



EUROPEAN CENTRAL BANK

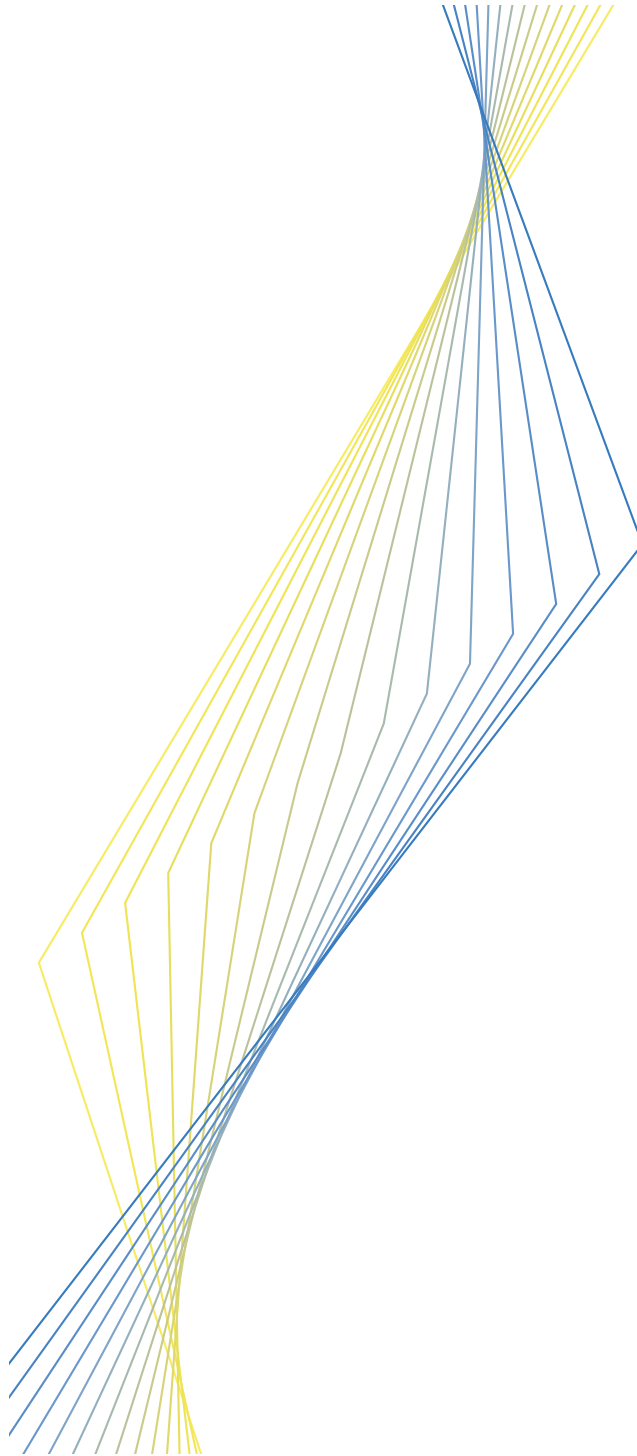
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**M O N T H L Y
B U L L E T I N**

November 2002



EUROPEAN CENTRAL BANK



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

These decisions were based on a comprehensive analysis of monetary, financial and economic developments, conducted within the framework of the ECB's monetary policy strategy. In view of the high uncertainty surrounding future economic growth and its implication for medium-term inflationary developments, the Governing Council discussed extensively the arguments for and against a cut in key ECB interest rates. The view to keep interest rates unchanged has prevailed. However, the downside risks to economic growth in the euro area will be monitored closely, considering their impact on the maintenance of price stability over the medium term.

As regards the analysis under the first pillar of the ECB's monetary policy strategy, the three-month average of the annual growth rates of M3 was 7.1% in the period from July to September 2002, unchanged from the period from June to August. The continuing strong expansion of M3 should be interpreted with caution, since it has been boosted considerably by high uncertainty in financial markets over recent months. At the same time, the low level of short-term interest rates continues to stimulate demand for the most liquid assets, which are included in the narrow aggregate M1. Loans to the private sector have stabilised at growth rates somewhat above 5%. In real terms, the current rate of growth in loans is broadly in line with its long-term average.

Considering all the evidence relating to the first pillar, from a medium-term perspective, more liquidity is available than would be needed to finance sustainable, non-inflationary growth. However, given the current economic environment, the Governing Council does not

see risks of this translating into inflationary pressure in the near future.

Concerning the second pillar, recent short-term conjunctural indicators and survey data suggest that real GDP in the euro area has continued to grow only moderately in the third quarter of this year. This is in contrast to earlier expectations that a more pronounced upswing would occur in the course of this year. Obviously, the hesitant pace of economic expansion and current lacklustre confidence reflect the significant degree of uncertainty that has been building up over recent months. This uncertainty is associated with the outlook for the global economy, taking into account geopolitical tensions and their possible impact on oil prices, and stock market developments.

However, for the time being, the main scenario for the euro area remains that economic growth is expected to return to rates close to potential in the course of 2003. In fact, this expectation is consistent with forecasts published by international organisations and private institutions. Moreover, financial markets have shown signs of stabilisation in recent weeks following a period of considerable turbulence. The expectation of an improvement in economic activity in the euro area is contingent on a recovery of growth in private consumption, supported by a reduction in actual and perceived inflation rates. This expectation is also conditional on a projected gradual recovery of the world economy and export growth which, together with the low level of interest rates, should help to strengthen investment. Nevertheless, the uncertainty surrounding this scenario remains high. It is therefore difficult, at this juncture, to predict the timing and strength of the economic upswing, both in the euro area and globally.

Turning to recent price developments, annual HICP inflation in September was 2.1%. For October, Eurostat's flash estimate indicates an annual HICP inflation rate of 2.2%. A base effect associated with energy prices is likely

to have been the major factor behind this increase, although no detailed information is available at present.

Looking at the remainder of 2002 and the early part of next year, notwithstanding the recent decline in oil prices, some upward impact on annual HICP inflation rates may occur, reflecting base effects and increases in indirect taxes and administered prices in a number of countries. Although difficult to anticipate, particularly due to the volatility of oil prices, a further increase in the annual rates of inflation and a delay in the return to inflation rates below 2% cannot be ruled out. However, such an increase should be only temporary.

Beyond the very short term, both the euro exchange rate, which has strengthened since early this year, and the overall economic environment continue to contribute towards reducing inflationary pressure. Moreover, there should also be a further unwinding of the indirect effects of previous increases in oil prices and other factors that have added to the stickiness of the annual rate of HICP inflation excluding unprocessed food and energy prices. However, for inflation rates to fall below 2% in the course of 2003 and to remain in line with price stability thereafter, as indicated by recent forecasts, it is crucial that oil prices do not increase significantly again and that the upward trend in labour cost indicators observed in recent years does not continue. With regard to the latter, there seems to be notable inertia, despite the subdued economic expansion; therefore vigilance is warranted.

Overall, the subdued trends in economic activity and the stronger exchange rate of the euro support the view that medium-term

inflationary pressures should decline. At the same time, some developments, mainly related to monetary and wage trends, argue for caution. There is a need to monitor closely the ultimate impact of all of these factors on inflation in the context of the ECB's monetary policy strategy.

Regarding fiscal policies in the euro area, on 24 October 2002 the Governing Council issued a statement on the Stability and Growth Pact (reproduced below). Both the principle of budgetary discipline enshrined in the Treaty and the Stability and Growth Pact are indispensable for Economic and Monetary Union. The Stability and Growth Pact has been successful in promoting sound public finances and fiscal convergence, and in supporting macroeconomic and price stability. Therefore, the Pact is also in the interest of individual Member States.

It is of paramount importance that governments implement decisively the structural reform agenda, both within the area of public expenditures and revenues as well as in labour and product markets. Such action is needed to enhance potential output growth over the medium term. At the same time, the prompt implementation of structural reforms would contribute to strengthening confidence in the euro area and thereby also support economic growth in the short term.

This issue of the Monthly Bulletin contains three articles. The first article focuses on the issue of the accountability of the ECB. The second addresses the importance of transparency in the monetary policy of the ECB. The third article analyses the composition of employment growth in the euro area in recent years.

Statement of the Governing Council on the Stability and Growth Pact issued on 24 October 2002

The principle of budgetary discipline enshrined in the Treaty and the Stability and Growth Pact are indispensable for Economic and Monetary Union (EMU)

EMU, with a single monetary policy and 12 governments responsible for budgetary policies, needs a fiscal institutional framework. The framework must be simple and enforceable and ensure that fiscal policies in Member States are sound and sustainable. Such a framework of fiscal policies fosters sustainable growth and employment, is conducive to economic stability and is a necessary complement of a monetary policy geared to price stability.

The Stability and Growth Pact has been successful in promoting sound public finances and fiscal convergence

Since agreement was reached on the fiscal rules in the Maastricht Treaty, generally fiscal balances have improved significantly in the Member States. Public debt ratios have been coming down in a sustained manner since the mid-1990s for the first time in decades. As a result, most Member States have now reached budget positions which are "close to balance or in surplus". These developments have supported, rather than hampered, growth in employment and real GDP.

The Stability and Growth Pact is in the interest of Member States

The main commitment of Member States under the Stability and Growth Pact is that the fiscal policies should result in medium-term budgetary positions which are "close to balance or in surplus". This, in conjunction with the Maastricht Treaty obligation to avoid excessive deficits and to apply appropriate implementation procedures, secures the sustainability of public finances and provides scope for dealing with the expected fiscal challenges caused by population ageing. Moreover, and contrary to the claims of its critics, the Stability and Growth Pact also provides sufficient flexibility after "close to balance or in surplus" positions have been reached, as automatic stabilisers can then operate fully. Problems have arisen not because the rules are inflexible, but as a result of some countries' unwillingness to honour their commitment to respect the rules.

The results of fiscal policy in several countries are very disappointing. In this context it is important to recall that the main reason why countries are in budgetary difficulties at present is because they have not used the situation of higher growth to substantially improve their fiscal position.

We continue to support the initiative of the Commission that all countries with remaining imbalances should commit themselves to implement a clear consolidation strategy with four key elements:

(i) a credible adjustment path, which requires the continuous adjustment of the underlying balance by at least 0.5% of GDP per year, (ii) realistic assumptions about the economic environment, (iii) well-specified measures to attain the objective and (iv) rigorous accounting rules and strict monitoring procedures for the implementation of the consolidation strategies. These commitments have to be honoured by rapid and decisive action.

The Stability and Growth Pact supports price stability

By ensuring sustainable public finances and by providing enough flexibility for the full operation of automatic stabilisers in periods of economic weakness as well as strength, the Stability and Growth Pact also has a favourable effect on macroeconomic stability. This facilitates achieving price stability and fosters confidence in the euro area's economic prospects.

Respecting the provisions of the Treaty and the full implementation of the Stability and Growth Pact remain fundamental to Monetary Union and to each individual Member State. Full compliance with the fiscal framework will also send an important message to accession countries.

Economic developments in the euro area

I Monetary and financial developments

Monetary policy decisions of the Governing Council of the ECB

At its meeting on 7 November, the Governing Council of the ECB decided to leave the minimum bid rate in the main refinancing operations, conducted as variable rate tenders, unchanged at 3.25%. The interest rates on both the marginal lending facility and the deposit facility were also kept unchanged, at 4.25% and 2.25% respectively (see Chart 1).

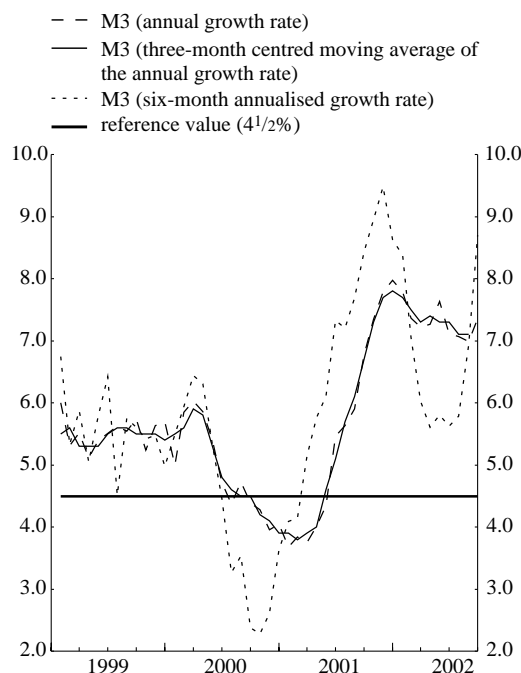
Strong M3 growth in September

The annual growth rate of the broad monetary aggregate M3 increased to 7.4% in September 2002, from 7.0% in the previous month (see Chart 2). This rise reflected a sizeable month-on-month increase (of 1.2%) in M3 in September, the largest since January 1999. The three-month average of the annual

Chart 2

M3 growth and the reference value

(adjusted for seasonal and calendar effects)

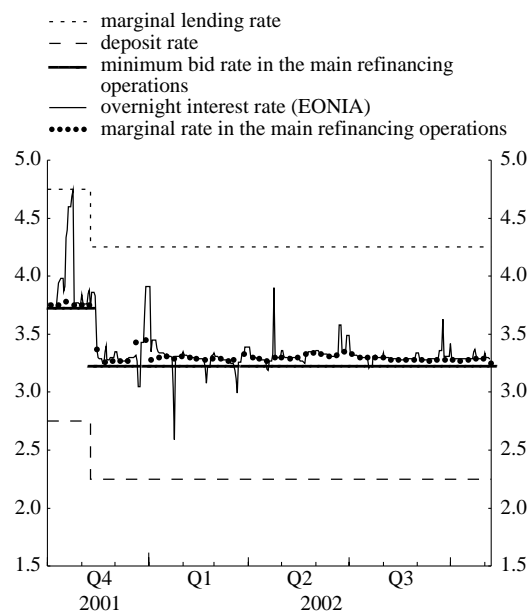


Source: ECB.

Chart 1

ECB interest rates and money market rates

(percentages per annum; daily data)



Sources: ECB and Reuters.

growth rates of M3 stood at 7.1% in the period from July to September 2002, unchanged from the period June to August 2002.

The strength of monetary growth in September seems largely to be a result of the continuation of portfolio shifts towards safe and liquid assets included in M3 in an environment of high financial and economic uncertainty. At the same time, the strong expansion of M3 over recent months has also been driven by the low level of short-term interest rates. As a consequence of the protracted period of high M3 growth, substantial excess liquidity has been accumulated in the euro area. While such high liquidity levels would – if not corrected – be a matter of concern as regards price stability in the medium term, it is unlikely that they will translate into inflationary pressures in the near future, given the current situation of moderate economic growth.

Turning to the main components of M3, the annual growth rate of the narrow monetary aggregate M1 rose further, to 8.2% in September, from 7.6% in August (see Table 1). This increase was driven by the rebound in currency in circulation, for which the seasonally adjusted monthly rise was €8 billion in September, continuing the upward trend registered since early this year. This trend reflects the gradual rebuilding of currency holdings by both domestic and foreign residents after the strong decline in the run-up to the cash changeover. The year-on-year growth rate of overnight deposits declined to 9.6%, from 10.0% in August. However, this decrease was mainly attributable to base effects, and the monthly rate of change in overnight deposits was in fact relatively strong in September (1.5%). Taking currency and overnight deposits together, the continuing strong demand for these most liquid assets included in M1 can be explained both by portfolio shifts as a reaction to high financial market uncertainties and by the low opportunity costs of holding these instruments.

The annual rate of growth of short-term deposits other than overnight deposits declined slightly in September, to 5.2%, from 5.4% in the previous month. The annual rate

of growth of marketable instruments rose significantly in September, to 11.7%, up from 10.2% in August. This development supports the hypothesis of renewed portfolio shifts into liquid and secure assets in September.

As regards counterparts of M3 in the MFI balance sheet, the annual rate of growth of MFIs' longer-term financial liabilities (excluding capital and reserves) decreased to 4.5% in September, from 5.2% in the previous month. This development could be related to the flattening of the yield curve and the high volatility in bond markets in recent months that may have led to a higher aversion on the part of investors to holding longer-term debt securities issued by MFIs.

Stable growth of loans to the private sector

Turning to the assets side of the MFI balance sheet, the annual rate of growth of credit to euro area residents was 4.3% in September, compared with 4.2% in the previous month. While the annual rate of growth of credit to the general government rose (to 1.7%, from 0.8% in the previous month), that of credit to the private sector remained unchanged (at 5.1%). As regards the latter, small declines in

Table 1
Summary table of monetary variables in the euro area

(annual percentage changes; quarterly averages)

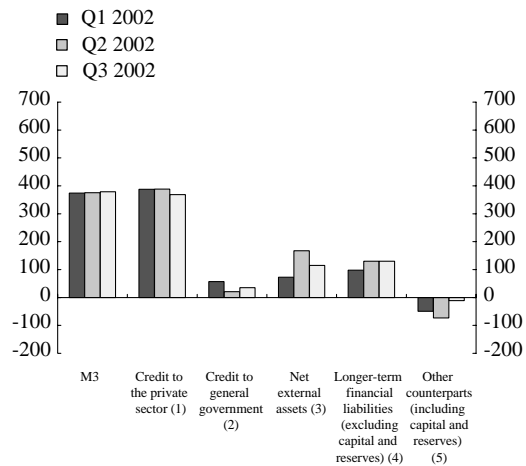
	2002 Q1	2002 Q2	2002 Q3	2002 June	2002 July	2002 Aug.	2002 Sep.
<i>Adjusted for seasonal and calendar effects</i>							
M1	6.2	6.6	7.6	6.8	7.6	7.6	8.2
<i>of which: currency in circulation</i>	-28.0	-20.0	-7.6	-14.3	-9.5	-5.7	-0.5
<i>of which: overnight deposits</i>	13.0	11.7	10.3	10.8	10.8	10.0	9.6
M2 - M1 (= other short-term deposits)	6.7	6.4	5.5	6.1	5.5	5.4	5.2
M2	6.5	6.5	6.5	6.5	6.5	6.4	6.6
M3 - M2 (= marketable instruments)	14.6	12.7	10.7	11.1	10.5	10.2	11.7
M3	7.6	7.4	7.1	7.1	7.1	7.0	7.4
<i>Not adjusted for seasonal and calendar effects</i>							
Longer-term financial liabilities (excluding capital and reserves)	3.1	4.0	4.9	4.6	4.9	5.2	4.5
Credit to euro area residents	5.1	4.5	4.2	4.4	4.1	4.2	4.3
Credit to general government	1.7	1.8	1.1	1.0	1.0	0.8	1.7
<i>of which: loans to general government</i>	-0.8	-0.9	-0.9	-0.6	-0.5	-1.4	-1.2
Credit to other euro area residents	6.1	5.3	5.1	5.4	4.9	5.1	5.1
<i>of which: loans to the private sector</i>	5.7	5.6	5.3	5.5	5.2	5.4	5.3

Source: ECB.

Chart 3

Movements in M3 and its counterparts

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



Source: ECB.

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

the annual growth in loans (to 5.3%, compared with 5.4% in August) and in MFI holdings of securities other than shares (to 3.8%, compared with 4.0% in the previous month) were accompanied by stable growth in MFI holdings of shares and other equities (2.7%). The recent developments suggest a broad stabilisation in the growth of loans to the private sector at a level which, given the cyclical position of the euro area economy, is broadly in line with the long-term average (see Box 1).

In September 2002, the net external asset position of the euro area MFI sector increased by €8 billion in absolute and non-seasonally adjusted terms. Over the 12 months up to September, the net external assets of the euro area MFI sector increased by €115 billion, compared with a rise of €138 billion over the 12 months up to August (see Chart 3).

Stable debt securities issuance in August

The annual percentage growth of the amount outstanding of debt securities issued by euro area residents was 6.3% in August 2002, unchanged from the previous month (see

Chart 4). Underlying this were broadly unchanged annual growth rates of the amounts outstanding of both long-term and short-term debt securities, at 6.5% and 4.0%, respectively. These figures masked declining issuance in the non-financial corporate sector in particular, which was offset by some increase in issuance in the MFI and general government sectors.

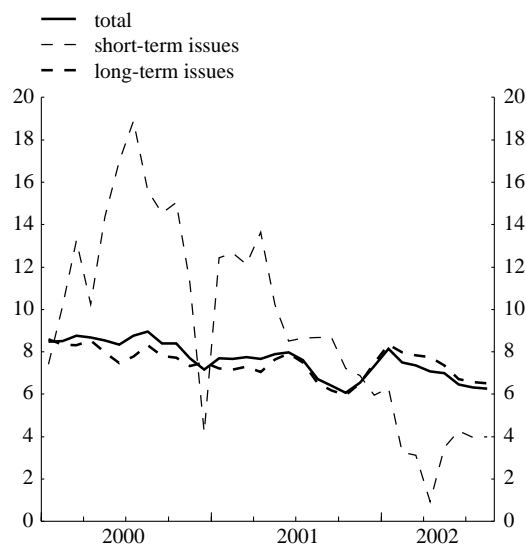
The currency breakdown shows that the annual growth of the amount outstanding of euro-denominated debt securities issued by euro area residents was also 6.3% in August 2002, and that the share of euro-denominated securities in gross debt-security issuance by euro area residents was 91.2%, both broadly unchanged from the previous month.

Turning to the sectoral breakdown of euro-denominated debt securities issuance, the annual growth of the amount outstanding of debt securities issued by MFIs, which accounts for the largest part of outstanding non-government issues, increased slightly in

Chart 4

Amounts outstanding of debt securities issued by euro area residents

(annual percentage changes)



Source: ECB.

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

Box I

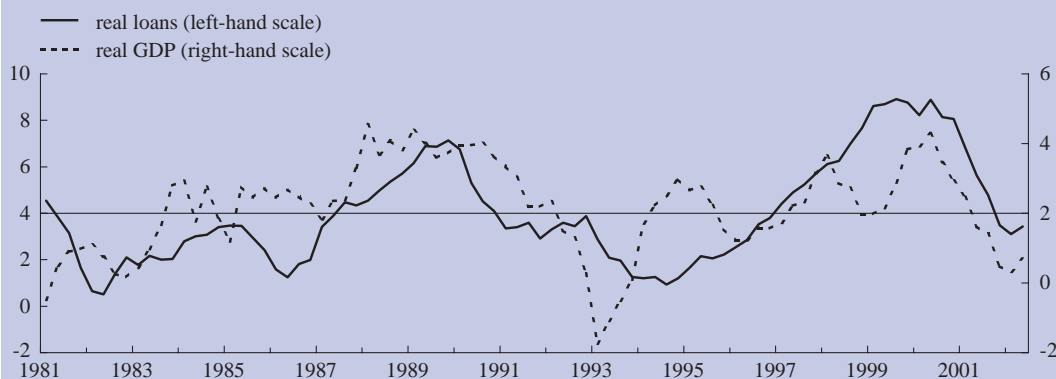
Trends in loans to the private sector and their fundamental determinants

Loans to the private sector granted by MFIs are the largest counterpart to M3 and the most prominent among the credit aggregates monitored by the ECB. It is therefore useful to analyse the relationship between these loans and their main determinants. This box considers this issue from two different angles. First, it analyses the long-run behaviour of the euro area loans to the private sector which – as shown by empirical studies – can in real terms be largely explained by developments in domestic macroeconomic variables, such as real GDP and real interest rates.¹ Second, it presents cross-country information relating developments in loans to those in nominal and real output and interest rates.

As Chart A shows, over the last 20 years developments in real loans to the private sector have followed a cyclical pattern. These lending cycles have been positively correlated with the general business cycle. Over this period, annual growth in real GDP moved around an average of 2.2%, while real lending growth averaged about 4.0%.

Chart A: Real loans to the private sector and real GDP in the euro area

(annual percentage changes)



Source: ECB.

Note: The horizontal line corresponds to the sample period average of plotted variables. The GDP deflator is used as a measure of the price level.

Looking at more recent developments, a sizeable gap between the growth rates of real loans and real GDP developed between the second half of 1998 and 2000. During these years, the annual percentage change in real loans remained most of the time at historically high levels of between 8½% and 9%, while the annual growth in real GDP ranged between 2% and 4¼%. One possible explanation for this discrepancy between the dynamics of real loans and real GDP is that at the time the demand for loans was fuelled by non-GDP transactions, relating to real estate market developments and financial transactions (particularly those associated with the financing of merger and acquisition activities both at home and abroad by euro area firms and of auctioned UMTS licences).

Later on, the growth differential between real loans and real GDP narrowed again, with real loans closely following the slowdown in economic activity. In the second quarter of 2002, the annual growth rate of loans to the private sector (deflated by the GDP deflator) stood at 3.4%. The recent slowdown in real loan growth seems to reflect to a large extent the weakening of the non-GDP transactions mentioned above as well as the effect of moderate economic activity. By contrast, the demand for loans is likely to have been supported by

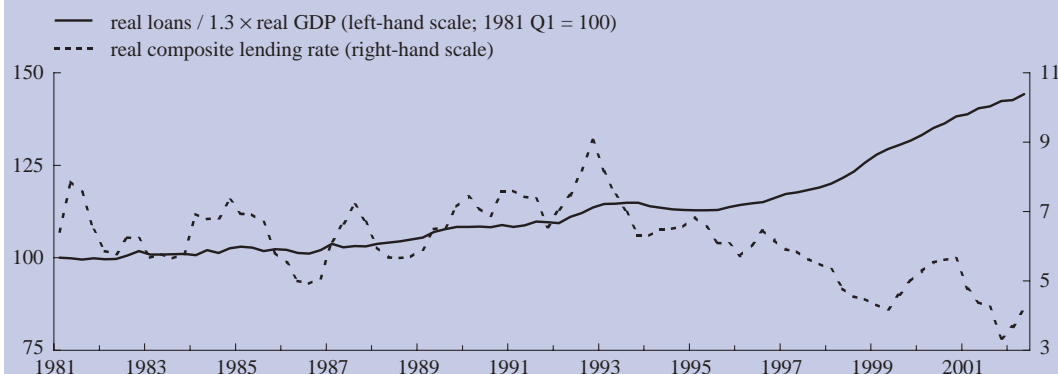
¹ See e.g. Calza A., C. Gartner and J. Sousa (2001), "Modelling the demand for loans to the private sector in the euro area", ECB Working Paper No. 55.

their low cost, as indicated by the fact that, in real terms, lending rates were at historically low levels in 2001 and 2002 (see Chart B). Finally, the significant fall in equity prices since early 2000 may also have had an impact on developments in loans via its effects on the balance sheets and financial positions of borrowers (thereby reducing the amount of collateral available to obtain credit).

Chart B compares the evolution of the ratio between real loans and real GDP (adjusted for an income elasticity of real loans above one) and that of a real “composite lending rate”.² The composite lending rate used is a synthetic indicator of the cost of euro area loans obtained as a weighted average of retail lending rates (with the weights given by the individual share of each category of loans in the aggregate). During the 1980s the real composite lending rate showed relatively limited fluctuations slightly above its historical mean of 6.1%. It remained significantly above its long-term average during the first half of the 1990s, which may to a certain extent explain the relatively low growth rate of real loans in that period (see Chart A). By contrast, in the run-up to Stage Three of EMU the composite lending rate was on a declining trend. From 1997 onwards it remained consistently below the sample average, reaching a 20-year minimum of 3.3% in the last quarter of 2001.

As can be seen in Chart B, in recent years, the decline in the real lending rate from the mid-1990s onwards has coincided with a rise in the ratio of real loans to (adjusted) real GDP. This development is consistent with a higher demand for loans to the private sector fostered by the more favourable financing conditions in the euro area as a whole.

Chart B: Real loans to the private sector and the real composite lending rate in the euro area
(index, percentages per annum)



Source: ECB.

Note: The GDP deflator is used as a measure of the price level. 1.3 is the estimated income elasticity of euro area real loans to the private sector (see footnote 1).

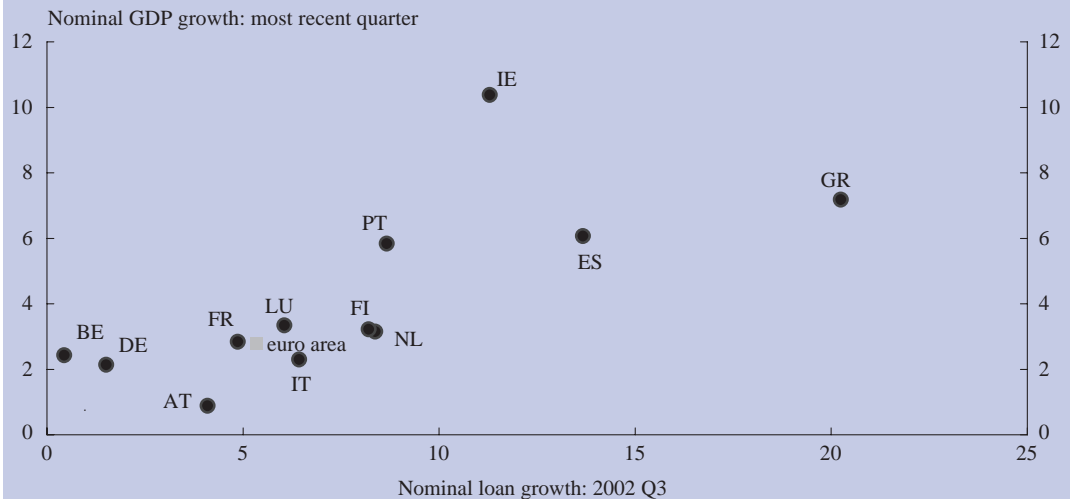
Turning to the evidence from national data on loans, Chart C plots the annual growth rates of nominal loans in the third quarter of 2002 against the most recent annual rate of nominal GDP growth in each euro area country. The chart shows that the dynamics of loans at the country level reflect to a large extent domestic economic developments. In those countries where the growth of nominal loans is strongest (Greece (GR), Spain (ES), Ireland (IE) and Portugal (PT)), the rates of nominal GDP growth are also the highest. Another group of countries (comprising France (FR), Italy (IT), Luxembourg (LU), the Netherlands (NL) and Finland (FI)) appears to be in an intermediate position, with a growth in loans that corresponds to a rate of nominal GDP growth close to the euro area average. Loan growth in Austria (AT) is also close to this average, but annual

² The empirical finding that, in the long run, real loans are positively related to real GDP and negatively related to real interest rates suggests that the ratio between the stock of real loans and real GDP – adjusted by the income elasticity of loan demand – should exhibit a stable relation to the level of real interest rates. An increase in real interest rates should lead to a decrease in the ratio and vice versa.

GDP growth is somewhat lower. As for the remaining countries, Belgium (BE) and Germany (DE), the annual growth rates of national loans are fairly low, but also reflect low rates of nominal GDP growth.

Chart C: Nominal loans and GDP at the country level

(annual percentage changes)

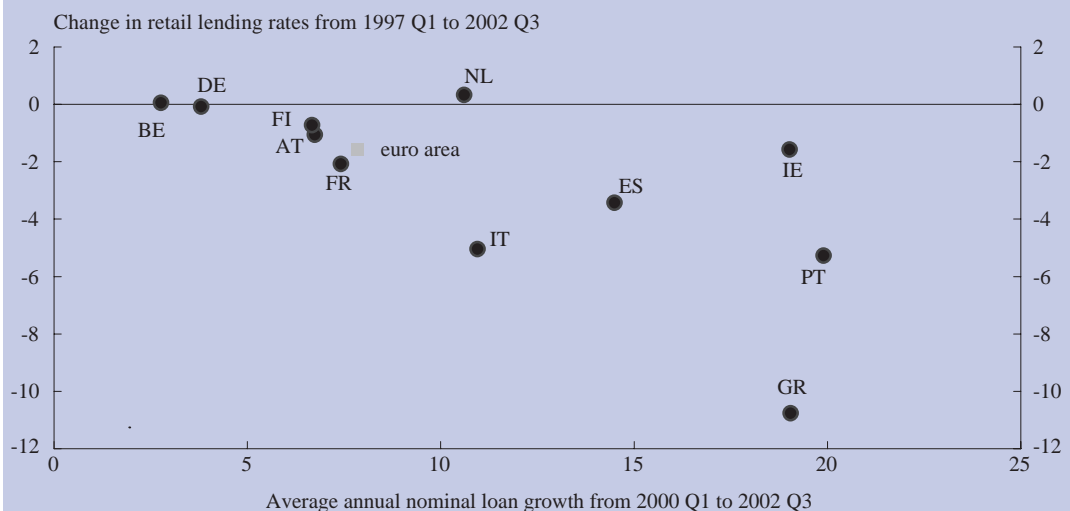


Sources: ECB and Eurostat.

Chart D takes a longer perspective and shows that the trends in national bank lending rates in recent years also help to explain the cross-country developments in loans. There appears to have been a relationship between the strength of national loan growth in the period from the first quarter of 2000 to the third quarter of 2002 and domestic changes in the level of retail lending interest rates since 1997. In countries where loan growth was more subdued (Belgium and Germany), bank lending interest rates in the third quarter of 2002 were basically the same as in 1997. At the same time, bank lending rates have declined significantly in three of the four countries mentioned above as currently having the highest growth in loans (namely Greece, Spain and Portugal). In Italy, bank lending rates have also declined significantly in recent years, but loan growth was somewhat lower than in other countries which experienced similar declines. To some extent, this difference

Chart D: Loans and retail lending rates at the country level

(percentage points; annual percentage changes)



Source: ECB calculations.

Note: The retail lending rates considered are weighted averages of mortgage interest rates and short-term loans to non-financial enterprises, with weights given by their respective shares in the national contributions to euro area loans to the private sector. Data on retail lending rates for Luxembourg are not available.

may be related to the fact that in the latter countries the pace of growth of nominal GDP was significantly higher than in Italy.

Nominal output growth and bank lending interest rates, however, are not the only factors that may explain loan developments in euro area countries. For instance, domestic real estate market developments play a major role in determining loan demand across euro area countries. In this respect, notably Greece, Spain, Ireland and the Netherlands have seen rather sharp rises in house prices recently, accompanied by a strong demand for mortgage refinancing. In addition, inter-country differences in non-interest components of the cost of loans (e.g. collateral requirements and other conditions attached to contracts) can be relevant. Moreover, at the current stage a rise in credit risk may also help to explain the subdued loan growth in some euro area countries. For instance, it has been suggested that, while in Germany the currently low level of loan growth appears to be mainly determined by weak economic growth, banks in that country may have also adopted a more cautious lending approach recently.³ Banks in Belgium also appear to have assumed a more cautious approach to lending, which, combined with the slowdown in economic activity, helps to explain the subdued loan growth there. Nevertheless, as the previous analysis shows, in the euro area as a whole the annual rate of growth in loans to the private sector is at present relatively close to its long-term historical average, which – given the current cyclical position – would seem to suggest fairly steady developments in bank credit in the euro area as a whole.

3 See the article entitled “The development of bank lending to the private sector” in the October 2002 issue of the Deutsche Bundesbank Monthly Report.

August 2002, to 4.6%, from 4.4% in July. The rather subdued issuance in this sector is in line with the relatively moderate market funding needs of MFIs, given the strong growth in deposits compared with credit. Rating downgrades in this sector may also partly explain this development.

In the non-MFI corporate sector, which includes both non-monetary financial and non-financial corporations, the annual growth rate of the amount outstanding declined to 16.9% in August 2002, from 19.6% in the previous month. Within this sector, the annual growth rate of the amount outstanding of euro-denominated debt securities issued by non-monetary financial corporations declined to 33.5%, from 35.0%. At the same time, the annual growth rate of the amount outstanding of euro-denominated debt securities issued by non-financial corporations declined to 4.7%, from 8.0% in July. Investor sentiment towards corporate bonds has become less favourable over the summer, due particularly to a downgrading of companies by rating agencies and corporate defaults. At the same time, strong investor demand has been observed so far in 2002 for the bonds of high-credit quality issuers.

Turning to the general government sector, the annual growth of the amount outstanding of debt securities issued by central government increased slightly in August 2002, to 4.2%, from 4.0% in July. In the same period, the annual growth rate of the amount outstanding of debt securities issued by the “other general government” sector declined to 34.0%, from 36.6% in the previous month.

Long-term retail bank interest rates continued to decline in September

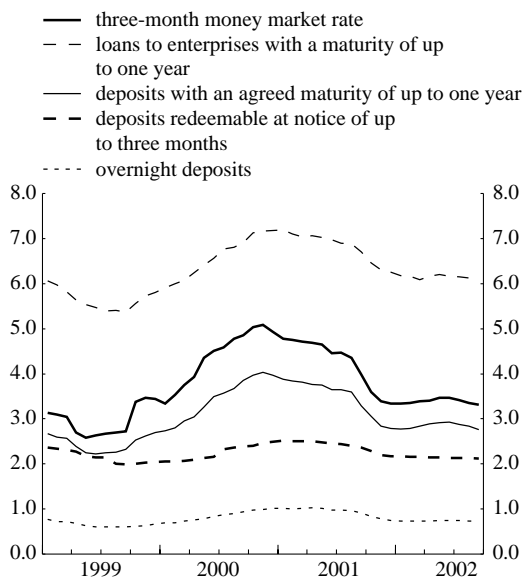
Short-term retail bank interest rates remained broadly unchanged in September 2002, at levels close to those prevailing at the start of the year (see Chart 5). This pattern was in line with fairly stable money market rates over the first nine months of the year.

Long-term retail bank interest rates declined in September 2002, following the trend observed since May, when government bond yields started to fall. However, bank credit spreads have widened somewhat over recent months. Long-term retail bank interest rates declined by between only 40 and 50 basis

Chart 5

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

(percentages per annum; monthly averages)



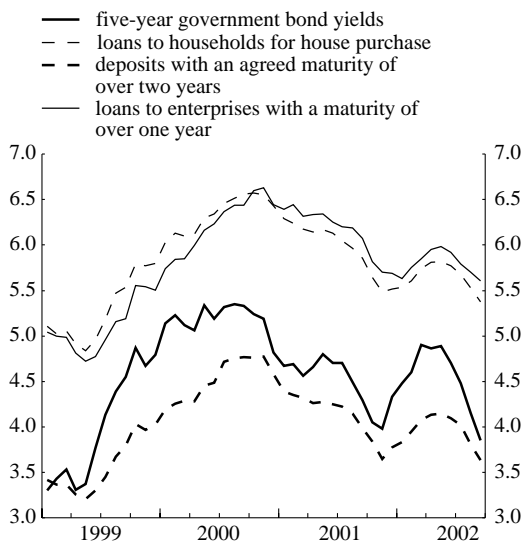
Sources: ECB aggregation of individual country data and Reuters.

Note: From January 2001, data include Greece.

Chart 6

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

(percentages per annum; monthly averages)



Sources: ECB aggregation of individual country data and Reuters.

Note: From January 2001, data include Greece.

points between May and September 2002 (see Chart 6). This compares with a decline in the average five-year government bond yield of slightly more than 100 basis points in the same period. The average interest rate on consumer credit fell by even less than other long-term retail rates between May and September 2002, which, however, is in line with the typically sticky behaviour of this retail bank interest rate.

Money market interest rates stabilised in October

The decrease in money market interest rates seen since late May 2002 came to a halt at the beginning of October, and overall, money market rates have changed only slightly since. The slope of the money market yield curve, as measured by the difference between the twelve-month and the one-month EURIBOR, which was negative at the end of September, became slightly flatter. Between the end of September and 6 November, rates implied in futures prices increased somewhat.

During October the overnight interest rate, as measured by the EONIA, fluctuated mainly between 3.29% and 3.32%, with few exceptions. Two-week money market rates also remained close to the minimum bid rate of 3.25% in the ECB's main refinancing operations. On average, the marginal and the average rates of allotment in the Eurosystem's main refinancing operations settled in October and early November were 3 and 4 basis points respectively above the minimum bid rate (see Box 2).

The one-month and three-month EURIBOR decreased by 7 and 9 basis points respectively between the end of September and 6 November, to stand at 3.25% and 3.21% on the latter date (see Chart 7). The marginal and the average interest rates in the Eurosystem's longer-term refinancing operation settled on 31 October were 3 and 1 basis points respectively lower than the then prevailing three-month EURIBOR, at 3.22% and 3.24% respectively. This was 1 and

Box 2**Monetary policy operations and liquidity conditions in the reserve maintenance period ending on 23 October 2002**

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

Regular monetary policy operations

(EUR billions; interest rates in percentages per annum)

Operation	Date of settlement	Date of maturity	Bids (amount)	Allotment (amount)	Bid-cover ratio	Number of participants	Minimum bid rate	Marginal rate	Weighted average rate
MRO	25/09/2002	09/10/2002	105.1	65.0	1.62	287	3.25	3.28	3.29
MRO	02/10/2002	16/10/2002	125.6	80.0	1.57	256	3.25	3.28	3.29
MRO	09/10/2002	23/10/2002	111.8	66.0	1.69	271	3.25	3.27	3.28
MRO	16/10/2002	30/10/2002	106.6	76.0	1.40	268	3.25	3.28	3.29
MRO	23/10/2002	06/11/2002	115.6	88.0	1.31	290	3.25	3.29	3.30
LTRO	26/09/2002	23/12/2002	25.7	15.0	1.72	151	-	3.23	3.26

Source: ECB.

The marginal rates in the MROs were relatively stable, varying between 3.27% and 3.29%.

The EONIA decreased smoothly from 3.31% on 24 September, the first trading day of the maintenance period, to 3.29% on 3 October and it then remained stable until 18 October. The only exception was a temporary increase to 3.42% on 30 September because of the end-of-quarter effect. On the third-to-last and second-to-last business days of the maintenance period, the EONIA increased to 3.35% and 3.37% respectively, as counterparties perceived liquidity conditions to be tight. On the last day, it decreased to 3.32% and the period ended with a limited net recourse to the deposit facility in the order of €1.0 billion. The average difference between current account holdings and minimum reserve requirements amounted to €0.6 billion.

The net liquidity-absorbing impact of the autonomous factors, i.e. factors not related to monetary policy operations (item (b) of the table below), was, on average, €63.1 billion. The published estimates of the average liquidity needs stemming from autonomous factors ranged between €59.7 billion and €70.4 billion. The largest deviation between the published estimate and the actual figure occurred in the second week of the maintenance period, and amounted to €1.6 billion.

Contributions to the banking system's liquidity

(EUR billions)

Daily average during the reserve maintenance period from 24 September to 23 October 2002

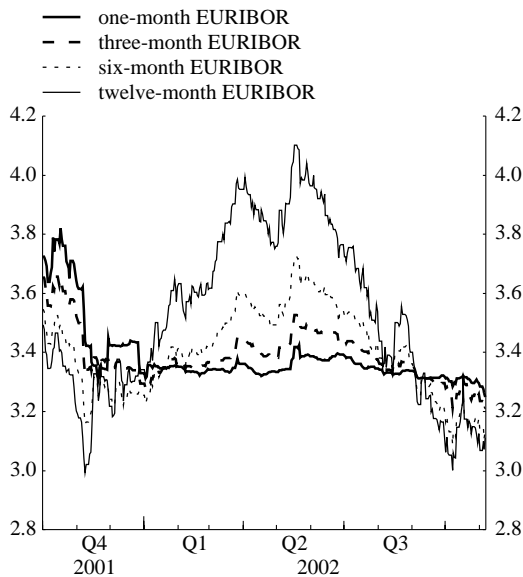
	Liquidity providing	Liquidity absorbing	Net contribution
(a) Monetary policy operations of the Eurosystem	191.5	0.1	+191.4
Main refinancing operations	146.1	-	+146.1
Longer-term refinancing operations	45.3	-	+45.3
Standing facilities	0.1	0.1	0.0
Other operations	-	-	0.0
(b) Other factors affecting the banking system's liquidity	370.0	433.1	-63.1
Banknotes in circulation	-	329.2	-329.2
Government deposits with the Eurosystem	-	45.6	-45.6
Net foreign assets (including gold)	370.0	-	+370.0
Other factors (net)	-	58.2	-58.2
(c) Credit institutions' holdings on current accounts with the Eurosystem (a) + (b)			128.3
(d) Required reserves			127.7

Source: ECB.

Note: Totals may not add up due to rounding.

Chart 7
Short-term interest rates in the euro area

(percentages per annum; daily data)



Source: Reuters.

2 basis points lower than the corresponding rates in the longer-term refinancing operation settled on 26 September.

The six-month EURIBOR decreased by 7 basis points, while the twelve-month EURIBOR remained unchanged between the end of September and 6 November, to stand at 3.13% and 3.11% respectively on the latter date. The slope of the money market yield curve, as measured by the difference between the twelve-month and the one-month EURIBOR, which was negatively sloped at -21 basis points at the end of September, was -14 basis points on 6 November.

The expected path of the three-month EURIBOR, as implied in the futures prices on contracts with delivery dates in 2002 and 2003, increased somewhat in October. The rates implied in futures prices on contracts with delivery dates in December 2002 and March, June, and September 2003 increased by 7, 13, 15 and 13 basis points respectively, to stand at 3.03%, 2.93%, 2.96% and 3.08% on 6 November.

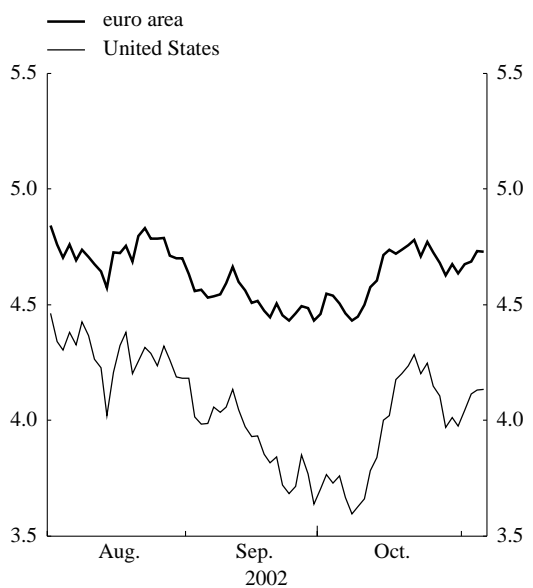
Long-term government bond yields increased in October

In October 2002 the downward trend in long-term government bond yields that began in mid-May was reversed in the euro area and in the United States, partly as a result of the rebound in stock prices. Between the end of September and 6 November, yields on ten-year government bonds in the euro area increased by 30 basis points, standing at 4.7% on the latter date. In the United States, ten-year government bond yields increased by about 50 basis points, to around 4.1% during the same period. The differential between ten-year government bond yields in the United States and the euro area thus narrowed by about 20 basis points between the end of September and 6 November, to around -60 basis points.

The general increase in government bond yields in the United States seems to have been driven, to a large extent, by a reversal of flight-to-safety portfolio shifts from bond to stock markets. In particular, investors

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

(percentages per annum; daily data)



Source: Reuters.

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

appeared to have moved funds back into the stock market when the third quarter earnings of some US corporations turned out to be better than expected. The sharp decline in nominal US yields in September and the similarly sharp rebound in October might also have been amplified by technical factors (such as the hedging strategies of US housing agencies).

The real yield on US ten-year index-linked government bonds increased by 40 basis points between the end of September and 6 November, to 2.4% on the latter date. This increase in real yields, similar to that in nominal US ten-year government bonds, suggests that market participants have become somewhat more optimistic concerning economic growth prospects, despite mixed macroeconomic data during the period under review.

The US ten-year break-even inflation rate remained broadly unchanged between end-September and 6 November, standing at 1.7% on the latter date. This indicates that there were no significant changes in inflation expectations among market participants.

Uncertainty, as measured by the implied volatility of options on futures contracts on ten-year US government bonds, remained high in the US bond market. Although the implied volatility declined somewhat during October, it was still above its two-year average.

In Japan yields on ten-year government bonds declined by around 20 basis points between end-September and 6 November, standing at around 1% on the latter date. The decline in yields may partly reflect flight-to-safety portfolio shifts, as the Japanese stock market fell in October.

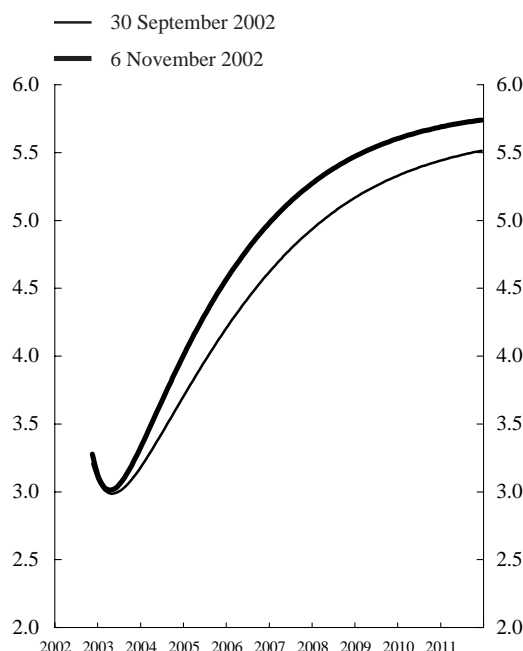
In the euro area, nominal government bond yields rose in October, although by less than in the United States. The general nominal yield increase in the euro area seemed to reflect, as in the United States, portfolio shifts from bonds to stocks.

Real bond yields in the euro area, as measured by the French ten-year index-linked bond yield (indexed on the euro area HICP excluding tobacco), rose by around 30 basis points between the end of September and 6 November, to stand at 2.9% on the latter date. As in the United States, this may have reflected a somewhat improved perception of longer-term growth prospects, despite mixed macroeconomic data during the period.

The ten-year break-even inflation rate (as measured by the difference between ten-year nominal bond yields and yields on ten-year French bonds linked to euro area inflation) changed little between end-September and 6 November, suggesting that market participants did not alter their long-term inflation expectations. However, developments

Chart 9
Implied forward euro area overnight interest rates

(percentages per annum; daily data)



Source: ECB estimate.

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.

in break-even inflation need to be interpreted with some caution due to the existence of a number of time-varying premia.

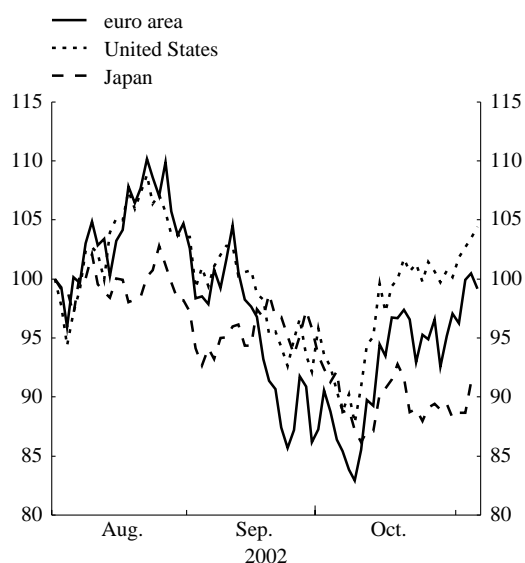
The implied forward overnight interest rate curve in the euro area shifted upwards between the end of September and 6 November (see Chart 9). This may have reflected a market perception that downward risks to the economic outlook for growth in the euro area had lessened by comparison with the previous month. However, the perceived degree of uncertainty among market participants about future euro area long-term government bond yields – as measured by the implied volatility of options on futures contracts on German government bonds – remained high. On 6 November, euro area implied volatility stood at 5.9%, which was around one percentage point above its two-year average.

Stock prices rebounded in October

Following the sharp decline in September 2002, most global stock markets rebounded

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

(index: 1 August 2002 = 100; daily data)

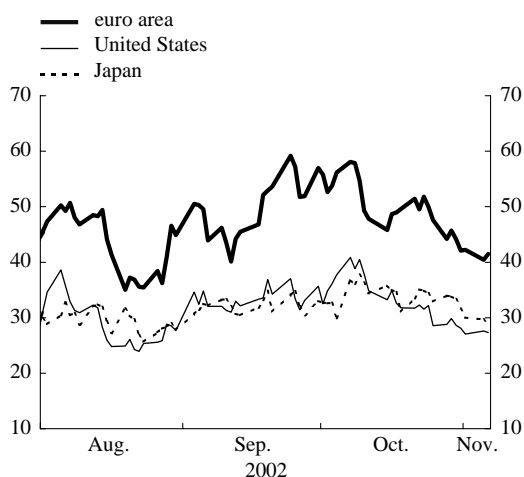


Source: Reuters.

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

(percentages per annum; daily data)



Source: Bloomberg.

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

in October. Stock prices in the euro area and the United States, as measured by the broad Dow Jones EURO STOXX and the Standard & Poor's 500 indices respectively, increased by 15% and 13% between the end of September and 6 November (see Chart 10). By contrast, in Japan the Nikkei 225 index fell by 5% in the same period.

In the United States, the rise in stock prices during October took place amid announcements of better than expected earnings by some major US corporations, while there were still mixed indications as to the strength of economic activity. Uncertainty, as measured by implied volatility derived from options on the Standard & Poor's 500, fell by 8 percentage points between the end of September and 6 November 2002, but remained 4 percentage points higher than its two-year average.

In Japan, the decline in stock prices, as measured by the Nikkei 225 index, in October contrasted with the developments

in other major markets and seemed to reflect factors specific to the Japanese market. In particular, concerns among market participants about financial fragility and the resolution of the problem of non-performing bank loans also played a role. Uncertainty, as measured by implied volatility extracted from options on the Nikkei 225 index, decreased somewhat between end-September and 6 November 2002, to a level close to its two-year average.

In the euro area, stock prices rebounded, broadly in line with the US stock markets. The increase in euro area stock prices occurred against a background of mixed signals from earnings statements and macroeconomic data. This recovery should

be seen in conjunction with the more pronounced declines experienced in the euro area in previous months as compared with those seen in the United States over the same period (see Box 3). The stock price reversal was broadly based, although sectors such as financials, telecommunications and technology, which had experienced larger declines in previous months, rebounded most strongly. The stock market rebound took place in an environment of widespread investor uncertainty, as measured by the implied volatility extracted from options on the EURO STOXX index, which by 6 November stood at a level some 12 percentage points higher than its two-year average.

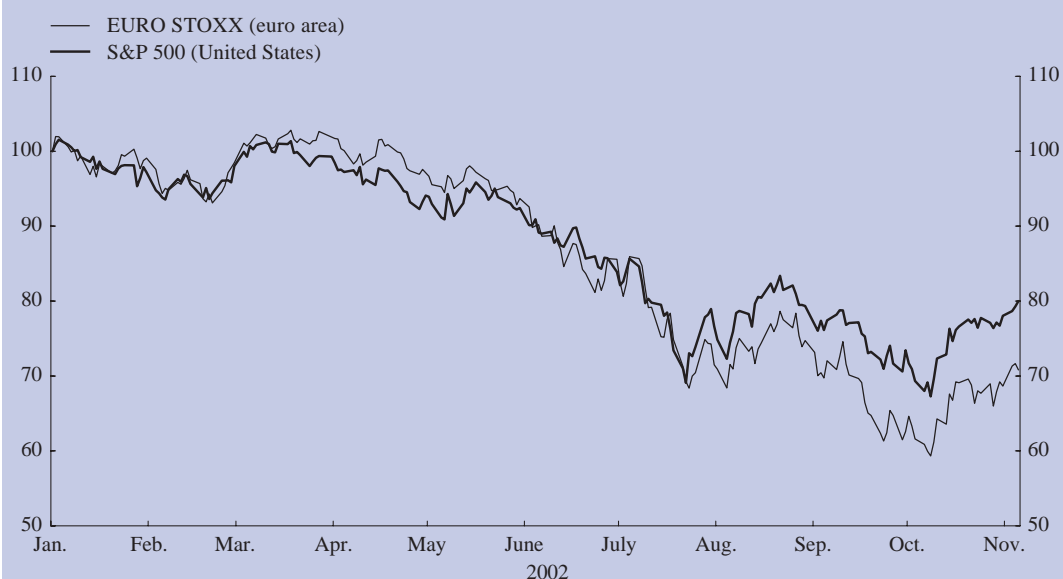
Box 3

Recent stock market developments in the euro area

Between the end of December 2001 and 6 November 2002 broad stock price indices for the euro area and the United States dropped by around 30% and 20% respectively (see Chart A). These sharp declines, which came after a two-year period in which stock prices had been falling more or less continuously, brought price-earnings ratios – the ratio between stock prices and corporate earnings for the previous 12 months – much lower in both markets (see Chart B). Of course, these ratios should be interpreted with a high degree of caution since (as explained in a box on page 19 of the May 2002 issue of the ECB’s Monthly Bulletin) they are influenced by developments in past profits and related to the business cycle. Nevertheless, price/earnings

Chart A: Stock market developments during 2002

(Rebased 1 January 2002 = 100)



Source: Bloomberg.

Chart B: Price/earnings ratios for the euro area and the United States



Source: Price/earnings ratio based on Thomson Financial Datastreams broad base stock market indices and earnings per share.

ratios, based on 12 months of past earnings, which are above historical averages, typically reflect market expectations that corporate profit growth will be stronger in the future compared with the recent past. In this respect, it was notable that by October 2002 these ratios in the euro area stood at around the average level seen over the past 30 years, while they were somewhat higher than the 30-year average in the United States.

The main factor triggering the turbulence in euro area equity markets in 2002 appears to have been the discovery of a series of accounting irregularities at large US corporations. Concerns about accounting irregularities began to surface in December 2001 with the collapse of Enron, an energy corporation, which came at a time when US profits were already under significant pressure. This dampened investor confidence in the information content of profit statements and optimism for a quick rebound in profits faltered. Later on, as more scandals were revealed, market uncertainty increased further and then surged after the unearthing of the largest accounting fraud in US corporate history at WorldCom, a telecommunications company, in June 2002. Following this series of accounting scandals, the Securities and Exchange Commission (SEC) ordered the chief executive officers (CEOs) and chief financial officers (CFOs) of almost 1,000 US companies to testify to the accurateness and completeness of their financial statements. Although this order had not resulted in any fresh revelations by 14 August 2002, when the vast majority of CEOs and CFOs were due to testify, US stock markets continued to decline until early October as uncertainties remained as to whether corporate earnings would recover quickly.

The accounting scandals gave rise to considerable uncertainty about underlying profit performances, not only in the United States. As a result, the premium demanded by investors to hold stocks also increased in the euro area. In particular, there was a surge in implied stock market volatility in the euro area after the WorldCom scandal in late June 2002 because this had raised general uncertainties about the true profit picture of corporations, particularly in the technology, media and telecommunications (TMT) sectors. In the latter half of the 1990s there had been exuberance among investors worldwide with regard to TMT stocks, which brought price/earnings ratios in these sectors to particularly high levels. However, once investors became uncertain about the ability of corporations in this sector to deliver the high levels of implied profits, stock prices in these sectors came under particularly severe pressure on a global scale.

More generally, there has been an increasing tendency for stock prices in the euro area and the United States to move closer together over recent years. One reason for this is that economic, particularly corporate, links have

become tighter between the two economies as a result of a substantial surge in global merger and acquisition (M&A) activity in the late 1990s. A sectoral breakdown of these M&A activities between euro area and US corporations shows that this surge occurred, to a large extent, in the technology and telecommunications sectors in the late 1990s.¹ As a result, unfavourable news affecting the US profit outlook, particularly in these two sectors, tended to spill over to the euro area, as market participants expected a concomitant deterioration in the euro area profit outlook.

Notwithstanding the discovery of accounting irregularities in the United States and spillover effects, the stock market correction in the euro area during 2002 can also be traced to factors specific to the euro area technology and telecommunications sectors as well as the insurance and bank sectors. These four sectors together accounted for around half of the total stock market decline between end-December 2001 and 6 November (see the table below). The decline in technology stock prices seems to partly reflect a correction from the high levels seen in the late 1990s and further downward revisions of investors' earnings expectations in 2002. Declines in the telecommunications sector occurred for similar reasons, while market participants also became concerned about the relatively high level of indebtedness in this sector.

The insurance and banking sectors also experienced severe declines in stock prices during 2002. A large proportion of euro area insurance corporations' assets consists of shares, making insurers particularly vulnerable to stock market declines. In addition, recent losses from natural catastrophes have also been high in this sector. The stock market correction also had an adverse influence on the banking sector, particularly during the summer. Notably, banks with relatively low profitability and banks with insurance company subsidiaries were adversely influenced by plunging stock prices.

In addition to these sectors, stock prices in the health, media and consumer non-cyclical sectors declined by more than the overall EURO STOXX index. However the weights of these sectors in the total index are rather limited, and the overall decline in stock prices in these sectors only contributed 15% to the total stock price decline between end-2001 and 6 November 2002.

Apart from these sector-specific considerations, different trends in long-term government bond yields might also partly explain why the drops in euro area stock prices since the end of 2001 have been larger than in the United States. In this respect, government bond yields, by setting a level for long-term interest rates, play a crucial role in determining the discount factor for stocks. All other things being equal, when

these yields decline, stock prices typically rise. This favourable discount effect was much larger for stock prices in the United States. Between end-2001 and 6 November 2002, US government bond yields fell by around 90 basis points while euro area government bond yields fell by just 30 basis points. This could therefore partly explain why stock prices in the euro area dropped by more than those in the United States.

Table: Development in EURO STOXX sector indices

(31 December 2001 to 6 November 2002)

	Price changes (in percentages)	Contribution to the total market change (in percentages)
Technology	-43.6	14.7
Banks	-23.5	13.8
Insurance	-45.3	12.2
Telecommunications	-33.0	9.4
Energy	-17.8	8.0
Utilities	-26.0	5.8
Health	-34.1	5.7
Media	-49.7	5.4
Cyclical Goods	-28.8	3.8
Non-Cyclical Goods	-31.0	3.7
Financial Services	-28.9	3.0
Auto	-20.1	2.9
Chemical	-22.4	2.7
Industry Goods	-26.4	2.6
Construction	-26.4	2.2
Retail	-22.0	1.9
Basic Resources	-22.0	1.2
Food/Beverage	-7.6	1.1
Total Index	-29.2	

Source: Bloomberg and ECB calculations.

¹ See the box entitled "Mergers and acquisition activity and the composition of the financial account of the euro area balance of payment" on p. 36 of the August 2002 issue of the ECB's Monthly Bulletin.

2 Price developments

Increase in HICP inflation in October 2002 due mainly to base effect in energy prices

According to Eurostat's flash estimate, HICP inflation increased to 2.2% in October 2002, from 2.1% in September (see Table 2). Although a detailed breakdown for October is not yet available, a base effect associated with energy prices is likely to have been the main factor behind this increase.

In September 2002, the most recent month for which detailed HICP data are available, HICP inflation remained unchanged at 2.1%.

This outturn was slightly lower than suggested by the flash estimate (see Box 4 on Eurostat's euro area HICP flash estimate). The year-on-year rate of change in the HICP excluding unprocessed food and energy remained at 2.5% for the third consecutive month. Regarding the short-term dynamics, the three-month annualised rate of growth in the HICP excluding unprocessed food and energy has been below the annual rate for the past four months.

The annual rate of decline in energy prices, at 0.4% in September 2002, was broadly unchanged compared with August

Table 2
Price and cost developments in the euro area

(annual percentage changes, unless otherwise indicated)

	1999	2000	2001	2001 Q4	2002 Q1	2002 Q2	2002 Q3	2002 May	2002 June	2002 July	2002 Aug.	2002 Sep.	2002 Oct.
Harmonised Index of Consumer Prices (HICP) and its components													
Overall index ¹⁾	1.1	2.3	2.5	2.1	2.6	2.1	2.0	2.0	1.8	1.9	2.1	2.1	2.2
<i>of which:</i>													
Goods	0.9	2.7	2.5	1.7	2.2	1.4	1.3	1.3	1.0	1.2	1.4	1.4	.
Food	0.6	1.4	4.5	4.7	4.9	2.8	2.2	2.7	2.3	2.1	2.3	2.3	.
Processed food	0.9	1.1	2.8	3.5	3.5	3.1	2.9	3.1	3.1	2.9	2.9	2.8	.
Unprocessed food	0.0	1.7	7.0	6.7	7.0	2.4	1.3	2.1	1.1	0.9	1.3	1.7	.
Industrial goods	1.0	3.4	1.5	0.2	0.9	0.7	0.9	0.6	0.3	0.7	0.9	1.0	.
Non-energy industrial goods	0.7	0.7	1.1	1.6	1.8	1.7	1.4	1.7	1.6	1.5	1.4	1.4	.
Energy	2.4	13.3	2.7	-4.1	-2.1	-2.4	-0.9	-2.9	-3.6	-1.7	-0.5	-0.4	.
Services	1.5	1.7	2.5	2.8	3.1	3.2	3.3	3.3	3.2	3.2	3.3	3.3	.
Other price and cost indicators													
Industrial producer prices ²⁾	-0.4	5.5	2.2	-0.8	-0.8	-0.8	-0.1	-0.8	-0.9	-0.3	-0.1	0.1	.
Unit labour costs ³⁾	1.0	1.2	2.6	3.3	3.3	2.5	.	-	-	-	-	-	-
Labour productivity ³⁾	1.0	1.4	0.1	-0.4	-0.4	0.2	.	-	-	-	-	-	-
Compensation per employee ³⁾	2.0	2.6	2.7	2.9	2.9	2.6	.	-	-	-	-	-	-
Total hourly labour costs ⁴⁾	2.3	3.2	3.4	3.3	4.0	3.6	.	-	-	-	-	-	-
Oil prices (EUR per barrel) ⁵⁾	17.1	31.0	27.8	22.4	24.6	27.8	27.2	28.1	25.8	25.9	27.0	28.9	27.9
Commodity prices ⁶⁾	-5.9	16.7	-7.6	-15.6	-3.6	-5.5	-1.7	-6.8	-8.4	-7.9	-1.3	4.7	7.8

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

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

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

2) Excluding construction.

3) Whole economy.

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

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

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

Box 4

Evaluating Eurostat's euro area HICP flash estimate

For over a year now, Eurostat has been releasing flash estimates for euro area HICP inflation. These are published some two weeks in advance of the official and complete HICP release. Comprehensive and reliable economic statistics released at a sufficiently high frequency and in a timely fashion are important for the conduct of economic analysis. This is particularly true of the HICP, which is a key variable. Normally, however, there is a trade-off between the timeliness with which an indicator is released and its reliability. This box reviews the main features of the HICP flash estimate and then evaluates the performance of the indicator since its launch in November 2001, bearing this trade-off in mind.

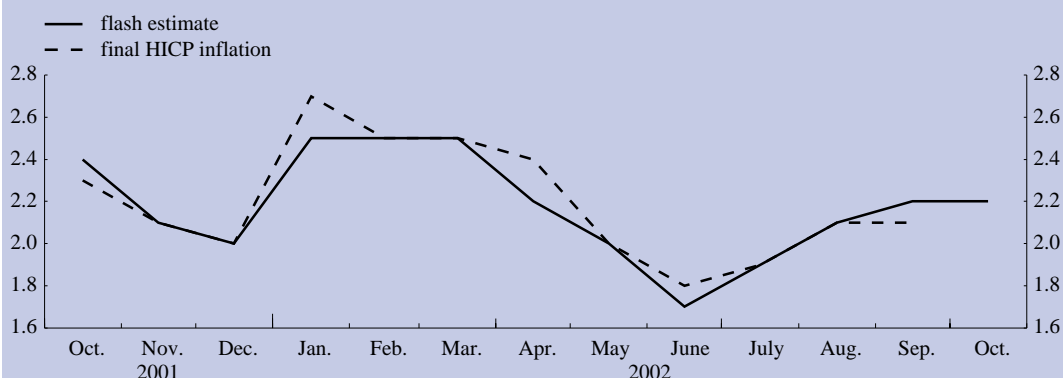
Features of Eurostat's HICP flash estimate

The first HICP flash estimate referred to the inflation rate for October 2001 (see the chart).¹ Normally, the flash estimate is released on the last working day of the reference month. As a consequence, the flash estimate is published approximately two weeks before the official release of the euro area HICP. It only refers to the annual HICP inflation rate for the euro area as a whole, meaning that no country or sectoral breakdown is provided.

When producing the flash estimate, Eurostat takes into account published preliminary HICP data for Germany and Italy, which are released in a very timely fashion. However, further information on consumer price developments from other euro area countries are also used when available (e.g. the Belgium CPI, which is released at the end of the reference month). In addition, early information on energy prices also feeds into the estimate, with Eurostat estimating the energy component of the HICP on the basis of oil price data. Broadly speaking, the methodology used by Eurostat is such that, in terms of HICP weights, more than half of the flash estimate is based on actual released data (the non-energy HICP component for Germany and Italy together with the energy component for all countries account for 54% of the euro area HICP). The remaining part of the HICP is estimated by Eurostat using time-series techniques.

Overall HICP

(annual percentage changes)



Source: Eurostat.

Review of the performance of Eurostat's flash estimate

Eurostat's flash estimate has correctly anticipated the annual HICP inflation rate in seven out of the past 12 months.² On three occasions the difference compared with the final estimate was 0.1 percentage point, while a

¹ Further information can be found in Eurostat news release No. 113/2001, 5 November 2001.

² It was not possible to evaluate the latest flash estimate for October 2002 since the official HICP estimate had not been released by the cut-off date for data to be included in the November 2002 Monthly Bulletin.

difference of 0.2 percentage point was recorded for two months. However, the directional change in the annual rate of final HICP inflation has been correctly anticipated for all months except September 2002, when the flash estimate signalled a slight increase in inflation although it remained unchanged. It should be noted, however, that the euro area flash estimate may differ from the official HICP figure, not only as a result of an estimation error but also as a result of changes to the preliminary national HICP data (i.e. for Germany and Italy) and rounding effects.

Performance of Eurostat's HICP flash estimate

(percentage points)

	HICP estimates		
	Flash	Naïve	AR
MAD	0.06	0.19	0.13

Source: ECB calculations.

estimates the inflation rate as an autoregressive (AR) function of the 12 HICP inflation outcomes over the previous year. The relative performance of the Eurostat flash estimate – compared against these two benchmarks – is evaluated using a standard performance statistic: the Mean Absolute Deviation (MAD). The MAD (see the table) is calculated as the average of the errors in absolute terms from October 2001 to September 2002. Hence, a low MAD indicates a small error. Not surprisingly, the Eurostat flash estimate clearly outperforms the estimate based on the naïve approach, with the MAD significantly higher for the naïve method. In addition, the flash estimate has also outperformed the AR benchmark in terms of anticipating the final HICP outcome.

To conclude, the performance of the flash estimate has been satisfactory and, in particular, it has proved a valuable indicator for predicting the directional change in the final HICP inflation rate. Hence, it is a useful early supplement to the available information on price developments in the euro area economy. Looking ahead, the quality of the flash estimate is likely to improve, since efforts to further increase its coverage are currently under way.

One insightful way of evaluating the track record of the flash estimate is to compare its performance against some kind of benchmark. Here two benchmarks are considered: first, a naïve method which simply assumes that the estimated rate of annual HICP inflation in month t is obtained from the actual observed outcome in month $t-1$; and a second, slightly more elaborate benchmark, which

(see Chart 12). However, this conceals a 1.0% month-on-month increase in energy prices owing to developments in oil prices. The 0.4 percentage point rise in the year-on-year rate of change in unprocessed food prices (to 1.7% in September) mainly reflects developments in vegetable prices.

The year-on-year rates of change in both non-energy industrial goods prices and services prices remained unchanged in September at 1.4% and 3.3%, respectively. Within services prices, some normalisation of air transport and accommodation prices following the sharp increase observed in August was partially counteracted by a relatively strong increase in restaurant prices in September. A consideration of short-term developments in services prices would suggest that the annual

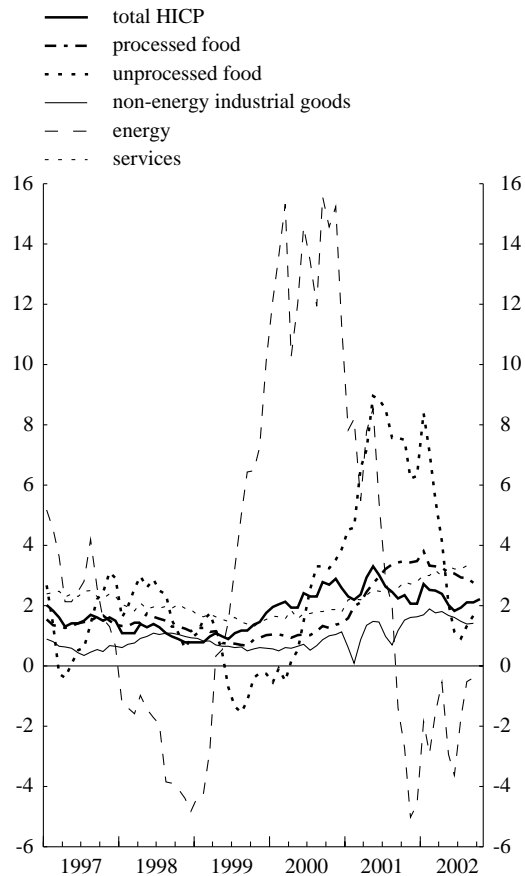
rate of increase in services prices may unwind gradually, in the absence of additional shocks, as the three-month annualised rate of growth, at 2.9%, was below the year-on-year rate. The year-on-year rate of change in processed food prices edged downwards from 2.9% in August to 2.8% in September.

Producer prices broadly stable

Although the year-on-year rate of change in industrial producer prices turned positive in September 2002 for the first time since October 2001, overall producer price pressures remain very subdued. In September, euro area industrial producer prices were 0.1% higher than a year ago. This compares with a year-on-year rate of decline of 0.1% in August.

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

(annual percentage changes; monthly data)



Source: Eurostat.

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

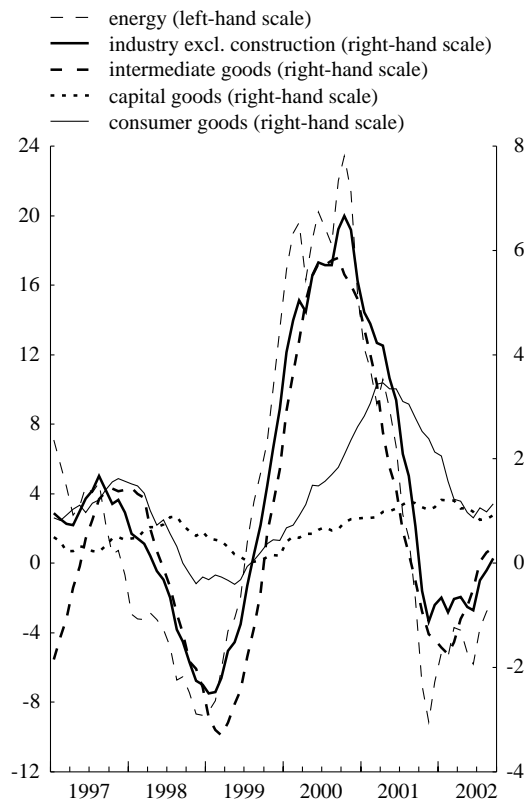
The increase in the overall year-on-year rate of change was due mainly to a rise in producer energy prices of 1.6% month on month in September in line with oil price developments. The year-on-year rate of decline in producer energy prices decreased further to 2.3% in September 2002 from 2.9% in August. Developments in intermediate goods prices continued to be moderate, rising by 0.3% year on year. The annual rate of increase in consumer goods prices edged upwards from 1.0% in August to 1.1% in September, reflecting movements in both durable and non-durable producer goods prices. Although overall industrial producer price pressures remain very moderate, base effects associated with intermediate goods and, in particular, energy

prices should contribute to a further increase in the annual rate of change of industrial producer prices over the coming months.

Survey indicators of producer price developments, such as the Eurozone Price Index seem to confirm overall subdued upward pressures. Although the index is still above 50, suggesting an increase in producer prices, it fell to 52.1 in October, down from 54.7 in September (see Chart 14). Energy prices may have risen further in October, reflecting a lagged response to the 7% oil price increase between August and September, although much of this increase was reversed in late October. Non-energy commodity prices increased by 1.3% month on month in October and were 7.8% higher than one year ago.

Chart 13
Breakdown of industrial producer prices for the euro area

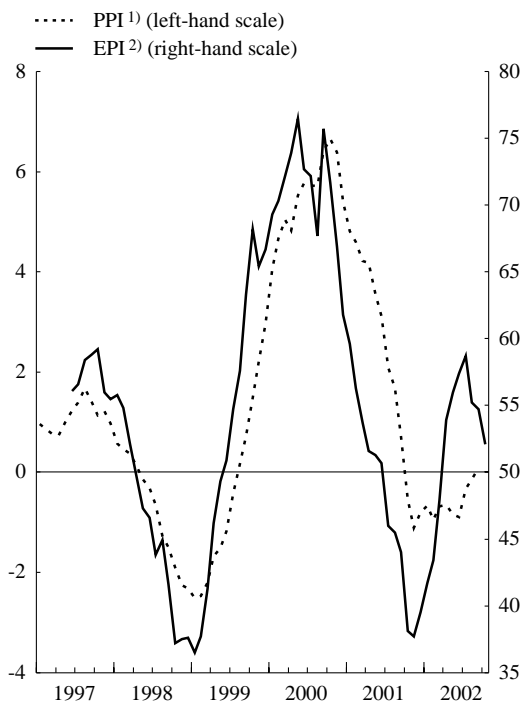
(annual percentage changes; monthly data)



Source: Eurostat.

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

Chart 14
Overall producer prices and manufacturing input prices for the euro area
(monthly data)



Sources: Eurostat and Reuters.
 Note: When available, data refer to the Euro 12 (including periods prior to 2001).
 1) Producer Price Index; annual percentage changes; excluding construction.
 2) Eurozone Price Index; manufacturing input prices from the Purchasing Managers' Survey. An index value above 50 indicates an increase in manufacturing input prices, whereas a value below 50 indicates a decrease.

Indicators of labour cost growth mixed

Chart 15 presents recent developments in a number of different indicators of euro area labour cost growth. Information available up to the second quarter of 2002 on wage negotiations indicates that agreed wage settlements have remained broadly unchanged at 2.8% year on year. The annual rate of change in monthly earnings edged upwards to 3.3% in the second quarter from 3.2% in the first. By contrast, the annual rate of change in total hourly labour costs in the non-agricultural business sector decreased to 3.6% in the second quarter, from 4.0% in the first.

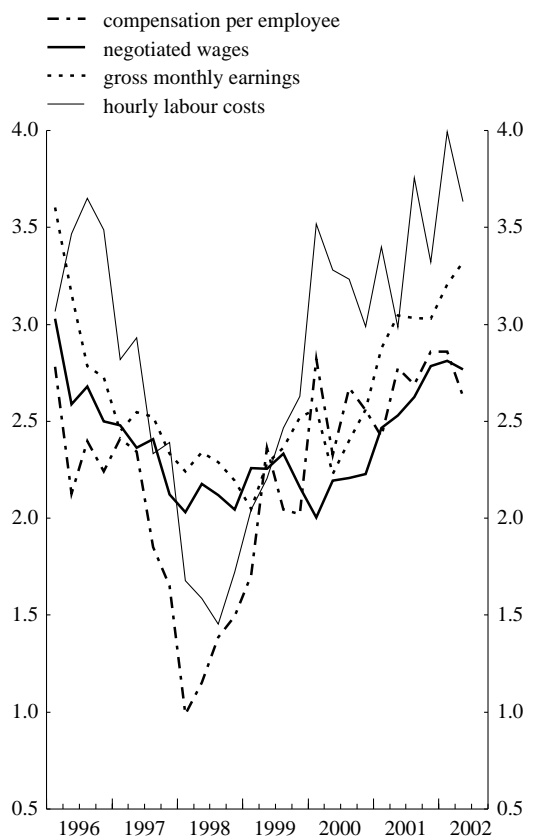
Data on compensation per employee show a decline in the annual rate of change to 2.6% in the second quarter of 2002, from 2.9% in the first quarter. Combined with a rise in labour productivity of 0.2% year on year, this caused unit labour costs to slow down significantly to 2.5% from 3.3%.

Overall, while recent data do not signal a further increase in labour cost growth, this would need to be confirmed by further information.

Short-term outlook affected by base effects and administered price and tax changes

Considering the remainder of 2002 and the early part of next year, there may be some

Chart 15
Selected labour cost indicators for the euro area
(annual percentage changes)



Sources: Eurostat, national data and ECB calculations.

upward impact on the annual rate of inflation, reflecting base effects and increases in indirect taxes and administered prices in a number of countries. Although difficult to foresee precisely, particularly given the volatility in oil prices, a further increase in the annual rates of inflation and a delay in the return to inflation rates below 2% cannot be ruled out. However, such an increase should only be temporary.

Beyond the very short term, both the euro exchange rate, which has strengthened since early this year, and the overall economic environment continue to contribute to reducing inflationary pressure. Moreover, there should be a further unwinding of the

indirect effects of previous oil price increases and other factors that have contributed to the stickiness of the annual rate of HICP inflation excluding unprocessed food and energy. However, for inflation rates to fall below 2% in the course of next year and to remain in line with price stability thereafter, as indicated by recent forecasts (see Box 5 for the results of the 2002 Q4 Survey of Professional Forecasters and other indicators of private sector expectations), it is crucial that oil prices do not escalate and that the upward trend in labour cost indicators observed over recent years does not continue. With respect to labour costs, there seems to be notable inertia, irrespective of the rather subdued economic expansion.

Box 5

Private sector expectations for inflation and economic activity in the euro area: results of the 2002 Q4 Survey of Professional Forecasters and other available indicators

This box presents the available indicators of private sector expectations for euro area inflation and economic activity. A summary of the results of the 2002 Q4 Survey of Professional Forecasters (SPF) conducted by the ECB in the second half of October is given below. The survey is called the Survey of Professional Forecasters to reflect the fact that all of the participants are experts affiliated with financial or non-financial institutions based within the European Union. It is also important to bear in mind that, since the participants are not given a common set of assumptions on which to base their forecasts, the SPF aggregate results most likely reflect a relatively heterogeneous set of subjective views and assumptions. Whenever possible, the data have been presented alongside other measures of private sector expectations for the same horizons.¹

Inflation expectations for 2002, 2003 and 2004

SPF participants expect the annual inflation rate in the euro area to average 2.2% in 2002. Thereafter, inflation is expected to decline and remain below 2% over the forecast horizon, at 1.8% in 2003 and 1.9% in 2004 (see the table). This implies a slight upward revision of inflation expectations by 0.1 percentage point for 2002, while expectations for the rest of the horizons remain unchanged from the previous survey conducted in mid-July. However, survey participants stress that the possibility of oil price hikes in the event of a military conflict in the Middle East is a serious risk for this inflation outlook. As shown in the table below, these results are broadly in line with the figures reported in the October 2002 issue of Consensus Economics Forecasts for the same horizons (2.2% for 2002 and 1.9% for 2003). The results from the October 2002 Euro Zone Barometer (2.2%, 1.8% and 1.9% for 2002, 2003 and 2004, respectively) also coincide with the SPF figures.² In the SPF, the inflation rates expected in September 2003 and September 2004 are 1.8% and 1.9%, respectively.

¹ These horizons are the calendar years 2002, 2003, 2004 and 2007. In addition, the expectations from the two additional "rolling horizons" requested in the SPF are also reported. These so-called rolling horizons are set one and two years ahead of the period for which the latest data for each particular variable are available at the time the survey is conducted. In the 2002 Q4 SPF, these rolling horizons were September 2003 and September 2004 for the HICP inflation rate, the second quarters of 2003 and 2004 for the rate of growth in real GDP, and August 2003 and August 2004 for the unemployment rate. These rolling horizons may be useful to identify dynamic patterns that are difficult to detect from calendar year averages.

² Consensus Economics figures are an aggregation of the expected annual rates of growth in the national Consumer Price Indices (CPIs), while the SPF results and the Euro Zone Barometer refer to the Harmonised Index of Consumer Prices (HICP).

Table: Results from the 2002 Q4 SPF, the 2002 Q3 SPF and Consensus Economics (October 2002)

(annual percentage changes, unless otherwise indicated)

	Survey horizon					
	2002	Sep. 2003	2003	Sep. 2004	2004	Longer-term ²⁾
HICP inflation						
2002 Q4 SPF	2.2	1.8	1.8	1.9	1.9	1.9
Previous SPF (2002 Q3)	2.1	-	1.8	-	1.9	1.9
Consensus (Oct. 2002)	2.2	-	1.9	-	-	1.9
Real GDP growth						
2002 Q4 SPF	0.8	1.7	1.8	2.5	2.5	2.4
Previous SPF (2002 Q3)	1.2	-	2.5	-	2.5	2.5
Consensus (Oct. 2002)	0.8	-	1.9	-	-	2.3
Unemployment rate¹⁾						
2002 Q4 SPF	8.3	8.3	8.4	7.9	8.0	7.2
Previous SPF (2002 Q3)	8.4	-	8.1	-	7.8	7.1

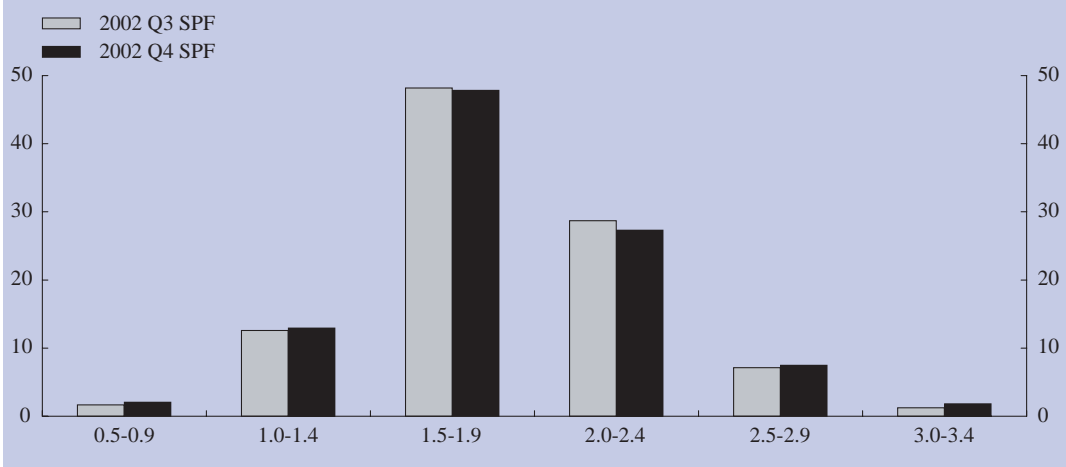
1) As a percentage of the labour force.

2) For the SPF longer-term inflation expectations refer to 2007. Consensus Economics figures refer to the period 2008-12.

The SPF questionnaire also asks survey participants to assign some probability to actual outcomes falling within specific intervals. The probability distribution resulting from the aggregation of responses helps to assess the extent to which survey participants, on average, gauge the risk of the actual outcome being above or below the most likely range. Chart A below shows the aggregate probability distributions for average annual HICP inflation in 2003 in the last two surveys. There have been very marginal changes in the inflation outlook compared with the last survey. Both distributions are centred around the interval 1.5-1.9%, which accounts for about 47% of the probability mass in both cases. Regarding the assessment of risks to the most likely inflation outcome in 2003, inflation outcomes above the central range received a probability of 37%, while outcomes below 1.5% had a probability of around 15%, without any substantial change in the assessment despite the worsening of growth prospects for 2003 (see section on GDP growth expectations below) since the previous survey.

Chart A: Probability distribution for average inflation in 2003 in the last two SPF rounds

(percentages)

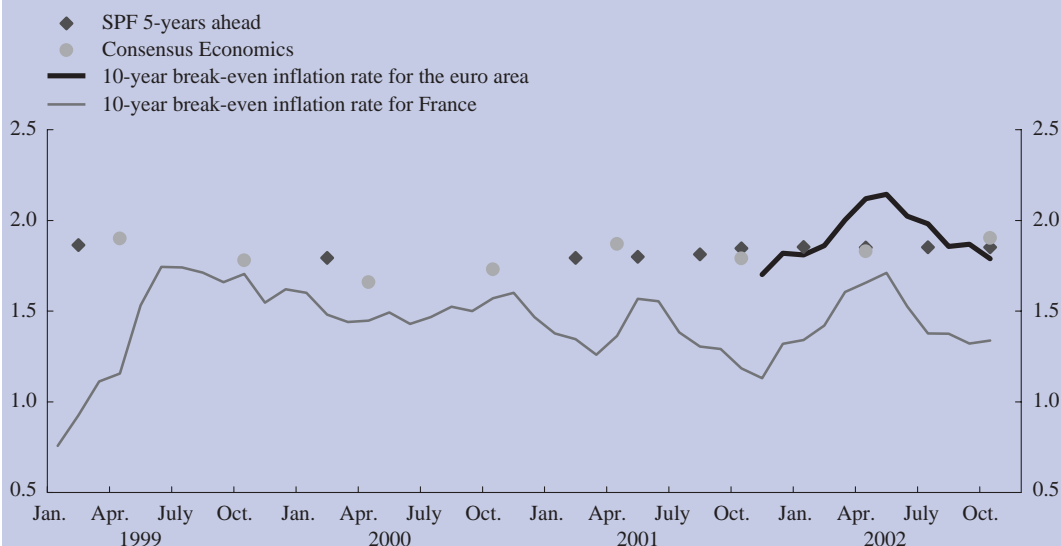


Indicators of longer-term inflation expectations

According to the 2002 Q4 SPF, average inflation in 2007 is expected to be 1.9%, unchanged from the previous survey. This level of longer-term inflation expectations is broadly consistent with other available measures. The October 2002 Euro Zone Barometer indicates an expected average inflation rate of 1.8% in 2006 and the October 2002 Consensus Economics results for five euro area countries for the period 2008-12 suggest an estimate of 1.9% for long-term inflation expectations in the euro area as a whole.³ Indicators of long-term expected inflation extracted from financial market prices convey a similar message. In particular, Chart B below shows the ten-year break-even inflation rates extracted from French bonds linked to the French CPI and the euro area HICP (both excluding tobacco), which have over recent months declined from the fairly high levels reached earlier in the year. However, when interpreting the levels of these measures, it is important to bear in mind that break-even inflation rates are not a direct measure of market inflation expectations. This is because a variety of risk premia, including an inflation uncertainty premium and a liquidity premium, are taken into consideration in the calculation.⁴

Chart B: Indicators of long-term inflation expectations

(average annual percentage changes)



Sources: French Treasury, Reuters, Consensus Economics and the ECB.

Note: For detailed information on these series, see Box 2 in the August 2002 Monthly Bulletin.

Expectations for euro area real GDP growth and unemployment

SPF participants have revised downwards their expectations for the average annual growth rate of real GDP in 2002 to 0.8%, i.e. by 0.4 percentage point compared with the previous survey. However, the most noticeable revision to expectations is for 2003, for which an annual rate of 1.8%, i.e. 0.7 percentage point lower, is now expected. These lower growth prospects for 2003 seem to stem from the high uncertainty associated with the global economic and financial situation and the geopolitical tensions. For 2004 Q2, an annual growth rate of 2.5% is expected, which is also the average expected for the year. According to the October 2002 issue of Consensus Economics Forecasts, annual rates of euro area real GDP growth are expected to average 0.8% and

³ The euro area figure was calculated using national figures for Germany, Spain, France, Italy and the Netherlands, which together represent around 85% of the euro area aggregate.

⁴ It should be noted that the break-even inflation rate reflects the average value of inflation expectations over the maturity of the index-linked bond under consideration and is not a point estimate for a precise year (as is the case for the survey indicators of long-term inflation expectations). For a thorough description of the conceptual nature of the break-even inflation rate, please refer to the box entitled "Deriving long-term euro area inflation expectations from index-linked bonds issued by the French Treasury" in the February 2002 Monthly Bulletin.

1.9% in 2002 and 2003 respectively, while the expectations reported in the October 2002 Euro Zone Barometer are 0.8% and 1.8% for these two horizons and 2.5% for 2004. Longer-term growth prospects – at 2.4% for 2007 according to the SPF, 2.3% on average for the period 2008-12 on the basis of the information published by Consensus Economics, and 2.4% for 2006 according to the October 2002 Euro Zone Barometer – remain in line with the upper end of the range of estimates for trend potential growth in the euro area.

According to the latest SPF, the euro area unemployment rate is expected to average 8.3% in 2002. Reflecting the downward revision to growth prospects in the euro area, the unemployment rate is expected to rise to 8.4% in 2003. Thereafter, it is expected to fall, averaging 8.0% in 2004 and 7.2% in 2007. These results are broadly in line with those from the October 2002 Euro Zone Barometer (8.3%, 8.4%, 7.8% and 7.2% in 2002, 2003, 2004 and 2006, respectively).

3 Output, demand and labour market developments

Real GDP growth in the second quarter of 2002 revised upwards slightly

The second release of euro area national accounts data for the second quarter of 2002 depicts a broadly unchanged picture for growth and its composition, compared with the first release. However, euro area real GDP growth in the second quarter was revised upwards slightly from 0.3% to 0.4% quarter on quarter (see Table 3). This upward revision was mainly accounted for by a stronger contribution from net exports, as import growth was revised downwards. The contribution from domestic demand in the second quarter of 2002 was positive for the first time in a year, as a pick-up in private consumption was only partially offset by the

continuing contraction in total investment. Overall, growth in the second quarter became more broadly based by comparison with the first quarter. While the recovery in the first quarter was primarily the result of weak imports, strong government consumption and a positive contribution from inventory changes, activity in the second quarter was supported by a recovery in exports and private consumption. According to value added data, growth in the second quarter was mainly concentrated in the services sector.

In August 2002, euro area industrial production (excluding construction) increased by 0.2% month on month, compensating for the fall in production registered in July (see Table 4).

Table 3

Composition of real GDP growth in the euro area

(percentage changes, unless otherwise indicated; seasonally adjusted)

	Annual rates ¹⁾								Quarterly rates ²⁾				
	1999	2000	2001	2001 Q2	2001 Q3	2001 Q4	2002 Q1	2002 Q2	2001 Q2	2001 Q3	2001 Q4	2002 Q1	2002 Q2
Real gross domestic product <i>of which:</i>	2.8	3.5	1.4	1.6	1.4	0.4	0.3	0.7	0.0	0.2	-0.3	0.4	0.4
Domestic demand	3.4	2.9	0.9	1.3	0.7	-0.1	-0.2	-0.3	0.2	-0.3	-0.3	0.1	0.2
Private consumption	3.5	2.5	1.8	1.8	1.8	1.7	0.6	0.4	0.5	0.2	0.0	-0.2	0.3
Government consumption	1.9	1.9	1.9	2.0	2.2	1.5	2.1	2.0	0.4	0.4	0.4	0.8	0.4
Gross fixed capital formation	5.9	4.8	-0.7	-0.2	-1.7	-2.4	-2.7	-2.7	-0.8	-0.7	-0.8	-0.6	-0.7
Changes in inventories ^{3), 4)}	-0.2	0.0	-0.4	-0.1	-0.4	-0.8	-0.4	-0.3	0.0	-0.3	-0.2	0.2	0.1
Net exports ³⁾	-0.6	0.7	0.5	0.3	0.6	0.6	0.5	0.9	-0.2	0.5	0.0	0.2	0.2
Exports ⁵⁾	5.3	12.7	2.6	4.3	1.3	-2.9	-2.9	0.0	-1.1	-0.2	-1.4	-0.2	1.8
<i>of which: goods</i>	5.0	12.6	2.5	4.1	1.2	-2.9	-2.1	0.0	-1.1	-0.2	-1.4	0.6	1.0
Imports ⁵⁾	7.4	11.2	1.3	3.7	-0.4	-4.6	-4.5	-2.6	-0.7	-1.5	-1.5	-0.9	1.3
<i>of which: goods</i>	7.1	11.3	0.5	3.3	-1.5	-5.8	-4.2	-2.8	-0.5	-1.7	-1.4	-0.7	0.9
Real gross value added:													
Agriculture and fishing ⁶⁾	2.7	-0.8	-0.8	-1.3	-0.7	-0.2	0.9	1.1	0.0	1.5	-0.2	-0.5	0.3
Industry	1.3	3.7	0.7	1.0	0.5	-1.6	-1.9	-0.8	-1.0	0.0	-1.4	0.5	0.1
Services	3.3	3.9	2.3	2.4	2.2	1.6	1.5	1.4	0.5	0.3	0.2	0.4	0.5

Sources: Eurostat and ECB calculations.

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

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

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

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

4) Including acquisitions less disposals of valuables.

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

6) Also includes hunting and forestry.

Table 4
Industrial production in the euro area

(annual percentage changes, unless otherwise indicated)

	2000	2001	2002 June	2002 July	2002 Aug.	2002	2002	2002	2002	2002	2002	2002	2002
						June	July	Aug.	Mar.	Apr.	May	June	July
						month-on-month			three-month moving averages				
Total industry excluding construction by main industrial groupings:	5.5	0.3	-0.3	-0.1	-1.0	0.3	-0.2	0.2	0.8	0.6	0.5	0.3	0.3
Total indus. excl. construction and energy ¹⁾	6.0	0.1	-0.8	-0.4	-1.1	0.8	-0.7	0.9	1.2	0.9	0.5	0.2	0.5
Intermediate goods	6.0	-0.8	0.0	0.6	0.2	0.5	-0.5	1.6	2.9	2.1	0.8	0.1	0.5
Capital goods	9.4	1.3	-1.7	-0.8	-2.1	1.3	-0.2	0.0	-0.2	0.0	0.5	0.4	0.7
Consumer goods	2.3	0.3	-0.9	-1.7	-2.2	0.3	-1.3	1.1	0.6	0.2	0.3	0.1	0.1
Durable consumer goods	6.4	-2.5	-5.3	-2.2	-9.2	2.1	-0.1	-0.3	-1.0	-2.3	-1.1	-0.3	1.1
Non-durable consumer goods	1.4	0.9	0.1	-1.6	-1.1	0.0	-1.5	1.3	0.9	0.7	0.6	0.2	-0.1
Energy	2.0	1.1	3.5	1.6	0.0	0.5	-0.5	-0.4	-0.1	0.1	0.7	0.7	0.3
Manufacturing	5.9	0.2	-0.8	0.1	-1.3	1.0	-0.3	0.3	1.1	0.8	0.7	0.3	0.6

Sources: Eurostat and ECB calculations.

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

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

The increase was largely due to a rebound in production of intermediate and non-durable consumer goods, two sectors which had experienced large falls in July. On a three-month moving average basis, the

growth rate of industrial production remained unchanged at 0.3%. On the same basis, the capital goods and durable consumer goods components appear to have seen more positive developments recently.

Table 5
Results from European Commission Business and Consumer Surveys for the euro area

(seasonally adjusted data)

	1999	2000	2001	2001	2002	2002	2002	2002	2002	2002	2002	2002	2002
				Q4	Q1	Q2	Q3	May	June	July	Aug.	Sep.	Oct.
Economic sentiment index ¹⁾	-0.1	2.5	-2.8	-1.4	0.3	0.3	-0.4	0.4	-0.2	-0.3	-0.3	0.3	-0.1
Consumer confidence indicator ²⁾	8	12	6	-1	1	3	1	3	3	1	0	2	-1
Industrial confidence indicator ²⁾	0	12	-1	-11	-7	-4	-5	-3	-4	-4	-5	-5	-3
Construction confidence indicator ²⁾	11	16	10	6	5	3	-2	4	3	0	-4	-2	-2
Retail trade confidence indicator ²⁾	1	6	0	-3	-10	-12	-11	-12	-12	-11	-10	-11	-10
Services confidence indicator ²⁾	5	8	-7	-27	-19	-17	-23	-16	-19	-22	-24	-22	-26
Business climate indicator ³⁾	-0.1	1.3	-0.1	-1.2	-0.8	-0.5	-0.5	-0.3	-0.5	-0.4	-0.6	-0.5	-0.4
Capacity utilisation (%) ⁴⁾	82.3	84.4	83.1	81.6	81.1	81.1	81.3	-	-	81.0	-	-	81.5

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

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

1) Percentage changes compared with the previous period.

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

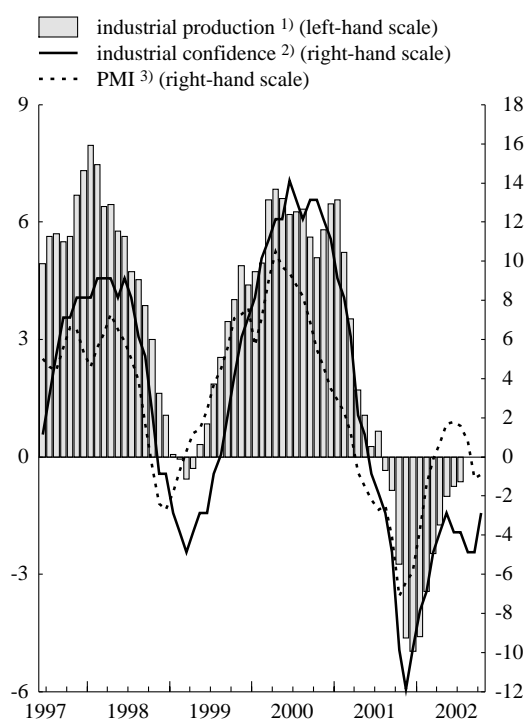
3) Units are defined as points of standard deviation.

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

Business confidence improved slightly in October 2002

Survey data for the manufacturing sector in October showed a slight improvement in the business climate compared with September. According to the European Commission Business and Consumer Surveys, industrial confidence increased in October by 2 index points, after having remained unchanged in September (see Table 5). This reflects an improvement in the assessment of order books (especially export orders) and stocks of finished products, and in production expectations. At the same time, the assessment

Chart 16
Industrial production, industrial confidence and the PMI for the euro area
 (monthly data)



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

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

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

of past production trends worsened. Looking backwards, in the light of increased uncertainty during the summer, the deterioration in industrial confidence appears to have been fairly limited so far. Indeed, confidence returned in October to the level observed in May, which was the highest reading of the index so far this year. The Purchasing Managers' Index (PMI) for the manufacturing sector also increased in October to 49.1, from 48.9 in September (see Chart 16). However, the level of the index remains below the threshold of 50, which signals unchanged production, therefore suggesting weak manufacturing activity in September and October. Although the worsening business climate during the third quarter may have reflected adverse financial market developments and heightened concerns about the global economic outlook, it may also partly have been the result of a "normalisation" of expectations following the overly optimistic views prevailing in the first half of the year. In this respect, the decline during the summer months might not necessarily translate into an equivalent deceleration of actual production, although uncertainty about this remains high.

As regards other sectors of the economy, according to the Commission's surveys, confidence in construction remained unchanged in October 2002 and improved slightly in retail trade (see Table 5). Retail trade confidence has remained broadly unchanged since the second quarter of 2002.

Some positive indicators of household spending, but consumer sentiment remains weak

Retail trade turnover increased by 0.8% month on month in August 2002, after an upwardly revised increase of 0.9% in July, which implies a significant strengthening of growth in retail sales during the third quarter of 2002. In particular, on a three-month moving average basis, retail sales grew by 0.4% in the period up to August compared with the period up to May. Furthermore, new passenger car registrations rose by 0.6%

quarter on quarter in the third quarter, compared with a decrease of 0.2% in the second quarter. Overall, current indicators for private consumption point to a growth rate in the third quarter broadly in line with or above that observed in the second quarter. In terms of annual growth rates, both retail sales and new car registrations have generally improved slightly (see Chart 17).

By contrast with these more positive developments, consumer confidence deteriorated during the summer and showed signs of renewed weakness in October. The decline in share prices in the summer months and the increase in uncertainty as a result of geopolitical tensions appear to have weighed on households' confidence. The deterioration in consumer confidence might also be a

consequence of the weak labour market conditions.

Economic activity expected to strengthen in the course of 2003

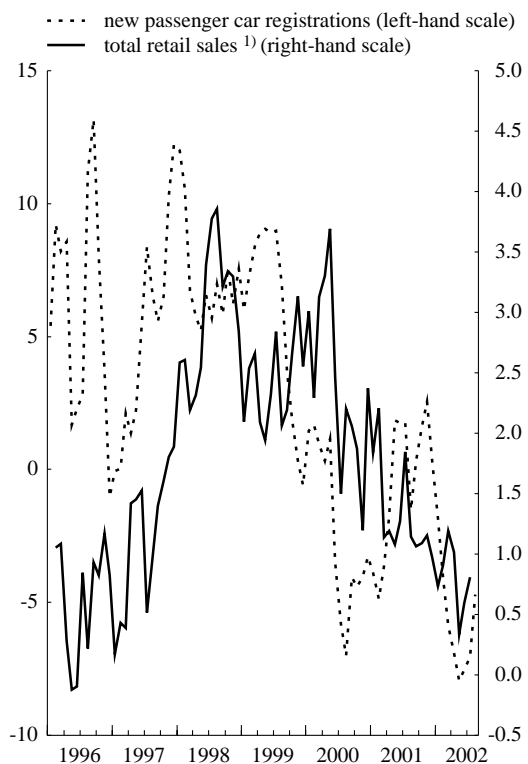
While modest economic growth is expected to continue in the immediate period ahead, the prevailing high level of uncertainty is expected to weigh on domestic demand developments and inhibit a further strengthening of activity in the short term. This uncertainty is associated with the outlook for the global economy, taking into account geopolitical tensions and their possible impact on oil prices, and stock market developments.

However, for the time being, the main scenario for the euro area remains that economic growth is expected to return to rates close to potential in the course of 2003. Financial markets have shown signs of stabilisation in recent weeks following a period of considerable turbulence. The expectation of an improvement in economic activity in the euro area is contingent on a recovery of growth in private consumption, supported by a reduction in actual and perceived inflation rates. It is also conditional on a projected gradual recovery of the world economy and export growth which, together with the low level of interest rates, should also help to strengthen investment. Nevertheless, the uncertainty surrounding this scenario remains high. It is therefore difficult, at this juncture, to predict the timing and strength of the economic upswing, both in the euro area and globally.

Unemployment rate remained unchanged at 8.3% in September 2002

In September, the standardised rate of unemployment for the euro area stood at 8.3% of the labour force, i.e. unchanged from the previous month (see Chart 18). As a result, the unemployment rate recorded a further increase in the third quarter of 2002, to 8.3% on average, which was 0.1 percentage

Chart 17
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 6**Unemployment in the euro area***(as a percentage of the labour force; seasonally adjusted)*

	1999	2000	2001	2001	2002	2002	2002	2002	2002	2002	2002	2002	2002
				Q4	Q1	Q2	Q3	Apr.	May	June	July	Aug.	Sep.
Total	9.4	8.5	8.0	8.0	8.1	8.2	8.3	8.1	8.2	8.2	8.3	8.3	8.3
Under 25 years ¹⁾	18.5	16.6	15.7	15.8	15.9	16.1	16.1	16.0	16.1	16.3	16.1	16.1	16.1
25 years and over	8.2	7.4	7.0	7.0	7.1	7.2	7.2	7.1	7.2	7.2	7.2	7.2	7.3

Source: Eurostat.

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

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

point higher than in the second quarter, confirming the overall pattern of a worsening unemployment rate during the year. However, the monthly average increase in the number of unemployed came to around 14,000 in the third quarter of 2002, which is clearly below the corresponding increases in the first two quarters (of around 50,000).

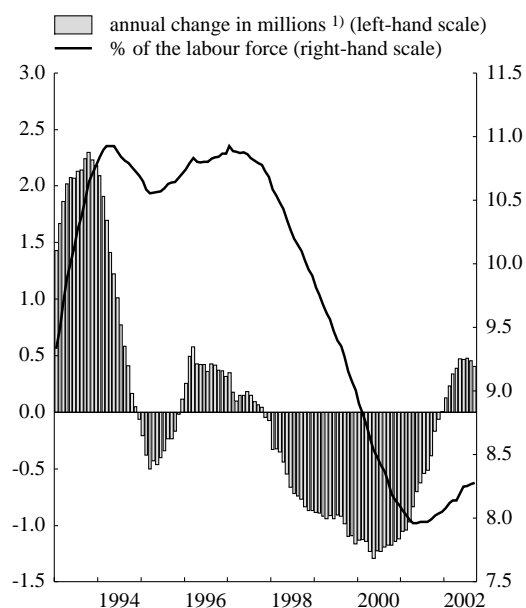
In terms of the age breakdown, the unemployment rate of those below 25 remained

unchanged in September compared with the previous month at 16.1% (see Table 6), although the number of unemployed actually fell slightly. For those aged 25 and above the unemployment rate rose by 0.1 percentage point to 7.3% in September 2002, following a further increase in the number of unemployed, although the increase was below that registered in previous months.

Employment remained unchanged in the second quarter of 2002

According to revised national accounts data, euro area total employment remained unchanged in the second quarter of 2002, after having registered a quarter-on-quarter growth rate of 0.1% in the first quarter. This reflects a continued decline in employment in the agricultural and industrial sectors, by 0.2% and 0.3% quarter on quarter respectively, and a further slowdown of 0.1 percentage point in the services sector, to 0.2% in the second quarter (see Table 7).

Employment expectations for the euro area, provided by the European Commission Business Surveys up to October, point to a continued decline in employment in both manufacturing and construction. In the services sector, expectations are for a further decline in employment growth. These expectations are consistent with those of the Purchasing Managers' Survey and, overall, indicate that employment is expected to have decreased in the third quarter of 2002.

Chart 18**Unemployment in the euro area***(monthly data; seasonally adjusted)*

Source: Eurostat.

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

1) Annual changes are not seasonally adjusted.

Table 7**Employment growth in the euro area***(annual percentage changes, unless otherwise indicated; seasonally adjusted)*

	1999	2000	2001	2001	2001	2001	2002	2002	2001	2001	2001	2002	2002
				Q2	Q3	Q4	Q1	Q2	Q2	Q3	Q4	Q1	Q2
	Quarterly rates ¹⁾												
Whole economy	1.8	2.1	1.3	1.5	1.1	0.8	0.7	0.5	0.2	0.1	0.2	0.1	0.0
<i>of which:</i>													
Agriculture and fishing ²⁾	-2.6	-1.7	-0.8	-0.4	-1.2	-1.5	-2.3	-2.1	-0.5	-1.0	-0.3	-0.6	-0.2
Industry	0.3	0.8	0.3	0.7	0.1	-0.5	-0.9	-1.0	-0.1	-0.2	-0.3	-0.2	-0.3
Excluding construction	-0.2	0.6	0.3	0.7	0.1	-0.6	-1.0	-1.0	-0.2	-0.2	-0.3	-0.3	-0.3
Construction	2.0	1.6	0.3	0.7	0.2	-0.3	-0.6	-0.9	0.0	-0.2	-0.2	-0.2	-0.3
Services	2.7	2.9	1.9	2.0	1.7	1.5	1.5	1.3	0.4	0.4	0.4	0.3	0.2
Trade and transport ³⁾	2.3	2.8	1.5	1.5	1.3	1.2	1.5	1.1	0.3	0.5	0.4	0.2	-0.1
Finance and business ⁴⁾	5.6	6.0	3.7	4.0	3.2	2.8	1.8	1.8	0.7	0.5	0.6	0.0	0.7
Public administration ⁵⁾	1.8	1.5	1.4	1.4	1.3	1.2	1.4	1.3	0.4	0.2	0.4	0.5	0.2

*Sources: Eurostat and ECB calculations.**Note: Data refer to the Euro 12 (including periods prior to 2001).**1) Quarterly rates: percentage change compared with the previous quarter.**2) Also includes hunting and forestry.**3) Also includes repairs, communication, hotels and restaurants.**4) Also includes real estate and renting services.**5) Also includes education, health and other services.*

4 Exchange rate and balance of payments developments

The euro strengthened at the end of October and in early November 2002

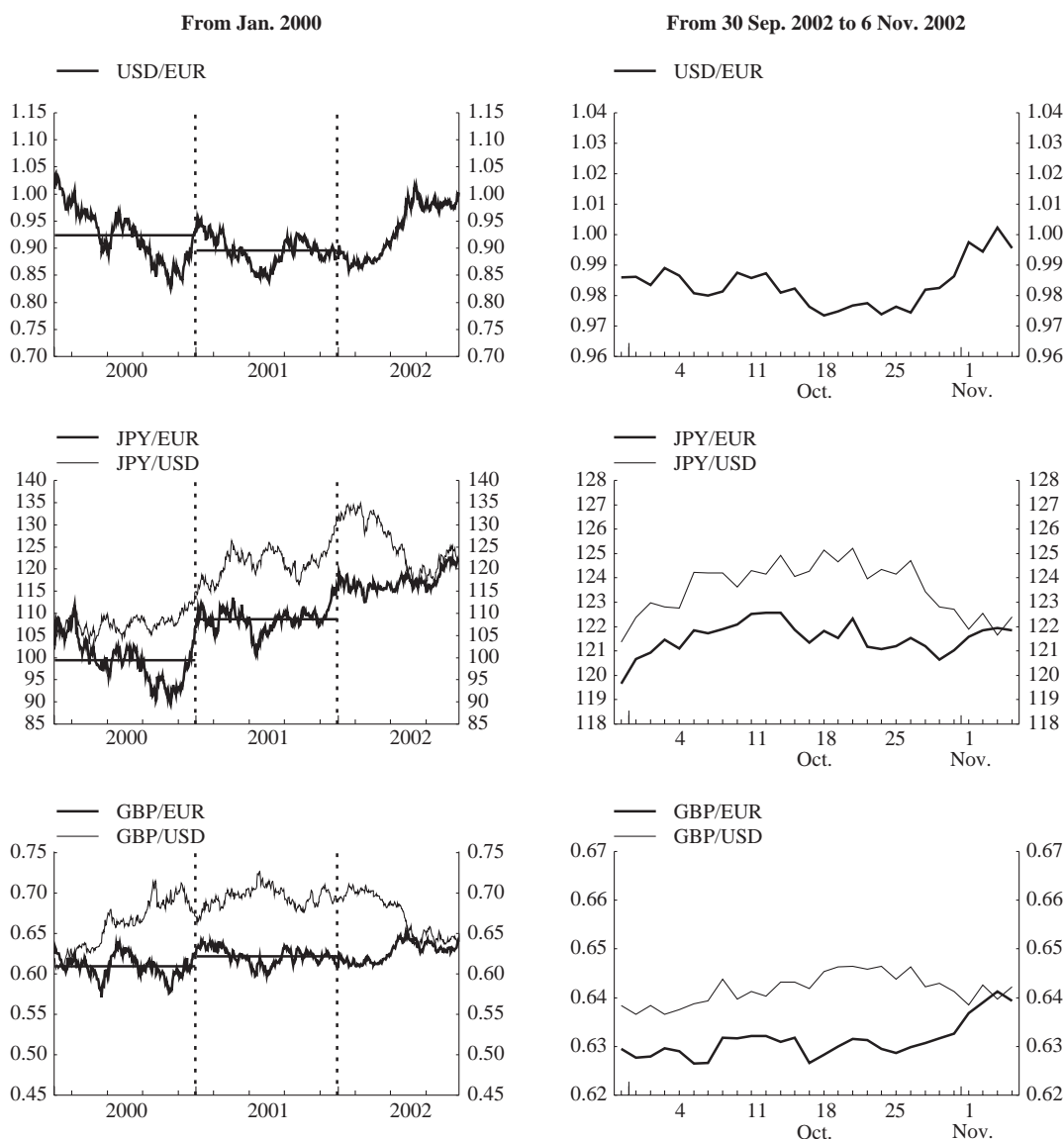
In the first half of October 2002 the euro traded in a narrow range against the US dollar. In the second half of the month, the euro was subjected to some temporary downward pressure, which was nevertheless fully reversed towards the end of the month

and in early November (see Chart 19). The rebound of the euro against the US dollar was seemingly related to the release of data indicating a fall in US consumer spending and a rise in unemployment in the country, thereby casting some doubt on the strength of US economic activity. The decision of the Federal Reserve System to cut its target for the Federal funds rate by 50 basis points to

Chart 19

Patterns in exchange rates

(daily data)



Source: ECB.

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

1.25% at its 6 November meeting did not have a notable impact in foreign exchange markets. On 6 November, the euro was quoted at USD 1.00, which was 1% higher than at the end of September and about 11% stronger than its 2001 average.

The Japanese yen depreciated against all major currencies in the first half of October this year to subsequently stabilise and eventually recover, albeit partly, towards the end of the month (see Chart 19). While recent political decisions were interpreted by market participants as a positive sign aimed at solving the country's banking sector problems, the lingering uncertainty regarding the timing as well as the precise modality of the banking sector reforms in Japan appears to have weighed on the yen throughout most of the reference period. Towards the end of October, the disclosure of the Japanese Government's reform plan as well as further monetary policy measures by the Bank of Japan supported the Japanese currency, particularly vis-à-vis the US dollar. On 6 November the euro was quoted at JPY 121.8, i.e. almost 2% higher than at the end of September and around 12% above its 2001 average.

After remaining broadly stable against the euro and the US dollar for most of October this year, the pound sterling depreciated

vis-à-vis the single currency towards the end of the month and at the beginning of November. The strengthening of the euro against the pound sterling may partly reflect the close association between the US dollar and the pound sterling observed occasionally in the past. It may also have been influenced by market uncertainty over the future adoption of the euro by the United Kingdom as well as over the timing of a referendum on euro area membership. On 6 November the euro traded against the pound sterling at GBP 0.64, which was more than 1.5% above its end-September level and around 3% higher than its 2001 average.

Chart 2 I
The effective euro exchange rate and its decomposition¹⁾

(daily data)

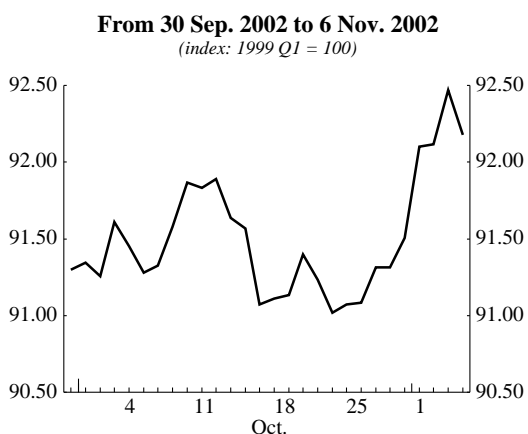
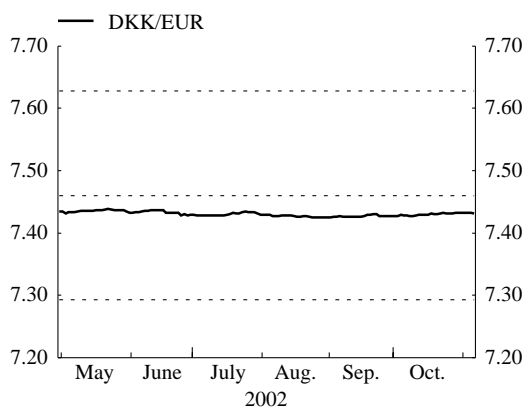


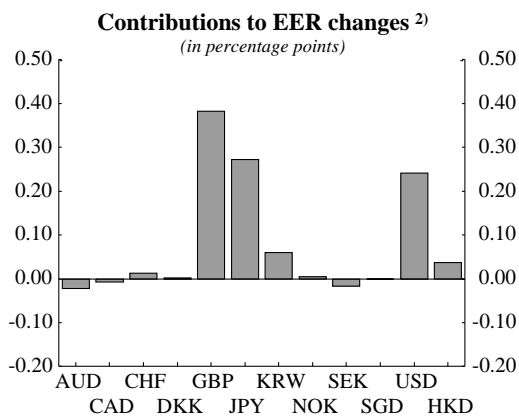
Chart 20
Patterns of exchange rates within ERM II

(daily data)



Source: ECB.

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



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.

As far as the other European currencies are concerned, the Danish krone continued to fluctuate in a narrow range slightly below its central parity within ERM II (see Chart 20). The Swedish krona and the Swiss franc remained broadly stable vis-à-vis the euro. On 6 November the euro traded against the Swiss currency at CHF 1.46, which was around 3% below its average level in 2001. Among emerging market currencies, in October and early November the Brazilian real rebounded from the low levels seen in September vis-à-vis the major currencies; against the euro, the Brazilian real appreciated by almost 8% over this period.

For most of October 2002, the nominal effective exchange rate of the euro – as measured against the 12 major trading partners of the euro area – fluctuated in a narrow range. At the end of the month and in early November it appreciated, reflecting mainly the strengthening of the euro against the pound sterling, the Japanese yen and the US dollar. On 6 November the euro stood, in nominal effective terms, 1% higher than at the end of September and about 6% above its average level in 2001 (see Chart 21). On the same date the nominal effective exchange rate of the US dollar was almost unchanged

from its end-September level and was about 4% below its average level in 2001. Over the review period, in nominal effective terms, the Japanese yen depreciated by more than 1% and on 6 November it stood at slightly more than 5% below its annual average for 2001 (see Chart 22).

Rise in the current account surplus in August 2002

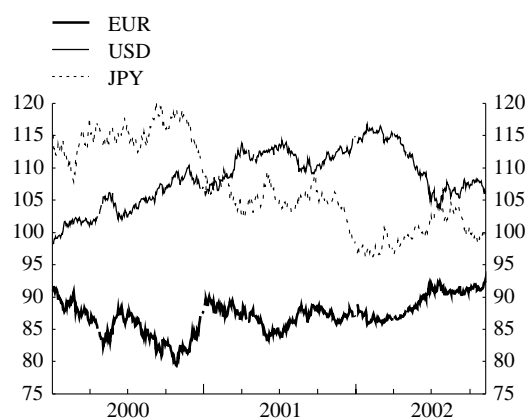
The euro area current account showed a surplus of €9.7 billion in August 2002, compared with a surplus of €5.3 billion in August 2001. This rise in the current account surplus resulted mainly from an increase in the goods surplus (from €7.4 billion to €11.7 billion), with the other current account items remaining broadly unchanged (see Table 8).

Data for the first eight months of 2002 show that the cumulated current account balance turned from a €23.6 billion deficit in the same period of last year into a €29.2 billion surplus. This development stemmed mainly from a

Chart 22

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

(daily data; 1999 Q1 = 100)



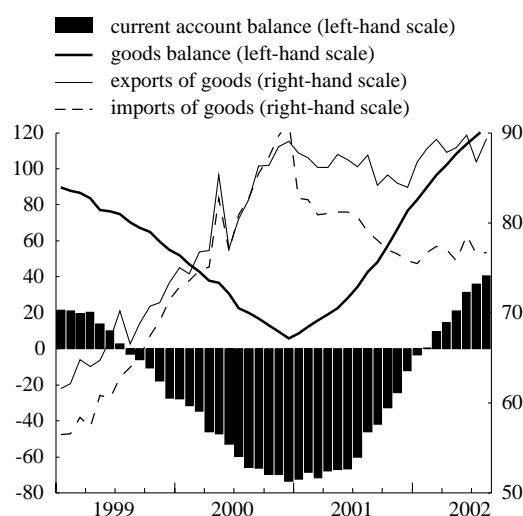
Source: ECB.

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

Chart 23

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.

significant increase in the goods surplus (by €45.8 billion, see Table 8) and, to a lesser extent, from a small increase (by €3.0 billion) in the services surplus and from lower deficits for income and current transfers. The rise in the goods surplus was mostly due to a sizeable fall in import values (by about 6%), reflecting both the lower average price of oil imports in the

first eight months of this year compared with the corresponding period of last year and subdued domestic demand, particularly for import-intensive demand components such as fixed capital expenditure. A small increase in exports (by 1.2%) also contributed to the larger surplus, though less significantly.

Table 8
Balance of payments of the euro area

(EUR billions; not seasonally adjusted)

	2001 Jan. - Aug.	2001 Aug.	2002 Jan. - Aug.	2002 June	2002 July	2002 Aug.
Current account balance	-23.6	5.3	29.2	7.3	2.6	9.7
Credits	1145.6	135.0	1126.4	145.1	148.6	132.8
Debits	1169.2	129.7	1097.2	137.8	146.0	123.1
Goods balance	39.1	7.4	84.9	13.6	14.2	11.7
Exports	687.2	80.9	695.7	90.1	93.0	80.8
Imports	648.1	73.5	610.8	76.4	78.8	69.1
Services balance	1.0	1.0	4.0	2.9	0.9	1.3
Exports	213.9	29.2	213.5	28.5	29.7	28.4
Imports	212.9	28.2	209.5	25.6	28.8	27.1
Income balance	-34.3	-0.0	-32.1	-1.7	-9.3	-0.1
Current transfers balance	-29.5	-3.1	-27.6	-7.5	-3.2	-3.2
Capital account balance	7.5	0.6	7.8	1.1	0.5	0.7
Financial account balance	12.9	-6.1	-71.8	-41.3	-11.2	-11.8
Direct investment	-102.4	-5.9	-21.3	-16.1	-3.6	1.7
Abroad	-207.2	-18.6	-106.7	-16.3	-9.3	-0.2
Equity capital and reinvested earnings	-131.7	-14.9	-87.4	-13.8	-12.2	-5.7
Other capital, mostly inter-company loans	-75.5	-3.6	-19.3	-2.5	2.9	5.5
In the euro area	104.8	12.7	85.4	0.1	5.7	1.9
Equity capital and reinvested earnings	79.6	7.0	52.8	3.0	2.2	2.1
Other capital, mostly inter-company loans	25.2	5.7	32.6	-2.9	3.5	-0.3
Portfolio investment	-14.3	3.7	33.9	17.1	14.2	4.5
Equities	48.8	8.0	17.1	-6.6	-4.2	3.3
Assets	-97.6	-4.7	-49.7	-5.4	-7.2	4.0
Liabilities	146.4	12.6	66.8	-1.2	3.0	-0.7
Debt instruments	-63.1	-4.2	16.9	23.7	18.4	1.1
Assets	-118.2	-18.3	-92.1	-3.8	-8.7	-7.5
Liabilities	55.0	14.1	109.0	27.5	27.1	8.6
Memo item:						
Combined net direct and portfolio investment	-116.8	-2.2	12.7	1.0	10.6	6.2
Financial derivatives	3.7	-3.5	-10.1	-1.9	-7.0	-1.9
Other investment	109.8	-4.5	-77.3	-36.8	-12.3	-17.8
Reserve assets	16.2	4.1	2.9	-3.4	-2.5	1.8
Errors and omissions	3.2	0.3	34.8	32.8	8.1	1.4

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.

Looking at month-on-month developments on the basis of seasonally adjusted data, the value of exports increased slightly in August compared with July (from €86.8 billion to €89.4 billion), while seasonally adjusted imports remained broadly unchanged (see Chart 23).

Net inflows of direct and portfolio investment in August 2002

In August, direct and portfolio investment flows were relatively small on both the asset and liability sides in comparison with previous months. Overall, there was a combined net direct and portfolio investment inflow into the euro area of €6.2 billion in August 2002, owing to net inflows of both direct investment (€1.7 billion) and portfolio investment (€4.5 billion).

On a cumulated basis over the first eight months of 2002, combined direct and portfolio investment recorded net inflows of €12.7 billion (compared with net outflows of €116.8 billion during the same period in 2001) in line with the decline in annual net outflows observed since 1999 (see Chart 24).

A comparison of financial flows in the first eight months of 2001 and 2002 suggests that the

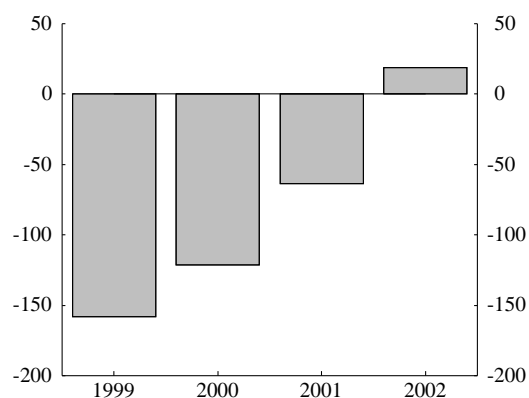
sharp fall in equity valuations worldwide, against the background of increased uncertainty over the outlook for the major economic areas, seems to have caused cross-border equity flows to decline sharply from €244 billion to €116.5 billion. At the same time, there has been a resurgence of cross-border debt instrument flows, which, in absolute terms, increased from €173.2 billion to €201.1 billion over the same period, despite a decline in euro area investment in debt instruments abroad from €118.2 billion to €92.1 billion. Conversely, non-resident investment in euro area debt instruments increased to €109.0 billion in the first eight months of 2002 compared with €55.0 billion in the same period in 2001. Developments in interest rate differentials between the euro area and other major economies may partly explain the increase in cross-border debt instrument flows into the euro area.

Revised data for the euro area balance of payments for 1999-2001 and the first half of 2002

In accordance with the current revision practice, euro area balance of payments statistics have been revised for the 1999-2001 period and for the first half of 2002.

Chart 24
Euro area combined net direct and portfolio investment flows

(EUR billions, cumulated data)



Source: ECB.

Note: A positive (negative) number indicates a net inflow (outflow). Data for 2002 is annualised based on the period Jan.- Aug. 2002.

In the current account, revisions to the data for the second quarter of 2002 have turned the previous €1.8 billion deficit into a €5.2 billion surplus. This €7.0 billion upward revision of the current account in the second quarter of 2002 came mainly from the goods item, which was revised upwards by €3.3 billion, but also from upward adjustments to the income deficit (by €2.3 billion) and the services surplus (by €1.7 billion). The upward net revision of the goods balance stems from a larger upward revision of exports than of imports. In addition to the quarterly revisions in 2002, the current account deficit was revised upwards by €11.5 billion in 2001, from €2.3 billion to €13.8 billion. As a result, the revised figures show a greater change between the 2001 deficit and the 2002 surplus. Revisions in the financial accounts for 2002 affected mainly portfolio investment,

with additional net inflows of €12.3 billion in the first two quarters of 2002. The revisions to both the current and financial accounts resulted in significant reductions in cumulated

errors and omissions for the first two quarters of 2002, which declined from €45.6 billion to €25.4 billion. Most of this net change referred to April 2002.

The accountability of the ECB

The accountability of the ECB and the transparency of its monetary policy are important elements of the institutional and policy framework of Economic and Monetary Union (EMU). In order to address and clarify these distinct and yet interrelated concepts, this issue of the Monthly Bulletin includes two articles on these topics. Whereas the second article deals with transparency in the monetary policy of the ECB, this article focuses on accountability, which is understood as the legal and political obligation of an independent central bank to justify and explain its decisions to the citizens and their elected representatives. Beginning with a general and abstract notion of the multi-faceted concept of central bank accountability, the article presents and explains how the ECB fulfils its duty to render account for its policy decisions. In this context, the ECB's relations with the European Parliament – the only European institution made up of directly elected representatives of the citizens – play a particularly prominent role and are described in detail. References are made to the accountability provisions and practices of other major central banks, such as the Federal Reserve System, the Bank of Japan and the Bank of England, wherever this appears useful or relevant.

I Introduction

A cornerstone of the monetary constitution of the euro area is the independence of the ECB and of the NCBs of the Eurosystem. Article 108 of the Treaty establishing the European Community (hereinafter referred to as “the Treaty”) safeguards this independence in a far-reaching manner, i.e. at the institutional, personal, functional and financial levels (see also the article entitled “The institutional framework of the ESCB” in the July 1999 issue of the Monthly Bulletin). At the same time, in modern democracies, independent institutions bestowed with a public function must be held accountable for their actions. Therefore, the high degree of independence granted to the ECB goes hand in hand with well defined ways of holding the latter accountable.

During the four years since its establishment, the ECB has, at times, been faced with discussions concerning the extent to which it is accountable and transparent. In this context, a certain degree of confusion with regard to the terms “accountability” and “transparency” has become apparent, not least because they are used interchangeably at times. While both terms are undoubtedly interrelated, they carry different meanings and should, therefore, be treated separately.

The accountability of the ECB is the subject of this article. First and foremost, it is understood as an obligation vis-à-vis the “political order” prevailing within the EU and as a crucial cornerstone of the legitimacy of the ECB and its policies. Transparency, on the other hand, is a notion stemming from the “economic order” and can be considered as an instrument aimed at enhancing the effectiveness of the ECB’s policy. While, as mentioned above, some aspects of accountability also relate to transparency, the latter is treated in the article entitled “Transparency in the monetary policy of the European Central Bank” in this issue of the Monthly Bulletin.

Holding the ECB accountable involves legal, institutional and practical aspects, and this article presents and explains existing provisions and practices. The focus is on *democratic* accountability, meaning that particular emphasis is placed on the ECB’s relations with elected bodies, most importantly the European Parliament as the EU institution composed of directly elected representatives of the European citizens. Wherever relevant, reference will be made to the accountability provisions and practices of other important central banks, such as the Federal Reserve System, the Bank of England and the Bank of Japan.

2 Accountability as a cornerstone of the ECB's legitimacy

Independent central banks in modern democracies

Accountability is a fundamental precondition for, and core element of, democratic legitimacy. In a democracy, all power emanates from the people. All decisions which bind and affect the community have to be legitimised by the will of the people. Typically, legitimacy is conceptualised as comprising two principal elements: first, public policy decisions are legitimate if they are, directly or indirectly, the expression of the will of the people ("government by the people"). This is often referred to as "input legitimacy" or "legitimacy by procedure". Second, decisions can be considered legitimate if they meet the justified expectations and needs of the people ("government for the people"), a notion which is also referred to as "output legitimacy" or "legitimacy by result".

By executing the specific powers conferred upon it by the Treaty, the ECB takes decisions which directly affect, first and foremost, the lives and welfare of over 300 million people in Europe. While not totally isolated from the political process, the decision-making of the ECB (and the NCBs within the Eurosystem) – through their guaranteed independent status – has been consciously kept free from any interference from Community institutions, governments of the Member States or any other body. Against this background, certain questions relating to the ECB's democratic legitimacy might well be raised; these can be answered with reference to the following three aspects.

First, the ECB enjoys "input legitimacy" as an institution established through an international treaty signed and ratified by all Member States in accordance with their constitutional requirements. It was the sovereign decision of the peoples of Europe (through their elected representatives) to transfer the competency for monetary policy and the other tasks enumerated in the Treaty

to a newly created European body, and to endow it with independence from political interference. While this was a singular act completed with the ratification of the Maastricht Treaty in 1992/93, this does not mean that from that point onwards the independent central bank has been deprived of any further "input legitimacy". The political process whereby national governments appoint the members of the ECB's decision-making bodies, i.e. the members of the Executive Board and the members of the Governing Council, confers further "input legitimacy" on the ECB.

Second, the ECB can derive "output legitimacy" from the successful performance of the tasks entrusted to it. The conduct of monetary policy and the performance of the other tasks have been made subject to independent decision-making for a specific purpose: the maintenance of price stability in the euro area. As the experience of a number of central banks in the post-war period has shown, an independent central bank, which successfully and consistently provides the "public good" of a stable and trusted currency, can earn the highest levels of public support, obtain the confidence of the citizens and enjoy full legitimacy in spite of its intentional distance from the normal political process.

Third, in addition to these two dimensions, the legitimacy of independent central banks rests on a comprehensive framework to hold them accountable. Independence and accountability are two sides of the same coin. Thus the ECB is called upon to explain and justify to the European citizens and their elected representatives how it uses the powers and prerogatives with which it has been entrusted to pursue its objectives.

In addition to these considerations of a more political and constitutional nature, the accountability requirement of central banks can also be conceptualised in terms of economic theory, namely as a principal-agent

relationship. The principal – “the people” and/or its elected representatives – delegates the task of conducting monetary policy to an independent agent, the central bank, and sets it a clearly defined mandate. An integral part of this contractual relationship between principal and agent are provisions on accountability, i.e. mechanisms by which the principal holds the agent responsible for its performance. To that end, a system of appropriately designed incentives must be in place. In abstract terms, this would involve, on the one hand, approval and reward if the mandate is successfully fulfilled, and, on the other hand, the application of sanction mechanisms in the event of sub-optimal performance.

While, in theory, sanctions may appear a suitable means for enforcing central bank accountability, the specific nature of monetary policy means that, in practice, certain qualifications should be added. The policy instruments under the direct control of the central bank (short-term interest rates, liquidity management) impact on prices via a complex web of economic interactions, known as the transmission mechanism (see the article entitled “Recent findings on monetary policy transmission in the euro area” in the October 2002 issue of the *Monthly Bulletin*). Given the time-lags in the transmission process, monetary policy can only affect the price level over the medium term. It is indeed impossible for the central bank to offset unanticipated shocks to the price level (such as those caused by changes in commodity prices) in the short run. Moreover, given the uncertainty surrounding the transmission mechanism and given that the appropriate response of monetary policy depends on the nature, duration and size of economic shocks, it does not appear appropriate to specify a fixed horizon over which monetary policy should be assessed. Therefore, a measurement of the central bank’s performance always requires a balanced and differentiated assessment. While the use of formal sanction mechanisms would be too blunt and would have potentially negative implications for the efficient

fulfilment of the central bank’s mandate, constant scrutiny of the central bank’s actions by the parliament and the public at large seems the appropriate method for holding an independent central bank accountable.

Further measures aimed at ensuring that the central bank acts within the limits of its mandate and legal framework include judicial review, i.e. ex post control of the legality of the central bank’s acts, provisions for the dismissal of members of the central bank’s decision-making bodies for clearly defined reasons (such as serious misconduct), disclosure of the audited accounts of the central bank and observance of standards of integrity for its internal governance and financial management, as, for instance, laid down and regularly reviewed by the IMF on the basis of the “Code of Good Practices on Transparency in Monetary and Financial Policies”.

These different provisions designed to ensure accountability derive from the same rationale: the ECB, just like any other independent central bank, is to subject its actions and decisions to public scrutiny and demonstrate that it “acts within the limits and the powers conferred upon it by the Treaty” (Article 8 of the Treaty). At the same time, it is also in the ECB’s enlightened self-interest to ensure that its decisions are properly explained and justified so as to legitimise its policy conduct and foster public support for its independent status.

The ECB and the specific constitutional context of the EU

The institutional set-up of the Eurosystem, with the ECB at its heart, is a reflection of conditions quite unlike those of other central banks in the world. In EMU, a central authority conducts monetary policy for an economic area consisting of 12 otherwise largely autonomous States. Not only do the Member States continue to hold responsibility for large fields of public policy (such as budgetary or structural policies, welfare and

social security, internal affairs and national defence), but also the respective political debate and public discourse are, to a very large extent, bound up in the different domestic systems, each with its own institutions and processes.

The sui generis nature of the EU's political system within which the ECB is embedded naturally has an influence on the operationalisation of central bank accountability. The ECB is a supranational institution, operating within an evolving European context. From a political and constitutional perspective, the ECB is therefore not a "conventional" central bank in a "conventional" nation state, such as the Federal Reserve, the Bank of England or the Bank of Japan. Indeed, there is no "EU government" in the same way as there are

national governments and the tasks and legislative powers of the European Parliament are different from those of national parliaments. For instance, while national parliaments have the possibility of changing the central bank act, the European Parliament's power with regard to substantive changes to the Statute of the ESCB (which is an integral part of the Treaty) is limited to consultation (in some specific cases the European Parliament's assent is required). In cross-country comparisons of accountability provisions found in the literature, this has, at times, not been taken fully into account. This does not imply that the ECB might be less accountable than the other central banks referred to above, it merely points to specific features of the European way of holding the central bank accountable.

3 Holding the ECB accountable

Accountability – a possible definition

Academic literature has for a long time grappled with the notion of accountability, its definition, content and scope. In fact, even the term "accountability" represents a semantic and linguistic challenge: the English word "accountability" carries a meaning rooted in the democratic and institutional conventions of English-speaking countries; a French translation might approximate the term, for instance, with "*obligation de rendre compte*" or "*contrôle démocratique*", which would invoke different connotations and state traditions; the German notion of "*Rechenschaftspflicht*" carries its own meaning, which might be difficult to compare with those in other languages.

For the purposes of this article, the notion of "being accountable" is understood as being held responsible for one's decisions and being required to justify and explain them. Democratic accountability necessarily refers to an ex post explanation and justification, for if any political body – such as the parliament or the government – were able to

intervene or influence directly the policy-making of the central bank, they would actually take part in the decision-making process itself and hence share the responsibility for the policy outcomes. This would not only contradict the independent status of the central bank, but it would also render the concept of accountability meaningless.

The concept of accountability can be broken down into four fundamental questions, namely:

- *Who is accountable?* Whenever decisions are taken by a collegial body, members can be held accountable for the decisions collectively or individually.
- *Accountable for what?* Accountability presupposes the existence of a mandate or task, for which the institution and/or its decision-makers can be held accountable.
- *Accountable to whom?* Accountability can be direct, i.e. vis-à-vis the citizens for whom the "public good" is provided, or to their elected representatives, i.e. parliaments or governments.

- *Accountable in what manner?* Accountability can be guaranteed in different ways: through openness about the decisions taken, through scrutiny of policy decisions and activities, and other means such as dismissal procedures and judicial review.

Who is accountable?

The ECB's main decision-making bodies are the Governing Council and the Executive Board, both of which are collegiate bodies in which all members share the collective responsibility for the proper fulfilment of the tasks and functions of the ECB. Unlike a number of national governments, for example, where individual ministers hold particular portfolios and hence are individually responsible for the activities and policy outcomes of their departments, the Governing Council acts as an entity, and its members are collectively responsible for the decisions taken. This collegiate responsibility corresponds to the particular set-up of the ECB, which can be justified on the grounds of both institutional structure and policy substance.

First, with regard to the institutional set-up, Article 112 of the Treaty stipulates that the "Governing Council of the ECB shall comprise the members of the Executive Board of the ECB and the Governors of the national central banks". While the Governing Council acts as a single and collegial body and all its members are of equal status (on the basis of the "one member, one vote" principle, with the President being "primus inter pares"), the members of the Executive Board and the NCB Governors are subject to differing appointment procedures. The members of the Executive Board are appointed through a special procedure specified in Article 112 of the Treaty. The NCB Governors, by contrast, are appointed in accordance with their respective national procedures. Their membership in the Governing Council of the ECB is automatic and is not subject to an act of confirmation at the EU level.

Second, in terms of policy substance, the primary objective of monetary policy is to maintain price stability in the euro area as a whole. The members of the Governing Council, regardless of whether they are Executive Board members or NCB Governors, take their decisions on the basis of conditions prevailing in the euro area as a whole, and not with reference to developments in any particular Member State.

Some observers have argued that individual responsibility of the members of a decision-making body would be preferable, as this would allow any member to signal their disagreement with decisions taken by majority. This, in turn, would also allow the individual performance of each member to be assessed. Provisions of this kind are in force, for example, in the Federal Reserve System, the Bank of England and the Bank of Japan. Since these central banks publish the votes of the individual members of the policy-making body, any disagreement of individual members with the majority decisions are known to the public. In all three countries, members may be requested to appear before the parliament not only in order to explain the decisions of the central bank, but also their personal positions.

However, in the light of the two aspects set out above, the ECB has taken the view that a system of individual accountability of the members of the Governing Council and the Executive Board would be inconsistent with the institutional structure and policy substance. For instance, a system whereby all the members of the Governing Council were held individually accountable by the European Parliament would be inconsistent in the case of the NCB Governors, since no EU body plays a role in their appointment. At the same time, neither would it be coherent for NCB Governors to give account of their actions as members of the Governing Council to their national parliaments, as national parliaments would lack the legitimacy to judge how NCB Governors perform their "European" duties – duties which explicitly preclude them from acting as defenders of national interests.

From this it follows that the decision-making bodies of the ECB are held collectively accountable for all decisions which they take and it is for the President of the ECB and the other members of the Executive Board to justify and explain the decisions taken collectively to the European Parliament.

Accountable for what?

In the absence of a definition of the mandate and a clear delineation of the tasks entrusted to an institution, the concept of accountability of that institution becomes meaningless. A clearly defined mandate lies at the very heart of the aforementioned “contract” between the people and the independent central bank. Moreover, there is also a direct relationship between the scope and magnitude of an independent central bank’s responsibilities and the need for it to be held accountable.

Under the Treaty, the primary objective of the ECB’s monetary policy is the maintenance of price stability in the euro area. Reporting on the fulfilment of this objective is central to the ECB’s provisions on accountability. By setting a quantitative definition of price stability, the ECB has created a benchmark against which its performance can be assessed. Indeed, the more clearly and precisely the objective is defined, the easier

it is to monitor whether the ECB complies with it. The ECB has also been granted the independence – within the framework principles laid down in the Treaty – to choose the instruments and the strategy with which to achieve this goal.

As illustrated in Table I below, the maintenance of price stability is an explicit, though not the only, objective of the ECB and the other three central banks referred to in this article. While the Treaty also assigns a further objective to the ECB, namely that of supporting the general economic policies in the Community with a view to contributing to the achievement of the objectives set out in Article 2 of the Treaty – where this is possible without prejudice to the objective of price stability – it does so with clear prioritisation.

While the Federal Reserve System has a dual mandate, an unambiguous hierarchy of statutory objectives exists for the Bank of England. In Japan, the legal provisions state that the Bank of Japan’s monetary policy is “aimed at, through the pursuit of price stability, contributing to the sound development of the national economy”. Indeed, there is today a general consensus, among both central bankers and academic economists, that in the medium and long term there is no trade-off between price stability

Table I
The mandate of central banks in the euro area, the United Kingdom, the United States and Japan

	ECB	Bank of England	Federal Reserve System	Bank of Japan
Objectives	<ul style="list-style-type: none"> • Price stability • Without prejudice to price stability, support of the general economic policies in the Community 	<ul style="list-style-type: none"> • Price stability • Subject to price stability, support of the economic policy of the Government, including its objectives for growth and employment 	<ul style="list-style-type: none"> • Stable prices • Maximum employment • Moderate long-term interest rates 	<ul style="list-style-type: none"> • Price stability, contributing to the sound development of the national economy
Primary objective	<ul style="list-style-type: none"> • Maintenance of price stability 	<ul style="list-style-type: none"> • Maintenance of price stability 	<ul style="list-style-type: none"> • No prioritisation 	<ul style="list-style-type: none"> • Maintenance of price stability
Specification of the price stability objective	<ul style="list-style-type: none"> • Quantified by the ECB 	<ul style="list-style-type: none"> • Quantified by the Treasury 	<ul style="list-style-type: none"> • Qualitative specification provided by the Federal Reserve 	<ul style="list-style-type: none"> • Qualitative specification provided by the Bank of Japan

and economic policy objectives, such as sustainable growth and a high level of employment. Hence, the best contribution that monetary policy can make to promote these objectives is, indeed, to maintain price stability.

Of the four central banks referred to in this article, all except the Bank of England have the option to quantify their statutory objectives; however, the ECB is the only one to have done so thus far publicly. In the United Kingdom, it is for the Chancellor of the Exchequer to define the inflation target for the Bank of England's monetary policy.

Like all central banks, the ECB also carries out other tasks in addition to monetary policy assigned to it by the Treaty. These tasks are an integral part of the ECB's duties and thus are included in the provisions on accountability. In this context, the competence of the ECB to adopt legal acts to the extent necessary to carry out specific tasks is of particular relevance, because regulatory powers are, in representative democracies, usually vested in an elected legislature rather than in an independent institution. This regulatory competence, which is complemented by the ECB's power "to impose fines or periodic penalty payments on undertakings for failure to comply with obligations under its regulations and decisions" (Article 34.3 of the Statute of the ESCB), calls for an appropriate method for holding the ECB accountable.

On the other hand, Article 14.4 of the Statute of the ESCB provides that "national central banks may perform functions other than those specified in this Statute unless the Governing Council finds, by a majority of two thirds of the votes cast, that these interfere with the objectives and tasks of the ESCB". Since such "functions shall be performed on the responsibility and liability of national central banks and shall not be regarded as being part of the functions of the ESCB", the ECB is not held accountable for them.

Accountable to whom?

As a body established by virtue of the Treaty, and acting within the limits of the powers conferred upon it, the ECB has the statutory task of providing the "public good" of price stability and of performing the other central banking functions for the euro area as a whole. Therefore, it is accountable first and foremost to the European citizens, from whom the Treaty's legitimacy derives. The Treaty contains a number of provisions (such as reporting obligations – see the following section) which provide a framework for the ECB to be under the direct scrutiny of the European public at large. Publications in all official Community languages as well as public speeches by the members of the ECB decision-making bodies in all euro area Member States provide opportunities to explain and justify the ECB's decisions directly to the public.

In addition, a more focused method of holding the central bank accountable is provided by the informed and competent dialogue which the elected representatives of the citizens, i.e. parliament, maintain with the central bank. In the EU, the Treaty assigns to the European Parliament primary responsibility for holding the ECB accountable. In the same vein, the national parliaments of the United States, Japan and the United Kingdom are the principal addressees of democratic accountability for the central banks of these countries.

It should be added that, since the euro area NCBs have retained certain tasks which are not part of the functions of the ESCB (see Article 14.4 of the Statute of the ESCB), national authorities also continue, in line with the legal and constitutional provisions of the respective Member States, to be the addressees of the NCBs' accountability for those specific tasks. There is a dense network of relations between NCBs and the political institutions of their respective countries. Without prejudice to their independent status, national legislation may require NCBs to present annual reports and empower the

respective parliament to ask NCB Governors to appear before the relevant parliamentary committees upon request, or at the Governors' own initiative.

Beyond that – and this does not strictly form part of the accountability provisions – the ECB is engaged in a continuous dialogue with all relevant institutions involved in the European political process. The existing comprehensive network of institutional and informal contacts is a reflection of the fact that the ECB – while fully independent in the discharge of its statutory tasks – is embedded in the overall institutional and political set-up of the Community. These relations give the ECB the opportunity to provide information on and explain the course of monetary policy, and to improve the outside understanding of the ECB's activities and the reasoning behind its decisions (for a detailed description of these contacts see the article entitled "The ECB's relations with institutions and bodies of the European Community" in the October 2000 issue of the *Monthly Bulletin*). Similarly, the contacts of NCBs with their national political authorities also offer prime opportunities to explain – within the framework of domestic communication conventions and using the local language – the ECB's decisions and inform national policy-makers of the conduct of the single monetary policy and the reasoning behind it.

Accountable in what manner?

At the heart of this question lies the issue of how best to discharge the obligation of accountability, i.e. through which procedures and methods, given the institutional context within which a central bank operates. A number of aspects should be considered in this context, such as reporting obligations and the scrutiny of central bank decisions by the parliament, e.g. through appearances of central bank officials before the relevant parliamentary committees. Beyond that, provisions to hold central banks responsible in areas other than policy performance (such as the legality of its decisions, the proper

conduct of the members of the decision-making bodies and the integrity of its internal governance) also need to be taken into account.

Reporting obligations

The Treaty lays down extensive reporting requirements for the ECB. Article 113 requires the ECB to present an Annual Report covering the activities of the ESCB and the monetary policy of both the previous and the current year. The report is addressed to the European Parliament, the Commission, the EU Council and also to the European Council. The Treaty also calls for the publication of quarterly reports.

The ECB actually exceeds these statutory obligations, for example, by publishing a *Monthly Bulletin* (rather than only quarterly reports) and by offering online access, via the ECB's website, to the ECB's press releases, working papers and other publications. These channels, as well as the obligation to make these publications available to interested parties free of charge, offer the broader public wide-ranging opportunities to be informed on the policies and activities of the ECB (see also the article entitled "Transparency in the monetary policy of the European Central Bank" in this issue of the *Monthly Bulletin*).

The ECB's reporting obligations are broadly similar to those of the other central banks referred to in this article, in that all three are requested to publish annual reports in one form or another (see Table 2). Moreover, the Federal Reserve System is required to publish semi-annual reports. The Bank of England has a statutory obligation to publish quarterly reports, and its Annual Report is sent to the Chancellor of the Exchequer who lays it before Parliament. In line with the provisions of the Bank of Japan Act, semi-annual reports have to be published by the Bank of Japan and are transmitted to the *Diet* via the Minister of Finance.

Table 2**Reports of the central banks to the public and to parliament**

	ECB	Bank of England	Federal Reserve System	Bank of Japan
Legally required reports	<ul style="list-style-type: none"> • Annual Report • Quarterly reports 	<ul style="list-style-type: none"> • Annual Report • Inflation Reports (quarterly) • Immediate statement after each meeting of the MPC • Minutes 	<ul style="list-style-type: none"> • Annual Report (on operations) • Semi-annual reports (on monetary policy) 	<ul style="list-style-type: none"> • Semi-annual reports • Annual Report (outline of business operations) • Minutes of monetary policy meetings
Selection of other principal communications by the central bank	<ul style="list-style-type: none"> • Monthly press conference of the President (immediately after the Governing Council meeting) • Monthly Bulletin 	<ul style="list-style-type: none"> • Quarterly Bulletin • Quarterly press conference on the launch of the Inflation Report • Financial Stability Review 	<ul style="list-style-type: none"> • Immediate statement after each meeting of the FOMC • Minutes • Monthly Bulletin 	<ul style="list-style-type: none"> • Immediate statement after each meeting of the Policy Board • Monthly Bulletin • Monthly press conference of the Governor

Two aspects of the reporting practices of the ECB which have frequently been the subject of public debate and questions from the European Parliament merit a more in-depth explanation. Unlike the Federal Reserve System, the Bank of England or the Bank of Japan, the ECB does not publish the minutes of the meeting of its main policy-making body, nor does it publish the votes of the members of the policy-making body. The merits and drawbacks of this method of fulfilling the ECB's reporting obligations should, however, be assessed in the light of the specific institutional context within which the ECB operates. Given that the Governing Council takes decisions for a multi-country economy, a publication of detailed proceedings – e.g. verbatim reports which include any dissenting views of Governing Council members – could lead to undue pressure on NCB Governors to deviate from a euro area perspective and to speculation regarding their determination to take such a perspective. The choice not to publish detailed proceedings is consistent with the clear stipulations of the Treaty concerning the personal independence of the members of the Governing Council, as well as with the provisions of the Statute of the ESCB, which state that “the proceedings of the meetings shall be confidential” (Article 10.4).

However, the same Article in the Statute of the ESCB also stipulates that “the Governing

Council may decide to make the outcome of its deliberations public”. The Governing Council has indeed decided to do so. In this respect, two aspects deserve particular attention. First, providing information to the public on the “outcome” of the deliberations should not be confused with the publication of minutes. Second, while the publication of some form of “summary minutes” may be a suitable way of presenting to the markets and the public at large the main arguments behind a particular policy decision, it is debatable as to whether this actually leads to a better understanding of monetary policy decisions than explanations given through other means of communication. The ECB's press conferences held immediately after the first Governing Council meeting of the month and the comprehensive regular assessments provided in the Monthly Bulletin appear, in terms of timeliness and detail, no less capable of explaining policy decisions than what other central banks would classify as “summary minutes” (see also the article entitled “Transparency in the monetary policy of the ECB” in this issue of the Monthly Bulletin).

With regard to the reporting of the individual voting behaviour of the members of the policy-making body, there are two reasons for the ECB's decision not to expose these details. First, similar to the reasoning presented above, it constitutes an additional

safeguard of its independence, as the publication of individual voting behaviour could lead to pressure and speculation about the motives behind the decisions of the individual members of the Governing Council, and could even allow the public to verify whether any attempts to exercise influence on voting behaviour had had the intended result. While such a concern might not be particularly relevant to the other three central banks surveyed – all of which operate in “conventional” nation states – it is relevant in the European context. Unlike in the United States, for example, where the link between individual States and the Presidents of the regional Federal Reserve banks is rather vague (Federal Reserve Districts are made up of groups of often rather heterogeneous States), in the euro area, NCB Governors are associated with their home countries as the NCB Governors’ membership of the ECB’s Governing Council derives from their national position as head of the respective NCB. In addition, economic policies in the euro area remain decentralised, which may foster a predominantly national (rather than euro area) outlook on the part of domestic policy-makers. This, in turn, harbours the danger of perceiving the respective NCB Governor as a “national representative” within the Governing Council and may lead to undue attempts to influence him or her.

Second, given that the members of the Governing Council are not individually accountable, for the reasons set out above, the publication of their individual votes is not warranted. Moreover, the focus on collective decision-making rather than an emphasis on differences in opinion among the members of the Governing Council turn the public’s attention on the outcome of the meetings rather than on the process.

Testimonies before Parliament

In line with the requirements of Article 113 of the Treaty, the President of the ECB presents the ECB’s Annual Report to the European Parliament at its plenary session.

This presentation is followed by the adoption of a European Parliament resolution, which provides a comprehensive ex post assessment of the ECB’s activities and policy conduct.

In addition, the President of the ECB appears four times a year before the Committee on Economic and Monetary Affairs of the European Parliament, which was designated, by way of the European Parliament’s Rules of Procedure, as the competent committee for relations with the ECB. These quarterly testimonies have become the mainstay of the Parliament’s activities in holding the ECB accountable. There, the President explains the ECB’s policy decisions, and thereafter answers questions posed by committee members. In addition to the direct interaction and exchange of views between the President of the ECB and the members of the Committee on Economic and Monetary Affairs at the testimony itself, the Rules of Procedure of the European Parliament (new Rule 40a “Written questions to the European Central Bank”) also allow all Members of the European Parliament – via the Chairman of the Committee on Economic and Monetary Affairs – to submit further questions in writing to the ECB, in so far as they relate to the fulfilment of the ECB’s mandate. These questions, together with the answers prepared by the ECB, are subsequently published in the Official Journal of the European Communities. Even though neither the Treaty nor the Statute of the ESCB contain any provisions or obligations in this respect, the ECB has undertaken to answer these questions on a voluntary basis. However, the ECB also emphasised that this should in no way lessen the importance of the regular testimonies, where the principal questions regarding the ECB’s policy decisions should continue to be discussed.

In addition, other members of the Executive Board of the ECB also appear before the Committee. Over past years, the Vice-President of the ECB has, as a rule, been invited to present the ECB’s Annual Report to the Committee on Economic and Monetary Affairs. Moreover, it has also become regular

practice for the Committee on Economic and Monetary Affairs to invite, on an annual basis, the Executive Board member who mainly deals with economics and research to present the ECB's views on the Commission's annual review of the EU economy and the draft Broad Economic Policy Guidelines. On occasion, the Committee has also invited and heard members of the Executive Board on other specific topics relating to the ECB's competencies and tasks (e.g. preparation of the Euro 2002 Information Campaign, contribution to prudential supervision, etc.).

The Committee meetings are open to the public and the transcripts of the testimonies by the President are published on the websites of both the European Parliament and the ECB after the testimony in order to make the exchange of views between the President and the committee members available to the general public as soon as possible. Moreover, the ECB's Annual Report devotes a separate chapter to accountability and the ECB's relation with the European Parliament highlighting the main issues discussed in the course of this regular dialogue.

For the sake of completeness, it may be added that the European Parliament has also organised hearings with ECB officials at the expert level, mostly relating to legislation initiated by the ECB or other issues on which the ECB's expertise is sought. As regards this latter aspect, compared with other countries where central banks may be frequently called upon to advise parliaments and to prepare reports and studies deemed necessary to support the latter's activity, the situation with regard to the ECB is somewhat different due to the fact that the legislative competence of the EU is clearly delineated by the Treaty. Parliaments in "conventional" nation states can address and legislate – within the boundaries set by the national constitution – on any issue they deem fit. Consequently, the central bank can be expected to be called upon to advise and report on a whole range of issues. In the EU, the European Parliament, despite the considerable broadening of the

scope of its powers over the past decades, is only involved in law-making where the Treaty so provides, and with due respect for the principle of subsidiarity. Hence the relationship between the ECB and the European Parliament is mainly concerned with the fulfilment of the ECB's mandate and tasks.

The ECB's legal requirements and established practices with regard to regularly scheduled appearances of central bank representatives before Parliament are similar to those of the other central banks referred to in this article. In the United States, only the Chairman of the Federal Reserve Board is required by law to appear before the committees of both the House of Representatives and the Senate in order to discuss the semi-annual reports. In practice, this means four appearances per annum, which are of great significance and attract substantial media interest. Moreover, there are annual hearings on monetary policy and the economic outlook before the Joint Economic Committee of the US Congress as well as annual appearances related primarily to fiscal policy issues before the Budget Committees of both chambers of Congress. The Governor of the Bank of Japan regularly appears before the competent parliamentary committees of both chambers of the *Diet* (House of Representatives and House of Councillors) in order to present the semi-annual reports. The Governor of the Bank of England and other members of the Monetary Policy Committee (MPC) regularly appear before the Treasury Select Committee of the House of Commons after the publication of the quarterly reports (except the August Inflation Report, because this is published during the Parliamentary summer recess). Moreover, the Governor of the Bank of England is required to write an open letter to the Chancellor if inflation strays by more than 1% either side of the set target.

Complementary aspects of accountability

To complete the picture of the main instruments of central bank accountability in a broader sense, a number of additional issues

would need to be considered, including the questions addressed below.

Judicial review: Articles 230-233 of the Treaty set out the general procedures for judicial review that apply to Community institutions. According to this procedure, the Commission, the EU Council or any Member State may start proceedings before the ECJ against acts of the ECB “on grounds of lack of competence, infringement of an essential procedural requirement, infringement of this Treaty or of any rule of law relating to its application, or misuse of power”. Moreover, any natural or legal person may, under the same conditions, institute proceedings against a decision of the ECB addressed to that person which is of direct and individual concern to that person. If the action is well founded, the ECJ shall declare the act to be void and shall require the ECB to take the necessary measures to comply with its judgement. An ex post judicial review of the legality of central banks’ acts is also foreseen in the legal frameworks of the United States, Japan and the United Kingdom.

Dismissal of the members of the decision-making bodies: The Statute of the ESCB also provides for an orderly dismissal procedure for the members of the ECB’s decision-making bodies, aimed at ensuring that the latter fulfil their duties in the proper manner. It should be clear, however, that dismissals cannot be undertaken in a discretionary manner on the grounds of past policy performance, but only in line with the clearly stipulated circumstances. This applies, for instance, if a member of the ECB’s decision-making bodies

no longer fulfils the conditions required for the performance of his or her duties or if he or she is found guilty of serious misconduct. In such cases, it is, however, for another independent institution – namely the Court of Justice of the European Communities (ECJ) – rather than for political authorities to decide whether the member concerned should be – in the case of Executive Board members – “compulsorily retired” (Article 11.4 of the Statute of the ESCB). NCB Governors can be “relieved from office” in accordance with the provisions of the statute of their respective NCB; however, the ECJ remains the final arbiter (Article 14.2 of the Statute of the ESCB). These orderly dismissal procedures are equivalent to those of the other central banks referred to in this article, where members of the decision-making bodies can only be dismissed for certain reasons which are distinct from past policy performance.

Audit and financial integrity: The ECB’s annual accounts are audited by an external auditor agreed by the EU Council and subsequently published in the ECB’s Annual Report. In accordance with Article 27.2 of the Statute of the ESCB, the Court of Auditors examines the operational efficiency of the management of the ECB. The legal provisions and practices developed by the ECB in this respect were deemed in conformity with the IMF’s “Code of Good Practices on Transparency in Monetary and Financial Policies”, most recently reviewed in 2001. The annual accounts of the other central banks referred to in this article are also subject to external auditing or approval.

4 Conclusion

The Treaty entrusts the ECB with a very high degree of independence to pursue its mandate, which is to maintain price stability and to perform other central banking functions with a view to providing a stable and trusted currency as a “public good” for all citizens of the euro area. This independent

status has its counterpart in a well-structured and functioning framework for holding the ECB accountable. The ECB views its duty to render account for its policy decisions as a necessary and welcome obligation since it allows it to explain and justify its policy decisions to the European citizens. Indeed, by

being accountable the ECB can contribute to fostering public support for the single currency.

Unlike central banks in “conventional” nation states, the ECB operates under special political, economic and institutional circumstances: it is a supranational central bank which executes its tasks for the multi-country economy of the euro area and which is embedded in the evolving constitutional order of the EU.

The Treaty provisions for holding the ECB accountable are adapted to the sui generis nature of this environment. The practices and procedures established over the past years – notably the active relations with the European Parliament and the statutory reporting requirements which the ECB seeks to exceed – also compare favourably in the international context and ensure that the ECB effectively and adequately fulfils its accountability obligations.

Transparency in the monetary policy of the ECB

This article addresses the importance of transparency for modern central banking. It stresses that effective communication and proper interaction with the public, i.e. the public at large, the media and market participants, is important for the credibility, predictability and effectiveness of monetary policy. By explaining the process of monetary policy-making and the rationale behind policy decisions to the public, the central bank enhances understanding of its mandate, policy strategy and decisions, which in turn allows the markets and the general public to better anticipate the future course of monetary policy. Greater transparency not only helps the central bank to carry out its mandate more effectively, but also enables it to be more easily held accountable for its actions. The latter aspect is discussed in greater detail in the article entitled “The accountability of the ECB” in this issue of the Monthly Bulletin.

I Introduction

Over the past decades, there has been a global trend in central banking towards greater transparency and openness. Today, transparency is widely acknowledged as a fundamental principle of sound economic governance. Most central banks around the globe have given strategic priority to effective communication and proper interaction with the public, considering transparency a very important component of their monetary policy framework. In this vein, many central banks, including the ECB, have made considerable efforts to present and explain monetary policy actions and the economic rationale underlying their decisions to the public in an open, clear and timely manner.

All these activities are aimed at ensuring that monetary policy is better understood by the public and therefore becomes more credible and effective.

The importance of transparency for central banks has also become a topical issue in the context of strengthening the international monetary and financial system. For instance, based on the recognition that the transparency of policy frameworks is beneficial, internationally agreed transparency standards have been set for central banks by the International Monetary Fund (IMF) in its “Code of Good Practices on Transparency in Monetary and Financial Policies”.

2 What is transparency?

Transparency can be defined as an environment in which the central bank provides in an open, clear and timely manner all relevant information on its mandate, strategy, assessments and policy decisions as well as its procedures to the general public and the markets. Transparency is ultimately about the genuine understanding by the public of the entire process of monetary policy-making.

In the economic literature the following areas are identified. First and foremost, transparency requires that the central bank make the interpretation of its mandate clear and is consequently forthcoming about its policy goals. This helps the public to

monitor and evaluate the central bank’s performance. In addition, it needs to explain the analytical framework for its internal decision-making (e.g. methods, models, and indicators) as well as its assessment of the state of the economy and the economic rationale underlying its monetary policy decisions. In this respect, transparency can be enhanced by a systematic approach to monetary policy-making, in particular by means of a publicly announced monetary policy strategy. Moreover, in order to accomplish its mandate, the central bank should release all the data it collects which may be relevant to taking monetary policy decisions. Finally, a prompt disclosure of policy decisions and the related information

with regard to the internal decision-making process are also important elements of transparency.

In practice, however, it is also recognised that it is difficult to provide a completely exhaustive and understandable description of all elements and aspects relevant to the decision-making process while, at the same time, being clear. Rather, a balance has to be struck between the different and partly conflicting dimensions of transparency, in particular openness and clarity.¹

Therefore, transparency means more than simply releasing information, as this does not by itself translate into a better understanding of monetary policy. The potential problem of information overload contrasts with the need for clarity, which becomes even more important when information is to be communicated to different audiences across different environments. Proper interaction with the public requires that the central bank as “sender” and the public as an active “receiver” share a common framework and language – a common understanding – with

which both are comfortable. Consequently, it is important that the central bank organises and presents the information available in a structured manner.

At the same time, efforts to convey a message with clarity should not detract from the need to be honest about the complex nature of policy-making. This means first and foremost a high degree of correspondence between the internal decision-making and external communication. Moreover, any communication aimed at contributing to a genuine understanding of monetary policy must reflect the fact that monetary policy has to operate in a complex and uncertain environment which is constantly changing.

Finally, the institutional context also plays an important role in the design of the procedure to enhance transparency. For instance, it makes a difference whether a central bank operates for a single country or a group of countries, as is the case for the ECB. There are in fact different possible routes to transparency in monetary policy.

3 Reasons for greater transparency in monetary policy

There are two main reasons for the move towards greater transparency in monetary policy. The first is more political in nature and linked to a move towards greater central bank independence in a number of countries and the corresponding need for greater accountability. The second is related to the notion that monetary policy can be made more effective in influencing the economy via private sector expectations and their impact on financial markets if the public has a better understanding of monetary policy objectives, procedures and decisions.

Transparency, independence and accountability

Across the world, there has been a trend towards establishing independent central

banks whose clear mandate is first and foremost to achieve price stability. This development is based on the broad consensus that any attempts to sacrifice the medium-term goal of price stability for efforts to meet other, short-term objectives will adversely affect the credibility and effectiveness of monetary policy and ultimately weaken long-term economic growth and welfare. To help the central bank to carry out its mandate to guarantee price stability, monetary policy needs to be made and kept independent of pressures potentially arising from short-term political and electoral objectives. In this sense, central bank independence has become a fundamental principle of modern economic governance.

¹ For a discussion of the definition of transparency, see B. Winkler (2000): “Which kind of transparency? On the need for clarity in monetary policy-making”, ECB Working Paper No. 26.

The recent trend towards independent central banks has led to a strong demand for transparency from the public. Transparency serves accountability, which in democratic societies is the quid pro quo of independence (see the article entitled “The accountability of the European Central Bank” in this issue of the Monthly Bulletin). A proper understanding by the public of the central bank’s objectives, behaviour and decisions is crucial for any meaningful evaluation of its performance.

Ultimately, any central bank’s monetary policy will be judged by the public on the basis of its ability and track record in fulfilling its mandate. This is the basis for accountability. At the same time, the effectiveness of monetary policy in meeting its statutory objectives must remain the overriding concern with regard to transparency and the role of communication with the public and the markets.

Transparency and policy effectiveness

Effective communication with the public has become more important for central banks as expectations of future monetary policy decisions have an increasing impact on the monetary policy transmission process. Profound changes in the financial markets over the past few decades, the rapid progress in information technology and the associated close links between expectations and current decisions of economic agents, as well as growing economic and financial interdependencies between countries are factors behind this development.

Transparency renders monetary policy more effective for several reasons. First of all, being clear about its mandate and how it goes about fulfilling it helps a central bank to foster credibility. When a central bank is perceived as being able and willing to achieve its policy mandate, price expectations are well anchored. This ensures that economic decisions, for example wage and price setting, are taken in the belief that price stability will

be maintained over the medium term. This creates a virtuous circle conducive to an environment of stable prices in which economic activity can flourish.

In this respect, it is crucial for central banks to be open and realistic about what monetary policy can do and, even more importantly, what monetary policy cannot do. For instance, monetary policy cannot solve the structural problems of the economy. Similarly, it cannot steer price developments with a high degree of precision, but needs to look ahead with a medium-term orientation.

Second, a strong commitment to transparency imposes self-discipline on policy-makers, which helps to ensure that their policy decisions and explanations are consistent over time. By facilitating public scrutiny of monetary policy actions, such a commitment enhances the incentives of the decision-making bodies to fulfil their mandate in an appropriate manner.

Third, a publicly announced monetary policy strategy provides guidance to the markets so that expectations can be formed more efficiently and accurately. Transparency helps the markets to understand the systematic response pattern of monetary policy to economic developments and shocks and thus to anticipate the broad direction of monetary policy over the medium term, making policy moves more predictable.

This anticipation effect is important for the conduct of monetary policy, given that central banks directly control only very short-term interest rates, while the expected path of short-term interest rates over longer horizons and premia for uncertainty are also significant for the transmission of monetary policy to the economy. If agents can broadly anticipate policy responses, this can shorten the process by which monetary policy is transmitted into investment and consumption decisions and accelerate needed economic adjustments. This allows a rapid incorporation of any (expected) changes in monetary policy into financial variables, thus potentially

enhancing the effectiveness of monetary policy. For example, if there is increasing evidence of rising inflationary pressures, interest rates at the shorter end of the maturity spectrum may increase in anticipation of a rise in the policy interest rates. If these expectations turn out correct, the market rates will then not react much when the central bank, in response to these inflationary pressures, actually increases its policy interest rates.

In addition, transparency can help to reduce uncertainty and volatility in financial markets. A correct interpretation by the market of the monetary policy decisions taken by the central bank reduces the volatility of interest rates both *ex ante* and *ex post*. *Ex ante* because a proper understanding of the monetary policy strategy and clear views about the assessment of incoming information make market rates react only to information signalling a need for monetary policy to be changed in order to safeguard price stability. *Ex post* because transparency reduces the likelihood of the market being surprised as a consequence of an incorrect interpretation of a monetary policy decision. A good understanding of monetary policy also allows private agents to better manage and hedge their risks, which may contribute to reducing market uncertainty and enhancing economic welfare.

Transparency and predictability

As mentioned above, a systematic and transparent approach to monetary policy-making oriented towards price stability tends to enhance predictability, i.e. the ability of the public to correctly anticipate future monetary policy decisions.

Ex post measures of predictability are sometimes viewed in the available literature as a way of assessing the transparency of a central bank. On the basis of the above definition of transparency, it is natural that a higher degree of transparency be connected with greater predictability. However, perfect

predictability of monetary policy decisions might be hard or even impossible to achieve in a world of uncertainty.

One of the reasons for this is the steady flow of new data that have to be taken into account. Notably, at longer horizons, unexpected developments are always likely to change the future path of policy rates. Furthermore, the monetary policy decision-making process is a complex one in which all relevant pieces of information have to be assessed in the light of their implications for the monetary policy mandate. Moreover, the outcome of the process of mapping all the information on the state and the functioning of the economy into policy decisions is also based on judgement. As there is always uncertainty about the state and prospects of the economy, the analysis of how monetary policy should react to ensure the fulfilment of its mandate cannot be done in a mechanistic way.

Furthermore, at very short horizons, it may be argued that, even in the absence of unexpected developments, the precise timing of monetary policy decisions may be hard to anticipate perfectly, especially if monetary policy meetings are held very frequently, as was the case for the Governing Council of the ECB before November 2001.² At any rate, what matters in economic terms is not the predictability of the exact timing or size of a monetary policy decision but rather good anticipation of the broad direction of monetary policy decisions.

It is sometimes argued that in order to be more transparent, central banks should provide precise indications of their future policy intentions as well as their current policy stance. However, there are clear limitations to the central bank's ability to follow this suggestion. Owing to general uncertainty about present and future developments in the state of the economy,

² *Until 8 November 2001 the Governing Council of the ECB held monetary policy discussions at all of its meetings, i.e. generally every two weeks, whereas since then it has discussed monetary policy issues only once a month.*

any central bank must always remain in a position to reconsider its assessment when circumstances change. It is important to clarify that future monetary policy depends not only on current and past developments but also on new and future information. Therefore, statements about future policy plans can only be of a general and conditional nature; at the same time, it is impossible to give a full description of all relevant contingencies.

While predictability in broad terms will be the natural result of a transparent monetary policy framework, it cannot be an independent

objective of monetary policy. In particular, monetary policy cannot simply follow market expectations when setting interest rates, but must always be governed by its commitment to fulfil its mandate.

At the same time, central banks do not have an interest in surprising the markets for the sake of doing so. However, on certain occasions when the central bank and the markets hold different views on the risks to price stability, some surprises for the market, especially with regard to the timing, may be unavoidable.

4 The ECB's approach to transparency

Given that transparency ultimately increases the public's understanding of its monetary policy, the ECB has always been committed to a high level of transparency. Since the beginning of the ECB's existence, communication with the general public and the financial markets has played an important role in its policy-making (for further details see also the article entitled "The external communication of the European Central Bank" in the February 2001 issue of the *Monthly Bulletin*).

The ECB's monetary policy strategy, which includes a definition of price stability and a framework for the analysis of risks to price stability, guides its monetary policy decisions and sets out a systematic framework for the conduct of monetary policy. In 1998, in order to specify its price stability objective more precisely, the Governing Council of the ECB announced a quantitative definition: "... as a year-on-year increase in the Harmonised Index of Consumer Prices (HICP) for the euro area of below 2%". The quantitative definition of price stability adds to transparency because it clarifies how the ECB interprets the task it was assigned by the Treaty establishing the European Community and helps to make the monetary policy framework easier for the public to understand. Moreover, the definition provides a clear yardstick against which the public

can hold the ECB accountable. Finally, it anchors market expectations of future price developments, thereby enhancing clarity and public trust in the overall policy framework.

Moreover, this publicly announced strategy sets out a clear framework for internal decision-making and external communication alike. The organisation and presentation of the available information in the framework of the two-pillar strategy ensures that all information relevant to monetary policy is included in the Governing Council's analysis, at the same time facilitating the cross-checking of various indicators, thereby enhancing the robustness of monetary policy decisions (see the article entitled "The two pillars of the ECB's monetary policy strategy" in the November 2000 issue of the *Monthly Bulletin*). This approach ensures that all information is taken into account in a systematic way in the decision-making process of the Governing Council, reflecting the uncertainty surrounding the monetary policy-making process. Indeed, monetary policy always needs to take a broad perspective on the economy, the structure of which is complex and characterised by uncertain relationships. This is why the ECB has refrained from relying on a commitment to simple policy rules, which link interest rates to selected economic indicators in a

predefined manner, for both internal use and external communication. Pretending that the world is more simply structured or more certain than it actually is does not make for a good recipe for monetary policy, foster a genuine understanding of monetary policy or achieve genuine transparency or predictability.

The ECB has always taken a very active approach to communicating with the public, and one, which suits the specific circumstances of its institutional environment. It shares with the public the information discussed by the Governing Council of the

ECB and describes in detail the economic rationale behind policy decisions. This demonstrates a strong institutional commitment to transparency. The IMF, in its “Report on observance of Standards and Codes” (ROSC) for the euro area, found that overall the Eurosystem maintains a high level of transparency in all aspects of its operations and a high degree of respect for the relevant Codes. Box I provides a brief overview of the key communication channels used by the ECB.

There is some evidence suggesting that the ECB’s monetary policy framework – including

Box I

Key communication channels used by the ECB

The monthly press conferences held by the President and the Vice-President and the Monthly Bulletin are two of the most important communication channels adopted by the ECB. The President’s introductory statement at the press conference provides a comprehensive summary of the policy-relevant assessment of economic developments. It is structured along the lines of the ECB’s monetary policy strategy and agreed by the Governing Council. The monthly press conference includes a question and answer session, which is attended by various media representatives from across the euro area and beyond and provides a platform for the timely explanation of monetary policy decisions to the public. Transcripts are made available on the ECB’s website only a few hours later. The press conference is thus an effective means of presenting and explaining the discussion in the Governing Council and therefore the monetary policy decision-making process.

A central role in the ECB’s communication policy is played by the Monthly Bulletin, which is intended to provide the general public and the financial markets with a more detailed and comprehensive analysis of the economic environment. However, it also provides an insight to the analytical tools used by the Eurosystem within the framework of the stability-oriented monetary policy strategy. Articles published in the Monthly Bulletin have served to explain the role of the two pillars in the strategy, i.e. the analysis of monetary developments in the first pillar and the analysis of non-monetary indicators under the second pillar (see, for example, the May 2001 article entitled “Framework and tools of monetary analysis” or more specialised articles such as “Measures of underlying inflation in the euro area” in July 2001 and “The stock market and monetary policy” in February 2002).

An important complement to the set of information released to the public occurred in December 2000 when the Eurosystem staff macroeconomic projections were published for the first time. The Governing Council decided to publish these projections twice a year (June and December) as they constitute important input in the policy process and should therefore be released to the public. For the sake of transparency, the ECB explained very clearly the role of the projections in the policy process, namely as an important piece of information under the second pillar of the ECB’s strategy.

Given that the Eurosystem, namely the ECB and the 12 NCBs of the euro area, is obliged to communicate in a multicultural and multilingual environment, the NCBs are essential players in the communication strategy. They maintain close contact with national and regional audiences and translate, not just literally, the policy signals into different languages tailoring them to the national context.

Box 2

Predictability of the monetary policy decisions of the ECB

Predictability can be defined as the ability of the public to correctly anticipate the monetary policy decisions of a central bank. Easy as it sounds, there is no single way of measuring this in practice, as, for example, the horizon over which predictability is assessed (given by the maturity of the interest rates used) and the technique employed may render different results.

Given that participants in financial markets closely follow the central banks' policy decisions and continuously analyse the economic outlook, market rates summarise a vast amount of information. While polls among market participants or ECB-watchers may also be a good approximation, market rates have the advantage of incorporating all the information available to the markets at a given point in time.

As noted in the text, the horizon at which monetary policy decisions have been anticipated has to be chosen. While a long horizon would allow an assessment of how the markets have anticipated the interest rate cycle, unexpected changes in economic conditions will not be reflected. At the same time, a short horizon allows market rates to incorporate all information analysed by the Governing Council.

Given the short track record of the ECB, relatively few pieces of work have been published on the predictability of monetary policy decisions in the euro area. Pérez-Quirós and Sicilia (2002)¹ have recently applied a set of measures to analyse the short-term predictability of the monetary policy decisions of the ECB. It is worth mentioning, however, that the sample is very short, and more evidence might be needed to reach definitive conclusions. In fact, the literature typically finds that predictability is an evolving process and that it tends to increase over time as markets learn more about the central bank's behaviour and change when institutional arrangements and procedures are modified. In this regard, the decision of the Governing Council of the ECB in November 2001 to switch from bimonthly to monthly discussions of monetary policy may have affected the predictability of the ECB, as the timing of its interest rate changes can be anticipated more easily by the markets.

Since at near-term horizons money market interest rates mainly reflect market expectations about the near-term path of monetary policy, the one-month forward rates for one, two and three months ahead can be used to evaluate whether the market broadly expected the monetary policy decisions taken. Pérez-Quirós and Sicilia (2002) find that market interest rates have predicted euro area interest rates comparatively well up to three months in advance (similar results are obtained for the United States).

This approach does not however capture the extent to which the decision was anticipated on the precise day of the meeting. This in turn means that the expectations of the market are not calculated with the same set of information as that available to the Governing Council when the monetary policy meeting takes place. In order to take this consideration into account, one of the routes followed by Pérez-Quirós and Sicilia (2002) is to use the level of market rates one day before the meeting to calculate the probability of a change of at least 25 basis points in the key ECB interest rates, and to compare this with the decision to change them or not. According to this approach, the market is assumed to be expecting a change in key ECB interest rates if short-term market interest rates anticipate a change of 25 basis points in key ECB interest rates with a probability of more than 50%. The results obtained indicate that over the period between 4 January 1999 and 6 June 2002, which included 78 meetings of the Governing Council of the ECB, the market correctly anticipated 94% of the decisions. More specifically, of the 12 occasions on which the key ECB interest rates

¹ Pérez-Quirós and Sicilia (2002), "Is the European Central Bank (and the United States Federal Reserve) predictable?", ECB Working Paper No. 192. See also Gaspar, Pérez-Quirós and Sicilia (2001) "The ECB monetary policy strategy and the money market", *International Journal of Finance and Economics* 6, 2001, pp. 325-342.

were changed, 11 (92%) were anticipated by the market, while of the 66 occasions on which rates were left unchanged, the market correctly anticipated that outcome 94% of the time.

It is also worth noting that since 8 November 2001, when the ECB announced that from that day, monetary policy would be discussed only once a month, none of the decisions have come as a surprise. Overall, these results are broadly similar to the ones calculated in the United States for the same period.

its commitment to transparency – has been conducive to the ECB's credibility. Various indications of medium and long-term inflation expectations suggest that the commitment to lastingly maintain price stability in the euro area remained credible in Stage Three of Economic and Monetary Union (EMU). Measures of long-term inflation expectations, as indicated by bond yields and surveys conducted among private sector economists, have indicated, since the beginning of Stage Three, that HICP inflation in the euro area is generally expected to remain within the

definition of price stability adopted by the Governing Council of the ECB.

Furthermore, there are also clear indications that the transparency of the ECB has contributed to a high degree of predictability concerning its monetary policy decisions. Box 2 summarises the results concerning the short-term predictability of the monetary policy decisions in the euro area from January 1999 to June 2002, and draws the conclusion that these decisions were very predictable for this period.

5 Conclusions

The ECB is responsible for fulfilling the mandate assigned to it by the Treaty and to honour the trust placed in it by the people of Europe. In order to be successful on a sustainable basis, the ECB must make itself understood to the general public. In this respect, honesty, openness and clarity when communicating with the markets and the general public are important means of enhancing the effectiveness and the credibility of the ECB's monetary policy.

During the first few years of the single monetary policy the ECB has striven to meet the highest standards of transparency. Its approach to communication with the public has thereby aimed to meet the diverse needs and specific challenges of the uncertain environment in which the ECB operates. The effectiveness of this approach can be seen in the fact that policy moves by the ECB have generally been well understood and anticipated by the markets.

The composition of employment growth in the euro area in recent years

While employment growth rates in the late 1990s were broadly similar to the high rates recorded in the second half of the 1980s, output growth appears to have been significantly more job-intensive. A survey of the stylised facts characterising these recent developments at a more disaggregated level may help to identify the possible impact of the reforms and policies implemented in the past. This article reviews trends in employment growth over the late 1990s, the results of which can be summarised as follows. First, as regards sectoral composition, employment growth in the late 1990s was broadly based across sectors and due mainly to an increase in the number of wage earners, while the contribution of self-employment continued to be marginal. Second, female employment growth was much higher than that of males and employment rates for the youngest and oldest age groups increased significantly in comparison with the second half of the 1980s. Third, the latter findings are partly related to the continuing increase in part-time and temporary employment seen in the late 1990s, which contributed strongly to employment growth among women and the young. Finally, although employment growth in the late 1990s was greatest among those with the highest levels of education, correcting for the development in the relative size of educational groups, the employment rate¹ increased the most among workers with the lowest educational attainment.

These positive developments may be linked to a range of factors generally affecting the supply of and demand for labour. Among those, wage moderation, differentiation and flexibility play an important role. A number of labour market institutions also influence employment performance over the medium term. In particular, over the second half of the 1990s, euro area countries strengthened their efforts to promote structural reforms aimed at improving the functioning of labour markets. Since 1997 these reforms have been framed within the European Employment Strategy. This strategy aims to raise employment rates within the European Union to 70% by 2010, as established at the 2000 Lisbon Council, with an intermediate target of 67% for 2005, as set by the Stockholm Council in 2001. Although the extent and implementation of reform have been uneven across countries, the efforts made in recent years appear to have been fruitful in fostering employment growth across most sectors and in aiding those groups facing particular difficulties when trying to enter the labour market, such as women, the youngest and oldest age groups and the lowest educated. Nonetheless, employment rates in the euro area remain below those of other economic areas such as the United States and further reforms, together with sustained wage moderation and a modernisation of the wage bargaining process are required in order to attain higher employment and participation rate levels, as well as lower unemployment rates.

I Introduction

High unemployment rates and slow employment growth within the euro area have often been linked to structural factors within euro area labour markets. It has been argued that negative macroeconomic shocks, interacting with overly rigid institutional structures, have prevented the necessary adjustment to changes in the economic environment, thereby slowing employment growth and leading to higher and more persistent unemployment. The employment rate in the euro area, 62% in 2001, was considerably lower than in the United States (around 73%), and employment growth declined in line with the economic slowdown.

The late 1990s saw a prolonged period of sustained employment growth, however, which led to a fall in unemployment despite a strong increase in the labour force.² Against this background, an analysis of the main characteristics of past employment developments and their link to labour market reforms implemented in the past may be a useful aid for drawing lessons as regards future challenges for increasing employment.

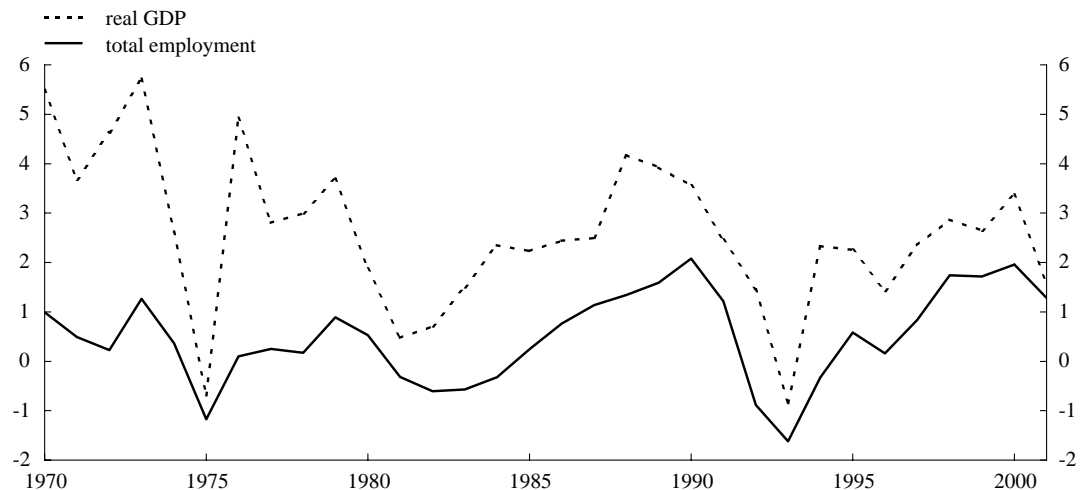
¹ The employment rate for a given group is formally defined as the ratio of employment in this group to the group-specific working age population.

² See, for example, the study entitled "Labour force developments in the euro area since the 1980s", Véronique Genre and Ramón Gómez-Salvador, July 2002, ECB Occasional Paper No. 4.

Chart I

Euro area employment and real GDP growth

(annual percentage changes)



Sources: European Commission and ECB calculations.

Since 1997 labour market reforms have been undertaken within the framework of the European Employment Strategy which aims to raise employment rates within the European Union to 70% by 2010. This article focuses on the euro area as a whole,³ while recognising that labour markets, and labour market policies, remain highly heterogeneous across countries.

The late 1990s reflected a period of relatively strong economic expansion⁴ which resulted in significant employment growth. Over the period from 1996 to 2001, total employment growth stood at 1.5% per year on average. Since 1970, as seen in Chart I, this average growth rate is only comparable to that recorded in the second half of the 1980s (1.4%), which was also a period of strong economic growth. However, the ratio of employment growth to real GDP growth indicates that real GDP growth was more job intensive in the late 1990s, at 0.6, compared with 0.4 in the late 1980s.

These developments may be linked to the implementation of labour market reforms in the past, and particularly since the mid-1990s, when the pace of reforms gained momentum,⁵ although reforms have tended to differ by type and scope across countries. The upward trend

in the overall tax burden on labour in the early 1990s has, for example, been reversed, with a reduction in the average income tax rate in the euro area of around 2 percentage points between 1996 and 2001. There has been some improvement in job mediation, i.e. in personalised services to help job seekers to find a job. Reforms of benefit systems placed, for example, a greater emphasis on reducing the period of unemployment and so-called “unemployment traps” (i.e. financial disincentives to seek work owing to benefit and tax systems) with some countries tightening the criteria for eligibility to benefits and increasing controls. There has also been a positive trend in educational attainment, and wage bargaining has shifted more towards the company level with an increase in the importance of non-pecuniary forms of pay negotiated between firms and employees. The overall strictness of employment protection, with regard to both regular and temporary employment, was also loosened in some countries in the late 1990s.

3 Greek data have been included in the estimate of euro area series (Greece joined EMU in January 2001).

4 For a more precise picture of business cycles in the euro area see the article in the July 2002 issue of the ECB's Monthly Bulletin entitled “Characteristics of the euro area business cycle in the 1990s”.

5 See also the Eurosystem report entitled “Labour market mismatches in euro area countries”, March 2002.

Although it takes time for the effect of such structural reforms to be felt in the labour market, the increase in the employment intensity of economic growth suggests that reform efforts have gradually started to bear fruit.

In order to identify some stylised facts for the euro area as a whole and to link them, where relevant, to reforms and policies which

were implemented in the 1990s, the main characteristics of recent employment growth are presented in the following two sections. Section 2 describes sectoral employment developments in the late 1990s, distinguishing between employees and the self-employed. Section 3 focuses on employment developments for specific groups (women, young and older workers).

2 Employment developments in the euro area at the sectoral level

The increase in job intensity of real output growth outlined in Section 1 may be attributed both to industrial and services sectors. This assessment is confirmed when thinking in terms of hours worked or full-time equivalents, as well as the number of persons employed (see Box 1). In the industrial sector, the job intensity of activity, measured by the ratio of employment growth to activity growth, was markedly higher in the late 1990s (see Table 1). Job intensity did not change in the services sector, but the relative economic size of this sector, which has historically been more job-intensive than the industrial sector, increased.

Employment growth was higher in services than in industry in both the late 1980s and

the late 1990s. However, whilst employment growth in industry registered an increase in the late 1990s compared with the late 1980s, in services it decelerated somewhat owing to a lower value-added growth rate in this sector.

Employment performance was broadly based across sub-sectors

A more detailed breakdown of economic activities is available in Eurostat's annual EU Labour Force Surveys (LFS) for the period between 1996 and 2001, which corresponds to the statistical classification (NACE Rev.1), as shown in Table 2. The examination of the sub-sectors given here suggests that

Table 1
Euro area employment and activity
(annual percentage changes unless otherwise indicated)

	1985 - 1991	1996 - 2001
Whole economy		
Total employment	1.4	1.5
Real GDP	3.2	2.6
Ratio employment growth / real GDP growth	0.4	0.6
Total industry		
Employment	0.7	0.9
Real value added	2.8	2.0
Ratio employment growth / real value-added growth	0.2	0.5
Total services		
Employment	2.8	2.2
Real value added	3.6	2.8
Ratio employment growth / real value-added growth	0.8	0.8

Sources: European Commission, Eurostat, OECD and ECB calculations.

Note: Total services include non-agricultural and non-industrial activities. For further details see Table 2.

employment growth in the euro area was broadly based across most sectors in the period between 1996 and 2001, although some displayed a more dynamic pattern of growth than others (see Chart 2).

Box I

The relationship between employment developments and the number of hours worked between 1996 and 2001

The continued increase in part-time employment in the euro area between 1996 and 2001 may have had an impact on the measurement of total employment growth, given that the number of hours worked by part-time and full-time workers is different.¹ There are two possible ways of shedding some light on this effect. One is to look at the number of hours worked in the economy, while the other is to construct a measure of full-time equivalent workers (see below). The inclusion of an estimate of the number of hours worked per week in the annual EU Labour Force Survey allows this to be done not only for the total economy, but also at the sectoral level.

The estimate of the total number of hours worked is calculated by multiplying the usual number of hours worked per week by the number of workers, both full-time and part-time, and adding the two together. For the estimate of full-time equivalents, the total number of hours usually worked per week by part-time workers is divided by the average number of hours usually worked per week by full-time workers to obtain an estimate of potential full-time workers. The result is then added to the number of full-time workers. As the number of usual hours worked under both forms of contract is quite stable for the period under consideration (around 41.5 and 20 hours for full-time and part-time workers respectively), the growth in hours worked was mainly driven by the rise in the part-time employment rate and the increase in the number of people employed. Thus, the growth in hours worked was very close to employment growth measured in full-time equivalents. A summary of the results is given in the table below. Note that the analysis refers to the usual number of hours worked for the main job only. The proportion of persons employed having a second job remained low and stable at less than 3% of total employment in the late 1990s.

For the economy as a whole, the impact of developments in part-time work on employment growth is estimated to have been 0.3 to 0.4 percentage point over the period between 1996 and 2001. In other words, total growth in terms of hours worked and full-time equivalents was 1.1% and 1.2% respectively in the late 1990s, as compared to 1.5% in terms of people employed. As expected, a continued increase in the part-time ratio results in a lower increase in the number of hours worked, and therefore in full-time equivalents, than in the number of employed itself. Sectoral estimates show that the difference is mainly concentrated in the services sector. This is mainly due to an increase in part-time employment in the services sector, but also to the fact that the usual number of hours worked by part-time workers in the services sector is lower.

A comparison of recent developments in employment, number of hours worked and full-time equivalents

(average annual percentage change; 1996-2001)

	Employment	Hours worked	Full-time equivalents
Total	1.5	1.1	1.2
Manufacturing	1.0	0.8	0.9
Construction	1.2	1.1	1.2
Services	2.1	1.6	1.7

Sources: European Commission, Eurostat, OECD and ECB calculations.

¹ This effect tends, moreover, to bias the standard measures of productivity used, e.g. a trend increase in part-time employment will imply an underestimation of productivity growth when using standard employment definitions. See Box 3 entitled "Developments in euro area labour productivity", pages 29-31 of the August 2002 issue of the ECB's Monthly Bulletin.

In the industrial sector, employment in both manufacturing and construction grew significantly, at an average annual rate of 1.0% and 1.2% respectively. This implies a contribution to total employment growth from manufacturing of around 0.2 percentage point and of 0.1 percentage point from construction. Mining and utilities both registered a fall in employment growth, possibly related to the restructuring process undertaken in these sub-sectors in recent years. Within market-related services, the employment growth recorded in business services was particularly high. At above 6%, it contributed around 0.5 percentage point to total employment growth. This could in part be related to the development of outsourcing in some industries. Other significant developments were recorded in hotel and restaurant services, transport and communication, and the wholesale and retail trade. Among non-market related activities,

the most significant developments occurred in health and social work, other services and private households with employed persons, with employment growth rates of above 2% per year on average. In contrast, employment continued to decline in the agricultural sector.

Employment growth in the services sector has become a common trend across industrial countries. More recently, progress in the liberalisation of some services may also have contributed to the strong employment performance in this sector. Given that the incidence of part-time work is substantially higher in the services sector than in the industrial sector (whereas temporary work is more uniform across sectors), the relatively strong growth in this sector may also be linked to policies designed to foster female employment and part-time work (see Section 3).

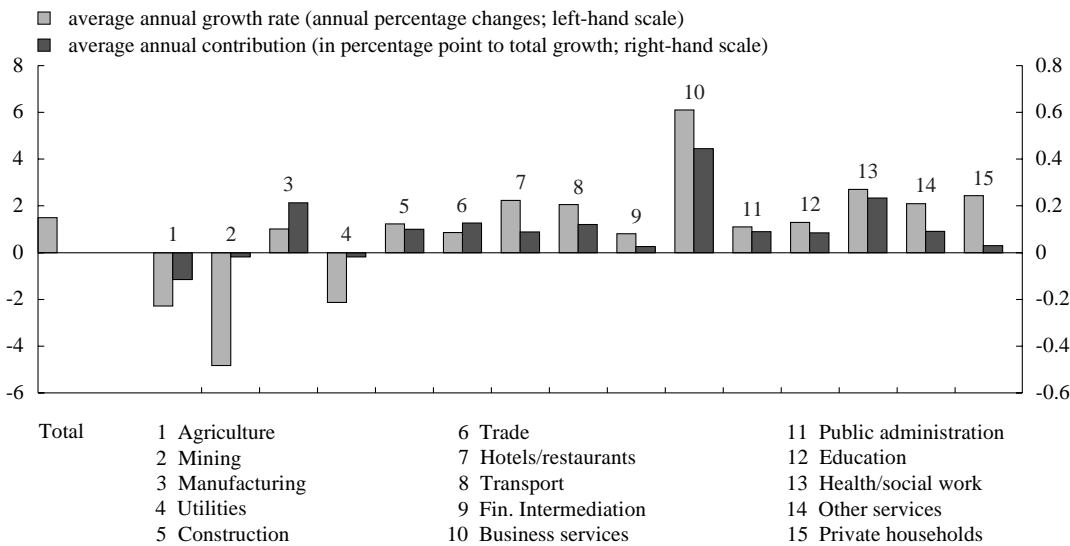
Table 2
Sectoral breakdown of euro area employment

Sectoral breakdown	Percentage ¹⁾
Agriculture (including hunting, forestry and fishing)	5.0
Industry	30.4
- Mining (including mining and quarrying of energy and non-energy producing materials)	0.4
- Manufacturing (including manufacture of food products, textiles, chemical products and transport equipment, etc.)	21.1
- Utilities (including electricity, gas and water supply)	0.8
- Construction	8.1
Market-related services	35.6
- Wholesale and retail trade (including repair of motor vehicles and personal and households goods)	14.9
- Hotels and restaurants	4.0
- Transport and communication (including storage)	5.9
- Financial intermediation (including insurance and pension funding services)	3.3
- Business services (including real estate and renting)	7.5
Non-market-related services	29.0
- Public administration (including defence, compulsory social security services)	8.1
- Education	6.5
- Health and social work	8.7
- Other services (including sewage and refuse disposal services, sanitation services, membership organisation, recreational, cultural and sporting services)	4.4
- Private households with employed persons	1.2
- Extra-territorial organisations and bodies	0.1
Total	100.0

Sources: Eurostat and ECB calculations.

1) Average percentage of employment in each sector with respect to the total between 1996 and 2001.

Chart 2
Euro area employment growth by sector (1996-2001)



Sources: Eurostat and ECB calculations.

The contribution of the self-employed to employment growth remained low, albeit varying across sectors

The breakdown of employment growth between employees and the self-employed by sector points to a very low contribution of self-employment to total employment growth. This is partly explained by the contraction of employment growth in agriculture, since the ratio of self-employed is the largest in this sector, at around 50%. However, there was an increase in the number of self-employed in the construction sector and in most service sectors (such as business services and health and social work), probably in response to the trend to outsource certain activities or to the expansion of some professional services. Even in these sectors, the contribution of the self-employed to employment growth was

much smaller than that of employees. Interestingly, increases in self-employment appear to have been driven entirely by female employment, in particular in business services.

In more recent years a number of measures were taken to simplify administrative procedures, often with the explicit aim of facilitating the start-up of new firms. Evidence suggests, however, that regulations within the euro area continue to pose considerable impediments to business start-ups. Such impediments may offer a partial explanation for the low contribution of self-employment to employment growth in the euro area. The 2002 Broad Economic Policy Guidelines, adopted by the EU Council, stress the importance of removing the remaining barriers to firms entering markets within the European Union.⁶

3 Employment developments in the euro area among specific groups

There seems to be evidence that incentives to take up employment have improved in recent years among particular groups of individuals. The number of male and female employed grew significantly during the period

from 1996 to 2001, particularly in the case of women. This reduced the difference between

⁶ See Box 4 entitled "The Broad Economic Policy Guidelines 2002", pages 28-30 of the July 2002 issue of the ECB's Monthly Bulletin.

male and female employment rates from 21.6 percentage points in 1996 to 19.4 percentage points in 2001. The growth rate of employment for females, above 2% on average between 1996 and 2001, was more than double that of males, contributing to around two-thirds of total employment growth. The female employment rate rose by more than 5 percentage points to 52.2%, an increase similar to that observed in the late 1980s (see Table 3). The male employment rate grew by over 3 percentage points to 71.6% between 1996 and 2001, compared with an increase of below 1 percentage point between 1985 and 1991.

The breakdown of employment growth by age groups helps to explain these developments. While younger and older workers contributed marginally to employment growth in the late 1980s, these age groups together accounted for half of the total employment growth recorded between 1996 and 2001. Although employment growth rates for the youngest and oldest age groups remain far below those of prime-aged workers (aged 25-49), both groups registered a significant increase in employment rates in the late 1990s. This is especially true for male workers, with the employment rate of men

aged 15-24 increasing to 40.9% and of those aged 50-64 rising to 59.3%, i.e. by over 5 and 2.5 percentage points between 1996 and 2001 respectively. By contrast, the employment rate increased by only 0.5 percentage point in the case of young males in the period between 1985 and 1991, and decreased by 1.5 percentage points for older males. The significant change in the employment pattern among the young is also significant for females.

Reforms of unemployment benefit systems in euro area countries have focused on reducing the overall level of unemployment benefits and have tightened eligibility criteria and job-seeking requirements. Open-ended or relatively high unemployment or other social security benefits may negatively affect the decision of individuals to look for work or accept jobs. Some reforms of benefits systems were implemented during the 1990s, as shown in Table 4, and will have contributed positively to employment growth. Reforms of pensions and early retirement schemes in some euro area countries may also have contributed to the increase in the employment rate of older workers, but some of the reforms in this area have only been undertaken since 2000 and have not yet

Table 3
Euro area employment by gender and age group
(in percentage points unless otherwise indicated)

	Contribution to annual employment growth		Change in employment rate		Employment rate (as a percentage)
	1985 - 1991	1996 - 2001	1985 - 1991	1996 - 2001	2001
Total	1.4	1.5	3.1	4.2	62.0
15-24 years old	0.0	0.2	1.0	4.8	37.2
25-49 years old	1.2	0.8	4.1	3.9	77.2
50-64 years old	0.1	0.6	1.0	3.8	47.5
Males	0.5	0.6	0.7	3.1	71.6
15-24 years old	0.0	0.1	0.5	5.1	40.9
25-49 years old	0.5	0.2	0.7	2.3	88.0
50-64 years old	0.0	0.3	-1.5	2.5	59.3
Females	0.9	0.9	5.2	5.2	52.2
15-24 years old	0.0	0.1	1.5	4.5	33.4
25-49 years old	0.8	0.5	7.4	5.4	66.5
50-64 years old	0.1	0.3	2.8	4.9	38.1

Sources: European Commission, Eurostat, OECD and ECB calculations.

Note: The employment rate for a given group is the ratio of total employment to total working age population for that given group.

Table 4**Main developments in benefit systems in the euro area in recent years**

Country	Unemployment benefit systems					(Early) retirement systems	
	Insurance in months	Assistance in months	Gross replacement rates (UI) ⁽¹⁾	Work availability requirements ⁽²⁾	Benefit eligibility requirements	Increase in retirement age	Higher disincentives ⁽³⁾
Belgium	No limit	none	=	+	=	+	+
Germany	6-32	unlimited	40% → 38%	+	=	=	+
Greece	5-15	none	=	=	=	=	+
Spain	4-24	6	80% → 70%	+	+	=	-
France	4-60	unlimited	57% → 53%	=	+	=	+
Ireland	15	unlimited	41% → 32%	=	=	=	=
Italy	6-9	none	15% → 33%	+	=	-	+/-
Luxembourg	12-24	none	=	=	=	+	=
Netherlands	6-60	24	=	+	+	=	+
Austria	5-12	unlimited	43% → 36%	=	+	+	+
Portugal	12-30	6-15	=	=	-	+	=
Finland	23	unlimited	54% → 61%	+	+	+	+

Source: ECB publication entitled "Labour market mismatches in euro area countries", March 2002.

Note: The sign "+" ("−") indicates an increase (decrease) in the respective indicator and "=" means that no changes have been recorded.

1) UI = unemployment insurance benefits or, in the countries with no UI, guaranteed income schemes. "Gross replacement rate" is the income of an unemployed worker with a dependent spouse in the first few months of being jobless as a proportion of the income earned when in work.

2) "Work availability requirements" involves tighter requirements for being available for work when offered a job.

3) Disincentives include less favourable taxation of pension benefits, a reduction in pension benefit eligibility, and a lengthening of the contribution period before pension entitlement.

had the time to take full effect. Although the reforms of the benefit systems are a step in the right direction, in most cases they have not been sufficiently far-reaching and early retirement schemes are widely spread across the euro area relative to other economic areas. The employment rate for older workers remains significantly below the employment rate of prime-aged males. The 2002 Broad Economic Policy Guidelines emphasise the need for a range of further measures for adapting tax and benefit systems to make work pay, including reducing incentives for early retirement.

Constraining levels of employment protection legislation may raise the average period of unemployment, reduce labour force participation and slow the adjustment of employment to changing economic conditions. Moreover, it may reinforce the bargaining power of "insiders", that is those who already have jobs, by allowing them to negotiate higher wages and making it even

more difficult for "outsiders", that is those without jobs, to enter the labour market. The overall level of employment protection legislation, in terms of both regular and temporary employment, was also reduced in some euro area countries in the late 1990s, and may have facilitated market entry, in particular for specific groups such as females and young workers. An appropriate balance between employment protection legislation and welfare systems is required to ensure adequate incentives both for employers to hire and employees to work. In the same vein, the 2002 Broad Economic Policy Guidelines mention the need for an appropriate balance between "flexibility" and "security".

Finally, equal opportunities policies should also be mentioned within the context of the increase in female employment growth. Factors such as the lack of affordable childcare, the design of the tax system to tax couples rather than individuals or inflexible

working hours may make work less attractive, particularly for women. Although the degree of implementation of gender equality varies considerably across the euro area, the reconciliation of work and family life is becoming an important area of policy. Almost all euro area countries are increasing efforts towards the provision of childcare and a number of countries are tackling gender segregation and/or gender wage gaps. However, female labour market participation continues to face obstacles and the 2002 Broad Economic Policy Guidelines emphasise the need to remove existing barriers to female labour force participation, for example by extending the provision of childcare and by promoting more flexible working hours.

Part-time jobs – one of the main sources of new employment for women and the young

Until the mid-1970s the basic legal instrument regulating the employment relationship in euro area countries was the indefinite, full-time employment contract. Policy changes over the 1990s contributed to the continuing

importance of part-time and temporary employment.

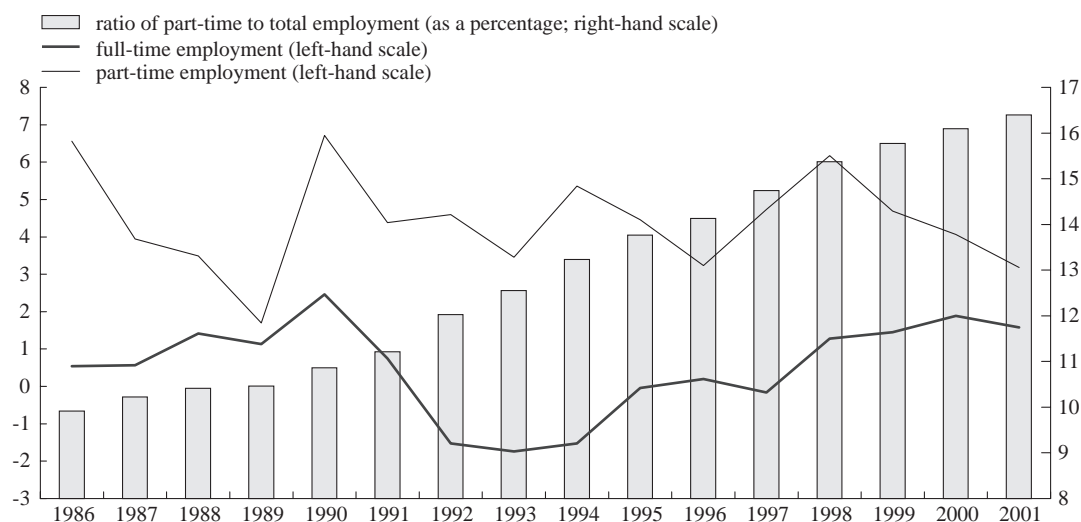
Between 1996 and 2001 part-time jobs made up nearly half of the total increase in employment. The growth rate of part-time employment reached 4.7% per year on average, i.e. roughly similar rates to those observed during the late 1980s, reflecting a continuing rise in the ratio of part-time employment to total employment which actually showed its strongest increase in the first part of the 1990s (see Chart 3). In 2001 the ratio of part-time employment stood at 16.4%. The sectoral contribution of part-time jobs to employment growth appears to vary quite substantially. It was smaller in industry – at around 20% of industrial employment growth – than in the services sector, where it accounted for half of employment growth. The contribution of part-time jobs was particularly relevant in non-market-related services.

Part-time employment growth is significantly greater among women than among men. In the case of male workers, employment growth has remained largely driven by full-

Chart 3

Euro area part-time employment

(annual percentage changes unless otherwise indicated)



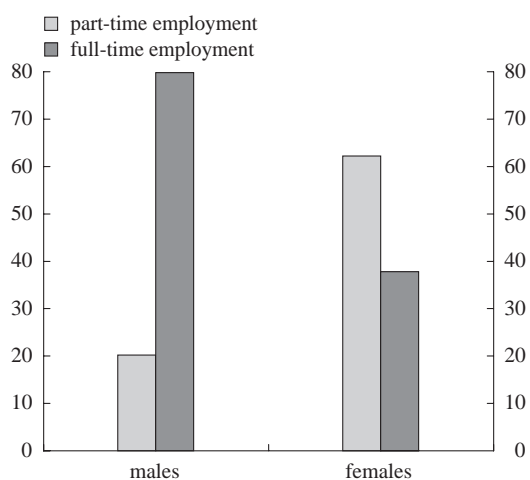
Sources: Eurostat and ECB calculations.

Note: The distinction between full-time and part-time employment is based on the answer given by the respondent to the EU Labour Force Survey and does not correspond to a predefined number of hours worked. Data have, however, been corrected for implausible answers and, on average, full-time work usually starts at about 30 hours per week.

time jobs. Between 1996 and 2001 part-time jobs accounted for around 20% of male employment growth (see Chart 4). Moreover, male part-time employment growth was broadly based across sectors, suggesting that specific sectoral developments had a limited influence on it. Conversely, part-time work appeared to be the main source of employment creation for women (60% part-time versus 40% full-time). At the same time, these developments have been accompanied by a fall in the percentage of both men and women in part-time employment but wishing to work full-time, from 21.0% in 1996 to 16.4% in 2001. This suggests that the dynamism of part-time employment growth also reflects a preferred choice for workers, although this remains less the case for men than for women.

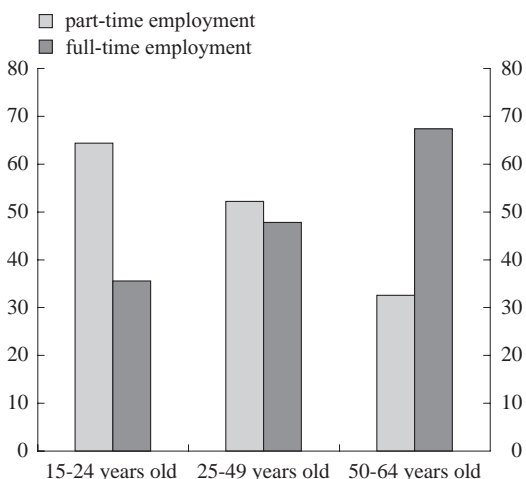
As regards the development of part-time work by age groups, there are also some clear differences in the relative contribution of part-time work to employment growth

Chart 4
Contribution of part-time and full-time jobs to employment growth by gender
(as a percentage of total growth; 1996-2001)



Sources: Eurostat and ECB calculations.

Chart 5
Contribution of part-time and full-time jobs to employment growth by age group
(as a percentage of total growth; 1996-2001)



Sources: Eurostat and ECB calculations.

(see Chart 5). In particular, for those aged 15 to 24 years, the growth in part-time jobs clearly exceeded that of full-time jobs, so that part-time employment contributed just over 65% of overall employment growth for the young. For those aged 25 to 49 years, the relative contribution of full-time versus part-time employment to total employment growth was broadly similar, while the contribution of full-time jobs clearly outweighed that of part-time jobs in the case of the oldest age group.

The wider use of flexible types of employment contract in European labour markets has increased their adaptability. The possibility of moving between full-time and part-time jobs allows employees to work more in line with their private needs, drawing people into the labour force who were previously unable or unwilling to consider full-time work, such as women or the young, and gives firms greater flexibility in terms of adjusting their employment levels in response, for example, to changes in demand.

Temporary jobs contributed substantially to employment growth, particularly among the young

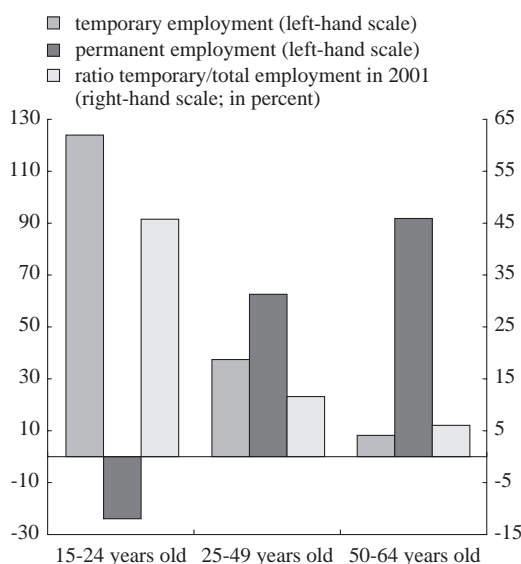
Typically, temporary contracts⁷ facilitate the adjustment of labour demand to business cycle fluctuations through the creation of short-term jobs in response to temporary needs. Moreover, temporary jobs may facilitate the screening of workers by firms, enhancing labour demand. Thus, for workers facing greater difficulties entering the labour market, in particular the young, temporary jobs may also facilitate labour market entry and offer a stepping stone to more permanent employment.

During the late 1990s, temporary jobs continued to contribute significantly to job creation, accounting for around one-third of the increase in the number of employees, a slightly lower proportion than in the late 1980s. This led to an increase in the ratio of temporary employment to total employment – 15.0% in 2001 compared with 12.8% in 1996. The contribution of temporary employment was more prominent in industry, especially construction, while permanent employment was the main contribution in most services, both market and non-market-related. Although the share of temporary work increased to 13.7% among males and to 16.0% among females, permanent jobs remained the main source of employment growth for both genders.

Looking at age groups, the impact of temporary jobs on employment growth has been very different. For those aged 15 to 24 years, temporary jobs were the main source of net job creation, on average, since 1996, although since 1999, permanent jobs have also contributed to employment growth. In the case of prime-aged workers (aged 15 to 49 years) and those aged 50 to 64 years the only source was permanent jobs, although for the prime-aged, temporary jobs also made a significant contribution (see Chart 6). The ratio of temporary workers among the young rose by more than 5 percentage points to 45.8% between 1996 and 2001. By comparison, the share of temporary

Chart 6
Contribution of permanent and temporary jobs to employment growth and ratio temporary/total employment

(as a percentage of total growth between 1996 and 2001, unless otherwise indicated)



Sources: Eurostat and ECB calculations.

employment rose by less than 2 percentage points among prime-aged workers (to 11.6%), and was stable in the oldest age group (6.0%).

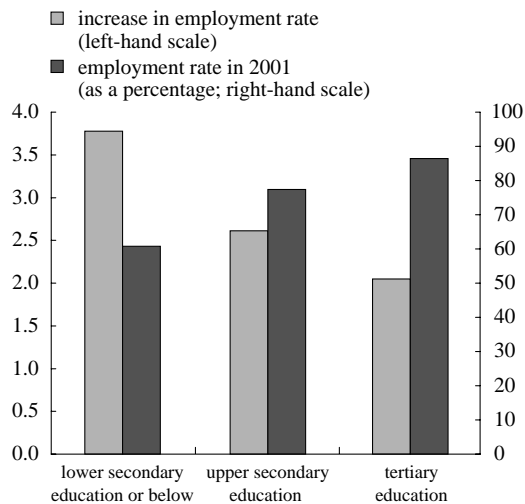
Employment growth improved in relative terms among the low-skilled

Empirical investigation of skill-specific employment faces the problem that skills are difficult to measure. A satisfactory indicator could combine levels of education with information on occupation. However, owing to a lack of aggregate data for the euro area, this section focuses on levels of education. Three categories of education are distinguished in the Labour Force Survey: tertiary education (university level), upper secondary education and lower secondary

⁷ According to the definition used in the Labour Force Survey, temporary jobs are those for which the termination of the job is determined by objective conditions, such as reaching a certain date, completion of an assignment or return of another employee who has been temporarily replaced. Generally, temporary jobs and part-time work constitute two distinct kinds of flexible contract. Although some temporary jobs are also part-time, around 77% of temporary jobs in 2001 were full-time.

Chart 7 Increase in employment rates by level of education

(in average annual percentage points between 1996 and 2001, unless otherwise indicated)



Sources: Eurostat and ECB calculations.

Note: Data refer to the population aged 25 to 59 years.

education or below (i.e. up to the end of compulsory education).

Given changes in the educational composition of the working age population, the employment rate by level of education provides useful information regarding the probability of finding a job. In the late 1990s, the employment rate increased most among those with lower secondary education or below – by 3.8 percentage points to 60.8%, compared with an increase of 2.0 percentage points to 86.5% among those with tertiary education and 2.6 percentage points to 77.4% among those with upper secondary education (see Chart 7). Although employment growth continued to be negative among those with lower secondary education or below (-0.5% on average between 1996 and 2001), the situation for this group improved compared with the first part of the decade when employment in this group declined by over 1% on average.

At the sectoral level, compared with the early 1990s, the improvement in employment growth among those with lower secondary education or below came mostly from the

industrial sector in the late 1990s. Between 1996 and 2001, while the number of those with the lowest levels of education continued to decline strongly in agriculture (-3.0% per year), their number decreased only very slightly in services (-0.1%) and increased in industry (0.3%). The rise in the employment rate for this group, albeit more pronounced in the case of women, was a common feature among both men and women.

In view of the problems that low-skilled workers have faced in entering the labour market in the past, many governments are increasingly implementing labour market reform measures aimed at enhancing the employment prospects of persons with low incomes. The 2002 Broad Economic Policy Guidelines stress the need for strengthening active labour market policies targeted towards disadvantaged groups. Almost all euro area countries have, in recent years, introduced policies directed at the low-paid, a group of workers which is often closely associated with being low-skilled. Although national approaches differ significantly, current policies are generally based on the following:

- *Reductions in tax rates* for persons at the lower end of the wage distribution (undertaken by almost all euro area countries in recent years). Lower take-home pay owing to higher income tax rates or social security contributions can make work less attractive. The average level of income tax and social security contributions as a percentage of labour costs for low-wage earners in the euro area decreased from an estimated 44% in 1996 to 41% in 2001.
- *Employment-conditional benefits* paid directly to employees upon taking up employment in a full-time or part-time job. These benefits effectively increase the net income from work and the difference between in-work and out-of-work incomes, thereby creating a stronger incentive for workers to become less dependent on benefits.

- *Payroll tax rebates, reductions in employers' social security contributions and/or subsidised employment (e.g. wage subsidies designed to reduce the costs to employers of employing the targeted group of workers).*

There has been a decline in indirect labour costs, such as social security payments by firms, which have fallen back to the levels seen in the early 1990s.

4 Concluding remarks

Given the fact that output growth was more job-intensive in the late 1990s than at the end of the 1980s, this article has identified some stylised facts which could be linked to labour market reforms implemented in the 1990s. Among these facts are the continued significant growth in female employment, which is much higher than that of males, and the increase in employment rates in the youngest and oldest age groups and among those with a lower level of education. For some groups, this improvement has been mainly due to the increasing use of part-time and temporary contracts.

Despite evidence of improved employment performance in the euro area in the late 1990s in comparison with the late 1980s, the average employment rate in the euro area (about 62% in 2001) is still considerably lower than in the United States (about 73%). Furthermore, employment rates of particular groups of workers, such as women, the youngest and oldest age groups, and the low skilled, remain relatively low and there is still a long way to go before the employment targets set at the Lisbon and Stockholm Councils are met.

The design of policies to tackle structural problems within euro area labour markets depends on the specific nature of the problems in each country and is principally a matter for the relevant national governments

and social partners. The progress made so far differs considerably across countries, and overall, for the euro area, it still remains insufficient. In particular, the implementation of structural reforms has not been proportionate to the magnitude of labour market problems, and the pace of reform seems to have slowed since 2001.

Looking ahead, in line with the 2002 Broad Economic Policy Guidelines, further comprehensive labour market reforms are needed. Policies to improve the efficient allocation of workers across sectors, regions and skill groups and to raise the incentive compatibility of tax and benefit systems are of particular importance. There is also a need to raise the incentives for firms to hire workers, for example through the reduction of labour costs and a better matching of workers skills to job requirements.

Such a reform agenda, together with sustained wage moderation, differentiation and flexibility, as well as a modernisation of the wage bargaining process, should be conducive to fostering employment growth, to increasing the growth potential of the euro area and to reducing unemployment over the medium term. It should also enable the euro area to weather external shocks better. In all these respects, there is a challenging agenda ahead.



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

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

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

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

Conventions used in the tables

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

Euro area overview table

Summary table of economic indicators for the euro area

(annual percentage changes, unless otherwise indicated)

1. Monetary developments and interest rates

	M1 ¹⁾	M2 ¹⁾	M3 ¹⁾²⁾		MFI loans to euro area residents excluding MFIs and general government ¹⁾	Securities issued by non-financial and non-monetary financial corporations ¹⁾	3-month interest rate (EURIBOR, % per annum, period averages) ⁷⁾	10-year government bond yield (% per annum, period averages) ⁸⁾
	1	2	3	3-month moving average (centred) ⁴⁾				
2001	3.6	4.2	5.4	-	7.8	26.4	4.26	5.03
2002	.	.	.	.	.	.	.	.
2002 Q1	6.2	6.5	7.6	-	5.7	28.9	3.36	5.13
Q2	6.6	6.5	7.4	-	5.6	24.3	3.45	5.26
Q3	7.6	6.5	7.1	-	5.3	.	3.36	4.77
Q4	.	.	.	-	.	.	.	.
2002 May	6.8	6.7	7.6	7.3	5.8	23.6	3.46	5.30
June	6.8	6.5	7.1	7.3	5.5	21.4	3.46	5.16
July	7.6	6.5	7.1	7.1	5.2	19.6	3.41	5.03
Aug.	7.6	6.4	7.0	7.1	5.4	16.9	3.35	4.73
Sep.	8.2	6.6	7.4	.	5.3	.	3.31	4.52
Oct.	.	.	.	.	.	.	3.26	4.62

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	2.5	2.2	3.4	1.4	0.3	83.6	1.3	8.0
2002	.	.	.	.	.	81.2	.	.
2002 Q1	2.6	-0.8	4.0	0.3	-2.5	81.1	0.7	8.1
Q2	2.1	-0.8	3.6	0.7	-0.6	81.2	0.5	8.2
Q3	2.0	-0.1	.	.	.	81.0	.	8.3
Q4	.	.	.	.	.	81.5	.	.
2002 May	2.0	-0.8	-	-	-0.9	-	-	8.2
June	1.8	-0.9	-	-	-0.3	-	-	8.2
July	1.9	-0.3	-	-	-0.1	-	-	8.3
Aug.	2.1	-0.1	-	-	-1.0	-	-	8.3
Sep.	2.1	0.1	-	-	.	-	-	8.3
Oct.	2.2	.	-	-	.	-	-	.

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	-4.9	75.8	-101.5	38.1	392.4	91.0	88.1	0.896
2002	.	.	.	.	.	.	.	.
2002 Q1	14.9	26.3	-15.0	-51.8	409.0	91.3	88.1	0.877
Q2	8.6	32.7	-4.4	67.1	367.0	93.9	90.6	0.919
Q3	.	.	.	.	380.9	97.9	94.0	0.984
Q4	.	.	.	.	.	.	.	.
2002 May	3.4	10.7	3.7	32.2	386.6	93.7	90.4	0.917
June	8.4	13.6	-16.1	17.1	367.0	96.4	92.8	0.955
July	3.1	14.2	-3.6	14.2	372.0	98.2	94.4	0.992
Aug.	10.4	11.7	1.7	4.5	372.9	97.7	93.7	0.978
Sep.	.	.	.	.	380.9	98.0	93.8	0.981
Oct.	.	.	.	.	.	98.5	94.3	0.981

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

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

1) Monthly growth rates refer to the end of the period, whereas quarterly and annual growth rates are calculated as period averages. Growth rates for M1, M2, M3 and loans are calculated on the basis of seasonally adjusted monthly stocks and flows.

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

I Monetary policy statistics

Table 1.1

Consolidated financial statement of the Eurosystem

(EUR millions)

1. Assets

		Gold and gold receivables	Claims on non-euro area residents in foreign currency	Claims on euro area residents in foreign currency	Claims on non-euro area residents in euro	Lending to euro area credit institutions in euro	Main refinancing operations	Longer-term refinancing operations	Fine-tuning reverse operations
		1	2	3	4	5	6	7	8
2002	7 June	139,414	260,127	23,583	5,079	173,309	113,000	60,000	0
	14	139,414	261,837	22,944	5,135	167,022	106,999	60,000	0
	21	139,378	263,172	22,001	4,985	175,937	111,999	60,000	0
	28	128,323	237,959	19,742	4,491	200,958	140,000	59,999	0
	5 July	128,323	237,865	19,335	4,598	187,023	127,000	59,999	0
	12	128,323	239,363	19,488	4,794	186,016	126,000	59,999	0
	19	128,323	240,102	20,162	4,947	194,378	134,002	59,999	0
	26	128,323	240,888	20,436	4,885	204,734	149,000	54,999	0
	2 Aug.	128,323	240,117	19,987	4,936	194,032	139,001	54,999	0
	9	128,323	239,409	19,302	4,824	192,067	136,998	54,999	0
	16	128,323	237,438	19,399	4,949	189,105	133,999	54,999	0
	23	128,323	239,979	17,924	4,827	189,037	133,999	54,999	0
	30	128,323	238,451	17,005	5,304	197,034	146,998	50,000	0
	6 Sep.	128,322	239,668	18,537	4,801	191,040	141,001	50,000	0
	13	128,322	241,413	18,246	4,574	186,051	136,002	50,000	0
	20	128,322	242,967	18,494	4,795	194,047	144,000	50,000	0
	27	128,322	242,538	18,267	4,961	194,085	149,000	44,998	0
	4 Oct.	131,211	248,348	18,472	4,475	190,377	145,000	44,998	0
	11	131,211	247,235	19,355	4,247	191,031	146,000	44,998	0
	18	131,211	246,437	19,628	4,239	187,124	141,999	44,998	0
	25	131,189	246,588	20,960	4,618	209,137	164,000	44,998	0
	1 Nov.	131,157	244,894	21,007	4,315	190,072	144,999	44,999	0

2. Liabilities

		Banknotes in circulation	Liabilities to euro area credit institutions in euro	Current accounts (covering the minimum reserve system)	Deposit facility	Fixed-term deposits	Fine-tuning reverse operations	Deposits related to margin calls	Other liabilities to euro area credit institutions in euro	Debt certificates issued
		1	2	3	4	5	6	7	8	9
2002	7 June	302,923	132,931	132,859	60	0	0	12	2,472	2,939
	14	303,602	128,245	128,202	30	0	0	13	2,432	2,939
	21	304,536	135,049	132,344	2,693	0	0	12	2,249	2,939
	28	308,753	134,893	134,781	100	0	0	12	2,034	2,939
	5 July	315,136	129,139	128,688	46	0	0	405	196	2,939
	12	316,696	129,439	129,400	22	0	0	17	126	2,939
	19	317,176	128,610	127,973	620	0	0	17	27	2,939
	26	317,563	132,354	132,334	16	0	0	4	83	2,939
	2 Aug.	323,953	129,253	129,237	12	0	0	4	31	2,939
	9	326,029	127,605	127,592	10	0	0	3	281	2,939
	16	325,804	129,440	129,406	31	0	0	3	209	2,939
	23	321,224	131,308	128,703	2,602	0	0	3	115	2,939
	30	321,780	126,066	125,935	130	0	0	1	131	2,939
	6 Sep.	325,814	129,856	129,836	15	0	0	5	260	2,939
	13	325,663	126,812	126,799	10	0	0	3	135	2,939
	20	324,542	129,987	129,927	58	0	0	2	142	2,939
	27	325,399	126,910	126,900	10	0	0	0	198	2,939
	4 Oct.	331,672	127,336	127,250	85	0	0	1	235	2,939
	11	331,640	132,319	132,288	31	0	0	0	374	2,939
	18	330,793	128,882	128,833	38	0	0	11	173	2,939
	25	329,550	136,845	136,823	11	0	0	11	131	2,939
	1 Nov.	334,839	122,651	122,615	35	0	0	1	132	2,939

Source: ECB.

Structural reverse operations	Marginal lending facility	Credits related to margin calls	Other claims on euro area credit institutions in euro	Securities of euro area residents in euro	General government debt in euro	Other assets	Total		
							9	10	11	12	13	14	15	16
0	305	4	213	29,944	67,701	89,062	788,433	2002	7 June
0	5	18	231	30,087	67,701	89,192	783,564		14
0	3,925	13	205	30,220	67,698	90,077	793,674		21
0	930	29	512	30,481	67,687	90,691	780,845		28
0	3	21	414	30,648	67,675	88,834	764,716		5 July
0	9	8	403	30,505	67,676	89,066	765,635		12
0	367	10	166	30,744	67,676	89,496	775,995		19
0	729	6	405	30,656	67,664	85,548	783,540		26
0	12	20	422	30,482	67,659	85,632	771,591		2 Aug.
0	23	47	402	30,630	67,638	86,034	768,630		9
0	69	38	151	30,673	67,198	86,272	763,509		16
0	28	11	144	30,919	67,198	85,740	764,092		23
0	22	14	367	31,361	67,198	85,794	770,838		30
0	5	34	244	31,538	67,198	84,224	765,573		6 Sep.
0	12	37	164	31,480	67,198	84,690	762,139		13
0	3	44	213	31,524	67,198	85,077	772,638		20
0	55	32	312	31,503	67,199	85,634	772,822		27
0	355	24	616	32,125	67,209	85,503	778,337		4 Oct.
0	6	27	619	32,253	67,209	85,545	778,706		11
0	10	117	441	32,256	67,209	85,768	774,314		18
0	27	112	155	32,142	67,209	86,029	798,028		25
0	60	14	361	32,264	67,209	88,379	779,659		1 Nov.

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
47,953	8,561	1,377	18,619	6,990	62,519	136,887	64,262	788,433	2002	7 June
46,035	8,318	1,423	20,020	6,990	62,407	136,887	64,266	783,564		14
48,337	8,932	1,423	19,135	6,990	62,934	136,887	64,263	793,674		21
70,880	8,437	1,641	16,944	6,521	64,431	99,114	64,258	780,845		28
57,501	8,517	1,237	16,867	6,521	63,297	99,114	64,252	764,716		5 July
54,513	8,637	1,237	18,845	6,521	63,313	99,114	64,255	765,635		12
62,743	8,574	1,537	20,002	6,521	64,490	99,114	64,262	775,995		19
69,572	9,032	1,298	21,486	6,521	59,314	99,114	64,264	783,540		26
55,257	9,382	1,392	20,375	6,521	59,106	99,114	64,268	771,591		2 Aug.
52,290	8,643	1,312	19,716	6,521	59,910	99,114	64,270	768,630		9
47,496	8,609	1,285	17,306	6,521	60,512	99,114	64,274	763,509		16
49,783	9,128	1,287	18,418	6,521	59,980	99,114	64,275	764,092		23
63,849	8,972	1,271	16,111	6,521	59,807	99,114	64,277	770,838		30
51,729	8,671	1,282	15,092	6,521	60,016	99,114	64,279	765,573		6 Sep.
50,133	8,588	1,309	16,613	6,521	60,031	99,114	64,281	762,139		13
55,839	8,992	1,518	18,110	6,521	60,651	99,114	64,283	772,638		20
58,763	8,903	1,443	17,851	6,521	60,495	99,114	64,286	772,822		27
47,782	9,245	1,303	18,145	6,567	62,516	106,307	64,290	778,337		4 Oct.
43,890	8,468	1,300	17,970	6,567	62,640	106,307	64,292	778,706		11
43,801	8,328	1,449	17,324	6,567	63,456	106,307	64,295	774,314		18
59,081	8,368	1,605	18,752	6,567	63,585	106,307	64,298	798,028		25
50,648	8,359	1,352	17,305	6,567	64,336	106,307	64,224	779,659		1 Nov.

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

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

Source: ECB.

- 1) The date refers to the deposit and marginal lending facilities. For main refinancing operations, unless otherwise indicated, changes in the rate are effective from the first operation following the date indicated. The change on 18 September 2001 was effective on that same day.
- 2) On 22 December 1998 the ECB announced that, as an exceptional measure between 4 and 21 January 1999, a narrow corridor of 50 basis points would be applied between the interest rates for the marginal lending facility and the deposit facility, aimed at facilitating the transition to the new regime by market participants.
- 3) On 8 June 2000 the ECB announced that, starting from the operation to be settled on 28 June 2000, the main refinancing operations of the Eurosystem would be conducted as variable rate tenders. The minimum bid rate refers to the minimum interest rate at which counterparties may place their bids.

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

Date of settlement	Bids (amount)	Allotment (amount)	Fixed rate tenders		Variable rate tenders		Running for (...) days
			Fixed rate	Minimum bid rate	Marginal rate ³⁾	Weighted average rate	
	1	2	3	4	5	6	7
2002 8 May	108,472	66,000	-	3.25	3.29	3.30	14
15	108,733	43,000	-	3.25	3.30	3.30	14
22	112,438	70,000	-	3.25	3.33	3.34	14
29	114,221	48,000	-	3.25	3.34	3.35	14
5 June	114,258	65,000	-	3.25	3.33	3.34	14
12	97,462	42,000	-	3.25	3.31	3.32	14
19	112,227	70,000	-	3.25	3.32	3.33	14
26	111,439	70,000	-	3.25	3.35	3.36	14
3 July	108,626	57,000	-	3.25	3.33	3.33	14
10	102,931	69,000	-	3.25	3.30	3.32	14
17	104,849	65,000	-	3.25	3.30	3.31	14
24	108,732	84,000	-	3.25	3.30	3.31	14
31	86,879	55,000	-	3.25	3.30	3.31	14
7 Aug.	104,266	82,000	-	3.25	3.28	3.29	14
14	85,232	52,000	-	3.25	3.28	3.29	14
21	115,921	82,000	-	3.25	3.28	3.29	14
28	104,816	65,000	-	3.25	3.28	3.29	14
4 Sep.	124,579	76,000	-	3.25	3.28	3.29	14
11	105,528	60,000	-	3.25	3.27	3.28	14
18	116,252	84,000	-	3.25	3.28	3.29	14
25	105,130	65,000	-	3.25	3.28	3.29	14
2 Oct.	125,630	80,000	-	3.25	3.28	3.29	14
9	111,824	66,000	-	3.25	3.27	3.28	14
16	106,563	76,000	-	3.25	3.28	3.29	14
23	115,642	88,000	-	3.25	3.29	3.30	14
30	101,910	57,000	-	3.25	3.29	3.29	14
6 Nov.	104,397	87,000	-	3.25	3.25	3.26	14

2. Longer-term refinancing operations

Date of settlement	Bids (amount)	Allotment (amount)	Fixed rate tenders	Variable rate tenders		Running for (...) days
			Fixed rate	Marginal rate ³⁾	Weighted average rate	
	1	2	3	4	5	6
2000 30 Nov.	31,999	15,000	-	5.03	5.05	91
29 Dec.	15,869	15,000	-	4.75	4.81	90
<i>Euro area enlargement</i>						
2001 25 Jan.	31,905	20,000	-	4.66	4.69	90
1 Mar.	45,755	20,000	-	4.69	4.72	91
29	38,169	19,101	-	4.47	4.50	91
25 Apr.	43,416	20,000	-	4.67	4.70	92
31 May	46,448	20,000	-	4.49	4.51	91
28 June	44,243	20,000	-	4.36	4.39	91
26 July	39,369	20,000	-	4.39	4.42	91
30 Aug.	37,855	20,000	-	4.20	4.23	91
27 Sep.	28,269	20,000	-	3.55	3.58	85
25 Oct.	42,308	20,000	-	3.50	3.52	98
29 Nov.	49,135	20,000	-	3.32	3.34	91
21 Dec.	38,178	20,000	-	3.29	3.31	97
2002 31 Jan.	44,547	20,000	-	3.31	3.33	84
28 Feb.	47,001	20,000	-	3.32	3.33	91
28 Mar.	39,976	20,000	-	3.40	3.42	91
25 Apr.	40,580	20,000	-	3.35	3.36	91
30 May	37,602	20,000	-	3.45	3.47	91
27 June	27,670	20,000	-	3.38	3.41	91
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

3. Other tender operations

Date of settlement	Type of operation	Bids (amount)	Allotment (amount)	Fixed rate tenders	Variable rate tenders			Running for (...) days
				Fixed rate	Minimum bid rate	Marginal rate ³⁾	Weighted average rate	
	1	2	3	4	5	6	7	8
2000 5 Jan. ⁴⁾	Collection of fixed-term deposits	14,420	14,420	-	-	3.00	3.00	7
21 June	Reverse transaction	18,845	7,000	-	-	4.26	4.28	1
<i>Euro area enlargement</i>								
2001 30 Apr.	Reverse transaction	105,377	73,000	-	4.75	4.77	4.79	7
12 Sep.	Reverse transaction	69,281	69,281	4.25	-	-	-	1
13	Reverse transaction	40,495	40,495	4.25	-	-	-	1
28 Nov.	Reverse transaction	73,096	53,000	-	3.25	3.28	3.29	7
2002 4 Jan.	Reverse transaction	57,644	25,000	-	3.25	3.30	3.32	3
10	Reverse transaction	59,377	40,000	-	3.25	3.28	3.30	1

Source: ECB.

- 1) The amounts shown may differ slightly from those in Table 1.1, columns 6 to 8, due to operations allotted but not settled.
- 2) On 8 June 2000 the ECB announced that, starting from the operation to be settled on 28 June 2000, the main refinancing operations of the Eurosystem would be conducted as variable rate tenders. The minimum bid rate refers to the minimum interest rate at which counterparties may place their bids.
- 3) In liquidity providing (absorbing) operations, the marginal rate refers to the lowest (highest) rate at which bids were accepted.
- 4) This operation was conducted with a maximum rate of 3.00%.

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

Reserve base as at:	Total	Liabilities to which a 2% reserve coefficient is applied			Liabilities to which a 0% reserve coefficient is applied		
		Deposits (overnight, up to 2 years' agreed maturity and notice period)	Debt securities up to 2 years' agreed maturity	Money market paper	Deposits (over 2 years' agreed maturity and notice period)	Repos	Debt securities over 2 years' agreed maturity
	1	2	3	4	5	6	7
2001 Sep.	10,627.3	5,956.0	188.2	191.3	1,315.7	631.6	2,344.6
Oct.	10,687.8	5,962.3	190.8	196.5	1,313.7	672.4	2,352.2
Nov.	10,798.1	6,073.4	199.0	191.3	1,300.9	656.5	2,376.9
Dec.	10,910.1	6,226.1	204.7	185.0	1,315.2	605.1	2,374.0
2002 Jan.	10,952.8	6,195.2	194.7	202.2	1,350.7	610.8	2,399.0
Feb.	10,964.1	6,164.7	196.8	196.0	1,337.1	653.2	2,416.3
Mar.	11,031.8	6,178.0	202.2	198.4	1,349.9	663.1	2,440.1
Apr.	11,076.4	6,176.1	205.1	199.8	1,355.1	699.1	2,441.2
May	11,111.6	6,150.4	204.3	206.2	1,355.8	741.7	2,453.2
June	11,009.1	6,083.3	203.3	204.2	1,355.3	699.2	2,463.9
July	10,999.6	6,069.3	202.3	206.3	1,368.0	691.0	2,462.7
Aug.	10,952.0	6,010.3	200.3	201.3	1,359.7	703.2	2,477.2
Sep. ^(p)	11,055.3	6,058.1	201.6	203.7	1,373.1	746.8	2,472.0

Source: ECB.

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

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

Maintenance period ending in:	Required reserves ²⁾	Actual reserves ³⁾	Excess reserves ⁴⁾	Deficiencies ⁵⁾	Interest rate on minimum reserves ⁶⁾
	1	2	3	4	5
2001 Nov.	126.1	126.6	0.5	0.0	3.62
Dec.	126.4	127.3	0.9	0.0	3.30
2002 Jan.	128.7	130.1	1.4	0.0	3.34
Feb.	131.7	132.4	0.7	0.0	3.30
Mar.	131.3	132.0	0.7	0.0	3.28
Apr.	130.6	131.1	0.5	0.0	3.30
May	131.0	131.5	0.5	0.0	3.30
June	131.0	131.7	0.7	0.0	3.33
July	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. ^(p)	128.7	.	.	.	.

Source: ECB.

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

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

Maintenance period ending in:	Liquidity-providing factors					Liquidity-absorbing factors					Credit institutions' current accounts ⁴⁾	Base money ⁵⁾
	Monetary policy operations of the Eurosystem					Deposit facility	Other liquidity-absorbing operations ²⁾	Banknotes in circulation	Central government deposits with the Eurosystem	Other factors (net) ³⁾		
	Eurosystem's net assets in gold and foreign currency ¹⁾	Main refinancing operations	Longer-term refinancing operations	Marginal lending facility	Other liquidity-providing operations ²⁾							
1	2	3	4	5	6	7	8	9	10	11	12	
2001 Sep.	401.3	147.1	60.0	0.5	3.5	0.4	0.0	335.4	45.2	105.4	126.1	461.9
Oct.	389.9	136.7	60.0	1.1	0.0	0.1	0.0	325.2	43.6	93.6	125.1	450.4
Nov.	385.0	132.3	60.0	0.2	0.0	0.3	0.0	311.3	46.1	93.1	126.7	438.3
Dec.	383.7	122.5	60.0	0.5	12.4	0.8	0.0	298.0	43.5	109.3	127.4	426.2
2002 Jan.	385.2	118.5	60.0	0.4	3.7	0.6	0.0	344.3	38.3	54.2	130.4	475.2
Feb.	386.0	127.3	60.0	0.2	0.0	0.1	0.0	306.2	49.6	85.2	132.6	438.8
Mar.	386.7	114.6	60.0	0.2	0.0	0.1	0.0	283.3	54.2	91.8	132.1	415.6
Apr.	395.4	112.7	60.0	0.4	0.0	0.2	0.0	285.9	55.9	95.3	131.2	417.3
May	397.7	110.6	60.0	0.1	0.0	0.3	0.0	293.7	49.2	93.5	131.7	425.6
June	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. ⁴⁾	370.0	146.1	45.3	0.1	0.0	0.1	0.0	329.2	45.6	58.2	128.3	457.6

Source: ECB.

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

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

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

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

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

2 Monetary developments in the euro area

Table 2.1

Aggregated balance sheet of the Eurosystem

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

1. Assets

	Loans to euro area residents				Holdings of securities other than shares issued by euro area residents				Holdings of shares/other equity issued by euro area residents			External assets ¹⁾	Fixed assets	Re-remaining assets	Total	
	1	MFIs ¹⁾	General government	Other euro area residents	5	MFIs	General government	Other euro area residents	9	MFIs	Other euro area residents					11	12	13	14	15
1999	444.6	424.3	19.7	0.5	89.1	1.9	86.1	1.1	14.1	4.3	9.8	400.6	9.9	56.2	1,014.5	
2000 Q3	493.1	474.4	18.2	0.5	98.5	2.9	94.6	1.0	14.6	4.4	10.2	459.1	10.2	54.3	1,129.8	
Q4	445.0	427.4	17.1	0.5	97.4	2.5	93.6	1.3	15.3	4.3	11.0	380.7	11.2	56.1	1,005.7	
<i>Euro area enlargement</i>																
2001 Q1	401.7	373.9	27.2	0.6	105.0	2.7	101.2	1.1	14.7	4.6	10.1	396.7	11.3	54.4	983.8	
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	
2001 Sep.	388.2	360.4	27.2	0.6	106.6	3.7	101.9	1.1	13.1	4.8	8.3	397.1	11.9	54.8	971.7	
Oct.	356.7	328.9	27.2	0.6	107.8	3.9	102.8	1.2	13.4	4.8	8.7	400.0	12.0	55.5	945.6	
Nov.	370.0	342.4	27.1	0.6	107.3	3.8	102.2	1.2	13.6	4.7	8.9	400.5	12.1	55.0	958.5	
Dec.	412.7	386.4	25.7	0.6	107.0	3.8	101.8	1.3	13.8	4.6	9.2	399.0	11.9	54.3	998.6	
2002 Jan.	400.1	373.7	25.7	0.6	104.1	3.8	99.0	1.3	13.8	4.7	9.1	409.0	12.0	102.5	1,041.4	
Feb.	373.4	347.1	25.7	0.6	105.9	4.1	100.6	1.2	13.7	4.7	9.0	413.5	12.0	103.3	1,021.7	
Mar.	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	106.1	1,034.0	
Apr.	344.2	317.8	25.8	0.6	107.5	5.0	101.4	1.1	13.5	4.7	8.8	401.3	12.0	108.0	986.5	
May	356.1	329.7	25.7	0.6	107.0	4.9	101.0	1.0	13.3	4.7	8.6	394.5	12.0	110.2	993.1	
June	387.7	361.3	25.7	0.6	107.5	4.9	101.6	1.1	13.3	4.7	8.6	372.7	12.0	114.4	1,007.5	
July	364.0	337.7	25.7	0.6	107.7	5.1	101.9	0.8	13.8	4.7	9.0	377.9	12.1	116.1	991.6	
Aug.	363.4	337.5	25.3	0.6	109.2	5.1	103.3	0.8	14.4	4.8	9.7	377.9	12.1	115.8	992.8	
Sep. ^(p)	365.6	339.6	25.3	0.6	110.8	5.4	104.6	0.8	14.1	4.8	9.3	385.9	12.1	116.1	1,004.6	

2. Liabilities

	Currency in circulation	Deposits of euro area residents	MFIs ¹⁾			Central government	Other general government/other euro area residents	Money market paper and debt securities issued	Capital and reserves	External liabilities ¹⁾	Remaining liabilities	Total
			3	4	5								6	7	8	9	10
1999	393.3	341.5	279.3	53.4	8.8	7.9	174.3	49.8	47.6	1,014.5		
2000 Q3	373.5	404.2	346.1	45.6	12.5	4.6	221.2	75.0	51.4	1,129.8		
Q4	390.2	327.3	270.4	47.1	9.8	3.8	197.5	29.9	57.0	1,005.7		
<i>Euro area enlargement</i>												
2001 Q1	370.5	312.6	253.4	46.8	12.4	5.5	204.6	26.8	63.8	983.8		
Q2	368.8	342.2	274.1	51.8	16.3	5.6	223.7	32.6	54.2	1,027.2		
2001 Sep.	346.1	323.6	269.4	37.6	16.6	5.5	209.2	30.0	57.3	971.7		
Oct.	333.8	302.8	244.7	40.0	18.1	5.5	210.6	34.3	58.5	945.6		
Nov.	317.4	330.4	277.5	35.2	17.6	4.7	210.1	35.3	60.6	958.5		
Dec.	285.9	391.9	342.4	35.1	14.4	4.6	209.8	35.6	70.8	998.6		
2002 Jan.	339.7	344.8	284.7	44.9	15.2	4.6	214.5	37.4	100.4	1,041.4		
Feb.	308.2	349.1	282.3	52.1	14.7	4.6	219.9	33.9	106.0	1,021.7		
Mar.	309.1	355.1	282.4	56.3	16.4	4.6	217.8	36.9	110.5	1,034.0		
Apr.	311.3	323.5	254.8	50.8	17.9	4.6	212.8	32.4	101.9	986.5		
May	319.6	326.6	268.4	40.7	17.4	4.6	208.0	31.6	102.7	993.1		
June	329.3	354.3	285.2	51.5	17.5	4.6	182.3	31.0	106.0	1,007.5		
July	340.1	316.0	247.4	52.9	15.6	4.6	183.7	35.1	112.2	991.6		
Aug.	342.3	318.7	255.8	47.3	15.6	4.6	186.4	31.0	109.8	992.8		
Sep. ^(p)	347.0	317.6	258.9	41.7	17.0	4.6	190.2	32.5	112.7	1,004.6		

Source: ECB.

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

Table 2.2

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

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

1. Assets

	Loans to euro area residents				Holdings of securities other than shares issued by euro area residents				Money market paper	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
1999	9,779.9	3,414.1	828.2	5,537.6	2,179.4	828.8	1,123.8	226.7	129.9	650.6	211.5	439.1	1,719.6	154.0	919.4	15,532.8
2000 Q3	10,235.9	3,456.4	799.8	5,979.7	2,232.8	941.2	1,033.9	257.7	139.8	707.6	204.1	503.5	2,004.8	155.9	1,034.6	16,511.4
Q4	10,419.8	3,510.4	817.8	6,091.5	2,193.4	933.3	995.9	264.2	141.4	750.9	240.2	510.8	2,026.2	158.7	1,015.4	16,705.7
<i>Euro area enlargement</i>																
2001 Q1	10,814.0	3,715.6	824.4	6,274.0	2,322.4	969.1	1,066.2	287.1	157.1	812.3	255.3	557.0	2,242.1	160.8	1,097.2	17,606.0
Q2	10,894.4	3,698.3	808.5	6,387.6	2,397.4	991.6	1,104.9	300.9	164.6	799.3	251.3	548.0	2,290.1	163.5	1,128.3	17,837.7
2001 Sep.	10,953.2	3,729.3	802.6	6,421.3	2,415.5	995.8	1,093.3	326.4	163.8	771.6	245.1	526.4	2,300.6	165.7	1,115.8	17,886.2
Oct.	10,976.2	3,725.3	800.0	6,451.0	2,417.2	1,004.5	1,084.0	328.7	167.0	779.1	244.0	535.1	2,342.5	166.3	1,147.0	17,995.4
Nov.	11,118.2	3,800.8	816.2	6,501.2	2,430.4	1,009.7	1,088.8	331.9	158.7	782.5	246.8	535.7	2,427.1	167.1	1,136.6	18,220.6
Dec.	11,134.8	3,794.0	822.1	6,518.7	2,421.5	1,008.3	1,077.4	335.9	153.1	811.0	251.9	559.1	2,408.4	168.1	1,129.4	18,226.3
2002 Jan.	11,066.2	3,713.4	819.1	6,533.8	2,466.9	1,018.9	1,107.3	340.6	168.8	811.5	252.3	559.2	2,420.4	165.4	1,159.9	18,259.2
Feb.	11,049.6	3,679.7	821.8	6,548.2	2,486.7	1,030.8	1,107.1	348.7	167.0	812.1	254.3	557.9	2,419.6	164.6	1,096.1	18,195.7
Mar.	11,210.8	3,778.4	826.8	6,605.6	2,519.6	1,046.2	1,128.1	345.3	174.0	811.6	260.1	551.5	2,430.7	164.5	1,031.1	18,342.4
Apr.	11,265.0	3,817.7	806.7	6,640.6	2,524.9	1,055.2	1,127.8	341.8	175.9	825.6	267.5	558.1	2,425.3	164.2	1,011.2	18,392.1
May	11,329.4	3,866.8	803.4	6,659.2	2,543.0	1,057.8	1,141.2	343.9	181.7	826.2	265.8	560.4	2,451.4	164.4	984.2	18,480.3
June	11,334.9	3,839.8	804.4	6,690.6	2,538.6	1,059.4	1,137.5	341.8	194.7	819.2	263.5	555.7	2,358.6	164.3	1,002.3	18,412.5
July	11,339.6	3,844.7	802.8	6,692.1	2,527.4	1,048.1	1,134.0	345.3	205.0	808.3	267.0	541.3	2,378.8	164.7	1,025.6	18,449.3
Aug.	11,321.2	3,836.8	792.7	6,691.7	2,515.3	1,044.8	1,131.7	338.9	203.1	816.8	265.7	551.2	2,367.2	165.6	1,011.0	18,400.2
Sep. ^(p)	11,410.9	3,881.4	795.4	6,734.2	2,531.2	1,041.6	1,148.1	341.5	208.2	805.2	261.2	544.0	2,429.4	166.4	1,046.3	18,597.5

2. Liabilities

	Currency in circulation	Deposits of euro area residents	MFIs	Central government	Other general government/other euro area residents					Money market fund shares/units ¹⁾	Money market paper and debt securities issued ¹⁾	Capital and reserves	External liabilities	Remaining liabilities	Total
						Over-night	With agreed maturity	Redeemable at notice	Repurchase agreements						
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1999	0.7	8,735.7	3,590.9	88.6	5,056.2	1,537.6	2,043.2	1,331.5	143.9	293.4	2,531.1	849.1	1,870.4	1,252.4	15,532.8
2000 Q3	0.0	8,859.4	3,595.4	113.7	5,150.4	1,577.2	2,129.3	1,272.4	171.4	334.8	2,720.5	913.6	2,295.1	1,388.0	16,511.4
Q4	0.0	9,057.2	3,679.4	117.4	5,260.5	1,648.9	2,159.8	1,276.9	174.9	323.3	2,712.9	941.5	2,299.5	1,371.3	16,705.7
<i>Euro area enlargement</i>															
2001 Q1	0.0	9,325.3	3,814.5	103.6	5,407.2	1,624.0	2,237.8	1,322.8	222.6	371.7	2,817.4	982.4	2,636.2	1,473.1	17,606.0
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	393.3	2,861.3	998.1	2,710.6	1,450.1	17,837.7
2001 Sep.	0.0	9,484.8	3,839.0	110.2	5,535.5	1,733.7	2,233.5	1,342.6	225.7	420.8	2,875.5	1,011.1	2,609.9	1,484.1	17,886.2
Oct.	0.0	9,484.9	3,815.0	113.2	5,556.7	1,732.5	2,237.3	1,351.9	235.1	433.1	2,900.6	1,019.3	2,627.3	1,530.2	17,995.4
Nov.	0.0	9,601.5	3,875.9	115.1	5,610.5	1,780.8	2,238.8	1,365.0	225.9	443.8	2,888.6	1,023.9	2,690.9	1,571.9	18,220.6
Dec.	0.0	9,696.7	3,829.6	103.9	5,763.2	1,882.2	2,257.5	1,405.0	218.5	440.5	2,882.9	1,042.9	2,683.4	1,479.9	18,226.3
2002 Jan.	0.0	9,630.2	3,804.4	104.0	5,721.8	1,833.0	2,253.8	1,418.8	216.2	462.1	2,921.5	1,050.1	2,717.8	1,477.6	18,259.2
Feb.	0.0	9,571.3	3,745.5	103.7	5,722.0	1,829.0	2,251.1	1,420.9	221.1	473.9	2,933.1	1,050.6	2,729.4	1,437.3	18,195.7
Mar.	0.0	9,696.7	3,853.2	101.2	5,742.3	1,823.3	2,266.3	1,423.0	229.6	482.5	2,966.1	1,057.6	2,749.8	1,389.7	18,342.4
Apr.	0.0	9,744.1	3,873.3	106.7	5,764.1	1,852.3	2,269.0	1,414.7	228.1	489.7	2,969.4	1,064.1	2,736.8	1,387.9	18,392.1
May	0.0	9,812.7	3,922.3	108.3	5,782.1	1,853.0	2,278.8	1,415.5	234.8	498.1	2,994.0	1,071.3	2,718.7	1,385.4	18,480.3
June	0.0	9,839.5	3,929.4	103.5	5,806.6	1,899.1	2,256.3	1,421.7	229.6	502.0	2,984.8	1,071.6	2,584.2	1,430.4	18,412.5
July	0.0	9,821.0	3,934.6	99.0	5,787.4	1,870.4	2,263.8	1,424.3	228.8	516.0	2,989.6	1,081.4	2,607.8	1,433.6	18,449.3
Aug.	0.0	9,783.7	3,922.1	93.6	5,768.0	1,836.2	2,265.4	1,429.8	236.5	529.6	3,002.0	1,088.2	2,579.9	1,416.8	18,400.2
Sep. ^(p)	0.0	9,875.0	3,957.9	106.7	5,810.4	1,891.8	2,242.8	1,433.5	242.4	527.8	3,004.0	1,091.8	2,635.8	1,463.2	18,597.5

Source: ECB.

1) 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

											Total
	Loans to euro area residents	General government	Other euro area residents	Holdings of securities other than shares issued by euro area residents	General government	Other euro area residents	Holdings of shares/ other equity issued by other euro area residents	External assets ²⁾	Fixed assets	Remaining assets	
	1	2	3	4	5	6	7	8	9	10	11
2001 Mar.	7,126.3	851.7	6,274.6	1,455.6	1,167.4	288.2	567.1	2,638.9	172.0	1,117.3	13,077.3
Apr.	7,157.4	843.5	6,313.9	1,467.6	1,173.4	294.2	586.9	2,616.2	173.3	1,128.1	13,129.5
May	7,172.8	838.4	6,334.4	1,494.1	1,193.0	301.1	587.3	2,677.5	174.6	1,148.3	13,254.6
June	7,223.9	835.7	6,388.2	1,508.6	1,206.5	302.1	557.5	2,704.8	175.4	1,147.0	13,317.2
July	7,227.2	832.9	6,394.4	1,516.5	1,201.5	315.0	552.3	2,619.1	176.5	1,092.2	13,183.9
Aug.	7,198.4	828.8	6,369.6	1,516.6	1,192.9	323.7	545.1	2,624.7	176.9	1,082.6	13,144.3
Sep.	7,251.7	829.8	6,421.9	1,522.6	1,195.2	327.4	534.7	2,697.8	177.6	1,134.1	13,318.6
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	1,516.4	1,179.2	337.2	568.3	2,807.4	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	568.2	2,829.5	177.5	1,169.2	13,671.8
Feb.	7,396.3	847.5	6,548.8	1,557.7	1,207.7	349.9	566.8	2,833.1	176.6	1,131.4	13,661.9
Mar.	7,458.9	852.6	6,606.2	1,575.7	1,229.1	346.6	560.6	2,845.2	176.4	1,082.3	13,699.1
Apr.	7,473.7	832.4	6,641.3	1,572.2	1,229.2	342.9	566.9	2,826.6	176.2	1,069.6	13,685.1
May	7,489.0	829.2	6,659.8	1,587.2	1,242.3	345.0	569.0	2,845.9	176.4	1,048.7	13,716.2
June	7,521.4	830.1	6,691.3	1,581.9	1,239.0	342.9	564.3	2,731.2	176.2	1,073.2	13,648.2
July	7,521.2	828.5	6,692.7	1,582.0	1,235.8	346.1	550.3	2,756.7	176.8	1,098.4	13,685.3
Aug.	7,510.4	818.0	6,692.3	1,574.7	1,235.0	339.7	560.8	2,745.0	177.7	1,085.5	13,654.2
Sep. ^(p)	7,555.5	820.7	6,734.8	1,595.1	1,252.7	342.3	553.3	2,815.3	178.4	1,122.1	13,819.7

2. Liabilities: levels

														Total
	Currency in circulation	Deposits of central government	Deposits of other general government/ other euro area residents	Over-night	With agreed maturity	Redeemable at notice	Repurchase agreements	Money market fund shares/ units ³⁾	Money market paper and debt securities issued ³⁾	Capital and reserves	External liabilities ²⁾	Re-maining liabilities	Excess of inter-MFI liabilities	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
2001 Mar.	336.3	150.3	5,419.7	1,636.1	2,238.2	1,322.8	222.6	346.1	1,719.5	927.0	2,663.0	1,536.9	-21.6	13,077.3
Apr.	336.2	152.5	5,449.5	1,666.9	2,237.4	1,323.9	221.4	354.1	1,720.3	928.1	2,676.4	1,524.7	-12.2	13,129.5
May	332.9	146.9	5,487.5	1,691.8	2,239.4	1,322.5	233.8	363.0	1,722.0	940.0	2,755.0	1,520.6	-13.2	13,254.6
June	333.0	165.5	5,521.1	1,731.8	2,237.0	1,330.8	221.5	360.5	1,740.5	965.9	2,743.3	1,504.4	-16.8	13,317.2
July	328.0	155.5	5,508.1	1,712.7	2,238.4	1,333.6	223.4	369.6	1,737.1	955.2	2,643.0	1,494.8	-7.4	13,183.9
Aug.	319.2	152.4	5,500.1	1,681.2	2,250.8	1,337.3	230.8	380.7	1,731.1	959.9	2,620.1	1,489.4	-8.6	13,144.3
Sep.	309.6	147.8	5,552.2	1,749.9	2,233.9	1,342.6	225.7	384.7	1,753.9	970.4	2,639.9	1,541.4	18.7	13,318.6
Oct.	295.5	153.3	5,574.8	1,750.3	2,237.6	1,351.9	235.1	395.9	1,767.9	981.1	2,661.6	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	404.5	1,760.3	982.6	2,726.2	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	402.0	1,760.7	996.2	2,719.1	1,550.7	-8.5	13,576.7
2002 Jan.	246.5	148.9	5,737.0	1,847.8	2,254.2	1,418.8	216.2	420.8	1,775.8	1,007.6	2,755.2	1,578.0	2.0	13,671.8
Feb.	240.3	155.7	5,736.8	1,843.4	2,251.4	1,420.9	221.1	431.6	1,778.2	1,011.5	2,763.3	1,543.4	1.1	13,661.9
Mar.	254.3	157.5	5,758.6	1,839.3	2,266.7	1,423.0	229.6	435.9	1,793.0	1,010.6	2,786.6	1,500.1	2.4	13,699.1
Apr.	261.7	157.5	5,782.0	1,869.9	2,269.4	1,414.7	228.1	442.2	1,785.4	1,004.7	2,769.2	1,489.8	-7.4	13,685.1
May	273.9	149.0	5,799.6	1,870.1	2,279.1	1,415.5	234.8	447.3	1,805.0	1,008.9	2,750.3	1,488.1	-5.8	13,716.2
June	285.8	155.0	5,824.1	1,916.3	2,256.6	1,421.7	229.6	443.7	1,788.7	985.7	2,615.2	1,536.4	13.5	13,648.2
July	296.8	151.9	5,803.0	1,885.7	2,264.1	1,424.3	228.8	455.5	1,796.4	993.3	2,642.8	1,545.8	-0.3	13,685.3
Aug.	301.2	141.0	5,783.6	1,851.6	2,265.7	1,429.8	236.5	468.7	1,814.5	1,004.2	2,610.9	1,526.5	3.6	13,654.2
Sep. ^(p)	306.7	148.5	5,827.4	1,908.5	2,243.1	1,433.5	242.4	466.6	1,814.5	1,016.0	2,668.3	1,575.9	-4.3	13,819.7

Source: ECB.

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

2) See Table 2.1, footnote 1.

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

3. Assets: flows ¹⁾

											Total
	Loans to euro area residents	General government	Other euro area residents	Holdings of securities other than shares issued by euro area residents	General government		Holdings of shares/ other equity issued by other euro area residents	External assets ²⁾	Fixed assets	Remaining assets	
1	2	3	4	5	6	7	8	9	10	11	
2001 Apr.	33.2	-8.2	41.4	12.1	6.6	5.5	18.4	-17.9	1.2	9.9	56.9
May	4.1	-5.6	9.7	25.9	20.8	5.1	1.0	-1.2	1.4	18.7	49.8
June	57.4	-2.6	60.0	14.0	13.3	0.7	-32.4	27.5	0.9	-1.4	66.0
July	12.7	-2.5	15.1	9.5	-3.2	12.7	-8.1	-41.3	1.1	-50.5	-76.5
Aug.	-18.9	-3.7	-15.2	4.9	-4.3	9.2	-6.0	57.2	0.3	-10.6	27.0
Sep.	48.6	1.0	47.5	-1.4	-4.3	2.9	-5.0	49.1	0.7	51.9	143.9
Oct.	25.7	-2.7	28.4	-7.0	-9.6	2.6	5.7	43.6	0.7	30.1	99.0
Nov.	65.7	16.0	49.7	9.9	7.9	2.1	-3.2	66.0	1.1	5.9	145.6
Dec.	27.7	3.7	24.1	-8.1	-10.2	2.1	22.3	-26.6	1.1	-17.2	-0.8
2002 Jan.	9.5	-3.1	12.7	26.8	21.9	5.0	-0.3	0.2	-2.5	31.0	64.8
Feb.	19.2	2.7	16.5	9.2	1.3	7.9	0.6	0.4	-0.9	-39.1	-10.5
Mar.	64.4	5.2	59.2	14.1	16.9	-2.9	-7.6	20.0	0.0	-48.1	42.8
Apr.	21.8	-20.0	41.8	-2.5	1.3	-3.8	6.5	18.8	-0.2	-13.2	31.3
May	25.6	-2.8	28.4	12.5	9.5	2.9	1.1	74.1	0.2	-21.1	92.4
June	40.9	1.4	39.5	-3.3	-1.5	-1.8	-4.5	-26.7	-0.2	24.7	30.9
July	-4.5	-1.8	-2.7	-3.0	-3.5	0.4	-10.9	-2.4	0.5	24.0	3.6
Aug.	-10.7	-10.9	0.2	-6.2	-1.5	-4.7	9.7	-7.3	1.0	-12.9	-26.3
Sep. ^(p)	46.7	2.7	44.0	15.0	12.5	2.5	-5.2	68.2	0.7	35.3	160.7

4. Liabilities: flows ¹⁾

														Total
	Currency in circulation	Deposits of central government	Deposits of other general government/ other euro area residents	Over-night	With agreed maturity	Redeemable at notice	Repurchase agreements	Money market fund shares/ units ³⁾	Money market paper and debt securities issued ³⁾	Capital and reserves	External liabilities ²⁾	Re-maining liabilities	Excess of inter-MFI liabilities	
2001 Apr.	-0.1	2.2	30.2	30.8	-0.5	1.1	-1.2	8.7	-2.4	1.3	18.4	-11.6	10.3	56.9
May	-3.3	-5.6	29.4	21.7	-3.0	-1.7	12.4	9.8	-11.7	8.4	11.8	12.4	-1.4	49.8
June	0.1	18.6	34.9	40.4	-1.6	8.3	-12.3	-1.5	20.4	19.1	-5.3	-18.2	-2.3	66.0
July	-5.0	-10.0	-8.2	-17.4	4.4	3.0	1.9	9.5	2.9	-6.5	-58.0	-11.1	9.8	-76.5
Aug.	-8.8	-3.1	-1.9	-29.6	16.3	3.9	7.5	10.5	1.4	7.3	30.1	-7.4	-1.2	27.0
Sep.	-9.6	-4.6	51.2	68.4	-17.4	5.3	-5.1	3.7	15.8	9.0	18.0	41.4	19.1	143.9
Oct.	-14.2	5.4	22.7	0.9	3.0	9.2	9.5	11.6	13.0	7.9	18.4	45.9	-11.8	99.0
Nov.	-15.7	-3.0	51.4	47.2	0.4	13.1	-9.2	9.8	23.9	2.9	38.5	33.1	4.6	145.6
Dec.	-40.0	-11.2	149.4	98.4	18.4	40.0	-7.4	-1.1	-0.7	14.6	-17.8	-74.7	-19.5	-0.8
2002 Jan.	6.8	10.4	-42.4	-49.4	-3.1	12.4	-2.3	19.8	10.4	13.3	13.8	21.4	11.3	64.8
Feb.	-6.2	6.9	0.3	-4.3	-2.5	2.1	4.9	10.8	4.8	-0.6	10.7	-36.5	-0.7	-10.5
Mar.	14.0	1.7	22.8	-3.8	16.1	2.2	8.4	3.2	18.4	2.6	25.6	-56.1	10.4	42.8
Apr.	7.4	0.0	27.6	32.1	5.2	-8.2	-1.5	8.0	-1.6	-4.9	20.6	-16.6	-9.2	31.3
May	12.2	-8.5	24.6	2.4	14.3	1.1	6.7	4.0	29.7	3.9	35.0	-10.0	1.5	92.4
June	12.0	6.0	31.2	48.2	-17.3	6.4	-6.1	-7.4	1.8	-17.2	-67.4	55.1	16.9	30.9
July	11.0	-3.1	-24.5	-31.7	5.5	2.5	-0.7	12.7	0.1	9.8	-0.7	11.9	-13.6	3.6
Aug.	4.4	-11.0	-5.0	-33.9	15.7	5.5	7.7	12.4	2.8	8.8	-23.6	-22.5	7.4	-26.3
Sep. ^(p)	5.6	7.5	44.6	56.9	-21.8	3.7	5.8	-2.0	3.3	9.7	59.8	40.4	-8.1	160.7

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

	M2							
	M1				Deposits with agreed maturity up to 2 years	Deposits redeemable at notice up to 3 months	Total	Index Dec. 98=100 ³⁾
	Currency in circulation	Overnight deposits	Total	Index Dec. 98=100 ³⁾				
			1	2	3	4	5	6	7	8
2001 Mar.	336.3	1,703.2	2,039.5	112.73	1,065.9	1,269.8	4,375.1	108.57
Apr.	336.2	1,735.9	2,072.1	114.53	1,067.8	1,273.4	4,413.3	109.52
May	332.9	1,759.2	2,092.1	115.46	1,069.0	1,273.2	4,434.3	109.85
June	333.0	1,798.4	2,131.4	117.66	1,066.2	1,283.0	4,480.6	111.03
July	328.0	1,780.3	2,108.3	116.48	1,073.2	1,287.2	4,468.7	110.83
Aug.	319.2	1,747.5	2,066.7	114.28	1,088.8	1,292.9	4,448.4	110.44
Sep.	309.6	1,815.1	2,124.7	117.47	1,070.9	1,299.7	4,495.3	111.59
Oct.	295.5	1,816.1	2,111.6	116.78	1,074.7	1,311.6	4,497.9	111.66
Nov.	279.7	1,864.6	2,144.3	118.55	1,077.6	1,326.4	4,548.2	112.87
Dec.	239.7	1,968.2	2,207.9	122.08	1,088.8	1,367.9	4,664.6	115.76
2002 Jan.	246.5	1,921.9	2,168.4	119.84	1,081.0	1,390.4	4,639.8	115.11
Feb.	240.3	1,917.2	2,157.5	119.24	1,076.7	1,394.5	4,628.8	114.85
Mar.	254.3	1,914.3	2,168.6	119.88	1,088.5	1,397.9	4,655.0	115.52
Apr.	261.7	1,945.7	2,207.4	122.10	1,092.4	1,391.9	4,691.7	116.52
May	273.9	1,945.6	2,219.5	122.90	1,100.4	1,394.0	4,713.9	117.21
June	285.8	1,992.3	2,278.2	126.25	1,075.3	1,400.0	4,753.6	118.36
July	296.8	1,959.7	2,256.5	124.99	1,083.7	1,403.0	4,743.1	117.95
Aug.	301.2	1,927.3	2,228.4	123.45	1,096.9	1,408.9	4,734.2	117.74
Sep. ^(p)	306.7	1,984.5	2,291.3	126.93	1,073.9	1,411.8	4,776.9	118.82

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	Overnight deposits	Total	Annual growth rate ³⁾ (%)				
			1	2	3	4	5	6	7	8
2001 Apr.	-0.1	32.6	32.5	1.6	2.2	3.7	38.4	3.3
May	-3.3	20.1	16.9	3.2	-3.2	-0.5	13.2	3.7
June	0.1	39.6	39.7	4.3	-2.1	9.8	47.4	4.5
July	-5.0	-16.4	-21.4	3.3	9.1	4.4	-7.9	4.4
Aug.	-8.8	-30.9	-39.7	3.2	18.4	5.9	-15.5	4.3
Sep.	-9.6	67.4	57.7	5.5	-18.2	6.8	46.3	5.3
Oct.	-14.2	1.6	-12.6	5.0	3.3	11.8	2.6	5.4
Nov.	-15.7	47.8	32.0	5.5	1.9	14.8	48.8	5.9
Dec.	-40.0	103.9	63.9	5.1	11.1	41.5	116.5	6.1
2002 Jan.	6.8	-47.3	-40.5	6.7	-6.7	21.1	-26.1	6.8
Feb.	-6.2	-4.6	-10.8	6.3	-4.0	4.1	-10.6	6.4
Mar.	14.0	-2.5	11.5	6.3	12.3	3.4	27.2	6.4
Apr.	7.4	32.9	40.2	6.6	5.7	-5.8	40.1	6.4
May	12.2	2.1	14.3	6.4	11.4	2.3	28.0	6.7
June	12.0	48.7	60.6	7.3	-20.9	6.3	46.0	6.6
July	11.0	-33.8	-22.8	7.3	3.7	2.8	-16.3	6.4
Aug.	4.4	-32.1	-27.8	8.0	13.5	6.0	-8.3	6.6
Sep. ^(p)	5.6	57.2	62.8	8.1	-22.5	2.9	43.2	6.5

Source: ECB.

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

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

M3 ²⁾						
Repurchase agreements	Money market fund shares/units	Money market paper and debt securities up to 2 years	Total	Index Dec. 98=100 ³⁾		
9	10	11	12	13		
222.6	346.1	139.3	5,083.1	110.91		2001 Mar.
221.4	354.1	140.0	5,128.7	111.88		Apr.
233.8	363.0	135.0	5,166.1	112.51		May
221.5	360.5	145.2	5,207.8	113.44		June
223.4	369.6	140.4	5,202.1	113.41		July
230.8	380.7	142.5	5,202.4	113.53		Aug.
225.7	384.7	147.6	5,253.4	114.49		Sep.
235.1	395.9	149.5	5,278.4	115.02		Oct.
225.9	404.5	152.2	5,330.8	116.20		Nov.
218.5	402.0	145.9	5,430.9	118.38		Dec.
216.2	420.8	141.8	5,418.7	118.18		2002 Jan.
221.1	431.6	138.8	5,420.3	118.21		Feb.
229.6	435.9	137.2	5,457.8	119.06		Mar.
228.1	442.2	134.7	5,496.7	120.01		Apr.
234.8	447.3	144.0	5,540.0	121.07		May
229.6	443.7	133.0	5,559.9	121.63		June
228.8	455.5	125.6	5,553.1	121.35		July
236.5	468.7	126.5	5,566.0	121.62		Aug.
242.4	466.6	132.1	5,618.1	122.75		Sep. ^(p)

M3 ²⁾						
Repurchase agreements	Money market fund shares/units	Money market paper and debt securities up to 2 years	Total	Annual growth rate ³⁾ (%)		
9	10	11	12	13		
-1.2	8.7	-1.6	44.3	3.9		2001 Apr.
12.4	9.8	-6.5	28.9	4.5		May
-12.3	-1.5	9.2	42.9	5.6		June
1.9	9.5	-4.9	-1.5	5.6		July
7.5	10.5	2.8	5.3	5.9		Aug.
-5.1	3.7	-0.9	44.0	6.9		Sep.
9.5	11.6	0.5	24.2	7.3		Oct.
-9.2	9.8	5.1	54.4	7.7		Nov.
-7.4	-1.1	-8.0	100.0	7.7		Dec.
-2.3	19.8	-0.4	-9.1	7.8		2002 Jan.
4.9	10.8	-3.9	1.2	7.4		Feb.
8.4	3.2	0.3	39.1	7.3		Mar.
-1.5	8.0	-3.3	43.4	7.3		Apr.
6.7	4.0	10.0	48.7	7.6		May
-6.1	-7.4	-6.9	25.6	7.2		June
-0.7	12.7	-8.9	-13.2	7.0		July
7.7	12.4	1.0	12.8	7.1		Aug.
5.8	-2.0	4.6	51.7	7.2		Sep. ^(p)

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

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

Table 2.4 (cont'd)
Monetary aggregates ¹⁾ and counterparts
(EUR billions and percentage growth rates, unless otherwise indicated)
3. Seasonally adjusted levels at the end of the period

	M2							
	M1				Other short-term deposits ⁵⁾		Total	Index Dec. 98=100 ⁴⁾
	Currency in circulation 1	Overnight deposits 2	Total	Index	Total	Index		
			3	Dec. 98=100 ⁴⁾		4	Dec. 98=100 ⁴⁾	
						7	8	
2001 Mar.	338.9	1,716.5	2,055.4	113.62	2,321.4	104.40	4,376.9	108.61
Apr.	337.5	1,725.0	2,062.5	114.00	2,338.6	105.18	4,401.1	109.22
May	332.5	1,750.1	2,082.7	114.94	2,337.0	104.90	4,419.7	109.49
June	329.1	1,765.7	2,094.8	115.64	2,356.7	105.82	4,451.5	110.31
July	323.6	1,770.0	2,093.6	115.66	2,372.2	106.62	4,465.8	110.76
Aug.	317.9	1,788.7	2,106.6	116.49	2,378.0	107.01	4,484.7	111.35
Sep.	309.1	1,821.1	2,130.2	117.78	2,390.8	107.57	4,521.0	112.23
Oct.	297.2	1,842.2	2,139.4	118.32	2,405.6	108.21	4,545.0	112.83
Nov.	279.1	1,876.1	2,155.3	119.16	2,421.1	108.86	4,576.3	113.57
Dec.	233.9	1,921.7	2,155.5	119.18	2,441.6	109.78	4,597.1	114.09
2002 Jan.	251.8	1,926.7	2,178.5	120.40	2,450.4	110.16	4,628.9	114.84
Feb.	245.0	1,933.0	2,178.0	120.38	2,457.8	110.51	4,635.8	115.02
Mar.	253.1	1,924.8	2,178.0	120.40	2,473.6	111.25	4,651.5	115.44
Apr.	263.6	1,933.8	2,197.4	121.55	2,480.1	111.63	4,677.5	116.17
May	271.9	1,944.1	2,216.0	122.70	2,484.2	111.98	4,700.2	116.88
June	282.0	1,947.3	2,229.2	123.54	2,487.0	112.30	4,716.2	117.43
July	292.8	1,954.3	2,247.1	124.47	2,496.5	112.51	4,743.6	117.96
Aug.	299.9	1,963.4	2,263.4	125.39	2,502.1	112.78	4,765.5	118.52
Sep. ^(p)	307.6	1,992.1	2,299.7	127.40	2,510.8	113.19	4,810.6	119.66

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 Apr.	-1.4	8.4	7.0	0.3	1.6	17.5	0.8	4.9	24.5	0.6	3.4
May	-5.0	22.0	17.0	0.8	2.9	-6.3	-0.3	4.1	10.7	0.2	3.6
June	-3.4	16.0	12.6	0.6	4.0	20.5	0.9	4.7	33.0	0.7	4.3
July	-5.4	5.9	0.5	0.0	3.4	17.8	0.8	5.3	18.2	0.4	4.4
Aug.	-5.7	20.7	14.9	0.7	3.6	8.7	0.4	5.1	23.7	0.5	4.4
Sep.	-8.9	32.2	23.3	1.1	5.0	12.4	0.5	5.2	35.7	0.8	5.1
Oct.	-11.9	21.6	9.7	0.5	5.2	14.3	0.6	5.7	24.0	0.5	5.5
Nov.	-18.0	33.2	15.2	0.7	5.9	14.5	0.6	5.9	29.7	0.7	6.0
Dec.	-45.3	45.8	0.5	0.0	5.5	20.5	0.8	7.2	21.0	0.5	6.4
2002 Jan.	17.9	4.1	22.0	1.0	6.6	8.5	0.3	6.8	30.4	0.7	6.7
Feb.	-6.8	6.4	-0.4	0.0	6.2	7.7	0.3	6.5	7.3	0.2	6.4
Mar.	8.1	-7.8	0.3	0.0	6.0	16.4	0.7	6.6	16.7	0.4	6.3
Apr.	10.4	10.5	20.9	1.0	6.6	8.5	0.3	6.1	29.4	0.6	6.4
May	8.3	12.5	20.8	0.9	6.8	7.7	0.3	6.7	28.6	0.6	6.7
June	10.1	5.0	15.1	0.7	6.8	7.2	0.3	6.1	22.3	0.5	6.5
July	10.8	6.0	16.8	0.8	7.6	4.7	0.2	5.5	21.5	0.5	6.5
Aug.	7.2	9.4	16.6	0.7	7.6	6.0	0.2	5.4	22.6	0.5	6.4
Sep. ^(p)	7.7	28.7	36.3	1.6	8.2	9.2	0.4	5.2	45.5	1.0	6.6

Source: ECB.

- 1) Monetary aggregates comprise monetary liabilities of MFIs and central government (Post Office, Treasury) vis-à-vis non-MFI euro area residents excluding central government.
- 2) M3 and its components exclude holdings by non-residents of the euro area of money market fund shares/units, money market paper and debt securities up to 2 years.
- 3) Loans, with other components of credit, are shown without seasonal adjustment on page 20*.
- 4) For the calculations of the index and the growth rates, see the technical notes.

M3 ²⁾				Loans to other euro area residents (excluding government) ³⁾		
Marketable instruments ⁶⁾		Total	Index Dec. 98=100 ⁴⁾	Total	Index Dec. 98=100 ⁴⁾	
Total	Index Dec. 98=100 ⁴⁾					
9	10	11	12	13	14	
695.9	126.20	5,072.8	110.69	6,266.5	121.94	2001 Mar.
701.5	126.96	5,102.6	111.31	6,301.1	122.65	Apr.
711.0	128.56	5,130.7	111.74	6,334.5	123.09	May
725.3	131.14	5,176.8	112.77	6,364.2	123.79	June
737.2	133.36	5,203.1	113.43	6,381.1	124.29	July
752.2	136.09	5,236.9	114.28	6,398.0	124.81	Aug.
767.8	137.74	5,288.8	115.26	6,433.8	125.42	Sep.
787.1	141.07	5,332.0	116.19	6,465.5	126.01	Oct.
787.2	141.75	5,363.6	116.92	6,503.6	126.74	Nov.
794.8	143.06	5,391.9	117.53	6,510.0	126.99	Dec.
785.3	142.18	5,414.2	118.09	6,535.6	127.45	2002 Jan.
785.8	142.13	5,421.6	118.24	6,562.7	128.02	Feb.
788.8	142.78	5,440.3	118.68	6,597.3	128.72	Mar.
791.3	143.40	5,468.8	119.40	6,626.3	129.42	Apr.
802.7	145.40	5,502.9	120.26	6,657.4	130.22	May
805.2	145.76	5,521.4	120.79	6,665.9	130.54	June
814.6	147.35	5,558.2	121.46	6,680.8	130.75	July
830.0	150.00	5,595.5	122.27	6,722.9	131.59	Aug.
852.5	153.92	5,663.1	123.74	6,746.5	132.08	Sep. ⁶⁾

M3 ²⁾							Loans to other euro area residents (excluding government) ³⁾			
Marketable instruments ⁶⁾			Total	Monthly growth rate ⁴⁾ (%)	Annual growth rate ⁴⁾ (%)	3-month moving average (centred) (%)	Total	Monthly growth rate ⁴⁾ (%)	Annual growth rate ⁴⁾ (%)	
Total	Monthly growth rate ⁴⁾ (%)	Annual growth rate ⁴⁾ (%)								
12	13	14	15	16	17	18	19	20	21	
4.2	0.6	8.2	28.6	0.6	4.0	4.0	36.7	0.6	8.4	2001 Apr.
8.8	1.3	9.4	19.6	0.4	4.3	4.6	22.6	0.4	8.0	May
14.3	2.0	12.9	47.4	0.9	5.5	5.1	35.9	0.6	7.9	June
12.3	1.7	13.6	30.5	0.6	5.6	5.7	25.9	0.4	7.8	July
15.1	2.0	16.0	38.8	0.7	5.9	6.1	26.6	0.4	7.2	Aug.
9.1	1.2	17.6	44.8	0.9	6.8	6.7	31.0	0.5	6.7	Sep.
18.5	2.4	19.5	42.5	0.8	7.3	7.3	30.4	0.5	6.5	Oct.
3.8	0.5	19.7	33.5	0.6	7.8	7.7	37.5	0.6	6.6	Nov.
7.3	0.9	18.1	28.2	0.5	8.0	7.8	13.1	0.2	6.1	Dec.
-4.9	-0.6	14.4	25.6	0.5	7.8	7.7	23.1	0.4	5.8	2002 Jan.
-0.3	0.0	13.7	7.0	0.1	7.4	7.5	29.2	0.4	5.6	Feb.
3.6	0.5	13.1	20.3	0.4	7.2	7.3	36.4	0.6	5.6	Mar.
3.4	0.4	12.9	32.8	0.6	7.3	7.4	35.8	0.5	5.5	Apr.
11.1	1.4	13.1	39.6	0.7	7.6	7.3	40.9	0.6	5.8	May
2.0	0.3	11.1	24.3	0.4	7.1	7.3	16.5	0.2	5.5	June
8.8	1.1	10.5	30.2	0.5	7.1	7.1	10.7	0.2	5.2	July
14.7	1.8	10.2	37.2	0.7	7.0	7.1	42.7	0.6	5.4	Aug.
21.7	2.6	11.7	67.2	1.2	7.4	.	25.2	0.4	5.3	Sep. 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, money market paper and debt securities up to two years.

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

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

	Longer-term MFI liabilities				Credit ²⁾				Net external assets	Fixed assets
	Deposits with agreed maturity over 2 years	Deposits redeemable at notice over 3 months	Debt securities over 2 years	Capital and reserves	Credit to government	Credit to other euro area residents	Of which loans	Index Dec. 98 =100 ³⁾		
	1	2	3	4	5	6	7	8	9	10
2001 Mar.	1,172.5	126.4	1,576.9	927.0	2,019.1	7,129.9	6,274.6	122.10	-24.2	172.0
Apr.	1,169.7	124.6	1,577.7	928.1	2,016.9	7,195.0	6,313.9	122.90	-60.1	173.3
May	1,170.6	123.2	1,584.5	940.0	2,031.3	7,222.8	6,334.4	123.09	-77.5	174.6
June	1,170.9	122.0	1,593.0	965.9	2,042.1	7,247.9	6,388.2	124.26	-38.5	175.4
July	1,165.3	120.7	1,594.1	955.2	2,034.4	7,261.6	6,394.4	124.55	-23.9	176.5
Aug.	1,162.0	119.5	1,586.2	959.9	2,021.6	7,238.5	6,369.6	124.26	4.6	176.9
Sep.	1,163.0	118.6	1,604.7	970.4	2,025.0	7,284.1	6,421.9	125.18	57.8	177.6
Oct.	1,162.9	116.9	1,617.0	981.1	2,014.0	7,325.2	6,451.6	125.74	80.9	178.3
Nov.	1,161.6	115.8	1,606.6	982.6	2,034.3	7,379.6	6,501.9	126.71	101.4	179.1
Dec.	1,169.1	115.8	1,613.6	996.2	2,026.9	7,424.8	6,519.3	127.17	88.3	180.0
2002 Jan.	1,173.2	112.3	1,632.9	1,007.6	2,051.1	7,444.6	6,534.4	127.42	74.3	177.5
Feb.	1,174.7	111.2	1,638.8	1,011.5	2,055.2	7,465.6	6,548.8	127.74	69.9	176.6
Mar.	1,178.2	109.9	1,655.8	1,010.6	2,081.7	7,513.4	6,606.2	128.90	58.5	176.4
Apr.	1,177.0	108.0	1,650.2	1,004.7	2,061.7	7,551.1	6,641.3	129.71	57.4	176.2
May	1,178.8	106.8	1,660.5	1,008.9	2,071.4	7,573.8	6,659.8	130.27	95.6	176.4
June	1,181.2	106.6	1,655.4	985.7	2,069.1	7,598.4	6,691.3	131.04	116.1	176.2
July	1,180.4	106.6	1,670.3	993.3	2,064.3	7,589.2	6,692.7	130.99	113.9	176.8
Aug.	1,168.9	106.8	1,687.3	1,004.2	2,053.0	7,592.9	6,692.3	130.99	134.1	177.7
Sep. ⁴⁾	1,169.2	107.2	1,681.5	1,016.0	2,073.4	7,630.5	6,734.8	131.85	147.0	178.4

6. Main counterpart parts of M3: flows ⁴⁾

	Longer-term MFI liabilities				Credit ²⁾				Net external assets	Fixed assets
	Deposits with agreed maturity over 2 years	Deposits redeemable at notice over 3 months	Debt securities over 2 years	Capital and reserves	Credit to government	Credit to other euro area residents	Of which loans	Annual growth rate ³⁾ (%)		
	1	2	3	4	5	6	7	8	9	10
2001 Apr.	-2.7	-1.9	-0.1	1.3	-1.6	65.3	41.4	8.4	-36.4	1.2
May	0.1	-1.4	-5.1	8.4	15.2	15.8	9.7	8.0	-13.0	1.4
June	0.5	-1.1	11.5	19.1	10.7	28.4	60.0	7.9	32.7	0.9
July	-4.7	-1.4	7.5	-6.5	-5.6	19.8	15.1	7.7	16.7	1.1
Aug.	-2.1	-1.2	-1.2	7.3	-8.0	-11.9	-15.2	7.2	27.1	0.3
Sep.	0.8	-0.9	17.5	9.0	-3.3	45.5	47.5	6.7	31.2	0.7
Oct.	-0.3	-1.7	12.7	7.9	-12.3	36.8	28.4	6.5	25.2	0.7
Nov.	-1.6	-1.1	18.7	2.9	23.8	48.6	49.7	6.6	27.5	1.1
Dec.	7.3	0.1	7.6	14.6	-6.6	48.5	24.1	6.1	-8.9	1.1
2002 Jan.	3.6	-3.6	11.0	13.3	18.7	17.3	12.7	5.7	-13.6	-2.5
Feb.	1.6	-1.0	9.3	-0.6	4.0	25.1	16.5	5.6	-10.3	-0.9
Mar.	3.7	-1.3	18.7	2.6	22.2	48.8	59.2	5.6	-5.7	0.0
Apr.	-0.5	-1.9	1.2	-4.9	-18.6	44.5	41.8	5.5	-1.7	-0.2
May	3.0	-1.2	19.7	3.9	6.7	32.5	28.4	5.8	39.1	0.2
June	3.6	-0.2	8.8	-17.2	-0.1	33.2	39.5	5.5	40.7	-0.2
July	1.8	0.0	8.8	9.8	-5.3	-13.1	-2.7	5.2	-1.8	0.5
Aug.	2.2	0.2	1.6	8.8	-12.4	5.3	0.2	5.4	16.3	1.0
Sep. ⁴⁾	0.7	0.4	-1.6	9.7	15.2	41.3	44.0	5.3	8.4	0.7

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	Up to 1 year	Index Dec.98 =100 ²⁾	Total	Up to 1 year	Index Dec.98 =100 ²⁾	Central government ³⁾	Other general government					Total	Index Dec.98 =100 ²⁾
								State government	Local government		Social security funds			
	Over 5 years	Over 5 years												
1	2	3	4	5	6	7	8	9	10	11	12	13	14	
2000 Q4	395.0	252.9	142.9	31.5	21.8	114.8	172.2	297.3	255.4	350.9	315.8	14.6	835.0	99.4
<i>Euro area enlargement</i>														
2001 1 Jan.	395.4	253.4	-	31.6	21.8	-	185.6	297.3	255.4	351.5	316.4	15.2	849.6	-
2001 Q1	418.2	273.1	153.0	36.4	26.8	132.3	188.4	295.2	255.3	352.4	314.0	15.6	851.7	99.0
Q2	425.5	280.7	155.8	36.2	26.7	131.5	174.1	294.0	254.9	350.4	312.4	17.2	835.7	97.1
Q3	409.0	256.8	149.6	37.4	26.9	137.1	167.3	293.9	254.1	349.7	312.0	18.9	829.8	96.5
Q4	434.6	276.2	159.9	34.9	24.8	127.8	170.1	298.3	252.0	362.9	322.3	16.4	847.7	98.5
2002 Q1	459.0	305.0	169.1	38.9	28.3	142.2	180.4	294.0	248.2	362.1	318.2	16.5	853.0	99.1
Q2 ⁴⁾	461.4	304.1	169.9	37.8	26.8	137.4	162.4	280.9	245.8	368.0	316.3	17.9	829.3	96.5

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	Up to 1 year	Annual growth rate ²⁾ (%)	Total	Up to 1 year	Annual growth rate ²⁾ (%)	Central government ³⁾	Other general government					Total	Annual growth rate ²⁾ (%)
								State government	Local government		Social security funds			
	Over 5 years	Over 5 years												
1	2	3	4	5	6	7	8	9	10	11	12	13	14	
2001 Q1	28.1	22.7	19.7	4.8	5.0	-2.1	-0.5	-2.0	-0.1	-0.7	-3.7	0.4	-2.9	-0.5
Q2	7.5	7.6	14.8	-0.2	-0.1	-6.9	-14.8	-1.3	-0.4	-2.0	-1.7	1.6	-16.4	-1.9
Q3	-16.8	-23.9	7.8	1.5	0.2	13.8	-6.2	0.0	-0.7	-0.7	-0.4	1.7	-5.2	-0.8
Q4	28.0	21.6	11.9	-2.5	-2.1	11.3	1.9	4.4	-2.1	13.2	10.3	-2.5	16.9	-0.9
2002 Q1	25.0	29.3	10.5	3.9	3.5	7.5	10.1	-4.3	-3.8	-0.8	-4.1	0.1	5.1	0.1
Q2 ⁴⁾	2.3	-0.9	9.1	-1.3	-1.5	4.5	-16.8	-13.1	-2.4	5.9	-1.9	1.4	-22.5	-0.7

Source: ECB.

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

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

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

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

Table 2.5 (cont'd)

MFI loans by counterpart, type and original maturity ¹⁾

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

3. Loans to non-financial sectors other than government: levels at the end of the period

	Non-financial corporations					Consumer credit ³⁾				
	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Total	Index Dec.98 =100 ²⁾	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Total	Index Dec.98 =100 ²⁾
	1	2	3	4	5	6	7	8	9	10
2000 Q4	968.0	429.8	1,287.9	2,685.7	118.6	97.5	165.2	212.9	475.7	115.9
<i>Euro area enlargement</i>										
2001 1 Jan.	996.6	436.6	1,293.6	2,726.9	-	102.1	166.1	213.0	481.2	-
2001 Q1	1,034.2	445.9	1,313.6	2,793.7	120.9	98.7	168.4	212.8	479.9	115.0
Q2	1,051.7	456.3	1,343.4	2,851.5	123.1	100.1	171.1	217.7	488.8	117.5
Q3	1,027.2	467.3	1,371.8	2,866.2	124.3	100.6	170.7	221.7	493.1	118.6
Q4	1,017.9	489.8	1,394.3	2,902.0	125.9	102.6	170.4	226.7	499.6	120.0
2002 Q1	1,018.6	494.8	1,418.4	2,931.8	126.9	99.4	170.5	229.2	499.1	119.9
Q2 ^(p)	1,017.5	503.6	1,433.6	2,954.7	129.0	102.7	175.2	232.8	510.6	122.1

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

	Non-financial corporations					Consumer credit ³⁾				
	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Total	Annual growth rate ²⁾ (%)	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Total	Annual growth rate ²⁾ (%)
	1	2	3	4	5	6	7	8	9	10
2001 Q1	32.7	5.4	13.8	52.0	10.1	-4.4	0.1	0.5	-3.8	4.5
Q2	13.6	12.1	25.9	51.7	9.1	1.3	3.9	5.2	10.4	5.2
Q3	-19.3	14.3	32.3	27.3	7.5	0.9	-0.5	4.1	4.5	3.6
Q4	-10.1	23.9	22.5	36.3	6.1	1.9	-0.7	4.9	6.1	3.6
2002 Q1	-1.2	4.9	20.0	23.7	5.0	-4.2	1.2	2.5	-0.5	4.3
Q2 ^(p)	7.1	14.3	27.5	48.9	4.8	3.3	2.3	3.6	9.2	3.9

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											Non-profit institutions serving households			
Lending for house purchase ³⁾					Other lending					Total	Index Dec.98 =100 ²⁾	Total	Index Dec.98 =100 ²⁾	
Up to 1 year	Over 1 and up to 5 years	Over 5 years	Total	Index Dec.98 =100 ²⁾	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Total	Index Dec.98 =100 ²⁾					
11	12	13	14	15	16	17	18	19	20	21	22	23	24	
22.2	62.4	1,792.7	1,877.3	121.7	147.4	101.3	340.0	588.6	112.8	2,941.6	118.8	38.2	109.3	2000 Q4
<i>Euro area enlargement</i>														
22.2	62.9	1,803.4	1,888.5	-	147.6	101.0	340.0	588.5	-	2,958.2	-	38.2	-	2001 1 Jan.
22.7	62.6	1,830.0	1,915.4	123.5	146.9	104.5	342.1	593.5	113.9	2,988.7	120.1	37.3	106.5	2001 Q1
23.3	63.2	1,866.3	1,952.8	125.7	148.8	100.9	342.7	592.4	114.9	3,034.0	122.0	40.7	116.5	Q2
23.6	61.9	1,904.0	1,989.5	128.1	144.3	100.8	342.1	587.2	114.1	3,069.8	123.5	39.0	111.6	Q3
23.8	62.0	1,933.0	2,018.8	130.0	144.6	101.9	343.6	590.0	115.2	3,108.5	125.2	39.0	111.7	Q4
24.2	61.8	1,970.5	2,056.6	132.4	142.6	101.0	337.9	581.6	114.7	3,137.2	126.6	38.7	110.7	2002 Q1
24.6	62.2	2,010.3	2,097.1	135.0	145.0	103.0	342.9	590.9	116.8	3,198.7	129.0	39.4	112.7	Q2 ^(p)

Households											Non-profit institutions serving households			
Lending for house purchase ³⁾					Other lending					Total	Annual growth rate ²⁾ (%)	Total	Annual growth rate ²⁾ (%)	
Up to 1 year	Over 1 and up to 5 years	Over 5 years	Total	Annual growth rate ²⁾ (%)	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Total	Annual growth rate ²⁾ (%)					
11	12	13	14	15	16	17	18	19	20	21	22	23	24	
0.4	-0.2	27.9	28.1	8.1	0.4	3.1	2.3	5.8	3.2	30.1	6.5	-1.0	-4.8	2001 Q1
0.6	0.6	32.1	33.3	7.6	2.0	-1.8	5.3	5.5	2.9	49.3	6.2	3.5	8.1	Q2
0.2	-1.3	38.3	37.2	7.6	-4.5	0.1	0.2	-4.3	2.3	37.4	5.9	-1.7	3.7	Q3
0.2	0.1	28.7	29.0	6.8	0.3	3.4	2.1	5.9	2.2	41.0	5.3	0.0	2.2	Q4
0.4	-0.2	37.6	37.9	7.2	-1.5	-0.4	-0.8	-2.7	0.7	34.7	5.4	-0.4	3.9	2002 Q1
0.4	0.4	39.8	40.6	7.4	2.6	2.5	5.8	10.8	1.7	60.6	5.7	0.7	-3.3	Q2 ^(p)

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

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

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

	Non-monetary financial intermediaries except insurance corporations and pension funds					Insurance corporations and pension funds					General government					
	Total ²⁾				Index Dec.98 =100 ³⁾	Total ²⁾				Index Dec.98 =100 ³⁾	Central government	Other general government			Total	Index Dec.98 =100 ³⁾
	Over-night	With agreed maturity	Repos			Over-night	With agreed maturity	Repos				State government	Local government	Social security funds		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
2000 Q4	431.1	153.6	198.9	74.0	130.9	477.6	40.6	418.5	15.3	114.8	164.5	30.6	68.2	53.2	316.5	120.1
<i>Euro area enlargement</i>																
2001 1 Jan.	434.1	154.1	200.2	75.2	-	479.9	40.7	418.5	17.5	-	166.2	30.6	69.1	55.1	321.0	-
2001 Q1	442.8	151.8	195.1	91.2	133.5	483.8	38.2	423.3	18.8	115.7	150.3	30.9	65.0	57.2	303.5	113.4
Q2	456.3	164.3	196.7	89.3	136.4	486.3	41.4	424.2	16.9	116.4	165.5	31.4	66.8	60.8	324.6	121.3
Q3	456.1	162.7	202.6	85.6	134.0	487.8	39.3	426.9	17.9	116.8	147.8	33.3	67.4	60.4	308.9	115.5
Q4	468.6	157.9	218.7	86.7	136.4	495.4	48.0	427.5	16.4	118.6	139.0	30.0	68.9	61.0	299.0	111.7
2002 Q1	487.6	158.1	230.1	93.4	141.4	498.6	43.9	433.0	17.7	119.3	157.5	31.0	64.2	61.8	314.4	117.7
Q2 ⁴⁾	490.1	163.8	227.3	93.5	141.9	504.3	48.8	433.4	18.5	120.7	153.2	34.4	65.5	59.6	312.8	117.1

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 Q1	8.6	-2.5	-5.1	16.0	1.9	3.9	-2.5	4.7	1.3	4.3	-15.6	0.1	-4.1	2.1	-17.5	10.6
Q2	9.6	12.4	-2.1	-1.8	4.4	2.8	3.4	1.0	-1.9	4.5	15.1	0.5	1.9	3.6	21.1	6.5
Q3	-8.2	-1.6	-2.1	-3.7	2.2	1.5	-2.1	2.7	1.0	4.6	-17.7	1.9	0.5	-0.5	-15.7	-2.0
Q4	8.1	-4.6	11.4	1.2	4.2	7.6	8.8	0.6	-1.4	3.3	-8.8	-3.4	1.5	0.7	-10.0	-6.9
2002 Q1	17.0	0.1	9.5	6.7	5.8	3.0	-4.2	5.4	1.3	3.1	19.0	1.0	-4.7	0.7	16.1	3.8
Q2 ⁴⁾	1.9	5.3	-2.4	-0.5	4.0	5.7	4.9	0.4	0.7	3.7	-4.2	3.5	1.4	-2.1	-1.6	-3.4

Source: ECB.

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

2) Including deposits redeemable at notice.

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

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

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

	Non-financial corporations						Households ²⁾					
	Overnight	With agreed maturity	Redeemable at notice	Repos	Total	Index Dec.98 =100 ³⁾	Overnight	With agreed maturity	Redeemable at notice	Repos	Total	Index Dec.98 =100 ³⁾
	1	2	3	4	5	6	7	8	9	10	11	12
2000 Q4	497.5	324.7	24.1	26.3	872.5	111.2	906.9	1,131.5	1,241.5	57.1	3,337.0	103.5
<i>Euro area enlargement</i>												
2001 1 Jan.	504.5	337.9	24.2	30.5	897.2	-	910.4	1,154.0	1,292.3	69.6	3,426.4	-
2001 Q1	479.0	348.2	24.1	32.4	883.7	108.5	906.1	1,192.4	1,287.1	78.9	3,464.5	104.6
Q2	514.6	334.7	24.4	32.1	905.8	110.8	947.2	1,198.8	1,293.5	81.3	3,520.8	106.3
Q3	514.8	321.9	25.4	34.5	896.7	111.9	963.6	1,203.8	1,305.3	84.6	3,557.3	107.5
Q4	577.1	336.6	27.5	36.5	977.6	121.6	1,043.5	1,195.8	1,365.7	76.8	3,681.9	111.4
2002 Q1	529.1	345.9	27.5	35.3	937.9	116.6	1,039.2	1,181.2	1,382.6	81.5	3,684.5	111.5
Q2 ⁴⁾	557.5	338.8	27.7	37.9	961.9	121.8	1,077.3	1,178.9	1,382.3	78.0	3,716.5	112.5

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

	Non-financial corporations						Households ²⁾					
	Overnight	With agreed maturity	Redeemable at notice	Repos	Total	Annual growth rate ³⁾ (%)	Overnight	With agreed maturity	Redeemable at notice	Repos	Total	Annual growth rate ³⁾ (%)
	1	2	3	4	5	6	7	8	9	10	11	12
2001 Q1	-28.5	5.8	-0.1	1.8	-21.1	7.4	-4.6	37.8	-5.8	9.3	36.7	2.4
Q2	32.7	-13.8	0.3	-0.4	18.9	6.1	41.1	6.4	6.3	2.3	56.2	4.4
Q3	3.9	1.7	0.4	2.5	8.6	5.2	16.2	5.2	12.7	3.4	37.4	6.0
Q4	62.1	12.0	2.0	2.0	78.2	9.4	80.1	-2.9	60.3	-7.8	129.8	7.6
2002 Q1	-48.5	9.1	0.0	-1.2	-40.6	7.4	-4.3	-10.3	15.1	4.7	5.2	6.6
Q2 ⁴⁾	34.8	4.5	0.2	2.3	41.9	9.9	37.7	-2.0	0.4	-3.5	32.5	5.8

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.98 =100 ³⁾	Banks ¹⁾		Non-banks				Total	Index Dec.98 =100 ³⁾
	Total	Index Dec.98 =100 ³⁾	General govern- ment	Other	Total	Index Dec.98 =100 ³⁾			Total	Index Dec.98 =100 ³⁾	General govern- ment	Other	Total	Index Dec.98 =100 ³⁾		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
2000 Q4	945.4	92.9	78.9	445.6	524.5	127.0	1,469.9	102.7	174.2	175.4	290.6	184.2	474.8	108.9	649.0	121.2
<i>Euro area enlargement</i>																
2001 1 Jan.	964.1	-	78.9	449.3	528.2	-	1,492.3	-	171.3	-	296.2	184.0	480.2	-	651.5	-
2001 Q1	1,051.6	99.8	76.3	518.0	594.2	142.1	1,645.8	111.9	192.3	191.0	285.9	205.1	491.0	112.7	683.2	127.2
Q2	1,071.2	99.9	79.2	519.3	598.5	139.7	1,669.6	111.3	210.5	204.8	294.6	208.7	503.2	113.5	713.7	130.4
Q3	1,082.8	103.1	75.1	527.8	602.8	145.9	1,685.6	115.4	206.6	207.6	273.8	213.0	486.8	113.4	693.4	130.9
Q4	1,118.1	105.9	75.2	543.7	618.9	147.4	1,737.0	117.9	236.4	233.7	290.2	217.6	507.8	116.8	744.2	138.5
2002 Q1	1,104.5	104.4	76.8	556.6	633.5	151.1	1,738.0	117.8	262.6	258.9	276.0	217.6	493.6	113.7	756.2	140.7
Q2 ^(p)	1,085.9	109.5	73.5	529.0	602.6	154.4	1,688.5	122.4	243.9	255.4	243.3	212.8	456.1	111.6	700.0	138.4

2. Flows ⁴⁾

	Loans to non-residents								Holdings of securities other than shares issued by non-residents							
	Banks ¹⁾²⁾		Non-banks				Total	Annual growth rate ³⁾ (%)	Banks ¹⁾		Non-banks				Total	Annual growth rate ³⁾ (%)
	Total	Annual growth rate ³⁾ (%)	General govern- ment	Other	Total	Annual growth rate ³⁾ (%)			Total	Annual growth rate ³⁾ (%)	General govern- ment	Other	Total	Annual growth rate ³⁾ (%)		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
2001 Q1	70.3	7.0	3.7	58.4	62.1	20.5	132.5	11.6	15.5	30.5	4.9	11.7	16.6	6.2	32.1	12.0
Q2	1.0	3.4	2.9	-12.6	-9.7	18.4	-8.7	8.3	13.9	30.9	9.2	-5.8	3.4	5.3	17.3	11.7
Q3	34.9	10.2	-4.1	30.5	26.5	19.6	61.3	13.5	2.9	26.6	-22.3	21.9	-0.4	3.2	2.6	9.2
Q4	29.4	14.1	0.1	6.1	6.2	16.1	35.7	14.8	25.9	33.2	16.7	-2.4	14.3	7.2	40.2	14.2
2002 Q1	-16.0	4.6	3.6	11.9	15.5	6.4	-0.5	5.3	25.5	35.5	-10.8	-2.6	-13.4	0.8	12.0	10.6
Q2 ^(p)	53.2	9.6	-3.3	17.0	13.7	10.5	66.9	9.9	-3.5	24.7	-35.4	26.5	-8.9	-1.7	-12.3	6.1

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

Table 2.7 (cont'd)

Holdings of shares and other equity issued by non-residents						Deposits held by non-residents								
Banks ¹⁾		Other		Total	Index Dec.98 =100 ³⁾	Banks ¹⁾		Non-banks				Total	Index Dec.98 =100 ³⁾	
Total	Index Dec.98 =100 ³⁾	Total	Index Dec.98 =100 ³⁾			Total	Index Dec.98 =100 ³⁾	General government	Other	Total	Index Dec.98 =100 ³⁾			
17	18	19	20	21	22	23	24	25	26	27	28	29	30	
61.6	241.9	80.0	192.7	141.6	210.2	1,550.9	124.1	84.6	504.0	588.7	138.0	2,139.6	127.6	2000 Q4
<i>Euro area enlargement</i>														
62.3	-	80.2	-	142.5	-	1,560.8	-	85.6	507.9	593.4	-	2,154.3	-	2001 1 Jan.
65.1	252.2	94.3	227.3	159.4	235.4	1,781.7	139.6	89.3	577.1	666.4	152.7	2,448.2	143.0	2001 Q1
61.1	236.4	97.2	233.7	158.3	233.3	1,817.5	139.3	94.9	587.1	681.9	153.4	2,499.4	142.9	Q2
63.6	245.8	89.9	215.6	153.5	225.8	1,710.8	135.8	93.0	588.5	681.5	158.0	2,392.3	141.5	Q3
73.0	269.9	89.8	217.4	162.8	236.1	1,718.4	134.9	95.3	615.0	710.3	162.6	2,428.8	142.0	Q4
76.9	281.9	98.5	241.0	175.4	254.9	1,740.4	135.5	99.0	636.8	735.8	167.9	2,476.2	143.8	2002 Q1
77.8	286.1	97.9	239.8	175.8	255.9	1,606.7	133.5	96.0	606.9	702.8	169.9	2,309.6	142.8	Q2 ⁴⁾

Holdings of shares and other equity issued by non-residents						Deposits held by non-residents								
Banks ¹⁾		Other		Total	Annual growth rate ³⁾ (%)	Banks ¹⁾		Non-banks				Total	Annual growth rate ³⁾ (%)	
Total	Annual growth rate ³⁾ (%)	Total	Annual growth rate ³⁾ (%)			Total	Annual growth rate ³⁾ (%)	General government	Other	Total	Annual growth rate ³⁾ (%)			
17	18	19	20	21	22	23	24	25	26	27	28	29	30	
2.6	27.0	14.4	46.7	17.0	38.1	193.5	13.3	3.5	59.6	63.1	21.1	256.6	15.3	2001 Q1
-4.1	15.3	2.7	45.4	-1.4	32.2	-3.6	14.6	5.6	-2.7	2.8	18.2	-0.8	15.6	Q2
2.4	8.5	-7.5	13.5	-5.1	11.4	-45.2	11.3	-1.9	22.4	20.6	14.0	-24.6	12.0	Q3
6.2	11.6	0.8	12.8	7.0	12.3	-12.0	8.7	2.3	17.5	19.8	17.9	7.8	11.2	Q4
3.3	11.8	9.8	6.1	13.0	8.3	7.6	-2.9	4.2	19.0	23.2	9.9	30.7	0.6	2002 Q1
1.1	21.0	-0.5	2.6	0.6	9.7	-25.1	-4.1	-3.0	11.6	8.5	10.7	-16.5	-0.1	Q2 ⁴⁾

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

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

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

	MFIs								Non-MFIs							
	All currencies 1	Euro ²⁾ 2	Other EU currencies 3	Other currencies 4	Other currencies				All currencies 9	Euro ²⁾ 10	Other EU currencies 11	Other currencies 12	Other currencies			
					USD 5	JPY 6	CHF 7	Other 8					USD 13	JPY 14	CHF 15	Other 16
2000 Q4	3,949.7	3,526.3	47.5	376.0	265.0	34.4	61.0	15.6	5,434.7	5,256.5	27.3	150.9	115.1	14.6	11.3	10.0
<i>Euro area enlargement</i>																
2001 Q1	4,059.7	3,559.0	55.4	445.3	316.6	40.2	67.8	20.7	5,578.2	5,367.8	31.2	179.2	130.8	23.8	12.3	12.2
Q2	4,072.5	3,586.1	52.8	433.6	309.0	40.3	65.4	19.0	5,693.8	5,480.8	30.7	182.3	133.5	24.0	11.6	13.2
Q3	4,101.6	3,624.2	48.9	428.5	300.6	38.9	71.0	17.9	5,706.8	5,507.8	28.2	170.9	125.7	22.1	10.8	12.2
Q4	4,166.0	3,694.1	46.6	425.4	307.6	33.0	67.2	17.6	5,922.5	5,721.2	26.0	175.4	127.4	24.5	10.5	13.0
2002 Q1	4,128.6	3,640.1	46.1	442.4	315.8	40.0	65.6	21.0	5,923.1	5,719.3	28.5	175.2	126.9	23.1	10.7	14.6
Q2 ³⁾	4,227.3	3,783.6	42.8	400.8	278.7	40.7	63.3	18.2	5,999.5	5,810.4	26.8	162.3	115.1	23.1	11.0	13.1

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

	Banks ³⁾								Non-banks							
	All currencies 1	Euro ²⁾ 2	Other EU currencies 3	Other currencies 4	Other currencies				All currencies 9	Euro ²⁾ 10	Other EU currencies 11	Other currencies 12	Other currencies			
					USD 5	JPY 6	CHF 7	Other 8					USD 13	JPY 14	CHF 15	Other 16
2000 Q4	1,550.9	590.9	126.8	833.2	684.3	53.1	65.8	30.1	588.7	254.1	64.1	270.5	225.6	20.5	12.3	12.2
<i>Euro area enlargement</i>																
2001 Q1	1,781.7	698.6	142.6	940.6	776.8	66.4	65.8	31.5	666.4	295.7	70.6	300.2	255.9	17.6	14.2	12.4
Q2	1,817.5	690.1	133.8	993.6	815.4	72.9	73.2	32.2	681.9	286.7	73.2	322.0	274.2	19.3	13.6	14.9
Q3	1,710.8	664.3	140.3	906.2	745.2	53.5	76.3	31.2	681.5	297.7	69.2	314.5	263.0	18.4	17.1	16.0
Q4	1,718.4	631.1	132.3	955.1	799.1	48.5	75.3	32.1	710.3	308.1	60.8	341.4	293.9	16.8	18.1	12.6
2002 Q1	1,740.4	661.9	144.8	933.7	781.0	44.4	74.6	33.8	735.8	312.7	66.6	356.5	302.8	20.0	18.9	14.8
Q2 ³⁾	1,606.7	647.5	142.1	817.1	669.5	39.3	73.7	34.6	702.8	321.9	62.9	318.1	269.6	19.3	18.0	11.2

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

	Debt securities								Money market paper							
	All currencies 1	Euro ²⁾ 2	Other EU currencies 3	Other currencies 4	Other currencies				All currencies 9	Euro ²⁾ 10	Other EU currencies 11	Other currencies 12	Other currencies			
					USD 5	JPY 6	CHF 7	Other 8					USD 13	JPY 14	CHF 15	Other 16
2000 Q4	2,567.1	2,246.1	46.5	274.5	157.3	62.1	35.4	19.7	262.2	215.8	2.4	44.1	34.0	5.6	2.9	1.5
<i>Euro area enlargement</i>																
2001 Q1	2,667.7	2,327.9	48.3	291.4	172.0	61.5	37.5	20.5	278.5	227.8	2.1	48.6	41.6	3.0	2.6	1.5
Q2	2,731.3	2,358.3	53.9	319.1	189.3	69.4	39.6	20.8	275.5	227.0	4.3	44.2	35.8	4.7	2.5	1.1
Q3	2,751.5	2,384.7	52.9	313.9	187.4	68.6	38.5	19.5	265.0	217.9	4.0	43.2	36.0	3.1	2.8	1.2
Q4	2,780.1	2,377.9	67.9	334.4	209.7	63.8	40.6	20.2	254.7	204.8	6.0	43.9	37.9	2.8	2.1	1.1
2002 Q1	2,844.8	2,428.7	71.5	344.6	219.8	56.4	43.3	25.2	274.7	226.1	5.4	43.2	36.9	2.4	2.6	1.3
Q2 ³⁾	2,849.1	2,447.0	68.4	333.7	207.9	55.4	44.5	25.9	285.5	233.8	6.6	45.0	39.1	1.8	2.4	1.7

Source: ECB.

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

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

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

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

	MFIs								Non-MFIs							
	All currencies 1	Euro ²⁾ 2	Other EU currencies 3	Other currencies 4	Other currencies				All currencies 9	Euro ²⁾ 10	Other EU currencies 11	Other currencies 12	Other currencies			
					USD 5	JPY 6	CHF 7	Other 8					USD 13	JPY 14	CHF 15	Other 16
2000 Q4	3,937.8	-	-	-	-	-	-	-	6,927.0	6,622.8	32.4	271.8	151.6	41.2	74.3	4.7
<i>Euro area enlargement</i>																
2001 Q1	4,081.2	-	-	-	-	-	-	-	7,126.0	6,782.7	35.1	308.1	182.3	45.4	74.9	5.6
Q2	4,089.4	-	-	-	-	-	-	-	7,223.5	6,857.3	29.4	336.9	204.7	51.7	74.0	6.5
Q3	4,082.8	-	-	-	-	-	-	-	7,251.4	6,907.3	30.9	313.1	177.9	52.1	77.3	5.8
Q4	4,174.5	-	-	-	-	-	-	-	7,366.7	7,025.3	29.8	311.7	181.3	47.8	77.5	5.1
2002 Q1	4,126.3	-	-	-	-	-	-	-	7,458.5	7,106.8	30.5	321.1	187.0	51.0	76.8	6.3
Q2 ^(p)	4,209.1	-	-	-	-	-	-	-	7,519.9	7,205.8	28.7	285.4	153.8	48.9	77.1	5.6

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

	Issued by MFIs								Issued by non-MFIs							
	All currencies 1	Euro ²⁾ 2	Other EU currencies 3	Other currencies 4	Other currencies				All currencies 9	Euro ²⁾ 10	Other EU currencies 11	Other currencies 12	Other currencies			
					USD 5	JPY 6	CHF 7	Other 8					USD 13	JPY 14	CHF 15	Other 16
2000 Q4	935.8	895.3	11.0	29.5	19.8	5.9	2.1	1.7	1,355.0	1,321.0	5.8	28.2	16.7	9.7	1.0	0.9
<i>Euro area enlargement</i>																
2001 Q1	971.8	931.5	9.7	30.5	20.6	6.3	1.7	1.8	1,453.2	1,413.3	3.8	36.0	21.2	13.1	1.1	0.6
Q2	994.4	951.3	11.0	32.1	22.1	6.5	1.6	1.8	1,506.9	1,465.1	4.9	36.9	21.7	13.3	1.1	0.8
Q3	999.2	959.7	9.6	29.9	21.0	5.9	1.5	1.5	1,521.2	1,482.2	4.2	34.8	20.4	12.6	1.2	0.6
Q4	1,011.8	966.8	12.4	32.6	23.1	6.3	1.4	1.8	1,515.2	1,477.4	3.7	34.1	20.3	12.1	1.1	0.6
2002 Q1	1,050.2	1,002.0	14.8	33.4	24.0	5.6	1.8	1.9	1,574.4	1,537.8	3.7	32.9	19.5	11.7	1.1	0.6
Q2 ^(p)	1,062.5	1,015.6	13.6	33.4	23.7	5.8	2.1	1.8	1,581.9	1,547.0	4.2	30.7	17.0	11.8	1.2	0.8

6. Loans to non-residents of the euro area

	Banks ³⁾								Non-banks							
	All currencies 1	Euro ²⁾ 2	Other EU currencies 3	Other currencies 4	Other currencies				All currencies 9	Euro ²⁾ 10	Other EU currencies 11	Other currencies 12	Other currencies			
					USD 5	JPY 6	CHF 7	Other 8					USD 13	JPY 14	CHF 15	Other 16
2000 Q4	945.4	410.0	89.2	446.2	337.8	44.2	32.6	31.7	524.5	163.3	45.3	315.8	271.2	11.5	25.9	7.2
<i>Euro area enlargement</i>																
2001 Q1	1,051.6	468.4	98.7	484.6	365.8	46.3	34.5	37.0	594.2	198.2	48.6	347.4	301.2	11.9	26.2	8.0
Q2	1,071.2	473.2	103.0	494.9	375.9	47.3	36.7	35.0	598.5	184.7	47.7	366.1	318.5	12.1	26.9	8.6
Q3	1,082.8	487.2	101.5	494.1	378.6	41.2	40.3	33.9	602.8	201.5	46.8	354.5	307.9	12.7	24.9	9.0
Q4	1,118.1	450.5	114.7	552.9	435.9	45.2	37.9	33.8	618.9	202.6	46.8	369.6	323.5	12.0	25.7	8.4
2002 Q1	1,104.5	432.0	131.1	541.5	424.3	45.6	37.3	34.3	633.5	199.5	49.9	384.1	331.6	16.4	26.9	9.2
Q2 ^(p)	1,085.9	458.4	129.0	498.5	377.9	59.2	37.9	23.6	602.6	205.4	46.5	350.7	301.5	12.8	27.8	8.7

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

	Issued by banks ³⁾								Issued by non-banks							
	All currencies 1	Euro ²⁾ 2	Other EU currencies 3	Other currencies 4	Other currencies				All currencies 9	Euro ²⁾ 10	Other EU currencies 11	Other currencies 12	Other currencies			
					USD 5	JPY 6	CHF 7	Other 8					USD 13	JPY 14	CHF 15	Other 16
2000 Q4	174.2	61.4	20.0	92.9	78.2	7.7	2.5	4.6	474.8	111.7	31.8	331.2	290.9	27.1	3.6	9.7
<i>Euro area enlargement</i>																
2001 Q1	192.3	65.2	23.0	104.1	89.9	7.3	2.3	4.6	491.0	121.0	24.4	345.5	307.1	25.7	2.7	10.1
Q2	210.5	72.4	25.5	112.6	98.4	6.8	2.6	4.8	503.2	121.3	25.8	356.1	316.2	26.9	3.0	9.9
Q3	206.6	76.4	27.0	103.2	93.1	4.7	2.1	3.4	486.8	129.0	27.1	330.7	292.7	27.1	3.9	7.1
Q4	236.4	80.5	27.6	128.3	118.1	4.2	2.7	3.3	507.8	131.4	27.0	349.4	306.2	30.3	4.2	8.7
2002 Q1	262.6	86.8	33.5	142.3	130.6	4.4	2.9	4.5	493.6	127.7	26.9	339.0	298.6	24.6	5.0	10.8
Q2 ^(p)	243.9	87.0	32.4	124.5	111.7	4.3	2.6	6.0	456.1	129.9	25.1	301.0	259.5	25.1	4.9	11.5

3 Financial markets and interest rates in the euro area

Table 3.1

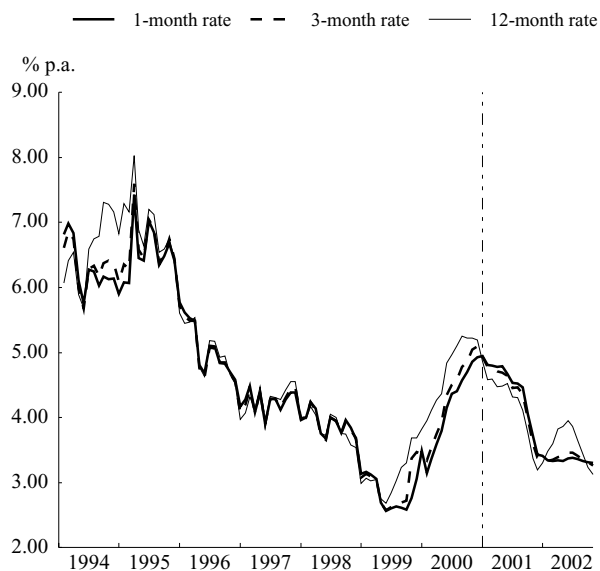
Money market interest rates ¹⁾

(percentages per annum)

	Euro area ⁴⁾					United States ⁶⁾	Japan ⁶⁾
	Overnight deposits ²⁾³⁾ 1	1-month deposits ⁵⁾ 2	3-month deposits ⁵⁾ 3	6-month deposits ⁵⁾ 4	12-month deposits ⁵⁾ 5	3-month deposits ⁶⁾ 6	3-month deposits ⁷⁾ 7
1997	3.98	4.23	4.24	4.25	4.28	5.76	0.62
1998	3.09	3.84	3.83	3.78	3.77	5.57	0.66
1999	2.74	2.86	2.96	3.06	3.19	5.42	0.22
2000	4.12	4.24	4.40	4.55	4.78	6.53	0.28
<i>Euro area enlargement</i>							
2001	4.39	4.33	4.26	4.16	4.09	3.78	0.15
2001 Oct.	3.97	3.72	3.60	3.46	3.37	2.40	0.08
Nov.	3.51	3.43	3.39	3.26	3.20	2.10	0.08
Dec.	3.34	3.42	3.34	3.26	3.30	1.92	0.08
2002 Jan.	3.29	3.35	3.34	3.34	3.48	1.82	0.09
Feb.	3.28	3.34	3.36	3.40	3.59	1.90	0.10
Mar.	3.26	3.35	3.39	3.50	3.82	1.99	0.10
Apr.	3.32	3.34	3.41	3.54	3.86	1.97	0.08
May	3.31	3.37	3.46	3.62	3.95	1.91	0.08
June	3.35	3.38	3.46	3.59	3.87	1.88	0.07
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
2002 4 Oct.	3.29	3.30	3.25	3.13	3.05	1.76	0.07
11	3.29	3.31	3.26	3.18	3.15	1.78	0.07
18	3.29	3.32	3.29	3.19	3.18	1.83	0.07
25	3.29	3.30	3.25	3.16	3.15	1.82	0.07
1 Nov.	3.30	3.28	3.24	3.13	3.07	1.66	0.08

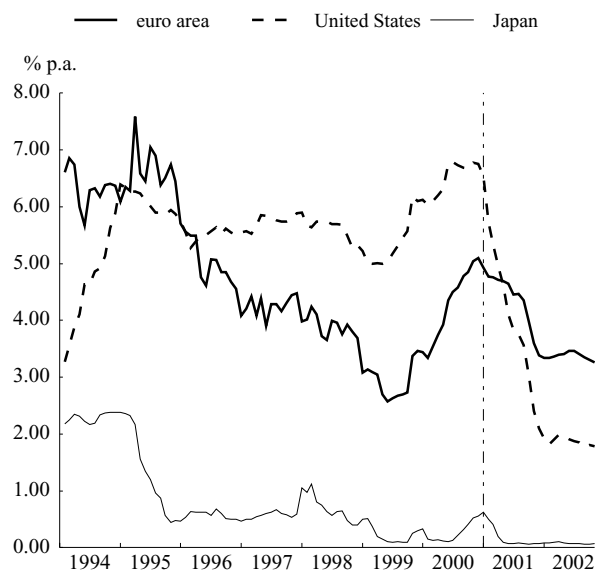
Euro area money market rates

(monthly)



3-month money market rates

(monthly)



Sources: Reuters and ECB.

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

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

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

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

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

6) London interbank offered rates (LIBOR).

Table 3.2

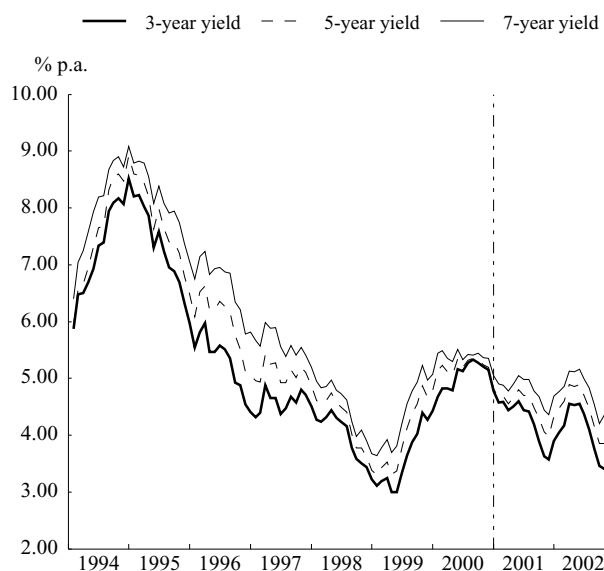
Government bond yields ¹⁾

(percentages per annum)

	Euro area ²⁾					United States	Japan
	2 years ¹⁾	3 years ²⁾	5 years ³⁾	7 years ⁴⁾	10 years ⁵⁾	10 years ⁶⁾	10 years ⁷⁾
1997	4.33	4.51	4.87	5.20	5.99	6.45	2.15
1998	3.16	3.22	3.38	3.67	4.71	5.33	1.30
1999	3.38	3.63	4.01	4.38	4.66	5.64	1.75
2000	4.90	5.03	5.19	5.37	5.44	6.03	1.76
<i>Euro area enlargement</i>							
2001	4.11	4.23	4.49	4.79	5.03	5.01	1.34
2001 Oct.	3.44	3.63	4.05	4.44	4.82	4.55	1.36
Nov.	3.36	3.58	3.98	4.37	4.67	4.61	1.33
Dec.	3.66	3.90	4.33	4.68	4.96	5.07	1.35
2002 Jan.	3.84	4.04	4.48	4.76	5.02	5.00	1.42
Feb.	3.96	4.17	4.60	4.85	5.07	4.90	1.52
Mar.	4.25	4.55	4.90	5.13	5.32	5.28	1.45
Apr.	4.21	4.53	4.86	5.12	5.30	5.21	1.39
May	4.25	4.55	4.89	5.16	5.30	5.15	1.38
June	4.10	4.37	4.70	4.99	5.16	4.90	1.36
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
2002 4 Oct.	2.99	3.27	3.70	4.23	4.51	3.72	1.15
11	3.15	3.42	3.82	4.31	4.57	3.75	1.10
18	3.22	3.52	4.00	4.50	4.74	4.16	1.09
25	3.22	3.50	3.97	4.48	4.73	4.11	1.07
1 Nov.	3.08	3.36	3.84	4.40	4.67	4.00	0.98

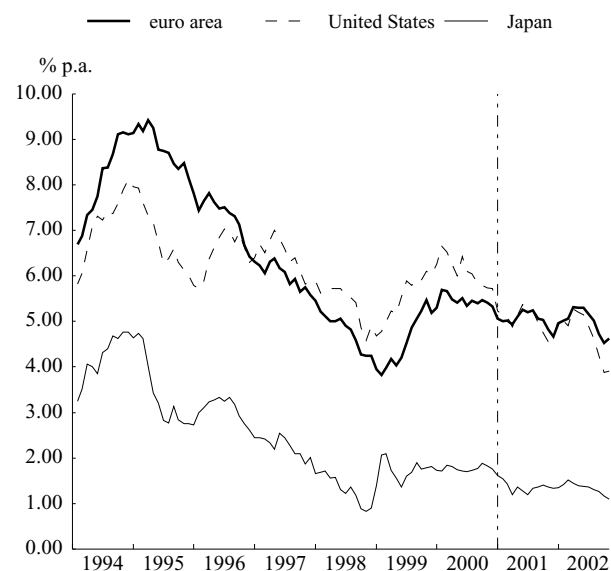
Euro area government bond yields

(monthly)



10-year government bond yields

(monthly)



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

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

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

Table 3.3

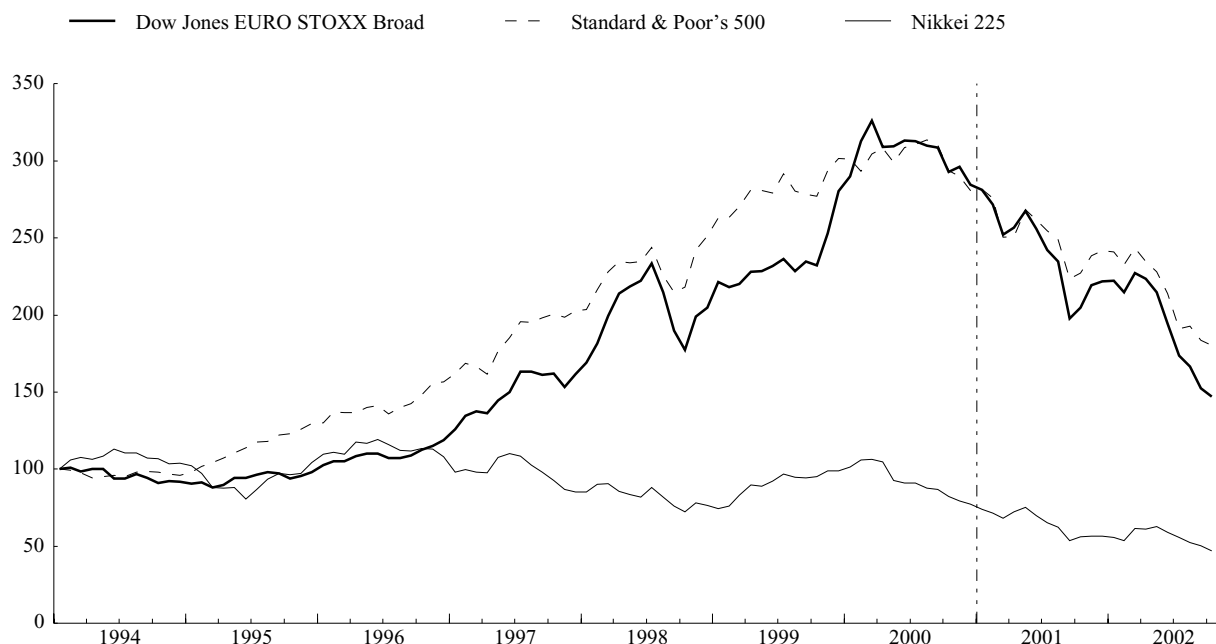
Stock market indices

(index levels, in points) ¹⁾

	Dow Jones EURO STOXX indices												United States	Japan
	Benchmark		Main economic sector indices											
	Broad	50	Basic materials	Consumer cyclical	Consumer non-cyclical	Energy	Financial	Industrial	Technology	Utilities	Telecommunications	Health-care			Standard & Poor's 500	Nikkei 225
1	2	3	4	5	6	7	8	9	10	11	12	13	14	
1997	207.6	2,319.6	233.4	191.9	231.9	227.3	184.4	168.0	227.7	205.5	324.1	301.7	873.9	18,373.4
1998	280.5	3,076.3	257.9	245.0	295.5	249.3	281.3	218.4	333.6	282.4	488.1	348.9	1,085.3	15,338.4
1999	325.8	3,787.3	279.2	262.9	327.7	286.0	295.7	285.1	470.4	306.2	717.7	392.6	1,327.8	16,829.9
2000	423.9	5,075.5	299.1	292.9	324.3	342.3	350.7	378.0	963.1	341.7	1,072.5	476.0	1,426.7	17,162.7
<i>Euro area enlargement</i>														
2001	336.3	4,049.4	296.0	228.2	303.3	341.4	321.6	310.0	530.5	309.6	541.2	540.1	1,193.8	12,114.8
2001 Oct.	284.4	3,440.9	260.5	180.4	281.1	322.5	269.9	253.7	373.4	302.7	418.9	539.7	1,076.6	10,428.8
2001 Nov.	304.2	3,674.4	281.3	202.1	286.7	313.7	287.5	270.6	464.5	297.0	473.2	528.8	1,130.3	10,519.7
2001 Dec.	308.0	3,708.4	286.2	209.9	288.8	313.0	285.6	282.2	496.4	286.4	480.9	520.9	1,144.9	10,490.8
2002 Jan.	308.5	3,690.1	293.2	210.8	287.8	320.2	286.3	281.8	494.5	291.1	459.7	524.8	1,140.5	10,338.5
2002 Feb.	297.9	3,537.6	294.9	198.6	288.5	334.0	275.1	279.3	463.7	291.1	406.3	490.1	1,101.5	9,966.9
2002 Mar.	315.4	3,739.6	312.9	215.5	296.5	355.0	294.8	299.0	494.4	291.2	429.3	486.3	1,153.3	11,452.5
2002 Apr.	310.2	3,657.0	308.6	210.2	302.8	351.5	299.5	299.0	438.6	296.9	409.7	472.1	1,112.0	11,391.6
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
2002 June	269.8	3,143.1	293.1	187.5	282.1	324.6	263.8	275.3	312.4	273.0	302.4	408.1	1,014.0	10,965.9
2002 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
2002 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
2002 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
2002 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
2002 4 Oct.	191.8	2,224.7	204.6	127.9	235.6	269.7	160.4	186.1	198.3	211.0	265.4	334.2	800.6	9,027.6
2002 11	200.2	2,351.8	212.7	131.3	233.8	275.9	173.3	190.0	222.4	204.9	284.8	340.0	835.3	8,529.6
2002 18	215.2	2,527.4	232.2	144.0	240.5	283.1	191.5	204.6	258.9	211.2	293.0	356.6	884.4	9,086.1
2002 25	210.8	2,456.9	214.9	141.3	236.8	269.8	185.8	195.0	263.5	210.6	307.3	348.0	897.7	8,726.3
2002 1 Nov.	213.9	2,487.7	214.8	143.6	238.3	271.0	188.7	198.2	277.1	211.9	309.9	351.0	901.0	8,685.7

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

(base month: January 1994 = 100; monthly)



Source: Reuters.

1) Monthly and yearly values are period averages.

Table 3.4

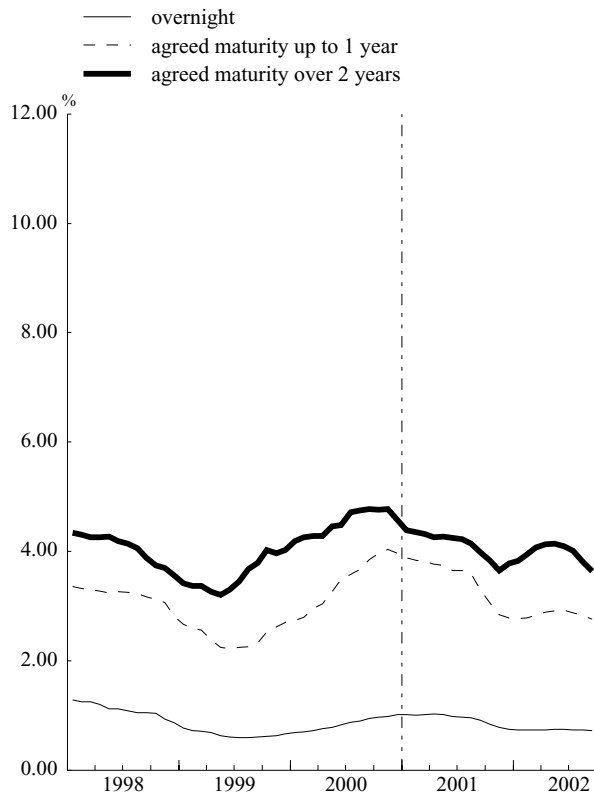
Retail bank interest rates

(percentages per annum; period averages)

	Deposit interest rates						Lending interest rates			
	Overnight 1	With agreed maturity			Redeemable at notice		To enterprises		To households	
		Up to 1 year 2	Up to 2 years 3	Over 2 years 4	Up to 3 months 5	Over 3 months 6	Up to 1 year 7	Over 1 year 8	Consumer lending 9	For house purchase 10
1999	0.65	2.44	2.45	3.57	2.15	2.76	5.65	5.10	9.39	5.29
2000	0.85	3.45	3.45	4.52	2.25	3.79	6.60	6.23	9.87	6.34
<i>Euro area enlargement</i>										
2001	0.94	3.49	3.49	4.12	2.40	3.59	6.83	6.15	10.12	5.97
2001 Sep.	0.91	3.28	3.28	3.98	2.36	3.33	6.71	6.07	10.08	5.86
Oct.	0.84	3.06	3.06	3.84	2.29	3.01	6.46	5.82	9.99	5.65
Nov.	0.78	2.84	2.83	3.65	2.19	2.75	6.31	5.71	9.87	5.48
Dec.	0.74	2.79	2.78	3.77	2.17	2.79	6.26	5.69	9.81	5.52
2002 Jan.	0.73	2.77	2.77	3.83	2.17	2.80	6.18	5.63	9.78	5.53
Feb.	0.73	2.78	2.79	3.95	2.15	2.91	6.16	5.75	9.81	5.61
Mar.	0.73	2.84	2.84	4.07	2.15	3.00	6.09	5.85	9.76	5.74
Apr.	0.74	2.89	2.90	4.13	2.14	3.07	6.17	5.95	9.82	5.81
May	0.74	2.91	2.92	4.15	2.15	3.08	6.20	5.98	9.85	5.82
June	0.74	2.93	2.94	4.09	2.13	3.08	6.17	5.92	9.81	5.77
July	0.74	2.88	2.89	4.02	2.13	3.02	6.15	5.79	9.76	5.68
Aug.	0.73	2.83	2.84	3.81	2.12	2.94	6.13	5.71	9.77	5.53
Sep.	0.73	2.77	2.77	3.64	2.12	2.73	6.09	5.61	9.80	5.37

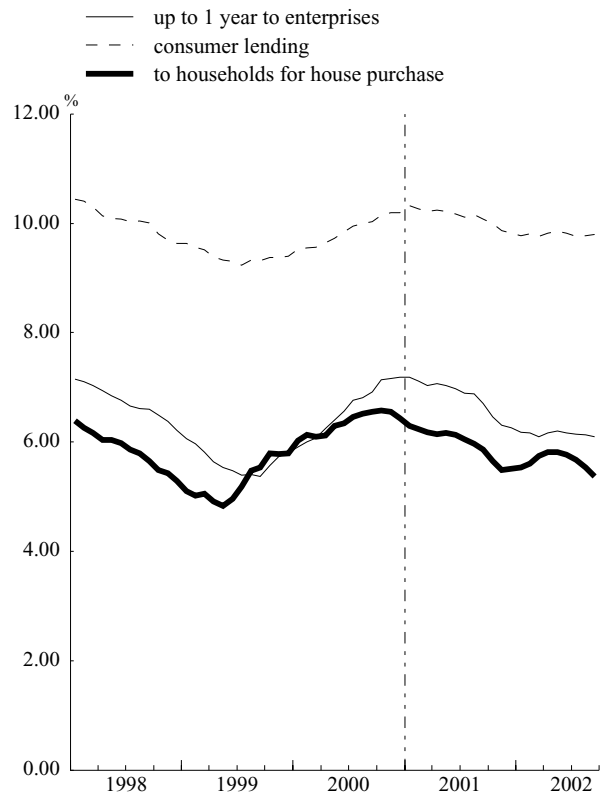
Deposit interest rates

(monthly)



Lending interest rates

(monthly)



Source: ECB.

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

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

	By euro area residents									
					In euro ¹⁾				In other	
	Issues	Redemptions	Net issues	Amounts outstanding	Issues	Redemptions	Net issues	Amounts outstanding	Issues	Redemptions
	1	2	3	4	5	6	7	8	9	10
2001 Aug.	423.7	419.1	4.6	740.2	405.0	399.9	5.1	655.3	18.7	19.2
Sep.	398.1	400.6	-2.5	737.9	374.5	376.6	-2.1	653.7	23.7	24.1
Oct.	498.9	496.0	2.9	744.0	480.2	471.4	8.8	662.7	18.7	24.6
Nov.	486.6	490.5	-3.9	741.7	459.6	466.6	-7.0	655.6	26.9	23.9
Dec.	332.5	376.7	-44.2	697.4	308.0	353.8	-45.7	610.8	24.5	22.9
2002 Jan.	485.8	453.9	31.8	732.8	464.3	432.9	31.4	643.6	21.5	21.0
Feb.	406.8	408.7	-1.9	728.6	387.0	387.8	-0.8	644.0	19.8	20.9
Mar.	421.1	403.5	17.6	748.4	400.1	383.5	16.7	662.4	20.9	20.0
Apr.	401.8	407.0	-5.1	742.8	376.7	384.4	-7.7	654.8	25.1	22.6
May	400.9	378.6	22.3	764.6	377.4	358.6	18.8	673.2	23.5	20.1
June	336.5	341.5	-5.0	760.4	315.8	318.7	-2.9	672.0	20.7	22.8
July	404.1	392.0	12.2	766.2	381.4	371.2	10.2	680.5	22.8	20.8
Aug.	383.9	377.9	6.0	769.7	365.6	356.8	8.8	688.9	18.3	21.1

2. Long-term

	By euro area residents									
					In euro ¹⁾				In other	
	Issues	Redemptions	Net issues	Amounts outstanding	Issues	Redemptions	Net issues	Amounts outstanding	Issues	Redemptions
	1	2	3	4	5	6	7	8	9	10
2001 Aug.	93.6	74.4	19.2	6,864.3	78.1	63.6	14.5	6,279.9	15.5	10.8
Sep.	124.7	106.8	17.9	6,884.7	109.1	88.4	20.7	6,300.9	15.6	18.3
Oct.	145.4	108.4	37.0	6,924.4	123.9	91.6	32.4	6,333.6	21.5	16.8
Nov.	142.4	92.4	50.1	6,978.9	116.0	86.5	29.4	6,362.7	26.5	5.8
Dec.	123.6	87.4	36.2	7,014.1	113.1	76.9	36.1	6,398.0	10.6	10.5
2002 Jan.	174.1	111.0	63.0	7,082.0	156.3	105.0	51.3	6,447.5	17.8	6.0
Feb.	143.0	109.3	33.8	7,117.1	130.4	97.6	32.8	6,481.5	12.7	11.7
Mar.	165.1	103.2	61.8	7,177.8	143.2	92.2	51.0	6,531.8	21.8	11.0
Apr.	126.2	79.9	46.3	7,214.4	115.3	74.8	40.5	6,572.9	10.9	5.2
May	153.9	87.0	66.9	7,268.2	132.4	75.4	57.0	6,631.1	21.6	11.6
June	132.5	95.3	37.3	7,282.6	122.8	87.7	35.2	6,662.5	9.7	7.6
July	130.0	112.6	17.4	7,311.7	113.6	102.9	10.7	6,676.9	16.4	9.7
Aug.	67.7	66.2	1.5	7,311.2	58.9	55.9	3.0	6,679.7	8.8	10.3

3. Total

	By euro area residents									
					In euro ¹⁾				In other	
	Issues	Redemptions	Net issues	Amounts outstanding	Issues	Redemptions	Net issues	Amounts outstanding	Issues	Redemptions
	1	2	3	4	5	6	7	8	9	10
2001 Aug.	517.2	493.5	23.7	7,604.5	483.1	463.4	19.6	6,935.2	34.2	30.0
Sep.	522.9	507.4	15.4	7,622.6	483.6	465.0	18.6	6,954.6	39.3	42.4
Oct.	644.3	604.4	39.9	7,668.4	604.1	563.0	41.1	6,996.3	40.2	41.4
Nov.	629.0	582.9	46.1	7,720.6	575.6	553.2	22.4	7,018.3	53.4	29.7
Dec.	456.1	464.1	-8.0	7,711.5	421.1	430.7	-9.6	7,008.8	35.0	33.4
2002 Jan.	659.8	564.9	94.9	7,814.7	620.6	538.0	82.6	7,091.1	39.2	27.0
Feb.	549.9	518.0	31.9	7,845.7	517.3	485.4	31.9	7,125.5	32.5	32.6
Mar.	586.1	506.7	79.4	7,926.2	543.3	475.7	67.7	7,194.2	42.8	31.0
Apr.	528.0	486.9	41.1	7,957.3	492.0	459.2	32.8	7,227.8	36.1	27.7
May	554.9	465.7	89.2	8,032.9	509.8	434.0	75.8	7,304.3	45.1	31.7
June	469.0	436.8	32.2	8,043.0	438.6	406.4	32.2	7,334.5	30.4	30.4
July	534.2	504.6	29.6	8,077.9	495.0	474.1	20.9	7,357.5	39.2	30.5
Aug.	451.6	444.1	7.5	8,081.0	424.5	412.7	11.8	7,368.6	27.1	31.4

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	
-0.6	84.9	9.9	14.7	-4.8	45.4	414.9	414.6	0.3	700.7	2001 Aug.
-0.4	84.2	22.0	12.0	10.0	55.4	396.5	388.5	8.0	709.1	Sep.
-5.8	81.3	8.8	20.0	-11.1	44.3	489.0	491.4	-2.4	707.0	Oct.
3.1	86.1	16.2	12.9	3.3	47.6	475.8	479.5	-3.7	703.2	Nov.
1.5	86.6	17.1	10.2	6.9	54.5	325.2	364.0	-38.8	665.4	Dec.
0.5	89.2	11.3	24.2	-12.9	41.6	475.6	457.1	18.5	685.3	2002 Jan.
-1.1	84.6	13.4	11.8	1.7	43.3	400.4	399.6	0.8	687.3	Feb.
0.9	86.0	24.3	7.9	16.4	59.7	424.5	391.4	33.1	722.1	Mar.
2.6	88.0	9.7	28.1	-18.4	41.3	386.4	412.5	-26.1	696.1	Apr.
3.5	91.5	13.7	13.4	0.3	41.5	391.1	372.0	19.1	714.7	May
-2.1	88.3	20.9	8.0	12.9	54.4	336.7	326.7	10.0	726.5	June
1.9	85.7	.	.	.	.	.	.	.	.	July
-2.8	80.8	.	.	.	.	.	.	.	.	Aug.

currencies		By non-residents of the euro area in euro ¹⁾				Total in euro ¹⁾				
		Net issues	Amounts outstanding	Issues	Redemptions	Net issues	Amounts outstanding	Issues	Redemptions		Net issues	Amounts outstanding
11	12	13	14	15	16	17	18	19	20	
4.7	584.4	13.0	6.0	7.0	837.6	91.1	69.6	21.5	7,117.5	2001 Aug.
-2.7	583.8	8.4	9.0	-0.6	837.0	117.5	97.5	20.1	7,137.9	Sep.
4.7	590.9	20.6	4.6	16.0	852.9	144.5	96.1	48.4	7,186.5	Oct.
20.7	616.2	30.1	7.4	22.8	875.7	146.1	93.9	52.2	7,238.4	Nov.
0.1	616.1	14.2	13.4	0.8	876.5	127.2	90.4	36.9	7,274.4	Dec.
11.8	634.5	19.6	6.8	12.7	889.2	175.9	111.9	64.0	7,336.6	2002 Jan.
1.0	635.6	19.7	13.9	5.9	895.1	150.1	111.5	38.6	7,376.6	Feb.
10.8	646.0	25.4	12.0	13.5	908.6	168.6	104.2	64.4	7,440.4	Mar.
5.8	641.5	22.9	7.6	15.4	924.2	138.2	82.3	55.9	7,497.2	Apr.
9.9	637.1	26.2	8.2	18.0	942.4	158.6	83.7	75.0	7,573.5	May
2.1	620.1	29.4	10.6	18.8	961.1	152.2	98.3	53.9	7,623.6	June
6.7	634.7	.	.	.	.	.	.	.	.	July
-1.5	631.5	.	.	.	.	.	.	.	.	Aug.

currencies		By non-residents of the euro area in euro ¹⁾				Total in euro ¹⁾				
		Net issues	Amounts outstanding	Issues	Redemptions	Net issues	Amounts outstanding	Issues	Redemptions		Net issues	Amounts outstanding
11	12	13	14	15	16	17	18	19	20	
4.1	669.3	22.9	20.7	2.2	883.0	506.0	484.2	21.8	7,818.2	2001 Aug.
-3.1	668.1	30.4	21.0	9.4	892.4	514.0	486.0	28.0	7,847.0	Sep.
-1.2	672.1	29.5	24.6	4.9	897.2	633.5	587.5	46.0	7,893.5	Oct.
23.7	702.2	46.3	20.2	26.0	923.3	621.9	573.4	48.5	7,941.6	Nov.
1.6	702.7	31.3	23.7	7.7	931.0	452.4	454.4	-2.0	7,939.8	Dec.
12.2	723.6	30.9	31.0	-0.1	930.8	651.5	569.0	82.5	8,021.9	2002 Jan.
-0.1	720.2	33.2	25.6	7.5	938.4	550.5	511.0	39.5	8,064.0	Feb.
11.8	732.0	49.8	19.9	29.9	968.3	593.1	495.6	97.5	8,162.5	Mar.
8.3	729.5	32.6	35.7	-3.0	965.5	524.6	494.9	29.8	8,193.3	Apr.
13.4	728.6	39.9	21.6	18.3	983.9	549.7	455.6	94.1	8,288.2	May
0.0	708.4	50.3	18.6	31.7	1,015.5	488.9	425.0	63.9	8,350.1	June
8.7	720.5	.	.	.	.	.	.	.	.	July
-4.3	712.3	.	.	.	.	.	.	.	.	Aug.

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

	By euro area residents						By non-residents			
	Total	MFIs (including Eurosystem)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations
	1	2	3	4	5	6	7	8	9	10
2001 Aug.	655.3	254.7	4.4	106.8	285.9	3.6	45.4	23.1	15.7	5.8
Sep.	653.7	251.9	4.1	106.4	287.5	3.7	55.4	27.1	22.2	5.5
Oct.	662.7	261.2	3.8	110.3	284.0	3.4	44.3	23.3	16.4	4.0
Nov.	655.6	250.9	3.9	106.1	291.2	3.6	47.6	23.6	19.4	3.4
Dec.	610.8	240.4	3.4	95.4	267.4	4.1	54.5	23.8	24.4	4.4
2002 Jan.	643.6	257.5	3.7	100.1	278.8	3.5	41.6	18.8	18.9	3.1
Feb.	644.0	251.9	3.9	98.1	286.7	3.5	43.3	19.9	19.0	3.6
Mar.	662.4	258.9	4.3	96.9	299.0	3.3	59.7	26.4	26.2	6.4
Apr.	654.8	256.1	4.5	92.4	298.8	3.0	41.3	18.2	18.5	3.8
May	673.2	262.6	3.7	89.6	314.3	3.0	41.5	18.3	19.0	3.5
June	672.0	260.7	3.8	81.9	322.5	3.0	54.4	21.3	27.6	4.4
July	680.5	265.3	4.2	86.0	321.7	3.4	.	.	.	.
Aug.	688.9	266.0	4.4	86.4	328.8	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
2001 Aug.	6,279.9	2,291.0	313.6	327.4	3,229.6	118.3	837.6	220.3	270.2	93.9
Sep.	6,300.9	2,297.5	318.0	325.9	3,237.2	122.4	837.0	221.1	271.0	93.3
Oct.	6,333.6	2,313.0	328.8	323.5	3,240.8	127.5	852.9	224.1	277.4	95.3
Nov.	6,362.7	2,315.5	337.3	339.8	3,240.9	129.2	875.7	228.3	288.9	99.7
Dec.	6,398.0	2,318.0	366.3	345.0	3,238.3	130.4	876.5	230.5	288.5	100.8
2002 Jan.	6,447.5	2,322.8	372.0	350.3	3,269.0	133.4	889.2	230.7	292.1	104.2
Feb.	6,481.5	2,344.2	376.5	353.5	3,274.3	133.0	895.1	234.2	295.0	105.1
Mar.	6,531.8	2,365.3	382.0	353.9	3,293.1	137.6	908.6	236.6	305.7	106.8
Apr.	6,572.9	2,374.4	392.1	359.2	3,305.1	142.2	924.2	239.3	311.2	107.3
May	6,631.1	2,388.3	409.4	364.5	3,321.2	147.7	942.4	242.8	318.1	110.1
June	6,662.5	2,398.0	413.6	367.9	3,332.9	150.1	961.1	250.0	331.8	109.8
July	6,676.9	2,396.0	422.0	369.9	3,329.9	159.1	.	.	.	.
Aug.	6,679.7	2,395.7	420.1	368.2	3,335.8	160.0	.	.	.	.

3. Total

	By euro area residents						By non-residents			
	Total	MFIs (including Eurosystem)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations
	1	2	3	4	5	6	7	8	9	10
2001 Aug.	6,935.2	2,545.7	318.0	434.1	3,515.5	121.8	883.0	243.4	285.9	99.7
Sep.	6,954.6	2,549.4	322.2	432.3	3,524.7	126.1	892.4	248.2	293.1	98.8
Oct.	6,996.3	2,574.2	332.6	433.8	3,524.8	130.8	897.2	247.4	293.8	99.3
Nov.	7,018.3	2,566.4	341.2	445.9	3,532.1	132.8	923.3	251.8	308.3	103.1
Dec.	7,008.8	2,558.4	369.7	440.4	3,505.6	134.6	931.0	254.4	312.9	105.2
2002 Jan.	7,091.1	2,580.3	375.7	450.4	3,547.8	136.9	930.8	249.5	311.0	107.4
Feb.	7,125.5	2,596.1	380.3	451.6	3,561.0	136.5	938.4	254.1	314.0	108.7
Mar.	7,194.2	2,624.2	386.3	450.8	3,592.1	140.9	968.3	262.9	331.9	113.2
Apr.	7,227.8	2,630.5	396.6	451.6	3,603.8	145.2	965.5	257.5	329.7	111.1
May	7,304.3	2,650.9	413.2	454.1	3,635.5	150.7	983.9	261.2	337.1	113.6
June	7,334.5	2,658.7	417.4	449.8	3,655.4	153.1	1,015.5	271.3	359.3	114.3
July	7,357.5	2,661.3	426.2	455.9	3,651.6	162.5	.	.	.	.
Aug.	7,368.6	2,661.7	424.5	454.6	3,664.6	163.3	.	.	.	.

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

of the euro area			Total							
Central government	Other general government	International organisations	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	International organisations	
11	12	13	14	15	16	17	18	19	20	
0.1	0.6	0.0	700.7	277.8	20.1	112.6	286.0	4.2	0.0	2001 Aug.
0.1	0.5	0.1	709.1	279.0	26.3	111.9	287.7	4.2	0.1	Sep.
0.1	0.3	0.2	707.0	284.5	20.2	114.3	284.2	3.7	0.2	Oct.
0.1	0.4	0.6	703.2	274.5	23.3	109.4	291.3	4.0	0.6	Nov.
0.1	0.5	1.3	665.4	264.3	27.8	99.8	267.5	4.7	1.3	Dec.
0.1	0.4	0.2	685.3	276.3	22.6	103.2	279.0	4.0	0.2	2002 Jan.
0.1	0.3	0.4	687.3	271.8	22.9	101.7	286.8	3.8	0.4	Feb.
0.1	0.2	0.4	722.1	285.2	30.5	103.3	299.2	3.5	0.4	Mar.
0.1	0.2	0.5	696.1	274.4	23.0	96.2	298.9	3.2	0.5	Apr.
0.1	0.2	0.4	714.7	280.9	22.7	93.1	314.4	3.2	0.4	May
0.2	0.5	0.5	726.5	282.0	31.4	86.4	322.7	3.5	0.5	June
.	.	.	.	.	.	.	.	.	.	July
.	.	.	.	.	.	.	.	.	.	Aug.

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	
93.8	46.0	113.4	7,117.5	2,511.3	583.8	421.3	3,323.4	164.3	113.4	2001 Aug.
92.0	46.0	113.6	7,137.9	2,518.5	589.0	419.2	3,329.1	168.4	113.6	Sep.
91.8	51.3	113.0	7,186.5	2,537.1	606.3	418.8	3,332.6	178.7	113.0	Oct.
91.5	51.7	115.7	7,238.4	2,543.7	626.2	439.5	3,332.4	180.9	115.7	Nov.
92.1	51.7	112.9	7,274.4	2,548.5	654.8	445.8	3,330.4	182.1	112.9	Dec.
91.3	56.5	114.4	7,336.6	2,553.5	664.1	454.6	3,360.3	189.8	114.4	2002 Jan.
92.0	56.3	112.5	7,376.6	2,578.4	671.5	458.6	3,366.4	189.3	112.5	Feb.
92.2	56.3	111.1	7,440.4	2,601.9	687.7	460.7	3,385.2	193.8	111.1	Mar.
94.1	61.3	111.0	7,497.2	2,613.7	703.4	466.5	3,399.2	203.5	111.0	Apr.
95.1	61.2	115.1	7,573.5	2,631.2	727.6	474.6	3,416.3	208.8	115.1	May
93.2	61.6	114.7	7,623.6	2,648.0	745.4	477.7	3,426.1	211.7	114.7	June
.	.	.	.	.	.	.	.	.	.	July
.	.	.	.	.	.	.	.	.	.	Aug.

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	
93.9	46.6	113.5	7,818.2	2,789.1	603.9	533.9	3,609.4	168.4	113.5	2001 Aug.
92.1	46.5	113.7	7,847.0	2,797.5	615.3	531.1	3,616.8	172.6	113.7	Sep.
92.0	51.6	113.2	7,893.5	2,821.6	626.4	533.1	3,616.8	182.4	113.2	Oct.
91.6	52.1	116.3	7,941.6	2,818.2	649.5	549.0	3,623.7	184.9	116.3	Nov.
92.2	52.2	114.1	7,939.8	2,812.8	682.6	545.6	3,597.9	186.7	114.1	Dec.
91.4	56.9	114.6	8,021.9	2,829.8	686.8	557.7	3,639.2	193.8	114.6	2002 Jan.
92.2	56.6	112.9	8,064.0	2,850.1	694.4	560.3	3,653.2	193.1	112.9	Feb.
92.3	56.5	111.5	8,162.5	2,887.1	718.2	564.0	3,684.4	197.4	111.5	Mar.
94.2	61.5	111.5	8,193.3	2,888.0	726.4	562.7	3,698.0	206.7	111.5	Apr.
95.2	61.4	115.5	8,288.2	2,912.1	750.3	567.6	3,730.6	212.1	115.5	May
93.4	62.1	115.2	8,350.1	2,930.0	776.8	564.1	3,748.8	215.2	115.2	June
.	.	.	.	.	.	.	.	.	.	July
.	.	.	.	.	.	.	.	.	.	Aug.

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

	By euro area residents						By non-residents			
	Total	MFIs (including Eurosystem)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations
	1	2	3	4	5	6	7	8	9	10
2001 Aug.	405.0	287.6	1.6	69.0	45.3	1.5	9.9	4.8	4.1	0.9
Sep.	374.5	269.9	2.2	66.4	34.3	1.8	22.0	8.0	11.4	2.2
Oct.	480.2	346.0	2.0	85.9	45.1	1.1	8.8	3.0	4.7	0.9
Nov.	459.6	347.5	2.3	66.4	42.2	1.3	16.2	6.4	7.9	1.1
Dec.	308.0	228.8	1.3	52.6	23.4	1.9	17.1	6.6	8.4	1.3
2002 Jan.	464.3	327.7	2.1	71.2	61.3	2.0	11.3	5.0	5.0	1.1
Feb.	387.0	268.6	2.6	66.0	47.9	1.9	13.4	5.0	6.5	1.5
Mar.	400.1	287.0	2.2	60.1	49.0	1.8	24.3	10.7	10.1	3.3
Apr.	376.7	255.2	2.5	63.4	53.8	1.8	9.7	4.4	4.1	0.9
May	377.4	254.3	2.1	62.4	57.0	1.6	13.7	5.2	7.0	1.2
June	315.8	207.0	2.5	51.6	52.5	2.2	20.9	6.3	12.3	1.8
July	381.4	259.2	1.9	65.6	52.6	2.2	.	.	.	.
Aug.	365.6	257.3	1.8	50.8	53.9	1.8	.	.	.	.

2. Long-term

	By euro area residents						By non-residents			
	Total	MFIs (including Eurosystem)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations
	1	2	3	4	5	6	7	8	9	10
2001 Aug.	78.1	29.9	7.7	7.7	29.6	3.1	13.0	3.4	8.6	0.9
Sep.	109.1	35.9	7.5	2.3	58.8	4.6	8.4	4.8	3.0	0.2
Oct.	123.9	58.7	14.1	4.5	40.8	5.8	20.6	4.4	7.9	2.3
Nov.	116.0	48.0	12.0	17.5	35.8	2.7	30.1	6.0	12.8	4.6
Dec.	113.1	43.0	35.7	9.1	23.0	2.2	14.2	6.4	4.0	2.2
2002 Jan.	156.3	47.5	11.1	6.5	88.0	3.2	19.6	4.1	4.5	3.7
Feb.	130.4	54.6	9.0	8.2	57.5	1.1	19.7	8.2	8.2	1.3
Mar.	143.2	56.4	9.3	2.8	69.4	5.3	25.4	8.6	12.1	3.3
Apr.	115.3	44.1	13.0	8.0	45.2	4.9	22.9	5.1	7.7	1.1
May	132.4	40.9	22.1	7.4	55.3	6.6	26.2	5.7	10.0	3.2
June	122.8	48.1	13.5	7.0	51.3	2.9	29.4	9.9	17.2	0.7
July	113.6	37.7	12.5	5.8	48.2	9.4	.	.	.	.
Aug.	58.9	27.8	2.4	2.2	25.2	1.3	.	.	.	.

3. Total

	By euro area residents						By non-residents			
	Total	MFIs (including Eurosystem)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations
	1	2	3	4	5	6	7	8	9	10
2001 Aug.	483.1	317.5	9.3	76.6	74.9	4.6	22.9	8.2	12.7	1.7
Sep.	483.6	305.8	9.7	68.7	93.1	6.4	30.4	12.7	14.3	2.4
Oct.	604.1	404.7	16.1	90.3	86.0	6.9	29.5	7.5	12.6	3.2
Nov.	575.6	395.5	14.3	83.9	78.0	4.0	46.3	12.5	20.7	5.7
Dec.	421.1	271.9	37.0	61.7	46.4	4.1	31.3	13.0	12.4	3.6
2002 Jan.	620.6	375.3	13.2	77.6	149.3	5.2	30.9	9.1	9.5	4.8
Feb.	517.3	323.2	11.5	74.2	105.4	3.0	33.2	13.2	14.7	2.9
Mar.	543.3	343.4	11.5	62.9	118.4	7.1	49.8	19.3	22.2	6.6
Apr.	492.0	299.4	15.5	71.4	99.0	6.7	32.6	9.5	11.7	2.0
May	509.8	295.2	24.3	69.8	112.3	8.2	39.9	10.9	17.0	4.4
June	438.6	255.1	16.0	58.7	103.8	5.2	50.3	16.3	29.5	2.5
July	495.0	296.9	14.3	71.4	100.8	11.6	.	.	.	.
Aug.	424.5	285.0	4.2	53.0	79.1	3.2	.	.	.	.

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

of the euro area			Total							
Central government	Other general government	International organisations	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	International organisations	
11	12	13	14	15	16	17	18	19	20	
0.1	0.0	0.0	414.9	292.4	5.7	69.8	45.4	1.5	0.0	2001 Aug.
0.1	0.4	0.0	396.5	277.8	13.5	68.6	34.3	2.1	0.0	Sep.
0.0	0.0	0.2	489.0	349.1	6.7	86.7	45.1	1.2	0.2	Oct.
0.1	0.2	0.4	475.8	353.9	10.2	67.5	42.3	1.5	0.4	Nov.
0.0	0.1	0.7	325.2	235.4	9.7	53.9	23.4	2.0	0.7	Dec.
0.1	0.0	0.1	475.6	332.8	7.1	72.2	61.5	2.0	0.1	2002 Jan.
0.0	0.1	0.2	400.4	273.6	9.1	67.6	47.9	2.0	0.2	Feb.
0.0	0.1	0.1	424.5	297.7	12.4	63.4	49.0	1.9	0.1	Mar.
0.1	0.0	0.2	386.4	259.7	6.6	64.3	53.9	1.8	0.2	Apr.
0.0	0.0	0.1	391.1	259.5	9.1	63.6	57.0	1.6	0.1	May
0.0	0.3	0.1	336.7	213.3	14.8	53.4	52.5	2.6	0.1	June
.	.	.	.	.	.	.	.	.	.	July
.	.	.	.	.	.	.	.	.	.	Aug.

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	0.0	91.1	33.3	16.3	8.5	29.7	3.2	0.0	2001 Aug.
0.1	0.0	0.4	117.5	40.7	10.5	2.5	58.9	4.6	0.4	Sep.
0.2	5.4	0.4	144.5	63.1	22.0	6.8	41.1	11.2	0.4	Oct.
1.0	0.5	5.1	146.1	54.1	24.8	22.1	36.8	3.2	5.1	Nov.
1.3	0.1	0.1	127.2	49.4	39.7	11.3	24.3	2.3	0.1	Dec.
0.0	5.1	2.1	175.9	51.6	15.6	10.2	88.0	8.3	2.1	2002 Jan.
1.5	0.3	0.3	150.1	62.8	17.2	9.5	59.0	1.4	0.3	Feb.
0.8	0.5	0.3	168.6	65.0	21.4	6.1	70.2	5.8	0.3	Mar.
3.3	5.1	0.7	138.2	49.2	20.7	9.1	48.5	10.0	0.7	Apr.
2.0	0.1	5.3	158.6	46.6	32.2	10.6	57.2	6.7	5.3	May
0.1	0.7	0.7	152.2	58.0	30.7	7.7	51.4	3.7	0.7	June
.	.	.	.	.	.	.	.	.	.	July
.	.	.	.	.	.	.	.	.	.	Aug.

of the euro area			Total							
Central government	Other general government	International organisations	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	International organisations	
11	12	13	14	15	16	17	18	19	20	
0.2	0.0	0.1	506.0	325.8	22.0	78.4	75.1	4.7	0.1	2001 Aug.
0.2	0.4	0.4	514.0	318.5	24.0	71.1	93.2	6.7	0.4	Sep.
0.2	5.4	0.5	633.5	412.2	28.7	93.5	86.2	12.3	0.5	Oct.
1.1	0.8	5.6	621.9	408.0	35.0	89.6	79.1	4.7	5.6	Nov.
1.3	0.3	0.8	452.4	284.8	49.4	65.3	47.8	4.3	0.8	Dec.
0.1	5.1	2.2	651.5	384.4	22.7	82.4	149.5	10.3	2.2	2002 Jan.
1.5	0.4	0.5	550.5	336.4	26.3	77.1	106.9	3.3	0.5	Feb.
0.8	0.5	0.4	593.1	362.6	33.7	69.5	119.2	7.6	0.4	Mar.
3.3	5.1	0.9	524.6	308.9	27.3	73.4	102.3	11.8	0.9	Apr.
2.0	0.1	5.5	549.7	306.2	41.3	74.2	114.3	8.3	5.5	May
0.2	1.0	0.9	488.9	271.3	45.4	61.2	103.9	6.2	0.9	June
.	.	.	.	.	.	.	.	.	.	July
.	.	.	.	.	.	.	.	.	.	Aug.

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

	By euro area residents						By non-residents			
	Total	MFIs (including Eurosystem)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations
	1	2	3	4	5	6	7	8	9	10
2001 Aug.	5.1	-4.7	-0.7	5.5	5.0	0.0	-4.8	-2.2	-1.6	-0.9
Sep.	-2.1	-3.2	-0.3	-0.4	1.7	0.1	10.0	4.0	6.5	-0.3
Oct.	8.8	9.1	-0.4	3.8	-3.5	-0.3	-11.1	-3.8	-5.8	-1.5
Nov.	-7.0	-10.3	0.1	-4.1	7.1	0.2	3.3	0.3	3.0	-0.6
Dec.	-45.7	-11.4	-0.5	-10.5	-23.8	0.6	6.9	0.2	5.0	1.0
2002 Jan.	31.4	15.7	0.2	4.6	11.4	-0.6	-12.9	-5.0	-5.5	-1.3
Feb.	-0.8	-6.7	0.2	-2.2	7.8	0.0	1.7	1.1	0.1	0.5
Mar.	16.7	5.3	0.4	-1.1	12.4	-0.2	16.4	6.5	7.2	2.8
Apr.	-7.7	-2.9	0.2	-4.5	-0.3	-0.3	-18.4	-8.1	-7.7	-2.6
May	18.8	7.0	-0.8	-2.9	15.5	0.0	0.3	0.1	0.5	-0.3
June	-2.9	-3.5	0.1	-7.9	8.3	0.0	12.9	3.0	8.6	1.0
July	10.2	6.4	0.4	4.0	-0.8	0.3	.	.	.	.
Aug.	8.8	1.1	0.2	0.4	7.2	-0.1	.	.	.	.

2. Long-term

	By euro area residents						By non-residents			
	Total	MFIs (including Eurosystem)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations
	1	2	3	4	5	6	7	8	9	10
2001 Aug.	14.5	1.2	2.9	6.6	0.9	2.9	7.0	1.1	6.9	0.7
Sep.	20.7	6.1	4.4	-1.4	7.5	4.2	-0.6	0.8	0.8	-0.6
Oct.	32.4	15.3	10.8	-2.4	3.7	5.1	16.0	3.0	6.5	2.0
Nov.	29.4	2.1	8.5	16.9	0.1	1.8	22.8	4.2	11.5	4.4
Dec.	36.1	3.4	29.0	5.1	-2.6	1.2	0.8	2.3	-0.4	1.1
2002 Jan.	51.3	6.4	5.7	5.4	30.7	2.9	12.7	0.1	3.6	3.4
Feb.	32.8	20.1	4.4	3.2	5.4	-0.4	5.9	3.5	2.8	0.9
Mar.	51.0	21.8	5.5	0.4	18.7	4.6	13.5	2.4	10.7	1.7
Apr.	40.5	8.5	10.2	5.3	12.0	4.6	15.4	2.7	5.5	0.5
May	57.0	12.7	17.3	5.3	16.1	5.5	18.0	3.6	6.9	2.8
June	35.2	13.8	3.9	3.4	11.7	2.4	18.8	7.1	13.7	-0.3
July	10.7	-4.7	7.6	2.1	-3.0	8.9	.	.	.	.
Aug.	3.0	-0.9	-1.2	-1.7	5.9	0.9	.	.	.	.

3. Total

	By euro area residents						By non-residents			
	Total	MFIs (including Eurosystem)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations
	1	2	3	4	5	6	7	8	9	10
2001 Aug.	19.6	-3.4	2.2	12.1	5.9	2.8	2.2	-1.1	5.3	-0.2
Sep.	18.6	2.8	4.1	-1.8	9.2	4.3	9.4	4.7	7.3	-0.9
Oct.	41.1	24.4	10.4	1.4	0.2	4.7	4.9	-0.8	0.7	0.5
Nov.	22.4	-8.2	8.6	12.7	7.2	2.0	26.0	4.5	14.5	3.7
Dec.	-9.6	-8.1	28.6	-5.4	-26.4	1.7	7.7	2.5	4.5	2.1
2002 Jan.	82.6	22.2	6.0	10.0	42.1	2.3	-0.1	-4.9	-1.8	2.2
Feb.	31.9	13.5	4.6	1.0	13.2	-0.4	7.5	4.6	2.9	1.3
Mar.	67.7	27.1	5.9	-0.8	31.1	4.3	29.9	8.9	17.9	4.5
Apr.	32.8	5.6	10.4	0.8	11.7	4.3	-3.0	-5.4	-2.2	-2.1
May	75.8	19.7	16.5	2.5	31.6	5.5	18.3	3.7	7.4	2.5
June	32.2	10.3	4.0	-4.5	20.0	2.5	31.7	10.1	22.2	0.7
July	20.9	1.6	7.9	6.1	-3.9	9.2	.	.	.	.
Aug.	11.8	0.2	-0.9	-1.3	13.0	0.8	.	.	.	.

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

of the euro area			Total							
Central government	Other general government	International organisations	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	International organisations	
11	12	13	14	15	16	17	18	19	20	
0.0	-0.1	0.0	0.3	-6.9	-2.2	4.6	5.0	-0.2	0.0	2001 Aug.
0.0	-0.1	0.0	8.0	0.7	6.2	-0.7	1.7	0.0	0.0	Sep.
0.0	-0.2	0.1	-2.4	5.3	-6.1	2.3	-3.5	-0.5	0.1	Oct.
0.0	0.1	0.4	-3.7	-10.1	3.2	-4.7	7.1	0.4	0.4	Nov.
0.0	0.1	0.7	-38.8	-11.2	4.5	-9.5	-23.9	0.6	0.7	Dec.
0.0	-0.1	-1.1	18.5	10.7	-5.2	3.3	11.5	-0.7	-1.1	2002 Jan.
0.0	-0.2	0.2	0.8	-5.6	0.3	-1.7	7.8	-0.2	0.2	Feb.
0.0	0.0	0.0	33.1	11.8	7.6	1.6	12.4	-0.3	0.0	Mar.
-0.1	0.0	0.1	-26.1	-11.0	-7.5	-7.1	-0.3	-0.3	0.1	Apr.
0.0	0.0	-0.1	19.1	7.1	-0.3	-3.2	15.5	0.0	-0.1	May
0.0	0.3	0.1	10.0	-0.5	8.7	-6.9	8.3	0.3	0.1	June
.	.	.	.	.	.	.	.	.	.	July
.	.	.	.	.	.	.	.	.	.	Aug.

of the euro area			Total							
Central government	Other general government	International organisations	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	International organisations	
11	12	13	14	15	16	17	18	19	20	
-0.2	-0.1	-1.3	21.5	2.3	9.8	7.3	0.6	2.8	-1.3	2001 Aug.
-1.8	0.0	0.2	20.1	6.8	5.2	-2.0	5.7	4.2	0.2	Sep.
-0.1	5.3	-0.6	48.4	18.3	17.3	-0.4	3.5	10.3	-0.6	Oct.
-0.4	0.4	2.7	52.2	6.3	20.0	21.2	-0.3	2.2	2.7	Nov.
0.6	0.0	-2.8	36.9	5.7	28.6	6.2	-2.0	1.2	-2.8	Dec.
-0.8	4.8	1.5	64.0	6.6	9.4	8.9	29.9	7.8	1.5	2002 Jan.
0.7	-0.2	-1.9	38.6	23.6	7.2	4.1	6.1	-0.5	-1.9	Feb.
0.1	0.0	-1.4	64.4	24.2	16.2	2.1	18.8	4.5	-1.4	Mar.
1.8	5.0	-0.1	55.9	11.1	15.6	5.8	13.8	9.6	-0.1	Apr.
0.9	-0.1	4.1	75.0	16.3	24.2	8.1	17.0	5.4	4.1	May
-1.9	0.5	-0.3	53.9	20.9	17.6	3.1	9.8	2.9	-0.3	June
.	.	.	.	.	.	.	.	.	.	July
.	.	.	.	.	.	.	.	.	.	Aug.

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	
-0.3	-0.2	-1.3	21.8	-4.5	7.6	11.9	5.6	2.6	-1.3	2001 Aug.
-1.8	-0.1	0.2	28.0	7.6	11.4	-2.7	7.4	4.2	0.2	Sep.
-0.2	5.1	-0.5	46.0	23.6	11.2	1.9	0.0	9.8	-0.5	Oct.
-0.3	0.5	3.1	48.5	-3.7	23.2	16.5	6.9	2.6	3.1	Nov.
0.6	0.0	-2.2	-2.0	-5.5	33.1	-3.3	-25.9	1.8	-2.2	Dec.
-0.8	4.7	0.5	82.5	17.3	4.1	12.2	41.4	7.1	0.5	2002 Jan.
0.7	-0.3	-1.7	39.5	18.0	7.5	2.3	14.0	-0.7	-1.7	Feb.
0.1	-0.1	-1.4	97.5	36.0	23.8	3.7	31.2	4.3	-1.4	Mar.
1.8	5.0	0.0	29.8	0.1	8.1	-1.3	13.5	9.3	0.0	Apr.
0.9	-0.1	4.0	94.1	23.4	23.9	4.9	32.5	5.3	4.0	May
-1.8	0.7	-0.3	63.9	20.4	26.3	-3.8	18.2	3.2	-0.3	June
.	.	.	.	.	.	.	.	.	.	July
.	.	.	.	.	.	.	.	.	.	Aug.

4 HICP and other prices in the euro area

Table 4.1

Harmonised Index of Consumer Prices

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

1. Total index and goods and services

	Total		Goods		Services		Total (s.a.)		Goods (s.a.)	Services (s.a.)
	Index 1996 = 100		Index 1996 = 100		Index 1996 = 100		Index 1996 = 100	% change on previous period	Index 1996 = 100	Index 1996 = 100
Weight in the total (%) ¹⁾	100.0	100.0	61.1	61.1	38.9	38.9	100.0	100.0	61.1	38.9
	1	2	3	4	5	6	7	8	9	10
1998	102.7	1.1	101.8	0.7	104.4	1.9	-	-	-	-
1999	103.8	1.1	102.7	0.9	106.0	1.5	-	-	-	-
2000	106.3	2.3	105.5	2.7	107.8	1.7	-	-	-	-
<i>Euro area enlargement</i>										
2001	108.9	2.5	108.1	2.5	110.4	2.5	-	-	-	-
2001 Q4	109.5	2.1	108.6	1.7	111.2	2.8	109.6	0.3	108.6	111.6
2002 Q1	110.4	2.6	109.1	2.2	112.6	3.1	110.4	0.7	109.3	112.6
Q2	111.5	2.1	110.3	1.4	113.5	3.2	111.1	0.6	109.8	113.6
Q3	111.5	2.0	109.6	1.3	114.8	3.3	111.6	0.4	110.1	114.4
2001 Nov.	109.5	2.1	108.5	1.5	111.1	2.7	109.5	0.0	108.5	111.6
Dec.	109.6	2.0	108.6	1.6	111.5	2.8	109.7	0.1	108.6	111.9
2002 Jan.	110.1	2.7	108.9	2.4	112.2	3.0	110.3	0.5	109.2	112.3
Feb.	110.2	2.5	108.8	2.1	112.7	3.0	110.3	0.1	109.1	112.6
Mar.	110.8	2.5	109.7	2.0	113.0	3.2	110.7	0.3	109.5	113.0
Apr.	111.4	2.4	110.4	2.0	113.2	3.0	111.0	0.3	109.9	113.1
May	111.5	2.0	110.4	1.3	113.6	3.3	111.2	0.2	109.9	113.7
June	111.5	1.8	110.2	1.0	113.9	3.2	111.2	0.0	109.7	113.9
July	111.3	1.9	109.4	1.2	114.8	3.2	111.3	0.1	109.8	114.1
Aug.	111.4	2.1	109.4	1.4	115.0	3.3	111.6	0.2	110.0	114.4
Sep.	111.7	2.1	110.1	1.4	114.7	3.3	111.9	0.3	110.4	114.7
Oct. ²⁾	.	2.2	.	.	.	.	.	.	.	.

2. Breakdown of goods and services

	Goods						Services				
	Food ³⁾			Industrial goods			Housing	Transport	Communi- cation	Recreation and personal	Miscellan- eous
	Total	Processed food ³⁾	Unprocessed food	Total	Non-energy industrial goods	Energy					
Weight in the total (%) ¹⁾	20.4	12.3	8.1	40.7	32.0	8.7	9.7	6.3	2.5	14.3	6.1
	11	12	13	14	15	16	17	18	19	20	21
1998	1.6	1.4	2.0	0.2	0.9	-2.6	2.3	1.7	-1.0	2.2	1.8
1999	0.6	0.9	0.0	1.0	0.7	2.4	1.8	2.1	-4.4	2.0	1.8
2000	1.4	1.1	1.7	3.4	0.7	13.3	1.6	2.6	-4.2	2.3	2.4
<i>Euro area enlargement</i>											
2001	4.5	2.8	7.0	1.5	1.1	2.7	1.9	3.5	-2.8	3.3	2.6
2001 Q4	4.7	3.5	6.7	0.2	1.6	-4.1	2.0	3.8	-1.8	3.6	2.9
2002 Q1	4.9	3.5	7.0	0.9	1.8	-2.1	2.3	3.6	-1.2	4.0	3.2
Q2	2.8	3.1	2.4	0.7	1.7	-2.4	2.4	3.4	-0.8	4.2	3.3
Q3	2.2	2.9	1.3	0.9	1.4	-0.9	2.5	3.6	-0.7	4.3	3.4
2001 Nov.	4.5	3.4	6.2	0.0	1.6	-5.0	2.0	3.7	-2.0	3.5	2.9
Dec.	4.6	3.5	6.3	0.2	1.6	-4.6	2.0	4.0	-1.7	3.6	2.9
2002 Jan.	5.6	3.8	8.4	0.9	1.7	-1.9	2.2	3.6	-1.2	3.9	3.1
Feb.	4.8	3.3	7.1	0.7	1.9	-2.9	2.2	3.5	-1.2	4.0	3.2
Mar.	4.2	3.3	5.5	1.0	1.8	-1.6	2.3	3.7	-1.0	4.2	3.2
Apr.	3.6	3.2	4.1	1.2	1.8	-0.5	2.5	3.2	-0.9	3.8	3.3
May	2.7	3.1	2.1	0.6	1.7	-2.9	2.4	3.5	-0.7	4.4	3.4
June	2.3	3.1	1.1	0.3	1.6	-3.6	2.4	3.5	-0.8	4.3	3.3
July	2.1	2.9	0.9	0.7	1.5	-1.7	2.5	3.5	-0.8	4.2	3.4
Aug.	2.3	2.9	1.3	0.9	1.4	-0.5	2.5	3.9	-0.7	4.3	3.5
Sep.	2.3	2.8	1.7	1.0	1.4	-0.4	2.4	3.4	-0.6	4.3	3.4
Oct.	.	.	.	.	.	.	.	.	.	.	.

Sources: Eurostat and ECB calculations.

1) Referring to the index period 2002.

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

3) Including alcoholic beverages and tobacco.

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

	Industrial producer prices											World market prices of raw materials ¹⁾	Oil prices ²⁾ (EUR per barrel)			
	Industry excluding construction ³⁾								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
1996	100.3	0.3	0.3	-1.8	1.4	1.7	2.0	1.7	0.9	1.4	0.9	6.0	-7.5	16.0		
1997	101.4	1.1	0.6	0.2	0.3	1.1	0.6	1.2	3.2	1.3	0.8	10.7	14.6	17.0		
1998	100.6	-0.8	0.2	-0.4	0.6	0.5	0.8	0.5	-5.2	0.3	-0.6	-21.0	-12.5	12.0		
1999	100.2	-0.4	-0.6	-1.5	0.2	-0.1	0.7	-0.2	0.5	1.2	0.2	15.8	-5.9	17.1		
2000	105.7	5.5	2.6	5.0	0.6	1.5	1.4	1.6	19.0	2.4	5.2	50.8	16.7	31.0		
<i>Euro area enlargement</i>																
2001	108.2	2.2	1.8	1.2	1.0	3.0	2.1	3.1	2.8	2.2	1.2	-8.8	-7.6	27.8		
2001 Q3	108.3	1.5	1.5	0.1	1.2	3.0	2.1	3.1	0.7	2.4	0.6	-11.3	-10.4	29.0		
Q4	107.3	-0.8	0.7	-1.3	1.1	2.3	1.9	2.4	-7.7	1.3	-1.3	-28.8	-15.6	22.4		
2002 Q1	107.5	-0.8	0.2	-1.6	1.2	1.6	1.8	1.6	-4.7	2.0	-0.6	-10.5	-3.6	24.6		
Q2	108.0	-0.8	0.3	-0.8	1.0	1.0	1.5	0.9	-4.9	1.9	-0.4	-8.7	-5.5	27.8		
Q3	108.2	-0.1	0.7	0.2	0.9	1.1	1.2	1.0	-2.9	.	0.3	-4.2	-1.7	27.2		
2001 Oct.	107.7	-0.5	0.9	-0.9	1.1	2.5	1.9	2.6	-7.0	-	-1.1	-30.2	-19.3	23.8		
Nov.	107.2	-1.1	0.6	-1.4	1.0	2.4	1.9	2.4	-9.1	-	-1.6	-34.1	-15.1	21.7		
Dec.	107.0	-0.8	0.5	-1.5	1.1	2.1	2.0	2.2	-6.8	-	-1.2	-20.6	-12.3	21.5		
2002 Jan.	107.4	-0.7	0.4	-1.6	1.2	2.1	1.9	2.1	-5.1	-	-0.5	-14.4	-6.5	22.6		
Feb.	107.4	-0.9	0.2	-1.7	1.2	1.6	1.7	1.5	-5.4	-	-0.8	-15.2	-4.0	23.5		
Mar.	107.8	-0.7	0.2	-1.5	1.2	1.2	1.7	1.2	-3.7	-	-0.4	-1.6	-0.3	27.9		
Apr.	108.1	-0.6	0.3	-1.1	1.0	1.2	1.6	1.1	-3.8	-	-0.2	-1.2	-1.4	29.3		
May	108.0	-0.8	0.3	-0.8	1.1	1.0	1.5	0.9	-5.2	-	-0.5	-9.5	-6.8	28.1		
June	107.9	-0.9	0.4	-0.5	1.0	0.9	1.4	0.8	-5.8	-	-0.6	-14.9	-8.4	25.8		
July	108.0	-0.3	0.6	0.0	0.8	1.1	1.2	1.0	-3.8	-	0.1	-10.2	-7.9	25.9		
Aug.	108.1	-0.1	0.7	0.2	0.8	1.0	1.3	0.9	-2.8	-	0.3	-4.3	-1.3	27.0		
Sep.	108.4	0.1	0.7	0.3	0.9	1.1	1.3	1.1	-2.2	-	0.4	2.4	4.7	28.9		
Oct.	.	.	.	.	.	.	.	.	.	-	.	14.3	7.8	27.9

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
1996	102.0	2.0	2.1	2.4	2.2	0.9	0.8	0.8
1997	103.6	1.5	1.7	2.0	1.3	1.0	1.8	2.6
1998	105.3	1.7	1.2	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	-0.2
2000	107.9	1.3	2.5	2.2	2.6	2.5	4.6	8.2
2000 Q3	108.2	1.5	2.6	2.3	2.6	2.6	4.8	8.1
Q4	108.5	1.6	2.7	2.5	2.6	3.0	5.2	8.4
<i>Euro area enlargement</i>								
2001	110.8	2.4	2.2	2.4	2.3	1.9	1.5	0.7
2001 Q1	109.9	2.1	2.5	2.4	2.4	2.4	3.4	4.1
Q2	110.6	2.4	2.4	2.8	2.4	2.0	2.7	2.6
Q3	111.1	2.3	2.1	2.5	2.1	2.1	0.8	0.1
Q4	111.9	2.8	1.8	2.1	2.2	1.5	-0.5	-3.3
2002 Q1	112.6	2.5	2.0	2.3	2.0	1.8	-0.3	-1.7
Q2	112.9	2.1	1.8	2.0	2.0	1.4	-0.7	-1.6

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 ⁵⁾	Changes in inventories ²⁾	Total	Exports ³⁾	Imports ³⁾
1	2	3	4	5	6	7	8	9	
1997	5,648.9	5,500.6	3,201.4	1,150.7	1,138.2	10.3	148.3	1,827.3	1,678.9
1998	5,883.3	5,744.0	3,332.2	1,176.6	1,202.4	32.8	139.4	1,949.1	1,809.7
1999	6,150.3	6,049.1	3,507.0	1,230.3	1,291.9	19.9	101.2	2,052.2	1,951.1
2000	6,448.9	6,378.9	3,675.0	1,286.0	1,388.2	29.8	69.9	2,415.7	2,345.7
<i>Euro area enlargement</i>									
2001	6,826.0	6,711.7	3,922.2	1,359.7	1,434.3	-4.5	114.3	2,547.9	2,433.6
2001 Q1	1,690.3	1,667.1	966.7	335.1	360.2	5.1	23.1	645.1	622.0
Q2	1,702.0	1,680.5	979.9	338.4	359.0	3.2	21.5	640.8	619.3
Q3	1,712.9	1,682.9	985.8	341.3	358.4	-2.6	29.9	635.8	605.9
Q4	1,720.9	1,681.2	989.9	344.9	356.6	-10.2	39.7	626.2	586.5
2002 Q1	1,737.6	1,696.9	994.7	348.9	356.7	-3.4	40.7	624.7	584.1
Q2	1,749.7	1,707.2	1,003.1	352.1	354.3	-2.3	42.5	636.2	593.7

2. Constant prices

(ECU billions at 1995 prices, seasonally adjusted)

	GDP								
	Total	Domestic demand					External balance ³⁾		
		Total	Private consumption	Government consumption	Gross fixed capital formation ⁴⁾	Changes in inventories ²⁾	Total	Exports ³⁾	Imports ³⁾
10	11	12	13	14	15	16	17	18	
1997	5,509.0	5,354.2	3,093.5	1,126.1	1,131.9	2.7	154.7	1,806.3	1,651.5
1998	5,667.7	5,545.5	3,187.9	1,142.4	1,190.2	24.9	122.2	1,939.3	1,817.1
1999	5,825.3	5,736.6	3,299.8	1,164.7	1,260.8	11.4	88.7	2,040.8	1,952.1
2000	6,028.0	5,900.6	3,383.1	1,186.5	1,320.3	10.7	127.4	2,297.4	2,170.0
<i>Euro area enlargement</i>									
2001	6,222.8	6,070.4	3,522.3	1,224.2	1,335.9	-12.1	152.4	2,385.8	2,233.4
2001 Q1	1,555.1	1,518.6	876.3	304.1	337.6	0.6	36.5	604.2	567.7
Q2	1,555.2	1,521.5	881.0	305.4	335.1	0.0	33.6	597.3	563.7
Q3	1,558.4	1,517.2	882.4	306.7	332.9	-4.8	41.2	596.4	555.2
Q4	1,554.1	1,513.0	882.6	308.0	330.3	-7.9	41.1	587.9	546.8
2002 Q1	1,559.7	1,514.9	881.3	310.4	328.4	-5.1	44.8	586.9	542.1
Q2	1,565.8	1,517.7	884.4	311.6	326.0	-4.2	48.1	597.2	549.1

(annual percentage changes)

1997	2.3	1.7	1.6	1.3	2.3	-	-	10.4	9.0
1998	2.9	3.6	3.1	1.4	5.2	-	-	7.4	10.0
1999	2.8	3.4	3.5	1.9	5.9	-	-	5.2	7.4
2000	3.5	2.9	2.5	1.9	4.7	-	-	12.6	11.2
<i>Euro area enlargement</i>									
2001	1.4	0.9	1.8	1.9	-0.7	-	-	2.6	1.3
2001 Q1	2.4	1.8	2.1	1.9	1.6	-	-	8.3	6.9
Q2	1.6	1.3	1.8	2.0	-0.2	-	-	4.3	3.7
Q3	1.4	0.7	1.8	2.2	-1.7	-	-	1.3	-0.4
Q4	0.4	-0.1	1.7	1.5	-2.4	-	-	-2.9	-4.6
2002 Q1	0.3	-0.2	0.6	2.1	-2.7	-	-	-2.9	-4.5
Q2	0.7	-0.3	0.4	2.0	-2.7	-	-	0.0	-2.6

Source: Eurostat.

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

2) Including acquisitions less disposals of valuables.

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

Value added by activity

3. Current prices

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

	Gross value added							Intermediate consumption of FISIM ¹⁾	Taxes less subsidies on products
	Total	Agriculture, hunting, forestry and fishing activities	Manufacturing, energy and mining	Construction	Trade, repairs, hotels and restaurants, transport and communication	Financial, real estate, renting and business activities	Public administration, education, health and other services		
	1	2	3	4	5	6	7	8	9
1997	5,270.4	138.6	1,227.7	291.7	1,086.0	1,382.4	1,144.0	203.7	582.2
1998	5,470.3	138.9	1,276.7	294.9	1,139.5	1,441.1	1,179.2	201.9	615.0
1999	5,690.0	136.2	1,294.4	310.4	1,192.5	1,527.8	1,228.7	202.1	662.4
2000	5,991.3	137.0	1,353.6	326.5	1,269.1	1,625.1	1,280.0	213.1	690.3
<i>Euro area enlargement</i>									
2001	6,337.8	151.7	1,413.0	346.6	1,358.1	1,718.9	1,349.5	229.6	717.8
2001 Q1	1,567.7	36.8	355.9	85.4	334.8	422.5	332.3	56.2	178.8
Q2	1,580.3	37.5	353.5	86.1	338.9	428.6	335.7	57.3	179.0
Q3	1,590.7	38.8	354.0	87.0	341.5	430.6	338.7	57.8	180.0
Q4	1,599.1	38.5	349.5	88.1	342.9	437.3	342.9	58.3	180.1
2002 Q1	1,611.7	38.7	352.0	89.2	345.1	439.2	347.5	57.2	183.1
Q2	1,623.8	38.2	352.7	89.2	348.6	444.1	351.0	56.7	182.6

4. Constant prices

(ECU billions at 1995 prices, seasonally adjusted)

	Gross value added							Intermediate consumption of FISIM ¹⁾	Taxes less subsidies on products
	Total	Agriculture, hunting, forestry and fishing activities	Manufacturing, energy and mining	Construction	Trade, repairs, hotels and restaurants, transport and communication	Financial, real estate, renting and business activities	Public administration, education, health and other services		
	10	11	12	13	14	15	16	17	18
1997	5,167.6	140.2	1,217.5	290.1	1,071.1	1,339.1	1,109.7	214.6	556.0
1998	5,319.4	142.4	1,256.9	291.3	1,114.9	1,387.5	1,126.4	222.2	570.4
1999	5,461.3	146.0	1,269.0	298.8	1,165.3	1,440.0	1,142.1	230.8	594.8
2000	5,664.0	145.1	1,319.7	305.3	1,222.4	1,507.2	1,164.1	246.3	610.4
<i>Euro area enlargement</i>									
2001	5,861.3	152.1	1,347.6	310.3	1,283.6	1,571.2	1,196.4	262.5	623.9
2001 Q1	1,463.3	37.7	341.3	77.6	319.7	389.4	297.5	64.7	156.5
Q2	1,464.5	37.8	337.3	77.5	321.0	392.3	298.6	65.4	156.1
Q3	1,468.5	38.3	337.5	77.5	321.5	394.2	299.5	65.9	155.8
Q4	1,465.0	38.3	331.5	77.6	321.4	395.4	300.8	66.5	155.6
2002 Q1	1,470.4	38.1	334.1	77.1	322.6	396.2	302.4	65.8	155.0
Q2	1,476.4	38.2	335.2	76.6	324.0	398.4	304.0	65.7	155.1
<i>(annual percentage changes)</i>									
1997	2.4	0.4	3.3	-1.8	3.1	3.3	1.0	3.8	2.4
1998	2.9	1.6	3.2	0.4	4.1	3.6	1.5	3.5	2.6
1999	2.7	2.5	1.0	2.6	4.5	3.8	1.4	3.9	4.3
2000	3.7	-0.6	4.0	2.2	4.9	4.7	1.9	6.7	2.6
<i>Euro area enlargement</i>									
2001	1.7	-0.8	1.0	-0.6	2.6	2.8	1.3	5.1	0.2
2001 Q1	2.7	-1.1	3.6	-0.4	3.8	3.2	1.3	6.2	1.1
Q2	1.9	-1.3	1.4	-0.6	2.9	3.1	1.1	5.3	-0.2
Q3	1.6	-0.7	0.8	-0.7	2.4	2.7	1.3	4.7	0.1
Q4	0.7	-0.2	-1.8	-0.6	1.2	2.2	1.3	4.3	-0.1
2002 Q1	0.5	0.9	-2.1	-0.8	0.9	1.8	1.7	1.7	-1.0
Q2	0.8	1.1	-0.6	-1.2	1.0	1.6	1.8	0.5	-0.6

Source: Eurostat.

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

Table 5.2
Selected other real economy indicators ¹⁾
1. Industrial production
(annual percentage changes, unless otherwise indicated)

	Total		Industry excluding construction ²⁾								Construction	Manufacturing
	Total		Industry excluding construction and energy						Energy			
	Index (s.a.) 1995 = 100		Total	Inter- mediate goods	Capital goods	Consumer goods						
						Total	Durable consumer goods	Non-durable consumer goods				
1	2	3	4	5	6	7	8	9	10	11	12	
1998	3.7	109.4	4.3	4.8	4.0	7.8	2.7	4.6	2.3	1.2	1.3	4.8
1999	2.1	111.4	1.9	2.1	1.9	2.5	1.6	1.4	1.6	1.3	4.2	1.9
2000	5.0	117.6	5.5	6.0	5.9	9.4	2.3	6.3	1.4	1.8	2.0	5.9
<i>Euro area enlargement</i>												
2001	0.1	118.2	0.3	0.1	-0.8	1.3	0.3	-2.5	0.9	1.1	-0.5	0.2
2001 Q3	-0.3	118.2	-0.2	-0.4	-1.3	0.2	0.4	-3.6	1.2	0.8	-0.3	-0.4
Q4	-3.1	116.2	-3.7	-4.7	-5.9	-4.8	-2.8	-7.4	-1.8	3.2	0.8	-4.6
2002 Q1	-2.3	116.9	-2.5	-3.1	-1.9	-6.4	-1.1	-6.6	0.0	1.8	1.6	-3.4
Q2	-1.0	117.5	-0.6	-1.0	0.3	-2.9	-0.8	-6.0	0.3	2.4	-1.3	-1.0
Q3	.	.	.	.	.	.	.	.	.	.	.	.
2001 Nov.	-3.2	115.9	-4.0	-5.0	-6.0	-5.4	-2.8	-7.3	-1.9	2.2	0.7	-4.9
Dec.	-4.2	116.1	-4.5	-6.5	-8.7	-6.4	-3.6	-8.0	-2.7	7.9	-1.0	-6.3
2002 Jan.	-2.4	116.6	-2.7	-3.5	-3.2	-6.1	-0.9	-6.6	0.3	2.5	1.5	-3.6
Feb.	-2.5	116.9	-2.9	-3.5	-2.3	-7.1	-1.1	-6.1	0.0	1.8	0.9	-3.8
Mar.	-2.0	117.1	-2.0	-2.3	-0.3	-6.0	-1.4	-7.1	-0.2	1.0	2.4	-3.0
Apr.	-0.7	117.3	-0.8	-1.0	0.2	-2.5	-1.3	-5.9	-0.4	1.9	0.3	-0.6
May	-1.8	117.3	-0.9	-1.1	0.5	-4.5	-0.1	-6.8	1.3	2.0	-3.2	-1.6
June	-0.6	117.7	-0.3	-0.8	0.0	-1.7	-0.9	-5.3	0.1	3.5	-0.8	-0.8
July	-0.9	117.5	-0.1	-0.4	0.6	-0.8	-1.7	-2.2	-1.6	1.6	1.9	0.1
Aug.	-3.2	117.7	-1.0	-1.1	0.2	-2.1	-2.2	-9.2	-1.1	0.0	0.2	-1.3
Sep.	.	.	.	.	.	.	.	.	.	.	.	.

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

	Retail sales (s.a.)									New passenger car registrations	
	Current prices			Constant prices						Thousands ³⁾ (s.a.)	
	Total		Index 1995 = 100	Total		Food, beverages, tobacco	Non-food		Textiles, clothing, footwear			Household equipment
	Index 1995 = 100			Index 1995 = 100							
13	14	15	16	17	18	19	20	21	22		
1998	108.1	3.8	104.8	3.1	2.2	3.7	2.2	4.7	923	7.2	
1999	111.6	3.2	107.3	2.4	2.9	2.3	1.2	2.7	973	5.4	
2000	116.2	4.1	109.8	2.3	1.9	2.3	1.8	4.8	952	-2.1	
<i>Euro area enlargement</i>											
2001	121.2	3.9	111.3	1.4	1.1	1.4	1.3	-0.1	969	-0.7	
2001 Q3	121.7	3.9	111.2	1.1	1.0	1.0	1.8	-0.9	955	-1.5	
Q4	122.2	3.3	111.7	1.2	1.3	1.0	0.2	-0.6	964	2.5	
2002 Q1	122.6	2.6	112.0	0.9	1.2	-0.2	0.1	-2.6	913	-4.1	
Q2	123.0	1.4	111.7	0.3	0.6	-0.2	-1.1	-2.5	911	-8.0	
Q3	.	.	.	.	.	.	.	.	917	-4.7
2001 Nov.	123.6	4.1	113.2	2.1	1.6	1.7	3.0	-0.9	967	3.3	
Dec.	122.2	2.6	111.4	0.7	0.4	0.5	0.2	-1.4	964	0.8	
2002 Jan.	122.0	2.0	111.6	0.1	0.4	-0.7	-1.1	-2.5	926	-2.4	
Feb.	122.3	3.1	111.8	1.4	1.4	0.1	0.2	-1.8	921	-3.2	
Mar.	123.5	2.6	112.7	1.3	1.8	-0.1	1.4	-3.4	893	-6.2	
Apr.	122.7	2.5	111.6	0.9	1.3	0.2	1.3	-2.7	894	-7.9	
May	123.3	1.8	112.0	0.8	1.5	-0.2	-3.8	-1.6	913	-6.8	
June	123.0	0.0	111.6	-0.8	-0.9	-0.7	-0.8	-3.3	926	-9.2	
July	123.5	2.2	112.5	1.7	1.7	1.1	1.8	0.5	898	-6.6	
Aug.	124.6	2.0	113.5	1.5	1.7	0.2	0.2	-1.6	924	-4.5	
Sep.	.	.	.	.	.	.	.	.	929	-2.5

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) Monthly averages.

Table 5.3

European Commission Business and Consumer Surveys

1. Economic sentiment indicator, manufacturing industry and consumer surveys

(percentage balances, seasonally adjusted, unless otherwise indicated)

	Economic sentiment indicator ¹⁾²⁾ (index 1995 = 100)	Manufacturing industry					Consumer confidence indicator ¹⁾				
		Industrial confidence indicator				Capacity utilisation ³⁾ (percentages)	Total ⁴⁾	Financial situation over next 12 months	Economic situation over next 12 months	Unemployment situation over next 12 months	Savings over next 12 months
		Total ⁴⁾	Order books	Stocks of finished products	Production expectations						
	1	2	3	4	5	6	7	8	9	10	11
1999	101.2	-7	-17	11	7	81.8	-3	3	-4	11	1
2000	103.7	5	3	5	17	83.8	1	4	1	1	2
<i>Euro area enlargement</i>											
2001	100.8	-8	-14	13	1	83.6	-5	2	-10	14	2
2002	.	.	.	.	.	81.2	.	.	.	.	.
2001 Q4	98.7	-18	-27	17	-9	82.2	-12	0	-18	30	2
2002 Q1	99.0	-14	-26	14	-1	81.1	-10	0	-12	28	0
Q2	99.3	-11	-25	12	4	81.2	-8	-1	-9	22	-3
Q3	98.9	-12	-27	11	4	81.0	-10	-1	-11	26	-3
Q4	.	.	.	.	.	81.5	.	.	.	.	.
2001 Oct.	99.0	-17	-25	16	-9	-	-11	1	-18	28	3
Nov.	98.4	-19	-28	18	-11	-	-13	0	-19	32	1
Dec.	98.7	-17	-28	16	-8	-	-11	0	-16	30	1
2002 Jan.	98.9	-15	-28	14	-2	-	-11	0	-14	29	1
Feb.	98.9	-14	-26	14	-3	-	-10	0	-11	28	0
Mar.	99.2	-12	-25	13	3	-	-9	0	-10	26	0
Apr.	99.1	-11	-26	12	4	-	-9	-1	-10	23	-3
May	99.5	-10	-23	11	4	-	-8	-1	-8	22	-2
June	99.3	-11	-25	12	4	-	-8	0	-8	22	-3
July	99.0	-11	-26	11	4	-	-10	-1	-10	26	-4
Aug.	98.7	-12	-30	10	4	-	-11	-1	-12	27	-4
Sep.	99.0	-12	-26	12	3	-	-9	-1	-10	24	-2
Oct.	98.9	-10	-25	10	4	-	-12	-2	-12	27	-7

2. Construction industry, retail trade and services surveys

(percentage balances, seasonally adjusted)

	Construction confidence indicator			Retail trade confidence indicator				Services confidence indicator ¹⁾			
	Total ⁴⁾	Order books	Employment expectations	Total ⁴⁾	Present business situation	Volume of stocks	Expected business situation	Total ⁴⁾	Business climate	Demand in recent months	Demand in the months ahead
	12	13	14	15	16	17	18	19	20	21	22
1998	-19	-25	-12	-3	-3	13	8	32	33	31	33
1999	-7	-14	1	-5	-5	15	4	27	25	26	31
2000	1	-6	8	-1	4	16	9	30	36	23	33
<i>Euro area enlargement</i>											
2001	-11	-16	-4	-6	-4	16	3	15	16	8	20
2001 Q3	-12	-16	-8	-6	-5	16	3	14	18	6	18
Q4	-15	-20	-8	-9	-11	15	-2	-5	-5	-8	-2
2002 Q1	-16	-23	-9	-16	-22	19	-6	3	3	-14	21
Q2	-18	-24	-10	-18	-25	20	-9	5	1	1	14
Q3	-23	-32	-14	-17	-24	15	-11	-1	-5	-8	11
2001 Oct.	-14	-19	-8	-9	-11	14	-1	-3	-3	-6	1
Nov.	-15	-20	-9	-9	-10	14	-3	-7	-7	-8	-6
Dec.	-15	-22	-7	-10	-12	17	-1	-6	-5	-11	-1
2002 Jan.	-17	-25	-9	-13	-17	15	-6	1	0	-15	17
Feb.	-15	-22	-8	-17	-28	19	-5	2	1	-15	20
Mar.	-17	-23	-10	-17	-22	23	-7	7	7	-11	26
Apr.	-18	-24	-11	-17	-25	21	-6	7	3	1	18
May	-17	-24	-9	-18	-25	21	-8	6	3	1	14
June	-18	-25	-11	-18	-24	18	-13	3	-3	1	10
July	-21	-31	-10	-17	-24	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	-10	0	-6	-5	12
Oct.	-23	-31	-14	-16	-21	15	-11	-4	-13	-4	4

Source: European Commission Business and Consumer Surveys.

1) Data for all periods refer to the Euro 12.

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

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

4) 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. Employment and unemployment in the whole economy ¹⁾
(annual percentage changes, seasonally adjusted, unless otherwise indicated)

	Employment						Unemployment			
	Total		By employment status		By selected sector		Total		Adult ²⁾	Youth ²⁾
	Millions		Employees	Self-employed	Industry excluding construction	Services	Millions	% of labour force	% of labour force	% of labour force
	1	2	3	4	5	6	7	8	9	10
1997	119.894	0.8	1.0	0.2	-0.2	1.4	13.946	10.9	9.4	21.9
1998	122.001	1.8	1.9	0.8	1.0	2.4	13.269	10.2	8.9	20.0
1999	124.209	1.8	2.2	-0.5	-0.2	2.7	12.252	9.3	8.2	18.0
2000	126.884	2.2	2.4	0.6	0.7	2.9	11.093	8.4	7.3	16.2
2000 Q3	127.266	2.2	2.5	0.8	0.9	3.0	10.960	8.3	7.2	16.1
Q4	127.917	2.2	2.4	1.5	1.1	2.9	10.728	8.1	7.1	15.6
<i>Euro area enlargement</i>										
2001	132.578	1.3	1.6	0.2	0.3	1.9	11.031	8.0	7.0	15.7
2001 Q1	132.190	1.9	2.1	1.0	1.2	2.4	11.037	8.0	7.0	15.7
Q2	132.484	1.5	1.7	0.6	0.7	2.0	10.967	8.0	7.0	15.6
Q3	132.676	1.1	1.4	-0.2	0.1	1.7	11.006	8.0	7.0	15.6
Q4	132.962	0.8	1.1	-0.6	-0.6	1.5	11.114	8.0	7.0	15.8
2002 Q1	133.108	0.7	0.9	-0.6	-1.0	1.5	11.244	8.1	7.1	15.9
Q2	133.172	0.5	0.8	-0.8	-1.0	1.3	11.379	8.2	7.2	16.1
Q3	.	.	.	.	.	.	11.480	8.3	7.2	16.1
2001 Sep.	-	-	-	-	-	-	11.027	8.0	7.0	15.6
Oct.	-	-	-	-	-	-	11.083	8.0	7.0	15.7
Nov.	-	-	-	-	-	-	11.115	8.0	7.0	15.8
Dec.	-	-	-	-	-	-	11.143	8.1	7.0	15.8
2002 Jan.	-	-	-	-	-	-	11.196	8.1	7.1	15.8
Feb.	-	-	-	-	-	-	11.250	8.1	7.1	15.9
Mar.	-	-	-	-	-	-	11.285	8.1	7.1	16.0
Apr.	-	-	-	-	-	-	11.298	8.1	7.1	16.0
May	-	-	-	-	-	-	11.385	8.2	7.2	16.1
June	-	-	-	-	-	-	11.453	8.2	7.2	16.3
July	-	-	-	-	-	-	11.463	8.3	7.2	16.1
Aug.	-	-	-	-	-	-	11.482	8.3	7.2	16.1
Sep.	-	-	-	-	-	-	11.495	8.3	7.3	16.1

2. Labour costs and productivity
(annual percentage changes)

	Unit labour cost in the whole economy, and components (s.a.)			Labour cost indices ³⁾					Earnings per employee in manufacturing	
	Unit labour cost	Compensation per employee	Labour productivity	Total	By component		By selected sector			
					Wages and salaries	Employers' social contributions and other costs	Industry excluding construction	Services		
	11	12	13	14	15	16	17	18	19	
1997	0.4	1.9	1.5	2.6	2.6	2.7	2.2	2.7	2.3	
1998	0.1	1.2	1.1	1.6	1.9	0.8	1.6	1.4	2.3	
1999	1.0	2.0	1.0	2.3	2.6	1.4	2.4	1.9	2.5	
2000	1.2	2.5	1.3	3.2	3.4	2.5	3.2	2.9	2.7	
2000 Q3	1.6	2.6	1.0	3.2	3.4	2.5	3.1	2.6	2.5	
Q4	2.0	2.5	0.5	3.0	3.2	2.1	2.8	2.9	2.5	
<i>Euro area enlargement</i>										
2001	2.6	2.7	0.1	3.4	3.6	2.6	3.2	3.2	3.1	
2001 Q1	2.0	2.4	0.5	3.4	3.8	2.3	3.2	3.3	3.4	
Q2	2.7	2.8	0.1	3.0	3.2	2.2	3.1	2.1	3.1	
Q3	2.5	2.7	0.2	3.8	3.9	3.1	3.6	3.7	3.3	
Q4	3.3	2.9	-0.4	3.3	3.5	2.7	3.0	3.6	2.8	
2002 Q1	3.3	2.9	-0.4	4.0	4.1	3.4	3.6	4.1	2.5	
Q2	2.5	2.6	0.2	3.6	3.6	3.6	3.1	3.9	3.0	

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

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

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

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

6 Saving, investment and financing in the euro area

Table 6.1

Financial investment and financing of non-financial sectors ¹⁾

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

Amounts outstanding

1. Main financial assets ²⁾

	Currency and deposits									Memo: deposits of non-banks with banks outside the euro area ³⁾
	Total	Currency	Deposits of non-financial sectors other than central government with euro area MFIs					Deposits of central government with euro area MFIs	Deposits with non-MFIs ⁴⁾	
			Total	Overnight	With agreed maturity	Redeemable at notice	Repurchase agreements			
	1	2	3	4	5	6	7	8	9	10
1998 Q2	4,699.1	315.5	4,100.3	1,204.9	1,452.7	1,341.9	100.8	147.4	135.8	239.7
Q3	4,677.4	311.8	4,074.2	1,184.2	1,451.1	1,341.4	97.4	156.4	135.0	237.6
Q4	4,825.9	323.4	4,211.2	1,282.9	1,463.3	1,386.3	78.6	149.8	141.5	215.3
1999 Q1	4,676.1	318.6	4,075.8	1,239.1	1,464.6	1,306.2	66.0	133.4	148.3	243.9
Q2	4,702.4	324.8	4,114.2	1,321.8	1,418.3	1,315.7	58.4	125.0	138.4	242.7
Q3	4,713.7	328.3	4,112.8	1,324.6	1,416.5	1,313.1	58.7	133.3	139.4	238.6
Q4	4,859.9	350.8	4,215.1	1,370.9	1,457.7	1,323.5	63.0	142.0	152.0	229.7
2000 Q1	4,837.9	335.5	4,222.3	1,379.6	1,462.5	1,303.3	76.8	130.2	150.0	260.5
Q2	4,894.9	342.0	4,256.9	1,409.7	1,485.7	1,282.6	78.9	146.0	150.0	247.1
Q3	4,915.1	339.8	4,266.5	1,396.9	1,524.0	1,263.7	81.9	159.2	149.6	253.9
Q4	5,030.3	348.4	4,361.6	1,464.4	1,542.4	1,269.1	85.6	164.5	155.9	230.1
<i>Euro area enlargement</i>										
2001 Q1	5,148.0	336.3	4,501.3	1,446.1	1,624.7	1,314.6	115.9	150.3	160.1	259.6
Q2	5,245.2	333.0	4,585.7	1,526.1	1,620.2	1,321.1	118.3	165.5	161.0	269.7
Q3	5,232.7	309.6	4,615.1	1,547.9	1,608.7	1,333.7	124.7	147.8	160.2	265.6
Q4	5,365.8	239.7	4,819.4	1,690.3	1,615.6	1,396.3	117.2	139.0	167.6	297.6
2002 Q1	5,368.8	254.3	4,779.3	1,637.6	1,607.2	1,413.0	121.6	157.5	177.7	303.0
Q2	.	285.8	4,837.9	1,706.4	1,599.1	1,412.9	119.6	153.2	.	.

	Securities other than shares			Shares ⁵⁾				Insurance technical reserves		
	Total	Short-term	Long-term	Total	Quoted shares	Mutual fund shares	Money market fund shares	Total	Net equity of households in life insurance reserves and pension fund reserves	Prepayments of insurance premiums and reserves for outstanding claims
1998 Q2	1,555.9	167.6	1,388.3	3,500.8	2,070.8	1,429.9	186.7	2,523.8	2,256.5	267.4
Q3	1,546.6	156.5	1,390.1	3,138.9	1,698.5	1,440.4	187.9	2,518.6	2,248.5	270.1
Q4	1,544.1	155.5	1,388.6	3,495.4	1,974.3	1,521.1	172.7	2,616.0	2,345.9	270.1
1999 Q1	1,559.8	135.8	1,424.0	3,721.9	2,090.8	1,631.0	194.8	2,679.6	2,402.8	276.9
Q2	1,483.8	125.5	1,358.2	3,989.6	2,258.8	1,730.9	211.6	2,749.9	2,469.4	280.5
Q3	1,491.7	115.1	1,376.6	4,027.4	2,288.6	1,738.8	210.8	2,793.4	2,508.8	284.6
Q4	1,565.0	171.2	1,393.8	4,619.6	2,783.6	1,836.0	203.9	2,938.0	2,650.4	287.6
2000 Q1	1,583.4	191.5	1,391.9	4,863.0	2,926.7	1,936.2	218.3	3,054.1	2,758.6	295.5
Q2	1,618.5	196.5	1,422.0	4,752.6	2,843.3	1,909.3	208.8	3,099.9	2,800.6	299.3
Q3	1,689.0	215.4	1,473.6	4,864.2	2,940.7	1,923.5	207.3	3,154.0	2,850.5	303.5
Q4	1,761.5	232.9	1,528.6	4,885.5	3,010.2	1,875.3	203.4	3,182.0	2,878.0	304.0
<i>Euro area enlargement</i>										
2001 Q1	1,881.5	321.4	1,560.1	4,594.7	2,755.2	1,839.5	228.4	3,232.4	2,921.6	310.8
Q2	1,877.9	288.1	1,589.7	4,647.4	2,786.2	1,861.2	235.4	3,290.5	2,977.6	312.9
Q3	1,903.5	289.6	1,613.9	3,991.4	2,249.3	1,742.1	256.1	3,267.0	2,950.7	316.3
Q4	1,900.8	278.8	1,622.0	4,362.6	2,526.3	1,836.3	263.8	3,364.0	3,043.4	320.6
2002 Q1	1,976.3	318.3	1,658.0	4,449.2	2,580.9	1,868.3	293.9	3,448.1	3,119.2	329.0
Q2	.	.	.	.	.	.	.	.	.	.

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, 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.

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

	Loans taken from euro area MFIs and other financial corporations by											Memo: loans taken from banks outside the euro area ³⁾ by non-banks ³⁾
	Total	Taken from euro area MFIs	General government			Non-financial corporations			Households ⁴⁾			
			Total	Short-term	Long-term ⁵⁾	Total	Short-term	Long-term	Total	Short-term	Long-term	
1	2	3	4	5	6	7	8	9	10	11	12	
1998 Q2	6,006.2	5,453.0	901.1	31.9	869.2	2,505.2	878.9	1,626.2	2,599.9	232.5	2,367.4	151.3
Q3	6,081.8	5,524.1	903.5	33.3	870.2	2,528.7	866.2	1,662.5	2,649.6	233.8	2,415.9	147.4
Q4	6,227.5	5,663.5	911.2	36.0	875.2	2,600.7	902.9	1,697.8	2,715.6	240.8	2,474.8	151.3
1999 Q1	6,259.4	5,682.7	902.1	36.3	865.8	2,595.9	921.3	1,674.6	2,761.3	251.8	2,509.6	156.8
Q2	6,423.4	5,817.5	899.5	39.0	860.6	2,688.1	964.2	1,724.0	2,835.7	255.6	2,580.1	183.3
Q3	6,491.4	5,886.6	884.7	37.9	846.8	2,703.0	943.7	1,759.3	2,903.6	255.4	2,648.3	191.4
Q4	6,665.1	6,039.5	900.1	42.1	858.0	2,795.4	979.8	1,815.6	2,969.5	264.1	2,705.4	201.4
2000 Q1	6,809.9	6,156.4	890.4	41.1	849.3	2,894.2	1,038.0	1,856.2	3,025.2	265.6	2,759.7	221.1
Q2	6,957.6	6,262.2	884.8	42.0	842.8	2,994.4	1,090.7	1,903.7	3,078.3	274.4	2,804.0	219.7
Q3	7,102.2	6,379.6	865.0	39.9	825.0	3,102.3	1,152.4	1,949.9	3,134.9	275.9	2,859.0	252.3
Q4	7,264.2	6,500.5	880.2	42.0	838.2	3,199.5	1,167.3	2,032.2	3,184.4	281.0	2,903.4	245.2
<i>Euro area enlargement</i>												
2001 Q1	7,450.5	6,671.4	894.5	41.8	852.7	3,320.4	1,243.9	2,076.4	3,235.7	280.2	2,955.5	257.3
Q2	7,554.9	6,761.9	877.5	42.1	835.4	3,392.2	1,266.5	2,125.7	3,285.2	286.2	2,999.0	296.2
Q3	7,626.8	6,804.9	871.0	45.1	826.0	3,432.8	1,244.6	2,188.1	3,323.0	281.8	3,041.2	249.7
Q4	7,730.5	6,897.2	891.3	50.6	840.7	3,470.1	1,225.3	2,244.8	3,369.1	284.1	3,085.1	267.9
2002 Q1	7,804.4	6,960.6	895.8	53.3	842.5	3,506.3	1,223.3	2,283.0	3,402.3	279.4	3,122.9	289.6
Q2		7,022.0										

	Securities other than shares issued by								Quoted shares issued by non-financial corporations	Deposit liabilities of central government	Pension fund reserves of non- financial corporations
	Total	General government			Non-financial corporations						
		Total	Short-term	Long-term	Total	Short-term	Long-term				
13	14	15	16	17	18	19	20	21	22		
1998 Q2	3,836.2	3,514.2	496.6	3,017.6	322.0	53.9	268.1	2,762.9	134.2	221.2	
Q3	3,927.0	3,595.0	498.6	3,096.4	332.0	55.3	276.7	2,362.0	133.8	224.1	
Q4	3,929.5	3,595.9	468.2	3,127.8	333.6	55.1	278.5	2,659.1	140.3	227.0	
1999 Q1	3,973.6	3,638.9	466.9	3,172.0	334.8	65.7	269.1	2,734.3	146.9	229.7	
Q2	3,956.6	3,616.0	459.3	3,156.7	340.7	66.4	274.3	2,955.3	136.6	232.6	
Q3	3,935.6	3,581.7	449.6	3,132.0	353.9	74.8	279.1	2,948.2	137.6	235.5	
Q4	3,896.3	3,532.6	421.1	3,111.5	363.8	78.2	285.5	3,959.9	149.8	238.7	
2000 Q1	3,964.9	3,598.8	425.3	3,173.5	366.1	78.7	287.4	4,422.6	147.6	241.0	
Q2	3,997.5	3,619.7	425.8	3,193.9	377.8	88.7	289.2	4,174.3	147.6	243.4	
Q3	4,033.5	3,635.5	421.8	3,213.7	397.9	95.6	302.4	4,053.3	147.2	245.3	
Q4	4,077.2	3,663.0	400.8	3,262.2	414.1	100.6	313.6	3,833.4	153.7	247.1	
<i>Euro area enlargement</i>											
2001 Q1	4,251.1	3,797.4	429.3	3,368.1	453.8	112.8	341.0	3,564.0	154.7	249.3	
Q2	4,310.2	3,830.3	440.7	3,389.7	479.9	123.9	355.9	3,572.4	155.2	251.5	
Q3	4,386.9	3,891.4	449.9	3,441.5	495.5	138.1	357.4	2,822.5	155.4	253.7	
Q4	4,393.3	3,879.3	434.4	3,444.9	514.0	136.5	377.5	3,276.5	165.5	253.1	
2002 Q1	4,451.4	3,931.9	446.8	3,485.1	519.5	143.6	375.9	3,324.0	174.8	255.6	
Q2											

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, 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) Including non-profit institutions serving households.

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

Transactions

1. Main financial assets ¹⁾

	Currency and deposits									Memo: deposits of non-banks with banks outside the euro area ²⁾
	Total	Currency	Deposits of non-financial sectors ³⁾ other than central government with euro area MFIs					Deposits of central government with euro area MFIs	Deposits with non-MFIs ⁴⁾	
			Total	Overnight	With agreed maturity	Redeemable at notice	Repurchase agreements			
	1	2	3	4	5	6	7	8	9	10
1998 Q2	52.5	3.6	45.2	68.1	-5.7	-0.5	-16.7	8.0	-4.4	-4.9
Q3	-14.0	-3.7	-18.5	-17.7	2.7	-0.2	-3.3	9.0	-0.7	2.8
Q4	148.5	11.6	137.0	98.1	13.0	44.8	-18.9	-6.6	6.5	-24.5
1999 Q1	-40.3	-5.2	-37.7	-19.4	-15.7	10.1	-12.7	-4.2	6.8	23.4
Q2	22.0	6.2	34.2	81.3	-48.9	9.4	-7.6	-8.4	-9.9	-4.3
Q3	12.9	3.5	0.2	3.5	-1.1	-2.6	0.3	8.3	1.0	-2.8
Q4	138.7	22.3	95.1	44.2	36.4	10.3	4.2	8.7	12.7	-14.2
2000 Q1	-28.9	-15.3	0.4	6.1	0.9	-20.4	13.7	-11.9	-2.1	26.1
Q2	52.6	6.7	30.0	31.9	17.8	-21.8	2.1	15.8	0.1	-12.8
Q3	6.4	-2.2	-4.2	-17.3	28.8	-18.5	2.9	13.3	-0.5	-1.7
Q4	128.4	8.6	108.3	71.4	27.3	5.7	3.8	5.3	6.3	-16.7
<i>Euro area enlargement</i>										
2001 Q1	-17.4	-19.8	13.8	-34.4	40.8	-6.1	13.4	-15.6	4.2	13.6
Q2	93.8	-3.3	81.0	77.1	-4.7	6.3	2.3	15.1	0.9	5.8
Q3	6.1	-23.4	48.0	25.4	3.2	13.0	6.5	-17.7	-0.8	2.5
Q4	135.4	-69.9	206.8	142.4	9.4	62.5	-7.5	-8.8	7.4	12.2
2002 Q1	5.4	14.6	-38.4	-53.3	-4.3	14.9	4.3	19.0	10.1	4.4
Q2	.	31.5	77.0	74.8	3.9	0.5	-2.2	-4.2	1.2	.

	Securities other than shares			Shares ⁵⁾				Insurance technical reserves		
	Total	Short-term	Long-term	Total	Quoted shares	Mutual fund shares	Money market fund shares	Total	Net equity of households in life insurance reserves and pension fund reserves	Prepayments of insurance premiums and reserves for outstanding claims
1998 Q2	-66.4	-24.9	-41.5	118.5	24.4	94.1	0.0	46.5	44.5	2.0
Q3	-12.7	-11.2	-1.5	100.2	14.3	85.9	1.0	42.9	40.3	2.6
Q4	-13.0	-2.2	-10.8	82.7	63.2	19.5	-16.1	49.5	47.6	2.0
1999 Q1	20.0	-13.1	33.1	105.3	3.7	101.6	2.9	64.7	58.6	6.0
Q2	-43.0	-11.9	-31.0	150.1	65.5	84.7	16.8	54.5	50.0	4.5
Q3	-4.6	-13.0	8.4	95.4	54.7	40.7	-0.4	57.7	52.9	4.8
Q4	89.3	50.7	38.6	-7.6	24.8	-32.4	-6.8	70.8	68.7	2.1
2000 Q1	11.0	26.9	-15.8	-13.2	-60.2	47.0	12.9	76.3	69.9	6.3
Q2	46.1	4.5	41.6	68.2	49.2	19.0	-9.7	56.7	52.1	4.6
Q3	80.0	19.6	60.4	150.9	142.6	8.4	-1.8	56.5	51.7	4.8
Q4	20.7	7.3	13.4	219.1	181.0	38.1	-4.0	58.4	59.1	-0.7
<i>Euro area enlargement</i>										
2001 Q1	130.1	92.7	37.5	62.3	25.8	36.6	24.7	59.5	54.2	5.3
Q2	-1.6	-34.9	33.4	43.2	38.7	4.5	6.4	56.1	53.1	3.0
Q3	38.6	-1.6	40.2	68.1	43.4	24.8	20.1	52.1	47.5	4.6
Q4	-3.9	-14.4	10.4	4.1	-23.4	27.5	7.3	70.0	65.7	4.2
2002 Q1	100.3	44.2	56.1	54.0	8.2	45.8	29.9	68.9	60.5	8.4
Q2	.	.	.	.	.	.	.	.	.	.

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, 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) Non-financial sectors comprise general government (S.13), non-financial corporations (S.11), and households (S.14) including non-profit institutions serving households (S.15).
- 4) Covering deposits with euro area central government (S.1311), other financial intermediaries (S.123) and insurance corporations and pension funds (S.125).
- 5) Excluding unquoted shares.

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

	Loans taken from euro area MFIs and other financial corporations by											Memo: loans taken from banks outside the euro area by non-banks ³⁾
	Total	Taken from euro area MFIs	General government			Non-financial corporations			Households ⁴⁾			
			Total	Short-term	Long-term ⁵⁾	Total	Short-term	Long-term	Total	Short-term	Long-term	
	1	2	3	4	5	6	7	8	9	10	11	12
1998 Q2	118.2	111.3	-5.9	-3.7	-2.2	56.6	22.5	34.1	67.5	9.1	58.4	6.4
Q3	81.1	82.2	2.8	1.4	1.4	27.6	-15.0	42.6	50.7	1.2	49.4	-0.7
Q4	160.2	151.0	8.3	2.8	5.5	75.8	37.3	38.5	76.0	7.1	68.9	3.5
1999 Q1	89.6	75.6	-7.7	0.3	-8.0	21.1	23.3	-2.2	76.2	9.2	67.0	1.9
Q2	162.7	133.2	-4.1	2.7	-6.8	89.6	41.2	48.4	77.2	3.9	73.3	23.9
Q3	70.6	71.5	-14.7	-1.1	-13.6	17.3	-16.7	34.0	67.9	-0.3	68.2	8.4
Q4	170.4	146.6	15.1	4.2	10.9	86.4	34.0	52.4	68.8	8.8	60.0	-7.0
2000 Q1	141.6	108.8	-8.3	-0.9	-7.4	91.9	54.7	37.2	58.0	1.6	56.4	15.1
Q2	163.4	118.4	-5.9	0.9	-6.8	113.4	62.2	51.3	55.9	9.8	46.1	-0.8
Q3	132.1	91.6	-16.2	-2.1	-14.1	96.6	53.4	43.2	51.8	0.0	51.8	23.2
Q4	185.0	140.1	15.6	2.1	13.5	116.3	19.6	96.7	53.1	5.3	47.7	1.9
<i>Euro area enlargement</i>												
2001 Q1	95.4	78.2	-3.8	-0.5	-3.3	62.1	38.1	24.0	37.1	-4.2	41.3	9.2
Q2	104.5	88.0	-17.3	0.3	-17.7	64.7	20.9	43.7	57.2	6.1	51.1	33.6
Q3	83.6	57.9	-6.0	2.9	-8.9	50.6	-15.8	66.4	38.9	-4.1	43.1	-38.0
Q4	103.8	94.3	18.6	5.5	13.1	35.9	-18.0	53.9	49.3	2.2	47.1	4.1
2002 Q1	73.6	63.2	4.4	2.7	1.6	30.1	-4.0	34.0	39.1	-5.2	44.3	20.5
Q2	.	87.7	.	.	.	.	.	.	.	.	.	.

	Securities other than shares issued by							Quoted shares issued by non-financial corporations	Deposit liabilities of central government	Pension fund reserves of non- financial corporations
	Total	General government			Non-financial corporations					
		Total	Short-term	Long-term	Total	Short-term	Long-term			
	13	14	15	16	17	18	19	20	21	22
1998 Q2	53.3	50.6	-1.3	51.9	2.7	-1.8	4.4	36.8	-2.1	2.2
Q3	61.3	54.0	2.1	52.0	7.3	1.6	5.7	10.1	-0.4	2.2
Q4	-10.5	-15.4	-31.0	15.6	4.8	0.5	4.4	40.1	6.4	1.9
1999 Q1	73.9	60.5	1.1	59.4	13.4	10.4	3.0	10.8	6.6	2.3
Q2	37.9	29.3	-7.4	36.7	8.5	0.6	8.0	34.4	-10.3	2.3
Q3	55.9	37.8	-10.8	48.6	18.2	8.3	9.8	35.4	1.0	2.3
Q4	-12.1	-19.7	-27.7	8.0	7.6	3.3	4.3	43.0	12.1	2.3
2000 Q1	60.8	58.9	10.0	48.9	1.8	0.5	1.4	19.4	-2.2	1.9
Q2	37.1	23.0	-1.0	23.9	14.1	10.2	3.9	29.7	0.0	1.9
Q3	49.3	25.5	-2.7	28.2	23.8	7.2	16.6	72.2	-0.4	1.9
Q4	-1.0	-17.7	-27.0	9.3	16.7	5.2	11.5	51.6	6.4	1.8
<i>Euro area enlargement</i>										
2001 Q1	76.0	38.5	32.3	6.1	37.5	11.0	26.5	54.7	1.1	2.2
Q2	86.1	60.3	10.7	49.6	25.7	11.0	14.7	46.5	0.4	2.2
Q3	49.0	30.0	8.7	21.3	19.0	14.1	4.9	17.6	0.2	2.2
Q4	6.2	-11.1	-22.1	11.0	17.3	-1.6	18.9	7.3	10.1	-0.5
2002 Q1	110.8	96.7	21.5	75.2	14.1	6.9	7.2	10.9	9.3	2.4
Q2	.	.	.	.	.	.	.	.	.	.

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, 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) Including non-profit institutions serving households.

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

Table 6.2
Saving, investment and financing ¹⁾
(EUR billions (ECU billions to 1998), 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	367.6	1,092.6	-751.6	26.5	0.1	1,527.6	0.7	484.6	222.1	420.9	164.6	201.1	33.6
1996	340.4	1,122.0	-783.6	1.7	0.4	1,730.1	-3.0	395.0	398.1	384.4	312.5	193.6	49.6
1997	352.5	1,138.5	-796.8	10.8	0.1	1,912.1	-0.2	393.4	331.9	446.4	482.9	222.1	35.6
1998	412.5	1,202.5	-822.9	32.6	0.2	2,369.9	11.0	430.2	361.7	511.0	815.5	209.7	30.8
1999	450.8	1,292.4	-861.4	19.6	0.1	3,036.2	1.3	552.7	433.9	883.9	899.5	255.2	9.7
2000	490.3	1,388.4	-910.9	29.3	-16.4	2,771.0	1.3	350.4	256.2	802.9	1,110.6	250.5	-0.9
<i>Euro area enlargement</i>													
2001	459.6	1,433.7	-969.3	-5.2	0.5	2,489.7	-0.5	591.6	473.2	697.4	547.9	248.7	-68.7

	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	413.6	1,157.9	-751.6	7.3	1,481.6	477.7	277.7	380.7	139.9	205.6
1996	413.0	1,188.4	-783.6	8.2	1,657.6	472.4	378.0	335.2	275.8	196.2
1997	457.9	1,240.4	-796.8	14.4	1,806.7	509.2	319.0	375.6	373.1	229.8
1998	487.6	1,298.0	-822.9	12.5	2,294.8	645.9	322.5	472.8	634.2	219.4
1999	500.8	1,350.9	-861.4	11.3	2,986.2	927.1	493.2	750.5	552.8	262.5
2000	519.6	1,419.0	-910.9	11.5	2,741.7	533.6	411.0	823.9	720.2	253.0
<i>Euro area enlargement</i>										
2001	492.2	1,451.7	-969.3	9.8	2,457.1	683.2	477.8	565.2	483.0	248.0

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	156.0	570.1	-438.3	220.2	33.4	10.0	39.9	64.5	236.3	530.7	139.9	-87.3	126.0	90.6
1996	137.4	589.9	-454.4	262.2	54.4	-13.8	55.4	85.9	124.0	536.3	275.7	6.8	144.1	117.2
1997	158.7	615.9	-468.9	239.1	24.4	-12.7	46.1	94.0	110.4	544.1	287.4	12.1	154.2	111.5
1998	203.7	661.4	-487.4	418.6	55.0	-9.7	87.8	199.9	147.2	590.6	475.1	25.8	243.6	197.1
1999	221.7	708.5	-508.5	596.4	26.6	58.7	175.0	301.2	108.3	572.0	709.8	47.7	416.8	230.5
2000	322.7	776.8	-542.1	803.2	69.9	69.5	167.3	414.5	95.4	595.3	1,030.5	56.4	544.4	425.3
<i>Euro area enlargement</i>														
2001	222.3	801.6	-576.0	531.9	83.1	53.5	135.6	178.3	73.9	604.8	680.4	99.6	309.1	264.8

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	160.3	350.6	-192.6	430.4	185.2	82.4	1.2	178.7	453.8	604.9	136.9	135.8	3,445.2	17.6
1996	158.2	360.6	-203.8	438.9	145.6	24.3	93.6	189.0	435.8	619.5	161.3	160.1	3,520.3	17.6
1997	153.9	351.7	-199.1	426.5	69.1	-18.8	194.9	215.8	411.9	587.0	168.5	167.1	3,613.4	16.2
1998	162.0	361.3	-203.1	450.6	95.5	-115.5	290.2	204.4	399.9	566.8	212.7	211.4	3,726.8	15.2
1999	174.9	392.3	-215.2	481.2	115.4	6.7	199.5	242.7	387.4	554.0	268.7	267.2	3,853.9	14.4
2000	180.5	410.8	-223.6	422.8	52.2	83.2	129.0	242.9	381.4	557.2	221.8	220.1	4,004.4	13.9
<i>Euro area enlargement</i>														
2001	173.4	416.3	-242.3	401.2	179.6	102.4	73.8	234.4	404.1	594.7	170.5	168.6	4,270.3	13.9

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			Social contributions		Sales	Capital revenue		Memo: fiscal burden ²⁾
		Direct taxes	Households	Corporations	Received by EU institutions	Employers	Employees	Capital taxes							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
1992	47.4	46.7	11.9	9.8	2.0	13.0	0.9	17.2	8.7	5.4	2.4	0.7	0.6	42.6	
1993	48.1	47.6	12.1	10.0	2.0	13.2	0.8	17.5	8.7	5.5	2.5	0.5	0.3	43.1	
1994	47.6	47.2	11.6	9.6	2.0	13.5	0.8	17.5	8.5	5.7	2.5	0.4	0.2	42.8	
1995	47.2	46.6	11.6	9.5	2.0	13.3	0.9	17.3	8.4	5.6	2.5	0.5	0.3	42.6	
1996	48.0	47.5	12.0	9.6	2.3	13.4	0.8	17.6	8.7	5.6	2.5	0.5	0.3	43.3	
1997	48.3	47.6	12.2	9.6	2.6	13.6	0.7	17.6	8.8	5.5	2.5	0.7	0.4	43.7	
1998	47.7	47.2	12.4	9.9	2.5	14.1	0.7	16.5	8.5	4.9	2.5	0.5	0.3	43.3	
1999	48.2	47.7	12.8	10.1	2.6	14.4	0.6	16.4	8.5	4.9	2.5	0.6	0.3	43.8	
2000	47.9	47.4	13.0	10.2	2.7	14.2	0.6	16.2	8.4	4.9	2.4	0.5	0.3	43.7	
<i>Euro area enlargement</i>															
2001	47.3	46.8	12.7	10.0	2.6	13.9	0.6	16.0	8.4	4.8	2.3	0.6	0.3	42.9	

2. Euro area – expenditure

	Total	Current expenditure							Capital expenditure			Memo: primary expenditure ⁴⁾		
		Compensation of employees	Intermediate consumption	Interest	Current transfers	Social payments ³⁾	Subsidies	Paid by EU institutions	Investment	Capital transfers	Paid by EU institutions			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1992	52.3	47.7	11.4	5.0	5.7	25.6	21.9	2.4	0.5	4.7	3.2	1.5	0.0	46.7
1993	53.8	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	48.4	11.3	5.0	5.5	26.5	22.9	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	22.8	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	23.2	2.2	0.6	4.0	2.6	1.4	0.0	46.6
1997	50.9	47.2	11.0	4.8	5.1	26.3	23.1	2.1	0.6	3.7	2.4	1.3	0.1	45.8
1998	50.0	46.1	10.7	4.6	4.7	26.0	22.6	2.1	0.5	3.9	2.4	1.5	0.1	45.2
1999	49.5	45.4	10.7	4.7	4.2	25.8	22.6	2.0	0.5	4.1	2.5	1.6	0.1	45.3
2000	48.8	44.8	10.5	4.7	4.0	25.5	22.2	1.9	0.5	4.0	2.5	1.5	0.0	44.8
<i>Euro area enlargement</i>														
2001	48.8	44.5	10.5	4.8	3.9	25.3	22.2	1.9	0.5	4.3	2.6	1.6	0.0	44.9

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

	Deficit (-) / surplus (+)					Primary deficit (-) / surplus (+)	Government consumption ⁵⁾							
	Total	Central government	State government	Local government	Social security funds		Total	Compensation of employees	Intermediate consumption	Transfers in kind via market producers	Consumption of fixed capital	Sales (minus)	Government collective consumption	Government individual consumption
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1992	-4.9	-4.3	-0.3	-0.2	0.0	0.8	20.8	11.4	5.0	5.0	1.8	-2.4	8.8	12.0
1993	-5.7	-5.0	-0.4	-0.2	-0.1	0.2	21.2	11.6	5.1	5.0	1.9	-2.5	8.9	12.3
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	8.6	12.2
1995	-5.0	-4.2	-0.5	-0.1	-0.3	0.7	20.5	11.2	4.8	5.1	1.8	-2.5	8.4	12.1
1996	-4.3	-3.6	-0.4	-0.1	-0.2	1.4	20.6	11.2	4.8	5.2	1.8	-2.5	8.5	12.1
1997	-2.6	-2.3	-0.4	0.1	0.0	2.5	20.4	11.0	4.8	5.1	1.8	-2.5	8.4	12.0
1998	-2.2	-2.2	-0.2	0.1	0.1	2.5	20.0	10.7	4.6	5.1	1.7	-2.5	8.1	11.9
1999	-1.3	-1.6	-0.1	0.1	0.4	2.9	20.0	10.7	4.7	5.1	1.7	-2.5	8.1	11.9
2000	-0.9	-1.3	-0.2	0.1	0.4	3.1	20.0	10.5	4.7	5.1	1.7	-2.4	8.1	11.8
<i>Euro area enlargement</i>														
2001	-1.5	-1.5	-0.4	0.1	0.3	2.5	20.0	10.5	4.8	5.1	1.7	-2.3	8.1	11.8

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
1998	-0.7	-2.2	-2.5	-2.7	-2.7	2.4	-2.8	3.1	-0.8	-2.4	-2.6	1.3
1999	-0.5	-1.5	-1.9	-1.1	-1.6	2.2	-1.8	3.6	0.7	-2.3	-2.4	1.9
2000	0.1	1.1	-0.8	-0.6	-1.3	4.4	-0.5	5.6	2.2	-1.5	-2.9	7.0
2001	0.4	-2.8	.	-0.1	-1.4	1.5	-2.2	6.1	0.1	0.2	-4.1	4.9

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 licences in 2000 (the euro area deficit / surplus including those proceeds is equal to 0.2). Data before 1995 are partially estimated. Transactions between countries and EU institutions are included and consolidated. Transactions among governments are not consolidated.

2) The fiscal burden comprises taxes and social contributions.

3) Comprises social benefits, social transfers in kind via market producers and transfers to non-profit institutions serving households.

4) Comprises total expenditure minus interest expenditure.

5) Corresponds to final consumption expenditure (P.3) of the general government in the ESA 95.

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	MFI	Other financial corporations	Other sectors	
1	2	3	4	5	6	7	8	9	10	
1992	61.0	2.6	16.2	10.1	32.0	50.3	26.4	7.6	16.3	10.7
1993	67.3	2.7	17.0	10.0	37.6	52.5	27.6	8.7	16.2	14.8
1994	70.0	2.9	16.1	10.3	40.6	55.8	29.8	9.9	16.0	14.2
1995	74.2	2.9	17.7	9.9	43.8	58.3	30.5	10.9	16.9	15.9
1996	75.5	2.9	17.2	9.9	45.5	58.9	30.3	13.2	15.5	16.5
1997	74.9	2.8	16.3	8.9	46.8	56.9	29.0	14.4	13.4	17.9
1998	73.1	2.8	15.1	7.9	47.3	53.3	27.0	16.2	10.2	19.8
1999	71.9	2.9	14.1	6.9	48.0	49.7	25.3	14.8	9.6	22.3
2000	69.4	2.7	13.0	6.2	47.5	45.9	22.8	13.3	9.8	23.6
<i>Euro area enlargement</i>										
2001	69.2	2.6	12.6	6.3	47.7	44.8	22.2	12.2	10.4	24.4

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

	Total	Issued by ⁴⁾				Original maturity			Residual maturity			Currency		
		Central government	State government	Local government	Social security funds	Up to 1 year	Over 1 year	Variable interest rate	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Euro or participating currency ⁵⁾	Non-domestic currency	Other currencies
1992	61.0	49.8	4.7	6.1	0.4	12.3	48.7	6.4	17.8	21.1	22.1	59.7	2.2	1.3
1993	67.3	55.3	5.2	6.3	0.6	12.0	55.3	6.7	18.5	24.4	24.4	65.6	2.9	1.7
1994	70.0	57.9	5.4	6.1	0.5	11.2	58.8	7.4	16.6	26.7	26.7	68.1	3.0	1.9
1995	74.2	61.7	5.7	6.0	0.8	10.6	63.6	6.9	17.6	26.4	30.2	72.3	2.9	1.9
1996	75.5	63.0	6.1	5.9	0.5	10.2	65.2	6.3	19.3	25.4	30.8	73.5	2.7	1.9
1997	74.9	62.4	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	73.1	61.1	6.3	5.4	0.4	7.7	65.5	5.5	16.4	26.1	30.7	71.4	3.2	1.7
1999	71.9	60.0	6.2	5.3	0.3	6.3	65.6	5.1	14.5	26.8	30.6	70.0	-	1.9
2000	69.4	57.9	6.1	5.1	0.3	5.5	63.9	4.5	14.4	27.4	27.6	67.6	-	1.8
<i>Euro area enlargement</i>														
2001	69.2	57.7	6.2	5.0	0.3	5.8	63.4	3.2	.	.	.	67.5	-	1.7

3. Euro area countries – government debt

	BE	DE	GR	ES	FR	IE	IT	LU	NL	AT	PT	FI
	1	2	3	4	5	6	7	8	9	10	11	12
1998	119.2	60.9	105.8	64.6	59.5	55.2	116.3	6.3	66.8	63.9	55.0	48.8
1999	114.9	61.2	104.3	63.1	58.5	49.7	114.5	6.0	63.1	64.9	54.4	46.8
2000	109.2	60.2	104.7	60.5	57.3	39.1	110.5	5.6	55.8	63.6	53.3	44.0
2001	107.6	59.5	.	57.1	57.3	36.4	109.8	5.6	52.8	63.2	55.5	43.4

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

2. Euro area – deficit-debt adjustment

	Change in debt	Deficit (-) / surplus (+) ⁸⁾	Deficit-debt adjustment ⁹⁾											Other ¹¹⁾
			Total	Transactions in main financial assets held by general government							Valuation effects	Exchange rate effects	Other changes in volume	
				Total	Currency and deposits	Securities ¹⁰⁾	Loans	Shares and other equity	Privatisations	Equity injections				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1992	6.7	-4.9	1.8	0.7	0.1	0.1	0.3	0.2	-0.1	0.2	0.4	0.3	0.7	0.0
1993	8.0	-5.7	2.3	1.5	1.3	0.2	0.3	-0.2	-0.3	0.1	0.3	0.3	0.1	0.3
1994	6.0	-5.1	0.9	0.0	-0.2	0.1	0.3	-0.1	-0.4	0.2	0.2	0.0	0.7	0.1
1995	7.8	-5.0	2.7	0.6	0.1	-0.1	0.5	0.1	-0.4	0.2	0.2	0.0	2.2	-0.3
1996	3.8	-4.3	-0.5	-0.1	-0.1	0.0	0.0	-0.1	-0.3	0.2	-0.2	-0.2	0.1	-0.2
1997	2.3	-2.6	-0.3	-0.5	0.2	-0.1	-0.1	-0.5	-0.8	0.3	0.2	0.2	-0.2	0.2
1998	1.6	-2.2	-0.6	-0.5	0.2	0.0	0.0	-0.7	-0.8	0.3	-0.2	0.0	0.0	0.1
1999	1.6	-1.3	0.3	-0.2	0.3	0.1	0.1	-0.7	-0.9	0.2	0.3	0.2	0.0	0.2
2000	0.8	0.2	1.0	1.0	0.7	0.2	0.2	-0.2	-0.4	0.2	0.1	0.0	-0.1	0.0
<i>Euro area enlargement</i>														
2001	1.7	-1.4	0.3	-0.3	-0.5	0.1	0.1	0.1	-0.3	0.2	0.0	0.0	0.1	0.5

Source: ECB.

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

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

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

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

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

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

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

8) Including proceeds from sales of UMTS licences.

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

10) Excluding financial derivatives.

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

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

Table 8.1

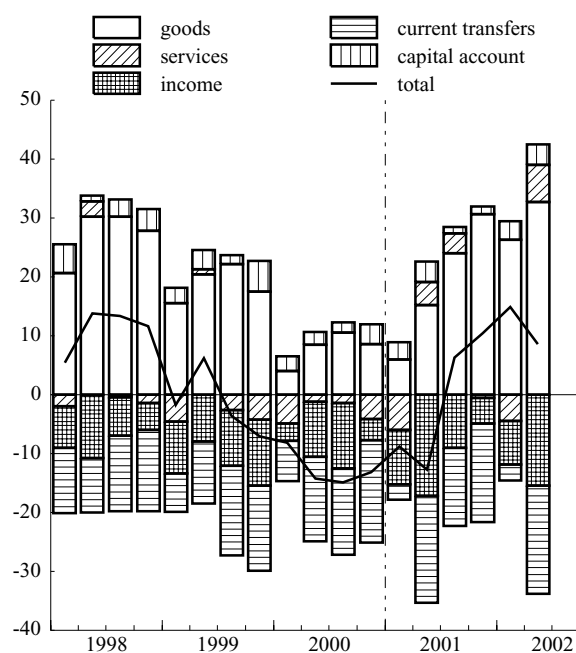
Summary balance of payments ^{1) 2)}

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

	Current account					Capital account	Financial account						Errors and omissions
	Total	Goods	Services	Income	Current transfers		Total	Direct investment	Portfolio investment	Financial derivatives	Other investment	Reserve assets	
	1	2	3	4	5	6	7	8	9	10	11	12	13
1997	62.1	116.4	3.1	-15.2	-42.2	13.0	.	-44.5	-24.3	.	.	.	.
1998	31.9	109.0	-1.1	-28.8	-47.2	12.4	-68.4	-81.3	-110.0	-8.2	123.0	8.2	24.1
1999	-19.0	75.7	-10.7	-37.3	-46.7	12.8	11.7	-120.1	-43.0	3.8	160.8	10.1	-5.4
2000	-60.4	31.6	-11.5	-27.0	-53.4	9.8	70.0	-12.3	-115.2	-2.2	182.0	17.6	-19.4
<i>Euro area enlargement</i>													
2001	-13.8	75.8	0.9	-39.7	-50.8	8.9	-40.5	-101.5	38.1	-3.7	8.8	17.8	45.4
2001 Q2	-16.2	15.2	3.9	-17.2	-18.2	3.5	6.1	-54.4	30.4	11.9	15.8	2.5	6.6
Q3	5.2	24.0	3.5	-9.0	-13.3	1.1	-53.1	-24.3	52.7	-10.4	-73.5	2.5	46.8
Q4	9.1	30.7	-0.5	-4.4	-16.7	1.4	-32.1	16.5	5.3	-6.9	-50.3	3.3	21.6
2002 Q1	11.7	26.3	-4.5	-7.4	-2.7	3.1	-26.5	-15.0	-51.8	1.6	41.8	-3.1	11.6
Q2	5.2	32.7	6.3	-15.4	-18.5	3.5	-22.3	-4.4	67.1	-2.8	-89.0	6.7	13.7
2001 June	-3.0	8.0	1.4	-4.9	-7.5	0.9	-6.1	-6.0	28.5	-2.5	-25.2	-0.8	8.2
July	-0.8	10.5	2.1	-7.9	-5.5	0.4	-25.6	-2.8	1.8	-6.3	-18.3	0.0	26.0
Aug.	5.3	7.4	1.0	0.0	-3.1	0.6	-6.1	-5.9	3.7	-3.5	-4.5	4.1	0.3
Sep.	0.7	6.0	0.4	-1.1	-4.6	0.1	-21.3	-15.6	47.2	-0.6	-50.7	-1.6	20.5
Oct.	4.1	11.4	0.5	-2.4	-5.4	0.4	-22.0	4.0	1.4	-2.9	-21.8	-2.7	17.5
Nov.	2.7	8.8	-0.9	-0.1	-5.2	0.2	-6.8	11.7	19.9	-2.8	-35.7	0.1	3.9
Dec.	2.3	10.4	-0.1	-1.9	-6.1	0.7	-3.2	0.8	-16.0	-1.1	7.2	5.9	0.2
2002 Jan.	-0.1	3.1	-2.4	-6.4	5.6	2.6	-49.5	0.0	-41.5	3.0	-5.8	-5.3	47.1
Feb.	4.4	10.0	-1.7	0.0	-3.9	0.2	6.7	-8.9	-12.9	1.7	24.4	2.5	-11.4
Mar.	7.4	13.2	-0.4	-0.9	-4.5	0.3	16.3	-6.1	2.6	-3.2	23.2	-0.2	-24.1
Apr.	-4.6	8.4	0.6	-7.7	-5.8	1.3	16.8	8.0	17.8	1.5	-18.9	8.4	-13.6
May	2.4	10.7	2.8	-6.0	-5.2	1.0	2.1	3.7	32.2	-2.3	-33.3	1.8	-5.5
June	7.3	13.6	2.9	-1.7	-7.5	1.1	-41.3	-16.1	17.1	-1.9	-36.8	-3.4	32.8
July	2.6	14.2	0.9	-9.3	-3.2	0.5	-11.2	-3.6	14.2	-7.0	-12.3	-2.5	8.1
Aug.	9.7	11.7	1.3	-0.1	-3.2	0.7	-11.8	1.7	4.5	-1.9	-17.8	1.8	1.4

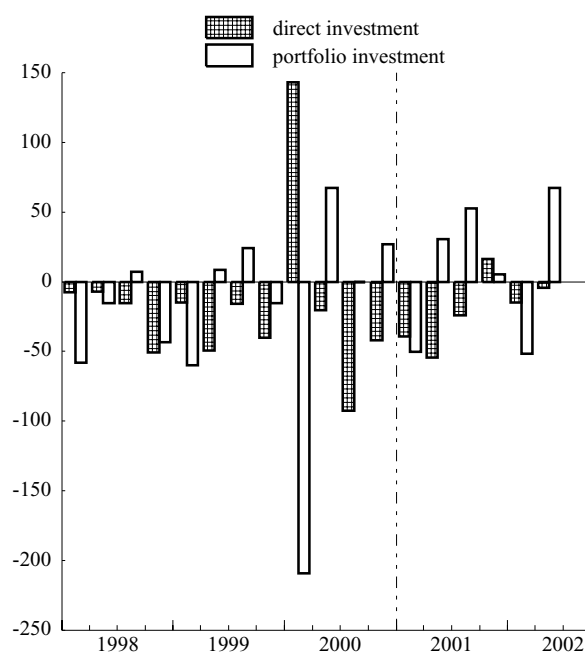
Current and capital accounts

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



Direct and portfolio investment

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



Source: ECB.

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

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

Table 8.2**Balance of payments: current and capital accounts ¹⁾***(EUR billions (ECU billions to end-1998))***1. Main items**

	Current account											Capital account	
	Total			Goods		Services		Income		Current transfers		Credit 12	Debit 13
	Credit 1	Debit 2	Net 3	Credit 4	Debit 5	Credit 6	Debit 7	Credit 8	Debit 9	Credit 10	Debit 11		
1997	1,218.5	1,156.3	62.1	754.6	638.3	214.2	211.0	189.5	204.7	60.1	102.3	18.9	5.9
1998	1,277.7	1,245.8	31.9	784.4	675.4	231.9	233.0	198.5	227.3	63.0	110.1	17.7	5.3
1999	1,337.5	1,356.5	-19.0	818.3	742.5	247.4	258.1	207.0	244.3	64.8	111.5	19.1	6.3
2000	1,612.4	1,672.8	-60.4	989.8	958.2	287.0	298.5	267.9	295.0	67.6	121.0	18.3	8.5
<i>Euro area enlargement</i>													
2001	1,712.2	1,726.0	-13.8	1,033.0	957.1	321.6	320.6	282.0	321.7	75.7	126.5	17.0	8.1
2001 Q2	432.9	449.1	-16.2	260.4	245.2	82.8	78.9	74.7	91.9	14.9	33.1	5.3	1.8
Q3	420.5	415.3	5.2	252.7	228.7	86.7	83.2	65.9	74.9	15.2	28.4	2.7	1.7
Q4	432.6	423.5	9.1	264.6	233.9	81.4	81.9	70.2	74.6	16.3	33.0	4.4	3.0
2002 Q1	415.2	403.5	11.7	254.3	228.0	71.6	76.1	58.3	65.7	31.0	33.8	4.6	1.5
Q2	429.7	424.6	5.2	267.6	234.9	83.8	77.5	62.9	78.3	15.4	33.8	4.9	1.5
2001 June	147.3	150.3	-3.0	89.5	81.5	28.4	26.9	25.1	30.1	4.3	11.8	1.3	0.4
July	151.4	152.2	-0.8	90.6	80.1	31.3	29.2	24.3	32.1	5.2	10.8	1.0	0.6
Aug.	135.0	129.7	5.3	80.9	73.5	29.2	28.2	20.3	20.4	4.5	7.7	1.1	0.5
Sep.	134.1	133.3	0.7	81.1	75.1	26.2	25.8	21.3	22.4	5.4	10.0	0.6	0.5
Oct.	148.8	144.7	4.1	94.5	83.1	28.0	27.5	21.4	23.8	4.8	10.3	1.1	0.7
Nov.	138.3	135.7	2.7	89.1	80.3	24.7	25.6	19.4	19.4	5.2	10.4	0.9	0.6
Dec.	145.4	143.1	2.3	81.0	70.5	28.8	28.9	29.4	31.3	6.3	12.4	2.4	1.7
2002 Jan.	141.5	141.6	-0.1	79.5	76.4	24.0	26.4	20.4	26.8	17.5	11.9	3.0	0.5
Feb.	132.3	127.9	4.4	83.2	73.2	22.7	24.4	19.2	19.2	7.2	11.0	0.8	0.6
Mar.	141.5	134.0	7.4	91.5	78.3	24.9	25.3	18.7	19.6	6.3	10.8	0.8	0.5
Apr.	141.2	145.7	-4.6	88.5	80.2	27.1	26.5	20.2	27.9	5.4	11.2	1.9	0.6
May	143.4	141.1	2.4	89.0	78.3	28.3	25.4	20.7	26.7	5.4	10.6	1.4	0.4
June	145.1	137.8	7.3	90.1	76.4	28.5	25.6	22.0	23.7	4.5	12.0	1.6	0.5
July	148.6	146.0	2.6	93.0	78.8	29.7	28.8	20.1	29.4	5.8	9.0	1.1	0.6
Aug.	132.8	123.1	9.7	80.8	69.1	28.4	27.1	18.1	18.2	5.5	8.7	1.3	0.7

2. Main current account items (seasonally adjusted)

	Current account										
	Total			Goods		Services		Income		Current transfers	
	Credit 1	Debit 2	Net 3	Credit 4	Debit 5	Credit 6	Debit 7	Credit 8	Debit 9	Credit 10	Debit 11
2000 Q2	387.3	407.2	-19.8	241.5	231.8	67.3	72.6	60.9	70.0	17.7	32.7
Q3	410.5	426.4	-16.0	252.9	245.0	71.6	74.2	70.2	79.0	15.8	28.2
Q4	431.7	449.5	-17.8	264.8	259.8	75.5	80.9	73.8	76.8	17.5	32.1
<i>Euro area enlargement</i>											
2001 Q1	431.4	439.4	-8.0	261.1	246.2	78.4	79.5	73.0	84.2	18.9	29.5
Q2	429.8	440.3	-10.4	260.7	243.5	80.8	80.4	69.8	82.6	18.5	33.8
Q3	428.3	426.2	2.1	258.0	237.8	81.1	80.6	70.0	77.0	19.2	30.8
Q4	422.5	418.4	4.1	253.7	229.4	80.7	79.8	68.8	76.6	19.3	32.6
2002 Q1	424.1	410.3	13.9	264.2	229.5	80.3	79.6	60.1	69.3	19.5	31.8
Q2	426.1	414.8	11.3	266.0	231.5	81.7	79.1	59.1	70.4	19.3	33.9
2001 June	141.4	146.8	-5.4	87.0	81.2	26.6	27.2	21.9	26.9	5.9	11.5
July	144.4	146.3	-1.9	86.2	80.7	27.5	27.2	24.5	26.8	6.2	11.7
Aug.	144.0	140.3	3.7	87.5	79.0	27.1	27.0	23.2	25.7	6.1	8.6
Sep.	139.9	139.5	0.4	84.2	78.1	26.6	26.4	22.3	24.6	6.8	10.5
Oct.	141.5	140.6	0.9	85.3	77.0	26.7	26.2	22.7	26.5	6.7	10.8
Nov.	138.6	137.0	1.7	84.4	76.6	26.2	26.5	21.6	23.1	6.4	10.8
Dec.	142.4	140.9	1.6	84.0	75.8	27.8	27.1	24.5	27.0	6.2	11.0
2002 Jan.	142.3	136.1	6.2	86.7	75.5	27.0	26.8	21.7	25.0	6.9	8.9
Feb.	141.5	138.0	3.5	88.2	76.7	26.5	26.7	20.7	23.3	6.1	11.3
Mar.	140.3	136.1	4.2	89.3	77.4	26.8	26.1	17.7	21.0	6.5	11.6
Apr.	141.6	140.7	0.9	87.8	77.0	27.4	26.9	20.1	25.4	6.4	11.4
May	141.5	136.2	5.4	88.4	75.8	27.0	25.9	19.6	23.3	6.5	11.2
June	142.9	138.0	5.0	89.8	78.6	27.3	26.4	19.4	21.6	6.4	11.4
July	139.4	136.7	2.7	86.8	76.6	25.5	26.3	20.2	24.0	6.9	9.9
Aug.	144.2	136.2	8.0	89.4	76.7	27.0	26.6	20.5	22.8	7.4	10.0

Source: ECB.

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

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

	Total		Compensation of employees		Investment income							
	Credit 1	Debit 2	Credit 3	Debit 4	Total		Direct investment		Portfolio investment		Other investment	
					Credit 5	Debit 6	Credit 7	Debit 8	Credit 9	Debit 10	Credit 11	Debit 12
1999	207.0	244.3	12.7	5.0	194.4	239.4	42.7	51.2	63.9	102.3	87.8	85.8
2000	267.9	295.0	13.2	5.4	254.8	289.5	60.1	64.3	76.4	107.5	118.3	117.7
<i>Euro area enlargement</i>												
2001	282.0	321.7	14.2	6.4	267.8	315.3	68.8	67.4	81.9	117.7	117.1	130.2
2001 Q2	74.7	91.9	3.6	1.8	71.2	90.1	19.4	16.5	21.5	40.7	30.3	32.9
Q3	65.9	74.9	3.5	1.8	62.4	73.1	15.0	15.0	19.9	27.4	27.5	30.7
Q4	70.2	74.6	3.7	1.5	66.6	73.1	19.0	20.8	21.9	22.3	25.7	30.0
2002 Q1	58.3	65.7	3.5	1.2	54.8	64.5	11.6	12.7	20.1	26.6	23.0	25.2
Q2	62.9	78.3	3.6	1.6	59.4	76.8	17.0	15.5	22.6	38.9	19.8	22.3

	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	4.5	9.5	34.0	54.4	68.4
2000	49.2	56.6	10.9	7.7	14.2	30.6	62.1	76.9
<i>Euro area enlargement</i>								
2001	58.7	58.7	10.2	8.7	17.3	43.8	64.5	73.9
2001 Q2	16.9	14.0	2.5	2.5	5.6	22.6	15.8	18.1
Q3	12.9	13.2	2.1	1.8	3.8	8.6	16.1	18.8
Q4	15.9	18.9	3.1	1.9	4.8	6.3	17.1	16.0
2002 Q1	9.5	11.4	2.1	1.3	4.5	8.4	15.7	18.2
Q2	15.1	14.4	1.9	1.2	6.3	23.5	16.3	15.4

Source: ECB.

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

	Abroad							In the euro area						
	Total	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	-93.1	.	.	.	.	.	48.6	.	.	.	.	.	.
1998	-172.8	.	.	.	.	.	91.5	.	.	.	.	.	.
1999	-320.5	-239.2	-25.0	-214.2	-81.3	-0.6	-80.7	200.4	146.6	3.5	143.0	53.8	0.2	53.6
2000	-436.3	-344.8	-35.8	-309.0	-91.5	-0.3	-91.2	424.0	298.1	12.2	285.9	125.9	0.1	125.8
<i>Euro area enlargement</i>														
2001	-255.8	-164.1	-13.2	-150.9	-91.7	-0.7	-91.0	154.3	103.1	5.3	97.8	51.2	0.7	50.5
2001 Q2	-96.6	-71.5	-4.9	-66.6	-25.1	-0.2	-24.9	42.1	26.4	-0.1	26.6	15.7	0.0	15.7
Q3	-55.6	-36.2	-1.0	-35.2	-19.5	-0.3	-19.1	31.3	24.7	-0.7	25.4	6.6	0.1	6.6
Q4	-28.2	-26.9	-3.1	-23.7	-1.3	-0.1	-1.3	44.7	16.6	8.4	8.2	28.1	0.1	28.0
2002 Q1	-56.0	-42.2	-2.2	-40.0	-13.8	0.0	-13.8	41.0	26.1	1.1	24.9	15.0	0.0	15.0
Q2	-41.2	-27.3	-6.4	-20.9	-13.9	-0.3	-13.6	36.8	22.4	2.6	19.8	14.4	0.1	14.4
2001 June	-27.0	-14.8	0.5	-15.3	-12.2	-0.1	-12.1	21.0	10.3	0.1	10.2	10.7	-0.1	10.8
July	-16.7	-15.7	-0.2	-15.6	-1.0	-0.1	-0.9	13.9	10.8	0.2	10.6	3.1	0.0	3.1
Aug.	-18.6	-14.9	-1.1	-13.9	-3.6	-0.1	-3.5	12.7	7.0	-0.8	7.8	5.7	0.0	5.6
Sep.	-20.4	-5.5	0.3	-5.8	-14.9	-0.2	-14.7	4.8	6.9	-0.1	7.0	-2.1	0.1	-2.2
Oct.	7.3	-8.2	-0.6	-7.6	15.5	0.0	15.6	-3.3	-9.6	0.2	-9.8	6.2	0.1	6.2
Nov.	-17.8	-7.8	0.3	-8.1	-9.9	0.0	-9.9	29.5	14.2	1.9	12.3	15.3	0.0	15.2
Dec.	-17.8	-10.8	-2.8	-8.0	-6.9	0.0	-6.9	18.6	12.0	6.3	5.7	6.6	0.0	6.6
2002 Jan.	-8.5	-9.4	-0.5	-8.9	1.0	0.0	0.9	8.5	3.0	0.2	2.8	5.5	0.1	5.5
Feb.	-20.1	-5.0	-0.3	-4.7	-15.1	0.0	-15.1	11.2	3.3	1.1	2.2	7.8	0.0	7.8
Mar.	-27.5	-27.8	-1.4	-26.3	0.3	-0.1	0.4	21.4	19.7	-0.2	19.9	1.6	0.0	1.7
Apr.	-8.4	-4.2	-4.2	0.0	-4.2	0.0	-4.1	16.4	9.1	2.0	7.2	7.2	0.0	7.3
May	-16.6	-9.3	-1.1	-8.2	-7.2	0.0	-7.2	20.3	10.2	0.7	9.5	10.1	0.0	10.2
June	-16.3	-13.8	-1.1	-12.7	-2.5	-0.3	-2.2	0.1	3.0	0.0	3.1	-2.9	0.1	-3.1
July	-9.3	-12.2	-3.4	-8.8	2.9	0.0	2.9	5.7	2.2	0.8	1.4	3.5	0.1	3.4
Aug.	-0.2	-5.7	-0.4	-5.3	5.5	-0.1	5.5	1.9	2.1	-0.9	3.0	-0.3	0.8	-1.1

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
1998	-363.3	253.3	-116.2	104.0	-247.1	-238.9	-8.2	149.3	121.6	27.7
1999	-311.3	268.3	-156.5	92.3	-154.8	-155.0	0.1	176.0	117.0	59.0
2000	-411.3	296.1	-287.9	50.8	-123.4	-114.6	-8.8	245.4	232.2	13.2
<i>Euro area enlargement</i>										
2001	-288.0	326.1	-108.6	231.1	-179.4	-158.7	-20.7	95.0	90.4	4.5
2001 Q2	-83.5	113.9	-46.5	100.4	-37.0	-49.2	12.1	13.5	8.5	5.0
Q3	-26.3	79.1	-1.1	52.0	-25.2	-15.6	-9.6	27.1	34.5	-7.4
Q4	-87.0	92.3	-24.8	60.5	-62.2	-51.3	-10.9	31.8	28.6	3.1
2002 Q1	-73.0	21.2	-33.6	30.4	-39.4	-20.8	-18.6	-9.2	1.0	-10.2
Q2	-49.5	116.6	-12.9	34.2	-36.5	-22.9	-13.6	82.4	55.2	27.2
2001 June	-30.8	59.3	-14.5	33.6	-16.3	-18.4	2.1	25.7	12.6	13.1
July	-18.2	20.0	-10.3	15.1	-7.9	-8.5	0.6	4.9	2.5	2.4
Aug.	-22.9	26.7	-4.7	12.6	-18.3	-16.0	-2.3	14.1	21.2	-7.2
Sep.	14.8	32.4	13.9	24.2	1.0	8.9	-8.0	8.2	10.8	-2.6
Oct.	-32.7	34.1	-8.0	23.1	-24.7	-17.8	-6.9	11.0	9.1	2.0
Nov.	-40.8	60.7	-10.2	24.8	-30.6	-17.1	-13.6	35.9	37.8	-1.9
Dec.	-13.5	-2.5	-6.6	12.6	-6.8	-16.4	9.5	-15.1	-18.2	3.1
2002 Jan.	-26.9	-14.6	-14.9	12.9	-12.0	-2.4	-9.6	-27.5	-15.5	-12.0
Feb.	-17.8	4.9	-8.8	8.0	-8.9	-5.4	-3.6	-3.1	0.0	-3.0
Mar.	-28.3	30.9	-9.8	9.5	-18.5	-13.0	-5.4	21.4	16.5	4.9
Apr.	-11.0	28.8	-1.9	6.4	-9.1	-9.3	0.2	22.4	12.9	9.5
May	-29.3	61.5	-5.6	28.9	-23.6	-14.2	-9.5	32.5	17.4	15.1
June	-9.2	26.3	-5.4	-1.2	-3.8	0.6	-4.4	27.5	24.9	2.6
July	-15.9	30.1	-7.2	3.0	-8.7	-3.0	-5.7	27.1	17.8	9.3
Aug.	-3.4	7.9	4.0	-0.7	-7.5	-9.2	1.7	8.6	1.1	7.6

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	-139.7	-1.7	-138.0	0.9	-8.1	7.3	-0.1	7.5
2000	-0.1	-4.3	-283.5	-2.6	-280.9	-1.9	-46.3	-66.4	-1.5	-64.9	2.2	-15.5	4.5	-1.0	5.5
<i>Euro area enlargement</i>															
2001	-0.4	3.8	-112.0	-2.0	-110.0	1.9	-71.7	-88.9	-1.2	-87.7	-2.3	-34.3	16.0	-0.1	16.1
2001 Q2	0.0	5.2	-51.6	-0.7	-50.9	0.7	-19.4	-30.4	-0.2	-30.2	-0.7	1.5	11.4	-0.5	11.8
Q3	-0.1	3.5	-4.6	-0.4	-4.1	1.0	5.6	-22.2	-0.1	-22.0	0.1	-13.9	4.3	-0.5	4.8
Q4	-0.1	4.7	-29.4	-0.5	-28.9	-0.7	-38.1	-12.4	-0.3	-12.2	-0.3	-3.8	-6.8	1.9	-8.8
2002 Q1	0.0	-4.9	-28.7	-1.4	-27.3	0.4	-4.5	-16.7	-0.5	-16.2	0.8	-13.6	-5.8	-1.2	-4.6
Q2	-0.1	-3.6	-9.3	-2.0	-7.3	2.4	-2.1	-23.2	0.2	-23.5	-0.1	-2.4	-11.1	-0.1	-11.0
2002 Mar.	0.0	-3.3	-6.5	.	.	0.2	-3.5	-9.7	.	.	-0.3	-1.5	-3.5	.	.
Apr.	-0.1	1.4	-3.3	.	.	2.0	1.7	-13.0	.	.	0.5	-1.1	0.8	.	.
May	0.0	-4.5	-1.2	.	.	1.0	-6.2	-9.0	.	.	-1.0	-2.4	-6.1	.	.
June	0.0	-0.5	-4.8	.	.	-0.7	2.4	-1.2	.	.	0.4	1.1	-5.9	.	.
July	0.0	0.2	-7.3	.	.	0.5	3.5	-7.0	.	.	0.5	-6.2	0.0	.	.
Aug.	0.1	2.3	1.6	.	.	-0.8	-4.8	-3.6	.	.	-0.1	0.2	1.6	.	.

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 Eurosysteem)						Other sectors	
	Assets 1	Liabilities 2	Assets 3	Liabilities 4	Assets 5	Liabilities 6	Total		Long-term		Short-term		Assets 13	Liabilities 14
							Assets 7	Liabilities 8	Assets 9	Liabilities 10	Assets 11	Liabilities 12		
1998	-81.9	204.9	-0.7	3.5	-1.0	-6.1	-22.6	192.4	-37.6	40.4	15.0	152.0	-57.6	15.2
1999	-31.9	192.7	-2.0	6.6	3.3	-13.0	16.3	161.2	-47.2	53.8	63.5	107.4	-49.4	37.8
2000	-178.9	361.0	-1.1	0.9	-2.2	0.9	-130.3	289.4	-50.0	53.0	-80.4	236.3	-45.3	69.8
<i>Euro area enlargement</i>														
2001	-240.9	249.6	0.6	4.4	2.9	-1.1	-227.2	234.1	-44.4	20.1	-182.9	214.0	-17.2	12.2
2001 Q2	9.6	6.1	-0.8	4.3	0.3	3.0	9.7	-7.8	-11.3	16.3	21.0	-24.1	0.5	6.6
Q3	-57.0	-16.5	1.0	-1.0	-1.0	0.1	-55.0	-27.2	-8.7	12.0	-46.3	-39.2	-2.0	11.6
Q4	-61.3	11.0	-0.4	3.7	1.9	4.2	-45.9	4.7	-17.6	-8.7	-28.3	13.4	-16.9	-1.7
2002 Q1	19.1	22.8	-0.4	1.2	-0.7	-8.4	18.4	25.8	-2.1	10.2	20.4	15.6	1.8	4.1
Q2	-80.8	-8.2	-0.6	-3.5	-0.1	3.7	-63.0	-10.6	-7.5	21.8	-55.5	-32.3	-17.2	2.2
2001 June	-1.1	-24.1	-0.3	4.2	-1.1	1.1	-7.4	-29.0	-3.3	8.5	-4.2	-37.5	7.7	-0.5
July	45.0	-63.3	0.7	-0.5	-2.0	1.0	44.0	-67.1	-2.1	1.9	46.1	-69.0	2.2	3.3
Aug.	-30.3	25.8	0.1	-2.4	1.4	-2.6	-31.3	26.6	-4.9	3.8	-26.4	22.8	-0.5	4.2
Sep.	-71.7	21.0	0.1	1.9	-0.4	1.7	-67.7	13.3	-1.7	6.3	-66.0	7.0	-3.8	4.2
Oct.	-35.4	13.5	-0.5	4.5	-0.6	2.1	-23.2	6.6	-3.7	1.9	-19.5	4.7	-11.1	0.3
Nov.	-61.4	25.7	0.0	2.0	2.5	2.5	-53.3	22.4	-9.6	-13.3	-43.6	35.7	-10.6	-1.2
Dec.	35.5	-28.3	0.1	-2.8	0.1	-0.4	30.5	-24.3	-4.3	2.7	34.8	-27.0	4.8	-0.8
2002 Jan.	1.3	-7.0	-0.7	2.6	-1.4	-8.8	14.3	0.5	-1.5	5.5	15.9	-5.0	-10.9	-1.3
Feb.	26.2	-1.8	-0.1	-3.8	1.0	-1.6	5.3	12.3	-6.6	1.2	11.9	11.1	20.1	-8.8
Mar.	-8.5	31.6	0.4	2.4	-0.2	2.1	-1.3	13.0	6.0	3.5	-7.3	9.5	-7.3	14.2
Apr.	-43.5	24.6	-0.4	-4.3	1.7	5.6	-30.1	23.4	-4.2	8.2	-25.9	15.2	-14.6	-0.1
May	-66.3	33.0	-0.1	-0.5	-1.0	-0.4	-56.6	35.4	-5.2	8.7	-51.4	26.6	-8.6	-1.5
June	28.9	-65.8	-0.1	1.3	-0.7	-1.6	23.7	-69.2	1.9	4.9	21.8	-74.1	6.0	3.8
July	-3.5	-8.7	0.4	2.7	-0.4	-1.2	11.1	-3.8	4.6	5.4	6.5	-9.2	-14.6	-6.4
Aug.	12.2	-30.0	0.1	-5.0	0.5	-2.3	12.9	-16.9	-3.2	2.8	16.2	-19.7	-1.3	-5.8

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

	Loans/currency and deposits			Other assets/liabilities		
	Assets 1	Liabilities 2	Balance 3	Assets 4	Liabilities 5	Balance 6
1999	-1.2	6.7	5.5	-0.8	-0.1	-0.9
2000	-1.1	0.9	-0.2	0.0	0.0	0.0
<i>Euro area enlargement</i>						
2001	0.6	4.4	5.0	0.0	0.0	0.0
2001 Q2	-0.8	4.3	3.5	0.0	0.0	0.0
Q3	1.0	-1.0	0.0	0.0	0.0	0.0
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

Source: ECB.

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

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

2.2. General government

	Trade credits			Loans/currency and deposits			Other assets/liabilities		
	Assets 7	Liabilities 8	Balance 9	Assets 10	Liabilities 11	Balance 12	Assets 13	Liabilities 14	Balance 15
1999	0.0	0.0	0.0	4.4	-13.1	-8.7	-1.2	0.2	-1.0
2000	0.1	0.0	0.1	-1.4	0.8	-0.5	-0.9	0.1	-0.8
<i>Euro area enlargement</i>									
2001	-0.1	0.0	-0.1	4.4	-1.1	3.3	-1.4	0.1	-1.3
2001 Q2	0.0	0.0	0.0	0.7	2.8	3.5	-0.4	0.1	-0.3
Q3	0.0	0.0	0.0	-0.7	0.2	-0.6	-0.3	0.0	-0.3
Q4	0.0	0.0	0.0	2.1	4.1	6.2	-0.1	0.1	-0.1
2002 Q1	0.0	0.0	0.0	-0.4	-8.1	-8.5	-0.3	-0.3	-0.6
Q2	1.4	0.0	1.4	-1.2	3.5	2.3	-0.3	0.2	-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	284.0	157.8	-4.1	5.3	1.3
<i>Euro area enlargement</i>						
2001	-213.3	224.3	10.9	-13.9	9.8	-4.1
2001 Q2	13.3	-10.6	2.7	-3.6	2.8	-0.8
Q3	-53.9	-29.1	-82.9	-1.1	1.8	0.7
Q4	-41.2	3.4	-37.8	-4.7	1.3	-3.4
2002 Q1	23.9	19.8	43.7	-5.5	6.0	0.5
Q2	-62.1	-9.3	-71.4	-0.9	-1.3	-2.2

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	2.8	-23.0	11.3	-11.7
2000	-14.5	10.4	-4.1	-25.2	64.4	39.2	-5.7	-5.0	-10.7
<i>Euro area enlargement</i>									
2001	-0.6	0.7	0.1	-16.2	10.9	-5.3	-0.3	0.6	0.3
2001 Q2	-2.0	0.5	-1.4	-0.1	7.1	7.1	2.5	-1.0	1.5
Q3	0.8	-0.9	-0.1	-0.9	11.1	10.2	-1.9	1.4	-0.5
Q4	2.6	-1.2	1.3	-19.4	-1.0	-20.4	-0.1	0.6	0.5
2002 Q1	-0.6	-0.5	-1.1	3.9	3.4	7.3	-1.5	1.2	-0.3
Q2	-5.0	-0.7	-5.7	-12.1	2.0	-10.1	-0.1	0.9	0.8

3. Reserve assets ¹⁾

	Total 1	Monetary gold 2	Special drawing rights 3	Reserve position in the IMF 4	Foreign exchange							Other claims 12
					Total 5	Currency and deposits		Securities			Financial derivatives 11	
						With monetary authorities and the BIS 6	With banks 7	Equity 8	Bonds and notes 9	Money market instruments 10		
1999	10.1	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
2001 Q2	2.5	-0.1	-0.6	-0.7	4.0	0.2	-1.8	0.0	5.5	0.0	0.0	0.0
Q3	2.5	0.2	0.1	-4.5	6.7	-0.9	3.1	0.0	4.9	-0.4	0.0	0.0
Q4	3.3	0.1	-0.1	0.8	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

Source: ECB.

1) Increase (-); decrease (+)

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

	Total	Direct investment			Portfolio investment					Financial derivatives	Other investment				Reserve assets
		Total	Equity (including reinvested earnings)	Other capital	Total	Equity securities	Debt instruments				Total	Trade credits	Loans/currency and deposits	Other assets/liabilities	
							Total	Bonds and notes	Money market instruments						
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1997	32.7	177.6	148.6	29.1	-724.7	-358.7	-366.0	-339.8	-26.2	-5.9	222.4	79.8	51.3	91.4	363.3
1998	-147.9	152.2	124.2	28.0	-713.5	-462.0	-251.5	-229.0	-22.5	2.3	81.7	100.0	-107.1	88.8	329.4
1999	-75.0	402.4	318.9	83.5	-752.8	-591.3	-161.4	-108.4	-53.0	10.1	-107.3	111.9	-338.2	119.0	372.6
2000	-101.4	466.6	395.0	71.6	-666.8	-366.9	-299.9	-263.1	-36.7	7.0	-286.2	115.7	-530.4	128.5	378.0
<i>Euro area enlargement</i>															
2001 1 Jan.	-152.1	459.3	388.5	70.8	-721.5	-375.8	-345.7	-308.6	-37.1	7.0	-288.2	114.9	-531.6	128.5	391.2

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

2. Reserves and related assets of the Eurosystem and of the European Central Bank ¹⁾

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

	Reserve assets													Memo: related assets		
	Total	Monetary gold	In fine troy ounces (millions) ²⁾	Special drawing rights	Reserve position in the IMF	Foreign exchange									Other claims	Claims on euro area residents denomin- ated in foreign currency
						Total	Currency and deposits		Securities				Financial deriva- tives			
							With monetary authorities and the BIS 7	With banks	Total	Equities	Bonds and notes	Money market instru- ments				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15		
Eurosystem 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.	372.6	116.4	402.762	4.5	24.3	227.5	12.8	23.8	191.1	0.0	134.3	56.7	-0.2	0.0	14.6	
2000 Dec.	378.0	117.8	399.537	4.3	20.8	235.0	9.2	20.9	204.2	0.0	153.9	50.3	0.7	0.0	15.8	
<i>Euro area enlargement</i>																
2001 1 Jan.	391.2	119.2	404.119	4.3	21.2	246.5	9.2	28.3	208.2	0.0	157.9	50.3	0.7	0.0	16.3	
2001 July	397.1	122.3	402.639	5.5	22.7	246.6	8.5	36.5	201.2	-	-	-	0.4	0.0	23.8	
Aug.	381.8	120.0	402.430	5.5	21.9	234.4	8.3	28.3	197.3	-	-	-	0.5	0.0	23.7	
Sep.	393.4	129.0	401.904	5.4	25.8	233.2	10.2	25.9	196.7	-	-	-	0.4	0.0	21.9	
Oct.	393.6	123.9	401.902	5.4	24.9	239.5	8.6	33.3	197.1	-	-	-	0.5	0.0	21.9	
Nov.	396.5	124.4	401.903	5.4	24.7	241.9	7.9	33.7	199.9	-	-	-	0.4	0.0	22.2	
Dec.	392.4	126.1	401.876	5.5	25.3	235.6	8.0	25.9	201.2	-	-	-	0.4	0.0	24.9	
2002 Jan.	407.8	131.4	401.877	5.5	25.7	245.2	8.3	38.2	198.4	-	-	-	0.3	0.0	22.3	
Feb.	411.4	137.9	401.798	5.6	26.0	242.0	9.0	35.6	197.2	-	-	-	0.2	0.0	22.6	
Mar.	409.0	138.7	401.527	5.5	25.8	238.9	9.6	39.0	190.1	-	-	-	0.2	0.0	21.8	
Apr.	394.2	137.0	400.564	5.3	24.2	227.7	10.3	34.2	182.9	-	-	-	0.3	0.0	23.8	
May	386.6	139.3	400.324	5.2	23.4	218.7	11.5	33.9	173.0	-	-	-	0.3	0.0	23.0	
June	367.0	127.8	400.197	4.7	26.3	208.2	11.2	32.1	164.5	-	-	-	0.4	0.0	20.0	
July	372.0	124.6	400.199	4.8	26.6	216.0	9.9	37.9	167.8	-	-	-	0.4	0.0	20.0	
Aug.	372.9	127.2	399.953	5.0	26.4	214.2	10.0	34.2	169.7	-	-	-	0.4	0.0	17.4	
Sep.	380.9	131.3	400.033	4.9	26.3	218.3	13.1	36.5	168.4	-	-	-	0.4	0.0	18.5	
European Central Bank ⁵⁾																
1999 Dec.	49.3	7.0	24.030	0.0	0.0	42.3	0.3	7.8	34.3	0.0	27.7	6.5	0.0	0.0	2.6	
2000 Dec.	44.7	7.0	24.030	0.0	0.0	37.7	0.6	6.8	30.0	0.0	19.8	10.2	0.3	0.0	3.8	
<i>Euro area enlargement</i>																
2001 July	49.8	7.5	24.656	0.1	0.0	42.3	1.0	11.7	29.6	-	-	-	0.0	0.0	2.9	
Aug.	45.5	7.3	24.656	0.1	0.0	38.1	1.1	6.1	30.8	-	-	-	0.0	0.0	3.5	
Sep.	44.5	7.9	24.656	0.1	0.0	36.5	1.4	4.4	30.6	-	-	-	0.0	0.0	3.9	
Oct.	47.9	7.6	24.656	0.1	0.0	40.2	0.9	7.2	32.1	-	-	-	0.0	0.0	2.8	
Nov.	48.3	7.6	24.656	0.1	0.0	40.6	0.9	6.1	33.6	-	-	-	0.0	0.0	3.2	
Dec.	49.0	7.7	24.656	0.1	0.0	41.2	0.8	7.0	33.3	-	-	-	0.0	0.0	3.6	
2002 Jan.	51.8	8.1	24.656	0.1	0.0	43.6	1.1	9.0	33.5	-	-	-	0.0	0.0	3.5	
Feb.	51.1	8.5	24.656	0.1	0.0	42.6	1.1	9.5	32.0	-	-	-	0.0	0.0	3.7	
Mar.	50.9	8.5	24.656	0.1	0.0	42.3	1.2	9.0	32.1	-	-	-	0.0	0.0	3.6	
Apr.	48.7	8.4	24.656	0.1	0.0	40.2	1.8	7.8	30.6	-	-	-	0.0	0.0	3.7	
May	46.8	8.6	24.656	0.1	0.0	38.1	1.4	7.9	28.9	-	-	-	0.0	0.0	4.0	
June	45.6	7.9	24.656	0.1	0.0	37.7	1.2	9.0	27.5	-	-	-	0.0	0.0	3.7	
July	46.9	7.7	24.656	0.1	0.0	39.1	1.1	9.9	28.1	-	-	-	0.0	0.0	3.4	
Aug.	45.9	7.8	24.656	0.2	0.0	37.9	1.4	6.8	29.7	-	-	-	0.0	0.0	2.8	
Sep.	46.5	8.1	24.656	0.2	0.0	38.2	1.1	7.9	29.2	-	-	-	0.0	0.0	2.7	

Source: ECB.

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

2) 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: Oil 11	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
Values (EUR billions (ECU billions to end-1998); 2000=100 for columns 12 and 13)													
1998	797.1	369.9	179.9	214.0	697.8	711.4	393.5	123.0	175.9	540.3	41.6	79.2	71.1
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	1,059.4	487.1	234.3	285.2	925.4	1,010.5	572.0	176.8	224.3	732.8	107.1	105.9	99.0
2001 Q2	267.5	124.8	58.7	70.7	233.3	260.1	149.6	45.2	55.9	187.7	28.8	106.3	101.4
Q3	257.7	118.1	55.8	71.0	225.2	239.5	135.3	38.9	56.4	172.0	27.8	106.2	98.5
Q4	272.2	121.1	62.9	74.6	237.5	247.1	136.0	44.7	56.8	180.4	23.1	104.2	94.1
2002 Q1	258.1	118.2	53.8	72.6	225.6	239.2	134.4	39.5	55.7	175.5	23.6	107.0	94.1
Q2	271.6	125.5	57.3	73.9	237.4	247.1	140.4	39.9	56.5	179.5	24.9	107.2	95.3
2002 Mar.	92.8	42.3	20.0	25.6	81.1	81.7	46.0	14.0	18.7	60.5	7.5	108.0	95.4
Apr.	90.3	41.5	18.9	25.1	78.8	85.6	48.4	14.2	19.3	61.9	8.5	107.2	96.7
May	91.0	42.6	19.3	24.3	79.4	82.1	46.9	13.5	18.5	59.6	8.5	109.1	95.6
June	90.4	41.5	19.2	24.6	79.3	79.4	45.1	12.2	18.6	58.0	7.9	105.4	93.6
July	94.1	42.2	19.3	26.8	82.2	80.2	44.3	12.4	19.6	58.4	4.4	104.8	93.0
Aug.	81.8	37.4	17.4	22.5	71.1	72.1	39.4	11.7	17.6	52.6	.	109.9	96.1
Volumes (annual percentage changes; 2000=100 for columns 12 and 13) ³⁾													
1998	3.6	4.2	6.0	3.8	4.0	11.4	8.2	21.8	7.7	13.4	-4.5	87.6	89.7
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	1.7	-1.1	4.3	3.8	2.0	-1.6	-1.9	-5.7	-2.6	-3.7	-1.3	101.9	98.2
2001 Q2	2.9	0.7	4.2	5.0	3.2	-1.4	-1.5	-3.9	-2.6	-2.7	-0.5	101.6	98.4
Q3	0.3	-2.3	2.8	2.8	0.9	-4.4	-4.6	-11.1	-2.3	-6.7	-2.9	102.2	97.7
Q4	-2.7	-7.1	-1.1	1.0	-3.3	-2.8	-3.5	-13.0	-2.7	-6.7	-0.3	100.2	96.9
2002 Q1	.	.	.	.	.	.	.	.	.	.	.	.	.
Q2	.	.	.	.	.	.	.	.	.	.	.	.	.
2002 Mar.	.	.	.	.	.	.	.	.	.	.	.	.	.
Apr.	.	.	.	.	.	.	.	.	.	.	.	.	.
May	.	.	.	.	.	.	.	.	.	.	.	.	.
June	.	.	.	.	.	.	.	.	.	.	.	.	.
July	.	.	.	.	.	.	.	.	.	.	.	.	.
Aug.	.	.	.	.	.	.	.	.	.	.	.	.	.
Unit values (annual percentage changes; 2000=100 for columns 12 and 13) ³⁾													
1998	0.9	-0.7	0.8	2.0	1.5	-5.4	-6.5	-3.6	1.2	-1.1	-30.4	90.5	79.4
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	3.7	3.0	3.0	5.2	3.9	0.5	-0.3	3.1	5.0	2.8	-11.5	103.9	100.6
2001 Q2	5.8	5.1	4.2	7.0	5.7	6.0	6.3	5.3	7.5	6.1	4.3	104.3	103.0
Q3	3.1	0.8	2.3	6.6	3.0	-0.4	-2.3	2.4	5.3	2.2	-12.7	104.3	100.7
Q4	0.2	0.2	0.5	2.0	1.1	-10.5	-12.6	-2.9	-0.2	-5.2	-34.0	103.9	97.0
2002 Q1	.	.	.	.	.	.	.	.	.	.	.	.	.
Q2	.	.	.	.	.	.	.	.	.	.	.	.	.
2002 Mar.	.	.	.	.	.	.	.	.	.	.	.	.	.
Apr.	.	.	.	.	.	.	.	.	.	.	.	.	.
May	.	.	.	.	.	.	.	.	.	.	.	.	.
June	.	.	.	.	.	.	.	.	.	.	.	.	.
July	.	.	.	.	.	.	.	.	.	.	.	.	.
Aug.	.	.	.	.	.	.	.	.	.	.	.	.	.

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

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

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

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

2. Geographical breakdown ¹⁾

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

	Total 1	Total (s.a.) 2	United Kingdom 3	Sweden 4	Denmark 5	Candidate countries 6	Switzer- land 7	United States 8	Japan 9	Asia excl. Japan 10	Africa 11	Latin America 12	Other countries 13
Exports (f.o.b.)													
1998	797.1	-	150.5	31.6	20.6	101.5	51.1	120.3	23.9	114.9	49.7	42.4	90.5
1999	832.8	-	161.4	33.1	21.1	102.9	56.1	135.1	26.8	119.2	48.4	39.1	89.6
2000	1,013.7	-	189.7	38.8	23.2	131.0	63.4	171.4	34.2	151.6	56.1	46.7	107.8
<i>Euro area enlargement</i>													
2001	1,059.4	-	200.8	36.7	24.1	137.1	66.3	180.0	34.5	165.3	59.9	49.8	104.7
2001 Q2	267.5	266.6	51.0	9.1	6.0	34.5	16.7	45.7	8.3	41.2	15.4	12.9	26.6
Q3	257.7	266.2	49.2	8.3	5.9	32.9	16.1	43.9	8.2	40.4	14.4	12.1	26.3
Q4	272.2	261.3	50.4	9.6	6.1	36.0	16.2	44.9	8.8	43.3	15.8	12.6	28.5
2002 Q1	258.1	268.4	51.3	9.1	6.1	33.9	15.9	44.6	7.9	39.4	14.0	10.2	25.6
Q2	271.6	268.8	50.5	9.2	6.2	38.3	16.2	45.7	7.8	42.8	15.5	11.3	.
2002 Mar.	92.8	90.3	18.2	3.2	2.1	12.2	5.7	15.9	2.8	14.5	5.1	3.8	9.2
Apr.	90.3	89.6	17.1	3.4	2.0	12.4	5.5	15.4	2.6	14.0	5.1	3.7	9.2
May	91.0	91.2	16.9	2.9	2.0	13.1	5.1	15.5	2.6	14.3	5.4	3.7	9.4
June	90.4	88.1	16.4	2.9	2.2	12.8	5.6	14.8	2.6	14.5	5.1	3.9	.
July	94.1	87.6	17.6	2.5	1.9	12.9	5.4	15.7	2.9	15.1	5.3	4.0	.
Aug.	81.8	91.9	.	.	.	.	.	.	.	.	.	.	.
% change versus previous year 2002 Aug. -0.3													
Imports (c.i.f.)													
1998	711.4	-	122.6	30.9	17.4	71.6	40.9	104.8	48.5	132.0	45.8	29.3	67.6
1999	781.2	-	131.0	33.2	18.6	80.4	43.2	113.2	53.9	151.8	49.0	30.4	76.5
2000	1,008.4	-	156.6	38.0	21.8	101.2	49.8	140.7	65.5	211.6	72.2	39.7	111.5
<i>Euro area enlargement</i>													
2001	1,010.5	-	153.8	34.0	21.2	117.3	52.9	138.0	58.7	207.8	74.0	40.9	112.0
2001 Q2	260.1	259.5	39.6	8.6	5.0	29.6	13.2	36.2	15.7	52.2	19.1	11.3	29.5
Q3	239.5	252.0	35.9	7.7	5.2	28.4	12.1	31.1	13.1	50.9	18.1	10.2	26.9
Q4	247.1	240.8	38.8	8.6	5.7	30.0	13.9	32.7	13.5	50.4	16.9	9.4	27.1
2002 Q1	239.2	240.7	35.8	8.2	5.1	29.3	12.7	32.9	12.8	49.2	17.8	9.3	26.1
Q2	247.1	243.9	36.7	8.8	5.2	31.2	13.5	32.6	13.5	48.6	17.1	10.6	.
2002 Mar.	81.7	81.4	12.6	2.9	1.7	10.3	4.3	11.3	4.5	16.4	5.7	3.3	8.6
Apr.	85.6	82.5	12.6	3.1	1.7	10.5	4.7	11.7	4.7	16.5	6.0	3.7	10.3
May	82.1	81.5	12.5	2.8	1.7	10.1	4.4	10.8	4.4	16.5	5.9	3.4	9.5
June	79.4	79.8	11.6	2.9	1.7	10.5	4.4	10.2	4.3	15.6	5.2	3.4	.
July	80.2	79.3	11.4	2.5	1.6	10.9	4.4	9.7	4.2	17.1	5.7	3.6	.
Aug.	72.1	82.0	.	.	.	.	.	.	.	.	.	.	.
% change versus previous year 2002 Aug. -5.7													
Balance													
1998	85.7	-	28.0	0.7	3.2	29.9	10.2	15.5	-24.6	-17.1	3.9	13.1	22.9
1999	51.6	-	30.4	-0.1	2.6	22.5	12.9	21.9	-27.1	-32.6	-0.6	8.7	13.1
2000	5.3	-	33.1	0.8	1.4	29.8	13.6	30.7	-31.3	-60.0	-16.1	7.0	-3.7
<i>Euro area enlargement</i>													
2001	48.8	-	47.1	2.7	2.9	19.8	13.4	42.0	-24.2	-42.5	-14.0	8.9	-7.3
2001 Q2	7.4	7.1	11.4	0.5	1.0	4.8	3.5	9.5	-7.4	-11.0	-3.6	1.6	-2.8
Q3	18.2	14.2	13.3	0.6	0.7	4.5	4.0	12.8	-4.8	-10.5	-3.7	1.9	-0.6
Q4	25.1	20.5	11.6	1.0	0.4	5.9	2.3	12.3	-4.7	-7.1	-1.2	3.1	1.4
2002 Q1	18.9	27.7	15.5	1.0	1.0	4.6	3.2	11.7	-4.9	-9.8	-3.8	1.0	-0.5
Q2	24.5	25.0	13.8	0.4	1.0	7.1	2.7	13.1	-5.7	-5.8	-1.6	0.6	.
2002 Mar.	11.0	8.9	5.6	0.2	0.4	1.9	1.4	4.6	-1.7	-1.9	-0.5	0.5	0.6
Apr.	4.7	7.1	4.5	0.3	0.3	1.8	0.8	3.7	-2.2	-2.5	-1.0	0.0	-1.0
May	8.8	9.7	4.4	0.1	0.3	2.9	0.7	4.8	-1.9	-2.2	-0.5	0.3	-0.1
June	11.0	8.2	4.8	0.0	0.4	2.3	1.2	4.6	-1.7	-1.1	-0.1	0.4	.
July	13.9	8.3	6.2	0.0	0.3	2.0	1.0	6.0	-1.3	-2.0	-0.4	0.4	.
Aug.	9.6	9.9	.	.	.	.	.	.	.	.	.	.	.

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	100.5	90.4	96.6	1.134	137.1	1.644	0.692
1998	101.5	101.3	101.6	99.7	96.6	99.1	1.121	146.4	1.622	0.676
1999	95.7	95.7	95.7	96.2	96.6	95.8	1.066	121.3	1.600	0.659
2000	85.7	86.5	87.0	86.9	88.2	86.3	0.924	99.5	1.558	0.609
2000 Q1	89.0	89.6	89.8	89.3	91.1	89.5	0.986	105.5	1.607	0.614
Q2	86.0	86.6	87.1	87.4	88.4	86.6	0.933	99.6	1.563	0.610
Q3	84.7	85.7	86.2	86.3	87.3	85.3	0.905	97.4	1.544	0.612
Q4	83.0	84.0	84.8	84.6	85.9	83.6	0.868	95.3	1.516	0.600
2000 Jan.	90.2	90.8	91.0	-	92.4	90.7	1.014	106.5	1.610	0.618
Feb.	89.2	89.8	90.0	-	91.2	89.6	0.983	107.6	1.607	0.615
Mar.	87.7	88.3	88.5	-	89.7	88.1	0.964	102.6	1.604	0.611
Apr.	86.1	86.6	87.0	-	88.4	86.7	0.947	99.9	1.574	0.598
May	84.5	85.0	85.7	-	86.9	85.1	0.906	98.1	1.556	0.602
June	87.4	88.1	88.4	-	89.9	88.1	0.949	100.7	1.561	0.629
July	86.9	87.9	88.1	-	89.4	87.5	0.940	101.4	1.551	0.623
Aug.	84.6	85.5	86.1	-	87.0	85.1	0.904	97.8	1.551	0.607
Sep.	82.8	83.6	84.6	-	85.3	83.3	0.872	93.1	1.531	0.608
Oct.	81.6	82.4	83.3	-	84.4	82.2	0.855	92.7	1.513	0.589
Nov.	82.3	83.3	84.0	-	85.1	82.9	0.856	93.3	1.522	0.600
Dec.	85.4	86.4	87.0	-	88.1	85.8	0.897	100.6	1.514	0.613
<i>Euro area enlargement</i>										
2001	87.3	88.9	89.2	88.7	91.0	88.1	0.896	108.7	1.511	0.622
2001 Q1	88.6	89.8	90.5	89.4	91.4	88.7	0.923	109.1	1.533	0.633
Q2	86.0	87.7	87.8	87.5	89.5	86.8	0.873	106.9	1.528	0.614
Q3	87.0	88.7	88.8	88.1	91.2	88.0	0.890	108.3	1.507	0.619
Q4	87.5	89.6	89.8	89.7	92.0	88.7	0.896	110.5	1.473	0.621
2002 Q1	87.1	89.7	89.8	89.3	91.3	88.1	0.877	116.1	1.473	0.615
Q2	88.8	91.7	91.4	91.6	93.9	90.6	0.919	116.5	1.465	0.629
Q3	91.3	94.3	94.3	-	97.9	94.0	0.984	117.2	1.464	0.635
2001 Jan.	89.2	90.2	90.8	-	91.7	89.0	0.938	109.6	1.529	0.635
Feb.	88.3	89.4	90.2	-	91.0	88.3	0.922	107.1	1.536	0.634
Mar.	88.4	89.8	90.4	-	91.4	88.9	0.910	110.3	1.535	0.629
Apr.	87.6	89.1	89.5	-	91.0	88.4	0.892	110.4	1.529	0.622
May	85.9	87.6	87.6	-	89.3	86.7	0.874	106.5	1.533	0.613
June	84.7	86.3	86.3	-	88.1	85.4	0.853	104.3	1.522	0.609
July	85.4	87.1	87.1	-	89.1	86.2	0.861	107.2	1.514	0.609
Aug.	87.7	89.3	89.5	-	91.8	88.6	0.900	109.3	1.514	0.627
Sep.	88.0	89.7	89.9	-	92.6	89.4	0.911	108.2	1.491	0.623
Oct.	88.0	90.0	90.0	-	92.8	89.5	0.906	109.9	1.479	0.624
Nov.	86.8	88.8	89.1	-	91.3	88.0	0.888	108.7	1.466	0.618
Dec.	87.7	89.9	90.2	-	91.9	88.6	0.892	113.4	1.475	0.620
2002 Jan.	87.6	90.3	90.4	-	91.6	88.4	0.883	117.1	1.475	0.617
Feb.	86.8	89.3	89.4	-	91.1	87.8	0.870	116.2	1.477	0.612
Mar.	86.8	89.6	89.5	-	91.2	88.2	0.876	114.7	1.468	0.616
Apr.	87.2	90.1	89.9	-	91.7	88.5	0.886	115.8	1.466	0.614
May	88.6	91.5	91.2	-	93.7	90.4	0.917	115.9	1.457	0.628
June	90.6	93.5	93.2	-	96.4	92.8	0.955	117.8	1.472	0.644
July	91.7	94.7	94.5	-	98.2	94.4	0.992	117.1	1.462	0.639
Aug.	91.1	93.9	94.0	-	97.7	93.7	0.978	116.3	1.464	0.636
Sep.	91.2	94.2	94.3	-	98.0	93.8	0.981	118.4	1.465	0.631
Oct.	91.7	94.8	94.9	-	98.5	94.3	0.981	121.6	1.465	0.630
% ch. vs. ⁴⁾ prev. month										
2002 Oct.	0.5	0.6	0.6	-	0.6	0.5	0.0	2.7	0.0	-0.1
% ch. vs. ⁴⁾ prev. year										
2002 Oct.	4.1	5.3	5.4	-	6.2	5.3	8.3	10.7	-1.0	1.0

Source: ECB.

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

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

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

Bilateral ECU or euro exchange rates ²⁾								
Swedish krona	Danish krone	Norwegian krone	Canadian dollar	Australian dollar	Hong Kong dollar ³⁾	Korean won ³⁾	Singapore dollar ³⁾	
11	12	13	14	15	16	17	18	
8.65	7.48	8.02	1.569	1.528	8.75	1,069.8	1.678	1997
8.92	7.50	8.47	1.665	1.787	8.69	1,568.9	1.876	1998
8.81	7.44	8.31	1.584	1.652	8.27	1,267.3	1.806	1999
8.45	7.45	8.11	1.371	1.589	7.20	1,043.5	1.592	2000
8.50	7.45	8.11	1.434	1.564	7.68	1,109.8	1.674	2000 Q1
8.28	7.46	8.20	1.381	1.585	7.27	1,042.0	1.608	Q2
8.40	7.46	8.10	1.341	1.576	7.06	1,009.5	1.569	Q3
8.60	7.45	8.04	1.325	1.632	6.77	1,011.6	1.516	Q4
8.60	7.44	8.12	1.469	1.542	7.89	1,145.9	1.697	2000 Jan.
8.51	7.45	8.10	1.427	1.564	7.65	1,110.8	1.674	Feb.
8.39	7.45	8.11	1.408	1.583	7.51	1,076.1	1.654	Mar.
8.27	7.45	8.15	1.389	1.588	7.38	1,051.4	1.620	Apr.
8.24	7.46	8.20	1.355	1.570	7.06	1,015.3	1.566	May
8.32	7.46	8.25	1.402	1.597	7.40	1,061.1	1.641	June
8.41	7.46	8.18	1.389	1.598	7.33	1,047.9	1.636	July
8.39	7.46	8.10	1.341	1.557	7.05	1,007.6	1.556	Aug.
8.41	7.46	8.03	1.295	1.575	6.80	973.2	1.517	Sep.
8.52	7.45	8.00	1.292	1.618	6.67	965.1	1.498	Oct.
8.63	7.46	8.00	1.320	1.639	6.68	990.6	1.497	Nov.
8.66	7.46	8.13	1.368	1.642	7.00	1,089.6	1.558	Dec.
<i>Euro area enlargement</i>								
9.26	7.45	8.05	1.386	1.732	6.99	1,154.8	1.604	2001
9.00	7.46	8.20	1.410	1.741	7.20	1,174.7	1.616	2001 Q1
9.13	7.46	8.01	1.345	1.701	6.81	1,138.9	1.583	Q2
9.41	7.44	8.01	1.374	1.734	6.94	1,150.1	1.582	Q3
9.48	7.44	7.97	1.416	1.751	6.99	1,155.2	1.634	Q4
9.16	7.43	7.81	1.398	1.692	6.84	1,155.3	1.607	2002 Q1
9.16	7.43	7.52	1.428	1.666	7.17	1,157.8	1.657	Q2
9.23	7.43	7.40	1.536	1.796	7.67	1,172.7	1.729	Q3
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.
-0.7	0.0	-0.3	0.3	-0.5	0.0	2.5	1.1	% ch. vs. ⁴⁾ prev. month 2002 Oct.
-4.9	-0.1	-8.2	8.8	-0.7	8.3	2.8	6.8	% ch. vs. ⁴⁾ prev. year 2002 Oct.

4) The table shows the percentage change in the latest monthly observation vis-à-vis the previous month, and vis-à-vis the same month of the previous year. A positive change denotes an appreciation of the euro. Due to the change in the weighting scheme, effective exchange rate data as from January 2001 are not fully comparable with earlier observations.

II Economic and financial developments in the other EU Member States

Table 11

Economic and financial developments

(annual percentage changes, unless otherwise indicated)

	HICP 1	General government deficit (-)/ surplus (+) as a % of GDP 2	General government gross debt as a % of GDP 3	Long-term government bond yield ¹⁾ as a % per annum 4	Exchange rate ²⁾ as national currency per ECU or euro 5	Current and new capital account as a % of GDP 6	Unit labour costs ³⁾ 7	Real GDP 8	Industrial production index ⁴⁾ 9	Standardised unemployment rate as a % of labour force (s.a.) 10	Broad money ⁵⁾ 11	3-month interest rate ¹⁾ as a % per annum 12
Denmark												
1998	1.3	1.1	56.2	4.94	7.50	-0.9	3.0	2.5	2.2	4.9	5.4	4.27
1999	2.1	3.1	52.7	4.91	7.44	1.9	2.2	2.3	1.8	4.8	-0.2	3.44
2000	2.7	2.5	46.8	5.64	7.45	1.6	1.5	3.0	6.2	4.4	1.1	5.00
2001	2.3	3.1	44.7	5.08	7.45	2.6	3.7	1.0	1.7	4.3	5.7	4.70
2001 Q2	2.5	-	-	5.27	7.46	1.7	3.9	0.9	0.9	4.4	3.3	5.06
Q3	2.3	-	-	5.18	7.44	3.7	4.1	1.2	1.9	4.3	8.0	4.73
Q4	2.0	-	-	4.83	7.44	0.4	3.7	0.4	-1.3	4.2	9.6	3.77
2002 Q1	2.5	-	-	5.21	7.43	2.5	2.6	0.9	-3.2	4.2	2.3	3.63
Q2	2.1	-	-	5.36	7.43	2.3	0.8	2.0	3.9	4.2	2.8	3.71
Q3	2.4	-	-	4.92	7.43	.	.	.	.	.	2.5	3.57
2002 May	1.9	-	-	5.42	7.44	-	-	-	2.4	4.2	3.1	3.73
June	2.2	-	-	5.27	7.43	-	-	-	2.3	4.2	2.2	3.73
July	2.2	-	-	5.13	7.43	-	-	-	-1.7	4.3	3.9	3.68
Aug.	2.4	-	-	4.88	7.43	-	-	-	-5.8	4.3	1.7	3.58
Sep.	2.5	-	-	4.74	7.43	-	-	-	.	.	1.9	3.45
Oct.	.	-	-	4.81	7.43	-	-	-	.	.	.	3.44
Sweden												
1998	1.0	1.9	70.5	4.99	8.92	3.7	0.9	3.6	3.8	8.3	3.5	4.36
1999	0.6	1.5	65.0	4.98	8.81	2.7	-1.0	4.5	1.9	7.1	6.8	3.32
2000	1.3	3.7	55.3	5.37	8.45	3.5	5.8	3.6	7.9	5.8	6.2	4.07
2001	2.7	4.8	56.6	5.11	9.26	3.2	4.4	1.2	-0.8	4.9	.	4.11
2001 Q2	3.0	-	-	5.20	9.13	2.0	5.5	1.0	-2.5	4.8	1.1	4.15
Q3	3.1	-	-	5.28	9.41	4.0	4.9	0.4	-2.5	4.8	2.6	4.34
Q4	3.0	-	-	5.12	9.48	3.8	4.5	0.7	-3.3	5.0	.	3.85
2002 Q1	2.9	-	-	5.42	9.16	4.9	4.8	0.3	-2.1	5.1	.	4.00
Q2	1.9	-	-	5.64	9.16	4.1	1.0	2.7	0.2	5.0	.	4.43
Q3	1.5	-	-	5.16	9.23	.	.	.	.	4.9	.	4.41
2002 May	1.7	-	-	5.69	9.22	-	-	-	1.5	5.0	.	4.46
June	1.7	-	-	5.53	9.11	-	-	-	-1.4	4.9	.	4.45
July	1.8	-	-	5.37	9.27	-	-	-	2.8	5.0	.	4.45
Aug.	1.7	-	-	5.14	9.25	-	-	-	-3.6	4.8	.	4.41
Sep.	1.2	-	-	4.97	9.17	-	-	-	.	5.1	.	4.38
Oct.	.	-	-	5.07	9.11	-	-	-	.	.	.	4.30
United Kingdom												
1998	1.6	0.2	47.7	5.60	0.676	-0.5	2.9	2.9	0.9	6.1	9.6	7.42
1999	1.3	1.1	45.1	5.01	0.659	-2.1	3.0	2.4	0.8	5.8	5.5	5.54
2000	0.8	3.9	42.1	5.33	0.609	-1.8	2.3	3.1	1.6	5.3	6.6	6.19
2001	1.2	0.8	39.1	5.01	0.622	-2.0	3.9	2.0	-2.1	5.0	8.0	5.04
2001 Q2	1.5	-2.2	39.6	5.18	0.614	-2.9	4.5	2.0	-1.6	4.9	7.5	5.30
Q3	1.5	1.2	38.8	5.13	0.619	-1.5	3.5	1.8	-2.7	5.0	7.8	5.00
Q4	1.0	-2.1	38.8	4.82	0.621	-2.5	3.4	1.6	-5.6	5.1	7.7	4.16
2002 Q1	1.5	2.4	37.9	5.13	0.615	-1.1	3.2	1.0	-5.6	5.1	6.1	4.08
Q2	0.9	-3.3	38.3	5.28	0.629	-2.2	2.9	1.3	-4.2	5.1	5.8	4.17
Q3	1.1	-1.3	38.0	4.71	0.635	.	.	1.7	.	.	5.7	4.01
2002 May	0.8	-6.4	38.1	5.35	0.628	-	-	-	0.3	5.1	5.7	4.15
June	0.6	-3.6	38.3	5.17	0.644	-	-	-	-8.9	5.1	6.1	4.18
July	1.1	4.2	37.9	5.02	0.639	-	-	-	-1.8	5.2	5.7	4.06
Aug.	1.0	-2.7	37.3	4.67	0.636	-	-	-	-4.3	.	5.7	3.99
Sep.	1.0	-5.3	38.0	4.45	0.631	-	-	-	.	.	5.6	3.99
Oct.	.	.	.	4.53	0.630	-	-	-	.	.	.	3.96

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

1) Average-of-period values.

2) For more information, see Table 10.

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

4) Total excluding construction; adjusted for working days.

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

12 Economic and financial developments outside the EU

Table 12.1

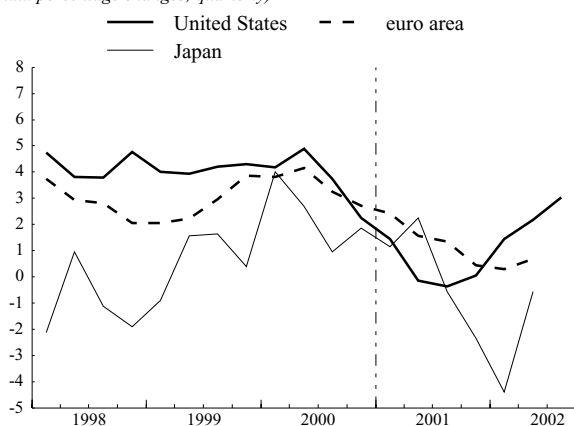
Economic and financial developments

(annual percentage changes, unless otherwise indicated)

	Consumer price index	Unit labour costs ¹⁾	Real GDP	Industrial production index ¹⁾	Unemployment rate as a % of labour force (s.a.)	M2 ²⁾	3-month interbank deposit rate ³⁾ as a % per annum	10-year government bond yield ³⁾ as a % per annum	Exchange rate ⁴⁾ as national currency per ECU or euro	Fiscal deficit (-)/surplus (+) ⁵⁾ as a % of GDP	Gross public debt ⁶⁾ as a % of GDP
	1	2	3	4	5	6	7	8	9	10	11
United States											
1998	1.6	0.4	4.3	5.9	4.5	7.3	5.57	5.33	1.121	0.3	53.4
1999	2.2	-1.1	4.1	4.2	4.2	7.6	5.42	5.64	1.066	0.7	50.4
2000	3.4	3.2	3.8	4.7	4.0	6.1	6.53	6.03	0.924	1.4	45.2
2001	2.8	0.6	0.3	-4.2	4.8	8.7	3.78	5.01	0.896	-0.5	44.8
2001 Q2	3.4	2.4	-0.1	-4.2	4.5	8.1	4.19	5.25	0.873	0.2	43.7
Q3	2.7	0.1	-0.4	-5.6	4.8	9.4	3.46	4.98	0.890	-1.7	44.1
Q4	1.9	0.9	0.1	-6.1	5.6	10.3	2.15	4.74	0.896	-1.0	44.8
2002 Q1	1.3	-0.6	1.4	-3.7	5.6	9.1	1.90	5.06	0.877	-3.0	45.2
Q2	1.3	-1.6	2.2	-1.3	5.9	7.5	1.92	5.08	0.919	-3.2	45.2
Q3	1.6	.	3.0	0.8	5.7	7.3	1.81	4.25	0.984	.	.
2002 May	1.2	.	.	-1.5	5.8	7.9	1.91	5.15	0.917	.	.
June	1.1	.	.	0.0	5.9	7.6	1.88	4.90	0.955	.	.
July	1.5	.	.	0.3	5.9	7.9	1.85	4.62	0.992	.	.
Aug.	1.8	.	.	0.6	5.7	8.0	1.78	4.24	0.978	.	.
Sep.	1.5	.	.	1.5	5.6	6.1	1.80	3.88	0.981	.	.
Oct.	.	.	.	.	5.7	.	1.78	3.91	0.981	.	.
Japan											
1998	0.7	6.3	-1.1	-7.1	4.1	4.4	0.66	1.30	146.4	-10.7	.
1999	-0.3	-2.4	0.7	0.8	4.7	3.7	0.22	1.75	121.3	-7.1	.
2000	-0.7	-6.3	2.4	5.9	4.7	2.1	0.28	1.76	99.5	-7.4	120.0
2001	-0.7	5.8	0.1	-7.8	5.0	2.8	0.15	1.34	108.7	.	127.0
2001 Q2	-0.7	3.6	2.3	-5.6	4.9	2.7	0.08	1.28	106.9	.	.
Q3	-0.8	9.2	-0.6	-10.8	5.1	3.1	0.07	1.36	108.3	.	.
Q4	-1.0	11.1	-2.3	-13.5	5.4	3.2	0.08	1.35	110.5	.	.
2002 Q1	-1.4	6.6	-4.4	-10.9	5.3	3.6	0.10	1.46	116.1	.	.
Q2	-0.9	-1.7	-0.6	-3.6	5.3	3.5	0.08	1.37	116.5	.	.
Q3	-0.8	.	.	3.6	.	3.3	0.07	1.24	117.2	.	.
2002 May	-0.9	-3.2	.	-2.1	5.4	3.5	0.08	1.38	115.9	.	.
June	-0.7	-2.9	.	-2.5	5.4	3.4	0.07	1.36	117.8	.	.
July	-0.8	-8.1	.	3.8	5.4	3.3	0.07	1.30	117.1	.	.
Aug.	-0.9	.	.	1.9	5.5	3.4	0.07	1.26	116.3	.	.
Sep.	-0.7	.	.	4.9	.	3.3	0.07	1.16	118.4	.	.
Oct.	.	.	.	.	.	.	0.07	1.09	121.6	.	.

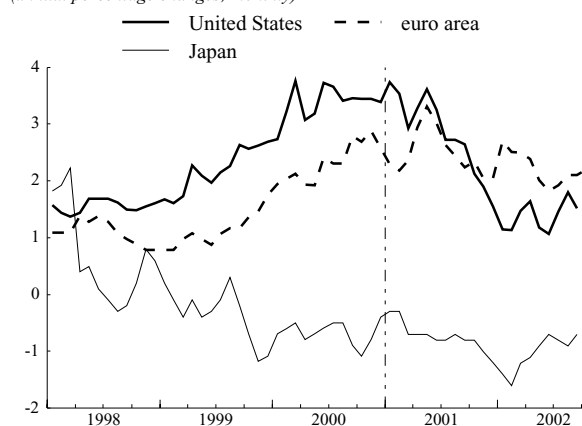
Real gross domestic product

(annual percentage changes; quarterly)



Consumer price indices

(annual percentage changes; monthly)



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

1) Manufacturing.

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

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

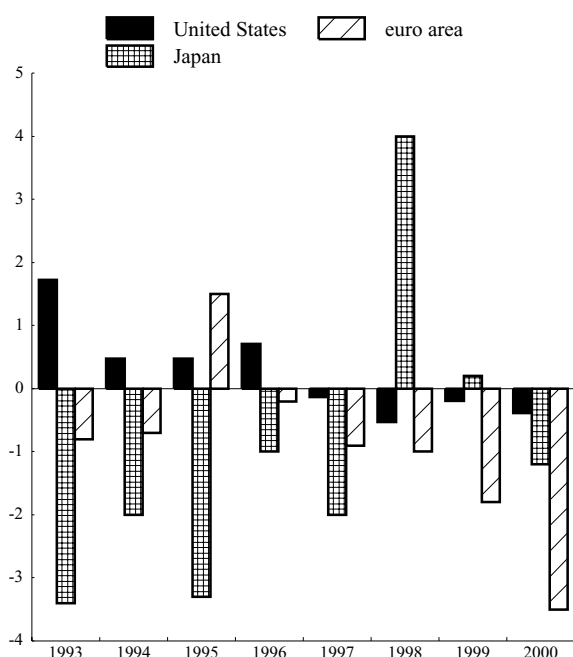
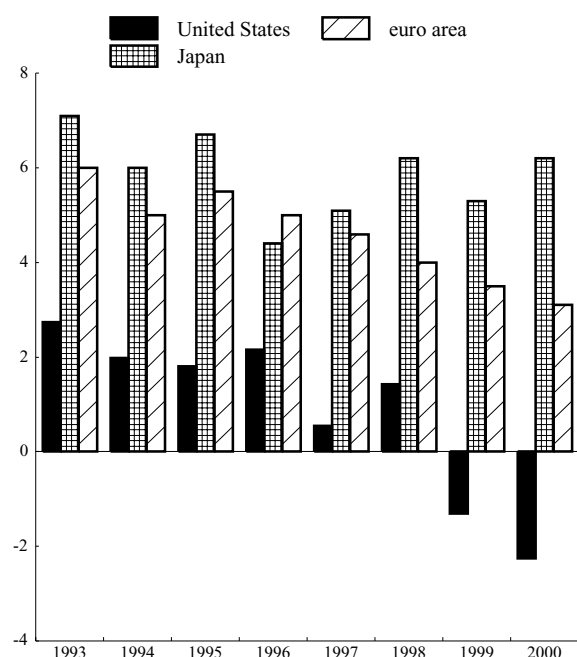
4) For more information, see Table 10.

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

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

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

	National saving and investment			Investment and financing of non-financial corporations						Investment and financing of households ¹⁾			
	Gross saving	Gross capital formation	Net lending to the rest of the world	Gross capital formation	Gross fixed capital formation	Net acquisition of financial assets	Gross saving	Net incurrence of liabilities	Securities and shares	Capital expenditure	Net acquisition of financial assets	Gross saving	Net incurrence of liabilities
	1	2	3	4	5	6	7	8	9	10	11	12	13
United States													
1998	18.8	20.7	-2.3	9.4	8.6	6.5	8.2	7.0	1.4	12.3	6.9	12.8	5.5
1999	18.4	20.9	-3.0	9.5	8.9	10.5	8.2	10.6	2.8	12.4	4.9	11.2	6.2
2000	18.4	21.1	-4.0	9.7	9.1	7.7	7.5	8.1	2.5	12.5	3.4	11.5	5.7
2001	16.5	19.1	-3.7	7.9	8.5	2.9	7.7	2.8	1.7	13.0	5.3	11.6	5.7
2000 Q3	18.5	21.1	-4.2	9.9	9.3	7.6	7.5	8.1	1.6	12.5	4.1	11.6	6.1
Q4	17.8	20.9	-4.3	9.5	9.0	5.2	7.3	5.5	0.2	12.3	0.1	11.4	3.8
2001 Q1	16.9	20.0	-4.1	8.6	8.9	3.3	7.1	4.4	1.8	12.9	4.2	11.4	3.5
Q2	16.6	19.3	-3.8	8.1	8.6	1.9	7.4	2.3	2.3	12.9	6.1	11.2	6.5
Q3	16.5	18.8	-3.5	7.7	8.3	3.3	7.8	2.9	0.6	12.9	8.9	12.8	9.0
Q4	15.9	18.2	-3.6	7.1	8.0	2.9	8.5	1.9	2.1	13.4	2.0	10.9	3.9
2002 Q1	15.6	18.6	-4.1	7.5	7.8	2.2	7.9	2.3	0.1	12.8	6.8	12.3	6.7
Q2	15.5	18.7	-4.8	7.7	7.6	2.0	7.7	2.4	1.4	12.7	6.4	12.7	5.9
Japan													
1998	29.1	26.9	2.6	15.6	15.6	-5.9	13.3	-8.3	-0.4	5.3	6.3	11.7	-0.9
1999	27.6	25.8	2.2	14.4	14.8	2.4	13.5	-3.5	1.7	5.2	5.1	11.1	0.2
2000	27.7	25.9	2.3	15.2	15.5	2.4	13.8	0.3	1.2	5.2	4.1	10.9	0.0
2001	.	27.5	.	.	.	-2.4	.	-5.8	1.7	.	3.0	.	-0.1
2000 Q3	27.9	26.1	2.6	.	.	11.1	.	-1.0	-0.3	.	-0.4	.	1.2
Q4	27.2	26.9	1.8	.	.	7.0	.	12.7	2.7	.	7.4	.	0.5
2001 Q1	33.2	27.1	2.3	.	.	8.8	.	-2.4	2.2	.	-4.0	.	3.2
Q2	.	23.5	.	.	.	-28.0	.	-16.0	4.2	.	12.3	.	-4.7
Q3	.	26.1	.	.	.	6.4	.	-8.9	-1.1	.	-5.2	.	2.6
Q4	.	25.1	.	.	.	2.3	.	3.2	1.5	.	8.9	.	-1.5
2002 Q1	.	27.3	.	.	.	9.8	.	-6.5	-2.4	.	-6.3	.	2.4
Q2	.	22.7	.	.	.	-26.3	.	-21.2	1.6	.	7.3	.	-8.7

Net lending of non-financial corporations
(as a percentage of GDP)

Net lending of households ¹⁾
(as a percentage of GDP)


Sources: ECB, Federal Reserve Board, Bank of Japan and Economic and Social Research Institute.

1) Households including non-profit institutions serving households.

Technical notes

Relating to Table 2.4¹

Seasonal adjustment of the euro area monetary aggregates

The approach used relies on multiplicative decomposition through X-12-ARIMA (version 0.2.2).² Seasonal adjustment for monetary aggregates includes a day-of-the-week adjustment for some components of M2. The seasonal adjustment of M3 is carried out indirectly by aggregating the seasonally adjusted series of M1, M2 less M1, and M3 less M2 to fulfil the additivity constraint.

Seasonal factors are estimated for the index of adjusted stocks. They are then applied to the levels expressed in EUR billions and to the adjustments due to reclassifications, other revaluations, etc., yielding seasonally adjusted values for the levels, the adjustments and thus for the flows. Seasonal factors are revised at annual intervals or as required.

Calculation of growth rates

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

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

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

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

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

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

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

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

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

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

Relating to Tables 2.5 to 2.8

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

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

Calculation of growth rates

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

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

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

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

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

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

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

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

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

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

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

Relating to Table 4.1

Seasonal adjustment of the HICP ¹

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

Relating to Table 8.2

Seasonal adjustment of the balance of payments current account

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

¹ See footnote 1 on the previous page.

General notes

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

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

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

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

As a general rule, the cut-off date for the statistics included in the ECB's Monthly Bulletin is the day preceding the first meeting in the month of the Governing Council of the ECB. For this issue, it was 6 November 2002.

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

Overview

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

Monetary policy and financial statistics

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

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

a maturity up to two years by MFIs located in the euro area. Accordingly, these holdings are included in the item external liabilities shown in Table 2.3, and as a result have an impact on the item net external assets shown in Table 2.4. Table 2.5 shows a quarterly sectoral and maturity analysis of loans by MFIs to euro area residents. Table 2.6 shows a quarterly analysis of deposits held by euro area residents with MFIs. Table 2.7 provides a quarterly analysis of MFI claims on and liabilities to non-residents of the euro area. Table 2.8 shows a quarterly currency analysis of certain MFI balance sheet items. Tables 2.5 to 2.7 show flows adjusted for reclassifications, other revaluations, exchange rate variations and any other changes which do not arise from transactions, and annual percentage changes. A complete list of MFIs is published on the ECB's website. Details of the sector definitions are set out in the "Money and Banking Statistics Sector Manual: Guidance for the statistical classification of customers" (ECB, November 1999). The "Money and Banking Statistics Compilation Guide" (EMI, April 1998) explains recommended practices to be followed by the NCBs. From 1 January 1999 the statistical information is collected and compiled on the basis of the ECB Regulation concerning the consolidated balance sheet of the Monetary Financial Institutions sector (ECB/1998/16, as replaced from January 2003 by ECB/2001/13).

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

Statistics on securities issues are presented in Tables 3.5 and 3.6. They are broken down into short-term and long-term securities. "Short-term" means securities with an original maturity of one year or less (in accordance with the ESA 95, in exceptional cases two years or less). Securities with a longer maturity, or with optional maturity

dates, the latest of which is more than one year away, or with indefinite maturity dates, are classified as long-term. The statistics on securities issues are estimated to cover approximately 95% of total issues by euro area residents. Table 3.5 shows securities issued, redemptions and amounts outstanding, broken down into short-term securities and long-term securities. Net issues differ from the change in amounts outstanding owing to valuation changes, reclassifications and other adjustments. Table 3.6 contains a sectoral breakdown of issuers of euro-denominated securities, whether resident in the euro area or elsewhere. For euro area residents, the sectoral breakdown is in line with the European System of Accounts 1995 (ESA 95).² For non-euro area residents, the term "banks (including central banks)" is used to indicate institutions of a similar type to MFIs (including the Eurosystem) resident outside the euro area. The term "international organisations" includes the European Investment Bank. (The ECB is included in the Eurosystem.)

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

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

Prices and real economy indicators

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

The Harmonised Index of Consumer Prices (HICP) for the euro area (Table 4.1) is available from 1995 onwards. The index is based on national HICPs that follow the same methodology in all euro area countries. The breakdown by goods and services components is derived from the Classification of individual consumption by purpose (Coicop) used for the HICP. The HICP covers monetary expenditure on final consumption by households on the economic territory of the euro area. The table includes seasonally adjusted HICP data which are compiled by the ECB.

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

Table 5.2 shows selected other real economy indicators. The implementation of Council Regulation (EC) No. 1165/98 of 19 May 1998 concerning short-term statistics will enlarge the range of available euro area data. The breakdown by end-use of the products applied in Tables 4.2.1 and 5.2.1 represents the harmonised sub-division of industry excluding construction (NACE sections C to E) into Main Industrial Groupings as defined in Commission Regulation (EC) No. 586/2001 of 26 March 2001.

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

Employment data (Table 5.4) are based on the ESA 95. Whenever coverage of the euro area is incomplete, some data are estimated by the ECB on the basis of the information available. Unemployment rates conform to International Labour Organization (ILO) guidelines. The labour force estimates underlying the unemployment rate are different from the sum of the employment and unemployment levels published in Table 5.4.

Financial accounts statistics

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

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

Table 6.2 has changed following the provision of capital accounts and financial accounts data for the years 1995 to 2001 under the ESA 95 Regulation (Council Regulation (EC) No. 2223/96 of 25 June 1996). The new table shows annual data on saving, (financial and non-financial) investment and financing for euro area sectors as a whole, and for non-financial corporations and households separately. These annual data provide, in particular, fuller sectoral information on the acquisition of financial assets and are consistent with the quarterly data in Table 6.1.

General government fiscal position

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

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

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

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

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

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

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

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

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

Table 9 shows data on euro area external trade in goods. The main source for the data is Eurostat. The ECB derives volume indices from Eurostat value and unit value indices, and performs seasonal adjustment of unit value indices, while value data are seasonally and working day adjusted by Eurostat.

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

Owing to differences in definitions, classification, coverage and time of recording, external trade data, in particular imports, are not fully comparable with the goods item in the balance of payments statistics (Tables 8.1 and 8.2). Part of the difference arises from the inclusion of insurance and freight services in the recording of goods imported, which accounted for about 3.8% of the value of imports (c.i.f.) in 1998 (ECB estimates).

Table 10 shows ECB calculations of nominal and real effective exchange rate indices for the euro based on weighted averages of bilateral euro exchange rates. Weights are based on 1995-97 manufactured goods trade with the trading partners and capture third-market effects. Up to December 2000, the narrow group is composed of the countries whose currencies are shown in the table plus Greece. On adopting the euro in January 2001, Greece ceased to be a partner country in the effective exchange rate of the euro and the weighting scheme has been adjusted accordingly. In addition, the broad group includes the following countries: Algeria, Argentina, Brazil, China, Croatia, Cyprus, the Czech Republic, Estonia, Hungary, India, Indonesia, Israel, Malaysia, Mexico, Morocco, New Zealand, the Philippines, Poland, Romania, Russia, Slovakia, Slovenia, South Africa, Taiwan, Thailand and Turkey. Real rates are calculated using consumer prices (CPI), producer prices in manufacturing (PPI) and unit labour costs in manufacturing (ULCM). Where deflators are not yet available, estimates are used. The bilateral rates shown are those against the 12 currencies used in the ECB's calculation of the "narrow" effective exchange rate of the euro. The ECB publishes daily reference rates for these and some other currencies.

Other statistics

Statistics on other EU Member States (Table 11) follow the same principles as those for data relating to the euro area. Data for the United States and Japan contained in Tables/Charts 12.1 and 12.2 are obtained from national sources.



Chronology of monetary policy measures of the Eurosystem¹

4 January 2000

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

5 January 2000

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

15 January 2000

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

20 January 2000

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

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

3 February 2000

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

17 February, 2 March 2000

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

16 March 2000

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

30 March, 13 April 2000

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

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

27 April 2000

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

11 May 2000

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

25 May 2000

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

8 June 2000

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

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

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

19 June 2000

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

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

21 June 2000

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

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

6 July, 20 July, 3 August 2000

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

31 August 2000

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

14 September 2000

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

5 October 2000

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

19 October, 2 November, 16 November, 30 November 2000

The Governing Council of the ECB decides that the minimum bid rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 4.75%, 5.75% and 3.75% respectively.

14 December 2000

The Governing Council of the ECB decides that the minimum bid rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 4.75%, 5.75% and 3.75% respectively.

In addition, it decides to reconfirm the existing reference value for monetary growth, namely an annual growth rate of 4½% for the broad aggregate M3. This decision is taken on the grounds that the available evidence continues to support the assumptions underlying the initial derivation of the reference value in December

1998 (and its confirmation in December 1999), namely that, over the medium term, M3 income velocity declines at a trend rate in the range from ½% to 1% per annum and potential output grows at a trend rate between 2% and 2½% per annum. The Governing Council will undertake the next review of the reference value in December 2001.

2 January 2001

On 1 January 2001 the euro was introduced in Greece. Greece thus became the twelfth EU Member State to adopt the single currency and the first to do so since the start of Stage Three of Economic and Monetary Union (EMU) on 1 January 1999. As a result, the Bank of Greece is now a full member of the Eurosystem, with the same rights and obligations as the 11 national central banks of the EU Member States which previously adopted the euro. In accordance with Article 49 of the Statute of the European System of Central Banks and of the European Central Bank, the Bank of Greece pays up the remainder of its contribution to the capital of the ECB, as well as its share of the ECB's reserves, and also transfers to the ECB its contribution to the foreign reserve assets of the ECB.

Further to the announcement on 29 December 2000, the first main refinancing operation of 2001, in which the Greek counterparties of the Eurosystem participate for the first time, is successfully conducted. The allotment volume of €101 billion takes into account the additional liquidity needs of the euro area banking system resulting from the integration of the Greek Monetary Financial Institutions.

4 January 2001

The Governing Council of the ECB decides that the minimum bid rate for the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 4.75%, 5.75% and 3.75% respectively.

In addition, it decides on an allotment amount of €20 billion per operation for the longer-term refinancing operations to be conducted in 2001. This amount takes into consideration the expected liquidity needs of the euro area banking system in 2001 and the desire of the Eurosystem to continue to provide the bulk of refinancing of the financial sector through its main refinancing operations. The Governing Council may adjust the allotment amount in the course of the year in the event of unexpected developments in liquidity needs.

18 January, 1 February, 15 February, 1 March, 15 March, 29 March, 11 April, 26 April 2001

The Governing Council of the ECB decides that the minimum bid rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 4.75%, 5.75% and 3.75% respectively.

10 May 2001

The Governing Council of the ECB decides to lower the minimum bid rate on the main refinancing operations by 0.25 percentage point to 4.50%, with effect from the operation to be settled on 15 May 2001. In addition, it decides to lower the interest rates on both the marginal lending facility and the deposit facility by 0.25 percentage point, to 5.50% and 3.50% respectively, both with effect from 11 May 2001.

23 May, 7 June, 21 June, 5 July, 19 July, 2 August 2001

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

30 August 2001

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

13 September 2001

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

17 September 2001

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

27 September, 11 October, 25 October 2001

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

8 November 2001

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

6 December 2001

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

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

3 January 2002

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

The Governing Council also decides on an allotment amount of €20 billion per operation for the longer-term refinancing operations to be conducted in 2002. This amount takes into consideration the expected liquidity needs of the euro area banking system in 2002 and the desire of the Eurosystem to continue to provide the bulk of refinancing of the financial sector through its main refinancing operations. The Governing Council may adjust the allotment amount in the course of the year in the event of unexpected developments in liquidity needs.

**7 February, 7 March, 4 April,
2 May, 6 June, 4 July, 1 August,
12 September, 10 October,
7 November 2002**

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 of the ECB decides that the minimum bid rate on the main refinancing

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