0	1,009.3	2,714.5	1,559.8	12.5	14,112.0
Mar.	327.1	170.9	6,006.4	1,984.9	2,277.1	1,521.2	223.2	550.8	1,803.3	1,002.2	2,693.6	1,548.2	24.4	14,127.0
Apr. ^(p)	336.2	155.9	6,046.4	2,004.1	2,282.3	1,527.4	232.6	563.5	1,834.9	997.2	2,714.6	1,599.2	-14.7	14,233.1

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) Includes money market paper. For further details, see the general notes.

3) See Table 2.1, footnote 1.

4) 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 ²⁾	General government		Holdings of shares/ other equity issued by other euro area residents	External assets ³⁾	Fixed assets	Remaining assets	Total
	1	2			3	4						5	6
2001 Nov.	65.7	16.0	49.7	9.9	7.9	2.1	-3.2	65.9	1.1	5.9	145.5
Dec.	25.6	3.7	21.9	-8.4	-10.3	2.0	22.1	-25.8	1.1	-17.1	-2.5
2002 Jan.	9.4	-3.1	12.6	27.1	21.9	5.2	-0.3	-0.2	-2.5	26.6	60.1
Feb.	19.0	2.7	16.2	9.2	1.2	8.0	0.6	0.3	-0.9	-39.3	-11.1
Mar.	64.2	5.2	59.0	14.1	16.9	-2.9	-7.6	19.8	0.0	-48.1	42.4
Apr.	21.7	-20.0	41.6	-1.9	1.5	-3.3	6.3	17.8	-0.2	-13.1	30.6
May	25.3	-2.8	28.1	12.7	9.7	3.0	0.9	73.3	0.2	-20.8	91.6
June	40.7	1.4	39.3	-3.0	-1.3	-1.7	-5.1	-27.1	-0.2	23.7	28.9
July	-4.6	-1.8	-2.8	-2.5	-2.0	-0.5	-11.7	-1.8	0.5	23.9	3.8
Aug.	-10.7	-10.9	0.2	-5.7	-3.1	-2.6	9.4	-10.7	1.0	-12.1	-28.8
Sep.	38.3	2.8	35.4	20.8	11.5	9.3	-4.4	65.7	0.6	47.8	168.7
Oct.	18.2	-0.4	18.6	-0.4	-2.6	2.2	10.3	54.9	0.9	-35.8	48.1
Nov.	25.7	9.0	16.7	9.4	6.1	3.4	1.9	84.7	-2.3	39.6	159.0
Dec.	50.0	8.0	42.0	-3.9	-14.1	10.2	4.7	-33.5	1.7	-12.8	6.2
2003 Jan.	25.9	1.3	24.6	24.1	20.0	4.1	-0.6	17.8	-2.0	-25.8	40.0
Feb.	28.4	-2.4	30.8	24.5	17.8	6.7	-2.3	66.3	-1.5	28.9	144.2
Mar.	34.1	1.5	32.6	14.2	11.8	2.4	0.6	6.5	0.0	-17.1	38.4
Apr. ⁴⁾	36.8	-5.0	41.8	29.2	17.9	11.3	15.4	39.8	-1.9	11.0	130.2

4. Liabilities: flows ¹⁾

	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 ⁴⁾	Debt securities issued ^{2) 4)}	Capital and reserves	External liabilities ³⁾	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
2001 Nov.	-15.7	-3.0	51.4	47.1	0.3	13.1	-9.2	9.7	23.8	2.9	38.6	33.2	4.6	145.5
Dec.	-40.0	-11.2	149.4	98.4	18.4	40.0	-7.4	-1.3	-0.5	13.6	-16.9	-76.1	-19.5	-2.5
2002 Jan.	6.8	10.4	-42.5	-49.5	-3.1	12.4	-2.3	19.5	10.4	14.2	14.1	15.8	11.3	60.1
Feb.	-6.2	6.9	0.2	-4.3	-2.5	2.1	4.9	10.4	4.8	-0.8	11.2	-36.8	-0.7	-11.1
Mar.	14.0	1.7	22.8	-3.8	16.1	2.2	8.4	3.3	18.4	2.7	25.5	-55.3	9.3	42.4
Apr.	7.4	0.0	27.6	32.0	5.2	-8.2	-1.5	7.9	-1.7	-5.2	20.3	-16.2	-9.6	30.6
May	12.2	-8.5	24.5	2.3	14.3	1.1	6.7	4.0	29.5	3.7	34.0	-9.2	1.5	91.6
June	12.0	6.0	31.1	48.1	-17.4	6.4	-6.1	-7.2	1.4	-17.1	-68.2	55.4	15.6	28.9
July	11.0	-3.1	-24.5	-31.7	5.5	2.5	-0.7	12.0	5.5	9.6	-4.2	10.9	-13.5	3.8
Aug.	4.4	-11.0	-4.7	-33.6	15.7	5.5	7.7	12.3	4.0	9.0	-25.1	-20.5	2.8	-28.8
Sep.	5.6	1.6	39.5	56.4	-22.3	3.0	2.4	-2.7	15.8	9.3	47.6	53.9	-1.9	168.7
Oct.	7.2	5.5	7.8	-16.4	21.7	5.3	-2.8	2.1	11.3	0.0	25.4	-20.5	9.4	48.1
Nov.	7.5	-4.3	54.8	52.2	-3.6	10.6	-4.4	14.7	11.5	2.0	49.3	29.3	-5.9	159.0
Dec.	19.8	-11.0	86.3	49.2	8.6	31.2	-2.8	-6.1	-6.1	8.9	-55.4	-42.4	12.3	6.2
2003 Jan.	-7.4	15.2	-16.5	-50.4	-1.4	20.6	14.7	19.4	12.3	11.0	10.5	-9.4	4.9	40.0
Feb.	7.2	18.6	22.9	-0.5	9.1	13.5	0.9	12.2	9.7	-4.3	55.4	17.1	5.4	144.2
Mar.	7.8	-5.0	38.0	38.1	2.7	7.8	-10.7	4.2	1.4	-2.8	-8.3	-8.8	11.9	38.4
Apr. ⁴⁾	9.1	-15.0	43.4	20.4	7.2	6.3	9.5	12.2	31.8	-1.1	44.3	43.9	-38.5	130.2

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. 01=100 ³⁾
	Currency in circulation 1	Overnight deposits 2	Total 3	Index Dec. 01=100 ³⁾				
					4	5	6	7	8
2001 Oct.	295.5	1,816.1	2,111.6	95.66	1,074.7	1,311.6	4,497.9	96.46
Nov.	279.7	1,864.6	2,144.3	97.11	1,077.6	1,326.4	4,548.2	97.50
Dec.	239.7	1,968.2	2,207.9	100.00	1,088.8	1,367.9	4,664.6	100.00
2002 Jan.	246.5	1,921.9	2,168.4	98.16	1,080.9	1,390.4	4,639.7	99.44
Feb.	240.3	1,917.1	2,157.4	97.67	1,076.7	1,394.5	4,628.6	99.21
Mar.	254.3	1,914.2	2,168.5	98.19	1,088.5	1,397.9	4,654.8	99.79
Apr.	261.7	1,945.5	2,207.2	100.01	1,092.0	1,391.9	4,691.1	100.64
May	273.8	1,945.4	2,219.2	100.65	1,099.6	1,394.0	4,712.8	101.23
June	285.8	1,992.1	2,277.9	103.40	1,074.8	1,400.0	4,752.7	102.23
July	296.8	1,959.3	2,256.1	102.37	1,083.7	1,403.0	4,742.8	101.89
Aug.	301.1	1,927.4	2,228.5	101.12	1,096.8	1,408.9	4,734.3	101.72
Sep.	306.7	1,984.3	2,291.0	103.96	1,073.6	1,411.1	4,775.6	102.60
Oct.	313.9	1,968.3	2,282.2	103.57	1,093.6	1,417.7	4,793.5	103.00
Nov.	321.4	2,020.9	2,342.3	106.31	1,086.2	1,428.8	4,857.2	104.38
Dec.	341.2	2,082.7	2,423.8	109.68	1,075.3	1,460.7	4,959.8	106.50
2003 Jan.	312.1	2,028.7	2,340.8	106.97	1,077.4	1,485.4	4,903.6	105.82
Feb.	319.3	2,029.0	2,348.4	107.31	1,079.5	1,500.9	4,928.7	106.36
Mar.	327.1	2,067.4	2,394.6	109.46	1,072.8	1,512.6	4,980.0	107.50
Apr. ^(p)	336.2	2,087.2	2,423.4	110.83	1,081.4	1,521.8	5,026.6	108.57

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 3	Annual growth rate ³⁾ (%)				
					4	5	6	7	8
2001 Nov.	-15.7	47.8	32.0	5.5	1.9	14.8	48.7	5.9
Dec.	-40.0	103.9	63.9	5.1	11.1	41.5	116.4	6.1
2002 Jan.	6.8	-47.4	-40.6	6.7	-6.7	21.1	-26.2	6.7
Feb.	-6.2	-4.6	-10.8	6.3	-4.0	4.1	-10.7	6.3
Mar.	14.0	-2.6	11.4	6.3	12.3	3.4	27.1	6.4
Apr.	7.4	32.8	40.2	6.6	5.4	-5.8	39.7	6.4
May	12.2	2.0	14.2	6.4	10.9	2.3	27.4	6.7
June	12.0	48.6	60.6	7.3	-20.6	6.3	46.2	6.6
July	11.0	-33.8	-22.8	7.3	4.2	2.8	-15.8	6.4
Aug.	4.4	-31.7	-27.3	8.0	13.5	6.0	-7.9	6.6
Sep.	5.6	56.9	62.5	8.0	-23.3	2.2	41.4	6.4
Oct.	7.2	-15.8	-8.6	8.3	20.4	6.7	18.4	6.8
Nov.	7.5	53.0	60.5	9.5	-7.3	11.1	64.3	7.1
Dec.	19.8	54.3	74.2	9.7	-7.9	32.1	98.4	6.5
2003 Jan.	-7.4	-52.4	-59.9	9.0	3.3	24.9	-31.7	6.4
Feb.	7.2	0.3	7.5	9.9	2.1	15.5	25.1	7.2
Mar.	7.8	39.1	46.9	11.5	-5.8	11.8	52.9	7.7
Apr. ^(p)	9.1	21.0	30.1	10.8	10.1	9.3	49.6	7.9

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 and debt securities up to 2 years.

M3 ²⁾						
Repurchase agreements	Money market fund shares/units	Debt securities up to 2 years ⁵⁾	Total	Index Dec. 01=100 ³⁾		
9	10	11	12	13		
235.1	392.3	149.5	5,274.7	97.16	2001 Oct.	
225.9	400.8	152.2	5,327.1	98.16	Nov.	
218.5	398.0	145.9	5,427.0	100.00	Dec.	
216.2	416.6	141.8	5,414.4	99.83	2002 Jan.	
221.1	427.0	138.8	5,415.5	99.84	Feb.	
229.6	431.2	137.2	5,453.0	100.56	Mar.	
228.1	437.5	134.7	5,491.4	101.35	Apr.	
234.8	442.6	144.0	5,534.2	102.23	May	
229.6	439.2	132.9	5,554.3	102.71	June	
228.8	450.3	125.5	5,547.4	102.46	July	
236.5	463.4	126.5	5,560.7	102.71	Aug.	
238.3	460.4	131.3	5,605.7	103.53	Sep.	
235.6	462.7	133.7	5,625.4	103.91	Oct.	
229.6	477.1	131.1	5,695.1	105.23	Nov.	
226.9	470.6	127.7	5,784.9	106.82	Dec.	
233.0	535.0	108.3	5,779.8	106.98	2003 Jan.	
233.8	547.3	108.8	5,818.7	107.69	Feb.	
223.2	550.8	101.0	5,855.0	108.39	Mar.	
232.6	563.5	125.8	5,948.5	110.09	Apr. ⁽⁶⁾	

M3 ²⁾						
Repurchase agreements	Money market fund shares/units	Debt securities up to 2 years ⁵⁾	Total	Annual growth rate ³⁾ (%)		
9	10	11	12	13		
-9.2	9.7	5.1	54.3	7.6	2001 Nov.	
-7.4	-1.3	-7.8	99.9	7.6	Dec.	
-2.3	19.5	-0.3	-9.2	7.7	2002 Jan.	
4.9	10.4	-3.9	0.7	7.3	Feb.	
8.4	3.3	0.2	39.0	7.3	Mar.	
-1.5	7.9	-3.4	42.7	7.2	Apr.	
6.7	4.0	9.8	47.9	7.5	May	
-6.1	-7.2	-7.4	25.6	7.2	June	
-0.7	12.0	-8.7	-13.2	6.9	July	
7.7	12.3	1.1	13.2	7.1	Aug.	
2.4	-2.7	3.6	44.7	7.0	Sep.	
-2.8	2.1	2.5	20.2	6.9	Oct.	
-4.4	14.7	-2.7	71.9	7.2	Nov.	
-2.8	-6.1	-3.9	85.7	6.8	Dec.	
14.7	19.4	6.2	8.6	7.2	2003 Jan.	
0.9	12.2	0.2	38.4	7.9	Feb.	
-10.7	4.2	-8.6	37.9	7.8	Mar.	
9.5	12.2	20.6	91.9	8.6	Apr. ⁽⁶⁾	

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.

5) Includes money market paper. For further details, see the general notes.

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								Total	Index ⁴⁾
	M1				Other short-term deposits ⁵⁾					
	Currency in circulation 1	Overnight deposits 2	Total	Index ⁴⁾	Total	Index ⁴⁾				
			3	4	5	6	7	8		
2001 Oct.	297.2	1,841.8	2,139.0	96.90	2,406.3	98.00		4,545.3	97.48	
Nov.	279.8	1,870.3	2,150.0	97.37	2,421.1	98.56		4,571.1	97.99	
Dec.	233.3	1,917.8	2,151.1	97.43	2,447.8	99.64		4,598.9	98.59	
2002 Jan.	251.7	1,924.5	2,176.2	98.52	2,452.9	99.83		4,629.1	99.21	
Feb.	244.8	1,932.3	2,177.1	98.56	2,449.6	99.71		4,626.7	99.17	
Mar.	254.1	1,921.7	2,175.8	98.52	2,471.8	100.64		4,647.6	99.64	
Apr.	263.4	1,939.2	2,202.6	99.80	2,477.4	100.95		4,680.0	100.41	
May	272.5	1,945.4	2,217.9	100.59	2,481.1	101.24		4,699.0	100.94	
June	281.8	1,948.2	2,230.1	101.23	2,486.5	101.64		4,716.6	101.45	
July	292.3	1,959.4	2,251.7	102.17	2,497.1	101.88		4,748.8	102.02	
Aug.	299.1	1,970.9	2,270.0	103.01	2,503.4	102.15		4,773.4	102.56	
Sep.	307.5	1,988.5	2,296.0	104.19	2,511.1	102.47		4,807.1	103.28	
Oct.	315.7	1,996.0	2,311.6	104.90	2,531.8	103.33		4,843.5	104.08	
Nov.	321.9	2,017.8	2,339.6	106.19	2,532.7	103.37		4,872.4	104.71	
Dec.	332.7	2,031.8	2,364.5	106.99	2,529.4	103.37		4,894.0	105.08	
2003 Jan.	317.4	2,040.2	2,357.6	107.73	2,538.6	103.80		4,896.2	105.66	
Feb.	323.6	2,055.7	2,379.4	108.73	2,551.9	104.35		4,931.3	106.41	
Mar.	332.4	2,074.2	2,406.6	110.00	2,572.5	105.23		4,979.1	107.48	
Apr. ^(p)	338.6	2,085.6	2,424.3	110.87	2,592.5	106.12		5,016.8	108.36	

4. Seasonally adjusted flows ⁷⁾

	M2										
	M1					Other short-term deposits ⁵⁾			Total	Monthly growth rate ⁴⁾ (%)	Annual growth rate ⁴⁾ (%)
	Currency in circulation 1	Overnight deposits 2	Total	Monthly growth rate ⁴⁾ (%)	Annual growth rate ⁴⁾ (%)	Total	Monthly growth rate ⁴⁾ (%)	Annual growth rate ⁴⁾ (%)			
			3	4	5	6	7	8	9	10	11
2001 Nov.	-17.4	27.8	10.3	0.5	5.9	13.8	0.6	5.9	24.1	0.5	5.9
Dec.	-46.4	47.8	1.3	0.1	5.4	26.6	1.1	7.2	27.9	0.6	6.4
2002 Jan.	18.4	5.7	24.1	1.1	6.6	4.8	0.2	6.9	28.8	0.6	6.8
Feb.	-6.9	8.0	1.0	0.0	6.2	-3.0	-0.1	6.5	-2.0	0.0	6.3
Mar.	9.3	-10.2	-0.9	0.0	6.0	22.8	0.9	6.6	21.9	0.5	6.3
Apr.	9.3	19.0	28.3	1.3	6.7	7.6	0.3	6.2	35.9	0.8	6.4
May	9.1	8.3	17.4	0.8	6.8	7.3	0.3	6.6	24.7	0.5	6.7
June	9.3	4.8	14.1	0.6	6.9	9.8	0.4	6.0	23.9	0.5	6.4
July	10.5	10.1	20.6	0.9	7.6	5.8	0.2	5.5	26.4	0.6	6.5
Aug.	6.8	11.8	18.6	0.8	7.7	6.6	0.3	5.4	25.2	0.5	6.5
Sep.	8.4	17.6	26.0	1.1	8.1	7.8	0.3	5.1	33.7	0.7	6.5
Oct.	8.2	7.6	15.8	0.7	8.3	21.1	0.8	5.4	37.0	0.8	6.8
Nov.	6.2	22.2	28.4	1.2	9.1	1.0	0.0	4.9	29.4	0.6	6.9
Dec.	10.8	6.8	17.7	0.8	9.8	0.0	0.0	3.7	17.7	0.4	6.6
2003 Jan.	6.6	9.7	16.4	0.7	9.4	10.5	0.4	4.0	26.9	0.5	6.5
Feb.	6.3	15.4	21.7	0.9	10.3	13.3	0.5	4.6	35.1	0.7	7.3
Mar.	8.7	19.2	27.9	1.2	11.7	21.6	0.8	4.6	49.5	1.0	7.9
Apr. ^(p)	6.3	12.6	18.9	0.8	11.1	21.7	0.8	5.1	40.6	0.8	7.9

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 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 general government) ³⁾			
Marketable instruments ⁶⁾		Total	Index ⁴⁾	Total	Index ⁴⁾		
Total	Index ⁴⁾						
9	10	11	12	13	14		
783.6	102.32	5,329.0	98.16	6,466.8	99.14	2001 Oct. Nov. Dec.	
784.0	102.85	5,355.1	98.68	6,511.5	99.81		
789.1	103.50	5,388.0	99.28	6,513.1	99.91		
778.5	102.73	5,407.5	99.70	6,534.3	100.19	2002 Jan. Feb. Mar. Apr. May June July Aug. Sep. Oct. Nov. Dec.	
780.9	102.95	5,407.6	99.70	6,558.6	100.59		
784.5	103.49	5,432.1	100.18	6,595.8	101.19		
787.6	104.00	5,467.6	100.91	6,625.1	101.74		
800.8	105.67	5,499.7	101.60	6,661.8	102.45		
802.2	105.75	5,518.8	102.05	6,660.8	102.55		
809.9	106.70	5,558.7	102.67	6,680.5	102.79		
824.0	108.45	5,597.4	103.38	6,718.4	103.38		
838.3	110.30	5,645.4	104.27	6,737.2	103.69		
838.6	110.33	5,682.0	104.95	6,757.2	104.04		
843.6	111.22	5,716.0	105.62	6,764.4	104.22		
853.7	112.55	5,747.7	106.13	6,778.5	104.67		
879.3	114.50	5,775.5	106.90	6,806.3	105.12		2003 Jan. Feb. Mar. Apr. ^(p)
883.2	114.94	5,814.5	107.61	6,842.2	105.74		
859.7	111.87	5,838.8	108.09	6,844.5	105.90		
908.1	117.59	5,924.9	109.65	6,873.4	106.45		

M3 ²⁾							Loans to other euro area residents (excluding general 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		
4.0	0.5	19.4	28.1	0.5	7.7	7.6	44.1	0.7	6.6	2001 Nov. Dec.	
5.0	0.6	17.5	32.9	0.6	7.9	7.8	6.0	0.1	6.1		
-5.9	-0.7	13.9	23.0	0.4	7.7	7.6	18.7	0.3	5.7	2002 Jan. Feb. Mar. Apr. May June July Aug. Sep. Oct. Nov. Dec.	
1.7	0.2	13.4	-0.3	0.0	7.3	7.4	26.2	0.4	5.6		
4.1	0.5	12.8	26.0	0.5	7.2	7.2	38.7	0.6	5.5		
3.9	0.5	12.6	39.7	0.7	7.3	7.3	35.9	0.5	5.5		
12.6	1.6	12.9	37.2	0.7	7.6	7.3	46.3	0.7	5.7		
0.6	0.1	10.9	24.5	0.4	7.1	7.2	6.8	0.1	5.4		
7.2	0.9	10.2	33.6	0.6	7.0	7.0	15.4	0.2	5.1		
13.3	1.6	9.9	38.5	0.7	7.0	7.0	38.4	0.6	5.4		
14.1	1.7	10.8	47.8	0.9	7.1	7.0	19.9	0.3	5.1		
0.2	0.0	7.8	37.1	0.7	6.9	7.0	22.6	0.3	4.9		
6.8	0.8	8.1	36.2	0.6	7.0	7.0	12.0	0.2	4.4		
10.1	1.2	8.7	27.7	0.5	6.9	7.0	29.1	0.4	4.8		
14.8	1.7	11.5	41.7	0.7	7.2	7.3	29.2	0.4	4.9		2003 Jan. Feb. Mar. Apr. ^(p)
3.4	0.4	11.6	38.5	0.7	7.9	7.7	40.2	0.6	5.1		
-23.6	-2.7	8.1	25.9	0.4	7.9	8.2	10.1	0.1	4.7		
43.9	5.1	13.1	84.6	1.4	8.7	.	35.5	0.5	4.6		

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 and debt securities up to two years.

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

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

	Longer-term MFI liabilities				Credit ²⁾				Net external assets	Fixed assets
	Deposits with agreed maturity over 2 years	Deposits redeemable at notice over 3 months	Debt securities over 2 years	Capital and reserves	Credit to general government	Credit to other euro area residents	Of which loans	Index Dec. 01 =100 ³⁾		
	1	2	3	4	5	6	7	8	9	10
2001 Oct.	1,162.9	116.9	1,617.0	981.1	2,014.0	7,325.2	6,451.6	98.90	77.3	178.3
Nov.	1,161.6	115.8	1,606.6	982.6	2,034.3	7,379.6	6,501.9	99.66	97.7	179.1
Dec.	1,169.1	115.8	1,613.6	995.2	2,026.9	7,424.4	6,519.3	100.00	84.7	180.0
2002 Jan.	1,173.2	112.3	1,632.9	1,007.5	2,051.1	7,444.4	6,534.4	100.19	70.1	177.5
Feb.	1,174.7	111.2	1,638.8	1,011.5	2,055.3	7,465.4	6,548.7	100.44	65.2	176.6
Mar.	1,178.2	109.9	1,655.8	1,010.7	2,081.7	7,513.2	6,606.1	101.35	54.0	176.4
Apr.	1,177.3	108.0	1,650.2	1,004.6	2,061.7	7,550.9	6,641.2	101.98	52.5	176.2
May	1,179.6	106.8	1,660.6	1,008.8	2,071.5	7,573.6	6,659.7	102.42	90.8	176.4
June	1,181.7	106.6	1,655.2	985.8	2,069.1	7,598.0	6,691.1	103.02	111.3	176.2
July	1,180.4	106.6	1,670.1	993.4	2,065.9	7,587.0	6,692.6	102.98	108.5	176.7
Aug.	1,168.9	106.8	1,687.0	1,004.3	2,053.0	7,592.5	6,692.3	102.98	129.0	177.7
Sep.	1,169.5	107.2	1,680.8	1,015.9	2,073.9	7,626.6	6,726.8	103.53	138.7	178.3
Oct.	1,170.5	106.2	1,688.7	1,014.0	2,068.8	7,657.4	6,742.7	103.81	165.6	179.3
Nov.	1,174.0	105.7	1,698.5	1,016.2	2,083.6	7,678.1	6,754.5	104.07	199.4	177.0
Dec.	1,189.5	105.8	1,689.7	1,006.5	2,057.8	7,721.2	6,781.5	104.72	213.1	179.5
2003 Jan.	1,189.1	106.3	1,684.5	1,016.3	2,104.4	7,747.0	6,804.7	105.10	189.0	176.3
Feb.	1,196.0	105.0	1,693.7	1,009.3	2,126.8	7,776.5	6,831.3	105.57	194.4	174.9
Mar.	1,204.3	100.9	1,701.5	1,002.2	2,137.8	7,803.2	6,856.0	106.08	201.0	172.9
Apr. ^(p)	1,200.9	98.3	1,708.2	997.2	2,149.6	7,874.4	6,891.2	106.72	191.0	171.0

6. Main counterparts of M3: flows ⁴⁾

	Longer-term MFI liabilities				Credit ²⁾				Net external assets	Fixed assets
	Deposits with agreed maturity over 2 years	Deposits redeemable at notice over 3 months	Debt securities over 2 years	Capital and reserves	Credit to general government	Credit to other euro area residents	Of which loans	Annual growth rate ³⁾ (%)		
	1	2	3	4	5	6	7	8	9	10
2001 Nov.	-1.6	-1.1	18.6	2.9	23.8	48.6	49.7	6.6	27.3	1.1
Dec.	7.3	0.1	7.5	13.6	-6.6	46.0	21.9	6.0	-8.9	1.1
2002 Jan.	3.6	-3.6	10.8	14.2	18.7	17.5	12.6	5.7	-14.3	-2.5
Feb.	1.6	-1.0	9.2	-0.8	3.9	24.9	16.2	5.6	-10.9	-0.9
Mar.	3.7	-1.3	18.8	2.7	22.1	48.5	59.0	5.5	-5.6	0.0
Apr.	-0.2	-1.9	1.3	-5.2	-18.5	44.6	41.6	5.5	-2.5	-0.2
May	3.5	-1.2	19.7	3.7	6.9	32.1	28.1	5.8	39.3	0.2
June	3.3	-0.2	8.9	-17.1	0.1	32.4	39.3	5.4	41.1	-0.2
July	1.3	0.0	14.0	9.6	-3.8	-15.0	-2.8	5.1	2.4	0.5
Aug.	2.2	0.2	2.7	9.0	-14.0	7.0	0.2	5.4	14.4	1.0
Sep.	1.0	0.4	12.0	9.3	14.3	40.3	35.4	5.1	18.1	0.6
Oct.	1.3	-1.0	9.0	0.0	-3.0	31.1	18.6	5.0	29.5	0.9
Nov.	3.7	-0.5	13.3	2.0	15.1	21.9	16.7	4.4	35.4	-2.3
Dec.	16.5	0.1	-1.9	8.9	-6.1	56.9	42.0	4.7	22.0	1.7
2003 Jan.	-4.6	0.5	6.5	11.0	21.3	28.1	24.6	4.9	7.3	-2.0
Feb.	6.9	-1.2	9.8	-4.3	15.5	35.1	30.8	5.1	10.9	-1.5
Mar.	8.5	-4.1	9.6	-2.8	13.4	35.6	32.6	4.7	14.8	0.0
Apr. ^(p)	-2.9	-2.6	11.3	-1.1	12.9	68.5	41.8	4.6	-4.5	-1.9

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.01 =100 ²⁾	Total		Index Dec.01 =100 ²⁾	Central government ³⁾	Other general government				Total	Index Dec.01 =100 ²⁾	
	1	Up to 1 year		2	Up to 1 year			3	4	5	6			State government		Local government		Social security funds
			8			Over 5 years	9					Over 5 years	10	11	12
13	14	15	16	17	18	19	20	21	22	23	24	25	26	
2001 Q3	409.0	256.8	93.7	37.4	26.9	107.3	167.3	293.9	254.1	349.7	312.0	18.9	829.8	98.0
Q4	434.4	276.0	100.0	34.9	24.8	100.0	170.1	298.3	252.0	362.9	322.3	16.4	847.7	100.0
2002 Q1	459.4	305.3	105.9	38.9	28.3	111.3	180.3	294.0	248.2	361.8	317.9	16.4	852.6	100.6
Q2	461.1	303.4	106.3	42.5	30.5	120.8	163.0	280.9	245.8	366.6	314.5	19.5	830.1	98.0
Q3	452.4	288.0	104.3	42.1	30.1	113.6	156.4	274.7	241.6	367.8	315.6	21.9	820.8	96.9
Q4	453.9	288.0	105.4	33.0	19.7	88.9	155.2	277.7	237.0	382.8	327.1	21.2	836.8	98.8
2003 Q1 ⁴⁾	470.6	301.2	107.1	42.1	29.8	118.5	158.7	267.2	229.2	382.2	330.0	21.1	829.1	97.8

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		2	Up to 1 year			3	4	5	6			State government		Local government		Social security funds
			8			Over 5 years	9					Over 5 years	10	11	12
13	14	15	16	17	18	19	20	21	22	23	24	25	26	
2001 Q4	27.5	21.3	12.0	-2.5	-2.1	11.5	1.9	4.4	-2.1	13.2	10.3	-2.5	16.9	-0.9
2002 Q1	25.6	29.8	10.5	3.9	3.5	7.5	10.1	-4.3	-3.8	-1.1	-4.4	0.1	4.8	0.0
Q2	1.6	-1.8	9.0	3.3	2.1	17.4	-16.2	-13.1	-2.4	4.8	-3.5	3.1	-21.4	-0.6
Q3	-8.7	-15.4	11.3	-2.5	-0.4	5.9	-6.7	-6.8	-4.7	1.2	1.1	2.4	-9.9	-1.1
Q4	4.7	3.4	5.4	-9.2	-10.5	-11.1	-0.8	3.1	-4.6	15.0	11.5	-0.7	16.6	-1.2
2003 Q1 ⁴⁾	7.3	4.1	1.1	10.9	10.2	6.5	2.2	-10.5	-7.9	-0.6	3.2	-0.1	-9.0	-2.8

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.01 =100 ²⁾	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Total	Index Dec.01 =100 ²⁾
	1	2	3	4	5	6	7	8	9	10
2001 Q3	1,027.2	467.3	1,372.1	2,866.6	98.7	100.6	170.7	221.7	493.1	99.3
Q4	1,019.0	489.8	1,394.5	2,903.3	100.0	102.5	170.4	224.2	497.1	100.0
2002 Q1	1,018.8	494.8	1,418.9	2,932.5	100.8	99.3	170.5	226.5	496.2	99.8
Q2	1,008.4	502.7	1,434.1	2,945.2	102.1	102.2	173.6	230.1	505.9	101.3
Q3	992.9	505.4	1,450.4	2,948.8	102.2	104.1	175.6	233.8	513.5	102.4
Q4	980.7	514.8	1,477.3	2,972.8	103.6	102.2	179.1	236.4	517.8	103.8
2003 Q1 ^(p)	1,027.6	501.1	1,464.5	2,993.2	104.8	112.2	173.2	208.7	494.1	102.8

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
2001 Q4	-9.1	23.2	22.4	36.5	7.8	1.8	-0.7	2.4	3.5	4.2
2002 Q1	-2.1	4.7	20.3	22.8	5.0	-4.2	1.2	2.3	-0.7	3.7
Q2	-2.3	13.3	27.5	38.6	4.4	2.9	0.7	3.7	7.3	3.0
Q3	-13.1	0.2	14.9	2.0	3.5	1.9	0.0	3.7	5.6	3.2
Q4	-8.5	13.3	34.9	39.8	3.6	2.5	3.0	1.5	7.0	3.8
2003 Q1 ^(p)	50.8	-9.1	-4.9	36.7	4.0	9.4	-7.6	-7.0	-5.2	2.9

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												
Lending for house purchase ³⁾					Other lending ⁵⁾					Total	Index Dec.01 =100 ²⁾	
Up to 1 year	Over 1 and up to 5 years	Over 5 years	Total	Index Dec.01 =100 ²⁾	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Total	Index Dec.01 =100 ²⁾			
11	12	13	14	15	16	17	18	19	20	21	22	
22.5	61.1	1,905.3	1,988.9	98.4	153.4	104.2	368.6	626.2	99.4	3,108.2	98.8	2001 Q3
22.7	61.0	1,937.0	2,020.6	100.0	152.8	105.3	370.3	628.3	100.0	3,146.0	100.0	Q4
23.1	60.7	1,975.0	2,058.7	101.9	150.6	104.7	364.5	619.8	99.5	3,174.7	101.1	2002 Q1
23.7	60.7	2,019.1	2,103.5	104.1	157.6	107.2	367.5	632.3	101.7	3,241.7	103.2	Q2
24.6	60.7	2,059.1	2,144.4	106.1	151.3	103.7	370.0	625.0	101.1	3,282.8	104.5	Q3
25.8	64.9	2,087.3	2,177.9	107.7	157.1	98.9	370.0	626.0	101.7	3,321.7	105.9	Q4
16.3	69.2	2,124.5	2,210.0	109.2	145.6	94.9	405.1	645.6	102.8	3,350.1	106.9	2003 Q1 ⁴⁾

Households												
Lending for house purchase ³⁾					Other lending ⁵⁾					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	
0.1	-0.1	31.4	31.5	7.5	-0.6	2.2	2.3	4.0	1.7	39.0	5.8	2001 Q4
0.4	-0.4	38.1	38.1	7.3	-1.7	-0.3	-1.2	-3.1	0.6	34.2	5.3	2002 Q1
0.6	0.0	44.2	44.8	7.8	7.1	2.8	3.7	13.7	1.4	65.8	5.7	Q2
0.9	0.0	39.6	40.5	7.8	-6.3	-1.5	3.8	-4.0	1.7	42.1	5.8	Q3
1.2	2.3	27.8	31.3	7.7	2.4	0.3	1.4	4.1	1.7	42.4	5.9	Q4
-9.4	4.3	36.6	31.6	7.2	-9.3	-1.3	17.2	6.5	3.3	33.2	5.8	2003 Q1 ⁴⁾

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.

5) Other lending includes loans to non-profit institutions serving households.

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.01 =100 ³⁾	Total ²⁾				Index Dec.01 =100 ³⁾	Central government	Other general government			Total	Index Dec.01 =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	
2001 Q3	455.3	162.7	201.8	85.6	98.8	487.8	39.3	426.9	17.9	98.5	147.8	33.3	67.4	60.4	308.9	103.3
Q4	465.8	157.9	217.3	85.3	100.0	495.4	48.0	427.5	16.4	100.0	139.0	30.0	68.9	61.0	299.0	100.0
2002 Q1	485.5	157.8	228.8	92.8	103.8	498.6	43.9	433.0	17.7	100.6	157.5	31.0	64.2	61.8	314.5	105.4
Q2	492.4	164.0	229.9	93.0	104.8	503.9	48.4	432.9	19.0	101.7	155.0	34.2	65.7	59.8	314.7	105.4
Q3	488.5	158.2	219.4	105.2	106.4	506.3	50.1	437.9	14.4	102.2	146.3	34.3	63.8	55.0	299.4	99.1
Q4	483.4	153.7	226.0	97.1	105.5	522.8	55.9	445.6	17.9	105.5	136.4	31.7	69.2	52.4	289.8	95.9
2003 Q1 ⁴⁾	524.7	166.3	250.7	99.5	116.2	535.2	59.5	453.8	18.2	107.8	170.9	32.2	65.9	53.1	322.1	104.7

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

	Non-monetary financial intermediaries except insurance corporations and pension funds					Insurance corporations and pension funds					General government					
	Total ²⁾				Annual growth rate ³⁾ (%)	Total ²⁾				Annual growth rate ³⁾ (%)	Central government	Other general government			Total	Annual growth rate ³⁾ (%)
	Over-night	With agreed maturity	Repos			Over-night	With agreed maturity	Repos				State government	Local government	Social security funds		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
2001 Q4	5.7	-4.7	10.5	-0.2	4.2	7.6	8.8	0.6	-1.4	3.8	-8.8	-3.4	1.5	0.7	-10.0	-6.9
2002 Q1	17.7	0.0	9.6	7.4	5.5	3.0	-4.2	5.3	1.3	3.1	19.0	1.0	-4.7	0.7	16.1	3.8
Q2	4.8	5.8	1.4	-0.4	4.2	5.3	4.5	-0.1	1.2	3.6	-2.5	3.3	1.5	-2.1	0.2	-2.9
Q3	7.3	-6.2	1.2	12.2	7.7	2.5	1.7	5.1	-4.6	3.8	-12.5	0.1	-1.9	-4.7	-19.0	-4.1
Q4	-3.9	-4.5	6.1	-6.5	5.5	16.5	5.8	7.7	3.5	5.5	-9.9	-2.6	5.5	-2.6	-9.5	-4.1
2003 Q1 ⁴⁾	48.9	12.6	23.7	10.9	12.0	11.6	3.7	7.4	0.4	7.2	28.9	0.5	-3.3	0.6	26.7	-0.6

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) 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.01 =100 ³⁾	Overnight	With agreed maturity	Redeemable at notice	Repos	Total	Index Dec.01 =100 ³⁾
	1	2	3	4	5	6	7	8	9	10	11	12
2001 Q3	514.8	318.4	25.4	32.0	890.7	91.5	963.6	1,203.8	1,305.3	84.6	3,557.3	96.5
Q4	577.1	335.2	27.5	36.2	976.0	100.0	1,043.5	1,194.6	1,365.7	76.6	3,680.4	100.0
2002 Q1	529.1	344.5	27.5	33.8	934.9	95.7	1,039.1	1,180.1	1,382.6	80.6	3,682.4	100.1
Q2	555.7	337.5	27.7	37.0	957.9	99.9	1,076.3	1,174.7	1,382.0	77.0	3,710.0	100.9
Q3	562.3	337.9	28.7	36.4	965.3	100.7	1,066.7	1,172.2	1,391.8	78.4	3,709.0	100.9
Q4	596.9	340.3	30.5	34.7	1,002.4	105.6	1,117.7	1,180.8	1,435.9	74.7	3,809.0	103.3
2003 Q1 ⁴⁾	561.8	331.8	34.4	31.6	959.7	101.8	1,125.8	1,167.7	1,471.5	70.6	3,835.7	104.0

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
2001 Q4	62.1	14.5	2.0	4.3	82.8	12.4	80.1	-4.1	60.3	-8.0	128.3	10.4
2002 Q1	-48.5	9.2	0.0	-2.5	-41.8	8.0	-4.5	-10.1	15.1	4.0	4.5	6.5
Q2	33.0	4.6	0.2	3.0	40.8	10.3	36.9	-5.1	1.6	-3.7	29.7	5.7
Q3	5.6	1.4	0.9	0.0	8.0	10.1	-9.2	-2.8	9.7	1.4	-0.8	4.5
Q4	38.3	7.7	2.8	-1.7	47.1	5.6	40.5	8.6	43.4	-3.7	88.8	3.3
2003 Q1 ⁴⁾	-32.9	-4.9	3.9	-3.0	-36.9	6.3	8.1	-16.7	35.9	-4.1	23.2	3.8

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) 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.01 =100 ³⁾	Banks ¹⁾		Non-banks				Total	Index Dec.01 =100 ³⁾
	Total	Index Dec.01 =100 ³⁾	General government	Other	Total	Index Dec.01 =100 ³⁾			Total	Index Dec.01 =100 ³⁾	General government	Other	Total	Index Dec.01 =100 ³⁾		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
2001 Q3	1,084.7	97.4	75.1	527.4	602.5	99.0	1,687.2	97.9	206.7	88.8	273.8	213.1	486.9	97.1	693.6	94.5
Q4	1,119.7	100.0	75.2	543.3	618.6	100.0	1,738.3	100.0	236.6	100.0	290.2	218.0	508.2	100.0	744.8	100.0
2002 Q1	1,104.8	98.5	76.8	556.1	633.0	102.5	1,737.8	99.9	262.9	110.8	275.9	217.8	493.7	97.3	756.6	101.6
Q2	1,083.4	102.9	73.2	529.6	602.9	104.8	1,686.3	103.6	244.0	109.2	244.5	214.6	459.2	96.0	703.2	100.2
Q3	1,122.2	105.6	76.3	540.1	616.3	106.3	1,738.5	105.9	249.8	110.2	253.1	231.8	484.9	99.9	734.7	103.2
Q4	1,183.4	114.2	72.0	520.0	592.0	105.5	1,775.4	111.2	244.2	110.9	248.2	229.1	477.3	101.3	721.5	104.4
2003 Q1 ^(p)	1,220.2	119.6	63.1	527.8	590.9	107.6	1,811.1	115.4	261.5	117.3	239.1	245.4	484.6	102.6	746.0	107.3

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	
2001 Q4	29.2	14.0	0.1	6.1	6.2	16.0	35.4	14.7	26.0	33.3	16.7	-2.1	14.6	7.3	40.6	14.3
2002 Q1	-17.3	4.4	3.6	11.8	15.4	6.3	-2.0	5.1	25.6	35.7	-10.9	-2.8	-13.7	0.9	11.9	10.7
Q2	50.2	9.1	-3.6	18.1	14.5	10.6	64.7	9.7	-3.8	24.7	-34.1	27.5	-6.6	-1.2	-10.4	6.5
Q3	28.4	8.5	3.0	5.3	8.3	7.4	36.7	8.1	2.3	24.1	4.6	14.0	18.6	2.9	20.9	9.2
Q4	91.6	14.2	-4.3	-0.2	-4.5	5.5	87.1	11.2	1.4	10.9	-5.2	12.1	6.9	1.3	8.3	4.4
2003 Q1 ^(p)	55.6	21.5	-8.9	20.5	11.6	5.0	67.2	15.5	14.1	5.8	-9.7	15.9	6.2	5.5	20.3	5.6

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 ⁵⁾						Deposits held by non-residents								
Banks ¹⁾		Other		Total	Index Dec.01 =100 ³⁾	Banks ¹⁾		Non-banks				Total	Index Dec.01 =100 ³⁾	
Total	Index Dec.01 =100 ³⁾	Total	Index Dec.01 =100 ³⁾			Total	Index Dec.01 =100 ³⁾	General government	Other	Total	Index Dec.01 =100 ³⁾			
17	18	19	20	21	22	23	24	25	26	27	28	29	30	
63.6	90.9	89.9	99.2	153.5	95.6	1,710.8	100.7	93.0	588.5	681.5	97.2	2,392.3	99.7	2001 Q3
73.1	100.0	89.8	100.0	162.9	100.0	1,718.4	100.0	95.3	615.0	710.3	100.0	2,428.8	100.0	Q4
77.1	104.5	98.5	110.9	175.6	108.0	1,740.4	100.4	99.0	636.8	735.9	103.3	2,476.3	101.3	2002 Q1
77.0	104.2	100.9	113.4	177.9	109.3	1,605.9	98.9	96.2	607.6	703.8	104.6	2,309.7	100.6	Q2
79.5	107.6	94.3	105.9	173.9	106.7	1,644.0	99.3	102.5	613.5	715.9	105.8	2,359.9	101.2	Q3
78.7	107.4	98.7	113.2	177.4	110.6	1,607.9	99.9	98.7	591.2	689.9	104.5	2,297.8	101.2	Q4
-	-	-	-	-	-	1,611.1	101.8	98.4	604.4	702.8	108.4	2,313.9	103.7	2003 Q1 ^(p)

Holdings of shares and other equity issued by non-residents ⁵⁾						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	
6.3	11.8	0.8	12.9	7.1	12.4	-12.0	8.7	2.3	17.5	19.8	18.0	7.8	11.2	2001 Q4
3.3	12.0	9.8	6.1	13.0	8.4	7.6	-2.9	4.2	19.0	23.2	9.9	30.8	0.6	2002 Q1
-0.2	19.1	2.3	5.5	2.1	10.6	-26.1	-4.2	-2.8	12.3	9.5	10.9	-16.6	-0.1	Q2
2.5	18.4	-6.7	6.8	-4.1	11.7	5.8	-1.4	6.1	2.2	8.2	8.9	14.1	1.5	Q3
-0.1	7.4	6.5	13.2	6.3	10.6	9.9	-0.1	-3.7	-5.1	-8.9	4.5	1.0	1.2	Q4
-	-	-	-	-	-	31.0	1.4	-0.3	26.2	25.9	5.0	56.8	2.5	2003 Q1 ^(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.

5) Breakdown discontinued with the entry into force of Regulation ECB/2001/13.

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
2001 Q3	4,108.4	3,628.3	48.9	431.2	300.6	41.7	71.0	17.9	5,700.0	5,503.7	28.2	168.1	125.7	19.4	10.8	12.2
Q4	4,171.9	3,699.5	46.6	425.9	307.6	33.5	67.2	17.6	5,916.6	5,715.8	26.0	174.8	127.4	23.9	10.5	13.0
2002 Q1	4,134.6	3,645.4	46.1	443.0	315.8	40.6	65.6	21.0	5,915.9	5,712.5	28.8	174.6	126.8	22.4	10.7	14.6
Q2	4,211.9	3,771.7	41.3	398.8	276.4	40.8	62.8	18.8	5,978.9	5,791.1	26.7	161.0	115.0	22.3	10.9	12.8
Q3	4,219.7	3,799.3	38.8	381.6	266.0	37.1	58.1	20.4	5,968.5	5,782.3	27.3	158.9	115.6	20.8	9.5	13.0
Q4	4,419.8	4,014.2	36.6	369.0	252.9	33.2	60.3	22.6	6,107.4	5,929.8	24.2	153.4	109.0	20.1	11.3	13.0
2003 Q1 ^(p)	4,476.2	4,076.4	38.8	361.0	251.8	32.1	58.6	18.5	6,177.3	5,999.5	25.6	152.2	107.4	20.9	11.7	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
2001 Q3	1,710.8	664.3	140.3	906.2	745.2	53.5	76.3	31.2	681.5	297.7	69.2	314.5	263.0	18.4	17.1	16.0
Q4	1,718.4	631.1	132.3	955.1	799.1	48.5	75.3	32.1	710.3	308.1	60.8	341.4	293.9	16.8	18.1	12.6
2002 Q1	1,740.4	661.8	144.8	933.8	781.0	44.4	74.6	33.8	735.9	312.7	66.6	356.6	302.8	20.0	18.9	14.8
Q2	1,605.9	648.9	141.6	815.4	665.8	40.5	73.4	35.7	703.8	322.4	63.3	318.1	268.7	19.4	17.8	12.2
Q3	1,644.0	703.2	147.8	793.0	649.0	37.7	73.0	33.3	715.9	335.7	68.2	312.1	261.7	17.7	16.4	16.4
Q4	1,607.9	701.0	140.7	766.2	634.9	33.5	68.8	29.0	689.9	332.5	71.9	285.5	242.9	15.5	13.2	13.9
2003 Q1 ^(p)	1,611.1	740.9	133.8	736.3	598.7	33.9	70.6	33.1	702.8	363.4	66.6	272.8	224.8	17.6	14.0	16.4

3. Debt securities and money market paper issued by euro area MFIs ⁴⁾

	Debt securities and money market paper								
	All currencies 1	Euro ²⁾ 2	Other EU currencies 3	Other currencies					
				USD 5	JPY 6	CHF 7	Other 8		
2001 Q3		3,016.5	2,602.6	56.8	357.1	223.5	71.7	41.3	20.7
Q4		3,034.8	2,582.7	73.8	378.3	247.6	66.6	42.8	21.3
2002 Q1		3,119.5	2,654.8	76.8	387.8	256.6	58.8	45.9	26.5
Q2		3,136.0	2,682.1	75.1	378.9	247.4	56.6	46.8	28.1
Q3		3,149.5	2,692.4	79.1	378.0	243.6	54.4	50.8	29.2
Q4		3,142.4	2,683.3	80.1	378.9	241.0	57.1	50.8	30.0
2003 Q1 ^(p)		3,195.3	2,726.8	75.1	393.4	258.0	55.1	51.8	28.6

Source: ECB.

1) Levels at the end of the period. 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.

4) Includes money market paper. For further details, see the general notes.

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	
2001 Q3	4,089.7	-	-	-	-	-	-	-	7,251.7	6,907.3	30.9	313.5	178.2	52.1	77.3	5.8
Q4	4,180.4	-	-	-	-	-	-	-	7,367.0	7,025.2	29.8	312.0	181.6	47.8	77.5	5.1
2002 Q1	4,133.3	-	-	-	-	-	-	-	7,458.8	7,106.7	30.5	321.5	187.4	51.0	76.8	6.3
Q2	4,201.2	-	-	-	-	-	-	-	7,521.2	7,209.0	28.9	283.3	152.5	46.7	78.3	5.8
Q3	4,224.7	-	-	-	-	-	-	-	7,547.5	7,238.6	28.4	280.5	148.1	45.4	81.2	5.8
Q4	4,411.0	-	-	-	-	-	-	-	7,618.3	7,327.4	28.1	262.8	133.7	40.3	83.3	5.5
2003 Q1 ¹⁾	4,451.8	-	-	-	-	-	-	-	7,685.7	7,394.0	27.5	264.2	136.3	36.9	83.9	7.1

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

	Issued by MFIs								Issued by non-MFIs							
	All currencies	Euro ²⁾	Other EU currencies	Other currencies					All currencies	Euro ²⁾	Other EU currencies	Other currencies				
					USD	JPY	CHF	Other					USD	JPY	CHF	Other
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
2001 Q3	1,127.2	1,073.9	256.3	226.6	203.8	9.1	7.0	6.8	1,522.6	1,483.6	4.2	34.8	20.4	12.6	1.2	0.6
Q4	1,126.7	1,071.6	24.1	50.8	37.9	9.0	1.8	2.1	1,516.1	1,478.6	3.6	33.9	20.1	12.1	1.1	0.6
2002 Q1	1,177.7	1,117.0	29.5	54.0	35.5	14.5	1.9	2.1	1,575.7	1,539.1	3.7	32.9	19.5	11.7	1.1	0.6
Q2	1,200.8	1,140.8	30.2	51.8	33.3	13.8	2.8	1.9	1,582.0	1,547.8	4.5	29.8	15.5	12.2	1.2	0.8
Q3	1,195.8	1,136.9	35.2	46.2	27.5	14.0	2.6	2.1	1,603.9	1,568.9	5.1	29.8	15.9	11.7	1.4	0.7
Q4	1,177.7	1,126.8	29.7	37.6	27.2	6.7	1.9	1.8	1,588.1	1,552.6	6.2	29.2	15.9	11.1	1.5	0.7
2003 Q1 ¹⁾	1,245.0	1,181.3	27.7	36.0	23.0	8.0	2.6	2.4	1,691.3	1,652.7	4.6	34.0	21.9	10.2	1.1	0.8

6. Loans to non-residents of the euro area

	Banks ³⁾								Non-banks							
	All currencies	Euro ²⁾	Other EU currencies	Other currencies					All currencies	Euro ²⁾	Other EU currencies	Other currencies				
					USD	JPY	CHF	Other					USD	JPY	CHF	Other
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
2001 Q3	1,084.7	488.3	101.5	494.8	378.6	42.0	40.3	33.9	602.5	201.5	46.8	354.2	307.5	12.7	24.9	9.0
Q4	1,119.7	452.2	114.7	552.9	435.9	45.2	37.9	33.8	618.6	202.3	46.8	369.5	323.4	12.0	25.7	8.4
2002 Q1	1,104.8	432.2	131.1	541.6	424.4	45.6	37.3	34.3	633.0	199.4	49.9	383.7	331.2	16.4	26.9	9.2
Q2	1,083.4	457.7	129.9	495.9	375.0	61.4	36.1	23.4	602.9	205.7	46.6	350.5	300.8	12.8	28.1	8.8
Q3	1,122.2	495.3	143.8	483.0	369.9	55.8	33.4	23.9	616.3	219.8	46.2	350.3	297.0	15.4	29.0	8.9
Q4	1,183.4	554.3	119.7	509.4	401.0	55.1	31.7	21.8	592.0	212.6	45.0	334.5	283.3	14.2	27.8	9.1
2003 Q1 ¹⁾	1,220.2	598.7	114.0	507.5	399.0	53.3	32.2	23.0	590.9	222.5	44.4	324.1	276.2	11.7	27.4	8.8

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

	Issued by banks ³⁾								Issued by non-banks							
	All currencies	Euro ²⁾	Other EU currencies	Other currencies					All currencies	Euro ²⁾	Other EU currencies	Other currencies				
					USD	JPY	CHF	Other					USD	JPY	CHF	Other
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
2001 Q3	206.7	76.5	27.0	103.2	93.1	4.7	2.1	3.4	486.9	129.1	27.1	330.7	292.7	27.1	3.9	7.1
Q4	236.6	80.7	27.6	128.3	118.1	4.2	2.7	3.3	508.2	131.5	27.1	349.6	306.4	30.3	4.2	8.7
2002 Q1	262.9	87.1	33.5	142.4	130.5	4.4	2.9	4.5	493.7	127.9	26.9	339.0	298.6	24.6	5.0	10.8
Q2	244.0	87.5	32.6	123.9	111.8	4.0	2.3	5.9	459.2	132.4	25.0	301.7	260.7	24.3	5.0	11.7
Q3	249.8	90.9	38.7	120.1	111.6	4.0	1.4	3.2	484.9	136.3	31.6	316.9	273.8	26.2	5.4	11.6
Q4	244.2	89.2	34.8	120.1	111.8	4.1	1.4	2.9	477.3	133.9	33.6	309.8	268.2	25.4	5.8	10.4
2003 Q1 ¹⁾	261.5	101.0	42.2	118.3	97.6	9.6	8.6	2.5	484.6	152.1	34.5	298.0	245.2	36.6	3.6	12.6

Table 2.9**Aggregated balance sheet of euro area investment funds ¹⁾***(EUR billions (not seasonally adjusted; end of period))***1. Assets**

									Total
	Deposits	Holdings of securities other than shares			Holdings of shares/ other equity	Holdings of investment fund shares	Fixed assets	Other assets	
			Up to 1 year	Over 1 year					
1	2	3	4	5	6	7	8	9	
2001 Q2	248.7	1,293.6	62.0	1,231.7	1,340.4	211.9	104.3	92.2	3,291.3
Q3	242.4	1,293.9	62.6	1,231.4	1,053.9	192.4	105.0	90.4	2,977.9
Q4	244.6	1,309.9	63.5	1,246.5	1,219.1	209.6	108.9	98.7	3,190.8
2002 Q1	253.6	1,308.7	70.7	1,238.0	1,263.3	224.6	111.0	98.0	3,259.2
Q2	242.8	1,312.6	75.4	1,237.1	1,056.1	215.2	108.0	99.8	3,034.4
Q3	236.7	1,337.4	74.3	1,263.0	844.8	203.4	121.0	103.2	2,846.5
Q4 ^(p)	242.0	1,336.6	72.5	1,264.1	853.6	203.4	123.5	106.8	2,865.9

2. Liabilities

				Total
	Deposits and loans taken	Investment fund shares	Other liabilities	
	1	2	3	4
2001 Q2	39.3	3,164.2	87.8	3,291.3
Q3	41.5	2,858.8	77.6	2,977.9
Q4	41.1	3,075.6	74.1	3,190.8
2002 Q1	42.6	3,137.7	78.8	3,259.2
Q2	39.1	2,919.8	75.5	3,034.4
Q3	38.9	2,732.3	75.3	2,846.5
Q4 ^(p)	40.1	2,748.6	77.2	2,865.9

3. Total assets/liabilities broken down by investment policy and type of investor

	Funds by investment policy							Funds by type of investor		Total
	Equity funds	Bond funds	Mixed funds	Real estate funds	Other funds	General public funds	Special investors' funds			
	1	2	3	4	5	6	7	8		
2001 Q2	947.5	1,019.3	857.1	123.6	343.8	2,510.3	781.0	3,291.3		
Q3	738.2	1,019.1	756.0	127.0	337.7	2,241.8	736.1	2,977.9		
Q4	839.6	1,031.7	810.3	134.0	375.2	2,408.1	782.7	3,190.8		
2002 Q1	862.4	1,039.3	820.3	142.3	394.8	2,464.2	794.9	3,259.2		
Q2	728.7	1,037.0	762.6	139.2	366.9	2,262.4	772.0	3,034.4		
Q3	585.2	1,063.2	699.9	145.6	352.6	2,092.3	754.2	2,846.5		
Q4 ^(p)	593.5	1,068.1	701.7	150.8	351.7	2,091.0	774.9	2,865.9		

Source: ECB.

¹⁾ Other than money market funds. Data refer to euro area countries excluding Ireland. For further details, see the general notes.

Table 2.10**Aggregated balance sheet of euro area investment funds broken down by investment policy***(EUR billions (not seasonally adjusted; end of period))***1. Assets of equity funds**

								Total
	Deposits 1	Holdings of securities other than shares 2			Holdings of shares/ other equity 5	Holdings of investment fund shares 6	Other assets 7	8
			Up to 1 year 3	Over 1 year 4				
2001 Q2	48.8	34.7	4.5	30.2	830.5	21.0	12.6	947.5
Q3	41.2	30.6	4.2	26.4	636.1	16.7	13.6	738.2
Q4	39.5	29.0	3.0	26.1	735.2	19.4	16.5	839.6
2002 Q1	39.3	28.7	2.9	25.8	759.1	20.6	14.7	862.4
Q2	34.0	27.4	4.0	23.4	630.0	22.2	15.0	728.7
Q3	29.0	26.5	3.7	22.8	496.5	19.1	14.1	585.2
Q4 ^(p)	26.7	28.2	3.1	25.1	505.6	18.3	14.9	593.5

2. Liabilities of equity funds

				Total
	Deposits and loans taken 1	Investment fund shares 2	Other liabilities 3	4
2001 Q2	3.2	936.4	8.0	947.5
Q3	4.1	727.9	6.1	738.2
Q4	2.6	831.4	5.6	839.6
2002 Q1	3.5	852.7	6.1	862.4
Q2	4.4	718.7	5.6	728.7
Q3	4.1	576.0	5.1	585.2
Q4 ^(p)	3.9	586.0	3.6	593.5

3. Assets of bond funds

								Total
	Deposits 1	Holdings of securities other than shares 2			Holdings of shares/ other equity 5	Holdings of investment fund shares 6	Other assets 7	8
			Up to 1 year 3	Over 1 year 4				
2001 Q2	78.6	858.5	29.4	829.1	36.4	12.3	33.6	1,019.3
Q3	74.9	865.5	32.2	833.3	34.3	12.7	31.6	1,019.1
Q4	73.2	875.5	33.2	842.3	38.5	11.2	33.4	1,031.7
2002 Q1	77.9	874.0	37.3	836.7	42.9	11.5	33.0	1,039.3
Q2	75.9	882.2	38.5	843.8	33.2	10.8	34.9	1,037.0
Q3	78.3	902.1	37.2	865.0	32.6	11.6	38.5	1,063.2
Q4 ^(p)	83.9	902.5	36.9	865.6	32.0	12.3	37.5	1,068.1

4. Liabilities of bond funds

				Total
	Deposits and loans taken 1	Investment fund shares 2	Other liabilities 3	4
2001 Q2	7.3	984.5	27.5	1,019.3
Q3	8.1	991.2	19.8	1,019.1
Q4	8.4	1,007.3	16.0	1,031.7
2002 Q1	8.5	1,013.2	17.7	1,039.3
Q2	7.9	1,011.5	17.6	1,037.0
Q3	7.0	1,039.2	17.0	1,063.2
Q4 ^(p)	7.7	1,044.0	16.5	1,068.1

Source: ECB.

Table 2.10 (cont'd)**Aggregated balance sheet of euro area investment funds broken down by investment policy***(EUR billions (not seasonally adjusted; end of period))***5. Assets of mixed funds**

									Total
	Deposits 1	Holdings of securities other than shares 2			Holdings of shares/ other equity 5	Holdings of investment fund shares 6	Fixed assets 7	Other assets 8	9
			Up to 1 year 3	Over 1 year 4					
2001 Q2	55.8	296.3	18.0	278.3	382.8	93.8	2.6	25.9	857.1
Q3	55.2	290.4	16.4	274.0	297.5	85.7	2.5	24.8	756.0
Q4	56.9	286.5	17.0	269.5	347.5	92.7	2.4	24.3	810.3
2002 Q1	52.6	283.8	18.1	265.7	357.0	100.3	2.3	24.4	820.3
Q2	54.2	286.9	20.6	266.3	298.8	94.6	2.1	26.0	762.6
Q3	53.0	291.7	21.3	270.4	234.3	88.1	5.2	27.7	699.9
Q4 ^(p)	53.9	295.4	21.4	274.0	233.0	87.8	3.4	28.2	701.7

6. Liabilities of mixed funds

				Total
	Deposits and loans taken 1	Investment fund shares 2	Other liabilities 3	4
2001 Q2	3.4	834.1	19.6	857.1
Q3	3.3	734.4	18.3	756.0
Q4	2.9	790.9	16.5	810.3
2002 Q1	2.9	799.4	18.0	820.3
Q2	3.1	741.3	18.2	762.6
Q3	3.5	676.9	19.5	699.9
Q4 ^(p)	3.0	677.3	21.5	701.7

7. Assets of real estate funds

									Total
	Deposits 1	Holdings of securities other than shares 2			Holdings of shares/ other equity 5	Holdings of investment fund shares 6	Fixed assets 7	Other assets 8	9
			Up to 1 year 3	Over 1 year 4					
2001 Q2	6.6	8.7	0.5	8.2	1.0	1.3	101.5	4.4	123.6
Q3	9.8	7.6	0.5	7.1	0.9	1.5	102.3	4.9	127.0
Q4	8.6	10.7	0.5	10.1	1.0	2.0	106.1	5.7	134.0
2002 Q1	11.5	12.9	0.6	12.3	1.1	2.1	108.3	6.4	142.3
Q2	13.5	9.8	0.6	9.2	0.9	3.9	105.1	6.0	139.2
Q3	13.3	10.7	0.6	10.1	0.8	5.1	109.5	6.2	145.6
Q4 ^(p)	10.9	9.5	0.5	8.9	0.8	7.0	115.7	6.9	150.8

8. Liabilities of real estate funds

				Total
	Deposits and loans taken 1	Investment fund shares 2	Other liabilities 3	4
2001 Q2	24.1	95.0	4.5	123.6
Q3	24.8	97.9	4.4	127.0
Q4	25.9	103.3	4.8	134.0
2002 Q1	26.7	110.7	4.9	142.3
Q2	22.3	112.1	4.8	139.2
Q3	22.9	117.7	5.0	145.6
Q4 ^(p)	24.5	120.9	5.4	150.8

Source: ECB.

Table 2.11**Aggregated balance sheet of euro area investment funds broken down by type of investor***(EUR billions (not seasonally adjusted; end of period))***1. Assets of general public funds**

							Total
	Deposits 1	Holdings of securities other than shares 2	Holdings of shares/ other equity 3	Holdings of investment fund shares 4	Fixed assets 5	Other assets 6	7
2001 Q2	209.3	919.1	1,047.7	170.4	96.5	67.4	2,510.3
Q3	196.4	912.1	820.2	151.6	96.4	65.1	2,241.8
Q4	201.0	928.7	949.2	167.0	99.1	63.2	2,408.1
2002 Q1	213.3	921.8	984.8	176.8	100.6	66.9	2,464.2
Q2	199.2	915.7	818.4	166.7	96.1	66.3	2,262.4
Q3	187.9	917.6	654.4	156.0	107.9	68.5	2,092.3
Q4 ^(p)	190.7	905.4	663.0	153.1	108.9	69.9	2,091.0

2. Liabilities of general public funds

				Total
	Deposits and loans taken 1	Investment fund shares 2	Other liabilities 3	4
2001 Q2	35.7	2,397.4	77.3	2,510.3
Q3	37.4	2,137.4	67.0	2,241.8
Q4	36.4	2,312.9	58.8	2,408.1
2002 Q1	38.1	2,360.2	65.9	2,464.2
Q2	34.0	2,166.0	62.4	2,262.4
Q3	33.0	1,997.8	61.5	2,092.3
Q4 ^(p)	33.6	1,995.7	61.7	2,091.0

3. Assets of special investors' funds

							Total
	Deposits 1	Holdings of securities other than shares 2	Holdings of shares/ other equity 3	Holdings of investment fund shares 4	Fixed assets 5	Other assets 6	7
2001 Q2	39.4	374.6	292.7	41.5	7.8	24.9	781.0
Q3	46.0	381.8	233.7	40.7	8.6	25.3	736.1
Q4	43.6	381.2	270.0	42.6	9.8	35.6	782.7
2002 Q1	40.3	386.9	278.4	47.8	10.3	31.2	794.9
Q2	43.6	396.9	237.7	48.5	11.9	33.5	772.0
Q3	48.8	419.8	190.3	47.5	13.1	34.7	754.2
Q4 ^(p)	51.3	431.2	190.6	50.3	14.7	36.9	774.9

4. Liabilities of special investors' funds

				Total
	Deposits and loans taken 1	Investment fund shares 2	Other liabilities 3	4
2001 Q2	3.6	766.8	10.6	781.0
Q3	4.2	721.4	10.5	736.1
Q4	4.6	762.8	15.3	782.7
2002 Q1	4.5	777.5	12.9	794.9
Q2	5.1	753.8	13.1	772.0
Q3	5.9	734.5	13.8	754.2
Q4 ^(p)	6.5	753.0	15.4	774.9

Source: ECB.

3 Financial markets and interest rates in the euro area

Table 3.1

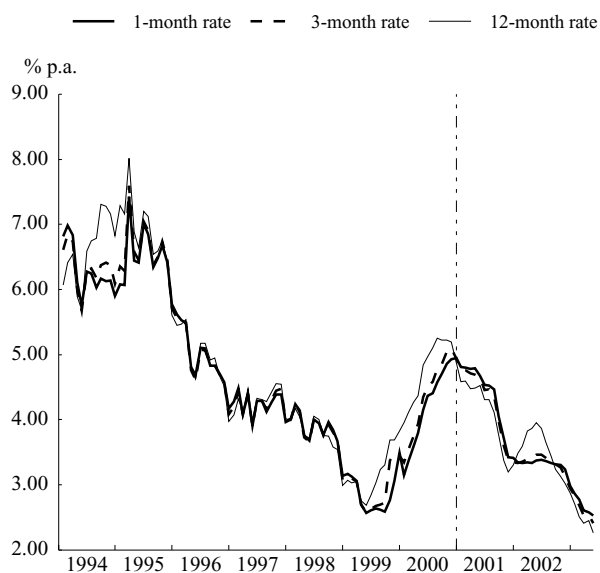
Money market interest rates ¹⁾

(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
1998	3.09	3.84	3.83	3.78	3.77	5.57	0.66
1999	2.74	2.86	2.96	3.06	3.19	5.42	0.22
2000	4.12	4.24	4.40	4.55	4.78	6.53	0.28
<i>Euro area enlargement</i>							
2001	4.39	4.33	4.26	4.16	4.09	3.78	0.15
2002	3.29	3.30	3.32	3.35	3.49	1.80	0.08
2002 May	3.31	3.37	3.46	3.62	3.95	1.91	0.08
June	3.35	3.38	3.46	3.59	3.87	1.88	0.07
July	3.30	3.36	3.41	3.48	3.64	1.85	0.07
Aug.	3.29	3.33	3.35	3.38	3.44	1.78	0.07
Sep.	3.32	3.32	3.31	3.27	3.24	1.80	0.07
Oct.	3.30	3.31	3.26	3.17	3.13	1.78	0.07
Nov.	3.30	3.23	3.12	3.04	3.02	1.46	0.07
Dec.	3.09	2.98	2.94	2.89	2.87	1.41	0.06
2003 Jan.	2.79	2.86	2.83	2.76	2.71	1.37	0.06
Feb.	2.76	2.77	2.69	2.58	2.50	1.34	0.06
Mar.	2.75	2.60	2.53	2.45	2.41	1.29	0.06
Apr.	2.56	2.58	2.54	2.47	2.45	1.30	0.06
May	2.56	2.52	2.41	2.32	2.26	1.28	0.06
2003 2 May	2.55	2.57	2.50	2.41	2.36	1.29	0.06
9	2.55	2.58	2.47	2.40	2.35	1.29	0.06
16	2.56	2.58	2.41	2.30	2.26	1.29	0.06
23	2.21	2.47	2.35	2.25	2.19	1.28	0.06
30	2.65	2.39	2.27	2.21	2.14	1.28	0.06

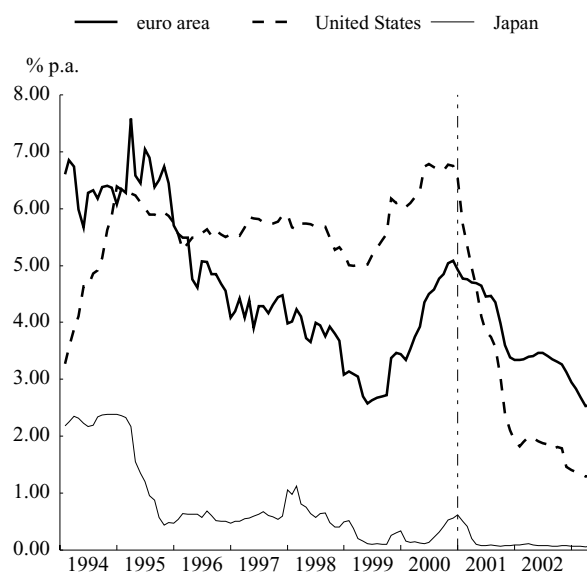
Euro area money market rates

(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

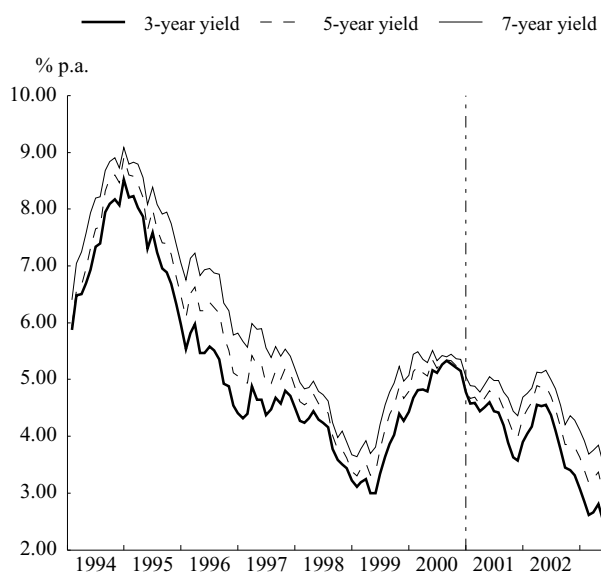
Government bond yields ¹⁾

(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
1998	3.16	3.22	3.38	3.67	4.71	5.33	1.30
1999	3.38	3.63	4.01	4.38	4.66	5.64	1.75
2000	4.90	5.03	5.19	5.37	5.44	6.03	1.76
<i>Euro area enlargement</i>							
2001	4.11	4.23	4.49	4.79	5.03	5.01	1.34
2002	3.68	3.94	4.35	4.70	4.92	4.60	1.27
2002 May	4.25	4.55	4.89	5.16	5.30	5.15	1.38
June	4.10	4.37	4.70	4.99	5.16	4.90	1.36
July	3.83	4.10	4.48	4.84	5.03	4.62	1.30
Aug.	3.47	3.76	4.15	4.54	4.73	4.24	1.26
Sep.	3.19	3.46	3.85	4.20	4.52	3.88	1.16
Oct.	3.13	3.41	3.86	4.36	4.62	3.91	1.09
Nov.	3.04	3.31	3.81	4.28	4.59	4.04	0.99
Dec.	2.84	3.08	3.63	4.10	4.41	4.03	0.97
2003 Jan.	2.64	2.85	3.40	3.93	4.27	4.02	0.84
Feb.	2.45	2.61	3.18	3.68	4.06	3.90	0.83
Mar.	2.50	2.66	3.26	3.76	4.13	3.79	0.74
Apr.	2.59	2.81	3.38	3.85	4.23	3.94	0.66
May	2.31	2.53	3.02	3.54	3.92	3.56	0.57
2003 2 May	2.49	2.75	3.27	3.79	4.16	3.90	0.61
9	2.38	2.61	3.10	3.61	3.99	3.70	0.58
16	2.28	2.49	2.98	3.50	3.89	3.48	0.58
23	2.17	2.38	2.85	3.34	3.72	3.32	0.57
30	2.20	2.41	2.89	3.40	3.80	3.39	0.53

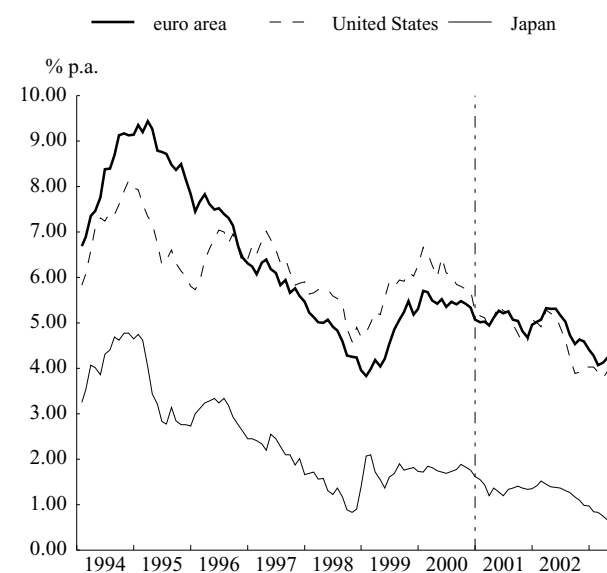
Euro area government bond yields

(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

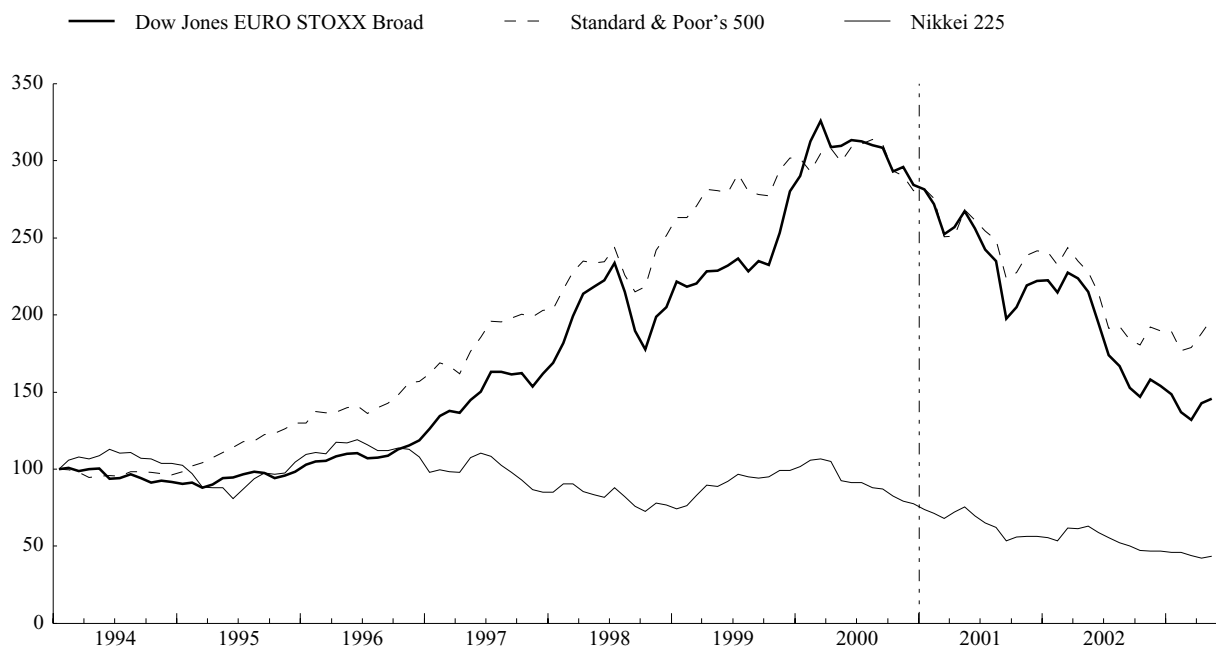
Stock market indices

(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
1998	280.5	3,076.3	257.9	245.0	295.5	249.3	281.3	218.4	333.6	282.4	488.1	348.9	1,085.3	15,338.4
1999	325.8	3,787.3	279.2	262.9	327.7	286.0	295.7	285.1	470.4	306.2	717.7	392.6	1,327.8	16,829.9
2000	423.9	5,075.5	299.1	292.9	324.3	342.3	350.7	378.0	963.1	341.7	1,072.5	476.0	1,426.7	17,162.7
<i>Euro area enlargement</i>														
2001	336.3	4,049.4	296.0	228.2	303.3	341.4	321.6	310.0	530.5	309.6	541.2	540.1	1,193.8	12,114.8
2002	259.9	3,023.4	267.5	175.0	266.5	308.9	243.3	252.4	345.1	255.5	349.2	411.8	995.4	10,119.3
2002 May	298.2	3,503.5	306.9	204.3	300.7	347.3	293.7	296.7	378.3	290.6	355.9	460.8	1,079.9	11,695.8
June	269.8	3,143.1	293.1	187.5	282.1	324.6	263.8	275.3	312.4	273.0	302.4	408.1	1,014.0	10,965.9
July	241.2	2,810.6	267.8	160.9	252.1	298.6	229.2	248.8	282.1	244.0	300.4	370.6	905.5	10,352.3
Aug.	231.3	2,697.4	243.6	152.9	250.1	290.9	217.4	227.9	258.8	236.7	310.0	376.6	912.6	9,751.2
Sep.	211.8	2,450.2	227.2	140.6	241.2	274.0	193.1	215.3	229.0	221.2	283.1	337.0	870.1	9,354.8
Oct.	204.0	2,384.7	214.4	135.3	236.5	272.1	177.8	193.6	235.8	209.6	286.8	345.4	854.6	8,781.1
Nov.	219.5	2,559.0	224.2	145.4	234.8	272.4	197.0	208.8	289.6	215.2	324.5	347.1	910.1	8,699.6
Dec.	213.6	2,475.1	225.3	139.4	226.5	268.8	194.2	205.2	270.4	207.3	322.5	324.4	899.1	8,674.8
2003 Jan.	206.3	2,377.4	213.0	130.9	220.2	262.4	186.5	198.5	250.2	210.0	330.0	313.8	896.0	8,567.4
Feb.	189.8	2,170.9	185.8	121.5	196.5	245.1	172.2	186.0	226.5	198.1	309.4	274.3	836.6	8,535.8
Mar.	183.0	2,086.5	176.1	115.4	188.4	241.1	164.5	181.2	228.2	185.6	292.8	275.2	846.6	8,171.0
Apr.	197.9	2,278.2	193.4	122.5	203.9	250.0	181.0	192.0	251.6	201.0	324.8	288.7	889.6	7,895.7
May	202.0	2,303.0	196.4	124.9	202.3	249.6	187.4	198.5	258.2	208.3	324.9	304.2	935.8	8,122.1
2003 2 May	202.9	2,321.9	202.0	125.9	203.2	244.9	189.0	198.7	263.1	205.8	326.3	303.7	930.1	7,907.2
9	202.8	2,314.1	198.3	125.8	203.1	251.2	188.2	200.7	260.2	208.0	321.5	305.0	933.4	8,152.2
16	205.5	2,349.1	201.8	126.9	202.4	252.7	192.5	200.3	263.6	212.1	326.4	309.6	944.3	8,117.3
23	198.0	2,246.6	189.2	122.2	200.6	248.8	182.6	194.5	245.6	206.6	322.3	302.4	931.9	8,184.8
30	204.9	2,330.1	194.2	127.5	201.0	252.1	189.8	201.0	265.4	212.3	336.2	307.6	963.6	8,424.5

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

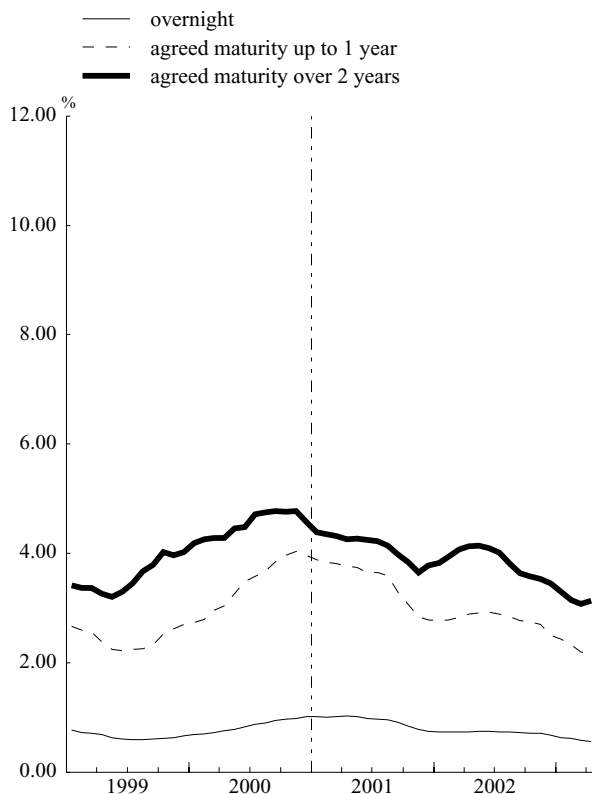
Retail bank interest rates

(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
2000	0.85	3.45	3.45	4.52	2.25	3.79	6.60	6.23	9.87	6.34
<i>Euro area enlargement</i>										
2001	0.94	3.49	3.49	4.12	2.40	3.59	6.83	6.15	10.12	5.97
2002	0.73	2.80	2.80	3.85	2.13	2.85	6.13	5.71	9.78	5.54
2002 Apr.	0.74	2.89	2.90	4.13	2.14	3.07	6.17	5.95	9.83	5.81
May	0.74	2.91	2.92	4.15	2.15	3.08	6.20	5.98	9.87	5.82
June	0.74	2.93	2.94	4.09	2.13	3.08	6.18	5.92	9.83	5.77
July	0.74	2.89	2.90	4.02	2.13	3.02	6.16	5.79	9.78	5.68
Aug.	0.73	2.84	2.85	3.81	2.12	2.94	6.15	5.71	9.79	5.53
Sep.	0.73	2.77	2.77	3.64	2.13	2.73	6.12	5.61	9.85	5.38
Oct.	0.72	2.74	2.74	3.58	2.11	2.63	6.13	5.54	9.72	5.26
Nov.	0.71	2.70	2.69	3.53	2.11	2.55	6.10	5.50	9.70	5.21
Dec.	0.68	2.51	2.51	3.45	2.05	2.41	5.98	5.34	9.58	5.10
2003 Jan.	0.63	2.43	2.43	3.30	2.04	2.34	5.85	5.30	9.50	4.92
Feb.	0.62	2.32	2.32	3.15	2.02	2.12	5.79	5.21	9.42	4.78
Mar.	0.59	2.20	2.19	3.08	1.97	2.05	5.65	5.19	9.30	4.70
Apr.	0.56	2.15	2.14	3.14	1.93	2.05	5.51	5.18	9.30	4.75

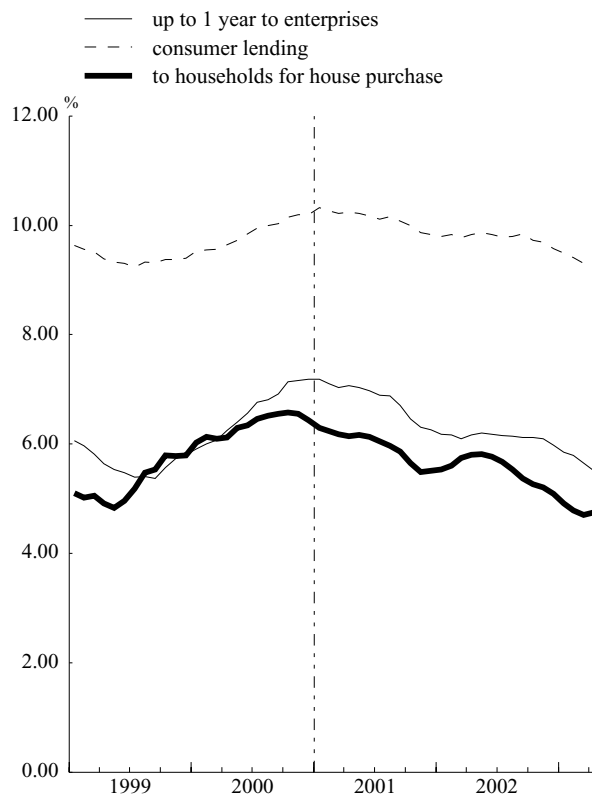
Deposit interest rates

(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
2002 Mar.	422.5	404.5	17.9	753.4	400.6	383.5	17.1	666.3	21.9	21.0
Apr.	403.4	407.0	-3.6	749.3	377.3	384.4	-7.1	659.1	26.1	22.7
May	402.1	379.9	22.2	770.3	378.2	358.7	19.5	677.5	23.9	21.2
June	337.8	342.2	-4.4	766.2	317.0	319.1	-2.1	676.8	20.9	23.1
July	406.0	392.2	13.7	772.6	382.4	371.4	11.0	685.0	23.5	20.9
Aug.	384.5	378.1	6.4	775.6	366.2	356.8	9.4	693.1	18.3	21.3
Sep.	414.9	400.6	14.3	792.6	392.1	381.0	11.0	706.7	22.8	19.6
Oct.	468.3	456.4	11.9	806.0	441.8	433.3	8.5	715.4	26.5	23.1
Nov.	435.5	413.0	22.4	830.5	413.5	388.9	24.6	740.1	22.0	24.2
Dec.	406.1	451.6	-45.5	783.4	386.8	429.9	-43.1	696.0	19.3	21.7
2003 Jan.	545.1	487.4	57.7	840.7	518.6	462.7	55.9	750.9	26.5	24.7
Feb.	455.2	428.4	26.8	864.5	432.7	408.3	24.3	774.7	22.6	20.1
Mar.	450.8	440.5	10.3	873.7	431.9	422.9	9.0	783.6	18.9	17.6

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
2002 Mar.	164.4	101.2	63.2	7,189.0	142.9	90.2	52.8	6,539.2	21.5	11.1
Apr.	126.0	79.5	46.5	7,225.7	114.9	74.4	40.5	6,580.3	11.1	5.1
May	149.3	87.7	61.7	7,274.0	126.8	75.8	51.0	6,632.5	22.5	11.9
June	133.2	94.9	38.3	7,289.4	123.3	87.2	36.1	6,665.0	10.0	7.8
July	131.1	113.6	17.5	7,318.5	114.3	104.3	10.0	6,678.7	16.8	9.3
Aug.	68.7	64.2	4.5	7,320.5	59.1	54.7	4.4	6,682.7	9.6	9.5
Sep.	140.1	86.1	54.0	7,374.0	121.3	74.4	46.8	6,728.8	18.8	11.7
Oct.	122.9	92.0	30.9	7,404.4	105.5	81.4	24.1	6,753.3	17.4	10.6
Nov.	132.4	96.8	35.6	7,437.2	118.9	90.8	28.1	6,781.4	13.4	6.0
Dec.	139.8	173.5	-33.7	7,384.3	128.3	160.5	-32.2	6,748.1	11.5	13.0
2003 Jan.	177.5	133.9	43.6	7,415.7	154.9	125.0	29.9	6,778.5	22.6	8.9
Feb.	163.2	110.1	53.1	7,476.5	146.0	102.3	43.7	6,824.4	17.2	7.8
Mar.	155.3	98.0	57.3	7,529.7	141.3	90.2	51.1	6,875.7	14.1	7.8

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
2002 Mar.	586.9	505.8	81.1	7,942.4	543.6	473.7	69.9	7,205.5	43.3	32.1
Apr.	529.5	486.5	42.9	7,975.0	492.2	458.8	33.5	7,239.4	37.2	27.8
May	551.4	467.6	83.8	8,044.3	505.0	434.5	70.5	7,310.1	46.4	33.1
June	471.1	437.1	33.9	8,055.7	440.2	406.3	33.9	7,341.8	30.9	30.9
July	537.1	505.8	31.3	8,091.1	496.7	475.7	21.1	7,363.7	40.4	30.2
Aug.	453.2	442.3	10.9	8,096.1	425.3	411.5	13.7	7,375.8	27.9	30.8
Sep.	555.0	486.7	68.3	8,166.7	513.3	455.4	57.9	7,435.5	41.7	31.3
Oct.	591.3	548.4	42.9	8,210.4	547.3	514.6	32.7	7,468.6	43.9	31.3
Nov.	567.9	509.8	58.0	8,267.7	532.4	479.7	52.8	7,521.5	35.4	30.2
Dec.	545.9	625.1	-79.2	8,167.7	515.1	590.3	-75.3	7,444.1	30.8	34.8
2003 Jan.	722.6	621.4	101.2	8,256.4	673.5	587.7	85.8	7,529.4	49.1	33.7
Feb.	618.5	538.5	80.0	8,341.0	578.7	510.7	68.0	7,599.1	39.8	27.8
Mar.	606.2	538.6	67.6	8,403.3	573.2	513.1	60.1	7,659.3	33.0	25.5

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	
0.8	87.1	24.3	7.9	16.4	59.7	424.9	391.4	33.5	726.0	2002 Mar.
3.4	90.2	9.7	28.1	-18.4	41.3	387.0	412.5	-25.5	700.3	Apr.
2.6	92.8	13.7	13.4	0.3	41.5	391.9	372.1	19.8	719.1	May
-2.2	89.5	20.9	8.0	12.9	54.4	337.9	327.1	10.7	731.2	June
2.7	87.6	14.7	24.8	-10.1	44.4	397.1	396.2	1.0	729.4	July
-3.0	82.5	12.1	11.5	0.6	44.9	378.3	368.4	9.9	738.0	Aug.
3.3	85.9	31.7	7.7	24.0	68.9	423.8	388.7	35.1	775.7	Sep.
3.4	90.7	17.1	31.3	-14.2	54.7	458.9	464.5	-5.6	770.1	Oct.
-2.2	90.3	14.6	16.9	-2.3	52.4	428.0	405.7	22.3	792.5	Nov.
-2.4	87.4	23.8	10.6	13.2	65.6	410.6	440.5	-29.9	761.6	Dec.
1.8	89.8	16.3	34.5	-18.2	47.4	534.9	497.2	37.7	798.3	2003 Jan.
2.5	89.7	20.1	14.1	5.9	53.3	452.7	422.5	30.3	828.1	Feb.
1.2	90.0	33.2	9.7	23.5	76.9	465.1	432.6	32.6	860.5	Mar.

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	
10.4	649.8	25.5	12.0	13.5	908.5	168.4	102.1	66.3	7,447.7	2002 Mar.
6.0	645.4	23.0	7.6	15.4	924.1	137.9	82.0	55.9	7,504.5	Apr.
10.7	641.5	26.3	8.2	18.0	942.3	153.1	84.1	69.0	7,574.9	May
2.2	624.4	29.3	11.0	18.3	960.5	152.6	98.2	54.3	7,625.5	June
7.5	639.8	11.6	8.2	3.4	964.0	125.9	112.5	13.4	7,642.7	July
0.1	637.8	7.0	8.1	-1.1	962.8	66.1	62.8	3.3	7,645.5	Aug.
7.1	645.2	24.3	11.4	12.9	975.8	145.6	85.8	59.8	7,704.6	Sep.
6.8	651.1	13.2	13.1	0.1	975.9	118.7	94.5	24.2	7,729.2	Oct.
7.4	655.9	13.6	12.1	1.6	977.5	132.6	102.9	29.7	7,758.9	Nov.
-1.6	636.2	18.3	10.9	7.4	984.9	146.6	171.4	-24.7	7,733.0	Dec.
13.6	637.2	23.8	7.2	16.6	1,001.6	178.7	132.2	46.6	7,780.1	2003 Jan.
9.5	652.1	26.5	17.7	8.8	1,010.4	172.5	120.0	52.5	7,834.8	Feb.
6.3	653.9	28.7	9.6	19.2	1,029.5	170.0	99.8	70.2	7,905.2	Mar.

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	
11.3	736.9	49.8	19.9	30.0	968.2	593.4	493.6	99.8	8,173.7	2002 Mar.
9.5	735.6	32.7	35.7	-3.0	965.4	524.9	494.5	30.4	8,204.8	Apr.
13.3	734.3	39.9	21.6	18.3	983.9	545.0	456.1	88.8	8,293.9	May
0.0	713.9	50.2	19.1	31.2	1,014.9	490.4	425.4	65.1	8,356.7	June
10.2	727.4	26.4	33.0	-6.7	1,008.3	523.1	508.7	14.4	8,372.1	July
-2.9	720.3	19.1	19.7	-0.6	1,007.7	444.4	431.2	13.2	8,383.5	Aug.
10.4	731.1	56.0	19.1	37.0	1,044.7	569.4	474.5	94.9	8,480.2	Sep.
10.2	741.8	30.3	44.3	-14.1	1,030.6	577.6	559.0	18.6	8,499.3	Oct.
5.3	746.2	28.2	29.0	-0.8	1,029.9	560.6	508.6	52.0	8,551.4	Nov.
-4.0	723.6	42.1	21.5	20.6	1,050.5	557.2	611.8	-54.7	8,494.6	Dec.
15.4	726.9	40.1	41.7	-1.6	1,049.0	713.6	629.4	84.2	8,578.4	2003 Jan.
11.9	741.9	46.6	31.8	14.7	1,063.7	625.3	542.5	82.8	8,662.9	Feb.
7.5	744.0	61.9	19.2	42.7	1,106.3	635.1	532.3	102.8	8,765.7	Mar.

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
2002 Mar.	666.3	262.5	4.3	97.1	299.0	3.3	59.7	26.4	26.4	6.4
Apr.	659.1	260.2	4.5	92.6	298.8	3.0	41.3	18.2	18.6	3.8
May	677.5	266.7	3.7	89.9	314.3	3.0	41.5	18.3	19.2	3.5
June	676.8	265.4	3.8	82.0	322.5	3.0	54.4	21.3	28.0	4.4
July	685.0	269.7	4.1	86.2	321.7	3.4	44.4	18.3	22.8	2.8
Aug.	693.1	269.9	4.3	86.7	328.8	3.3	44.9	18.1	23.9	2.6
Sep.	706.7	276.6	4.1	87.7	335.7	2.6	68.9	26.8	37.3	4.0
Oct.	715.4	284.0	4.2	88.5	335.6	3.0	54.7	20.9	28.1	3.5
Nov.	740.1	304.7	4.7	89.9	337.8	3.1	52.4	18.2	28.1	3.7
Dec.	696.0	281.4	4.3	85.3	321.8	3.2	65.6	20.5	37.9	4.6
2003 Jan.	750.9	313.3	4.5	92.6	337.9	2.6	47.4	18.1	26.4	2.4
Feb.	774.7	318.6	6.0	95.9	351.2	3.2	53.3	21.4	28.9	2.5
Mar.	783.6	313.7	6.3	98.4	362.0	3.2	76.9	27.6	44.5	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
2002 Mar.	6,539.2	2,368.5	380.6	358.2	3,294.3	137.6	908.5	232.3	350.2	108.2
Apr.	6,580.3	2,377.4	390.7	363.7	3,306.3	142.2	924.1	235.0	360.7	108.7
May	6,632.5	2,391.5	401.9	369.0	3,322.4	147.7	942.3	238.6	367.5	111.5
June	6,665.0	2,401.6	406.5	372.5	3,334.1	150.2	960.5	246.0	381.0	111.0
July	6,678.7	2,400.2	413.3	374.9	3,331.1	159.2	964.0	246.0	385.3	110.7
Aug.	6,682.7	2,399.1	413.6	373.0	3,337.0	160.1	962.8	245.4	385.0	110.8
Sep.	6,728.8	2,420.6	422.0	375.7	3,348.7	161.8	975.8	246.2	394.3	109.3
Oct.	6,753.3	2,416.7	428.3	374.9	3,367.8	165.5	975.9	247.0	395.9	109.0
Nov.	6,781.4	2,413.5	441.4	378.3	3,381.2	167.0	977.5	249.3	398.2	108.4
Dec.	6,748.1	2,399.0	472.3	379.8	3,328.2	168.7	984.9	251.9	402.9	109.5
2003 Jan.	6,778.5	2,394.1	474.0	386.3	3,351.3	172.7	1,001.6	258.0	412.1	111.0
Feb.	6,824.4	2,406.6	483.5	390.4	3,365.8	178.1	1,010.4	264.5	414.1	112.3
Mar.	6,875.7	2,416.3	493.4	398.5	3,386.5	181.1	1,029.5	274.6	417.8	112.2

3. Total

	By euro area residents						By non-residents			
	Total	MFIs (including Eurosystem)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations
	1	2	3	4	5	6	7	8	9	10
2002 Mar.	7,205.5	2,631.1	384.9	455.4	3,593.3	140.9	968.2	258.7	376.6	114.6
Apr.	7,239.4	2,637.6	395.2	456.3	3,605.1	145.2	965.4	253.2	379.4	112.5
May	7,310.1	2,658.1	405.6	458.9	3,636.7	150.7	983.9	256.9	386.7	115.0
June	7,341.8	2,667.0	410.4	454.5	3,656.7	153.2	1,014.9	267.3	408.9	115.4
July	7,363.7	2,669.8	417.5	461.1	3,652.8	162.6	1,008.3	264.3	408.0	113.5
Aug.	7,375.8	2,669.0	417.9	459.6	3,665.8	163.4	1,007.7	263.5	408.9	113.4
Sep.	7,435.5	2,697.1	426.1	463.5	3,684.4	164.4	1,044.7	272.9	431.6	113.3
Oct.	7,468.6	2,700.7	432.6	463.5	3,703.4	168.5	1,030.6	267.9	424.0	112.5
Nov.	7,521.5	2,718.2	446.1	468.2	3,718.9	170.1	1,029.9	267.5	426.4	112.1
Dec.	7,444.1	2,680.5	476.5	465.1	3,650.1	171.9	1,050.5	272.4	440.8	114.1
2003 Jan.	7,529.4	2,707.4	478.5	478.9	3,689.3	175.3	1,049.0	276.1	438.5	113.4
Feb.	7,599.1	2,725.1	489.4	486.2	3,717.0	181.4	1,063.7	285.9	443.0	114.8
Mar.	7,659.3	2,730.0	499.6	496.9	3,748.6	184.3	1,106.3	302.2	462.3	115.5

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

of the euro area			Total							
Central government	Other general government	International organisations	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	International organisations	
11	12	13	14	15	16	17	18	19	20	
0.1	0.1	0.4	726.0	288.9	30.7	103.5	299.2	3.4	0.4	2002 Mar.
0.1	0.1	0.5	700.3	278.4	23.1	96.4	298.9	3.1	0.5	Apr.
0.1	0.1	0.4	719.1	285.0	22.9	93.4	314.4	3.1	0.4	May
0.2	0.1	0.5	731.2	286.7	31.8	86.4	322.7	3.1	0.5	June
0.2	0.0	0.2	729.4	288.0	26.9	89.0	321.9	3.4	0.2	July
0.1	0.0	0.1	738.0	288.0	28.2	89.3	329.0	3.4	0.1	Aug.
0.2	0.0	0.6	775.7	303.3	41.4	91.8	335.9	2.7	0.6	Sep.
0.1	0.2	1.8	770.1	304.9	32.4	92.1	335.7	3.2	1.8	Oct.
0.1	0.2	2.0	792.5	322.9	32.9	93.6	337.8	3.3	2.0	Nov.
0.0	0.2	2.4	761.6	302.0	42.2	89.8	321.9	3.4	2.4	Dec.
0.0	0.1	0.4	798.3	331.4	30.9	95.0	338.0	2.7	0.4	2003 Jan.
0.0	0.1	0.4	828.1	339.9	34.9	98.3	351.2	3.4	0.4	Feb.
0.0	0.2	1.2	860.5	341.3	50.8	101.7	362.0	3.4	1.2	Mar.

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	
92.2	14.6	111.1	7,447.7	2,600.8	730.8	466.5	3,386.4	152.1	111.1	2002 Mar.
94.1	14.6	111.0	7,504.5	2,612.4	751.4	472.4	3,400.4	156.8	111.0	Apr.
95.1	14.6	115.1	7,574.9	2,630.0	769.4	480.5	3,417.5	162.3	115.1	May
93.2	14.6	114.7	7,625.5	2,647.6	787.5	483.5	3,427.3	164.8	114.7	June
93.1	14.6	114.3	7,642.7	2,646.1	798.6	485.6	3,424.2	173.8	114.3	July
93.4	14.6	113.6	7,645.5	2,644.4	798.6	483.8	3,430.4	174.7	113.6	Aug.
94.1	14.7	117.3	7,704.6	2,666.8	816.3	485.0	3,442.8	176.5	117.3	Sep.
93.6	14.6	115.9	7,729.2	2,663.7	824.2	484.0	3,461.4	180.1	115.9	Oct.
93.1	14.6	113.8	7,758.9	2,662.8	839.6	486.7	3,474.3	181.6	113.8	Nov.
92.7	14.3	113.6	7,733.0	2,650.9	875.2	489.4	3,420.9	183.0	113.6	Dec.
92.2	14.0	114.4	7,780.1	2,652.1	886.1	497.2	3,443.5	186.7	114.4	2003 Jan.
92.7	14.9	111.8	7,834.8	2,671.1	897.6	502.7	3,458.6	193.0	111.8	Feb.
92.7	15.4	116.9	7,905.2	2,690.9	911.2	510.7	3,479.2	196.4	116.9	Mar.

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	
92.3	14.6	111.5	8,173.7	2,889.7	761.4	570.0	3,685.6	155.5	111.5	2002 Mar.
94.2	14.6	111.5	8,204.8	2,890.8	774.6	568.8	3,699.3	159.9	111.5	Apr.
95.2	14.6	115.5	8,293.9	2,915.0	792.3	573.9	3,731.9	165.4	115.5	May
93.4	14.7	115.2	8,356.7	2,934.3	819.3	569.9	3,750.0	167.9	115.2	June
93.3	14.7	114.5	8,372.1	2,934.1	825.5	574.6	3,746.1	177.3	114.5	July
93.5	14.7	113.7	8,383.5	2,932.5	826.8	573.1	3,759.4	178.1	113.7	Aug.
94.3	14.7	117.9	8,480.2	2,970.1	857.7	576.8	3,778.7	179.1	117.9	Sep.
93.7	14.8	117.7	8,499.3	2,968.6	856.6	576.0	3,797.2	183.2	117.7	Oct.
93.2	14.8	115.9	8,551.4	2,985.7	872.5	580.3	3,812.1	184.9	115.9	Nov.
92.7	14.5	116.0	8,494.6	2,952.9	917.3	579.2	3,742.8	186.3	116.0	Dec.
92.2	14.1	114.8	8,578.4	2,983.5	917.0	592.2	3,781.5	189.4	114.8	2003 Jan.
92.8	15.0	112.2	8,662.9	3,011.0	932.5	601.0	3,809.8	196.4	112.2	Feb.
92.7	15.5	118.1	8,765.7	3,032.2	962.0	612.4	3,841.2	199.8	118.1	Mar.

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
2002 Mar.	400.6	287.4	2.2	60.2	49.0	1.8	24.3	10.7	10.1	3.3
Apr.	377.3	255.9	2.5	63.3	53.8	1.8	9.7	4.4	4.1	0.9
May	378.2	255.0	2.1	62.5	57.0	1.6	13.7	5.2	7.1	1.2
June	317.0	208.1	2.5	51.7	52.5	2.2	20.9	6.3	12.6	1.8
July	382.4	260.2	1.8	65.6	52.6	2.2	14.7	5.9	8.2	0.6
Aug.	366.2	257.8	1.8	50.9	53.9	1.8	12.1	4.5	6.8	0.6
Sep.	392.1	278.4	1.9	56.8	53.0	2.0	31.7	11.1	18.0	2.0
Oct.	441.8	319.5	2.2	64.7	53.1	2.3	17.1	5.0	9.0	1.3
Nov.	413.5	302.9	2.4	58.2	47.7	2.3	14.6	4.7	8.4	1.2
Dec.	386.8	291.3	2.2	46.4	44.3	2.6	23.8	6.3	15.6	1.3
2003 Jan.	518.6	375.7	2.1	66.0	72.9	1.9	16.3	6.3	9.4	0.3
Feb.	432.7	308.0	2.2	56.6	63.6	2.1	20.1	7.2	11.6	1.0
Mar.	431.9	300.5	2.3	62.9	63.7	2.6	33.2	10.2	20.6	1.4

2. Long-term

	By euro area residents						By non-residents			
	Total	MFIs (including Eurosystem)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations
	1	2	3	4	5	6	7	8	9	10
2002 Mar.	142.9	56.9	9.1	2.9	68.8	5.3	25.5	8.6	12.4	3.3
Apr.	114.9	44.1	12.6	8.2	45.2	4.9	23.0	5.1	12.8	1.1
May	126.8	41.5	16.0	7.4	55.3	6.6	26.3	5.7	10.1	3.2
June	123.3	48.2	13.5	7.4	51.3	2.9	29.3	9.9	17.7	0.7
July	114.3	37.9	12.7	6.2	48.2	9.4	11.6	2.9	6.9	0.4
Aug.	59.1	28.1	2.4	2.1	25.2	1.3	7.0	3.1	2.7	0.3
Sep.	121.3	52.4	11.5	4.4	50.4	2.6	24.3	5.2	12.6	0.2
Oct.	105.5	39.0	9.1	0.9	52.1	4.4	13.2	4.6	6.7	0.3
Nov.	118.9	48.1	15.8	3.5	48.0	3.6	13.6	5.6	6.6	0.8
Dec.	128.3	45.5	36.8	7.9	34.4	3.7	18.3	6.1	8.8	2.2
2003 Jan.	154.9	57.9	6.1	8.9	75.8	6.3	23.8	7.9	12.4	1.7
Feb.	146.0	55.5	12.4	8.6	63.2	6.3	26.5	10.8	6.7	3.5
Mar.	141.3	50.2	13.9	10.4	63.1	3.7	28.7	13.2	8.2	0.6

3. Total

	By euro area residents						By non-residents			
	Total	MFIs (including Eurosystem)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations
	1	2	3	4	5	6	7	8	9	10
2002 Mar.	543.6	344.2	11.3	63.1	117.8	7.1	49.8	19.3	22.5	6.6
Apr.	492.2	300.0	15.1	71.5	99.0	6.7	32.7	9.5	16.9	2.0
May	505.0	296.4	18.1	69.9	112.3	8.2	39.9	10.9	17.2	4.4
June	440.2	256.2	16.0	59.1	103.8	5.2	50.2	16.3	30.3	2.5
July	496.7	298.1	14.5	71.8	100.8	11.6	26.4	8.8	15.1	1.0
Aug.	425.3	285.8	4.2	53.1	79.1	3.2	19.1	7.7	9.6	0.9
Sep.	513.3	330.8	13.4	61.1	103.5	4.6	56.0	16.3	30.7	2.1
Oct.	547.3	358.5	11.3	65.6	105.2	6.7	30.3	9.6	15.8	1.6
Nov.	532.4	351.0	18.2	61.7	95.7	5.8	28.2	10.3	15.0	2.0
Dec.	515.1	336.8	38.9	54.3	78.7	6.4	42.1	12.4	24.4	3.5
2003 Jan.	673.5	433.6	8.1	74.9	148.7	8.2	40.1	14.2	21.9	2.1
Feb.	578.7	363.5	14.6	65.2	126.9	8.4	46.6	18.1	18.4	4.5
Mar.	573.2	350.7	16.2	73.3	126.7	6.3	61.9	23.5	28.9	2.0

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

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

of the euro area			Total							
Central government	Other general government	International organisations	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	International organisations	
11	12	13	14	15	16	17	18	19	20	
0.0	0.0	0.1	424.9	298.0	12.4	63.6	49.0	1.8	0.1	2002 Mar.
0.1	0.0	0.2	387.0	260.3	6.6	64.2	53.9	1.8	0.2	Apr.
0.0	0.0	0.1	391.9	260.2	9.2	63.8	57.0	1.6	0.1	May
0.0	0.0	0.1	337.9	214.4	15.1	53.5	52.5	2.2	0.1	June
0.0	0.0	0.0	397.1	266.1	10.0	66.2	52.7	2.2	0.0	July
0.0	0.0	0.1	378.3	262.3	8.6	51.5	53.9	1.8	0.1	Aug.
0.1	0.0	0.5	423.8	289.5	19.9	58.7	53.1	2.0	0.5	Sep.
0.0	0.1	1.6	458.9	324.5	11.2	66.0	53.1	2.5	1.6	Oct.
0.0	0.0	0.2	428.0	307.6	10.8	59.4	47.7	2.3	0.2	Nov.
0.0	0.0	0.5	410.6	297.5	17.8	47.7	44.3	2.7	0.5	Dec.
0.0	0.1	0.1	534.9	382.0	11.5	66.3	72.9	2.0	0.1	2003 Jan.
0.0	0.0	0.2	452.7	315.2	13.9	57.6	63.6	2.1	0.2	Feb.
0.0	0.0	0.9	465.1	310.7	22.9	64.3	63.7	2.6	0.9	Mar.

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	
0.8	0.2	0.3	168.4	65.5	21.5	6.1	69.5	5.5	0.3	2002 Mar.
3.3	0.0	0.7	137.9	49.1	25.3	9.3	48.5	4.9	0.7	Apr.
2.0	0.0	5.3	153.1	47.2	26.1	10.6	57.2	6.6	5.3	May
0.1	0.1	0.7	152.6	58.1	31.3	8.1	51.4	3.0	0.7	June
0.9	0.1	0.3	125.9	40.8	19.6	6.6	49.1	9.5	0.3	July
0.3	0.1	0.5	66.1	31.2	5.1	2.4	25.5	1.4	0.5	Aug.
0.7	0.2	5.5	145.6	57.5	24.1	4.6	51.1	2.7	5.5	Sep.
0.2	0.0	1.3	118.7	43.7	15.8	1.2	52.2	4.4	1.3	Oct.
0.0	0.0	0.5	132.6	53.7	22.5	4.3	48.0	3.6	0.5	Nov.
0.4	0.0	0.8	146.6	51.6	45.6	10.0	34.8	3.7	0.8	Dec.
0.5	0.0	1.3	178.7	65.8	18.5	10.6	76.3	6.3	1.3	2003 Jan.
3.3	1.0	1.1	172.5	66.3	19.1	12.1	66.5	7.4	1.1	Feb.
0.4	0.6	5.7	170.0	63.4	22.1	11.0	63.5	4.3	5.7	Mar.

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	
0.8	0.2	0.4	593.4	363.6	33.9	69.7	118.6	7.3	0.4	2002 Mar.
3.3	0.0	0.9	524.9	309.5	31.9	73.5	102.3	6.7	0.9	Apr.
2.0	0.0	5.5	545.0	307.4	35.3	74.3	114.3	8.2	5.5	May
0.2	0.1	0.9	490.4	272.5	46.3	61.6	103.9	5.3	0.9	June
1.0	0.1	0.4	523.1	306.8	29.6	72.8	101.8	11.7	0.4	July
0.3	0.1	0.6	444.4	293.5	13.7	54.0	79.4	3.3	0.6	Aug.
0.8	0.2	6.0	569.4	347.0	44.0	63.3	104.3	4.8	6.0	Sep.
0.2	0.1	2.9	577.6	368.2	27.0	67.2	105.3	6.9	2.9	Oct.
0.0	0.0	0.7	560.6	361.3	33.3	63.7	95.7	5.9	0.7	Nov.
0.4	0.0	1.3	557.2	349.2	63.4	57.8	79.1	6.4	1.3	Dec.
0.5	0.1	1.4	713.6	447.8	30.0	76.9	149.2	8.3	1.4	2003 Jan.
3.3	1.0	1.3	625.3	381.6	33.0	69.7	130.2	9.5	1.3	Feb.
0.4	0.6	6.6	635.1	374.2	45.0	75.3	127.2	6.9	6.6	Mar.

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
2002 Mar.	17.1	5.7	0.4	-1.1	12.4	-0.2	16.4	6.5	7.1	2.8
Apr.	-7.1	-2.2	0.2	-4.5	-0.3	-0.3	-18.4	-8.1	-7.7	-2.6
May	19.5	7.6	-0.8	-2.7	15.5	0.0	0.3	0.1	0.5	-0.3
June	-2.1	-2.5	0.1	-8.1	8.3	0.0	12.9	3.0	8.8	1.0
July	11.0	7.2	0.3	4.1	-0.8	0.3	-10.1	-3.0	-5.2	-1.6
Aug.	9.4	1.5	0.2	0.5	7.2	0.0	0.6	-0.2	1.1	-0.2
Sep.	11.0	4.1	-0.3	1.1	6.9	-0.7	24.0	8.6	13.5	1.4
Oct.	8.5	7.5	0.2	0.8	-0.3	0.3	-14.2	-5.8	-9.1	-0.5
Nov.	24.6	20.5	0.5	1.4	2.2	0.1	-2.3	-2.7	0.0	0.2
Dec.	-43.1	-22.2	-0.4	-4.7	-15.9	0.1	13.2	2.3	9.8	0.9
2003 Jan.	55.9	32.8	0.3	7.3	16.1	-0.6	-18.2	-2.5	-11.6	-2.1
Feb.	24.3	5.8	1.4	3.3	13.2	0.6	5.9	3.3	2.6	0.0
Mar.	9.0	-4.7	0.3	2.5	10.9	0.0	23.5	6.2	15.6	0.8

2. Long-term

	By euro area residents						By non-residents			
	Total	MFIs (including Eurosystem)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations
	1	2	3	4	5	6	7	8	9	10
2002 Mar.	52.8	23.0	6.1	0.4	18.7	4.6	13.5	2.4	10.8	1.7
Apr.	40.5	8.3	10.1	5.5	12.0	4.6	15.4	2.7	10.5	0.5
May	51.0	12.9	11.2	5.3	16.1	5.5	18.0	3.6	6.7	2.8
June	36.1	13.8	4.6	3.5	11.7	2.5	18.3	7.4	13.5	-0.6
July	10.0	-5.0	6.8	2.4	-3.0	8.9	3.4	0.0	4.3	-0.3
Aug.	4.4	-0.8	0.3	-1.9	5.9	0.9	-1.1	-0.6	-0.2	0.1
Sep.	46.8	22.4	8.4	2.6	11.7	1.7	12.9	0.8	9.3	-1.5
Oct.	24.1	-4.4	6.3	-0.8	19.3	3.7	0.1	0.8	1.5	-0.3
Nov.	28.1	-0.5	13.0	0.8	13.3	1.5	1.6	2.3	2.4	-0.6
Dec.	-32.2	-14.6	31.0	2.6	-52.9	1.7	7.4	2.6	4.7	1.1
2003 Jan.	29.9	-5.5	1.7	6.6	23.1	4.0	16.6	6.1	9.2	1.4
Feb.	43.7	10.2	9.5	4.1	14.5	5.4	8.8	6.5	2.0	1.4
Mar.	51.1	8.9	10.4	8.3	20.5	2.9	19.2	10.1	3.7	-0.1

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
2002 Mar.	69.9	28.7	6.5	-0.7	31.1	4.3	30.0	8.9	17.9	4.5
Apr.	33.5	6.1	10.3	1.0	11.8	4.4	-3.0	-5.4	2.8	-2.1
May	70.5	20.4	10.4	2.6	31.6	5.5	18.3	3.7	7.2	2.5
June	33.9	11.3	4.7	-4.6	20.0	2.5	31.2	10.4	22.4	0.4
July	21.1	2.1	7.1	6.5	-3.9	9.2	-6.7	-3.0	-1.0	-1.9
Aug.	13.7	0.8	0.5	-1.4	13.0	0.8	-0.6	-0.8	0.9	-0.1
Sep.	57.9	26.5	8.1	3.7	18.6	1.0	37.0	9.4	22.7	-0.1
Oct.	32.7	3.1	6.5	0.0	19.1	4.0	-14.1	-5.0	-7.6	-0.8
Nov.	52.8	20.0	13.5	2.2	15.5	1.6	-0.8	-0.4	2.4	-0.4
Dec.	-75.3	-36.8	30.6	-2.0	-68.9	1.8	20.6	4.9	14.4	2.0
2003 Jan.	85.8	27.2	2.0	13.9	39.2	3.4	-1.6	3.6	-2.3	-0.7
Feb.	68.0	16.0	10.9	7.4	27.7	6.0	14.7	9.8	4.6	1.4
Mar.	60.1	4.2	10.7	10.8	31.4	2.9	42.7	16.3	19.3	0.7

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	0.0	33.5	12.2	7.5	1.7	12.4	-0.2	0.0	2002 Mar.
-0.1	0.0	0.1	-25.5	-10.3	-7.5	-7.1	-0.3	-0.3	0.1	Apr.
0.0	0.0	-0.1	19.8	7.7	-0.3	-3.0	15.5	0.0	-0.1	May
0.0	0.0	0.1	10.7	0.5	8.9	-7.1	8.3	0.0	0.1	June
0.0	0.0	-0.2	1.0	4.2	-4.9	2.5	-0.8	0.3	-0.2	July
0.0	0.0	-0.1	9.9	1.3	1.3	0.3	7.1	0.0	-0.1	Aug.
0.1	0.0	0.5	35.1	12.7	13.2	2.5	6.9	-0.7	0.5	Sep.
-0.1	0.1	1.2	-5.6	1.7	-9.0	0.3	-0.3	0.5	1.2	Oct.
0.0	0.0	0.2	22.3	17.8	0.5	1.5	2.1	0.1	0.2	Nov.
-0.1	0.0	0.3	-29.9	-20.0	9.4	-3.8	-16.0	0.1	0.3	Dec.
0.0	-0.1	-2.0	37.7	30.3	-11.3	5.2	16.1	-0.7	-2.0	2003 Jan.
0.0	0.0	0.0	30.3	9.1	4.0	3.3	13.2	0.7	0.0	Feb.
0.0	0.0	0.8	32.6	1.6	16.0	3.4	10.8	0.0	0.8	Mar.

of the euro area			Total							
Central government	Other general government	International organisations	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	International organisations	
11	12	13	14	15	16	17	18	19	20	
0.1	0.0	-1.4	66.3	25.4	16.9	2.1	18.8	4.5	-1.4	2002 Mar.
1.8	0.0	-0.1	55.9	10.9	20.6	6.0	13.9	4.7	-0.1	Apr.
0.9	0.0	4.1	69.0	16.4	17.9	8.1	17.0	5.5	4.1	May
-1.9	0.0	-0.3	54.3	21.2	18.2	3.0	9.8	2.5	-0.3	June
-0.1	0.0	-0.5	13.4	-5.0	11.1	2.1	-3.1	8.9	-0.5	July
0.3	0.0	-0.7	3.3	-1.4	0.0	-1.7	6.2	0.9	-0.7	Aug.
0.7	0.0	3.7	59.8	23.3	17.7	1.1	12.4	1.7	3.7	Sep.
-0.5	-0.1	-1.4	24.2	-3.6	7.9	-1.1	18.8	3.6	-1.4	Oct.
-0.5	0.0	-2.0	29.7	1.8	15.4	0.2	12.9	1.5	-2.0	Nov.
-0.4	-0.3	-0.3	-24.7	-11.9	35.7	3.7	-53.4	1.4	-0.3	Dec.
-0.5	-0.3	0.7	46.6	0.5	11.0	8.0	22.6	3.7	0.7	2003 Jan.
0.6	0.9	-2.6	52.5	16.7	11.5	5.5	15.1	6.3	-2.6	Feb.
-0.1	0.5	5.1	70.2	19.0	14.1	8.2	20.5	3.4	5.1	Mar.

of the euro area			Total							
Central government	Other general government	International organisations	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	International organisations	
11	12	13	14	15	16	17	18	19	20	
0.1	0.0	-1.4	99.8	37.6	24.4	3.7	31.2	4.3	-1.4	2002 Mar.
1.8	0.0	0.0	30.4	0.6	13.1	-1.2	13.5	4.4	0.0	Apr.
0.9	0.0	4.0	88.8	24.1	17.7	5.0	32.5	5.5	4.0	May
-1.8	0.0	-0.3	65.1	21.7	27.1	-4.2	18.2	2.6	-0.3	June
-0.1	0.0	-0.7	14.4	-0.8	6.2	4.5	-3.9	9.2	-0.7	July
0.3	0.0	-0.8	13.2	0.0	1.3	-1.4	13.3	0.8	-0.8	Aug.
0.8	0.0	4.2	94.9	35.9	30.8	3.6	19.3	1.0	4.2	Sep.
-0.6	0.1	-0.2	18.6	-1.9	-1.1	-0.8	18.5	4.1	-0.2	Oct.
-0.5	0.0	-1.8	52.0	19.6	15.8	1.7	15.0	1.6	-1.8	Nov.
-0.5	-0.3	0.1	-54.7	-31.9	45.1	0.0	-69.4	1.5	0.1	Dec.
-0.5	-0.4	-1.2	84.2	30.9	-0.3	13.2	38.7	3.1	-1.2	2003 Jan.
0.6	0.9	-2.6	82.8	25.8	15.5	8.8	28.3	7.0	-2.6	Feb.
-0.1	0.5	5.9	102.8	20.6	30.0	11.6	31.3	3.4	5.9	Mar.

Table 3.7**Annual growth rates of securities other than shares issued by euro area residents ¹⁾***(percentage changes)***1. Short-term**

	In all currencies combined						
	Total		MFIs (including Eurosystem)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government
	1	Index Dec.01= 100 2					
2002 Mar.	2.3	107.4	-2.5	-16.3	4.1	7.5	48.8
Apr.	0.5	106.9	-3.0	-18.0	1.3	4.4	36.1
May	3.8	110.0	2.1	-32.8	-8.3	10.5	27.8
June	4.5	109.4	0.4	-25.1	-15.2	16.7	50.8
July	5.3	111.4	3.8	-16.4	-14.0	14.6	-3.1
Aug.	5.4	112.3	4.8	0.6	-18.0	15.2	-1.3
Sep.	7.7	114.4	8.9	0.8	-17.0	16.3	-19.4
Oct.	8.9	116.1	10.5	14.9	-18.5	17.9	-0.9
Nov.	12.3	119.3	18.6	23.3	-14.6	15.6	-5.3
Dec.	12.8	112.8	14.8	30.4	-10.4	19.3	-14.3
2003 Jan.	15.3	121.1	17.6	28.9	-7.3	21.1	-16.0
Feb.	19.2	124.9	22.4	60.4	-1.7	22.7	-0.2
Mar.	17.7	126.4	19.1	53.1	2.0	21.2	4.9

2. Long-term

	In all currencies combined						
	Total		MFIs (including Eurosystem)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government
	1	Index Dec.01= 100 2					
2002 Mar.	7.8	102.2	7.5	30.6	15.8	4.0	23.7
Apr.	7.9	102.9	7.5	32.1	16.3	3.8	25.4
May	7.9	103.7	8.0	32.7	14.5	3.5	29.6
June	7.5	104.3	7.7	30.2	12.9	3.1	31.7
July	7.0	104.5	6.7	27.2	11.7	3.1	36.7
Aug.	6.8	104.6	6.5	26.6	8.9	3.3	34.3
Sep.	7.3	105.4	7.0	27.4	11.7	3.6	31.2
Oct.	7.2	105.8	6.2	26.6	12.3	3.9	30.0
Nov.	6.9	106.3	5.7	26.8	7.8	4.3	29.3
Dec.	5.8	105.8	4.9	24.8	6.9	2.9	29.7
2003 Jan.	5.6	106.5	4.6	23.7	7.2	2.7	30.2
Feb.	5.8	107.2	4.3	25.0	7.6	3.0	34.6
Mar.	5.7	108.1	3.7	25.7	9.2	3.0	32.4

3. Total

	In all currencies combined						
	Total		MFIs (including Eurosystem)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government
	1	Index Dec.01= 100 2					
2002 Mar.	7.3	102.7	6.3	30.0	13.4	4.2	24.2
Apr.	7.1	103.2	6.2	31.4	13.3	3.9	25.7
May	7.5	104.3	7.3	31.8	9.6	4.0	29.6
June	7.2	104.8	6.9	29.5	7.1	4.2	32.0
July	6.8	105.2	6.4	26.6	6.3	4.0	35.4
Aug.	6.7	105.3	6.3	26.3	3.1	4.3	33.2
Sep.	7.3	106.2	7.2	27.1	5.5	4.6	29.7
Oct.	7.3	106.7	6.7	26.5	5.4	5.0	29.2
Nov.	7.4	107.5	7.1	26.8	3.1	5.2	28.4
Dec.	6.5	106.5	5.9	24.9	3.5	4.1	28.3
2003 Jan.	6.5	107.8	6.0	23.7	4.3	4.1	29.0
Feb.	7.1	108.8	6.3	25.3	5.8	4.6	33.7
Mar.	6.9	109.7	5.4	25.9	7.9	4.5	31.7

Source: ECB.

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

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

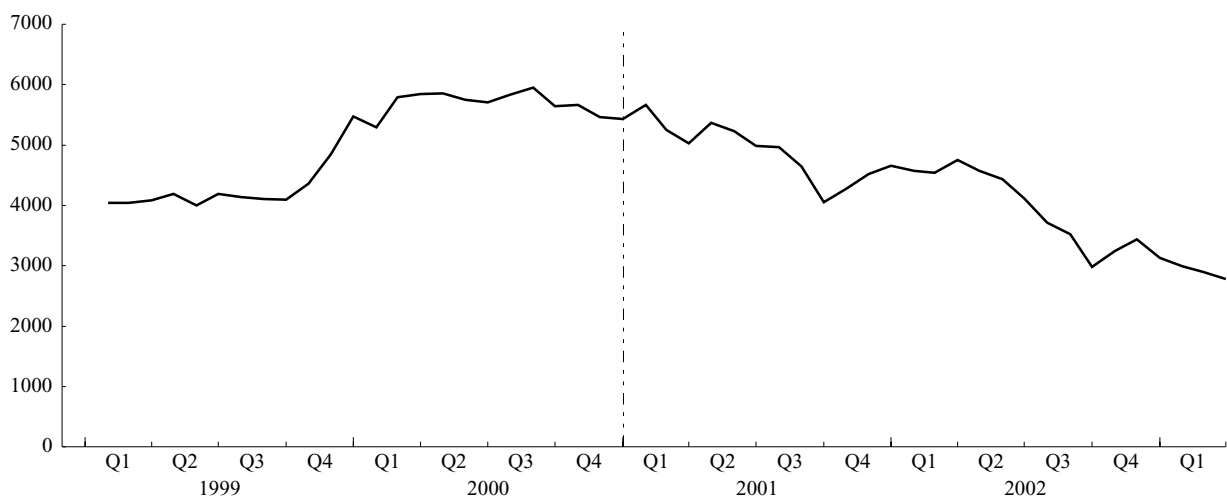
In euro ²⁾							
Total	Index Dec.01= 100	MFIs (including Eurosystem)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	
							8	9	10	11	12	13	14
2.7	108.5	-2.9	-16.3	2.4	8.1	52.5	2002 Mar.
-0.2	107.3	-5.3	-18.0	-0.2	4.7	38.6	Apr.
3.2	110.5	0.9	-32.8	-10.1	10.6	26.0	May
4.1	110.1	-0.9	-27.1	-16.6	16.5	51.6	June
5.0	111.9	3.5	-18.5	-15.6	14.5	-7.0	July
5.6	113.5	6.0	-1.8	-19.4	15.0	-7.0	Aug.
7.7	115.3	9.0	-1.8	-18.1	16.7	-28.9	Sep.
7.5	116.7	8.0	12.1	-20.3	18.1	-11.8	Oct.
12.3	120.7	20.3	20.6	-15.9	15.9	-14.0	Nov.
13.6	113.6	16.6	27.3	-11.4	20.3	-23.4	Dec.
16.1	122.8	20.5	26.0	-8.1	21.1	-27.0	2003 Jan.
20.0	126.7	25.8	57.5	-2.8	22.4	-9.0	Feb.
18.2	128.2	21.2	50.3	0.9	21.0	-2.7	Mar.

In euro ²⁾							
Total	Index Dec.01= 100	MFIs (including Eurosystem)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	
							8	9	10	11	12	13	14
7.4	102.1	5.6	43.6	18.8	3.9	24.7	2002 Mar.
7.5	102.7	5.6	44.7	19.4	3.8	26.5	Apr.
7.4	103.5	5.8	42.9	17.3	3.6	30.5	May
7.0	104.1	5.7	39.4	15.8	3.2	32.7	June
6.4	104.2	4.5	33.8	15.7	3.1	37.9	July
6.3	104.3	4.4	32.6	12.8	3.3	35.3	Aug.
6.7	105.0	5.1	33.5	14.1	3.4	32.1	Sep.
6.5	105.4	4.2	31.1	14.7	3.9	29.7	Oct.
6.5	105.8	4.1	31.7	9.3	4.3	29.1	Nov.
5.3	105.3	3.4	29.4	8.3	2.8	29.2	Dec.
5.0	105.8	3.0	28.2	8.5	2.5	29.4	2003 Jan.
5.2	106.5	2.5	29.1	8.7	2.8	33.8	Feb.
5.1	107.3	1.9	29.8	10.9	2.8	31.5	Mar.

In euro ²⁾							
Total	Index Dec.01= 100	MFIs (including Eurosystem)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	
							8	9	10	11	12	13	14
6.9	102.6	4.7	42.4	14.9	4.3	25.2	2002 Mar.
6.7	103.1	4.4	43.5	14.8	3.9	26.7	Apr.
7.0	104.1	5.3	41.4	10.7	4.2	30.4	May
6.7	104.6	5.0	38.3	8.2	4.2	33.0	June
6.3	104.9	4.4	32.9	8.2	4.1	36.6	July
6.2	105.1	4.6	32.1	4.9	4.2	34.1	Aug.
6.8	105.9	5.5	33.0	6.2	4.5	30.3	Sep.
6.6	106.4	4.6	30.9	5.9	5.0	28.7	Oct.
7.0	107.1	5.7	31.5	3.4	5.3	27.9	Nov.
6.1	106.1	4.6	29.4	4.1	4.1	27.6	Dec.
6.0	107.3	4.8	28.2	4.9	4.0	28.0	2003 Jan.
6.5	108.3	4.8	29.4	6.2	4.3	32.7	Feb.
6.3	109.1	3.8	30.0	8.7	4.3	30.7	Mar.

Table 3.8**Quoted shares issued by euro area residents***(EUR billions; end-of-period stocks; market values)***Amounts outstanding**

	Total 1	MFIs 2	Non-monetary financial corporations 3	Non-financial corporations 4
2000 Mar.	5,842.2	658.2	649.7	4,534.3
Apr.	5,860.1	670.4	654.9	4,534.8
May	5,751.1	673.4	648.2	4,429.5
June	5,705.7	680.6	645.7	4,379.4
July	5,833.7	700.3	696.3	4,437.2
Aug.	5,947.3	742.1	700.4	4,504.7
Sep.	5,638.9	730.3	687.7	4,221.0
Oct.	5,666.3	719.0	664.4	4,282.9
Nov.	5,465.3	674.5	673.5	4,117.4
Dec.	5,430.3	687.0	675.0	4,068.3
<i>Euro area enlargement</i>				
2001 Jan.	5,667.2	762.2	706.3	4,198.7
Feb.	5,247.9	710.1	661.6	3,876.2
Mar.	5,027.4	686.3	620.4	3,720.8
Apr.	5,364.4	715.3	643.4	4,005.6
May	5,233.9	697.9	627.0	3,909.0
June	4,989.9	676.5	635.1	3,678.3
July	4,959.8	647.0	572.4	3,740.4
Aug.	4,650.3	643.2	576.6	3,430.5
Sep.	4,056.7	535.7	485.3	3,035.7
Oct.	4,277.9	551.5	497.7	3,228.7
Nov.	4,522.8	587.5	512.0	3,423.2
Dec.	4,655.3	617.3	511.1	3,526.9
2002 Jan.	4,574.0	623.8	518.8	3,431.4
Feb.	4,545.6	622.4	509.8	3,413.4
Mar.	4,748.1	665.3	536.7	3,546.2
Apr.	4,569.8	678.0	517.5	3,374.2
May	4,432.0	666.3	484.9	3,280.9
June	4,113.0	614.8	463.4	3,034.8
July	3,709.7	515.6	395.4	2,798.7
Aug.	3,519.2	521.7	371.0	2,626.5
Sep.	2,977.8	412.6	276.0	2,289.2
Oct.	3,250.9	446.9	321.2	2,482.8
Nov.	3,434.7	487.3	346.0	2,601.4
Dec.	3,130.5	450.7	283.6	2,396.2
2003 Jan.	2,993.8	425.8	261.1	2,306.9
Feb.	2,900.3	425.5	270.7	2,204.1
Mar.	2,784.3	413.2	236.0	2,135.1

Total outstanding amounts*(EUR billions; end-of-period stocks; market values)*

Source: ECB.



4 HICP and other prices in the euro area

Table 4.1

Harmonised Index of Consumer Prices

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

1. Total index and goods and services

	Total		Goods		Services		Total (s.a.)		Goods (s.a.)	Services (s.a.)
	Index 1996 = 100		Index 1996 = 100		Index 1996 = 100		Index 1996 = 100	% change on previous period	Index 1996 = 100	Index 1996 = 100
Weight in the total (%) ¹⁾	100.0	100.0	59.1	59.1	40.9	40.9	100.0	100.0	59.1	40.9
	1	2	3	4	5	6	7	8	9	10
1999	103.8	1.1	102.7	0.9	106.0	1.5	-	-	-	-
2000	106.0	2.1	105.3	2.5	107.5	1.5	-	-	-	-
<i>Euro area enlargement</i>										
2001	108.5	2.3	107.7	2.3	110.2	2.5	-	-	-	-
2002	110.9	2.3	109.5	1.7	113.6	3.1	-	-	-	-
2002 Q2	111.0	2.1	109.9	1.4	113.1	3.1	110.7	0.6	109.4	113.2
Q3	111.1	2.1	109.2	1.3	114.5	3.3	111.2	0.4	109.6	114.1
Q4	111.7	2.3	110.1	1.8	114.5	3.1	111.8	0.5	110.0	114.8
2003 Q1	112.5	2.3	110.8	2.0	115.3	2.7	112.6	0.8	111.1	115.4
2002 June	111.1	1.9	109.7	1.0	113.5	3.2	110.8	0.0	109.3	113.5
July	111.0	2.0	108.9	1.2	114.5	3.2	111.0	0.1	109.4	113.8
Aug.	111.0	2.1	108.9	1.4	114.6	3.3	111.2	0.2	109.6	114.1
Sep.	111.3	2.1	109.7	1.4	114.2	3.2	111.5	0.3	109.9	114.3
Oct.	111.6	2.3	110.1	1.8	114.2	3.1	111.7	0.2	110.1	114.6
Nov.	111.5	2.3	110.0	1.8	114.2	3.1	111.7	0.0	109.9	114.8
Dec.	112.0	2.3	110.2	1.9	115.2	3.0	111.9	0.2	110.1	115.1
2003 Jan.	111.9	2.1	110.2	1.6	115.0	2.8	112.3	0.4	110.7	115.2
Feb.	112.4	2.4	110.7	2.1	115.4	2.7	112.6	0.3	111.1	115.4
Mar.	113.1	2.4	111.7	2.2	115.6	2.6	113.0	0.3	111.5	115.6
Apr.	113.2	2.1	111.7	1.5	116.0	2.9	112.8	-0.1	111.1	115.9
May ²⁾	.	1.9	.	.	.	.	.	.	.	.

2. Breakdown of goods and services

	Goods						Services				
	Food ³⁾			Industrial goods			Housing	Transport	Communi- cation	Recreation and personal	Miscellan- eous
	Total	Processed food ³⁾	Unprocessed food	Total	Non-energy industrial goods	Energy					
Weight in the total (%) ¹⁾	19.3	11.7	7.6	39.8	31.6	8.2	10.4	6.3	2.9	14.9	6.4
	11	12	13	14	15	16	17	18	19	20	21
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	1.2	1.8	3.0	0.5	13.0	1.5	2.5	-7.1	2.4	2.5
<i>Euro area enlargement</i>											
2001	4.5	2.9	7.0	1.2	0.9	2.2	1.8	3.6	-4.1	3.6	2.7
2002	3.1	3.1	3.1	1.0	1.5	-0.6	2.4	3.2	-0.3	4.2	3.4
2002 Q2	2.9	3.2	2.5	0.7	1.6	-2.3	2.4	3.2	-0.2	4.2	3.4
Q3	2.3	2.9	1.4	0.8	1.3	-0.7	2.4	3.4	0.0	4.3	3.5
Q4	2.3	2.7	1.7	1.6	1.2	2.9	2.5	3.0	-0.2	4.0	3.4
2003 Q1	2.0	3.2	0.2	2.0	0.7	7.0	2.4	3.2	-0.8	3.0	3.7
2002 June	2.3	3.1	1.2	0.4	1.5	-3.6	2.4	3.3	-0.1	4.3	3.4
July	2.2	3.0	1.0	0.7	1.3	-1.6	2.4	3.4	0.0	4.3	3.5
Aug.	2.3	3.0	1.4	0.9	1.3	-0.3	2.4	3.6	-0.1	4.4	3.5
Sep.	2.4	2.8	1.7	0.9	1.3	-0.2	2.4	3.2	0.1	4.3	3.4
Oct.	2.3	2.7	1.7	1.5	1.2	2.6	2.4	3.0	0.1	4.3	3.3
Nov.	2.4	2.6	2.0	1.5	1.3	2.4	2.5	3.2	-0.4	4.0	3.4
Dec.	2.2	2.7	1.3	1.7	1.2	3.8	2.5	2.8	-0.5	3.8	3.5
2003 Jan.	1.5	2.9	-0.6	1.7	0.6	6.0	2.5	3.3	-0.7	3.2	3.6
Feb.	2.1	3.3	0.3	2.2	0.7	7.7	2.4	3.3	-0.9	3.0	3.7
Mar.	2.3	3.3	0.8	2.2	0.8	7.5	2.4	3.0	-0.7	2.8	3.7
Apr.	2.4	3.4	1.0	1.1	0.8	2.2	2.4	3.2	-0.6	3.5	3.6
May	.	.	.	.	.	.	.	.	.	.	.

Sources: Eurostat and ECB calculations.

1) Referring to the index period 2003.

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

3) Including alcoholic beverages and tobacco.

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

	Industrial producer prices											World market prices of raw materials ¹⁾	Oil prices ²⁾ (EUR per barrel)			
	Industry excluding construction ³⁾								Construction ⁴⁾	Manufacturing	Total excluding energy					
	Total		Industry excluding construction and energy					Energy								
	Index 1995 = 100		Total	Intermediate goods	Capital goods	Consumer goods										
1	2	3	4	5	Total	Durable consumer goods	Non-durable consumer goods	6	7	8	9	10	11	12	13	14
1997	101.4	1.1	0.6	0.2	0.3	1.1	0.6	1.2	3.1	1.3	0.8	10.7	14.6	17.0		
1998	100.7	-0.7	0.2	-0.4	0.6	0.5	0.7	0.5	-4.4	0.3	-0.5	-21.0	-12.5	12.0		
1999	100.2	-0.5	-0.6	-1.5	0.2	-0.1	0.7	-0.2	0.1	1.2	0.1	15.8	-5.9	17.1		
2000	105.5	5.3	2.6	5.0	0.6	1.5	1.4	1.6	16.8	2.4	4.9	50.8	16.7	31.0		
<i>Euro area enlargement</i>																
2001	107.9	2.1	1.8	1.1	1.0	3.0	1.8	3.1	3.0	2.1	1.2	-8.8	-7.6	27.8		
2002	107.9	0.0	0.6	-0.3	1.0	1.3	1.5	1.3	-1.9	2.4	0.3	-3.2	-1.7	26.5		
2002 Q1	107.3	-0.6	0.3	-1.6	1.2	1.7	1.8	1.7	-3.8	2.5	-0.4	-10.5	-3.6	24.6		
Q2	107.8	-0.7	0.3	-0.8	1.1	1.0	1.5	1.0	-4.1	2.3	-0.3	-8.7	-5.5	27.8		
Q3	108.1	0.0	0.8	0.3	0.9	1.2	1.4	1.1	-2.3	2.3	0.4	-4.2	-1.6	27.2		
Q4	108.4	1.2	1.1	1.0	0.8	1.4	1.2	1.4	2.6	2.7	1.5	14.0	4.4	26.5		
2003 Q1	109.9	2.4	1.2	1.6	0.4	1.3	0.9	1.4	7.1	.	2.2	10.2	-4.2	28.4		
2002 May	107.9	-0.7	0.3	-0.8	1.1	1.0	1.5	0.9	-4.2	-	-0.3	-9.5	-6.8	28.1		
June	107.7	-0.8	0.4	-0.5	1.0	0.9	1.4	0.9	-4.9	-	-0.4	-14.9	-8.4	25.8		
July	107.9	-0.2	0.7	0.1	0.9	1.1	1.2	1.0	-3.0	-	0.2	-10.2	-7.6	25.9		
Aug.	108.0	0.0	0.8	0.3	0.9	1.1	1.4	1.1	-2.2	-	0.5	-4.3	-1.3	27.0		
Sep.	108.3	0.2	0.9	0.5	0.9	1.3	1.4	1.3	-1.6	-	0.6	2.4	4.7	28.9		
Oct.	108.5	1.1	1.0	0.8	0.8	1.4	1.2	1.4	2.0	-	1.3	14.3	7.8	27.9		
Nov.	108.2	1.1	1.1	1.1	0.8	1.3	1.2	1.3	2.2	-	1.3	10.5	3.4	24.2		
Dec.	108.5	1.6	1.2	1.2	0.9	1.4	1.2	1.5	3.7	-	1.8	17.2	2.1	27.1		
2003 Jan.	109.5	2.2	1.1	1.4	0.5	1.3	1.0	1.3	6.4	-	2.0	17.2	-1.5	28.3		
Feb.	110.0	2.6	1.2	1.7	0.3	1.4	0.9	1.5	8.0	-	2.4	16.8	-3.7	29.8		
Mar.	110.2	2.4	1.2	1.7	0.3	1.2	0.7	1.3	7.0	-	2.1	-1.7	-7.2	27.2		
Apr.	109.7	1.7	1.1	1.5	0.4	1.2	0.6	1.2	3.4	-	1.1	-15.2	-6.7	22.9		
May	.	.	.	.	.	.	.	.	.	-	.	-16.6	-8.7	21.9

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
1997	103.6	1.5	1.7	2.0	1.3	0.9	1.8	2.6
1998	105.3	1.7	1.3	1.4	1.2	0.9	-0.1	-1.5
1999	106.4	1.1	1.2	1.1	1.9	0.8	-0.5	-0.3
2000	107.8	1.3	2.5	2.2	2.7	2.5	4.6	8.2
<i>Euro area enlargement</i>								
2001	110.8	2.4	2.2	2.4	2.4	2.0	1.5	0.8
2002	113.5	2.4	2.2	2.3	1.8	2.0	-0.7	-1.6
2001 Q2	110.8	2.6	2.6	2.7	2.7	2.1	2.5	2.6
Q3	111.2	2.3	2.2	2.5	2.2	2.1	0.5	0.0
Q4	112.2	2.9	1.8	2.1	2.2	1.7	-0.6	-3.5
2002 Q1	112.8	2.7	2.3	2.6	2.0	2.0	-0.9	-1.9
Q2	113.3	2.3	2.1	2.2	1.7	2.2	-1.1	-1.9
Q3	114.0	2.6	2.1	2.3	1.8	1.9	-0.3	-1.9
Q4	114.6	2.1	2.2	2.4	1.7	1.9	-0.3	-0.2

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	
1998	5,883.6	5,743.8	3,328.8	1,176.4	1,203.6	34.9	139.9	1,949.1	1,809.2
1999	6,150.4	6,048.5	3,504.9	1,230.0	1,291.8	21.7	101.9	2,052.4	1,950.6
2000	6,453.1	6,385.2	3,672.5	1,289.2	1,389.1	34.3	67.9	2,416.7	2,348.8
<i>Euro area enlargement</i>									
2001	6,840.1	6,727.7	3,918.1	1,369.3	1,437.4	2.8	112.5	2,556.1	2,443.7
2002	7,063.5	6,889.3	4,033.5	1,431.6	1,427.6	-3.4	174.1	2,571.2	2,397.0
2001 Q4	1,727.8	1,689.9	989.0	348.0	357.8	-4.9	37.9	630.7	592.8
2002 Q1	1,744.0	1,703.8	995.2	352.6	357.5	-1.5	40.2	627.2	587.0
Q2	1,758.6	1,716.4	1,002.9	356.8	355.1	1.5	42.2	639.5	597.3
Q3	1,775.5	1,727.1	1,013.3	359.9	356.6	-2.7	48.4	652.2	603.9
Q4	1,785.5	1,742.0	1,022.2	362.3	358.3	-0.7	43.4	652.3	608.9
2003 Q1	.	.	.	.	.	.	.	.	.

2. Constant prices

(ECU billions at 1995 prices, seasonally adjusted)

	GDP								
	Total	Domestic demand					External balance ³⁾		
		Total	Private consumption	Government consumption	Gross fixed capital formation	Changes in inventories ²⁾	Total	Exports ³⁾	Imports ³⁾
10	11	12	13	14	15	16	17	18	
1998	5,667.3	5,544.7	3,184.3	1,142.2	1,191.0	27.3	122.5	1,939.1	1,816.6
1999	5,826.5	5,738.1	3,297.2	1,164.7	1,260.6	15.6	88.4	2,040.3	1,951.9
2000	6,029.9	5,906.3	3,380.3	1,189.5	1,322.1	14.4	123.6	2,295.3	2,171.7
<i>Euro area enlargement</i>									
2001	6,227.3	6,079.4	3,519.0	1,231.0	1,339.0	-9.7	148.0	2,391.7	2,243.7
2002	6,279.4	6,092.4	3,538.3	1,264.6	1,303.9	-14.4	187.0	2,421.6	2,234.6
2001 Q4	1,556.0	1,517.6	881.6	310.5	331.1	-5.6	38.4	591.7	553.3
2002 Q1	1,562.5	1,517.6	879.8	313.5	328.8	-4.6	44.9	590.4	545.5
Q2	1,568.6	1,520.1	882.2	315.9	324.6	-2.6	48.5	602.7	554.2
Q3	1,573.6	1,524.0	886.3	317.3	325.1	-4.7	49.6	614.8	565.2
Q4	1,574.7	1,530.7	890.0	317.9	325.4	-2.5	44.0	613.7	569.7
2003 Q1	1,574.8	1,538.3	893.1	318.6	320.9	5.8	36.5	609.8	573.3

(annual percentage changes)

1998	2.9	3.5	3.0	1.4	5.1	-	-	7.4	10.0
1999	2.8	3.5	3.5	2.0	5.8	-	-	5.2	7.4
2000	3.5	2.9	2.5	2.1	4.9	-	-	12.5	11.3
<i>Euro area enlargement</i>									
2001	1.5	1.0	1.8	2.2	-0.6	-	-	3.0	1.7
2002	0.8	0.2	0.5	2.7	-2.6	-	-	1.2	-0.4
2001 Q4	0.6	0.1	1.6	2.0	-2.4	-	-	-2.3	-3.8
2002 Q1	0.4	-0.1	0.5	2.6	-2.8	-	-	-2.7	-4.3
Q2	0.8	-0.3	0.2	3.0	-3.3	-	-	1.0	-1.8
Q3	1.0	0.4	0.6	2.9	-2.6	-	-	3.0	1.7
Q4	1.2	0.9	0.9	2.4	-1.7	-	-	3.7	3.0
2003 Q1	0.8	1.4	1.5	1.6	-2.4	-	-	3.3	5.1

Source: Eurostat.

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

2) Including acquisitions less disposals of valuables.

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

Value added by economic 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
1998	5,471.0	138.7	1,276.8	295.4	1,139.8	1,441.3	1,179.0	202.2	614.8
1999	5,689.3	136.0	1,293.3	310.7	1,191.2	1,527.6	1,230.6	201.6	662.7
2000	5,973.1	136.9	1,347.3	326.5	1,261.2	1,620.3	1,280.9	212.1	692.2
<i>Euro area enlargement</i>									
2001	6,344.2	151.7	1,412.0	347.3	1,356.5	1,719.7	1,357.0	232.4	728.3
2002	6,560.0	149.7	1,430.7	360.7	1,394.4	1,797.8	1,426.7	237.9	741.3
2001 Q4	1,604.3	38.4	350.6	88.6	342.8	438.6	345.3	59.1	182.6
2002 Q1	1,619.0	38.0	353.3	89.9	345.3	442.3	350.2	59.0	184.0
Q2	1,634.1	37.3	357.2	89.6	347.6	447.7	354.7	58.8	183.2
Q3	1,648.4	37.5	360.2	90.2	349.7	451.9	358.9	59.3	186.3
Q4	1,658.4	36.9	360.0	91.0	351.9	455.8	362.9	60.8	187.8
2003 Q1	.	.	.	.	.	.	.	.	.

4. Constant prices

(ECU billions at 1995 prices, seasonally adjusted)

	Gross value added							Intermediate consumption of FISIM ¹⁾	Taxes less subsidies on products
	Total	Agriculture, hunting, forestry and fishing activities	Manufacturing, energy and mining	Construction	Trade, repairs, hotels and restaurants, transport and communication	Financial, real estate, renting and business activities	Public administration, education, health and other services		
	10	11	12	13	14	15	16	17	18
1998	5,319.6	142.3	1,256.7	291.9	1,114.4	1,388.3	1,126.0	222.4	570.1
1999	5,462.5	146.0	1,268.3	299.2	1,164.2	1,441.4	1,143.4	231.2	595.2
2000	5,667.4	145.6	1,319.0	306.2	1,220.6	1,508.2	1,167.8	247.6	610.1
<i>Euro area enlargement</i>									
2001	5,865.3	151.8	1,348.6	311.0	1,282.4	1,569.5	1,202.1	264.7	626.8
2002	5,938.2	150.8	1,359.0	308.2	1,299.4	1,589.2	1,231.6	271.1	612.4
2001 Q4	1,467.4	38.0	333.1	78.0	321.2	394.3	302.8	67.1	155.7
2002 Q1	1,475.7	37.8	336.9	77.7	323.4	395.0	304.9	66.8	153.6
Q2	1,484.0	37.7	340.5	77.0	324.4	397.2	307.2	67.2	151.8
Q3	1,488.3	37.8	341.6	76.8	325.3	398.0	308.8	68.0	153.4
Q4	1,490.2	37.5	340.0	76.7	326.4	399.0	310.7	69.1	153.6
2003 Q1	1,490.6	37.8	341.4	74.8	326.4	399.8	310.5	69.0	153.2
<i>(annual percentage changes)</i>									
1998	2.9	1.5	3.2	0.4	4.0	3.7	1.5	3.6	2.6
1999	2.7	2.6	0.9	2.5	4.5	3.8	1.5	4.0	4.4
2000	3.8	-0.3	4.0	2.3	4.8	4.6	2.1	7.1	2.5
<i>Euro area enlargement</i>									
2001	1.7	-1.3	1.1	-0.6	2.6	2.6	1.4	5.4	0.7
2002	1.2	-0.7	0.8	-0.9	1.3	1.3	2.4	2.4	-2.3
2001 Q4	0.8	-1.1	-1.3	-0.3	1.4	2.0	1.7	4.7	-0.1
2002 Q1	0.8	-0.2	-1.3	0.0	1.2	1.4	2.1	2.3	-2.3
Q2	1.3	-0.1	1.0	-0.8	1.2	1.3	2.5	1.9	-3.7
Q3	1.3	-1.1	1.3	-1.1	1.3	1.1	2.6	2.6	-1.8
Q4	1.6	-1.4	2.1	-1.7	1.6	1.2	2.6	2.9	-1.3
2003 Q1	1.0	0.1	1.3	-3.7	0.9	1.2	1.8	3.2	-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	
1999	2.0	111.4	1.9	2.0	1.9	2.5	1.5	1.4	1.6	0.9	3.9	2.0
2000	4.9	117.4	5.4	5.8	5.8	9.0	2.0	6.2	1.2	1.9	2.1	5.7
<i>Euro area enlargement</i>												
2001	0.3	118.0	0.5	0.3	-0.6	1.6	0.3	-1.7	0.7	1.0	0.0	0.4
2002	-0.7	117.3	-0.6	-0.8	0.3	-2.1	-0.8	-5.6	0.2	0.8	-0.2	-0.8
2002 Q1	-2.4	116.7	-2.8	-3.4	-2.2	-6.4	-1.4	-7.0	-0.2	1.4	1.7	-3.6
Q2	-1.0	117.2	-0.7	-1.0	0.0	-2.2	-1.1	-6.2	0.0	2.1	-0.3	-0.8
Q3	-0.2	117.7	0.0	-0.2	1.1	-1.1	-1.2	-4.5	-0.5	1.1	-0.1	-0.1
Q4	0.7	117.5	1.2	1.5	2.4	1.3	0.4	-4.4	1.4	-1.3	-1.8	1.5
2003 Q1	0.6	117.7	1.1	0.7	1.8	1.0	-1.1	-5.6	-0.2	3.9	-3.5	0.9
2002 June	-1.0	117.6	-0.5	-1.0	-0.7	-0.9	-1.9	-5.4	-1.1	3.7	-1.0	-1.0
July	0.2	117.8	0.6	0.3	1.4	-0.1	-1.0	-2.3	-0.8	2.1	0.2	0.4
Aug.	-0.8	117.6	-0.8	-1.0	-0.1	-1.3	-2.0	-9.3	-0.8	0.8	-0.5	-0.8
Sep.	-0.1	117.6	0.2	0.0	1.7	-1.9	-0.7	-3.6	0.0	0.5	0.2	0.0
Oct.	0.4	117.7	1.2	0.7	1.5	0.2	0.2	-3.8	1.1	3.8	-2.8	0.9
Nov.	2.2	118.3	2.7	3.4	4.3	4.0	1.8	-2.2	2.6	-1.5	-0.4	3.4
Dec.	-0.5	116.4	-0.5	0.2	1.4	-0.1	-0.9	-7.5	0.4	-5.2	-2.1	0.1
2003 Jan.	1.0	117.8	1.2	1.1	2.6	0.9	-1.2	-4.6	-0.5	1.1	1.2	1.0
Feb.	1.1	118.3	2.1	1.1	1.4	2.6	-0.8	-5.1	0.1	8.1	-2.7	1.1
Mar.	-0.1	117.1	0.2	0.1	1.5	-0.4	-1.5	-7.0	-0.3	2.7	-2.0	0.6
Apr.	.	.	.	.	.	.	.	.	.	.	.	.

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

	Retail sales (s.a.)									New passenger car registrations	
	Current prices			Constant prices						Thousands ³⁾ (s.a.)	
	Total		Index 1995 = 100	Total		Food, beverages, tobacco	Non-food				
	Index 1995 = 100			Index 1995 = 100			Textiles, clothing, footwear	Household equipment			
13	14	15	16	17	18	19	20	21	22		
1999	111.4	3.1	107.3	2.4	2.8	2.3	1.1	2.6	973	5.4	
2000	115.9	4.1	109.7	2.3	2.0	2.2	1.7	4.5	953	-2.1	
<i>Euro area enlargement</i>											
2001	121.2	4.2	111.2	1.4	1.5	1.3	1.1	-0.4	968	-0.8	
2002	123.4	1.8	111.6	0.3	0.9	0.0	-1.2	-2.1	926	-4.3	
2002 Q1	122.5	2.4	111.5	0.5	0.8	-0.3	-0.3	-2.4	919	-4.3	
Q2	123.1	1.7	111.2	-0.1	0.4	0.2	-1.7	-2.3	915	-7.6	
Q3	124.0	1.7	112.1	0.7	1.1	0.6	-1.8	-0.8	919	-4.8	
Q4	124.1	1.5	111.6	0.1	1.2	-0.4	-1.1	-2.9	952	0.2	
2003 Q1	126.1	2.9	112.1	0.6	2.4	0.1	-1.4	-0.2	896	-2.6	
2002 June	123.2	1.3	111.1	-0.7	-0.5	-0.3	-1.1	-3.0	928	-7.6	
July	123.5	1.5	112.0	1.0	1.0	0.9	0.1	0.2	899	-7.1	
Aug.	124.3	2.0	112.5	0.8	1.7	0.4	-0.4	-2.1	925	-4.1	
Sep.	124.1	1.5	111.7	0.4	0.7	0.5	-5.0	-0.6	931	-2.6	
Oct.	124.9	3.3	112.6	2.2	2.1	2.2	4.5	-1.6	930	-3.3	
Nov.	123.7	0.7	111.4	-0.6	1.4	-1.5	-5.2	-3.6	944	-1.2	
Dec.	123.8	0.4	110.6	-1.2	0.1	-2.0	-2.1	-3.4	982	6.1	
2003 Jan.	126.1	3.4	113.2	2.5	4.1	1.5	2.7	-0.1	885	-5.3	
Feb.	126.2	2.8	112.3	0.8	2.9	-0.1	-3.7	-0.8	896	-3.5	
Mar.	126.0	2.5	110.9	-1.5	0.2	-1.0	-3.1	0.3	906	0.6	
Apr.	.	.	.	.	.	.	.	.	874	-3.9

Sources: Eurostat, except columns 21 and 22 (ECB calculation based on data from the ACEA, 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) Annual and quarterly figures are averages of monthly totals.

Table 5.3

European Commission Business and Consumer Surveys ¹⁾

1. Economic sentiment indicator, manufacturing industry and consumer surveys

(percentage balances ²⁾, unless otherwise indicated; seasonally adjusted)

	Economic sentiment indicator ³⁾ (index 1995 = 100)	Manufacturing industry					Consumer confidence indicator				
		Industrial confidence indicator				Capacity utilisation ⁴⁾ (percentages)	Total ⁵⁾	Financial situation over next 12 months	Economic situation over next 12 months	Unemployment situation over next 12 months	Savings over next 12 months
		Total ⁵⁾	Order books	Stocks of finished products	Production expectations						
	1	2	3	4	5	6	7	8	9	10	11
1999	101.4	-7	-16	11	7	82.6	-3	3	-4	11	1
2000	103.8	5	2	4	16	84.4	1	4	1	1	2
2001	100.8	-9	-15	14	1	82.9	-5	2	-10	14	2
2002	99.1	-11	-25	11	3	81.4	-11	-1	-12	26	-3
2002 Q1	99.2	-13	-26	13	-1	81.3	-10	0	-12	28	0
Q2	99.5	-10	-24	11	6	81.4	-8	-1	-9	22	-3
Q3	99.0	-11	-27	11	4	81.5	-10	-1	-11	26	-3
Q4	98.7	-10	-23	10	3	81.5	-14	-3	-15	30	-8
2003 Q1	98.2	-11	-24	10	0	81.1	-19	-5	-23	39	-9
2002 May	99.7	-9	-23	10	6	-	-8	-1	-8	22	-2
June	99.5	-10	-25	12	6	-	-8	0	-8	22	-3
July	99.0	-12	-27	11	2	81.2	-10	-1	-10	26	-4
Aug.	98.8	-12	-28	10	2	-	-11	-1	-12	27	-4
Sep.	99.2	-10	-26	12	7	-	-9	-1	-10	24	-2
Oct.	99.0	-10	-25	10	6	81.7	-12	-2	-12	27	-7
Nov.	98.7	-10	-22	10	3	-	-14	-4	-15	30	-7
Dec.	98.5	-10	-22	10	1	-	-16	-4	-19	33	-9
2003 Jan.	98.3	-11	-22	9	-1	81.3	-18	-5	-21	36	-9
Feb.	98.4	-11	-23	11	2	-	-19	-5	-23	39	-9
Mar.	97.8	-12	-26	10	-1	-	-21	-6	-26	42	-9
Apr.	98.1	-12	-27	10	0	80.8	-19	-5	-22	40	-9
May	98.0	-13	-27	10	-1	-	-20	-4	-23	43	-9

2. Construction industry, retail trade and services surveys

(percentage balances ²⁾, seasonally adjusted)

	Construction confidence indicator			Retail trade confidence indicator				Services confidence indicator			
	Total ⁵⁾	Order books	Employment expectations	Total ⁵⁾	Present business situation	Volume of stocks	Expected business situation	Total ⁵⁾	Business climate	Demand in recent months	Demand in the months ahead
	12	13	14	15	16	17	18	19	20	21	22
1999	-10	-17	-2	-7	-7	17	2	27	25	26	31
2000	-5	-13	3	-2	1	17	9	30	36	23	33
2001	-11	-16	-4	-7	-7	17	2	15	16	8	20
2002	-20	-28	-12	-16	-23	18	-9	1	-4	-6	13
2002 Q1	-16	-23	-9	-16	-22	20	-6	3	3	-14	21
Q2	-18	-24	-10	-18	-24	20	-9	5	1	1	14
Q3	-23	-32	-14	-17	-23	15	-11	-1	-5	-8	11
Q4	-24	-31	-16	-15	-21	16	-8	-4	-13	-4	4
2003 Q1	-21	-28	-14	-17	-24	17	-10	-5	-16	-11	11
2002 May	-17	-24	-9	-18	-24	21	-8	6	3	1	14
June	-18	-25	-11	-18	-23	18	-12	3	-3	1	10
July	-21	-31	-10	-17	-23	17	-11	0	-4	-7	10
Aug.	-25	-34	-16	-16	-22	14	-12	-2	-4	-12	11
Sep.	-23	-30	-15	-17	-25	15	-11	0	-6	-5	12
Oct.	-23	-32	-14	-16	-21	15	-11	-4	-13	-4	5
Nov.	-25	-32	-18	-14	-17	18	-7	-4	-13	-4	5
Dec.	-23	-30	-15	-16	-24	16	-7	-5	-13	-4	2
2003 Jan.	-22	-29	-15	-19	-29	18	-10	-4	-15	-12	14
Feb.	-21	-28	-13	-13	-17	14	-9	-4	-15	-8	10
Mar.	-21	-28	-14	-18	-25	18	-12	-7	-17	-13	9
Apr.	-21	-28	-14	-17	-24	17	-9	-4	-15	-2	5
May	-23	-29	-16	-14	-19	18	-6	-2	-12	0	6

Source: European Commission Business and Consumer Surveys.

1) Data refer to the Euro 12.

2) Difference between the percentages of respondents giving positive and negative replies.

3) The economic sentiment indicator is composed of the industrial, consumer, construction and retail trade confidence indicators; the industrial confidence indicator has a weight of 40% and the three other indicators have a weight of 20% each.

4) Data are collected in January, April, July and October each year. The quarterly figures shown are the average of two successive surveys. Annual data are derived from quarterly averages.

5) The confidence indicators are calculated as simple averages of the components shown; the assessment of stocks (columns 4 and 17) and unemployment (column 10) are used with inverted signs for the calculation of confidence indicators.

Table 5.4**Labour market indicators ¹⁾****1. Employment***(annual percentage changes, unless otherwise indicated; seasonally adjusted)*

	Whole economy		By employment status		By economic activity					
	Millions		Employees	Self-employed	Agriculture, hunting, forestry and fishing	Manufacturing, energy and mining	Construction	Trade, repairs, hotels and restaurants, transport and communication	Financial, real estate, renting and business services	Public administration, education, health and other services
Weight in the total ²⁾	100.0	100.0	84.2	15.8	4.7	19.3	7.0	25.2	14.2	29.6
	1	2	3	4	5	6	7	8	9	10
1998	122.335	1.8	1.9	0.9	-1.3	1.0	0.1	2.0	5.3	1.6
1999	124.584	1.8	2.3	-0.6	-2.5	-0.2	1.9	2.3	5.6	1.9
2000	127.346	2.2	2.5	0.8	-1.5	0.6	1.7	3.1	5.8	1.6
<i>Euro area enlargement</i>										
2001	133.077	1.4	1.6	0.2	-0.6	0.3	0.4	1.6	3.8	1.3
2002	133.655	0.4	0.6	-0.6	-2.0	-1.2	-1.1	0.7	1.9	1.4
2001 Q4	133.466	0.8	1.1	-0.4	-1.3	-0.5	-0.4	1.2	2.9	1.1
2002 Q1	133.598	0.7	0.9	-0.3	-2.0	-1.0	-0.8	1.5	2.2	1.4
Q2	133.639	0.5	0.7	-0.6	-1.9	-1.2	-1.0	0.9	2.0	1.4
Q3	133.638	0.3	0.5	-0.9	-1.8	-1.2	-1.4	0.3	1.7	1.5
Q4	133.746	0.2	0.4	-0.6	-2.2	-1.4	-1.3	0.2	1.6	1.4

2. Unemployment*(seasonally adjusted)*

	Total		By age ³⁾				By gender ⁴⁾			
			Adult		Youth		Male		Female	
	Millions	% of labour force	Millions	% of labour force	Millions	% of labour force	Millions	% of labour force	Millions	% of labour force
	11	12	13	14	15	16	17	18	19	20
1998	13.270	10.2	10.146	8.9	3.124	20.0	6.445	8.6	6.825	12.5
1999	12.247	9.3	9.431	8.2	2.815	18.0	5.901	7.8	6.345	11.4
2000	11.104	8.4	8.555	7.3	2.549	16.2	5.286	7.0	5.818	10.3
<i>Euro area enlargement</i>										
2001	11.062	8.0	8.535	7.0	2.527	15.7	5.313	6.7	5.749	9.7
2002	11.667	8.4	9.061	7.4	2.606	16.3	5.770	7.3	5.897	9.8
2002 Q1	11.402	8.2	8.836	7.2	2.566	16.0	5.577	7.0	5.824	9.8
Q2	11.603	8.3	8.995	7.3	2.608	16.2	5.724	7.2	5.879	9.8
Q3	11.748	8.4	9.130	7.4	2.618	16.3	5.833	7.4	5.915	9.9
Q4	11.918	8.5	9.273	7.5	2.645	16.6	5.949	7.5	5.970	9.9
2003 Q1	12.211	8.7	9.492	7.7	2.719	17.0	6.117	7.7	6.094	10.1
2002 Apr.	11.510	8.3	8.930	7.2	2.580	16.1	5.655	7.1	5.855	9.8
May	11.611	8.3	9.009	7.3	2.602	16.2	5.731	7.2	5.880	9.8
June	11.689	8.4	9.047	7.3	2.642	16.4	5.787	7.3	5.902	9.8
July	11.720	8.4	9.099	7.4	2.621	16.3	5.810	7.3	5.909	9.9
Aug.	11.747	8.4	9.128	7.4	2.619	16.3	5.834	7.4	5.913	9.9
Sep.	11.777	8.5	9.163	7.4	2.614	16.3	5.855	7.4	5.922	9.9
Oct.	11.833	8.5	9.213	7.5	2.620	16.4	5.893	7.4	5.940	9.9
Nov.	11.923	8.5	9.275	7.5	2.648	16.6	5.951	7.5	5.972	9.9
Dec.	11.999	8.6	9.333	7.5	2.666	16.7	6.002	7.6	5.997	10.0
2003 Jan.	12.107	8.7	9.410	7.6	2.697	16.9	6.060	7.6	6.047	10.0
Feb.	12.215	8.7	9.493	7.7	2.722	17.0	6.122	7.7	6.093	10.1
Mar.	12.310	8.8	9.573	7.7	2.737	17.1	6.169	7.7	6.141	10.2
Apr.	12.380	8.8	9.637	7.8	2.743	17.1	6.209	7.8	6.171	10.2

Sources: ECB calculations based on Eurostat data (columns 1 to 10) and Eurostat (columns 11 to 20).

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

2) In 2002.

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

4) Rates are expressed as a percentage of the labour force for the relevant gender.

3. Unit labour costs, compensation per employee and labour productivity

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

	Total		By economic activity					
	Index 1995=100 1	2	Agriculture, hunting, forestry and fishing 3	Manufacturing, energy and mining 4	Construction 5	Trade, repairs, hotels and restaurants, transport and communication 6	Financial, real estate renting and business services 7	Public administration, education, health and other services 8
Unit labour costs ¹⁾								
2000	104.3	1.3	1.6	-0.3	2.0	0.0	4.2	1.8
<i>Euro area enlargement</i>								
2001	107.2	2.7	3.5	2.0	3.9	1.9	2.7	3.1
2002	109.5	2.1	2.0	0.9	3.1	1.7	2.8	1.4
2001 Q4	108.7	3.2	3.4	3.5	3.5	2.8	2.5	3.1
2002 Q1	109.1	3.3	6.4	3.1	3.7	2.9	3.4	2.3
Q2	109.2	2.1	0.1	0.6	3.0	1.8	2.3	1.5
Q3	109.5	1.8	-0.9	0.5	2.8	1.2	2.6	1.2
Q4	110.1	1.3	2.5	-0.5	2.9	0.8	2.9	0.5
Compensation per employee								
2000	110.3	2.6	2.8	3.0	2.7	1.7	3.0	2.3
<i>Euro area enlargement</i>								
2001	113.7	2.8	2.7	2.7	2.9	2.8	1.5	3.3
2002	116.6	2.5	3.3	2.9	3.3	2.3	2.2	2.4
2001 Q4	114.9	2.9	3.6	2.7	3.6	2.9	1.6	3.7
2002 Q1	115.7	3.0	8.4	2.8	4.6	2.6	2.6	3.1
Q2	116.2	2.4	1.9	2.9	3.2	2.2	1.6	2.6
Q3	116.9	2.4	-0.2	3.1	3.0	2.2	2.0	2.3
Q4	117.6	2.3	3.3	3.0	2.5	2.2	2.4	1.8
Labour productivity ²⁾								
2000	105.7	1.3	1.2	3.3	0.6	1.7	-1.1	0.5
<i>Euro area enlargement</i>								
2001	106.1	0.1	-0.7	0.8	-1.0	1.0	-1.1	0.1
2002	106.5	0.4	1.3	2.0	0.2	0.6	-0.6	1.0
2001 Q4	105.7	-0.3	0.2	-0.8	0.1	0.2	-0.9	0.6
2002 Q1	106.0	-0.3	1.9	-0.3	0.9	-0.3	-0.7	0.8
Q2	106.4	0.3	1.9	2.2	0.2	0.4	-0.7	1.1
Q3	106.8	0.6	0.7	2.6	0.2	1.0	-0.6	1.1
Q4	106.8	1.0	0.8	3.6	-0.4	1.4	-0.4	1.2

4. Hourly labour cost indicators

(annual percentage changes, unless otherwise indicated)

	Total ³⁾		By component		By selected economic activity		
	Index (s.a.) 1995=100 9	10	Wages and salaries 11	Employers' social contributions 12	Manufacturing, energy and mining 13	Construction 14	Services 15
2000	109.9	3.2	3.4	2.3	3.2	3.9	3.0
<i>Euro area enlargement</i>							
2001	113.7	3.4	3.6	2.7	3.2	4.0	3.2
2002	117.7	3.5	3.6	3.3	3.4	4.1	3.5
2001 Q4	115.2	3.4	3.6	2.9	3.0	4.4	3.7
2002 Q1	116.3	4.0	4.2	3.4	3.8	5.0	4.0
Q2	117.2	3.3	3.3	3.3	3.0	3.7	3.4
Q3	118.2	3.4	3.4	3.2	3.2	3.9	3.3
Q4	119.2	3.5	3.5	3.4	3.5	3.7	3.2

Sources: ECB calculations based on Eurostat data (columns 1 to 8 and 15) and Eurostat (columns 9 to 14).

1) Compensation (at current prices) per employee divided by value added (at constant prices) per person employed.

2) Value added (at constant prices) per person employed.

3) Hourly labour costs for the whole economy, excluding agriculture, public administration, education, health and other services. 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; 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	
1999 Q1	4,675.4	318.6	4,075.8	1,239.1	1,464.6	1,306.2	66.0	133.4	147.6	243.9	
Q2	4,701.4	324.8	4,114.2	1,321.8	1,418.3	1,315.7	58.4	125.0	137.4	242.7	
Q3	4,712.6	328.3	4,112.8	1,324.6	1,416.5	1,313.1	58.7	133.3	138.2	238.6	
Q4	4,860.0	350.8	4,215.1	1,370.9	1,457.7	1,323.5	63.0	142.0	152.1	229.7	
2000 Q1	4,837.8	335.5	4,222.3	1,379.6	1,462.5	1,303.3	76.8	130.2	149.8	260.5	
Q2	4,894.7	342.0	4,256.9	1,409.7	1,485.7	1,282.6	78.9	146.0	149.8	247.1	
Q3	4,915.1	339.8	4,266.5	1,396.9	1,524.0	1,263.7	81.9	159.2	149.5	253.9	
Q4	5,030.6	348.4	4,361.6	1,464.4	1,542.4	1,269.1	85.6	164.5	156.1	230.1	
<i>Euro area enlargement</i>											
2001 Q1	5,138.1	336.3	4,494.1	1,446.1	1,620.9	1,314.6	112.6	150.3	157.4	259.6	
Q2	5,236.0	333.0	4,579.2	1,526.1	1,616.7	1,321.1	115.3	165.5	158.3	268.8	
Q3	5,224.7	309.6	4,609.0	1,547.9	1,605.2	1,333.7	122.2	147.8	158.2	265.6	
Q4	5,363.6	239.7	4,816.3	1,690.3	1,613.0	1,396.3	116.7	139.0	168.5	297.7	
2002 Q1	5,363.9	254.3	4,774.3	1,637.4	1,604.8	1,413.0	119.1	157.5	177.8	300.5	
Q2	5,447.5	285.8	4,827.6	1,703.6	1,593.8	1,412.5	117.6	155.0	179.1	277.7	
Q3	5,460.8	306.7	4,827.4	1,699.6	1,585.8	1,423.3	118.8	146.3	180.3	289.0	
Q4	5,630.8	341.2	4,964.8	1,790.2	1,593.2	1,469.6	111.9	136.4	188.4	.	
2003 Q1	.	327.1	4,946.6	1,759.1	1,572.7	1,509.3	105.5	170.9	.	.	

	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
1999 Q1	1,575.5	154.1	1,421.3	4,044.3	2,425.8	1,618.5	194.9	2,686.3	2,403.5	282.8
Q2	1,488.2	144.3	1,343.9	4,166.4	2,448.9	1,717.5	211.4	2,755.8	2,468.9	286.9
Q3	1,493.6	133.1	1,360.5	4,083.1	2,358.2	1,724.9	210.0	2,798.0	2,507.2	290.8
Q4	1,559.2	166.3	1,392.9	4,823.8	3,003.8	1,819.9	204.2	2,943.1	2,649.0	294.1
2000 Q1	1,549.0	174.3	1,374.7	4,888.8	2,970.4	1,918.4	214.9	3,061.4	2,760.6	300.8
Q2	1,580.2	180.4	1,399.8	4,801.1	2,908.8	1,892.2	204.6	3,108.1	2,803.5	304.7
Q3	1,663.0	198.7	1,464.3	4,843.9	2,938.4	1,905.5	204.1	3,163.0	2,854.5	308.5
Q4	1,746.1	216.6	1,529.5	4,867.5	3,009.2	1,858.3	200.1	3,192.8	2,885.3	307.5
<i>Euro area enlargement</i>										
2001 Q1	1,855.1	276.4	1,578.7	4,544.8	2,725.2	1,819.6	224.0	3,243.6	2,930.1	313.4
Q2	1,852.4	237.0	1,615.5	4,513.4	2,664.6	1,848.8	232.3	3,302.4	2,986.8	315.7
Q3	1,887.0	233.4	1,653.6	4,023.8	2,296.2	1,727.7	253.1	3,277.6	2,958.2	319.4
Q4	1,917.7	225.0	1,692.7	4,375.8	2,553.2	1,822.5	260.1	3,370.8	3,050.1	320.7
2002 Q1	1,974.9	265.7	1,709.2	4,464.3	2,610.2	1,854.2	290.7	3,406.3	3,076.6	329.7
Q2	1,996.5	229.7	1,766.8	4,078.9	2,321.8	1,757.1	292.8	3,425.4	3,091.9	333.5
Q3	2,045.6	253.5	1,792.0	3,472.4	1,753.5	1,718.9	309.9	3,452.1	3,115.5	336.6
Q4	2,071.0	255.4	1,815.5	3,478.9	1,777.2	1,701.7	308.1	3,506.0	3,168.2	337.8
2003 Q1	.	.	.	.	.	.	.	.	.	.

Source: ECB.

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

2) Most of the financial asset and liability categories defined in the ESA 95 are covered. Financial derivatives, loans granted by general government and non-financial corporations, unquoted shares and other 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.

2. Main liabilities ¹⁾

	Loans taken from euro area MFIs and other financial corporations by											Memo: loans taken from banks outside the euro area by non-banks ²⁾
	Total	Taken from euro area MFIs	General government			Non-financial corporations			Households ³⁾			
			Total	Short-term	Long-term ⁴⁾	Total	Short-term	Long-term	Total	Short-term	Long-term	
1	2	3	4	5	6	7	8	9	10	11	12	
1999 Q1	6,250.2	5,682.6	900.5	36.0	864.5	2,590.9	919.8	1,671.1	2,758.8	250.5	2,508.4	156.8
Q2	6,413.8	5,817.3	897.9	38.6	859.3	2,682.9	962.5	1,720.4	2,833.0	254.2	2,578.8	183.3
Q3	6,481.7	5,886.4	883.1	37.5	845.5	2,697.9	942.0	1,755.9	2,900.8	253.9	2,646.8	191.4
Q4	6,654.3	6,039.0	898.5	41.7	856.7	2,789.7	977.8	1,811.9	2,966.1	262.2	2,703.9	201.4
2000 Q1	6,799.2	6,155.9	889.1	40.8	848.3	2,888.2	1,036.0	1,852.3	3,021.9	263.6	2,758.2	221.1
Q2	6,946.5	6,261.7	884.0	41.6	842.3	2,987.7	1,088.0	1,899.7	3,074.9	272.3	2,802.6	219.7
Q3	7,091.7	6,379.2	864.5	39.6	825.0	3,095.7	1,149.7	1,946.0	3,131.5	273.9	2,857.6	252.3
Q4	7,255.3	6,500.0	880.3	41.7	838.6	3,194.4	1,165.2	2,029.2	3,180.6	278.9	2,901.7	245.2
<i>Euro area enlargement</i>												
2001 Q1	7,452.7	6,671.1	896.3	41.8	854.5	3,321.6	1,243.2	2,078.4	3,234.8	278.6	2,956.2	257.3
Q2	7,558.0	6,761.6	880.4	42.1	838.3	3,393.3	1,265.5	2,127.8	3,284.3	284.6	2,999.7	279.2
Q3	7,629.9	6,804.6	874.2	45.1	829.1	3,433.6	1,243.6	2,190.1	3,322.1	280.1	3,042.0	249.7
Q4	7,749.0	6,897.1	901.3	50.6	850.7	3,474.0	1,226.7	2,247.2	3,373.7	281.5	3,092.3	268.7
2002 Q1	7,823.2	6,959.9	905.6	53.3	852.3	3,508.8	1,223.1	2,285.8	3,408.8	277.1	3,131.7	285.5
Q2	7,907.3	7,017.0	878.5	53.5	825.0	3,549.0	1,207.9	2,341.1	3,479.8	287.8	3,192.1	252.1
Q3	7,946.9	7,052.4	869.6	54.8	814.8	3,554.6	1,189.6	2,365.1	3,522.7	283.8	3,238.9	247.6
Q4	8,066.1	7,131.3	884.6	60.7	823.9	3,597.7	1,172.7	2,425.0	3,583.8	289.2	3,294.6	.
2003 Q1	.	7,172.4	.	.	.	.	.	.	.	.	.	.

	Securities other than shares issued by								Quoted shares issued by non-financial corporations	Deposit liabilities of central government	Pension fund reserves of non- financial corporations
	Total	General government			Non-financial corporations						
		Total	Short-term	Long-term	Total	Short-term	Long-term				
13	14	15	16	17	18	19	20	21	22		
1999 Q1	3,967.8	3,634.9	465.8	3,169.1	333.0	64.3	268.7	2,966.8	146.9	219.6	
Q2	3,952.9	3,612.1	458.2	3,153.8	340.8	66.6	274.2	3,088.9	136.6	221.9	
Q3	3,931.9	3,577.4	448.1	3,129.2	354.6	75.0	279.6	3,014.3	137.6	224.2	
Q4	3,898.3	3,533.3	419.7	3,113.6	364.9	78.3	286.7	4,194.6	149.8	226.5	
2000 Q1	3,953.7	3,586.0	425.1	3,160.9	367.7	78.8	289.0	4,534.3	147.6	228.4	
Q2	3,987.5	3,607.7	425.6	3,182.1	379.8	88.9	290.9	4,379.4	147.6	230.2	
Q3	4,020.2	3,621.0	422.0	3,199.0	399.2	95.6	303.6	4,221.0	147.2	232.1	
Q4	4,066.7	3,647.8	400.5	3,247.2	418.9	101.1	317.9	4,068.3	153.7	233.9	
<i>Euro area enlargement</i>											
2001 Q1	4,243.5	3,787.5	429.8	3,357.7	456.0	112.1	343.9	3,720.8	154.7	236.1	
Q2	4,292.7	3,811.8	441.6	3,370.2	481.0	123.1	357.9	3,678.3	155.2	238.3	
Q3	4,377.7	3,879.7	450.3	3,429.4	498.1	137.1	360.9	3,033.6	155.4	240.5	
Q4	4,389.9	3,874.6	434.3	3,440.3	515.3	136.0	379.4	3,526.9	165.5	241.4	
2002 Q1	4,445.7	3,925.5	446.7	3,478.7	520.2	141.3	378.9	3,546.2	174.8	243.8	
Q2	4,535.9	4,021.6	481.7	3,539.9	514.2	126.9	387.3	3,034.8	176.1	246.2	
Q3	4,647.4	4,119.3	480.0	3,639.3	528.0	134.4	393.6	2,288.9	177.2	248.6	
Q4	4,655.7	4,124.5	480.1	3,644.4	531.2	140.6	390.5	2,396.2	185.2	251.1	
2003 Q1	.	.	.	.	.	.	.	2,135.1	.	.

Source: ECB.

1) Most of the financial asset and liability categories defined in the ESA 95 are covered. Financial derivatives, loans granted by general government and non-financial corporations, unquoted shares and other 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) Including non-profit institutions serving households.

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

Table 6.1 (cont'd)
Financial investment and financing of non-financial sectors ¹⁾
(EUR billions; not seasonally adjusted)
Transactions
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	
1999 Q1	-0.2	-5.2	2.4	-12.6	0.7	26.9	-12.5	-4.2	6.8	23.4	
Q2	21.5	6.2	33.9	81.3	-49.1	9.3	-7.6	-8.4	-10.2	-4.3	
Q3	12.6	3.5	0.0	3.5	-1.2	-2.6	0.3	8.3	0.9	-2.8	
Q4	137.7	22.3	94.2	44.2	35.7	10.2	4.2	8.7	12.5	-14.2	
2000 Q1	-29.9	-15.3	-0.4	6.1	0.3	-20.5	13.7	-11.9	-2.2	26.1	
Q2	52.4	6.7	30.0	31.9	17.8	-21.8	2.1	15.8	0.0	-12.8	
Q3	5.2	-2.2	-5.5	-17.4	27.7	-18.7	2.9	13.3	-0.3	-1.7	
Q4	129.9	8.6	109.5	71.5	28.3	5.8	3.8	5.3	6.6	-16.7	
<i>Euro area enlargement</i>											
2001 Q1	86.5	-19.8	120.6	-23.8	72.6	44.9	26.9	-15.6	1.2	13.6	
Q2	94.7	-3.3	81.8	77.1	-4.3	6.3	2.7	15.1	0.9	4.8	
Q3	7.1	-23.4	48.3	25.4	3.0	13.0	7.0	-17.7	-0.1	3.4	
Q4	141.5	-69.9	209.9	142.3	10.6	62.5	-5.4	-8.8	10.3	12.2	
2002 Q1	2.7	14.6	-40.2	-53.4	-4.1	14.9	2.3	19.0	9.3	1.9	
Q2	103.6	31.5	73.2	72.2	0.9	1.7	-1.7	-2.5	1.3	-9.2	
Q3	10.2	20.9	0.6	-4.4	-7.3	10.6	1.7	-12.5	1.2	9.1	
Q4	169.0	34.5	136.3	83.8	12.8	46.6	-6.9	-9.9	8.1	.	
2003 Q1	.	7.6	-15.8	-28.9	-20.6	40.0	-6.4	28.9	.	.	

	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
1999 Q1	52.6	4.3	48.3	105.3	1.7	103.5	4.3	63.9	58.1	5.8
Q2	-41.1	-12.2	-28.9	152.2	67.5	84.7	15.6	53.2	49.0	4.2
Q3	-1.7	-12.5	10.8	87.6	47.5	40.1	-2.0	56.0	51.9	4.1
Q4	67.8	32.1	35.7	-17.5	13.5	-31.0	-12.6	74.3	70.9	3.5
2000 Q1	5.7	19.9	-14.2	-16.9	-64.8	47.8	13.5	80.6	73.8	6.8
Q2	42.6	5.3	37.3	67.8	48.5	19.3	-7.2	56.9	53.0	3.9
Q3	75.7	21.3	54.4	105.8	98.2	7.6	-1.2	57.0	53.0	3.9
Q4	17.6	6.7	10.9	179.6	141.1	38.5	-5.0	60.4	61.4	-1.0
<i>Euro area enlargement</i>										
2001 Q1	100.0	60.5	39.5	45.1	-2.2	47.3	22.1	61.9	56.0	5.9
Q2	-2.3	-34.1	31.9	41.0	34.4	6.6	3.4	56.6	54.3	2.2
Q3	31.9	-4.3	36.3	57.5	31.1	26.4	14.1	51.8	48.1	3.8
Q4	3.3	-12.9	16.2	-0.7	-24.4	23.6	3.0	60.2	58.9	1.3
2002 Q1	63.4	36.5	26.9	47.5	5.0	42.5	26.4	70.2	61.1	9.1
Q2	-10.0	-42.2	32.2	25.2	12.2	13.1	-1.5	51.4	47.6	3.7
Q3	38.9	24.9	14.0	45.2	21.7	23.5	13.6	51.4	48.2	3.2
Q4	-2.5	-6.5	4.1	-34.9	-45.5	10.6	-4.3	57.2	56.0	1.2
2003 Q1	.	.	.	.	.	.	.	.	.	.

Source: ECB.

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

2) Most of the financial asset and liability categories defined in the ESA 95 are covered. Financial derivatives, loans granted by general government and non-financial corporations, unquoted shares and other 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.

2. Main liabilities ¹⁾

	Loans taken from euro area MFIs and other financial corporations by											Memo: loans taken from banks outside the euro area by non-banks ²⁾	
	Total	Taken from euro area MFIs	General government			Non-financial corporations			Households ³⁾				
			Total	Short-term	Long-term ⁴⁾	Total	Short-term	Long-term	Total	Short-term	Long-term		
	1	2	3	4	5	6	7	8	9	10	11	12	
1999 Q1	141.2	127.3	-8.6	0.1	-8.8	47.9	34.9	13.1	101.9	15.0	86.9	1.7	
Q2	162.3	133.1	-4.1	2.7	-6.7	89.3	41.0	48.4	77.0	3.8	73.2	23.9	
Q3	70.5	71.5	-14.7	-1.1	-13.6	17.4	-16.7	34.1	67.7	-0.3	68.1	8.4	
Q4	171.2	146.3	15.0	4.2	10.9	87.9	33.6	54.2	68.3	8.4	59.9	-7.0	
2000 Q1	141.4	108.8	-7.9	-0.9	-7.0	91.3	54.7	36.6	58.0	1.5	56.5	15.1	
Q2	162.9	118.4	-5.5	0.9	-6.4	112.6	61.5	51.0	55.8	9.7	46.1	-0.8	
Q3	132.8	91.6	-15.8	-2.1	-13.7	96.8	53.4	43.5	51.7	-0.1	51.8	23.2	
Q4	188.0	140.2	16.1	2.2	13.9	119.3	20.2	99.0	52.7	5.3	47.4	1.9	
					<i>Euro area enlargement</i>								
2001 Q1	156.4	137.2	-3.6	-0.5	-3.2	106.8	67.0	39.8	53.2	-0.3	53.6	9.2	
Q2	109.2	88.0	-16.2	0.3	-16.5	68.3	20.7	47.6	57.1	6.0	51.1	16.8	
Q3	88.5	57.9	-5.7	2.9	-8.7	55.3	-15.9	71.2	38.9	-4.2	43.1	-21.4	
Q4	118.6	92.4	26.2	5.5	20.8	40.5	-19.1	59.6	51.8	1.4	50.4	4.2	
2002 Q1	74.9	61.9	4.2	2.7	1.5	28.9	-5.8	34.7	41.8	-4.9	46.7	15.8	
Q2	103.3	83.0	-25.6	0.2	-25.8	58.3	-3.9	62.2	70.5	10.9	59.6	-18.2	
Q3	38.3	34.2	-9.1	1.3	-10.4	1.6	-17.6	19.2	45.8	-4.0	49.8	-6.1	
Q4	134.4	98.7	15.8	5.9	9.9	53.0	-11.9	64.9	65.6	6.3	59.3	.	
2003 Q1	.	60.9	.	.	.	.	.	.	.	.	.	.

	Securities other than shares issued by							Quoted shares issued by non-financial corporations	Deposit liabilities of central government	Pension fund reserves of non- financial corporations	
	Total	General government			Non-financial corporations						
		Total	Short-term	Long-term	Total	Short-term	Long-term				
	13	14	15	16	17	18	19	20	21	22	
1999 Q1	74.0	60.6	1.2	59.4	13.4	10.4	3.0	10.9	6.6	2.8	
Q2	39.0	29.0	-7.7	36.7	10.0	2.3	7.8	34.7	-10.3	2.8	
Q3	56.5	38.6	-10.0	48.6	17.9	8.2	9.7	34.7	1.0	2.8	
Q4	-12.2	-19.8	-27.9	8.1	7.6	3.4	4.1	42.1	12.1	2.8	
2000 Q1	62.0	61.0	10.9	50.1	1.0	0.5	0.5	20.7	-2.2	2.8	
Q2	38.9	23.5	-1.3	24.8	15.4	10.2	5.2	28.9	0.0	2.8	
Q3	48.8	25.8	-2.3	28.1	23.0	7.0	16.0	68.8	-0.4	2.8	
Q4	-0.7	-20.2	-27.4	7.2	19.6	6.5	13.1	55.0	6.4	2.8	
					<i>Euro area enlargement</i>						
2001 Q1	75.1	37.8	32.5	5.3	37.3	11.5	25.8	52.4	1.1	3.1	
Q2	85.1	59.4	10.7	48.6	25.7	11.6	14.1	45.0	0.4	3.1	
Q3	47.9	29.6	8.8	20.8	18.3	13.9	4.3	10.2	0.2	3.1	
Q4	7.1	-8.5	-22.2	13.8	15.6	-1.8	17.4	7.3	10.1	1.8	
2002 Q1	102.6	93.0	21.7	71.3	9.7	5.6	4.1	9.4	9.3	3.3	
Q2	59.7	62.0	33.9	28.1	-2.3	-15.2	12.9	4.7	1.3	3.3	
Q3	56.5	46.0	-0.9	46.9	10.4	7.7	2.8	-0.3	1.1	3.8	
Q4	2.3	-0.7	-8.4	7.7	3.0	6.1	-3.2	-6.1	8.1	2.5	
2003 Q1	.	.	.	.	.	.	.	.	.	.

Source: ECB.

1) Most of the financial asset and liability categories defined in the ESA 95 are covered. Financial derivatives, loans granted by general government and non-financial corporations, unquoted shares and other 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) Including non-profit institutions serving households.

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

Table 6.3**Saving, investment and financing ¹⁾***(EUR billions, unless otherwise indicated)***1. All sectors in the euro area ²⁾**

	Net acquisition of non-financial assets					Net acquisition of financial assets							
	Total	Gross fixed capital formation	Consumption of fixed capital (-)	Changes in inventories ³⁾	Non-produced assets	Total	Monetary gold and SDRs	Currency and deposits	Securities other than shares ⁴⁾	Loans	Shares and other equity	Insurance technical reserves	Other investment (net) ⁵⁾
	1	2	3	4	5	6	7	8	9	10	11	12	13
1995	368.4	1,093.3	-751.7	26.6	0.1	1,600.8	0.7	500.7	223.0	422.0	164.5	202.6	87.4
1996	340.9	1,122.7	-783.9	1.7	0.4	1,730.1	-3.0	396.2	398.1	383.0	315.0	195.5	45.4
1997	353.2	1,139.5	-797.1	10.8	0.1	1,917.6	-0.2	394.4	332.3	449.9	485.6	223.7	32.0
1998	412.5	1,203.6	-823.6	32.3	0.2	2,369.3	11.0	430.7	360.9	523.1	816.1	216.0	11.5
1999	448.0	1,291.8	-863.7	19.7	0.1	3,034.4	1.3	557.7	435.9	880.8	905.0	255.1	-1.2
2000	487.1	1,389.0	-913.1	27.8	-16.6	2,764.0	1.3	350.0	241.4	796.0	1,120.9	257.7	-3.3
<i>Euro area enlargement</i>													
2001	456.1	1,437.3	-973.6	-8.3	0.7	2,544.0	-0.5	587.6	405.3	705.3	597.2	238.3	10.7

	Changes in net worth ⁶⁾				Net incurrence of liabilities						
	Total	Gross saving	Consumption of fixed capital (-)	Net capital transfers receivable	Total	Currency and deposits	Securities other than shares ⁴⁾	Loans	Shares and other equity	Insurance technical reserves	
	14	15	16	17	18	19	20	21	22	23	
1995	413.0	1,159.8	-751.7	5.0	1,556.1	495.4	277.7	437.2	139.8	206.0	
1996	410.7	1,190.0	-783.9	4.6	1,660.3	472.3	378.2	335.3	278.2	196.3	
1997	456.1	1,241.8	-797.1	11.4	1,814.7	511.6	319.0	378.6	375.6	229.9	
1998	486.5	1,299.1	-823.6	11.1	2,295.4	648.4	324.2	465.5	635.7	221.5	
1999	498.3	1,352.0	-863.7	10.0	2,984.1	929.3	496.2	736.2	557.7	264.7	
2000	514.3	1,419.4	-913.1	8.0	2,736.8	531.4	414.0	808.8	725.6	257.1	
<i>Euro area enlargement</i>											
2001	483.6	1,449.4	-973.6	7.7	2,516.5	676.1	476.7	579.8	533.4	250.5	

2. Non-financial corporations

	Net acquisition of non-financial assets			Net acquisition of financial assets					Changes in net worth ⁶⁾		Net incurrence of liabilities			
	Total	Gross fixed capital formation	Consumption of fixed capital (-)	Total	Currency and deposits	Securities other than shares ⁴⁾	Loans	Shares and other equity	Total	Gross saving	Total	Securities other than shares ⁴⁾	Loans	Shares and other equity
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1995	155.0	569.8	-438.7	255.4	34.7	10.1	40.0	64.7	270.4	531.1	140.0	-87.3	126.0	90.6
1996	136.3	589.4	-454.8	267.3	54.2	-12.9	55.1	87.5	126.2	538.1	277.3	7.0	143.8	119.0
1997	157.5	615.2	-469.3	245.3	25.3	-13.6	46.3	95.9	113.6	546.1	289.2	12.1	154.5	113.0
1998	202.4	660.3	-487.9	433.5	54.9	-6.9	96.6	200.9	150.6	590.3	485.3	23.8	252.7	198.2
1999	221.6	708.2	-508.8	613.5	28.4	87.0	169.8	308.3	111.8	571.6	723.3	48.9	422.1	235.7
2000	319.2	774.4	-543.2	817.4	70.3	93.8	167.9	425.7	94.0	591.0	1,042.6	58.9	546.8	429.0
<i>Euro area enlargement</i>														
2001	216.9	798.9	-577.3	594.9	83.0	73.5	137.8	225.9	69.4	594.2	742.4	96.9	324.3	309.2

3. Households ⁷⁾

	Net acquisition of non-financial assets			Net acquisition of financial assets					Changes in net worth ⁶⁾		Net incurrence of liabilities		Memo:	
	Total	Gross fixed capital formation	Consumption of fixed capital (-)	Total	Currency and deposits	Securities other than shares ⁴⁾	Shares and other equity	Insurance technical reserves	Total	Gross saving	Total	Loans	Disposable income	Gross saving ratio ⁸⁾
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1995	167.8	351.6	-186.4	394.5	190.1	82.5	0.8	180.1	425.5	606.7	136.9	135.8	3,604.5	16.8
1996	164.4	361.8	-198.9	433.4	146.6	22.7	94.4	190.9	436.4	620.1	161.3	160.1	3,762.9	16.5
1997	160.2	353.7	-194.7	422.1	70.4	-18.3	195.0	217.4	413.8	589.1	168.5	167.1	3,789.7	15.5
1998	168.9	363.7	-198.1	427.5	95.7	-117.6	289.6	210.9	401.1	568.0	195.4	194.0	3,898.9	14.6
1999	177.5	392.5	-212.5	456.2	118.2	-15.8	196.7	241.6	386.8	555.6	246.9	245.4	4,062.6	13.7
2000	185.8	413.0	-219.9	403.1	53.1	35.1	134.2	251.7	383.5	561.5	205.5	203.8	4,236.1	13.3
<i>Euro area enlargement</i>														
2001	181.2	422.6	-239.6	404.5	179.5	50.0	59.0	226.2	415.9	612.1	169.8	167.9	4,531.2	13.5

Source: ECB.

1) Non-consolidated data.

2) All sectors comprise general government (S.13), non-financial corporations (S.11), financial corporations (S.12) and households (S.14) including non-profit institutions serving households (S.15).

3) Including net acquisition of valuables.

4) Excluding financial derivatives.

5) Financial derivatives, other accounts receivable/payable and statistical discrepancies.

6) Arising from saving and net capital transfers receivable, after allowance for consumption of fixed capital (-).

7) Including non-profit institutions serving households.

8) Gross saving as a percentage of disposable income.

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

Table 7.1

Revenue, expenditure and deficit / surplus ¹⁾

(as a percentage of GDP)

1. Euro area – revenue

	Total	Current revenue					Indirect taxes	Received by EU institutions	Social contributions	Employers	Employees	Sales	Capital revenue	Capital taxes	Memo: fiscal burden ²⁾
		Direct taxes	Households	Corporations	3	4										5	6	7	8	9	10	11	12	13	14
1993	48.0	47.5	12.1	9.8	2.0	13.2	0.8	17.5	8.7	5.6	2.5	0.5	0.3	43.1	
1994	47.6	47.1	11.6	9.3	1.9	13.4	0.8	17.5	8.5	5.7	2.5	0.4	0.2	42.8	
1995	47.2	46.6	11.6	9.2	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	9.4	2.3	13.4	0.8	17.6	8.7	5.6	2.5	0.5	0.3	43.3	
1997	48.3	47.6	12.2	9.3	2.5	13.5	0.7	17.6	8.8	5.6	2.5	0.7	0.4	43.7	
1998	47.7	47.2	12.4	9.6	2.5	14.1	0.7	16.5	8.5	5.0	2.5	0.5	0.3	43.3	
1999	48.2	47.7	12.8	9.8	2.6	14.3	0.6	16.4	8.5	5.0	2.5	0.5	0.3	43.8	
2000	47.8	47.3	13.0	10.0	2.7	14.2	0.6	16.2	8.4	4.9	2.4	0.5	0.3	43.6	
<i>Euro area enlargement</i>															
2001	47.1	46.6	12.6	9.8	2.5	13.9	0.6	16.0	8.4	4.8	2.3	0.5	0.3	42.8	
2002	46.6	46.0	12.1	9.5	2.4	13.8	0.5	16.0	8.4	4.7	2.3	0.6	0.3	42.3	

2. Euro area – expenditure

	Total	Current expenditure								Capital expenditure	Investment	Capital transfers	Paid by EU institutions	Memo: primary expenditure ⁴⁾
		Total	Compensation of employees	Intermediate consumption	Interest	Current transfers	Social payments ³⁾	Subsidies	Paid by EU institutions					
1993	53.7	49.2	11.6	5.1	5.9	26.6	22.9	2.5	0.6	4.6	3.1	1.6	0.1	47.9
1994	52.7	48.3	11.3	5.0	5.5	26.5	23.0	2.4	0.6	4.3	2.9	1.5	0.0	47.2
1995	52.2	47.7	11.2	4.8	5.7	26.1	22.9	2.2	0.6	4.5	2.7	1.8	0.1	46.5
1996	52.3	48.3	11.2	4.8	5.7	26.6	23.3	2.2	0.6	4.0	2.6	1.4	0.0	46.6
1997	50.9	47.2	11.0	4.7	5.1	26.3	23.2	2.1	0.6	3.7	2.4	1.3	0.1	45.8
1998	50.0	46.0	10.7	4.6	4.7	26.0	22.7	2.0	0.5	3.9	2.4	1.5	0.1	45.3
1999	49.5	45.4	10.7	4.7	4.2	25.8	22.6	2.0	0.5	4.0	2.5	1.5	0.1	45.3
2000	48.7	44.8	10.5	4.7	4.0	25.5	22.3	1.9	0.5	3.9	2.5	1.4	0.0	44.7
<i>Euro area enlargement</i>														
2001	48.7	44.6	10.5	4.7	4.0	25.4	22.3	1.9	0.5	4.2	2.5	1.6	0.0	44.8
2002	48.8	44.8	10.6	4.8	3.7	25.7	22.8	1.8	0.5	4.0	2.4	1.6	0.0	45.1

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

	Deficit (-) / surplus (+)					Primary deficit (-) / surplus (+)	Government consumption ⁵⁾							
	Total	Central government	State government	Local government	Social security funds		Total	Compensation of employees	Intermediate consumption	Transfers in kind via market producers	Consumption of fixed capital	Sales (minus)	Government collective consumption	Government individual consumption
1993	-5.7	-5.0	-0.4	-0.2	-0.1	0.2	21.2	11.6	5.1	5.0	2.0	-2.5	9.0	12.2
1994	-5.1	-4.4	-0.5	-0.2	0.0	0.4	20.8	11.3	5.0	5.1	1.9	-2.5	8.7	12.1
1995	-5.1	-4.2	-0.5	-0.1	-0.3	0.6	20.5	11.2	4.8	5.1	1.9	-2.5	8.6	11.9
1996	-4.3	-3.6	-0.4	0.0	-0.2	1.4	20.6	11.2	4.8	5.2	1.9	-2.5	8.6	12.0
1997	-2.6	-2.3	-0.4	0.1	0.0	2.5	20.4	11.0	4.7	5.1	1.9	-2.5	8.4	11.9
1998	-2.3	-2.2	-0.3	0.1	0.0	2.4	20.0	10.7	4.6	5.1	1.8	-2.5	8.2	11.8
1999	-1.3	-1.6	-0.1	0.1	0.4	2.9	20.0	10.7	4.7	5.1	1.8	-2.5	8.2	11.8
2000	-1.0	-1.4	-0.1	0.1	0.4	3.1	20.0	10.5	4.7	5.2	1.8	-2.4	8.1	11.9
<i>Euro area enlargement</i>														
2001	-1.6	-1.6	-0.4	0.0	0.3	2.3	20.0	10.5	4.7	5.2	1.8	-2.3	8.1	11.9
2002	-2.3	-1.9	-0.5	-0.1	0.2	1.5	20.3	10.6	4.8	5.3	1.8	-2.3	8.1	12.2

4. Euro area countries – deficit (-) / surplus (+) ⁶⁾

	BE	DE	GR	ES	FR	IE	IT	LU	NL	AT	PT	FI
	1	2	3	4	5	6	7	8	9	10	11	12
1999	-0.5	-1.5	-1.8	-1.2	-1.8	2.3	-1.7	3.5	0.7	-2.3	-2.8	2.0
2000	0.1	1.1	-1.9	-0.8	-1.4	4.3	-0.6	6.1	2.2	-1.5	-2.8	6.9
2001	0.4	-2.8	-1.4	-0.1	-1.5	1.1	-2.6	6.4	0.1	0.3	-4.2	5.1
2002	0.0	-3.6	-1.2	-0.1	-3.1	-0.1	-2.3	2.6	-1.1	-0.6	-2.7	4.7

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

1) Revenue, expenditure and deficit / surplus based on the ESA 95, but the figures exclude proceeds from the sale of UMTS (Universal Mobile Telecommunications Systems) licences in 2000 (the euro area deficit / surplus including those proceeds is equal to 0.1). 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.

6) Including proceeds from the sale of UMTS licences.

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	MFIs	Other financial corporations	Other sectors	
1	2	3	4	5	6	7	8	9	10	
1993	67.3	2.7	17.0	10.0	37.6	52.5	27.6	8.8	16.2	14.8
1994	70.0	2.9	16.1	10.3	40.6	55.8	29.8	10.0	16.0	14.2
1995	74.2	2.9	17.7	9.9	43.8	58.3	30.5	11.0	16.8	15.9
1996	75.4	2.9	17.2	9.9	45.5	58.9	30.3	13.2	15.4	16.5
1997	74.9	2.8	16.3	8.9	46.8	56.9	29.0	14.5	13.4	17.9
1998	73.2	2.8	15.1	7.9	47.3	53.4	27.0	16.3	10.2	19.8
1999	72.1	2.9	14.2	6.9	48.1	49.8	25.2	14.9	9.7	22.3
2000	69.6	2.7	13.0	6.2	47.6	45.9	22.8	13.3	9.8	23.6
<i>Euro area enlargement</i>										
2001	69.2	2.6	12.5	6.3	47.8	44.6	22.5	12.5	9.6	24.6
2002	69.1	2.5	11.8	6.7	48.0	43.4	21.7	12.1	9.5	25.7

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

	Total	Issued by ⁴⁾				Original maturity			Residual maturity			Currency		
		Central government	State government	Local government	Social security funds	Up to 1 year	Over 1 year	Variable interest rate	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Euro or participating currency ⁵⁾	Non-domestic currency	Other currencies
1993	67.3	55.2	5.2	6.3	0.6	11.9	55.4	6.6	18.4	24.4	24.4	65.6	2.9	1.7
1994	70.0	57.9	5.4	6.1	0.5	11.2	58.8	7.4	16.5	26.8	26.7	68.1	3.0	1.9
1995	74.2	61.7	5.7	6.0	0.8	10.6	63.6	6.8	17.6	26.4	30.2	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	25.4	30.8	73.5	2.7	1.9
1997	74.9	62.3	6.3	5.6	0.6	8.8	66.0	6.0	18.6	25.4	30.8	72.8	2.8	2.0
1998	73.2	61.1	6.3	5.4	0.4	7.7	65.4	5.5	16.4	26.1	30.7	71.4	3.2	1.7
1999	72.1	60.2	6.2	5.3	0.3	6.5	65.6	5.0	14.4	26.9	30.7	70.2	-	1.9
2000	69.6	58.1	6.1	5.1	0.3	5.7	63.8	4.4	14.3	27.6	27.7	67.7	-	1.9
<i>Euro area enlargement</i>														
2001	69.2	57.8	6.2	4.9	0.3	6.0	63.2	3.2	14.6	26.3	28.3	67.5	-	1.8
2002	69.1	57.5	6.4	4.8	0.3	6.2	62.8	3.2	15.7	24.8	28.5	67.5	-	1.6

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
1999	114.9	61.2	105.1	63.1	58.5	49.3	114.9	6.0	63.1	67.5	54.3	47.0
2000	109.6	60.2	106.2	60.5	57.2	39.3	110.6	5.6	55.8	66.8	53.3	44.5
2001	108.5	59.5	107.0	56.9	56.8	36.8	109.5	5.6	52.8	67.3	55.6	43.8
2002	105.4	60.8	104.9	54.0	59.1	34.0	106.7	5.7	52.6	67.9	58.0	42.7

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
1993	8.0	7.5	0.3	0.1	0.1	0.2	1.2	0.1	6.5	3.6	2.0	1.3	4.4
1994	6.0	5.2	0.2	0.7	0.0	0.4	-0.1	0.9	4.9	5.9	3.6	1.7	0.2
1995	7.8	5.5	0.2	2.2	-0.2	0.2	2.3	0.0	5.2	5.3	2.2	1.5	2.4
1996	3.8	4.2	-0.2	0.1	-0.3	0.1	0.1	0.4	3.2	2.6	0.8	2.6	1.2
1997	2.3	2.4	0.2	-0.2	0.0	0.0	-0.2	-0.6	3.1	0.2	-0.1	1.8	2.0
1998	1.7	1.9	-0.2	0.0	0.0	0.1	-0.4	-0.6	2.6	-1.0	-0.8	2.4	2.6
1999	1.7	1.4	0.3	0.1	0.0	0.2	-0.4	-0.7	2.6	-1.5	-0.7	-0.7	3.2
2000	0.9	0.8	0.1	-0.1	0.0	0.0	-0.5	-0.3	1.7	-1.5	-1.3	-0.9	2.4
<i>Euro area enlargement</i>													
2001	1.7	1.7	0.0	0.0	0.0	0.0	-0.2	0.4	1.4	0.2	0.1	-0.1	1.5
2002	2.0	2.5	-0.1	-0.4	0.0	0.0	-0.4	0.6	1.7	0.2	0.0	0.0	1.9

2. Euro area – deficit-debt adjustment

	Change in debt	Deficit (-)/surplus (+) ⁸⁾	Deficit-debt adjustment ⁹⁾											Other ¹¹⁾
			Total	Transactions in main financial assets held by general government							Valuation effects	Exchange rate effects	Other changes in volume	
				Total	Currency and deposits	Securities ¹⁰⁾	Loans	Shares and other equity	Privatisations	Equity injections				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1993	8.0	-5.7	2.3	1.5	1.3	0.2	0.3	-0.2	-0.3	0.1	0.3	0.3	0.1	0.3
1994	6.0	-5.1	0.9	0.0	-0.2	0.1	0.3	-0.1	-0.4	0.2	0.2	0.0	0.7	0.1
1995	7.8	-5.1	2.7	0.6	0.1	-0.1	0.5	0.1	-0.4	0.2	0.2	0.0	2.2	-0.3
1996	3.8	-4.3	-0.5	-0.2	-0.1	0.0	-0.1	-0.1	-0.3	0.2	-0.2	-0.1	0.1	-0.2
1997	2.3	-2.6	-0.3	-0.5	0.2	-0.1	0.0	-0.5	-0.8	0.3	0.2	0.2	-0.2	0.2
1998	1.7	-2.3	-0.6	-0.5	0.1	0.0	-0.1	-0.6	-0.8	0.3	-0.2	0.0	0.0	0.1
1999	1.7	-1.3	0.4	-0.1	0.5	0.1	0.0	-0.7	-0.9	0.2	0.3	0.2	0.1	0.1
2000	0.9	0.1	1.0	0.9	0.7	0.1	0.2	-0.2	-0.4	0.2	0.1	0.0	-0.1	0.1
<i>Euro area enlargement</i>														
2001	1.7	-1.6	0.1	-0.4	-0.6	0.1	0.2	-0.1	-0.3	0.2	0.0	0.0	0.0	0.5
2002	2.0	-2.3	-0.2	0.2	0.3	0.0	0.1	-0.2	-0.4	0.1	-0.1	-0.1	-0.4	0.0

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

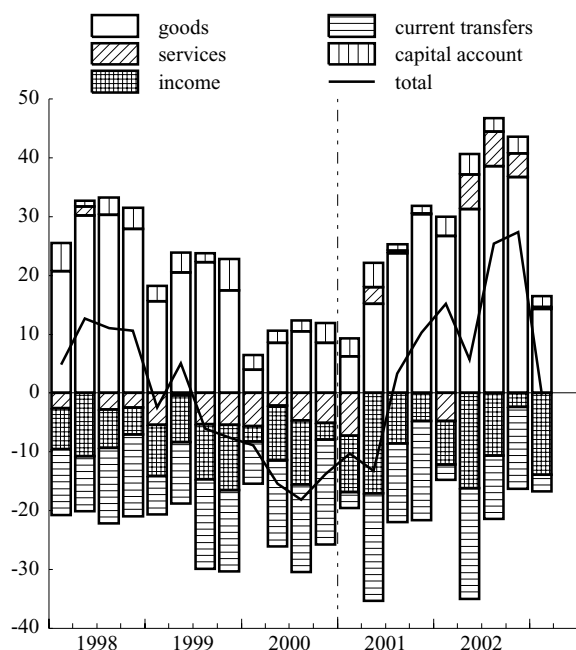
Summary balance of payments ^{1) 2)}

(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	56.7	116.4	-2.3	-15.2	-42.2	13.0	.	-44.4	-24.1	.	.	.	.
1998	26.7	109.0	-6.3	-28.8	-47.2	12.4	-67.0	-81.3	-109.9	-8.2	124.2	8.2	27.9
1999	-23.8	75.7	-16.5	-37.0	-46.1	12.8	13.5	-119.5	-41.4	3.3	161.0	10.1	-2.5
2000	-66.0	31.6	-17.5	-25.5	-54.6	9.8	66.9	-16.5	-111.6	-3.4	180.8	17.6	-10.7
<i>Euro area enlargement</i>													
2001	-19.4	75.5	-3.7	-39.9	-51.2	9.5	-24.9	-102.8	64.7	-3.5	-1.1	17.8	34.7
2002	61.7	133.3	11.0	-36.6	-46.0	11.8	-137.7	-45.5	110.6	-13.9	-186.7	-2.2	64.3
2002 Q1	12.0	26.7	-4.7	-7.4	-2.6	3.2	-8.2	-16.0	-35.8	2.5	44.1	-3.1	-6.9
Q2	2.2	31.3	5.9	-16.2	-18.8	3.5	-19.8	-9.2	72.2	-2.8	-86.7	6.7	14.1
Q3	23.0	38.5	5.9	-10.7	-10.7	2.3	-50.3	-12.0	35.7	-9.6	-59.7	-4.6	24.9
Q4	24.5	36.8	4.0	-2.3	-13.9	2.8	-59.5	-8.3	38.4	-3.9	-84.4	-1.3	32.2
2003 Q1	-2.1	14.3	0.3	-13.8	-2.9	1.9	-26.3	-6.1	14.4	0.4	-47.0	12.0	26.6
2002 Jan.	-0.1	3.1	-2.5	-6.4	5.7	2.6	-39.4	1.2	-33.6	3.3	-5.0	-5.3	37.0
Feb.	4.7	10.1	-1.4	-0.2	-3.9	0.4	13.3	-9.1	-8.6	2.1	26.4	2.5	-18.3
Mar.	7.4	13.5	-0.8	-0.8	-4.4	0.3	17.9	-8.1	6.4	-2.9	22.7	-0.2	-25.6
Apr.	-5.8	7.3	0.6	-7.7	-6.0	1.3	14.8	8.1	16.0	1.4	-19.1	8.4	-10.3
May	0.7	10.3	2.1	-6.4	-5.3	1.0	5.6	1.5	34.2	-2.0	-30.0	1.9	-7.3
June	7.4	13.7	3.2	-2.1	-7.5	1.1	-40.2	-18.8	22.0	-2.2	-37.7	-3.5	31.8
July	4.8	15.3	1.7	-9.0	-3.1	0.5	-17.4	-6.7	10.7	-8.2	-10.7	-2.6	12.1
Aug.	9.9	12.2	0.4	0.3	-3.0	0.6	-11.5	1.7	8.3	-2.1	-21.1	1.8	1.0
Sep.	8.3	11.1	3.9	-2.0	-4.6	1.2	-21.3	-7.0	16.7	0.7	-27.9	-3.8	11.8
Oct.	3.8	12.3	0.2	-2.4	-6.3	1.5	-18.5	-7.1	25.2	-0.4	-38.5	2.2	13.2
Nov.	11.5	13.7	1.4	0.4	-4.0	0.4	-26.0	0.5	15.8	-1.5	-38.4	-2.4	14.0
Dec.	9.1	10.7	2.4	-0.4	-3.7	0.9	-15.0	-1.7	-2.6	-2.0	-7.5	-1.2	4.9
2003 Jan.	-6.5	0.8	-0.4	-10.1	3.1	2.1	-15.6	-0.9	-5.5	-1.0	-9.6	1.5	20.0
Feb.	3.2	8.9	-0.1	-2.6	-3.0	-0.9	-13.8	2.8	-0.8	1.0	-22.3	5.4	11.6
Mar.	1.2	4.6	0.8	-1.2	-3.1	0.7	3.1	-8.0	20.7	0.4	-15.0	5.0	-4.9

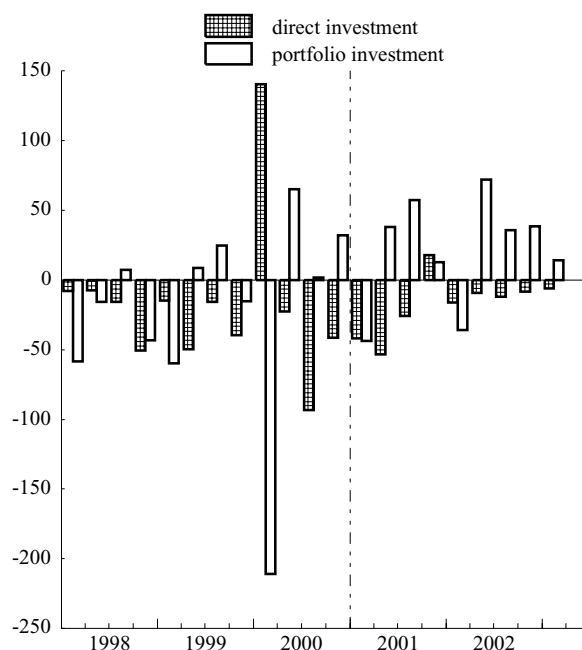
Current and capital accounts

(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	1,161.8	56.7	754.6	638.3	214.3	216.5	189.5	204.7	60.0	102.3	18.9	5.9
1998	1,277.3	1,250.6	26.7	784.4	675.4	231.6	237.9	198.5	227.3	62.9	110.1	17.7	5.3
1999	1,337.0	1,360.8	-23.8	818.3	742.5	246.7	263.2	207.3	244.2	64.8	110.9	19.1	6.3
2000	1,613.1	1,679.1	-66.0	989.8	958.3	287.5	304.9	269.1	294.6	66.7	121.3	18.3	8.5
<i>Euro area enlargement</i>													
2001	1,716.3	1,735.7	-19.4	1,033.0	957.6	325.0	328.7	283.1	322.9	75.3	126.5	17.0	7.5
2002	1,713.6	1,651.9	61.7	1,059.7	926.4	331.7	320.7	238.1	274.7	84.1	130.1	19.1	7.3
2002 Q1	416.5	404.6	12.0	254.9	228.2	72.5	77.3	58.3	65.7	30.8	33.4	4.7	1.5
Q2	429.3	427.1	2.2	267.3	236.0	84.5	78.6	62.5	78.6	15.1	33.9	5.0	1.5
Q3	426.8	403.8	23.0	263.2	224.7	89.8	83.9	55.4	66.0	18.4	29.2	4.1	1.7
Q4	441.0	416.5	24.5	274.3	237.6	84.9	81.0	62.0	64.4	19.7	33.6	5.3	2.5
2003 Q1	410.6	412.7	-2.1	252.0	237.7	74.2	73.9	52.7	66.5	31.6	34.6	5.1	3.2
2002 Jan.	141.7	141.9	-0.1	79.6	76.6	24.3	26.8	20.3	26.7	17.4	11.7	3.0	0.5
Feb.	132.8	128.1	4.7	83.5	73.3	23.1	24.5	19.2	19.4	7.1	10.9	1.0	0.6
Mar.	142.0	134.5	7.4	91.8	78.3	25.1	25.9	18.7	19.6	6.3	10.8	0.7	0.5
Apr.	141.4	147.2	-5.8	88.4	81.1	27.5	26.8	20.2	27.9	5.3	11.3	1.9	0.6
May	143.0	142.3	0.7	88.9	78.6	28.2	26.1	20.5	26.9	5.3	10.6	1.5	0.4
June	144.9	137.6	7.4	89.9	76.3	28.8	25.6	21.7	23.8	4.5	12.0	1.6	0.5
July	151.1	146.3	4.8	93.5	78.2	31.3	29.6	20.1	29.1	6.3	9.4	1.1	0.6
Aug.	134.9	125.1	9.9	81.7	69.5	28.9	28.6	18.3	18.0	6.0	9.0	1.3	0.7
Sep.	140.8	132.4	8.3	88.1	77.0	29.6	25.7	17.0	19.0	6.1	10.7	1.6	0.4
Oct.	151.3	147.5	3.8	97.7	85.4	28.8	28.7	19.7	22.1	5.1	11.4	2.1	0.6
Nov.	144.9	133.3	11.5	91.7	78.0	26.7	25.3	19.7	19.3	6.7	10.7	1.2	0.8
Dec.	144.8	135.7	9.1	84.9	74.1	29.4	27.0	22.6	22.9	7.9	11.6	2.0	1.1
2003 Jan.	143.3	149.7	-6.5	81.8	80.9	25.2	25.6	18.7	28.7	17.6	14.4	2.6	0.5
Feb.	130.8	127.6	3.2	83.1	74.2	22.9	23.0	17.1	19.7	7.7	10.7	1.5	2.4
Mar.	136.5	135.3	1.2	87.2	82.6	26.1	25.2	16.9	18.0	6.4	9.5	1.0	0.3

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
2001 Q1	431.6	440.4	-8.8	261.0	245.6	78.8	81.9	72.7	83.6	19.1	29.4
Q2	432.2	443.4	-11.2	261.3	244.1	81.5	82.3	70.7	83.3	18.7	33.7
Q3	428.4	430.1	-1.8	257.2	238.9	82.1	82.5	70.6	78.1	18.4	30.6
Q4	422.9	420.1	2.8	254.1	228.9	81.8	81.7	68.4	76.6	18.7	32.9
2002 Q1	425.1	409.9	15.2	263.9	228.6	81.6	81.8	59.8	67.9	19.8	31.5
Q2	427.8	418.2	9.6	265.8	232.4	82.9	80.7	59.6	71.3	19.5	33.9
Q3	430.9	411.5	19.4	265.9	232.0	83.7	78.8	59.0	68.7	22.3	31.9
Q4	430.2	412.5	17.7	264.6	233.5	83.2	79.3	60.1	66.3	22.3	33.5
2003 Q1	416.8	414.4	2.4	258.7	235.8	83.7	78.3	54.0	68.4	20.5	31.9
2002 Jan.	142.3	134.8	7.5	86.5	74.5	27.3	27.4	21.3	24.2	7.2	8.8
Feb.	142.3	138.5	3.8	88.3	77.0	27.2	27.3	20.7	22.8	6.0	11.4
Mar.	140.5	136.6	3.9	89.2	77.2	27.1	27.1	17.7	21.0	6.5	11.4
Apr.	142.7	142.4	0.3	88.1	77.9	27.9	27.6	20.2	25.6	6.4	11.4
May	141.8	137.9	3.9	88.4	76.5	27.2	26.6	19.7	23.7	6.6	11.1
June	143.3	137.9	5.4	89.3	78.0	27.8	26.5	19.7	22.0	6.5	11.4
July	141.8	138.2	3.6	87.5	76.8	27.0	26.6	20.1	24.5	7.2	10.2
Aug.	145.1	137.6	7.5	89.4	77.6	27.6	26.9	20.4	22.6	7.7	10.5
Sep.	144.0	135.6	8.4	89.1	77.5	29.1	25.3	18.5	21.6	7.4	11.2
Oct.	143.2	140.4	2.8	88.3	78.5	27.5	27.0	20.1	23.2	7.3	11.6
Nov.	145.4	137.8	7.7	89.0	77.2	28.1	26.5	20.6	22.9	7.7	11.2
Dec.	141.6	134.4	7.2	87.3	77.7	27.6	25.8	19.3	20.3	7.4	10.6
2003 Jan.	143.5	141.2	2.2	88.6	78.6	28.3	26.1	19.4	25.5	7.2	11.0
Feb.	140.1	138.2	1.9	87.7	77.9	27.2	25.8	18.5	23.4	6.7	11.1
Mar.	133.2	134.9	-1.7	82.4	79.3	28.2	26.4	16.0	19.5	6.6	9.8

Source: ECB.

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

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

	Total		Compensation of employees		Investment income							
	Credit 1	Debit 2	Credit 3	Debit 4	Total		Direct investment		Portfolio investment		Other investment	
					Credit 5	Debit 6	Credit 7	Debit 8	Credit 9	Debit 10	Credit 11	Debit 12
1999	207.3	244.2	12.6	4.9	194.7	239.3	42.7	51.2	64.2	102.2	87.8	85.8
2000	269.1	294.6	13.2	5.3	255.9	289.4	61.3	64.5	76.7	107.4	117.9	117.5
<i>Euro area enlargement</i>												
2001	283.1	322.9	14.0	5.9	269.1	317.0	69.5	68.9	82.5	118.2	117.1	129.8
2002	238.1	274.7	14.4	5.7	223.7	269.0	56.9	55.3	83.2	121.9	83.6	91.8
2001 Q4	71.0	75.8	3.6	1.4	67.4	74.3	19.5	22.2	22.2	22.3	25.7	29.9
2002 Q1	58.3	65.7	3.5	1.2	54.7	64.5	11.3	12.9	20.6	26.4	22.8	25.1
Q2	62.5	78.6	3.5	1.4	58.9	77.2	17.2	16.3	22.0	38.6	19.8	22.3
Q3	55.4	66.0	3.6	1.6	51.8	64.5	10.9	11.8	20.5	31.0	20.3	21.6
Q4	62.0	64.4	3.8	1.5	58.2	62.9	17.4	14.3	20.1	25.9	20.7	22.7

	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	46.7	6.5	4.6	9.5	34.0	54.7	68.3
2000	50.5	56.8	10.9	7.7	14.3	30.6	62.4	76.8
<i>Euro area enlargement</i>								
2001	59.3	60.1	10.2	8.9	17.3	43.8	65.2	74.4
2002	49.3	49.7	7.5	5.7	20.6	53.0	62.5	68.9
2001 Q4	16.4	20.1	3.1	2.1	4.8	6.3	17.4	16.0
2002 Q1	9.3	11.6	2.1	1.3	4.8	8.8	15.7	17.6
Q2	15.4	15.1	1.8	1.2	6.5	23.8	15.5	14.8
Q3	9.5	10.5	1.4	1.3	4.4	10.4	16.1	20.6
Q4	15.2	12.5	2.2	1.8	4.9	10.0	15.2	15.9

Source: ECB.

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

	By resident units abroad							By non-resident units in the euro area						
	Total	Equity capital and reinvested earnings			Other capital (mostly inter-company loans)			Total	Equity capital and reinvested earnings			Other capital (mostly inter-company loans)		
		Total	MFIs ²⁾	Non-MFIs	Total	MFIs ²⁾	Non-MFIs		Total	MFIs ²⁾	Non-MFIs	Total	MFIs ²⁾	Non-MFIs
1	2	3	4	5	6	7	8	9	10	11	12	13	14	
1997	-93.2	.	.	.	.	.	48.7	.	.	.	.	.	.
1998	-172.7	.	.	.	.	.	91.4	.	.	.	.	.	.
1999	-320.9	-239.5	-25.0	-214.6	-81.3	-0.6	-80.7	201.3	145.7	3.5	142.2	55.6	0.2	55.4
2000	-443.3	-351.7	-35.5	-316.2	-91.5	0.3	-91.8	426.7	301.0	12.4	288.6	125.8	0.1	125.7
<i>Euro area enlargement</i>														
2001	-259.2	-167.0	-13.9	-153.1	-92.1	-0.6	-91.6	156.4	99.9	5.3	94.6	56.5	0.7	55.8
2002	-174.5	-145.7	-18.4	-127.3	-28.8	-0.5	-28.3	129.0	94.1	3.2	90.9	34.9	0.7	34.2
2002 Q1	-55.5	-41.6	-2.5	-39.1	-13.9	0.0	-13.8	39.5	26.3	1.2	25.2	13.1	0.0	13.1
Q2	-47.0	-28.8	-6.0	-22.7	-18.2	-0.3	-17.9	37.7	22.1	2.8	19.3	15.6	0.1	15.6
Q3	-32.5	-36.2	-5.2	-31.0	3.7	-0.1	3.8	20.5	12.2	-0.4	12.6	8.4	0.6	7.8
Q4	-39.5	-39.1	-4.8	-34.4	-0.4	-0.1	-0.3	31.3	33.5	-0.3	33.9	-2.3	0.0	-2.3
2003 Q1	-31.7	-16.0	-1.9	-14.1	-15.7	-0.2	-15.5	25.6	16.6	1.1	15.5	9.0	-0.3	9.3
2002 Jan.	-6.7	-8.6	-0.6	-8.0	1.9	0.0	1.9	7.9	2.8	0.2	2.6	5.1	0.1	5.1
Feb.	-21.4	-5.1	-0.4	-4.8	-16.2	0.0	-16.2	12.2	3.4	1.2	2.2	8.9	0.0	8.9
Mar.	-27.4	-27.9	-1.5	-26.4	0.5	-0.1	0.5	19.3	20.2	-0.1	20.3	-0.9	0.0	-0.8
Apr.	-7.7	-2.3	-4.1	1.8	-5.4	0.0	-5.4	15.8	9.4	2.0	7.4	6.4	0.0	6.4
May	-18.0	-10.5	-1.0	-9.5	-7.4	0.0	-7.4	19.4	6.5	0.7	5.8	13.0	0.0	12.9
June	-21.3	-15.9	-0.9	-15.0	-5.4	-0.3	-5.1	2.5	6.2	0.1	6.2	-3.7	0.1	-3.8
July	-13.1	-14.5	-3.4	-11.1	1.4	0.0	1.4	6.4	2.8	0.9	1.9	3.6	0.0	3.6
Aug.	-1.1	-6.6	-0.3	-6.3	5.5	-0.1	5.5	2.8	2.4	-0.8	3.2	0.4	0.7	-0.3
Sep.	-18.3	-15.2	-1.5	-13.7	-3.1	0.0	-3.1	11.3	7.0	-0.6	7.5	4.3	-0.1	4.4
Oct.	-13.3	-7.1	-0.9	-6.2	-6.1	0.0	-6.1	6.2	6.6	0.2	6.4	-0.4	-0.1	-0.2
Nov.	-22.0	-16.4	-0.3	-16.1	-5.6	0.0	-5.5	22.5	15.5	-0.4	15.9	7.0	0.1	6.9
Dec.	-4.3	-15.6	-3.5	-12.1	11.3	0.0	11.3	2.6	11.4	-0.2	11.6	-8.8	0.0	-8.9
2003 Jan.	-10.9	-6.7	-0.8	-5.9	-4.2	0.0	-4.2	10.0	8.4	0.3	8.1	1.6	0.0	1.6
Feb.	-5.4	-5.0	-0.6	-4.4	-0.4	0.0	-0.4	8.2	5.5	1.1	4.5	2.7	0.0	2.7
Mar.	-15.3	-4.3	-0.5	-3.8	-11.0	-0.1	-10.9	7.3	2.7	-0.3	2.9	4.7	-0.4	5.1

Source: ECB.
1) Inflows (+); outflows (-).
2) Excluding the Eurosystem.

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	149.4	121.3	28.1
1999	-311.3	269.8	-156.5	93.0	-154.8	-154.9	0.1	176.8	117.0	59.9
2000	-409.0	297.4	-285.9	49.9	-123.1	-114.3	-8.8	247.5	239.2	8.3
<i>Euro area enlargement</i>										
2001	-291.0	355.8	-108.3	233.2	-182.7	-160.1	-22.6	122.5	115.1	7.4
2002	-172.8	283.3	-40.8	89.2	-132.0	-78.1	-53.9	194.2	128.6	65.6
2002 Q1	-75.0	39.2	-32.1	34.5	-42.9	-21.9	-21.0	4.8	7.1	-2.3
Q2	-54.2	126.5	-13.9	36.0	-40.3	-25.3	-15.0	90.5	61.4	29.1
Q3	-19.8	55.5	12.7	6.0	-32.5	-17.3	-15.2	49.5	26.3	23.2
Q4	-23.7	62.1	-7.5	12.8	-16.2	-13.5	-2.7	49.4	33.7	15.6
2003 Q1	-50.5	64.8	8.6	8.1	-59.1	-55.2	-3.9	56.7	49.6	7.2
2002 Jan.	-27.5	-6.1	-13.5	13.3	-14.0	-3.0	-11.0	-19.4	-11.6	-7.8
Feb.	-18.6	10.1	-8.8	9.4	-9.8	-5.7	-4.2	0.6	1.2	-0.5
Mar.	-28.9	35.2	-9.9	11.7	-19.0	-13.2	-5.8	23.5	17.5	6.0
Apr.	-13.2	29.3	-1.9	6.5	-11.3	-10.1	-1.2	22.8	15.1	7.7
May	-29.5	63.7	-5.8	27.8	-23.6	-14.7	-9.0	35.9	22.8	13.1
June	-11.6	33.5	-6.2	1.7	-5.4	-0.6	-4.8	31.8	23.5	8.3
July	-15.8	26.5	-6.4	4.5	-9.4	-1.3	-8.1	22.0	13.4	8.6
Aug.	-4.4	12.7	5.1	-0.3	-9.5	-10.1	0.5	13.0	2.1	10.9
Sep.	0.4	16.4	14.0	1.9	-13.6	-6.0	-7.7	14.5	10.8	3.7
Oct.	1.0	24.2	-0.6	-3.7	1.6	-4.0	5.6	27.9	15.7	12.3
Nov.	-9.1	24.8	-0.3	16.5	-8.8	-5.0	-3.7	8.3	6.6	1.7
Dec.	-15.6	13.1	-6.6	-0.1	-9.0	-4.5	-4.6	13.1	11.5	1.7
2003 Jan.	-22.6	17.1	2.0	14.1	-24.7	-17.0	-7.7	3.0	4.3	-1.3
Feb.	-20.5	19.7	-0.1	2.8	-20.4	-22.4	2.0	16.9	9.0	7.9
Mar.	-7.3	28.0	6.7	-8.8	-14.0	-15.9	1.8	36.8	36.2	0.6

2. Assets by instrument and sector of holder

	Equity					Debt instruments										
	Euro-system	MFIs ³⁾	Non-MFIs			Euro-system	MFIs ³⁾	Bonds and notes			Money market instruments					
			Total	General government	Other sectors			Euro-system	MFIs ³⁾	Non-MFIs			Euro-system	MFIs ³⁾	Non-MFIs	
										Total	General government	Other sectors			Total	General government	Other sectors
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15		
1999	0.1	-1.5	-155.1	-2.1	-153.0	0.1	-15.4	-139.6	-1.7	-137.9	0.9	-8.1	7.3	-0.1	7.5	
2000	-0.1	-4.3	-281.6	-2.6	-278.9	-1.9	-46.3	-66.1	-1.5	-64.6	2.2	-15.5	4.6	-1.0	5.5	
<i>Euro area enlargement</i>																
2001	-0.4	3.8	-111.8	-2.1	-109.8	1.9	-71.1	-90.9	-1.2	-89.6	-2.3	-34.5	14.3	-0.2	14.5	
2002	-0.3	-9.7	-30.8	-5.2	-25.6	3.7	-7.0	-74.8	-1.0	-73.8	2.1	-35.0	-21.0	-0.9	-20.1	
2002 Q1	0.0	-4.8	-27.3	-1.4	-25.8	0.4	-4.7	-17.5	-0.5	-17.0	0.8	-13.0	-8.8	-1.1	-7.7	
Q2	-0.1	-3.7	-10.1	-2.0	-8.1	2.4	-2.3	-25.4	0.2	-25.6	0.0	-1.9	-13.1	-0.1	-13.0	
Q3	-0.1	2.8	10.0	-0.6	10.6	-1.1	-2.9	-13.3	-0.3	-13.0	0.9	-13.3	-2.7	0.2	-3.0	
Q4	-0.1	-4.0	-3.5	-1.2	-2.3	2.1	3.0	-18.6	-0.4	-18.1	0.4	-6.8	3.6	0.1	3.5	
2003 Q1	-0.1	-2.7	11.5	.	.	0.2	-23.5	-32.0	.	.	-1.5	-2.5	0.1	.	.	
2002 Oct.	0.0	-2.2	1.6	.	.	0.4	3.8	-8.3	.	.	0.4	3.5	1.7	.	.	
Nov.	-0.1	-1.2	0.9	.	.	1.4	-6.2	-0.3	.	.	-0.1	-9.8	6.2	.	.	
Dec.	0.0	-0.6	-6.0	.	.	0.2	5.3	-10.0	.	.	0.1	-0.5	-4.2	.	.	
2003 Jan.	0.0	1.4	0.6	.	.	0.0	-12.7	-4.2	.	.	-0.3	-10.9	3.4	.	.	
Feb.	-0.1	-0.9	0.9	.	.	1.0	-10.1	-13.3	.	.	-0.9	-0.3	3.2	.	.	
Mar.	0.0	-3.3	10.0	.	.	-0.7	-0.7	-14.5	.	.	-0.2	8.6	-6.6	.	.	

Source: ECB.

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

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

3) Excluding the Eurosystem.

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

	Total		Eurosysteem		General government		MFIs (excluding the 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	-81.5	205.6	-0.7	3.5	-1.0	-6.1	-22.6	192.4	-37.6	40.4	15.0	152.0	-57.1	15.9
1999	-31.8	192.7	-1.9	6.6	3.3	-13.0	16.3	161.2	-47.2	53.8	63.5	107.4	-49.4	37.9
2000	-179.0	359.8	-1.1	0.9	-2.2	0.7	-130.4	288.8	-50.0	52.5	-80.4	236.3	-45.4	69.5
<i>Euro area enlargement</i>														
2001	-250.2	249.0	0.6	4.4	2.9	-0.5	-227.6	233.5	-45.3	22.4	-182.3	211.1	-26.1	11.6
2002	-224.4	37.7	-1.2	0.1	0.0	-8.3	-167.3	29.5	-28.3	51.9	-139.0	-22.3	-55.9	16.4
2002 Q1	19.8	24.3	-0.4	1.2	-0.6	-8.3	18.7	25.8	-2.5	11.4	21.2	14.4	2.2	5.6
Q2	-77.6	-9.1	-0.6	-3.5	0.9	3.8	-62.7	-11.8	-4.4	19.8	-58.3	-31.6	-15.2	2.4
Q3	-62.1	2.3	0.3	-0.1	-0.5	-2.8	-34.9	9.6	-4.7	4.6	-30.2	5.0	-26.9	-4.3
Q4	-104.5	20.1	-0.4	2.5	0.3	-1.0	-88.3	6.0	-16.6	16.1	-71.7	-10.1	-16.1	12.7
2003 Q1	-111.0	64.0	-0.6	-4.4	-1.7	-9.2	-57.5	58.7	-8.7	17.5	-48.7	41.2	-51.3	18.9
2002 Jan.	2.0	-7.0	-0.7	2.6	-1.4	-8.8	14.7	0.5	-1.0	6.3	15.6	-5.8	-10.6	-1.3
Feb.	27.0	-0.6	-0.1	-3.8	1.0	-1.6	5.3	12.4	-7.7	1.3	13.1	11.1	20.8	-7.6
Mar.	-9.2	31.9	0.4	2.4	-0.2	2.1	-1.4	12.9	6.2	3.8	-7.5	9.1	-8.0	14.5
Apr.	-42.2	23.1	-0.4	-4.3	1.7	5.6	-30.1	22.2	-4.2	7.1	-25.9	15.1	-13.3	-0.4
May	-64.2	34.2	-0.1	-0.5	0.0	0.0	-56.0	36.4	-3.9	8.2	-52.1	28.2	-8.0	-1.7
June	28.8	-66.4	-0.1	1.3	-0.7	-1.8	23.4	-70.4	3.7	4.4	19.7	-74.8	6.2	4.5
July	-2.3	-8.4	0.4	2.7	-0.2	-1.2	14.0	-9.8	2.8	1.6	11.2	-11.4	-16.5	-0.1
Aug.	8.5	-29.7	0.1	-5.0	-0.6	-2.2	12.8	-17.9	0.4	2.0	12.4	-19.9	-3.8	-4.6
Sep.	-68.3	40.4	-0.2	2.1	0.3	0.6	-61.7	37.3	-7.9	0.9	-53.8	36.3	-6.6	0.4
Oct.	-68.8	30.3	-0.1	-0.3	-0.4	1.3	-54.2	22.4	-4.4	7.6	-49.8	14.8	-14.2	7.0
Nov.	-78.3	39.9	0.9	1.2	-1.6	-0.3	-65.5	34.8	-7.8	-7.0	-57.6	41.8	-12.1	4.2
Dec.	42.5	-50.1	-1.3	1.6	2.2	-2.0	31.3	-51.2	-4.4	15.5	35.8	-66.7	10.2	1.5
2003 Jan.	-9.5	-0.2	0.5	-2.4	-2.3	-6.2	6.5	3.4	-2.0	9.3	8.5	-5.8	-14.1	5.0
Feb.	-82.8	60.4	-0.5	-2.0	-3.8	-2.9	-55.2	54.6	-4.3	6.1	-50.9	48.4	-23.3	10.8
Mar.	-18.7	3.7	-0.5	0.0	4.5	-0.1	-8.8	0.7	-2.4	2.1	-6.4	-1.4	-13.9	3.1

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	-1.1	6.7	5.6	-0.8	-0.1	-0.9
2000	-1.1	0.9	-0.2	0.0	0.0	0.0
<i>Euro area enlargement</i>						
2001	0.6	4.4	5.0	0.0	0.0	0.0
2002	-1.2	0.0	-1.1	0.0	0.0	0.0
2001 Q4	-0.4	3.8	3.4	0.0	0.0	0.0
2002 Q1	-0.4	1.2	0.7	0.0	0.0	0.0
Q2	-0.6	-3.5	-4.1	0.0	0.0	0.0
Q3	0.3	-0.2	0.1	0.0	0.0	0.0
Q4	-0.4	2.6	2.1	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.

Table 8.6 (cont'd)
Balance of payments: other investment account and reserve assets
(EUR billions; net flows)
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	-1.4	0.6	-0.8	-0.9	0.1	-0.8
<i>Euro area enlargement</i>									
2001	-0.1	0.0	-0.1	4.4	-0.6	3.9	-1.4	0.1	-1.3
2002	1.5	0.0	1.4	-0.6	-8.0	-8.6	-0.8	-0.3	-1.1
2001 Q4	0.0	0.0	0.0	2.1	4.7	6.8	-0.1	0.1	-0.1
2002 Q1	0.0	0.0	0.0	-0.3	-8.0	-8.3	-0.3	-0.3	-0.6
Q2	1.4	0.0	1.4	-0.2	3.6	3.4	-0.3	0.2	-0.2
Q3	0.0	0.0	0.0	-0.3	-2.7	-3.0	-0.2	0.0	-0.3
Q4	0.0	0.0	0.0	0.2	-0.9	-0.6	0.1	-0.1	-0.1

2.3. MFIs (excluding the Eurosystem)

	Loans/currency and deposits			Other assets/liabilities		
	Assets 16	Liabilities 17	Balance 18	Assets 19	Liabilities 20	Balance 21
1999	15.5	160.5	176.0	0.8	0.7	1.5
2000	-126.3	283.5	157.1	-4.1	5.3	1.3
<i>Euro area enlargement</i>						
2001	-213.6	223.7	10.0	-13.9	9.8	-4.1
2002	-163.6	32.5	-131.1	-3.7	-2.9	-6.6
2001 Q4	-41.6	3.3	-38.2	-4.7	1.3	-3.4
2002 Q1	24.1	19.7	43.9	-5.5	6.0	0.5
Q2	-61.8	-10.5	-72.3	-0.9	-1.3	-2.2
Q3	-32.6	7.6	-25.0	-2.3	2.0	-0.3
Q4	-93.4	15.6	-77.7	5.0	-9.7	-4.6

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	-18.9	21.7	2.9	-23.0	11.3	-11.7
2000	-14.6	10.5	-4.0	-25.2	64.0	38.8	-5.7	-5.0	-10.7
<i>Euro area enlargement</i>									
2001	-0.4	0.6	0.1	-25.3	10.6	-14.7	-0.3	0.4	0.1
2002	-9.6	-2.3	-11.9	-43.5	14.4	-29.1	-2.8	4.3	1.5
2001 Q4	2.6	-1.2	1.4	-27.7	-2.3	-30.0	-0.1	0.5	0.4
2002 Q1	-1.2	-0.5	-1.7	5.0	5.3	10.3	-1.6	0.8	-0.8
Q2	-3.6	-1.4	-5.0	-11.4	2.9	-8.6	-0.1	0.9	0.8
Q3	-2.8	0.9	-1.9	-23.9	-7.2	-31.2	-0.1	2.0	1.9
Q4	-2.0	-1.4	-3.4	-13.1	13.5	0.4	-1.0	0.6	-0.4

3. Reserve assets ¹⁾

	Total 1	Monetary gold 2	Special drawing rights 3	Reserve position in the IMF 4	Foreign exchange							Other claims 12
					Total 5	Currency and deposits		Securities			Financial derivatives 11	
						With monetary authorities and the BIS 6	With banks 7	Equity 8	Bonds and notes 9	Money market instruments 10		
1999	10.1	0.3	1.0	2.0	6.1	12.5	-12.1	0.2	3.5	2.0	-0.1	0.8
2000	17.6	1.0	0.3	2.9	13.3	4.3	4.6	0.0	-5.6	10.1	-0.1	0.0
<i>Euro area enlargement</i>												
2001	17.8	0.6	-1.0	-4.2	22.5	10.0	-5.3	-1.1	20.4	-1.6	0.0	0.0
2002	-2.2	0.7	0.2	-2.0	-1.2	-2.3	-15.3	0.0	8.2	8.4	-0.2	0.0
2001 Q4	3.3	0.1	-0.1	0.8	2.4	2.7	1.7	0.0	4.8	-6.9	0.0	0.0
2002 Q1	-3.1	-0.2	0.0	-0.4	-2.4	-1.7	-12.4	0.0	4.2	7.4	0.0	0.0
Q2	6.7	0.5	0.5	-2.1	7.8	-0.6	1.2	0.0	4.3	3.1	-0.2	0.0
Q3	-4.6	-0.1	-0.2	0.2	-4.6	-2.4	-3.0	0.0	1.9	-1.2	0.0	0.0
Q4	-1.3	0.4	-0.1	0.3	-1.9	2.3	-1.2	0.0	-2.2	-0.9	0.0	0.0

Source: ECB.
1) Increase (-); decrease (+)

Table 8.7
Monetary presentation of the euro area balance of payments ¹⁾
(EUR billions)

	Current and capital accounts	Direct investment		Portfolio investment			Other investment		Financial derivatives	Errors and omissions	Total ⁵⁾	Memo item: transactions in the external counterpart of M3 ⁶⁾
		By resident units abroad (non-MFIs)	By non-resident units in the euro area ²⁾	Assets Non-MFIs	Liabilities		Assets Non-MFIs	Liabilities Non-MFIs				
					Equity ³⁾	Debt instruments ⁴⁾						
	1	2	3	4	5	6	7	8	9	10	11	12
2000	-56.2	-408.0	426.7	-343.1	37.2	209.8	-47.6	70.2	-3.4	-10.7	-125.1	142.0
2000 Q1	-8.9	-68.4	217.6	-129.2	-103.3	38.2	-40.3	10.6	1.3	-35.8	-118.1	118.1
Q2	-15.4	-88.8	71.6	-66.7	66.9	70.8	-5.5	4.1	4.4	3.7	45.2	-35.6
Q3	-18.1	-121.4	40.3	-75.1	28.9	55.6	-12.3	38.3	0.1	23.2	-40.4	52.0
Q4	-13.8	-129.4	97.1	-72.1	44.7	45.2	10.5	17.1	-9.3	-1.9	-11.8	7.4
<i>Euro area enlargement</i>												
2001	-9.8	-244.7	155.7	-188.4	173.0	83.7	-23.2	11.1	-3.5	34.7	-11.4	4.7
2002	73.5	-155.5	128.3	-126.6	52.4	183.8	-55.9	8.1	-13.9	64.3	158.4	-168.8
2001 Q1	-10.3	-72.9	35.4	-46.0	1.7	22.4	2.8	-12.1	1.4	-32.5	-110.1	105.9
Q2	-13.2	-91.2	43.2	-70.1	89.6	5.1	0.8	9.5	12.0	-2.0	-16.3	18.2
Q3	3.4	-56.1	31.3	-22.9	42.0	27.9	-3.5	11.9	-10.3	47.4	71.0	-75.9
Q4	10.3	-24.6	45.8	-49.4	39.7	28.3	-23.2	1.8	-6.6	21.8	43.9	-43.4
2002 Q1	15.2	-53.0	39.5	-53.6	15.2	3.9	1.6	-2.7	2.5	-6.9	-38.4	30.9
Q2	5.7	-40.7	37.7	-48.6	38.5	83.7	-14.3	6.2	-2.8	14.1	79.4	-77.9
Q3	25.3	-27.2	19.9	-6.0	-4.7	56.6	-27.4	-7.1	-9.6	24.9	44.7	-34.9
Q4	27.3	-34.7	31.2	-18.4	3.4	39.6	-15.8	11.7	-3.9	32.2	72.6	-86.9
2003 Q1	-0.3	-29.6	25.9	-20.4	11.1	52.0	-52.9	9.7	0.4	26.6	22.5	-33.0

Source: ECB.

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

2) Including all transactions of the non-MFI sector, and MFI sector transactions in equity capital and reinvested earnings.

3) Excluding money market fund shares/units.

4) Excluding debt securities with a maturity of up to two years and issued by euro area MFIs.

5) Sum of columns 1 to 10; errors and omissions (column 10) are those shown in Table 8.1 (column 13) of the Monthly Bulletin; remaining differences (in absolute values) with column 12 are explained in a methodological note available on the statistics section of the ECB's website (www.ecb.int).

6) Source: Monthly Bulletin, Table 2.4.6, column 9.

Table 8.8**International investment position ¹⁾ and reserve assets outstanding***(EUR billions (ECU billions in 1997); end-of-period positions)***1. Summary international investment position**

	Total		Direct investment 3	Portfolio investment 4	Financial derivatives 5	Other investment 6	Reserve assets 7
	1	as % of GDP 2					
Net international investment position ²⁾³⁾							
1997	16.3	0.3	181.5	-750.5	-5.9	223.8	367.3
1998	-170.1	-2.8	152.0	-748.5	2.3	86.5	337.6
1999	-297.3	-4.7	369.6	-881.2	16.0	-183.9	382.2
2000	-414.7	-6.3	428.4	-804.9	8.5	-437.2	390.4
2001	-152.2	-2.2	530.7	-682.7	-5.9	-387.0	392.7
Outstanding assets							
1999	5,796.7	92.5	1,174.5	2,058.1	111.1	2,070.8	382.2
2000	6,740.0	102.5	1,609.7	2,344.1	117.9	2,277.9	390.4
2001	7,459.4	109.3	1,859.9	2,499.8	123.7	2,583.4	392.7
Outstanding liabilities							
1999	6,094.0	97.2	804.9	2,939.3	95.1	2,254.7	-
2000	7,154.7	108.9	1,181.2	3,149.1	109.3	2,715.1	-
2001	7,611.6	111.5	1,329.2	3,182.5	129.5	2,970.5	-

2. Direct investment

	By resident units abroad						By non-resident units in the euro area					
	Equity capital and reinvested earnings			Other capital (mostly inter-company loans)			Equity capital and reinvested earnings			Other capital (mostly inter-company loans)		
	Total 1	MFIs ⁴⁾ 2	Non-MFIs 3	Total 4	MFIs ⁴⁾ 5	Non-MFIs 6	Total 7	MFIs ⁴⁾ 8	Non-MFIs 9	Total 10	MFIs ⁴⁾ 11	Non-MFIs 12
1999	938.7	85.7	853.0	235.8	1.8	234.0	606.3	24.3	582.0	198.6	1.7	196.9
2000	1,256.0	115.9	1,140.1	353.7	2.3	351.3	880.6	31.8	848.8	300.7	1.8	298.9
2001	1,478.4	132.0	1,346.4	381.5	2.6	378.9	985.6	42.4	943.2	343.6	2.6	341.0

3.1. Portfolio investment by instrument

	Equity		Debt instruments					
	Assets 1	Liabilities 2	Assets			Liabilities		
			Total 3	Bonds and notes 4	Money market instruments 5	Total 6	Bonds and notes 7	Money market instruments 8
1999	1,013.6	1,698.1	1,044.4	937.2	107.2	1,241.2	1,138.5	102.7
2000	1,183.6	1,627.6	1,160.5	1,038.4	122.1	1,521.5	1,399.9	121.6
2001	1,111.5	1,577.6	1,388.3	1,208.1	180.1	1,604.9	1,505.5	99.4

3.2. Portfolio investment: assets by instrument and sector of holder

	Equity					Debt instruments									
	Euro-system 9	MFIs ⁴⁾ 10	Non-MFIs			Bonds and notes			Money market instruments						
			Total 11	General government 12	Other sectors 13	Euro-system 14	MFIs ⁴⁾ 15	Non-MFIs			Euro-system 19	MFIs ⁴⁾ 20	Non-MFIs		
								Total 16	General government 17	Other sectors 18			Total 21	General government 22	Other sectors 23
1999	0.4	25.9	987.3	4.1	983.2	4.5	257.2	675.4	6.2	669.3	2.6	68.5	36.1	0.2	35.9
2000	0.9	42.7	1,140.0	5.6	1,134.4	3.4	328.5	706.5	5.7	700.9	0.5	85.6	36.0	0.1	35.8
2001	1.2	43.7	1,066.7	6.6	1,060.0	2.1	422.1	784.0	8.0	776.0	2.8	125.2	52.1	0.2	51.9

Source: ECB.

1) Data refer to the Euro 12, i.e. they include Greece.

2) Assets minus liabilities.

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

4) Excluding the Eurosystem.

4. Other investment by sector and instrument

	Eurosystem						General government							
	Total		Loans/currency and deposits		Other assets/liabilities		Total		Trade credits		Loans/currency and deposits		Other assets/liabilities	
	Assets 1	Liabilities 2	Assets 3	Liabilities 4	Assets 5	Liabilities 6	Assets 7	Liabilities 8	Assets 9	Liabilities 10	Assets 11	Liabilities 12	Assets 13	Liabilities 14
1999	3.1	27.4	3.0	27.1	0.1	0.3	125.5	57.3	2.5	0.1	72.4	45.4	50.6	11.8
2000	3.0	32.2	2.9	31.9	0.1	0.3	133.8	60.0	2.8	0.2	77.5	47.7	53.5	12.1
2001	3.0	36.4	2.9	36.2	0.1	0.2	132.5	63.8	3.1	0.2	73.6	51.4	55.9	12.3

	MFIs (excluding the Eurosystem)						Other sectors							
	Total		Loans/currency and deposits		Other assets/liabilities		Total		Trade credits		Loans/currency and deposits		Other assets/liabilities	
	Assets 15	Liabilities 16	Assets 17	Liabilities 18	Assets 19	Liabilities 20	Assets 21	Liabilities 22	Assets 23	Liabilities 24	Assets 25	Liabilities 26	Assets 27	Liabilities 28
1999	1,317.7	1,823.5	1,291.8	1,798.1	25.9	25.5	624.5	346.5	161.0	90.7	394.2	225.7	69.3	30.1
2000	1,458.5	2,168.4	1,421.4	2,126.4	37.1	42.0	682.6	454.5	179.5	110.2	418.9	314.8	84.2	29.5
2001	1,719.5	2,407.3	1,668.6	2,354.1	50.9	53.2	728.4	462.9	177.6	109.7	478.4	321.9	72.4	31.4

5. 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) ²⁾	Special drawing rights	Reserve position in the IMF	Foreign exchange									Other claims	Claims on euro area residents denomi- nated in foreign currency
						Total	Currency and deposits		Securities				Financial deriva- tives			
							With monetary authorities and the BIS 7	With banks 8	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 ³⁾																
1998 Dec. ⁴⁾	329.4	99.6	404.131	5.2	23.4	201.2	12.6	19.6	169.0	0.0	116.6	52.4	0.0	0.0	7.6	
1999 Dec.	372.1	116.4	402.758	4.5	24.3	226.9	13.5	23.0	190.7	0.0	133.9	56.8	-0.2	0.0	14.6	
2000 Dec.	377.2	117.1	399.537	4.3	20.8	235.0	9.7	20.1	204.4	0.0	154.0	50.4	0.7	0.0	15.8	
<i>Euro area enlargement</i>																
2001 1 Jan.	390.4	118.4	404.157	4.3	21.2	246.5	16.8	20.5	208.5	0.0	158.1	50.4	0.7	0.0	16.3	
2001 Dec.	392.7	126.1	401.876	5.5	25.3	235.8	8.0	25.9	201.5	1.2	147.0	53.3	0.4	0.0	24.7	
2002 Dec.	366.1	130.4	399.022	4.8	25.0	205.8	10.3	35.3	159.8	-	-	-	0.4	0.0	22.4	
2003 Jan.	363.4	135.5	398.728	4.7	24.4	198.8	13.1	38.5	146.6	-	-	-	0.6	0.0	20.4	
Feb.	352.2	128.2	397.765	4.8	24.3	194.9	10.4	38.4	145.6	-	-	-	0.5	0.0	19.3	
Mar.	339.1	122.3	397.765	4.7	24.4	187.7	7.9	36.4	142.8	-	-	-	0.6	0.0	18.9	
Apr.	332.4	119.9	396.324	4.5	25.0	183.1	7.6	33.6	141.0	-	-	-	0.9	0.0	18.4	
European Central Bank ⁵⁾																
1999 Dec.	49.3	7.0	24.030	0.0	0.0	42.3	0.3	7.8	34.3	0.0	27.8	6.5	0.0	0.0	2.6	
2000 Dec.	45.3	7.0	24.030	0.0	0.0	38.2	0.6	6.8	30.6	0.0	20.4	10.2	0.3	0.0	3.8	
<i>Euro area enlargement</i>																
2001 Dec.	49.3	7.8	24.656	0.1	0.0	41.4	0.8	7.0	33.6	0.0	23.5	10.1	0.0	0.0	3.6	
2002 Dec.	45.5	8.1	24.656	0.2	0.0	37.3	1.2	9.9	26.1	-	-	-	0.0	0.0	3.0	
2003 Jan.	42.9	8.4	24.656	0.2	0.0	34.4	0.8	9.5	24.1	-	-	-	0.0	0.0	2.9	
Feb.	42.0	7.9	24.656	0.2	0.0	33.9	1.3	8.8	23.8	-	-	-	0.0	0.0	2.6	
Mar.	40.5	7.6	24.656	0.2	0.0	32.8	0.9	9.3	22.6	-	-	-	0.0	0.0	3.0	
Apr.	40.7	7.5	24.656	0.2	0.0	33.1	0.9	6.8	25.4	-	-	-	0.0	0.0	2.5	

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) 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.

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

4) Position as at 1 January 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.) (2000=100)	
	Total				Memo: Manufac- tures 5	Total				Memo:		Exports 12	Imports 13
	1	Inter- mediate 2	Capital 3	Consump- tion 4		6	Inter- mediate 7	Capital 8	Consump- tion 9	Manufac- tures 10	Oil 11		
Values (EUR billions; 2000=100 for columns 12 and 13)													
1999	832.8	386.5	183.2	224.2	725.0	781.2	423.2	143.6	192.1	590.6	61.5	82.5	78.1
2000	1,013.7	482.6	221.7	265.4	883.2	1,008.4	579.8	179.4	218.1	730.2	118.9	100.0	100.0
<i>Euro area enlargement</i>													
2001	1,060.8	491.6	235.8	287.0	930.8	1,011.1	575.1	178.2	226.1	738.1	107.5	106.3	98.9
2002	1,077.0	493.3	226.8	302.5	938.5	974.6	547.4	160.2	228.4	707.5	102.6	107.9	95.3
2002 Q1	258.9	119.3	53.6	72.9	226.2	239.8	135.2	39.3	55.9	176.0	22.7	107.6	94.3
Q2	273.3	127.8	57.5	74.6	238.6	248.9	142.0	40.5	57.2	181.0	25.8	108.1	96.1
Q3	266.9	121.3	55.2	76.1	232.5	234.3	131.2	37.7	56.5	170.7	26.0	108.3	95.0
Q4	277.9	124.8	60.5	78.8	241.2	251.5	139.0	42.8	58.8	179.8	28.1	107.5	96.0
2003 Q1	253.4	116.1	51.4	71.2	220.0	247.8	139.2	39.3	56.8	177.6	28.7	104.8	96.8
2002 Oct.	99.7	45.0	20.7	29.4	86.8	90.1	50.9	14.6	21.3	64.8	10.2	107.6	96.6
Nov.	93.4	41.9	20.2	26.8	81.2	83.8	46.0	14.9	19.5	60.5	8.5	109.1	96.9
Dec.	84.9	37.9	19.6	22.7	73.2	77.6	42.2	13.3	18.1	54.5	9.4	105.8	94.4
2003 Jan.	82.2	38.1	16.0	23.3	71.1	83.3	46.6	13.5	19.2	59.1	10.1	107.2	97.1
Feb.	84.0	38.3	16.8	24.0	73.1	78.9	44.9	11.4	18.2	55.6	9.5	107.2	96.4
Mar.	87.2	39.7	18.7	23.9	75.8	85.6	47.7	14.4	19.4	62.8	9.2	100.1	96.9
Volumes (annual percentage changes; 2000=100 for columns 12 and 13)													
1999	2.2	2.8	-0.8	3.3	1.4	6.1	3.5	12.9	7.7	7.1	6.0	89.3	95.2
2000	12.4	12.5	12.7	12.7	13.6	5.9	6.8	11.7	4.5	8.9	4.7	100.0	100.0
<i>Euro area enlargement</i>													
2001	5.1	1.8	8.6	7.9	5.8	-1.2	-1.0	-3.9	-0.1	-1.7	-1.6	105.3	98.8
2002	1.8	1.0	-3.5	4.3	1.2	-1.5	-2.5	-8.2	1.6	-2.7	-1.5	107.3	97.2
2002 Q1	-2.3	-3.8	-7.1	1.9	-3.0	-6.1	-6.1	-17.9	-1.0	-8.8	-1.3	106.3	96.6
Q2	2.7	2.7	-2.5	4.8	2.4	-1.4	-1.7	-9.4	2.4	-2.7	-3.1	107.5	97.6
Q3	4.7	3.5	-0.3	6.5	3.9	0.8	-0.6	-0.3	1.6	0.7	-2.6	108.3	97.2
Q4	2.3	1.8	-4.0	4.2	1.6	0.4	-1.9	-4.2	3.0	0.0	-0.9	107.2	97.4
2003 Q1	.	.	.	.	.	.	.	.	.	.	.	.	.
2002 Oct.	1.6	1.9	-6.0	5.8	0.6	0.9	0.5	-3.8	3.9	0.6	2.0	106.8	97.9
Nov.	2.4	1.4	-0.2	5.4	2.4	-2.2	-4.7	-1.8	-0.3	-3.1	-1.0	108.3	98.4
Dec.	5.0	6.1	-1.2	5.6	3.7	4.5	1.2	0.5	9.1	4.2	2.6	106.4	95.9
2003 Jan.	3.6	2.4	-0.1	5.1	2.8	2.2	-2.7	13.8	4.6	4.0	-4.6	108.8	98.5
Feb.	1.9	0.6	0.1	1.8	1.5	1.7	0.1	-4.1	3.4	2.3	-1.5	109.4	99.5
Mar.	.	.	.	.	.	.	.	.	.	.	.	.	.
Unit values (annual percentage changes; 2000=100 for columns 12 and 13)													
1999	2.3	1.7	2.7	1.4	2.4	3.5	3.9	3.4	1.4	2.0	39.4	92.4	82.0
2000	8.3	11.0	7.4	5.1	7.2	21.9	28.3	11.8	8.7	13.5	84.8	100.0	100.0
<i>Euro area enlargement</i>													
2001	1.0	0.7	0.3	1.9	1.0	0.2	-1.3	1.6	2.8	1.7	-11.0	101.0	100.2
2002	-0.7	-1.4	-0.6	0.5	-0.7	-2.4	-2.8	-2.2	-1.0	-1.6	-3.7	100.3	97.8
2002 Q1	0.9	-0.5	1.5	2.9	0.9	-3.4	-5.7	-0.6	1.1	-0.6	-16.8	101.1	97.6
Q2	-0.7	-1.4	-0.3	0.4	-0.6	-3.2	-4.2	-1.8	-1.1	-1.6	-8.4	100.6	98.3
Q3	-1.9	-2.7	-1.8	-0.6	-1.9	-3.4	-3.6	-3.4	-2.8	-2.8	-4.6	99.5	97.3
Q4	-1.1	-1.0	-1.6	-0.7	-1.2	0.6	2.6	-2.9	-1.4	-1.5	19.7	99.9	97.9
2003 Q1	.	.	.	.	.	.	.	.	.	.	.	.	.
2002 Oct.	0.0	-0.3	-0.8	0.9	0.0	1.4	3.2	-1.6	-0.4	-0.6	19.6	100.0	97.9
Nov.	-0.9	-0.8	-1.4	-0.6	-1.1	0.3	1.8	-3.2	-0.6	-1.4	15.4	100.2	97.8
Dec.	-2.3	-2.0	-2.7	-2.4	-2.5	0.1	2.8	-3.9	-3.2	-2.6	24.5	99.4	98.1
2003 Jan.	-2.5	-2.1	-2.8	-2.5	-2.7	1.4	4.6	-6.0	-1.7	-2.6	32.4	98.6	98.3
Feb.	-2.4	-1.5	-2.5	-3.5	-2.6	0.2	4.1	-6.4	-4.3	-3.9	33.8	98.8	97.5
Mar.	.	.	.	.	.	.	.	.	.	.	.	.	.

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.

2. Geographical breakdown ¹⁾

(EUR billions; not seasonally adjusted, unless otherwise indicated)

	Total 1	Total (s.a.) 2	United Kingdom 3	Sweden 4	Denmark 5	Acceding 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.)													
1999	832.8	-	161.4	33.1	21.1	77.3	56.1	135.1	26.8	119.2	48.4	39.1	113.6
2000	1,013.7	-	189.7	38.8	23.2	94.6	63.4	171.4	34.2	151.6	56.1	46.7	141.6
<i>Euro area enlargement</i>													
2001	1,060.8	-	201.9	36.9	24.3	105.9	66.3	180.0	34.5	165.3	60.3	49.8	135.6
2002	1,077.0	-	203.9	36.8	24.7	112.0	63.9	181.6	32.6	170.3	59.8	43.1	148.4
2002 Q1	258.9	269.3	51.9	9.1	6.0	26.3	15.9	44.7	7.9	39.4	14.1	10.2	33.2
Q2	273.3	270.7	51.5	9.3	6.2	28.7	16.2	45.9	7.8	42.9	15.6	11.3	37.8
Q3	266.9	271.0	50.2	8.4	6.0	27.8	15.7	44.3	8.3	43.0	14.9	10.6	37.8
Q4	277.9	269.1	50.2	9.9	6.5	29.2	16.1	46.6	8.6	45.1	15.2	11.0	39.6
2003 Q1	253.4	262.4	.	.	.	.	.	.	.	.	.	.	.
2002 Oct.	99.7	89.8	18.0	3.7	2.3	10.8	5.8	17.1	3.1	15.7	5.3	4.2	13.8
Nov.	93.4	91.0	17.3	3.5	2.3	10.0	5.5	15.7	2.9	14.5	4.8	3.4	13.5
Dec.	84.9	88.3	14.9	2.8	1.9	8.4	4.7	13.8	2.6	14.9	5.0	3.4	12.4
2003 Jan.	82.2	89.4	15.4	3.0	1.9	8.9	5.3	14.2	2.5	12.2	4.5	3.1	.
Feb.	84.0	89.4	15.8	3.1	2.0	9.1	5.5	13.6	2.7	13.3	4.3	3.0	.
Mar.	87.2	83.5	.	.	.	.	.	.	.	.	.	.	.
% change versus previous year 2003 Mar. -6.3													
Imports (c.i.f.)													
1999	781.2	-	131.0	33.2	18.6	60.3	43.2	113.2	53.9	151.8	49.0	30.4	95.4
2000	1,008.4	-	156.6	38.0	21.8	76.8	49.8	140.7	65.5	211.6	72.2	39.7	134.0
<i>Euro area enlargement</i>													
2001	1,011.1	-	154.0	34.3	21.3	88.8	52.9	138.1	58.6	207.9	74.0	40.9	140.3
2002	974.6	-	144.8	34.0	21.6	93.5	51.9	125.1	52.5	203.8	68.4	39.1	139.9
2002 Q1	239.8	241.5	36.3	8.2	5.1	22.2	12.7	33.0	12.8	49.2	17.8	9.3	33.2
Q2	248.9	246.0	37.7	8.8	5.2	23.9	13.6	32.9	13.5	48.8	17.1	10.7	36.6
Q3	234.3	243.2	33.8	7.9	5.2	22.6	12.3	28.7	12.6	51.2	16.2	9.9	33.9
Q4	251.5	245.6	37.0	9.1	6.1	24.7	13.3	30.5	13.5	54.6	17.2	9.3	36.2
2003 Q1	247.8	247.8	.	.	.	.	.	.	.	.	.	.	.
2002 Oct.	90.1	82.4	12.6	3.2	2.0	9.0	4.9	10.9	4.9	19.6	6.4	3.7	12.8
Nov.	83.8	82.7	12.4	3.0	2.1	8.4	4.4	10.6	4.6	18.2	5.4	2.9	11.8
Dec.	77.6	80.5	12.0	2.8	2.0	7.4	4.0	9.0	4.0	16.7	5.4	2.6	11.6
2003 Jan.	83.3	82.9	10.9	2.7	1.9	8.0	4.1	9.8	4.6	18.7	6.2	3.0	.
Feb.	78.9	82.3	11.2	2.9	1.9	7.9	4.2	8.8	4.1	17.0	6.0	2.7	.
Mar.	85.6	82.7	.	.	.	.	.	.	.	.	.	.	.
% change versus previous year 2003 Mar. 4.3													
Balance													
1999	51.6	-	30.4	-0.1	2.6	17.4	12.9	21.9	-27.1	-32.6	-0.6	8.7	18.2
2000	5.3	-	33.1	0.8	1.4	18.5	13.6	30.7	-31.3	-60.0	-16.1	7.0	7.6
<i>Euro area enlargement</i>													
2001	49.7	-	47.8	2.7	3.0	17.1	13.4	42.0	-24.1	-42.5	-13.7	8.9	-4.7
2002	102.4	-	59.1	2.7	3.1	18.5	11.9	56.5	-19.9	-33.5	-8.7	4.0	8.4
2002 Q1	19.1	27.8	15.6	0.9	0.9	4.1	3.2	11.8	-4.9	-9.8	-3.8	1.0	0.1
Q2	24.4	24.7	13.8	0.4	1.0	4.8	2.7	13.0	-5.7	-6.0	-1.5	0.6	1.0
Q3	32.5	27.8	16.4	0.5	0.8	5.2	3.3	15.6	-4.3	-8.2	-1.3	0.7	3.9
Q4	26.5	23.5	13.3	0.8	0.4	4.5	2.8	16.1	-4.9	-9.5	-2.0	1.7	3.4
2003 Q1	5.7	14.6	.	.	.	.	.	.	.	.	.	.	.
2002 Oct.	9.6	7.4	5.4	0.4	0.3	1.8	0.9	6.2	-1.8	-3.9	-1.1	0.5	1.0
Nov.	9.6	8.4	4.9	0.5	0.2	1.7	1.1	5.1	-1.7	-3.8	-0.6	0.4	1.7
Dec.	7.3	7.7	3.0	0.0	-0.1	0.9	0.8	4.9	-1.4	-1.9	-0.4	0.8	0.7
2003 Jan.	-1.1	6.6	4.4	0.3	0.0	0.9	1.2	4.5	-2.1	-6.4	-1.7	0.1	.
Feb.	5.2	7.2	4.6	0.3	0.1	1.2	1.2	4.8	-1.4	-3.7	-1.7	0.3	.
Mar.	1.6	0.8	.	.	.	.	.	.	.	.	.	.	.

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	100.6	90.4	96.5	1.134	137.1	1.644	0.692
1998	101.5	101.3	101.6	99.4	96.6	99.1	1.121	146.4	1.622	0.676
1999	95.7	95.7	95.7	96.0	96.6	95.8	1.066	121.3	1.600	0.659
2000	85.7	86.3	87.1	87.1	88.2	86.0	0.924	99.5	1.558	0.609
<i>Euro area enlargement</i>										
2001	87.3	88.6	89.3	87.7	91.0	87.7	0.896	108.7	1.511	0.622
2002	90.0	92.5	92.9	90.7	95.6	91.7	0.946	118.1	1.467	0.629
2001 Q1	88.6	89.5	90.6	89.2	91.4	88.4	0.923	109.1	1.533	0.633
Q2	86.0	87.3	87.9	86.9	89.5	86.4	0.873	106.9	1.528	0.614
Q3	87.0	88.3	89.0	86.8	91.2	87.7	0.890	108.3	1.507	0.619
Q4	87.5	89.3	89.9	87.9	92.0	88.4	0.896	110.5	1.473	0.621
2002 Q1	87.1	89.4	89.9	87.5	91.3	87.8	0.877	116.1	1.473	0.615
Q2	88.8	91.4	91.6	90.0	93.9	90.2	0.919	116.5	1.465	0.629
Q3	91.3	93.9	94.4	92.4	97.9	93.8	0.984	117.2	1.464	0.635
Q4	92.5	95.4	95.5	92.9	99.4	94.9	0.999	122.4	1.467	0.636
2003 Q1	96.9	100.1	99.8	-	104.1	99.3	1.073	127.6	1.466	0.670
2001 Jan.	89.2	89.9	91.0	-	91.7	88.6	0.938	109.6	1.529	0.635
Feb.	88.3	89.1	90.4	-	91.0	88.1	0.922	107.1	1.536	0.634
Mar.	88.4	89.4	90.5	-	91.4	88.4	0.910	110.3	1.535	0.629
Apr.	87.6	88.8	89.6	-	91.0	88.0	0.892	110.4	1.529	0.622
May	85.9	87.2	87.7	-	89.3	86.2	0.874	106.5	1.533	0.613
June	84.7	86.0	86.5	-	88.1	85.0	0.853	104.3	1.522	0.609
July	85.4	86.8	87.2	-	89.1	85.9	0.861	107.2	1.514	0.609
Aug.	87.7	89.0	89.6	-	91.8	88.3	0.900	109.3	1.514	0.627
Sep.	88.0	89.3	90.0	-	92.6	89.0	0.911	108.2	1.491	0.623
Oct.	88.0	89.6	90.1	-	92.8	89.1	0.906	109.9	1.479	0.624
Nov.	86.8	88.4	89.2	-	91.3	87.6	0.888	108.7	1.466	0.618
Dec.	87.7	89.8	90.3	-	91.9	88.5	0.892	113.4	1.475	0.620
2002 Jan.	87.6	89.9	90.5	-	91.6	88.1	0.883	117.1	1.475	0.617
Feb.	86.8	89.0	89.6	-	91.1	87.4	0.870	116.2	1.477	0.612
Mar.	86.8	89.3	89.7	-	91.2	87.8	0.876	114.7	1.468	0.616
Apr.	87.2	89.7	90.1	-	91.7	88.1	0.886	115.8	1.466	0.614
May	88.6	91.1	91.4	-	93.7	89.9	0.917	115.9	1.457	0.628
June	90.6	93.2	93.4	-	96.4	92.4	0.955	117.8	1.472	0.644
July	91.7	94.4	94.7	-	98.2	94.1	0.992	117.1	1.462	0.639
Aug.	91.1	93.6	94.2	-	97.7	93.5	0.978	116.3	1.464	0.636
Sep.	91.2	93.7	94.4	-	98.0	93.6	0.981	118.4	1.465	0.631
Oct.	91.7	94.3	94.5	-	98.5	94.2	0.981	121.6	1.465	0.630
Nov.	92.5	95.1	95.3	-	99.3	94.6	1.001	121.7	1.467	0.637
Dec.	93.6	96.7	96.8	-	100.4	96.0	1.018	124.2	1.468	0.642
2003 Jan.	95.8	98.8	99.0	-	103.0	98.1	1.062	126.1	1.462	0.657
Feb.	97.1	100.2	100.1	-	104.4	99.4	1.077	128.6	1.467	0.670
Mar.	97.9	101.2	100.2	-	105.1	100.2	1.081	128.2	1.469	0.683
Apr.	98.6	102.1	101.7	-	105.2	100.3	1.085	130.1	1.496	0.689
May	102.5	106.0	105.8	-	109.1	103.7	1.158	135.8	1.516	0.713
% ch. vs. ⁴⁾ prev. month										
2003 May	3.9	3.9	4.1	-	3.6	3.5	6.8	4.4	1.3	3.5
% ch. vs. ⁴⁾ prev. year										
2003 May	15.6	16.4	15.8	-	16.4	15.4	26.3	17.2	4.0	13.5

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
<i>Euro area enlargement</i>								
9.26	7.45	8.05	1.386	1.732	6.99	1,154.8	1.604	2001
9.16	7.43	7.51	1.484	1.738	7.37	1,175.5	1.691	2002
9.00	7.46	8.20	1.410	1.741	7.20	1,174.7	1.616	2001 Q1
9.13	7.46	8.01	1.345	1.701	6.81	1,138.9	1.583	Q2
9.41	7.44	8.01	1.374	1.734	6.94	1,150.1	1.582	Q3
9.48	7.44	7.97	1.416	1.751	6.99	1,155.2	1.634	Q4
9.16	7.43	7.81	1.398	1.692	6.84	1,155.3	1.607	2002 Q1
9.16	7.43	7.52	1.428	1.666	7.17	1,157.8	1.657	Q2
9.23	7.43	7.40	1.536	1.796	7.67	1,172.7	1.729	Q3
9.09	7.43	7.32	1.569	1.791	7.79	1,215.4	1.767	Q4
9.18	7.43	7.57	1.620	1.809	8.37	1,288.9	1.872	2003 Q1
8.91	7.46	8.24	1.410	1.689	7.32	1,194.9	1.630	2001 Jan.
8.98	7.46	8.21	1.403	1.724	7.19	1,153.8	1.607	Feb.
9.13	7.46	8.16	1.417	1.807	7.09	1,173.4	1.611	Mar.
9.11	7.46	8.11	1.390	1.785	6.96	1,183.5	1.617	Apr.
9.06	7.46	7.99	1.347	1.681	6.82	1,133.7	1.586	May
9.21	7.45	7.94	1.302	1.647	6.65	1,104.1	1.550	June
9.26	7.44	7.97	1.315	1.689	6.71	1,120.3	1.569	July
9.31	7.45	8.06	1.386	1.717	7.02	1,154.0	1.586	Aug.
9.67	7.44	8.00	1.426	1.804	7.11	1,178.3	1.593	Sep.
9.58	7.44	8.00	1.422	1.796	7.07	1,178.6	1.640	Oct.
9.42	7.45	7.92	1.415	1.717	6.93	1,137.5	1.625	Nov.
9.44	7.44	7.99	1.408	1.735	6.96	1,147.0	1.639	Dec.
9.23	7.43	7.92	1.413	1.709	6.89	1,160.8	1.625	2002 Jan.
9.18	7.43	7.79	1.388	1.696	6.79	1,147.2	1.594	Feb.
9.06	7.43	7.72	1.390	1.669	6.83	1,157.3	1.602	Mar.
9.14	7.43	7.62	1.401	1.654	6.91	1,163.2	1.619	Apr.
9.22	7.44	7.52	1.421	1.666	7.15	1,150.1	1.651	May
9.11	7.43	7.40	1.463	1.679	7.45	1,160.6	1.703	June
9.27	7.43	7.40	1.532	1.792	7.74	1,169.2	1.740	July
9.25	7.43	7.43	1.533	1.805	7.63	1,167.1	1.716	Aug.
9.17	7.43	7.36	1.543	1.793	7.65	1,182.6	1.732	Sep.
9.11	7.43	7.34	1.548	1.783	7.65	1,211.9	1.751	Oct.
9.08	7.43	7.32	1.574	1.785	7.81	1,208.2	1.767	Nov.
9.10	7.43	7.29	1.587	1.808	7.94	1,226.9	1.786	Dec.
9.17	7.43	7.33	1.636	1.822	8.28	1,250.1	1.843	2003 Jan.
9.15	7.43	7.54	1.630	1.811	8.40	1,282.8	1.880	Feb.
9.23	7.43	7.84	1.594	1.795	8.43	1,335.4	1.895	Mar.
9.15	7.43	7.83	1.585	1.781	8.46	1,337.4	1.928	Apr.
9.16	7.42	7.87	1.602	1.787	9.03	1,390.0	2.007	May
0.0	0.0	0.5	1.0	0.3	6.8	3.9	4.1	% ch. vs. ⁴⁾ prev. month 2003 May
-0.7	-0.1	4.7	12.7	7.2	26.3	20.9	21.6	% ch. vs. ⁴⁾ prev. year 2003 May

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	General government deficit (-)/surplus (+) as a % of GDP	General government gross debt as a % of GDP	Long-term government bond yield ¹⁾ as a % per annum	Exchange rate ²⁾ as national currency per euro	Current and new capital account as a % of GDP	Unit labour costs ³⁾	Real GDP	Industrial production index ⁴⁾	Standardised unemployment rate as a % of labour force (s.a.) ⁵⁾	Broad money ⁵⁾	3-month interest rate ¹⁾ as a % per annum
	1	2	3	4	5	6	7	8	9	10	11	12
Denmark												
1999	2.1	3.3	53.0	4.91	7.44	1.8	2.4	2.6	0.1	4.8	-0.2	3.44
2000	2.7	2.6	47.4	5.64	7.45	1.5	1.4	2.9	5.7	4.4	1.1	5.00
2001	2.3	3.1	45.4	5.08	7.45	3.1	3.7	1.4	1.3	4.3	5.7	4.70
2002	2.4	1.9	45.2	5.06	7.43	3.0	1.4	1.6	1.5	4.5	3.5	3.54
2001 Q4	2.0	-	-	4.83	7.44	0.7	3.7	1.0	-0.5	4.3	9.6	3.77
2002 Q1	2.5	-	-	5.21	7.43	2.8	3.0	1.2	-0.5	4.3	2.3	3.63
Q2	2.1	-	-	5.36	7.43	3.2	0.6	3.1	4.5	4.4	2.8	3.71
Q3	2.4	-	-	4.92	7.43	3.8	1.0	1.1	0.9	4.6	2.6	3.57
Q4	2.7	-	-	4.74	7.43	2.0	1.0	1.0	1.1	4.7	6.1	3.27
2003 Q1	2.8	-	-	4.30	7.43	3.2	.	1.2	1.6	5.0	19.1	2.83
2002 Dec.	2.6	-	-	4.61	7.43	-	-	-	-1.7	4.8	10.8	3.07
2003 Jan.	2.6	-	-	4.43	7.43	-	-	-	-0.5	4.9	17.7	2.97
Feb.	2.9	-	-	4.21	7.43	-	-	-	3.3	5.0	21.1	2.83
Mar.	2.8	-	-	4.26	7.43	-	-	-	2.1	5.1	18.5	2.67
Apr.	2.5	-	-	4.41	7.43	-	-	-	.	.	20.8	2.67
May	.	-	-	4.09	7.42	-	-	-	.	.	.	2.54
Sweden												
1999	0.6	1.5	62.7	4.98	8.81	2.6	-1.2	4.6	2.2	6.7	6.8	3.32
2000	1.3	3.4	52.8	5.37	8.45	3.8	5.0	4.4	6.3	5.6	6.2	4.07
2001	2.7	4.5	54.4	5.11	9.26	3.8	5.8	1.1	-0.3	4.9	3.4	4.11
2002	2.0	1.2	52.4	5.31	9.16	4.1	2.1	1.9	-1.2	4.9	5.3	4.24
2001 Q4	3.0	-	-	5.12	9.48	4.3	5.6	0.8	-2.3	4.9	6.2	3.85
2002 Q1	2.9	-	-	5.42	9.16	5.5	4.7	0.8	-1.1	4.9	7.0	4.00
Q2	1.9	-	-	5.64	9.16	5.3	0.8	3.1	0.2	4.8	5.3	4.43
Q3	1.5	-	-	5.16	9.23	4.1	1.4	2.4	-1.2	4.9	5.8	4.41
Q4	1.6	-	-	5.00	9.09	1.8	1.7	1.3	-2.6	5.1	3.1	4.09
2003 Q1	2.9	-	-	4.59	9.18	.	.	.	-2.0	5.3	5.6	3.72
2002 Dec.	1.7	-	-	4.89	9.10	-	-	-	-3.5	5.1	4.2	3.85
2003 Jan.	2.6	-	-	4.71	9.17	-	-	-	1.7	5.4	5.2	3.83
Feb.	3.3	-	-	4.48	9.15	-	-	-	-2.4	5.2	5.7	3.75
Mar.	2.9	-	-	4.57	9.23	-	-	-	-4.7	5.3	5.9	3.56
Apr.	2.3	-	-	4.73	9.15	-	-	-	.	5.4	4.5	3.56
May	.	-	-	4.37	9.16	-	-	-	.	.	.	3.35
United Kingdom												
1999	1.3	1.1	45.1	5.01	0.659	-2.1	2.9	2.4	0.8	5.9	5.5	5.54
2000	0.8	3.9	42.1	5.33	0.609	-1.8	2.3	3.1	1.6	5.4	6.6	6.19
2001	1.2	0.8	39.0	5.01	0.622	-1.1	4.1	2.1	-2.1	5.0	8.1	5.04
2002	1.3	-1.4	38.6	4.91	0.629	-0.7	.	1.8	-3.4	5.1	6.0	4.06
2001 Q4	1.0	-1.8	38.7	4.82	0.621	-1.5	3.4	1.9	-5.6	5.1	7.8	4.16
2002 Q1	1.5	2.8	37.7	5.13	0.615	-0.3	2.7	1.2	-5.7	5.1	6.1	4.08
Q2	0.9	-3.6	38.1	5.28	0.629	-1.7	2.6	1.6	-4.4	5.1	5.7	4.17
Q3	1.1	-0.7	37.7	4.71	0.635	0.3	1.5	2.2	-2.2	5.2	5.7	4.01
Q4	1.6	-3.0	38.3	4.52	0.636	-1.1	.	2.2	-1.1	5.0	6.3	3.98
2003 Q1	1.5	-1.1	37.6	4.34	0.670	.	.	2.3	-1.1	.	6.9	3.80
2002 Dec.	1.7	-4.5	38.3	4.49	0.642	-	-	-	-0.8	4.9	7.2	4.02
2003 Jan.	1.4	3.4	37.6	4.31	0.657	-	-	-	-0.7	5.0	6.7	3.98
Feb.	1.6	-1.3	37.3	4.29	0.670	-	-	-	-0.4	5.1	6.8	3.75
Mar.	1.6	-5.4	37.6	4.41	0.683	-	-	-	-2.0	.	7.2	3.66
Apr.	1.5	-0.1	37.5	4.56	0.689	-	-	-	.	.	8.0	3.65
May	.	.	.	4.31	0.713	-	-	-	.	.	.	3.63

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

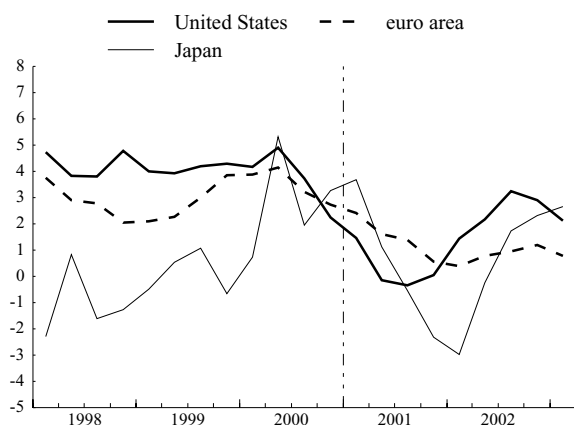
Economic and financial developments

(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 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											
1999	2.2	-1.1	4.1	5.0	4.2	7.6	5.42	5.64	1.066	0.7	49.6
2000	3.4	3.2	3.8	5.2	4.0	6.1	6.53	6.03	0.924	1.4	44.3
2001	2.8	0.7	0.3	-4.1	4.8	8.7	3.78	5.01	0.896	-0.5	43.9
2002	1.6	-1.1	2.4	-1.0	5.8	7.7	1.80	4.60	0.946	-3.4	46.1
2001 Q4	1.9	1.0	0.1	-6.2	5.6	10.3	2.15	4.74	0.896	-1.0	44.0
2002 Q1	1.3	-0.8	1.4	-4.0	5.6	9.1	1.90	5.06	0.877	-3.0	44.3
Q2	1.3	-1.5	2.2	-1.5	5.8	7.5	1.92	5.08	0.919	-3.3	44.6
Q3	1.6	-1.9	3.3	0.5	5.8	7.3	1.81	4.25	0.984	-3.4	45.2
Q4	2.2	-0.3	2.9	1.1	5.9	7.0	1.55	3.99	0.999	-3.8	46.1
2003 Q1	2.9	1.2	2.1	0.4	5.8	6.9	1.33	3.90	1.073	-4.0	.
2002 Dec.	2.4	-	-	0.9	6.0	6.6	1.41	4.03	1.018	-	-
2003 Jan.	2.6	-	-	0.8	5.7	6.7	1.37	4.02	1.062	-	-
Feb.	3.0	-	-	0.5	5.8	6.8	1.34	3.90	1.077	-	-
Mar.	3.0	-	-	0.0	5.8	7.1	1.29	3.79	1.081	-	-
Apr.	2.2	-	-	-0.9	6.0	7.8	1.30	3.94	1.085	-	-
May	.	-	-	.	.	.	1.28	3.56	1.158	-	-
Japan											
1999	-0.3	-1.9	0.1	0.2	4.7	3.7	0.22	1.75	121.3	-7.2	118.2
2000	-0.7	-6.2	2.8	5.7	4.7	2.1	0.28	1.76	99.5	-7.4	126.1
2001	-0.7	4.8	0.4	-6.8	5.0	2.8	0.15	1.34	108.7	-6.1	134.6
2002	-0.9	-3.0	0.2	-1.4	5.4	3.3	0.08	1.27	118.1	.	.
2001 Q4	-1.0	10.1	-2.3	-12.6	5.4	3.2	0.08	1.35	110.5	.	.
2002 Q1	-1.4	5.5	-3.0	-9.9	5.3	3.6	0.10	1.46	116.1	.	.
Q2	-0.9	-1.5	-0.3	-3.8	5.4	3.5	0.08	1.37	116.5	.	.
Q3	-0.8	-7.0	1.7	3.2	5.4	3.3	0.07	1.24	117.2	.	.
Q4	-0.5	-8.6	2.3	5.9	5.4	2.9	0.07	1.01	122.4	.	.
2003 Q1	-0.2	.	2.7	5.6	5.4	1.9	0.06	0.80	127.6	.	.
2002 Dec.	-0.3	-8.8	-	7.0	5.4	2.1	0.06	0.97	124.2	-	-
2003 Jan.	-0.4	-9.5	-	8.2	5.5	1.9	0.06	0.84	126.1	-	-
Feb.	-0.2	-6.7	-	4.8	5.2	1.9	0.06	0.83	128.6	-	-
Mar.	-0.1	.	-	4.1	5.4	1.7	0.06	0.74	128.2	-	-
Apr.	-0.1	.	-	3.6	.	1.4	0.06	0.66	130.1	-	-
May	.	.	-	.	.	.	0.06	0.57	135.8	-	-

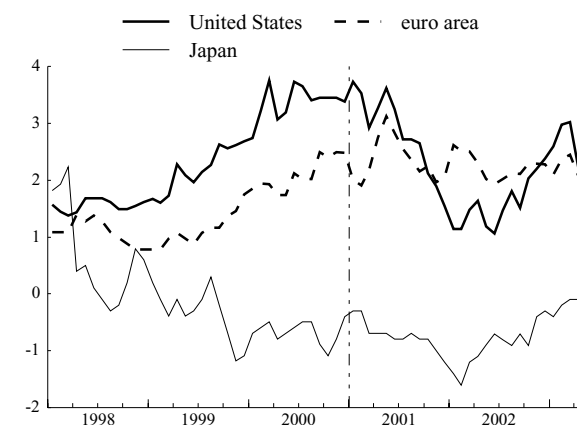
Real gross domestic product

(annual percentage changes; quarterly)



Consumer price indices

(annual percentage changes; monthly)



Sources: National data (columns 1, 2 (United States), 3, 4, 5, 6, 9 and 10); OECD (column 2 (Japan)); Eurostat (euro area chart data); Reuters (column 7 and 8); 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.

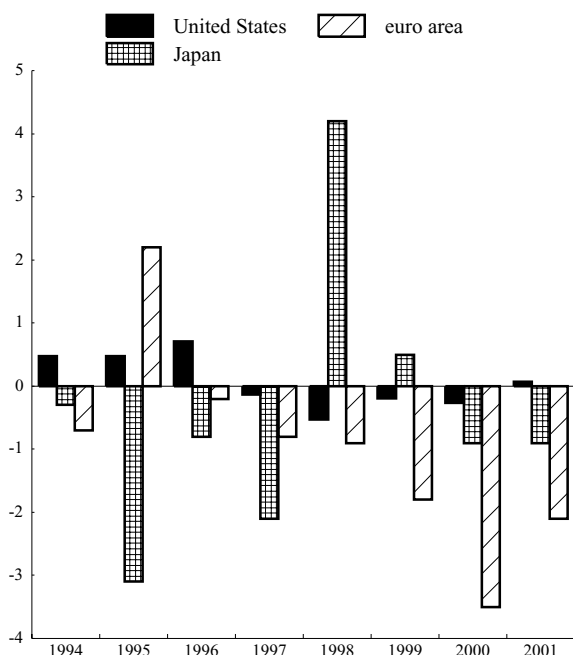
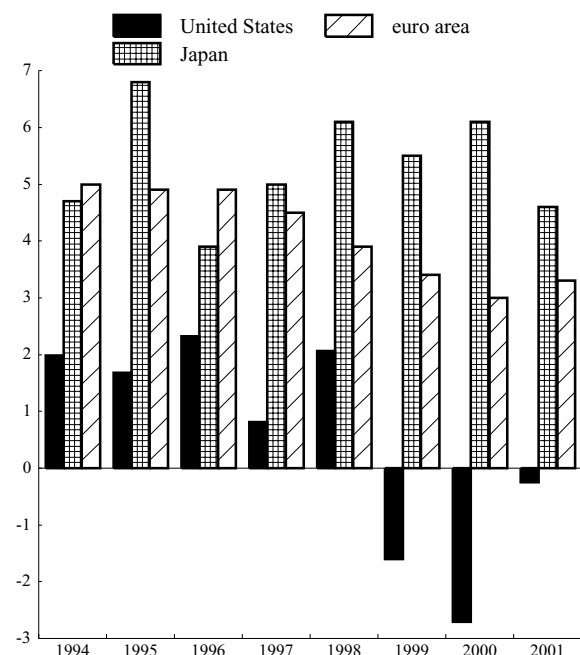
4) For more information, see Table 10.

5) 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													
1999	18.4	20.9	-3.0	9.5	8.9	10.5	8.2	10.6	2.9	12.4	4.6	11.2	6.2
2000	18.4	21.1	-4.0	9.7	9.1	12.3	7.5	12.6	2.7	12.5	3.0	11.5	5.7
2001	16.5	19.1	-3.7	7.9	8.5	3.7	7.7	3.7	2.0	13.0	5.5	11.6	5.7
2002	15.2	18.6	-4.6	7.7	7.7	2.3	7.6	2.9	0.2	12.8	6.4	12.7	6.8
2001 Q1	16.9	20.0	-4.1	8.6	8.9	4.6	7.1	5.6	2.2	12.9	4.0	11.4	3.5
Q2	16.6	19.3	-3.8	8.1	8.6	4.0	7.4	4.1	2.8	12.9	6.2	11.2	6.6
Q3	16.5	18.8	-3.5	7.7	8.3	2.6	7.8	2.2	0.8	12.9	9.1	12.8	9.1
Q4	15.9	18.2	-3.6	7.1	8.0	3.8	8.5	2.8	2.3	13.4	2.7	10.9	3.7
2002 Q1	15.6	18.6	-4.1	7.5	7.8	2.6	7.9	2.8	0.3	12.8	6.5	12.3	6.7
Q2	15.5	18.7	-4.8	7.7	7.6	2.6	7.7	3.1	1.1	12.7	6.8	12.7	5.8
Q3	15.0	18.6	-4.7	7.8	7.6	1.2	7.5	2.1	-1.3	12.9	4.7	12.7	6.5
Q4	14.8	18.7	-5.0	7.8	7.6	2.7	7.3	3.5	0.8	12.7	7.5	12.8	8.2
Japan													
1999	27.8	25.9	2.2	14.4	14.8	2.4	13.7	-3.5	1.7	5.2	5.1	11.5	0.2
2000	27.7	26.2	2.3	15.8	15.4	2.4	14.3	0.3	1.2	5.2	4.1	10.7	0.0
2001	26.4	25.6	2.0	15.7	15.2	-2.3	14.1	-5.7	1.7	4.9	3.0	8.6	-0.1
2002	.	23.7	.	.	.	-2.4	.	-6.6	-0.3	.	1.2	.	-2.1
2001 Q1	30.1	26.4	2.3	.	.	8.9	.	-2.4	2.2	.	-4.1	.	3.2
Q2	24.2	25.4	1.7	.	.	-26.7	.	-15.3	4.0	.	11.8	.	-4.5
Q3	25.9	25.3	2.1	.	.	6.3	.	-8.9	-1.1	.	-5.2	.	2.6
Q4	25.5	25.5	2.0	.	.	2.3	.	3.2	1.5	.	8.8	.	-1.5
2002 Q1	29.6	22.8	3.4	.	.	10.0	.	-6.7	-2.5	.	-6.5	.	2.5
Q2	.	22.7	.	.	.	-25.0	.	-19.0	2.0	.	7.4	.	-8.0
Q3	.	23.7	.	.	.	-0.8	.	-7.5	-2.6	.	-4.3	.	-0.1
Q4	.	25.0	.	.	.	6.0	.	5.8	1.5	.	7.3	.	-2.6

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 Tables 2.3 to 2.7

Calculation of flows

Monthly flows are calculated from monthly differences in levels adjusted for reclassifications, other revaluations, exchange rate variations and any other changes which do not arise from transactions.

If L_t represents the level outstanding at the end of the month t , C_t^M the reclassification adjustment in month t , E_t^M the exchange rate adjustment and V_t^M the other revaluation adjustments, the flow F_t^M in month t is defined as:

$$a) F_t^M = (L_t - L_{t-1}) - C_t^M - E_t^M - V_t^M$$

Similarly, the quarterly flow F_t^Q for the quarter ending in month t is defined as:

$$b) F_t^Q = (L_t - L_{t-3}) - C_t^Q - E_t^Q - V_t^Q$$

where L_{t-3} is the level outstanding at the end of month $t-3$ (the end of the previous quarter) and, for example, C_t^Q is the reclassification adjustment in the quarter ending in month t .

Relating to Table 2.4

Calculation of growth rates

Growth rates may be calculated from flows or from the index of adjusted stocks. If F_t^M and L_t are defined as above, the index I_t of adjusted stocks in month t is defined as:

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

As a base, the index (of the non-seasonally adjusted series) is set equal to 100 on December 2001. The annual percentage change a_t for month t – i.e. the change in the 12 months ending in month t – may be calculated using either of the following two formulae:

$$d) a_t = \left[\prod_{i=0}^{11} \left(1 + \frac{F_{t-i}^M}{L_{t-1-i}} \right) - 1 \right] \times 100$$

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

Similarly, the month-on-month percentage change a_t^M for month t may be calculated as:

$$f) a_t^M = \left(\frac{F_t^M}{L_{t-1}} \right) \times 100$$

$$g) a_t^M = \left(\frac{I_t}{I_{t-1}} - 1 \right) \times 100$$

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.

Seasonal adjustment of the euro area monetary aggregates and loans¹

The approach used relies on a multiplicative decomposition through X-12-ARIMA.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.

The seasonal adjustment procedures are first applied to the index of adjusted stocks.³ The resulting

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", 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.

³ It follows that for the seasonally adjusted series, the level of the index for the base period, i.e. December 2001, generally differs from 100, reflecting the seasonality of that month.

estimates of the seasonal factors are then applied to the levels and to the adjustments arising from reclassifications and revaluations, in turn yielding seasonally adjusted flows. Seasonal (and trading day) factors are revised at annual intervals or as required.

Relating to Tables 2.5 to 2.8

As far as possible, the data have been harmonised and are comparable over time. Nevertheless, as a result of the implementation of a new reporting scheme in January 1999, outstanding levels for periods prior to the first quarter of 1999 are not always directly comparable with those referring to later periods.

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

Calculation of growth rates

Growth rates may be calculated from flows or from the index of adjusted stocks. If F_t^Q and L_{t-3} are defined as above, the index I_t of adjusted stocks for the quarter ending in month t is defined as:

$$h) I_t = I_{t-3} \times \left(1 + \frac{F_t^Q}{L_{t-3}} \right)$$

As a base, the index is set equal to 100 on December 2001. The annual percentage change in the four quarters ending in month t , i.e. a_t , may be calculated using either of the following two formulae:

$$i) a_t = \left[\prod_{i=0}^3 \left(1 + \frac{F_{t-3i}^Q}{L_{t-3(i+1)}} \right) - 1 \right] \times 100$$

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

Similarly, the quarter-on-quarter percentage change a_t^Q for the quarter ending in month t may be calculated as:

$$k) a_t^Q = \left(\frac{F_t^Q}{L_{t-3}} \right) \times 100$$

$$l) a_t^Q = \left(\frac{I_t}{I_{t-3}} - 1 \right) \times 100$$

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 3.7

Calculation of growth rates

Growth rates are calculated on the basis of financial transactions and therefore exclude reclassifications, revaluations, exchange rate variations and any other changes which do not arise from transactions. They may be calculated from flows or from the index of adjusted stocks. If N_t^M represents the flow (net issues) in month t and L_t the level outstanding at the end of the month t , the index I_t of adjusted stocks in month t is defined as:

$$m) I_t = I_{t-1} \times \left(1 + \frac{N_t^M}{L_{t-1}} \right)$$

As a base, the index is set equal to 100 on December 2001. The annual percentage change a_t for month t – i.e. the change in the 12 months ending in month t – may be calculated using either of the following two formulae:

$$n) a_t = \left[\prod_{i=0}^{11} \left(1 + \frac{N_{t-i}^M}{L_{t-1-i}} \right) - 1 \right] \times 100$$

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

The method to calculate the growth rates in the field of securities issues statistics is the same as the one used for the monetary aggregates with the only difference being that an "N" is used here rather than an "F". The reason is to distinguish the different ways of obtaining "flows" used for the monetary aggregates and "net issues" for securities issues statistics, where the ECB collects information on gross issues and redemptions separately.

Relating to Table 4.1

Seasonal adjustment of the HICP⁴

The approach used relies on multiplicative decomposition through X-12-ARIMA (see footnote 2 on page 85*). 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 (see footnote 2 on page 85*). Goods raw data are first pre-adjusted to take into

account “working day”, “leap year” and “Easter” effects. Services include only a “working day” pre-adjustment. The seasonal adjustment for goods and services is carried out using these pre-adjusted series. Income and current transfers do not include any pre-adjustment at all. 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.

⁴ See footnote 1 on page 85*.



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. The document covers money and banking and related statistics, balance of payments statistics, international investment position statistics and financial accounts statistics. The ECB’s requirements for statistics on prices and costs, national accounts, the labour market, government receipts and expenditure, short-term indicators of output and demand, and the European Commission Business and Consumer Surveys are set out in the document entitled “Requirements in the field of general economic statistics” of August 2000.¹

The focus of these statistics is the euro area as a whole. New data will appear in the ECB’s Monthly Bulletin as they become available. More detailed and longer runs of data, with further explanatory notes, are available on the statistics section of the ECB’s website (www.ecb.int). The services available within “Statistics on-line” include a Browser interface with search facilities, subscription to different datasets and the possibility to download data directly in compressed Comma Separated Value (CSV) files.

Given that the composition of the ECU does not coincide with the currencies of the countries 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 EU 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 where appropriate.

As a general rule, the cut-off date for the statistics included in the ECB’s Monthly Bulletin is the day preceding the first meeting in the month of the Governing Council of the ECB. For this issue, the cut-off date was 4 June 2003.

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

Reference statistical series relating to the euro area cover EU Member States that had adopted the euro at the time to which the statistics relate. This means that euro area data up to end-2000 cover the Euro 11 and, from the beginning of 2001, data 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 enlargement of the euro area. In the charts, the break is indicated by a dotted line. Where possible, absolute and percentage changes for 2001 calculated from a base in 2000 use a series which takes into account the impact of Greece’s entry into the euro area.

Data for the euro area plus Greece up to end-2000 can be downloaded (CSV files) from the ECB’s website (www.ecb.int).

The group “acceding countries” consists of the Czech Republic, Estonia, Cyprus, Latvia, Lithuania, Hungary, Malta, Poland, Slovenia and Slovakia.

¹ The ECB is responsible for money, banking and financial markets statistics 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).

Overview

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

Monetary policy 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 developments and investment funds

Monetary data relating to Monetary Financial Institutions (MFIs), including the Eurosystem, are shown in Tables 2.1 to 2.3. Table 2.3 is consolidated; inter-MFI positions within the euro area are not shown, but any difference between the sum total of such claims and liabilities as recorded is shown in column 13. Table 2.4 sets out monetary aggregates drawn from the consolidated MFI balance sheet; they also include some (monetary) liabilities of central government. The M3 data shown in Table 2.4 exclude holdings by non-residents of the euro area of i) shares/units issued by money market funds located in the euro area, and ii) 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 external liabilities item 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 "Guidance Notes to Regulation ECB/2001/13 on the MFI Balance Sheet Statistics" (ECB, November 2002) explains recommended practices to be followed by the NCBs. From 1 January 1999 the statistical information is collected and compiled on the basis of the ECB Regulation concerning the consolidated balance sheet of the Monetary Financial Institutions sector (ECB/1998/16, as replaced from January 2003 by ECB/2001/13).

Further to the entry into force of Regulation ECB/2001/13, the balance sheet item "money market paper" has been merged with the item "debt securities" on both the assets and liabilities side of the MFI balance sheet.

Table 2.9 shows end-quarter outstanding stocks for the balance sheet of the euro area investment funds (other than money market funds). The balance sheet is aggregated and thus includes among the liabilities holdings by investment funds of shares/units issued by other investment funds. Total assets/liabilities are also broken down by investment policy (equity funds, bond funds, mixed funds, real estate funds, and other funds) and by type of investor (general public funds and special investors' funds). Table 2.10 shows the aggregated balance sheet for each investment fund sector as identified by investment policy, and Table 2.11 shows the aggregated balance sheet broken down by type of investor.

Financial markets and interest rates

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 cover securities other than shares (debt securities), which are presented in Tables 3.5, 3.6 and 3.7 as well as quoted shares, which are presented in Table 3.8. Debt securities are broken down into short-term and long-term securities. "Short-term" means securities with an original maturity of one year or less (in exceptional cases, in accordance with the ESA 95, 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 debt securities 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.

Table 3.7 shows annual growth rates for debt securities issued by euro area residents and by sector of the issuer, which are based on financial transactions that occur when an institutional unit acquires or disposes of financial assets and incurs or repays liabilities. The annual growth rates therefore exclude reclassifications, revaluations, exchange rate variations and any other changes which do not arise from transactions.

Table 3.8 shows the outstanding amounts of quoted shares issued by euro area residents broken down by issuing sector. The monthly data for quoted shares issued by non-financial corporations correspond to the quarterly series shown in Table 6.1 (Main liabilities, column 20).

HICP and other prices

The data described in this section and the "Real economy indicators" section 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

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

harmonised and comparable. As a general rule, however, the availability of comparable data is better for the more recent periods than for earlier periods.

The Harmonised Index of Consumer Prices (HICP) for the euro area (Table 4.1) is available from 1995 onwards. The index is based on national HICPs that follow the same methodology in all euro area countries. The breakdown by goods and services components is derived from the Classification of individual consumption by purpose (Coicop) used for the HICP. The HICP covers monetary expenditure on final consumption by households on the economic territory of the euro area. The table includes seasonally adjusted HICP data which are compiled by the ECB.

Real economy indicators

With regard to statistics on national accounts (Tables 4.2 and 5.1), the implementation of the ESA 95 from 1999 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 by Commission Regulation (EC) No. 586/2001 of 26 March 2001.

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

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. The labour force estimates underlying the unemployment rate are different from the sum of the employment and unemployment levels published in Table 5.4.

Saving, investment and financing

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 cover amounts outstanding and transactions classified according to the ESA 95 and show the main financial investment and financing activities of the non-financial sectors. On the financing side (liabilities) the data are presented by ESA 95 sector and original maturity. Whenever possible the financing taken from MFIs is presented separately. The information on financial investment (assets) is currently less detailed than that on financing, especially since a breakdown by sector is not possible.

Table 6.2 shows quarterly data on financial accounts for insurance corporations and pensions funds (S.125) in the euro area. As in Table 6.1, the data cover amounts outstanding and financial transactions and show the main financial investment and financing activities of this sector.

The quarterly data in both tables are based on quarterly national financial accounts, MFI balance sheet and securities issues statistics. Table 6.1 also refers to data taken from BIS international banking statistics. Although all euro area countries contribute to the MFI balance sheet and securities issues statistics, Ireland and Luxembourg do not yet provide quarterly national financial accounts data.

Table 6.3 shows annual data on saving, (financial and non-financial) investment and financing for the euro area sectors as a whole, and for the non-financial corporations and households separately. These annual data provide, in particular, fuller sector information on the acquisition of financial assets and are consistent with the quarterly data in the two previous tables.

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 (EC) 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 (including reserves)

The concepts and definitions used in balance of payments statistics (Tables 8.1 to 8.6) and

international investment position (Tables 8.8.1 to 8.8.4) statistics generally conform to the 5th edition of the IMF Balance of Payments Manual (October 1993), to the ECB Guideline of May 2003 (ECB/2003/7) on the statistical reporting requirements of the ECB, and to Eurostat's documentation.

The euro area balance of payments (b.o.p.) data are compiled by the ECB. Data up to December 1998 are expressed in ECU. The recent monthly figures for b.o.p. statistics should be regarded as provisional. Data are revised with the publication of the update for the next month and of the detailed quarterly b.o.p. data. Earlier data are revised periodically or as a result of methodological changes in the compilation of the source data.

Some earlier data have been partially estimated and may not be fully comparable with more recent observations. Table 8.5.2 provides a sectoral breakdown of euro area purchasers of securities issued by non-residents of the euro area. For the time being, it is not possible to show a sectoral breakdown of euro area issuers of securities acquired by non-residents.

A new table on the monetary presentation of the euro area b.o.p. has been added to section 8 (Table 8.7). A specific methodological note is available on the statistics section of the ECB's website (www.ecb.int). See also Box I in this issue.

The euro area i.i.p. (Tables 8.8.1 to 8.8.4) is compiled on the basis of euro area member countries' positions vis-à-vis non-euro area residents (i.e. considering the euro area as a whole economy) from end-1999 positions with the result that euro area assets and liabilities are shown separately (see also Box 9 in the December 2002 issue). The i.i.p. is compiled on a "net" basis, i.e. by aggregating national data regarding end-1997 and end-1998 positions. The "net" and the "extra-euro area" based compilation methodologies may not give fully comparable results. 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 8.8.5 with the corresponding reserves and related assets held by the ECB. The data in Table 8.8.5 are in line with the recommendations for the IMF/BIS template on international reserves and foreign currency liquidity. Earlier data are continually revised. 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 ("Statistical treatment of the Eurosystem's international reserves", October 2000).

External trade in goods

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.

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).

Exchange rates

Table 10 shows ECB calculations of nominal and real effective exchange rate indices for the euro based on weighted averages of bilateral euro exchange rates. Weights are based on 1995-97 manufactured goods trade with the trading partners and capture third-market effects. Up to December 2000, the narrow group is composed of the countries whose currencies are shown in the table plus Greece. When Greece joined the euro area in January 2001, it ceased to be a partner country in the effective exchange rate of the euro and the weighting scheme has been adjusted accordingly. In addition, the broad group includes the following countries: Algeria, Argentina, Brazil, China, Croatia, Cyprus, the Czech Republic, Estonia, Hungary, India, Indonesia, Israel, Malaysia, Mexico, Morocco, New Zealand, the Philippines, Poland, Romania, Russia, Slovakia, Slovenia, South Africa, Taiwan, Thailand and Turkey. Real rates are calculated using consumer prices (CPI), producer prices in manufacturing (PPI) and unit labour costs in manufacturing (ULCM). Where deflators are not yet available, estimates are used. The bilateral rates shown are those against the 12 currencies used in the ECB's calculation of the "narrow" effective exchange rate of the euro. The ECB publishes daily reference rates for these and some other currencies. For more detailed information, see the ECB's Occasional Paper No. 2 ("The effective exchange rates of the euro", Luca Buldorini, Stelios Makrydakis and Christian Thimann, February 2002), which can be downloaded from the ECB's website.

Economic and financial developments outside the euro area

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.

Chronology of monetary policy measures of the Eurosystem¹

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

¹ The chronology of monetary policy measures of the Eurosystem taken in 1999 and 2000 can be found on pages 176 to 179 of the ECB Annual report 1999 and on pages 205 to 208 of the ECB Annual report 2000 respectively.

refinancing operations by 0.25 percentage point to 4.25%, with effect from the operation to be settled on 5 September 2001. In addition, it decides to lower the interest rates on both the marginal lending facility and the deposit facility by 0.25 percentage point, to 5.25% and 3.25% respectively, both with effect from 31 August 2001.

13 September 2001

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

17 September 2001

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

27 September, 11 October, 25 October 2001

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

8 November 2001

The Governing Council of the ECB decides to lower the minimum bid rate on the main

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

6 December 2001

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

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

3 January 2002

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

The Governing Council also decides on an allotment amount of €20 billion per operation for the longer-term refinancing operations to be conducted in 2002. This amount takes into consideration the expected liquidity needs of the euro area banking system in 2002 and the desire of the Eurosystem to continue to provide the bulk of refinancing of the financial sector through its main refinancing operations. The Governing Council may adjust the allotment amount in the course of the year in the event of unexpected developments in liquidity needs.

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

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

10 July 2002

The Governing Council of the ECB decides to reduce the allotment amount for each of the longer-term refinancing operations to be conducted in the second half of 2002 from €20 billion to €15 billion. This latter amount takes into consideration the expected liquidity needs of the euro area banking system in the second half of 2002 and reflects the desire of the Eurosystem to continue to provide the bulk of liquidity through its main refinancing operations.

**1 August, 12 September, 10 October,
7 November 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.

5 December 2002

The Governing Council of the ECB decides to lower the minimum bid rate on the main refinancing operations by 0.50 percentage point to 2.75%, starting from the operation to be settled on 11 December 2002. It also decides to lower the interest rates on both the marginal lending facility and the deposit facility by 0.50 percentage point, to 3.75% and 1.75% respectively, both with effect from 6 December 2002.

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

9 January 2003

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 2.75%, 3.75% and 1.75% respectively.

23 January 2003

The Governing Council of the ECB decides to implement the following two measures to improve the operational framework for monetary policy:

Firstly, the timing of the reserve maintenance period will be changed so that it will always start on the settlement day of the main refinancing operation (MRO) following the Governing Council meeting at which the monthly assessment of the monetary policy stance is pre-scheduled. Furthermore, as a rule, the implementation of changes to the standing facility rates will be aligned with the start of the new reserve maintenance period.

Secondly, the maturity of the MROs will be shortened from two weeks to one week.

These measures are scheduled to come into effect during the first quarter of 2004.

Further to the press release of 10 July 2002, the Governing Council also decides to maintain at €15 billion the allotment amount for each of the longer-term refinancing operations to be conducted in the year 2003. This amount takes into consideration the expected liquidity needs of the euro area banking system in 2003 and reflects the desire of the Eurosystem to continue to provide the bulk of liquidity through its main refinancing operations.

6 February 2003

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 2.75%, 3.75% and 1.75% respectively.

6 March 2003

The Governing Council of the ECB decides to lower the minimum bid rate on the main refinancing operations by 0.25 percentage point to 2.50%, starting from the operation to be settled on 12 March 2003. It also decides to lower the interest rates on both the marginal lending facility and the deposit facility by 0.25 percentage point, to 3.50% and 1.50% respectively, both with effect from 7 March 2003.

3 April 2003

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 2.50%, 3.50% and 1.50% respectively.

8 May 2003

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 2.50%, 3.50% and 1.50% respectively.

It also announces the results of its evaluation of the ECB's monetary policy strategy. This strategy, which was announced on 13 October 1998, consists of three main elements: a quantitative definition of price stability, a

prominent role for money in the assessment of risks to price stability, and a broadly based assessment of the outlook for price developments.

The Governing Council confirms the definition of price stability formulated in October 1998, namely that "price stability is defined as a year-on-year increase in the Harmonised Index of Consumer Prices (HICP) for the euro area of below 2%. Price stability is to be maintained over the medium term". At the same time, the Governing Council agrees that in the pursuit of price stability it will aim to maintain inflation rates close to 2% over the medium term.

The Governing Council confirms that its monetary policy decisions will continue to be based on a comprehensive analysis of the risks to price stability. At the same time, the Governing Council decides to clarify in its communication the respective roles played by economic and monetary analysis in the process of coming to the Council's overall assessment of risks to price stability.

To underscore the longer-term nature of the reference value for monetary growth as a benchmark for the assessment of monetary developments, the Governing Council also decides that it will no longer conduct a review of the reference value on an annual basis. However, it will continue to assess the underlying conditions and assumptions.

5 June 2003

The Governing Council of the ECB decides to lower the minimum bid rate on the main refinancing operations by 0.50 percentage point to 2.0%, starting from the operation to be settled on 9 June 2003. It also decides to lower the interest rates on both the marginal lending facility and the deposit facility by 0.50 percentage point, to 3.0% and 1.0% respectively, both with effect from 6 June 2003.

The TARGET (Trans-European Automated Real-time Gross settlement Express Transfer) system

Payment flows in TARGET

TARGET as a whole, i.e. on both the domestic and cross-border level, processed a daily average of 252,899 payments with a value of €1,696 billion in the first quarter, showing a reduction of 2% in volume and a growth of 3% in value compared with the previous quarter. Both the domestic and cross-border figures contributed to the growth in terms of value. The lower volumes were a result of fewer payments processed on a domestic level, even though the number of cross-border payments grew. TARGET's overall market share went up in value terms (from 86.2% in the previous quarter to 86.6%) and fell slightly in terms of volume (57.8% compared with 58.6% in the fourth quarter 2002).

TARGET domestic

TARGET processed a daily average of 195,334 domestic payments (representing a decrease of 4% compared with the previous quarter) with a value of €1,147 billion (an increase of 2%). Compared with the first quarter of 2002, the value of payments grew by 8% and the volume decreased slightly, by 0.5%.

TARGET domestic accounted for 67.6% and 77.2% of the total value and volume of TARGET respectively. The average value of a domestic payment was €5.9 million, €0.4 million higher than in the previous quarter.

The highest domestic value was recorded on 21 February 2003, when a total of €1,404 billion

Table I

Payment instructions processed by TARGET and other selected interbank funds transfer systems: volume of transactions

(number of payments)

	2002 Q1	2002 Q2	2002 Q3	2002 Q4	2003 Q1
TARGET					
All TARGET payments					
Total volume	15,364,299	15,834,392	16,361,900	16,581,446	15,932,658
Daily average	247,811	251,340	247,908	259,085	252,899
Cross-border TARGET payments					
Total volume	3,188,285	3,419,144	3,577,801	3,548,455	3,626,612
Daily average	51,424	54,272	54,209	55,445	57,565
Domestic TARGET payments					
Total volume	12,176,014	12,415,248	12,784,099	13,032,991	12,306,046
Daily average	196,387	197,067	193,698	203,640	195,334
Other systems					
Euro 1 (EBA)					
Total volume	7,790,799	8,549,759	8,866,903	9,193,222	9,175,565
Daily average	125,658	135,710	134,347	143,644	145,664
Paris Net Settlement (PNS)					
Total volume	1,900,298	1,901,820	1,860,283	1,907,487	1,848,463
Daily average	30,650	30,188	28,186	29,804	29,341
Servicio Español de Pagos Interbancarios (SPI)					
Total volume	409,483	455,080	449,333	462,054	475,698
Daily average	6,605	7,223	6,808	7,220	7,551
Pankkien On-line Pikasirrot ja Sekit-järjestelmä (POPS)					
Total volume	152,445	212,064	157,864	138,552	134,248
Daily average	2,459	3,366	2,392	2,165	2,131

was processed. In volume terms, the peak day was the last day of the quarter, 31 March 2003, with a total of 255,860 payments. Some 61% of all domestic TARGET payments had a value of less than or equal to €50,000, while 14% were for more than €1 million. On a daily average, about 150 TARGET domestic payments had a value above €1 billion.

TARGET cross-border

At cross-border level, TARGET processed a daily average of 57,565 payments with a value of €550 billion. Compared with the fourth quarter of 2002 the volume was 4% higher and turnover was up by 7%. The cross-border figures rose by 12% in volume terms and 15% in value terms compared with the first quarter of 2002.

Interbank payments rose by 7% in terms of value and 6% in volume terms compared with the previous quarter. Customer payments grew by 4% in value, while their number increased by 2%.

In terms of volume, interbank payments represent 52.4% (51.3% in the previous quarter) of all TARGET cross-border traffic, while in terms of value 95.7% (95.5% in the previous quarter) belong to this category. The average value of interbank payments went up slightly from €17.3 million to €17.4 million in comparison with the fourth quarter of 2002. The average value of customer payments increased from €851,000 to €867,000.

During the first quarter, the highest value on a single day in TARGET cross-border was

Table 2

Payment instructions processed by TARGET and other selected interbank funds transfer systems: value of transactions

(EUR billions)

	2002 Q1	2002 Q2	2002 Q3	2002 Q4	2003 Q1
TARGET					
All TARGET payments					
Total value	95,440	97,682	97,404	105,008	106,869
Daily average	1,539	1,551	1,476	1,641	1,696
Cross-border TARGET payments					
Total value	29,720	30,794	30,309	32,899	34,636
Daily average	479	489	459	514	550
Domestic TARGET payments					
Total value	65,720	66,888	67,095	72,110	72,233
Daily average	1,060	1,062	1,017	1,127	1,147
Other systems					
Euro 1 (EBA)					
Total value	11,961	12,045	12,279	11,711	11,431
Daily average	193	191	186	183	181
Paris Net Settlement (PNS)					
Total value	5,061	5,079	4,832	4,995	4,896
Daily average	82	81	73	78	78
Servicio Español de Pagos Interbancarios (SPI)					
Total value	74	80	78	72	79
Daily average	1	1	1	1	1
Pankkien On-line Pikasiirrot ja Sekit-järjestelmä (POPS)					
Total value	92	100	98	102	115
Daily average	1	1	1	2	2

recorded on 28 February 2003, the last day of the month, when €653 billion was processed. With 76,045 processed cross-border payments, the peak day in cross-border volume terms was 18 February 2003, the day following a US public holiday.

In terms of value bands, 54% of all cross-border payments had a value of less than or equal to €50,000, while 18% had a value above €1 million. On a daily average about 40 TARGET cross-border payments had a value above €1 billion.

TARGET information system (TIS)

The TARGET Information System (TIS) was implemented on 23 October 2000 as a means for the market to cope with frictions deriving from a temporary unavailability of a TARGET component.

The TIS is a common standardised information tool complementing the established communication channels at national level. It shows the TARGET users whether the system is fully operational and, if not, states which

component has failed. The information is simultaneously broadcast by the three information providers, Reuters (page ECB46), Telerate/Bridge (pages 47556/47557) and Bloomberg (page ECB17).

The system has been thoroughly reviewed to accommodate TARGET users' requirements while taking account of the experience gained during its first years of operation. As a result, an enhanced version of the TIS was developed which is thought to better meet the market's need for timely and reliable information on the operational status of the TARGET system. The new release went live on 26 May 2003.

TARGET release 2003

Preparations have started for the next TARGET release, which will go live in November 2003. This release will consist of the suppression of the sub-message type 100, in parallel with the suppression of the MT100 message at SWIFT level. From November 2003, only the MT103 message already available since November 2000 will be used for customer payments. No other TARGET change is foreseen.

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