

EN

EUROPEAN CENTRAL BANK



EUROPEAN CENTRAL BANK

ECB EZB EKT BCE EKP

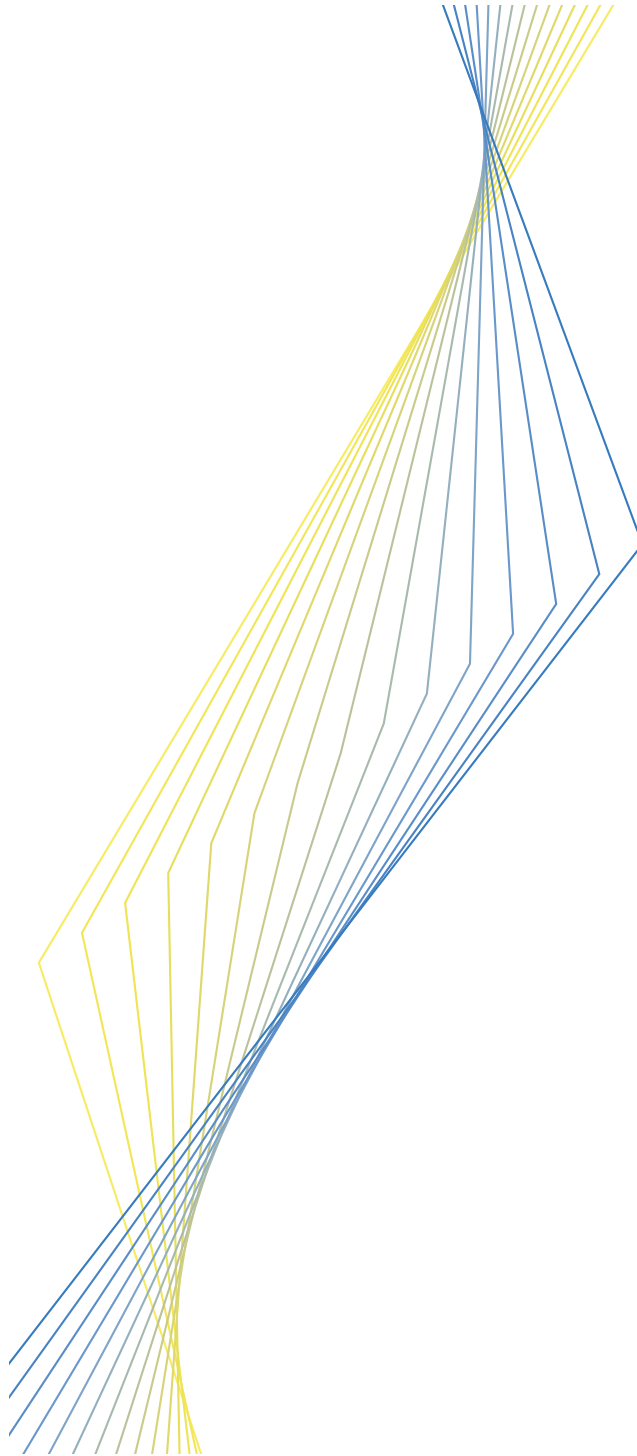
MONTHLY BULLETIN December 2002

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

December 2002



EUROPEAN CENTRAL BANK



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

December 2002

© **European Central Bank, 2002**

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

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

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

The cut-off date for the statistics included in this issue was 4 December 2002.

ISSN 1561-0136

Contents

Editorial	5
Economic developments in the euro area	9
Monetary and financial developments	9
Price developments	36
Output, demand and labour market developments	41
Fiscal developments	50
Eurosysteem staff macroeconomic projections for the euro area	55
The global macroeconomic environment, exchange rates and the balance of payments	61
Boxes:	
1 Annual review of the reference value for monetary growth	10
2 Financial investment of the non-financial sectors in the euro area in the second quarter of 2002	17
3 Monetary policy operations and liquidity conditions in the reserve maintenance period ending on 23 November 2002	25
4 Information content of the trading volume of EURIBOR futures	28
5 Activity in the euro area initial public offering market	34
6 The unemployment-vacancy relationship in the euro area	48
7 Comparison with June 2002 Projections	59
8 Forecasts by other institutions	60
9 Enhanced compilation of the euro area international investment position statistics for the 1999-2001 period	71
Euro area statistics	1*
Chronology of monetary policy measures of the Eurosystem	81*
The TARGET (Trans-European Automated Real-time Gross settlement Express Transfer) system	87*
Documents published by the European Central Bank	91*

Abbreviations

Countries

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

Others

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

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

Editorial

At its meeting on 5 December 2002, the Governing Council of the ECB decided to reduce the minimum bid rate on the main refinancing operations of the Eurosystem, conducted as variable rate tenders, by 50 basis points to 2.75%. The interest rates on the marginal lending facility and the deposit facility were also reduced by 50 basis points, to 3.75% and 1.75% respectively.

This decision reflected the Governing Council's assessment that the evidence has increased that inflationary pressures are easing, owing in particular to the sluggish economic expansion. Furthermore, the downside risks to economic growth have not vanished.

At its meeting the Governing Council also reviewed the reference value for monetary growth, which has an important role under the first pillar of the ECB's monetary policy strategy. It decided to leave the value unchanged at an annual growth rate of 4½% for the broad aggregate M3. The background to this decision is explained in detail in Box 1 of the "Economic developments in the euro area" section of this issue of the Monthly Bulletin.

In the period from August to October 2002 the three-month average of the annual growth rate of M3 was 7.1%, unchanged from the period from July to September. M3 growth has for some time now been influenced considerably by portfolio re-allocations in an environment of general uncertainty and particularly by stress in financial markets. In addition, it reflects the low level of interest rates in the euro area which makes the holding of liquid assets relatively attractive. There is ample liquidity in the euro area. However, particularly in the light of sluggish economic growth, it is unlikely at this juncture that this will translate into inflationary pressures. The recent moderation of the growth in loans to the private sector, particularly to non-financial corporations, supports this assessment.

As regards the second pillar, recent information has strengthened the evidence of a decline in inflationary pressure.

A first estimate released by Eurostat indicates that quarter-on-quarter real GDP growth was 0.3% in the third quarter of 2002. This was towards the lower end of expectations. Recent survey data suggest that overall sentiment in the euro area economy remains lacklustre, with business confidence improving somewhat but consumer confidence falling further. It is expected, therefore, that economic growth will remain subdued in the coming months.

The Eurosystem staff projections, which are presented in this issue of the Monthly Bulletin, see growth in euro area real GDP increasing from a range of 0.6 to 1.0% in 2002 to a range between 1.1 and 2.1% in 2003. In 2004 real GDP growth is projected to be in a range between 1.9 and 2.9%. These projections are conditional on a set of technical assumptions for, inter alia, interest rates, exchange rates and oil prices, which are based on developments up to mid-November 2002.

In line with available forecasts, the staff projections have been revised downwards since spring 2002. This disappointing picture mainly reflects the persistently high degree of uncertainty. Geopolitical tensions with potential consequences for oil prices, developments in financial markets, the sluggish growth of the world economy and the persistence of global imbalances are all factors that weigh adversely on confidence. These factors also have negative effects on euro area consumption, investment and labour markets. As it is hard to predict when this uncertainty will start to abate, it must be taken into account in the more medium-term outlook for economic growth.

Regarding price developments, over the course of 2002 inflation has been rather persistent despite the economic slowdown. This persistence has partly reflected a series of transitory developments, such as the

effects of previous oil and food price increases and a limited impact from the euro cash changeover. However, the upward trend in wage developments observed until recently has also played a role. This trend has only just shown signs of stabilisation. Services price inflation has also remained stubbornly high. All this may suggest that structural rigidities have hampered an appropriate adjustment of wages and prices. As a result, annual inflation rates have remained above 2% during most of 2002, including November, as indicated by Eurostat's flash estimate, which put annual HICP inflation for that month at 2.2%.

When looking forward from now until the early part of 2003, although recent developments in oil prices have lowered short-term price pressures, there are still some factors that could keep annual inflation rates above 2% for several months to come. Yet this short-term outlook is mainly related to base effects and increases in indirect taxes and administered prices, i.e. to temporary influences.

The subdued economic activity should limit potential upward risks to price stability and help to ease inflationary pressure. Moreover, the higher level of the euro exchange rate compared with earlier this year will contribute further towards reducing inflationary pressure. It is also expected that the indirect effects of previous increases in oil prices and the impact of other factors on inflation will further unwind. Although wage-related risks remain in place, they are judged less likely to materialise as long as the economic environment does not change substantially.

Against this background, the staff projections, which envisage annual average HICP inflation in a range of 2.1 to 2.3% in 2002, see it declining to between 1.3 and 2.3% on average in 2003. In 2004, HICP inflation is projected to be between 1.0 and 2.2%. Available forecasts also point to lower inflation rates in 2003 and 2004.

Overall, the reduction in the key ECB interest rates on 5 December 2002 was guided by the assessment that prospects have strengthened for inflation to fall below 2% in the course of 2003 and to remain in line with price stability thereafter. This decision should also help to improve the outlook for the euro area economy by providing some counterweight to the downside risks to economic growth, thereby supporting confidence.

The most likely scenario is that economic growth will gradually recover in the course of 2003 towards rates more in line with potential. Falling inflation should support real disposable income and, together with a reduction in the current gap between perceived and actual inflation, should underpin private consumption. Moreover, exports are expected to strengthen in line with a gradual recovery in foreign demand. This, together with the low level of interest rates, should benefit investment.

The key ECB interest rates have now reached a very low level by historical standards. The Governing Council will continue to monitor closely all factors that may affect the prospects for inflation in the euro area.

The outlook for the euro area economy will also very much depend on visible progress in other policy areas. Regarding fiscal policies, the Governing Council reiterated that budgetary discipline strengthens the conditions for sustainable growth of GDP and employment. The recent European Commission communication is a good starting point for strengthening confidence in the budgetary framework. The Governing Council, as already reflected in its statement on the Stability and Growth Pact of 24 October 2002, fully supports the Commission's main objective, namely to improve the implementation of the Pact within the existing framework of rules. Sound fiscal positions, as enshrined in the Treaty and further developed in the Stability and Growth Pact, are in the interest not only of Monetary Union but also of all the Member States. Given the disappointing fiscal

developments in some countries and the challenges which have recently emerged to the EU fiscal framework, the actions to correct or prevent excessive deficits, i.e. the implementation of excessive deficit procedures in the case of Germany and Portugal and the early warning issued to France, are important. Countries with remaining imbalances are urged to prepare sufficiently ambitious consolidation plans for their forthcoming stability programmes. Emphasis should be placed on a growth-oriented consolidation policy that strengthens the productive forces of the economy.

As regards the structural reform agenda, the Governing Council noted with some concern the slow progress in many euro area countries and called on governments to take determined action. The medium-term impact of these reforms on the economic growth potential of the euro area should be substantial. A prompt implementation of structural reforms in labour, product and financial markets is particularly important at this juncture since it would contribute to strengthening confidence in the euro area, thereby also supporting economic activity in the short term.

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 5 December the Governing Council of the ECB decided to reduce the minimum bid rate in the main refinancing operations, conducted as variable rate tenders, by 50 basis points, to 2.75%, starting from the operations to be settled on 11 December 2002. The interest rates on both the marginal lending facility and the deposit facility were also reduced by 50 basis points, to 3.75% and 1.75% respectively, in both cases with effect from 6 December 2002 (see Chart 1).

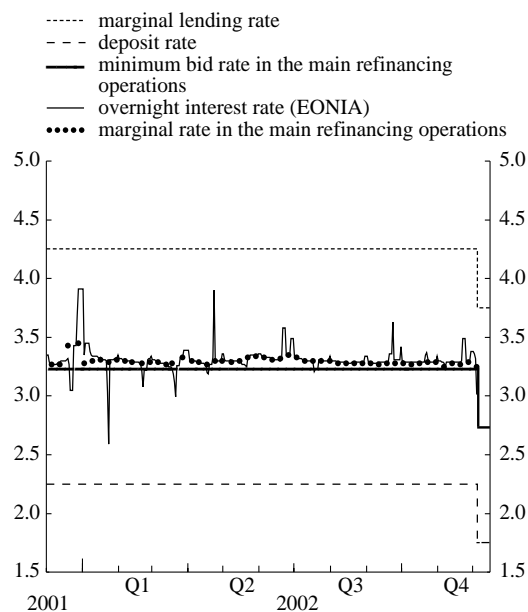
M3 growth remained high

The annual growth rate of the broad monetary aggregate M3 stood at 7.0% in October 2002, which was somewhat below the rate in September (7.3%). The three-month centred moving average of the annual

Chart 1

ECB interest rates and money market rates

(percentages per annum; daily data)

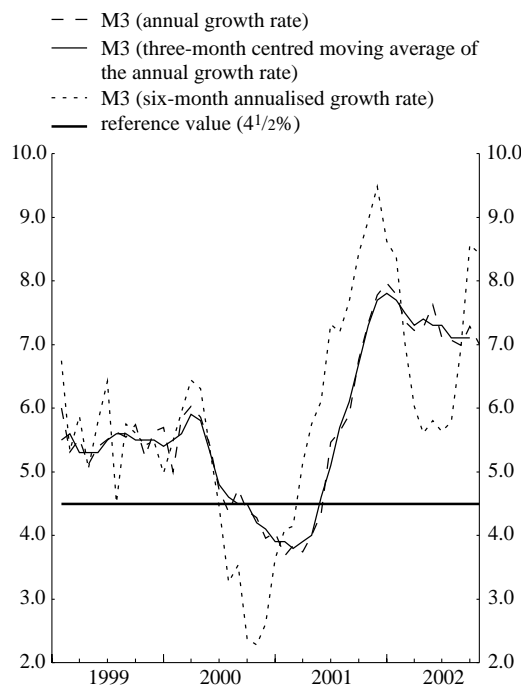


Sources: ECB and Reuters.

Chart 2

M3 growth and the reference value

(adjusted for seasonal and calendar effects)



Source: ECB.

growth rates of M3 was 7.1% in the period from August to October 2002, unchanged from the period from July to September 2002 (see Chart 2), thus remaining significantly above the reference value for M3 growth of 4½%. The Governing Council confirmed this reference value at its meeting on 5 December 2002 (see Box 1).

The annual growth rate of M3 declined slightly in recent months relative to the first half of the year. However, this masks a marked strengthening of the short-term dynamics, as shown by the significant increase in the six-month annualised growth rate of M3 over the same period (see Chart 2).

Chart 3 illustrates that actual M3 growth continued to diverge from the developments in its standard determinants, i.e. economic activity and interest rates, in the third quarter of 2002. The top panel of Chart 3 shows that in the third quarter of 2002 real M3 growth

Box I

Annual review of the reference value for monetary growth

At its meeting on 5 December 2002 the Governing Council of the ECB reviewed the reference value for monetary growth. On the basis of this review, the Governing Council decided to reconfirm the existing reference value for monetary growth, namely an annual growth rate of 4% for the broad aggregate M3. This box provides some background information on this decision.

The first pillar of the ECB's monetary policy strategy assigns a prominent role to money in reflection of the fundamentally monetary origins of inflation over the medium to longer-term horizons. In order to signal this prominent role to the public, in October 1998 the Governing Council decided to announce a quantitative reference value for the growth rate of a broad monetary aggregate. The reference value refers to the rate of monetary growth which is consistent with –and serves the achievement of –price stability over the medium term. In December 1998 the Governing Council announced the first reference value of 4% for the annual growth rate of the broad monetary aggregate M3.

At that time, empirical evidence confirmed that the condition for announcing a reference value, namely the stability of money demand, was satisfied for the euro area. Furthermore, studies had shown that M3 has good leading indicator properties for future price developments over medium-term horizons. Over recent years, further studies became available which confirmed that M3 has the desired empirical properties needed for announcing a reference value.¹

The derivation of the reference value is based on the ECB's definition of price stability as a year-on-year increase in the Harmonised Index of Consumer Prices (HICP) for the euro area of below 2%. In addition, in order to be consistent with the medium-term orientation of the ECB's monetary policy strategy, the reference value is derived using assumptions for the medium-term trends in M3 income velocity and potential output growth.

On 5 December 2002 the Governing Council reviewed the estimates of these medium-term assumptions for M3 income velocity and potential growth on the basis of additional data that had become available since the last review of the reference value in December 2001. The Governing Council confirmed the assumptions that M3 income velocity declines at a trend rate in the range of ½ to 1% per annum and that trend potential output growth is between 2% and 2½ per annum in the euro area.

The Governing Council also announced that it will continue to monitor monetary developments in relation to the reference value on the basis of a three-month moving average of annual growth rates. It will also continue to focus its assessment of the liquidity conditions in the euro area on the analysis of the persistent deviations from the reference value and of the underlying reasons for such deviations.

With regard to the assumption for trend potential growth, the Governing Council considers that there is no clear evidence that structural changes have taken place in the euro area which would warrant a revision of this assumption. The attainment of higher potential growth in the euro area, which is urgently needed, remains conditional on further progress in structural reforms, especially in the labour and goods markets. The Governing Council will continue to monitor the evidence with regard to developments in productivity growth in the euro area, and the ECB's monetary policy will take such evidence into account as appropriate.

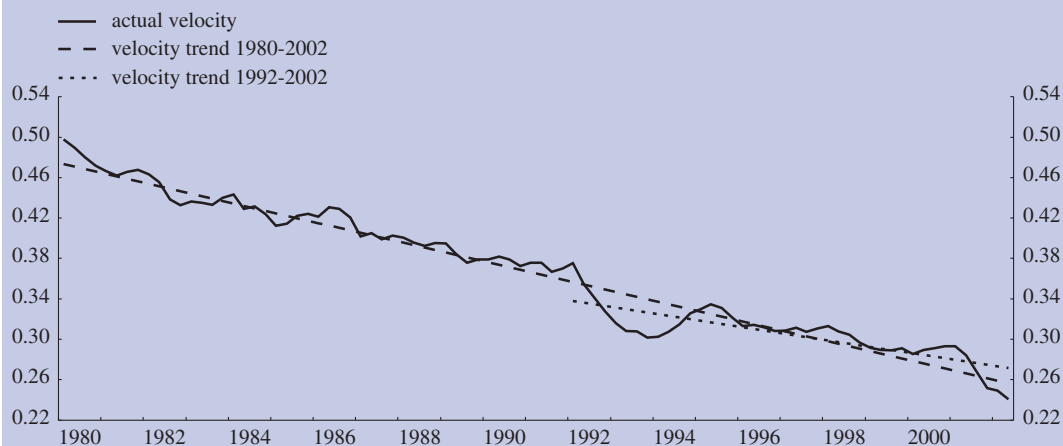
¹ See, for instance, Coenen and Vega (1999), 'The demand for M3 in the euro area', ECB Working Paper No. 6; Brand and Cassola (2000), 'A money demand system for euro area M3', ECB Working Paper No. 39; Calza, Gerdesmeier and Levy (2001), 'Euro area money demand: measuring the opportunity costs appropriately', IMF Working Paper 01/179 and Nicoletti Altimari (2001), 'Does money lead inflation in the euro area?', ECB Working Paper No. 63.

Concerning the empirical evidence for M3 income velocity in the euro area, the confirmation by the Governing Council of a trend decline in M3 income velocity within a range of $\frac{1}{2}$ to 1% per year was based on the following considerations. A simple trend estimate over the sample period from 1980 to 2002 suggests that the historical decline is close to 1% per annum. Over a shorter and more recent time span the trend decline in velocity in the last decade turns out to be closer to $\frac{1}{2}$ (see chart below). However, the simple trend estimate may not represent the best estimate of future trends in velocity, since it may fail to take into account that the decline in inflation and nominal interest rates over the past two decades increased the demand for liquid assets and contributed to the past decline in velocity.

In an environment of price stability, the trend decline in velocity is likely to be less pronounced than over a period dominated by disinflation and falling nominal interest rates. This additional information on the evolution of the opportunity costs of holding money is incorporated in money demand models which are able to isolate the effect that the disinflation process over the 1980s and 1990s had on the historical trend decline in velocity. In the context of these models the trend decline of M3 income velocity is around the middle of the range of $\frac{1}{2}$ to 1% per annum. This result is fairly robust across different money demand models and different methods for aggregating euro area data.²

M3 velocity trends for the euro area

(log levels)



Sources: ECB (M3) and ECB calculations based on Eurostat data (GDP).

Note: Velocity is measured as the ratio of nominal GDP to M3. The underlying quarterly series are seasonally adjusted and constructed by aggregating national data converted into euro at the irrevocable exchange rates applied as from 1 January 1999 and as from 1 January 2001 in the case of Greece. The M3 series is based on the headline index of adjusted stocks (for further details, see the technical notes in the 'Euro area statistics' section of the ECB Monthly Bulletin). M3 quarterly data are averages of end-month observations.

The reference value for monetary growth is a medium-term concept. Short-run movements in M3 may be difficult to interpret and may stem from a number of temporary factors which do not necessarily have implications for future price developments. For this reason, the Governing Council already made it clear in 1998 that the announcement of the reference value does not imply a commitment on the part of the ECB to mechanically correct deviations of monetary growth from the reference value. Rather, the reference value, by making explicit the rate of growth of money which is consistent with the maintenance of price stability over the medium term, is a tool for monetary analysis. It provides monetary policy with a "compass" which ensures that the central bank, when analysing the risks to price stability, does not lose sight of the fact that the rate of

² For further details, see Brand, Gerdesmeier and Roffia (2002), 'Estimating the trend of M3 income velocity underlying the reference value for monetary growth', ECB Occasional Paper, No. 3.

growth of money must be consistent with its price stability objective over a sufficiently extended period of time.

Moreover, while the analysis of the deviations of annual M3 growth from the reference value represents an important element in the evaluation of monetary developments and their implications for future price stability, monetary analysis is not limited to this. First, other monetary indicators (such as components and counterparts of M3, in particular M1 and loans to the private sector) also contain significant information. Second, it is important to take into account past deviations of monetary growth from the reference value in order to come to a broadly based assessment of the liquidity conditions in the euro area. In this respect, also measures of excess liquidity, which are represented by the deviation of the real money stock from an estimated equilibrium level, may be useful (see Chart 4 in the main text). Third, developments in M3 need to be analysed in conjunction with other indicators (e.g. real GDP, prices, interest rates and other financial market indicators) in order to understand the nature of the shocks affecting monetary developments and to best extract the indications for future price developments.

The experience of high M3 growth since mid-2001 has to be seen in the context of the high level of uncertainty and distress in financial markets and notably the protracted and unprecedented decline in stock prices over the past two years. These exceptional developments have prompted non-MFI residents in the euro area to reduce their holdings of relatively risky assets such as shares and increase their demand for relatively liquid and low-risk assets included in M3. This explanation is supported by the analysis of flow of funds data (see Box 2) which shows, over this period, a significant decline of net inflows into equities and a contemporaneous strong increase in the acquisition of components included in M3, in particular money market funds.

It is clear that the protracted phase of financial uncertainty has made it more difficult to extract the information contained in the deviations of M3 growth from the reference value. In the light of this recent experience, it is not surprising that money demand models for the euro area show that some signs of instability have emerged in the short-run dynamics of the demand for M3 since mid-2001, i.e. in the period of heightened global financial uncertainty.

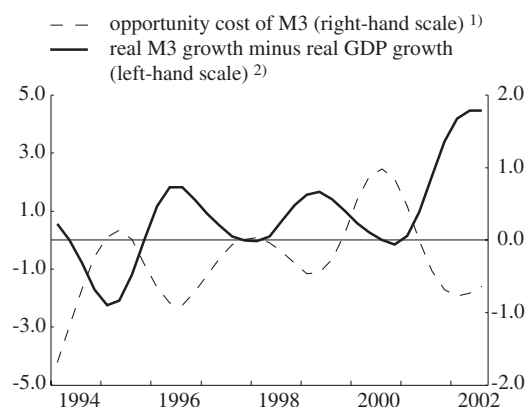
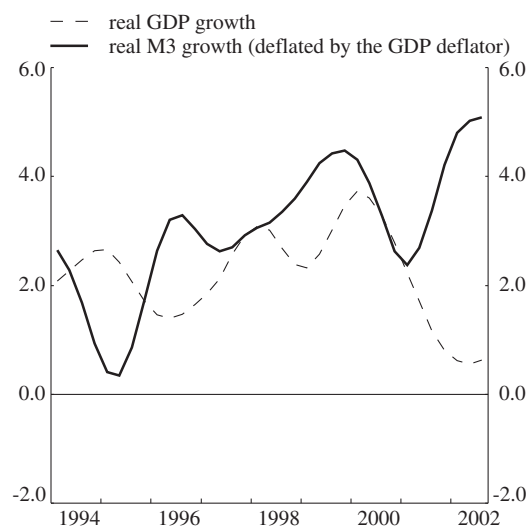
However, these indications of short-run instability should not be over-emphasised. First and foremost, there are, at present, no signs of structural breaks or changes in the *long-run* fundamental relationship between money and prices in the euro area, which underlies the derivation of the reference value for monetary growth. Therefore, the condition for announcing a reference value for M3 growth remains satisfied in the euro area. Second, these signs of instability are close to the end of the sample period, a fact which calls for caution in drawing firm conclusions on the parameter stability of the models considered. Third, it should be kept in mind that monetary analysis was able to assess the impact of the exceptional developments in financial markets in real time and thus to roughly filter out underlying monetary trends and assess their implications for the risks to price stability. Finally, considering the exceptional nature of recent stock market developments in terms of the size and duration of the decline in stock prices, events such as those in the past two years would not be expected to occur regularly. This notwithstanding, it will be necessary in the future to continue monitoring closely the stability of the long-run money demand relationship in the euro area.

The next review of the reference value for monetary growth is scheduled for December 2003.

was significantly above real GDP growth, which suggests that the rise in (real) M3 growth cannot be attributed to greater demand for real transaction balances. The bottom panel shows that part of this gap can be explained by the low level of the opportunity costs of M3. However, the gap between real M3 growth and real GDP growth was considerably wider than in past periods when the opportunity costs of M3 were at levels close to those of the third

Chart 3 Real M3, real GDP and opportunity costs

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



Source: ECB.

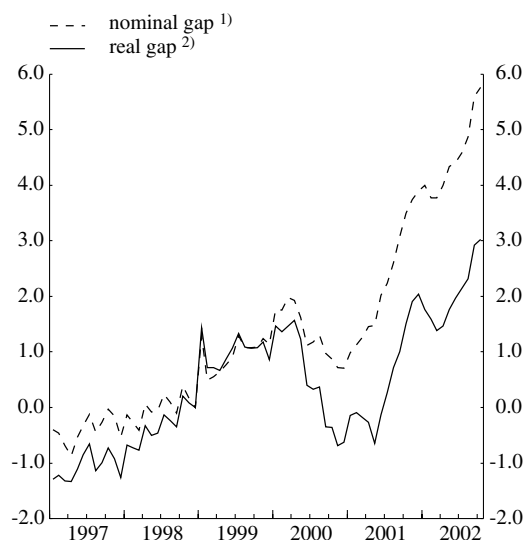
Note: The annual growth rates of GDP and the GDP deflator in the third quarter of 2002 are assumed to be equal to those in the second quarter of 2002.

1) The opportunity cost of M3 is defined as the difference between the three-month money market rate and the own rate of return on M3.

2) Calculated as the difference between M3 growth deflated by the GDP deflator and real GDP growth.

Chart 4 Estimates of the nominal and real money gaps

(as a percentage of the stock of M3)



Source: ECB.

1) Deviation of the actual stock of M3 from the level consistent with monetary growth at the reference value, taking December 1998 as the base period.

2) Nominal money gap minus the deviation of consumer prices from a level compatible with the definition of price stability, taking December 1998 as the base period.

quarter of 2002. This indicates that M3 growth continued to be partly driven by renewed portfolio shifts against the background of declines in equity prices and high volatility in financial markets (see Box 2).

The strong M3 growth for a prolonged period has resulted in an accumulation of excess liquidity in the euro area. This is signalled by the further increase in money gap measures constructed on the basis of cumulated deviations of M3 from the level implied by its reference value until October 2002 (see Chart 4).¹

1) The measure used for the nominal money gap refers to the difference between the actual level of M3 and the level of M3 which would have resulted from growth at the reference value (4½% p.a.) since December 1998. The measure for the real money gap used in Chart 3 shows the difference between the actual level of M3 deflated by the HICP and the level of M3 in real terms which would have resulted from nominal M3 growth at the reference value and HICP inflation in line with the definition of price stability – again using December 1998 as the base period. Since the choice of the base period is somewhat arbitrary, the levels of these measures are less informative than changes in these measures (see the May 2001 Monthly Bulletin article entitled “Framework and tools of monetary analysis”).

Strong growth of the narrow monetary aggregate M1

The annual growth rate of the narrow monetary aggregate M1 increased in the third quarter of 2002 to 7.6%, from 6.6% in the previous quarter (see Table I). In October, the annual growth rate of M1 stood at 8.2%. The strong annual growth rate of M1 reflects both the high growth in overnight deposits and the rebound in the annual growth rate of currency in circulation.

Developments in M1 seem to reflect the low level of interest rates in the euro area, which has reduced the opportunity cost of holding its components. In addition, the turbulence in financial markets has probably led to an increase in the demand for very liquid assets in recent months.

Within M1, there seems to have been some substitution from overnight deposits towards currency in circulation. Indeed, while growth in overnight deposits recently moderated slightly, the rebuilding of currency holdings has continued at a steady pace. The (seasonally adjusted) monthly inflow to currency in circulation was €8 billion in October 2002, the same as the average monthly increase in the period from March

to September. The expansion of currency in circulation so far this year is likely to reflect to a large extent the reversal of previous shifts from currency into short-term deposits included in M3 that occurred in the run-up to the euro cash changeover. As Chart 5 shows, the annual decline in currency in circulation became increasingly smaller from December 2001 onwards and turned into a positive annual flow for the first time in October. The renewed rise of currency in circulation coincided with a decline in the annual flows into overnight deposits. Part of the rise in currency in circulation may also be due to the demand for currency by non-residents, as suggested by balance of payments data. In addition, there might also have been some flows from assets other than overnight deposits into currency in circulation.

The annual rate of growth in short-term deposits other than overnight deposits was 5.5% in October, unchanged from the third quarter of 2002. This compares with 6.4% in the second quarter. Within this component, short-term savings deposits (deposits redeemable at notice of up to three months) continued to grow at a rapid pace, while the growth of short-term time deposits (deposits with an agreed maturity of up to two years) remained subdued. This divergence can be

Table I
Components of M3

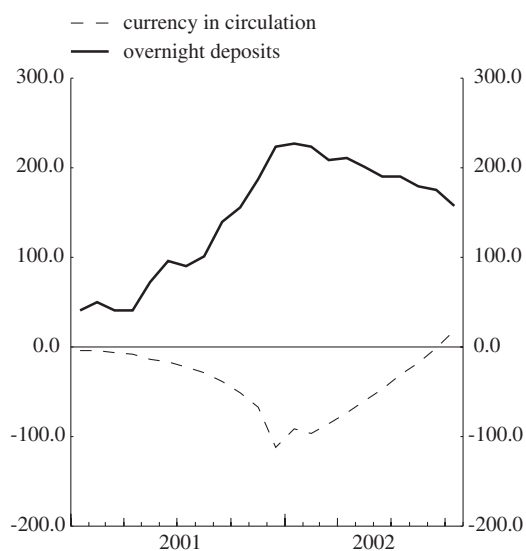
(annual percentage changes; quarterly averages)

	2001 Q3	2001 Q4	2002 Q1	2002 Q2	2002 Q3	2002 Oct.
<i>Adjusted for seasonal and calendar effects</i>						
M1	3.8	5.5	6.2	6.6	7.6	8.2
<i>of which: currency in circulation</i>	-7.6	-18.6	-28.0	-19.9	-7.7	6.2
<i>of which: overnight deposits</i>	6.1	10.4	13.0	11.7	10.3	8.5
M2 - M1 (= other short-term deposits)	5.1	5.9	6.7	6.4	5.5	5.5
M2	4.5	5.7	6.5	6.5	6.5	6.8
M3 - M2 (= marketable instruments)	15.0	19.0	14.6	12.7	10.7	8.4
M3	5.9	7.5	7.6	7.4	7.1	7.0
<i>Not adjusted for seasonal and calendar effects</i>						
Currency in circulation	-7.4	-18.4	-27.9	-19.7	-7.7	6.3
Overnight deposits	6.2	10.1	13.0	11.7	10.5	8.5
Deposits with an agreed maturity of up to 2 years	11.3	7.3	3.6	2.9	1.5	2.4
Deposits redeemable at notice of up to 3 months	0.5	5.0	9.1	9.4	8.9	8.0
Repurchase agreements	20.0	19.5	4.6	2.3	3.0	0.5
Money market fund shares/units	18.0	26.7	30.4	25.5	22.8	18.4
Money market paper and debt securities issued with a maturity of up to 2 years	0.7	1.5	-6.2	-3.0	-9.1	-5.1

Source: ECB.

Chart 5 Currency in circulation and overnight deposits

(annual flows, EUR billions)



Source: ECB.

explained by the lower spread between the interest rates on these two types of deposits in 2002, which made investments in savings deposits relatively more attractive in terms of remuneration.

The annual growth rate of marketable instruments declined in the third quarter of 2002, and again in October. However, this decline reflects to a large extent base effects resulting from the very high growth of this

component of M3 in autumn 2001. In fact, the short-term dynamics of these instruments, which are well-suited for parking money in times of financial market turbulence, continued to be strong in recent months. Within marketable instruments, the annual growth rate of money market fund shares/units remained particularly high (18.4% in October), which is consistent with renewed portfolio shifts away from equity markets in 2002.

Further moderation in the growth of loans to the private sector

The annual rate of growth of credit to euro area residents was 4.2% in the third quarter of 2002 and 4.3% in October, compared with 4.5% in the second quarter. There was a slowdown in credit to the private sector, but a somewhat higher growth of credit to general government in October (see Table 2).

The annual growth rate of credit to general government was 2.1% in October, up from 1.1% in the third quarter and 1.8% in the second (see Table 2). This pattern mainly reflects that of the annual growth of MFI holdings of debt securities issued by general government. By contrast, the annual rate of change in loans to general government has remained broadly stable in 2002, at around -0.8%.

Table 2 Counterparts of M3

(annual percentage changes; quarterly averages; not adjusted for seasonal and calendar effects)

	2001 Q3	2001 Q4	2002 Q1	2002 Q2	2002 Q3	2002 Oct.
Longer-term financial liabilities (excluding capital and reserves)	2.2	2.9	3.1	4.0	5.0	5.1
Deposits with an agreed maturity of over 2 years	-0.4	-0.2	0.2	0.8	1.9	2.3
Deposits redeemable at notice of over 3 months	1.2	-5.7	-11.5	-13.2	-11.1	-9.1
Debt securities issued with a maturity of over 2 years	4.3	5.9	6.5	7.7	8.5	8.1
Credit to euro area residents	5.6	5.2	5.1	4.5	4.2	4.3
Credit to general government	-2.1	-0.7	1.7	1.8	1.1	2.1
Securities other than shares	-2.5	-0.7	3.5	3.8	2.5	4.1
Loans	-1.5	-0.8	-0.8	-0.9	-0.9	-0.8
Credit to other euro area residents	7.8	6.9	6.1	5.2	5.0	4.9
Securities other than shares	24.4	23.8	22.2	14.7	7.4	5.9
Shares and other equities	4.6	3.2	2.1	-3.5	1.1	3.6
Loans	7.4	6.5	5.7	5.6	5.3	5.0

Source: ECB.

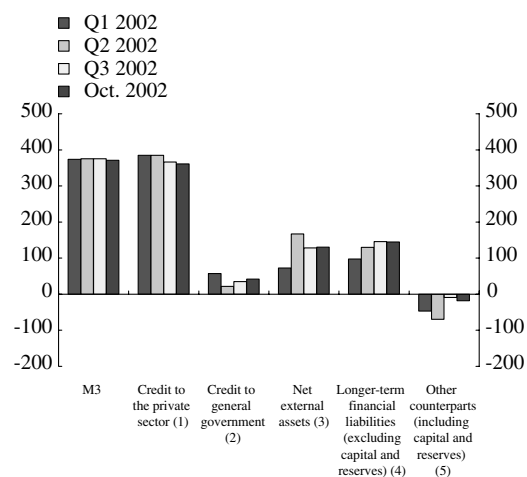
As regards credit to the private sector, the broad downward trend in the growth of this counterpart to M3 continued in recent months, reflecting to a large extent that of its most important component, loans to the private sector. The annual growth rate of this latter component decreased to 5.3% in the third quarter of 2002 and to 5.0% in October, from 5.6% in the second quarter. In real terms, the annual growth rate of loans to the private sector is at present somewhat below its historical average. However, given the current cyclical situation, loan dynamics are not particularly weak in the euro area. The behaviour of loans to the private sector masks different country² and sectoral dynamics, as far as households and non-financial corporations are concerned. (For details of the developments in loans by sector, see the sub-section on financing developments of the non-financial sectors below.)

Turning to the other counterparts of M3, the annual rate of growth of MFIs' longer-term financial liabilities (excluding capital and reserves) has, benefiting from a steeper yield curve compared with the previous year, increased during 2002, reaching 5.1% in October. Within longer-term financial liabilities, the annual growth rate of deposits with an agreed maturity of over two years has, in recent months, tended to recover, which could partly reflect shifts from equity investment.

Over the 12 months to October 2002, the net external assets of the euro area MFI sector rose by €130.5 billion, compared with €128.2 billion in the 12 months to September (see Chart 6). Balance of payments data up to September 2002 show that combined direct and portfolio investment in the euro area by non-residents remained relatively strong, while such euro area investment abroad remained moderate. This also reflects a stronger preference by euro area residents for safe and liquid assets.

Chart 6 Movements in M3 and its counterparts

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



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

Ample liquidity situation not indicating inflationary risks at this juncture

In summary, monetary growth has remained strong in recent months. The high uncertainty in financial markets seems to have caused renewed portfolio shifts into monetary assets. At the same time, the low opportunity costs of holding liquid instruments also contributed to higher M3 growth. The strong M3 growth has led to an increase in the available liquidity in the euro area, which is above the level consistent with sustained non-inflationary growth. If not corrected, such excess liquidity could become a risk to price stability in the medium term. However, in view of the sluggish economic growth in the euro area, at this juncture it is unlikely that this excess liquidity will translate into inflationary pressures. The moderation of the growth of loans to the private sector supports this assessment.

² See Box 1 on page 12 of the November 2002 issue of the ECB Monthly Bulletin, entitled "Trends in loans to the private sector and their fundamental determinants".

Box 2**Financial investment of the non-financial sectors in the euro area in the second quarter of 2002**

The euro area financial accounts, which are available up to the second quarter of 2002, allow an analysis of the development of the financial investment of the non-financial sectors (households, non-financial corporations and general government) and of the value of their financial assets. These data provide some evidence of the portfolio allocation decisions of the non-financial sectors as well as of the development of their financial wealth.

Financial investment of euro area non-financial sectors

	Outstanding amount as a percentage of financial investment ¹⁾	Annual growth rates ²⁾									
		2000		2000		2001		2001		2002	
		Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
Financial investment	100	5.4	6.4	6.9	8.1	7.9	6.9	5.3	5.1	5.1	.
<i>of which: short-term financial investment</i> ³⁾	40.6	4.5	4.9	3.8	5.4	5.6	6.1	6.2	5.1	5.5	.
<i>of which: long-term financial investment</i> ⁴⁾	58.4	5.7	7.1	8.7	9.7	9.2	7.7	5.1	5.2	5.0	.
Currency and deposits	35.8	3.7	3.6	3.3	3.5	4.3	4.3	4.4	4.7	4.8	.
Securities other than shares	13.4	9.2	14.9	10.0	17.8	13.8	10.4	8.4	6.0	6.8	.
<i>of which: short-term</i>	1.7	54.2	88.6	34.7	64.5	38.8	23.8	11.5	-6.0	-6.2	.
<i>of which: long-term</i>	11.7	5.1	8.9	7.2	11.6	10.5	8.6	7.9	8.3	8.9	.
Mutual fund shares	11.6	4.2	2.4	6.1	5.3	4.7	5.6	5.0	5.4	5.8	.
<i>of which: mutual fund shares, excluding money market fund shares</i>	9.7	5.0	3.1	7.1	5.5	3.9	3.6	2.1	2.2	3.0	.
<i>of which: money market fund shares</i>	1.9	-1.9	-2.7	-1.6	4.0	11.9	22.8	28.8	28.1	25.6	.
Quoted shares	16.6	2.4	5.9	9.9	12.6	12.7	9.6	3.0	2.5	1.5	.
Insurance technical reserves	22.6	9.5	9.3	8.6	7.6	7.5	7.3	7.4	7.6	7.3	.
M3 ⁵⁾		4.7	4.4	4.1	3.7	5.5	6.8	8.0	7.2	7.1	7.3

Source: ECB.

Note: Most of the liability and financial asset categories in the ESA 95 are covered by the quarterly data on financing and financial investment of the non-financial sectors in the euro area. Financial derivatives, loans granted by general government and non-financial corporations, unquoted shares, other equity, and other receivables and payables are not yet included. This also applies to deposits with banks abroad and loans taken from banks abroad.

1) As at the end of the second quarter of 2002.

2) Annual growth rates are calculated as the ratio of the cumulative amount of financial investment in the last four quarters to the initial stock.

3) Short-term financial investment includes currency and deposits (excluding central government deposits), short-term debt securities and money market fund shares. Due to the exclusion of central government deposits, short-term and long-term financial investment do not add up to 100%. When interpreting these figures, it should be kept in mind that both short-term and long-term deposits are included in short-term investment as no maturity breakdown is available so far.

4) Long-term financial investment includes long-term debt securities, mutual fund shares excluding money market fund shares, quoted shares and insurance and pension products.

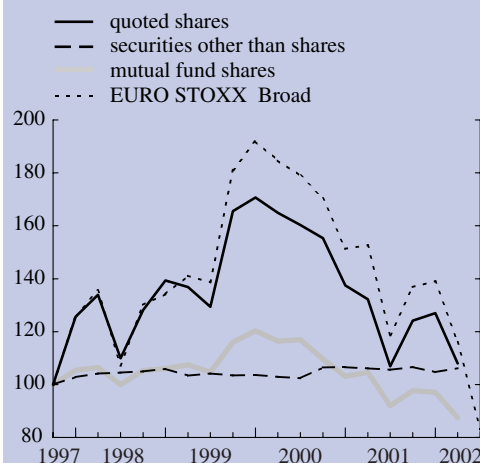
5) End of quarter. The monetary aggregate M3 includes monetary instruments held by euro area non-MFIs (i.e. the non-financial sector and non-monetary financial institutions) with euro area MFIs.

In the second quarter of 2002, the annual growth of the financial investment of the non-financial sectors remained unchanged from the previous quarter, at 5.1% (see table). It had been broadly stable at this level since the fourth quarter of 2001 – despite a decline in the annual growth of disposable income of households during this period – reflecting a slight increase in the households' savings ratio. At the same time, the non-financial sectors experienced further holding losses in their stock of financial assets, mainly owing to the continued decline in stock prices in the second quarter of 2002 (see Chart A).

In that context, investors seem to have shifted funds from shares into both bonds and short-term assets in the second quarter of 2002. The annual growth of short-term financial investment rose to 5.5%, from 5.1% in the first quarter (see Chart B). Among the components of short-term financial investment, the annual growth of investment in money market fund shares remained especially high. By contrast, the overall annual growth of

Chart A: Holding gains and losses on securities

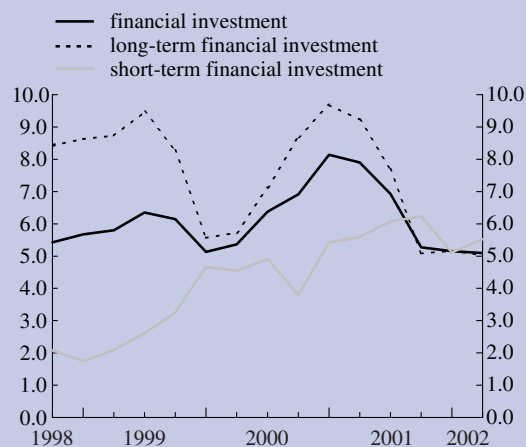
(1997 Q4 = 100)



Source: ECB.

Chart B: Short-term and long-term financial investment of non-financial sectors

(annual percentage changes)



Source: ECB.

Note: For details, see the table in this box.

long-term financial investment of the non-financial sectors remained broadly unchanged in the second quarter compared with the two previous quarters, at around 5%. However, the development of its components varied considerably. The annual growth of investment in long-term debt securities rose to 8.9%, from 8.3% in the first quarter of 2002. By contrast, the annual growth of investment in quoted shares declined further, to 1.5% in the second quarter from 2.5% in the first. Investment in long-term debt securities probably also profited from the steepening of the yield curve after the autumn of 2001. This was also reflected in the rise in the annual growth of longer-term financial liabilities of MFIs, i.e. the higher holdings of MFI debt securities by non-MFIs, in the second quarter of 2002.

These developments support the assessment that the strong M3 growth during the second quarter of 2002 reflected in part a preference of the non-financial sectors for secure and liquid assets. In addition, they give an indication of the size of the losses in financial wealth of the non-financial sectors following the decline in stock prices, a factor which may have dampened somewhat domestic demand.

Decline in the growth of debt securities issuance in the third quarter

In the third quarter of 2002, the average annual growth of the amount outstanding of debt securities issued by euro area residents declined slightly to 6.5%, from 6.8% in the second quarter (see Chart 7). Underlying this decline were a decrease in the average annual growth rate of the amount outstanding of long-term debt securities, by 0.7 percentage point to 6.6%, and an increase in the annual growth rate of the amount outstanding of short-term debt securities, by 2 percentage points to 4.9%. The latter was mainly the

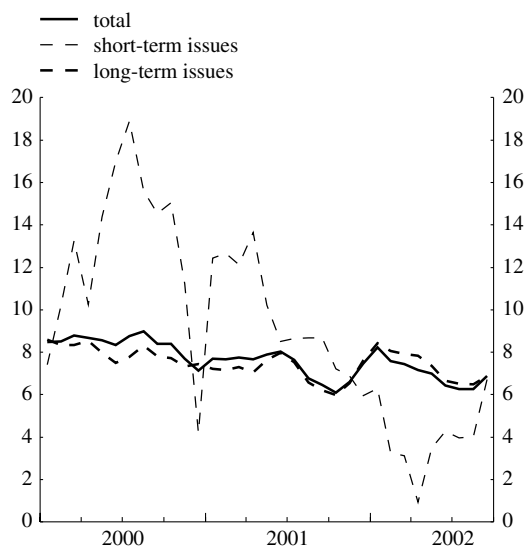
result of strong issuance of short-term debt securities by MFIs and central government. At the same time, the stock of outstanding short-term debt securities issued by non-financial corporations continued to show substantial negative annual growth rates.

The currency breakdown indicates that the average annual growth of the amount outstanding of euro-denominated debt securities issued by euro area residents decreased slightly to 6.4% in the third quarter, from 6.8% in the previous quarter. At the same time, the share of euro-denominated debt securities in total gross issuance by euro

Chart 7

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.

area residents was 93%, unchanged from the previous quarter.

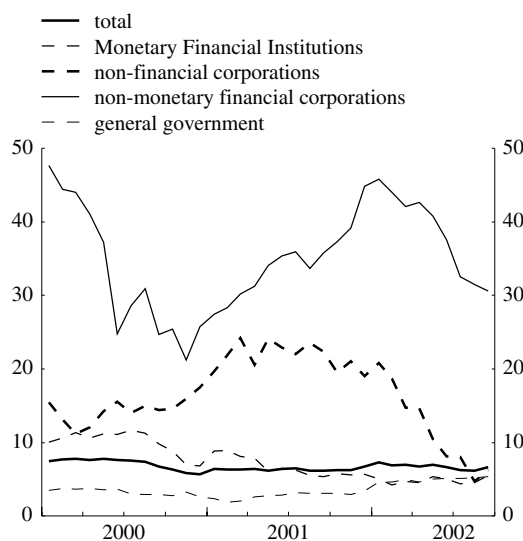
Turning to the sectoral breakdown of euro-denominated debt securities issuance, the average annual growth of the amount outstanding of debt securities issued by MFIs decreased from 5.0% in the second quarter to 4.8% in the third quarter (see Chart 8). The underlying factor behind this development was a decline in the average annual growth rate of the amount outstanding of long-term debt securities issued by this sector, from 5.7% in the second quarter to 4.8% in the third. Over the same period, the average annual growth rate of the amount outstanding of short-term debt securities increased by 6.5 percentage points to 5.2%. Since the beginning of this year, the annual growth rates of debt securities outstanding in this sector have stood at around 5%, which was lower than the average annual rate of growth of 6.7% in 2001, reflecting the moderate annual growth rates of loans extended by MFIs.

In the third quarter, the average annual growth of the amount outstanding of debt securities issued by non-financial corporations was 6.3%. This was almost 5 percentage points lower than in the previous quarter. In line with developments in government bond yields, corporate bond yields of most rating grades declined during the summer of 2002. Although some corporations were facing higher financing costs as they descended through the credit quality spectrum, higher quality issuers might have benefited from the decline in yields. This notwithstanding, the overall growth of the amount outstanding of debt securities issued by non-financial corporations declined steadily across maturities in the first three quarters of this year. This was true in particular of the amount outstanding of short-term paper, which declined by 17.3% year on year in the third quarter. Over recent months, the growth rates of outstanding short-term paper have steadily declined. This development reflects both reduced working

Chart 8

Amounts outstanding of euro-denominated debt securities issued by euro area residents

(annual percentage changes)



Source: ECB.

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

capital financing needs by enterprises owing to the weakening of economic activity, and investors' lack of interest in this type of security when faced with the corporate credit rating downgrades mentioned above.

As regards non-monetary financial corporations, the average annual growth rate of the amount outstanding of debt securities declined from 40.3% in the second quarter of 2002 to 31.5% in the third quarter. The average annual growth rate of the amount outstanding in this sector remained high, possibly reflecting the greater ease with which corporations, including MFIs, can finance themselves by means of "special purpose vehicles" included in this sector, since this latter source of structured finance generally benefits from high credit ratings.

As regards the general government sector, the average annual growth of the amount outstanding of debt securities issued by central government increased slightly, from 4.1% in the second quarter to 4.3% in the third quarter. The annual rate of growth of the amount outstanding of short-term debt securities reached relatively high values in the third quarter of this year, 15.5%, possibly reflecting incentives for governments to take advantage of the low level of short-term interest rates.

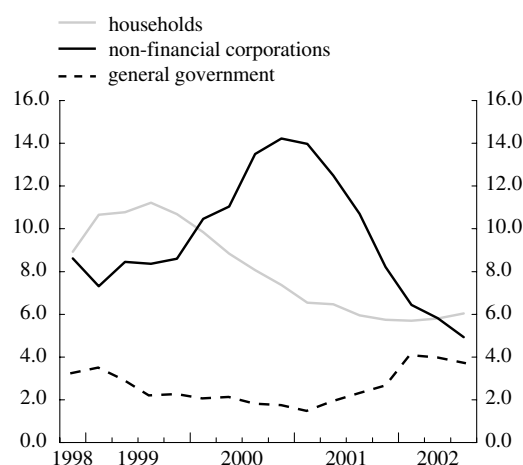
At the same time, the average annual growth rate of the amount outstanding of debt securities issued by other general government sub-sectors increased from 29.9% in the second quarter to 33.6% in the third quarter. Underlying this increase was a rise in the average annual growth rate of the amount outstanding of long-term debt securities, of 5.3 percentage points to 35.1%, and a drop in the average annual growth rates of the amount outstanding of short-term debt securities from 38.7% in the second quarter to -14.4% in the third quarter. These recent developments could reflect a deterioration in the fiscal position of some local governments.

Divergent overall financing patterns of households and non-financial corporations

The annual growth of debt financing of the non-financial sectors (i.e. households, non-financial corporations and general government) in the euro area is estimated to have declined further in the third quarter of 2002, to around 4¾% from 5.1% in the second quarter, thereby continuing the downward trend observed since the first

Chart 9
Debt financing of the non-financial sectors

(annual percentage changes)



Source: ECB.

Note: For details, see Table 3.

quarter of 2001 (see Table 3).³ According to this estimate, in contrast to previous quarters, the annual growth of long-term debt financing declined somewhat, while the annual growth of short-term debt financing remained low.

³ Debt financing developments in the third quarter of 2002 have been estimated here on the basis of transactions as reported in money and banking statistics and securities issues statistics, as quarterly financial accounts data on the financing of the non-financial sectors are only available up to the second quarter of 2002. While the extension of loans by MFIs and the issuance of debt securities provide a good estimation for the debt financing of households and non-financial corporations, at present information on loans granted by other financial intermediaries and on pension fund reserves of non-financial corporations is only available up to the second quarter of 2002.

Table 3**Financing of euro area non-financial sectors**

	Outstanding amount as a percentage of (sector) financing ¹⁾	Annual growth rates ²⁾									
		2000		2001		2001		2002		2002	
		Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3 ³⁾
Non-financial sectors	100	6.0	6.6	6.3	6.1	6.1	5.4	4.7	4.5	4.1	.
<i>of which:</i> long-term financing ⁴⁾	85.3	5.6	5.7	5.6	5.3	5.6	5.2	4.6	4.8	4.5	.
Debt financing ⁵⁾	80.9	6.6	7.1	7.1	6.8	6.5	6.0	5.3	5.3	5.1	4 3/4
<i>of which:</i> short-term debt financing	14.7	8.4	12.4	11.0	11.4	9.4	6.8	5.2	2.8	1.6	1 3/4
<i>of which:</i> long-term debt financing	66.2	6.2	5.9	6.3	5.7	5.9	5.8	5.4	5.9	5.9	5 1/2
Households^{5), 6)}	21.8	8.8	8.1	7.4	6.5	6.5	5.9	5.7	5.7	5.8	6
<i>of which:</i> short-term debt financing	8.2	7.8	7.9	6.3	3.7	2.2	0.7	-0.4	-0.5	0.1	2
<i>of which:</i> long-term debt financing	91.8	8.9	8.1	7.5	6.8	6.9	6.5	6.3	6.3	6.4	6 1/2
Non-financial corporations	46.2	7.6	9.5	8.6	8.6	8.4	7.0	5.4	4.2	3.5	.
<i>of which:</i> long-term financing	81.8	6.1	7.1	6.7	6.9	7.3	6.7	5.5	4.9	4.8	.
Debt financing ⁵⁾	58.7	11.0	13.5	14.2	14.0	12.5	10.7	8.2	6.4	5.8	5
<i>of which:</i> short-term debt financing	18.2	15.2	22.2	20.1	18.7	14.2	8.5	4.9	1.1	-2.8	-3 1/2
<i>of which:</i> long-term debt financing	40.5	9.1	9.6	11.5	11.8	11.6	11.8	9.9	9.2	10.2	9 1/4
<i>of which:</i> loans	48.4	11.5	14.4	15.0	13.4	11.4	9.5	6.7	5.5	5.6	3 3/4
<i>of which:</i> securities other than shares	7.0	12.1	13.2	15.4	24.7	26.9	24.2	23.1	15.3	8.6	6
<i>of which:</i> pension fund reserves	3.3	3.8	3.5	3.3	3.4	3.5	3.6	2.6	2.7	2.7	.
Quoted shares	41.3	4.0	5.2	4.1	4.4	5.0	3.8	2.8	1.9	0.8	.
General government⁵⁾	31.9	2.1	1.8	1.7	1.4	2.0	2.3	2.7	4.1	4.0	3 3/4
<i>of which:</i> short-term debt financing	14.0	-2.4	-1.5	-2.7	1.5	3.4	6.2	8.3	8.1	11.7	13 1/4
<i>of which:</i> long-term debt financing	86.0	2.8	2.3	2.4	1.4	1.7	1.7	1.9	3.5	2.8	2 1/4
<i>of which:</i> loans	17.2	-1.4	-1.6	-1.5	-1.0	-2.3	-1.2	-0.3	0.5	-0.5	-1 1/2
<i>of which:</i> securities other than shares	79.3	2.8	2.5	2.5	1.9	2.9	3.0	3.2	4.6	4.6	4 1/2
<i>of which:</i> central government deposit liabilities	3.5	8.1	7.0	2.6	4.9	5.1	5.5	7.7	12.9	13.5	13 3/4

Source: ECB.

Note: Most of the liability and financial asset categories in the ESA 95 are covered by the quarterly data on financing and financial investment of non-financial sectors in the euro area. Financial derivatives, loans granted by general government and non-financial corporations, unquoted shares, other equity, and other receivables and payables are not yet included. This also applies to deposits with banks abroad and loans taken from banks abroad. For further details, see footnote in Table 6.1 in the "Euro area statistics" section of the Monthly Bulletin.

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

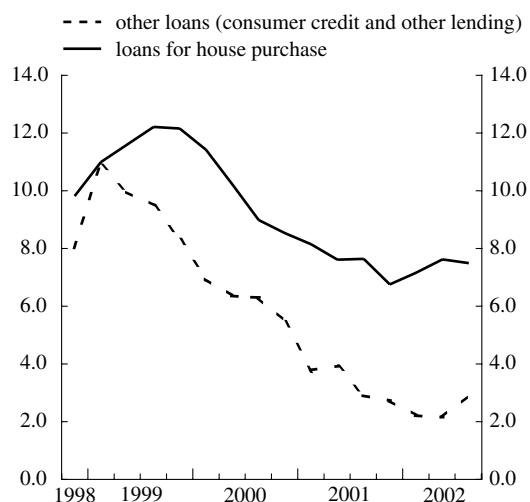
The overall decrease in the annual growth of debt financing of the non-financial sectors reflects a further fall in the annual growth of debt financing of non-financial corporations, while the annual growth of debt financing of households and that of general government broadly stabilised (see Chart 9). Taking a somewhat longer-term perspective, against the background of subdued economic growth in the euro area, general government borrowing needs have increased since 2001, whereas the debt financing of households and non-financial corporations declined. This is

especially reflected in short-term borrowing, which is more sensitive to the business cycle than long-term debt financing.

Regarding households, the annual growth of debt financing is estimated to have been at a level of around 6% in the third quarter of 2002. The annual growth of MFI loans, which account for more than 90% of all loans to households, recovered slightly in the course of 2002, to 5.9% in the third quarter (see Table 4 and Chart 10).

Chart 10
Breakdown of loans to households by purpose

(annual percentage changes)



Source: ECB.

After a prolonged decline in the annual rate of change of short-term debt financing up to the first quarter of 2002, short-term borrowing by households has since increased slightly. At the same time, the annual growth of long-term debt financing of households, accounting for more than 90% of all loans to households and to a large extent consisting

of mortgages, remained broadly stable. This continued relatively strong demand for loans for house purchase has to be seen against the background of the historically low levels of mortgage interest rates and the relatively strong increases in house prices in some euro area countries.

As a consequence of the robust annual growth of debt financing of households, the ratio of household debt to GDP in the euro area continued to rise slightly during recent quarters (see Chart 11).

The annual growth of debt financing of non-financial corporations declined further in the third quarter, to around 5% from 5.8% in the second quarter. Nearly 70% of the amount outstanding of debt of non-financial corporations consists of loans granted by MFIs. These loans continued their declining trend, reaching an annual growth rate of 3.7% in the third quarter after 4.7% in the second (see Table 4).

The annual growth of short-term debt financing of non-financial corporations remained negative in the third quarter, while that of long-term debt financing is estimated

Table 4
MFI loans to households and non-financial corporations

(end of quarter; not adjusted for seasonal and calendar effects)

	outstanding amount as a % of total ¹⁾	Annual growth rates					
		2001 Q2	2001 Q3	2001 Q4	2002 Q1	2002 Q2	2002 Q3
Non-financial corporations	47.7	9.1	7.5	6.1	5.0	4.7	3.7
Up to 1 year	33.8	10.4	5.2	2.0	-1.6	-2.9	-2.4
Over 1 year	66.2	8.3	8.9	8.5	8.8	9.1	7.1
Over 1 and up to 5 years	17.1	10.8	9.9	12.6	12.3	12.7	9.3
Over 5 years	49.1	7.5	8.6	7.2	7.7	7.9	6.3
Households²⁾	52.3	6.2	5.9	5.3	5.4	5.7	5.9
Consumer credit ³⁾	16.0	5.2	3.6	3.6	4.3	3.6	4.3
Lending for house purchase ³⁾	66.0	7.6	7.6	6.8	7.2	7.6	7.5
Other lending	18.1	2.9	2.3	2.0	0.5	0.9	1.7

Source: ECB, Money and Banking Statistics.

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

1) As at the end of the third quarter of 2002. Sector loans as a percentage of total MFI loans to the non-financial private sector (excluding non-profit institutions serving households); maturity breakdown and breakdown by purpose as a percentage of MFI loans to the respective sector. Figures may not add up exactly due to rounding.

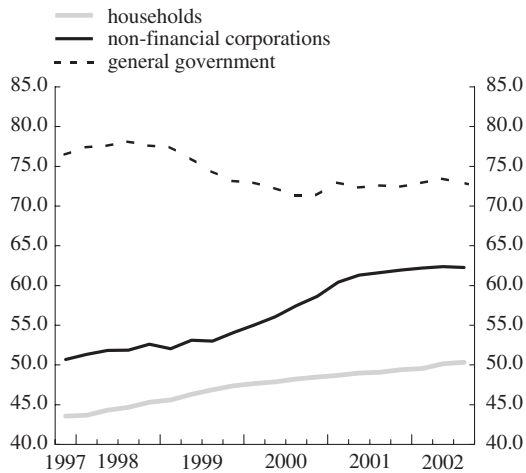
2) In line with ESA 95 definition of households.

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

Chart 11

Ratio of debt to GDP of the non-financial sectors

(in percentages)



Source: ECB.

Note: For details, see Table 3. Compared with the annual financial accounts, the ratio of debt to GDP is somewhat lower on the basis of the quarterly financial accounts, mainly due to the fact that loans granted by non-financial sectors and by banks outside the euro area are not included.

to have declined, to around 9% from 10.2% in the second quarter. The latter was the result of developments in both long-term loans and long-term debt securities issuance. To a large extent, the fall in the annual growth of debt financing is likely to have mirrored subdued real investment activity of non-financial corporations in the context of weak demand and low corporate earnings. In addition, non-financial corporations might have felt the need to reduce their debt in order to improve their balance sheet positions. Furthermore, it cannot be ruled out that factors such as the decline in corporate profitability and the decrease in the value of non-financial corporations' financial assets owing to the fall in stock prices may have prompted banks to be somewhat more cautious in granting loans. As a consequence of these developments, the ratio of debt to GDP of non-financial corporations has broadly stabilised (see Chart 11).

As regards the financing of non-financial corporations via the issuance of quoted

shares, data are only available up to the second quarter of 2002. The annual growth of quoted shares issued fell further, from 1.9% in the first quarter to 0.8% in the second (see Chart 12). This decline most likely reflected weak real investment activity and the continued decline in stock prices, which increased the cost of equity financing for non-financial corporations (see also Box 5).

Finally, the annual growth of debt financing of general government remained broadly stable during recent quarters, at around 4%. The annual growth of short-term debt financing is estimated to have increased further in the third quarter, to around 13% from 11.7% in the second, whereas the annual growth of long-term debt financing moderated somewhat in the course of 2002. This points to a tendency by general government to meet additional borrowing requirements at short-term maturities, taking advantage of the low level of short-term interest rates.

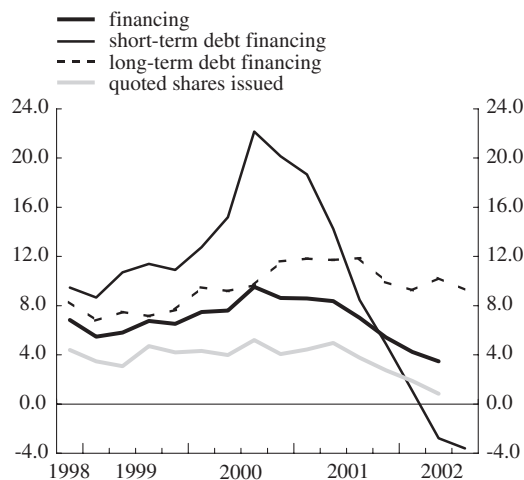
Retail bank interest rates declined

Although not moving much over the course of the year, in October 2002 the average

Chart 12

Short-term and long-term financing of non-financial corporations

(annual percentage changes)



Source: ECB.

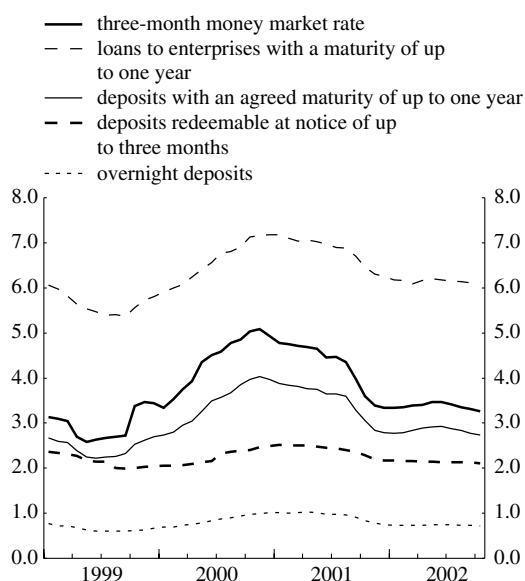
Note: For details, see Table 3.

interest rate level on short-term loans to enterprises and on deposits up to one year were around 20 basis points below those observed 12 months earlier. This compares with a decline of 34 basis points in the three-month money market interest rate over the same period. The average retail bank interest rate on overnight deposits and deposits redeemable at notice of up to three months decreased by less than 20 basis points (see Chart 13), in line with the usual limited adjustment of these rates to changes in market rates.

At the long end of the maturity spectrum, following the significant declines in government bond yields from May 2002 onwards, long-term bank retail interest rates decreased (see Chart 14) between May and October 2002. During this period the average retail bank interest rates on deposits with an agreed maturity of over two years and on loans to households for house purchase decreased by more than 50 basis points, while the average retail bank interest rates for loans to enterprises of over one year decreased by

Chart 13
Short-term retail bank interest rates and a comparable market rate

(percentages per annum; monthly averages)

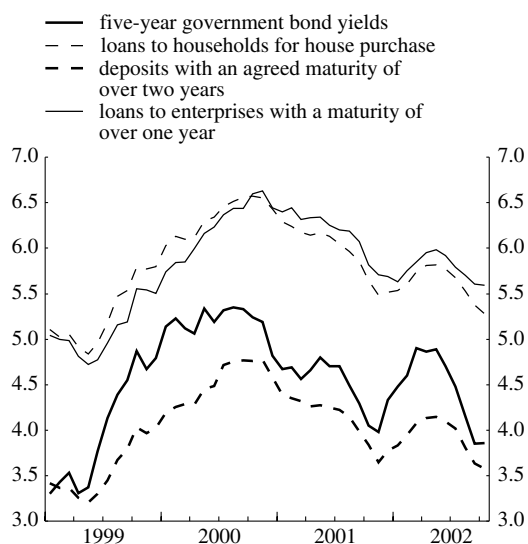


Sources: ECB aggregation of individual country data and Reuters.

Note: From January 2001, data include Greece.

Chart 14
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.

40 basis points. Over the same period, five-year government bond yields decreased by around 100 basis points. Consequently, the spread between government bond yields and lending rates to enterprises has widened slightly in recent months. In addition to the normal delays in the pass-through of market rates to retail rates, this possibly also reflects rising corporate credit risks. Some widening of spreads was also observed in the corporate bond market until October (see Chart 22).

Money market interest rates decreased over the past few months

Over the past few months, money market interest rates have declined, continuing the fall seen since mid-May 2002. The decline in these rates was most pronounced at the longer maturities (see Chart 15). Consequently, the slope of the money market yield curve, as measured by the difference between the twelve-month and the one-month EURIBOR, has flattened continuously since mid-May and inverted at the beginning of September. This trend reflected the gradual

Box 3**Monetary policy operations and liquidity conditions in the reserve maintenance period ending on 23 November 2002**

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

Regular monetary policy operations

(EUR billions; interest rates in percentages per annum)

Operation	Date of settlement	Date of maturity	Bids (amount)	Allotment (amount)	Bid-cover ratio	Number of participants	Minimum bid rate	Marginal rate	Weighted average rate
MRO	30/10/2002	13/11/2002	101.9	57.0	1.79	270	3.25	3.29	3.29
MRO	06/11/2002	20/11/2002	104.4	87.0	1.20	241	3.25	3.25	3.26
MRO	13/11/2002	27/11/2002	85.0	51.0	1.67	243	3.25	3.28	3.28
MRO	20/11/2002	04/12/2002	120.3	99.0	1.22	263	3.25	3.27	3.29
LTRO	31/10/2002	30/01/2003	27.8	15.0	1.85	163	-	3.22	3.34

Source: ECB.

The marginal rate fell from 3.29% in the first operation of the maintenance period to 3.25% in the operation settled on 6 November, but increased again in the following two operations to 3.28% and 3.27%.

On all but three business days the EONIA was stable between 3.28% and 3.30%. On 31 October it increased to 3.34%, due to an end-of-month effect, and on 7 November it dropped temporarily to 3.25%. On the last business day of the maintenance period the EONIA increased to 3.49%, reflecting slightly tight liquidity conditions.

The maintenance period ended with a small aggregate net recourse to the marginal lending facility of €1.4 billion (reflecting a net recourse of €0.7 billion on Friday 22 November which automatically accumulated on Saturday 23 November). The average difference between current account holdings and minimum reserve requirements was €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, €63.3 billion. The published estimates of the average liquidity needs stemming from autonomous factors ranged between €54.4 billion and €73.6 billion. The largest deviation between the published estimate and the actual figure occurred for the period from 28 October to 5 November, amounting to €1.7 billion.

Contributions to the banking system's liquidity

(EUR billions)

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

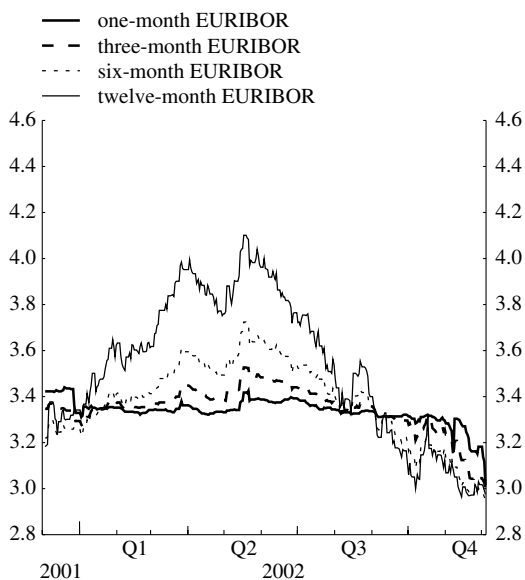
	Liquidity providing	Liquidity absorbing	Net contribution
(a) Monetary policy operations of the Eurosystem	192.6	0.1	+192.5
Main refinancing operations	147.5	-	+147.5
Longer-term refinancing operations	45.0	-	+45.0
Standing facilities	0.1	0.1	0.0
Other operations	-	-	0.0
(b) Other factors affecting the banking system's liquidity	372.1	435.4	-63.3
Banknotes in circulation	-	334.0	-334.0
Government deposits with the Eurosystem	-	42.8	-42.8
Net foreign assets (including gold)	372.1	-	+372.1
Other factors (net)	-	58.6	-58.6
(c) Credit institutions' holdings on current accounts with the Eurosystem (a) + (b)			129.3
(d) Required reserves			128.7

Source: ECB.

Note: Totals may not add up due to rounding.

Chart 15
Short-term interest rates in the euro area

(percentages per annum; daily data)



Source: Reuters.

downward adjustment of market participants' expectations about future short-term interest rates. On 4 December 2002, the money market yield curve was, however, virtually flat again after the one-month EURIBOR declined as well.

The overnight interest rate, as measured by the EONIA, fluctuated, with a few short-lived exceptions, around levels slightly above the minimum bid rate of 3.25% in the Eurosystem's main refinancing operations over the past few months. The two-week money market rates also remained broadly stable and mostly slightly above the minimum bid rate. The marginal and average rates of allotment in the Eurosystem's main refinancing operations settled in the past few months varied around 3.28-3.29% (see Box 3).

The one-month and three-month EURIBOR decreased during the past few months. More recently, between the end of October and 4 December, the rates decreased by 28 and 27 basis points respectively, to stand at 3.02% and 2.99% on the latter date. At the short end of the money market yield curve, the slope (as measured by the difference between

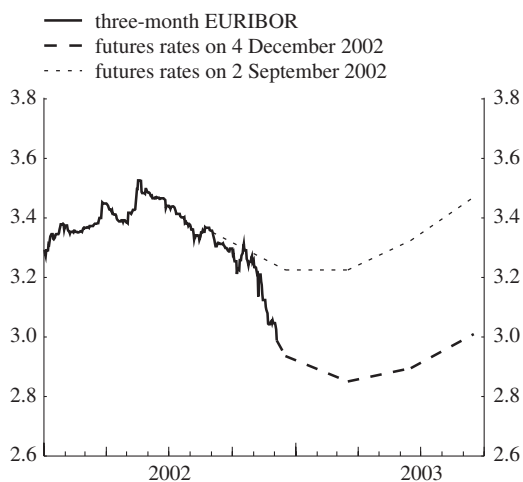
the three-month and the one-month EURIBOR) turned negative in mid-September and was -3 basis points on 4 December.

Developments in the interest rates of allotment in the longer-term refinancing operations of the Eurosystem over the past few months have largely reflected those in the three-month EURIBOR. In the operation settled on 28 November, the marginal and average rates of allotment were 3.02% and 3.04%, respectively. For both the marginal rate and the average rate, this was 20 basis points lower than the corresponding rates in the longer-term refinancing operation settled on 31 October, and respectively 21 and 22 basis points lower than the corresponding rates in the longer-term refinancing operation settled on 26 September.

At the longer end of the money market yield curve, interest rates decreased more significantly over recent months, continuing the pronounced decline observed since mid-May 2002. The slope of the money market yield curve, as measured by the difference between the twelve-month and the one-month EURIBOR, which was positive at

Chart 16
Three-month interest rates and futures rates in the euro area

(percentages per annum; daily data)



Source: Reuters.

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

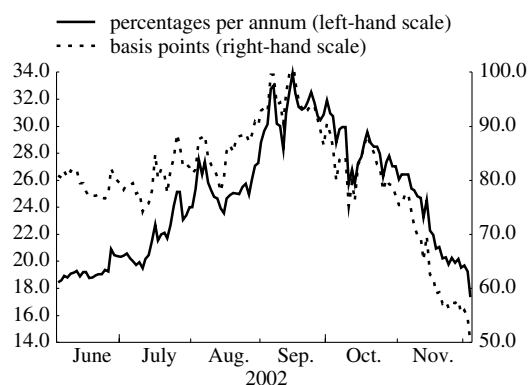
around 70 basis points in mid-May, flattened continuously and inverted at the beginning of September. More recently, between the end of October and 4 December, the six-month and twelve-month EURIBOR declined by 23 and 15 basis points respectively, to stand at 2.95% and 2.98% on the latter date.

The expected path of the three-month EURIBOR, as implied in the futures prices on contracts with delivery dates in 2002 and 2003, also moved downwards over the past few months. Compared with the beginning of September, market participants expected on 4 December a considerably lower path for short-term rates in 2003 (see Chart 16). However, between the end of October and 4 December, implied futures rates changed only slightly. On 4 December, the rates implied in futures prices on contracts with delivery dates in December 2002 and March, June and September 2003 stood at 2.93%, 2.85%, 2.89% and 3.01% respectively (see Box 4 for more details on the information content of the trading volume of EURIBOR futures).

Chart 17

Implied volatilities from options on three-month EURIBOR futures maturing in March 2003

(percentages per annum; basis points; daily data)



Sources: Bloomberg and ECB calculations.

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

The volatility of the three-month EURIBOR implied in options on futures contracts maturing in March 2003 reflects the uncertainty market participants attach to the expected future path of the three-month EURIBOR over the period up to the delivery date in March 2003. While the volatility remained broadly unchanged in September 2002, it decreased significantly in October and November 2002, reflecting lower uncertainty about short-term money market rates in the next few months (see Chart 17).

Long-term government bond yields stable in the euro area in November

Following substantial declines between mid-May and the end of September, mainly influenced by flight-to-safety portfolio shifts from highly volatile stock markets, ten-year government bond yields in the euro area and the United States rebounded in October. The upward tendency continued in the United States during November, probably as the result of waning uncertainty in the stock market in conjunction with market participants' less pessimistic perceptions of growth prospects. By contrast, in the euro area there was little overall change in the level of long-term government bond yields during November. Between the end of October and 4 December, yields on ten-year government bonds in the euro area remained close to 4.6%. In the United States, in contrast, ten-year government bond yields increased by about 20 basis points to around 4.2% over the same period. As a result, between the end of October and 4 December the differential between ten-year government bond yields in the United States and the euro area narrowed by some 35 basis points to around -30 basis points.

In the United States over recent months, conditions in bond markets have been highly volatile, as investors have shifted funds to and from the equity markets. First, bond yields declined sharply after June as investors shifted out of volatile equity markets. The

Box 4

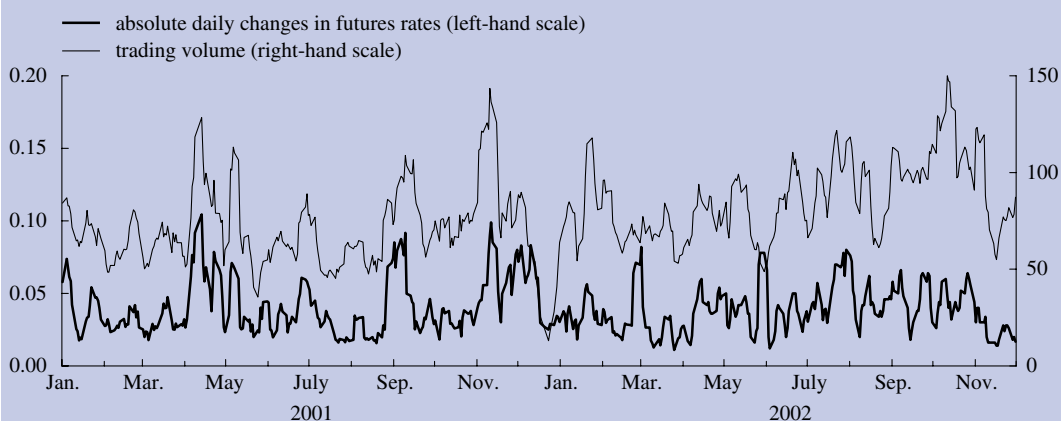
Information content of the trading volume of EURIBOR futures

The patterns of prices and trading volumes in financial markets may provide information on how market participants react to economic news. In this box, the patterns of prices, trading volumes and volatility in the market for futures contracts on EURIBOR rates at the London International Financial Futures Exchange (LIFFE) are analysed.

In principle, the volume of transactions in financial futures contracts on money market rates can be expected to be high when economic information is released or when uncertainty becomes greater. In the first case, an increase in transactions would signal an adjustment of positions of market participants to the new information. In the second, an increase in transactions may signal a stronger demand for hedging through futures contracts and/or the attempt of speculators to profit from the greater uncertainty. Hence an analysis of trading patterns may provide an interesting insight into market participants' reactions to new information and changes in uncertainty surrounding the economic outlook.

Chart A: Daily trading volume on LIFFE and absolute daily changes in interest rates for three-month EURIBOR futures contracts

(basis points; thousands of contracts; five-day centred moving average)



Sources: Reuters and ECB calculations.

Note: The trading volume is calculated as the average of the four contracts closest to expiry, with the replacement of the closest contract half a month before it expires. The use of this average rather than rolling over a single contract reduces the time-to-maturity effect caused by the replacement of contracts (see also Box 2 entitled "Measures of implied volatility derived from options on short-term interest rate futures" in the section "Monetary and financial developments" of the May 2002 issue of the Monthly Bulletin).

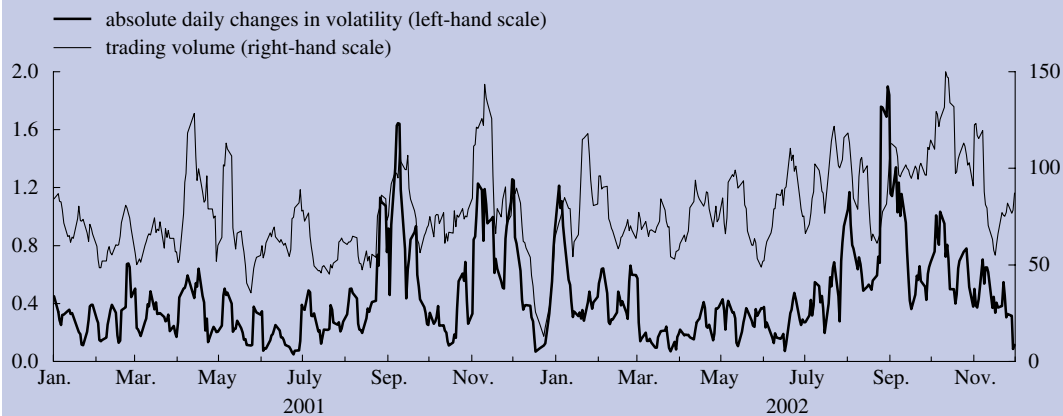
Chart A shows the daily trading volume and absolute daily changes in the interest rate for three-month EURIBOR futures contracts. Because of high variability in daily changes, both series have been smoothed as a centred average over five-day periods. The chart reveals a positive relationship between the trading volume and absolute changes in implied futures interest rates, with a correlation coefficient equal to 0.47. The relationship is particularly pronounced at peaks, suggesting that changes in futures rates, possibly reflecting the release of economic news, provide market participants with incentives to take new positions, regardless of whether the rates move up or down.

Chart B shows the daily trading volume and the smoothed absolute daily changes in implied volatility, as derived from interest rate options on the futures contracts. The latter can be regarded as an indicator of the future uncertainty attached to short-term money market rates. The relationship is positive, with a correlation coefficient equal to 0.32. Although the absolute changes in implied volatility are less correlated with the trading volume compared with the implied futures interest rate, a clear co-movement between them can be

identified, particularly at peaks. This reflects the fact that market participants react to changes in uncertainty by changing their positions in the market.

Chart B: Daily trading volume on LIFFE and absolute daily changes in implied volatility derived from options on three-month EURIBOR futures contracts

(percentages per annum; thousands of contracts; five-day centred moving average)



Sources: Reuters, Bloomberg and ECB calculations.
 Note: See Chart A for calculation of the trading volume.

downward pressure on bond yields might have been amplified by technical factors (such as the hedging strategies of US housing agencies). In October, a rebound in yields appeared to have been triggered mainly by portfolio shifts from the bond market back into the stock market. This shift seemed to be due, in part, to better than expected third-quarter earnings reports by some US corporations and more favourable economic releases. However, the rebound in yields lost some of its strength following the 6 November decision of the Federal Open Market Committee to lower its target for the Federal Funds rate by 50 basis points to 1.25%, a reduction larger than market participants had expected. The rise in US bond yields was accompanied by a fall in spreads between yields on bonds issued by BBB-rated corporations and yields on government bonds during October and November (see Chart 22).

The rise in nominal bond yields after end-September was concurrent with an increase in US real index-linked government bond yields. The rise in real yields was partly driven by a number of economic data which seemed to have raised optimism over long-term

growth prospects among market participants. Since the rise in real yields was smaller than the increase in the US nominal ten-year government bond yield, the ten-year

Chart 18

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.

break-even inflation rate, measured as the difference between the two, rose by some 10 basis points between end-September and 4 December. This development may suggest that some upward revision of long-term inflation expectations also took place after September. Despite the rising trend over recent months, US nominal ten-year government bond yields remained at about 90 basis points below the levels prevailing on 31 December 2001 (see Chart 18).

Concomitant with the rise in long-term bond yields after September, uncertainty in the bond market, as measured by the implied volatility on ten-year US Treasury futures contracts, waned, falling by almost one percentage point to 8.5 on 4 December (see Chart 19). This would seem to suggest that following the rebound in bond yields, market participants perceived lower probability of further sharp movements.

In Japan recent bond market developments were widely decoupled from global trends.

Japan experienced some declines in bond yields during October, partly driven by concerns related to the problem of non-performing loans within the banking system and flight-to-safety portfolio shifts among investors as the stock market declined. Thereafter, in November movements in bond markets were moderate. Between the end of October and 4 December the yields on ten-year government bonds remained broadly unchanged, standing at around 1% at the end of this period.

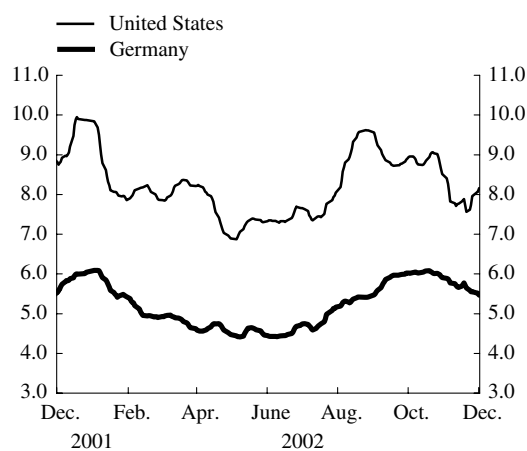
In the euro area, after the sharp increases in October, partly driven by portfolio shifts from bonds to stocks, long-term government bond yields changed little during November. Similarly, after rising in October, real bond yields, as measured by the French ten-year index-linked bond yield (indexed on the euro area HICP excluding tobacco), remained broadly stable in November (see Chart 20). There were also hardly any changes in the implied forward overnight interest rate curve (see Chart 21). These developments may reflect a market perception that recent economic data releases did not materially alter the prevailing assessment of longer-term growth prospects.

Taking a longer-term perspective, euro area nominal ten-year government bond yields remained at about 60 basis points lower than the levels prevailing at 31 December 2001. At the same time, market expectations of longer-term inflation prospects do not seem to have changed significantly over recent months. On 4 December the ten-year break-even inflation rate, derived from the difference between ten-year nominal bond yields and ten-year index-linked bond yields (indexed on the euro area HICP excluding tobacco), was close to its 2002 trough at 1.8%, and around 40 basis points lower than its peak in May 2002 (see Chart 20).

The degree of uncertainty prevailing in the euro area bond market, as measured by the implied volatility of options on futures contracts on German government bonds, has decreased somewhat over recent months.

Chart 19
Implied volatility for futures contracts on the ten-year German Bund and the ten-year US Treasury note

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



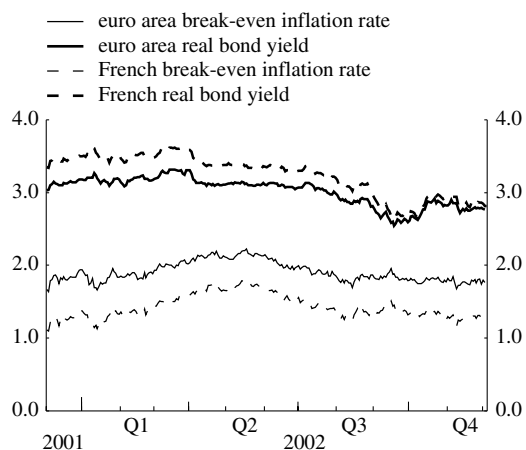
Source: Bloomberg.

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

Chart 20

Break-even inflation rate

(in percentages; daily data)



Sources: Reuters, French Treasury and ISMA.

Note: The French and euro area real bond yields are derived from the market prices of French government bonds which are indexed to the French CPI or euro area HICP (both excluding tobacco prices) and which mature in 2009 and 2012 respectively. The nominal bond yields are obtained from bonds that mature in 2009. The methods used to compute the break-even inflation rate were outlined on page 16 of the February 2002 issue of the Monthly Bulletin.

Implied volatility in the euro area stood at 5.1% on 4 December, which was very close to its average over the last two years (see Chart 19).

Indications of a stabilisation in bond market conditions in the euro area could also be seen in the corporate bond market. In October and November, the differential between the yields on bonds issued by BBB-rated corporations and ten-year government bond yields in the euro area fell sharply (see Chart 22).

Stock market uncertainty declined in November

Since mid-May global stock markets have been highly turbulent. This was reflected in the very high levels of uncertainty – as indicated by the implied volatility derived from options on the broad stock price indices – which accompanied the overall downward movement in stock prices prior to early October. However, uncertainty has

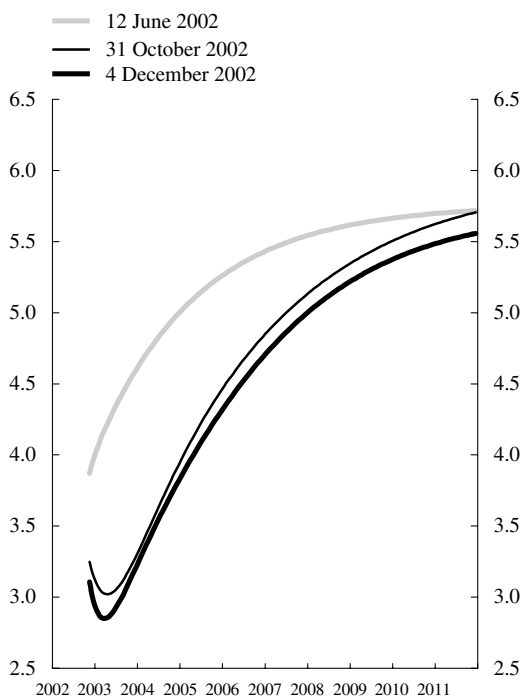
declined significantly with the subsequent strong rebound in stock prices, and by end-November had returned to levels last seen in May.

This rebound in euro area and US stock markets, which got underway in October following the sharp declines in earlier months, continued in November, albeit at a somewhat slower pace. These increases in stock prices took place against a background of announcements of better than expected quarterly corporate earnings and some data releases perceived by market participants as indicating an improved economic outlook, especially in the United States. Stock prices in both the euro area and the United States, as measured by the broad Dow Jones EURO STOXX and the Standard & Poor's 500

Chart 21

Implied forward euro area overnight interest rates

(percentages per annum; daily data)

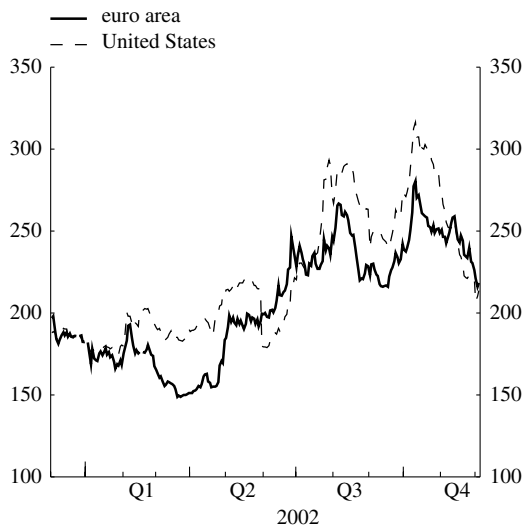


Source: ECB estimate.

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

Chart 22
Corporate bond spreads in the euro area and the United States

(in basis points; daily data; BBB rating)



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

indices respectively, increased by 3% between the end of October and 4 December (see Chart 23). In Japan, following some significant declines in October, the Nikkei 225 index increased by 4% over the same period. Concomitant with the stock price increases, uncertainty, as measured by implied stock price volatility, declined to levels close to the averages recorded over the last two years (see Chart 24).

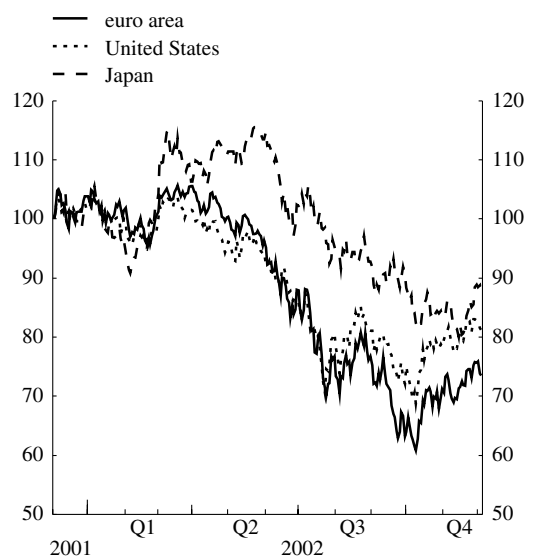
In the United States, the upward trend in stock prices slowed somewhat in November, compared with October. The continued increases in stock prices took place amid announcements of better than expected earnings by some major US corporations, reflecting, in part, severe cost-cutting measures pursued earlier in the year, and a perception among market participants of a somewhat improved economic outlook. The decline in uncertainty was reflected in a decrease in implied volatility, derived from options on the Standard & Poor's 500 index, of 2 percentage points to 26% since the end of October. On 4 December 2002 this measure of uncertainty stood only

3 percentage points above its average over the last two years.

In Japan, in recent months, stock price developments have seemed to reflect factors specific to the Japanese market. In particular, concerns among market participants about financial fragility and continued uncertainty surrounding the resolution of the problem of non-performing bank loans continued to depress stock prices in October and early November, when euro area and US stock markets rebounded. From mid-November there was a reversal of the trend, and stock prices began to pick up against the background of a slight weakening of the yen and some positive earnings announcements from major banks and technology corporations. As a result, in November the Nikkei 225 index saw its first monthly gain for six months. Uncertainty, as measured by implied volatility extracted from options on the Nikkei 225 index, diminished further in November and early December to a level 4 percentage points below its average of the past two years.

Chart 23
Stock price indices in the euro area, the United States and Japan

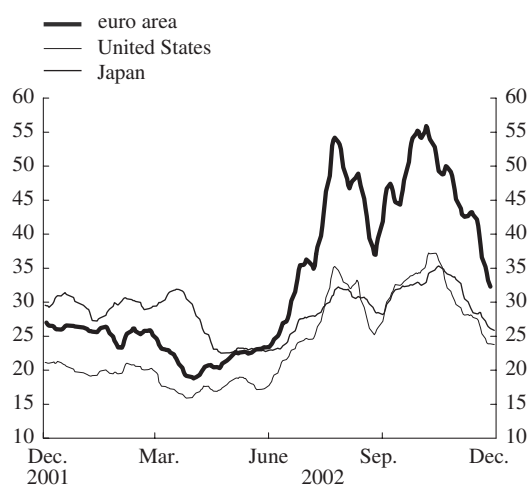
(index: 1 December 2001 = 100; daily data)



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

Chart 24
Implied stock market volatility in the euro area, United States and Japan

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



Source: Bloomberg.

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

In the euro area, stock prices in October and November rose at a somewhat stronger pace than in the United States. These developments came against a background of relatively mixed signals concerning future corporate earnings and economic activity, and also need to be seen in conjunction with the very sharp declines of the previous quarters. In addition, the improved sentiment among market participants could signal a lowering of the so-called "equity risk premium", which to some extent was reflected in the decline in uncertainty, as measured by the implied volatility extracted from options on the EURO STOXX index. By 4 December implied stock price volatility stood at 34%, down 8 percentage points since end-October but still 5 percentage points above its two-year average (see Chart 24).

The increase in the Dow Jones EURO STOXX index since October was broadly based, affecting almost all economic sectors (see Table 5). In particular, the stock prices of telecommunications, technology

Table 5
Price changes and historical volatility in the Dow Jones EURO STOXX economic sector indices

(price changes as percentages of end-of-period prices; historical volatility as percentages per annum)

	Basic materials	Consumer cyclical	Consumer non-cyclical	Energy	Financial	Healthcare	Industrial	Technology	Telecommunications	Utility	EURO STOXX
Price changes (end-of-period data)											
2001 Q3	-19.2	-29.0	-13.3	-14.2	-22.7	-12.0	-23.5	-37.9	-26.5	-7.4	-22.4
2001 Q4	15.4	26.8	6.0	5.5	9.7	1.9	17.5	58.0	21.7	-1.4	15.4
2002 Q1	8.5	2.1	1.6	10.4	4.1	-10.1	7.8	-3.2	-10.0	-0.4	1.6
2002 Q2	-6.4	-17.1	-7.6	-8.5	-13.8	-14.4	-11.4	-36.3	-33.9	-7.8	-16.5
2002 Q3	-28.8	-29.3	-18.0	-21.0	-36.7	-22.7	-27.8	-35.6	-11.7	-23.8	-28.2
October	4.9	12.3	4.7	4.2	16.1	9.9	2.8	38.0	24.7	1.3	12.6
November	10.1	7.4	-3.2	0.5	9.4	-3.9	10.5	11.9	9.4	2.7	6.2
End-September to 4 December 2002	13.7	15.8	0.6	1.8	22.4	3.1	10.4	49.2	33.7	4.3	16.3
Volatilities (period averages)											
2001 Q3	31.3	34.3	22.0	33.3	35.5	29.1	25.5	53.6	40.0	24.6	29.7
2001 Q4	21.2	32.6	17.3	34.8	26.8	20.9	23.4	54.8	37.6	17.0	26.3
2002 Q1	13.0	20.7	10.3	18.3	18.8	20.2	14.1	38.7	26.7	12.8	17.6
2002 Q2	16.4	24.9	14.5	23.6	22.2	27.5	14.5	44.3	36.3	17.2	20.9
2002 Q3	38.4	46.0	32.2	46.5	51.2	49.5	28.0	59.7	48.0	39.7	43.4
October	43.0	54.0	26.4	43.8	56.3	38.6	36.7	74.7	36.7	34.4	47.5
November	27.3	31.5	16.4	19.1	37.8	23.6	26.4	53.4	36.5	26.5	29.6
End-September to 4 December 2002	35.8	43.6	21.5	33.1	47.1	33.0	31.4	65.1	36.2	29.8	38.8

Sources: STOXX and ECB calculations.

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

and financial sector companies rebounded strongly in October and November, offsetting some of the severe losses experienced in these sectors in the previous quarters. All in all, these three sectors were the largest contributors to the upward movement of the broad stock price index over the last two months.

The rebound in the stock prices of telecommunications and technology companies should partly be seen in the light of the very sharp declines observed in the course of the last two years. In addition, heavy cost-cutting measures and debt restructuring, in particular in many telecommunications companies, may also have improved near-term earnings

prospects. Moreover, positive earnings announcements from US technology corporations are likely to have had a positive influence on the stock prices of euro area technology firms. The increase in the stock prices of financial companies seems, in part, to reflect the fact that the profitability concerns surrounding banks and insurance companies, which emerged in the third quarter of the year, have waned somewhat recently. The stock price index of technology sector companies increased by 49% between end-September and 4 December, while over the same period the stock price indices of companies in the telecommunications and financial sectors increased by 34% and 22% respectively.

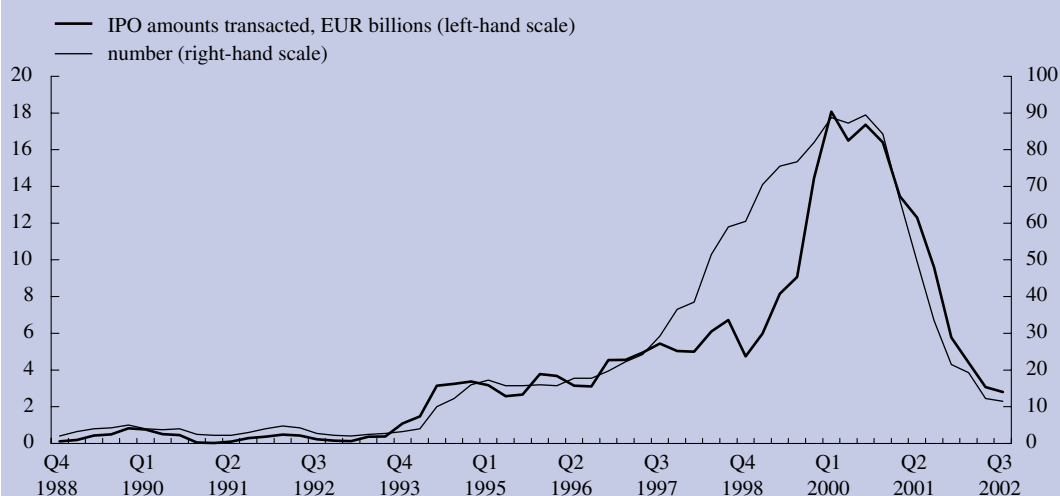
Box 5

Activity in the euro area initial public offering market

Initial public offering (IPO) activity in the euro area, measured either by total transacted amounts or by the number of transactions, surged after the mid-1990s (see Chart A below). The market was particularly active in 1999 and reached a peak in the first quarter of 2000. Since then activity has fallen off markedly and by the third quarter of 2002 it reached levels as low as those seen in the mid-1990s. While several factors may have played a role in these swings, this box focuses on the link between IPO activity and its cost, as proxied by the cost of equity.

Chart A: Initial public offering activity

(four-quarter moving average, quarterly data)



Source: Bondware.

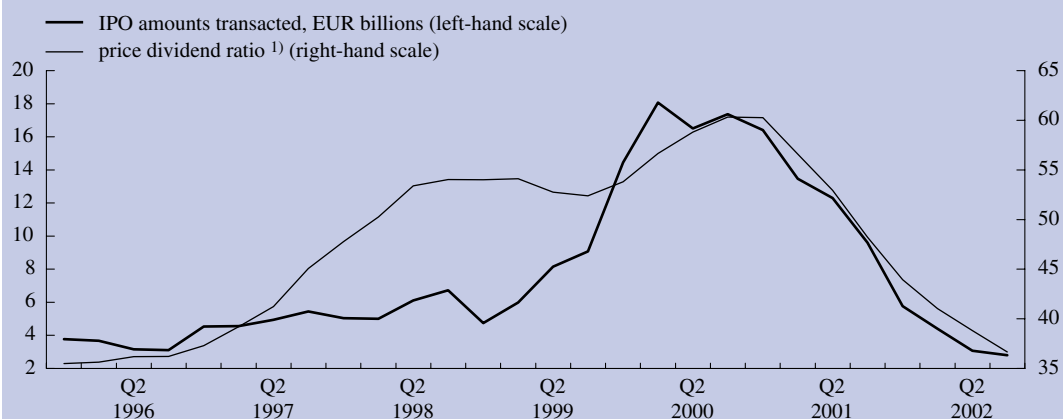
A commonly accepted definition of the cost faced by firms in raising equity capital is the return demanded by investors to bear the risk of an equity investment. It can be broken down into a risk-free interest rate, usually the return that investors would obtain from investing in a government bond, plus an equity risk premium, the additional return demanded by the investor to bear the specific risk attached to equity. From a conceptual

viewpoint the definition of the cost of equity is straightforward; in practice, however, its measurement is rather cumbersome, notably because it is difficult to measure the size of the equity risk premium.

Stock prices reflect the discounted value of future dividends. The discount rate that equates the current stock price with the net present value of future dividends is the return demanded by shareholders for holding stocks. If the return demanded by shareholders rises, this will, assuming dividends cannot be raised and all else being equal, bring about a decline in stock prices and a rise in the dividend yield, i.e. the anticipated annual dividend as a percentage of the share price. Such a rise in the dividend yield then implies a higher cost of equity capital.

Chart B: Initial public offering activity and the price/dividend ratio

(four-quarter moving average, quarterly data)



Source: Bondware and Datastream.

1) Share price as a percentage of the anticipated annual dividend.

Chart B shows the amounts transacted in IPOs in the euro area since 1995 together with the price/dividend ratio (i.e. the inverse of the dividend yield) of the euro area Datastream stock index. The two series show a very high correlation. The IPO market was more active when the price/dividend ratio was high or, in other words, when the cost of equity was low. In the period since 1995, the price/dividend ratio has been driven mainly by stock price developments. Hence it would seem that there is a close link between IPO activity and stock price developments, which impact on the cost of equity. This result sheds light on one of the transmission mechanisms between asset prices and the real economy, namely the cost-of-capital channel. It illustrates how the decline in stock prices over the past two years has made access to equity financing more difficult.

2 Price developments

HICP inflation estimated at 2.2% in November 2002

According to Eurostat's flash estimate, annual HICP inflation declined to 2.2% in November 2002, from 2.3% in October (see Table 6). Although a detailed breakdown is not yet available, given the presence of an unfavourable base effect in energy prices, this estimate suggests that the annual rate of change in the HICP excluding unprocessed food and energy may have eased slightly further in November.

In October 2002, the most recent month for which detailed HICP data are available, HICP

inflation was 2.3%, compared with 2.1% in September. This increase mainly reflected a base effect in energy prices; the year-on-year rate of change in each of the other sub-components declined. Consequently, the year-on-year rate of change in the HICP excluding unprocessed food and energy fell from 2.5% in September to 2.4% in October. Regarding short-term dynamics, the three-month annualised rate of growth in the HICP excluding unprocessed food and energy has remained below the annual rate for the past five months, which is consistent with the gradual easing in the latter observed since June 2002.

Table 6
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 June	2002 July	2002 Aug.	2002 Sep.	2002 Oct.	2002 Nov.
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	1.8	1.9	2.1	2.1	2.3	2.2
<i>of which:</i>													
Goods	0.9	2.7	2.5	1.7	2.2	1.4	1.3	1.0	1.2	1.4	1.4	1.7	.
Food	0.6	1.4	4.5	4.7	4.9	2.8	2.2	2.3	2.1	2.3	2.3	2.2	.
Processed food	0.9	1.1	2.8	3.5	3.5	3.1	2.9	3.1	2.9	2.9	2.8	2.6	.
Unprocessed food	0.0	1.7	7.0	6.7	7.0	2.4	1.3	1.1	0.9	1.3	1.7	1.6	.
Industrial goods	1.0	3.4	1.5	0.2	0.9	0.7	0.9	0.3	0.7	0.9	1.0	1.5	.
Non-energy industrial goods	0.7	0.7	1.1	1.6	1.8	1.7	1.4	1.6	1.5	1.4	1.4	1.3	.
Energy	2.4	13.3	2.7	-4.1	-2.1	-2.4	-0.9	-3.6	-1.7	-0.5	-0.4	2.3	.
Services	1.5	1.7	2.5	2.8	3.1	3.2	3.3	3.2	3.2	3.3	3.3	3.2	.
Other price and cost indicators													
Industrial producer prices ²⁾	-0.4	5.5	2.2	-0.8	-0.8	-0.8	-0.1	-0.9	-0.3	-0.1	0.1	0.9	.
Unit labour costs ³⁾	1.0	1.2	2.6	3.2	3.1	2.5	.	-	-	-	-	-	-
Labour productivity ³⁾	1.0	1.4	0.1	-0.4	-0.4	0.1	.	-	-	-	-	-	-
Compensation per employee ³⁾	2.0	2.6	2.7	2.8	2.8	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	25.8	25.9	27.0	28.9	27.9	24.2
Commodity prices ⁶⁾	-5.9	16.7	-7.6	-15.6	-3.6	-5.5	-1.7	-8.4	-7.9	-1.3	4.7	7.8	3.4

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

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

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

2) Excluding construction.

3) Whole economy.

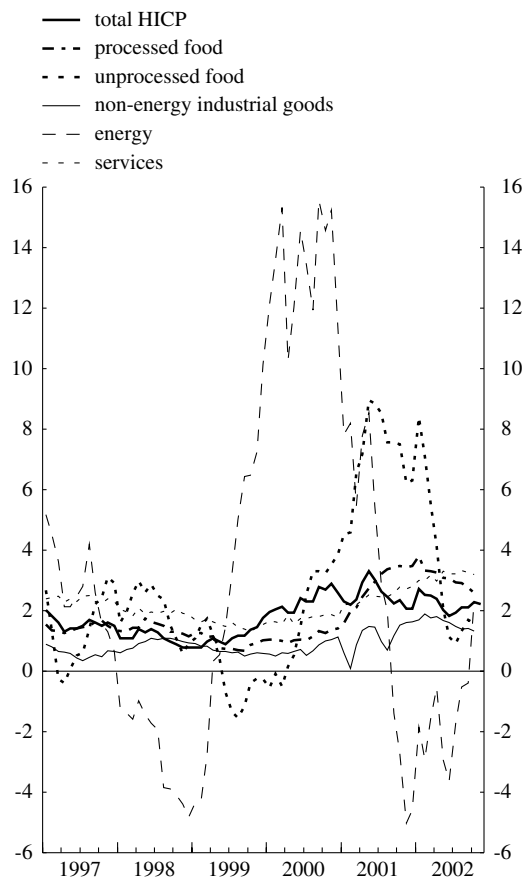
4) Whole economy (excluding agriculture, public administration, education, health and other services).

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.

Chart 25
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.

Energy prices in the HICP increased by 2.3% in year-on-year terms in October 2002, which compares with a decline of 0.4% in September (see Chart 25). This increase was mainly explained by a base effect from last year. However, the level of energy prices also increased by 0.5% in October. Further unfavourable base effects will arise in November and December. The year-on-year rate of change in unprocessed food prices edged down to 1.6% in October, from 1.7% in September. This slight decline was driven entirely by developments in vegetable prices, as the year-on-year rate of change in the other components increased. Short-term dynamics in unprocessed food prices are less favourable since the unwinding of

unprocessed food price increases following bad weather at the end of last year has come to an end, while recent adverse weather conditions are exerting some upward pressure.

In terms of the less volatile components, the year-on-year rate of change in each of the sub-components of the HICP excluding energy and unprocessed food declined in October 2002. The annual rate of change in non-energy industrial goods prices fell further to 1.3% in October, from 1.4% in September. The steady decrease in the annual rate of change in non-energy industrial goods prices from 1.9% since February of this year mainly reflects the unwinding of the indirect effects from past shocks. The year-on-year rate of change in services prices also edged down in October, to 3.2%, from 3.3% in September. With regard to the short-term dynamics in services prices, the three-month annualised rate of growth remained below the annual rate, albeit only slightly. Notwithstanding some changes in administered services prices, this would suggest that further gradual downward movements in the annual rate of change in services prices can be expected over the coming months. The annual rate of change in processed food prices declined further to 2.6% in October, from 2.8% in September. Indirect tax changes in January 2003 may have some upward effects on the rate of change in processed food prices.

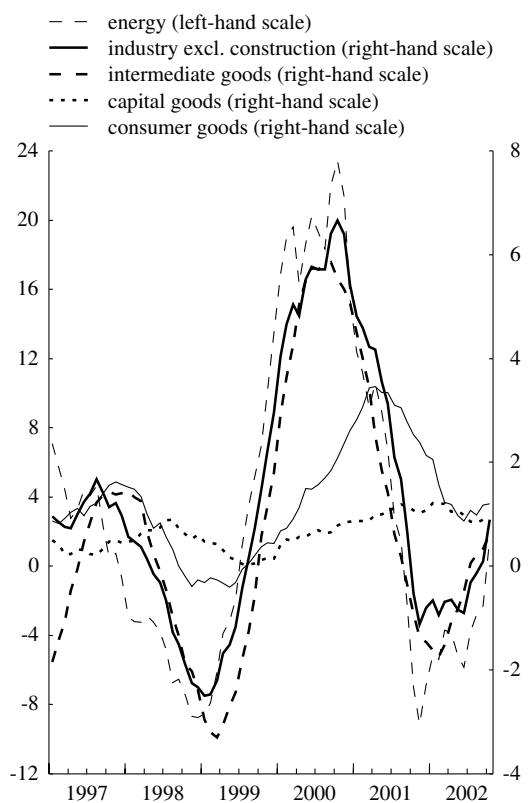
Upward pressures from producer prices remain moderate

The year-on-year rate of change in producer prices increased significantly in October 2002, to 0.9%, from 0.1% in September. However, this was due primarily to a base effect in energy prices. Excluding energy, the annual rate of change in industrial producer prices rose slightly, from 0.8% in September to 0.9% in October.

Energy prices increased by 1.6% in year-on-year terms in October 2002, as compared with a decline of 2.3% in September (see

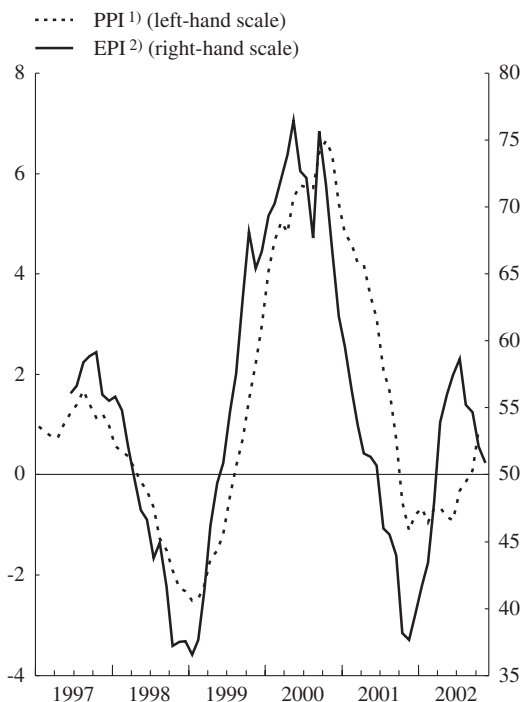
Chart 26). Most of this increase was due to a base effect. However, producer energy prices also increased by 0.9% in October. While further base effects will occur in the coming months, the decline in oil prices from levels observed in late September should attenuate some of the upward pressure on the annual rate of change in producer prices. The year-on-year rate of change in intermediate goods prices increased to 0.6% in October, from 0.3% in September. Further along the production chain, producer price pressures remain contained. The annual rate of change in consumer goods producer prices was unchanged at 1.2% in October, reflecting countervailing movements in the durable and non-durable consumer goods sectors. The year-on-year rate of change in capital goods prices was also unchanged at 0.9% in October.

Chart 26
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 27
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.

The Eurozone Price Index fell further to 50.9 in November, from 52.1 in October (see Chart 27). As it remains above 50, this suggests upward but moderate pressure on producer prices. This index may decline further in the coming months as the decline in oil prices from their peak in late September should exert some downward force. Oil prices stood at €24.2 per barrel in November, 16% below their September level. Non-energy commodity price levels eased slightly in November, with declines recorded in cereals, beverages, sugar and tobacco prices.

Base effects associated with intermediate goods and, in particular, energy prices could give rise to a further increase in the annual

rate of change in producer prices over the coming months. Excluding energy, however, producer price developments should remain moderate, indicating an absence of significant upward pressure on consumer prices from this channel.

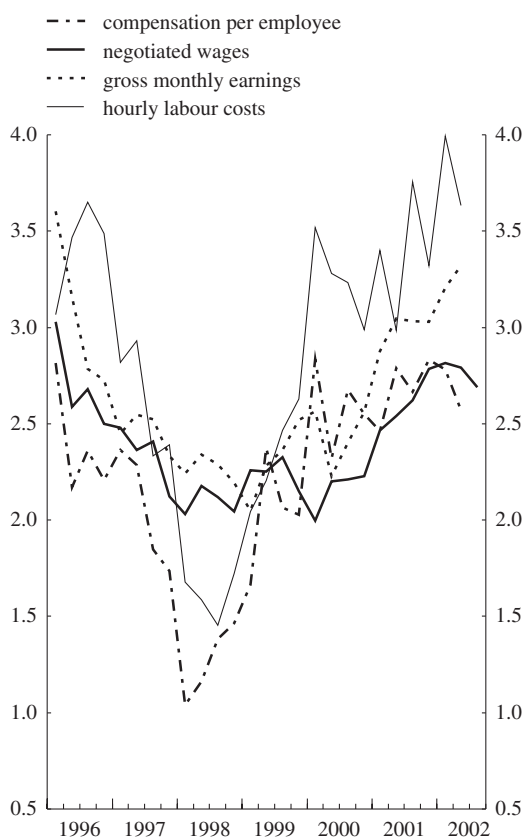
Some preliminary indications of a levelling-off in labour cost growth

The most recent information on euro area labour cost growth suggests that the upward movement may have levelled off (see Chart 28), although this evidence is preliminary and will need to be confirmed by future data releases.

Data on compensation per employee in the second quarter of 2002 show that the annual

Chart 28
Selected labour cost indicators for the euro area

(annual percentage changes)



Sources: Eurostat, national data and ECB calculations.

rate of increase slowed to 2.6%, from 2.8% in the first quarter. This is broadly similar to the average annual rate that prevailed in 2000 and 2001. Labour productivity rose by 0.1% in the second quarter (in year-on-year terms), compared with a 0.4% decline in the first quarter. The combination of the slight easing in compensation growth and a nascent recovery in labour productivity growth resulted in the annual rate of change in unit labour costs decreasing from 3.1% in the first quarter of 2002 to 2.5% in the second quarter.

Other indicators of labour cost growth in the second quarter give mixed signals. Information on wage negotiations available up to the second quarter of 2002 indicates that agreed wage settlements remained unchanged at 2.8%, year-on-year. The annual rate of growth 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 quarter, while the rate of growth in gross monthly earnings increased slightly to 3.3%.

Concerning more recent developments, the negotiated wages indicator for the third quarter decreased to 2.6%, from 2.8% in the second quarter. Although there is some indication that labour cost growth may be levelling off, it has not responded in a noticeable manner to the prolonged slowdown in economic activity and the increase in unemployment. In the current environment, continued wage moderation is critically important, in terms of both future price developments and supporting the recovery in economic activity.

Prospects for inflation to fall below 2% have improved

Base effects in energy prices and some country-specific developments, such as indirect tax increases or administered price changes, may have some upward impact on HICP inflation in the coming months, although currently lower oil prices attenuate this upward pressure. On balance, annual HICP inflation is likely to remain above 2% for some months.

Looking beyond the short term, some moderation in inflationary pressures is expected. Both the appreciation of the euro, which is currently around 5% stronger than at the beginning of the year, and general economic conditions should attenuate price pressures. Combined with the ongoing unwinding of the indirect effects from previous price shocks, the annual rate of

HICP inflation should decline to below 2% in the course of 2003. The expectation that inflation will fall below 2% in 2003 and remain in line with price stability thereafter, is conditional on relatively stable oil prices and on labour costs not accelerating further. For further information, see the section entitled "Eurosysteem staff macroeconomic projections for the euro area".

3 Output, demand and labour market developments

Continued low real GDP growth in the third quarter of 2002

According to Eurostat's first estimate, real GDP increased by 0.3% quarter on quarter in the third quarter of 2002, unchanged from the rate of growth recorded in the second quarter (see Table 7). The newly released estimate includes a marginal downward revision to growth in the second quarter of the year, confirming the picture of continued subdued growth in the course of 2002.

In the third quarter, the contribution to growth from final domestic demand (i.e. excluding changes in inventories) continued to rise, while that from changes in inventories declined and was slightly negative. The contribution to growth from net exports remained positive, while both

export and import growth strengthened. As regards final domestic demand, private consumption picked up further, growing by 0.5% quarter-on-quarter in the third quarter. Fixed capital formation stabilised, following negative quarter-on-quarter growth in previous quarters. When assessing the contributions to growth from individual GDP components, it should be borne in mind, however, that they are often subject to revisions, particularly between the first and second estimates, as additional information becomes available.

No clear signs yet of a strengthening of growth in the industrial sector

Euro area industrial production (excluding construction) was unchanged in September

Table 7

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 Q3	2001 Q4	2002 Q1	2002 Q2	2002 Q3	2001 Q3	2001 Q4	2002 Q1	2002 Q2	2002 Q3
Real gross domestic product	2.8	3.5	1.4	1.3	0.4	0.3	0.6	0.8	0.2	-0.3	0.4	0.3	0.3
<i>of which:</i>													
Domestic demand	3.5	2.9	0.9	0.7	-0.2	-0.2	-0.3	0.3	-0.3	-0.3	0.1	0.2	0.3
Private consumption	3.5	2.5	1.8	1.8	1.6	0.5	0.2	0.6	0.1	0.0	-0.2	0.2	0.5
Government consumption	2.0	1.9	1.9	2.2	1.5	2.2	2.5	2.4	0.4	0.4	0.9	0.8	0.3
Gross fixed capital formation	6.0	4.8	-0.7	-1.6	-2.5	-3.2	-3.7	-3.0	-0.7	-0.9	-1.0	-1.2	0.0
Changes in inventories ^{3), 4)}	-0.2	0.0	-0.4	-0.4	-0.8	-0.2	-0.1	0.1	-0.3	-0.1	0.2	0.1	-0.1
Net exports ³⁾	-0.6	0.6	0.5	0.6	0.6	0.6	0.9	0.5	0.4	0.0	0.4	0.1	0.1
Exports ⁵⁾	5.3	12.7	2.8	1.4	-2.8	-2.8	0.1	2.5	-0.2	-1.3	0.0	1.6	2.2
<i>of which: goods</i>	5.0	12.5	2.6	1.3	-2.8	-1.9	0.3	.	-0.2	-1.3	0.8	1.1	.
Imports ⁵⁾	7.4	11.3	1.4	-0.3	-4.6	-4.5	-2.3	1.2	-1.4	-1.4	-0.9	1.4	2.2
<i>of which: goods</i>	7.1	11.3	0.6	-1.4	-5.7	-4.1	-2.5	.	-1.6	-1.3	-0.7	1.0	.
Real gross value added:													
Agriculture and fishing ⁶⁾	2.8	-0.8	-1.2	-1.2	-0.5	1.3	1.1	0.5	1.5	-0.2	0.0	-0.2	0.9
Industry	1.3	3.7	0.7	0.5	-1.5	-1.9	-0.6	-0.2	0.1	-1.3	0.5	0.2	0.5
Services	3.3	3.9	2.3	2.2	1.7	1.5	1.4	1.2	0.4	0.2	0.3	0.5	0.2

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 8
Industrial production in the euro area

(annual percentage changes, unless otherwise indicated)

	2000	2001	2002	2002	2002	2002	2002	2002	2002	2002	2002	2002	2002
			July	Aug.	Sep.	July	Aug.	Sep.	Apr.	May	June	July	Aug.
				month-on-month			three-month moving averages						
Total industry excluding construction by main industrial groupings:	5.5	0.4	-0.1	-1.3	-0.3	-0.2	0.1	0.0	0.6	0.6	0.4	0.2	0.0
Total indus. excl. construction and energy ¹⁾	6.0	0.2	-0.3	-1.4	-0.6	-0.7	0.6	-0.4	0.9	0.6	0.2	0.4	0.0
Intermediate goods	5.9	-0.8	0.7	0.0	1.4	-0.4	1.3	-0.7	2.1	0.8	0.2	0.4	0.4
Capital goods	9.4	1.3	-0.7	-2.5	-2.8	-0.4	-0.2	-0.6	-0.1	0.5	0.3	0.5	-0.2
Consumer goods	2.2	0.4	-1.6	-2.6	-1.3	-1.1	0.6	-0.1	0.1	0.2	0.0	0.0	-0.4
Durable consumer goods	6.5	-2.5	-1.9	-9.1	-2.7	-0.2	-0.5	0.0	-2.3	-0.9	-0.1	1.3	0.7
Non-durable consumer goods	1.4	1.0	-1.5	-1.6	-1.0	-1.3	0.8	-0.2	0.5	0.4	0.1	-0.2	-0.6
Energy	2.0	1.2	1.2	-0.4	0.7	-0.9	-0.7	0.6	-1.7	1.0	1.0	0.2	-0.8
Manufacturing	5.9	0.2	-0.3	-1.3	-0.6	-0.5	0.4	-0.2	0.9	0.7	0.3	0.4	0.1

Sources: Eurostat and ECB calculations.

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

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

2002, following a small increase in August (see Table 8). In the third quarter as a whole the level of production was unchanged compared with the previous quarter, following positive growth of around 0.5% in both the first and second quarters. Growth

in the manufacturing sector followed a similar pattern, but remained slightly positive in the third quarter. Although the decline in production growth in the third quarter was widely spread across the main industrial groupings, it was particularly pronounced in

Table 9
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	June	July	Aug.	Sep.	Oct.	Nov.
Economic sentiment index ¹⁾	-0.1	2.5	-2.8	-1.4	0.3	0.3	-0.4	-0.2	-0.3	-0.3	0.3	-0.2	-0.2
Consumer confidence indicator ²⁾	8	12	6	-1	1	3	1	3	1	0	2	-1	-3
Industrial confidence indicator ²⁾	0	12	-1	-11	-7	-4	-5	-4	-4	-5	-5	-4	-3
Construction confidence indicator ²⁾	11	16	10	6	5	3	-2	3	0	-4	-2	-2	-4
Retail trade confidence indicator ²⁾	1	6	0	-3	-10	-12	-11	-12	-11	-10	-11	-10	-8
Services confidence indicator ²⁾	6	9	-6	-26	-18	-16	-22	-18	-21	-23	-21	-25	-25
Business climate indicator ³⁾	-0.1	1.3	-0.1	-1.2	-0.8	-0.5	-0.5	-0.5	-0.4	-0.6	-0.5	-0.4	-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.

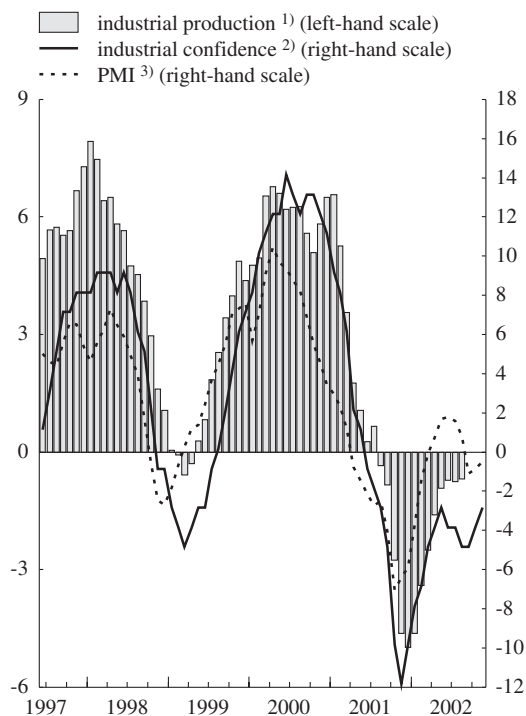
3) Units are defined as points of standard deviation.

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.

Chart 29

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.

industries producing non-durable consumer goods.

In the second quarter, there was a sharp slowdown in the rate of growth in the intermediate goods industries, following a particularly strong recovery early this year. As the production of intermediate goods tends to be linked to the inventory cycle, this development may help to explain the decline in the contribution to growth from inventory changes.

It would appear that industrial activity began the fourth quarter with a low momentum.

Survey data for the manufacturing sector improved somewhat in October and November 2002, suggesting that business conditions have stabilised at low levels of activity.

According to the European Commission Business and Consumer Surveys, industrial confidence increased further in November, back to the levels recorded in the spring of this year (see Table 9). This reflects an improved assessment of order books and production expectations, while the assessment of stocks of finished products remains unchanged. The Purchasing Managers' Index (PMI) for the manufacturing sector also increased somewhat further in November, to 49.5, from 49.1 in October. However, the level of the index remained below the threshold of 50, which signals unchanged production, thus continuing to point to weak manufacturing activity (see Chart 29). As regards the individual components of the PMI, the rise in November essentially reflects businesses' assessment that order book volumes increased. However, a further shortening in suppliers' delivery times, indicating low levels of activity in the intermediate goods industries, had a partially offsetting effect.

Household spending indicators improved somewhat, but consumer confidence remains low

Retail sales volumes declined strongly in September 2002, partly offsetting the increases recorded in July and August. In the third quarter as a whole, retail sales rose by 0.7% quarter on quarter, compared with slightly negative growth in the second quarter. This strengthening was broadly based, with higher rates of growth in both sales of food items and non-food items. The level of new passenger car registrations remained broadly unchanged in October 2002, following an increase of 0.5% quarter on quarter in the third quarter. The strengthening in growth of retail sales and new passenger car registrations in the third quarter underpins

the rise in private consumption growth recorded in that quarter. Both indicators also point to a strengthening in consumption growth in year-on-year terms (see Chart 30).

This suggests that the strong rise in perceived inflation in the aftermath of the cash changeover and the significant decline in the willingness to make major purchases, as reported in the European Commission Business and Consumer Surveys, may have started to play a less prominent role. However, there is as yet no clear sign of a reversal in these adverse developments. Consumer confidence continued to decline in November 2002 to a level lower than that recorded following the terrorist attacks in

the United States in September 2001. This deterioration reflects, to a large extent, the more pessimistic expectations of households in Germany with regard to the general economic situation. In November, confidence in the euro area retail trade sector continued its gradual recovery which had begun in the middle of this year, but remained below the levels recorded at the start of this year (see Table 9).

Outlook for growth remains surrounded by high uncertainty

Real GDP growth is expected to remain moderate around the turn of the year. Thereafter, a gradual recovery is projected during the course of 2003 (for more details see Section 5 entitled “Eurosysteem staff macroeconomic projections for the euro area”). The main factors expected to support this strengthening of the economy are lower inflation and the associated gains in households’ real disposable income, which should underpin private consumption, and a further gradual recovery in foreign demand, which should support exports and – together with low interest rates – also investment. However, this outlook remains surrounded by high uncertainty, related to geopolitical tensions, developments in financial markets and the persistence of global imbalances. In the light of these uncertainties, the precise timing and strength of the economic recovery in the euro area remain difficult to predict.

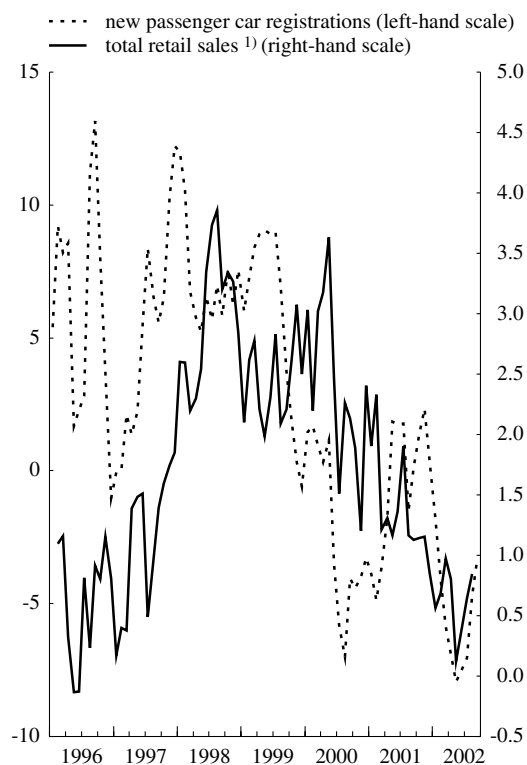
Euro area unemployment rate increased in October 2002

The standardised rate of unemployment for the euro area increased to 8.4% of the labour force in October 2002, compared with 8.3% in September (see Chart 31). Compared with November 2001, i.e. before the unemployment rate started to rise, the unemployment rate has increased by 0.4 percentage point. The increase in the number of unemployed was around 54,000 in October 2002, well above the average

Chart 30

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).

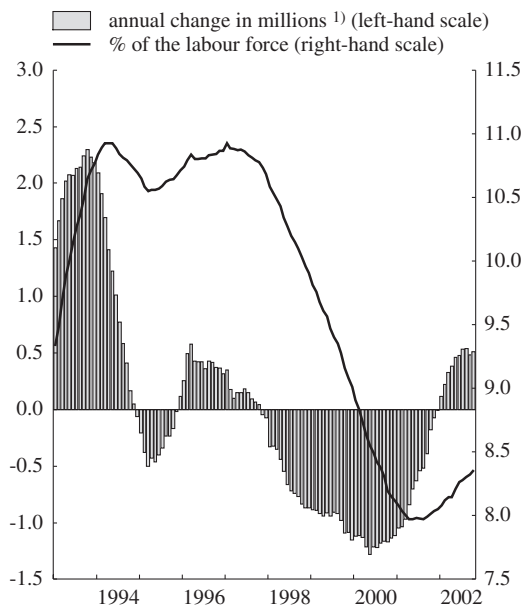
Note: Data refer to the Euro 12 (including periods prior to 2001).

1) Calculated using seasonally adjusted data.

Chart 3 I

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.

increase recorded in the third quarter of this year (revised up to 27,000).

The increase in unemployment continued to affect both those below 25 and those aged 25 and above (see Table 10). In October 2002, the unemployment rate for those below 25 increased by 0.1 percentage point to 16.2%, while it remained unchanged at 7.3% for those aged 25 and above. The increase in the youth unemployment rate since April 2001 has been

somewhat stronger than the increase in 1995-1996, the last period in which the youth unemployment rate increased significantly in the euro area.

An indicator of the euro area vacancy rate, i.e. the number of vacant jobs as a percentage of the labour force, continued to decline in the third quarter.¹ This decline in the vacancy rate, which may act as a leading indicator of unemployment and employment developments, is consistent with the observed and expected rise in unemployment in the second half of 2002. Taken together, recent unemployment and vacancy developments confirm an easing in labour market tightness in the course of this year. Box 6 on the unemployment-vacancy relationship in the euro area discusses the information provided by these data.

Employment may have declined in the third quarter of 2002

National accounts data on euro area employment in the third quarter are not yet available. Currently available national data, however, suggest that employment growth in the euro area may have turned negative in the third quarter. This is likely to reflect both the lagged effect of the past downturn

¹ No official data are available for the euro area. An indicator of vacancies at the euro area level on the basis of country information was discussed and presented in the box entitled "The information content of job vacancies in the euro area" published in the February 2002 issue of the ECB's Monthly Bulletin.

Table 10

Unemployment in the euro area

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

	1999	2000	2001	2001 Q4	2002 Q1	2002 Q2	2002 Q3	2002 May	2002 June	2002 July	2002 Aug.	2002 Sep.	2002 Oct.
Total	9.4	8.5	8.0	8.0	8.1	8.2	8.3	8.2	8.3	8.3	8.3	8.3	8.4
Under 25 years ¹⁾	18.5	16.7	15.7	15.7	15.9	16.1	16.1	16.0	16.2	16.1	16.2	16.1	16.2
25 years and over	8.2	7.4	7.0	7.0	7.1	7.2	7.3	7.2	7.2	7.3	7.3	7.3	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.

Table I I
Employment growth in the euro area

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

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

in activity and the slower than expected recovery in economic activity in the course of 2002.

According to revised national accounts data, euro area total employment was unchanged in the second quarter (see Table I I). The decline in employment in industry appeared to slow down in the second quarter, from -0.4% quarter-on-quarter in the first quarter to -0.2%. Employment growth in industry has, however, been negative for five consecutive quarters. At the same time, employment growth in services, while remaining slightly positive in the second quarter, has become less robust. The trade and transport sub-sector contributed most to this weakening in employment growth, declining by 0.4 percentage point to -0.2% quarter-on-quarter in the second quarter. Employment growth in the finance and business sub-sector appeared to have returned to its previous high level following zero growth in the first quarter.

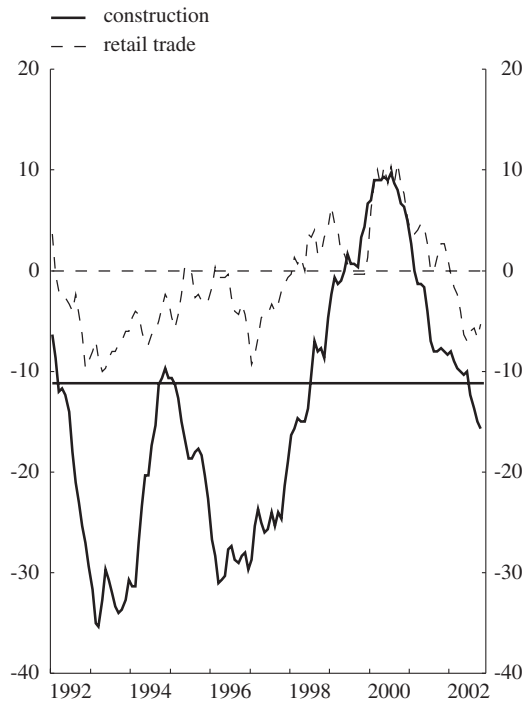
Employment expectations remain subdued

According to the European Commission Business and Consumer Surveys, employment expectations in both retail trade and services improved in November 2002. However, given the past volatility of these series, a further improvement in employment expectations is required before indicating an increase in employment growth in the services sector. At the same time, the Purchasing Managers' employment index for services remained approximately unchanged in November. Employment expectations in construction declined further in November (see Chart 32).

According to the European Commission Business and Consumer Surveys, employment expectations in the manufacturing sector declined in November 2002, pointing to a continued decline in employment in that sector (see Chart 33). The decline in employment expectations in the second half of 2002 followed a temporary improvement in expectations. This pattern may reflect overly optimistic expectations in the first half of this year. As a result, the most recent

Chart 32
Employment expectations in the euro area

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



Sources: European Commission Business and Consumer Surveys.
 Note: The horizontal lines are averages of the employment expectations since January 1985 for construction and since February 1986 for retail trade.

developments in employment expectations may not translate into a stronger decline in employment in industry at the end of the year. This assessment is supported by a broadly stable PMI employment index for November.

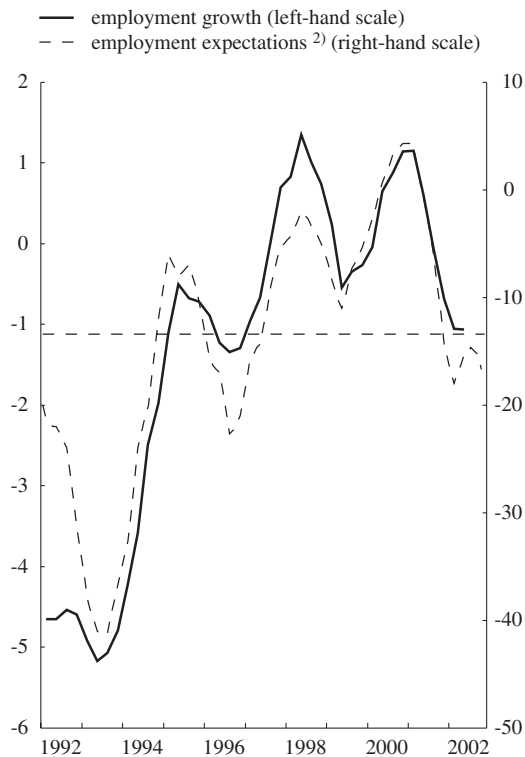
Short-term labour market outlook remains sluggish

Total employment is likely to have declined in the second half of this year while

unemployment has continued to increase. Looking ahead, based on the projection of a renewed improvement in economic activity, employment growth is expected to resume during the course of 2003 (see also Section 5 entitled “Eurosystem staff macroeconomic projections for the euro area”). Wage developments that support employment growth remain essential for an improvement in the labour market outlook.

Chart 33
Employment growth and employment expectations in industry in the euro area¹⁾

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



Sources: Eurostat and European Commission Business and Consumer Surveys.

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

1) Excluding construction.

2) Employment expectations refer to manufacturing only.

Box 6

The unemployment-vacancy relationship in the euro area

This box looks at unemployment developments in the euro area from the perspective of the relationship between the unemployment rate and the vacancy rate¹, the so-called Beveridge curve. The vacancy rate refers to the number of vacant jobs as a percentage of the labour force. The unemployment-vacancy (UV) relationship appears to be an informative tool, given that it can give a broad indication of whether changes in the unemployment rate are caused only by cyclical developments in economic activity or by more permanent or structural factors.

The coexistence of vacancies and unemployed reflects the continuous process of job creation and job destruction, causing a flow of workers from unemployment and inactivity to employment and vice versa. At the same time, the process of matching newly vacant positions and workers looking for a job is subject to, among other factors, some delay on account of search and selection process costs, thereby resulting in the coexistence of vacancies and unemployed.

Shocks affecting the unemployment-vacancy relationship

Given the selection and search processes of employers and the unemployed, unemployment and vacancy rates can be expected to have a negative relationship, as the higher the level of vacant jobs in the labour market, the higher the likelihood of finding a job for an unemployed person. Moreover, as the likelihood of finding a job increases less than in proportion to the number of vacancies, the UV relationship can be expected to be convex to the origin (see Charts A and B).

Chart A: Unemployment-vacancy relationship: activity shocks

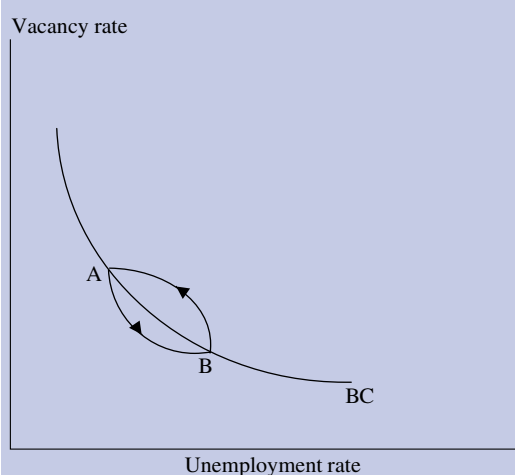
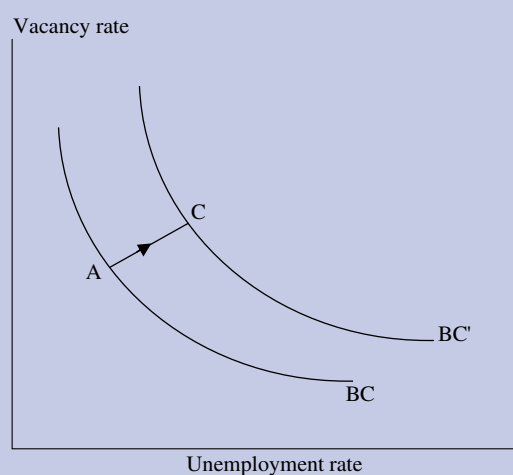


Chart B: Unemployment-vacancy relationship: structural shocks



Two main types of shock are generally considered to affect the UV relationship: aggregate activity shocks and structural shocks. *Aggregate activity* shocks induce movements in opposite directions in unemployment and vacancies. For instance, in the case of a slowdown in economic activity, i.e. a negative aggregate activity shock, the number of vacancies posted will decrease as firms plan to create fewer jobs. At the same time the level of unemployment will increase as a result of both less job creation and more job destruction. Reflecting

¹ A first discussion of the unemployment-vacancy relationship for the euro area was introduced in the ECB publication entitled "Labour market mismatches in euro area countries", March 2002.

these developments, Chart A shows a movement describing an arc below the Beveridge curve from point A to point B. Once the slowdown in activity reversed, the opposite movement would be observed, i.e. an increase in vacancies and a fall in unemployment (returning to the starting point); activity shocks thus tend to produce anticlockwise loops around a unique UV relationship.

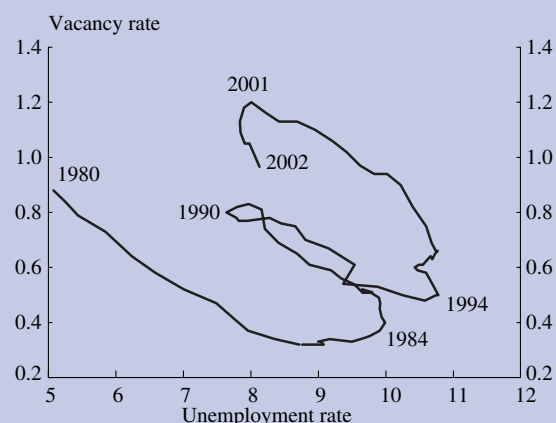
By contrast, *structural shocks* induce movements in the same direction in both unemployment and vacancies. These include reallocation shocks and changes in the effectiveness of the matching process. Reallocation shocks are related to sectoral shifts, such as shifts from industrial to service activities, while changes in the effectiveness of the job matching process are related to institutional factors, such as the effect of unemployment benefit systems on the degree of intensity with which workers search for a job. Reallocation shocks produce outward movements of the UV relationship, as both unemployment and vacancy rates tend to increase, while mismatch shocks produce an outward (inward) movement when the efficiency in the matching decreases (increases). Chart B shows a shift from point A to point C.

Developments in the euro area unemployment-vacancy relationship since the 1980s point to the dominant role of structural shocks in the labour market

Past developments in the euro area UV relationship suggest the occurrence of both cyclical and structural shocks (see Chart C). Anticlockwise loops describing activity shocks can be identified both in the 1980s and in the 1990s. Indeed, the vacancy rate followed a downward pattern in the first half of both decades, while the unemployment rate was growing. Reverse movements were observable thereafter. In addition, it is worth noting that, together with activity shocks, a marked outward shift in the UV relationship took place between the 1980s and the 1990s, as both the unemployment and the vacancy rates showed a positive trend. These developments point to the dominant role of structural shocks in the euro area labour market, i.e. shocks connected with a decline in the effectiveness of the job matching process and/or sectoral shifts.

Chart C: Unemployment-vacancy rate relationship in the euro area

(in percentage of the labour force)



Sources: Eurostat and ECB calculations.

Note: Vacancy data cover around 64% of the euro area. The 2002 figures include data up to the third quarter.

Indeed, there is some evidence suggesting a link between the labour market performance in the euro area and both changes in the labour market and sectoral shifts. It appears that some institutional aspects are positively correlated with the outward shift in the UV relationship, such as the duration of unemployment benefit. This is explained by the fact that an increase in the duration of unemployment benefits may reduce the efficiency in searching for a job, leading to a delay in the matching process and, as a result, to an increase in unemployment and vacancy rates. Moreover, sectoral shifts also appear to explain the outward shift in the UV relationship, confirming that the process of restructuring in euro area economies could also partly explain the increase in unemployment and vacancy rates.

Recent developments point mainly to cyclical shocks

Recent UV developments in the euro area have been in line with the expected effects of the past downturn in economic activity. Indeed, the vacancy rate has been decreasing since the first quarter of 2001, contributing to

lower employment growth, while the unemployment rate began to increase in the second half of 2001. These developments have followed a period of a trend increase and decrease in vacancy and unemployment rates respectively which started in the mid-1990s. Thus, an anti-clockwise loop, which characterises activity shocks, appears to have been the prevailing movement in the UV relationship in recent years, while no further outward movement of the Beveridge curve seems to have taken place.

This could indicate, on the one hand, that policies and reforms implemented during the 1990s have had a positive impact on labour market developments and, on the other hand, that further reforms are needed in order to absorb the impact of sectoral shifts and increase the efficiency of the matching process, i.e. to move the UV relationship inwards.

4 Fiscal developments

Significant deficits expected in the euro area in 2002 and 2003

The most recent economic forecasts by the European Commission point to a significant deterioration of fiscal balances for the euro area. The average general government deficit-to-GDP ratio in the euro area is expected to amount to 2.3% in 2002. This reflects a considerable worsening compared with both the outcome for 2001 and the Commission's spring forecast for this year (see Table 12 and the June 2002 issue of the Monthly Bulletin). The euro area primary surplus ratio (which excludes interest expenditure) is

expected to decline significantly in 2002 instead of staying broadly unchanged as projected in the spring.

Budgets in the euro area are also expected, on average, to miss by a very large margin the targets for 2002, which were set in the stability programmes updated at the end of 2001. Most euro area countries are expected to record a deficit in 2002, whereas half the countries reported surpluses in 2001. Two countries, Germany and Portugal, are projected to breach the 3% deficit limit, the latter for the second year in a row.

Table 12
Forecasts of fiscal developments in the euro area

(as a percentage of GDP)

		2001	2002	2003
Budget balance	European Commission ¹⁾	-1.5	-2.3	-2.1
	OECD ²⁾	-1.5	-2.2	-2.1
	Stability programmes ³⁾	-1.1	-0.9	-0.5
Cyclically adjusted budget balance	European Commission ¹⁾	-1.9	-2.0	-1.7
	OECD ^{2), 4)}	-1.5	-1.6	-1.4
	Stability programmes ³⁾	-1.2	-0.7	-0.4
Primary budget balance	European Commission ¹⁾	2.5	1.5	1.6
	Stability programmes ³⁾	2.7	2.8	3.1
Gross debt	European Commission ¹⁾	69.3	69.6	69.1
	Stability programmes ³⁾	68.7	67.2	65.5

Note: In 2001 and 2002 the proceeds from the sale of UMTS licences in the euro area as a whole are included. However, such proceeds are very limited and do not affect the figures reported in the table.

1) *European Economy 5/2002, Economic Forecasts, autumn 2002.*

2) *Economic Outlook, preliminary edition, November 2002.*

3) *European Commission figures on the basis of Member States' updated stability programmes, January 2002.*

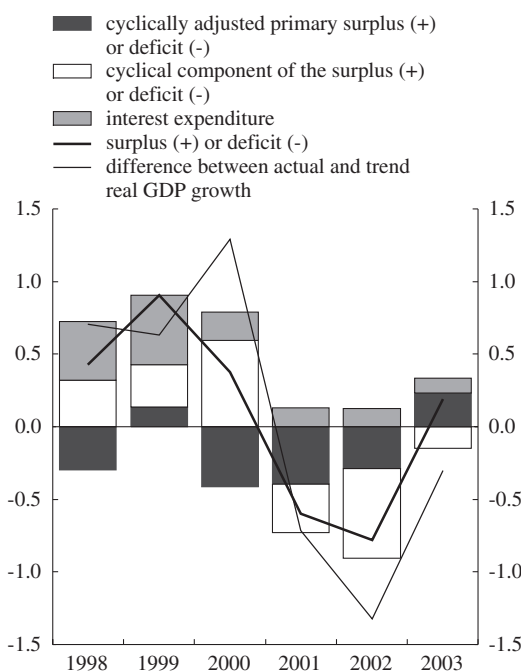
4) *Excluding Luxembourg.*

The deterioration in public finances mainly stems from the operation of automatic stabilisers in a considerably less favourable macroeconomic environment than anticipated. In 2002, the cyclical component will hence account for much of the expected total deficit deterioration (see Chart 34). Revisions of past fiscal data have also affected the evolution of budget positions in 2001, with noticeable carry-over effects to 2002 in some cases. Nonetheless, a setback in fiscal consolidation is manifest in the euro area average, in contrast to the improvement projected in the 2001 updated stability programmes and in the European Commission's spring forecasts. A number of temporary measures are projected to contain in a few countries the discretionary loosening in the current year. The cyclically adjusted overall balance ratio, however, is expected to worsen only marginally compared with 2001, as a declining ratio of interest expenditure compensates for much of the effect of the fiscal loosening in other budget items.

The euro area general government debt-to-GDP ratio is forecast to increase slightly in 2002, interrupting the gradual downward trend that began in the mid-1990s. Both lower nominal growth and higher deficits contribute to the rise in the debt ratio compared with earlier forecasts. The debt ratio is expected to increase in Italy, which has a very high public debt. In Germany, the debt ratio is likely to exceed the Maastricht limit of 60% of GDP again after having fallen below that value in 2001.

For 2003, the European Commission forecasts show a small improvement in the euro area-wide budgetary position, with the average deficit falling slightly to 2.1% of GDP. One country, Germany, is expected to have a deficit above 3% of GDP and two countries, France and Portugal, are forecast to be still very close to the reference value. As part of the improvement in budgetary positions stems from declining interest expenditure, the average primary surplus is expected to rise only marginally in the euro area. The average

Chart 34
Annual changes in the average euro area budgetary position and underlying factors
(in percentage points of GDP)



Sources: European Commission, autumn 2002, and ECB calculations.

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

debt ratio will resume its decline in 2003, although in France and Portugal it will continue to increase and come very close to the Maastricht limit.

The expected development of the overall deficit in 2003 reflects a mildly restrictive fiscal stance, although this fiscal tightening does not fully compensate for the loosening observed in 2001 and 2002. Against the background of real GDP growth expected to remain below trend on average for the year 2003, the cyclical component will continue to adversely affect the change in the budget balance next year, although by much less than in 2002. However, as in 2002, some temporary measures will contribute to containing the deterioration of the budget balance in a few countries.

Expenditure-based consolidation expected to resume in 2003

The European Commission forecasts that the euro area deficit ratio in 2002 will increase as a result of both decreasing revenue and increasing primary expenditure ratios (see Chart 35). The decline in the revenue ratio in 2002, which is very significant in a number of countries, is mainly due to the weak economic environment and is compounded by the lagged effects of the economic slowdown in 2001 on taxable income and the underestimation of the effect of tax reforms. The stock market downturn has also had negative effects on the value of asset holdings and thereby on the balance sheets and tax obligations of corporations and financial institutions. The implementation of additional tax cuts in 2002 is gradually further reducing the average tax burden in the euro area. These factors are contributing to the fall in

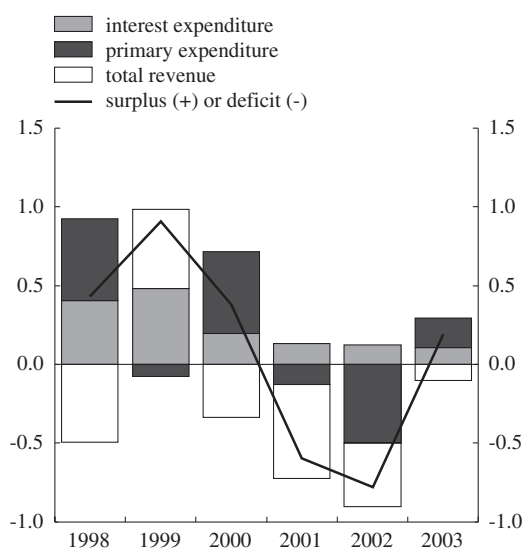
the direct tax revenue ratio, particularly from the corporate sector, while the slow growth in private consumption is adversely affecting indirect tax revenue.

The increase in the expenditure ratio in the euro area in 2002 broadly reflects unambitious government spending restraint in the initial budget plans, together with a weaker economic environment than had been anticipated in those plans. Primary expenditure overruns appear to have been fairly limited and mainly relate to unemployment benefit expenditure.

In 2003, the improvement in the euro area budget balance is projected to result from both declining interest and primary expenditure ratios. This is partly offset by lower revenue owing to further moderate tax cuts. Expenditure restraint regarding social payments and government consumption will underpin the expected slowdown of primary expenditure growth in 2003.

Chart 35
Annual changes in the average euro area budgetary position: contributions of revenue, primary expenditure and interest expenditure

(in percentage points of GDP)



Sources: European Commission, autumn 2002, and ECB calculations.

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

However, primary expenditure developments differ markedly from one country to the next, with some recording high rates of growth both in 2002 and in 2003. In some countries, deficits in the financing of social security are widening and overruns in health expenditure are recurrent. Fiscal deficits are at times also higher than expected at the local government level.

Significant fiscal imbalances prevail in some countries owing to insufficient fiscal consolidation in the past

Fiscal developments in the euro area as a whole do not reveal the extent of the divergence in the fiscal positions of individual countries resulting from their pursuit of very different fiscal strategies over recent years.

A group of four countries, comprising Germany, France, Italy and Portugal, is experiencing significant fiscal imbalances. On average, these countries mainly relied on tax increases to consolidate public finances in

the run-up to Monetary Union. Subsequently, they did not take advantage of stronger economic growth in the years 1998-2000 to complete the transition to sound budgetary positions. On the contrary, expenditure growth remained rather buoyant. When tax cuts introduced in 2001-2002 coincided with a weakening economic environment, fiscal positions deteriorated rapidly and considerably. As a consequence, in 2002 two of these countries are expected to record budget deficits above the 3%-of-GDP reference value and the other two will post deficits close to this threshold. The ECOFIN Council on 5 November 2002 decided that an excessive deficit exists in Portugal, and the European Commission has initiated an excessive deficit procedure against Germany and an early warning procedure against France.

The other countries are expected to continue reporting either adequate fiscal positions or only moderate imbalances. These countries had, on average, pursued expenditure restraint to consolidate public finances in the run-up to Monetary Union. Thereafter, having also completed the transition to sound public finances, they simultaneously reduced taxes and expenditures. Nevertheless, the economic downturn, coupled with some slippages and data revisions, have seen the return to non-negligible deficits in some of these countries. This shows how sensitive fiscal positions are to a sudden change in the economic environment and confirms the need for sufficient safety margins in budgetary positions.

The experience of this group of countries also shows how the Stability and Growth Pact should work over the cycle: with automatic stabilisers operating fully, fiscal balances can deteriorate in the downturn without breaching the 3% threshold, while they are expected to improve again in the next upswing.

Progress towards sound budgetary positions and fiscal structural reforms will build confidence in the institutional and economic environment

Fiscal developments in the euro area are still being affected by the incomplete transition to sound public finances and slow progress with fiscal structural reforms in a number of countries. Decisive policy action in both areas, however, is essential to secure a stable and growth-friendly economic environment. In this regard, compliance with the Stability and Growth Pact's main objective of attaining medium-term budgetary positions that are "close to balance or in surplus" has contributed significantly to fiscal consolidation and automatic stabilisation in the majority of euro area countries, as it strikes the right balance between promoting discipline while allowing flexibility in changing economic environments.

Given the worrisome developments in a number of euro area countries, some elements of an appropriate consolidation strategy were defined by the Eurogroup (following a European Commission suggestion) on 7 October 2002. This agreement was also fully supported by the ECB Governing Council in its statement of October 24 of this year (see page 7 of the November 2002 issue of the Monthly Bulletin). All countries with remaining imbalances should commit themselves to implementing 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.

While these commitments should be honoured by rapid and decisive action, only two countries of the four mentioned above, Germany and Portugal, are so far planning the required fiscal consolidation in 2003. However, for Germany the European

Commission forecasts expect the deficit to remain slightly above 3% in that year. In France and Italy, the cyclically adjusted budget balance is projected to remain broadly unchanged. In France, the absence of consolidation efforts is expected to drive the fiscal balance very close to the 3% reference value. In Italy and Portugal, the envisaged sizeable one-off consolidation measures (such as the sale of real assets) are anticipated to have only temporary and uncertain fiscal effects. Hence, significant efforts are needed if excessive deficits are to be avoided and credible consolidation paths are to prevail in all these countries. The next round of updated stability programmes will provide the first test of countries' commitment to the agreed approach.

In the remaining countries, those that do not show significant fiscal imbalances should let automatic stabilisers operate symmetrically to changes in the economic environment. However, fiscal activism is not warranted. Furthermore, governments should avoid relaxing budgetary vigilance in the "shadow" of the countries with large imbalances. To maintain their good fiscal performance and thereby contribute to sound public finances and institutional confidence in the euro area, governments should take appropriate adjustment measures when necessary.

Recent developments have also revealed the importance of timely and accurate reporting on fiscal developments. For a number of countries, fiscal balance estimates have had to be revised downwards substantially and were only submitted with considerable lags. Inaccurate projections and reporting induce a delayed implementation of policy measures and reduce the value of multilateral surveillance procedures.

From a long-term perspective, reaching budgetary positions in line with the Stability and Growth Pact will improve fiscal sustainability and create much-needed room for manoeuvre to cope with the eventual costs of population ageing. This will enhance macroeconomic stability and thereby support economic growth. However, it is unlikely to trigger the desirable dynamism in euro area economies. Despite the alleviation of the tax burden in recent years, average and marginal tax rates continue to be very high and incentives for labour force participation relatively low in most euro area countries. Social security system reform has been piecemeal, although further reform plans are now being considered. Similarly, public expenditure growth has often been stronger than planned and higher than needed to finance countries' ambitious tax cut plans, thereby contributing to recent fiscal slippages.

Expenditure restraint and reform are central to creating the conditions for the fiscal consolidation, increased confidence, high employment and more dynamic growth that are also the objectives of the European growth strategy. If taxes are to come down significantly in order to be more employment-friendly, expenditure ratios will also have to decline strongly and investment in human capital and infrastructure should be given priority over current transfers. In addition, high public debt and large ageing-related or other contingent liabilities require further expenditure restraint. Experience in a number of countries shows that this can only be attained by institutional reform that increases policy-makers' incentives to avoid overspending and reduce public commitments which are less productive.

5 Eurosystem staff macroeconomic projections for the euro area

On the basis of the information available up to mid-November 2002, Eurosystem staff have prepared projections for macroeconomic developments in the euro area. These projections were produced jointly by experts from both the ECB and the euro area national central banks in line with established procedures.¹ They are a biannual input into the Governing Council's assessment of economic developments and the risks to price stability under the second pillar of the ECB's monetary policy strategy.

The staff projections are based on a series of assumptions with regard to, inter alia, interest rates, exchange rates, oil prices and world trade outside the euro area. In particular, the technical assumption is made that short-term market interest rates will remain unchanged over the projection horizon. This assumption is made in order to facilitate discussion in the Governing Council by identifying the possible consequences for future price developments of leaving the key ECB interest rates unchanged over the projection horizon. For this reason, the staff economic projections will not in general be the best unconditional predictor of future outcomes, particularly over longer horizons, since monetary policy will always act to maintain price stability. In addition to the assumption for short-term interest rates, the technical assumption is made that bilateral euro exchange rates will remain unchanged. The technical assumptions with regard to long-term interest rates are based on market expectations, which present a slightly rising profile over the projection horizon. Fiscal assumptions are based on national budget plans for 2003, medium-term budget guidelines and other available information concerning budgetary developments in the individual euro area member countries.

To express the uncertainty surrounding projections, ranges are used to present the results for each variable. The ranges are based upon the differences between actual outcomes and previous projections carried

out by euro area central banks over a number of years. The width of the ranges is twice the average absolute value of these differences. In general, the ranges differ depending on the variable and the time horizon involved. They reflect both the different degrees of difficulty in projecting individual variables at different horizons and the discrepancies between the assumptions made for interest rates, exchange rates, etc. and the actual outturns for these variables. The tendency of most ranges to widen over the projection horizon reflects the increased uncertainty surrounding projections for the later years of the horizon.

Assumptions with regard to the international environment

The assumptions made with regard to the international environment imply that the recovery in world economic activity will continue over the projection horizon, leading to a resumption of stronger annual growth rates in 2003 and 2004.

After the low rates of growth observed in the course of 2001, global economic activity gained strength in early 2002 and quarterly growth rates have remained relatively stable for the remainder of the year. However, earlier expectations of the recovery gaining further momentum have not materialised and its pace has differed among world regions. The relatively smooth and quick transition from economic downturn to recovery in the United States has been tempered by concerns about corporate profitability and some evidence of past over-investment, notably in the new technology sectors. Global financial conditions have deteriorated, reflecting significant declines in equity prices, an increase in risk premia and continued high volatility in financial markets. The perception of a high level of risk amongst investors has also been reinforced by geopolitical tensions.

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

In this context, the rate of growth in world economic activity in early 2003 is expected to remain at about the level observed so far in 2002. Thereafter, with the factors underlying the current perception of high risk dissipating, world economic activity is expected to increase gradually over the remainder of the projection horizon. *World real GDP growth outside the euro area* is estimated to have reached about 3% on average for 2002, above the growth rate of 2.3% observed in 2001. It is projected to increase further to about 3.5% in 2003 and 4.5% in 2004. In the United States, growth is expected to gradually strengthen in 2003 and to remain strong in 2004, albeit at rates below those observed in the late 1990s. The economic recovery is expected to remain muted in Japan, but to be relatively robust in other developed economies, notably in the United Kingdom. Projections vary for the emerging markets. While economic growth in Latin America is projected to remain relatively weak in 2003 before rebounding in 2004, emerging markets in Asia are projected to continue their rapid economic expansion, supported by strong domestic demand in the region. The EU accession countries and other transition economies are projected to continue to grow at a relatively strong pace, given the more favourable external environment and the continued resilience in domestic demand.

Growth in world trade is assumed to follow a similar pattern to that of world real GDP growth. After a rate of 2.2% in 2002, growth in the *euro area's external export markets* is projected to pick up gradually in the course of 2003, resulting in an average annual growth rate for external export markets of around 5.5% in 2003. Euro area export market growth is expected to increase further to about 7% in 2004.

Based on the path implied by futures markets as from mid-November 2002, when the projections were finalised, *world oil prices* are assumed to decline modestly over the projection horizon, by some 10% in US dollar terms. By contrast, it is assumed that *non-*

energy commodity prices will increase in both 2003 and 2004, thereby reversing the pronounced decline seen in 2001.

Inflation rates declined in most industrialised countries outside the euro area during 2002, reflecting the delayed impacts of weaker economic activity and low non-energy commodity prices. They are expected to remain broadly unchanged on average in 2003, but to increase in 2004 as the recovery in economic activity advances.

Real GDP growth projections

After a virtual stagnation in the quarterly growth rates of euro area real GDP for most of 2001, euro area real GDP growth resumed in the first half of 2002 as external demand improved. The contribution to growth from domestic demand, however, remained close to zero. It is estimated that no further increases in euro area quarterly real GDP growth will have taken place in the second half of the year, but that domestic demand will have picked up somewhat, reflecting in particular a return to moderate positive growth rates in private consumption. Overall, adverse developments in global financial markets have also weighed on the euro area economy in 2002, but their impact is expected to dissipate over the remainder of the projection horizon.

It should be noted that the average annual growth rates in euro area real GDP and its demand components in 2002 will be mechanically reduced by carry-over effects from the low growth rates experienced in the second half of 2001.² The projections therefore show a decline in the average annual growth rate in euro area real GDP to 0.6 to 1.0% in 2002 from a rate of growth of 1.5% observed in 2001.

Real GDP growth is projected to increase to between 1.1 and 2.1% in 2003, and then to be

² Carry-over effects are explained in Box 6 of the December 2001 issue of the *Monthly Bulletin*.

in a range of between 1.9 and 2.9% in 2004. Mirroring developments in the external environment, the recovery in domestic demand growth is projected to gradually gain strength in 2003 and 2004. Inventory investment is projected to provide a small positive contribution to real GDP growth over the horizon. The contribution of net exports to GDP growth is projected to become broadly neutral in both 2003 and 2004.

Among the domestic expenditure components, *private consumption* growth is estimated to have been in a range of 0.4 to 0.8% in 2002. It is projected to increase to between 1.1 and 2.1% in 2003 and to be in a range of 1.5 to 3.1% in 2004. Consumption expenditure is projected to develop broadly in line with growth in real disposable income, which is supported by lower inflation, a positive contribution of net fiscal transfers in 2003 and, in the latter part of the projection horizon, by a recovery in employment growth. The household savings ratio increased in 2001. It is projected to decline slightly over the projection horizon, but nevertheless to remain at a relatively high level. On the basis of current budget plans it is assumed that the contribution to real GDP growth from *government consumption* will decline over the projection horizon.

After negative quarterly rates of growth in 2001 and the first half of 2002, *total fixed investment* is projected to recover somewhat in the remainder of 2002. The average annual rate of growth is estimated to have been between -2.9 and -1.9% in 2002, but is projected to rebound to between -0.6 and 2.4% in 2003 and to be in a range of 1.4 to 4.6% in 2004. This gradual recovery in total investment results mainly from *business investment*, which is supported by the improvement in the global and domestic economic environment. Nevertheless, business investment is projected to remain subdued in 2003 as the decline in share prices and the negative impact on firms' profitability of the prolonged period of slow growth have

made financing conditions in some segments of the corporate sector less favourable. The level of *housing investment* is estimated to have declined in 2002 and is projected to be broadly unchanged in 2003 and 2004. *Public investment* growth is projected to remain moderate over the horizon.

After posting negative quarterly rates of change for five successive quarters, both exports and imports – including intra-euro area trade – have returned to positive quarterly growth rates in the second quarter of 2002. The average annual rate of change in exports is estimated to have remained at -0.9 to 1.9% in 2002. It is projected to increase to a range of 2.4 to 5.6% in 2003 and to be between 3.9 and 7.1% in 2004. The projection for exports reflects the increase in export market growth, but also a slight decline in the euro area's external market share related to some losses in competitiveness. The average annual rate of change in imports is estimated to have remained in a range of -2.4 to 0.2% in 2002. It is projected to increase to between 2.6 and 6.0% in 2003 and to be between 4.1 and 7.5% in 2004, broadly reflecting the profile of total final expenditure in the euro area. As a result of the developments in the first half of the year, the net trade contribution to GDP growth is estimated to have been strongly positive in 2002. The projections for export and import growth imply that it will turn broadly neutral in both 2003 and 2004.

After having remained very weak in the course of 2002, *total employment growth* in the euro area is projected to recover moderately in 2003 and to strengthen further in 2004. This pattern reflects, with a lag, the projected cyclical developments in economic activity. Labour supply is projected to rise as a result of increasing participation rates, although at a slower pace than in recent years. These projections for labour supply and employment imply that the unemployment rate will increase slightly in 2003 before resuming its decline in 2004.

Price and cost projections

On the basis of the projection assumptions and other available information, the average rate of increase in the overall *Harmonised Index of Consumer Prices (HICP)* is projected to have been in a range of 2.1 to 2.3% in 2002, after an increase of 2.5% in 2001. It is projected to decline to between 1.3 and 2.3% in 2003 and to be between 1.0 and 2.2% in 2004. The downward shift in the ranges projected for the rate of increase in the overall HICP in 2003 reflects lower increases in the non-energy component, whereas for 2004 the downward shift is largely explained by the assumed decline in energy prices. Overall, the projection for the rate of increase in the overall HICP thus reflects an expected limited reduction in domestic cost pressures and a small negative contribution from import prices.

Having declined markedly in the course of 2002 as a result of the unwinding of previous oil price increases and weak world trade, the annual rate of change in import prices is projected to increase gradually in the course of 2003. Nonetheless, the average annual rate of change in import prices for 2003 is projected to remain slightly negative, being dampened by the appreciation of the effective exchange rate of the euro observed since spring 2002. It is projected to turn positive in 2004 in line with the recovery in world trade prices and export demand.

Despite the weakening in economic activity, nominal wage growth increased in the course of 2001, resulting in an average growth rate of 2.8% for the year as a whole, and is estimated to have remained broadly unchanged in 2002. Based on current wage settlements and other available information, the projections assume some further increases in nominal wage growth for both 2003 and 2004.

The projections for *unit labour costs* reflect the cyclical recovery in labour productivity and the higher wage increases. Unit labour costs increased sharply in 2001, due to the cyclical weakening in labour productivity growth and stronger wage growth, but eased somewhat in the first half of 2002. As economic activity picks up, labour productivity growth is projected to recover over the horizon, moving back to close to its long-term average. As a result – despite the increases in wage growth – unit labour cost growth is projected to decline. In the context of weak economic activity, *profit margins* were squeezed in 2001 as a result of higher costs. They are estimated to have remained restrained in 2002, but projected to widen over the projection horizon as the recovery gathers momentum.

As a result of the factors mentioned above, the rate of increase in the *GDP deflator at market prices* – which reflects the behaviour of unit labour costs, profit margins and

Table 13

Macroeconomic projections

(average annual percentage changes)

	2001	2002	2003	2004
HICP	2.5	2.1 – 2.3	1.3 – 2.3	1.0 – 2.2
Real GDP	1.5	0.6 – 1.0	1.1 – 2.1	1.9 – 2.9
Private consumption	1.9	0.4 – 0.8	1.1 – 2.1	1.5 – 3.1
Government consumption	1.9	1.3 – 2.5	0.7 – 1.7	0.8 – 1.8
Gross fixed capital formation	-0.4	-2.9 – -1.9	-0.6 – 2.4	1.4 – 4.6
Exports (goods and services)	3.0	-0.9 – 1.9	2.4 – 5.6	3.9 – 7.1
Imports (goods and services)	1.5	-2.4 – 0.2	2.6 – 6.0	4.1 – 7.5

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

Box 7

Comparison with June 2002 Projections

The major changes to the projection assumptions compared with the Eurosystem staff macroeconomic projections published in the Monthly Bulletin in June 2002 are a downward revision of growth in the euro area external export markets by about 1½ percentage points in 2003 and a higher nominal effective exchange rate of the euro. The latter reflects the appreciation of the euro by some 4% since June 2002. A further important change in assumptions is a downward shift in market expectations for long-term interest rates by some 50 basis points.

The ranges projected for real GDP growth are now shifted downwards for both 2002 and 2003. The downward revisions reflect the projected delay in the recovery as compared with the June 2002 projections. Although the revisions are, to a limited extent, explained by the changes in projection assumptions for world trade and the euro exchange rate, they predominantly reflect the lower projections for growth in euro area domestic demand. The downward revision of domestic demand growth takes into account the impact of high uncertainty surrounding the current economic environment and the related weakening in global financial markets. Against this background, the projected delay in the recovery of investment is explained by a combination of lower growth in external demand and weaker short-term profitability prospects, whereas private consumption is projected to be dampened somewhat by wealth effects.

Notwithstanding the weaker projections for euro area domestic demand, the range projected for the annual rate of increase in the overall HICP in 2003 has been shifted downwards only marginally. This is explained by upward revisions of projections for domestic cost factors. Based on wage settlements and other available information, the assumptions for nominal wage growth have only been revised downwards slightly compared with the June 2002 projections. In combination with lower labour productivity growth the projections for unit labour cost growth have therefore been revised upwards. In addition, despite weaker projected economic activity, the downward revisions to the projections for profit margins are small, because firms are expected to attempt to restore margins after the prolonged period of weak profitability.

Comparison of macroeconomic projections

(average annual percentage changes)

	2001	2002	2003
HICP – December 2002	2.5	2.1 – 2.3	1.3 – 2.3
HICP – June 2002	2.5	2.1 – 2.5	1.3 – 2.5
Real GDP – December 2002	1.5	0.6 – 1.0	1.1 – 2.1
Real GDP – June 2002	1.5	0.9 – 1.5	2.1 – 3.1

indirect taxes – is estimated to have been in a range of 2.2 to 2.4% in 2002 after 2.4% in 2001. It is projected to be between 1.4 and 2.1% in 2003 and to increase slightly in 2004, as the recovery in economic activity advances. *Administered prices* and *indirect taxes* will have some small upward impact on prices in both 2002 and 2003.

Developments in the non-energy and non-food components of the HICP are projected

to broadly reflect the overall pattern of the GDP deflator. Inflation in non-energy industrial goods prices declined gradually in 2002 and is projected to further decline slightly in 2003, as the impacts of earlier import price decreases pass through the supply chain and the rate of capacity utilisation remains relatively low. Inflation in services prices increased in 2002, owing to higher unit labour cost growth, a rise in administered prices and indirect taxes, and

Box 8**Forecasts by other institutions**

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

Despite different assumptions, there is a clear consensus among the forecasts currently available from other institutions that euro area economic activity will gain further strength in both 2003 and 2004. The upturn in activity is expected to be underpinned by both higher domestic demand and a recovery in foreign demand. For 2003, the European Commission, the OECD, the Consensus Economics Forecasts and the Survey of Professional Forecasters forecast real GDP growth of 1.7 to 1.8%, while, according to the IMF, growth could be somewhat higher at 2.3%. For 2004, all available forecasts predict a further resumption in euro area GDP growth.

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

	Date of release	2002	2003	2004
European Commission	November 2002	0.8	1.8	2.6
IMF	September 2002	0.9	2.3	n.a.
OECD	November 2002	0.8	1.8	2.8
Consensus Economics Forecasts	November 2002	0.8	1.7	n.a.
Survey of Professional Forecasters	November 2002	0.8	1.8	2.5

Sources: European Commission Economic Forecasts Autumn 2002; IMF World Economic Outlook September 2002; OECD Economic Outlook No. 72; Consensus Economics Forecasts and the ECB's Survey of Professional Forecasters.

All forecasts show a gradual decrease in consumer price inflation in 2003, with average annual inflation falling to 2.2% according to the OECD, to 2.0% according to the European Commission and to 1.6% according to the IMF. The differences between these forecasts are partially explained by different assumptions for the level of oil prices over the horizon. The Consensus Economics Forecasts and the Survey of Professional Forecasters predict a rate of 1.8 to 1.9% for 2003. For 2004, all available forecasts expect the inflation rate to remain broadly at the level predicted for 2003.

Table B: Comparison of forecasts for euro area consumer price inflation¹⁾*(annual percentage changes)*

	Date of release	2002	2003	2004
European Commission	November 2002	2.3	2.0	1.8
IMF	September 2002	2.1	1.6	n.a.
OECD	November 2002	2.4	2.2	2.0
Consensus Economics Forecasts	November 2002	2.1	1.9	n.a.
Survey of Professional Forecasters	November 2002	2.2	1.8	1.9

Sources: European Commission Economic Forecasts Autumn 2002; IMF World Economic Outlook September 2002; OECD Economic Outlook No. 72; Consensus Economics Forecasts and the ECB's Survey of Professional Forecasters

1) Private consumption deflator for IMF, CPI for Consensus Economics Forecasts, HICP otherwise.

cash changeover effects in the earlier part of the year. As unit labour cost growth starts to decrease, some limited decline in service price inflation is projected for 2003.

Unprocessed food prices are also expected to contribute to the decline in the annual rate of increase in the overall HICP in 2003.

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

Recovery of the world economy lost momentum

Following a relatively rapid pace earlier in 2002, the global economic recovery appears to have temporarily lost some momentum. In particular, there have been signs that the contributions to growth by private consumption in the United States and by net exports in Japan may have declined in the fourth quarter. Moreover, financial market developments and geopolitical tensions have added to uncertainty about growth prospects. However, the rate of growth in world economic activity is expected to gradually increase in the course of 2003 beyond the levels observed in 2002 (see the section entitled "Eurosysteem staff macroeconomic projections for the euro area").

A number of factors appear likely to foster and sustain a gradual pick-up in global growth. First, there are indications that a reversal is under way in some of the developments that were behind the economic downturn, such as the strong decline in demand for IT goods. Second, the capacity of the corporate sector to absorb recessionary shocks has increased during the past decade reflecting, in particular, more flexible production structures. Moreover, in some countries, notably the United States, there has been progress in increasing competition, thereby reducing underlying inflationary pressures and allowing a significant economic policy stimulus.

Looking at individual countries, in the United States, following relatively strong GDP growth in the third quarter of 2002, the latest high-frequency data point to a slowdown of private consumption growth in the fourth quarter –

a main contributor to the economic recovery since 2001. For the third quarter of 2002, preliminary data show that real GDP growth was 4.0% on a quarter-on-quarter annualised basis. The major factor behind the increase in real GDP growth was personal consumption expenditures. In particular, the durable goods component of personal consumption grew by 23% (quarter-on-quarter, annualised), driven mainly by the automotive sector which benefited from substantial retail incentives. Government spending, private investment and exports also contributed to real GDP growth in the third quarter of 2002, albeit to a much lesser extent. The contributions of these components to GDP growth were partly offset by high imports.

Looking forward, economic growth in the United States is likely to be contained in the short term by the lagged negative wealth effect from past equity market losses as well as a slowdown in the growth of durable goods' consumption (particularly car purchases) before gradually strengthening. Concerning private business investment, there are still no clear signs that a significant recovery can be expected in the near term. In contrast, public spending growth is expected to remain strong in the short term. Turning to the external sector, the contribution of net trade to GDP growth is likely to strengthen, in line with the competitiveness gains accompanying the depreciation of the US dollar vis-à-vis the currencies of its main trading partners during 2002.

The rise in energy costs contributed to an increase in annual CPI inflation to 2.0% in October 2002, while CPI inflation excluding food and energy remained at 2.2%. The low

capacity utilisation rate and continuing strength in productivity growth are expected to limit domestic inflationary pressure in the short term.

In this context, at its meeting of 6 November 2002, the Federal Open Market Committee (FOMC) reduced its target for the federal funds rate and the discount rate by 50 basis points to 1.25% and 0.75% respectively. In addition, the FOMC indicated that the risks to the economy are now “balanced”, while in its statement of 24 September 2002 risks had been identified as weighting mainly towards economic weakness.

In Japan, the economy continued its gradual recovery, albeit at a slower rate. In the third quarter of 2002, real GDP growth slowed to 0.7% quarter on quarter, after standing at 1.0% in the second quarter. This development was the result of a decline in the contribution from net exports to overall growth from +0.3 percentage point to -0.1 percentage point, reflecting a sharp slowdown in export growth. Private consumption spending and inventory investment were the main factors supporting overall GDP growth while business fixed investment spending contracted.

Looking forward, the economic recovery is expected to remain muted. Prospects for growth depend, to a large extent, on developments in Japan’s major export markets. Private consumption is likely to be weighed down by the continued weakness in income growth and the labour market situation while business fixed investment is expected to remain subdued. The implementation of the recently announced plans to deal with the structural problems in the banking sector, most notably the non-performing loan problem, may also weigh on the growth outlook.

Deflationary pressures in Japan continue, with the annual rate of change of the CPI declining to -0.9% in October compared with -0.7% in September. At the same time, the

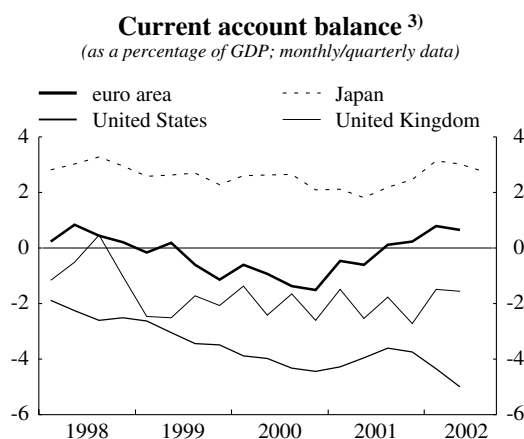
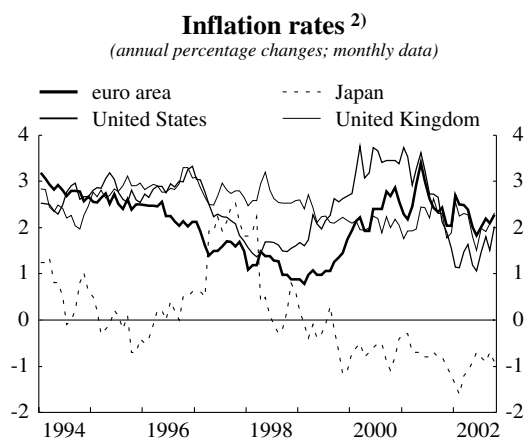
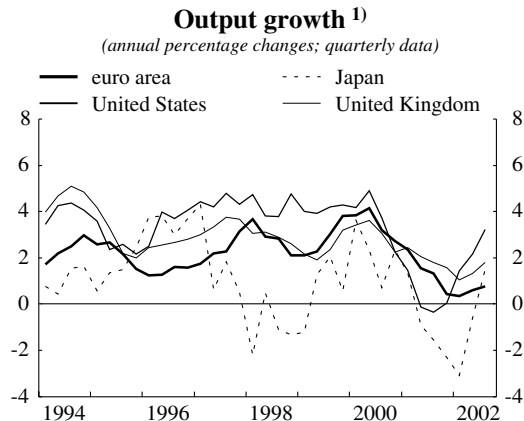
annual rate of change of the domestic WPI stood at -0.5% in October compared with -0.9% in September. On 18 September the Bank of Japan announced that it would explore possible policy measures to enhance financial institutions’ efforts to reduce their shareholdings. On 11 October it announced the outline of a stock purchasing plan involving the purchase of JPY 2 trillion worth of shares at market prices from commercial banks with shareholdings exceeding their Tier 1 capital. Furthermore, on 30 October the Bank of Japan decided to raise its target range for the outstanding balance of the current accounts it holds to JPY 15-20 trillion. Moreover, it increased its monthly outright purchases of long-term government bonds to JPY 1.2 trillion.

In the United Kingdom, quarterly real GDP growth picked up to around trend in the third quarter to stand at 0.8%, which was somewhat higher than in the second quarter. Despite a slowdown in private consumption growth, household spending remained the main contributory factor to growth during the third quarter. Continuing house price increases of around 25-30% per annum provided strong support to household spending, despite falls in financial wealth and real disposable income growth. By contrast, investment and net foreign trade made a negative contribution to real GDP growth during the third quarter. An increase in the cost of financing, associated with the declines in equity prices, and the possible deferral of some capital spending owing to financial market uncertainty are likely to have depressed business investment. Following a strong recovery in the second quarter, exports fell back again during the third quarter, reflecting the weakness in the global economy.

Inflation has been hovering below the target of 2.5% for almost the whole year. After an average increase of 2.0% in the third quarter, the Retail Price Index excluding mortgage interest payments (RPIX) rose at an annual rate of 2.3% in October. At the same time annual HICP inflation, at 1.4%, was considerably lower than RPIX inflation, partly

Chart 36

Main developments in major industrialised economies



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

1) Eurostat data are used for the euro area and the United Kingdom; for the United States and Japan national data are used.

2) Data for the euro area up to 1995 are estimates for the HICP based on national CPI data; after 1995 HICP data are used. The RPIX index is used for the United Kingdom.

3) ECB and Eurostat data are used for the euro area and the United Kingdom; for the United States and Japan national data are used. For all countries, figures refer to seasonally adjusted data for both GDP and the current account.

due to the fact that the strongly increasing housing cost component of the RPIX is not included in the HICP index.

The short-term prospects for the UK economy appear to depend mostly on the strength of the global recovery. On the domestic side, a continuing source of uncertainty relates to the future development of house prices and its potential impact on private consumption.

In Denmark, quarter-on-quarter real GDP growth fell to -1.0% in the third quarter of 2002, down from 1.8% in the previous quarter, taking the annual real GDP growth rate to 0.9%. This development was due mainly to a decrease in inventories and exports. After an average increase of 2.4% in the third quarter, HICP inflation rose at an annual rate of 2.7% in October.

In Sweden, quarter-on-quarter real GDP growth increased slightly to 0.6% in the second quarter, mainly owing to a recovery in household consumption and investment. While industrial activity was weak in the third quarter, private consumption appears to have continued to grow strongly. Annual HICP inflation stood at 1.7% in October compared with 1.5% in the third quarter.

In Switzerland, recent data releases have confirmed the delay in the economic recovery. Although real GDP growth was positive in the third quarter of 2002 (1.3% quarter-on-quarter, annualised), economic activity has remained weak, as reflected in the significant contraction in domestic demand. Moreover, leading indicators are pointing to subdued growth in the short term. Regarding inflation, the recent decline in oil prices has contributed to a moderation in inflation. In November the year-on-year rate of inflation was 0.9% compared with 1.2% in October.

Economic growth in the larger EU accession countries continues to be relatively sustained, as the consequences of a weak international environment have so far been offset by the impact of strong fiscal impulses. At country

level, in the Czech Republic output growth has been mainly driven by domestic demand, as confirmed by second quarter figures. Looking ahead, GDP growth may slow down, as fiscal policy is expected to be less supportive and investment could be affected by the strength of the Czech koruna. In Hungary, year-on-year real GDP growth increased slightly in the second quarter, as private consumption continued to grow at a rapid pace. However, a mild deceleration in economic growth is anticipated, as net trade is expected to contribute negatively to GDP growth in the second half of 2002. In Poland, the outlook continued to improve, but only very gradually. This was confirmed by a moderate increase in annual GDP growth in the second quarter. Following a prolonged period of negative growth, the manufacturing sector in Poland continues to show signs of economic revival.

In Turkey, GDP growth increased significantly in the second quarter of 2002. The main driving force was the very rapid increase in inventories while private and public consumption also started to recover. Strong inflationary pressures prevail as confirmed by data for September and October. In Russia, several indicators point to an improvement in the economic outlook. In the second quarter of 2002, real GDP growth increased to over 4% in annual terms, sustained in particular by brisk consumption growth. Output growth remains buoyant across all sectors of the economy. However, the persistence of high inflationary pressures remains a source of concern.

In non-Japan Asia, there are increasing signs that the strong recovery has begun to moderate, as export and manufacturing growth rates are beginning to stabilise across economies. Nevertheless, domestic demand continues to support growth, reflecting higher household income and more favourable economic policy conditions.

Within the region, China continues to outperform its neighbours, posting strong third quarter real GDP growth estimated at

8.1% year on year. Strong fixed asset investment growth (of around 25% year on year in the year to date), supported by robust growth in foreign direct investment, and buoyant consumption, as reflected by retail sales growth of about 9% year on year, have contributed to this development. In parallel, deflationary pressures related primarily to structural factors persisted, with annual CPI inflation standing at -1% in October.

In Korea, real GDP growth declined slightly to an estimated 5.8% year on year in the third quarter. Exports, in particular of IT goods, continued to fuel the expansion, posting year-on-year growth of 16.7%. Similarly, production activity in the manufacturing sector kept up its growth momentum. However, private consumer spending growth fell on account of tighter financial conditions. Against this background, there have been moderate upward pressures on consumer prices. In Singapore and Taiwan, preliminary real GDP growth in the third quarter of 2002 was estimated at 3.9% and 4.8% year on year respectively. While growth in exports to China, particularly from Taiwan, has been surging, there are indications that foreign demand, predominantly from the United States and Japan, is beginning to weaken. In the meantime, deflationary pressures have reappeared.

Overall, the general outlook for non-Japan Asia remains positive, partly thanks to economic policy responses, although a less buoyant external environment is expected to weigh on recovery prospects.

In Latin America, the latest information confirms the divergence in the economic performance of the largest countries. The region's outlook is bleaker than previously envisaged owing to financial instability in Brazil and the continuing recession in Argentina. In Brazil, despite some signs of improvement, financial market indicators remain volatile, with high interest rates still causing concern as regards the future servicing of public debt. It is still too early to anticipate whether the country's financial turbulence will ease

following the recent election of a new government. In Argentina, there are tentative signs of economic recovery. However, the stabilisation of the peso needed to reduce inflation may harm the pick-up in exports, while domestic demand continues to be constrained by limits on bank account withdrawals and a lack of credit. By contrast, Mexico continues to show signs of economic recovery supported by domestic demand.

Nevertheless, export activity has remained sluggish despite the ongoing depreciation of the peso.

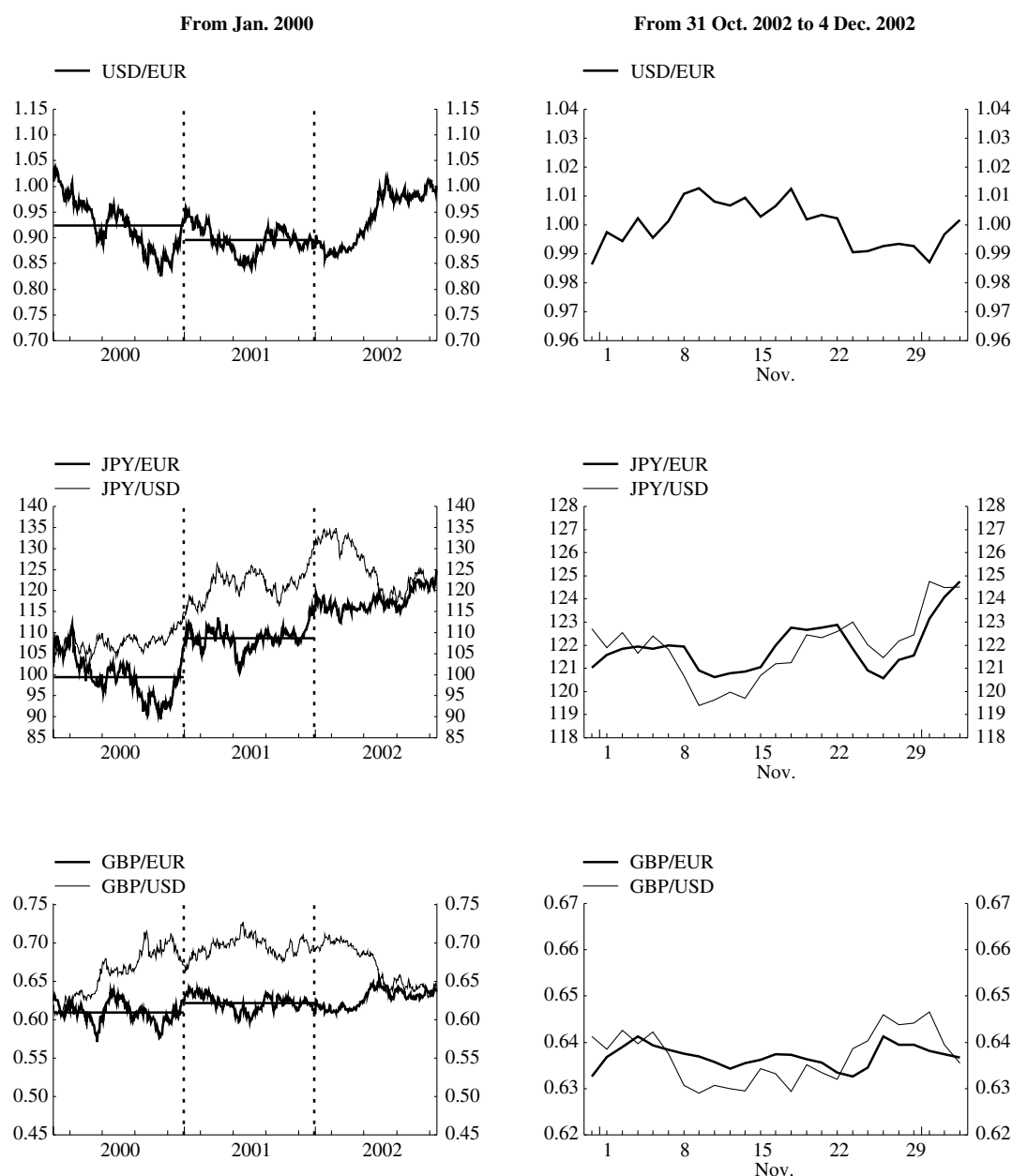
Euro appreciated in November and early December 2002

In November and early December 2002 developments in foreign exchange markets

Chart 37

Patterns in exchange rates

(daily data)



Source: ECB.

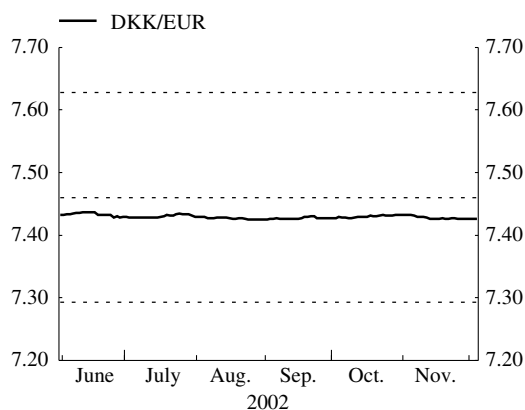
Note: The scaling of the charts is comparable in each column. Horizontal lines show annual averages.

saw the euro appreciating against all major currencies. Particularly pronounced was the appreciation of the single currency vis-à-vis the Japanese yen, and to a lesser extent, against the US dollar.

In the first half of November 2002, the euro appreciated against the US currency seemingly in response to market concerns over the strength of the US economic recovery and a widening interest rate differential in favour of the euro area (see Chart 37). In the second half of the month, the release of more favourable consumer and employment data in the United States and the upward revision of US GDP growth for the third quarter of 2002 supported the US dollar. In early December, however, the euro rebounded and it was quoted, on 4 December, at USD 1.00, i.e. 1.6% above its level at the end of October and 11.9% stronger than its 2001 average.

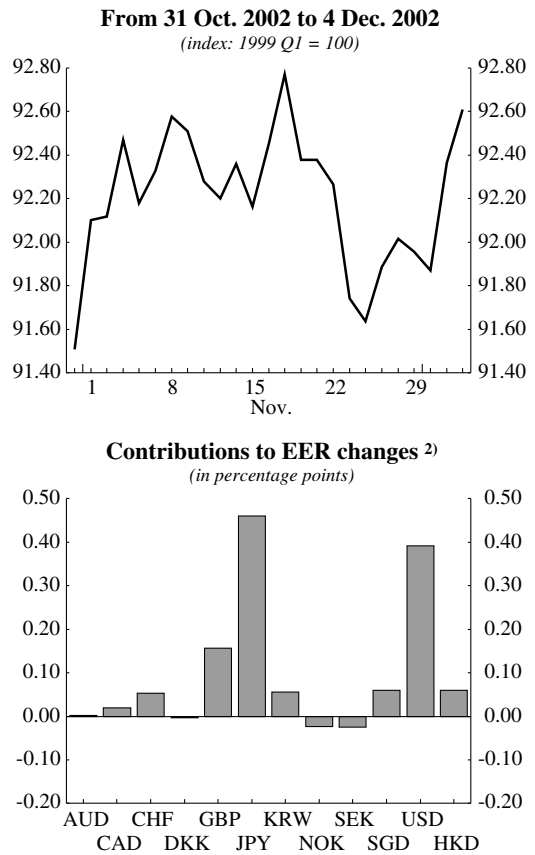
Against the Japanese yen the euro fluctuated in a rather wide range of JPY 120-125 in the course of November and early December 2002. Following a period of stability in the first half of November, the yen came under some temporary depreciating pressure in the third week of the month, amid a downward revision of the Bank of Japan's assessment of the country's economic outlook (see

Chart 38
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).

Chart 39
The effective euro exchange rate and its decomposition¹⁾
(daily data)



Source: ECB.
1) An upward movement of the index represents an appreciation of the effective exchange rate against 12 partner currencies.
2) Changes are calculated, using trade weights, against 12 major trading partners.

Chart 37). The announcement of a smaller than anticipated supplementary fiscal package may also have contributed to the decline in the yen. In early December the downward pressure on the Japanese currency regained momentum and on 4 December the euro stood at JPY 124.75, i.e. 3.1% higher than the level seen at the end of October and 14.8% stronger than its 2001 average.

In November and early December 2002, the pound sterling experienced a moderate depreciation against the euro, while it appreciated vis-à-vis the US dollar. It appears that technical trading factors accounted mostly for these developments.

On 4 December the euro was quoted against the pound sterling at GBP 0.64, i.e. 0.6% stronger than at the end of October and almost 2.5% higher than its 2001 average.

As far as the other European currencies are concerned, the Danish krone continued to trade slightly below its central parity within ERM II over the period under review (see Chart 38). The euro remained broadly unchanged vis-à-vis the Swedish krona, while it appreciated slightly against the Swiss franc. On 4 December the euro traded against the Swedish krona at SEK 9.05, i.e. 2.2% weaker than its 2001 average, while it stood at CHF 1.47, which was still 2.5% below its average level in 2001.

In the light of the above developments, the nominal effective exchange rate of the euro – as measured against the 12 major trading partners of the euro area – was, on 4 December, 1.2% higher than its end-October level and 6.4% above its average level in 2001 (see Chart 39). As far as measures of the international price and cost competitiveness of the euro area – i. e. the

CPI, PPI and ULCM-based real effective exchange rate indices of the euro (see Chart 40) – are concerned, these mainly reflect the sizeable nominal effective appreciation of the single currency since the second quarter of this year.

Current account surplus increased in September 2002

The euro area current account registered a surplus of €8.0 billion in September 2002 compared with a surplus of €0.7 billion in September 2001. This was primarily due to an increase in the goods surplus (from €6.0 billion to €11.3 billion) combined with a rise in the surplus for services (from €0.4 billion to €3.9 billion), which were only partially offset by a small increase in the income deficit. Meanwhile, the deficit for current transfers remained broadly unchanged.

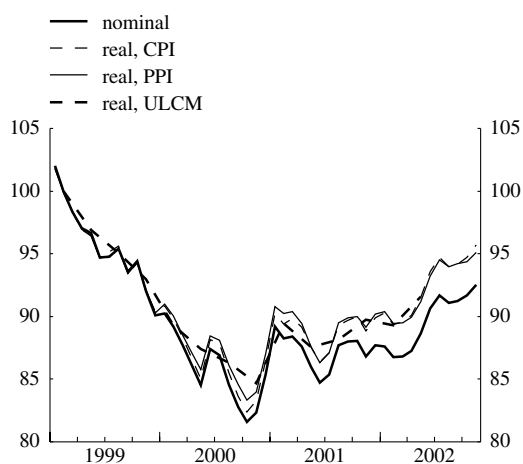
During the first three quarters of 2002, the cumulated current account balance shifted from a deficit of €22.9 billion in the same period last year to a surplus of €37.2 billion. This development resulted largely from a substantial increase in the goods surplus (of €51.1 billion) and, to a lesser extent, from a small rise in the services surplus (of €6.5 billion), while the deficits for both income and current transfers declined slightly. The rise in the goods surplus was mostly due to a significant decline in the value of imports (of 4.9%) – partly reflecting the lower average price of oil imports in the first nine months of this year compared with the same period last year – combined with a small increase in the value of exports (of 2.1%).

Turning to month-on-month developments on the basis of seasonally adjusted data, the value of exports of goods in September remained at roughly the same level as in August, while imports showed a slight increase in September compared with the previous month (see Chart 41). As regards services, the value of exports increased by 7.8% in September compared with August, while the value of imported services registered a marginal

Chart 40

Nominal and real effective euro exchange rates¹⁾

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



Source: ECB.

1) An upward movement of the index represents an appreciation of the euro. The latest observations for monthly data are November 2002. In the case of the ULCM-based real EER, the latest observation is for Q2 2002 and is partly based on estimates.

decline over the same period. Looking at longer-term developments, the seasonally adjusted values of both exports and imports of goods and services in the third quarter remained at roughly the same level as in the first two quarters of 2002.

These sluggish developments in trade seem to be primarily associated with weak demand

conditions both inside and outside the euro area. For example, subdued domestic demand, which has been particularly acute in the import-intensive expenditure categories such as fixed capital expenditure, is consistent with the strong decline in the value of capital goods imports relative to consumption goods imports, while the fall in oil prices as well as weak euro area demand have contributed to

Table 14
Balance of payments of the euro area

(EUR billions; not seasonally adjusted)

	2001 Jan. - Sep.	2001 Sep.	2002 Jan. - Sep.	2002 July	2002 Aug.	2002 Sep.
Current account balance	-22.9	0.7	37.2	2.6	9.7	8.0
Credits	1279.6	134.1	1265.9	148.6	132.8	139.5
Debits	1302.5	133.3	1228.7	146.0	123.1	131.5
Goods balance	45.2	6.0	96.2	14.2	11.7	11.3
Exports	768.4	81.1	784.2	93.0	80.8	88.4
Imports	723.2	75.1	688.0	78.8	69.1	77.1
Services balance	1.4	0.4	7.9	0.9	1.3	3.9
Exports	240.2	26.2	242.9	29.7	28.4	29.4
Imports	238.7	25.8	235.0	28.8	27.1	25.5
Income balance	-35.4	-1.1	-34.7	-9.3	-0.1	-2.6
Current transfers balance	-34.1	-4.6	-32.1	-3.2	-3.2	-4.5
Capital account balance	7.6	0.1	8.9	0.5	0.7	1.2
Financial account balance	-8.4	-21.3	-92.1	-11.2	-11.8	-20.3
Direct investment	-118.0	-15.6	-24.7	-3.6	1.7	-3.4
Abroad	-227.6	-20.4	-120.2	-9.3	-0.2	-13.5
Equity capital and reinvested earnings	-137.2	-5.5	-97.7	-12.2	-5.7	-10.4
Other capital, mostly inter-company loans	-90.4	-14.9	-22.5	2.9	5.5	-3.1
In the euro area	109.6	4.8	95.5	5.7	1.9	10.1
Equity capital and reinvested earnings	86.5	6.9	59.2	2.2	2.1	6.4
Other capital, mostly inter-company loans	23.1	-2.1	36.3	3.5	-0.3	3.7
Portfolio investment	32.8	47.2	49.8	14.2	4.5	15.8
Equities	86.9	38.1	29.2	-4.2	3.3	12.1
Assets	-83.7	13.9	-36.9	-7.2	4.0	12.8
Liabilities	170.6	24.2	66.1	3.0	-0.7	-0.7
Debt instruments	-54.0	9.1	20.6	18.4	1.1	3.8
Assets	-117.2	1.0	-103.1	-8.7	-7.5	-10.9
Liabilities	63.2	8.2	123.7	27.1	8.6	14.7
Memo item:						
Combined net direct and portfolio investment	-85.2	31.6	25.1	10.6	6.2	12.4
Financial derivatives	3.1	-0.6	-9.2	-7.0	-1.9	0.9
Other investment	59.1	-50.7	-107.1	-12.3	-17.8	-29.8
Reserve assets	14.6	-1.6	-0.8	-2.5	1.8	-3.8
Errors and omissions	23.7	20.5	45.9	8.1	1.4	11.1

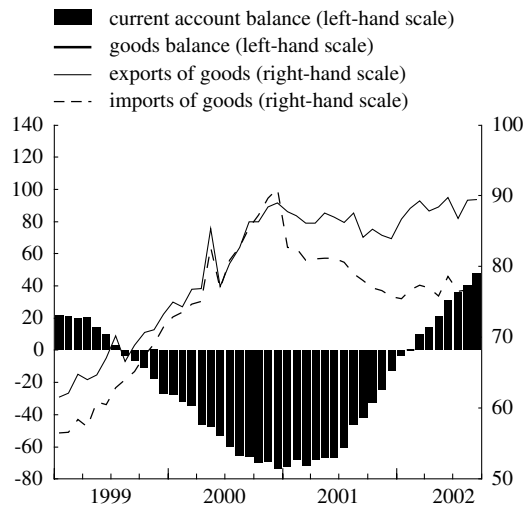
Source: ECB.

Notes: Figures may not add up due to rounding. For the financial account, a positive sign indicates an inflow, a negative sign an outflow; for reserve assets, a negative sign indicates an increase, a positive sign a decrease. A detailed set of tables on Euro 12 balance of payments data can be found on the ECB's website.

Chart 41

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

(EUR billions; seasonally adjusted)



Source: ECB.

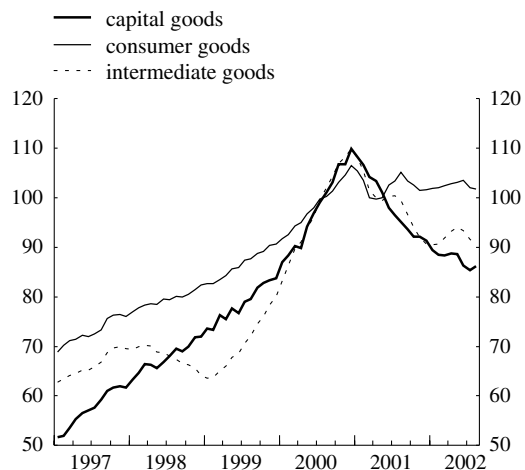
Note: Data refer to the Euro 12. Balances are cumulated over 12 months; exports and imports of goods are monthly values.

the sharp decrease in the value of intermediate goods imports (see Chart 42). Meanwhile, the sluggishness of extra-euro area exports seems to be spread across most major export markets, in particular the

Chart 42

Extra-euro area import values for selected commodities¹⁾

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



Sources: Eurostat and ECB calculations.

1) Latest observations are for August 2002.

United States, the United Kingdom and the EU accession countries.

Sizeable net inflows of portfolio investment in September 2002

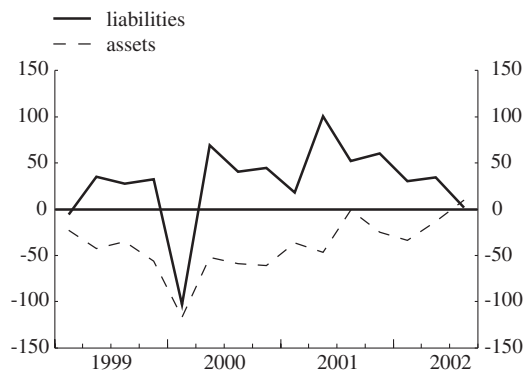
The euro area recorded net inflows of €12.4 billion of combined direct and portfolio investment in September 2002. Net portfolio investment inflows of €15.8 billion accounted for this development, as the direct investment account of the euro area only registered small net outflows of €3.4 billion.

The net direct investment outflows in September follow similar developments to those observed over the past 18 months. Net outflows of equity direct investment (€3.9 billion) more than outweigh the very small net inflows for the category other capital, comprising mostly inter-company loans (€0.5 billion).

Turning to the portfolio investment account of the euro area, the net inflows experienced in this item in September 2002 were mostly accounted for by net inflows of equity portfolio investment (€12.1 billion), which were complemented by net inflows of €3.8 billion in debt instruments. A salient feature of the financial account data in September is the sizeable net inflows of €12.8 billion in equity portfolio investment held by euro area residents. It has been the second consecutive month and only the fourth time since 1999 that euro area residents, on aggregate, repatriated equity portfolio investment from abroad (Chart 43). One other instance when euro area residents, on aggregate, withdrew equity portfolio capital from abroad was in September 2001, after the terrorist attacks on the United States and the steep global equity market declines. The decline of global equity market valuations during the summer of 2002 may have provided some impetus for euro area investors to repatriate part of their equity portfolio investment abroad or transform equity portfolio investment into investment in debt instruments.

Chart 43
Euro area portfolio investment in equity securities

(EUR billions, quarterly data)



Source: ECB.

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

More generally, Chart 43 shows that a key characteristic of developments in the euro area financial account over the past two years has been a steady decline of net portfolio inflows into the euro area from non-residents, as well as a decrease of net portfolio outflows by euro area residents. This reduction in cross-border net portfolio flows may reflect a smaller investor appetite for foreign investments in an environment of economic uncertainty and turbulence in financial markets.

On a cumulated basis for the first nine months of 2002, combined direct and portfolio investment registered net inflows of €25.1 billion compared with net outflows of €85.2 billion during the same period in 2001. This shift from large net outflows to net inflows of

combined direct and portfolio investment between 2001 and 2002 reflects both a sharp decrease in net outflows of direct investment as well as an increase in net inflows of portfolio investment.

Data availability improvements for the euro area international investment position

There have been substantial improvements to the availability and compilation of the statistics relating to the international investment position (i.i.p.) for the euro area. This issue of the Monthly Bulletin reports on these improvements and on the resultant more comprehensive set of i.i.p. statistics for the euro area. The methodological details underlying the new i.i.p. statistics as well as developments in the euro area i.i.p. over the period 1999-2001 are described in Box 9.

At the end of 2001, the i.i.p. of the euro area vis-à-vis the rest of the world recorded net liabilities of €152.2 billion (representing 2.2 % of GDP). These net liabilities are substantially smaller than those at the end of 2000, when they stood at €414.7 billion (6.3% of GDP). According to the newly compiled data, which provide a more detailed account of the underlying positions, the sizeable reduction in the net liabilities of the i.i.p. between 2000 and 2001 is explained by the greater increase in assets than in liabilities in both categories, direct investment and portfolio investment.

Box 9

Enhanced compilation of the euro area international investment position statistics for the 1999-2001 period

The statistical section of the Monthly Bulletin contains, for the first time, a more comprehensive and improved compilation of the euro area's annual international investment position (i.i.p.) from 1999 to 2001. These data are presented in the "Euro area statistics section" of the Monthly Bulletin in Tables 8.7.1 to 8.7.4. The i.i.p. reports the net external positions of stocks of direct and portfolio investment, financial derivatives, other investment and reserve assets. In this context, it complements the balance of payments (b.o.p.) statistics, which record flows of assets and liabilities, with data on the value of stocks. So far the euro area i.i.p. has been compiled by aggregating, on a net basis, euro area countries' year-end external positions (see Box 9 in the December 1999 Monthly Bulletin, when the i.i.p. for the euro area was first reported). By contrast, the new i.i.p. data allow for a differentiation between the asset and liability sides – in line with the practice applied in the reporting of the euro area b.o.p. flows from as early as 1999 – and are compiled by totalling the positions with counterparts outside the euro area (i.e. compilation on an extra-euro area basis). Data prior to 1999 are not subject to such compilation improvements and, therefore, are not fully comparable.

The definition and classification of the items follow the standard components of the b.o.p. financial account and i.i.p. as established by the International Monetary Fund, namely direct investment, portfolio investment, financial derivatives, other investment and reserve assets. These items are further broken down by instrument and resident sector. As indicated above, to facilitate the reconciliation with flows, the i.i.p. presentation has the same level of detail as the quarterly euro area b.o.p. statistics. Direct investment is split into equity capital (plus reinvested earnings) and other capital (debt between affiliated companies), and each of these items is subdivided further by sector according to the MFI/non-MFI classification. Portfolio investment is classified by instrument, i.e. equity securities and debt securities, with the latter instrument category being subdivided into bonds and notes and money market instruments. The other investment account is broken down into trade credits, loans/currency and deposits as well as other assets and liabilities.

Showing assets and liabilities separately requires the euro area countries to distinguish between positions with residents of other euro area countries and positions with non-euro area residents. All EMU countries are now in a position to provide this breakdown for all items except portfolio investment liabilities (as in the case of b.o.p. flow statistics) for year-end positions from 1999 onwards. The additional information on euro area assets and liabilities sheds further light on the link between euro area b.o.p. flows and the i.i.p., by classifying the total change between two end-of-period positions into (i) changes due to real transactions (b.o.p. flows) and (ii) other changes for each financial account item. "Other changes" include valuation changes due to price and exchange rate effects and other adjustments (for instance write-offs, reclassifications and so on). The euro area i.i.p. is valued at market prices, with the exception of direct investment stocks, for which book values are used to a large extent.

Small overall net debtor position of the euro area

Total outstanding assets held by euro area residents amounted to €5,796.7 billion in 1999 compared with €7,459.4 billion in 2001, representing an increase of 28.7% over the two-year period (see Table). During the same period, the outstanding stock of euro area assets held by non-residents (i.e. euro area liabilities) increased by 24.9% from €6,094.0 billion to €7,611.6 billion. On balance, the euro area has a small and decreasing overall debtor position vis-à-vis the rest of the world, with net liabilities of €152.2 billion in 2001 (representing 2.2% of euro area GDP). The size of this net debtor position is substantially smaller than in 1999 and 2000, when it stood at €297.3 billion (4.7% of GDP) and €414.7 billion (6.3% of GDP) respectively. The decrease in the debtor position mostly reflects the increase in the net direct investment asset position and the decrease in the net portfolio investment liability position in the period under review.

The international investment position of the euro area

(EUR billions)

	1999	2000			End-of-year stocks	2001			End-of-year stocks
	End-of-year stocks	Total changes	of which			Total changes	of which		
			Transactions	Other changes			Transactions	Other changes	
Total									
<i>Net</i>	-297.3	-117.4	-74.6	-42.9	-414.7	262.5	40.5	222.0	-152.2
<i>Assets</i>	5,796.7	943.3	998.6	-55.3	6,740.0	719.5	766.9	-47.3	7,459.5
<i>Liabilities</i>	6,094.0	1,060.7	1,075.0	-14.3	7,154.7	457.0	730.1	-273.1	7,611.7
Direct investment									
<i>Net</i>	369.6	58.9	14.7	44.2	428.5	102.2	101.5	0.7	530.7
<i>Assets</i>	1,174.5	435.2	438.7	-3.5	1,609.7	250.2	255.8	-5.6	1,859.9
<i>Liabilities</i>	804.9	376.3	424.0	-47.7	1,181.2	148.0	154.3	-6.4	1,329.2
Portfolio investment									
<i>Net</i>	-881.2	76.3	106.4	-30.1	-804.9	122.2	-38.1	160.3	-682.7
<i>Assets</i>	2,058.1	286.0	398.4	-112.4	2,344.1	155.7	288.0	-132.3	2,499.8
<i>Liabilities</i>	2,939.3	209.8	291.9	-82.1	3,149.1	33.4	326.1	-292.7	3,182.5
Financial derivatives									
<i>Net</i>	16.0	-7.5	1.8	-9.3	8.5	-14.4	3.7	-18.1	-5.9
<i>Assets</i>	111.1	6.8	-	-	117.9	5.8	-	-	123.7
<i>Liabilities</i>	95.1	14.2	-	-	109.3	20.2	-	-	129.5
Other investment									
<i>Net</i>	-183.9	-253.3	-183.0	-70.3	-437.2	50.2	-8.8	59.0	-387.0
<i>Assets</i>	2,070.8	207.1	176.0	31.1	2,277.9	305.5	240.9	64.6	2,583.4
<i>Liabilities</i>	2,254.7	460.4	359.0	101.4	2,715.1	255.4	249.6	5.8	2,970.5
Reserve assets	382.2	8.2	-14.5	22.7	390.4	2.3	-17.8	20.1	392.7

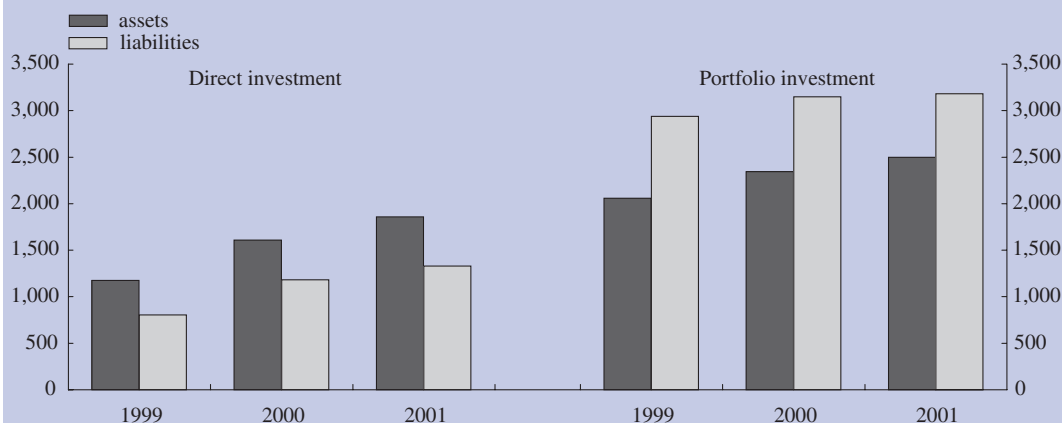
Source: ECB.

In more detail, the net direct investment asset position increased from €369.6 billion in 1999 to €530.7 billion in 2001 (see the chart below). Conversely, the net portfolio investment liability position declined from €881.2 billion in 1999 to €682.7 billion in 2001. With regard to the remaining items of the euro area i.i.p., the net "other investment" position shows a net debtor position of €387.0 billion in 2001, down from €437.2 billion in 2000. Furthermore, the net financial derivative positions were of a small magnitude in the period under review, resulting in a net debtor position of €5.9 billion in 2001. Reserve assets increased slightly to €392.7 billion at the end of 2001.

Turning to the subcategories of the i.i.p., developments in the international direct investment position of the euro area were largely driven by cross-border transactions in the form of equity capital and reinvested

The international direct and portfolio investment position of the euro area

(EUR billions, end-of-period)



Source: ECB.

earnings, particularly in the non-MFI sector. In fact, euro area non-MFI firms held €853 billion worth of foreign assets of this type in 1999, which increased by 57.8% to €1,346.4 billion in 2001. Similarly, foreign firms' holdings of euro area non-MFI equity capital and reinvested earnings were equal to €582 billion in 1999, and rose by 62.1% to €943.2 billion in 2001. These developments appear to be largely accounted for by the surge in international merger and acquisition activity observed over most of this period. Similarly, the cross-border loans between non-MFI affiliated companies rose considerably over the same period, i.e. by almost two-thirds in the case of euro area assets and by almost three-quarters in the case of euro area liabilities. Nevertheless, the outstanding gross positions of the inter-company loans are of a much smaller magnitude and are positive in net terms.

Developments in the international portfolio investment position of the euro area were largely affected by developments in bonds and notes. Euro area holdings of foreign bonds and notes amounted to €937.2 billion in 1999, rising by 28.9% to €1,208.1 billion in 2001. This increase was, to a large extent, attributable to acquisitions by the MFI sector, which rose from €257.2 billion to €422.1 billion. Similarly, non-euro area residents increased their net holdings of euro area bonds and notes by 32.2% from €1,138.5 billion in 1999 to €1,505.5 billion in 2001. Non-resident demand for euro area debt securities over this period may have been partly driven by the broadening and deepening of the euro area corporate debt markets as well as shifts from equities to bonds in an environment where conditions in global equity markets had become highly volatile. With regard to portfolio equity investment, euro area assets in the form of equity securities increased by 9.7% between 1999 and 2001, while non-euro area residents reduced their outstanding position with the euro area by 7.1% over the same period. As shown in the table above, the outstanding positions in portfolio equity securities were influenced by valuation changes, and particularly by the decline in stock market prices in 2000 and 2001.

With regard to the other investment category, most of the developments occurred in the MFI (excluding the Eurosystem) sector, partly as a result of the transactions in direct and portfolio investment. Indeed, MFI assets increased from €1,317.7 billion in 1999 to €1,719.5 billion in 2001. Similarly, MFI liabilities increased from €1,823.5 billion to €2,407.3 billion over the same period.



Euro area statistics



Contents ¹

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

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

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

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

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

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

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

Conventions used in the tables

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

Euro area overview table

Summary table of economic indicators for the euro area

(annual percentage changes, unless otherwise indicated)

1. Monetary developments and interest rates

	M1 ¹⁾	M2 ¹⁾	M3 ¹⁾²⁾		MFI loans to euro area residents excluding MFIs and general government ¹⁾	Securities issued by non-financial and non-monetary financial corporations ¹⁾	3-month interest rate (EURIBOR, % per annum, period averages) ⁷⁾	10-year government bond yield (% per annum, period averages) ⁸⁾
	1	2	3	3-month moving average (centred) ⁴⁾				
2001	3.6	4.2	5.4	-	7.8	26.6	4.26	5.03
2002	.	.	.	.	.	.	.	.
2002 Q1	6.2	6.5	7.6	-	5.7	29.3	3.36	5.13
Q2	6.6	6.5	7.4	-	5.6	24.1	3.45	5.26
Q3	7.6	6.5	7.1	-	5.3	17.7	3.36	4.77
Q4	.	.	.	-	.	.	.	.
2002 June	6.8	6.5	7.1	7.3	5.4	20.5	3.46	5.16
July	7.6	6.5	7.1	7.1	5.1	18.6	3.41	5.03
Aug.	7.6	6.4	7.0	7.1	5.4	16.1	3.35	4.73
Sep.	8.2	6.6	7.3	7.1	5.2	16.7	3.31	4.52
Oct.	8.2	6.8	7.0	.	5.0	.	3.26	4.62
Nov.	.	.	.	.	.	.	3.12	4.59

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	0.4	83.6	1.3	8.0
2002	.	.	.	.	.	81.2	.	.
2002 Q1	2.6	-0.8	4.0	0.3	-2.7	81.1	0.7	8.1
Q2	2.1	-0.8	3.6	0.6	-0.6	81.2	0.5	8.2
Q3	2.0	-0.1	.	0.8	-0.5	81.0	.	8.3
Q4	.	.	.	.	.	81.5	.	.
2002 June	1.8	-0.9	-	-	-0.3	-	-	8.3
July	1.9	-0.3	-	-	-0.1	-	-	8.3
Aug.	2.1	-0.1	-	-	-1.3	-	-	8.3
Sep.	2.1	0.1	-	-	-0.3	-	-	8.3
Oct.	2.3	0.9	-	-	.	-	-	8.4
Nov.	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	90.5	0.919
Q3	22.7	37.2	-5.3	34.5	380.9	97.9	94.0	0.984
Q4	.	.	.	.	.	.	.	.
2002 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.	9.2	11.3	-3.4	15.8	380.9	98.0	93.9	0.981
Oct.	.	.	.	.	375.5	98.5	94.4	0.981
Nov.	.	.	.	.	.	99.3	95.0	1.001

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	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
	8	131,157	246,441	19,802	3,844	189,009	143,999	44,999	0
	15	131,137	246,907	20,443	3,887	183,092	138,000	44,999	0
	22	131,137	246,911	21,014	3,789	196,263	150,000	44,999	0
	29	131,106	245,572	20,036	3,518	206,092	160,999	45,000	0

2. Liabilities

		Banknotes in circulation	Liabilities to euro area credit institutions in euro	Current accounts (covering the minimum reserve system)	Deposit facility	Fixed-term deposits	Fine-tuning reverse operations	Deposits related to margin calls	Other liabilities to euro area credit institutions in euro	Debt certificates issued
		1	2	3	4	5	6	7	8	9
2002	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
	8	336,722	130,667	130,616	51	0	0	0	266	2,029
	15	335,687	129,674	129,603	71	0	0	0	183	2,029
	22	334,601	126,769	126,280	489	0	0	0	210	2,029
	29	340,039	121,903	121,860	43	0	0	0	192	2,029

Source: ECB.

Structural reverse operations	Marginal lending facility	Credits related to margin calls	Other claims on euro area credit institutions in euro	Securities of euro area residents in euro	General government debt in euro	Other assets	Total		
							9	10		11	12	13	14	15	16
0	3	21	414	30,648	67,675	88,834	764,716	2002	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.
0	3	8	360	32,554	67,201	87,126	777,495		8
0	66	27	364	32,675	67,222	87,604	773,332		15
0	1,229	35	154	33,099	67,223	89,076	788,667		22
0	65	28	258	33,242	67,225	89,414	796,464		29

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
57,501	8,517	1,237	16,867	6,521	63,297	99,114	64,252	764,716	2002	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.
41,235	8,454	1,355	17,013	6,567	62,653	106,307	64,227	777,495		8
36,809	8,400	1,629	17,097	6,567	64,722	106,307	64,228	773,332		15
55,095	8,252	1,683	19,268	6,567	63,446	106,307	64,440	788,667		22
64,849	8,634	1,338	17,292	6,567	62,870	106,307	64,444	796,464		29

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

With effect from ¹⁾	Deposit facility		Main refinancing operations			Marginal lending facility	
			Fixed rate tenders	Variable rate tenders			
	Level 1	Change 2	Fixed rate	Minimum bid rate	Change 5	Level 6	Change 7
			Level 3	Level 4			
1999 1 Jan.	2.00	-	3.00	-	-	4.50	-
4 ²⁾	2.75	0.75	3.00	-	...	3.25	-1.25
22	2.00	-0.75	3.00	-	...	4.50	1.25
9 Apr.	1.50	-0.50	2.50	-	-0.50	3.50	-1.00
5 Nov.	2.00	0.50	3.00	-	0.50	4.00	0.50
2000 4 Feb.	2.25	0.25	3.25	-	0.25	4.25	0.25
17 Mar.	2.50	0.25	3.50	-	0.25	4.50	0.25
28 Apr.	2.75	0.25	3.75	-	0.25	4.75	0.25
9 June	3.25	0.50	4.25	-	0.50	5.25	0.50
28 ³⁾	3.25	...	-	4.25	...	5.25	...
1 Sep.	3.50	0.25	-	4.50	0.25	5.50	0.25
6 Oct.	3.75	0.25	-	4.75	0.25	5.75	0.25
2001 11 May	3.50	-0.25	-	4.50	-0.25	5.50	-0.25
31 Aug.	3.25	-0.25	-	4.25	-0.25	5.25	-0.25
18 Sep.	2.75	-0.50	-	3.75	-0.50	4.75	-0.50
9 Nov.	2.25	-0.50	-	3.25	-0.50	4.25	-0.50
2002 6 Dec.	1.75	-0.50	-	2.75	-0.50	3.75	-0.50

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 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
13	85,033	51,000	-	3.25	3.28	3.28	14
20	120,351	99,000	-	3.25	3.27	3.29	14
27	108,905	62,000	-	3.25	3.29	3.31	14
4 Dec.	111,791	111,791	-	3.25	3.25	3.25	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 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	
28 Nov.	38,644	15,000	-	3.02	3.04	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 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.	11,054.3	6,055.4	201.3	203.7	1,373.5	747.6	2,472.7
Oct. ^(a)	11,113.3	6,051.1	202.2	212.1	1,379.4	790.7	2,477.8

Source: ECB.

- 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.
- 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 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.	128.7	129.2	0.5	0.0	3.28
Dec. ^(a)	128.8	.	.	.	.

Source: ECB.

- This table contains full data for completed maintenance periods and required reserves for the current maintenance period.
- 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.
- Aggregate average daily holdings of credit institutions required to hold a positive amount of reserves on their reserve accounts over the maintenance period.
- 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.
- 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.
- 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 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.	370.0	146.1	45.3	0.1	0.0	0.1	0.0	329.2	45.6	58.2	128.3	457.6
Nov. ⁶⁾	372.1	147.5	45.0	0.1	0.0	0.1	0.0	334.0	42.8	58.6	129.3	463.4

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			Other euro area residents	Holdings of securities other than shares issued by euro area residents			Holdings of shares/other equity issued by euro area residents			External assets ¹⁾	Fixed assets	Re-maining assets	Total	
	1	MFIs ¹⁾	General government		MFIs	General government	Other euro area residents	MFIs	Other euro area residents	Other euro area residents					
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 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	54.3	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
Q3	388.2	360.4	27.2	0.6	106.6	3.7	101.9	1.1	13.1	4.8	8.3	397.1	11.9	54.8	971.7
2001 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	101.5	1,040.5
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	102.2	1,020.7
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	105.0	1,032.9
Apr.	344.2	317.8	25.8	0.6	107.5	5.0	101.4	1.1	13.5	4.7	8.8	401.2	12.0	106.9	985.2
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	109.0	991.9
June	387.7	361.3	25.7	0.6	107.9	4.9	101.6	1.4	12.9	4.7	8.2	372.7	12.0	113.2	1,006.2
July	364.0	337.7	25.7	0.6	108.8	5.3	101.9	1.7	12.7	4.7	7.9	377.9	12.1	114.8	990.3
Aug.	363.4	337.5	25.3	0.6	110.8	5.4	103.3	2.1	12.8	4.8	8.0	377.9	12.1	114.5	991.5
Sep.	365.6	339.6	25.3	0.6	112.5	5.8	104.6	2.2	12.3	4.8	7.5	386.0	12.1	112.5	1,001.0
Oct. ^(p)	370.8	344.8	25.3	0.6	113.4	6.4	106.1	0.9	13.0	4.9	8.1	379.9	12.1	115.1	1,004.5

2. Liabilities

	Currency in circulation	Deposits of euro area residents	MFIs ¹⁾			Central government	Other general government/other euro area residents	Money market paper and debt securities issued	Capital and reserves	External liabilities ¹⁾	Remaining liabilities	Total
			1	2	3								4	5
1999	393.3	341.5	279.3		53.4	8.8	7.9	174.3	49.8	47.6	1,014.5	
2000 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	
Q3	346.1	323.6	269.4		37.6	16.6	5.5	209.2	30.0	57.3	971.7	
2001 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	99.5	1,040.5	
Feb.	308.2	349.1	282.3		52.1	14.7	4.6	219.9	33.9	105.0	1,020.7	
Mar.	309.1	355.1	282.4		56.3	16.4	4.6	217.8	36.9	109.4	1,032.9	
Apr.	311.3	323.5	254.8		50.8	17.9	4.6	212.7	32.4	100.7	985.2	
May	319.6	326.6	268.4		40.7	17.4	4.6	208.0	31.6	101.5	991.9	
June	329.3	354.3	285.2		51.5	17.5	4.6	182.3	31.0	104.8	1,006.2	
July	340.1	316.0	247.4		52.9	15.6	4.6	183.7	35.1	110.9	990.3	
Aug.	342.3	318.7	255.8		47.3	15.6	4.6	186.4	31.0	108.5	991.5	
Sep.	347.0	317.6	258.9		41.7	17.0	4.6	190.2	32.5	109.1	1,001.0	
Oct. ^(p)	355.4	313.5	254.4		40.8	18.3	4.6	187.9	31.3	111.9	1,004.5	

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
	MFI	General government	Other euro area residents		MFI	General government	Other euro area residents			MFI	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 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
Q3	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
2001 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	2,527.3	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	1,044.7	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.	11,404.0	3,880.4	795.8	6,727.8	2,536.5	1,041.5	1,148.0	347.0	207.9	804.8	261.0	543.8	2,430.1	166.2	1,048.6	18,598.0
Oct. ^(p)	11,461.7	3,922.5	795.5	6,743.7	2,530.2	1,037.0	1,141.4	351.8	209.8	819.1	263.7	555.4	2,485.4	167.1	1,011.2	18,684.5

2. Liabilities

	Currency in circulation	Deposits of euro area residents	MFI	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	
						Overnight	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 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	
Q3	0.0	9,484.8	3,839.0	110.2	5,535.5	1,733.7	2,233.5	1,342.6	225.7	420.8	2,875.5	1,011.1	2,609.9	1,484.1	17,886.2	
2001 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	2,984.6	1,071.6	2,584.4	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.	0.0	9,875.0	3,961.3	106.7	5,807.0	1,891.4	2,242.8	1,432.7	240.0	522.9	3,004.1	1,091.6	2,639.9	1,464.6	18,598.0	
Oct. ^(p)	0.0	9,941.1	4,015.9	113.1	5,812.0	1,873.3	2,263.8	1,437.9	237.1	526.7	3,010.8	1,094.4	2,663.8	1,447.7	18,684.5	

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 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	1,168.3	13,670.8
Feb.	7,396.3	847.5	6,548.8	1,557.7	1,207.7	349.9	566.8	2,833.1	176.6	1,130.4	13,660.8
Mar.	7,458.9	852.6	6,606.2	1,575.7	1,229.1	346.6	560.6	2,845.2	176.4	1,081.2	13,698.0
Apr.	7,473.7	832.4	6,641.3	1,572.2	1,229.2	342.9	566.9	2,826.4	176.2	1,068.5	13,683.9
May	7,489.0	829.2	6,659.8	1,587.2	1,242.3	345.0	569.0	2,845.9	176.4	1,047.5	13,715.1
June	7,521.4	830.1	6,691.2	1,582.2	1,239.0	343.2	563.9	2,731.2	176.2	1,072.0	13,646.9
July	7,521.2	828.5	6,692.7	1,582.8	1,235.8	347.0	549.2	2,756.7	176.8	1,097.1	13,683.8
Aug.	7,510.4	818.0	6,692.3	1,576.0	1,235.0	341.0	559.2	2,745.1	177.7	1,084.2	13,652.6
Sep.	7,549.6	821.1	6,728.4	1,601.8	1,252.6	349.2	551.3	2,816.1	178.2	1,120.8	13,817.7
Oct. ^(p)	7,565.1	820.8	6,744.3	1,600.2	1,247.5	352.7	563.5	2,865.3	179.3	1,084.9	13,858.4

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 Apr.	336.2	152.5	5,449.5	1,666.9	2,237.4	1,323.9	221.4	354.1	1,720.3	928.0	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	1,577.1	2.0	13,670.8
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	1,542.3	1.1	13,660.8
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	1,499.0	2.4	13,698.0
Apr.	261.7	157.5	5,782.0	1,869.9	2,269.4	1,414.7	228.1	442.2	1,785.4	1,004.5	2,769.2	1,488.7	-7.4	13,683.9
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	1,486.9	-5.8	13,715.1
June	285.8	155.0	5,824.1	1,916.3	2,256.6	1,421.7	229.6	443.7	1,788.5	985.7	2,615.4	1,535.2	13.5	13,646.9
July	296.8	151.9	5,803.0	1,885.7	2,264.1	1,424.3	228.8	455.5	1,796.2	993.3	2,642.9	1,544.5	-0.3	13,683.8
Aug.	301.2	141.0	5,783.6	1,851.6	2,265.7	1,429.8	236.5	468.7	1,814.3	1,004.2	2,610.9	1,525.2	3.6	13,652.6
Sep.	306.7	148.4	5,824.0	1,908.1	2,243.1	1,432.7	240.0	461.7	1,814.6	1,016.0	2,672.4	1,573.7	0.2	13,817.7
Oct. ^(p)	313.9	153.9	5,830.3	1,891.2	2,264.1	1,437.9	237.1	464.0	1,824.9	1,013.6	2,695.1	1,559.6	2.9	13,858.4

Source: ECB.

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

2) See Table 2.1, footnote 1.

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

3. Assets: flows ¹⁾

	Loans to euro area residents		Other euro area residents	Holdings of securities other than shares issued by euro area residents	General government		Holdings of shares/ other equity issued by other euro area residents	External assets ²⁾	Fixed assets	Remaining assets	Total
	1	2			3	4						5	6
2001 May	4.1	-5.6	9.7	25.9	20.8	5.1	1.0	-1.2	1.4	18.7	49.9
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	26.9
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	43.7	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.	25.5	3.7	21.9	-8.1	-10.2	2.1	22.3	-26.6	1.1	-17.2	-3.0
2002 Jan.	9.5	-3.1	12.6	26.8	21.9	5.0	-0.3	0.2	-2.5	30.1	63.8
Feb.	19.0	2.7	16.3	9.2	1.3	7.9	0.6	0.4	-0.9	-39.2	-10.8
Mar.	64.2	5.2	59.0	14.1	16.9	-2.9	-7.6	19.9	0.0	-48.1	42.5
Apr.	21.7	-20.0	41.7	-2.3	1.5	-3.8	6.3	18.7	-0.2	-13.3	30.9
May	25.4	-2.8	28.3	12.7	9.7	3.0	0.9	74.1	0.2	-21.1	92.2
June	40.8	1.4	39.4	-2.9	-1.3	-1.6	-5.2	-27.0	-0.2	24.7	30.2
July	-4.6	-1.8	-2.8	-2.5	-3.5	1.0	-11.6	-2.4	0.5	23.9	3.3
Aug.	-10.8	-10.9	0.2	-5.7	-1.5	-4.2	9.2	-10.7	1.0	-12.9	-30.0
Sep.	40.6	3.2	37.5	18.7	11.0	7.7	-2.1	68.5	0.5	35.2	161.5
Oct. ^(p)	18.3	-0.3	18.6	-2.2	-5.2	3.1	9.9	52.7	1.0	-36.5	43.2

4. Liabilities: flows ¹⁾

	Currency in circulation	Deposits of central government	Deposits of other general government/ other euro area residents	Over-night	With agreed maturity	Redeemable at notice	Repurchase agreements	Money market fund shares/ units ³⁾	Money market paper and debt securities issued ³⁾	Capital and reserves	External liabilities ²⁾	Re-maining liabilities	Excess of inter-MFI liabilities	Total
2001 May	-3.3	-5.6	29.5	21.7	-3.0	-1.6	12.4	9.8	-11.7	8.4	11.8	12.3	-1.4	49.9
June	0.1	18.6	34.8	40.4	-1.7	8.3	-12.3	-1.5	20.4	19.1	-5.3	-18.1	-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	-1.8	-29.6	16.4	3.9	7.5	10.5	1.4	7.3	30.1	-7.5	-1.2	26.9
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	22.6	0.9	3.0	9.2	9.5	11.6	13.0	7.9	18.4	46.0	-11.8	99.0
Nov.	-15.7	-3.0	51.4	47.2	0.3	13.1	-9.2	9.8	23.9	2.9	38.5	33.2	4.6	145.6
Dec.	-40.0	-11.2	149.3	98.4	18.4	40.0	-7.4	-1.1	-0.7	14.6	-17.8	-76.8	-19.5	-3.0
2002 Jan.	6.8	10.4	-42.4	-49.4	-3.1	12.4	-2.3	19.8	10.4	13.3	13.8	20.4	11.3	63.8
Feb.	-6.2	6.9	0.3	-4.3	-2.5	2.1	4.9	10.8	4.8	-0.6	10.7	-36.8	-0.7	-10.8
Mar.	14.0	1.7	22.8	-3.8	16.1	2.2	8.4	3.2	18.5	2.6	25.6	-56.4	10.4	42.5
Apr.	7.4	0.0	27.6	32.1	5.2	-8.2	-1.5	8.0	-1.6	-5.2	20.6	-16.7	-9.2	30.9
May	12.2	-8.5	24.6	2.4	14.3	1.1	6.7	4.0	29.7	3.9	35.0	-10.2	1.5	92.2
June	12.0	6.0	31.2	48.2	-17.3	6.4	-6.1	-7.4	1.5	-17.5	-67.4	54.9	16.9	30.2
July	11.0	-3.1	-24.5	-31.7	5.4	2.5	-0.7	12.7	0.2	9.7	-0.7	11.8	-13.6	3.3
Aug.	4.4	-11.0	-5.0	-33.9	15.7	5.5	7.7	12.4	4.0	8.8	-24.9	-22.5	3.9	-30.0
Sep.	5.6	3.7	41.2	56.5	-21.8	3.0	3.5	-1.6	17.5	10.3	44.7	40.0	0.1	161.5
Oct. ^(p)	7.2	5.5	7.3	-16.7	21.7	5.2	-2.9	2.0	12.7	-0.6	25.1	-19.8	3.9	43.2

Table 2.4

Monetary aggregates ¹⁾ and counterparts

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

1. Monetary aggregates: levels at the end of the period

	M2							
	M1				Deposits with agreed maturity up to 2 years	Deposits redeemable at notice up to 3 months	Total	Index Dec. 01=100 ³⁾
	Currency in circulation ¹⁾	Overnight deposits ²⁾	Total	Index Dec. 01=100 ³⁾				
					1	2	3	4	5	6	7	8
2001 Apr.	336.2	1,735.9	2,072.1	93.82	1,067.8	1,273.4	4,413.3	94.61
May	332.9	1,759.2	2,092.1	94.58	1,069.0	1,273.2	4,434.3	94.90
June	333.0	1,798.4	2,131.4	96.38	1,066.2	1,283.0	4,480.6	95.91
July	328.0	1,780.3	2,108.3	95.41	1,073.2	1,287.2	4,468.7	95.74
Aug.	319.2	1,747.5	2,066.7	93.61	1,088.8	1,292.9	4,448.4	95.41
Sep.	309.6	1,815.1	2,124.7	96.23	1,070.9	1,299.7	4,495.3	96.40
Oct.	295.5	1,816.1	2,111.6	95.66	1,074.7	1,311.6	4,497.9	96.46
Nov.	279.7	1,864.6	2,144.3	97.11	1,077.6	1,326.4	4,548.2	97.50
Dec.	239.7	1,968.2	2,207.9	100.00	1,088.8	1,367.9	4,664.6	100.00
2002 Jan.	246.5	1,921.9	2,168.4	98.16	1,081.0	1,390.4	4,639.8	99.44
Feb.	240.3	1,917.2	2,157.5	97.68	1,076.7	1,394.5	4,628.8	99.21
Mar.	254.3	1,914.3	2,168.6	98.20	1,088.5	1,397.9	4,655.0	99.80
Apr.	261.7	1,945.7	2,207.4	100.02	1,092.4	1,391.9	4,691.7	100.66
May	273.9	1,945.6	2,219.5	100.67	1,100.4	1,394.0	4,713.9	101.26
June	285.8	1,992.3	2,278.2	103.42	1,075.3	1,400.0	4,753.6	102.25
July	296.8	1,959.7	2,256.5	102.38	1,083.7	1,403.0	4,743.1	101.89
Aug.	301.2	1,927.3	2,228.4	101.12	1,096.9	1,408.9	4,734.2	101.72
Sep.	306.7	1,984.1	2,290.9	103.96	1,073.7	1,411.0	4,775.6	102.61
Oct. ⁴⁾	313.9	1,967.4	2,281.3	103.53	1,093.7	1,417.5	4,792.6	102.99

2. Monetary aggregates: flows ⁴⁾

	M2							
	M1				Deposits with agreed maturity up to 2 years	Deposits redeemable at notice up to 3 months	Total	Annual growth rate ³⁾ (%)
	Currency in circulation ¹⁾	Overnight deposits ²⁾	Total	Annual growth rate ³⁾ (%)				
					1	2	3	4	5	6	7	8
2001 May	-3.3	20.1	16.9	3.2	-3.1	-0.5	13.3	3.7
June	0.1	39.6	39.7	4.3	-2.2	9.8	47.3	4.5
July	-5.0	-16.4	-21.4	3.3	9.0	4.4	-7.9	4.4
Aug.	-8.8	-30.9	-39.7	3.2	18.4	5.9	-15.4	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	48.7	5.9
Dec.	-40.0	103.9	63.9	5.1	11.1	41.5	116.4	6.1
2002 Jan.	6.8	-47.3	-40.5	6.7	-6.7	21.1	-26.1	6.7
Feb.	-6.2	-4.6	-10.8	6.3	-4.0	4.1	-10.6	6.3
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	28.1	6.7
June	12.0	48.7	60.6	7.3	-20.9	6.3	46.0	6.6
July	11.0	-33.8	-22.9	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.	5.6	56.9	62.4	8.0	-22.8	2.1	41.8	6.4
Oct. ⁴⁾	7.2	-16.6	-9.4	8.2	20.5	6.5	17.6	6.8

Source: ECB.

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

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

M3 ²⁾						Index Dec. 01=100 ³⁾	
Repurchase agreements	Money market fund shares/units	Money market paper and debt securities up to 2 years	Total				
9	10	11	12		13		
221.4	354.1	140.0	5,128.7		94.51	2001 Apr.	
233.8	363.0	135.0	5,166.1		95.04	May	
221.5	360.5	145.2	5,207.8		95.83	June	
223.4	369.6	140.4	5,202.1		95.80	July	
230.8	380.7	142.5	5,202.4		95.90	Aug.	
225.7	384.7	147.6	5,253.4		96.71	Sep.	
235.1	395.9	149.5	5,278.4		97.16	Oct.	
225.9	404.5	152.2	5,330.8		98.16	Nov.	
218.5	402.0	145.9	5,430.9		100.00	Dec.	
216.2	420.8	141.8	5,418.6		99.83	2002 Jan.	
221.1	431.6	138.8	5,420.3		99.86	Feb.	
229.6	435.9	137.2	5,457.8		100.58	Mar.	
228.1	442.2	134.7	5,496.7		101.38	Apr.	
234.8	447.3	144.0	5,540.0		102.27	May	
229.6	443.7	133.0	5,559.9		102.75	June	
228.8	455.5	125.6	5,553.1		102.50	July	
236.5	468.7	126.6	5,566.0		102.74	Aug.	
240.0	461.7	132.1	5,609.4		103.63	Sep.	
237.1	464.0	134.8	5,628.5		104.00	Oct. ^(p)	

M3 ²⁾						Annual growth rate ³⁾ (%)	
Repurchase agreements	Money market fund shares/units	Money market paper and debt securities up to 2 years	Total				
9	10	11	12		13		
12.4	9.8	-6.5	28.9		4.5	2001 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	5.4		5.9	Aug.	
-5.1	3.7	-0.9	43.9		6.9	Sep.	
9.5	11.6	0.5	24.2		7.3	Oct.	
-9.2	9.8	5.0	54.4		7.7	Nov.	
-7.4	-1.1	-8.0	100.0		7.6	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	48.8		7.6	May	
-6.1	-7.4	-6.9	25.7		7.2	June	
-0.7	12.7	-8.9	-13.3		7.0	July	
7.7	12.4	1.0	12.8		7.1	Aug.	
3.5	-1.6	4.5	48.2		7.2	Sep.	
-2.9	2.0	3.2	20.0		7.0	Oct. ^(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 ⁴⁾
	Currency in circulation 1	Overnight deposits 2	Total	Index ⁴⁾	Total	Index ⁴⁾		
			3	4	5	6	7	8
2001 Apr.	338.4	1,724.1	2,062.5	93.38	2,338.6	95.22	4,401.1	94.35
May	334.0	1,748.7	2,082.7	94.15	2,337.0	94.97	4,419.7	94.58
June	330.1	1,764.7	2,094.8	94.72	2,356.7	95.80	4,451.5	95.29
July	323.8	1,769.8	2,093.6	94.74	2,372.2	96.52	4,465.8	95.68
Aug.	317.5	1,789.2	2,106.6	95.42	2,378.0	96.88	4,484.7	96.19
Sep.	307.8	1,822.4	2,130.2	96.47	2,390.8	97.39	4,521.0	96.95
Oct.	295.8	1,843.6	2,139.4	96.92	2,405.6	97.97	4,545.0	97.47
Nov.	278.3	1,877.0	2,155.3	97.60	2,421.1	98.56	4,576.3	98.11
Dec.	233.4	1,922.2	2,155.5	97.63	2,441.6	99.39	4,597.1	98.55
2002 Jan.	251.2	1,927.3	2,178.5	98.62	2,450.4	99.73	4,628.9	99.21
Feb.	245.3	1,932.7	2,178.0	98.61	2,457.8	100.04	4,635.8	99.36
Mar.	254.1	1,923.9	2,178.0	98.62	2,473.6	100.71	4,651.5	99.72
Apr.	264.4	1,933.0	2,197.4	99.57	2,480.1	101.06	4,677.5	100.35
May	273.6	1,942.4	2,216.0	100.51	2,484.2	101.37	4,700.2	100.96
June	283.0	1,946.2	2,229.2	101.20	2,487.0	101.66	4,716.2	101.44
July	292.8	1,954.3	2,247.1	101.96	2,496.5	101.86	4,743.6	101.90
Aug.	299.3	1,964.1	2,263.4	102.71	2,502.1	102.10	4,765.5	102.39
Sep.	306.2	1,993.1	2,299.4	104.34	2,509.8	102.43	4,809.2	103.34
Oct. ¹⁾	314.1	1,996.9	2,311.1	104.88	2,531.6	103.34	4,842.6	104.07

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 May	-4.5	21.5	17.0	0.8	2.9	-6.2	-0.3	4.1	10.8	0.2	3.6
June	-3.8	16.4	12.6	0.6	4.0	20.4	0.9	4.6	33.0	0.7	4.3
July	-6.3	6.8	0.5	0.0	3.4	17.8	0.8	5.3	18.2	0.4	4.4
Aug.	-6.4	21.3	15.0	0.7	3.6	8.8	0.4	5.1	23.8	0.5	4.4
Sep.	-9.6	32.9	23.3	1.1	5.0	12.4	0.5	5.2	35.7	0.8	5.1
Oct.	-12.0	21.7	9.7	0.5	5.2	14.2	0.6	5.7	24.0	0.5	5.5
Nov.	-17.5	32.7	15.2	0.7	5.9	14.5	0.6	5.9	29.7	0.7	6.0
Dec.	-44.9	45.4	0.5	0.0	5.5	20.4	0.8	7.2	20.9	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.	-6.0	5.6	-0.4	0.0	6.2	7.6	0.3	6.5	7.3	0.2	6.4
Mar.	8.8	-8.5	0.3	0.0	6.0	16.4	0.7	6.6	16.7	0.4	6.3
Apr.	10.3	10.6	20.9	1.0	6.6	8.5	0.3	6.1	29.4	0.6	6.4
May	9.2	11.6	20.8	0.9	6.8	7.8	0.3	6.7	28.6	0.6	6.7
June	9.4	5.7	15.1	0.7	6.8	7.2	0.3	6.1	22.3	0.5	6.5
July	9.8	6.9	16.8	0.8	7.6	4.7	0.2	5.5	21.4	0.5	6.5
Aug.	6.4	10.1	16.6	0.7	7.6	6.0	0.2	5.4	22.6	0.5	6.4
Sep.	6.9	29.0	36.0	1.6	8.2	8.2	0.3	5.2	44.1	0.9	6.6
Oct. ¹⁾	7.9	3.9	11.9	0.5	8.2	22.2	0.9	5.5	34.1	0.7	6.8

Source: ECB.

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

M3 ²⁾					Loans to other euro area residents (excluding government) ³⁾		
Marketable instruments ⁶⁾		Total	Index ⁴⁾	Index ⁴⁾	Total	Index ⁴⁾	
Total	Index ⁴⁾						
9	10	11	12	13	14		
701.5	92.04	5,102.6	94.03	6,301.1	96.48	2001 Apr.	
711.0	93.20	5,130.7	94.39	6,334.5	96.82	May	
725.3	95.08	5,176.8	95.26	6,364.2	97.37	June	
737.2	96.68	5,203.1	95.82	6,381.1	97.77	July	
752.2	98.66	5,236.9	96.54	6,398.0	98.17	Aug.	
767.8	99.86	5,288.8	97.36	6,433.8	98.65	Sep.	
787.1	102.27	5,332.0	98.15	6,465.5	99.12	Oct.	
787.2	102.76	5,363.6	98.76	6,503.6	99.69	Nov.	
794.8	103.71	5,391.9	99.28	6,510.0	99.86	Dec.	
785.3	103.08	5,414.2	99.75	6,535.6	100.21	2002 Jan.	
785.8	103.04	5,421.6	99.88	6,562.7	100.66	Feb.	
788.8	103.51	5,440.3	100.25	6,597.3	101.21	Mar.	
791.3	103.96	5,468.8	100.86	6,626.3	101.76	Apr.	
802.7	105.41	5,502.9	101.59	6,657.4	102.39	May	
805.2	105.67	5,521.4	102.04	6,665.9	102.64	June	
814.6	106.82	5,558.2	102.60	6,680.8	102.80	July	
830.0	108.75	5,595.5	103.28	6,722.9	103.46	Aug.	
845.2	111.31	5,654.4	104.46	6,740.1	103.74	Sep.	
841.4	110.86	5,684.0	105.03	6,758.2	104.06	Oct. ^(p)	

M3 ²⁾								Loans to other euro area residents (excluding government) ³⁾			
Marketable instruments ⁶⁾			Total	Monthly growth rate ⁴⁾ (%)	Annual growth rate ⁴⁾ (%)	3-month moving average (centred) (%)	Total	Monthly growth rate ⁴⁾ (%)	Annual growth rate ⁴⁾ (%)		
Total	Monthly growth rate ⁴⁾ (%)	Annual growth rate ⁴⁾ (%)									
12	13	14	15	16	17	18	19	20	21		
8.8	1.3	9.4	19.6	0.4	4.3	4.6	22.7	0.4	8.0	2001 May	
14.3	2.0	12.9	47.3	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	38.9	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	10.9	0.2	6.1	Dec.	
-4.9	-0.6	14.4	25.6	0.5	7.8	7.7	23.1	0.4	5.7	2002 Jan.	
-0.3	0.0	13.7	7.0	0.1	7.4	7.5	29.0	0.4	5.6	Feb.	
3.6	0.5	13.1	20.3	0.4	7.2	7.3	36.2	0.6	5.5	Mar.	
3.4	0.4	12.9	32.8	0.6	7.3	7.4	35.7	0.5	5.5	Apr.	
11.0	1.4	13.1	39.6	0.7	7.6	7.3	40.8	0.6	5.7	May	
2.0	0.3	11.1	24.3	0.4	7.1	7.3	16.4	0.2	5.4	June	
8.8	1.1	10.5	30.2	0.5	7.1	7.1	10.6	0.2	5.1	July	
14.7	1.8	10.2	37.3	0.7	7.0	7.1	42.6	0.6	5.4	Aug.	
19.6	2.4	11.5	63.7	1.1	7.3	7.1	18.6	0.3	5.2	Sep.	
-3.4	-0.4	8.4	30.7	0.5	7.0	.	20.8	0.3	5.0	Oct. ^(p)	

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

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

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

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

	Longer-term MFI liabilities				Credit ²⁾				Net external assets	Fixed assets
	Deposits with agreed maturity over 2 years	Deposits redeemable at notice over 3 months	Debt securities over 2 years	Capital and reserves	Credit to government	Credit to other euro area residents	Of which loans	Index Dec. 01 =100 ³⁾		
	1	2	3	4	5	6	7	8	9	10
2001 Apr.	1,169.7	124.6	1,577.7	928.0	2,016.9	7,195.0	6,313.9	96.67	-60.1	173.3
May	1,170.6	123.2	1,584.5	940.0	2,031.3	7,222.8	6,334.4	96.82	-77.5	174.6
June	1,170.9	122.0	1,593.0	965.9	2,042.1	7,247.9	6,388.2	97.74	-38.5	175.4
July	1,165.3	120.7	1,594.1	955.2	2,034.4	7,261.6	6,394.4	97.97	-23.9	176.5
Aug.	1,162.0	119.5	1,586.2	959.9	2,021.6	7,238.5	6,369.6	97.74	4.6	176.9
Sep.	1,163.0	118.6	1,604.7	970.4	2,025.0	7,284.1	6,421.9	98.47	57.8	177.6
Oct.	1,162.9	116.9	1,617.0	981.1	2,014.0	7,325.2	6,451.6	98.90	80.9	178.3
Nov.	1,161.6	115.8	1,606.6	982.6	2,034.3	7,379.6	6,501.9	99.66	101.4	179.1
Dec.	1,169.1	115.8	1,613.6	996.2	2,026.9	7,424.8	6,519.3	100.00	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	100.19	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	100.44	69.8	176.6
Mar.	1,178.2	109.9	1,655.8	1,010.6	2,081.7	7,513.4	6,606.2	101.35	58.5	176.4
Apr.	1,177.0	108.0	1,650.2	1,004.5	2,061.7	7,551.1	6,641.3	101.99	57.3	176.2
May	1,178.8	106.8	1,660.5	1,008.9	2,071.4	7,573.8	6,659.8	102.42	95.6	176.4
June	1,181.2	106.6	1,655.2	985.7	2,069.1	7,598.4	6,691.2	103.03	115.9	176.2
July	1,180.4	106.6	1,670.1	993.3	2,064.3	7,588.9	6,692.7	102.98	113.8	176.8
Aug.	1,168.9	106.8	1,687.0	1,004.2	2,053.0	7,592.6	6,692.3	102.99	134.2	177.7
Sep.	1,169.5	107.2	1,681.6	1,016.0	2,073.7	7,628.9	6,728.4	103.56	143.7	178.2
Oct. ^(p)	1,170.4	106.2	1,689.6	1,013.6	2,068.3	7,660.5	6,744.3	103.85	170.2	179.3

6. Main counterparts of M3: flows ⁴⁾

	Longer-term MFI liabilities				Credit ²⁾				Net external assets	Fixed assets
	Deposits with agreed maturity over 2 years	Deposits redeemable at notice over 3 months	Debt securities over 2 years	Capital and reserves	Credit to government	Credit to other euro area residents	Of which loans	Annual growth rate ³⁾ (%)		
	1	2	3	4	5	6	7	8	9	10
2001 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	32.8	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	27.0	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	46.3	21.9	6.0	-8.8	1.1
2002 Jan.	3.6	-3.6	11.0	13.3	18.7	17.3	12.6	5.7	-13.6	-2.5
Feb.	1.6	-1.0	9.3	-0.6	4.0	24.8	16.3	5.6	-10.3	-0.9
Mar.	3.7	-1.3	18.7	2.6	22.2	48.6	59.0	5.5	-5.7	0.0
Apr.	-0.5	-1.9	1.2	-5.2	-18.5	44.2	41.7	5.5	-1.8	-0.2
May	3.0	-1.2	19.7	3.9	6.9	32.2	28.3	5.8	39.1	0.2
June	3.6	-0.2	8.6	-17.5	0.1	32.6	39.4	5.4	40.4	-0.2
July	1.8	0.0	8.8	9.7	-5.3	-13.4	-2.8	5.1	-1.7	0.5
Aug.	2.2	0.2	2.7	8.8	-12.4	5.1	0.2	5.4	14.1	1.0
Sep.	1.0	0.4	12.8	10.3	14.2	43.1	37.5	5.2	23.8	0.5
Oct. ^(p)	1.2	-1.0	9.7	-0.6	-5.5	31.5	18.6	5.0	27.6	1.0

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

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

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

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

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

	Non-monetary financial intermediaries except insurance corporations and pension funds			Insurance corporations and pension funds			General government							
	Total		Index Dec.01 =100 ²⁾	Total		Index Dec.01 =100 ²⁾	Central government ³⁾	Other general government					Total	Index Dec.01 =100 ²⁾
	1	Up to 1 year		2	Up to 1 year			3	State government	Local government		Social security funds		
			Over 5 years			Over 5 years				10	11		12	
8	9	10	11	12	13	14								
2001 Q1	418.2	273.1	95.8	36.4	26.8	103.5	188.4	295.2	255.3	352.4	314.0	15.6	851.7	100.6
Q2	425.5	280.7	97.5	36.2	26.7	102.9	174.1	294.0	254.9	350.4	312.4	17.2	835.7	98.6
Q3	409.0	256.8	93.6	37.4	26.9	107.3	167.3	293.9	254.1	349.7	312.0	18.9	829.8	98.0
Q4	434.6	276.2	100.0	34.9	24.8	100.0	170.1	298.3	252.0	362.9	322.3	16.4	847.7	100.0
2002 Q1	459.0	305.0	105.8	38.9	28.3	111.3	180.3	294.0	248.2	361.8	317.9	16.4	852.6	100.6
Q2	461.3	303.7	106.3	39.4	28.2	112.2	163.0	280.9	245.8	366.6	314.5	19.5	830.1	98.0
Q3 ⁴⁾	453.3	290.6	104.4	43.1	30.7	116.8	155.4	274.7	241.6	371.3	319.4	19.7	821.1	96.9

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

	Non-monetary financial intermediaries except insurance corporations and pension funds			Insurance corporations and pension funds			General government							
	Total		Annual growth rate ²⁾ (%)	Total		Annual growth rate ²⁾ (%)	Central government ³⁾	Other general government					Total	Annual growth rate ²⁾ (%)
	1	Up to 1 year		2	Up to 1 year			3	State government	Local government		Social security funds		
			Over 5 years			Over 5 years				10	11		12	
8	9	10	11	12	13	14								
2001 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	27.7	21.6	11.8	-2.5	-2.1	11.3	1.9	4.4	-2.1	13.2	10.3	-2.5	16.9	-0.9
2002 Q1	25.1	29.3	10.4	3.9	3.5	7.5	10.1	-4.3	-3.8	-1.1	-4.4	0.1	4.8	0.0
Q2	2.1	-1.3	9.0	0.3	-0.2	9.0	-16.2	-13.1	-2.4	4.8	-3.5	3.1	-21.4	-0.6
Q3 ⁴⁾	-8.0	-13.1	11.5	1.6	2.6	8.8	-7.7	-6.8	-4.7	4.7	5.0	0.2	-9.6	-1.1

Source: ECB.

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

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

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

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

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

	Non-financial corporations					Consumer credit ³⁾				
	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Total	Index Dec.01 =100 ²⁾	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Total	Index Dec.01 =100 ²⁾
	1	2	3	4	5	6	7	8	9	10
2001 Q1	1,034.2	445.9	1,313.9	2,794.0	96.1	98.7	168.4	212.7	479.9	95.8
Q2	1,051.7	456.3	1,343.7	2,851.8	97.8	100.1	171.1	217.7	488.8	97.9
Q3	1,027.2	467.3	1,372.1	2,866.6	98.8	100.6	170.7	221.7	493.1	98.8
Q4	1,017.9	489.8	1,394.6	2,902.3	100.0	102.6	170.4	226.7	499.6	100.0
2002 Q1	1,018.7	494.8	1,418.9	2,932.4	100.8	99.3	170.5	229.2	499.0	99.9
Q2	1,010.2	504.9	1,437.4	2,952.4	102.4	102.3	173.6	233.0	508.9	101.4
Q3 ^(p)	998.6	505.2	1,450.2	2,954.0	102.4	104.5	177.3	237.1	518.8	103.0

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 Q2	13.6	12.1	25.9	51.7	9.1	1.3	3.9	5.2	10.4	5.2
Q3	-19.2	14.3	32.3	27.4	7.5	0.9	-0.5	4.1	4.5	3.6
Q4	-10.1	23.2	22.5	35.6	6.1	1.9	-0.7	4.9	6.1	3.6
2002 Q1	-1.1	4.7	20.2	23.8	5.0	-4.2	1.2	2.5	-0.5	4.3
Q2	-0.4	15.5	30.9	46.0	4.7	2.9	0.7	3.8	7.4	3.6
Q3 ^(p)	-12.7	-0.1	13.0	0.3	3.7	2.2	1.8	4.1	8.1	4.3

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.01 =100 ²⁾	Total	Index Dec.01 =100 ²⁾	
Up to 1 year	Over 1 and up to 5 years	Over 5 years	Total	Index Dec.01 =100 ²⁾	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Total	Index Dec.01 =100 ²⁾					
11	12	13	14	15	16	17	18	19	20	21	22	23	24	
21.8	62.0	1,831.6	1,915.4	95.1	146.9	104.5	342.1	593.5	99.0	2,988.7	95.9	37.3	95.3	2001 Q1
22.3	62.4	1,868.0	1,952.8	96.7	148.8	100.9	342.7	592.4	99.9	3,034.0	97.5	40.7	104.3	Q2
22.5	61.1	1,905.9	1,989.5	98.6	144.3	100.8	342.1	587.2	99.2	3,069.8	98.7	39.0	99.9	Q3
22.7	61.0	1,935.1	2,018.8	100.0	144.6	101.9	343.6	590.0	100.0	3,108.5	100.0	39.0	100.0	Q4
23.1	60.7	1,972.9	2,056.6	101.9	142.6	101.2	337.7	581.6	99.5	3,137.3	101.1	38.7	99.1	2002 Q1
23.7	60.7	2,016.9	2,101.3	104.1	145.7	103.3	339.5	588.6	100.9	3,198.7	103.0	39.4	101.0	Q2
24.5	60.9	2,053.6	2,139.0	105.9	143.3	101.5	340.7	585.6	100.9	3,243.4	104.5	39.9	102.2	Q3 ⁴⁾

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	
0.5	0.5	32.2	33.3	7.6	2.0	-1.8	5.3	5.5	2.9	49.3	6.2	3.5	8.1	2001 Q2
0.2	-1.4	38.4	37.3	7.6	-4.5	0.1	0.2	-4.3	2.3	37.4	5.9	-1.7	3.7	Q3
0.1	-0.1	28.9	29.0	6.8	0.3	2.3	2.0	4.6	2.0	39.7	5.3	0.0	2.2	Q4
0.4	-0.4	37.9	37.9	7.2	-1.6	-0.3	-1.2	-3.0	0.5	34.3	5.4	-0.4	3.9	2002 Q1
0.6	0.0	44.0	44.7	7.6	3.4	2.4	2.4	8.2	0.9	60.3	5.7	0.8	-3.2	Q2
0.9	0.2	36.4	37.5	7.5	-2.5	0.2	2.6	0.3	1.7	45.8	5.9	0.5	2.2	Q3 ⁴⁾

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

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

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

	Non-monetary financial intermediaries except insurance corporations and pension funds					Insurance corporations and pension funds					General government					
	Total ²⁾				Index Dec.01 =100 ³⁾	Total ²⁾				Index Dec.01 =100 ³⁾	Central government	Other general government			Total	Index Dec.01 =100 ³⁾
	Over-night	With agreed maturity	Repos			Over-night	With agreed maturity	Repos				State government	Local government	Social security funds		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
2001 Q1	441.8	151.8	194.1	91.2	98.3	483.8	38.2	423.3	18.8	97.6	150.3	30.9	65.0	57.2	303.5	101.5
Q2	455.6	164.3	196.0	89.3	100.5	486.3	41.4	424.2	16.9	98.2	165.5	31.4	66.8	60.8	324.6	108.6
Q3	455.3	162.7	201.8	85.6	98.7	487.8	39.3	426.9	17.9	98.5	147.8	33.3	67.4	60.4	308.9	103.3
Q4	465.8	157.9	217.3	85.3	100.0	495.4	48.0	427.5	16.4	100.0	139.0	30.0	68.9	61.0	299.0	100.0
2002 Q1	484.7	157.8	228.7	92.1	103.6	498.6	43.9	433.0	17.7	100.6	157.5	31.0	64.2	61.8	314.4	105.4
Q2	492.4	164.0	229.9	93.0	104.8	503.9	48.4	432.9	19.0	101.7	155.0	34.2	65.7	59.6	314.5	105.4
Q3 ^(p)	490.1	159.2	219.6	105.6	106.8	507.9	49.6	437.8	16.6	102.5	148.4	34.4	63.9	54.9	301.6	99.8

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

	Non-monetary financial intermediaries except insurance corporations and pension funds					Insurance corporations and pension funds					General government					
	Total ²⁾				Annual growth rate ³⁾ (%)	Total ²⁾				Annual growth rate ³⁾ (%)	Central government	Other general government			Total	Annual growth rate ³⁾ (%)
	Over-night	With agreed maturity	Repos			Over-night	With agreed maturity	Repos				State government	Local government	Social security funds		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
2001 Q2	10.0	12.4	-1.8	-1.8	4.6	2.8	3.4	1.0	-1.9	4.5	15.1	0.5	1.9	3.6	21.1	6.5
Q3	-8.2	-1.6	-2.2	-3.7	2.3	1.5	-2.1	2.7	1.0	4.6	-17.7	1.9	0.5	-0.5	-15.7	-2.0
Q4	6.1	-4.7	10.8	-0.2	3.8	7.6	8.8	0.6	-1.4	3.3	-8.8	-3.4	1.5	0.7	-10.0	-6.9
2002 Q1	16.9	0.0	9.4	6.7	5.4	3.0	-4.2	5.4	1.3	3.1	19.0	1.0	-4.7	0.7	16.1	3.8
Q2	5.6	5.8	1.5	0.3	4.3	5.3	4.5	-0.1	1.2	3.6	-2.5	3.3	1.5	-2.1	0.2	-2.9
Q3 ^(p)	9.4	-5.2	1.9	12.7	8.3	4.1	1.3	5.0	-2.4	4.1	-10.3	0.1	-1.7	-4.7	-16.7	-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.01 =100 ³⁾	Overnight	With agreed maturity	Redeemable at notice	Repos	Total	Index Dec.01 =100 ³⁾
	1	2	3	4	5	6	7	8	9	10	11	12
2001 Q1	479.0	344.4	24.1	29.0	876.5	88.6	906.1	1,192.4	1,287.1	78.9	3,464.5	94.0
Q2	514.6	331.2	24.4	29.1	899.3	90.6	947.2	1,198.8	1,293.5	81.3	3,520.8	95.5
Q3	514.8	318.4	25.4	32.0	890.7	91.5	963.6	1,203.8	1,305.3	84.6	3,557.3	96.5
Q4	577.1	335.3	27.5	36.2	976.1	100.0	1,043.5	1,194.5	1,365.7	76.6	3,680.3	100.0
2002 Q1	529.1	344.8	27.5	34.5	935.9	95.8	1,039.2	1,180.1	1,382.6	80.6	3,682.5	100.1
Q2	555.7	337.7	27.7	37.0	958.1	99.9	1,076.6	1,174.7	1,382.0	77.0	3,710.2	100.9
Q3 ⁴⁾	561.5	336.6	28.9	35.5	962.5	100.3	1,067.0	1,173.4	1,391.5	78.4	3,710.2	100.9

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 Q2	32.7	-13.3	0.3	0.0	19.7	6.3	41.1	6.4	6.3	2.3	56.2	4.4
Q3	3.9	1.6	0.4	3.0	8.9	5.4	16.2	5.2	12.7	3.4	37.4	6.0
Q4	62.1	14.2	2.0	4.3	82.6	10.1	80.1	-4.2	60.3	-8.0	128.2	7.6
2002 Q1	-48.5	9.3	0.0	-1.8	-41.0	8.1	-4.3	-10.1	15.1	4.0	4.7	6.5
Q2	33.0	4.5	0.2	2.3	40.1	10.2	37.0	-5.1	1.6	-3.7	29.8	5.7
Q3 ⁴⁾	4.9	-0.6	1.2	-1.5	4.0	9.6	-9.1	-1.6	9.4	1.4	0.2	4.6

Source: ECB.

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

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

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

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

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

	Loans to non-residents								Holdings of securities other than shares issued by non-residents							
	Banks ¹⁾²⁾		Non-banks				Total	Index Dec.01 =100 ³⁾	Banks ¹⁾		Non-banks				Total	Index Dec.01 =100 ³⁾
	Total	Index Dec.01 =100 ³⁾	General govern- ment	Other	Total	Index Dec.01 =100 ³⁾			Total	Index Dec.01 =100 ³⁾	General govern- ment	Other	Total	Index Dec.01 =100 ³⁾		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
2001 Q1	1,053.9	94.3	76.3	517.6	593.9	96.4	1,647.8	95.0	192.3	81.7	285.9	205.1	491.0	96.5	683.3	91.8
Q2	1,073.2	94.3	79.2	519.0	598.1	94.8	1,671.3	94.5	210.6	87.6	294.6	208.7	503.3	97.2	713.9	94.2
Q3	1,084.7	97.4	75.1	527.4	602.5	99.0	1,687.2	97.9	206.7	88.8	273.8	213.1	486.9	97.1	693.6	94.5
Q4	1,119.7	100.0	75.2	543.4	618.6	100.0	1,738.3	100.0	236.6	100.0	290.2	217.7	507.9	100.0	744.5	100.0
2002 Q1	1,104.8	98.5	76.8	556.2	633.1	102.5	1,737.9	99.9	262.9	110.8	275.9	217.8	493.7	97.4	756.6	101.6
Q2	1,085.2	103.1	72.9	528.4	601.3	104.6	1,686.4	103.6	244.3	109.4	244.2	214.6	458.9	96.1	703.2	100.4
Q3 ^(p)	1,123.6	105.8	76.9	539.2	616.1	106.3	1,739.7	105.9	254.2	112.3	252.5	229.1	481.6	99.8	735.8	103.7

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 Q2	0.7	3.3	2.9	-12.6	-9.7	18.3	-9.1	8.3	14.0	31.0	9.2	-5.7	3.5	5.3	17.4	11.8
Q3	34.8	10.1	-4.1	30.5	26.4	19.6	61.2	13.4	2.9	26.7	-22.3	21.9	-0.4	3.2	2.6	9.2
Q4	29.2	14.0	0.1	6.1	6.2	16.0	35.4	14.7	26.0	33.3	16.7	-2.3	14.3	7.2	40.3	14.3
2002 Q1	-17.3	4.4	3.6	11.9	15.4	6.4	-1.9	5.1	25.6	35.7	-10.9	-2.5	-13.4	0.9	12.2	10.7
Q2	51.9	9.3	-3.9	16.8	12.9	10.3	64.8	9.7	-3.4	24.9	-34.4	28.2	-6.2	-1.1	-9.5	6.6
Q3 ^(p)	28.1	8.6	4.0	5.7	9.7	7.4	37.8	8.2	6.4	26.4	5.9	11.4	17.3	2.7	23.7	9.8

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.01 =100 ³⁾	Banks ¹⁾		Non-banks				Total	Index Dec.01 =100 ³⁾	
Total	Index Dec.01 =100 ³⁾	Total	Index Dec.01 =100 ³⁾			Total	Index Dec.01 =100 ³⁾	General government	Other	Total	Index Dec.01 =100 ³⁾			
17	18	19	20	21	22	23	24	25	26	27	28	29	30	
65.1	93.5	94.3	104.5	159.4	99.7	1,781.7	103.5	89.3	577.1	666.4	93.9	2,448.2	100.7	2001 Q1
61.1	87.6	97.2	107.5	158.3	98.8	1,817.5	103.3	94.9	587.1	681.9	94.3	2,499.4	100.7	Q2
63.6	91.1	89.9	99.2	153.5	95.7	1,710.8	100.7	93.0	588.5	681.5	97.2	2,392.3	99.7	Q3
73.0	100.0	89.8	100.0	162.8	100.0	1,718.4	100.0	95.3	615.0	710.3	100.0	2,428.8	100.0	Q4
76.9	104.5	98.5	110.9	175.4	108.0	1,740.4	100.4	99.0	636.8	735.8	103.3	2,476.3	101.3	2002 Q1
76.8	104.1	100.9	113.4	177.7	109.3	1,606.1	98.9	96.2	607.3	703.6	104.6	2,309.7	100.6	Q2
77.8	105.4	96.4	108.2	174.2	107.0	1,645.4	100.6	102.4	609.8	712.3	105.2	2,357.7	102.0	Q3 ^(p)

Holdings of shares and other equity issued by non-residents						Deposits held by non-residents								
Banks ¹⁾		Other		Total	Annual growth rate ³⁾ (%)	Banks ¹⁾		Non-banks				Total	Annual growth rate ³⁾ (%)	
Total	Annual growth rate ³⁾ (%)	Total	Annual growth rate ³⁾ (%)			Total	Annual growth rate ³⁾ (%)	General government	Other	Total	Annual growth rate ³⁾ (%)			
17	18	19	20	21	22	23	24	25	26	27	28	29	30	
-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	2001 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	30.8	0.6	2002 Q1
-0.2	18.9	2.3	5.5	2.1	10.5	-25.9	-4.2	-2.8	12.1	9.3	10.8	-16.7	-0.1	Q2
0.9	15.7	-4.7	9.1	-3.7	11.8	27.0	-0.1	6.1	-1.6	4.4	8.3	31.4	2.3	Q3 ^(p)

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

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

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

	MFIs								Non-MFIs							
	All currencies 1	Euro ²⁾ 2	Other EU currencies 3	Other currencies 4	Other currencies				All currencies 9	Euro ²⁾ 10	Other EU currencies 11	Other currencies 12	Other currencies			
					USD 5	JPY 6	CHF 7	Other 8					USD 13	JPY 14	CHF 15	Other 16
2001 Q1	4,067.9	3,563.6	55.4	448.9	316.6	43.7	67.8	20.7	5,570.0	5,363.2	31.2	175.6	130.8	20.2	12.3	12.2
Q2	4,079.7	3,590.3	52.8	436.6	309.0	43.3	65.4	19.0	5,686.6	5,476.6	30.7	179.3	133.5	21.0	11.6	13.2
Q3	4,108.4	3,628.3	48.9	431.2	300.6	41.7	71.0	17.9	5,700.0	5,503.7	28.2	168.1	125.7	19.4	10.8	12.2
Q4	4,171.9	3,699.5	46.6	425.9	307.6	33.5	67.2	17.6	5,916.6	5,715.8	26.0	174.9	127.4	23.9	10.5	13.0
2002 Q1	4,135.7	3,646.5	46.1	443.0	315.8	40.6	65.6	21.0	5,916.1	5,712.7	28.8	174.6	126.9	22.4	10.7	14.6
Q2	4,214.6	3,774.5	41.3	398.8	276.4	40.8	62.8	18.8	5,979.1	5,791.4	26.7	161.0	115.0	22.3	10.9	12.8
Q3 ³⁾	4,217.0	3,797.1	38.5	381.3	265.8	37.7	58.2	19.7	5,972.4	5,785.4	25.8	161.2	117.8	21.2	9.4	12.9

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

	Banks ³⁾								Non-banks							
	All currencies 1	Euro ²⁾ 2	Other EU currencies 3	Other currencies 4	Other currencies				All currencies 9	Euro ²⁾ 10	Other EU currencies 11	Other currencies 12	Other currencies			
					USD 5	JPY 6	CHF 7	Other 8					USD 13	JPY 14	CHF 15	Other 16
2001 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	933.8	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	1,606.1	649.1	141.6	815.4	665.8	40.5	73.4	35.7	703.6	322.2	63.3	318.1	268.7	19.4	17.8	12.2
Q3 ³⁾	1,645.4	703.0	144.3	798.2	650.2	42.1	72.5	33.4	712.3	334.7	68.3	309.3	258.6	17.9	16.4	16.4

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
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	2,850.7	2,448.4	67.9	334.4	209.4	55.1	44.1	25.8	285.3	233.7	7.2	44.5	38.0	1.5	2.7	2.3
Q3 ³⁾	2,862.9	2,458.9	70.6	333.4	203.4	53.6	48.0	28.4	286.6	234.2	6.3	46.1	39.8	1.1	3.0	2.2

Source: ECB.

- 1) Outstanding amounts are not adjusted for reclassifications, other revaluations or exchange rate variations. Data are partially estimated. For further details, see the technical notes.
- 2) Including items expressed in the national denominations of the euro.
- 3) The term "banks" is used in this table to indicate institutions of a similar type to MFIs resident outside the euro area.

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

	MFIs								Non-MFIs							
	All currencies	Euro ²⁾	Other EU currencies	Other currencies					All currencies	Euro ²⁾	Other EU currencies	Other currencies				
					USD	JPY	CHF	Other					USD	JPY	CHF	Other
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
2001 Q1	4,089.5	-	-	-	-	-	-	-	7,126.3	6,782.7	35.1	308.5	182.6	45.4	74.9	5.6
Q2	4,096.6	-	-	-	-	-	-	-	7,223.9	6,857.3	29.4	337.2	205.0	51.7	74.0	6.5
Q3	4,089.7	-	-	-	-	-	-	-	7,251.7	6,907.3	30.9	313.5	178.2	52.1	77.3	5.8
Q4	4,180.4	-	-	-	-	-	-	-	7,367.0	7,025.3	29.8	312.0	181.6	47.8	77.5	5.1
2002 Q1	4,133.3	-	-	-	-	-	-	-	7,458.8	7,106.8	30.5	321.5	187.4	51.0	76.8	6.3
Q2	4,201.2	-	-	-	-	-	-	-	7,521.3	7,209.1	28.9	283.3	152.5	46.7	78.3	5.8
Q3 ³⁾	4,220.0	-	-	-	-	-	-	-	7,549.5	7,240.8	27.7	281.0	150.3	45.1	80.0	5.6

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

	Issued by MFIs								Issued by non-MFIs							
	All currencies	Euro ²⁾	Other EU currencies	Other currencies					All currencies	Euro ²⁾	Other EU currencies	Other currencies				
					USD	JPY	CHF	Other					USD	JPY	CHF	Other
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
2001 Q1	971.8	931.6	9.7	30.5	20.6	6.3	1.7	1.8	1,455.6	1,415.8	3.8	36.0	21.2	13.1	1.1	0.6
Q2	994.7	951.6	11.0	32.1	22.1	6.5	1.6	1.8	1,508.6	1,466.8	4.9	36.9	21.7	13.3	1.1	0.8
Q3	999.5	960.0	9.6	29.9	21.0	5.9	1.5	1.5	1,522.6	1,483.6	4.2	34.8	20.4	12.6	1.2	0.6
Q4	1,012.1	967.1	12.4	32.6	23.1	6.3	1.4	1.8	1,516.4	1,478.6	3.7	34.1	20.4	12.1	1.1	0.6
2002 Q1	1,050.4	1,002.2	14.8	33.3	24.0	5.6	1.8	1.9	1,575.7	1,539.1	3.7	32.9	19.5	11.7	1.1	0.6
Q2	1,064.3	1,017.3	13.5	33.5	23.9	5.8	2.0	1.8	1,582.2	1,547.9	4.5	29.8	15.5	12.2	1.2	0.8
Q3 ³⁾	1,047.2	1,002.5	14.1	30.7	22.2	4.9	2.0	1.7	1,601.8	1,567.0	5.2	29.6	15.2	12.2	1.4	0.7

6. Loans to non-residents of the euro area

	Banks ³⁾								Non-banks							
	All currencies	Euro ²⁾	Other EU currencies	Other currencies					All currencies	Euro ²⁾	Other EU currencies	Other currencies				
					USD	JPY	CHF	Other					USD	JPY	CHF	Other
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
2001 Q1	1,053.9	469.7	98.7	485.6	365.8	47.3	34.5	37.0	593.9	198.2	48.6	347.0	300.8	11.9	26.2	8.0
Q2	1,073.2	474.4	103.0	495.8	375.9	48.2	36.7	35.0	598.1	184.7	47.7	365.7	318.1	12.1	26.9	8.6
Q3	1,084.7	488.3	101.5	494.8	378.6	42.0	40.3	33.9	602.5	201.5	46.8	354.2	307.5	12.7	24.9	9.0
Q4	1,119.7	452.2	114.7	552.9	435.9	45.2	37.9	33.8	618.6	202.6	46.8	369.3	323.2	12.0	25.7	8.4
2002 Q1	1,104.8	432.2	131.1	541.6	424.4	45.6	37.3	34.3	633.1	199.5	49.9	383.7	331.2	16.4	26.9	9.2
Q2	1,085.2	459.4	129.9	495.9	375.0	61.4	36.1	23.4	601.3	204.2	46.6	350.5	300.8	12.8	28.1	8.8
Q3 ³⁾	1,123.6	498.9	142.1	482.5	368.4	56.9	33.6	23.7	616.1	217.2	46.2	352.8	299.5	15.5	29.3	8.6

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

	Issued by banks ³⁾								Issued by non-banks							
	All currencies	Euro ²⁾	Other EU currencies	Other currencies					All currencies	Euro ²⁾	Other EU currencies	Other currencies				
					USD	JPY	CHF	Other					USD	JPY	CHF	Other
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
2001 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	210.6	72.5	25.5	112.6	98.4	6.8	2.6	4.8	503.3	121.4	25.8	356.1	316.2	26.9	3.0	9.9
Q3	206.7	76.5	27.0	103.2	93.1	4.7	2.1	3.4	486.9	129.1	27.1	330.7	292.7	27.1	3.9	7.1
Q4	236.6	80.7	27.6	128.3	118.1	4.2	2.7	3.3	507.9	131.5	27.0	349.4	306.2	30.3	4.2	8.7
2002 Q1	262.9	87.1	33.5	142.4	130.5	4.4	2.9	4.5	493.7	127.9	26.9	339.0	298.6	24.6	5.0	10.8
Q2	244.3	87.5	32.6	124.2	111.8	4.3	2.3	5.9	458.9	132.4	25.0	301.4	260.7	24.0	5.0	11.7
Q3 ³⁾	254.2	92.3	38.7	123.1	113.1	3.9	2.4	3.7	481.6	135.5	31.4	314.8	271.5	25.7	5.4	12.1

3 Financial markets and interest rates in the euro area

Table 3.1

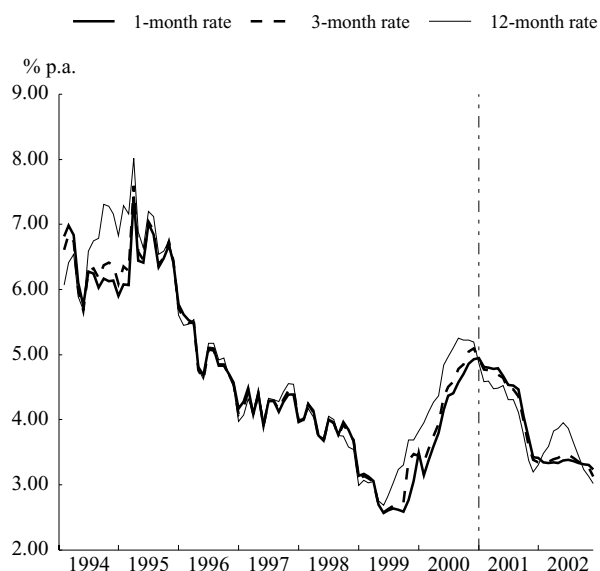
Money market interest rates ¹⁾

(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 Nov.	3.51	3.43	3.39	3.26	3.20	2.10	0.08
2001 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
2002 Feb.	3.28	3.34	3.36	3.40	3.59	1.90	0.10
2002 Mar.	3.26	3.35	3.39	3.50	3.82	1.99	0.10
2002 Apr.	3.32	3.34	3.41	3.54	3.86	1.97	0.08
2002 May	3.31	3.37	3.46	3.62	3.95	1.91	0.08
2002 June	3.35	3.38	3.46	3.59	3.87	1.88	0.07
2002 July	3.30	3.36	3.41	3.48	3.64	1.85	0.07
2002 Aug.	3.29	3.33	3.35	3.38	3.44	1.78	0.07
2002 Sep.	3.32	3.32	3.31	3.27	3.24	1.80	0.07
2002 Oct.	3.30	3.31	3.26	3.17	3.13	1.78	0.07
2002 Nov.	3.30	3.23	3.12	3.04	3.02	1.46	0.07
2002 1 Nov.	3.30	3.28	3.24	3.13	3.07	1.66	0.08
2002 8	3.29	3.30	3.21	3.10	3.05	1.40	0.07
2002 15	3.29	3.27	3.12	3.03	3.01	1.42	0.07
2002 22	3.49	3.16	3.04	2.97	2.97	1.43	0.07
2002 29	3.38	3.18	3.05	2.99	3.02	1.43	0.07

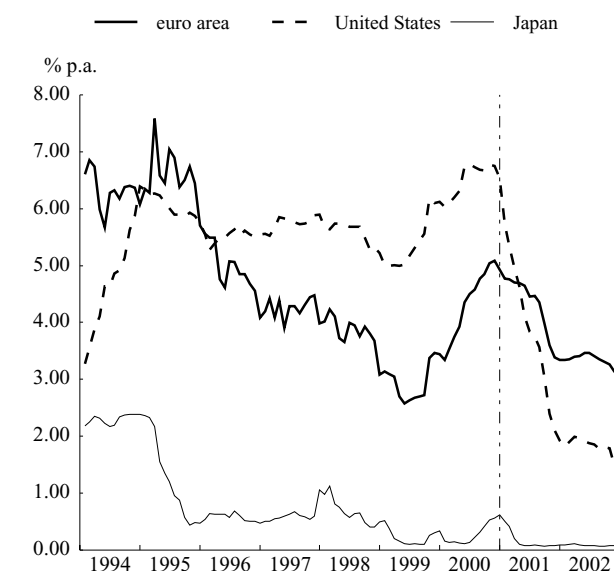
Euro area money market rates

(monthly)



3-month money market rates

(monthly)



Sources: Reuters and ECB.

- 1) With the exception of the overnight rate to December 1998, monthly and yearly values are period averages.
- 2) Interbank deposit bid rates to December 1998. From January 1999 column 1 shows the euro overnight index average (EONIA).
- 3) End-of-period rates to December 1998; period averages thereafter.
- 4) Before January 1999 synthetic euro area rates were calculated on the basis of national rates weighted by GDP.
- 5) From January 1999, euro interbank offered rates (EURIBOR). Up to December 1998, London interbank offered rates (LIBOR) where available.
- 6) London interbank offered rates (LIBOR).

Table 3.2

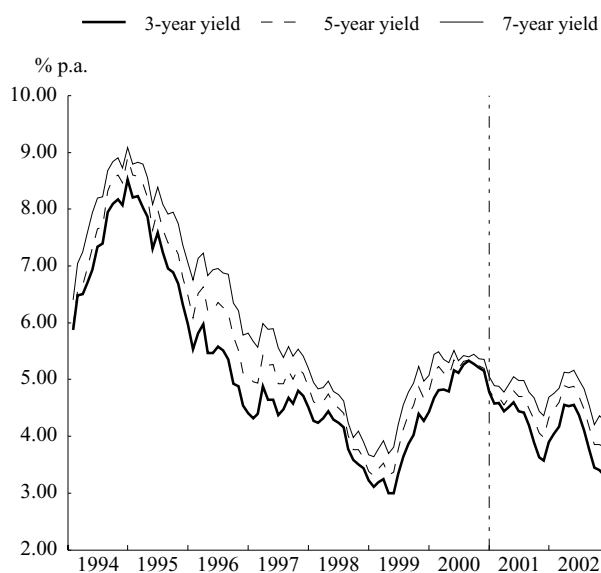
Government bond yields ¹⁾

(percentages per annum)

	Euro area ²⁾					United States	Japan
	2 years ¹	3 years ²	5 years ³	7 years ⁴	10 years ⁵	10 years ⁶	10 years ⁷
1997	4.33	4.51	4.87	5.20	5.99	6.45	2.15
1998	3.16	3.22	3.38	3.67	4.71	5.33	1.30
1999	3.38	3.63	4.01	4.38	4.66	5.64	1.75
2000	4.90	5.03	5.19	5.37	5.44	6.03	1.76
<i>Euro area enlargement</i>							
2001	4.11	4.23	4.49	4.79	5.03	5.01	1.34
2001 Nov.	3.36	3.58	3.98	4.37	4.67	4.61	1.33
2001 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
2002 Feb.	3.96	4.17	4.60	4.85	5.07	4.90	1.52
2002 Mar.	4.25	4.55	4.90	5.13	5.32	5.28	1.45
2002 Apr.	4.21	4.53	4.86	5.12	5.30	5.21	1.39
2002 May	4.25	4.55	4.89	5.16	5.30	5.15	1.38
2002 June	4.10	4.37	4.70	4.99	5.16	4.90	1.36
2002 July	3.83	4.10	4.48	4.84	5.03	4.62	1.30
2002 Aug.	3.47	3.76	4.15	4.54	4.73	4.24	1.26
2002 Sep.	3.19	3.46	3.85	4.20	4.52	3.88	1.16
2002 Oct.	3.13	3.41	3.86	4.36	4.62	3.91	1.09
2002 Nov.	3.04	3.31	3.81	4.28	4.59	4.04	0.99
2002 1 Nov.	3.08	3.36	3.84	4.35	4.66	4.00	0.98
2002 8	3.03	3.29	3.76	4.26	4.56	3.84	0.99
2002 15	3.01	3.28	3.77	4.24	4.55	4.06	1.01
2002 22	3.04	3.30	3.81	4.25	4.60	4.15	1.03
2002 29	3.06	3.33	3.82	4.27	4.57	4.22	1.00

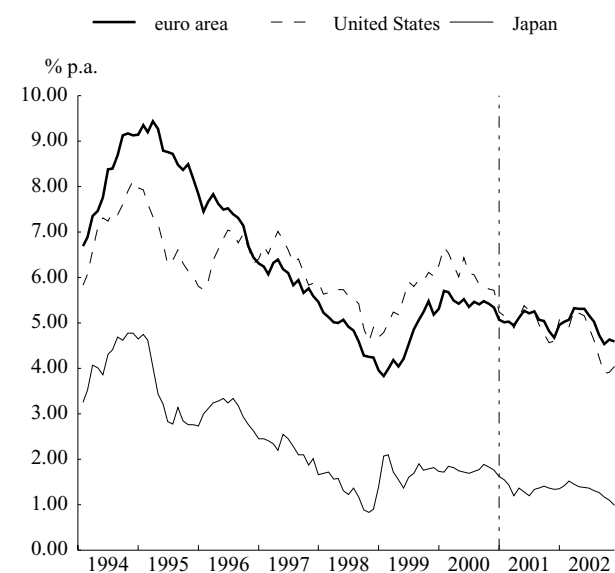
Euro area government bond yields

(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

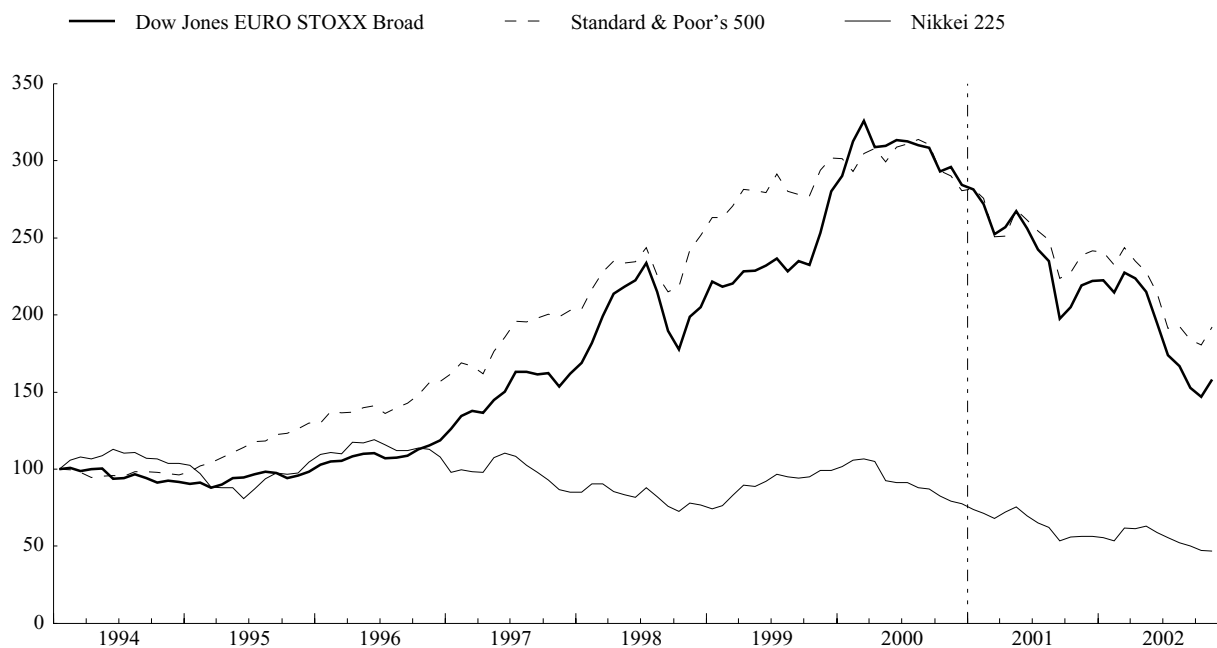
Stock market indices

(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 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 Nov.	219.5	2,559.0	224.2	145.4	234.8	272.4	197.0	208.8	289.6	215.2	324.5	347.1	910.1	8,699.6
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
2002 8	210.9	2,450.4	216.0	139.2	232.9	266.8	187.9	202.5	265.8	210.7	305.5	344.2	894.7	8,690.8
2002 15	217.0	2,535.7	221.2	142.1	233.9	273.1	193.0	207.4	285.7	214.5	322.6	347.3	909.8	8,503.6
2002 22	226.2	2,648.1	229.5	150.8	234.9	273.8	205.9	214.3	307.2	216.7	336.8	350.3	930.6	8,772.6
2002 29	229.0	2,656.9	239.8	154.9	232.2	275.0	209.0	221.4	311.6	215.3	342.4	340.1	936.3	9,215.6

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

(base month: January 1994 = 100; monthly)



Source: Reuters.

1) Monthly and yearly values are period averages.

Table 3.4

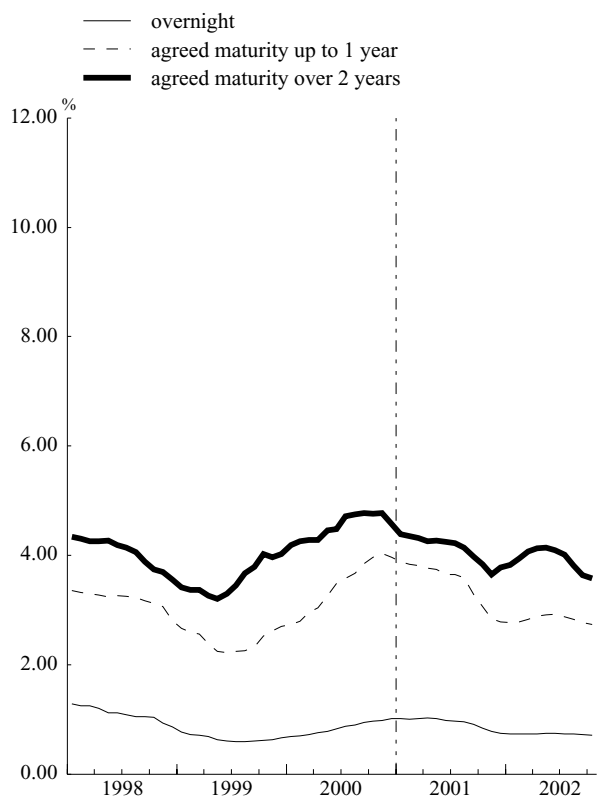
Retail bank interest rates

(percentages per annum; period averages)

	Deposit interest rates						Lending interest rates			
	Overnight	With agreed maturity			Redeemable at notice		To enterprises		To households	
		1	Up to 1 year	Up to 2 years	Over 2 years	Up to 3 months	Over 3 months	Up to 1 year	Over 1 year	Consumer lending	For house purchase
	2	3	4	5	6	7	8	9	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 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	9.81	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	6.18	5.92	9.82	5.77
July	0.74	2.88	2.89	4.02	2.13	3.02	6.16	5.79	9.76	5.68
Aug.	0.73	2.84	2.84	3.81	2.12	2.94	6.14	5.70	9.77	5.53
Sep.	0.73	2.77	2.77	3.64	2.13	2.73	6.11	5.61	9.82	5.37
Oct.	0.72	2.74	2.74	3.57	2.11	2.63	6.13	5.59	9.79	5.28

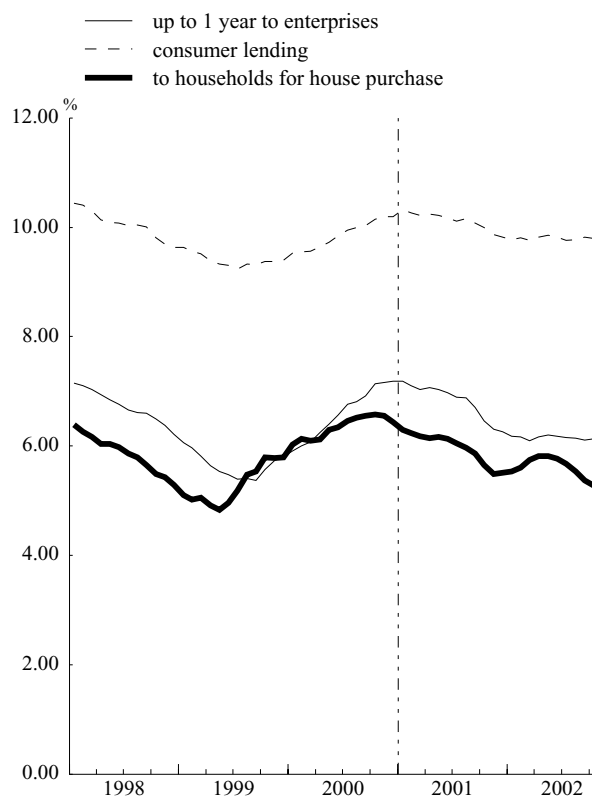
Deposit interest rates

(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 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	400.2	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	764.7	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	672.1	20.7	22.8
July	404.2	392.0	12.2	766.3	381.4	371.2	10.2	680.6	22.8	20.8
Aug.	383.9	377.9	6.0	769.8	365.6	356.8	8.8	689.0	18.3	21.1
Sep.	414.7	400.1	14.6	787.5	392.0	380.9	11.1	703.1	22.7	19.2

2. Long-term

	By euro area residents									
					In euro ¹⁾				In other	
	Issues	Redemptions	Net issues	Amounts outstanding	Issues	Redemptions	Net issues	Amounts outstanding	Issues	Redemptions
	1	2	3	4	5	6	7	8	9	10
2001 Sep.	124.5	106.8	17.8	6,888.8	108.9	88.4	20.5	6,303.7	15.6	18.3
Oct.	145.2	108.4	36.9	6,928.4	123.8	91.6	32.2	6,336.3	21.5	16.8
Nov.	142.4	92.4	50.1	6,982.9	116.0	86.5	29.4	6,365.4	26.5	5.8
Dec.	125.9	86.4	39.5	7,021.4	113.5	76.9	36.6	6,401.1	12.4	9.5
2002 Jan.	174.1	111.0	63.1	7,089.3	156.3	105.0	51.3	6,450.6	17.8	6.0
Feb.	143.0	109.3	33.7	7,124.5	130.4	97.6	32.7	6,484.6	12.7	11.7
Mar.	164.4	102.7	61.7	7,185.1	142.6	91.6	51.0	6,534.9	21.8	11.1
Apr.	126.5	79.9	46.6	7,221.9	115.3	74.7	40.5	6,576.1	11.2	5.2
May	148.1	87.0	61.0	7,269.7	126.5	75.4	51.1	6,628.4	21.6	11.6
June	132.5	95.3	37.3	7,283.8	122.8	87.7	35.2	6,659.7	9.7	7.6
July	130.3	113.8	16.5	7,312.1	113.8	104.0	9.9	6,673.3	16.5	9.8
Aug.	67.4	63.1	4.3	7,314.4	58.6	54.4	4.2	6,677.3	8.8	8.7
Sep.	134.1	85.1	49.0	7,363.6	116.0	73.8	42.2	6,718.7	18.2	11.3

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 Sep.	522.7	507.4	15.3	7,626.7	483.4	465.0	18.4	6,957.4	39.3	42.4
Oct.	644.2	604.4	39.8	7,672.4	603.9	562.9	41.0	6,998.9	40.2	41.4
Nov.	629.0	582.9	46.1	7,724.6	575.6	553.2	22.4	7,021.0	53.4	29.7
Dec.	458.4	463.1	-4.7	7,718.8	421.5	430.7	-9.2	7,011.9	36.9	32.4
2002 Jan.	659.8	564.9	94.9	7,822.1	620.6	537.9	82.7	7,094.2	39.2	27.0
Feb.	549.9	518.0	31.8	7,853.0	517.3	485.4	31.9	7,128.7	32.5	32.6
Mar.	585.5	506.2	79.4	7,933.5	542.7	475.1	67.7	7,197.3	42.8	31.1
Apr.	528.3	486.9	41.5	7,964.7	492.0	459.2	32.8	7,230.9	36.4	27.7
May	549.0	465.7	83.3	8,034.3	503.9	434.0	69.9	7,301.6	45.1	31.7
June	469.0	436.8	32.3	8,044.2	438.6	406.4	32.3	7,331.8	30.4	30.4
July	534.5	505.8	28.7	8,078.4	495.2	475.1	20.1	7,353.9	39.2	30.6
Aug.	451.3	441.0	10.4	8,084.2	424.3	411.2	13.1	7,366.3	27.1	29.8
Sep.	548.9	485.2	63.7	8,151.1	508.0	454.7	53.3	7,421.8	40.9	30.5

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

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

currencies		By non-residents of the euro area in euro ¹⁾				Total in euro ¹⁾				
		Issues	Redemptions	Net issues	Amounts outstanding	Issues	Redemptions	Net issues	Amounts outstanding	
Net issues	Amounts outstanding									
11	12	13	14	15	16	17	18	19	20	
-0.4	84.2	22.0	12.0	10.0	55.4	396.5	388.5	8.0	709.1	2001 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	14.7	24.8	-10.1	44.4	396.1	395.9	0.2	724.9	July
-2.8	80.8	12.1	11.5	0.6	44.9	377.7	368.3	9.4	733.9	Aug.
3.5	84.5	31.7	7.7	24.0	68.9	423.7	388.5	35.1	772.0	Sep.

currencies		By non-residents of the euro area in euro ¹⁾				Total in euro ¹⁾				
		Issues	Redemptions	Net issues	Amounts outstanding	Issues	Redemptions	Net issues	Amounts outstanding	
Net issues	Amounts outstanding									
11	12	13	14	15	16	17	18	19	20	
-2.7	585.1	8.4	9.0	-0.6	837.0	117.3	97.4	19.9	7,140.7	2001 Sep.
4.7	592.2	20.6	4.6	16.0	852.9	144.4	96.1	48.3	7,189.2	Oct.
20.7	617.5	30.1	7.4	22.8	875.7	146.1	93.9	52.2	7,241.1	Nov.
2.9	620.3	14.2	13.4	0.8	876.5	127.7	90.3	37.3	7,277.6	Dec.
11.8	638.7	19.6	6.8	12.7	889.2	175.9	111.8	64.0	7,339.8	2002 Jan.
1.0	639.8	19.7	13.9	5.9	895.1	150.1	111.5	38.6	7,379.8	Feb.
10.8	650.1	25.4	12.0	13.5	908.6	168.0	103.6	64.4	7,443.5	Mar.
6.1	645.8	23.0	7.6	15.4	924.3	138.2	82.3	55.9	7,500.3	Apr.
9.9	641.3	26.3	8.2	18.0	942.4	152.8	83.7	69.1	7,570.8	May
2.1	624.1	29.3	10.9	18.4	960.8	152.2	98.5	53.6	7,620.5	June
6.7	638.8	11.7	8.2	3.5	964.3	125.5	112.2	13.3	7,637.6	July
0.1	637.1	7.1	8.1	-1.0	963.2	65.7	62.5	3.2	7,640.5	Aug.
6.9	644.8	24.3	11.5	12.9	976.1	140.3	85.3	55.0	7,694.8	Sep.

currencies		By non-residents of the euro area in euro ¹⁾				Total in euro ¹⁾				
		Issues	Redemptions	Net issues	Amounts outstanding	Issues	Redemptions	Net issues	Amounts outstanding	
Net issues	Amounts outstanding									
11	12	13	14	15	16	17	18	19	20	
-3.1	669.4	30.4	21.0	9.4	892.4	513.8	486.0	27.9	7,849.8	2001 Sep.
-1.2	673.4	29.5	24.6	4.9	897.2	633.4	587.5	45.9	7,896.2	Oct.
23.7	703.6	46.3	20.2	26.0	923.3	621.9	573.4	48.5	7,944.3	Nov.
4.4	706.9	31.3	23.7	7.7	931.0	452.9	454.4	-1.5	7,942.9	Dec.
12.2	727.9	30.9	31.0	-0.1	930.8	651.5	569.0	82.5	8,025.0	2002 Jan.
-0.1	724.4	33.2	25.6	7.5	938.4	550.5	511.1	39.4	8,067.1	Feb.
11.7	736.1	49.8	19.9	29.9	968.3	592.5	494.9	97.6	8,165.7	Mar.
8.6	733.8	32.7	35.7	-3.0	965.5	524.7	494.8	29.8	8,196.4	Apr.
13.4	732.7	39.9	21.6	18.3	984.0	543.9	455.6	88.2	8,285.6	May
0.0	712.4	50.2	18.9	31.3	1,015.2	488.9	425.3	63.6	8,347.0	June
8.6	724.5	26.4	33.0	-6.6	1,008.6	521.6	508.1	13.5	8,362.5	July
-2.7	717.9	19.2	19.7	-0.5	1,008.1	443.4	430.8	12.6	8,374.5	Aug.
10.4	729.3	56.0	19.1	36.9	1,045.0	564.0	473.8	90.2	8,466.8	Sep.

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 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	672.1	260.7	3.8	82.0	322.5	3.0	54.4	21.3	27.6	4.4
July	680.6	265.3	4.2	86.0	321.7	3.4	44.4	18.3	22.3	2.8
Aug.	689.0	266.0	4.4	86.5	328.8	3.3	44.9	18.1	23.5	2.6
Sep.	703.1	273.1	4.4	87.3	335.7	2.6	68.9	26.7	37.0	4.0

2. Long-term

	By euro area residents						By non-residents			
	Total	MFIs (including Eurosystem)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations
	1	2	3	4	5	6	7	8	9	10
2001 Sep.	6,303.7	2,297.5	320.9	325.9	3,237.2	122.4	837.0	221.1	271.1	94.6
Oct.	6,336.3	2,313.0	331.5	323.4	3,240.8	127.5	852.9	224.1	277.5	96.6
Nov.	6,365.4	2,315.5	340.0	339.8	3,240.9	129.2	875.7	228.3	289.0	101.0
Dec.	6,401.1	2,318.0	369.5	344.9	3,238.3	130.4	876.5	230.5	288.6	102.1
2002 Jan.	6,450.6	2,322.8	375.2	350.3	3,269.0	133.4	889.2	230.7	292.2	105.5
Feb.	6,484.6	2,344.2	379.6	353.5	3,274.3	133.0	895.1	234.2	295.1	106.4
Mar.	6,534.9	2,365.3	385.1	353.8	3,293.1	137.6	908.6	236.6	305.8	108.1
Apr.	6,576.1	2,374.4	395.3	359.1	3,305.1	142.2	924.3	239.3	311.4	108.5
May	6,628.4	2,388.4	406.6	364.4	3,321.2	147.7	942.4	242.8	318.3	111.4
June	6,659.7	2,398.1	410.8	367.8	3,332.9	150.1	960.8	250.0	331.8	110.8
July	6,673.3	2,396.1	418.4	369.9	3,329.9	159.1	964.3	250.1	335.4	110.4
Aug.	6,677.3	2,395.8	417.6	368.2	3,335.8	160.0	963.2	249.4	335.8	110.6
Sep.	6,718.7	2,417.4	420.2	372.0	3,347.4	161.7	976.1	250.3	340.1	109.1

3. Total

	By euro area residents						By non-residents			
	Total	MFIs (including Eurosystem)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations
	1	2	3	4	5	6	7	8	9	10
2001 Sep.	6,957.4	2,549.4	325.0	432.3	3,524.7	126.1	892.4	248.2	293.2	100.1
Oct.	6,998.9	2,574.2	335.3	433.8	3,524.8	130.8	897.2	247.4	293.9	100.6
Nov.	7,021.0	2,566.4	343.9	445.8	3,532.1	132.8	923.3	251.8	308.4	104.3
Dec.	7,011.9	2,558.4	372.9	440.4	3,505.6	134.6	931.0	254.4	313.0	106.5
2002 Jan.	7,094.2	2,580.3	378.9	450.3	3,547.8	136.9	930.8	249.5	311.2	108.6
Feb.	7,128.7	2,596.1	383.5	451.5	3,561.0	136.5	938.4	254.1	314.1	109.9
Mar.	7,197.3	2,624.2	389.4	450.8	3,592.1	140.9	968.3	262.9	332.0	114.4
Apr.	7,230.9	2,630.5	399.8	451.6	3,603.9	145.2	965.5	257.5	329.9	112.3
May	7,301.6	2,651.0	410.3	454.1	3,635.5	150.7	984.0	261.2	337.3	114.8
June	7,331.8	2,658.8	414.6	449.8	3,655.4	153.1	1,015.2	271.3	359.4	115.2
July	7,353.9	2,661.3	422.6	455.9	3,651.6	162.5	1,008.6	268.4	357.7	113.3
Aug.	7,366.3	2,661.7	422.0	454.7	3,664.6	163.3	1,008.1	267.6	359.2	113.2
Sep.	7,421.8	2,690.5	424.6	459.3	3,683.2	164.3	1,045.0	277.0	377.1	113.1

*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	0.5	0.1	709.1	279.0	26.3	111.9	287.7	4.2	0.1	2001 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
0.2	0.5	0.2	724.9	283.6	26.5	88.9	321.9	3.8	0.2	July
0.1	0.4	0.1	733.9	284.1	27.9	89.1	329.0	3.7	0.1	Aug.
0.2	0.3	0.6	772.0	299.8	41.4	91.3	335.9	2.9	0.6	Sep.

of the euro area			Total							
Central government	Other general government	International organisations	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	International organisations	
11	12	13	14	15	16	17	18	19	20	
92.0	44.7	113.6	7,140.7	2,518.5	591.9	420.4	3,329.1	167.1	113.6	2001 Sep.
91.8	49.9	113.0	7,189.2	2,537.1	609.1	420.0	3,332.6	177.4	113.0	Oct.
91.5	50.3	115.7	7,241.1	2,543.7	629.0	440.7	3,332.4	179.5	115.7	Nov.
92.1	50.3	112.9	7,277.6	2,548.5	658.1	447.0	3,330.4	180.7	112.9	Dec.
91.3	55.1	114.4	7,339.8	2,553.5	667.4	455.8	3,360.3	188.5	114.4	2002 Jan.
92.0	54.9	112.5	7,379.8	2,578.4	674.7	459.8	3,366.4	188.0	112.5	Feb.
92.2	54.9	111.1	7,443.5	2,601.9	691.0	461.9	3,385.2	192.5	111.1	Mar.
94.1	60.0	111.0	7,500.3	2,613.7	706.7	467.7	3,399.2	202.1	111.0	Apr.
95.1	59.8	115.1	7,570.8	2,631.3	724.9	475.8	3,416.3	207.5	115.1	May
93.2	60.3	114.7	7,620.5	2,648.0	742.6	478.6	3,426.1	210.4	114.7	June
93.1	60.9	114.3	7,637.6	2,646.1	753.8	480.4	3,423.0	220.1	114.3	July
93.4	60.4	113.6	7,640.5	2,645.2	753.4	478.8	3,429.2	220.4	113.6	Aug.
94.1	65.3	117.3	7,694.8	2,667.7	760.3	481.1	3,441.5	227.0	117.3	Sep.

of the euro area			Total							
Central government	Other general government	International organisations	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	International organisations	
11	12	13	14	15	16	17	18	19	20	
92.1	45.1	113.7	7,849.8	2,797.5	618.2	532.3	3,616.8	171.2	113.7	2001 Sep.
92.0	50.2	113.2	7,896.2	2,821.6	629.2	534.3	3,616.8	181.1	113.2	Oct.
91.6	50.8	116.3	7,944.3	2,818.2	652.3	550.2	3,623.7	183.6	116.3	Nov.
92.2	50.8	114.1	7,942.9	2,812.8	685.9	546.9	3,597.9	185.4	114.1	Dec.
91.4	55.6	114.6	8,025.0	2,829.8	690.0	558.9	3,639.2	192.5	114.6	2002 Jan.
92.2	55.2	112.9	8,067.1	2,850.1	697.6	561.5	3,653.2	191.8	112.9	Feb.
92.3	55.2	111.5	8,165.7	2,887.1	721.4	565.2	3,684.4	196.0	111.5	Mar.
94.2	60.2	111.5	8,196.4	2,888.0	729.7	563.9	3,698.1	205.4	111.5	Apr.
95.2	60.0	115.5	8,285.6	2,912.2	747.6	568.9	3,730.7	210.7	115.5	May
93.4	60.7	115.2	8,347.0	2,930.1	774.0	565.0	3,748.8	213.9	115.2	June
93.3	61.4	114.5	8,362.5	2,929.7	780.3	569.2	3,744.9	223.9	114.5	July
93.5	60.9	113.7	8,374.5	2,929.3	781.3	567.9	3,758.1	224.2	113.7	Aug.
94.3	65.7	117.9	8,466.8	2,967.5	801.7	572.4	3,777.5	230.0	117.9	Sep.

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 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.	400.2	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	51.7	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	14.7	5.9	8.2	0.6
Aug.	365.6	257.3	1.8	50.8	53.9	1.8	12.1	4.5	6.8	0.6
Sep.	392.0	278.4	2.1	56.5	53.0	2.0	31.7	11.1	17.9	2.0

2. Long-term

	By euro area residents						By non-residents			
	Total	MFIs (including Eurosystem)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations
	1	2	3	4	5	6	7	8	9	10
2001 Sep.	108.9	35.9	7.3	2.3	58.8	4.6	8.4	4.8	3.0	0.2
Oct.	123.8	58.7	14.0	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.	113.5	43.0	36.2	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.	142.6	56.4	9.3	2.8	68.8	5.3	25.4	8.6	12.1	3.3
Apr.	115.3	44.1	13.0	8.0	45.2	4.9	23.0	5.1	7.7	1.1
May	126.5	41.1	16.1	7.4	55.3	6.6	26.3	5.7	10.1	3.2
June	122.8	48.1	13.5	7.0	51.3	2.9	29.3	9.9	17.1	0.7
July	113.8	37.7	12.7	5.8	48.2	9.4	11.7	3.0	6.2	0.4
Aug.	58.6	27.9	2.0	2.2	25.2	1.3	7.1	3.1	2.8	0.3
Sep.	116.0	51.9	6.7	4.3	50.4	2.6	24.3	5.2	7.6	0.2

3. Total

	By euro area residents						By non-residents			
	Total	MFIs (including Eurosystem)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations
	1	2	3	4	5	6	7	8	9	10
2001 Sep.	483.4	305.8	9.5	68.7	93.1	6.4	30.4	12.7	14.3	2.4
Oct.	603.9	404.7	16.0	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.	421.5	271.9	37.5	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.	542.7	343.4	11.5	63.0	117.8	7.1	49.8	19.3	22.2	6.6
Apr.	492.0	299.4	15.5	71.4	99.0	6.7	32.7	9.5	11.8	2.0
May	503.9	295.3	18.3	69.8	112.3	8.2	39.9	10.9	17.1	4.4
June	438.6	255.1	16.0	58.7	103.8	5.2	50.2	16.3	29.4	2.5
July	495.2	296.9	14.5	71.4	100.8	11.6	26.4	8.9	14.3	1.0
Aug.	424.3	285.1	3.8	53.1	79.1	3.2	19.2	7.7	9.6	0.9
Sep.	508.0	330.3	8.8	60.8	103.5	4.6	56.0	16.3	25.5	2.1

*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	0.4	0.0	396.5	277.8	13.5	68.6	34.3	2.1	0.0	2001 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	63.5	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
0.0	0.0	0.0	396.1	265.0	10.0	66.1	52.7	2.2	0.0	July
0.0	0.0	0.1	377.7	261.8	8.6	51.5	53.9	1.9	0.1	Aug.
0.1	0.1	0.5	423.7	289.5	20.0	58.4	53.1	2.1	0.5	Sep.

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	0.4	117.3	40.7	10.3	2.5	58.9	4.6	0.4	2001 Sep.
0.2	5.4	0.4	144.4	63.1	21.8	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	127.7	49.4	40.1	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	168.0	65.0	21.4	6.1	69.5	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	152.8	46.8	26.2	10.6	57.2	6.7	5.3	May
0.1	0.7	0.7	152.2	58.0	30.6	7.7	51.4	3.7	0.7	June
0.9	0.8	0.3	125.5	40.7	18.8	6.2	49.1	10.2	0.3	July
0.3	0.1	0.5	65.7	31.0	4.8	2.5	25.5	1.4	0.5	Aug.
0.7	5.2	5.5	140.3	57.1	14.3	4.5	51.1	7.8	5.5	Sep.

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	0.4	0.4	513.8	318.5	23.8	71.1	93.2	6.7	0.4	2001 Sep.
0.2	5.4	0.5	633.4	412.2	28.6	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	452.9	284.8	49.8	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	592.5	362.6	33.7	69.6	118.6	7.6	0.4	Mar.
3.3	5.1	0.9	524.7	308.9	27.3	73.4	102.3	11.8	0.9	Apr.
2.0	0.1	5.5	543.9	306.3	35.3	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
1.0	0.8	0.4	521.6	305.8	28.9	72.4	101.8	12.4	0.4	July
0.3	0.1	0.6	443.4	292.8	13.4	54.0	79.4	3.3	0.6	Aug.
0.8	5.3	6.0	564.0	346.5	34.3	62.9	104.3	9.9	6.0	Sep.

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 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	-2.8	15.5	0.0	0.3	0.1	0.5	-0.3
June	-2.9	-3.5	0.1	-7.8	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	-10.1	-3.0	-5.2	-1.6
Aug.	8.8	1.1	0.2	0.4	7.2	0.0	0.6	-0.2	1.1	-0.2
Sep.	11.1	4.2	-0.1	0.8	6.9	-0.7	24.0	8.6	13.5	1.4

2. Long-term

	By euro area residents						By non-residents			
	Total	MFIs (including Eurosystem)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations
	1	2	3	4	5	6	7	8	9	10
2001 Sep.	20.5	6.1	4.2	-1.4	7.5	4.2	-0.6	0.8	0.8	-0.6
Oct.	32.2	15.3	10.7	-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.	36.6	3.4	29.5	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.	32.7	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	51.1	12.8	11.3	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	18.4	7.1	13.6	-0.6
July	9.9	-4.7	6.7	2.1	-3.0	8.9	3.5	0.1	3.6	-0.4
Aug.	4.2	-0.9	0.1	-1.7	5.9	0.9	-1.0	-0.6	0.4	0.1
Sep.	42.2	22.4	2.7	3.7	11.7	1.7	12.9	0.8	4.3	-1.5

3. Total

	By euro area residents						By non-residents			
	Total	MFIs (including Eurosystem)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations
	1	2	3	4	5	6	7	8	9	10
2001 Sep.	18.4	2.8	4.0	-1.8	9.2	4.3	9.4	4.7	7.3	-0.9
Oct.	41.0	24.4	10.3	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.	-9.2	-8.1	29.0	-5.4	-26.4	1.7	7.7	2.5	4.5	2.1
2002 Jan.	82.7	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	11.8	4.3	-3.0	-5.4	-2.2	-2.1
May	69.9	19.8	10.5	2.5	31.6	5.5	18.3	3.7	7.4	2.5
June	32.3	10.3	4.0	-4.4	20.0	2.5	31.3	10.1	22.2	0.4
July	20.1	1.6	7.1	6.1	-3.9	9.2	-6.6	-2.9	-1.6	-2.0
Aug.	13.1	0.2	0.3	-1.3	13.0	0.8	-0.5	-0.8	1.5	-0.1
Sep.	53.3	26.6	2.6	4.5	18.6	1.0	36.9	9.4	17.9	-0.1

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	8.0	0.7	6.2	-0.7	1.7	0.0	0.0	2001 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	-3.1	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
0.0	0.0	-0.2	0.2	3.4	-4.9	2.4	-0.8	0.3	-0.2	July
0.0	0.0	-0.1	9.4	0.9	1.4	0.2	7.1	-0.1	-0.1	Aug.
0.1	-0.1	0.5	35.1	12.8	13.5	2.2	6.9	-0.8	0.5	Sep.

of the euro area			Total							
Central government	Other general government	International organisations	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	International organisations	
11	12	13	14	15	16	17	18	19	20	
-1.8	0.0	0.2	19.9	6.8	5.0	-2.0	5.7	4.2	0.2	2001 Sep.
-0.1	5.3	-0.6	48.3	18.3	17.2	-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	37.3	5.7	29.1	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	13.9	9.6	-0.1	Apr.
0.9	-0.1	4.1	69.1	16.4	18.2	8.1	17.0	5.4	4.1	May
-1.9	0.5	-0.3	53.6	20.9	17.5	2.9	9.8	2.9	-0.3	June
-0.1	0.7	-0.5	13.3	-4.6	10.3	1.7	-3.1	9.5	-0.5	July
0.3	-0.5	-0.7	3.2	-1.5	0.4	-1.6	6.2	0.4	-0.7	Aug.
0.7	4.9	3.7	55.0	23.2	7.0	2.1	12.4	6.6	3.7	Sep.

of the euro area			Total							
Central government	Other general government	International organisations	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	International organisations	
11	12	13	14	15	16	17	18	19	20	
-1.8	-0.1	0.2	27.9	7.6	11.2	-2.7	7.4	4.2	0.2	2001 Sep.
-0.2	5.1	-0.5	45.9	23.6	11.0	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	-1.5	-5.5	33.6	-3.3	-25.9	1.8	-2.2	Dec.
-0.8	4.7	0.5	82.5	17.3	4.2	12.2	41.4	7.1	0.5	2002 Jan.
0.7	-0.3	-1.7	39.4	18.0	7.5	2.3	14.0	-0.7	-1.7	Feb.
0.1	-0.1	-1.4	97.6	36.0	23.8	3.7	31.2	4.3	-1.4	Mar.
1.8	5.0	0.0	29.8	0.1	8.2	-1.3	13.5	9.3	0.0	Apr.
0.9	-0.1	4.0	88.2	23.5	17.9	4.9	32.5	5.3	4.0	May
-1.8	0.7	-0.3	63.6	20.4	26.2	-4.0	18.2	3.2	-0.3	June
-0.1	0.7	-0.7	13.5	-1.3	5.4	4.1	-3.9	9.9	-0.7	July
0.3	-0.5	-0.8	12.6	-0.6	1.8	-1.4	13.3	0.3	-0.8	Aug.
0.8	4.8	4.2	90.2	36.0	20.5	4.4	19.3	5.8	4.2	Sep.

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 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.	112.0	2.3	110.6	1.7	114.7	3.2	112.1	0.2	110.5	115.0
Nov. 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 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.	2.2	2.6	1.6	1.5	1.3	2.3	2.5	3.2	-0.5	4.3	3.3
Nov.	.	.	.	.	.	.	.	.	.	.	.

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⁾									Construc- tion ⁴⁾	Manu- facturing	Total excluding energy		
	Total		Industry excluding construction and energy						Energy					
	Index 1995 = 100		Total	Inter- mediate goods	Capital goods	Consumer goods								
						Total	Durable consumer goods	Non-durable consumer goods						
1	2	3	4	5	6	7	8	9	10	11	12	13	14	
1996	100.3	0.3	0.3	-1.8	1.4	1.7	2.0	1.7	0.9	1.4	0.9	6.0	-7.5	16.0
1997	101.4	1.1	0.6	0.2	0.3	1.1	0.6	1.2	3.2	1.3	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	1.6	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	0.3	-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	-5.0	1.7	-0.4	-8.7	-5.5	27.8
Q3	108.2	-0.1	0.7	0.2	0.9	1.1	1.3	1.0	-3.0	.	0.3	-4.2	-1.7	27.2
2001 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	0.1	0.9	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	1.0	-2.8	-	0.3	-4.3	-1.3	27.0
Sep.	108.4	0.1	0.8	0.3	0.9	1.2	1.4	1.1	-2.3	-	0.4	2.4	4.7	28.9
Oct.	108.6	0.9	0.9	0.6	0.9	1.2	1.2	1.2	1.6	-	1.2	14.3	7.8	27.9
Nov.	.	.	.	.	.	.	.	.	.	-	.	10.5	3.4	24.2

2. Deflators of gross domestic product⁵⁾
(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	2.7	2.5	4.8	8.1
Q4	108.5	1.6	2.7	2.5	2.6	2.8	4.9	8.2
<i>Euro area enlargement</i>								
2001	110.8	2.4	2.2	2.4	2.3	1.9	1.5	0.7
2001 Q1	109.8	2.1	2.5	2.4	2.4	2.1	2.7	3.7
Q2	110.6	2.4	2.5	2.8	2.4	1.8	2.4	2.6
Q3	111.1	2.3	2.1	2.5	2.2	2.2	0.8	0.1
Q4	111.9	2.8	1.6	2.1	2.2	1.7	0.2	-3.0
2002 Q1	112.6	2.5	1.9	2.3	1.7	2.2	0.4	-1.2
Q2	113.0	2.1	1.6	1.9	1.6	2.1	-0.2	-1.7

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

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

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

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

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

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

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

5 Real economy indicators in the euro area

Table 5.1

National accounts ¹⁾

GDP and expenditure components

1. Current prices

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

	GDP								
	Total	Domestic demand					External balance ³⁾		
		Total	Private consumption	Government consumption	Gross fixed capital formation ⁵⁾	Changes in inventories ²⁾	Total	Exports ³⁾	Imports ³⁾
1	2	3	4	5	6	7	8	9	
1997	5,648.7	5,500.4	3,201.0	1,150.7	1,138.5	10.2	148.3	1,827.3	1,678.9
1998	5,883.2	5,743.4	3,331.9	1,176.4	1,202.5	32.6	139.7	1,949.2	1,809.5
1999	6,150.8	6,049.4	3,507.3	1,230.3	1,292.4	19.4	101.4	2,052.4	1,951.0
2000	6,448.0	6,379.0	3,674.1	1,286.2	1,388.4	30.3	69.0	2,416.8	2,347.8
<i>Euro area enlargement</i>									
2001	6,824.2	6,710.9	3,919.9	1,360.8	1,433.7	-3.5	113.3	2,551.0	2,437.7
2001 Q2	1,702.4	1,682.6	979.9	338.7	358.6	5.4	19.8	640.1	620.2
Q3	1,711.5	1,682.5	985.3	341.5	358.9	-3.2	28.9	635.8	606.8
Q4	1,720.4	1,678.5	988.5	345.2	356.8	-12.1	42.0	631.1	589.2
2002 Q1	1,737.9	1,695.3	993.4	348.7	355.2	-1.9	42.5	628.7	586.2
Q2	1,749.5	1,705.2	1,000.4	352.7	352.4	-0.3	44.4	639.9	595.5
Q3	.	.	.	.	.	.	.	.	.

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	5,354.3	3,093.3	1,126.1	1,132.1	2.8	154.7	1,806.3	1,651.5
1998	5,667.4	5,545.1	3,187.9	1,142.2	1,189.8	25.1	122.3	1,939.2	1,816.9
1999	5,826.0	5,737.2	3,300.1	1,164.7	1,261.0	11.5	88.8	2,040.6	1,951.8
2000	6,027.4	5,901.8	3,382.5	1,186.7	1,321.2	11.5	125.6	2,297.2	2,171.6
<i>Euro area enlargement</i>									
2001	6,221.0	6,070.4	3,521.0	1,224.9	1,336.7	-12.1	150.6	2,388.4	2,237.8
2001 Q2	1,555.0	1,521.6	881.0	305.7	335.5	-0.6	33.5	597.4	564.0
Q3	1,557.6	1,517.3	882.0	306.8	333.2	-4.6	40.2	596.4	556.1
Q4	1,553.6	1,513.4	881.9	308.1	330.2	-6.7	40.2	588.8	548.6
2002 Q1	1,560.0	1,514.4	880.5	311.0	326.9	-4.1	45.6	589.0	543.4
Q2	1,564.5	1,517.1	882.7	313.3	323.0	-2.0	47.4	598.2	550.8
Q3	1,569.7	1,521.4	886.9	314.2	323.1	-2.8	48.3	611.3	563.1
<i>(annual percentage changes)</i>									
1997	2.3	1.7	1.6	1.3	2.4	-	-	10.4	9.0
1998	2.9	3.6	3.1	1.4	5.1	-	-	7.4	10.0
1999	2.8	3.5	3.5	2.0	6.0	-	-	5.2	7.4
2000	3.5	2.9	2.5	1.9	4.8	-	-	12.6	11.3
<i>Euro area enlargement</i>									
2001	1.4	0.9	1.8	1.9	-0.7	-	-	2.8	1.4
2001 Q2	1.6	1.3	1.8	2.1	-0.2	-	-	4.5	3.9
Q3	1.3	0.7	1.8	2.2	-1.6	-	-	1.4	-0.3
Q4	0.4	-0.2	1.6	1.5	-2.5	-	-	-2.8	-4.6
2002 Q1	0.3	-0.2	0.5	2.2	-3.2	-	-	-2.8	-4.5
Q2	0.6	-0.3	0.2	2.5	-3.7	-	-	0.1	-2.3
Q3	0.8	0.3	0.6	2.4	-3.0	-	-	2.5	1.2

Source: Eurostat.

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

2) Including acquisitions less disposals of valuables.

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

Value added by activity

3. Current prices

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

	Gross value added							Intermediate consumption of FISIM ¹⁾	Taxes less subsidies on products
	Total	Agriculture, hunting, forestry and fishing activities	Manufacturing, energy and mining	Construction	Trade, repairs, hotels and restaurants, transport and communication	Financial, real estate, renting and business activities	Public administration, education, health and other services		
	1	2	3	4	5	6	7	8	9
1997	5,270.1	138.6	1,227.8	291.6	1,086.0	1,382.4	1,143.7	203.7	582.3
1998	5,469.8	138.9	1,275.9	294.8	1,139.6	1,441.8	1,178.9	202.1	615.5
1999	5,690.1	136.1	1,293.5	310.4	1,191.9	1,528.8	1,229.4	202.5	663.2
2000	5,989.8	136.9	1,353.4	326.5	1,266.0	1,625.4	1,281.5	212.4	690.1
<i>Euro area enlargement</i>									
2001	6,337.0	151.6	1,409.9	346.7	1,356.2	1,720.6	1,352.0	230.9	718.0
2001 Q2	1,579.9	37.5	352.6	86.2	338.3	429.0	336.2	57.6	180.1
Q3	1,590.2	38.6	353.3	86.9	341.0	431.0	339.3	58.2	179.5
Q4	1,599.5	38.5	348.9	88.2	342.6	437.7	343.6	58.9	179.9
2002 Q1	1,611.9	39.0	350.7	89.3	345.0	439.7	348.2	57.8	183.7
Q2	1,624.3	38.2	353.5	88.9	348.2	443.5	351.9	57.6	182.8
Q3	.	.	.	.	.	.	.	.	.

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	1,217.6	290.1	1,071.2	1,339.1	1,109.4	214.6	556.0
1998	5,318.9	142.5	1,256.6	291.3	1,114.2	1,388.3	1,126.0	222.3	570.8
1999	5,461.7	146.1	1,269.2	298.8	1,164.0	1,441.0	1,142.7	231.1	595.4
2000	5,663.3	145.3	1,320.6	305.3	1,219.4	1,507.3	1,165.4	245.7	609.9
<i>Euro area enlargement</i>									
2001	5,860.9	151.6	1,349.0	310.2	1,281.6	1,570.7	1,197.6	263.3	623.4
2001 Q2	1,464.0	37.7	337.4	77.5	320.4	392.2	298.8	65.5	156.5
Q3	1,468.4	38.2	337.7	77.5	321.0	394.3	299.8	66.2	155.4
Q4	1,465.2	38.1	332.1	77.6	321.0	395.2	301.1	66.9	155.3
2002 Q1	1,470.6	38.1	334.5	77.1	322.1	395.9	302.9	66.1	155.5
Q2	1,476.1	38.1	336.2	76.1	323.7	397.5	304.5	66.3	154.8
Q3	1,480.3	38.4	338.4	75.9	324.4	397.9	305.3	67.3	156.7
<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	4.0	3.7	1.5	3.6	2.7
1999	2.7	2.5	1.0	2.6	4.5	3.8	1.5	4.0	4.3
2000	3.7	-0.5	4.1	2.2	4.8	4.6	2.0	6.3	2.4
<i>Euro area enlargement</i>									
2001	1.7	-1.2	1.0	-0.6	2.6	2.8	1.3	5.7	0.2
2001 Q2	1.9	-1.7	1.3	-0.6	3.0	3.0	1.1	5.8	0.1
Q3	1.6	-1.2	0.9	-0.8	2.5	2.7	1.3	5.4	0.1
Q4	0.7	-0.5	-1.7	-0.5	1.3	2.2	1.4	5.1	-0.2
2002 Q1	0.5	1.3	-2.1	-0.8	0.9	1.7	1.7	2.2	-0.5
Q2	0.8	1.1	-0.4	-1.8	1.0	1.4	1.9	1.2	-1.1
Q3	0.8	0.5	0.2	-2.0	1.1	0.9	1.9	1.7	0.9

Source: Eurostat.

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

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

	Total	Industry excluding construction ²⁾									Construction	Manufacturing	
		Total			Industry excluding construction and energy								Energy
		Index (s.a.) 1995 = 100		Total	Inter- mediate goods	Capital goods	Consumer goods						
							Total	Durable consumer goods	Non-durable consumer goods				
1	2	3	4	5	6	7	8	9	10	11	12		
1998	3.7	109.3	4.3	4.8	4.0	7.8	2.7	4.5	2.4	1.0	1.3	4.8	
1999	2.1	111.3	1.9	2.1	1.9	2.5	1.6	1.4	1.6	0.9	4.1	1.9	
2000	5.0	117.5	5.5	6.0	5.9	9.4	2.2	6.4	1.4	1.8	2.0	5.9	
<i>Euro area enlargement</i>													
2001	0.2	118.1	0.4	0.2	-0.8	1.3	0.4	-2.5	1.0	1.2	0.0	0.2	
2001 Q3	-0.2	118.2	-0.2	-0.4	-1.3	0.2	0.4	-3.6	1.3	0.8	0.1	-0.3	
2001 Q4	-2.9	116.2	-3.6	-4.7	-6.0	-4.7	-2.6	-7.4	-1.6	3.5	1.5	-4.6	
2002 Q1	-2.3	116.7	-2.7	-3.2	-2.1	-6.5	-1.2	-6.7	-0.1	1.5	1.3	-3.4	
2002 Q2	-1.1	117.3	-0.6	-0.9	0.3	-2.7	-0.9	-5.8	0.1	2.4	-2.0	-0.9	
2002 Q3	-1.1	117.3	-0.5	-0.8	0.8	-2.0	-1.8	-4.1	-1.4	0.5	-0.9	-0.7	
2001 Dec.	-4.1	116.1	-4.3	-6.5	-8.8	-6.3	-3.4	-8.0	-2.5	8.8	-0.5	-6.3	
2002 Jan.	-2.5	116.5	-2.8	-3.5	-3.4	-6.1	-0.9	-6.5	0.3	2.3	1.2	-3.7	
2002 Feb.	-2.6	116.7	-3.0	-3.6	-2.5	-7.2	-1.2	-6.2	-0.1	1.5	0.5	-3.9	
2002 Mar.	-2.0	116.9	-2.2	-2.5	-0.4	-6.2	-1.6	-7.3	-0.4	0.6	2.1	-2.7	
2002 Apr.	-0.7	117.2	-0.7	-0.8	0.4	-2.2	-1.3	-5.7	-0.3	1.7	0.1	-0.9	
2002 May	-1.8	117.2	-0.9	-1.1	0.5	-4.4	-0.5	-6.8	0.8	2.1	-3.7	-1.1	
2002 June	-0.8	117.6	-0.3	-0.7	0.0	-1.5	-1.0	-5.0	-0.2	3.3	-2.1	-0.8	
2002 July	-0.6	117.3	-0.1	-0.3	0.7	-0.7	-1.6	-1.9	-1.5	1.2	0.1	-0.3	
2002 Aug.	-1.7	117.4	-1.3	-1.4	0.0	-2.5	-2.6	-9.1	-1.6	-0.4	-1.4	-1.3	
2002 Sep.	-1.0	117.3	-0.3	-0.6	1.4	-2.8	-1.3	-2.7	-1.0	0.7	-1.4	-0.6	
2002 Oct.	.	.	.	.	.	.	.	.	.	.	.	.

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

	Retail sales (s.a.)									New passenger car registrations	
	Current prices			Constant prices						Thousands ³⁾ (s.a.)	
	Total		Index 1995 = 100	Total		Food, beverages, tobacco	Non-food				
	Index 1995 = 100			Index 1995 = 100				Textiles, clothing, footwear	Household equipment		
13	14	15	16	17	18	19	20	21	22		
1998	108.1	3.7	104.7	3.1	2.2	3.6	2.2	4.6	923	7.2	
1999	111.6	3.3	107.3	2.4	3.0	2.3	1.2	2.7	973	5.4	
2000	116.2	4.1	109.8	2.3	2.0	2.3	1.8	4.6	952	-2.1	
<i>Euro area enlargement</i>											
2001	121.2	3.9	111.4	1.4	1.3	1.5	1.4	0.0	969	-0.7	
2001 Q3	121.9	4.1	111.3	1.2	1.1	1.1	1.8	-1.0	955	-1.5	
2001 Q4	122.3	3.3	111.7	1.2	1.3	1.1	0.3	-0.5	962	2.3	
2002 Q1	122.7	2.7	111.8	0.7	1.2	0.1	0.2	-2.3	913	-4.1	
2002 Q2	123.3	1.7	111.5	0.1	0.6	0.2	-0.9	-2.5	912	-8.0	
2002 Q3	123.9	1.6	112.3	0.8	1.2	0.9	-0.8	-1.1	917	-4.7	
2001 Dec.	122.3	2.9	111.4	0.6	0.6	0.8	0.3	-1.4	963	0.8	
2002 Jan.	122.4	2.6	111.4	-0.1	0.5	-0.3	-1.0	-2.3	926	-2.4	
2002 Feb.	122.5	2.7	111.7	1.2	1.5	0.5	0.4	-1.4	921	-3.2	
2002 Mar.	123.2	2.8	112.4	0.9	1.6	0.2	1.2	-3.2	894	-6.2	
2002 Apr.	123.2	2.3	111.4	0.8	1.3	0.6	1.4	-2.4	895	-7.9	
2002 May	123.2	1.6	111.9	0.7	1.5	0.3	-3.4	-1.6	914	-6.8	
2002 June	123.4	1.1	111.3	-1.1	-0.9	-0.4	-0.6	-3.3	927	-9.2	
2002 July	123.8	1.5	112.3	1.5	1.6	1.6	2.0	0.5	898	-6.6	
2002 Aug.	124.2	1.9	113.4	1.5	1.7	0.8	0.6	-1.8	924	-4.5	
2002 Sep.	123.8	1.5	111.1	-0.5	0.3	0.2	-4.8	-1.9	929	-2.5	
2002 Oct.	.	.	.	.	.	.	.	.	928	-3.2

Sources: Eurostat, except columns 21 and 22 (ECB calculation based on data from the ACEA, European Automobile Manufacturers' Association).
1) Adjusted for variations in the number of working days.
2) Breakdown in accordance with the harmonised definition of Main Industrial Groupings.
3) Annual and quarterly figures are averages of monthly totals.

Table 5.3

European Commission Business and Consumer Surveys

1. 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 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.	98.8	-11	-25	10	3	-	-12	-2	-12	27	-7
Nov.	98.6	-10	-24	10	4	-	-14	-4	-15	30	-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 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	-32	-14	-16	-21	15	-11	-4	-13	-4	5
Nov.	-25	-32	-18	-14	-17	18	-6	-4	-13	-4	5

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	119.902	0.8	1.0	0.2	-0.2	1.4	13.947	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	12.256	9.3	8.2	18.0
2000	126.884	2.2	2.4	0.6	0.7	2.9	11.107	8.4	7.3	16.2
2000 Q3	127.274	2.2	2.5	0.8	0.9	3.0	10.974	8.3	7.2	16.1
Q4	127.921	2.2	2.4	1.5	1.1	2.9	10.742	8.1	7.1	15.6
<i>Euro area enlargement</i>										
2001	132.578	1.3	1.6	0.2	0.3	1.9	11.040	8.0	7.0	15.7
2001 Q1	132.185	1.9	2.1	1.0	1.2	2.4	11.052	8.0	7.0	15.7
Q2	132.467	1.5	1.7	0.5	0.7	1.9	10.980	8.0	7.0	15.6
Q3	132.690	1.1	1.4	-0.2	0.1	1.7	11.010	8.0	7.0	15.6
Q4	132.969	0.8	1.1	-0.6	-0.6	1.5	11.117	8.0	7.0	15.7
2002 Q1	133.102	0.7	1.0	-0.9	-1.1	1.6	11.259	8.1	7.1	15.9
Q2	133.143	0.5	0.8	-1.2	-1.1	1.3	11.409	8.2	7.2	16.1
Q3	.	.	.	.	.	.	11.543	8.3	7.3	16.1
2001 Oct.	-	-	-	-	-	-	11.084	8.0	7.0	15.7
Nov.	-	-	-	-	-	-	11.118	8.0	7.0	15.8
Dec.	-	-	-	-	-	-	11.150	8.1	7.0	15.8
2002 Jan.	-	-	-	-	-	-	11.206	8.1	7.1	15.8
Feb.	-	-	-	-	-	-	11.264	8.1	7.1	15.8
Mar.	-	-	-	-	-	-	11.305	8.1	7.1	15.9
Apr.	-	-	-	-	-	-	11.322	8.1	7.1	15.9
May	-	-	-	-	-	-	11.414	8.2	7.2	16.0
June	-	-	-	-	-	-	11.490	8.3	7.2	16.2
July	-	-	-	-	-	-	11.515	8.3	7.3	16.1
Aug.	-	-	-	-	-	-	11.544	8.3	7.3	16.2
Sep.	-	-	-	-	-	-	11.570	8.3	7.3	16.1
Oct.	-	-	-	-	-	-	11.624	8.4	7.3	16.2

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	0.4	3.0	3.2	2.1	2.8	2.9	2.5	
<i>Euro area enlargement</i>										
2001	2.6	2.7	0.1	3.4	3.6	2.6	3.2	3.2	3.1	
2001 Q1	2.0	2.5	0.4	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	3.2	2.8	-0.4	3.3	3.5	2.7	3.0	3.6	2.8	
2002 Q1	3.1	2.8	-0.4	4.0	4.1	3.4	3.6	4.1	2.4	
Q2	2.5	2.6	0.1	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 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	5,140.9	336.3	4,494.1	1,446.1	1,620.9	1,314.6	112.6	150.3	160.1	259.6
Q2	5,238.8	333.0	4,579.2	1,526.1	1,616.7	1,321.1	115.3	165.5	161.0	269.7
Q3	5,226.7	309.6	4,609.0	1,547.9	1,605.2	1,333.7	122.2	147.8	160.2	265.6
Q4	5,362.7	239.7	4,816.4	1,690.3	1,613.0	1,396.3	116.7	139.0	167.6	297.6
2002 Q1	5,364.9	254.3	4,775.3	1,637.6	1,605.0	1,413.0	119.8	157.5	177.8	303.0
Q2	5,449.0	285.8	4,827.9	1,703.9	1,593.8	1,412.5	117.6	155.0	180.3	.
Q3	.	306.7	4,825.9	1,699.2	1,585.6	1,423.2	117.8	148.4	.	.

	Securities other than shares			Shares ⁵⁾				Insurance technical reserves		
	Total	Short-term	Long-term	Total	Quoted shares	Mutual fund shares	Money market fund shares	Total	Net equity of households in life insurance reserves and pension fund reserves	Prepayments of insurance premiums and reserves for outstanding claims
	11	12	13	14	15	16	17	18	19	20
1998 Q3	1,546.6	156.7	1,389.9	3,366.3	1,929.8	1,436.5	187.9	2,520.6	2,248.9	271.7
Q4	1,539.8	155.7	1,384.1	3,825.5	2,307.8	1,517.7	172.7	2,622.8	2,351.0	271.8
1999 Q1	1,587.2	136.5	1,450.7	4,129.3	2,502.4	1,626.9	194.8	2,679.5	2,401.8	277.6
Q2	1,505.0	126.7	1,378.2	4,251.7	2,525.3	1,726.4	211.6	2,750.1	2,468.2	282.0
Q3	1,514.0	114.2	1,399.8	4,185.1	2,451.2	1,733.9	210.8	2,793.9	2,507.3	286.6
Q4	1,593.1	166.7	1,426.5	4,924.7	3,094.1	1,830.6	203.9	2,937.1	2,648.6	288.5
2000 Q1	1,598.5	186.9	1,411.6	5,053.4	3,124.6	1,928.7	215.9	3,054.1	2,759.4	294.7
Q2	1,636.2	191.8	1,444.4	4,971.4	3,069.3	1,902.2	206.4	3,100.9	2,802.2	298.6
Q3	1,712.7	210.5	1,502.2	5,047.1	3,130.2	1,916.8	204.7	3,155.8	2,853.2	302.7
Q4	1,800.7	228.3	1,572.5	5,094.7	3,226.0	1,868.7	200.4	3,186.6	2,884.9	301.7
<i>Euro area enlargement</i>										
2001 Q1	1,928.4	315.8	1,612.6	4,778.3	2,945.9	1,832.4	225.3	3,236.8	2,929.4	307.4
Q2	1,914.0	268.8	1,645.3	4,750.9	2,895.3	1,855.5	232.2	3,295.9	2,986.2	309.6
Q3	1,942.0	264.0	1,678.0	4,243.9	2,509.0	1,735.0	252.8	3,271.3	2,957.9	313.4
Q4	1,954.6	252.4	1,702.1	4,607.2	2,783.4	1,823.8	260.0	3,366.3	3,048.7	317.6
2002 Q1	2,014.8	294.0	1,720.8	4,699.2	2,838.2	1,861.0	290.3	3,450.6	3,124.0	326.7
Q2	2,044.3	256.2	1,788.1	4,286.7	2,522.6	1,764.1	293.3	3,442.4	3,112.3	330.1
Q3	.	.	.	.	.	.	.	.	.	.

Source: ECB.

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

2) Most of the financial asset and liability categories defined in the ESA 95 are covered. 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 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 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	875.1	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	6,958.8	6,262.2	886.0	42.0	844.0	2,994.4	1,090.7	1,903.7	3,078.3	274.4	2,804.0	219.7
Q3	7,103.4	6,379.6	866.2	39.9	826.3	3,102.3	1,152.4	1,949.9	3,134.9	275.9	2,859.0	252.3
Q4	7,265.6	6,500.5	881.4	42.0	839.4	3,199.5	1,167.3	2,032.2	3,184.6	281.0	2,903.6	245.2
<i>Euro area enlargement</i>												
2001 Q1	7,452.3	6,671.7	895.8	41.8	854.0	3,320.7	1,243.9	2,076.8	3,235.8	279.3	2,956.5	257.3
Q2	7,557.6	6,762.2	879.8	42.1	837.6	3,392.5	1,266.5	2,126.1	3,285.3	285.3	3,000.1	296.2
Q3	7,629.5	6,805.2	873.3	45.1	828.2	3,433.1	1,244.6	2,188.5	3,323.2	280.7	3,042.4	249.7
Q4	7,741.2	6,897.5	897.2	50.6	846.6	3,471.5	1,226.3	2,245.2	3,372.6	282.9	3,089.6	267.9
2002 Q1	7,815.7	6,960.9	901.5	53.3	848.2	3,508.4	1,224.4	2,283.9	3,405.8	278.3	3,127.5	289.6
Q2	7,900.7	7,020.7	874.3	53.5	820.8	3,555.8	1,211.0	2,344.7	3,470.6	285.5	3,185.1	.
Q3	.	7,058.4	.	.	.	.	.	.	.	.	.	.
<i>Securities other than shares issued by</i>												
	Total	General government			Non-financial corporations			Quoted shares issued by non-financial corporations	Deposit liabilities of central government	Pension fund reserves of non- financial corporations		
		Total	Short-term	Long-term	Total	Short-term	Long-term					
13	14	15	16	17	18	19	20	21	22			
1998 Q3	3,925.8	3,592.3	498.6	3,093.7	333.5	55.3	278.2	2,446.1	133.8	215.3		
Q4	3,928.3	3,593.2	468.2	3,125.0	335.1	55.0	280.1	2,815.2	140.3	217.2		
1999 Q1	3,972.4	3,636.1	466.9	3,169.2	336.3	65.7	270.6	2,969.9	146.9	219.6		
Q2	3,955.4	3,613.2	459.3	3,153.9	342.2	66.4	275.8	3,096.3	136.6	221.9		
Q3	3,934.3	3,578.9	449.6	3,129.2	355.4	74.8	280.6	3,018.1	137.6	224.2		
Q4	3,897.2	3,529.8	421.1	3,108.7	367.3	78.2	289.1	4,172.9	149.8	226.5		
2000 Q1	3,954.1	3,584.9	425.3	3,159.6	369.2	78.7	290.5	4,544.5	147.6	228.4		
Q2	3,986.3	3,605.6	425.8	3,179.8	380.6	88.7	291.9	4,381.2	147.6	230.2		
Q3	4,022.5	3,621.4	421.8	3,199.6	401.1	95.6	305.5	4,223.6	147.2	232.1		
Q4	4,067.5	3,648.9	400.8	3,248.1	418.6	100.6	318.0	4,069.9	153.7	233.9		
<i>Euro area enlargement</i>												
2001 Q1	4,247.9	3,790.6	429.3	3,361.3	457.3	111.5	345.8	3,718.3	154.7	236.1		
Q2	4,294.5	3,812.9	440.7	3,372.2	481.7	122.2	359.4	3,675.7	155.2	238.3		
Q3	4,377.9	3,879.6	449.9	3,429.7	498.3	135.9	362.4	3,033.3	155.4	240.5		
Q4	4,391.7	3,874.5	434.3	3,440.2	517.2	134.8	382.3	3,524.1	165.5	240.0		
2002 Q1	4,451.5	3,928.4	446.8	3,481.6	523.1	141.0	382.1	3,547.5	174.8	242.4		
Q2	4,541.0	4,024.9	481.8	3,543.1	516.2	125.5	390.7	3,035.0	176.1	244.8		
Q3	.	.	.	.	.	.	.	.	.	.

Source: ECB.

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

2) Most of the financial asset and liability categories defined in the ESA 95 are covered. 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 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	-17.3	-19.8	13.9	-34.4	42.6	-6.1	11.8	-15.6	4.2	13.6
Q2	94.6	-3.3	81.8	77.1	-4.3	6.3	2.7	15.1	0.9	5.8
Q3	6.4	-23.4	48.3	25.4	3.0	13.0	7.0	-17.7	-0.8	2.5
Q4	138.3	-69.9	209.7	142.4	10.3	62.5	-5.4	-8.8	7.4	12.2
2002 Q1	4.5	14.6	-39.3	-53.3	-3.9	14.9	3.0	19.0	10.2	4.4
Q2	104.1	31.5	72.5	72.4	0.8	1.7	-2.4	-2.5	2.5	.
Q3	.	20.9	-2.2	-5.1	-7.9	10.6	0.2	-10.3	.	.

	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 Q3	-12.2	-11.2	-1.1	102.6	17.1	85.6	1.0	43.0	40.3	2.7
Q4	-13.8	-2.2	-11.5	81.9	62.8	19.1	-16.1	49.7	47.6	2.1
1999 Q1	31.2	-13.1	44.2	102.9	2.6	100.4	2.9	64.2	58.2	6.0
Q2	-41.0	-11.9	-29.0	148.3	64.9	83.4	16.8	54.1	49.6	4.5
Q3	-3.3	-13.0	9.7	94.7	55.2	39.4	-0.4	57.2	52.5	4.8
Q4	90.1	50.4	39.7	-14.6	19.0	-33.6	-6.8	70.4	68.2	2.1
2000 Q1	2.5	26.8	-24.2	-11.1	-58.4	47.3	12.9	78.7	72.6	6.2
Q2	49.2	4.4	44.8	62.9	44.1	18.8	-9.7	55.9	51.9	4.0
Q3	84.3	19.5	64.7	148.7	140.2	8.4	-2.0	56.0	52.0	4.1
Q4	24.1	7.2	16.9	219.2	181.6	37.6	-4.3	60.9	61.9	-1.0
<i>Euro area enlargement</i>										
2001 Q1	126.6	89.5	37.2	66.0	27.9	38.1	24.7	60.2	54.5	5.7
Q2	-8.6	-41.7	33.1	47.2	41.2	6.0	6.3	56.9	54.5	2.4
Q3	36.7	-4.9	41.6	75.4	49.4	25.9	20.0	51.0	47.3	3.7
Q4	-3.8	-16.7	12.9	0.5	-22.2	22.7	6.7	66.8	62.8	4.0
2002 Q1	90.4	44.3	46.1	50.2	5.5	44.8	30.1	70.0	61.5	8.4
Q2	6.0	-39.3	45.3	26.1	12.0	14.1	2.6	51.9	49.1	2.9
Q3	.	.	.	.	.	.	.	.	.	.

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 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	-7.9	21.1	23.3	-2.2	76.2	9.2	67.0	1.9
Q2	162.7	133.2	-4.1	2.7	-6.7	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	164.6	118.4	-4.7	0.9	-5.6	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	185.2	140.1	15.6	2.1	13.5	116.3	19.6	96.7	53.2	5.3	47.9	1.9
<i>Euro area enlargement</i>												
2001 Q1	95.8	78.5	-3.7	-0.5	-3.3	62.4	39.6	22.8	37.1	-5.1	42.2	9.2
Q2	105.5	88.0	-16.4	0.3	-16.7	64.7	20.9	43.7	57.2	6.0	51.2	33.6
Q3	83.6	57.9	-6.0	2.9	-8.9	50.6	-15.8	66.4	38.9	-4.2	43.1	-38.0
Q4	108.7	92.3	23.0	5.5	17.5	36.3	-17.0	53.2	49.5	2.2	47.3	4.1
2002 Q1	73.6	62.6	4.2	2.7	1.5	30.6	-3.8	34.4	38.8	-5.2	44.0	20.5
Q2	111.4	85.6	-26.1	0.2	-26.3	73.8	-5.3	79.0	63.7	7.5	56.2	.
Q3	.	37.0	.	.	.	.	.	.	.	.	.	.

	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 Q3	61.3	54.0	2.1	52.0	7.3	1.6	5.7	9.4	-0.4	2.2	
Q4	-10.5	-15.4	-31.0	15.6	4.8	0.5	4.4	39.0	6.4	1.9	
1999 Q1	73.9	60.5	1.1	59.4	13.4	10.5	2.9	9.4	6.6	2.3	
Q2	37.9	29.3	-7.4	36.7	8.5	0.6	7.9	32.7	-10.3	2.3	
Q3	55.7	37.8	-10.8	48.6	17.9	8.3	9.6	34.3	1.0	2.3	
Q4	-12.0	-19.7	-27.7	8.0	7.7	3.3	4.3	41.6	12.1	2.3	
2000 Q1	60.7	58.9	10.0	48.9	1.8	0.5	1.3	19.6	-2.2	1.9	
Q2	37.2	23.1	-1.0	24.1	14.1	10.2	3.9	27.8	0.0	1.9	
Q3	48.8	25.5	-2.7	28.2	23.3	7.2	16.1	68.1	-0.4	1.9	
Q4	-0.5	-17.9	-27.0	9.1	17.4	5.2	12.2	53.9	6.4	1.8	
<i>Euro area enlargement</i>											
2001 Q1	74.2	37.5	32.3	5.2	36.6	11.0	25.6	51.4	1.1	2.2	
Q2	83.8	58.7	10.7	48.0	25.1	11.0	14.1	44.3	0.4	2.2	
Q3	47.6	29.6	8.7	20.8	18.0	14.1	3.9	9.6	0.2	2.2	
Q4	9.0	-8.0	-22.2	14.2	17.0	-1.9	18.8	6.8	10.1	-0.5	
2002 Q1	103.0	93.2	21.8	71.4	9.8	6.8	3.0	9.4	9.3	2.4	
Q2	59.0	62.4	33.9	28.5	-3.3	-15.8	12.4	5.3	1.3	2.4	
Q3	.	.	.	.	.	.	.	.	.	.

Source: ECB.

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

2) Most of the financial asset and liability categories defined in the ESA 95 are covered. 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	1,537.6	0.7	489.4	222.1	422.4	164.6	201.1	37.2
1996	340.4	1,122.0	-783.6	1.7	0.4	1,726.4	-3.0	394.8	398.0	384.5	312.5	193.6	46.0
1997	352.5	1,138.5	-796.8	10.8	0.1	1,912.7	-0.2	394.7	331.8	448.5	482.9	222.1	32.8
1998	412.5	1,202.5	-822.9	32.6	0.2	2,365.8	11.0	430.2	362.6	510.4	813.5	209.7	28.4
1999	450.8	1,292.4	-861.4	19.6	0.1	3,034.1	1.3	552.8	433.9	883.3	898.1	255.2	9.4
2000	490.3	1,388.4	-910.9	29.3	-16.4	2,774.0	1.3	351.5	256.0	806.8	1,112.8	250.5	-4.8
<i>Euro area enlargement</i>													
2001	459.6	1,433.7	-969.3	-5.2	0.5	2,486.3	-0.5	589.9	471.0	702.2	548.5	248.7	-73.5

	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	411.4	1,157.9	-751.6	5.0	1,493.9	486.4	277.7	384.3	139.9	205.6		
1996	409.4	1,188.4	-783.6	4.6	1,657.4	472.2	378.0	335.2	275.8	196.2		
1997	455.0	1,240.4	-796.8	11.5	1,810.2	510.5	319.0	377.7	373.1	229.8		
1998	486.1	1,298.0	-822.9	11.1	2,292.1	645.9	322.5	472.1	632.1	219.4		
1999	499.7	1,350.9	-861.4	10.2	2,985.2	926.7	494.1	750.4	551.5	262.5		
2000	516.5	1,419.0	-910.9	8.5	2,747.8	534.7	410.7	827.7	721.5	253.2		
<i>Euro area enlargement</i>												
2001	490.5	1,451.7	-969.3	8.1	2,455.3	683.4	478.0	567.0	483.5	243.4		

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	254.0	33.4	10.1	39.9	64.5	270.0	530.7	139.9	-87.3	126.0	90.6
1996	137.4	589.9	-454.4	262.5	54.4	-13.9	55.4	85.9	124.3	536.3	275.7	6.8	144.1	117.2
1997	158.7	615.9	-468.9	240.0	24.4	-12.8	46.1	94.0	111.4	544.1	287.4	12.1	154.2	111.5
1998	203.7	661.4	-487.4	420.1	55.0	-9.7	87.8	199.9	149.4	590.6	474.5	25.8	243.6	196.4
1999	222.2	708.6	-508.2	597.6	26.6	58.7	175.0	301.2	110.4	570.6	709.3	47.7	416.8	230.1
2000	322.2	776.5	-541.6	804.5	69.5	69.5	167.3	414.5	97.4	593.2	1,029.3	56.4	544.3	424.3
<i>Euro area enlargement</i>														
2001	219.5	798.9	-575.7	531.2	83.3	53.5	135.6	178.3	71.2	596.6	679.5	99.6	309.0	264.1

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	394.2	185.2	82.1	1.2	178.7	417.6	604.8	136.9	135.8	3,409.2	17.7
1996	158.2	360.6	-203.8	434.7	145.6	24.5	93.6	189.0	431.6	619.5	161.3	160.1	3,528.0	17.6
1997	153.9	351.7	-199.1	422.5	69.1	-18.4	194.9	215.8	407.9	587.0	168.5	167.1	3,622.5	16.2
1998	162.0	361.3	-203.1	445.5	95.5	-115.5	288.8	204.4	394.8	566.8	212.7	211.4	3,736.3	15.2
1999	174.3	392.3	-215.6	478.0	115.4	6.7	198.6	242.7	383.6	555.0	268.7	267.2	3,860.0	14.4
2000	178.9	409.4	-224.2	414.8	51.8	83.2	133.1	242.9	371.8	554.8	221.9	220.2	4,012.8	13.8
<i>Euro area enlargement</i>														
2001	173.4	416.3	-242.5	401.9	179.4	102.4	70.0	234.4	404.1	601.9	171.1	169.2	4,290.7	14.0

Source: ECB.

1) Non-consolidated data.

2) All sectors comprise general government (S.13), non-financial corporations (S.11), financial corporations (S.12) and households (S.14) including non-profit institutions serving households (S.15).

3) Including net acquisition of valuables.

4) Excluding financial derivatives.

5) Financial derivatives, other accounts receivable/payable and statistical discrepancies.

6) Arising from saving and net capital transfers receivable, after allowance for consumption of fixed capital (-).

7) Including non-profit institutions serving households.

8) Gross saving as a percentage of disposable income.

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

Table 7.1

Revenue, expenditure and deficit / surplus ¹⁾

(as a percentage of GDP)

1. Euro area – revenue

	Total	Current revenue					Indirect taxes	Received by EU institutions	Social contributions		Sales	Capital revenue	Capital taxes	Memo: fiscal burden ²⁾
		Direct taxes	Households	Corporations	Employers	Employees								
	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	17.1	8.7	5.4	2.4	0.7	0.6	42.6
1993	48.0	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	47.1	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⁾		
		Total	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	47.6	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	48.3	11.3	5.0	5.5	26.5	22.9	2.4	0.6	4.3	2.9	1.5	0.0	47.1
1995	52.2	47.7	11.2	4.8	5.7	26.1	22.8	2.2	0.6	4.5	2.7	1.8	0.1	46.5
1996	52.3	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	1.7	0.0	44.9

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

	Deficit (-) / surplus (+)					Primary deficit (-) / surplus (+)	Government consumption ⁵⁾							Government individual consumption
	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	
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	8.5	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	-1.6	-0.4	0.1	0.3	2.4	20.0	10.5	4.8	5.1	1.7	-2.3	8.1	11.8

4. Euro area countries – deficit (-) / surplus (+) ⁶⁾

	BE ¹⁾	DE ²⁾	GR ³⁾	ES ⁴⁾	FR ⁵⁾	IE ⁶⁾	IT ⁷⁾	LU ⁸⁾	NL ⁹⁾	AT ¹⁰⁾	PT ¹¹⁾	FI 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	-1.8	-0.6	-1.3	4.4	-0.5	5.6	2.2	-1.5	-2.9	7.0
2001	0.4	-2.8	-1.2	-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	11.0	16.9	15.9
1996	75.5	2.9	17.2	9.9	45.5	58.9	30.3	13.2	15.5	16.5
1997	74.9	2.8	16.3	8.9	46.8	56.9	29.0	14.4	13.4	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	44.9	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	105.1	63.1	58.5	49.7	114.5	6.0	63.1	64.9	54.4	46.8
2000	109.2	60.2	106.2	60.5	57.3	39.1	110.5	5.6	55.8	63.6	53.3	44.0
2001	107.6	59.5	107.0	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⁾	MFIs	Other financial corporations	Other creditors ⁷⁾
	1	2	3	4	5	6	7	8	9	10	11	12	13
1992	6.7	5.6	0.4	0.7	0.1	0.1	1.1	1.0	4.5	4.8	3.1	0.6	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	-1.5	0.3	-0.3	-0.5	0.1	0.1	0.0	-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 [$debt(t) - debt(t-1) \div GDP(t)$].

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

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

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

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

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

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

8) Including proceeds from sales of UMTS licences.

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

10) Excluding financial derivatives.

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

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

Table 8.1

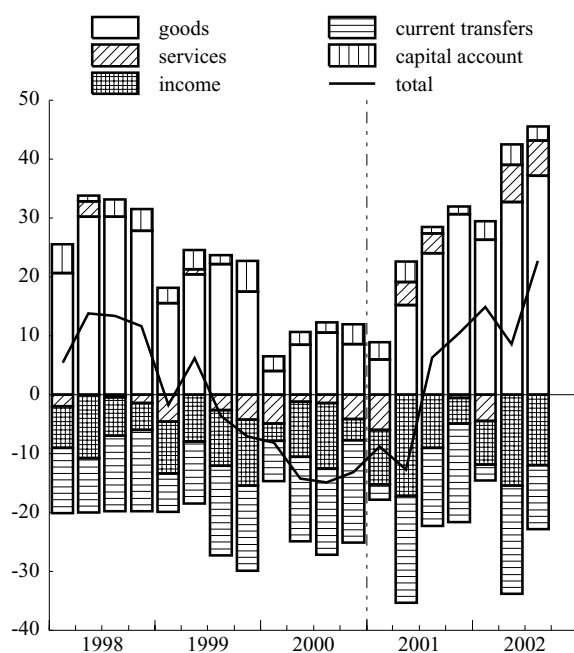
Summary balance of payments ^{1) 2)}

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

	Current account					Capital account	Financial account						Errors and omissions
	Total	Goods	Services	Income	Current transfers		Total	Direct investment	Portfolio investment	Financial derivatives	Other investment	Reserve assets	
	1	2	3	4	5	6	7	8	9	10	11	12	13
1997	62.1	116.4	3.1	-15.2	-42.2	13.0	.	-44.5	-24.3	.	.	.	.
1998	31.9	109.0	-1.1	-28.8	-47.2	12.4	-68.4	-81.3	-110.0	-8.2	123.0	8.2	24.1
1999	-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 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
Q3	20.3	37.2	6.1	-12.0	-10.9	2.4	-43.2	-5.3	34.5	-8.0	-59.9	-4.5	20.5
2001 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
Sep.	8.0	11.3	3.9	-2.6	-4.5	1.2	-20.3	-3.4	15.8	0.9	-29.8	-3.8	11.1

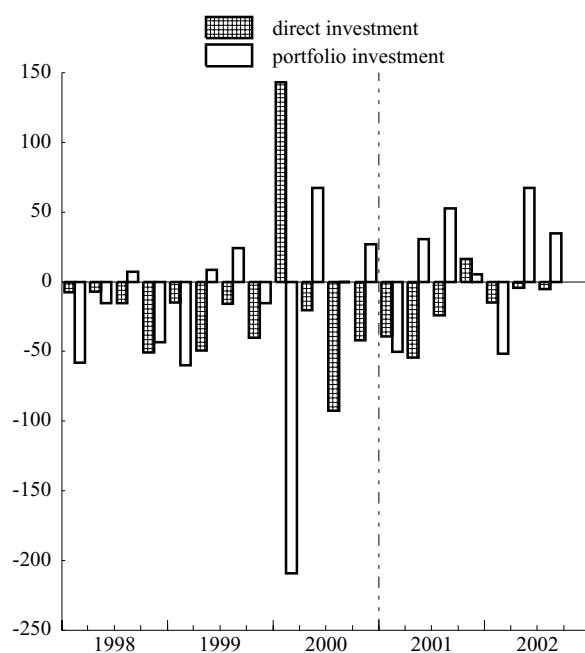
Current and capital accounts

(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 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
Q3	421.0	400.6	20.3	262.2	225.1	87.5	81.4	54.6	66.6	16.6	27.5	4.0	1.7
2001 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
Sep.	139.5	131.5	8.0	88.4	77.1	29.4	25.5	16.4	19.0	5.3	9.9	1.6	0.4

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 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
Q3	426.0	407.3	18.7	265.6	230.9	81.6	78.4	57.9	67.7	21.0	30.3
2001 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
Sep.	142.5	134.5	8.0	89.5	77.6	29.1	25.5	17.1	20.9	6.7	10.4

Source: ECB.

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

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

	Total		Compensation of employees		Investment income							
	Credit 1	Debit 2	Credit 3	Debit 4	Total		Direct investment		Portfolio investment		Other investment	
					Credit 5	Debit 6	Credit 7	Debit 8	Credit 9	Debit 10	Credit 11	Debit 12
1999	207.0	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)

	By resident units abroad							By non-resident units in the euro area						
	Total	Equity capital and reinvested earnings			Other capital (mostly inter-company loans)			Total	Equity capital and reinvested earnings			Other capital (mostly inter-company loans)		
		Total	MFIs ²⁾	Non-MFIs	Total	MFIs ²⁾	Non-MFIs		Total	MFIs ²⁾	Non-MFIs	Total	MFIs ²⁾	Non-MFIs
1	2	3	4	5	6	7	8	9	10	11	12	13	14	
1997	-93.1	.	.	.	.	.	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 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
Q3	-23.0	-28.2	-5.4	-22.8	5.2	-0.1	5.3	17.7	10.8	-0.7	11.5	6.9	0.8	6.1
2001 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
Sep.	-13.5	-10.4	-1.6	-8.8	-3.1	0.0	-3.1	10.1	6.4	-0.6	7.1	3.7	0.0	3.7

Source: ECB.

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

2) Excluding the Eurosystem.

Table 8.5

Balance of payments: portfolio investment account ¹⁾

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

1. By instrument ²⁾

	Total		Equity		Debt instruments					
	Assets	Liabilities	Assets	Liabilities	Assets			Liabilities		
					Total	Bonds and notes	Money market instruments	Total	Bonds and notes	Money market instruments
	1	2	3	4	5	6	7	8	9	10
1998	-363.3	253.3	-116.2	104.0	-247.1	-238.9	-8.2	149.3	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 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
Q3	-17.6	52.1	9.6	1.6	-27.2	-15.5	-11.7	50.5	29.9	20.6
2001 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
Sep.	1.8	14.0	12.8	-0.7	-10.9	-3.3	-7.6	14.7	11.0	3.7

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 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
Q3	0.0	2.6	7.0	.	.	-0.8	-3.5	-11.2	.	.	0.8	-12.1	-0.4	.	.
2002 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	.	.
Sep.	-0.1	0.1	12.7	.	.	-0.5	-2.2	-0.6	.	.	0.4	-6.1	-2.0	.	.

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		Eurosystem		General government		MFIs (excluding the Eurosystem)						Other sectors	
	Assets 1	Liabilities 2	Assets 3	Liabilities 4	Assets 5	Liabilities 6	Total		Long-term		Short-term		Assets 13	Liabilities 14
							Assets 7	Liabilities 8	Assets 9	Liabilities 10	Assets 11	Liabilities 12		
1998	-81.9	204.9	-0.7	3.5	-1.0	-6.1	-22.6	192.4	-37.6	40.4	15.0	152.0	-57.6	15.2
1999	-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 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
2001 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
2002 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
2002 Q3	-58.8	-1.1	0.3	-0.1	0.5	-3.1	-38.2	16.0	-6.8	8.7	-31.5	7.3	-21.3	-13.8
2001 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
2001 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
2001 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
2001 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
2001 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
2001 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
2002 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
2002 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
2002 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
2002 May	-66.3	33.0	-0.1	-0.5	-1.0	-0.4	-56.6	35.3	-5.2	8.7	-51.4	26.6	-8.6	-1.5
2002 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
2002 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
2002 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
2002 Sep.	-67.5	37.6	-0.2	2.1	0.3	0.4	-62.3	36.7	-8.2	0.5	-54.1	36.2	-5.3	-1.6

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

	Loans/currency and deposits			Other assets/liabilities		
	Assets 1	Liabilities 2	Balance 3	Assets 4	Liabilities 5	Balance 6
1999	-1.2	6.7	5.5	-0.8	-0.1	-0.9
2000	-1.1	0.9	-0.2	0.0	0.0	0.0
<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
2001 Q3	1.0	-1.0	0.0	0.0	0.0	0.0
2001 Q4	-0.4	3.8	3.4	0.0	0.0	0.0
2002 Q1	-0.4	1.2	0.7	0.0	0.0	0.0
2002 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 ¹⁾ and reserve assets outstanding***(EUR billions (ECU billions in 1997); end-of-period positions)***1. Summary international investment position**

	Total		Direct investment 3	Portfolio investment 4	Financial derivatives 5	Other investment 6	Reserve assets 7
	1	as % of GDP 2					
Net international investment position ²⁾³⁾							
1997	16.3	0.3	181.5	-750.5	-5.9	223.8	367.3
1998	-170.1	-2.8	152.0	-748.5	2.3	86.5	337.6
1999	-297.3	-4.7	369.6	-881.2	16.0	-183.9	382.2
2000	-414.7	-6.3	428.4	-804.9	8.5	-437.2	390.4
2001	-152.2	-2.2	530.7	-682.7	-5.9	-387.0	392.7
Outstanding assets							
1999	5,796.7	-	1,174.5	2,058.1	111.1	2,070.8	382.2
2000	6,740.0	-	1,609.7	2,344.1	117.9	2,277.9	390.4
2001	7,459.4	-	1,859.9	2,499.8	123.7	2,583.4	392.7
Outstanding liabilities							
1999	6,094.0	-	804.9	2,939.3	95.1	2,254.7	-
2000	7,154.7	-	1,181.2	3,149.1	109.3	2,715.1	-
2001	7,611.6	-	1,329.2	3,182.5	129.5	2,970.5	-

2. Direct investment

	By resident units abroad						By non-resident units in the euro area					
	Equity capital and reinvested earnings			Other capital (mostly inter-company loans)			Equity capital and reinvested earnings			Other capital (mostly inter-company loans)		
	Total 1	MFIs ⁴⁾ 2	Non-MFIs 3	Total 4	MFIs ⁴⁾ 5	Non-MFIs 6	Total 7	MFIs ⁴⁾ 8	Non-MFIs 9	Total 10	MFIs ⁴⁾ 11	Non-MFIs 12
1999	938.7	85.7	853.0	235.8	1.8	234.0	606.3	24.3	582.0	198.6	1.7	196.9
2000	1,256.0	115.9	1,140.1	353.7	2.3	351.3	880.6	31.8	848.8	300.7	1.8	298.9
2001	1,478.4	132.0	1,346.4	381.5	2.6	378.9	985.6	42.4	943.2	343.6	2.6	341.0

3.1. Portfolio investment by instrument

	Equity		Debt instruments					
	Assets 1	Liabilities 2	Assets			Liabilities		
			Total 3	Bonds and notes 4	Money market instruments 5	Total 6	Bonds and notes 7	Money market instruments 8
1999	1,013.6	1,698.1	1,044.4	937.2	107.2	1,241.2	1,138.5	102.7
2000	1,183.6	1,627.6	1,160.5	1,038.4	122.1	1,521.5	1,399.9	121.6
2001	1,111.5	1,577.6	1,388.3	1,208.1	180.1	1,604.9	1,505.5	99.4

3.2. Portfolio investment: assets by instrument and sector of holder

	Equity					Debt instruments									
	Euro-system 9	MFIs ⁴⁾ 10	Non-MFIs			Bonds and notes			Money market instruments						
			Total 11	General government 12	Other sectors 13	Euro-system 14	MFIs ⁴⁾ 15	Non-MFIs			Euro-system 19	MFIs ⁴⁾ 20	Non-MFIs		
								Total 16	General government 17	Other sectors 18			Total 21	General government 22	Other sectors 23
1999	0.4	25.9	987.3	4.1	983.2	4.5	257.2	675.4	6.2	669.3	2.6	68.5	36.1	0.2	35.9
2000	0.9	42.7	1,140.0	5.6	1,134.4	3.4	328.5	706.5	5.7	700.9	0.5	85.6	36.0	0.1	35.8
2001	1.2	43.7	1,066.7	6.6	1,060.0	2.1	422.1	784.0	8.0	776.0	2.8	125.2	52.1	0.2	51.9

Source: ECB.

1) Data refer to the Euro 12, i.e. they include Greece.

2) Assets minus liabilities.

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

4) Excluding the Eurosystem.

4. Other investment by sector and instrument

	Eurosysteem						General government							
	Total		Loans/currency and deposits		Other assets/liabilities		Total		Trade credits		Loans/currency and deposits		Other assets/liabilities	
	Assets 1	Liabilities 2	Assets 3	Liabilities 4	Assets 5	Liabilities 6	Assets 7	Liabilities 8	Assets 9	Liabilities 10	Assets 11	Liabilities 12	Assets 13	Liabilities 14
1999	3.1	27.4	3.0	27.1	0.1	0.3	125.5	57.3	2.5	0.1	72.4	45.4	50.6	11.8
2000	3.0	32.2	2.9	31.9	0.1	0.3	133.8	60.0	2.8	0.2	77.5	47.7	53.5	12.1
2001	3.0	36.4	2.9	36.2	0.1	0.2	132.5	63.8	3.1	0.2	73.6	51.4	55.9	12.3

	MFIs (excluding the Eurosysteem)						Other sectors							
	Total		Loans/currency and deposits		Other assets/liabilities		Total		Trade credits		Loans/currency and deposits		Other assets/liabilities	
	Assets 15	Liabilities 16	Assets 17	Liabilities 18	Assets 19	Liabilities 20	Assets 21	Liabilities 22	Assets 23	Liabilities 24	Assets 25	Liabilities 26	Assets 27	Liabilities 28
1999	1,317.7	1,823.5	1,291.8	1,798.1	25.9	25.5	624.5	346.5	161.0	90.7	394.2	225.7	69.3	30.1
2000	1,458.5	2,168.4	1,421.4	2,126.4	37.1	42.0	682.6	454.5	179.5	110.2	418.9	314.8	84.2	29.5
2001	1,719.5	2,407.3	1,668.6	2,354.1	50.9	53.2	728.4	462.9	177.6	109.7	478.4	321.9	72.4	31.4

5. Reserves and related assets of the Eurosysteem and of the European Central Bank ¹⁾

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

	Reserve assets													Memo: related assets		
	Total	Monetary gold	In fine troy ounces (millions) ²⁾	Special drawing rights	Reserve position in the IMF	Foreign exchange									Other claims	Claims on euro area residents denomi- nated in foreign currency
						Total	Currency and deposits		Securities				Financial derivatives			
							With monetary authorities and the BIS	With banks	Total	Equities	Bonds and notes	Money market instru- ments				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15		
Eurosysteem ³⁾																
1998 Dec. ⁴⁾	329.4	99.6	404.131	5.2	23.4	201.2	12.6	19.6	169.0	0.0	116.6	52.4	0.0	0.0	7.6	
1999 Dec.	372.1	116.4	402.762	4.5	24.3	226.9	13.5	23.0	190.7	0.0	133.9	56.8	-0.2	0.0	14.6	
2000 Dec.	377.2	117.1	399.537	4.3	20.8	235.0	9.7	20.1	204.4	0.0	154.0	50.4	0.7	0.0	15.8	
<i>Euro area enlargement</i>																
2001 1 Jan.	390.4	118.4	404.119	4.3	21.2	246.5	16.8	20.5	208.5	0.0	158.1	50.4	0.7	0.0	16.3	
2001 Dec.	392.7	126.1	401.876	5.5	25.3	235.8	8.0	25.9	201.5	1.2	147.0	53.3	0.4	0.0	24.9	
2002 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	
Oct.	375.5	128.5	400.114	4.9	25.9	216.1	10.4	40.9	164.4	-	-	-	0.5	0.0	20.8	
European Central Bank ⁵⁾																
1999 Dec.	49.3	7.0	24.030	0.0	0.0	42.3	0.3	7.8	34.3	0.0	27.8	6.5	0.0	0.0	2.6	
2000 Dec.	45.3	7.0	24.030	0.0	0.0	38.2	0.6	6.8	30.6	0.0	20.4	10.2	0.3	0.0	3.8	
<i>Euro area enlargement</i>																
2001 Dec.	49.3	7.8	24.656	0.1	0.0	41.4	0.8	7.0	33.6	0.0	23.5	10.1	0.0	0.0	3.6	
2002 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	
Oct.	45.8	7.9	24.656	0.2	0.0	37.7	1.1	9.4	27.2	-	-	-	0.0	0.0	3.0	

Source: ECB.

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

2) Changes in the gold holdings of the Eurosysteem 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 Eurosysteem's reserves.

9 External trade in goods of the euro area

Table 9

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

(not seasonally adjusted, unless otherwise indicated)

	Exports of goods (f.o.b.)					Imports of goods (c.i.f.)						Total (s.a.) (2000=100)	
	Total				Memo: Manufac- tures 5	Total				Memo:		Exports 12	Imports 13
	1	Inter- mediate 2	Capital 3	Consump- tion 4		6	Inter- mediate 7	Capital 8	Consump- tion 9	Manufac- tures 10	Oil 11		
Values (EUR billions (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	489.2	234.3	285.5	925.4	1,010.5	572.0	176.8	224.4	732.8	107.4	105.9	98.9
2001 Q3	257.7	118.7	55.8	71.0	225.2	239.5	135.3	38.9	56.4	172.1	28.0	106.2	98.5
Q4	272.2	121.6	62.9	74.6	237.5	247.1	136.0	44.7	56.8	180.4	23.1	104.2	94.1
2002 Q1	258.2	118.7	53.9	72.7	225.7	239.2	134.5	39.5	55.7	175.6	22.7	107.1	94.2
Q2	272.0	126.5	57.6	74.6	237.6	247.7	141.1	40.5	56.9	180.0	25.7	107.4	95.5
Q3	264.9	119.7	55.3	74.7	231.1	231.1	128.3	36.7	55.6	168.0	.	107.8	93.8
2002 Apr.	90.3	41.8	18.9	25.3	78.8	85.8	48.7	14.5	19.5	62.1	8.8	107.2	96.8
May	91.0	42.9	19.3	24.4	79.4	82.2	47.0	13.5	18.6	59.7	8.8	109.2	95.8
June	90.6	41.8	19.4	24.8	79.5	79.6	45.3	12.5	18.8	58.3	8.1	105.7	93.9
July	94.4	42.4	19.3	26.9	82.5	80.1	44.2	12.4	19.6	58.3	8.5	105.3	92.7
Aug.	81.2	36.7	17.5	22.5	70.7	71.2	39.0	11.5	17.5	51.6	8.3	109.3	94.9
Sep.	89.3	40.6	18.5	25.2	77.8	79.8	45.0	12.8	18.6	58.1	.	108.8	93.9
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 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	.	.	.	.	.	.	.	.	.	.	.	.	.
Q3	.	.	.	.	.	.	.	.	.	.	.	.	.
2002 Apr.	.	.	.	.	.	.	.	.	.	.	.	.	.
May	.	.	.	.	.	.	.	.	.	.	.	.	.
June	.	.	.	.	.	.	.	.	.	.	.	.	.
July	.	.	.	.	.	.	.	.	.	.	.	.	.
Aug.	.	.	.	.	.	.	.	.	.	.	.	.	.
Sep.	.	.	.	.	.	.	.	.	.	.	.	.	.
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 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	.	.	.	.	.	.	.	.	.	.	.	.	.
Q3	.	.	.	.	.	.	.	.	.	.	.	.	.
2002 Apr.	.	.	.	.	.	.	.	.	.	.	.	.	.
May	.	.	.	.	.	.	.	.	.	.	.	.	.
June	.	.	.	.	.	.	.	.	.	.	.	.	.
July	.	.	.	.	.	.	.	.	.	.	.	.	.
Aug.	.	.	.	.	.	.	.	.	.	.	.	.	.
Sep.	.	.	.	.	.	.	.	.	.	.	.	.	.

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	60.3	49.8	104.4
2001 Q3	257.7	266.3	49.2	8.3	5.9	32.9	16.1	43.9	8.2	40.4	14.5	12.1	26.2
Q4	272.2	261.3	50.4	9.6	6.1	36.0	16.2	44.9	8.8	43.3	15.9	12.6	28.4
2002 Q1	258.2	268.5	51.5	9.1	6.0	33.9	15.9	44.6	7.9	39.4	14.0	10.2	25.6
Q2	272.0	269.3	50.5	9.2	6.2	38.4	16.2	45.7	7.8	42.9	15.6	11.3	28.1
Q3	264.9	270.3	.	.	.	.	.	.	.	.	.	.	.
2002 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	91.3	17.0	2.9	2.0	13.1	5.1	15.6	2.6	14.3	5.4	3.7	9.4
June	90.6	88.4	16.4	3.0	2.2	12.9	5.6	14.8	2.6	14.5	5.1	3.9	9.6
July	94.4	88.0	17.6	2.5	1.9	13.0	5.4	15.7	2.9	15.2	5.3	4.0	.
Aug.	81.2	91.4	14.8	2.7	1.8	10.9	4.7	14.0	2.5	13.3	4.8	3.3	.
Sep.	89.3	90.9	.	.	.	.	.	.	.	.	.	.	.
% change versus previous year													
2002 Sep.	7.9	-	.	.	.	.	.	.	.	.	.	.	.
Imports (c.i.f.)													
1998	711.4	-	122.6	30.9	17.4	71.6	40.9	104.8	48.5	132.0	45.8	29.3	67.6
1999	781.2	-	131.0	33.2	18.6	80.4	43.2	113.2	53.9	151.8	49.0	30.4	76.5
2000	1,008.4	-	156.6	38.0	21.8	101.2	49.8	140.7	65.5	211.6	72.2	39.7	111.5
<i>Euro area enlargement</i>													
2001	1,010.5	-	153.8	34.0	21.2	117.3	52.9	138.0	58.7	207.8	74.0	40.9	112.0
2001 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	240.7	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	241.0	35.8	8.2	5.1	29.3	12.7	32.9	12.8	49.2	17.8	9.3	26.1
Q2	247.7	244.4	36.8	8.8	5.2	31.3	13.6	32.9	13.5	48.7	17.1	10.6	29.2
Q3	231.1	240.1	.	.	.	.	.	.	.	.	.	.	.
2002 Apr.	85.8	82.6	12.6	3.1	1.7	10.6	4.7	11.8	4.7	16.5	6.0	3.8	10.2
May	82.2	81.7	12.5	2.8	1.7	10.1	4.4	10.8	4.4	16.6	5.9	3.4	9.5
June	79.6	80.0	11.7	2.9	1.7	10.6	4.4	10.2	4.3	15.6	5.2	3.5	9.4
July	80.1	79.1	11.4	2.5	1.7	10.9	4.4	9.7	4.2	17.1	5.7	3.5	.
Aug.	71.2	80.9	9.9	2.3	1.7	8.9	3.6	9.3	3.8	16.1	4.6	3.0	.
Sep.	79.8	80.1	.	.	.	.	.	.	.	.	.	.	.
% change versus previous year													
2002 Sep.	1.5	-	.	.	.	.	.	.	.	.	.	.	.
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	48.9	-	47.1	2.7	2.9	19.8	13.4	42.0	-24.2	-42.5	-13.7	8.9	-7.6
2001 Q3	18.2	14.3	13.3	0.6	0.7	4.5	4.0	12.8	-4.8	-10.5	-3.6	1.9	-0.7
Q4	25.1	20.6	11.6	1.0	0.4	5.9	2.3	12.3	-4.7	-7.1	-1.1	3.1	1.3
2002 Q1	19.0	27.4	15.7	1.0	0.9	4.6	3.2	11.7	-4.9	-9.8	-3.8	1.0	-0.5
Q2	24.3	24.9	13.7	0.4	1.0	7.1	2.7	12.9	-5.7	-5.9	-1.5	0.6	-1.0
Q3	33.8	30.3	.	.	.	.	.	.	.	.	.	.	.
2002 Apr.	4.5	7.0	4.5	0.3	0.3	1.8	0.8	3.5	-2.1	-2.5	-1.0	0.0	-1.0
May	8.8	9.6	4.4	0.1	0.3	2.9	0.7	4.8	-1.9	-2.2	-0.5	0.3	-0.2
June	11.0	8.3	4.8	0.0	0.4	2.3	1.2	4.6	-1.7	-1.1	-0.1	0.4	0.2
July	14.3	8.9	6.2	0.0	0.3	2.1	1.0	6.0	-1.3	-1.9	-0.4	0.4	.
Aug.	10.0	10.5	4.9	0.4	0.1	2.0	1.2	4.7	-1.3	-2.8	0.2	0.3	.
Sep.	9.5	10.9	.	.	.	.	.	.	.	.	.	.	.

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	90.5	0.919	116.5	1.465	0.629
Q3	91.3	94.3	94.2	-	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	89.3	0.911	108.2	1.491	0.623
Oct.	88.0	90.0	90.0	-	92.8	89.5	0.906	109.9	1.479	0.624
Nov.	86.8	88.8	89.1	-	91.3	87.9	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	94.0	94.0	-	97.7	93.7	0.978	116.3	1.464	0.636
Sep.	91.2	94.2	94.2	-	98.0	93.9	0.981	118.4	1.465	0.631
Oct.	91.7	94.7	94.3	-	98.5	94.4	0.981	121.6	1.465	0.630
Nov.	92.5	95.7	95.1	-	99.3	95.0	1.001	121.7	1.467	0.637
% ch. vs. ⁴⁾ prev. month										
2002 Nov.	0.9	1.1	0.8	-	0.7	0.7	2.1	0.1	0.2	1.1
% ch. vs. ⁴⁾ prev. year										
2002 Nov.	6.6	7.8	6.7	-	8.7	8.0	12.7	11.9	0.1	3.0

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.
9.08	7.43	7.32	1.574	1.785	7.81	1,208.2	1.767	Nov.
-0.3	0.0	-0.3	1.6	0.1	2.1	-0.3	0.9	% ch. vs. ⁴⁾ prev. month 2002 Nov.
-3.6	-0.2	-7.6	11.2	3.9	12.7	6.2	8.7	% ch. vs. ⁴⁾ prev. year 2002 Nov.

4) The table shows the percentage change in the latest monthly observation vis-à-vis the previous month, and vis-à-vis the same month of the previous year. A positive change denotes an appreciation of the euro. Due to the change in the weighting scheme, effective exchange rate data as from January 2001 are not fully comparable with earlier observations.

II Economic and financial developments in the other EU Member States

Table 11

Economic and financial developments

(annual percentage changes, unless otherwise indicated)

	HICP	General government deficit (-)/surplus (+) as a % of GDP	General government gross debt as a % of GDP	Long-term government bond yield ¹⁾ as a % per annum	Exchange rate ²⁾ as national currency per ECU or euro	Current and new capital account as a % of GDP	Unit labour costs ³⁾	Real GDP	Industrial production index ⁴⁾	Standardised unemployment rate as a % of labour force (s.a.)	Broad money ⁵⁾	3-month interest rate ¹⁾ as a % per annum
	1	2	3	4	5	6	7	8	9	10	11	12
Denmark												
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	1.8	2.2	2.3	1.8	4.8	-0.2	3.44
2000	2.7	2.5	46.8	5.64	7.45	1.4	1.5	3.0	6.2	4.4	1.1	5.00
2001	2.3	2.8	44.7	5.08	7.45	2.9	3.7	1.0	1.7	4.3	5.7	4.70
2001 Q2	2.5	-	-	5.27	7.46	2.3	3.9	0.9	0.9	4.4	3.3	5.06
Q3	2.3	-	-	5.18	7.44	4.0	4.0	1.2	2.0	4.3	8.0	4.73
Q4	2.0	-	-	4.83	7.44	0.6	3.7	0.4	-1.3	4.3	9.6	3.77
2002 Q1	2.5	-	-	5.21	7.43	2.4	2.9	0.9	-3.2	4.3	2.3	3.63
Q2	2.1	-	-	5.36	7.43	2.4	0.2	2.8	3.9	4.4	2.8	3.71
Q3	2.4	-	-	4.92	7.43	3.4	1.7	0.9	-1.9	4.6	2.5	3.57
2002 June	2.2	-	-	5.27	7.43	-	-	-	2.4	4.5	2.2	3.73
July	2.2	-	-	5.13	7.43	-	-	-	-2.0	4.5	3.9	3.68
Aug.	2.4	-	-	4.88	7.43	-	-	-	-3.5	4.6	1.7	3.58
Sep.	2.5	-	-	4.74	7.43	-	-	-	-0.2	4.6	1.9	3.45
Oct.	2.7	-	-	4.81	7.43	-	-	-	.	4.7	3.1	3.44
Nov.	.	-	-	4.79	7.43	-	-	-	.	.	.	3.31
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	5.0	4.8	0.3	-2.1	5.1	.	4.00
Q2	1.9	-	-	5.64	9.16	4.4	1.0	2.7	0.5	5.0	.	4.43
Q3	1.5	-	-	5.16	9.23	.	.	.	-1.1	4.9	.	4.41
2002 June	1.7	-	-	5.53	9.11	-	-	-	-1.1	4.9	.	4.45
July	1.8	-	-	5.37	9.27	-	-	-	2.8	5.0	.	4.45
Aug.	1.7	-	-	5.14	9.25	-	-	-	-3.3	4.8	.	4.41
Sep.	1.2	-	-	4.97	9.17	-	-	-	-1.7	5.0	.	4.38
Oct.	1.7	-	-	5.07	9.11	-	-	-	.	5.0	.	4.30
Nov.	.	-	-	5.05	9.08	-	-	-	.	.	.	4.12
United Kingdom												
1998	1.6	0.2	47.7	5.60	0.676	-0.5	2.9	2.9	0.9	6.2	9.6	7.42
1999	1.3	1.1	45.1	5.01	0.659	-2.1	3.0	2.4	0.8	5.9	5.5	5.54
2000	0.8	3.9	42.1	5.33	0.609	-1.8	2.3	3.1	1.6	5.4	6.6	6.19
2001	1.2	0.8	39.1	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	5.1	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	-5.5	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	-1.2	38.0	4.71	0.635	.	.	1.8	-2.7	.	5.7	4.01
2002 June	0.6	-3.6	38.3	5.17	0.644	-	-	-	-8.8	5.1	6.0	4.18
July	1.1	4.5	37.9	5.02	0.639	-	-	-	-1.8	5.2	5.8	4.06
Aug.	1.0	-2.6	37.3	4.67	0.636	-	-	-	-3.8	5.2	5.7	3.99
Sep.	1.0	-5.7	38.0	4.45	0.631	-	-	-	-2.6	.	5.5	3.99
Oct.	1.4	2.3	37.8	4.53	0.630	-	-	-	.	.	5.5	3.96
Nov.	.	.	.	4.55	0.637	-	-	-	.	.	.	3.97

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

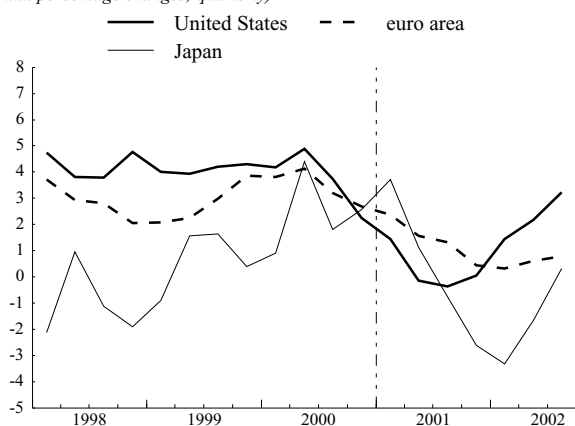
Economic and financial developments

(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	-1.3	1.4	-3.7	5.6	9.1	1.90	5.06	0.877	-3.0	45.2
Q2	1.3	-2.2	2.2	-1.3	5.9	7.5	1.92	5.08	0.919	-3.2	45.2
Q3	1.6	-2.1	3.2	0.8	5.7	7.3	1.81	4.25	0.984	-3.2	.
2002 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	-	-	0.7	5.7	8.0	1.78	4.24	0.978	-	-
Sep.	1.5	-	-	1.4	5.6	6.2	1.80	3.88	0.981	-	-
Oct.	2.0	-	-	1.3	5.7	7.2	1.78	3.91	0.981	-	-
Nov.	.	-	-	.	.	.	1.46	4.04	1.001	-	-
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	0.3	-7.8	5.0	2.8	0.15	1.34	108.7	.	127.0
2001 Q2	-0.7	3.6	1.1	-5.6	4.9	2.7	0.08	1.28	106.9	.	.
Q3	-0.8	9.2	-0.7	-10.8	5.1	3.1	0.07	1.36	108.3	.	.
Q4	-1.0	11.1	-2.6	-13.5	5.4	3.2	0.08	1.35	110.5	.	.
2002 Q1	-1.4	6.6	-3.3	-10.9	5.3	3.6	0.10	1.46	116.1	.	.
Q2	-0.9	-1.7	-1.6	-3.6	5.3	3.5	0.08	1.37	116.5	.	.
Q3	-0.8	.	0.3	3.7	5.4	3.3	0.07	1.24	117.2	.	.
2002 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	-6.1	-	1.9	5.5	3.4	0.07	1.26	116.3	-	-
Sep.	-0.7	.	-	5.3	5.4	3.2	0.07	1.16	118.4	-	-
Oct.	-0.9	.	-	5.3	.	3.3	0.07	1.09	121.6	-	-
Nov.	.	.	-	.	.	.	0.07	0.99	121.7	-	-

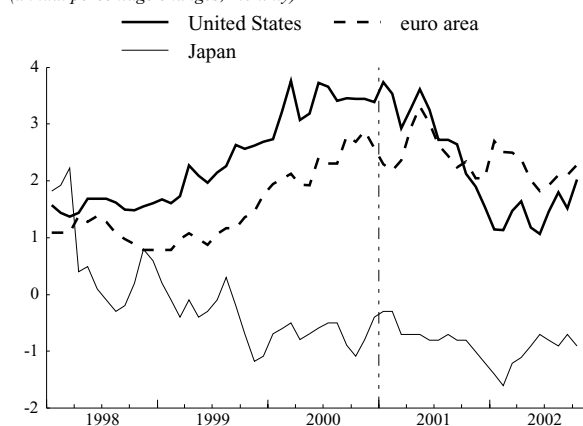
Real gross domestic product

(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

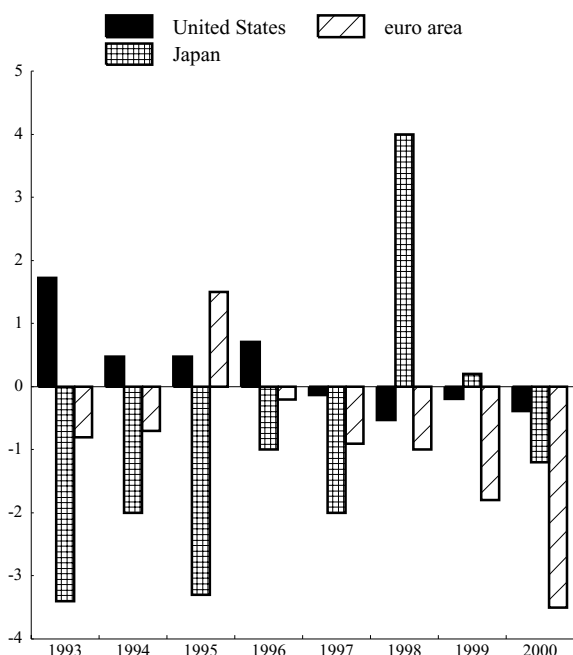
Saving, investment and financing

(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	27.8	26.2	2.3	15.2	15.5	2.4	13.8	0.3	1.2	5.2	4.1	10.9	0.0
2001	.	25.6	.	.	.	-2.3	.	-5.7	1.7	.	3.0	.	-0.1
2000 Q3	27.7	26.2	2.5	.	.	11.1	.	-1.0	-0.3	.	-0.4	.	1.2
Q4	27.0	27.7	1.7	.	.	6.9	.	12.6	2.7	.	7.4	.	0.5
2001 Q1	33.4	26.4	2.3	.	.	8.9	.	-2.4	2.2	.	-4.1	.	3.2
Q2	.	25.4	.	.	.	-26.7	.	-15.3	4.0	.	11.8	.	-4.5
Q3	.	25.3	.	.	.	6.3	.	-8.9	-1.1	.	-5.2	.	2.6
Q4	.	25.5	.	.	.	2.3	.	3.2	1.5	.	8.8	.	-1.5
2002 Q1	.	22.8	.	.	.	10.0	.	-6.7	-2.5	.	-6.5	.	2.4
Q2	.	22.7	.	.	.	-26.3	.	-21.2	1.6	.	7.3	.	-8.7

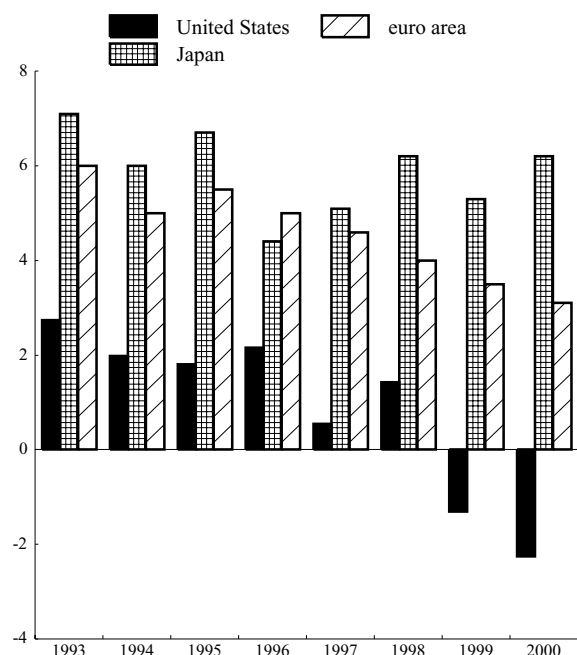
Net lending of non-financial corporations

(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 Tables 2.3 to 2.7

Calculation of flows

Monthly flows are calculated from monthly differences in levels adjusted for reclassifications, other revaluations, exchange rate variations and any other changes which do not arise from transactions.

If L_t represents the level outstanding at the end of the month t , C_t^M the reclassification adjustment in month t , E_t^M the exchange rate adjustment and V_t^M the other revaluation adjustments, the flow F_t^M in month t is defined as:

$$a) F_t^M = (L_t - L_{t-1}) - C_t^M - E_t^M - V_t^M$$

Similarly, the quarterly flow F_t^Q for the quarter ending in month t is defined as:

$$b) F_t^Q = (L_t - L_{t-3}) - C_t^Q - E_t^Q - V_t^Q$$

where L_{t-3} is the level outstanding at the end of month $t-3$ (the end of the previous quarter) and, for example, C_t^Q is the reclassification adjustment in the quarter ending in month t .

Relating to Table 2.4

Calculation of growth rates

Growth rates may be calculated from flows or from the index of adjusted stocks. If F_t^M and L_t are defined as above, the index I_t of adjusted stocks in month t is defined as:

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

As a base, the index (of the non-seasonally adjusted series) is set equal to 100 on December 2001. The annual percentage change a_t for month t – i.e. the change in the 12 months ending in month t – may be calculated using either of the following two formulae:

$$d) a_t = \left[\prod_{i=0}^{11} \left(1 + \frac{F_{t-i}^M}{L_{t-1-i}} \right) - 1 \right] \times 100$$

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

Similarly, the month-on-month percentage change a_t^M for month t may be calculated as:

$$f) a_t^M = \left(\frac{F_t^M}{L_{t-1}} \right) \times 100$$

$$g) a_t^M = \left(\frac{I_t}{I_{t-1}} - 1 \right) \times 100$$

Finally, the three-month moving average for M3 is obtained as $(a_t + a_{t-1} + a_{t-2})/3$.

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

Seasonal adjustment of the euro area monetary aggregates and loans¹

The approach used relies on a multiplicative decomposition through X-12-ARIMA (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.

The seasonal adjustment procedures are first applied to the index of adjusted stocks.³ The resulting

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

² For details see Findley, D., Monsell, B., Bell, W., Otto, M. and Chen, B. C. (1998), "New Capabilities and Methods of the X-12-Arima Seasonal Adjustment Program", *Journal of Business and Economic Statistics*, 16, 2, 127-152, or "X-12-ARIMA Reference Manual, 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", Banco de España, Working Paper No. 9628, Madrid.

³ It follows that for the seasonally adjusted series, the level of the index for the base period, i.e. December 2001, generally differs from 100, reflecting the seasonality of that month.

estimates of the seasonal factors are then applied to the levels and to the adjustments arising from reclassifications and revaluations, in turn yielding seasonally adjusted flows. Seasonal (and trading day) factors are revised at annual intervals or as required.

Relating to Tables 2.5 to 2.8

As far as possible, the data have been harmonised and are comparable over time. Nevertheless, as a result of the implementation of a new reporting scheme in January 1999, outstanding levels for periods prior to the first quarter of 1999 are not always directly comparable with those referring to later periods.

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

Calculation of growth rates

Growth rates may be calculated from flows or from the index of adjusted stocks. If F_t^Q and L_{t-3} are defined as above, the index I_t of adjusted stocks for the quarter ending in month t is defined as:

$$h) I_t = I_{t-3} \times \left(1 + \frac{F_t^Q}{L_{t-3}} \right)$$

As a base, the index is set equal to 100 on December 2001. The annual percentage change in the four quarters ending in month t , i.e. a_t , may be calculated using either of the following two formulae:

$$i) a_t = \left[\prod_{i=0}^3 \left(1 + \frac{F_{t-3i}^Q}{L_{t-3(i+1)}} \right) - 1 \right] \times 100$$

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

Similarly, the quarter-on-quarter percentage change a_t^Q for the quarter ending in month t may be calculated as:

$$k) a_t^Q = \left(\frac{F_t^Q}{L_{t-3}} \right) \times 100$$

$$l) a_t^Q = \left(\frac{I_t}{I_{t-3}} - 1 \right) \times 100$$

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

Relating to Table 4.1

Seasonal adjustment of the HICP⁴

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). Goods raw data are first pre-adjusted to take into account "working day", "leap year" and "Easter" effects. Services include only a "working day" pre-adjustment. The seasonal adjustment for goods and services is carried out using these pre-adjusted series. Income and current transfers do not include any pre-adjustment at all. The seasonal adjustment of the total current account is carried out by aggregating the seasonally adjusted euro area series for goods, services, income and current transfers. Seasonal factors are revised at annual intervals or as required.

⁴ See footnote 1 on 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 4 December 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 (Tables 8.7.1 to 8.7.4) 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 (b.o.p.) is compiled by the ECB. Data up to December 1998 are expressed in ECU. The recent monthly figures for b.o.p. statistics should be regarded as provisional. Data are revised with the publication of the detailed quarterly b.o.p. 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 international investment position (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. For the time being, 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. (Tables 8.7.1 to 8.7.4) is compiled on the basis of euro area Member States' positions vis-à-vis non-euro area residents (i.e. considering the euro area as a whole economy) from end-1999 positions onwards with the result that euro area assets and liabilities are shown separately (see also Box 9 in this issue). The i.i.p. is compiled on a "net" basis, i.e. by aggregating national data regarding end-1997 and end-1998 positions. The "net" and the "extra euro area" based compilation methodologies may not give fully comparable results. The i.i.p. is valued at

current market prices with the exception of direct investment stocks, where book values are used to a large extent.

The outstanding amounts of the Eurosystem's international reserves and related assets are shown in Table 8.7.5 with the corresponding reserves and related assets held by the ECB. The data in Table 8.7.5 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 ("Statistical treatment of the Eurosystem's international reserves", October 2000).

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. For more detailed information, please see the ECB Occasional Paper No. 2 ("The effective exchange rates of the euro", Luca Buldorini and Stelios Makrydakis and Christian Thimann, February 2002), which can be downloaded from the ECB's website.

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**

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

5 December 2002

The Governing Council of the ECB decides to lower the minimum bid rate on the main refinancing operations by 0.50 percentage point to 2.75%, starting from the operation to be settled on 11 December 2002. It also decides to lower the interest rates on both the marginal lending facility and the deposit facility by 0.50 percentage point, to 3.75% and 1.75% respectively, both with effect from 6 December 2002.

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

The TARGET (Trans-European Automated Real-time Gross settlement Express Transfer) system

Payment flows in TARGET

In the third quarter of 2002, on a daily average TARGET traffic decreased slightly in terms of both value and volume as compared with the previous quarter. This is typical for the summer holiday period.

TARGET as a whole, i.e. cross-border and domestic payments taken together, processed a daily average of 247,908 payments with a value of €1,476 billion in the third quarter of 2002. Compared with the second quarter of 2002, this equals a decrease of 4.8% in terms of value and of 1.4% in terms of volume.

At the **domestic** level, TARGET processed a daily average of 193,698 payments with a value of €1,017 billion, showing a decrease of 1.7% in volume and 4.2% in value compared with the previous quarter. Domestic payments in TARGET accounted for 68.9% and 78.1% respectively of the total value and volume of TARGET payments. The highest value on a single day in TARGET domestic payments was recorded on 30 September 2002 (the last day of the quarter), when a total of €1,366 billion was processed. In volume terms, 30 September 2002 was also the peak day, with a total of 262,687 payments. The average value of a domestic payment was €5.2 million. 63% of the

Table I

Payment instructions processed by TARGET and other selected interbank funds transfer systems: volume of transactions

(number of payments)

	2001 Q3	2001 Q4	2002 Q1	2002 Q2	2002 Q3
TARGET					
All TARGET payments					
Total volume	12,992,738	14,990,244	15,364,299	15,834,392	16,361,900
Daily average	199,888	237,940	247,811	251,340	247,908
Cross-border TARGET payments					
Total volume	2,854,823	3,045,061	3,188,285	3,419,144	3,577,801
Daily average	43,920	48,334	51,424	54,272	54,209
Domestic TARGET payments					
Total volume	10,137,915	11,945,183	12,176,014	12,415,248	12,784,099
Daily average	155,968	189,606	196,387	197,067	193,698
Other systems					
Euro 1 (EBA)					
Total volume	6,990,816	7,607,298	7,790,799	8,549,759	8,866,903
Daily average	107,551	120,751	125,658	135,710	134,347
Euro Access Frankfurt (EAF)¹⁾					
Total volume	3,230,911	1,209,501	-	-	-
Daily average	49,706	48,380	-	-	-
Paris Net Settlement (PNS)					
Total volume	1,959,480	1,998,239	1,900,298	1,901,820	1,860,283
Daily average	30,146	31,718	30,650	30,188	28,186
Servicio Español de Pagos Interbancarios (SPI)					
Total volume	360,296	421,685	409,483	455,080	449,333
Daily average	5,543	6,693	6,605	7,223	6,808
Pankkien On-line Pikasiirrot ja Sekit-järjestelmä (POPS)					
Total volume	180,229	165,329	152,445	212,064	157,864
Daily average	2,773	2,624	2,459	3,366	2,392

1) The EAF system ceased operations on 2 November 2001 and its functions were taken over by the RTGS^{plus} system.

total number of domestic payments had a value of less than or equal to €50,000, 24% had a value ranging from €50,000 to €1 million, and 13% were above €1 million. The share of domestic TARGET payments with a value above €1 billion was less than 0.1%.

During the third quarter of 2001, TARGET processed a daily average of 155,968 domestic payments with a value of €711 billion. The figures for the third quarter of 2002 represent an increase of 24% in terms of volume and 43% in terms of value. However, the comparison of TARGET traffic in the third quarter of this year with the same quarter of 2001 is difficult because of the shutdown of the EAF¹ when the Deutsche Bundesbank launched its RTGS^{plus} system on

5 November 2001. The EAF traffic which moved to RTGS^{plus} was not included in the TARGET domestic figures of 2001. If the domestic traffic of the German RTGS^{plus} system is compared² with the ELS³ plus EAF figures in the third quarter of 2001, it shows a decrease of 9% and 13% in terms of value and volume respectively. For the other RTGS systems forming TARGET, the comparison with the third quarter of 2001

1 Euro Access Frankfurt; the former hybrid system of the Deutsche Bundesbank.

2 In this comparison, the liquidity transfers between the home accounts of the participants at the Deutsche Bundesbank and their RTGS^{plus} accounts have not been included, given that this kind of transaction did not exist in the ELS system and to enable a meaningful comparison between 2001 and 2002 figures.

3 Euro Link System; the former RTGS system of the Deutsche Bundesbank.

Table 2
Payment instructions processed by TARGET and other selected interbank funds transfer systems: value of transactions
(EUR billions)

	2001 Q3	2001 Q4	2002 Q1	2002 Q2	2002 Q3
TARGET					
All TARGET payments					
Total value	78,040	92,627	95,440	97,682	97,404
Daily average	1,201	1,470	1,539	1,551	1,476
Cross-border TARGET payments					
Total value	31,818	32,176	29,720	30,794	30,309
Daily average	490	511	479	489	459
Domestic TARGET payments					
Total value	46,222	60,451	65,720	66,888	67,095
Daily average	711	960	1,060	1,062	1,017
Other systems					
Euro 1 (EBA)					
Total value	12,533	12,445	11,961	12,045	12,279
Daily average	193	198	193	191	186
Euro Access Frankfurt (EAF) ¹⁾					
Total value	10,082	3,660	-	-	-
Daily average	155	146	-	-	-
Paris Net Settlement (PNS)					
Total value	5,393	5,399	5,061	5,079	4,832
Daily average	83	86	82	81	73
Servicio Español de Pagos Interbancarios (SPI)					
Total value	98	73	74	80	78
Daily average	2	1	1	1	1
Pankkien On-line Pikasiirrot ja Sekit-järjestelmä (POPS)					
Total value	89	92	92	100	98
Daily average	1	1	1	1	1

1) The EAF system ceased operations on 2 November 2001 and its functions were taken over by the RTGS^{plus} system.

shows an increase of 8% in terms of value and 5% in terms of volume.

The volume of **cross-border** payments remained stable in comparison with the second quarter of 2002 (averaging 54,209 payments a day), whereas the value diminished by 6% (averaging a daily value of €459 billion).

During the third quarter, the highest value on a single day in TARGET cross-border payments was recorded on 30 September 2002 (the last day of the quarter), when a total of €640 billion was processed. In terms of volume, the peak day was 5 July 2002 (day following a public holiday in the United States) with a total of 78,767 payments.

The ratio of customer payments to the average number of daily TARGET cross-border payments decreased slightly to 44% in terms of volume and remained stable at 4% in terms of value. The average value of customer payments levelled out at €0.8 million and the average value of interbank payments decreased to €14.6 million. Though the proportion of customer payments in the daily volume of TARGET cross-border payments decreased slightly compared with the previous quarter, a comparison with the third quarter of 2001 shows a significant increase (+39%). The increase in the proportion of customer payments thus remains one of the most notable trends in TARGET cross-border flows. In terms of value bands, 52% of total cross-border payments had a value of less than or equal to €50,000, 29% had a value ranging from €50,000 to €1 million, and 19% were above €1 million. The share of TARGET cross-border payments with a value above €1 billion was less than 0.1%.

Compensation regime

On 28 November 2002, the Governing Council of the ECB adopted a new policy framework for the compensation of TARGET users in the event of a TARGET malfunctioning. The new compensation regime has been inspired by existing market practices and aims at offering compensation for certain damages in a swift and standardised manner.

Long-term evolution of TARGET

On 24 October 2002, the Governing Council of the ECB took a strategic decision on the direction of the next generation of the TARGET system (**TARGET2**). TARGET2 will be a multiple-platform system, consisting of national components and one “shared component”. The latter will be an IT-platform commonly used by a number of central banks on a voluntary basis. Within three years of the start of operation of TARGET2, it will be assessed whether the single shared component can satisfy the needs of all central banks and their banking communities not wishing to maintain a national platform. Eventually, it may be decided to build additional shared components at a later stage of TARGET2. As in the present TARGET system, TARGET2 will be designed as a system for the settlement in central bank money of large-value payments in euro. Nevertheless, again as is the case at present, any payments that users may wish to process in real time in central bank money will be accepted in TARGET without limits. TARGET2 will have a far more harmonised service level than the present system and will have a single Eurosystem-wide price structure for its core service, which includes all those services and functions that are offered by all TARGET2 components. By the end of a four-year period after the start of TARGET2 operations, subsidies going beyond an acceptable public good factor have to be phased out obligatorily.⁴

On 24 October 2002, the Governing Council also decided that the central banks of **accession countries** will have the possibility – but not the obligation – to connect to TARGET as from their joining the EU.

Additional information on the TARGET system as well as the ECB press release on the long-term evolution are available in the “TARGET” section of the ECB’s website.

⁴ Platforms which do not comply with this requirement will have to be given up.

Documents published by the European Central Bank

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

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

Annual Report

"Annual Report 1998", April 1999.

"Annual Report 1999", April 2000.

"Annual Report 2000", May 2001.

"Annual Report 2001", April 2002.

Convergence Report

"Convergence Report 2000", May 2000.

"Convergence Report 2002", May 2002.

Monthly Bulletin

Articles published from January 1999 onwards:

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

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

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

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

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

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

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

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

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

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

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

“Inflation differentials in a monetary union”, October 1999.

“ESCB preparations for the year 2000”, October 1999.

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

“TARGET and payments in euro”, November 1999.

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

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

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

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

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

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

“EMU and banking supervision”, April 2000.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

“Fiscal policies and economic growth”, August 2001.

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

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

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

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

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

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

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

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

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

“The stock market and monetary policy”, February 2002.

“Recent developments in international co-operation”, February 2002.

“The operation of automatic fiscal stabilisers in the euro area”, April 2002.

“The role of the Eurosystem in payment and clearing systems”, April 2002.

“Enhancements to MFI balance sheet and interest rate statistics”, April 2002.

“The liquidity management of the ECB, May 2002.

“International supervisory co-operation”, May 2002.

“Implications of the euro cash changeover on the development of banknotes and coins in circulation”, May 2002.

“Characteristics of the euro area business cycle in the 1990s”, July 2002.

“The Eurosystem’s dialogue with EU accession countries”, July 2002.

“Developments in the external direct and portfolio investment flows of the euro area”, July 2002.

“Price level convergence and competition in the euro area”, August 2002.

“Recent developments and risks in the euro area banking sector”, August 2002.

“Saving, financing and investment in the euro area”, August 2002.

“Recent findings on monetary policy transmission in the euro area”, October 2002.

“Main features of the repo market in the euro area”, October 2002.

“The accountability of the ECB”, November 2002.

“Transparency in the monetary policy of the ECB”, November 2002.

“The composition of employment growth in the euro area in recent years”, November 2002.

Occasional Paper Series

- 1 “The impact of the euro on money and bond markets” by J. Santillán, M. Bayle and C. Thygesen, July 2000.
 - 2 “The effective exchange rates of the euro” by L. Buldorini, S. Makrydakis and C. Thimann, February 2002.
 - 3 “Estimating the trend of M3 income velocity underlying the reference value for monetary growth” by C. Brand, D. Gerdesmeier and B. Roffia, May 2002.
 - 4 “Labour force developments in the euro area since the 1980s” by V. Genre and R. Gómez-Salvador, July 2002.
 - 5 “The evolution of clearing and central counterparty services for exchange-traded derivatives in the United States and Europe: a comparison” by D. Russo, T. L. Hart and A. Schönenberger, September 2002.
 - 6 “Banking integration in the euro area” by I. Cabral, F. Dierick and J. Vesala, December 2002.
-

Working Paper Series

- 1 “A global hazard index for the world foreign exchange markets” by V. Brousseau and F. Scacciavillani, May 1999.
- 2 “What does the single monetary policy do? A SVAR benchmark for the European Central Bank” by C. Monticelli and O. Tristani, May 1999.
- 3 “Fiscal policy effectiveness and neutrality results in a non-Ricardian world” by C. Detken, May 1999.
- 4 “From the ERM to the euro: new evidence on economic and policy convergence among EU countries” by I. Angeloni and L. Dedola, May 1999.
- 5 “Core inflation: a review of some conceptual issues” by M. Wynne, May 1999.
- 6 “The demand for M3 in the euro area” by G. Coenen and J.-L. Vega, September 1999.
- 7 “A cross-country comparison of market structures in European banking” by O. De Bandt and E. P. Davis, September 1999.
- 8 “Inflation zone targeting” by A. Orphanides and V. Wieland, October 1999.
- 9 “Asymptotic confidence bands for the estimated autocovariance and autocorrelation functions of vector autoregressive models”, by G. Coenen, January 2000.
- 10 “On the effectiveness of sterilized foreign exchange intervention”, by R. Fatum, February 2000.

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

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

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

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

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

- 102 “The bank lending channel of monetary policy: identification and estimation using Portuguese micro bank data” by L. Farinha and C. Robalo Marques, December 2001.
- 103 “Bank-specific characteristics and monetary policy transmission: the case of Italy” by L. Gambacorta, December 2001.
- 104 “Is there a bank lending channel of monetary policy in Greece? Evidence from bank level data” by S. N. Brissimis, N. C. Kamberoglou and G. T. Simigiannis, December 2001.
- 105 “Financial systems and the role of banks in monetary policy transmission in the euro area” by M. Ehrmann, L. Gambacorta, J. Martínez-Pagés, P. Sevestre and A. Worms, December 2001.
- 106 “Investment, the cost of capital, and monetary policy in the nineties in France: a panel data investigation” by J.-B. Chatelain and A. Tiomo, December 2001.
- 107 “The interest rate and credit channel in Belgium: an investigation with micro-level firm data” by P. Butzen, C. Fuss and P. Vermeulen, December 2001.
- 108 “Credit channel and investment behaviour in Austria: a micro-econometric approach” by M. Valderrama, December 2001.
- 109 “Monetary transmission in Germany: new perspectives on financial constraints and investment spending” by U. von Kalckreuth, December 2001.
- 110 “Does monetary policy have asymmetric effects? A look at the investment decisions of Italian firms” by E. Gaiotti and A. Generale, December 2001.
- 111 “Monetary transmission: empirical evidence from Luxembourg firm level data” by P. Lünemann and T. Mathä, December 2001.
- 112 “Firm investment and monetary transmission in the euro area” by J.-B. Chatelain, A. Generale, I. Hernando, U. von Kalckreuth and P. Vermeulen, December 2001.
- 113 “Financial frictions and the monetary transmission mechanism: theory, evidence and policy implications”, by C. Bean, J. Larsen and K. Nikolov, January 2002.
- 114 “Monetary transmission in the euro area: where do we stand?” by I. Angeloni, A. Kashyap, B. Mojon and D. Terlizzese, January 2002.
- 115 “Monetary policy rules, macroeconomic stability and inflation: a view from the trenches” by A. Orphanides, December 2001.
- 116 “Rent indices for housing in west Germany 1985 to 1998” by J. Hoffmann and C. Kurz, January 2002.
- 117 “Hedonic house prices without characteristics: the case of new multiunit housing” by O. Bover and P. Velilla, January 2002.
- 118 “Durable goods, price indexes and quality change: an application to automobile prices in Italy, 1988-1998” by G. M. Tomat, January 2002.
- 119 “Monetary policy and the stock market in the euro area” by N. Cassola and C. Morana, January 2002.

- 120 “Learning stability in economics with heterogenous agents” by S. Honkapohja and K. Mitra, January 2002.
- 121 “Natural rate doubts” by A. Beyer and R. E. A. Farmer, February 2002.
- 122 “New technologies and productivity growth in the euro area” by F. Vijselaar and R. Albers, February 2002.
- 123 “Analysing and combining multiple credit assessments of financial institutions” by E. Tabakis and A. Vinci, February 2002.
- 124 “Monetary policy, expectations and commitment” by G. W. Evans and S. Honkapohja, February 2002.
- 125 “Duration, volume and volatility impact of trades” by S. Manganelli, February 2002.
- 126 “Optimal contracts in a dynamic costly state verification model” by C. Monnet and E. Quintin, February 2002.
- 127 “Performance of monetary policy with internal central bank forecasting” by S. Honkapohja and K. Mitra, February 2002.
- 128 “Openness, imperfect exchange rate pass-through and monetary policy” by F. Smets and R. Wouters, March 2002.
- 129 “Non-standard central bank loss functions, skewed risks, and certainty equivalence” by A. al-Nowaihi and L. Stracca, March 2002.
- 130 “Harmonized indexes of consumer prices: their conceptual foundations” by E. Diewert, March 2002.
- 131 “Measurement bias in the HICP: what do we know, and what do we need to know?” by M. A. Wynne and D. Rodríguez-Palenzuela, March 2002.
- 132 “Inflation dynamics and dual inflation in accession countries: a ‘new Keynesian’ perspective” by O. Arratibel, D. Rodríguez-Palenzuela and C. Thimann, March 2002.
- 133 “Can confidence indicators be useful to predict short term real GDP growth?” by A. Mourougane and M. Roma, March 2002.
- 134 “The cost of private transportation in the Netherlands, 1992-1999” by B. Bode and J. Van Dalen, March 2002.
- 135 “The optimal mix of taxes on money, consumption and income” by F. De Fiore and P. Teles, April 2002.
- 136 “Retail bank interest rate pass-through: new evidence at the euro area level” by G. de Bondt, April 2002.
- 137 “Equilibrium bidding in the Eurosystem’s open market operations” by U. Bindseil, April 2002.
- 138 “‘New’ views on the optimum currency area theory: what is EMU telling us?” by F. P. Mongelli, April 2002.

- I39 “On currency crises and contagion” by M. Fratzscher, April 2002.
- I40 “Price setting and the steady-state effects of inflation” by M. Casares, May 2002.
- I41 “Asset prices and fiscal balances” by F. Eschenbach and L. Schuknecht, May 2002.
- I42 “Modelling the daily banknotes in circulation in the context of the liquidity management of the European Central Bank” by A. Cabrero, G. Camba-Mendez, A. Hirsch and F. Nieto, May 2002.
- I43 “A non-parametric method for valuing new goods” by L. Blow and I. Crawford, May 2002.
- I44 “A failure in the measurement of inflation: results from a hedonic and matched experiment using scanner data” by M. Silver and S. Heravi, May 2002.
- I45 “Towards a new early warning system of financial crises” by M. Bussiere and M. Fratzscher, May 2002.
- I46 “Competition and stability – what’s special about banking?” by E. Carletti and P. Hartmann, May 2002.
- I47 “Time-to-build approach in a sticky price, stricky wage optimizing monetary model” by M. Casares, May 2002.
- I48 “The functional form of yield curves” by V. Brousseau, May 2002.
- I49 “The Spanish block of the ESCB-multi-country model” by A. Willman and A. Estrada, May 2002.
- I50 “Equity and bond market signals as leading indicators of bank fragility” by R. Gropp, J. Vesala and G. Vulpes, June 2002.
- I51 “G-7 inflation forecasts” by F. Canova, June 2002.
- I52 “Short-term monitoring of fiscal policy discipline” by G. Camba-Mendez and A. Lamo, June 2002.
- I53 “Euro area production function and potential output: a supply side system approach” by A. Willman, June 2002.
- I54 “The euro bloc, the dollar bloc and the yen bloc: how much monetary policy independence can exchange rate flexibility buy in an interdependent world?” by M. Fratzscher, June 2002.
- I55 “Youth unemployment in the OECD: demographic shifts, labour market institutions, and macroeconomic shocks” by J. F. Jimeno and D. Rodriguez-Palenzuela, June 2002.
- I56 “Identifying endogenous fiscal policy rules for macroeconomic model” by J. J. Perez and P. Hiebert, July 2002.
- I57 “Bidding and performance in repo auctions: evidence from ECB open market operations” by Kjell G. Nyborg, U. Bindseil and I. A. Strebulaev, July 2002.

- 158 “Quantifying embodied technological change” by P. Sakellars and D.J. Wilson, July 2002.
- 159 “Optimal public money” by C. Monnet, July 2002.
- 160 “Model uncertainty and the equilibrium value of the real effective euro exchange rate” by C. Detken, A. Dieppe, J. Henry, C. Marin and F. Smets, July 2002.
- 161 “The optimal allocation of risks under prospect theory” by L. Stracca, July 2002.
- 162 “Public debt asymmetries: the effect on taxes and spending in the European Union” by S. Krogstrup, August 2002.
- 163 “The rationality of consumers’ inflation expectations: survey-based evidence for the euro area” by M. Forsells and G. Kenny, August 2002.
- 164 “Euro area corporate debt securities market: first empirical evidence” by G. de Bondt, August 2002.
- 165 “The industry effects of monetary policy in the euro area” by G. Peersman and F. Smets, August 2002.
- 166 “Monetary and fiscal policy interactions in a micro-founded model of a monetary union” by R. M. W. J. Beetsma and H. Jensen, August 2002.
- 167 “Identifying the effects of monetary policy shocks on exchange rates using high frequency data” by J. Faust, J. H. Rogers, E. Swanson and J. H. Wright, August 2002.
- 168 “Estimating the effects of fiscal policy in OECD countries” by R. Perotti, August 2002.
- 169 “Modeling model uncertainty” by A. Onatski and N. Williams, August 2002.
- 170 “What measure of inflation should a central bank target?” by G. Mankiw and R. Reis, August 2002.
- 171 “An estimated stochastic dynamic general equilibrium model of the euro area” by F. Smets and R. Wouters, August 2002.
- 172 “Constructing quality-adjusted price indices: a comparison of hedonic and discrete choice models” by N. Jonker, September 2002.
- 173 “Openness and equilibrium determinacy under interest rate rules” by F. de Fiore and Z. Liu, September 2002.
- 174 “International monetary policy coordination and financial market integration” by A. Sutherland, September 2002.
- 175 “Monetary policy and the financial accelerator in a monetary union” by S. Gilchrist, J. O. Hairault and H. Kempf, September 2002.
- 176 “Macroeconomics of international price discrimination” by G. Corsetti and L. Dedola, September 2002.

- 177 “A theory of the currency denomination of international trade” by P. Bacchetta and E. van Wincoop, September 2002.
- 178 “Inflation persistence and optimal monetary policy in the euro area” by P. Benigno and J. D. López-Salido, September 2002.
- 179 “Optimal monetary policy with durable and non-durable goods” by C. J. Erceg and A. T. Levin, September 2002.
- 180 “Regional inflation in a currency union: fiscal policy vs. fundamentals” by M. Duarte and A. L. Wolman, September 2002.
- 181 “Inflation dynamics and international linkages: a model of the United States, the euro area and Japan” by G. Coenen and V. Wieland, September 2002.
- 182 “The information content of real-time output gap estimates, an application to the euro area” by G. Rünstler, September 2002.
- 183 “Monetary policy in a world with different financial systems” by E. Faia, October 2002.
- 184 “Efficient pricing of large value interbank payment systems” by C. Holthausen and J.-C. Rochet, October 2002.
- 185 “European integration: what lessons for other regions? The case of Latin America” by E. Dorrucchi, S. Firpo, M. Fratzscher and F. P. Mongelli, October 2002.
- 186 “Using money market rates to assess the alternatives of fixed vs. variable rate tenders: the lesson from 1989-1998 data for Germany” by M. Manna, October 2002.
- 187 “A fiscal theory of sovereign risk” by M. Uribe, October 2002.
- 188 “Should central banks really be flexible?” by H. P. Grüner, October 2002.
- 189 “Debt reduction and automatic stabilisation” by P. Hiebert, J. J. Pérez and M. Rostagno, October 2002.
- 190 “Monetary policy and the zero bound to interest rates: a review” by T. Yates, October 2002.
- 191 “The fiscal costs of financial instability revisited” by L. Schuknecht and F. Eschenbach, November 2002.
- 192 “Is the European Central Bank (and the United States Federal Reserve) predictable?” by G. Pérez-Quirós and J. Sicilia, November 2002.
- 193 “Sustainability of public finances and automatic stabilisation under a rule of budgetary discipline” by J. Marín, November 2002.
- 194 “Sensitivity analysis of volatility: a new tool for risk management” by S. Manganelli, V. Ceci and W. Vecchiato, November 2002.
- 195 “In-sample or out-of-sample tests of predictability: which one should we use?” by A. Inoue and L. Kilian, November 2002.

- 196 “Bootstrapping autoregressions with conditional heteroskedasticity of unknown form” by S. Gonçalves and L. Kilian, November 2002.
- 197 “A model of the Eurosystem’s operational framework for monetary policy implementation” by C. Ewerhart, November 2002.
- 198 “Extracting risk neutral probability densities by fitting implied volatility smiles: some methodological points and an application to the 3M Euribor futures option prices” by A. B. Andersen and T. Wagener, December 2002.
-

Other publications

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

“Money and banking statistics: Series keys for the exchange of balance sheet items time series”, November 1999.

“Money and banking statistics: Handbook for the compilation of flow statistics”, December 1999.

“Payment systems in the European Union: Addendum incorporating 1998 figures”, February 2000.

“Interlinking: Data dictionary”, Version 2.02, March 2000.

“Asset prices and banking stability”, April 2000.

“EU banks’ income structure”, April 2000.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

“TARGET: Annual Report”, May 2001.

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

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

“Why price stability?”, June 2001.

“The euro bond market”, July 2001.

“The euro money market”, July 2001.

“The euro equity markets”, August 2001.

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

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

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

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

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

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

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

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

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

“Accession countries: Balance of payments/international investment position statistical methods”, February 2002.

“List of Monetary Financial Institutions and institutions subject to minimum reserves”, February 2002.

“Labour market mismatches in euro area countries”, March 2002.

“Compendium: Collection of legal instruments, June 1998 – December 2001”, March 2002.

“Evaluation of the 2002 cash changeover”, April 2002.

“TARGET Annual Report 2001, April 2002.

“The single monetary policy in the euro area: General documentation on Eurosystem monetary policy instruments and procedures”, April 2002.

“Annual report on the activities of the Anti-Fraud Committee of the European Central Bank, covering the period from January 2001 to January 2002”, May 2002.

“Developments in banks’ liquidity profile and management”, May 2002.

“The Eurosystem’s terms of reference for the use of cash-recycling machines by credit institutions and other euro area institutions engaged in the sorting and distribution of banknotes to the public as a professional activity”, May 2002.

“Bond markets and long-term interest rates in European Union accession countries”, June 2002.

“TARGET minimum common performance features of RTGS systems within TARGET as at November 2001”, June 2002.

“TARGET Interlinking data dictionary as at November 2001”, June 2002.

“TARGET Interlinking specification as at November 2001”, June 2002.

“TARGET Interlinking user requirement as at November 2001”, June 2002.

“Task force on portfolio investment collection systems, Final Report”, June 2002.

“Measurement issues in European consumer price indices and the conceptual framework of the HICP”, July 2002.

“Payment and securities settlement systems in the European Union: Addendum incorporating 2000 figures”, July 2002.

“Financial sectors in EU accession countries”, August 2002.

“Payment and securities settlement systems in accession countries”, August 2002.

“TARGET Interlinking specification”, November 2002.

“TARGET Interlinking data dictionary”, November 2002.

“Guidance Notes to Regulation ECB/2001/13 on the MFI balance sheet statistics”, November 2002.

“Structural analysis of the EU banking sector”, November 2002

“European Union balance of payments/international investment position statistical methods”, November 2002.

“Review of the international role of the euro”, December 2002.

Information brochures

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

“The ECB payment mechanism”, August 2000.

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

“TARGET”, August 2000.

“The European Central Bank”, April 2001.

“The euro banknotes and coins”, May 2001.

“TARGET – update 2001”, July 2001.

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

“The euro banknotes and coins”, August 2002.

