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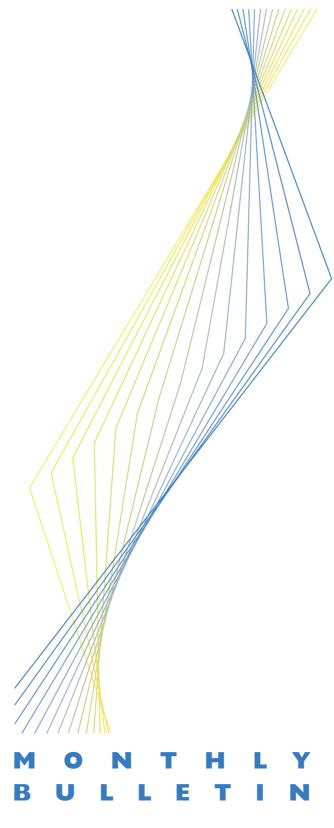
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February 2003



EUROPEAN CENTRAL BANK



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Contents

Editorial	5
Economic developments in the euro area	7
Monetary and financial developments	7
Price developments	18
Output, demand and labour market developments	25
Exchange rate and balance of payments developments	30
Boxes:	
I Monetary policy operations and liquidity conditions in the reserve maintenance period ending on 23 January 2003	12
2 Private sector expectations for inflation and economic activity in the euro area: the results of the 2003 QI Survey of Professional Forecasters and other available indicators	22
The relationship between monetary policy and fiscal policies in the euro area	37
Exchange rate regimes for emerging market economies	51
Euro area statistics	*
Chronology of monetary policy measures of the Eurosystem	9 *
Documents published by the European Central Bank	9 5*

Abbreviations

Countries

BE	Belgium
DK	Denmark
DE	Germany
GR	Greece
ES	Spain
FR	France
IE	Ireland
IT	Italy
LU	Luxembourg
NL	Netherlands
AT	Austria
РТ	Portugal
FI	Finland
SE	Sweden
UK	United Kingdom
JP	Japan
ÚS	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. I	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 6 February 2003, the Governing Council of the ECB decided to leave the minimum bid rate on the main refinancing operations of the Eurosystem unchanged at 2.75%. The interest rates on the marginal lending facility and the deposit facility were also left unchanged at 3.75% and 1.75% respectively.

decisions were based on a These comprehensive analysis of monetary, financial and economic developments, conducted within the framework of the ECB's monetary policy strategy. Overall, the Governing Council came to the assessment that the prevailing monetary policy stance remains appropriate to preserve a favourable outlook for price stability in the medium term. The current low level of key ECB interest rates should help counterbalance the negative effects on economic activity stemming from the high degree of worldwide uncertainty and should, thereby, contribute to a sustainable economic recovery in the course of 2003. The Governing Council continued to assume that the high degree of uncertainty will decline in the course of 2003, but noted that, at the current juncture, it was very difficult, if not impossible, to form a conclusive judgement on the impact of geopolitical developments on the world economy in general, and the euro area in particular.

Starting with the analysis under the first pillar, the three-month average of the annual growth rates of M3 declined to 6.9% in the period from October to December 2002, from 7.1% in the period from September to November 2002. The continued strong monetary growth reflects a pronounced preference for liquidity in an environment of high financial, economic and geopolitical uncertainty. However, it also mirrors the low level of short-term and longterm interest rates in the euro area.

Although liquidity remains ample, it is unlikely at this stage that it will give rise to inflationary pressures, given the current economic environment and the expectation that some of the portfolio shifts will be reversed once the financial market uncertainty diminishes. This assessment is also supported by the continuing moderate growth of loans to the private sector.

As regards the information under the second pillar, economic activity in the euro area remained subdued around the turn of the year, as suggested by recently published data and survey information. This is broadly in line with previous expectations. At present, the most likely scenario is that of a gradual increase, starting in the second half of the year, in real GDP growth rates to levels close to potential. Whereas the appreciation of the exchange rate of the euro over recent months may contribute to dampening export growth to some extent, the price competitiveness of euro area companies remains favourable in a medium-term perspective and export growth should benefit from the expected recovery of the world economy.

At the same time, several factors contributing to the general climate of uncertainty are still in place. In particular, investors remain risk averse against the background of ongoing geopolitical tension. Further turbulence in the oil markets could have a negative impact on economic activity throughout the world and, thereby, also on euro area employment. These concerns are also weighing on consumer confidence. Finally, accumulated macroeconomic imbalances in other major economies give rise to uncertainty about the strength of the global recovery. Taken together, there remain downside risks to the outlook for euro area economic activity.

Considering price developments, according to Eurostat's flash estimate, annual HICP inflation decreased to 2.1% in January 2003, from 2.3% in the previous month. As usual, these estimates are subject to uncertainty and there is no detailed breakdown available as yet. It appears that compensating factors played a role in January: on the one hand, there was upward pressure from oil prices and from various increases in indirect taxes and administered prices; on the other hand, the strengthening of the euro and base effects were contributing to limiting year-on-year consumer price increases. These two latter factors should also help to further reduce annual rates of HICP inflation over the next few months. However, given the high volatility in oil markets, short-term forecasts for HICP inflation are currently subject to a particularly high degree of uncertainty.

Beyond the immediate future, given the outlook for moderate economic growth, the gradual pass-through of the appreciation of the euro should contribute to dampening inflationary pressures. The most likely outcome remains that inflation will fall and eventually stabilise at a level below 2% in the course of 2003.

A major condition for price stability to prevail in the medium term will be moderate wage developments. Wage moderation would also help improve the prospects for economic growth and further employment creation. It is therefore of particular importance that the upward trend in wage growth finally comes to a halt. However, the indications for this are still mixed, despite weak economic activity throughout last year.

As for fiscal policy, the framework laid down in the Treaty and the Stability and Growth Pact limits the risk of fiscal imbalances therefore contributes occurring, and significantly to favourable financing conditions for the private sector. At the same time, it allows an appropriate medium-term orientation of fiscal policy which fosters confidence and thereby economic growth. In order to fully reap the benefits of this framework, it is important that countries respect its objectives and implement appropriate consolidation plans where needed. Hence, the commitments made in the stability programmes and the requests to further improve fiscal positions, as subsequently agreed in the ECOFIN Council, must be met in full. In order to maximise the benefits of fiscal consolidation, it is important that the underlying policy measures are part of a comprehensive reform strategy to support economic growth.

It is, in fact, the implementation of structural reforms at the micro level that ultimately raises the production potential, improves flexibility in the economy and makes the euro area more resilient to external shocks. The lack of progress in structural reform is one of the key factors currently hampering a recovery in confidence. Therefore, the Governing Council welcomes a recent Communication by the Commission on the implementation of the Broad Economic Policy Guidelines. It emphasises the need to step up the pace of labour market reform to achieve the Lisbon objectives, to fully implement the Internal Market and to enhance competition in product markets as well as to foster capital market integration, entrepreneurship, a knowledge-based economy, and research and development. The Governing Council fully shares the Commission's assessment that policy inertia and backtracking are widespread. Against background, this renewed momentum in the process of structural reform will be crucial to foster confidence among consumers and investors.

This issue of the Monthly Bulletin contains two articles. The first addresses the interactions between the single monetary policy and fiscal policies in the euro area. The second considers issues relating to the choice of exchange rate regimes for emerging market economies.

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 6 February 2003, the Governing Council of the ECB decided to leave the minimum bid rate in the main refinancing operations, conducted as variable rate tenders, unchanged at 2.75%. The interest rates on both the marginal lending facility and the deposit facility were also kept unchanged, at 3.75% and 1.75% respectively (see Chart I).

M3 growth declined slightly in December

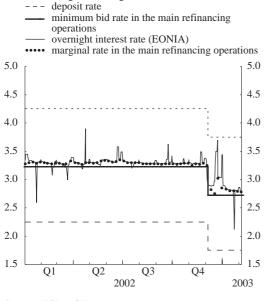
The annual growth rate of the broad monetary aggregate M3 declined to 6.8% in December 2002, from 7.1% in the previous month (see Chart 2). The three-month average of the annual growth rate of M3 went down slightly, to 6.9% in the period from October to December, from 7.1% in the period from September to November 2002. In addition, the annualised six-month rate of

Chart I

ECB interest rates and money market rates

(percentages per annum; daily data)

----- marginal lending rate

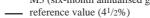


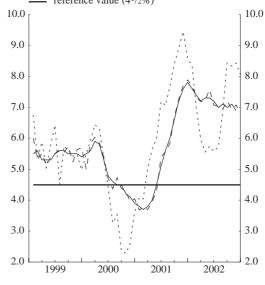
Sources: ECB and Reuters.

Chart 2

M3 growth and the reference value (adjusted for seasonal and calendar effects)

- - M3 (annual growth rate)
- M3 (three-month centred moving average of the annual growth rate)
- ---- M3 (six-month annualised growth rate)





Source: ECB.

growth of M3 decreased to 8.1% in December, from 8.4% in November. However, the growth pattern of M3 over the past two months has been somewhat affected by a special factor, namely the postponement of tax payments in Italy from November to December. This factor had an upward influence on monthly changes in M3 in November and a downward influence in December 2002.

The continued strong M3 growth seems to be largely the result of the marked preference among investors for safe and liquid assets included in this broad monetary aggregate, in the current context of high financial market, economic and geopolitical uncertainty. The buoyant expansion of M3 over recent months was also driven by the low level of opportunity cost of holding liquid assets. As a consequence of the extended period of high M3 growth, substantial excess liquidity has been accumulated in the euro area. While such high liquidity levels – if not corrected – would be a matter of concern with regard to price stability in the medium term, it is unlikely at the current juncture that they will translate into inflationary pressures, given the slow pace of economic growth. Moreover, owing to the significant impact of portfolio shifts on monetary developments, part of this excess liquidity may be temporary.

Turning to the main components of M3, the annual growth rate of the narrow monetary aggregate MI increased to 9.8% in December, from 9.2% in November (see Table I). This increase was driven by the significant rebound in currency in circulation, which continued to recover strongly, with a seasonally adjusted monthly increase of \in I4 billion. The upward trend in euro currency in circulation, which started in early 2002, reflects the gradual rebuilding of currency holdings by both euro area and non-euro area residents after the strong decline in the run-up to the euro cash changeover. Over 2002 as a whole, currency in circulation increased by more than 40% (an average of $\in 8$ billion per month), bringing the stock to levels slightly below those recorded in December 2000.

Part of the increase in currency in December was probably related to substitution with overnight deposits, whose annual growth rate declined significantly to 5.8%, from 8.3% in November. Taking currency and overnight deposits together, the continuing strong demand for these most liquid assets included in M3 over recent months can be explained both by portfolio shifts as a reaction to high financial market uncertainty and by the low opportunity costs of holding these instruments.

The annual rate of growth of short-term deposits other than overnight deposits declined to 3.6% in December 2002, from 4.9% in the previous month. At the same time, the annual rate of growth of marketable instruments rose to 8.6% in December, from 8.2% in November. In particular, money market fund shares/units continued to expand at a strong pace. This development confirms a preference of non-MFIs for liquid and secure assets.

As regards counterparts of M3 in the MFI balance sheet, the annual rate of growth of MFIs' longer-term financial liabilities

Table I

Summary table of monetary variables in the euro area

(annual percentage changes; quarterly averages)

	2002	2002	2002	2002	2002	2002	2002
	Q2	Q3	Q4	Sep.	Oct.	Nov.	Dec.
Adjusted for seasonal and calendar effects							
M1	6.6	7.6	8.8	8.2	8.3	9.2	9.8
of which: currency in circulation	-19.9	-7.7	12.9	-0.5	6.2	14.8	42.7
of which: overnight deposits	11.7	10.3	8.2	9.6	8.6	8.3	5.8
M2 - M1 (= other short-term deposits)	6.4	5.5	4.9	5.2	5.5	4.9	3.6
M2	6.5	6.5	6.7	6.6	6.8	6.9	6.5
M3 - M2 (= marketable instruments)	12.5	10.4	8.5	10.9	7.8	8.2	8.6
M3	7.3	7.0	7.0	7.2	6.9	7.1	6.8
Not adjusted for seasonal and calendar effects							
Longer-term financial liabilities (excluding capital							
and reserves)	4.0	5.0	5.0	5.1	5.0	5.1	4.6
Credit to euro area residents	4.5	4.2	4.1	4.3	4.3	3.9	4.0
Credit to general government	1.8	1.1	1.9	1.7	2.2	1.7	1.6
of which: loans to general government	-0.9	-0.9	-1.2	-1.1	-0.9	-1.7	-1.2
Credit to other euro area residents	5.2	5.0	4.8	5.0	4.9	4.6	4.7
of which: loans to the private sector	5.6	5.3	4.8	5.1	5.0	4.5	4.6

Source: ECB.

(excluding capital and reserves) declined to 4.6%, from 5.1% in November. This development may be related to both the low level of long-term interest rates and, possibly, the relatively high volatility in bond markets.

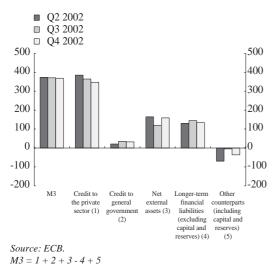
Growth of loans to the private sector remained stable

Turning to the asset side of the MFI balance sheet, the annual rate of growth of credit to euro area residents stood at 4.0% in December, almost unchanged from the previous month (3.9%). This reflects broadly stable annual growth rates of credit to general government (1.6% in December compared with 1.7% in November) and credit to the private sector (4.7%, as against 4.6% in the previous month). As regards the latter, the annual growth rate of loans to the private sector increased slightly in December, to 4.6%, from 4.5% in November. The shortterm dynamics in loans remained weak in a context of subdued economic growth and weak confidence. As far as the other credit components are concerned, the growth of MFI holdings of securities other than shares increased to 9.3%, from 6.7% in November.

Chart 3

Movements in M3 and its counterparts

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



Finally, the annual growth rate of MFI holdings of shares and other equities decreased to 2.6%, from 4.4% in the previous month. However, this decrease is mainly attributable to base effects, since the short-term dynamics of holdings of shares and other equities have been relatively strong in recent months, partly reflecting the reluctance of non-MFIs to invest in equity.

In December 2002 the net external asset position of the euro area MFI sector increased by \in 18 billion in absolute and nonseasonally adjusted terms. It rose by \in 159 billion over the 12 months to December, compared with an increase of \in 133 billion over the 12 months to November (see Chart 3).

Stable growth in debt securities issuance in November

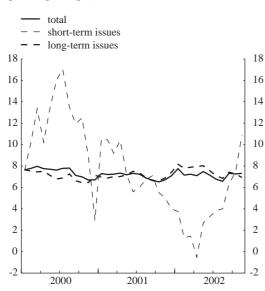
The annual rate of growth of the amount outstanding of debt securities issued by euro area residents was 7.3% in November 2002, unchanged from the previous month (see Chart 4). Underlying this was an increase of 3.5 percentage points in the annual rate of growth of the amount outstanding of short-term debt securities, to 10.9% in November. Conversely, the annual growth rate of the amount outstanding of long-term debt securities decreased by 0.4 percentage point, to 6.9%. At the sectoral level, there were increases in the annual growth rates of the amount outstanding of debt securities issued by the MFI sector and, to a lesser extent, by the central government sector, which were offset by a decline in those of non-MFI corporations.

The currency breakdown shows that the annual growth of the amount outstanding of euro-denominated debt securities issued by euro area residents increased from 6.5% in October to 6.9% in November. At the same time, the annual growth rate of non-euro-denominated debt securities issued by euro area residents declined from 15.2% in October to 11.7% in November.

Chart 4

Annual growth of debt securities issued by euro area residents

(percentage changes)



Source: ECB.

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

Turning to the sectoral breakdown of eurodenominated debt securities issuance, the annual growth of the amount outstanding of debt securities issued by MFIs, which accounts for the largest part of outstanding nongovernment issues, increased from 4.4% in October to 5.6% in November. In the non-MFI corporate sector, which includes both non-monetary financial and non-financial corporations, the annual rate of growth of the amount outstanding of debt securities declined from 16.5% in October to 14.9% in November. Within this sector, the annual growth rate of the amount outstanding of debt securities issued by non-financial corporations declined from 5.9% in October to 3.2% in November. This decline seems to have been largely due to lower financing needs of corporations against the background of weakened economic activity.

As for the non-monetary financial corporation sector, the annual growth in the amount outstanding of debt securities remained high and broadly unchanged from the previous month at 30.3% in November. It cannot be excluded that this strong issuance activity may have reflected in part a switch by corporations from direct bond issuance in the market to indirect issuance (e.g. via "Special-Purpose Vehicles" (SPVs)). In particular there was strong issuance during November by companies in the consumer cyclical and automobile sectors via their financial subsidiaries, classified within the non-monetary financial sector.

Turning to the government sector, the annual growth of the amount outstanding of debt securities issued by the general government sector continued to increase, from 5.9% in October to 6.1% in November. The overall growth of outstanding debt securities issued by the central government increased by 0.3 percentage point to 5.3% in November. At the same time, the annual growth rate in the amount outstanding of debt securities issued by the other general government subsectors, albeit slightly declining, continued to be very high at 27.8% in November. These developments reflected the deterioration in the fiscal position of governments.

Retail bank interest rates declined in December

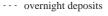
Following the reduction in key ECB interest rates in early December and associated falls in money market interest rates, short-term retail bank interest rates also declined in December. The declines in deposit rates were larger than those in lending rates. The rate on one-year deposits dropped by 20 basis points, while the lending rate to enterprises for up to one year fell by about 10 basis points in that month. These developments were broadly consistent with past observations whereby only part of the changes in ECB and money market interest rates are typically passed through to short-term bank interest rates within the first month. All in all, the recent declines brought short-term bank interest rates back to levels last seen in early 2000 and around 30 basis points lower than in December 2001 (see Chart 5).

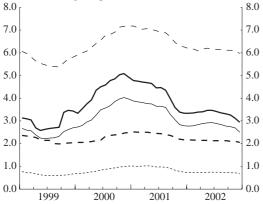
Chart 5

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

(percentages per annum; monthly averages)

- ----- three-month money market rate
- loans to enterprises with a maturity of up to one year
- deposits with an agreed maturity of up to one year
 deposits redeemable at notice of up
- to three months





Sources: ECB aggregation of individual country data and Reuters.

Note: From January 2001, data include Greece.

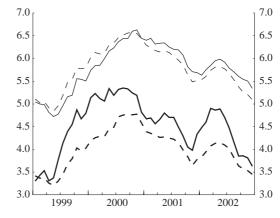
In an environment of continuing declines in long-term government bond yields, long-term retail bank interest rates also fell in December (see Chart 6). While interest rates on deposits with maturities of over two years and the lending rate to households for house purchase fell by about 10 basis points, the lending rate to enterprises for loans over one year declined by 16 basis points in December. A less than one-for-one passthrough of market interest rate changes to long-term retail bank interest rates has been observed since June, when long-term government bond yields started to decline. This was particularly evident for bank lending rates. However, similar developments were recorded in the first half of 2002, when a rise in long-term government bond yields was also only partly passed-through to long-term retail bank interest rates. Fluctuations in bond yields together with lags in the pass-through process may have played some role in accounting for the less amplified pattern in retail bank interest rates than in market rates over the year. In addition, market concerns about credit risk - which led to a temporary

Chart 6

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

(percentages per annum; monthly averages)

- ---- five-year government bond yields
- loans to households for house purchase
- deposits with an agreed maturity of over two years
- loans to enterprises with a maturity of over one year



Sources: ECB aggregation of individual country data and Reuters.

Note: From January 2001, data include Greece.

surge in the spreads of BBB-rated long-term corporate bonds – may have also dampened the extent of the pass-through in the second half of last year.

Money market interest rates decreased somewhat in January

Money market interest rates decreased somewhat in January 2003, continuing the trend that had started in 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, was slightly more negative on 5 February 2003 than at the end of December 2002. In the same period, interest rates implied in EURIBOR futures prices on contracts with delivery dates in the second half of 2003 decreased somewhat.

Between the end of December 2002 and 5 February 2003, the overnight interest rate, as measured by the EONIA, fluctuated between 2.79% and 2.90%, with a few short-

Box I

Monetary policy operations and liquidity conditions in the reserve maintenance period ending on 23 January 2003

During the reserve maintenance period under review, the Eurosystem settled five main refinancing operations (MROs).

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	24/12/2002	07/01/2003	146.2	88.0	1.66	350	2.75	3.02	3.08
MRO	31/12/2002	14/01/2003	117.4	92.0	1.28	217	2.75	2.85	2.95
MRO	07/01/2003	22/01/2003	133.8	82.0	1.63	302	2.75	2.83	2.84
MRO	15/01/2003	29/01/2003	120.4	79.0	1.52	270	2.75	2.80	2.81
MRO	22/01/2003	05/02/2003	123.7	91.0	1.36	313	2.75	2.80	2.81

Source: ECB.

In the first two MROs of the maintenance period, which both covered the turn of the year, the marginal and weighted average rates emerged at relatively high levels compared with the minimum bid rate. In the subsequent operations, tender rates declined to more normal levels.

The EONIA started the maintenance period at levels slightly above 3%, partly anticipating the rather strong increase on 31 December 2002, the last trading day of the year. On that day it reached 3.44%, mainly reflecting the usual high liquidity demand resulting from balance sheet considerations of financial institutions at year-end. This spread to the minimum bid rate of 69 basis points is comparable with that observed at the end of 2001 (66 bps). Subsequently, the EONIA declined gradually from 2.90% on 2 January to 2.81% on 17 January 2003. After the allotment of the last MRO of the reserve maintenance period on 21 January, the EONIA decreased further, to 2.57% and 2.12% on the penultimate and last day of the reserve maintenance period respectively, as market participants perceived the liquidity conditions to be ample.

Contributions to the banking system's liquidity

(EUR billions)

Daily average during the reserve maintenance period from 24 December 2002 to 23 January 2003

	Liquidity providing	Liquidity absorbing	Net contribution
(a) Monetary policy operations of the Eurosystem	221.8	0.3	+ 221.5
Main refinancing operations	176.3	-	+ 176.3
Longer-term refinancing operations	45.0	-	+45.0
Standing facilities	0.5	0.3	0.2
Other operations	0.0	-	0.0
(b) Other factors affecting the banking system's liquid	lity 360.9	450.9	- 90.0
Banknotes in circulation	-	353.9	- 353.9
Government deposits with the Eurosystem	-	43.7	- 43.7
Net foreign assets (including gold)	360.9	-	+ 360.9
Other factors (net)	-	53.3	- 53.3
(c) Credit institutions' holdings on current accounts			
with the Eurosystem (a) + (b)			131.6
(d) Required reserves			130.8
Source: ECB.			
Note: Totals may not add up due to rounding.			

Indeed the maintenance period ended with a net recourse to the deposit facility of \in 5.6 billion. The average difference between current account holdings of credit institutions with the Eurosystem and minimum reserve requirements was \in 0.70 billion.

The net liquidity-absorbing impact of the autonomous factors, i.e. factors not related to monetary policy operations (item (b) of the table above) was, on average, \in 90.0 billion. The published estimates of the average liquidity needs stemming from autonomous factors ranged between \in 78.5 billion and \in 94.0 billion. The largest deviation between the estimate, published together with an MRO announcement, and the actual figure amounted to \in 4.0 billion and occurred for the period from 27 December to 7 January. However, the ECB published a revised estimate on 30 December, when the corresponding MRO was allotted.

lived exceptions at the end of 2002 and at the end of the maintenance period on 22 and 23 January 2003. Overall, following relatively high values at the start of January 2003, the EONIA gradually declined over the course of this month to a level close to the minimum bid rate in the Eurosystem's main refinancing operations of 2.75%. Between the end of 2002 and 5 February 2003, the twoweek EONIA swap rate remained close to the minimum bid rate and stood at 2.78% on the latter date. In the same period, the marginal and average rates of allotment in the Eurosystem's main refinancing operations were, on average, 6 and 9 basis points respectively above the minimum bid rate (see Box I).

Between the end of December 2002 and 5 February 2003, the one-month and threemonth EURIBOR decreased by 8 and 7 basis points respectively, to stand at 2.82% and 2.80% on the latter date (see Chart 7). The marginal and average interest rates in the Eurosystem's longer-term refinancing operation settled on 30 January were 3 and I basis point respectively lower than the then prevailing three-month EURIBOR, at 2.78% and 2.80% respectively. Both rates were I5 basis points lower than the corresponding rates in the longer-term refinancing operation settled on 23 December 2002.

The six-month and twelve-month EURIBOR decreased by 10 and 14 basis points respectively between the end of December 2002 and 5 February 2003, to stand at 2.70% and 2.61% on the latter date. The slope of the money market yield curve, as measured

by the difference between the twelve-month and the one-month EURIBOR, was -21 basis points on 5 February, slightly steeper than at end-December 2002.

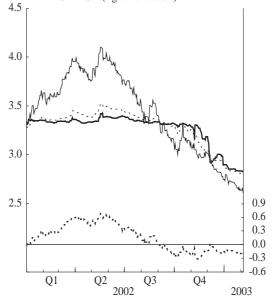
The expected path of the three-month EURIBOR, as implied in futures prices on contracts with delivery dates in mid-2003 and beyond, has moved slightly downwards since the end of December 2002. While the rate

Chart 7

Short-term interest rates in the euro area and the slope of the money market yield curve

(percentages per annum; percentage points; daily data)

- one-month EURIBOR (left-hand scale)
- ---- three-month EURIBOR (left-hand scale)
- ••••• spread between twelve-month and one-month EURIBOR (right-hand scale)



Source: Reuters.

implied in prices on contracts with delivery date in March 2003 increased by 4 basis points, to 2.68% on 5 February, similar rates for June, September and December 2003 decreased by 3, 9 and 16 basis points respectively, to stand at 2.47%, 2.43% and 2.49% on 5 February.

Long-term government bond yields declined in the euro area in January

Ten-year government bond yields in the euro area and the United States moved in opposite directions during most of January (see Chart 8). Between end-December and 5 February, ten-year bond yields declined by 10 basis points in the euro area whereas they rose by around 20 basis points in the United States, bringing yields to 4.1% and 4.0% respectively on 5 February. The rise in US bond yields seemed to have been due in part to a fiscal package proposed by the US administration at the beginning of January 2003. At the same time, it cannot be excluded that the depreciation of the US dollar may have played some role in driving bond yields in the United States and the euro area closer together by altering market expectations of relative inflation prospects in the two economic regions. As a consequence, the negative differential between ten-year government bond yields in the United States and the euro area narrowed significantly in January and stood at a level of -10 basis points on 5 February.

In the United States the proposal by the US administration of a tax stimulus package impacted on bond markets through two main channels. First, market participants seemed to seek higher yields as a result of expectations that issuance of Treasury bonds would increase significantly in the course of 2003. Second, the proposal to eliminate the tax on dividends may have also prompted some portfolio reallocation from the bond to the stock market. A further factor driving up long-term bond yields in January seemed to have been the weakening of the US dollar which, together with the high level of oil

Chart 8

Long-term government bond yields in the euro area and the United States (percentages per annum; daily data)



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

prices prevailing and the aforementioned fiscal package, appeared to give rise to market perceptions of upside risks to inflation. The US ten-year break-even inflation rate, calculated as the difference between ten-year nominal bond yields and ten-year index-linked bond yields, increased by 35 basis points between end-December and 5 February.

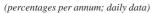
Meanwhile, less optimistic market views about economic growth prospects were apparent in a fall of 15 basis points in US ten-year real index-linked government bond yields over the same period, leaving this real rate at 2%, the lowest level recorded since the US Treasury began issuing these bonds in 1997. This may indicate that market participants have placed greater emphasis on some negative economic data released in January and on the adverse economic effects of a possible war in Iraq than on possible effects of the fiscal package and the depreciation of the US dollar. Uncertainty prevailing in the US bond market, as measured by the ten-day moving average of implied volatility extracted from the prices of bond options contracts, declined by 0.7 percentage point between end-December and 5 February, to stand at 7.4% on the latter date, which was slightly lower than its average over the past two years.

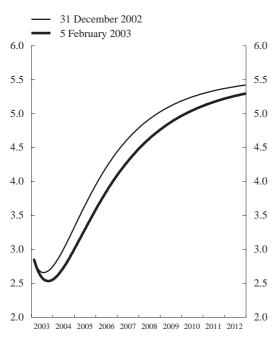
In Japan, ten-year government bond yields declined by some 5 basis points between end-December and 5 February, standing at a level of around 0.9% on the latter date. This drop in long-term Japanese bond yields may have been linked to the strength of the Japanese yen vis-à-vis the US dollar, which may have raised market concerns about further declines in consumer prices. In the course of January, yields on Japanese government bonds reached historical lows.

In the euro area, bond yields across all maturities remained in January 2003 on the downward path observed since late October 2002. Among the factors contributing to

Chart 9 Implied forward euro area overnight

interest rates





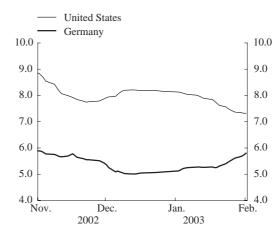
Source: ECB estimate.

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 IO

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 in 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.

these developments were portfolio shifts partly associated with market participants' perceptions of an increasing likelihood of a war in Iraq. Underlying the drop in ten-year nominal yields was a decline in ten-year real bond yields in the euro area (indexed on the euro area HICP excluding tobacco) of around 30 basis points between end-December and 5 February, indicating more pessimistic market views about economic growth prospects. These market views were also reflected in a downward shift in the implied forward overnight interest-rate curve for the euro area for medium to long maturities between the end of December and 5 February (see Chart 9).

The ten-year break-even inflation rate in the euro area – as measured by the difference between ten-year nominal bond yields and ten-year index-linked bond yields (issued by the French Government and linked to the euro area HICP excluding tobacco) – increased by 10 basis points between end-December and 5 February. Having remained broadly stable over the first three weeks of January, bond market uncertainty, as measured by the ten-day moving average in implied volatility extracted from the prices of bond options contracts, increased towards the end of the month. Overall, implied volatility increased by 0.7 percentage point between end-December and 5 February, to stand at 5.8% on the latter date (see Chart 10), which was significantly higher than its average over the past two years.

Stock prices continued to decline in January

Stock prices declined globally in January in an environment of increasing nervousness among market participants about the possibility of a war in Iraq. Mixed economic data releases as well as heightening uncertainty about the corporate earnings outlook added to the downward pressure. Stock prices in the euro area, as measured by the broad Dow Jones EURO STOXX index, declined by 6% between the end of December 2002 and 5 February 2003 (see Chart II). In the United States, stock prices, as measured by the Standard & Poor's 500 index, declined by around 4%, while in Japan the Nikkei 225 index fell by 1% over the same period.

In the United States, the decline in stock prices was broad-based and, to a large extent, driven by macroeconomic data releases which appeared to be somewhat weaker than market participants had expected. At the same time, signals concerning future corporate profitability were mixed, with several corporations revising their earnings outlook for 2003 downward. In addition, perceptions among market participants of an increasing likelihood of a war in Iraq heightened market uncertainties about shortterm prospects for economic growth and corporate profitability. Reflecting this, uncertainty, as measured by the ten-day moving average of the implied volatility derived from options on the Standard & Poor's 500, increased by 4 percentage points between end-December and 5 February 2003, to stand at a level around 6 percentage points

Chart I I

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

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



Source: Reuters.

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

higher than its average for the past two years (see Chart 12).

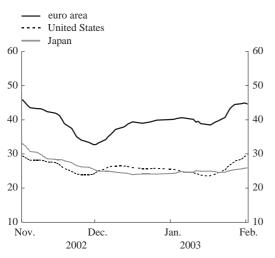
In Japan, the decline in stock prices seemed to reflect ongoing market concerns about short-term prospects for the Japanese economy. The strength of the Japanese yen vis-à-vis the US dollar together with rising global uncertainty, had an adverse effect on the stock prices of export-oriented corporations. In line with developments in global stock markets, uncertainty in the Japanese stock market, as measured by the ten-day moving average of the implied volatility extracted from options on the Nikkei 225 index, increased by around 2 percentage points between end-December and 5 February but, on the latter date, was still at a level of some 3 percentage points lower than the average of the past two years.

In the euro area, following a temporary halt in the fall in stock prices in the first two weeks of January 2003, the decline resumed thereafter, leaving stock prices significantly

Chart I 2

Implied stock market volatility in the euro area, the 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.

lower by the beginning of February when compared with end-December. The tensions in the Middle East as well as macroeconomic indicators and data on corporate profitability released during January seemed to heighten market uncertainty about the timing and strength of the economic recovery and, thus, the corporate profit outlook. The decline in euro area stock prices was broadly based, with the basic materials, consumer and financial sectors enduring the most significant drops. Underlying the stock price declines in the two former sectors were market expectations of weak consumer demand in the euro area. In the financial sector, the decline partly reflected concerns about the profitability of insurance companies. By contrast, stock prices in the telecommunications sector increased by around 3% between end-December and 5 February, in an environment in which market participants' confidence in the financial soundness of telecommunication corporations improved somewhat. Investor uncertainty in the euro area, as measured by the ten-day moving average of the implied volatility extracted from options on the EURO STOXX index, increased significantly, by 4 percentage points between end-December and 5 February, to reach a level of some 13 percentage points higher than its two-year average on the latter date.

2 **Price developments**

First estimate for HICP inflation points to a decline in January 2003

According to Eurostat's flash estimate, annual euro area HICP inflation declined by 0.2 percentage point to 2.1% between December 2002 and January 2003 (see Table 2). Although no detailed information is available as yet, the main factors behind this development are likely to have been benign base effects related mainly to past increases in unprocessed food and services prices as well as the strengthening of the euro, which seem to have more than compensated for upward pressure from oil prices and various increases in indirect taxes and administered prices which became effective at the beginning of 2003. However, it should be borne in mind that these flash estimates are surrounded by a high degree of uncertainty.

In December 2002, the most recent month for which a detailed breakdown is available, inflation increased by 0.1 percentage point to 2.3%. This increase can largely be explained by developments in the energy component of the HICP.

Taking 2002 as a whole, overall HICP inflation was on average 2.2%, down from 2.5% in 2001. The HICP excluding unprocessed food and energy was 2.5%, up from 2.0% in 2001.

Table 2

Price and cost developments in the euro area

(annual percentage changes, unless otherwise indicated)

	2000	2001	2002	2002	2002	2002	2002	2002	2002	2002	2002	2002	2003
				Q1	Q2	Q3	Q4	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.
Harmonised Index of Consumer Prices (HICP) and its components													
Overall index 1)	2.3	2.5	2.2	2.6	2.1	2.0	2.3	2.1	2.1	2.3	2.2	2.3	2.1
of which:													
Goods	2.7	2.5	1.7	2.2	1.4	1.3	1.8	1.4	1.4	1.7	1.8	1.9	
Food	1.4	4.5	3.0	4.9	2.8	2.2	2.2	2.3	2.3	2.2	2.3	2.1	
Processed food	1.1	2.8	3.0	3.5	3.1	2.9	2.6	2.9	2.8	2.6	2.5	2.6	
Unprocessed food	1.7	7.0	3.0	7.0	2.4	1.3	1.6	1.3	1.7	1.6	1.8	1.3	
Industrial goods	3.4	1.5	1.0	0.9	0.7	0.9	1.6	0.9	1.0	1.5	1.5	1.8	
Non-energy industrial goods	0.7	1.1	1.5	1.8	1.7	1.4	1.3	1.4	1.4	1.3	1.3	1.3	
Energy	13.3	2.7	-0.7	-2.1	-2.4	-0.9	2.7	-0.5	-0.4	2.3	2.1	3.6	
Services	1.7	2.5	3.2	3.1	3.2	3.3	3.1	3.3	3.3	3.2	3.1	3.1	
Other price and cost indicators													
Industrial producer prices ²⁾	5.5	2.2	-0.1	-0.8	-0.8	-0.1	1.2	-0.1	0.1	0.9	1.1	1.5	
Unit labour costs 3)	1.2	2.6		3.1	2.4	2.3		-	-	-	-	-	-
Labour productivity 3)	1.4	0.1		-0.4	0.1	0.6		-	-	-	-	-	-
Compensation per employee ³⁾	2.6	2.7		2.7	2.5	2.8		-	-	-	-	-	-
Total hourly labour costs ⁴⁾	3.3	3.4		4.0	3.6	3.7		-	-	-	-	-	-
Oil prices (EUR per barrel) ⁵⁾	31.0	27.8	26.5	24.6	27.8	27.2	26.5	27.0	28.9	27.9	24.2	27.1	28.3
Commodity prices 6)	16.7	-7.6	-1.7	-3.6	-5.5	-1.6	4.4	-1.3	4.7	7.8	3.4	2.1	-2.3

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 January 2003 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. Weighted according to extra-euro area commodity imports.

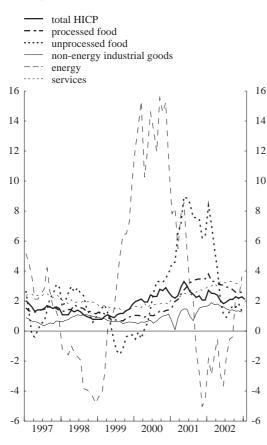
Hence, the lower average rate of overall HICP inflation in 2002 is mainly attributable to lower annual increases in its more volatile components, unprocessed food and energy.

The increase in the year-on-year rate of change in energy prices from 2.1% to 3.6% between November and December 2002 was, to some extent, counterbalanced by developments in unprocessed food prices, for which the year-on-year rate of change declined from 1.8% to 1.3% (see Chart 13). Base effects were the main contributor to these developments. Furthermore, the energy component was also affected by an oil price increase of 11.8% (calculated in euro) between November and December 2002.

Chart I3

Breakdown of HICP inflation in the euro area by component

(annual percentage changes; monthly data)



Source: Eurostat

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

The year-on-year rate of increase in the HICP excluding unprocessed food and energy declined to 2.3% in December 2002 from 2.4% in November, while the November figure was revised upwards by 0.1 percentage point. As regards the less volatile components of the HICP, the year-on-year rates of change in the prices of non-energy industrial goods and services was unchanged at 1.3% and 3.1% respectively. The gradual decline in the annual rate of increase in non-energy industrial goods prices over most of 2002 was largely attributable to the unwinding of past price shocks related to the euro exchange rate and oil prices, while the relative inertia of services prices reflected developments in wages and other factors such as euro cash changeover effects. The year-on-year rate of change of processed food prices increased by 0.1 percentage point to 2.6% between November and December 2002, reflecting higher tobacco prices in some countries, in part triggered by tax hikes.

Annual rate of increase in producer prices rose further in December 2002

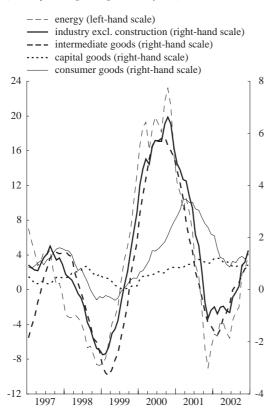
The annual rate of increase in euro area industrial producer prices was 1.5% in December 2002, up from 1.1% in November (see Chart 14). This development was mainly attributable to the energy component, which in turn had primarily been affected by the oil price increase in December 2002. The yearon-year rate of change in energy prices increased to 4.0% in December 2002, up from 2.2% in November 2002. The year-on-year rate of change in consumer goods prices rose by 0.2 percentage point to 1.4% in December 2002 owing to an increase in non-durable consumer goods prices, while that in intermediate goods prices and capital goods prices remained broadly unchanged.

The Eurozone Price Index (EPI) from the Purchasing Managers' Survey increased to 55.2 in January 2003 from 51.2 in December 2002, indicating that some further upward pressure on euro area producer prices is expected in January 2003 due to recent increases in oil

Chart I4

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).

prices. After January 2003, base effects stemming largely from energy prices will have a downward impact on the annual rate of change in producer prices.

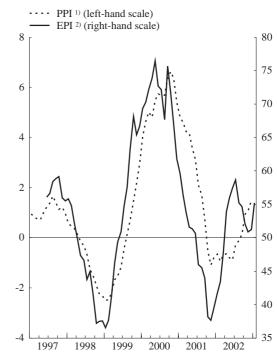
Higher compensation per employee annual growth in the third quarter of 2002

The annual growth rates of compensation per employee and total hourly labour costs (in the non-agricultural business sector) in the euro area are both estimated to have increased between the second and third quarters of 2002, to 2.8% and 3.7% respectively (see Chart 16). By contrast, the annual growth rate of gross monthly earnings

Chart I 5

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).

- 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.

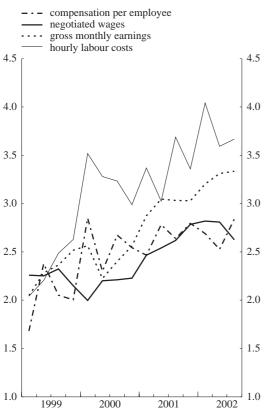
remained unchanged at 3.3% over the same period, while that of negotiated wages, which stood at 2.6% in the third quarter of 2002, appears to have declined by 0.2 percentage point compared with the previous quarter. Available country data suggest that this decline in negotiated wage growth may have continued in the fourth quarter.

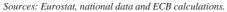
The cyclical recovery of annual labour productivity growth which began in the second quarter of 2002 continued in the third quarter at a rate which more than compensated for the rise in compensation per employee growth. Consequently, the year-on-year rate of change in unit labour costs declined further for the whole economy, albeit slightly.

Chart 16

Selected labour cost indicators for the euro area

(annual percentage changes)





HICP inflation is likely to ease in the coming months

Recent developments support the expectation of a decline in annual inflation over the coming months. This is also suggested by the annualised three-month rates of change in both the HICP and the HICP excluding unprocessed food and energy which stood at 1.3% and 1.9% respectively in December 2002. Although the recent increase in oil prices - particularly if sustained - together with various increases in indirect taxes and administered prices should exert some upward pressure on annual HICP inflation in the months to come, the appreciation of the euro and subdued demand are expected to have a dampening effect. Base effects will also contribute to a decline in annual inflation as the price increases occurring in the first few months of 2002 fall out of the annual growth rates. Taking all these factors into account, annual HICP inflation is expected to ease in the coming months and stabilise below 2% over the course of this year. However, given the high volatility in oil markets, short-term forecasts for HICP inflation are currently subject to a particularly high degree of uncertainty. Moreover, price stability in the medium term will be largely dependent on moderate wage developments, but evidence of this has thus far been mixed, despite weak economic activity throughout last year.

Box 2

Private sector expectations for inflation and economic activity in the euro area: the results of the 2003 Q1 Survey of Professional Forecasters and other available indicators

This box presents the available indicators of private sector expectations for euro area inflation and economic activity. A summary of the results of the 2003 Q1 Survey of Professional Forecasters (SPF) conducted by the ECB in the second half of January is given below. The survey's name reflects the fact that all of the participants are experts affiliated with financial or non-financial institutions based within the European Union. It is also important to bear in mind that, since the participants are not given a common set of assumptions on which to base their forecasts, the SPF aggregate results most likely reflect a relatively heterogeneous set of subjective views and assumptions. Whenever possible, the data have been presented together with other sources of private sector expectations for the same horizons.¹

Inflation expectations for 2003 and 2004

SPF participants expect the annual inflation rate in the euro area to remain below 2% over the entire forecast horizon. Specifically, inflation is expected to be 1.8% both in 2003 and in 2004 (see table below). Inflation expectations for 2003 are therefore unchanged from the previous survey round, while there is a minor downward revision of 0.1 percentage point for 2004, which is in line with participants' comments that the inflation outlook has changed little from the last survey conducted in October 2002. Survey participants stress,

			Survey horizon		
HICP inflation	Dec. 2003	2003	Dec. 2004	2004	Longer term ²⁾
2003 Q1 SPF	1.8	1.8	1.8	1.8	1.9
Previous SPF (2002 Q4)	-	1.8	-	1.9	1.9
Consensus (Jan. 2003)	-	1.7	-	1.7	1.9
Real GDP growth	2003 Q3	2003	2004 Q3	2004	Longer term ²⁾
2003 Q1 SPF	1.5	1.4	2.4	2.3	2.4
Previous SPF (2002 Q4)	-	1.8	-	2.5	2.4
Consensus (Jan. 2003)	-	1.4	-	2.3	2.3
Unemployment rate 1)	Nov. 2003	2003	Nov. 2004	2004	Longer term ²⁾
2003 Q1 SPF	8.4	8.5	8.1	8.2	7.1
Previous SPF (2002 Q4)	-	8.4	-	8.0	7.2
Consensus (Jan. 2003)		8.6		8.4	

Results from the 2003 Q1 SPF, the 2002 Q4 SPF and Consensus Economics (January 2003)

(annual percentage changes, unless otherwise indicated)

1) As a percentage of the labour force.

2) For the SPF longer-term inflation expectations refer to 2007. The Consensus Economics figure refers to the period 2008-12 as reported in the October 2002 issue.

however, that the possibility of oil price hikes in the event of an escalation of tensions in the Middle East remains a serious risk over the short run. As shown in the table above, these results are close to the figures reported in the January 2003 issue of Consensus Economics for the same horizons (1.7% for both 2003 and 2004). The results from the January 2003 Euro Zone Barometer (1.8% and 1.7% for 2003 and 2004) also match those of the SPF.² In the SPF the inflation rate expected both in December 2003 and December 2004 is 1.8%.

¹ These horizons are the calendar years 2003, 2004 and 2007. In addition, the expectations for the two "rolling horizons" requested in the SPF are also reported. These rolling horizons are set one and two years ahead of the period for which the latest data for each particular variable are available at the time the survey is conducted. In the 2003 Q1 SPF, these rolling horizons were December 2003 and 2004 for the HICP inflation rate, the third quarter of 2003 and 2004 for the rate of growth in real GDP, and November 2003 and 2004 for the unemployment rate. These rolling horizons may be useful to identify dynamic patterns that are difficult to detect from averages over calendar years.

² Consensus Economics figures refer to an aggregation of the expected annual rates of growth of the national CPIs, while the SPF results and the Euro Zone Barometer refer to the HICP.

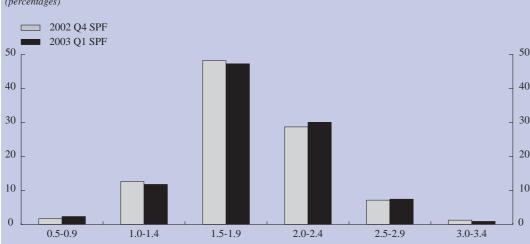


Chart A: Probability distribution for average inflation in 2003 in the last two SPF rounds *(percentages)*

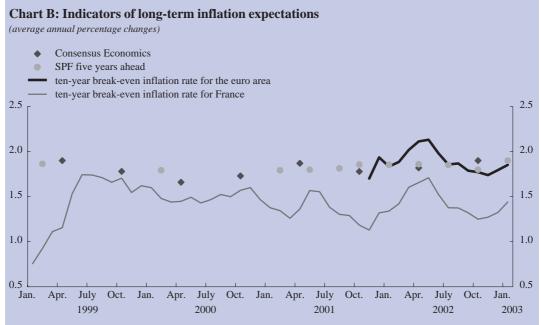
The SPF questionnaire also asks survey participants to assign some probability to actual outcomes falling within specific intervals. The probability distribution resulting from the aggregation of responses helps to assess how survey participants, on average, gauge the risk of the actual outcome being above or below the most likely range. Chart A shows the aggregate probability distributions for average HICP inflation in 2003 in the last two survey rounds. It confirms that there have been very marginal changes in the inflation outlook since the 2002 Q4 SPF. Both distributions are centred around the interval 1.5-1.9%, which accounts for around 47% of the probability mass in both cases. Regarding the assessment of risks to inflation in 2003, inflation outcomes above the central range received a probability of 39%, while outcomes below 1.5% received a probability of around 14%. This does not represent a substantial change compared with the previous assessment against the background of a further deterioration in growth prospects for 2003, higher oil prices and the stronger euro exchange rate incorporated in this survey round.

Indicators of longer-term inflation expectations

According to the 2003 Q1 SPF, average inflation in 2007 is expected to be 1.9%, unchanged from the previous round. This level of longer-term inflation expectations is consistent with other available measures of inflation expectations. The January 2003 Euro Zone Barometer indicates an expected average rate of inflation of 1.8% in 2007, and the results from Consensus Economics in October 2002 for five euro area countries suggest inflation expectations of 1.9% on average in the euro area as a whole for the period 2008-12.³ Indicators of long-term expected inflation extracted from financial market prices convey a similar message. In particular, Chart B shows that what are known as the ten-year "break-even" inflation rates extracted from French bonds linked to the French CPI and the euro area HICP (both excluding tobacco) have remained over recent months clearly below the levels reached earlier last year. However, when interpreting the levels of these measures it is important to bear in mind that break-even inflation rates are not a direct measure of market inflation expectations. This is because a variety of risk premia, including an inflation uncertainty premium and a liquidity premium, are included in the calculation.⁴

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

⁴ It should be noted that the break-even inflation rate reflects the average value of inflation expectations over the maturity of the index-linked bond under consideration and is not a point estimate for a precise year (as is the case for the survey indicators of long-term inflation expectations). For a thorough description of the conceptual nature of the break-even inflation rate, refer to the box entitled "Deriving long-term euro area inflation expectations from index-linked bonds issued by the French Treasury" on page 16 of the February 2002 issue of the ECB's Monthly Bulletin.



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

Expectations for euro area real GDP growth and unemployment

SPF participants revised downwards their expectations for the average annual growth rate of euro area real GDP in 2003 by 0.4 percentage point compared with the previous survey round, to 1.4% (see table above). This downward revision of growth prospects for 2003 seems to be the result of high uncertainty mainly associated with geopolitical tensions which are affecting the global economic and financial situation. For the third quarter of 2004, a growth rate of 2.4% is expected, which is slightly higher than the expected average for that year of 2.3%. According to the January 2003 Consensus Economics forecasts, euro area real GDP growth is expected to average 1.4% in 2003 and to increase to 2.3% in 2004, while the expectations reported in the January 2003 Euro Zone Barometer are 1.3% and 2.3% for these two years. Long-term growth prospects – at 2.4% for 2007 according to the SPF, 2.3% for 2007 according to the January 2003 Euro Zone Barometer and 2.3% on average for the period 2008-12 on the basis of the information published by Consensus Economics – remain in line with the range of estimates for trend potential growth in the euro area.

According to the latest SPF, the euro area unemployment rate is expected to rise to 8.5% on average in 2003, reflecting the further downward revision of growth prospects in the euro area in 2003 and the lagged effects of subdued economic activity in 2002. Thereafter it is expected to fall, however, averaging 8.2% in 2004 and 7.1% in 2007. These results are broadly in line with those from the January 2003 Euro Zone Barometer (8.6%, 8.3% and 7.5% in 2003, 2004 and 2007 respectively) and the January 2003 Consensus Economics (8.6% and 8.4% in 2003 and 2004 respectively).

3 Output, demand and labour market developments

Broadly unchanged GDP growth in the first three quarters of 2002

As reported in the January 2003 issue of the Monthly Bulletin, real GDP rose by 0.3% quarter on quarter in the third quarter of 2002 according to Eurostat's second estimate. The quarter-on-quarter rate of real GDP growth was therefore broadly unchanged over the first three quarters of 2002. However, the composition of GDP growth in the third quarter differed from what was observed earlier in the year. In particular, the contributions of consumption and investment to GDP growth increased, while the contribution of changes in inventories decreased (see Table 3). Both export and import growth rose significantly over the first three quarters of last year. As regards the

main sectors, quarter-on-quarter growth in value added in the services sector declined somewhat in the third quarter of 2002, but this was offset by higher growth in value added in industry.

Strong rise in industrial production in November 2002 partly due to calendar effects

Euro area industrial production (excluding construction) increased in November 2002, by 0.9% month on month, after 0.2% in October (see Table 4). It should be noted that this marked increase is likely to overstate the actual strength of industrial activity. Indeed, as was mentioned in the January 2003 issue of the Monthly Bulletin, industrial

Table 3

Composition of real GDP growth in the euro area

(percentage changes, unless otherwise indicated; seasonally adjusted)

				Ann	ual rate	s 1)				Qua	rterly r	ates 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 <i>of which:</i>	2.8	3.5	1.4	1.3	0.5	0.3	0.7	0.8	0.2	-0.2	0.4	0.3	0.3
Domestic demand	3.5	2.9	0.9	0.7	-0.2	-0.3	-0.2	0.2	-0.3	-0.3	0.1	0.3	0.1
Private consumption	3.5	2.5	1.8	1.8	1.7	0.6	0.4	0.7	0.1	0.1	-0.1	0.3	0.5
Government consumption	2.0	1.9	1.9	2.2	1.6	2.2	2.5	2.3	0.4	0.5	0.8	0.7	0.3
Gross fixed capital formation	6.0	4.8	-0.7	-1.6	-2.5	-3.1	-3.6	-2.9	-0.7	-0.8	-1.0	-1.2	0.1
Changes in inventories 3), 4)	-0.2	0.0	-0.4	-0.4	-0.8	-0.4	-0.1	-0.1	-0.3	-0.2	0.2	0.2	-0.2
Net exports 3)	-0.6	0.6	0.5	0.6	0.6	0.6	0.9	0.7	0.5	0.0	0.3	0.1	0.2
Exports 5)	5.3	12.6	2.7	1.4	-2.6	-2.5	0.5	2.8	-0.1	-1.1	0.0	1.7	2.2
of which: goods	5.0	12.5	2.6	1.3	-2.8	-1.8	0.8	3.6	-0.1	-1.3	0.7	1.5	2.8
Imports 5)	7.4	11.3	1.4	-0.3	-4.4	-4.2	-1.9	1.2	-1.3	-1.2	-0.9	1.6	1.7
of which: goods	7.1	11.3	0.6	-1.4	-5.6	-4.1	-2.2	1.8	-1.7	-1.1	-0.8	1.4	2.3
Real gross value added:													
Agriculture and fishing ⁶⁾	2.8	-0.8	-1.2	-1.1	-0.6	1.1	1.1	0.2	1.7	-0.4	-0.1	-0.1	0.8
Industry	1.3	3.7	0.7	0.5	-1.5	-1.8	-0.6	-0.2	0.0	-1.3	0.5	0.2	0.4
Services	3.3	3.9	2.3	2.2	1.7	1.4	1.5	1.3	0.4	0.2	0.4	0.5	0.2

Sources: Eurostat and ECB calculations.

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

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

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

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

4) Including acquisitions less disposals of valuables.

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

6) Also includes hunting and forestry.

Table 4

Industrial production in the euro area

(annual percentage changes, unless otherwise indicated)

	2000	2001	2002 Sep.	2002 Oct.	2002 Nov.	2002 Sep.	2002 Oct.	2002 Nov.	2002 June	2002 July	2002 Aug.	2002 Sep.	2002 Oct.
						mont	h-on-m	onth	three	e-month	movin	ıg avera	ıges
Total industry excluding construction by main industrial groupings:	5.5	0.4	-0.4	0.7	2.8	0.0	0.2	0.9	0.4	0.4	0.1	0.2	0.4
Total indus. excl. construction and energy ¹⁾	6.0	0.2	-0.7	0.1	3.3	-0.4	-0.3	1.4	0.3	0.5	0.1	0.2	0.1
Intermediate goods	5.9	-0.8	1.4	1.2	4.2	-0.7	-0.7	1.3	0.1	0.3	0.3	0.4	0.0
Capital goods	9.4	1.3	-2.7	-0.7	3.6	-0.5	0.4	1.6	0.7	1.1	0.3	0.3	0.3
Consumer goods	2.2	0.4	-1.5	-0.4	1.6	-0.3	-0.3	1.2	0.0	0.1	-0.4	-0.2	0.0
Durable consumer goods	6.5	-2.5	-3.0	-2.5	1.2	-0.2	-1.7	2.5	-0.2	1.2	0.6	-0.4	-0.8
Non-durable consumer goods	1.4	1.0	-1.2	0.0	1.7	-0.3	0.0	0.9	0.1	-0.1	-0.6	-0.2	0.1
Energy	2.0	1.2	0.9	4.4	-0.1	0.3	0.7	-0.7	0.9	0.4	-0.2	0.0	0.2
Manufacturing	5.9	0.2	-0.4	0.4	2.7	0.1	-0.1	0.9	0.3	0.5	0.1	0.2	0.3

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.

activity in October was dampened by strikes in some member countries. Moreover, working day effects are likely to have had an opposite impact on the October and November data. The fact that in November 2002 a strong monthly rise was observed for all the main industrial groupings supports the view that calendar effects had distorted the latest data.

In terms of three-month averages, industrial production increased by 0.4% in the period

Table 5

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

	2000	2001	2002	2002	2002	2002	2002	2002	2002	2002	2002	2002	2003
				Q1	Q2	Q3	Q4	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.
Economic sentiment index 1)	2.5	-2.8	-1.8	0.4	0.3	-0.4	-0.3	-0.4	0.3	-0.2	-0.4	0.2	-0.2
Consumer confidence indicator ²⁾	12	6	0	1	3	1	-3	0	2	-1	-3	-5	-6
Industrial confidence indicator ²⁾	12	-1	-5	-7	-4	-5	-3	-5	-5	-4	-4	-2	-3
Construction confidence indicator ²⁾	16	10	1	5	3	-2	-3	-4	-2	-2	-4	-2	-1
Retail trade confidence indicator ²⁾	5	0	-9	-9	-11	-10	-8	-9	-10	-9	-7	-9	-12
Services confidence indicator ²⁾	9	-6	-20	-18	-16	-22	-25	-23	-21	-25	-25	-26	-25
Business climate indicator ³⁾	1.3	-0.1	-0.5	-0.8	-0.5	-0.5	-0.4	-0.6	-0.5	-0.4	-0.4	-0.2	-0.3
Capacity utilisation (%) ⁴⁾	84.4	83.1	81.2	81.1	81.1	81.3	81.3	-	-	81.5	-	-	81.1

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.

 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.

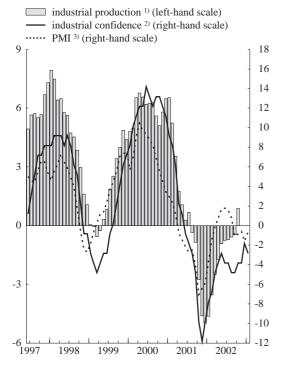
4) Data are collected in January, April, July and October of each year. The quarterly figures shown are the average of two successive surveys, i.e. the surveys conducted at the beginning of the quarter in question and at the beginning of the following quarter. Annual data are derived from quarterly averages. from September to November 2002, compared with the period from June to August. In the intermediate and consumer goods sectors, the three-month on three-month growth rate was around zero, while it stood at 0.3% in the capital goods sector.

Climate of uncertainty weighs on business confidence

In January 2003 the Purchasing Managers' Index (PMI) rose while the European Commission's industrial confidence indicator fell, the opposite of the developments observed in the previous month (see

Chart 17

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



Sources: Eurostat, European Commission Business and Consumer Surveys, Reuters and ECB calculations. Note: Where available, data refer to the Euro 12 (including

periods prior to 2001).Manufacturing; annual percentage changes in three-month

moving averages; working day adjusted data.

2) Percentage balances; deviations from the average since January 1985.

 Purchasing Managers' Index; deviations from the value of 50; positive deviations indicate an expansion of economic activity. Chart 17). The rise in the PMI in January was broadly based across its components. The fall in the European Commission's industrial confidence indicator was accounted for by slightly lower production expectations, while businesses' assessment of stocks and order books was unchanged. Overall, both the PMI and the European Commission's industrial confidence indicator are at relatively low levels, which is likely to reflect the negative impact of the current climate of uncertainty industrial activity on and business expectations.

Similarly, uncertainty may account for the relatively low levels of the survey data for the market services sector. In January 2003 the European Commission's services confidence indicator improved slightly while the activity index in the services PMI survey decreased. According to both surveys, however, expectations improved significantly in January 2003.

Weak signals for consumption at the beginning of 2003

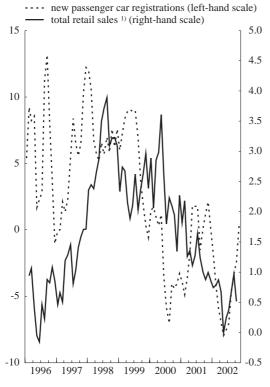
Survey data are the only source of information on developments in consumption at the beginning of this year. According to the European Commission's survey, consumer confidence declined further slightly in January 2003 (see Table 5). Following four consecutive monthly declines, the current level of the consumer confidence indicator is low from a historical point of view. For most questions in the survey, the January results were weaker than in the previous month. The only improvement in January - albeit from very low levels - concerned households' assessment of whether there is any advantage in making major purchases at present. In general over the past few months, households have become more pessimistic mainly about the general economic outlook and future unemployment. This trend may be related to the general environment of uncertainty about economic prospects, which could have had a negative impact on consumption at the beginning of this year.

Data for retail sales volumes are available up to November 2002. The monthly decline recorded in November partly offset the strong rise which had been recorded in October. In the period from September to November, year-on-year retail sales growth declined to 0.5%, compared with 1% for the three-month period up to October (see Chart 18). As regards more recent developments, the marked further decline in the European Commission's retail confidence indicator in January 2003 does not bode well for retail activity around the turn of the year. However, these results should be interpreted with caution as, in the past, the survey's results have sometimes diverged from retail sales data. Moreover, the decline in overall retail confidence is at odds with lanuary's rise in orders that retailers expect to place with suppliers.

Chart 18

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.

Decline in uncertainty necessary for recovery to gather pace

The latest data confirm earlier indications that real GDP growth was subdued around the turn of the year, broadly unchanged compared with the first three quarters of 2002. At the current juncture, the assessment remains that a gradual recovery in the course of this year is the most likely outcome. Although the appreciation of the euro over recent months may contribute to dampening export growth to some extent, the international price competitiveness of euro area companies remains favourable from a medium-term perspective, and export growth should benefit from the expected recovery of the world economy. In addition, several factors will contribute to the recovery, notably the low levels of interest rates and the expected decline in inflation. In this respect, the appreciation of the euro will help to shield the euro area economy against the latest increase in dollar-denominated oil prices and to support real incomes. However, the timing and pace of the recovery hinge on the decline of the current uncertainty about future economic prospects, which, while it lasts, is likely to have a negative impact on euro area consumption and investment. As long as this uncertainty persists, downside risks to the outlook for euro area economic activity will remain.

Unemployment rate unchanged in December 2002

The standardised rate of unemployment for the euro area remained unchanged in December 2002, at 8.5% of the labour force, while the figure for November was revised upwards by 0.1 percentage point (see Table 6). The increase in the number of unemployed in December was similar in magnitude to the increases in the previous two months. Indeed, reflecting generally weaker labour market conditions at the end of 2002, the average monthly rise in the number of unemployed in the fourth quarter (70,000) was twice as large as that in the

Table 6

Unemployment in the euro area

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

	2000	2001	2002	2002 01	2002 O2	2002 O3						2002 Nov.	
				Q1	Q2	Q3	Q4	July	Aug.	Sep.	001.	1404.	Dec.
Total	8.5	8.0	8.3	8.1	8.2	8.3	8.5	8.3	8.3	8.4	8.4	8.5	8.5
Under 25 years 1)	16.7	15.7	16.0	15.9	16.1	16.1	16.2	16.2	16.2	16.1	16.2	16.2	16.3
25 years and over	7.4	7.0	7.3	7.1	7.2	7.3	7.4	7.3	7.3	7.4	7.4	7.4	7.5

Source: Eurostat.

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

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

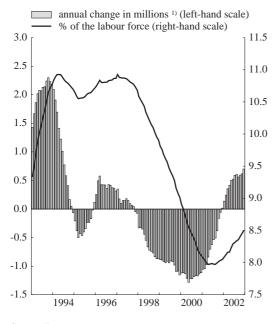
third quarter (35,000). In the 12 months to December 2002, the unemployment rate increased by 0.4 percentage point, from 8.1% in December 2001 (see Chart 19).

Employment situation remains fragile

National accounts data on employment for the fourth quarter of 2002 are not yet available. Data for the third quarter show a modest decline in employment compared with

Chart 19

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



Source: Eurostat.

the second quarter. This decline indicates that job destruction, as a result of the past downturn and subdued economic activity, outpaced job creation. Despite the decline in employment in quarterly terms, the annual rate of growth in employment remained positive at 0.3% in the third quarter of 2002 (see Table 7).

As reported in the January 2003 issue of the Monthly Bulletin, all sectors of the economy contributed to the weakening of employment growth in the third quarter of 2002. Following a temporary improvement in the second quarter, the quarter-on-quarter rate of decline in employment in industry increased again in the third quarter. At the same time, employment growth in services decreased further, remaining barely positive at 0.1% quarter on quarter.

Recent data do not signal an improvement in overall employment prospects at the beginning of this year. Employment expectations from the January 2003 European Commission Business and Consumer Surveys improved slightly in both manufacturing and services, while they deteriorated further in retail trade and remained unchanged in construction. The Purchasing Managers' employment index manufacturing improved in January, for while the index for services deteriorated. However, both indices continue to indicate negative employment growth. Overall, available evidence suggests that employment may have continued to decline at the end of 2002 and, furthermore, that the employment outlook remains fragile at the beginning of 2003.

Note: Data refer to the Euro 12 (including periods prior to 2001).1) Annual changes are not seasonally adjusted.

Table 7

Employment growth in the euro area

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

	1999	2000	2001	2001 Q3	2001 Q4	2002 Q1	2002 Q2	2002 Q3	2001 Q3	2001 Q4	2002 Q1	2002 Q2	2002 Q3
					-	-			Quarterly rates ¹⁾				
Whole economy <i>of which:</i>	1.8	2.1	1.4	1.2	0.8	0.7	0.5	0.3	0.2	0.2	0.1	0.1	-0.1
Agriculture and fishing ²⁾	-2.6	-1.6	-0.8	-1.1	-1.6	-2.2	-1.9	-1.9	-0.9	-0.5	-0.3	-0.2	-0.8
Industry	0.4	0.8	0.3	0.1	-0.5	-1.0	-1.0	-1.3	-0.2	-0.3	-0.4	-0.2	-0.5
Excluding construction	-0.2	0.6	0.3	0.0	-0.6	-1.1	-1.1	-1.2	-0.3	-0.3	-0.4	-0.2	-0.4
Construction	2.0	1.6	0.4	0.3	-0.2	-0.7	-0.8	-1.5	-0.1	-0.2	-0.4	-0.1	-0.8
Services	2.7	2.9	1.9	1.8	1.5	1.6	1.3	1.1	0.4	0.4	0.4	0.2	0.1
Trade and transport ³⁾	2.3	2.8	1.5	1.4	1.2	1.6	1.0	0.4	0.6	0.3	0.2	-0.2	0.0
Finance and business ⁴⁾	5.6	6.0	3.8	3.3	2.8	1.8	1.7	1.2	0.5	0.5	0.0	0.6	0.0
Public administration 5)	1.8	1.5	1.4	1.4	1.2	1.6	1.5	1.5	0.2	0.4	0.6	0.2	0.3

Sources: Eurostat and ECB calculations.

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

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

2) Also includes hunting and forestry.

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

4) Also includes real estate and renting services.

5) Also includes education, health and other services.

4 Exchange rate and balance of payments developments

Euro appreciated in January and early February 2003

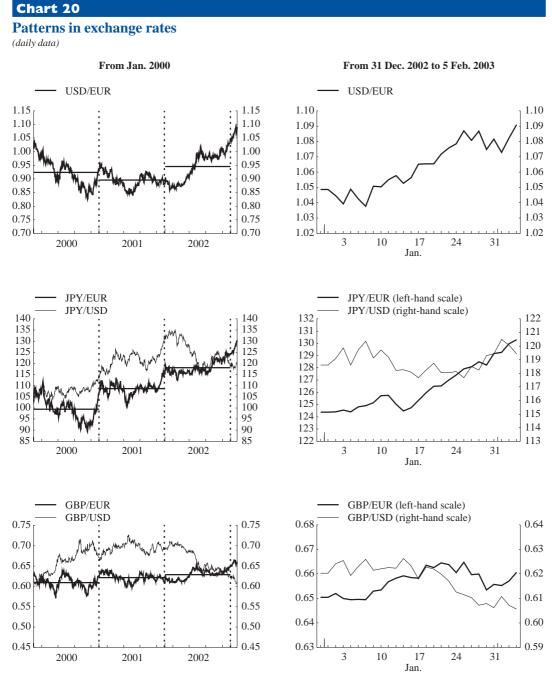
In January and early February 2003 the euro appreciated against most major currencies in concomitance with a similarly broad-based decline in the US dollar. These developments took place against the background of high financial, economic and geopolitical uncertainty, and evidence of a sluggish global economic recovery.

Against the US dollar, the euro continued its appreciation for most of the period under review (see Chart 20). Uncertainty generated by rising geopolitical tensions in conjunction with a number of weaker than expected economic data releases in the United States seem to have weighed on the US currency. Furthermore, the widening current account deficit and the deteriorating fiscal position of the US economy were identified by market participants as additional negative factors affecting the US dollar. The Federal Reserve's decision on 29 January to keep interest rates unchanged was widely expected and therefore did not have any direct effect on the foreign exchange market. On 5 February 2003 the euro was quoted at USD 1.09, that is 4% higher than at the end of December 2002 and about $15\frac{1}{2}$ % stronger than its 2002 average.

In January and early February 2003 the Japanese yen depreciated relative to the euro against the background of a deterioration in the short-term economic outlook for the Japanese economy (see Chart 20). At the same time, the Japanese yen weakened slightly against the US dollar. In early February the Japanese authorities indicated that throughout January they had purchased US dollars in the foreign exchange market in an attempt to stabilise the yen vis-à-vis the US dollar. On 5 February 2003 the euro was quoted at JPY 130.3, 4.8% higher than at the end of December 2002 and 10.4% above its 2002 average.

For most of January the pound sterling depreciated gradually against the euro, reaching levels last seen in August 1999. The depreciation of the British currency against the euro seems to have been associated with a slight deterioration in the UK economic outlook. Towards the end of the month and in early February the pound sterling recovered some of its earlier losses against the euro, while it also appreciated against the US dollar (see Chart 20). On 5 February 2003 the euro traded against the pound sterling at GBP 0.66, 1.6% stronger compared with its level at end-December 2002 and 5.1% higher than its 2002 average.

Looking at other European currencies, the Danish krone continued to fluctuate in a narrow range slightly below its central parity in ERM II (see Chart 21). In the reference period, the euro strengthened somewhat against the Swedish krona and the Swiss franc.

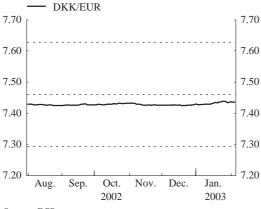


Source: ECB.

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

Chart 21

Patterns in exchange rates within ERM II (daily data)

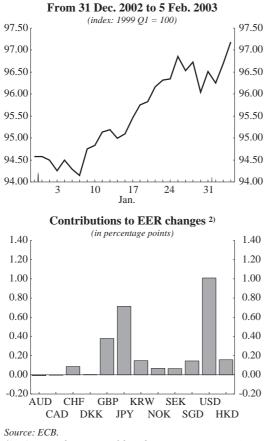


Source: ECB.

Chart 22

The effective euro exchange rate and its decomposition ¹⁾

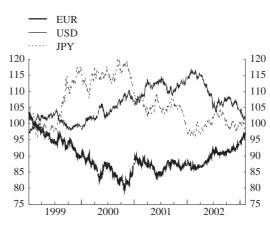
(daily data)



An upward movement of the index represents an appreciation of the effective exchange rate against 12 partner currencies.
 Changes are calculated, using trade weights, against 12

Chart 23

Effective exchange rates of the euro, the US dollar and the Japanese yen¹⁾ (*daily data; 1999 Q1 = 100*)



Source: ECB.

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

On 5 February 2003 the euro stood at its 2002 average level against the Swiss currency and was somewhat above its 2002 average level against the Swedish krona.

In the light of the above developments, the nominal effective exchange rate of the euro - as measured against the currencies of 12 major trading partners of the euro area - was, on 5 February 2003, 2.8% higher than its end-December 2002 level (see Chart 22) and 8.4% above its average level in 2002. In nominal effective terms, the US dollar depreciated by about 2.3% during the period under review and on 5 February 2003 it stood more than $7\frac{1}{2}$ % below its 2002 average (see Chart 23). In the case of the Japanese yen, the nominal effective exchange rate remained broadly stable in the first three weeks of the review period, but declined thereafter to close the period 2.3% weaker than at the end of December 2002 and 1.5% lower than its average level in 2002. Overall, the effective exchange rate indices of the three major currencies have, over recent months, been gradually moving closer to the levels that prevailed in the first quarter of 1999 (see Chart 23).

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

Changes are calculated, using trade weights, against 1 major trading partners.

Current account surplus increased in November 2002

In November 2002 the euro area current account surplus increased to $\in 10.3$ billion from $\in 2.7$ billion in November 2001. The main factors underlying this development

were a \in 4.8 billion rise in the goods surplus and, to a lesser extent, a switch in the services balance from a \in 0.9 billion deficit to a \in 0.7 billion surplus coupled with a \in 1.3 billion decrease in the deficit for current transfers. The income balance was unchanged compared with November 2001 (see Table 8).

Table 8

Balance of payments of the euro area

(EUR billions; not seasonally adjusted)

	2001	2001	2002	2002	2002	2002
	Jan Nov.	Nov.	Jan Nov.	Sep.	Oct.	Nov.
Current account balance	-16.1	2.7	53.9	8.7	3.7	10.3
Credits	1566.8	138.3	1560.7	140.0	150.2	141.6
Debits	1582.8	135.7	1506.8	131.3	146.5	131.3
Goods balance	65.4	8.8	122.1	11.6	11.7	13.6
Exports	952.0	89.1	972.1	88.1	97.6	90.6
Imports	886.6	80.3	849.9	76.5	85.9	77.0
Services balance	1.0	-0.9	11.7	4.0	1.4	0.7
Exports	292.8	24.7	298.2	29.4	28.7	25.0
Imports	291.8	25.6	286.5	25.4	27.3	24.3
Income balance	-37.8	-0.1	-37.4	-2.0	-3.1	-0.1
Current transfers balance	-44.7	-5.2	-42.5	-4.9	-6.3	-3.9
Capital account balance	8.2	0.2	10.7	1.1	1.5	0.4
Financial account balance	-37.3	-6.8	-161.2	-21.3	-21.5	-28.6
Direct investment	-102.3	11.7	-30.7	-3.2	-5.0	3.9
Abroad	-238.1	-17.8	-151.4	-14.7	-11.4	-10.5
Equity capital and reinvested earnings	-153.3	-7.8	-115.4	-11.7	-6.4	-5.9
Other capital, mostly inter-company loans	-84.8	-9.9	-36.0	-3.0	-5.0	-4.6
In the euro area	135.7	29.5	120.7	11.5	6.4	14.4
Equity capital and reinvested earnings	91.2	14.2	72.2	6.8	5.4	7.2
Other capital, mostly inter-company loans	44.6	15.3	48.5	4.7	1.0	7.1
Portfolio investment	54.1	19.9	64.4	16.8	19.4	9.7
Equities	116.6	14.6	43.7	15.6	-3.5	16.1
Assets	-101.9	-10.2	-32.1	14.1	0.6	1.6
Liabilities	218.5	24.8	75.7	1.5	-4.2	14.5
Debt instruments	-62.4	5.2	20.7	1.2	23.0	-6.4
Assets	-172.5	-30.6	-125.5	-13.0	-3.0	-13.3
Liabilities	110.1	35.9	146.3	14.2	26.0	6.8
Memo item:						
Combined net direct and portfolio investmer	nt -48.2	31.6	33.7	13.6	14.4	13.6
Financial derivatives	-2.6	-2.8	-12.5	0.6	-0.0	-1.1
Other investment	1.5	-35.7	-181.1	-31.7	-38.0	-38.5
Reserve assets	12.0	0.1	-1.4	-3.8	2.1	-2.6
Errors and omissions	45.2	3.9	96.6	11.5	16.3	17.9

Source: ECB.

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

In the first 11 months of 2002, the cumulated current account balance shifted to a surplus of \in 53.9 billion from a deficit of \in 16.1 billion in the same period of the previous year. This development resulted primarily from a substantial increase in the goods surplus (by \in 56.7 billion), reflecting a decline in goods imports (by 4.1%) combined with an increase in exports (by 2.1%). The services surplus also increased (by \in 10.7 billion), while the deficits for both income and current transfers slightly decreased.

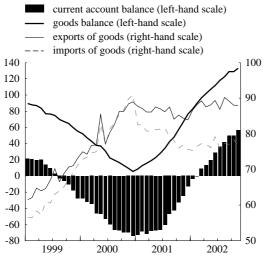
Turning to month-on-month developments on the basis of seasonally adjusted data, the current account registered a \in 6.8 billion surplus in November 2002 compared with a surplus of \in 3.2 billion the month before. An increase in the goods surplus was the main factor behind this development, essentially relating to a 2.4% (month-on-month) fall in the value of goods imports (see Chart 24).

As evidenced by trade volume data available up to July 2002, lower import volumes since the start of 2002 were behind the decline in the cumulated value of imports. This partly

Chart 24

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.

Chart 25

Volume of euro area exports to selected trading partners

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



reflects weak euro area demand. In particular, a sharp decline in the volume of capital goods imports was registered which seems to be linked to the fall in some import-intensive categories of domestic expenditure, such as investment. Turning to exports, at the start of 2002 a significant part of the recovery in export volumes was related to strong demand from Asia. At the same time, export volumes to both the United States and the United Kingdom grew somewhat less strongly. As the year progressed, euro area exports to Asia levelled off, while those to the United States and the United Kingdom fell somewhat (see Chart 25). With regard to commodity composition, export volumes of both intermediate and consumer goods recorded significant growth in 2002, while those of capital goods remained fairly constant.

Net inflows of portfolio investment in November 2002

The euro area registered net inflows of combined direct and portfolio investment amounting to $\in 13.6$ billion in November 2002. This reflected net inflows of both direct investment ($\in 3.9$ billion) and portfolio investment ($\notin 9.7$ billion).

In November, as throughout 2002, net inflows in both equity direct investment (\in I.3 billion) and the category "other capital, mostly inter-company loans" (€2.6 billion) contributed to the overall net inflows of direct investment. Among the other salient features of the euro area financial account in November were substantial net inflows of equity portfolio investment amounting to \in 16.1 billion. This resulted from a net acquisition of euro area equities by non-residents amounting to \in 14.5 billion. By contrast, debt instruments recorded net outflows of $\in 6.4$ billion in November, reflecting net outflows of money market instruments (€11.6 billion) but net inflows of bonds and notes (\in 5.1 billion).

On a cumulated basis, combined direct and portfolio investment recorded net inflows of \in 33.7 billion during the first 11 months of 2002, compared with net outflows of \in 48.2 billion during the same period in 2001. This shift mostly reflects smaller net outflows in the euro area direct investment account in this period, and in particular the decrease of almost \in 50 billion in capital supplied by euro area companies to their non-euro area subsidiaries. Net inflows of portfolio investment remained relatively stable. However, the composition of euro area portfolio investment experienced a shift, as the net inflows of equity investment declined from \in 116.6 billion in the first 11 months of 2001 to \in 43.7 billion in the same period of 2002, whereas the balance for debt instruments turned from net outflows of \in 62.4 billion to net inflows of \in 20.7 billion.

Data revisions

The balance of payments statistics were subject to some revisions for the second and third quarters of 2002. The current account balance was revised downwards by $\in 2.3$ billion for the second quarter of 2002, and upwards by $\in 4.9$ billion for the third quarter. The revision for the third quarter affected essentially July 2002 data: goods debits were revised downwards by $\in 1.9$ billion and services credits upwards by $\in 1.3$ billion, resulting in a larger surplus for both goods and services.

Revisions to the financial account statistics for the second and third quarters of 2002 mainly affected the portfolio investment account. Net inflows of portfolio investment into the euro area were revised downwards, from \in 67.1 billion to \in 57.4 billion for the second quarter and from \in 34.5 billion to \notin 29.7 billion for the third quarter.

The relationship between monetary policy and fiscal policies in the euro area

This article addresses the interactions between the single monetary policy and fiscal policies in the euro area. These interactions relate to the fact that both types of policy have an impact on key macroeconomic variables, and this in turn creates interdependencies in the pursuit of policy objectives. On the one hand, fiscal policy influences price developments, real interest rates and risk premia, as well as aggregate demand and potential output, all variables which need to be systematically taken into account by a monetary policy that focuses on price stability. On the other hand, monetary policy has an impact on, inter alia, short-term interest rates, inflation expectations and the risk premia incorporated in long-term yields which in turn affect the economic environment in which fiscal policy operates.

Given these interdependencies, there is a need for an institutional framework to govern the interactions between monetary policy and fiscal policy. In this respect, monetary policy has the mandate to maintain price stability, given that this is the only objective monetary policy can be expected to deliver in the long run. At the same time, it is important that monetary policy be granted full independence in the pursuit of this objective, so that it can be shielded from possible short-term political interests of governments. On the other hand, fiscal policies must provide a stable and predictable environment in which markets can operate efficiently and, as part of overall governance, foster public confidence and political consensus. In this respect, frameworks based on clear mandates and rules reflect a macroeconomic policy design that is generally preferable to the ad hoc discretionary co-ordination of day-to-day policy action in the face of shocks. Indeed, the discretionary or ad hoc co-ordination of policy actions has proved to be largely inefficient, if not actually counterproductive. This is because the discretionary co-ordination of policies always gives rise to implementation problems and incentive distortions for the actors involved.

The institutional framework of the euro area, founded on the Treaty and complemented by the Stability and Growth Pact, is designed to take the above considerations into due account. It assigns clear objectives and priorities to individual policy-makers and, together with its provisions for monitoring, sets proper incentives for them all to pursue and meet these objectives. (For a comprehensive discussion of the institutional macroeconomic framework in EMU see the article entitled "The economic policy framework in EMU" in the November 2001 issue of the ECB's Monthly Bulletin).

I Introduction

Monetary and fiscal policies influence key macroeconomic variables, and this in turn creates interdependencies in the pursuit of policy objectives. On the one hand, fiscal policy affects the allocation of resources between the public and private sectors, as well as within the private sector itself, and has an impact on the incentives to consume, save and invest and thus on potential output and the business cycle. Fiscal policy can thereby influence price developments, real interest rates and risk premia. All these variables need to be systematically taken into account by a monetary policy that focuses on price stability. On the other hand, the monetary policy regime in place is a fundamental determinant of short-term

interest rates, inflation expectations and the premium that is incorporated in long-term yields to compensate for the risk of inflation variability. In addition, monetary policy can have a temporary impact on real economic activity and thereby, indirectly, on short-term developments in public revenue and expenditure. In all these ways, monetary policy exerts an influence on the macroeconomic environment in which other policy-makers operate.

Against this background, it is natural that the relationship between monetary policy and fiscal policy – the so-called "policy mix" – has always attracted attention in academic circles as well as in the policy debate. However, the

way economic thinking has analysed these interactions has evolved significantly over the last few decades. Until the early 1970s it was maintained that the impact that one policy could have on the other policy's sphere called for a joint, co-ordinated approach to business-cycle stabilisation. Both policies were regarded as powerful instruments to be implemented for the appropriate management of aggregate demand and the systematic promotion of economic growth. Fiscal policy was viewed as the dominant force in the determination of aggregate demand. At the same time, for many years mainstream monetary theory was based on the notion that it was possible for monetary policy to permanently raise output and employment at the cost of a limited sacrifice in terms of inflation. In this way, the view was often held that monetary policy could systematically assist the stabilising efforts of fiscal policy and, if needed, accommodate its financing necessities with only limited consequences for monetary stability. The interactions between the two policies were at that time primarily studied within a static model in which the level of output in the face of economic shocks was determined by the fiscal response, while monetary policy had responsibility for the composition of demand. Little or no attention was paid to the incentives driving policy-makers and to the role played by private sector expectations in determining the ultimate macroeconomic outcomes.

This paradigm was strongly challenged in the face of the macroeconomic policy failures of the 1970s. It became increasingly manifest that the systematic efforts to sustain demand by means of repeated fiscal impulses and to exploit the assumed trade-off between output and inflation were responsible for the persistently high inflation, rising unemployment and economic distress of the decade. Consequently, a new paradigm has since gradually established itself in line with the re-affirmation of the classical tenets of economic theory. This theory places the formation of private expectations at the centre of economic analysis. It stresses that agents optimise their behaviour over time in anticipation of future economic developments, including the expectation of future policy actions. In the field of monetary-fiscal policy co-ordination, the emphasis has shifted away from the joint design of short-term policy responses to shocks towards the establishment of a nondiscretionary, rule-based regime capable of providing monetary and fiscal policy-makers with a time-consistent guide for action and thus a reliable anchor for private expectations.

This article discusses the interactions between monetary policy and fiscal policy from the point of view of the new paradigm. It argues that the most effective solution to the problem of optimal macroeconomic policy design is the establishment of a regime which gives a clear and consistent allocation of mandates and objectives to the various policy-makers, includes rule-based and transparent frameworks and procedures, and in which monetary policy and fiscal policy are offered steady guidance for action, while short-sighted behaviour is discouraged. Within such a regime, provided it is appropriately designed and applied, the response of monetary policy and fiscal policy to changes in the economic environment will - almost by design - be mutually consistent and conducive to achieving the best macroeconomic outcome. Therefore there will generally be no need for further co-ordination of day-to-day policy moves. Under these conditions any further benefits to be had from the joint design of policy responses to shocks can only arise if the objectives assigned to the various policymakers are misaligned and incoherent. However, if this is the case, the solution lies in an explicit realignment of objectives rather than in a common and co-ordinated response to shocks. The latter option would lead to confusion over policy spheres and hinder the accountability of the responsible policy-makers thus aggravating incentive distortions.

2 Economic considerations on the design of the monetary and fiscal policy regime

It is a fundamental principle that individual policies should be assigned only to those macroeconomic objectives that they can attain. In this context, it is now generally recognised that, given the neutrality of monetary impulses in the longer term, monetary policy cannot increase real output beyond the level that is determined by technological progress and the fundamental factors underlying economic decisions. These factors are rooted in individual preferences and incentives to work, to save, to invest and consume, and to assume risk, all of which are independent of the price level. Monetary activism aimed at modifying the long-term growth path of the economy would then be a counterproductive exercise. In fact, any systematic attempt by the monetary authority to fine-tune economic activity could easily destabilise inflation expectations and heighten uncertainty, thereby increasing the perceived risks associated with economic undertakings. Instability of the general level of prices would call for costly precautionary measures on the part of savers and lenders, which would reduce the amount of funds available for allocation to productive uses. It would also introduce inefficient variations in aggregate employment and output and a number of distortions in the composition of demand. Thus, viewed from a longer-term perspective, monetary fine-tuning is detrimental to the economic prospects of society. By contrast, an environment of price stability fosters the workings of the mechanism determining relative prices, favours allocation efficiency and, by anchoring inflation expectations, reduces market uncertainty and the risk premia included in long-term nominal contracts. As such, price stability is regarded as the foundation of a well-functioning market economy, and the best contribution that monetary policy can make to economic welfare.

On the fiscal side, it has been acknowledged that the scope for systematic, discretionary demand management aimed at steering shortterm economic activity is very limited. First, the intrinsic lags and uncertainties of the political process together with the lags with which, for example, a discretionary increase in government spending or a cut in taxes impacts on aggregate demand, and the substantial uncertainty about the magnitude of the economic response to the fiscal stimulus, make counter-cyclical fiscal policy a difficult and risky practice. Second, while fiscal instruments can be important tools in smoothing incomes across macroeconomic fluctuations, there is a risk that public debt burdens could grow from one business cycle to the next. Such a "deficit bias" typically originates from the fact that the political process is at times dominated by short-term considerations and goals associated with electoral cycles and pressures to further the interests of specific and well-organised groups. A relatively easy way for fiscal authorities to accommodate possibly conflicting demands on limited available resources is to finance expenditure by debt, thereby shifting the financing burden to future generations of taxpayers. In ageing societies, this may additionally lead to a buildup in the implicit liabilities of public pension systems. Such growing fiscal imbalances are indeed associated with large welfare costs. Unsustainable public finances limit the scope and effectiveness of fiscal policies to stabilise the economy, and increasing expenditure and debt ratios lead to rising tax burdens current or future - that generate mounting efficiency losses due to distortionary taxation. In addition, drifting debt burdens can gradually crowd out the private accumulation of productive capital and depress economic growth in the medium term.

Growing awareness of the limitations associated with macroeconomic fine-tuning has led to a worldwide trend towards the adoption of more rule-based institutional frameworks. The purpose of such an approach to economic policy is twofold: first, to provide authorities with specific mandates, i.e. clearly identified policy objectives, in order to set proper incentives at the decision-making level and ensure predictability of policy; second, to provide responsible authorities with guidance on the appropriate setting of their instruments in the face of constantly changing economic developments, in such a way as to keep the path of their action through time as consistent as possible with the long-term attainment of their policy objective. While these frameworks include certain "rules", these need not normally be fully specified reaction functions, i.e. contingency plans prescribing the setting of policy instruments as a function of an exhaustive list of possible events. Instead, they ought to impose a rulegoverned behaviour which disciplines policymakers' decisions to make them consistent through time. Such behaviour fosters trust in the economic institutions and promotes productive investment (see also the article entitled "Issues related to monetary policy rules" in the October 2001 issue of the ECB's Monthly Bulletin).

In this environment, it becomes easy for the general public to assess policy moves and keep authorities under continuous scrutiny. To the extent that authorities' actions can be seen to match systematically their professed commitments, private agents can continue to trust in a stable economic climate and can confidently factor it into their economic plans. By contrast, signs of systematic and unmotivated deviations will be sanctioned by a change in expectations and a loss of confidence. Such monitoring by the public requires a transparent setting in which policy moves and economic outcomes can be attributed to single policy-makers; thus public accountability is fully operative.

All this offers a strong argument for a clear delimitation of policy domains and spheres of responsibility across the various authorities, and it suggests that proper incentives should be set and the scope for conflicts and the confusion of responsibilities minimised. Obviously, objectives and instruments must be assigned to the various policy-makers in a consistent manner, so as to ensure that the ultimate macroeconomic outcome is the best possible.

These general principles of macroeconomic governance have far-reaching implications for the relations between monetary policy and fiscal policy. First, maintaining price stability or keeping inflation low and stable has become the primary objective of monetary this end, central policy. То bank independence has been recognised as an indispensable instrument for the maintenance of a central bank's control over the price level in the medium term. Second, it has become evident that sustainable public finances make an important contribution to an efficient inter-temporal allocation of resources. Given the influence that the level and structure of taxes and government expenditure exert on economic activity, a medium-term orientation of fiscal policies should guarantee the sustainability of public finances and allow the operation of automatic stabilisers. This implies that, in discharging its task of smoothing the profile of incomes over the business cycle, fiscal policy has to ensure that its response to shocks is symmetric. Rule-based fiscal policies can contribute to achieving these objectives and, thereby, also contribute to long-term income growth, employment and welfare more generally (see the articles entitled "Fiscal policies and economic growth" and "The operation of automatic fiscal stabilisers in the euro area" in the August 2001 and April 2002 issues respectively of the ECB's Monthly Bulletin).

Central bank independence and fiscal rules

Price stability is regarded as a common good and an indispensable precondition for longterm prosperity. It is therefore in the interest of society to delegate the pursuit of price stability to an independent central bank that stands above the fray of day-to-day politics. Indeed, the move towards central bank independence in recent years has mainly taken place in response to concerns that monetary policy may become subject to pressures originating from the fiscal side. One important reason for these concerns is the presence of the deficit bias in the political process discussed above.

Given that this bias exists, fiscal authorities may at times be tempted to influence monetary policy to reduce the cost of borrowing and thereby alleviate the burden of accumulated debt. In fact, retaining some form of control over the setting of the interest rate used by the central bank for its monetary operations may become the key to a policy of systematic debt financing. A central bank that is not equipped with institutional safeguards is likely to succumb to these attempts, and an inflation bias will result. Economic history supports this view. Many episodes of runaway inflation which were experienced in continental Europe in the early 1920s had their ultimate origin in a "contamination" of budgetary and monetary policies. Moreover, the fact that the monetary authorities were not sufficiently protected from the financing needs of the public sector was at the root of the prolonged era of high and unstable inflation which ensued in a number of European countries after the first oil price shock of the early 1970s.

The appropriate design of frameworks for monetary and fiscal policy is one way in which society has insured itself against persistent inflation and the macroeconomic disruptions inflicted by discretionary monetary policy and disorderly public finances. On the monetary side, one provision that can constitute a standing guarantee that the central bank retains effective control over its policy instruments is the full independence of its decision-making process, and thereby a clear and definitive prohibition of the monetary financing of budget deficits. Only an independent central bank that can, at any time, reject requests for the direct monetary funding of budget deficits is capable of retaining lasting control over the money supply and, thereby, the price level in the medium term.

On the fiscal side, procedures and objectives limiting, in one way or another, the pace at which government liabilities can grow in proportion to the size of the economy are extremely important and have therefore also gained increasing prominence over time. While these rules normally preserve a degree of flexibility for governments to cope with unexpected and extraordinary events, the general principle on which they are founded is to make the link between the expansion of spending programmes and the need to raise taxes to fund them evident to both policymakers and the public. In this context, a constitutional limit on the government's power to run a deficit gives policy-makers a stronger incentive to evaluate alternative spending plans more carefully in order to maximise the expected social benefit, taking into account the need to finance expenditure through revenues. By contrast, in the absence of any binding constraint on the amount of resources that the government can borrow, the need to finance disbursements entirely through taxes would be deferred to some point in the future. In these conditions, the incentives for governments to follow a policy that seeks to improve society's welfare in the future may be rather less compelling.

Principles for fiscal policy in a monetary union

Distortions in fiscal incentives can be exacerbated in the context of a monetary union among sovereign states. Greater recourse to capital markets by national governments to finance an increasing debt level will ultimately affect financial market conditions in the area as a whole. Such spillover effects are generally transmitted via higher long-term interest rates through the whole currency area, as expansionary fiscal policy in one country and the drain that this exerts on union-wide private savings put pressure on the cost of long-term finance in all constituent countries. Since the size of the overall financial market is large, the impact of an increase in the debt level of any individual member on its own refinancing conditions is

normally much smaller than it would be in the absence of a monetary union. Indeed, while such spillover effects are also possible across independent currency areas, they are more direct and immediate in a monetary union, given the single currency (and the irrevocably fixed exchange rates) and the higher degree of integration between national financial markets. Therefore, in monetary unions sovereign issuers receive stronger incentives to engage in debt financing because the impact of higher liabilities in the form of higher real rates is not entirely borne by those authorities which embark on fiscal expansion, but more widely shared by all their fellow participants in monetary union.

These incentive problems cannot be countered fully through market mechanisms. Financial operators have improved their ability to assess the country-specific credit risk of major borrowers, which normally results in higher national risk premia for those authorities that depart from a sound policy course. This type of market discipline is welcome, as it tends to discourage deviation from fiscal discipline by individual governments and provides the latter with further incentives to conduct sustainable policies. This notwithstanding, market mechanisms alone can only to a limited extent prevent national issuers from running up excessive deficits.

The arguments expounded above explain why a monetary union needs commonly shared rules of fiscal restraint and the appropriate enforcement and monitoring mechanisms. One such important safeguard is represented by rules which ensure that fiscal policies remain sound over the business cycle. Indeed, the experience of federal states has shown that balanced budget provisions or restrictions to the maximum size of the fiscal deficit that local authorities can run have proved instrumental in keeping the public finances of the general government under control. Also important is the obligation on the national fiscal authorities not to bail each other out in the event of national financial distress. Under this provision none of the participating countries can be held responsible for the debt of any other government should funding difficulties manifest themselves. Such supranational rules facilitate the conduct of policy by individual governments, avoid moral hazard problems, and thus inspire mutual trust among members.

The rationale for mutually consistent objectives

Monetary and fiscal rules of the sort described above ensure that the long-term policy objectives assigned to individual policymakers are duly internalised in their decisionmaking process, and systematic divergences from the intended policy course are avoided. They provide a clear demarcation of the domains in which individual policies can operate freely in the pursuit of their goals and can be easily assessed by the public. However, while necessary, these elements may not be sufficient for an efficient macroeconomic outcome, as the assigned objectives also need to be consistent.

Past experience shows that when monetary and fiscal authorities have conflicting objectives and preferences, the interaction of their responses to economic shocks may undesirable macroeconomic result in outcomes. This situation could materialise, for example, in cases where the monetary and fiscal authorities have differing views about the level of output that is sustainable in the medium term and that is thus consistent with lasting conditions of price stability. Using simple stylised models of the monetary-fiscal policy interactions, it can be shown that if the level considered desirable in the short term by the fiscal authority were to be in excess of true potential growth, a lack of co-ordinated action may translate into deteriorating public finance conditions and higher inflationary pressures; these pressures in turn lead monetary authorities to engineer a rise in real interest rates. In these conditions, co-ordinated policy action would appear in some models to be an

attractive solution. A joint setting of policy instruments would seem capable of overcoming the individual policy-makers' failure to factor into their respective moves the likely reaction of the other policy-makers in a way that could exploit the close interdependencies of the two distinct policy spheres. However, this conclusion would be flawed. It is apparent that, as the possible source of disruption lies in a misalignment of policy objectives, the remedy should be sought in an appropriate correction of this misalignment. In a situation of conflict between objectives or between views about the fundamental workings of the economy, recourse to active co-ordination would simply entrench and prolong an institutional problem that should instead be tackled at root.

The problems of ad hoc co-ordination

However, even if policy objectives are fully aligned, there are compelling arguments for avoiding recourse to the active co-ordination of monetary policy and fiscal policy in demand management. These arguments are related to the existence of significant implementation problems. In practice, the enhanced coordination of policy moves would be fraught with information, incentive and enforcement problems. In general, the existence of pervasive uncertainty and imperfect information about the state of the economy and future developments makes it difficult for policy-makers to agree upon and implement on a case-by-case basis co-ordinated policy plans in an effective and timely manner. The effective pursuit of such policies would require the nature of the shocks affecting the economy to be identified and, even more importantly, an agreement on a proper macro model in order to trace exactly their propagation pattern and quantify the

magnitude of the most appropriate policy response. Since it is difficult to identify correctly the nature of shocks and agree on their propagation over time and possible spillovers of joint policy actions, as well as to reach a common understanding of the "true" model of the economy, the pursuit of active policy co-ordination can often be counterproductive. This problem is exacerbated by the inherent difficulties for both monetary and fiscal policy to fine-tune economic developments.

However, more importantly, incentive and enforcement problems undermine the viability of active ad hoc co-ordination. First, there is a strong risk that, by blurring their respective responsibilities, policy-makers' incentives and/or ability to deliver on their specific objectives are weakened and the possibility for the public to hold them accountable is diminished. Second, the lack of appropriate instruments to monitor and implement coordinated actions in a way that would keep the policy-makers involved faithful to the agreed sequence of moves would make those incentive problems all the more severe. In the absence of enforcement mechanisms. such a policy framework would not be credible and would likely remain largely ineffective.

In conclusion, there are significant risks implicit in the design of concerted ad hoc policy interventions. Notably, the severe information, incentive and enforcement problems which undermine the viability of policy co-ordination strongly argue in favour of establishing from the outset mutually consistent frameworks and principles constraining the behaviour of single authorities. Under these conditions, individual authorities are provided with a stable environment in which there is no need for ad hoc agreements on specific courses of action.

3 The institutional setting for Economic and Monetary Union – Treaty foundations and practical conduct of policy

The Treaty establishing the European Community builds on the principles of sound macroeconomic governance described in the preceding section. It lays down a solid institutional foundation for economic policymaking in Europe. The specific design of Economic and Monetary Union, established by the Treaty, transfers the competence for monetary policy to the Community level while leaving the responsibilities for fiscal as well as other economic policies in most respects in the hands of the national authorities. In all fields, the Treaty sets up a clear allocation of policy responsibilities based on a set of shared objectives and guiding principles for the conduct of policies in Europe, notably stable prices, sound public finances and sustainable non-inflationary growth (Articles 2 and 4 of the Treaty).

For monetary policy, an independent central bank has been established to serve the primary objective of price stability. This aims, ceteris paribus, to ensure that economic shocks with an inflationary or deflationary potential receive a timely and appropriate monetary policy response. Such a stability-oriented framework removes one primary cause of economic instability. On the fiscal side, where the Treaty is complemented by the Stability and Growth Pact, disciplined fiscal policies anchored to the principles of medium-term close-to-balance or in-surplus budgetary positions and the avoidance of excessive deficits minimise the risk of macroeconomic instability stemming from the disturbances that are generated by unsustainable fiscal policies. Central bank independence and budgetary rules are therefore mutually reinforcing elements in this framework with a view to ensuring macroeconomic stability.

The Treaty foundations

The importance of price stability for the efficient functioning of the market mechanism implies that, within the single market, a stability-oriented monetary policy is a

common public good to be provided in a uniform manner by an independent central bank. The Treaty unambiguously assigns the Eurosystem (the ECB and the National Central Banks which have adopted the euro) and the single monetary policy the primary objective of maintaining price stability in the euro area (Article 105).

To ensure that this mandate can be fulfilled effectively, the Treaty assigns considerable independence to the Eurosystem and the members of its decision-making bodies. Article 101 stipulates that the monetary financing of public deficits is forbidden, and Article 108 safeguards independence in every respect, i.e. from an institutional, personal, functional and financial point of view (see also the article entitled "The institutional framework of the European System of Central Banks" in the July 1999 issue of the ECB's Monthly Bulletin). The Treaty not only specifies that the Eurosystem and the members of its decision-making bodies shall not seek to take instructions from Community institutions or bodies, from any government of a Member State or from any other body, it also symmetrically states that "Community institutions" and "any government" undertake "not to seek to influence the members of the decision-making bodies of the ECB".

The Treaty does not refer to any type of active policy co-ordination between monetary policy and fiscal policy. On the contrary, it clearly separates a Chapter on "monetary policy" from a Chapter on "economic policies". At the same time, the Treaty takes into account interdependencies between policies. Article 105 states that the Eurosystem shall "implement the monetary policy of the Community" and "support the general economic policies in the Community". This formulation suggests that the Eurosystem shares the objectives of the Community. The latter include "a harmonious, balanced and sustainable development of economic activities, a high level of employment [...], sustainable and non-inflationary growth [and] a high degree of competitiveness and convergence of economic performance" (Article 2). However, the general mandate to support "general economic policies" contained in the second sentence of Article 105.1 is qualitatively different from the Eurosystem's primary and direct obligation to maintain price stability. For practical and political economy reasons, which have been discussed in the previous section, the Treaty does not give the ECB direct responsibility for any additional objectives other than price stability. In particular, the Treaty does not refer to "secondary objectives" of the ECB or the Eurosystem. Rather, the Treaty requires that the Eurosystem take into account other Community objectives in the pursuit of its primary objective.

The Treaty also reflects the experience that budgetary rules may be needed as an additional safeguard for protecting the economy against the risks resulting from unsound fiscal policies. Notably, excessive budget deficits are to be avoided (Article 104). In addition, the "no bail-out" clause, which stipulates that neither the Community nor any Member State is liable for or can assume the debts incurred by any other Member State (Article 103), imposes further incentives on the part of national fiscal authorities to preserve budgetary discipline. In this respect, high government debt cannot be inflated away, nor can a government that does not stick to the rules rely on being eventually bailed out by other governments. Thus, in the current institutional framework, individual governments cannot shift part of the burden of high government debt to other parts of the euro area. In this way, it also ensures that unsound fiscal policies in one country will tend to lead to higher risk premia for the debt of that country and not for the debt of other countries. This in turn increases the incentives for fiscal discipline at the national level. The box entitled "The European framework for fiscal policies" reviews the main features of the institutional framework regulating fiscal policy in the EU.

The current fiscal regime focuses fiscal policies firmly on long-term objectives and should therefore make the path of fiscal policy through the business cycle more predictable. This regime, which is conducive to a sound fiscal policy, at the same time contributes to making the task of the central bank easier. The institutional provisions on public finances aim to free the conduct of fiscal policy at the national level from the impediments that have often tied governments' hands in the past. Within the current institutions, governments are in a position to regain control over instruments of income smoothing and automatic stabilisation that they had largely lost in the face of spiralling debt burdens, rising costs of debt funding and increasing rigidities in the management of their budgets. Provided budgets are balanced on average over the cycle, built-in stabilising mechanisms can be left to work and act as efficient forces to counter economic hardships.

Within this overall institutional framework, conflicts and overlaps of competencies in the conduct of the single monetary policy and in the design of fiscal policies are avoided and responsibilities are clearly assigned to the ECB on the one hand and to fiscal policymakers on the other. Thus, incentives for all policy-makers are properly established and genuine accountability is ensured.

Exchange of information between the ECB and other policy-makers

The ECB communicates through the public appearances of its representatives and through its publications which systematically provide an assessment of the economic situation together with explanations for monetary policy decisions. Thereby all policy-makers, including fiscal authorities, are given all the information they need to understand and thus anticipate monetary developments, including the responses of monetary policy to developments in fiscal and structural policies (see the Article entitled "Transparency in the monetary policy of the ECB" in the November 2002 issue of the ECB's Monthly Bulletin).

Moreover, since the ECB is part of the overall economic policy framework, additional channels of communication in the form of constructive and open exchanges of information and views with other policymakers have been established. Owing to the fact that structural and fiscal policy measures may influence, inter alia, short-term price developments, supply conditions and the transmission mechanism of monetary policy, there can be economic advantages to be had from the ECB participating in exchanges of information and views about the current economic situation and fiscal and structural policies between the policy-making bodies of the European Union.

Conversely, the President of ECOFIN and a representative of the Commission can regularly participate in meetings of the Governing Council of the ECB (Article 113.1). In this way, ministers and the Commission are systematically kept aware of the broad orientation of monetary policy. Furthermore, a number of arrangements have been made for informal exchanges of information between the ECB and the Commission and ministers in meetings of the Eurogroup and in the context of the Macroeconomic Dialogue.

For its part, the ECB is well informed of current and planned fiscal policy measures through the fiscal programmes discussed in the context of the euro area surveillance exercises. The credible implementation of the Stability and Growth Pact and fully functioning surveillance and co-ordination procedures contribute to making budgetary behaviour both more reliable and more predictable.

This institutional framework thus provides for a fruitful exchange of information while ensuring the mutual respect of the independence of all parties, without any commitment or mandate to take and implement joint decisions in an active and pre-agreed manner. At the same time, it helps to enhance mutual understanding of the policy objectives, responsibilities and behaviour in the respective policy areas and thus assists in achieving Community objectives in an efficient way, while not blurring policy responsibilities or weakening democratic accountability (see also the Article entitled "The accountability of the ECB" in the November 2002 issue of the ECB's Monthly Bulletin).

The ECB has further specified the terms of the monetary policy framework by announcing a quantitative definition of price stability. With this announcement the ECB has defined a yardstick against which others can expect it to act and against which its performance can be assessed. Furthermore, the ECB has announced how it intends to assess risks to price stability within the framework of its monetary policy strategy. This helps other policy-makers to form expectations about its policy moves in the face of new economic developments. The ECB has illustrated its monetary policy strategy in detail and systematically provides explanations of monetary policy decisions. In this context, it has been made clear how monetary policy will respond to economic developments, including fiscal and structural policies. Obviously, monetary policy actions are always conditional on the prevailing economic climate and on the nature and magnitudes of economic shocks that are expected to affect price stability. Thus, any statement about the monetary policy response in this respect must always be subject to an "all other things being equal" qualification, and there can never be a oneto-one response pattern of monetary policy to fiscal (or structural) policy. However, the ECB's mandate and its strategy provide a binding framework within which policy responses have to be framed and pursued. Monetary policy can react to fiscal policies (and structural economic reform). However, the extent of such reaction is determined by the effects of these measures on risks to price stability, and occurs within the limits that are dictated by the need to preserve price stability over the medium term.

It is also important for all policy-makers to be aware that the ECB has made it clear that it reacts differently to different shocks. In this respect, there is typically no conflict between pursuing its objective and avoiding unnecessary volatility in economic activity. This is most evident in the case of demand shocks. As these shocks tend to move inflation and output in the same direction, a stabilising reaction on the part of the ECB will normally also have the positive side effect of counteracting the movements in output. A more complex task is for monetary policy to determine the appropriate response to forces which move inflation and output in different

directions, such as cost-push shocks. In these circumstances, the ECB will need to focus on its primary objective as there is always a risk of propagation of these price disturbances through the economy to the point where they may become entrenched in wage and price-setting behaviour. However, the ECB has made it clear that it will pursue its objective with the appropriate medium-term orientation. This normally implies that the ECB will have scope for a more measured response to such shocks, which, in turn, will avoid introducing unnecessary volatility in real activity.

4 Conclusions

It is now widely acknowledged that institutional regimes in which monetary policy and fiscal policy are disciplined by clear mandates and transparent medium-term oriented frameworks generally represent a policy approach to the optimal design of macroeconomic policy that is preferable to the ad hoc discretionary co-ordination of dayto-day policy action in the face of shocks. Within such a regime the behaviour of monetary policy should be determined by a transparent monetary policy strategy which allows other policy-makers to foresee and take into account in their actions the likely way in which the central bank will respond to new developments - including monetary policy reactions to structural and fiscal policies. Such a framework provides a stable and reliable environment in which the single monetary policy and the national fiscal policies in the euro area can interact harmoniously, markets can operate efficiently and, as part of overall governance, these policies can foster public confidence and political consensus. By contrast, an active co-ordination of discretionary policy actions in the face of shocks does not seem warranted. Co-ordination of policy actions

is likely to result in reduced welfare due to implementation problems, incentive distortions and lack of transparency.

All the institutional preconditions for a stable currency and for steadily improving the prospects for long-term economic growth are in place in Europe today. The Treaty establishing the European Community an efficient assignment of provides objectives with a clear, sound allocation of responsibilities to individual policy-makers. This assignment makes active policy coordination of monetary and fiscal policy redundant. An independent central bank like the ECB, which is prohibited from monetary financing of government deficits, can thus consistently reassure private agents and markets that governments will not eventually resort to inflation as a way of solving fiscal imbalances. The Treaty's fiscal provisions, including the "no bail-out" clause, limit the risk of unsustainable fiscal positions building up. Through all these provisions, the Treaty sets the right incentives for policy-makers to design and implement the policies for which they are responsible.

Box The European framework for fiscal policies

The European framework for fiscal policies preserves national responsibility for fiscal policy-making but makes this subject to clearly defined rules and procedures. This framework guarantees the sustainability of public finances and allows fiscal policies to play a stabilising role. It is based on the Treaty establishing the European Community and on the Stability and Growth Pact.

The Treaty establishing the European Community

Article 104 of the Treaty states that "*Member States shall avoid excessive government deficits*". Compliance with this requirement is assessed on the basis of two criteria:

- the general government deficit ratio should remain below the 3% of GDP reference value or should have declined substantially and continuously and reached a level that comes close to the reference value;
- the government debt ratio should remain below the 60% of GDP reference value or should be sufficiently diminishing and approaching the reference value at a satisfactory pace.

If a country does not fulfil the requirements under one or both of these criteria, the Council may decide that an excessive deficit exists, on the basis of a procedure involving the European Commission and the Economic and Financial Committee. At the same time, the Council makes a recommendation to the Member State concerned with a view to bringing that situation to an end. Sanctions may be applied should the excessive deficit persist. The Treaty allows the reference value for the deficit ratio to be exceeded only when the excess over the reference value is "exceptional" and temporary, and the ratio remains close to the reference value.

The Stability and Growth Pact

The Stability and Growth Pact¹ requires that countries attain the "medium-term objective for the budgetary position of close to balance or in surplus". As stated by the European Council, "adherence to the objective of sound budgetary positions close to balance or in surplus will allow all Member States to deal with normal cyclical fluctuations" without breaching the 3% of GDP reference value. The Stability and Growth Pact specifies that an excess over the 3% of GDP deficit limit is considered "exceptional" when resulting from an unusual event outside the control of the Member State concerned and which has a major impact on the financial position of the general government, or when resulting from a severe economic slowdown. The Stability and Growth Pact sets out the steps of the excessive deficit procedure and specifies when an early warning should be given. It also reinforces multilateral surveillance by requiring that the euro area countries submit stability programmes, and the other EU countries convergence programmes, on a yearly basis.

Fiscal sustainability and flexibility

Compliance with the Treaty guarantees budgetary discipline, thereby securing the sustainability of public finances. Compliance with the Stability and Growth Pact ensures that the necessary room is created for fiscal policies to let the automatic stabilisers operate throughout the business cycle without breaching the 3% of GDP reference value, thereby contributing to the stabilisation of the economy. In this way, by adhering to the Pact, fiscal policies can make a positive contribution to macroeconomic stability.

The Treaty refers to the government deficit ratio in nominal terms for detecting excessive deficits, and the Stability and Growth Pact also requires the annual budget targets in the stability and convergence programmes

¹ The Stability and Growth Pact consists of Council Regulation (EC) no. 1466/97 and Council Regulation (EC) no. 1467/97, complemented by a European Council Resolution adopted on 17 June 1997.

to be formulated in nominal terms. However, in its monitoring and surveillance of budgetary developments, the Commission and the Council need to assess the targets and outcomes in the light of cyclical conditions.

Recent discussions

The European framework for fiscal policies is currently being put to the test. Several euro area countries have been unwilling to honour their commitments to respect the rules, with the result that these countries have recorded or will record budgetary deficits above or close to the 3% of GDP reference value. Accompanying the fiscal deterioration, weaknesses in the existing surveillance mechanism have also become apparent. These developments have threatened to undermine confidence in the existing fiscal framework. Some initiatives have therefore been taken to renew commitment to consolidation and improve the implementation of the Stability and Growth Pact.

Eurogroup renews commitment to consolidation

In October 2002, following disappointing news on budgetary developments, the Eurogroup renewed its commitment to the Stability and Growth Pact and expressed its hope that progress could be made towards fiscal consolidation in those countries with remaining imbalances. For these countries, the Eurogroup agreed on the need for a clear consolidation strategy requiring the continuous adjustment of the underlying (i.e. cyclically adjusted) balance by at least 0.5% of GDP per year. Ministers committed themselves to proposing realistic adjustment paths in the next updates of their stability programmes, based on realistic assumptions on the economic outlook and the measures specified. Furthermore, the finance ministers underlined that the procedures for preventing and correcting excessive deficits must be implemented in a strict and timely manner.

Commission Communication emphasises implementation

In November 2002 the Commission released a communication in which it re-affirmed that the Stability and Growth Pact remains the appropriate framework for the conduct of budgetary policies. The Communication also advanced a number of proposals to improve the implementation of the Stability and Growth Pact, which could mostly be realised within the existing institutional provisions. These proposals emphasise re-prioritising consolidation (assessed in cyclically adjustment terms), preventing pro-cyclical policies in upturns, and putting more emphasis on the sustainability and quality of public finances. To attain these objectives, political commitment is essential, but the analysis of budgetary developments also needs to be based on improved budgetary statistics and strengthened surveillance mechanisms.

Exchange rate regimes for emerging market economies

The varied and sometimes dramatic experiences of emerging market economies (EMEs) with exchange rate regimes during the last decade has created much debate about the choice of exchange rate regime for this type of economy. This debate has been dominated by criticism of intermediate regimes such as conventional pegging, and support for floating rate regimes or hard pegs such as a currency board. This article considers issues relevant to this debate. It draws attention to the fact that country-specific characteristics determine the most suitable regime for a country. Consequently, no single exchange rate regime will be the most appropriate for all countries, nor for any country all of the time.

An important insight is that the exchange rate regime needs to be compatible with the wider policy framework, and the article highlights the interactive relationship between an exchange rate regime and the wider policy framework, particularly the disciplining role of the regime. In addition, the policy framework needs to be consistent with economic fundamentals. Thus, changes in fundamentals should prompt a review of the policy framework, including the exchange rate regime. From this perspective, all regimes are subject to change should circumstances dictate.

Issues of relevance are discussed for each broad category of regime: floating, hard peg and intermediate. Although floating rate regimes and hard pegs commonly attract more approval than intermediate regimes, the article takes a more nuanced view. Furthermore, it highlights practical issues to be taken into account when considering regimes actually pursued by emerging market economies, and trends in regimes. Although the popularity of intermediate regimes has slipped over the past decade, EME experiences with floats and hard pegs remains relatively recent, which cautions against drawing premature conclusions from their evaluation.

I Introduction

Since the crises in Latin America and Asia in the second half of the 1990s, the issue of exchange rate regimes in emerging market economies has returned to prominence. In contrast with the focus on fixed versus flexible regimes in the 1960s and 1970s, the current debate distinguishes between "corner" regimes (in reference to floating rate and hard peg regimes at either end of the continuum of regimes) and "intermediate" or "soft peg" regimes (defined by default as the remainder). See Box I for details. Using this distinction, emerging market economies are frequently advised to adopt a corner regime in order to resolve the tensions resulting from these economies integrating into global financial markets. Underpinning this advice is the observation that the crises in emerging markets in the second half of the 1990s mostly affected countries with intermediate regimes. More recently, because the stricter requirements imposed by hard peg regimes are considered by many observers as acceptable only for a limited number of countries, floating rate regimes have been advocated over hard peg regimes, giving rise to double bias against intermediate regimes.

Exchange rate regimes matter because they are an important determinant of economic and financial performance through their contribution to the attainment of macroeconomic stability and the preservation of orderly international trade and financial relations. An appropriate regime fosters overall economic stability, as well as sound and sustainable development, and minimises the effects of shocks on the domestic and global economy, for example, by minimising risks to the domestic and global financial system.

This article presents the selection criteria for an exchange rate regime and discusses the role of the regime in the wider policy framework. After considering issues pertinent to each category of regime, it briefly discusses current trends in exchange rate regimes in

Box I Classification of corner and intermediate exchange rate regimes

Classifying regimes is difficult given the wide diversity of regime characteristics. Since grouping regimes can lead to misconceptions about the common characteristics of each group, it is important not to ascribe regime characteristics to the different categories without careful analysis. For ease of discussion and consistency with the classification used in the ongoing debate, the following grouping of regimes is used here.

- Corner regimes comprise:
 - *Hard peg regimes,* consisting of a) currency board arrangements, under which the monetary authorities pledge to sell foreign currency for domestic currency on demand at a fixed rate, and back the domestic currency with foreign currency for this purpose, and b) the unilateral official adoption of a foreign currency e.g. dollarisation or euroisation. Note that, for the purposes of this article, the term "dollarisation" will be used as a catch-all word for the latter type of regime.
 - *Floating rate regimes,* consisting of independent floats and managed floats. Under both types of regime, intervention may occur, but there is no explicit and officially announced commitment. Under independent floats, any intervention is solely to smooth market movements and provide for more orderly market conditions. Under managed floats, intervention may be used to influence the direction of change of the exchange rate, but without a specific exchange rate in mind.
- *Intermediate (or soft peg) regimes* are those under which the authorities aim to achieve a pre-announced or undeclared exchange rate target. This group comprises pegs to another currency or basket of currencies, crawling pegs, and bands. The literature implicitly discusses "single country" or "unilateral" intermediate regimes, a practice which is followed here. The other variant, multilateral regimes, are beyond the scope of this article.

Monetary unions are excluded from the groupings on the grounds that they envisage the adoption of a single currency, and as such, they are not an exchange rate regime.

emerging market economies, along with the relevant caveats, before concluding.

Note that the usage and understanding of "emerging market economies" varies markedly across international fora. The meaning attached to the term in this article includes economies going through transition in a process of catching up with advanced economies and liberalising their capital account.

2 Regime selection criteria

The most appropriate exchange rate regime for any country depends on, and will vary through time according to changes in, the characteristics of that country. The factors considered relevant to the choice of regime have long been deliberated in the literature on the subject, and have changed over time. One strand of this literature, built around the concept of "optimal currency areas", considered important characteristics such as capital mobility, the inflation rate differential with major trading partners, the size of the economy and its degree of openness, the geographic and product diversification of trade, labour mobility, the degree of synchronisation of business cycles, and the stage of economic development. Empirical testing of the relationship between these criteria and exchange rate variability, which in turn indicates suitability to a particular type of regime, has produced mixed results, with the most significance being attached to the inflation rate differential.

Another strand of the literature considered that the nature of shocks (source, frequency and severity) was the major variable in regime choice. The most appropriate regime was considered to be that which best stabilised macroeconomic performance, i.e. minimising volatility in output or containing inflation in the face of such shocks. The view emerged that greater fixity was appropriate where domestic shocks were largely monetary in nature, and greater flexibility more suitable if shocks originated from real factors or externally.

Recently, the literature has focused on the implications for regime choice of the expansion in global capital flows and the increased integration of global financial markets with regard to causing and transmitting shocks. A common, though not universal conclusion is that floating rate regimes minimise the economic costs of such shocks for the domestic economy and the global financial system. Support for this conclusion is derived from the "inconsistent quartet", which is the impossibility of having simultaneously openness to trade in goods and services, unrestricted capital flows, autonomy of monetary policy and a fixed exchange rate (see Box 2 for a fuller discussion). The series of crises in the second half of the 1990s affecting emerging market economies pursuing intermediate regimes is held up as evidence of the desirability of corner regimes, in particular floating rate regimes.

Along the way, some criteria have been reemphasised and other criteria added. The trend towards increasing economic openness has heightened the importance of the exchange rate in the price formation mechanism. It follows that, for small, open economies, the variability of the exchange

Box 2

The inconsistent quartet and the two corner solution

The inconsistent quartet is a key concept linking capital flows to exchange rate regimes. It states that the combination of unrestricted capital flows, openness to trade, a fixed exchange rate and monetary policy autonomy are incompatible. For example, given freely mobile capital and trade openness, the operation of a fixed exchange rate requires that monetary policy be employed to maintain the exchange rate, rather than in the pursuit of a domestic monetary policy objective (including ensuring price stability); if there is a preference for monetary policy autonomy, the exchange rate must be left to float.

This concept is commonly used to support the view that intermediate regimes, in contrast to corner regimes, are not compatible with freely mobile capital. This view may be illustrated by reference to the event of sudden and unexpected capital outflows which exert downward pressure on the exchange rate. Under an intermediate regime, if markets perceive that the authorities are not able to defend the exchange rate (through an interest rate rise or drawings on international reserves), they are likely to launch a speculative attack on the regime and precipitate a forced and potentially costly exit. By contrast, the view prevailed until the recent crisis in Argentina that hard pegs were beyond market doubt: in the case of a currency board, for example, the domestic money supply is backed with foreign reserves, while under a floating rate regime the exchange rate is free to adjust to market pressure.

The essence of this view, which is not unchallenged, is that capital flows to EMEs have become so large and potentially disruptive that the best strategy to limit instability in the domestic economy is to either attempt to suppress the potential for regime disruption by imposing a hard peg regime, or to accommodate the flows with a floating rate regime and allow fluctuations in the exchange rate to relieve pressures.

rate is of greater concern than for large, more closed economies. Of the additional criteria identified as relevant to regime choice, the most pertinent include the degree of regional economic (cyclical and structural convergence) and institutional integration, the depth of financial and foreign exchange markets and the level of reserves. Where present, regional co-operation may significantly alter the cost-benefit considerations in regime choice, and affect the modalities of regime shifts. Some European Union (EU) accession countries provide a clear example of this. In order to cope with the demands of transition from a planned to a market economy, and prepare for EU accession and exchange rate mechanism II (ERM II) membership, some accession countries are moving through various types of regimes with the ultimate shift being the adoption of the single currency. Regional integration and cooperation is an issue which also confronts other regions such as Asia and Latin America, where the desire to stabilise intra-regional exchange rates to foster trade and capital flows may necessitate reducing volatility and uncertainty in exchange rate movements between integrating countries. Such an objective is more compatible with some form of fixed rate regime than a freely floating regime.

The array of considerations behind regime choice shows that, since economies differ widely and evolve through time, no single exchange rate regime will be suitable for all countries, nor for any country all of the time.

3 Interaction between the exchange rate regime and the overall policy framework

The exchange rate regime is one element of the overall policy framework and, as such, should not be operated in isolation. The policy framework, in order to achieve macroeconomic and financial stability, needs to be consistent. Hence, the exchange rate regime must be compatible with the other elements of the framework, such as monetary, fiscal and structural policies (i.e. policies related to price formation in labour and product markets), as well as the degree of openness of the capital account. In addition, it should also be compatible with the broader institutional background of the country.

The evolution of the policy framework is an interactive process: while the exchange rate regime must be tailored to suit the other policies, it will in turn influence them. This two-way, dynamic interaction is significant on two counts. First, it dispels the notion that both hard or floating regimes do not require further attention once adopted, which leads to the conclusion that no exchange rate regime *per* se constitutes an intrinsic guarantee for macroeconomic and financial

stability. Second, it recognises that the exchange rate regime may have a disciplining effect on other policies. The degree of disciplining effect is determined by both the choice of an external or internal anchor for monetary policy and the degree of control over capital flows. Regarding the use of an external anchor, under hard peg regimes and, to a lesser extent, under intermediate regimes, the country seeks to import policy credibility at the cost of restricting its degree of monetary policy freedom. By contrast, under floating rate arrangements the commitment to the internal anchor forms the basis of policy discipline and directly determines the credibility of the regime. This commitment and credibility rely, to a larger extent than in a framework based on an external anchor, on specific and potentially demanding domestic institutional and operational requirements. Such requirements apply in the first place to monetary policy and its transmission mechanisms (e.g. central bank independence, accountability and transparency, and domestic capital market deepening), but also to the other components of the domestic policy framework (e.g. fiscal and financial policies). The choice between an external and an internal anchor will depend in the main on the authorities' credibility, policy preferences and capabilities, and the stability of the wider domestic and external environment, including in particular regional integration and co-operation.

Regarding restrictions on capital flows, it could be argued that by shielding policymakers from the scrutiny of financial markets, capital controls accommodate the pursuit of inappropriate policies, particularly in the fiscal area. In this sense, capital controls soften the disciplining effect of regimes. This calls into question those regimes which owe their sustainability exclusively to the maintenance of capital controls, and raises the issue of how best to remove capital controls. In light of this, countries contemplating capital account liberalisation measures should also review their exchange rate policy. For instance, countries operating intermediate regimes have typically decided to widen the fluctuation band of their peg in the process of liberalising their capital account.

Given the need to preserve consistency, the exchange rate regime must adapt to changes

in policies, the economic environment, and advances in, or desires for, regional integration. This implies that all regimes can be subject to a shift. It is the task of the authorities to effect a regime shift at a minimum cost in terms of output, inflation, and financial stability. This can best be achieved by the development and timely implementation of an exit strategy. If handled adeptly, and provided there are no intervening shocks to damage credibility, the pre-announcement of the shift can help smooth the transition, promote the adjustment of expectations and reassure markets of a timely transition. In the event of a market-forced and disorderly regime shift, the related budgetary (i.e. bank and corporate restructuring) and economic costs (i.e. output loss) are potentially large. What is crucial, however, is that these costs be contained through the adoption of determined policy adjustments designed to confront long-standing macroeconomic or structural problems. Consequently, when evaluating the fallout from a currency crisis, the magnitude of the short-term costs of a disorderly regime shift must be weighed against any long-term benefits from overdue policy reforms that the fallout helped induce.

4 Regime-specific issues

The consideration of factors influencing the choice of regime and the interactive relationship between the chosen regime and the wider policy and institutional framework prompts discussion of the regimes themselves. In this section, each of the regime types is examined, focusing on advantages, major costs and factors pertinent to stability.

4.1 Hard peg regimes

In general, fixed exchange rate regimes are deemed to have two major advantages. First, they reduce transaction costs and exchange rate risk, limiting real exchange rate volatility, which in turn encourages trade and investment. Second, they can provide a credible external anchor for monetary policy and impart a disciplining effect on other macroeconomic and structural policies. For this reason, they are commonly employed where the capability of a country to conduct an alternative exchange rate or domestically anchored monetary policy is impaired by institutional or operational constraints.

Hard pegs further enhance credibility, even if the types of hard peg regime differ in certain important aspects (see Box 3). Currency board arrangements (CBAs) and dollarisation are underpinned by formal legal and institutional foundations that signal a strong commitment to the regime. A sudden devaluation, re-adjustment of the parity, or total abandonment of the regime at short

Box 3 Distinguishing dollarisation from currency board regimes

Despite their similarities and common classification as hard pegs, formal dollarisation (which here, for the sake of brevity, includes euroisation) differs from an orthodox currency board in a number of important respects:

- Dollarisation is more difficult, operationally and logistically, to reverse, which increases the perception of permanency relative to currency boards, arguably lending dollarisation greater credibility.
- Unlike currency board regimes, dollarisation does not permit a mismatch in the currency denomination of assets and liabilities in the public, banking, corporate or household sector, thereby eliminating the risk of a related run on banks. On this count, dollarisation does not require quite the same degree of strength of the banking sector that is necessary under a currency board.
- Dollarisation requires the political willingness to abandon the domestic currency, and concomitantly, the seigniorage revenues, which are not insignificant.

At present, there are fewer countries willing to dollarise (e.g. Panama, El Salvador and Ecuador) than there are pursuing currency boards (e.g. Hong Kong, Estonia, Lithuania and Bulgaria). This may be traced in part to the unwillingness to relinquish domestic monetary policy instruments on a permanent basis.

notice is considered highly unlikely, except in extreme circumstances. For example, orthodox currency boards are enshrined in law; under normal circumstances, any alteration in the exchange rate parity – let alone an abandonment of the arrangement – needs to be approved by a sizeable parliamentary majority, often in the form of a constitutional amendment. This is also largely true of dollarisation although, of course, in this case there is no exchange rate parity to alter, and there exists the added complication of the logistical and operational difficulties involved in introducing a new currency.

These legal foundations, coupled with the inherent features of the arrangements, are also a source of stability. Orthodox CBAs must typically hold in reserve currency 100% of the monetary base in circulation, since the monetary authority is obliged to exchange unlimited amounts of domestic currency for reserve currency (or vice versa) on demand. In addition, under CBAs, central banks are banned from lending to the government, including the purchase of government bonds, with the result that debt monetisation is impossible. With dollarisation, monetary emission is outside the control of the domestic authorities. Therefore, both forms of hard pegs take the control of monetary policy out of the hands of domestic authorities. It should nevertheless be added that the authorities, in an attempt to gain policy manoeuvrability, may issue debt to the domestic financial sector, as was the case in Argentina.

The additional credibility provided by hard pegs translates into a number of beneficial developments for the adopting countries. First, both inflation and interest rates should converge to those prevailing in the anchor country. Note, however, that the interest rate differential will not necessarily be eliminated owing to the persistence of country risk (including default risk). This was the case in Argentina, in particular on account of its unsupportive fiscal policy. On account of the inflation and interest rate convergence, hard pegs typically provide fast and successful exchange rate-based stabilisation. In addition, both of the hard arrangements are, in principle, more robust than conventional unilateral pegs: the mechanics of the CBA are such that a successful speculative attack is rendered more difficult, although not impossible. For example, the currency board for the Hong Kong dollar suffered a speculative attack in 1997, which the Hong Kong authorities successfully fended off with the unorthodox measure of purchasing equities to support the stock market. Interest rates act as automatic stabilisers responding to monetary base changes, such that the shock of an attack falls on the banking system. Under dollarisation, the adopting country's fate is inevitably tied to the fortunes of the anchor currency.

Since hard pegs involve a commitment to an unadjustable exchange rate, the authorities must give up any degree of monetary policy autonomy and pursue appropriate fiscal, structural and financial policies. CBAs, for example, require fiscal discipline, price flexibility and the availability of an adequate level of international reserves to operate effectively. In this respect, four comments are in order. First, since the exchange rate cannot be used, to any degree, as a shock absorber in the event of an asymmetric shock, wages and prices must bear the burden of adjustment. This is likely to be a painful process because prices are "sticky" in the short run, even in economies that are considered flexible. Second, given that, in principle, the central bank is not in a position to play the role of lender of last resort, the authorities cannot provide support to an individual institution or the banking sector in a systemic crisis.¹ As a result, a precondition for the adoption of a currency board is the existence of a sound domestic financial sector. This implies, for a number of emerging market economies, allowing a significant degree of participation of foreign financial institutions in their domestic market. Third, a relevant consideration for a number of emerging market countries is the loss of seigniorage arising from dollarisation, and to a lesser extent, under the adoption of a currency board. For instance, the Chilean authorities have estimated that, were they to dollarise their economy, there would be an initial loss of seigniorage of 2.6% of GDP, and a further 0.19% per annum thereafter. Fourth, political resistance to renouncing national sovereignty over monetary policy is

not uncommon. In view of the constraints associated with currency boards and dollarisation, it is not surprising that the number of countries which have adopted these forms of hard pegs remains limited.

4.2 Floating rate regimes

In a world of liberalised capital flows it may be in some countries' best interest to abandon the fixing of the exchange rate. This is because floating exchange rate regimes permit the pursuit of an autonomous monetary policy to absorb external shocks (see the "inconsistent quartet" argument, Box 2). In this context, a floating rate regime possesses in principle four main advantages. First, an autonomous monetary policy is consistent with the prioritisation of domestic objectives, such as inflation. Second, since a floating rate regime, unlike a peg, carries no implicit exchange rate guarantee, the exchange rate risk must be factored into decisions, thereby reducing the scope for moral hazard. Third, exchange rate flexibility should allow for smoother and more gradual adjustment to external shocks than under intermediate regimes and hard pegs. Fourth, in countries which have liberalised their capital account, floating exchange rates are better able to cope with abrupt capital flow reversals. For these reasons, floating rate regimes may be considered relatively less crisis-prone and may exhibit less of a propensity to misalign than pegs.

These positive arguments need to be qualified, as there are drawbacks associated with floating rate regimes. First, it should be noted that the autonomy of monetary policy under a floating rate regime may be either illusory or undesirable in certain cases. Even with monetary policy autonomy, a country that is subject to spillover effects from another economy needs to take these effects into account when setting monetary policy.

I This final aspect can be partially offset, however, by the presence in the country of foreign banks – which may potentially act as lender of last resort for their respective branches – or by building up private contingent credit lines.

Consequently, it may not be in a country's interests to pursue an independent monetary policy. Similarly, complete monetary policy autonomy is not necessarily optimal for some economies: optimal currency area theory suggests that small, open economies may be better off being part of a larger monetary area rather than having their own independent currency and exchange rate.

Second, where currency mismatches are not removed (owing in part to the difficulty of many emerging market economies in issuing debt in domestic currency, a phenomenon known as "original sin"), foreign currency indebtedness is vulnerable to downward pressure in foreign exchange markets and the flexibility of the exchange rate is of no advantage. This consideration underpins the "fear of floating" argument, as discussed below. Third, under a floating rate regime, an internal nominal anchor for monetary policy is needed.

In the absence of an external anchor, an internal anchor must be adopted. A monetary target is problematical for emerging market economies on account of the instability of demand and under-developed money domestic capital markets, and is rarely attempted. Inflation targeting is currently regarded as a more viable option and has been implemented in a number of emerging market economies. Such a framework implies specific domestic institutional and operational requirements in order to be fully fledged. While many of these requirements may gradually be met as the inflation targeting framework is implemented, central bank independence and transparency are prerequisites. Significant reliance of inflation targeting on macroeconomic projections makes its implementation more difficult in emerging market and transition economies where macroeconomic structures and relationships - in particular the monetary policy transmission mechanisms - are more difficult to estimate and less stable than in mature economies. Another requirement is the existence of a well developed domestic financial market, insofar as financial variables

are used to gauge market expectations. If this is not the case when commencing inflation targeting, however, deep and liquid capital markets may gradually develop over time. Recent favourable experiences with inflation targeting in some countries, for example Mexico, Chile and Israel, may be attributable not only to compatibility with and positive developments in other components of the policy framework (specifically, fiscal policy and the domestic banking system), but also to the significant decline in exchange rate pass-through, i.e. the weakening of the impact of import price rises on inflation. It has been argued that the limited exchange rate passthrough is in fact a reflection of the adoption of an inflation targeting framework and the associated public confidence that price stability will be maintained. However, these experiences may be too recent to form a definitive view about the success of the inflation targeting framework, which means that the ability of inflation targeting to reduce and stabilise inflation at a low level should not be overestimated at this early stage.

In practice, the use of inflation targeting as an internal anchor by an emerging market economy is often far from being fully fledged insofar as some elements of the inflation targeting framework are lacking. Therefore inflation targeting tends to be complemented by some degree of exchange rate targeting. Israel and Chile have illustrated the dual pursuit of an internal and external anchor over several years with a view to effecting a gradual shift from the external to an internal anchor, and boosting domestic credibility. Recent developments in Brazil and Mexico - where the exchange rate showed a tendency for, respectively, excessive depreciation/appreciation over certain periods of time - also confirm that the authorities cannot completely ignore exchange rate developments under an inflation targeting framework. The fact that the exchange rate is less "well behaved" in emerging market economies than in mature economies adds to the size and variability of the interest rate risk premium, complicating the conduct of monetary policy.

4.3 Intermediate regimes

Intermediate regimes (which here refer exclusively to unilateral regimes, thus excluding multilateral regimes) have been widely employed by emerging market economies seeking economic stabilisation. Their experiences suggest that careful management of the regime is necessary to minimise vulnerability to crises. Below are some important considerations pertinent to intermediate regimes, in particular those with a pre-announced exchange rate target.

First, the credibility of an intermediate regime is important for economic performance. The pursuit of a peg, particularly an adjustable peg, may give rise to doubts about the commitment to maintaining the exchange rate, and expectations of devaluation or revaluation may arise.² Inflation expectations will be altered by the fact that the currency may be subject to depreciation beyond the bounds of the regime, prompting economic agents to demand a higher risk premium on domestic currency-denominated assets. In turn, upward pressure is exerted on nominal interest rates. The result can be volatility in output and lower growth. However, the need to ensure credibility has, in some countries, promoted the exercise of greater policy discipline, and where credibility is secured, an intermediate regime can play a key role in macroeconomic stabilisation.

Second, under conventional fixed-rate intermediate regimes, as is the case under hard pegs, there is no monetary policy autonomy to manage the economic cycle, smooth fluctuations or respond to shocks, although there is some room for manoeuvre under other types of intermediate regime. This argument rests on the "inconsistent quartet" of free trade, a fixed exchange rate, unrestricted capital flows and the autonomy of monetary policy. Given the first three conditions, monetary policy is subordinated to maintaining the exchange rate. In effect, this means adopting the monetary policy of the anchor currency economy, which can cause economic strain if the two countries'

business cycles are not synchronised. However, since synchronisation is increased by economic integration, and integration is a major determinant in the choice of the anchor currency, the problem of business cycle asymmetry is unlikely to occur unless the two economies are structurally dissimilar.

It is also argued that in countries pursuing a disinflation policy, the positive interest rate differential maintained to reduce inflation induces capital inflows, which need to be sterilised in the foreign exchange market. As experience has shown, this can be costly. In Israel, which is a key example along with Hungary, the cost of sterilisation has been estimated at 1% of GDP per annum.

Third, rising capital flows accompanying account liberalisation render capital intermediate regimes more vulnerable to crises. The behaviour of domestic agents mainly in the financial and corporate sectors - and international investors may be influenced by the belief that there will be no depreciation or devaluation of the currency. To the extent that economic agents feel protected by implicit guarantees, and investment positions do not fully reflect potential risk, this may foster moral hazard which may ultimately precipitate a crisis if the quality of investment portfolios deteriorate, and/or lead to the build-up of unhedged positions, which would exacerbate the size of financial losses in the event of a crisis.

In addition, countries which adopt an exchange rate peg are exposed to self-fulfilling attacks. Given that the authorities publicly announce their commitment to an exchange

Two arguments are ventured to explain why adjustable pegs attract weak credibility. First, there are expectations that if the authorities allow scope for adjustments of the exchange rate, they will at some point carry out adjustments. Second, it would appear that certain types of adjustable pegs lack clarity and as a result are less well understood, with economic agents interpreting commitment to a moving or broad target (e.g. a crawling peg or a band) as weaker than the commitment to a single anchor currency without adjustments. Alternatively, agents may be wary that moving targets afford the authorities more opportunity to alter the size of the adjustment. These concerns reveal the spread of different types of adjustable pegs along the fixedflexible continuum.

rate level, financial markets can "test" the strength and limitations of that commitment. In particular, the balance of costs and benefits of defending the peg changes in the presence of multiple equilibria which may, if the situation persists, contribute to deteriorating initially sound economic fundamentals. This may lead markets to initiate an attack. In deflecting speculative attacks, credibility plays a crucial role.

To conclude against intermediate regimes on the grounds of their vulnerability, as is often done, is to overlook the potential disciplining effect that these regimes can have on the adoption of appropriate policies at the onset of, or even in the wake of a crisis precisely because of their vulnerability. An intermediate regime that is subject to a speculative attack alerts policy-makers to the need to review policy compatibility with underlying fundamentals. Should there be insufficient political willingness to address policy weaknesses, the disciplining effect of market forces will increase the pressure for reform on policy-makers.

Fourth, in the event of a crisis, costs may be high if not contained or offset by appropriate policy action. Where a crisis in an intermediate regime occurs, costs are incurred whether the exchange rate is defended or abandoned. Although the successful defence of a peg contributes to enhancing the credibility of the authorities' commitment to pursue policies consistent with the maintenance of the chosen nominal anchor, the rise in interest rates will place a heavy burden on the banking, corporate and household sectors, reducing investment and thus dampening growth. If the peg is abandoned and the exchange rate allowed to fall, foreign exchange reserves will be preserved, but debts denominated in foreign currencies will rise with negative implications for the balance sheets of the public, corporate and household sectors. These costs are unlikely to have been hedged given the operation of the peg. Bankruptcies tend to rise and bad and non-performing loans mount, leading banks to engage in credit rationing to restore profitability with repercussions for investment and growth. It should be added that the abandonment of the peg and the subsequent fall-out are not unique to intermediate regimes, but are also possible under hard peg currency boards, as was the case in Argentina.

Notwithstanding the potential for large losses, it may be argued that the cost of a crisis should not be the only yardstick on which to base a decision on regime choice. Countries' experiences of the overall impact of a crisis in an intermediate regime vary widely, depending on the exchange rate passthrough and the structure of public and private assets and liabilities. Moreover, the shock induced by a disorderly exit may galvanise political will which was absent before the crisis and foster the acceptance across a wide spectrum of economic agents of stringent policy measures aimed at correcting the policies which were at the origin of the crisis. Consequently, the shortterm financial and economic costs of a currency crisis under an intermediate regime need to be weighed against possible longterm beneficial effects arising from more appropriate and more decisive policy action resulting from the crisis.

5 Current developments in exchange rate regimes in emerging market economies

When discussing exchange rate regimes in operation, a distinction needs to be made between *de jure* regimes (regimes declared to the IMF) and *de facto* regimes. Recent literature on the subject provides some

indication of the extent of the divergence between the two. Depending on the method used to infer *de facto* regimes, it appears that around half, if not more, of all declared regimes are not actually pursued. This

discrepancy can be explained, to a large extent, by emerging market economies' "fear of floating" and, to a lesser extent, "fear of fixing". Fear of floating is the fear that a falling exchange rate will raise inflation and/or cause a large rise in debt denominated in, or indexed to a foreign currency. Fear of fixing is both the fear of becoming the target of a speculative attack if a peg to a given exchange rate is declared, and the fear that, for relatively closed economies operating a fixed regime, a sudden stop in capital flows will necessitate a very large real depreciation to restore a viable external position, which implies a degree of price and wage flexibility that is both difficult to achieve and politically unpalatable.

A second difficulty in analysing existing regimes is that the corner/intermediate dichotomy is far from clear-cut. At the flexible end, the practical distinction between managed and independent floating rests on the motive for intervention: in the former case it will be to influence the direction of change in the exchange rate; in the latter it will be to reduce volatility. Yet the motive is non-observable, and can be identified, if at all, only after intervention. In the literature, there are differences in views across authors on the inclusion of managed floats in the flexible corner, underlining the difficulties in appropriately delineating exchange rate regimes. At the hard peg end, it can be argued that hardness can be defined in terms of the costs (economic, political and reputational) of the exit, rather than in terms of the degree of rigidity of the central rate. Given that the costs of exit will be higher where the exit entails a breach of a commitment, enshrining the commitment into national law can be seen to harden the regime.

In terms of the categories described in Box I, recent empirical studies suggest that intermediate regimes are currently the second most popular type of regime, behind floating rate regimes, but well ahead of hard peg regimes. This observation undermines what the literature terms the "hollowing out" of the mid-range of the spectrum of exchange rate regimes, i.e. the claim that intermediate regimes are disappearing.

In terms of trends during the 1990s, recent literature suggests that regime shifts were not predominantly outwards, towards corner regimes. First it is noted that although most regime shifts originated in intermediate regimes, this should come as no surprise given that in 1990 almost four-fifths of emerging market economies pursued intermediate regimes. Second, of the emerging markets which exited intermediate regimes, more than half adopted another form of intermediate regime rather than a corner regime. Shifts to a floating rate regime could not, in many instances, be described as a "choice" but are rather prompted by a lack of credible alternatives. Moreover, some countries, such as Malaysia and Ecuador, whose currencies were forced to float reintroduced an intermediate or hard peg regime upon stabilisation of the exchange rate after a period of free-fall. Consequently, claims of a growing preference for corner regimes are somewhat exaggerated.

Importantly, emerging market economies' experiences with floating rate regimes and hard pegs is limited. Only a small number of emerging market economies have pursued hard pegs for any significant period of time (e.g. Panama, Hong Kong and Estonia), while the experience in Argentina showed that the conditions needed to sustain a currency board are demanding. At the opposite end, experiences with floats are also too recent to draw firm conclusions (examples of this include Brazil and Poland). As noted above, there are initial signs that floating plus inflation targeting offers a stabilising influence in emerging markets. The fact that relatively few emerging market economies have thus far adopted this type of regime may be a reflection of the relatively demanding institutional and operational requirements needed to operate this policy framework in a credible manner (central bank independence, transparency, and an effective monetary policy transmission mechanism in the country concerned).

6 Conclusions

The experiences of emerging market economies with various regimes in the 1990s led to popular support for corner solutions and for free floats in particular, but closer examination reveals a need for some rebalancing of the arguments. Since economic and financial conditions vary widely across countries, there is no single ideal exchange rate regime for all countries, nor for any country all of the time. Countries should be aware of the full range of regimes available, and be at liberty to choose among them in accordance with their own particular situation (e.g. degree of monetary policy autonomy desirable and feasible, degree of capital account liberalisation and financial stability, pattern of trade and financial linkages, participation in regional cooperation arrangements).

An exchange rate regime is not an end in itself but a means to an end, namely macroeconomic stability and sound and sustainable growth. The exchange rate regime may play a disciplining role in terms of contributing to the adoption of stability-oriented macroeconomic policies and appropriate structural reforms which otherwise may not be accepted. Intermediate regimes are particularly sensitive barometers of policy inconsistency with regard to economic fundamentals on account of their greater susceptibility to market pressure compared with hard pegs or floating rate regimes. This cautions against using vulnerability or orderliness of regime exit as key criteria to assess exchange rate regimes.

Considering each of the classes of regimes in turn, currency boards are a viable option in only a limited number of cases on account of their demanding requirements, notwithstanding the usefulness of currency boards as swift stabilisation devices for economies suffering from very high inflation and with a history of failed stabilisation attempts. Flexible exchange rates have become more attractive to a wide range of emerging market economies in the current environment of increased capital mobility, given that intermediate regimes have become more demanding to operate. Intermediate regimes nevertheless offer a potentially useful policy option and have distinct merits under appropriate, albeit strict, conditions. The view that there has been a "hollowing out" of regimes towards corner regimes for EMEs does not find rigorous empirical support. Although the popularity of intermediate regimes in EMEs has declined over the decade, they are still widely pursued. In the main, corner regimes are in a "trial phase" for many emerging market economies, and developments with floating plus inflation targeting in particular will be worth monitoring.

Euro area statistics



	Euro area overview table	5*
I	Monetary policy statistics	
-	I.I Consolidated financial statement of the Eurosystem	6*
	I.2 Key ECB interest rates	8*
	 I.3 Eurosystem monetary policy operations allotted through tenders 	8*
	I.4 Minimum reserve statistics	10*
	I.5 Banking system's liquidity position	*
2	Monetary developments and investment funds 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	4*
	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*
	2.9 Aggregated balance sheet of euro area investment funds	30*
	2.10 Aggregated balance sheet of euro area investment funds broken down	
	by investment policy	31*
	2.11 Aggregated balance sheet of euro area investment funds broken down	
	by type of investor	33*
3	Financial markets and interest rates in the euro area	
	3.1 Money market interest rates	34*
	3.2 Government bond yields	35*
	3.3 Stock market indices	36*
	3.4 Retail bank interest rates	37*
	3.5 Securities issues other than shares by original maturity, residency of the issuer	,
	and currency denomination	38*
	3.6 Euro-denominated securities other than shares by original maturity, residency	
	and sector of the issuer	40*
	3.7 Annual growth rates of securities other than shares issued by euro area reside	ents 46*
	3.8 Quoted shares issued by euro area residents	48*
4	HICP and other prices in the euro area	
	4.1 Harmonised Index of Consumer Prices	50*
	4.2 Selected other price indicators	51*
5	Real economy indicators in the euro area	
	5.1 National accounts	52*
	5.2 Selected other real economy indicators	54*
	5.3 European Commission Business and Consumer Surveys	55*
	5.4 Labour market indicators	56*
6	Saving, investment and financing in the euro area	
	6.1 Financial investment and financing of non-financial sectors	57*
	6.2 Saving, investment and financing	61*

6.2 Saving, investment and financing

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

7	General government fiscal position in the euro area and in the euro area countries											
	7.I	Revenue, expenditure and deficit / surplus	62*									
	7.2	Debt	63*									
	7.3	Change in debt	64 *									
8	Bala	nce of payments and international investment position of the euro area (including reserves)										
	8.I	Summary balance of payments	65 *									
	8.2	Balance of payments: current and capital accounts	66 *									
	8.3	Balance of payments: income account	67*									
	8.4	Balance of payments: direct investment account	68*									
	8.5	Balance of payments: portfolio investment account	69 *									
	8.6	Balance of payments: other investment account and reserve assets	70*									
	8.7	International investment position and reserve assets outstanding	72*									
9	Exte	ernal trade in goods of the euro area	7 4 *									
10	Excl	nange rates	76*									
11	Ecor	nomic and financial developments in the other EU Member States	78 *									
12	Ecor	nomic and financial developments outside the EU										
	12.1	Economic and financial developments	79 *									
	12.2	Saving, investment and financing	80*									
Tec	nnical	notes	81*									
Gen	eral r	notes	85*									

Enlargement of the euro area on I 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"	109
(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	Securities issued by non-	3-month interest rate	10-year government
	1	2	3	3-month moving average (centred) 4	residents excluding MFIs and general government ¹⁾ 5	financial and non-monetary financial corporations ¹⁾ 6	(EURIBOR, % per annum, period averages) 7	bond yield (% per annum, period averages) 8
2001 2002	3.6 7.3	4.2 6.5	5.3 7.2	-	7.8 5.3	27.3	4.26 3.32	5.03 4.92
2002 Q1 Q2 Q3 Q4	6.2 6.6 7.6 8.8	6.5 6.5 6.5 6.7	7.5 7.3 7.0 7.0		5.7 5.6 5.3 4.8	29.2 24.3 18.1	3.36 3.45 3.36 3.11	5.13 5.26 4.77 4.54
2002 Aug. Sep. Oct. Nov. Dec.	7.6 8.2 8.3 9.2 9.8	6.4 6.6 6.8 6.9 6.5	7.0 7.2 6.9 7.1 6.8	7.1 7.0 7.1 6.9	5.4 5.1 5.0 4.5 4.6	16.3 17.7 16.5 14.9	3.35 3.31 3.26 3.12 2.94	4.73 4.52 4.62 4.59 4.41
2003 Jan.							2.83	4.27

2. Price and real economy developments

	HICP 9	Industrial producer prices 10	Hourly labour costs (whole economy) 11	Real GDP	Industrial production (excluding construction) 13	Capacity utilisation in manufacturing (percentages) 14	Employment (whole economy) 15	Unemployment (% of labour force) 16
2001 2002	2.5 2.2	2.2 -0.1	3.4	1.4	0.4	83.1 81.2	1.4	8.0 8.3
2002 Q1 Q2 Q3 Q4	2.6 2.1 2.0 2.3	-0.8 -0.8 -0.1 1.2	4.0 3.6 3.7	0.3 0.7 0.8	-2.7 -0.6 -0.6	81.1 81.1 81.3 81.3	0.7 0.5 0.3	8.1 8.2 8.3 8.5
2002 Aug. Sep. Oct. Nov. Dec.	2.1 2.1 2.3 2.2 2.3	-0.1 0.1 0.9 1.1 1.5			-1.2 -0.4 0.7 2.8	81.5	- - - -	8.3 8.4 8.4 8.5 8.5
2003 Jan.	2.1		-	-		81.1	-	

3. Balance of payments, reserve assets and exchange rates (EUR billions, unless otherwise indicated)

	Ba	alance of payme	nts (net flows)		Reserve assets (end-of-period	Effective exchange rate of the euro: broad group		USD/EUR exchange rate
	Current and capital	Goods	Direct	Portfolio investment	positions)	(1999 Q1 = 10)		C
	accounts				21	Nominal	Real (CPI)	24
	17	18	19	20	21	22	23	24
2001	-4.9	75.8	-101.5	38.1	392.7	91.0	88.1	0.896
2002					366.1	95.6	92.0	0.946
2002 Q1	14.9	26.3	-15.0	-51.8	408.9	91.3	88.1	0.877
Q2	6.3	30.7	-7.9	57.4	367.0	93.9	90.5	0.919
Q3	27.5	39.8	-6.7	29.7	380.9	97.9	94.1	0.984
Q4					366.1	99.4	95.2	0.999
2002 Aug.	11.5	12.1	3.1	6.0	373.0	97.7	93.8	0.978
Sep.	9.8	11.6	-3.2	16.8	380.9	98.0	94.1	0.981
Oct.	5.2	11.7	-5.0	19.4	375.5	98.5	94.6	0.981
Nov.	10.7	13.6	3.9	9.7	372.6	99.3	95.0	1.001
Dec.					366.1	100.4	96.1	1.018
2003 Jan.						103.0	98.5	1.062

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.

to 2 years.

I Monetary policy statistics

Table 1.1

Consolidated financial statement of the Eurosystem *(EUR millions)*

1. Assets

	Gold and	Claims on non-	Claims on euro	Claims on non-	Lending to			
	gold	euro area	area residents in	euro area	euro area credit	Main	Longer-term	Fine-tuning
	receivables		foreign currency	residents	institutions	refinancing	refinancing	reverse
		foreign currency		in euro	in euro	operations	operations	operations
	1	2	3	4	5	6	7	8
2002 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
6 Dec.	131,065	248,397	20,125	3,668	219,704	173,791	45,000	0
13	131,034	250,736	20,192	3,700	221,816	176,792	45,000	0
20	130,961	248,555	20,196	3,720	223,805	168,501	45,000	9,999
27	130,858	248,634	19,881	4,020	236,589	191,501	45,000	0
2003 3 Jan.	130,739	236,765	19,948	4,030	225,117	180,000	45,000	0
10	130,702	237,058	16,585	4,085	219,066	174,001	45,000	0
17	130,686		15,565	4,369	208,613	160,999	45,000	0
24	130,664	231,755	16,584	4,378	215,343	169,999	45,000	Õ
31	130,641	233,338	18,335	4,924	219,190	174,001	45,000	Õ
	,		;	.,.= .	,	.,.,	,	-

2. Liabilities

Т

	~ / / /	*							
	Banknotes in	Liabilities to	<u> </u>	D :	E' 14	T. ()	D 1		Debt certificates
	circulation		Current accounts	Deposit	Fixed-term		Deposits	to euro area	issued
		institutions in euro	(covering the minimum	facility	deposits	reverse	related to	credit institutions in euro	
		in euro				operations	margin calls	in euro	
	1	2	reserve system)	4	5	6	7	8	9
2002 6 Sep.	325,814	129,856	129,836	15	0	0	5	260	2,939
							3		
13	325,663	126,812	126,799	10	0	0		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	Ő	ŏ	ŏ	192	2,029
6 Dec.	351,340	127,068	127,002	66	0	0	0	262	2,029
13	355,673	130,036	129,942	94	ŏ	ŏ	ŏ	15	2,029
20	367,890	127,909	126,745	1,164	Ő	Ő	Ő	15	2,029
20	374,600	129,305	120,745	1,104	0	0	0	15	2,029
	374,000	· · · · · ·	<i>.</i>		0	0	0		· · · · · ·
2003 3 Jan.	354,528	130,012	129,938	74	0	0	0	15	2,029
10	346,293	133,539	133,441	89	0	0	9	15	2,029
17	341,636	132,870	132,748	118	0	0	4	15	2,029
24	338,201	127,180	127,168	9	0	0	3	15	2,029
31	339,517	126,760	126,631	128	0	0	1	62	2,029
		,	,						, -

Source: ECB.

	Total							
		Other assets	General government debt	Securities of	Other claims on euro area credit	Credits related	Marginal	Structural
			in euro	residents	institutions	to margin calls	lending facility	reverse
				in euro	in euro	C I	5 5	operations
	16	15	14	13	12	11	10	9
2002 6 Sep.	765,573	84,224	67,198	31,538	244	34	5	0
13	762,139	84,690	67,198	31,480	164	37	12	0
20	772,638	85,077	67,198	31,524	213	44	3	0
27	772,822	85,634	67,199	31,503	312	32	55	0
4 Oct.	778,337	85,503	67,209	32,125	616	24	355	0
11	778,706	85,545	67,209	32,253	619	27	6	0
18	774,314	85,768	67,209	32,256	441	117	10	0
25	798,028	86,029	67,209	32,142	155	112	27	0
1 Nov.	779,659	88,379	67,209	32,264	361	14	60	0
8	777,495	87,126	67,201	32,554	360	8	3	0
15	773,332	87,604	67,222	32,675	364	27	66	0
22	788,667	89,076	67,223	33,099	154	35	1,229	0
29	796,464	89,414	67,225	33,242	258	28	65	0
6 Dec.	812,706	89,080	67,224	33,231	211	21	892	0
13	818,720	90,733	67,106	33,205	197	9	15	0
20	820,448	92,688	67,106	33,253	163	30	275	0
27	832,558	93,062	66,306	33,098	109	48	40	0
2003 3 Jan.	794,992	105.962	44,486	27,824	120	72	45	0
10	786.619	106,625	44,475	27,919	103	55	10	Õ
17	773,267	105,949	44,485	28,016	174	39	2,575	Ō
24	778,863	106,893	44,485	28,522	238	45	299	0
31	786,730	106,466	44,485	29,054	296	19	170	0

	Total								
		Capital and	Revaluation	Other liabilities	Counterpart of	Liabilities to	Liabilities to	Liabilities to	Liabilities to
		reserves	accounts	naonnies	special drawing rights allocated	non-euro area residents	euro area residents in	non-euro area residents	other euro area residents
					by the IMF	in foreign	foreign	in euro	in euro
					-	currency	currency		
	18	17	16	15	14	13	12	11	10
2002 6 Sep	765,573	64,279	99,114	60,016	6,521	15,092	1,282	8,671	51,729
13	762,139	64,281	99,114	60,031	6,521	16,613	1,309	8,588	50,133
20	772,638	64,283	99,114	60,651	6,521	18,110	1,518	8,992	55,839
27	772,822	64,286	99,114	60,495	6,521	17,851	1,443	8,903	58,763
4 Oct	778,337	64,290	106,307	62,516	6,567	18,145	1,303	9,245	47,782
11	778,706	64,292	106,307	62,640	6,567	17,970	1,300	8,468	43,890
18	774,314	64,295	106,307	63,456	6,567	17,324	1,449	8,328	43,801
25	798,028	64,298	106,307	63,585	6,567	18,752	1,605	8,368	59,081
1 No	779,659	64,224	106,307	64,336	6,567	17,305	1,352	8,359	50,648
8	777,495	64,227	106,307	62,653	6,567	17,013	1,355	8,454	41,235
15	773,332	64,228	106,307	64,722	6,567	17,097	1,629	8,400	36,809
22	788,667	64,440	106,307	63,446	6,567	19,268	1,683	8,252	55,095
29	796,464	64,444	106,307	62,870	6,567	17,292	1,338	8,634	64,849
6 Dec	812,706	64,448	106,307	62,616	6,567	20,045	1,341	8,489	62,194
13	818,720	64,451	106,307	62,972	6,567	22,432	1,296	8,428	58,514
20	820,448	64,420	106,307	63,728	6,567	20,693	1,382	9,541	49,967
27	832,558	64,420	106,307	64,121	6,567	20,067	1,232	8,810	55,085
2003 3 Jan	794,992	64,323	82,844	73,817	6,339	20,996	1,126	11,555	47,408
10	786.619	64,240	82,844	73,640	6,339	19,714	1,147	8,278	48,541
17	773,267	64,246	82,844	74,025	6,339	17,259	1,136	8,346	42,522
24	778,863	64.070	82,844	74,217	6,339	14,978	1,125	8,872	58,993
31	786,730	64.071	82,848	73,719	6,339	15,759	1,054	9,426	65,146

Table 1.2

Key ECB interest rates

(levels in percentages per annum; changes in percentage points)

With effect from ¹⁾	Deposit facili	ty	Mai	n refinancing operation	15	Marginal lending facility	
			Fixed rate tenders Variable rate tenders				
			Fixed rate	Minimum bid rate			
	Level 1	Change 2	Level 3	Level 4	Change 5	Level 6	Change 7
1999 1 Jan.	2.00	-	3.00	-	-	4.50	-
4 ²⁾	2.75	0.75	3.00	-		3.25	-1.25
22	2.00	-0.75	3.00	-		4.50	1.25
9 Apr.	1.50	-0.50	2.50	-	-0.50	3.50	-1.00
5 Nov.	2.00	0.50	3.00	-	0.50	4.00	0.50
2000 4 Feb.	2.25	0.25	3.25	-	0.25	4.25	0.25
17 Mar.	2.50	0.25	3.50	-	0.25	4.50	0.25
28 Apr.	2.75	0.25	3.75	-	0.25	4.75	0.25
9 June	3.25	0.50	4.25	-	0.50	5.25	0.50
28 3)	3.25		-	4.25		5.25	
1 Sep.	3.50	0.25	-	4.50	0.25	5.50	0.25
6 Oct.	3.75	0.25	-	4.75	0.25	5.75	0.25
2001 11 May	3.50	-0.25	-	4.50	-0.25	5.50	-0.25
31 Aug.	3.25	-0.25	-	4.25	-0.25	5.25	-0.25
18 Sep.	2.75	-0.50	-	3.75	-0.50	4.75	-0.50
9 Nov.	2.25	-0.50	-	3.25	-0.50	4.25	-0.50
2002 6 Dec.	1.75	-0.50	-	2.75	-0.50	3.75	-0.50

Source: ECB.

Source: ECB.
 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.
 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. 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	V	ariable rate tenders		
	()	()	Fixed rate	Minimum bid rate	Marginal rate 3)	Weighted	Running for
	1	2	3	4	5	average rate	() days 7
	101011					~ 1	,
2002 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
11	100,511	65,000	-	2.75	2.82	2.83	13
18	103,502	103,502	-	2.75	2.75	2.87	13
24	146,157	88,000	-	2.75	3.02	3.08	15
31	117,377	92,000	-	2.75	2.85	2.95	15
2003 8 Jan.	133,781	82,000	-	2.75	2.83	2.84	14
15	120,349	79,000	-	2.75	2.80	2.81	14
22	123,705	91,000	-	2.75	2.80	2.81	14
29	114,931	83,000	-	2.75	2.79	2.81	14
5 Feb.	115,836	86,000	-	2.75	2.78	2.79	14

2.	Longer-term	refinancing	operations
	Longer term	rennancing	operations

Date of settlement	Bids (amount)	Allotment (amount)	Fixed rate tenders	Variable rate tenders			
	(Fixed rate	Marginal rate 3)	Weighted	Running for	
	1	2	3	4	average rate	() days 6	
	1	- 1	3	•	5		
2001 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	3.20	91	
28 Nov.	38,644	15,000	-	3.02	3.04	91 91	
23 Dec.	42,305	15,000	-	2.93	2.95	94	
2003 30 Jan.	31,716	15,000	-	2.78	2.80	90	

3. Other tender operations

Type of operation	Bids Allotment (amount) (amount)				lers		
			Fixed rate	Minimum	Marginal	Weighted	Running for
				bid rate	rate 3)	average rate	() days
1	2	3	4	5	6	- 7	8
Collection of fixed-term deposits	14,420	14,420	-	-	3.00	3.00	7
Reverse transaction	18,845	7,000	-	-	4.26	4.28	1
	— Eu	ro area enla	rgement —				
Reverse transaction	105,377	73,000	-	4.75	4.77	4.79	7
Reverse transaction	69,281	69,281	4.25	-	-	-	1
Reverse transaction	40,495	40,495	4.25	-	-	-	1
Reverse transaction	73,096	53,000	-	3.25	3.28	3.29	7
Reverse transaction	57,644	25,000	-	3.25	3.30	3.32	3
Reverse transaction	59.377	40,000	-	3.25	3.28	3.30	1
Reverse transaction	28,480	10,000	-	2.75	2.80	2.82	6
	collection of fixed-term deposits Reverse transaction Reverse transaction Reverse transaction Reverse transaction Reverse transaction Reverse transaction Reverse transaction Reverse transaction	operation (amount) 1 2 Collection of fixed-term deposits 14,420 Reverse transaction 18,845 Eu 105,377 Reverse transaction 40,495 Reverse transaction 73,096 Reverse transaction 57,644 Reverse transaction 59,377	operation (amount) (amount) 1 2 3 Collection of fixed-term deposits 14,420 14,420 Reverse transaction 18,845 7,000	operation (amount) (amount) Fixed rate 1 2 3 4 Collection of fixed-term deposits 14,420 14,420 - Reverse transaction 18,845 7,000 - Euro area enlargement - - - Reverse transaction 69,281 69,281 4.25 Reverse transaction 40,495 40,495 4.25 Reverse transaction 73,096 53,000 - Reverse transaction 57,644 25,000 - Reverse transaction 59,377 40,000 -	$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	$ \begin{array}{c c c c c c c c c c c c c c c c c c c $

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	Total	Liabilities to which	h a 2% reserve coeffic	cient is applied	Liabilities to which a	0% reserve coeff	icient is applied
as at:		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	ı ź	3	4	5	6	7
2001 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.	11,113.6	6,052.0	202.1	212.1	1,379.1	790.5	2,477.8
Nov.	11,207.0	6,142.9	206.3	220.7	1,365.2	784.2	2,487.7
Dec. ^(p)	11,109.2	6,137.4	202.6	206.4	1,380.4	725.7	2,456.8

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.

2) Maintenance periods start on the 24th of the month and run to the 23rd of the following month; the required reserve is calculated from the reserve base as at the end of the preceding month.

2. Reserve maintenance ¹⁾

(EUR billions; interest rates as annual percentages)

Maintenance period ending in:	Required reserves ²⁾	Actual reserves ³⁾ 2	Excess reserves ⁴⁾ 3	Deficiencies ⁵)	Interest rate on minimum reserves ⁶⁾ 5
2002 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.	128.8	129.4	0.7	0.0	3.06
2003 Jan. Feb. ^(p)	130.9 130.4	131.4	0.6	0.0	2.87

Source: ECB.

1) This table contains full data for completed maintenance periods and required reserves for the current maintenance period.

2) The amount of reserve requirement of each individual credit institution is first calculated by applying the reserve ratio for the corresponding categories of liabilities to the eligible liabilities, using the balance sheet data as at the end of each calendar month; subsequently, each credit institution deducts from this figure a lump-sum allowance of EUR 100,000. The resulting reserve requirements are then aggregated at the euro area level.

3) Aggregate average daily holdings of credit institutions required to hold a positive amount of reserves on their reserve accounts over the maintenance period.

 Average actual reserve holdings over the maintenance period in excess of the required reserves, computed on the basis of those credit institutions that have fulfilled the reserve requirement.

5) Average shortfalls of actual reserve holdings from required reserves over the maintenance period, computed on the basis of those credit institutions that have not fulfilled the reserve requirement.

6) This rate equals the average, over the maintenance period, of the ECB's rate (weighted according to the number of calendar days) on the Eurosystem's main refinancing operations (see Table 1.3).

Table 1.5

Banking system's liquidity position 1)

(EUR billions; period averages of daily positions)

Maintenance period		Liquidit	y-providing fac	ctors			Liquidity-	absorbing fa	actors		Credit institu-	Base money 5)
ending in:		Ν	Aonetary policy	operations	of the Euros	ystem					tions' current	,
	Eurosystem's net assets in gold and foreign currency	Main refinancing operations	Longer-term refinancing operations	Marginal lending facility	Other liquidity- providing operations ²⁾	Deposit facility	Other liquidity- absorbing operations 2)	Banknotes in circulation	Central government deposits with the Eurosystem	Other factors (net) ³⁾	accounts 4)	
	1	2	3	4	5	6	7	8	9	10	11	12
2001 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.	372.1	147.5	45.0	0.1	0.0	0.1	0.0	334.0	42.8	58.6	129.3	463.4
Dec.	371.5	168.1	45.0	1.1	2.0	0.2	0.0	350.7	51.7	55.5	129.5	480.5
2003 Jan.	^{p)} 360.9	176.3	45.0	0.5	0.0	0.3	0.0	353.9	43.7	53.3	131.6	485.8

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).

Monetary developments and investment 2 funds in the euro area

Table 2.1

Aggregated balance sheet of the Eurosystem (EUR billions (not seasonally adjusted; end of period))

1. Assets

	_											_			Total
	Loans to	A 4997 1)			Holdings		~ .		Holdings			External	Fixed	Re-	
	euro area	MFIs 1)	General		of	MFIs	General	Other	of shares/	MFIs	Other	assets 1)	assets	maining	
	residents			euro area	securities other than			euro area residents	other equity		euro area residents			assets	
			ment	residents	shares		mem	residents	issued		residents				
					issued				by euro						
					by euro				area						
					area				residents						
					residents		-			10		1.0	10		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1999	444.6	424.3	19.7	0.5	89.1	1.9	86.1	1.1	14.1	4.3	9.8	400.6	9.9	56.2	1,014.5
2000 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
						Euro	area en	largemen	nt —						
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 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	98.1	1,037.1
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		1,017.2
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	101.5	1,029.4
Apr.	344.2	317.8	25.8	0.6	107.5	5.0	101.4	1.1	13.5	4.7	8.8	401.2	12.0	103.3	981.7
May	356.1	329.7	25.7	0.6	107.0	4.9	101.0	1.0	13.3	4.7	8.6	394.4	12.0	105.5	988.3
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		1,001.9
July	364.0	337.7	25.7	0.6	108.8	5.3	101.9	1.7	12.7	4.7	7.9	377.9	12.1	110.5	986.0
Aug.	363.4	337.5	25.3	0.6	110.8	5.4	103.3	2.1	12.8	4.8	8.0	377.9	12.1	110.9	987.9
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		1,001.0
Oct.	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		1,004.5
Nov.	377.3	351.3	25.3	0.6	115.0	7.0	107.1	0.9	13.6	5.0	8.6	378.8	9.8		1,013.8
Dec. (p)	416.0	391.2	24.2	0.6	94.5	7.6	86.0	0.8	13.3	5.1	8.2	374.6	12.1	124.8	1,035.4

2. Liabilities

							1			Total
	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	
	1	2	3	4	5	6	7	8	9	10
1999	393.3	341.5	279.3	53.4	8.8	7.9	174.3	49.8	47.6	1,014.5
2000 Q4	390.2	327.3	270.4	47.1	9.8	3.8	197.5	29.9	57.0	1,005.7
				— Euro	o area enlargen	nent —				
2001 Q1 Q2 Q3	370.5 368.8 346.1	312.6 342.2 323.6	253.4 274.1 269.4	46.8 51.8 37.6	12.4 16.3 16.6	5.5 5.6 5.5	204.6 223.7 209.2	26.8 32.6 30.0	63.8 54.2 57.3	983.8 1,027.2 971.7
2001 Dec.	285.9	391.9	342.4	35.1	14.4	4.6	209.8	35.6	70.8	998.6
2002 Jan. Feb. Mar. Apr. May June July Aug. Sep. Oct. Nov.	339.7 308.2 311.3 319.6 329.4 340.1 342.3 347.0 355.4 360.8	344.8 349.1 323.5 326.6 354.3 316.0 318.7 317.6 313.5 319.3	284.7 282.3 282.4 254.8 268.4 285.2 247.4 255.8 258.9 254.4 255.2	44.9 52.1 56.3 50.8 40.7 51.5 52.9 47.3 41.7 40.8 46.2	15.2 14.7 16.4 17.9 17.4 17.5 15.6 15.6 15.6 17.0 18.3 17.9	$\begin{array}{c} 4.6 \\ 4.6 \\ 4.6 \\ 4.6 \\ 4.6 \\ 4.6 \\ 4.6 \\ 4.6 \\ 4.6 \\ 4.6 \\ 4.6 \\ 4.6 \\ 3.6 \end{array}$	214.5 219.9 217.8 212.7 207.9 182.3 183.7 186.4 190.2 187.9 185.7	37.4 33.9 36.9 32.4 31.6 31.0 35.1 31.0 32.5 31.3 31.5	96.0 101.5 105.9 97.2 98.0 100.5 106.6 104.9 109.1 111.9 112.9	1,037.1 1,017.2 1,029.4 981.7 988.3 1,001.9 986.0 987.9 1,001.0 1,004.5 1,013.8

Source: ECB.

Source: ECB.
 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.

Aggregated balance sheet of the euro area MFIs, excluding the Eurosystem (EUR billions (not seasonally adjusted; end of period))

1. Assets

-																Total
	Loans to				Holdings				Money	Holdings			External	Fixed	Remaining	
	euro area	MFIs	General			MFIs	General	Other	market	of shares/	MFIs	Other	assets	assets	assets	
	residents				securities			euro area	paper	other		euro area				
			ment	residents	other than		ment	residents		equity		residents				
					shares issued					issued by euro						
					by euro					area						
					area					residents						
					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	1,015.2	16,705.6
							Euro ar	ea enlarg	ement							
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 Dec.	11,134.7	3,794.0	822.1	6,518.7	2,421.3	1,008.3	1,077.4	335.6	153.1	811.0	251.9	559.1	2,408.7	168.1	1,129.5	18,226.3
2002 Jan.	11,066.2	3,713.4	819.1	6,533.7	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	18,259.1
Feb.	11,049.6	3,679.7	821.8	6,548.1	2,486.7	1,030.8	1,107.1	348.7	167.0	812.1	254.3	557.9	2,419.5	164.6	1,096.1	18,195.6
Mar.	11,210.8	3,778.4	826.8	6,605.5	2,519.6	1,046.2	1,128.1	345.3	174.0	811.6	260.1	551.5	2,430.6	164.5	1,031.1	18,342.2
Apr.	11,264.9	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	2,425.1	164.2	1,011.2	18,391.9
May	11,329.0	3,866.4	803.4	6,659.1	2,543.0	1,057.8	1,141.2	343.9	181.7	826.2	265.8	560.4	2,451.3	164.4	984.6	18,480.1
June	11,334.7	3,839.8	804.4	6,690.5	2,538.6	1,059.5	1,137.5	341.7	194.7	819.2	263.5	555.7	2,358.4	164.3	1,002.3	18,412.2
July	11,339.5	3,844.7	802.8	6,691.9	2,527.4	1,048.2	1,135.5	343.6	205.0	808.3	267.0	541.3	2,378.7	164.7	1,025.6	18,449.0
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.	11,406.6	3,885.0	795.5	6,726.1	2,539.5	1,042.3	1,148.6	348.6	209.8	805.3	263.7	541.6	2,427.3	166.2	1,057.9	18,612.6
Oct.	11,463.5	3,926.4	795.1	6,742.0	2,532.1	1,037.5	1,142.3	352.2	211.7	819.5	266.0	553.4	2,483.6	167.1	1,021.1	18,698.6
Nov.	11,592.2	4,034.5	803.9	6,753.9	2,543.2	1,040.1	1,147.3	355.8	229.1	822.9	264.7	558.2	2,558.2	167.1	1,055.3	18,968.1
Dec. () 11,610.0	4,020.5	812.2	6,777.3	2,522.4	1,023.9	1,131.6	366.9	212.5	828.1	257.1	571.0	2,462.4	168.0	1,059.1	18,862.5

2. Liabilities

															Total
	Currency	Deposits								Money	Money	Capital	External	Remaining	
	in	of euro	MFIs		Other					market	market	and	liabil-	liabilities	
	circu-	area		govern-	general	Over-	With	Redeem-	Repur-	fund	paper	reserves	ities		
	lation	residents		ment	govern-	night	agreed	able	chase	shares/ units 1)	and debt securities				
					ment/ other euro		maturity	at notice	agree- ments	units	issued 1)				
					area			nouce	ments		Issued				
					residents										
	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	9,057.1	3,679.3	117.4	5,260.5	1,648.9	2,159.8	1,276.9	174.9	323.3	2,712.9	940.5	2,299.5	1,372.2	16,705.6
						— Eı	ıro area e	nlargemer	ıt						
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	369.2	2,817.4	982.4	2,638.7	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	390.2	2,861.3	998.1	2,713.8	1,450.1	17,837.7
Q3	0.0	9,484.8	3,839.0	110.2	5,535.5	1,733.7	2,233.5	1,342.6	225.7	417.3	2,875.5	1,011.1	2,613.4	1,484.1	17,886.2
2001 Dec.	0.0	9,696.6	3,829.6	103.9	5,763.1	1,882.1	2,257.5	1,405.0	218.5	436.5	2,882.9	1,041.9	2,687.4	1,480.9	18,226.3
2002 Jan.	0.0	9,630.1	3,804.4	104.0	5,721.7	1,832.9	2,253.8	1,418.8	216.2	457.9	2,921.5	1,050.1	2,722.0	1,477.6	18,259.1
Feb.	0.0	9,571.1	3,745.5	103.7	5,721.9	1,828.9	2,251.1	1,420.9	221.1	469.2	2,933.1	1,050.6	2,734.1	1,437.3	18,195.6
Mar.	0.0	9,695.4	3,852.1	101.2	5,742.1	1,823.1	2,266.3	1,423.0	229.6	477.9	2,966.1	1,057.6	2,754.4	1,390.7	18,342.2
Apr.	0.0	9,742.5	3,871.8	106.7	5,763.9	1,852.1	2,269.0	1,414.7	228.1	485.0	2,969.4	1,064.1	2,741.5	1,389.4	18,391.9
May	0.0	9,810.7	3,920.5	108.3	5,781.9	1,852.8	2,278.8	1,415.5	234.8	493.4	2,994.0	1,071.3	2,723.4	1,387.2	18,480.1
June	0.0	9,836.5	3,926.6	103.5	5,806.4	1,898.8	2,256.3	1,421.7	229.6	497.5	2,984.6	1,071.6	2,589.0	1,433.2	18,412.2
July	0.0	9,818.1	3,932.1	99.0	5,787.1	1,870.1	2,263.8	1,424.3	228.8	510.7	2,989.6	1,081.4	2,613.1	1,436.1	18,449.0
Aug.	0.0	9,779.9	3,918.3	93.6	5,768.0	1,836.2	2,265.4	1,429.8	236.5	524.3	3,002.0	1,088.2	2,585.3	1,420.5	18,400.2
Sep.	0.0	9,870.6	3,960.8	104.6	5,805.2	1,891.3	2,242.8	1,432.8	238.3	522.5	3,004.3	1,094.1	2,642.2	1,478.9	18,612.6
Oct.	0.0	9,942.2	4,020.3	111.0	5,810.9	1,873.5	2,263.8	1,438.1	235.6	526.4	3,010.3	1,097.0	2,666.5	1,456.3	18,698.6
Nov.	0.0	10,091.7	4,126.6	101.3	5,863.8	1,925.7	2,259.8	1,448.7	229.6	542.8	3,038.6	1,100.1	2,706.3	1,488.6	18,968.1
Dec.	^(p) 0.0	10,189.3	4,131.4	107.0	5,951.0	1,984.9	2,262.1	1,477.5	226.5	533.0	2,989.6	1,102.7	2,595.8	1,452.1	18,862.5

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.

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			Holdings			Holdings	External	Fixed	Remaining	
	euro area	General	Other	of securities	General	Other	of shares/	assets 2)	assets	assets	
	residents	govern-	euro area	other than	govern-	euro area	other				
		ment	residents	shares	ment	residents	equity				
				issued			issued by other				
				by euro area			euro area				
				residents			residents				
	1	2	3	4	5	6	7	8	9	10	11
2001 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	1,516.1	1,179.2	336.9	568.3	2,807.6	180.0	1,137.6	13,576.6
2002 Jan.	7,379.1	844.8	6,534.4	1,548.3	1,206.3	341.9	568.2	2,829.4	177.5	1,164.8	13,667.3
Feb.	7,396.2	847.5	6,548.7	1,557.7	1,207.7	349.9	566.8	2,833.0	176.6	1,126.9	13,657.2
Mar.	7,458.8	852.6	6,606.1	1,575.7	1,229.1	346.6	560.6	2,845.1	176.4	1,077.7	13,694.3
Apr.	7,473.6	832.4	6,641.2	1,572.2	1,229.2	342.9	566.9	2,826.3	176.2	1,065.0	13,680.2
May	7,488.9	829.2	6,659.7	1,587.2	1,242.3	345.0	569.0	2,845.7	176.4	1,044.4	13,711.5
June	7,521.2	830.1	6,691.1	1,582.0	1,239.0	343.0	563.9	2,731.1	176.2	1,067.7	13,642.1
July	7,521.1	828.5	6,692.6	1,582.7	1,237.4	345.3	549.2	2,756.5	176.8	1,092.7	13,679.0
Aug.	7,510.4	818.0	6,692.3	1,576.0	1,235.0	341.0	559.2	2,745.1	177.7	1,080.7	13,649.0
Sep.	7,547.5	820.8	6,726.8	1,603.9	1,253.1	350.8	549.1	2,813.3	178.3	1,130.1	13,822.2
Oct.	7,563.1	820.4	6,742.7	1,601.6	1,248.5	353.1	561.5	2,863.5	179.3	1,094.9	13,863.8
Nov.	7,583.7	829.2	6,754.5	1,611.1	1,254.4	356.7	566.7	2,937.0	177.0	1,135.1	14,010.7
Dec. (p	7,614.4	836.4	6,778.0	1,585.5	1,217.7	367.8	579.2	2,837.0	180.1	1,132.2	13,928.3

2. Liabilities: levels

														Total
	Currency	Deposits	Deposits					Money	Money	Capital	External	Re-	Excess	
	in	of	of other			Redeem-	Repur-	market	market	and	liabilities	maining	of inter-	
	circu-	central	general	night	agreed		chase	fund	paper and	reserves	2)	liabilities	MFI	
	lation	govern-	govern-		maturity	at	agree-	shares/	debt				liabilities	
		ment	ment/			notice	ments	units 3)	securities					
			other						issued 3)					
			euro area											
			residents											
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
2001 June	333.0	165.5	5,521.1	1.731.8	2.237.0	1.330.8	221.5	357.3	1,740.5	965.9	2,746.4	1.504.4	-16.8	13,317.2
July	328.0		5,508.1				223.4	366.4	1,737.1		2,646.2			13,183.9
Aug.	319.2		5,500.1				230.8	377.6	1,731.1		2,623.1			13,144.3
Sep.	309.6		5,552.2				225.7	381.2	1.753.9		2.643.4		18.7	13.318.6
Oct.	295.5	153.3		1,750.3			235.1	392.3	1,767.9		2,665.2		5.5	13,424.2
Nov.	279.7		5,628.1				225.9	400.8	1,760.3		2,729.9			13,574.5
Dec.	239.7		5,777.6			1,405.0	218.5	398.0	1,760.7		2,723.0			13,576.6
2002 Jan.	246.5	148.9	5,736.9	1.847.8	2.254.2	1.418.8	216.2	416.6	1,775.8	1.007.6	2,759.4	1.573.6	2.0	13,667.3
Feb.	240.3		5,736.7				221.1	427.0			2,767.9		1.1	13,657.2
Mar.	254.3		5,758.5				229.6	431.2			2,791.2		1.3	13,694.3
Apr.	261.7		5,781.8				228.1	437.5			2,774.0			13,680.2
May	273.9		5,799.3			1.415.5	234.8	442.6			2,755.0		-7.3	13,711.5
June	285.8	155.0		1,916.0		1,421.7	229.6	439.2	1,788.3	985.7			10.7	13,642.1
July	296.8	151.9	5,802.6			1,424.3	228.8	450.3	1,796.1		2,648.1		-2.9	13,679.0
Aug.	301.2	141.0		1,851.6		1,429.8	236.5	463.4	1.814.3		2,616.3		-0.2	13,649.0
Sep.	306.7	146.3		1,908.0		1,432.8	238.3	460.4	1,813.0		2,674.7		-5.0	13,822.2
Oct.	313.9	151.8	5,829.1			1,438.1	235.6	462.7	1,823.0		2,697.8		3.4	13,863.8
Nov.	321.4		5,881.6	/	/	/	229.6	477.1	,	/	2,737.8	/		14,010.7
Dec. (r		136.5		2,000.2			226.5	470.1	1,812.1	997.0			2.9	13,928.3
			-	·	·	,			,		-	-		<i>,</i>

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			Holdings			Holdings	External	Fixed	Remaining	Total
	euro area	General	Other	of securities	General	Other	of shares/	assets 2)	assets	assets	
	residents	govern-	euro area	other than	govern-	euro area	other				
		ment	residents	shares	ment	residents	equity				
				issued			issued				
				by euro			by other euro area				
				area residents			residents				
	1	2	3	4	5	6	7	8	9	10	11
2001 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	21.8	-8.4	-10.3	2.0	22.3	-26.4	1.1	-17.1	-3.0
2002 Jan.	9.4	-3.1	12.6	27.1	21.8	5.2	-0.3	-0.2	-2.5	26.6	60.2
Feb.	19.0	2.7	16.2	9.2	1.2	8.0	0.6	0.3	-0.9	-39.3	-11.1
Mar.	64.2	5.2	59.0	14.1	16.9	-2.9	-7.6	19.9	0.0	-48.2	42.4
Apr.	21.7	-20.0	41.7	-1.9	1.5	-3.3	6.3	18.0	-0.2	-13.1	30.8
May	25.4	-2.8	28.2	12.7	9.7	3.0	0.9	73.9	0.2	-20.8	92.3
June	40.7	1.4	39.3	-3.0	-1.3	-1.7	-5.2	-26.8	-0.2	23.7	29.1
July	-4.7	-1.8	-2.9	-2.5	-2.0	-0.5	-11.6	-2.4	0.5	23.9	3.2
Aug.	-10.7	-10.9	0.2	-5.6	-3.1	-2.5	9.2	-10.6	1.0	-12.1	-28.8
Sep.	38.6	2.8	35.8	20.9	11.5	9.3	-4.3	65.6	0.6	48.1	169.4
Oct.	18.2	-0.4	18.6	-0.3	-2.5	2.2	10.1	55.1	0.9	-35.8	48.2
Nov.	28.6	9.0	19.6	9.7	6.1	3.6	3.0	84.7	-2.3	40.0	163.7
Dec. (p)	41.0	7.6	33.4	-6.6	-17.4	10.8	13.3	-35.4	1.6	-9.0	4.9

4. Liabilities: flows 1)

														Total
	Currency	Deposits						Money	Money	Capital		Re-	Excess	
	in	of	of other	Over-		Redeem-	Repur-	market	market		liabilities			
	circu-	central	general	night	agreed	able	chase	fund	paper and	reserves	2)	liabilities	MFI	
	lation	govern-	govern-		maturity	at	agree-	shares/	debt				liabilities	
		ment	ment/			notice	ments	units 3)	securities					
			other						issued 3)					
			euro area											
			residents											
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
2001 July	-5.0	-10.0	-8.2	-17.4	4.4	3.0	1.9	9.5	2.9	-6.5	-57.9	-11.1	9.8	-76.5
Aug.	-8.8	-3.1	-1.8	-29.6	16.4	3.9	7.5	10.6	1.4	7.3	30.0	-7.5	-1.2	26.9
Sep.	-9.6	-4.6	51.2	68.4	-17.4	5.3	-5.1	3.2	15.8	9.0	18.4	41.4	19.1	143.9
Oct.	-14.2	5.4	22.6	0.9	3.0	9.2	9.5	11.5	13.0	7.9	18.5	46.0	-11.8	99.0
Nov.	-15.7	-3.0	51.4	47.2	0.3	13.1	-9.2	9.7	23.9	2.9	38.7	33.2	4.6	145.6
Dec.	-40.0	-11.2	149.3	98.4	18.4	40.0	-7.4	-1.3	-0.7	13.6	-17.5	-75.7	-19.5	-3.0
2002 Jan.	6.8	10.4	-42.5	-49.5	-3.1	12.4	-2.3	19.5	10.4	14.2	14.1	15.9	11.3	60.2
Feb.	-6.2	6.9	0.2	-4.3	-2.5	2.1	4.9	10.4	4.8	-0.8	11.2	-36.9	-0.7	-11.1
Mar.	14.0	1.7	22.8	-3.8	16.1	2.2	8.4	3.3	18.5	2.6	25.6	-55.3	9.3	42.4
Apr.	7.4	0.0	27.6	32.1	5.2	-8.2	-1.5	7.9	-1.7	-5.2	20.7	-16.4	-9.6	30.8
May	12.2	-8.5	24.6	2.4	14.4	1.1	6.7	4.0	29.7	3.7	35.0	-9.8	1.5	92.3
June	12.0	6.0	31.1	48.2	-17.3	6.4	-6.1	-7.2	1.4	-17.2	-67.6	55.1	15.6	29.1
July	11.0	-3.1	-24.5	-31.8	5.4	2.5	-0.7	12.0	0.2	9.7	0.0	11.5	-13.5	3.2
Aug.	4.4	-11.0	-4.7	-33.6	15.7	5.5	7.7	12.3	4.1	8.7	-24.8	-20.6	2.8	-28.8
Sep.	5.6	1.6	40.0	56.4	-21.8	3.0	2.4	-2.7	15.9	9.9	46.9	54.1	-1.9	169.4
Oct.	7.2	5.5	7.8	-16.4	21.7	5.3	-2.8	2.1	11.4	0.0	25.4	-20.7	9.5	48.2
Nov.	7.5	-4.3	55.5	52.9	-3.7	10.6	-4.4	14.7	14.1	3.0	49.7	30.1	-6.6	163.7
Dec.		-11.0	81.0	48.9	6.1	29.1	-3.1	-6.6	-15.6	2.1	-53.0	-18.8	6.9	4.9

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

						М	12	
-		M1			Deposits with agreed	Deposits redeemable	Total	Index Dec. 01=100 ³⁾
-	Currency in	Overnight	Total	Index Dec. 01=100 ³⁾	maturity up to 2 years	at notice up to 3 months		
	circulation 1	deposits 2	3	4	5	6	7	8
2001 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	4,639.7	99.44
Feb.	240.3	1,917.1	2,157.4	97.67	1,076.7	1,394.5	4,628.7	99.21
Mar.	254.3	1,914.2	2,168.5	98.19	1,088.5	1,397.9	4,654.9	99.79
Apr.	261.7	1,945.5	2,207.2	100.01	1,092.1	1,391.9	4,691.2	100.65
May	273.9	1,945.4	2,219.3	100.66	1,099.6	1,394.0	4,712.8	101.24
June	285.8	1,992.1	2,277.9	103.41	1,074.8	1,400.0	4,752.8	102.23
July	296.8	1,959.3	2,256.1	102.37	1,083.7	1,403.0	4,742.8	101.89
Aug.	301.2	1,927.4	2,228.6	101.13	1,096.9	1,408.9	4,734.3	101.72
Sep.	306.7	1,984.3	2,291.0	103.96	1,073.6	1,411.1	4,775.7	102.62
Oct.	313.9	1,968.3	2,282.3	103.57	1,093.6	1,417.7	4,793.5	103.01
Nov.	321.4	2,020.9	2,342.3	106.35	1,086.2	1,428.8	4,857.3	104.41
Dec. (p)	341.2	2,083.1	2,424.3	109.71	1,076.3	1,458.5	4,959.1	106.50

2. Monetary aggregates: flows ⁴⁾

						M2		
	Currency in circulation	M1 Overnight deposits 2	Total	Annual growth rate ³⁾ (%) 4	Deposits with agreed maturity up to 2 years	Deposits redeemable at notice up to 3 months	Total	Annual growth rate ³⁾ (%)
2001 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	103.8	63.8	5.1	11.1	41.5	116.4	6.1
2002 Jan.	6.8	-47.3	-40.6	6.7	-6.7	21.1	-26.2	6.7
Feb.	-6.2	-4.6	-10.8	6.3	-4.0	4.1	-10.7	6.3
Mar.	14.0	-2.6	11.4	6.3	12.3	3.4	27.1	6.4
Apr.	7.4	32.8	40.2	6.6	5.4	-5.8	39.8	6.4
May	12.2	2.1	14.3	6.4	10.9	2.3	27.5	6.7
June	12.0	48.6	60.6	7.3	-20.6	6.3	46.3	6.6
July	11.0	-33.8	-22.9	7.3	4.2	2.8	-15.9	6.4
Aug.	4.4	-31.7	-27.3	8.0	13.5	6.0	-7.9	6.6
Sep.	5.6	56.9	62.5	8.0	-22.8	2.2	41.8	6.4
Oct.	7.2	-15.8	-8.6	8.3	20.4	6.7	18.5	6.8
Nov.	7.5	53.8	61.2	9.5	-7.3	11.1	65.0	7.1
Dec. ^(p)	19.8	54.1	73.9	9.7	-6.9	30.0	96.9	6.5

Source: ECB.

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

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

		M3 ²⁾			
Repurchase agreements	Money market fund shares/units	Money market paper and debt securities up to 2 years	Total	Index Dec. 01=100 ³⁾	
9	10	11	12	13	
221.5 223.4 230.8 225.7 235.1 225.9 218.5	357.3 366.4 377.6 381.2 392.3 400.8 398.0	145.2 140.4 142.5 147.6 149.5 152.2 145.9	5,204.7 5,198.9 5,199.3 5,249.9 5,274.7 5,327.1 5,427.0	95.84 95.81 95.92 96.72 97.16 98.16 100.00	2001 June July Aug. Sep. Oct. Nov. Dec.
$\begin{array}{c} 216.2 \\ 221.1 \\ 229.6 \\ 228.1 \\ 234.8 \\ 229.6 \\ 228.8 \\ 236.5 \\ 238.3 \\ 235.6 \\ 229.6 \\ 229.6 \\ 226.5 \end{array}$	416.6 427.0 431.2 437.5 442.6 439.2 450.3 463.4 460.4 462.7 477.1 470.1	141.8 138.8 137.2 134.7 144.0 132.9 125.5 126.6 131.3 133.7 131.2 127.0	5,414.4 5,415.5 5,453.0 5,491.5 5,534.3 5,554.4 5,547.4 5,560.8 5,605.8 5,605.8 5,605.3 5,782.7	99.83 99.84 100.56 101.35 102.24 102.72 102.47 102.72 103.55 103.93 105.27 106.81	2002 Jan. Feb. Mar. Apr. May June July Aug. Sep. Oct. Nov. Dec. ^(p)

			M3 ²⁾		
	Annual growth rate ³⁾ (%)	Total	Money market paper and debt securities up to 2 years	Money market fund shares/units	Repurchase agreements
	13	12	11	10	9
2001 July Aug. Sep. Oct. Nov. Dec. 2002 Jan. Feb. Mar. Apr.	5.5 5.8 6.8 7.3 7.6 7.6 7.6 7.7 7.3 7.3 7.2	-1.5 5.5 43.5 24.1 54.3 99.7 -9.4 0.7 39.1 42.9	-4.9 2.8 -0.9 0.5 5.0 -8.0 -0.4 -3.9 0.3 -3.3	9.5 10.6 3.2 11.5 9.7 -1.3 19.5 10.4 3.3 7.9	1.9 7.5 -5.1 9.5 -9.2 -7.4 -2.3 4.9 8.4 -1.5
May June July Aug. Sep. Oct. Nov. Dec. ^(p)	7.6 7.2 7.0 7.1 7.1 7.0 7.2 6.8	48.3 25.9 -13.5 13.3 45.2 20.3 72.8 82.8	10.0 -7.0 -8.9 1.2 3.6 2.6 -2.6 -4.4	4.0 -7.2 12.0 12.3 -2.7 2.1 14.7 -6.6	6.7 -6.1 -0.7 7.7 2.4 -2.8 -4.4 -3.1

For the calculations of the index and the growth rates, see the technical notes.
 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)
			Total	Index 4)	Total	Index 4)		
	Currency in circulation 1	Overnight deposits 2	3	4	5	6	7	8
2001 June July Aug.	330.1 323.8 317.5	1,764.7 1,769.8 1,789.2	2,094.8 2,093.6 2,106.6	94.72 94.74 95.42	2,356.7 2,372.2 2,378.0	95.80 96.52 96.88	4,451.5 4,465.8 4,484.7	95.29 95.68 96.19
Sep. Oct. Nov. Dec.	307.8 295.8 278.3 233.4	1,822.4 1,843.6 1,877.0 1,922.1	2,130.2 2,139.4 2,155.3 2,155.5	96.48 96.92 97.61 97.63	2,390.8 2,405.6 2,421.1 2,441.6	97.39 97.97 98.56 99.39	4,521.0 4,545.0 4,576.3 4,597.1	96.96 97.47 98.11 98.55
2002 Jan. Feb. Mar. Apr. May June July Aug. Sep.	251.3 245.3 254.1 264.4 273.6 283.0 292.8 299.3 306.2	1,927.2 1,932.6 1,923.7 1,932.8 1,942.2 1,945.9 1,954.0 1,964.3 1,993.3	2,178.5 2,177.9 2,177.8 2,197.2 2,215.8 2,228.9 2,246.8 2,263.5 2,299.5	98.62 98.60 98.61 99.56 100.50 101.19 101.95 102.72 104.35	2,450.4 2,457.8 2,473.6 2,479.8 2,483.4 2,486.5 2,496.5 2,502.1 2,509.8	99.73 100.04 100.71 101.04 101.34 101.64 101.86 102.10 102.43	4,628.9 4,635.7 4,651.4 4,677.0 4,699.2 4,715.4 4,743.3 4,765.7 4,809.3	99.21 99.36 99.72 100.34 100.94 101.43 101.90 102.39 103.34
Oct. Nov. Dec. ^(p)	314.1 319.6 333.1	1,997.9 2,027.0 2,036.4	2,312.0 2,346.6 2,369.6	104.92 106.55 107.23	2,531.6 2,532.0 2,518.3	103.34 103.36 102.93	4,843.6 4,878.7 4,887.9	104.09 104.87 104.97

4. Seasonally adjusted flows 7)

								М	2		
		M1				Other sh	ort-term dep	oosits 5)	Total	Monthly growth rate 4)	Annual growth rate 4)
	Currency in circulation	Overnight deposits 2	Total 3	Monthly growth rate ⁴⁾ (%)	Annual growth rate ⁴⁾ (%) 5	Total 6	Monthly growth rate ⁴⁾ (%) 7	Annual growth rate ⁴⁾ (%) 8	9	10 10 10	(%)
2001 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	0.0	3.6	8.8	0.8	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	21.9	1.0	6.6	8.4	0.3	6.8	30.4	0.7	6.7
Feb.	-5.9	5.5	-0.4	0.0	6.2	7.6	0.3	6.5	7.3	0.2	6.3
Mar.	8.8	-8.5	0.3	0.0	6.0	16.4	0.7	6.6	16.6	0.4	6.3
Apr.	10.3	10.6	20.9	1.0	6.6	8.2	0.3	6.1	29.0	0.6	6.3
May	9.2	11.6	20.8	0.9	6.7	7.3	0.3	6.7	28.1	0.6	6.7
June	9.4	5.7	15.1	0.7	6.8	7.4	0.3	6.1	22.6	0.5	6.4
July	9.8	6.9	16.7	0.8	7.6	5.2	0.2	5.5	21.9	0.5	6.5
Aug.	6.4	10.6	17.0	0.8	7.6	6.0	0.2	5.4	23.0	0.5	6.4
Sep.	6.9	29.1	36.0	1.6	8.2	8.1	0.3	5.2	44.1	0.9	6.6
Oct.	7.9	4.7	12.6	0.5	8.3	22.3	0.9	5.5	34.9	0.7	6.8
Nov.	5.5	30.3	35.8	1.5	9.2	0.5	0.0	4.9	36.3	0.7	6.9
Dec. (p)	13.5	1.5	15.1	0.6	9.8	-10.6	-0.4	3.6	4.5	0.1	6.5

Source: ECB.

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

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

to 2 years.
Loans, with other components of credit, are shown without seasonal adjustment on page 20*.
For the calculations of the index and the growth rates, see the technical notes.

		M3 ²⁾		Loans to other euro area (excluding general gover		
Marketable instr	ruments 6)	Total	Index 4)		, ,	
Total	Index 4)			Total	Index 4)	
9	10	11	12	13	14	
722.1	95.15	5,173.7	95.27	6,364.2	97.37	2001 June
734.0	96.76	5,199.8	95.83	6,381.1	97.77	July
749.1	98.77	5,233.8	96.55	6,398.0	98.17	Aug.
764.2	99.91	5,285.2	97.37	6,433.8	98.65	Sep.
783.4	102.32	5,328.4	98.15	6,465.5	99.12	Oct.
783.5	102.80	5,359.8	98.77	6,503.6	99.69	Nov.
790.7	103.71	5,387.8	99.28	6,510.0	99.86	Dec.
781.1	103.05	5,409.9	99.75	6,535.6	100.21	2002 Jan.
781.2	102.96	5,416.9	99.87	6,562.7	100.66	Feb.
784.2	103.44	5,435.6	100.24	6,597.2	101.21	Mar.
786.6	103.88	5,463.6	100.84	6,626.3	101.76	Apr.
798.1	105.36	5,497.3	101.56	6,657.3	102.38	May
800.5	105.61	5,515.9	102.01	6,665.7	102.63	June
809.1	106.67	5,552.4	102.57	6,680.6	102.79	July
824.6	108.61	5,590.3	103.26	6,722.9	103.45	Aug.
841.3	110.77	5,650.6	104.38	6,738.4	103.71	Sep.
837.5	110.27	5,681.1	104.96	6,756.5	104.03	Oct.
842.6	111.18	5,721.3	105.76	6,755.2	104.13	Nov.
853.6	112.67	5,741.5	106.04	6,769.3	104.50	Dec. (p)

				M3 ²⁾				euro area resido neral governmen		
Marketa	ble instruments	6)	Total	Monthly growth	Annual growth	3-month moving				
Total	Monthly growth rate ⁴⁾ (%)	Annual growth rate ⁴⁾ (%)		rate ⁴⁾ (%)	rate ⁴⁾ (%)	average (centred) (%)	Total	Monthly growth rate ⁴⁾ (%)	Annual growth rate ⁴⁾ (%)	
 12	13	14	15	16	17	18	19	20	21	
12.2	1.7	13.1	30.4	0.6	5.6	5.6	25.9	0.4	7.8	2001 July
15.2	2.1	15.5	39.0	0.8	5.8	6.0	26.6	0.4	7.2	Aug.
8.7	1.2	17.0	44.3	0.8	6.7	6.6	31.0	0.5	6.7	Sep.
18.4	2.4	19.0	42.4	0.8	7.3	7.2	30.4	0.5	6.5	Oct.
3.7	0.5	19.2	33.4	0.6	7.7	7.6	37.5	0.6	6.6	Nov.
6.9	0.9	17.5	27.8	0.5	7.9	7.8	10.9	0.2	6.1	Dec.
-5.0	-0.6	13.8	25.4	0.5	7.7	7.6	23.0	0.4	5.7	2002 Jan.
-0.7	-0.1	13.5	6.6	0.1	7.3	7.4	29.0	0.4	5.6	Feb.
3.7	0.5	12.9	20.3	0.4	7.2	7.2	36.1	0.6	5.5	Mar.
3.3	0.4	12.7	32.4	0.6	7.2	7.3	35.6	0.5	5.5	Apr.
11.2	1.4	12.9	39.2	0.7	7.6	7.3	40.7	0.6	5.7	May
1.9	0.2	11.0	24.4	0.4	7.1	7.2	16.3	0.2	5.4	June
8.0	1.0	10.2	29.9	0.5	7.0	7.0	10.5	0.2	5.1	July
14.8	1.8	10.0	37.8	$0.7 \\ 1.1$	7.0 7.2	7.1	42.7 16.9	0.6	5.4 5.1	Aug.
16.4 -3.9	2.0 -0.5	10.9 7.8	60.5 31.1	0.5	6.9	7.0 7.1	20.8	0.3 0.3	5.1 5.0	Sep. Oct.
-3.9	-0.5	8.2	43.3	0.3	7.1	6.9	6.5	0.3	4.5	Nov.
11.3	1.3	8.6	15.8	0.8	6.8	0.9	23.9	0.4	4.6	Dec. ^(p)

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.
 Marketable instruments comprise repurchase agreements, money market fund shares/units, money market paper and debt securities up to two years.
 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 M	IFI liabilities			Cre	dit ²⁾		Net external	Fixed assets
	Deposits with agreed maturity over 2 years	Deposits redeem- able at notice over 3 months	Debt securities over 2 years	Capital and reserves	Credit to general govern- ment	Credit to other euro area residents	Of which loans	Index Dec. 01 =100 ³⁾	assets	
	1	2	3	4	5	6	7	8	9	10
2001 June July Aug. Sep. Oct. Nov. Dec.	1,170.9 1,165.3 1,162.0 1,163.0 1,162.9 1,161.6 1,169.1	122.0 120.7 119.5 118.6 116.9 115.8 115.8	1,593.0 1,594.1 1,586.2 1,604.7 1,617.0 1,606.6 1,613.6	965.9 955.2 959.9 970.4 981.1 982.6 995.2	2,042.1 2,034.4 2,021.6 2,025.0 2,014.0 2,034.3 2,026.9	7,247.9 7,261.6 7,238.5 7,284.1 7,325.2 7,379.6 7,424.5	6,388.2 6,394.4 6,369.6 6,421.9 6,451.6 6,501.9 6,519.3	97.74 97.97 97.74 98.47 98.90 99.67 100.00	-41.6 -27.1 1.5 54.3 77.3 97.7 84.6	175.4 176.5 176.9 177.6 178.3 179.1 180.0
2002 Jan. Feb. Mar. Apr. May June July Aug. Sep. Oct. Nov. Dec. (9)	$\begin{array}{c} 1,173.2\\ 1,174.7\\ 1,178.2\\ 1,177.3\\ 1,179.6\\ 1,181.7\\ 1,180.4\\ 1,168.9\\ 1,169.5\\ 1,170.5\\ 1,174.0\\ 1,186.1 \end{array}$	112.3 111.2 109.9 108.0 106.8 106.6 106.6 106.8 107.2 106.2 105.7 105.8	$1,632.9\\1,638.8\\1,655.8\\1,650.2\\1,660.5\\1,655.2\\1,670.1\\1,687.0\\1,680.8\\1,688.7\\1,688.7\\1,698.9\\1,683.8$	$\begin{array}{c} 1,007.6\\ 1,011.5\\ 1,010.6\\ 1,004.5\\ 1,008.7\\ 985.7\\ 993.4\\ 1,004.2\\ 1,015.7\\ 1,013.9\\ 1,016.0\\ 997.0\\ \end{array}$	$\begin{array}{c} 2,051.1\\ 2,055.2\\ 2,081.7\\ 2,061.7\\ 2,071.4\\ 2,069.1\\ 2,065.9\\ 2,053.0\\ 2,073.9\\ 2,068.8\\ 2,083.6\\ 2,054.1\\ \end{array}$	7,444.5 7,465.5 7,513.3 7,551.0 7,573.7 7,598.1 7,592.6 7,626.6 7,657.3 7,677.9 7,725.0	6,534.4 6,548.7 6,606.1 6,641.2 6,659.7 6,692.3 6,726.8 6,722.6 6,724.5 6,778.0	$100.19 \\ 100.44 \\ 101.35 \\ 101.99 \\ 102.42 \\ 103.02 \\ 102.98 \\ 103.53 \\ 103.82 \\ 104.12 \\ 104.63 \\ 104.63 \\ 100.44 \\ 1$	$\begin{array}{c} 70.0\\ 65.1\\ 53.8\\ 52.4\\ 90.6\\ 111.1\\ 108.4\\ 128.8\\ 138.6\\ 165.7\\ 199.2\\ 208.4 \end{array}$	177.5 176.6 176.4 176.2 176.4 176.2 176.8 177.7 178.3 179.3 177.0 180.1

6. Main counterparts of M3: flows 4)

		Longer-term N	/IFI liabilities			Cr	edit ²⁾		Net external	Fixed
	Deposits with agreed maturity over 2 years	Deposits redeem- able at notice over 3 months	Debt securities over 2 years	Capital and reserves	Credit to general govern- ment	Credit to other euro area residents	Of which loans	Annual growth rate ³⁾ (%)	assets	
	1	2	3	4	5	6	7	8	9	10
2001 July	-4.7	-1.4	7.5	-6.5	-5.6	19.8	15.1	7.7	16.6	1.1
Aug.	-2.1	-1.2 -0.9	-1.2 17.5	7.3 9.0	-8.0 -3.3	-11.9 45.5	-15.2 47.5	7.2 6.7	27.2 30.8	0.3 0.7
Sep. Oct.	0.8 -0.3	-0.9	17.3	9.0 7.9	-3.3	45.5 36.8	47.3 28.4	6.5	50.8 25.1	0.7
Nov.	-0.5	-1.1	18.7	2.9	23.8	48.6	49.7	6.6	27.4	1.1
Dec.	7.3	0.1	7.6	13.6	-6.7	46.1	21.8	6.0	-8.8	1.1
2002 Jan.	3.6	-3.6	11.0	14.2	18.7	17.5	12.6	5.7	-14.2	-2.5
Feb.	1.6	-1.0	9.3	-0.8	3.9	24.9	16.2	5.6	-10.9	-0.9
Mar.	3.7	-1.3	18.7	2.6	22.2	48.5	59.0	5.5	-5.7	0.0
Apr.	-0.2	-1.9	1.0	-5.2	-18.5	44.6	41.7	5.5	-2.8	-0.2
May	3.5	-1.2	19.7	3.7	6.9	32.1	28.2	5.8	38.9	0.2
June	3.3	-0.2	8.6	-17.2	0.1	32.4	39.3	5.4	40.8	-0.2
July	1.3	0.0	8.8	9.7	-3.8	-15.1	-2.9	5.1	-2.3	0.5
Aug.	2.2	0.2	2.7	8.7	-14.0	6.9	0.2	5.4	14.2	1.0
Sep.	1.0	0.4	12.1	9.9	14.4	40.8	35.8	5.1	18.7	0.6
Oct.	1.3	-1.0	9.1	0.0	-2.9	30.9	18.6	5.0	29.7	0.9
Nov.	3.6	-0.5	15.7	3.0	15.1	26.1	19.6	4.5	35.0	-2.3
Dec. (p	13.1	0.1	-10.8	2.1	-9.8	57.5	33.4	4.6	17.7	1.6

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. 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.

2)

ś)

For the calculations of the index and the growth rates, see the technical notes. Calculated from monthly differences in levels adjusted for reclassifications, other revaluations, exchange rate variations and any other changes which do *4*) not arise from transactions.

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 inter- mediaries except insurance corporations and pension funds Insurance corporations and pension funds Total Index Total Ir						General government							
	Total Ind Up to Dec. 1 year =100			Total	Up to 1 year	Index Dec.01 =100 ²⁾	Central govern- ment 3)	ern-			Social	Total	Index Dec.01 =100 ²⁾	
									Over 5 years		Over 5 years	security funds		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
2001 Q1 Q2 Q3 Q4	418.2 425.5 409.0 434.6	273.1 280.7 256.8 276.2	95.8 97.5 93.6 100.0	36.4 36.2 37.4 34.9	26.8 26.7 26.9 24.8	103.5 102.9 107.3 100.0	188.4 174.1 167.3 170.1	295.2 294.0 293.9 298.3	255.3 254.9 254.1 252.0	352.4 350.4 349.7 362.9	314.0 312.4 312.0 322.3	15.6 17.2 18.9 16.4	851.7 835.7 829.8 847.7	100.6 98.6 98.0 100.0
2002 Q1 Q2 Q3 (p)	459.0 461.3 453.3	305.0 303.7 290.6	105.8 106.3 104.4	38.9 39.4 43.1	28.3 28.2 30.7	111.3 112.2 116.8	180.3 163.0 155.4	294.0 280.9 274.7	248.2 245.8 241.6	361.8 366.6 371.3	317.9 314.5 319.4	16.4 19.5 19.7	852.6 830.1 821.1	100.6 98.0 96.9

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

	Non-monet mediaries e corporation	except insu	irance				General government					:		
	Total	Up to	Annual growth	Total	Up to	Annual growth	Central govern-	0	ther genera	al governm			Total	Annual growth
		1 year	rate ²⁾ (%)		1 year	rate ²⁾ (%)	ment ³⁾	State government Over 5 years		Over 5 security				rate ²⁾ (%)
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
2001 Q2 Q3 Q4	7.5 -16.8 27.7	7.6 -23.9 21.6	14.8 7.8 11.8	-0.2 1.5 -2.5	-0.1 0.2 -2.1	-6.9 13.8 11.3	-14.8 -6.2 1.9	-1.3 0.0 4.4	-0.4 -0.7 -2.1	-2.0 -0.7 13.2	-1.7 -0.4 10.3	1.6 1.7 -2.5	-16.4 -5.2 16.9	-1.9 -0.8 -0.9
2002 Q1 Q2 Q3 ^(p)	25.1 2.1 -8.0	29.3 -1.3 -13.1	10.4 9.0 11.5	3.9 0.3 1.6	3.5 -0.2 2.6	7.5 9.0 8.8	10.1 -16.2 -7.7	-4.3 -13.1 -6.8	-3.8 -2.4 -4.7	-1.1 4.8 4.7	-4.4 -3.5 5.0	$0.1 \\ 3.1 \\ 0.2$	4.8 -21.4 -9.6	0.0 -0.6 -1.1

Source: ECB.

 For the calculation of the index and the growth rates, see the technical notes.
 A maturity breakdown is not available for loans to central government.
 Calculated from quarterly differences in levels adjusted for reclassifications, other revaluations, exchange rate variations and any other changes which do not arise from transactions.

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.

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 Index Up to 1 year Over 1 Over Total Consumer credit Dec.01=100² and up to 5 years Up to 1 year Over 1 Total Index Over 5 years and up to 5 years Dec.01=100²⁾ 5 years 6 7 9 10 1,034.2 1,051.7 1,027.2 2001 Q1 95.8 445.9 1,313.9 2,794.0 96.1 98.7 168.4 212.7 479.9 2,851.8 2,866.6 Q2 Q3 Q4 456.3 467.3 1,343.7 1.372.1 97.8 98.8 100.1 171.1 217.7 221.7 488.8 493.1 97.9 98.8 100.6 1707 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 Q3 ^(p) 102.3 1,010.2 504.9 1,437.4 2,952.4 102.4 173.6 233.0 508.9 101.4 998.6 505.2 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-fina	ncial corporatio	ns						
	Up to 1 year	Over 1 and up to	Over 5 years	Total	Annual growth		Co	nsumer credit 3)		
	l year	5 years	5 years		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 Q3 Q4	13.6 -19.2 -10.1	12.1 14.3 23.2	25.9 32.3 22.5	51.7 27.4 35.6	9.1 7.5 6.1	1.3 0.9 1.9	3.9 -0.5 -0.7	5.2 4.1 4.9	$ \begin{array}{r} 10.4 \\ 4.5 \\ 6.1 \end{array} $	5.2 3.6 3.6
2002 Q1 Q2 Q3 ^(p)	-1.1 -0.4 -12.7	4.7 15.5 -0.1	20.2 30.9 13.0	23.8 46.0 0.3	5.0 4.7 3.7	-4.2 2.9 2.2	1.2 0.7 1.8	2.5 3.8 4.1	-0.5 7.4 8.1	4.3 3.6 4.3

Source: ECB.

 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.

					Househo				Non-profit i serving ho					
	Lending for	or house p	urchase 3)			(Other lendin	g		Total	Index Dec.01	Total	Index Dec.01	
Up to 1 year		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 $=100^{2}$		=100 ²⁾		=100 ²⁾	
11	12	13	14	15	16	17	18	19	20	21	22	23	24	
21.8 22.3 22.5 22.7	62.0 62.4 61.1 61.0	1,831.6 1,868.0 1,905.9 1,935.1	1,915.4 1,952.8 1,989.5 2,018.8	95.1 96.7 98.6 100.0	146.9 148.8 144.3 144.6	104.5 100.9 100.8 101.9	342.1 342.7 342.1 343.6	593.5 592.4 587.2 590.0	99.9 99.2	3,034.0 3,069.8	95.9 97.5 98.7 100.0	37.3 40.7 39.0 39.0	95.3 104.3 99.9 100.0	2001 Q1 Q2 Q3 Q4
23.1 23.7 24.5	60.7 60.7 60.9	1,972.9 2,016.9 2,053.6		101.9 104.1 105.9	142.6 145.7 143.3	101.2 103.3 101.5	337.7 339.5 340.7	581.6 588.6 585.6	99.5 100.9 100.9	3,137.3 3,198.7 3,243.4	101.1 103.0 104.5	38.7 39.4 39.9	99.1 101.0 102.2	$2002 \begin{array}{c} Q1 \\ Q2 \\ Q3 \ ^{(p)} \end{array}$

					Househo				Non-profit serving he					
	Lending fo						Other lendir	<u> </u>		Total	Annual growth	Total	Annual growth	
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⁾ (%)		rate ²⁾ (%)		rate ²⁾ (%)	
11	12	13	14	15	16	17	18	19	20	21	22	23	24	
0.5 0.2 0.1	0.5 -1.4 -0.1	32.2 38.4 28.9	33.3 37.3 29.0	7.6 7.6 6.8	2.0 -4.5 0.3	-1.8 0.1 2.3	5.3 0.2 2.0	5.5 -4.3 4.6	2.9 2.3 2.0	49.3 37.4 39.7	6.2 5.9 5.3	3.5 -1.7 0.0	8.1 3.7 2.2	2001 Q2 Q3 Q4
0.4 0.6 0.9	-0.4 0.0 0.2	37.9 44.0 36.4	37.9 44.7 37.5	7.2 7.6 7.5	-1.6 3.4 -2.5	-0.3 2.4 0.2	-1.2 2.4 2.6	-3.0 8.2 0.3	0.5 0.9 1.7	34.3 60.3 45.8	5.4 5.7 5.9	-0.4 0.8 0.5	3.9 -3.2 2.2	$2002 \begin{array}{c} Q1 \\ Q2 \\ Q3 \ ^{(p)} \end{array}$

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.

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

		etary finar ce corpora				Insurance	corpora	tions and	1 pensio	n funds		(General go	vernment		
	Total ²		With	Damag	Index Dec.01	Total ²⁾	Over-	With	Repos	Index Dec.01 =100 ³⁾	Central govern-		ther gener overnmen		Total	Index Dec.01 =100 ³⁾
		Over- nightWith agreed matu- rityRepos =100234			-100 %		night	agreed matu- rity	Repos	-100 %	ment	State govern- ment	Local govern- ment	Social security funds		-100 %
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
2001 Q1 Q2 Q3 Q4	441.8 455.6 455.3 465.8	151.8 164.3 162.7 157.9	194.1 196.0 201.8 217.3	91.2 89.3 85.6 85.3	98.3 100.5 98.7 100.0	483.8 486.3 487.8 495.4	38.2 41.4 39.3 48.0	423.3 424.2 426.9 427.5	18.8 16.9 17.9 16.4	97.6 98.2 98.5 100.0	150.3 165.5 147.8 139.0	30.9 31.4 33.3 30.0	65.0 66.8 67.4 68.9	57.2 60.8 60.4 61.0	303.5 324.6 308.9 299.0	101.5 108.6 103.3 100.0
2002 Q1 Q2 Q3 ^(p)	484.7 492.4 490.1	157.8 164.0 159.2	228.7 229.9 219.6	92.1 93.0 105.6	103.6 104.8 106.8	498.6 503.9 507.9	43.9 48.4 49.6	433.0 432.9 437.8	17.7 19.0 16.6	100.6 101.7 102.5	157.5 155.0 148.4	31.0 34.2 34.4	64.2 65.7 63.9	61.8 59.6 54.9	314.4 314.5 301.6	105.4 105.4 99.8

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

			ncial inter ations and			Insurance	corpora	ations and	l pensio	n funds		(General go	overnment		
	Total ²				Annual growth rate 3)	Total ²				Annual growth	Central govern-		ther gener		Total	Annual growth
		Over- night agreed matu- rity 1 2 3 4					Over- night	With agreed matu- rity	Repos	rate ³⁾ (%)	ment	State govern- ment	Local govern- ment	Social security funds		rate ³⁾ (%)
	1	2	5	6	7	8	9	10	11	12	13	14	15	16		
2001 Q2 Q3 Q4	10.0 -8.2 6.1	12.4 -1.6 -4.7	-1.8 -2.2 10.8	-1.8 -3.7 -0.2	4.6 2.3 3.8	2.8 1.5 7.6	3.4 -2.1 8.8	1.0 2.7 0.6	-1.9 1.0 -1.4	4.5 4.6 3.3	15.1 -17.7 -8.8	0.5 1.9 -3.4	1.9 0.5 1.5	3.6 -0.5 0.7	21.1 -15.7 -10.0	6.5 -2.0 -6.9
2002 Q1 Q2 Q3 ^(p)	16.9 5.6 9.4	0.0 5.8 -5.2	9.4 1.5 1.9	6.7 0.3 12.7	5.4 4.3 8.3	3.0 5.3 4.1	-4.2 4.5 1.3	5.4 -0.1 5.0	1.3 1.2 -2.4	3.1 3.6 4.1	19.0 -2.5 -10.3	1.0 3.3 0.1	-4.7 1.5 -1.7	0.7 -2.1 -4.7	16.1 0.2 -16.7	3.8 -2.9 -3.4

Source: ECB.

2)

3) 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.

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. Including deposits redeemable at notice. For the calculation of the index and the growth rates, see the technical notes.

Table 2.6 (cont'd)

Deposits held with MFIs, by counterpart and instrument¹⁾

(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

		Nc	on-financial co	rporations					Household	s ²⁾		
	Overnight	With agreed maturity		Repos	Total	Index Dec.01 =100 ³⁾	Overnight	With agreed maturity		Repos	Total	Index Dec.01 =100 ³⁾
	1	2	3	4	5	6	7	8	9	10	11	12
2001 Q1 Q2 Q3 Q4	479.0 514.6 514.8 577.1	344.4 331.2 318.4 335.3	24.1 24.4 25.4 27.5	29.0 29.1 32.0 36.2	876.5 899.3 890.7 976.1	88.6 90.6 91.5 100.0	906.1 947.2 963.6 1,043.5	1,192.4 1,198.8 1,203.8 1,194.5	1,287.1 1,293.5 1,305.3 1,365.7	78.9 81.3 84.6 76.6	3,464.5 3,520.8 3,557.3 3,680.3	94.0 95.5 96.5 100.0
2002 Q1 Q2 Q3 ^(p)	529.1 555.7 561.5	344.8 337.7 336.6	27.5 27.7 28.9	34.5 37.0 35.5	935.9 958.1 962.5	95.8 99.9 100.3	1,039.2 1,076.6 1,067.0	1,180.1 1,174.7 1,173.4	1,382.6 1,382.0 1,391.5	80.6 77.0 78.4	3,682.5 3,710.2 3,710.2	100.1 100.9 100.9

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

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

Source: ECB.

do not arise from transactions.

¹⁾ Corresponding ESA 95 sector codes: non-financial corporations, S.11; households, S.14; non-profit institutions serving households, S.15; non-monetary Corresponding ESA 95 sector codes, non-junctual corporations, 5.14, non-profit institutions serving noisenotas, 5.17, non-monetary financial intermediaries except insurance corporations and pension funds, S.125; general government, S.13.
 Comprises households (S.14) and non-profit institutions serving households (S.15).
 For the calculation of the index and the growth rates, see the technical notes.
 Calculated from quarterly differences in levels adjusted for reclassifications, other revaluations, exchange rate variations and any other changes which

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

2. Flows 4)

			Loans t	o non-res	sidents				Hol	dings of	securities of	other than	shares i	ssued by	non-resi	dents
	Ban	ks ^{1) 2)}		Non-b	anks		Total	Annual growth	Ва	anks 1)		Non-ba	anks		Total	Annual growth
	growth govern- rate ³⁾ ment grow (%)		Annual growth rate ³⁾ (%)		rate ³⁾ (%)	Total	Annual growth rate ³⁾ (%)	General govern- ment	Other	Total	Annual growth rate ³⁾ (%)		rate ³⁾ (%)			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
2001 Q2 Q3 Q4	0.7 34.8 29.2	3.3 10.1 14.0	2.9 -4.1 0.1	-12.6 30.5 6.1	-9.7 26.4 6.2	18.3 19.6 16.0	-9.1 61.2 35.4	8.3 13.4 14.7	14.0 2.9 26.0	31.0 26.7 33.3	9.2 -22.3 16.7	-5.7 21.9 -2.3	3.5 -0.4 14.3	5.3 3.2 7.2	17.4 2.6 40.3	11.8 9.2 14.3
2002 Q1 Q2 Q3 ^(p)	-17.3 51.9 28.1	4.4 9.3 8.6	3.6 -3.9 4.0	11.9 16.8 5.7	15.4 12.9 9.7	6.4 10.3 7.4	-1.9 64.8 37.8	5.1 9.7 8.2	25.6 -3.4 6.4	35.7 24.9 26.4	-10.9 -34.4 5.9	-2.5 28.2 11.4	-13.4 -6.2 17.3	0.9 -1.1 2.7	12.2 -9.5 23.7	10.7 6.6 9.8

Source: ECB.

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

Table 2.7 (cont'd)

		gs of share sued by nor						Deposi	ts held by	non-reside	ents			
 Bank	(S ¹⁾	Otl	ner	Total	Index Dec.01	Bar	nks 1)		Non-b	anks		Total	Index Dec.01	
 Total	Index Dec.01 =100 ³⁾	Total	Index Dec.01 =100 ³⁾		=100 ³⁾	Total	Index Dec.01 = 100^{3}	General govern- ment	Other	Total	Index Dec.01 =100 ³⁾		=100 ³⁾	
 17	18	19	20	21	22	23	24	25	26	27	28	29	30	
65.1 61.1 63.6 73.0	93.5 87.6 91.1 100.0	94.3 97.2 89.9 89.8	104.5 107.5 99.2 100.0	159.4 158.3 153.5 162.8	99.7 98.8 95.7 100.0	1,781.7 1,817.5 1,710.8 1,718.4	103.5 103.3 100.7 100.0	89.3 94.9 93.0 95.3	577.1 587.1 588.5 615.0	666.4 681.9 681.5 710.3	93.9 94.3 97.2 100.0	2,448.2 2,499.4 2,392.3 2,428.8	100.7 100.7 99.7 100.0	2001 Q1 Q2 Q3 Q4
76.9 76.8 77.8	104.5 104.1 105.4	98.5 100.9 96.4	110.9 113.4 108.2	175.4 177.7 174.2	108.0 109.3 107.0	1,740.4 1,606.1 1,645.4	100.4 98.9 100.6	99.0 96.2 102.4	636.8 607.3 609.8	735.8 703.6 712.3	103.3 104.6 105.2	2,476.3 2,309.7 2,357.7	101.3 100.6 102.0	2002 Q1 Q2 Q3 ^(p)

	Holdi	ngs of share ssued by nor	s and othe	r equity				Deposi	ts held by	non-reside	ents			
Bank	(S ¹⁾	Otl	her	Total	Annual growth		nks 1)		Non-b	anks		Total	Annual growth	
Total	Annual growth rate ³⁾ (%)	$ \begin{array}{c c} th \\ rate \\ \hline \% \end{array} & \begin{array}{c} growth \\ rate \\ \hline \% \end{array} \\ \hline \% \end{array} $			rate ³⁾ (%)	Total	Annual growth rate ³⁾ (%)	General govern- ment	Other	Total	Annual growth rate ³⁾ (%)		rate ³⁾ (%)	
17	18	19	20	21	22	23	24	25	26	27	28	29	30	
-4.1 2.4 6.2	15.3 8.5 11.6	2.7 -7.5 0.8	45.4 13.5 12.8	-1.4 -5.1 7.0	32.2 11.4 12.3	-3.6 -45.2 -12.0	14.6 11.3 8.7	5.6 -1.9 2.3	-2.7 22.4 17.5	2.8 20.6 19.8	18.2 14.0 17.9	-0.8 -24.6 7.8	15.6 12.0 11.2	2001 Q2 Q3 Q4
3.3 -0.2 0.9	11.8 18.9 15.7	9.8 2.3 -4.7	6.1 5.5 9.1	13.0 2.1 -3.7	8.3 10.5 11.8	7.6 -25.9 27.0	-2.9 -4.2 -0.1	4.2 -2.8 6.1	19.0 12.1 -1.6	23.2 9.3 4.4	9.9 10.8 8.3	30.8 -16.7 31.4	0.6 -0.1 2.3	2002 Q1 Q2 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.

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	3							Non-	-MFIs						
	All curren-	Euro ²⁾	EU	Other curren-	LICD	IDV	CUE	Other	All curren- cies	Euro ²⁾	Other EU	Other curren-	LICD	IDV	CHF	Other
	cies	2	curren- cies 3	cies 4	USD 5	JPY 6	CHF 7	Other 8	cies 9	10	curren- cies 11	cies 12	USD 13	JPY 14	LHF 15	16
2001 Q1 Q2		3,563.6 3,590.3	55.4 52.8	448.9 436.6		43.7 43.3	67.8 65.4		5,570.0 5.686.6		31.2 30.7	175.6 179.3	130.8 133.5	$20.2 \\ 21.0$		12.2 13.2
Q3 Q4	4,108.4 4,171.9	3,628.3 3,699.5	48.9 46.6	431.2 425.9	300.6 307.6	41.7 33.5	71.0 67.2		5,700.0 5,916.6	-)	28.2 26.0	168.1 174.9	125.7 127.4	19.4 23.9		12.2 13.0
2002 Q1 Q2 Q3 ^(p)	4,214.6	3,646.5 3,774.5 3,797.1	46.1 41.3 38.5	443.0 398.8 381.3		40.6 40.8 37.7	65.6 62.8 58.2	18.8	5,916.1 5,979.1 5,972.4	5,791.4	28.8 26.7 25.8	174.6 161.0 161.2	126.9 115.0 117.8	22.4 22.3 21.2	10.7 10.9 9.4	14.6 12.8 12.9

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

	Banks 3)							Non-b	oanks						
	All curren- cies	Euro 2)	Other EU curren-	Other curren- cies	USD	JPY	CHF	Other	All curren- cies	Euro 2)	Other EU curren-	Other curren- cies	USD	JPY	CHF	Other
	1	2	cies 3	4	5	6	7	8	9	10	cies 11	12	13	14	15	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		255.9	17.6	14.2	12.4
Q2	1,817.5	690.1	133.8		815.4	72.9	73.2	32.2	681.9	286.7	73.2		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 Q2 Q3	1,606.1	661.9 649.1 703.0	144.8 141.6 144.3	933.8 815.4 798.2	781.0 665.8 650.2	44.4 40.5 42.1	74.6 73.4 72.5	33.8 35.7 33.4	735.8 703.6 712.3	312.7 322.2 334.7	66.6 63.3 68.3	318.1	302.8 268.7 258.6	20.0 19.4 17.9	18.9 17.8 16.4	14.8 12.2 16.4

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

	Debt se	ecurities							Money	market pa	per					
	All curren-	Euro ²⁾	Other EU	Other curren-					All curren-	Euro 2)	Other EU	Other curren-				
	cies		curren- cies	cies	USD	JPY	CHF	Other	cies		curren- cies	cies	USD	JPY	CHF	Other
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	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		2,358.3	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		2,384.7	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		2,428.7	71.5	344.6	212.0	56.4	43.3	25.2	274.7	226.1	5.4	43.2	36.9	2.4	2.6	1.3
Q2 Q3 ^(p)		2,448.4 2,458.9	67.9 70.6	334.4 333.4	209.4 203.4	55.1 53.6	44.1 48.0	25.8 28.4	285.3 286.6	233.7 234.2	7.2 6.3	44.5 46.1	38.0 39.8	1.5 1.1	2.7 3.0	2.3 2.2

Source: ECB.
Levels at the end of the period. Data are partially estimated. For further details, see the technical notes.
Including items expressed in the national denominations of the euro.
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 curren- cies	Euro ²⁾	Other EU curren-	Other curren- cies	USD	JPY	CHF	Other	All curren- cies	Euro ²⁾	Other EU curren-	Other curren- cies	USD	JPY	CHF	Other
	1	2	cies 3	4	5	6	7	8	9	10	cies 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		30.9	313.5		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		30.5	321.5	187.4	51.0	76.8	6.3
Q2 Q3 (p	4,201.2 4,220.0	-	-	-	-	-	-		7,521.3 7,549.5		28.9 27.7		152.5 150.3	46.7 45.1	78.3 80.0	5.8 5.6

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

	Issued by	/ MFIs							Issued by	y non-MFIs	6					
	All curren-	Euro ²⁾	Other EU	Other curren-					All curren-	Euro ²⁾	Other EU	Other curren-				
	cies		curren- cies	cies	USD	JPY	CHF	Other	cies		curren- cies	cies	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		1,466.8	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		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 Q3 ^(p)	1,064.3 1,047.2	1,017.3 1,002.5	13.5 14.1	33.5 30.7	23.9 22.2	5.8 4.9	2.0 2.0	1.8 1.7	1,582.2 1,601.8	1,547.9 1,567.0	4.5 5.2	29.8 29.6	15.5 15.2	12.2 12.2	1.2 1.4	$\begin{array}{c} 0.8\\ 0.7\end{array}$

6. Loans to non-residents of the euro area

	Banks 3)								Non-l	oanks						
	All curren-	Euro ²⁾	Other EU	Other curren-					All curren-	Euro ²⁾	Other EU	Other curren-				
	cies		curren- cies	cies	USD	JPY	CHF	Other	cies		curren- cies	cies	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 Q2 Q3 (r	1,104.8 1,085.2 1,123.6	432.2 459.4 498.9	131.1 129.9 142.1	541.6 495.9 482.5	424.4 375.0 368.4	45.6 61.4 56.9	37.3 36.1 33.6	34.3 23.4 23.7	633.1 601.3 616.1	199.5 204.2 217.2	49.9 46.6 46.2	383.7 350.5 352.8	331.2 300.8 299.5	16.4 12.8 15.5	26.9 28.1 29.3	9.2 8.8 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 curren-	Euro ²⁾	Other EU	Other curren-					All curren-	Euro 2)	Other EU	Other curren-				
	cies		curren- cies	cies	USD	JPY	CHF	Other	cies		curren- cies	cies	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		316.2	26.9	3.0	9.9
Q3 Q4	206.7 236.6	76.5 80.7	27.0 27.6	103.2 128.3	93.1 118.1	4.7 4.2	2.1 2.7	3.4 3.3	486.9 507.9	129.1 131.5	27.1 27.0	330.7 349.4	292.7 306.2	27.1 30.3	3.9 4.2	7.1 8.7
2002 Q1 Q2 Q3 ^(p)	262.9 244.3 254.2	87.1 87.5 92.3	33.5 32.6 38.7	142.4 124.2 123.1	130.5 111.8 113.1	4.4 4.3 3.9	2.9 2.3 2.4	4.5 5.9 3.7	493.7 458.9 481.6	127.9 132.4 135.5	26.9 25.0 31.4	339.0 301.4 314.8	298.6 260.7 271.5	24.6 24.0 25.7	5.0 5.0 5.4	

Aggregated balance sheet of euro area investment funds ¹) (EUR billions (not seasonally adjusted; end of period))

1. Assets

	Deposits	Holdings of securities other than shares	Up to 1 year	Over 1 year	Holdings of shares/ other equity	Holdings of investment fund shares	Fixed assets	Other assets	Total
	1	2	3	4	5	6	7	8	9
2000 Q4	226.4	1,258.6	58.0	1,200.6	1,394.8	187.1	96.9	92.5	3,256.2
			E	uro area enla	irgement				
2001 Q1 Q2 Q3 Q4	233.0 248.6 242.4 244.6	1,289.7 1,293.1 1,294.0 1,309.9	60.0 61.9 62.6 63.4	1,229.8 1,231.2 1,231.4 1,246.5	1,279.6 1,339.3 1,053.1 1,217.8	191.5 211.9 192.4 209.6	100.1 104.3 105.0 108.9	89.8 90.9 88.7 98.0	3,183.8 3,288.1 2,975.6 3,188.8
2002 Q1 Q2 ^(p)	253.6 242.6	1,308.7 1,312.5	70.7 75.4	1,238.0 1,237.1	1,263.3 1,056.8	224.6 219.2	111.0 108.0	97.5 99.3	3,258.6 3,038.3

2. Liabilities

				Total
	Deposits and loans taken	Investment fund shares	Other liabilities	
	1	2	3	4
2000 Q4	37.7	3,114.5	104.1	3,256.2
	<i>Eur</i>	ro area enlargement		
2001 Q1	37.3	3,044.8	101.7	3,183.8
Q2	39.3	3,136.4	112.4	3,288.1
Õ3	41.5	2,838.7	95.3	2,975.6
Q2 Q3 Q4	41.1	3,050.4	97.3	3,188.8
2002 Q1	42.6	3,114.2	101.8	3,258.6
Q2 ^(p)	39.2	2,905.5	93.5	3,038.3

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

		Funds by inves	stment policy			Funds type of i		Total
-	Equity funds	Bond funds	Mixed funds	Real estate funds	Other funds	General public funds	Special investors' funds	
	1	2	3	4	5	6	7	8
2000 Q4	981.3	973.3	878.3	118.2	305.2	2,479.0	777.2	3,256.2
			— Euro	area enlargemen	t			
2001 Q1 Q2 Q3 Q4	899.3 945.4 737.0 838.1	999.4 1,019.1 1,019.0 1,031.6	848.4 856.5 755.3 810.1	118.1 123.6 127.0 134.0	318.5 343.6 337.2 375.0	2,413.3 2,507.1 2,239.4 2,406.1	770.5 781.0 736.1 782.7	3,183.8 3,288.1 2,975.6 3,188.8
2002 Q1 Q2 ^(p)	862.1 728.8	1,039.3 1,037.0	820.3 762.5	142.3 139.2	394.6 370.8	2,463.7 2,267.6	794.9 770.7	3,258.6 3,038.3

Source: ECB.

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

Aggregated balance sheet of euro area investment funds broken down by investment policy (EUR billions (not seasonally adjusted; end of period)) ¹⁾

1. Assets of equity funds

	Deposits	Holdings of			Holdings	Holdings of	Other	Total
	- F	securities other than shares	Up to 1 year	Over 1 year	of shares/ other equity	investment fund shares	assets	
	1	2	3	4	5	6	7	8
2000 Q4	50.5	37.4	5.2	32.1	864.0	14.2	15.1	981.3
			- Euro area	a enlargement				
2001 Q1	50.2	34.3	4.6	29.6	788.6	13.7	12.6	899.3
	48.6	34.2	4.4	29.7	829.3	21.0	12.4	945.4
Q3	41.2	30.7	4.3	26.4	635.3	16.7	13.2	737.0
Q2 Q3 Q4	39.5	29.0	3.0	26.1	733.9	19.4	16.3	838.1
2002 Q1	39.3	28.7	2.9	25.8	759.1	20.6	14.4	862.1
Q2 ^(p)	34.0	27.4	4.0	23.4	630.4	22.1	14.8	728.8

2. Liabilities of equity funds

	Deposits and loans taken	Investment fund shares	Other liabilities	Total
	1	2	3	4
2000 Q4	3.7	967.8	9.7	981.3
	— Euro are	a enlargement		
2001 Q1	3.4	889.8	6.2	899.3
	3.2	934.9	7.3	945.4
Q3	4.1	732.2	0.7	737.0
Q2 Q3 Q4	2.6	832.8	2.7	838.1
2002 Q1	3.5	856.0	2.7	862.1
Q2 ^(p)	4.4	725.7	-1.3	728.8

3. Assets of bond funds

								Total
	Deposits	Holdings of			Holdings	Holdings of	Other	
		securities	Up to	Over	of shares/	investment	assets	
		other than	1 year	1 year	other	fund shares		
		shares		-	equity			
	1	2	3	4	5	6	7	8
2000 Q4	64.4	831.2	25.0	806.2	34.1	8.8	34.8	973.3
			- Euro area	a enlargement				
2001 Q1	67.4	856.0	26.6	829.4	33.2	9.8	33.0	999.4
Q2	78.6	858.4	29.3	829.1	36.4	12.3	33.4	1,019.1
Õ3	74.9	865.5	32.2	833.3	34.3	12.7	31.5	1,019.0
Q3 Q4	73.2	875.4	33.1	842.3	38.5	11.3	33.3	1,031.6
2002 Q1	77.9	874.0	37.3	836.7	42.9	11.5	32.9	1,039.3
Q2 ^(p)	75.9	882.2	38.5	843.7	33.2	10.8	34.8	1,037.0

4. Liabilities of bond funds

				Total
	Deposits	Investment	Other	
	and loans	fund	liabilities	
	taken	shares		
	1	2	3	4
2000 Q4	7.1	928.9	37.3	973.3
	Euro	o area enlargement		
2001 Q1	7.1	954.8	37.5	999.4
Õ2	7.3	964.5	47.3	1,019.1
Ò3	8.1	971.0	39.9	1,019.0
Q2 Q3 Q4	8.4	986.2	37.0	1,031.6
2002 Q1	8.5	992.0	38.8	1,039.3
Q2 ^(p)	7.9	990.1	39.0	1,037.0

Source: ECB.

1) Any negative values reflect different accounting practices.

Table 2.10 (cont'd)

Aggregated balance sheet of euro area investment funds broken down by investment policy (EUR billions (not seasonally adjusted; end of period)) ¹

5. Assets of mixed funds

									Total
	Deposits	Holdings of			Holdings	Holdings of	Fixed	Other	
	-	securities other than	Up to 1 year	Over 1 year	of shares/ other	investment fund shares	assets	assets	
	1	shares 2	3	4	equity 5	6	7	8	9
2000 Q4	53.8	300.9	18.2	282.6	410.7	86.4	2.4	24.2	878.3
			—— Ei	iro area enla	irgement				
2001 Q1	54.8	302.2	19.0	283.2	373.4	88.6	2.5	27.0	848.4
Ò2	55.8	296.3	18.0	278.3	382.8	93.8	2.6	25.2	856.5
Ò3	55.2	290.4	16.4	274.0	297.5	85.7	2.5	24.1	755.3
Q2 Q3 Q4	56.9	286.5	17.0	269.5	347.5	92.7	2.4	24.1	810.1
2002 Q1	52.6	283.8	18.1	265.7	357.0	100.3	2.3	24.4	820.3
Q2 (p)	54.2	286.9	20.6	266.3	298.8	94.6	2.1	25.9	762.5

6. Liabilities of mixed funds

	Deposits and loans taken	Investment fund shares	Other liabilities	Total
	1	2	3	4
2000 Q4	3.3	849.2	25.9	878.3
	Euro an	ea enlargement ———		
2001 Q1	3.1	817.6	27.8	848.4
Q2	3.4	827.9	25.2	856.5
Q3	3.3	729.9	22.1	755.3
Q2 Q3 Q4	2.9	785.2	22.0	810.1
2002 Q1	2.9	793.8	23.6	820.3
Q2 ^(p)	3.1	737.3	22.1	762.5

7. Assets of real estate funds

									Total
	Deposits	Holdings of			Holdings	Holdings of	Fixed	Other	
		securities	Up to	Over	of shares/	investment	assets	assets	
		other than	1 year	1 year	other	fund shares			
		shares			equity				
	1	2	3	4	5	6	7	8	9
2000 Q4	6.1	8.1	0.6	7.5	3.9	1.1	94.3	4.7	118.2
			—— Eu	ro area enla	argement				
2001 Q1	6.0	8.3	0.5	7.8	0.9	1.5	97.5	4.0	118.1
Q2	6.6	8.7	0.5	8.2	1.0	1.3	101.5	4.4	123.6
Q3	9.8	7.6	0.5	7.1	0.9	1.5	102.3	4.9	127.0
Q3 Q4	8.6	10.7	0.5	10.1	1.0	2.0	106.1	5.7	134.0
2002 Q1	11.5	12.9	0.6	12.3	1.1	2.1	108.3	6.4	142.3
Q2 ^(p)	13.5	9.8	0.6	9.2	0.9	3.9	105.1	6.0	139.2

8. Liabilities of real estate funds

				Total
	Deposits	Investment	Other	
	and loans	fund	liabilities	
	taken	shares		
	1	2	3	4_
2000 Q4	22.3	91.2	4.7	118.2
	<i>Eı</i>	uro area enlargement		
2001 Q1	22.3	91.7	4.1	118.1
	24.1	95.0	4.5	123.6
Ò3	24.8	97.8	4.4	127.0
Q2 Q3 Q4	25.9	103.2	4.8	134.0
2002 Q1	26.7	110.7	4.9	142.3
Q2 ^(p)	22.3	112.1	4.8	139.2

Source: ECB.

1) Any negative values reflect different accounting practices.

Aggregated balance sheet of euro area investment funds broken down by type of investor (EUR billions (not seasonally adjusted; end of period))

1. Assets of general public funds

							Total
	Deposits	Holdings of	Holdings of	Holdings of	Fixed	Other	
		securities	shares/	investment	assets	assets	
		other than	other	fund shares			
		shares	equity				_
	1	2	3	4	5	6	7
2000 Q4	188.0	900.6	1,084.1	148.4	89.9	68.0	2,479.0
			Euro area enlar	gement —			
2001 Q1	192.2	917.9	994.8	151.6	92.9	63.8	2,413.3
Õ2	209.2	918.6	1,046.5	170.4	96.5	66.0	2,507.1
Ò3	196.4	912.1	819.5	151.6	96.4	63.4	2,239.4
Q2 Q3 Q4	201.0	928.7	947.8	167.1	99.1	62.5	2,406.1
2002 Q1	213.3	921.8	984.8	176.8	100.6	66.3	2,463.7
Q2 ^(p)	199.3	915.8	819.9	170.6	96.1	65.9	2,267.6

2. Liabilities of general public funds

				Total
	Deposits	Investment	Other	
	and loans	fund	liabilities	
	taken	shares		
	1	2	3	4
2000 Q4	34.2	2,348.6	96.2	2,479.0
	Euro area	enlargement		
2001 Q1	33.9	2,288.7	90.7	2,413.3
Ò2	35.7	2,369.6	101.8	2,507.1
Ò3	37.4	2,117.3	84.7	2,239.4
Q2 Q3 Q4	36.5	2,287.6	82.0	2,406.1
2002 Q1	38.1	2,336.6	88.9	2,463.7
Q2 ^(p)	34.1	2,152.9	80.5	2,267.6

3. Assets of special investors' funds

							Total
	Deposits	Holdings of	Holdings of	Holdings of	Fixed	Other	
		securities	shares/	investment	assets	assets	
		other than	other	fund shares			
	1	shares 2	equity 3	4	5	6	7
2000 Q4	38.4	358.0	310.7	38.7	7.0	24.5	777.2
			Euro area enlar	gement —			
2001 Q1	40.8	371.8	284.8	39.9	7.2	26.0	770.5
Õ2	39.4	374.6	292.7	41.5	7.8	24.9	781.0
Ò3	46.0	381.8	233.7	40.7	8.6	25.3	736.1
Q2 Q3 Q4	43.6	381.2	270.0	42.6	9.8	35.6	782.7
2002 Q1	40.3	386.9	278.4	47.8	10.3	31.2	794.9
Q2 ^(p)	43.3	396.7	236.8	48.6	11.9	33.4	770.7

4. Liabilities of special investors' funds

				Total
	Deposits	Investment	Other	
	and loans	fund	liabilities	
	taken	shares		
	1	2	3	4
2000 Q4	3.5	765.9	7.8	777.2
	Euro area	enlargement		
2001 Q1	3.4	756.1	11.0	770.5
	3.6	766.8	10.6	781.0
Ò3	4.2	721.4	10.5	736.1
Q2 Q3 Q4	4.6	762.8	15.3	782.7
2002 Q1	4.5	777.5	12.9	794.9
Q2 ^(p)	5.1	752.6	13.0	770.7

Source: ECB.

Financial markets and interest rates 3 in the euro area

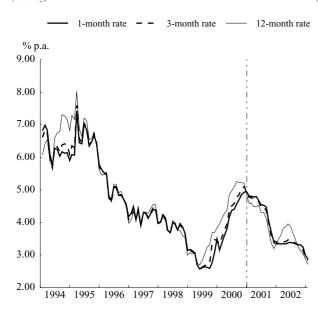
Table 3.1

Money market interest rates ¹⁾

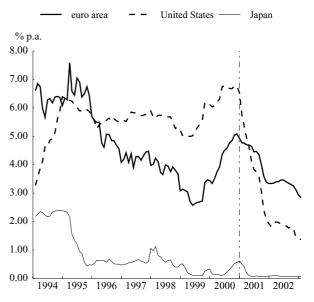
(percentages per annum)

		E	uro 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	3-month deposits 7
1998	3.09	3.84	3.83	3.78	3.77	5.57	0.66
1999	2.74	2.86	2.96	3.06	3.19	5.42	0.22
2000	4.12	4.24	4.40	4.55	4.78	6.53	0.28
			Euro area en	largement —			
2001	4.39	4.33	4.26	4.16	4.09	3.78	0.15
2002	3.29	3.30	3.32	3.35	3.49	1.80	0.08
2002 Jan.	3.29	3.35	3.34	3.34	3.48	1.82	0.09
Feb.	3.28	3.34	3.36	3.40	3.59	1.90	0.10
Mar.	3.26	3.35	3.39	3.50	3.82	1.99	0.10
Apr.	3.32	3.34	3.41	3.54	3.86	1.97	0.08
May	3.31	3.37	3.46	3.62	3.95	1.91	0.08
June	3.35	3.38	3.46	3.59	3.87	1.88	0.07
July	3.30	3.36	3.41	3.48	3.64	1.85	0.07
Aug.	3.29	3.33	3.35	3.38	3.44	1.78	0.07
Sep.	3.32	3.32	3.31	3.27	3.24	1.80	0.07
Oct.	3.30	3.31	3.26	3.17	3.13	1.78	0.07
Nov.	3.30	3.23	3.12	3.04	3.02	1.46	0.07
Dec.	3.09	2.98	2.94	2.89	2.87	1.41	0.06
2003 Jan.	2.79	2.86	2.83	2.76	2.71	1.37	0.06
2003 3 Jan.	2.89	2.90	2.86	2.81	2.80	1.39	0.06
10	2.82	2.85	2.84	2.77	2.73	1.38	0.07
17	2.81	2.85	2.83	2.76	2.72	1.37	0.06
24	2.81	2.84	2.82	2.73	2.66	1.35	0.06
31	2.86	2.83	2.81	2.72	2.64	1.35	0.06

Euro area money market rates (monthly)



3-month money market rates (monthly)



Sources: Reuters and ECB.

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

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

³⁾ 4)

End-of-period rates to December 1998; period averages thereafter. Before January 1999 synthetic euro area rates were calculated on the basis of national rates weighted by GDP. From January 1999, euro interbank offered rates (EURIBOR). Up to December 1998, London interbank offered rates (LIBOR) where available. 5)

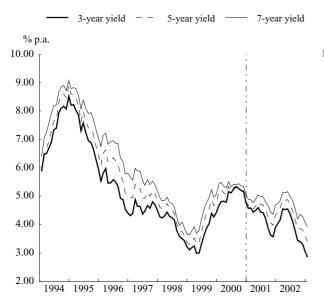
⁶⁾ London interbank offered rates (LIBOR).

Government bond yields 1)

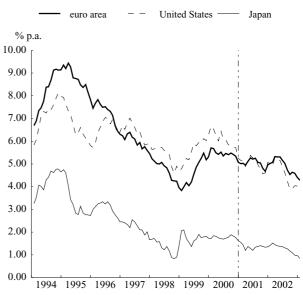
(percentages per annum)

			Euro area ²⁾			United States	Japan
	2 years 1	3 years 2	5 years 3	7 years 4	10 years 5	10 years 6	10 years 7
1998	3.16	3.22	3.38	3.67	4.71	5.33	1.30
1999	3.38	3.63	4.01	4.38	4.66	5.64	1.75
2000	4.90	5.03	5.19	5.37	5.44	6.03	1.76
			Euro area enlarg	gement —			
2001	4.11	4.23	4.49	4.79	5.03	5.01	1.34
2002	3.68	3.94	4.35	4.70	4.92	4.60	1.27
2002 Jan.	3.84	4.04	4.48	4.76	5.02	5.00	1.42
Feb.	3.96	4.17	4.60	4.85	5.07	4.90	1.52
Mar.	4.25	4.55	4.90	5.13	5.32	5.28	1.45
Apr.	4.21	4.53	4.86	5.12	5.30	5.21	1.39
May	4.25	4.55	4.89	5.16	5.30	5.15	1.38
June	4.10	4.37	4.70	4.99	5.16	4.90	1.36
July	3.83	4.10	4.48	4.84	5.03	4.62	1.30
Aug.	3.47	3.76	4.15	4.54	4.73	4.24	1.26
Sep.	3.19	3.46	3.85	4.20	4.52	3.88	1.16
Oct.	3.13	3.41	3.86	4.36	4.62	3.91	1.09
Nov.	3.04	3.31	3.81	4.28	4.59	4.04	0.99
Dec.	2.84	3.08	3.63	4.10	4.41	4.03	0.97
2003 Jan.	2.64	2.85	3.40	3.93	4.27	4.02	0.84
2003 3 Jan.	2.76	3.00	3.56	4.10	4.44	4.05	0.90
10	2.65	2.87	3.46	4.00	4.35	4.16	0.87
17	2.60	2.81	3.36	3.90	4.25	4.01	0.83
24	2.54	2.73	3.25	3.75	4.09	3.88	0.81
31	2.57	2.77	3.32	3.83	4.19	3.98	0.81

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. To December 1998, euro area yields are calculated on the basis of harmonised national government bond yields weighted by GDP. Thereafter, the

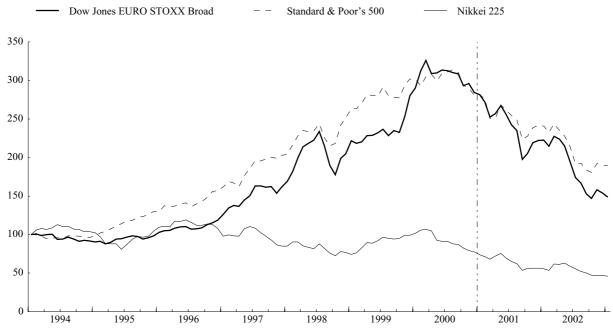
2) weights are the nominal outstanding amounts of government bonds in each maturity band.

Stock market indices

(index levels, in points) ¹⁾

	Dow Jones EURO STOXX indices									United States	Japan			
-	Benc	hmark			N	Main econ	nomic sect	or indices					Suites	
-	Broad	50	Basic of materials	Consumer cyclical 4	Consumer non- cyclical 5	Energy 6	Financial	Industrial 8	Techno- logy 9	Utilities	Tele- communi- cations 11		Standard & Poor's 500 13	Nikkei 225 14
1998 1999 2000	325.8	3,076.3 3,787.3 5,075.5	257.9 279.2 299.1	245.0 262.9 292.9	295.5 327.7 324.3	249.3 286.0 342.3	281.3 295.7 350.7	218.4 285.1 378.0	333.6 470.4 963.1	282.4 306.2 341.7	488.1 717.7	348.9 392.6	1,085.3 1,327.8	15,338.4 16,829.9 17,162.7
2001 2002		4,049.4 3,023.4	296.0 267.5	228.2 175.0	303.3 266.5	341.4 308.9	<i>ea enlar</i> g 321.6 243.3	310.0 252.4	530.5 345.1	309.6 255.5	541.2 349.2	540.1 411.8		12,114.8 10,119.3
2002 Jan. Feb. Mar. Apr. May June July Aug. Sep. Oct. Nov. Dec.	308.5 297.9 315.4 310.2 298.2 269.8 241.2 231.3 211.8 204.0 219.5	3,690.1 3,537.6 3,739.6 3,657.0 3,503.5 3,143.1 2,810.6 2,697.4 2,450.2 2,384.7 2,559.0 2,475.1	293.2 294.9 312.9 308.6 306.9 293.1 267.8 243.6 227.2 214.4 224.2 225.3	210.8 198.6 215.5 210.2 204.3 187.5 160.9 152.9 140.6 135.3 145.4 139.4	287.8 288.5 296.5 302.8 300.7 282.1 252.1 250.1 241.2 236.5 234.8 226.5	320.2 334.0 355.0 351.5 347.3 324.6 298.6 290.9 274.0 272.1 272.4 268.8	286.3 275.1 294.8 299.5 293.7 263.8 229.2 217.4 193.1 177.8 197.0 194.2	281.8 279.3 299.0 299.0 296.7 275.3 248.8 227.9 215.3 193.6 208.8 205.2	494.5 463.7 494.4 438.6 378.3 312.4 282.1 258.8 229.0 235.8 289.6 270.4	291.1 291.1 296.9 290.6 273.0 244.0 236.7 221.2 209.6 215.2 207.3	459.7 406.3 429.3 409.7 355.9 302.4 300.4 300.4 310.0 283.1 286.8 324.5 322.5	490.1 486.3 472.1	1,101.5 1,153.3 1,112.0 1,079.9 1,014.0	10,338.5 9,966.9 11,452.5 11,391.6 11,695.8 10,965.9 10,352.3 9,751.2 9,354.8 8,781.1 8,699.6 8,674.8
2003 Jan. 2003 3 Jan. 10 17 24 31	215.7 214.5 207.7 196.4	2,377.4 2,502.2 2,489.0 2,390.4 2,234.6 2,248.2	213.0 227.1 219.8 216.3 201.7 193.3	130.9 139.1 135.6 130.1 124.0 127.1	220.2 231.9 229.5 219.9 208.9 208.6	262.4 277.9 272.9 264.3 245.1 253.5	186.5 196.7 195.2 188.0 176.8 174.2	198.5 207.1 204.2 201.9 192.1 188.8	250.2 264.4 265.0 245.2 235.5 233.2	210.0 209.3 214.7 214.7 204.1 210.3	330.0 321.7 338.1 338.5 328.9 316.6	313.8 330.7 326.3 319.2 294.0 295.3	896.0 908.6 927.6 914.6 861.4 855.7	8,567.4 8,579.0 8,470.5 8,690.3 8,731.7 8,339.9

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



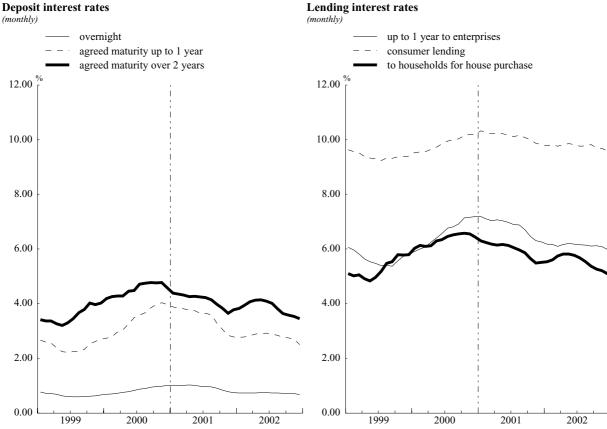
Source: Reuters. 1) Monthly and yearly values are period averages.

Retail bank interest rates

(percentages per annum; period averages)

			Deposit inte			Lending inte	erest rates			
	Overnight	With a	greed maturity	/	Redeemable	at notice	To enterp	rises	To households	
	1	Up to 1 year 2	Up to 2 years 3	Over 2 years 4	Up to 3 months 5	Over 3 months 6	Up to 1 year 7	Over 1 year 8	Consumer lending 9	For house purchase 10
2000	0.85	3.45	3.45	4.52	2.25	3.79	6.60	6.23	9.87	6.34
				Euro a	rea enlargeme	ent —				
2001 2002	0.94 0.73	3.49 2.80	3.49 2.80	4.12 3.85	2.40 2.13	3.59 2.85	6.83 6.13	6.15 5.71	10.12 9.76	5.97 5.54
2002 2001 Dec.	0.74	2.79	2.78	3.77	2.13	2.39	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. Mar.	0.73 0.73	2.78 2.84	2.79 2.84	3.95 4.07	2.15 2.15	2.91 3.00	6.16 6.09	5.75 5.85	9.81 9.76	5.61 5.74
Apr.	0.74	2.89	2.90	4.13	2.14	3.07	6.17	5.95	9.81	5.81
May June	0.74 0.74	2.91 2.93	2.92 2.94	4.15 4.09	2.15 2.13	3.08 3.08	6.20 6.18	5.98 5.92	9.85 9.82	5.82 5.77
July	0.74	2.89	2.90	4.02	2.13	3.02	6.16	5.79	9.76	5.68
Aug.	0.73	2.84	2.85	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. Nov.	0.72 0.71	$2.74 \\ 2.70$	2.74 2.69	3.58 3.53	2.11 2.11	2.63 2.55	6.12 6.09	5.54 5.50	9.70 9.67	5.26 5.20
Dec.	0.68	2.51	2.51	3.45	2.06	2.41	5.97	5.34	9.59	5.10

Deposit interest rates



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.

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 a	ea residents				
				ſ		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 Nov.	486.7	490.5	-3.8	742.3	459.6	466.6	-7.0	655.9	27.0	23.9
Dec.	332.5	377.0	-44.4	697.9	308.1	353.9	-45.8	611.1	24.5	23.1
2002 Jan.	485.8	453.9	31.8	733.2	464.3	432.9	31.3	643.8	21.5	21.0
Feb.	406.7	408.5	-1.8	729.0	386.8	387.6	-0.8	644.2	19.9	20.9
Mar.	421.2	403.5	17.7	748.9	400.2	383.4	16.8	662.7	21.0	20.1
Apr.	401.9	406.9	-5.0	743.5	376.7	384.3	-7.6	655.3	25.2	22.6
May	400.9	378.5	22.3	765.4	377.3	358.5	18.8	673.7	23.5	20.1
June	336.6	342.0	-5.4	761.0	315.9	318.9	-3.1	672.6	20.7	23.0
July	404.3	392.2	12.1	766.8	381.5	371.4	10.1	681.0	22.8	20.8
Aug.	384.2	378.1	6.1	772.1	365.9	356.8	9.1	689.6	18.3	21.3
Sep.	415.0	400.4	14.5	789.7	392.2	380.9	11.3	703.8	22.8	19.5
Oct.	468.3	457.0	11.3	803.0	441.8	433.3	8.5	712.3	26.5	23.7
Nov.	434.8	413.1	21.7	830.0	412.9	389.0	23.9	739.7	22.0	24.2

2. Long-term

					By euro ar	ea 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 Nov.	142.2	92.4	49.8	6,992.1	115.8	86.6	29.2	6,371.5	26.5	5.9
Dec.	126.9	86.9	39.9	7,031.0	114.5	77.5	37.0	6,407.6	12.4	9.5
2002 Jan.	174.1	111.0	63.1	7,099.0	156.3	105.0	51.3	6,457.2	17.8	6.0
Feb.	143.1	109.3	33.8	7,134.2	130.4	97.6	32.8	6,491.2	12.7	11.7
Mar.	165.0	102.0	63.0	7,196.1	143.1	90.9	52.2	6,542.7	21.9	11.1
Apr.	126.9	79.9	47.1	7,233.4	115.7	74.7	40.9	6,584.3	11.3	5.2
May	148.1	87.0	61.0	7,280.8	126.4	75.4	51.0	6,636.5	21.6	11.6
June	133.0	95.4	37.6	7,295.3	123.3	87.7	35.6	6,668.3	9.7	7.7
July	130.9	113.2	17.7	7,325.7	114.1	103.9	10.1	6,683.1	16.8	9.2
Aug.	68.6	64.0	4.7	7,327.3	59.1	54.7	4.4	6,686.5	9.5	9.3
Sep.	142.1	85.0	57.1	7,384.3	121.5	73.8	47.7	6,733.8	20.6	11.1
Oct.	120.6	92.6	28.0	7,411.8	104.9	82.6	22.3	6,756.4	15.7	10.0
Nov.	127.3	95.6	31.7	7,437.0	116.1	89.7	26.4	6,779.5	11.2	5.9

3. Total

					By euro ar	ea residents				
						In euro	D 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 Nov.	628.9	582.9	46.0	7,734.4	575.4	553.2	22.2	7,027.4	53.5	29.7
Dec.	459.4	463.9	-4.5	7,728.9	422.6	431.4	-8.8	7,018.7	36.9	32.6
2002 Jan.	659.9	564.9	94.9	7,832.2	620.6	538.0	82.6	7,101.0	39.3	27.0
Feb.	549.8	517.8	31.9	7,863.3	517.2	485.2	32.0	7,135.4	32.6	32.6
Mar.	586.2	505.5	80.7	7,945.1	543.3	474.3	69.0	7,205.5	42.9	31.2
Apr.	528.8	486.8	42.1	7,977.0	492.4	459.0	33.3	7,239.6	36.4	27.7
May	548.9	465.6	83.4	8,046.2	503.8	433.9	69.9	7,310.2	45.2	31.7
June	469.6	437.4	32.3	8,056.4	439.2	406.6	32.6	7,340.9	30.4	30.8
July	535.1	505.4	29.8	8,092.5	495.6	475.3	20.3	7,364.1	39.6	30.1
Aug.	452.9	442.1	10.7	8,099.5	425.0	411.5	13.5	7,376.1	27.9	30.6
Sep.	557.0	485.4	71.7	8,174.0	513.7	454.7	59.0	7,437.6	43.4	30.7
Oct.	588.9	549.6	39.3	8,214.8	546.7	515.9	30.8	7,468.8	42.2	33.7
Nov.	562.1	508.7	53.4	8,266.9	528.9	478.7	50.3	7,519.1	33.2	30.0

		euro 1)	Total in		euro 1)	e euro area in	n-residents of th	By not		
										currencies
	Amounts outstanding	Net issues	Redemptions	Issues	Amounts outstanding	Net issues	Redemptions	Issues	Amounts outstanding	Net issues
	20	19	18	17	16	15	14	13	12	11
2001 Nov.	703.5	-3.7	479.5	475.8	47.6	3.3	12.9	16.2	86.4	3.2
Dec.	665.6	-38.9	364.1	325.2	54.5	6.9	10.2	17.1	86.8	1.4
2002 Jan.	685.4	18.5	457.1	475.6	41.6	-12.9	24.2	11.3	89.4	0.5
Feb.	687.5	0.8	399.4	400.2	43.3	1.7	11.8	13.4	84.8	-1.0
Mar.	722.4	33.2	391.3	424.5	59.7	16.4	7.9	24.3	86.2	0.9
Apr.	696.6	-26.0	412.4	386.4	41.3	-18.4	28.1	9.7	88.3	2.6
May	715.2	19.1	371.9	391.0	41.5	0.3	13.4	13.7	91.7	3.5
June	727.0	9.8	327.0	336.8	54.4	12.9	8.0	20.9	88.4	-2.3
July	725.3	0.0	396.2	396.2	44.4	-10.1	24.8	14.7	85.8	1.9
Aug.	734.6	9.6	368.4	378.0	44.9	0.6	11.5	12.1	82.5	-3.0
Sep.	772.7	35.3	388.6	423.9	68.9	24.0	7.7	31.7	85.9	3.3
Oct.									90.7	2.7
Nov.									90.3	-2.2

		euro 1)	Total in		euro 1)	e euro area in	n-residents of th	By nor		
										urrencies
	Amounts outstanding	Net issues	Redemptions	Issues	Amounts outstanding	Net issues	Redemptions	Issues	Amounts outstanding	Net issues
	20	19	18	17	16	15	14	13	12	11
2001 No	7,247.2	52.0	93.9	145.9	875.7	22.8	7.4	30.1	620.7	20.6
Dee	7,284.1	37.8	90.9	128.7	876.5	0.8	13.4	14.2	623.4	2.9
2002 Jan	7,346.3	64.1	111.9	175.9	889.2	12.7	6.8	19.6	641.9	11.8
Feb	7,386.3	38.6	111.5	150.1	895.1	5.9	13.9	19.7	643.0	1.0
Ma	7,451.3	65.7	102.9	168.5	908.6	13.5	12.0	25.4	653.4	10.8
Ap	7,508.5	56.3	82.3	138.6	924.3	15.4	7.6	23.0	649.2	6.1
Ma	7,579.0	69.1	83.7	152.7	942.4	18.0	8.2	26.3	644.3	10.0
Jun	7,629.1	54.1	98.5	152.6	960.8	18.4	10.9	29.3	627.0	2.0
July	7,647.4	13.6	112.1	125.7	964.3	3.5	8.2	11.7	642.6	7.6
Au	7,649.7	3.4	62.8	66.2	963.2	-1.0	8.1	7.1	640.9	0.3
Sep	7,709.9	60.6	85.3	145.8	976.1	12.9	11.5	24.3	650.5	9.4
Oct									655.3	5.7
No									657.5	5.4

		By no	n-residents of th	ne euro area in	euro 1)		Total ir	euro ¹⁾		
currencies										
Net issues	Amounts outstanding	Issues	Redemptions	Net issues	Amounts outstanding	Issues	Redemptions	Net issues	Amounts outstanding	
11	12	13	14	15	16	17	18	19	20	
23.7	707.1	46.3	20.2	26.0	923.3	621.7	573.4	48.2	7,950.7	2001 Nov.
4.3	710.2	31.3	23.7	7.7	931.0	453.9	455.0	-1.1	7,949.7	Dec.
12.3	731.3	30.9	31.0	-0.1	930.8	651.5	569.0	82.5	8,031.8	2002 Jan.
0.0	727.9	33.2	25.6	7.5	938.4	550.3	510.9	39.5	8,073.8	Feb.
11.7	739.6	49.8	19.9	29.9	968.3	593.1	494.1	98.9	8,173.8	Mar.
8.7	737.4	32.7	35.7	-3.0	965.5	525.1	494.7	30.3	8,205.1	Apr.
13.5	736.0	39.9	21.6	18.3	984.0	543.7	455.5	88.2	8,294.2	May
-0.3	715.5	50.2	18.9	31.3	1,015.2	489.4	425.5	63.9	8,356.1	June
9.5	728.4	26.4	33.0	-6.6	1,008.6	521.9	508.3	13.6	8,372.7	July
-2.7	723.4	19.2	19.7	-0.5	1,008.1	444.2	431.2	13.0	8,384.3	Aug.
12.7	736.4	56.0	19.1	36.9	1,045.0	569.7	473.8	95.9	8,482.6	Sep.
8.4	746.0				·					Oct.
3.2	747.8									Nov.

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 are	a residents					E	By non-residents
_	Total	MFIs (including Eurosystem) 2	Non-monetary financial corporations	corporations	Central government	Other general government	Total	Banks (including central banks) 8	Non-monetary financial corporations 9	corporations
2001 Nov.	655.9	250.9	3.9	106.3	291.2	3.6	47.6	23.6	19.4	3.4
Dec.	611.1	240.5	3.4	95.6	267.4	4.1	54.5	23.8	24.4	4.4
2002 Jan.	643.8	257.6	3.7	100.2	278.8	3.5	41.6	18.8	18.9	3.1
Feb.	644.2	251.9	3.9	98.2	286.7	3.5	43.3	19.9	19.0	3.6
Mar.	662.7	259.0	4.3	97.1	299.0	3.3	59.7	26.4	26.2	6.4
Apr.	655.3	256.3	4.5	92.7	298.8	3.0	41.3	18.2	18.5	3.8
May	673.7	262.8	3.7	89.9	314.3	3.0	41.5	18.3	19.0	3.5
June	672.6	261.1	3.8	82.1	322.5	3.0	54.4	21.3	27.6	4.4
July	681.0	265.5	4.1	86.3	321.7	3.4	44.4	18.3	22.3	2.8
Aug.	689.6	266.4	4.4	86.7	328.8	3.3	44.9	18.1	23.5	2.6
Sep.	703.8	273.5	4.1	87.8	335.7	2.6	68.9	26.7	37.0	
Oct.	712.3	280.9	4.2	88.7	335.6	3.0		2017	2710	
Nov.	739.7	304.1	4.7	89.9	337.8	3.1				

2. Long-term

			By euro are	a residents					E	y non-residents
	Total	MFIs		Non-financial	Central	Other general	Total		Non-monetary	
		(including	financial	corporations	government	government		(including		corporations
		Eurosystem)	corporations					central banks)	corporations	
	1	2	3	4	5	6	7	8	9	10
2001 Nov.	6,371.5	2,321.5	336.2	343.6	3,240.9	129.2	875.7	228.3	289.0	101.0
Dec.	6,407.6	2,323.8	365.9	349.3	3,238.3	130.4	876.5	230.5	288.6	102.1
2002 Jan.	6,457.2	2,328.6	371.6	354.6	3,269.0	133.4	889.2	230.7	292.2	105.5
Feb.	6,491.2	2,349.9	376.1	357.8	3,274.4	133.0	895.1	234.2	295.1	106.4
Mar.	6,542.7	2,372.3	381.7	358.2	3,293.1	137.6	908.6	236.6	305.8	108.1
Apr.	6,584.3	2,381.1	392.2	363.6	3,305.1	142.2	924.3	239.3	311.4	108.5
May	6,636.5	2,394.8	403.9	369.0	3,321.3	147.7	942.4	242.8	318.3	111.4
June	6,668.3	2,404.5	408.1	372.6	3,332.9	150.1	960.8	250.0	331.8	110.8
July	6,683.1	2,403.5	415.7	374.8	3,329.9	159.1	964.3	250.1	335.4	110.4
Aug.	6,686.5	2,402.6	415.0	373.1	3,335.8	160.0	963.2	249.4	335.8	110.6
Sep.	6,733.8	2,424.7	423.4	376.5	3,347.5	161.7	976.1	250.3	340.1	109.1
Oct.	6,756.4	2,420.9	428.4	375.0	3,366.7	165.4				
Nov.	6,779.5	2,418.5	438.8	375.2	3,380.1	166.8				

3. Total

			By euro are	a residents					В	y non-residents
	Total 1	MFIs (including Eurosystem) 2	Non-monetary financial corporations 3	Non-financial corporations 4	Central government 5	Other general government	Total 7	Banks (including central banks) 8	Non-monetary financial corporations 9	Non-financial corporations
2001 Nov. Dec.	7,027.4 7,018.7	2,572.4 2,564.2	340.1 369.3	450.0 444.9	3,532.1 3,505.6	132.8 134.6	923.3 931.0	251.8 254.4	308.4 313.0	104.3 106.5
2002 Jan. Feb. Mar. Apr. May June July Aug. Sep. Oct. Nov.	7,101.0 7,135.4 7,205.5 7,239.6 7,310.2 7,340.9 7,364.1 7,376.1 7,437.6 7,468.8 7,519.1	2,586.2 2,601.8 2,631.2 2,637.4 2,657.6 2,665.6 2,669.0 2,669.0 2,698.2 2,701.8 2,722.7	375.3 380.0 385.9 396.7 407.6 411.9 419.9 419.4 427.5 432.7 443.5	454.8 456.0 455.3 456.3 458.9 454.8 461.1 459.8 464.4 463.7 465.1	3,547.8 3,561.0 3,592.1 3,603.9 3,635.5 3,655.5 3,651.6 3,664.6 3,683.2 3,702.3 3,717.9	136.9 136.5 140.9 145.2 150.7 153.1 162.5 163.3 164.3 168.3 170.0	930.8 938.4 968.3 965.5 984.0 1,015.2 1,008.6 1,008.1 1,045.0	249.5 254.1 262.9 257.5 261.2 271.3 268.4 267.6 277.0	311.2 314.1 332.0 329.9 337.3 359.4 357.7 359.2 377.1	108.6 109.9 114.4 112.3 114.8 115.2 113.3 113.2 113.1

of the euro a	rea				1	Total				
or the curo u	icu					our				
Central	Other general	International	Total	Banks			Central	Other general		
government	government	organisations		(including		corporations	government	government	organisations	
				central banks)	corporations					
11	12	13	14	15	16	17	18	19	20	
0.1	0.4	0.6	703.5	274.5	23.3	109.7	291.3	4.0	0.6	2001 Nov.
0.1	0.5	1.3	665.6	264.3	27.8	100.0	267.5	4.7	1.3	Dec.
0.1	0.4	0.2	685.4	276.4	22.6	103.3	279.0	4.0	0.2	2002 Jan.
0.1	0.4	0.2	687.5	270.4	22.0	105.5	279.0	3.8	0.2	Feb.
0.1	0.2	0.4	722.4	285.3	30.5	103.5	299.2	3.5	0.4	Mar.
0.1	0.2	0.5	696.6	274.5	23.0	96.5	298.9	3.2	0.5	Apr.
0.1	0.2	0.4	715.2	281.1	22.7	93.4	314.4	3.2	0.4	May
0.2	0.5	0.5	727.0	282.4	31.4	86.6	322.7	3.5	0.5	June
0.2	0.5	0.2	725.3	283.8	26.5	89.1	321.9	3.8	0.2	July
0.1	0.4	0.1	734.6	284.5	27.9	89.3	329.0	3.7	0.1	Aug.
0.2	0.3	0.6	772.7	300.3	41.1	91.9	335.9	3.0	0.6	Sep.
										Oct.
										Nov.

of the euro a	rea]	Total				
Central government	Other general government	International organisations	Total	Banks (including central banks)	Non-monetary financial corporations	corporations	Central government	Other general government		
11	12	13	14	15	16	17	18	19	20	
91.5	50.3	115.7	7,247.2	2,549.7	625.2	444.6	3,332.4	179.6	115.7	2001 Nov.
92.1	50.3	112.9	7,284.1	2,554.3	654.5	451.3	3,330.4	180.7	112.9	Dec.
91.3	55.1	114.4	7,346.3	2,559.3	663.8	460.1	3,360.3	188.5	114.4	2002 Jan.
92.0	54.9	112.5	7,386.3	2,584.1	671.2	464.2	3,366.4	188.0	112.5	Feb.
92.2	54.9	111.1	7,451.3	2,608.8	687.5	466.2	3,385.2	192.5	111.1	Mar.
94.1	60.0	111.0	7,508.5	2,620.4	703.6	472.2	3,399.2	202.1	111.0	Apr.
95.1	59.8	115.1	7,579.0	2,637.6	722.2	480.3	3,416.3	207.5	115.1	May
93.2	60.3	114.7	7,629.1	2,654.5	739.9	483.5	3,426.2	210.4	114.7	June
93.1	60.9	114.3	7,647.4	2,653.6	751.2	485.3	3,423.0	220.1	114.3	July
93.4	60.4	113.6	7,649.7	2,652.1	750.7	483.7	3,429.2	220.4	113.6	Aug.
94.1	65.3	117.3	7,709.9	2,674.9	763.5	485.6	3,441.6	227.0	117.3	Sep.
										Oct.
										Nov.

of the euro a	rea				1	Total				
Central government	Other general government		Total	Banks (including central banks)	Non-monetary financial corporations			Other general government	International organisations	
11	12	13	14	15	16	17	18	19	20	
91.6	50.8	116.3	7,950.7	2,824.2	648.5	554.3	3,623.7	183.6	116.3	2001 Nov.
92.2	50.8	114.1	7,949.7	2,818.6	682.3	551.4	3,597.9	185.4	114.1	Dec.
91.4	55.6	114.6	8,031.8	2,835.6	686.4	563.4	3,639.3	192.5	114.6	2002 Jan.
92.2	55.2	112.9	8,073.8	2,855.9	694.1	566.0	3,653.2	191.8	112.9	Feb.
92.3	55.2	111.5	8,173.8	2,894.1	718.0	569.7	3,684.4	196.0	111.5	Mar.
94.2	60.2	111.5	8,205.1	2,894.9	726.6	568.7	3,698.1	205.4	111.5	Apr.
95.2	60.0	115.5	8,294.2	2,918.7	744.9	573.7	3,730.7	210.7	115.5	May
93.4	60.7	115.2	8,356.1	2,936.9	771.3	570.0	3,748.8	213.9	115.2	June
93.3	61.4	114.5	8,372.7	2,937.4	777.6	574.4	3,744.9	223.9	114.5	July
93.5	60.9	113.7	8.384.3	2,936.5	778.6	573.0	3,758.2	224.2	113.7	Aug.
94.3	65.7	117.9	8,482.6	2,975.2	804.6	577.5	3,777.5	230.0	117.9	Sep.
			<i>.</i>	,						Oct.
										Nov.

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 are	a residents					E	By non-residents
	Total	MFIs (including Eurosystem) 2	Non-monetary financial corporations		Central government	Other general government	Total 7	Banks (including central banks) 8	Non-monetary financial corporations 9	Non-financial corporations
2001 Nov.	459.6	347.5	2.3	66.4	42.2	1.3	16.2	6.4	7.9	1.1
Dec.	308.1	228.9	1.3	52.6	23.4	1.9	17.1	6.6	8.4	1.3
2002 Jan.	464.3	327.7	2.1	71.1	61.3	2.0	11.3	5.0	5.0	1.1
Feb.	386.8	268.6	2.6	65.9	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	255.3	2.5	63.4	53.8	1.8	9.7	4.4	4.1	0.9
May	377.3	254.4	2.1	62.2	57.0	1.6	13.7	5.2	7.0	1.2
June	315.9	207.0	2.5	51.7	52.5	2.2	20.9	6.3	12.3	1.8
July	381.5	259.3	1.8	65.6	52.6	2.2	14.7	5.9	8.2	0.6
Aug.	365.9	257.5	1.8	50.9	53.9	1.8	12.1	4.5	6.8	0.6
Sep.	392.2	278.5	1.9	56.8	53.0	2.0	31.7	11.1	17.9	2.0
Oct.	441.8	319.5	2.2	64.7	53.1	2.3				
Nov.	412.9	302.4	2.4	58.1	47.7	2.3				

2. Long-term

			By euro are	a residents					В	y non-residents
	Total	MFIs (including Eurosystem)		Non-financial corporations	Central government	Other general government		Banks (including central	Non-monetary financial corporations	
	1	2	3	4	5	6	7	banks)	9	10
2001 Nov.	115.8	47.9	11.9	17.5	35.8	2.7	30.1	6.0	12.8	4.6
Dec.	114.5	43.0	36.7	9.6	23.0	2.2	14.2	6.4	4.0	2.2
2002 Jan.	156.3	47.6	11.1	6.5	88.0	3.2	19.6	4.1	4.5	3.7
Feb.	130.4	54.6	9.0	8.2	57.5	1.1	19.7	8.2	8.2	1.3
Mar.	143.1	56.9	9.3	2.8	68.8	5.3	25.4	8.6	12.1	3.3
Apr.	115.7	44.1	13.3	8.2	45.2	4.9	23.0	5.1	7.7	1.1
May	126.4	41.1	16.0	7.4	55.3	6.6	26.3	5.7	10.1	3.2
June	123.3	48.2	13.5	7.4	51.3	2.9	29.3	9.9	17.1	0.7
July	114.1	37.9	12.7	5.9	48.2	9.4	11.7	3.0	6.2	0.4
Aug.	59.1	28.2	2.2	2.2	25.2	1.3	7.1	3.1	2.8	0.3
Sep.	121.5	52.4	11.7	4.3	50.4	2.6	24.3	5.2	7.6	0.2
Oct.	104.9	39.1	8.6	0.7	52.1	4.4				
Nov.	116.1	47.6	14.1	2.9	48.0	3.5				

3. Total

			By euro are	a residents					В	y non-residents
	Total	MFIs (including Eurosystem) 2	Non-monetary financial corporations	corporations	Central government	Other general government	Total 7	Banks (including central banks) 8	Non-monetary financial corporations 9	Non-financial corporations
2001 Nov. Dec.	575.4 422.6	395.4 271.9	14.2 38.0	83.9	78.0 46.4	4.0 4.1	46.3 31.3	12.5 13.0	20.7 12.4	5.7 3.6
2002 Jan. Feb. Mar. Apr. May	492.4 503.8	375.3 323.2 343.9 299.4 295.4	13.2 11.5 11.5 15.9 18.2	77.6 74.1 63.0 71.5 69.7	149.3 105.4 117.8 99.0 112.3	5.2 3.0 7.1 6.7 8.2	30.9 33.2 49.8 32.7 39.9	9.1 13.2 19.3 9.5 10.9	9.5 14.7 22.2 11.8 17.1	4.8 2.9 6.6 2.0 4.4
June July Aug. Sep. Oct. Nov.	495.6 425.0 513.7 546.7	255.3 297.1 285.6 330.9 358.6 350.0	16.0 14.5 4.0 13.6 10.8 16.5	59.0 71.6 53.1 61.1 65.4 61.0	103.8 100.8 79.1 103.5 105.2 95.7	5.2 11.6 3.2 4.6 6.7 5.8	50.2 26.4 19.2 56.0	16.3 8.9 7.7 16.3	29.4 14.3 9.6 25.5	2.5 1.0 0.9 2.1

of the euro a	rea				1	otal				
Central government		International organisations	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	International organisations	
11	12	13	14	15	16	17	18	19	20	
0.1	0.2	0.4	475.8	353.9	10.2	67.5	42.3	1.5	0.4	2001 Nov.
0.0	0.1	0.7	325.2	235.4	9.7	54.0	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	400.2	273.7	9.1	67.4	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	391.0	259.6	9.1	63.5	57.0	1.6	0.1	May
0.0	0.3	0.1	336.8	213.4	14.8	53.5	52.5	2.6	0.1	June
0.0	0.0	0.0	396.2	265.1	10.0	66.2	52.7	2.2	0.0	July
0.0	0.0	0.1	378.0	262.0	8.6	51.5	53.9	1.9	0.1	Aug.
0.1	0.1	0.5	423.9	289.6	19.8	58.7	53.1	2.1	0.5	Sep.
										Oct.
										Nov.

of the euro a	rea				1	Total				
Central government	Other general government		Total	Banks (including central banks)			Central government	Other general government		
11	12	13	14	15	16	17	18	19	20	
1.0	0.5	5.1	145.9	53.9	24.7	22.1	36.8	3.2	5.1	2001 Nov.
1.3	0.1	0.1	128.7	49.4	40.6	11.8	24.3	2.3	0.1	Dec.
0.0	5.1	2.1	175.9	51.7	15.6	10.2	88.0	8.3	2.1	2002 Jan.
1.5	0.3	0.3	150.1	62.7	17.2	9.5	59.0	1.4	0.3	Feb.
0.8	0.5	0.3	168.5	65.5	21.4	6.1	69.5	5.8	0.3	Mar.
3.3	5.1	0.7	138.6	49.1	21.0	9.3	48.5	10.0	0.7	Apr.
2.0	0.1	5.3	152.7	46.8	26.1	10.6	57.2	6.7	5.3	May
0.1	0.7	0.7	152.6	58.2	30.6	8.1	51.4	3.7	0.7	June
0.9	0.8	0.3	125.7	40.9	18.8	6.3	49.1	10.2	0.3	July
0.3	0.1	0.5	66.2	31.3	5.0	2.5	25.5	1.4	0.5	Aug.
0.7	5.2	5.5	145.8	57.6	19.3	4.5	51.1	7.8	5.5	Sep.
										Oct.
			•			•			•	Nov.

of the euro a	rea]	Total				
Central government	Other general government	International organisations	Total	Banks (including central banks)		Non-financial corporations		Other general government	International organisations	
11	12	13	14	15	16	17	18	19	20	
1.1	0.8	5.6	621.7	407.8	34.9	89.6	79.1	4.7	5.6	2001 Nov.
1.3	0.3	0.8	453.9	284.8	50.3	65.8	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	550.3	336.4	26.3	77.0	106.9	3.3	0.5	Feb.
0.8	0.5	0.4	593.1	363.2	33.7	69.6	118.6	7.6	0.4	Mar.
3.3	5.1	0.9	525.1	308.9	27.6	73.5	102.3	11.8	0.9	Apr.
2.0	0.1	5.5	543.7	306.4	35.2	74.1	114.3	8.3	5.5	May
0.2	1.0	0.9	489.4	271.5	45.4	61.5	103.9	6.2	0.9	June
1.0	0.8	0.4	521.9	306.0	28.8	72.5	101.8	12.4	0.4	July
0.3	0.1	0.6	444.2	293.3	13.6	54.0	79.4	3.3	0.6	Aug.
0.8	5.3	6.0	569.7	347.2	39.2	63.2	104.3	9.9	6.0	Sep.
										Oct. Nov.

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 are	a residents					E	By non-residents
	Total 1	MFIs (including Eurosystem) 2	Non-monetary financial corporations 3	corporations	Central government 5	Other general government 6	Total 7	Banks (including central banks) 8	Non-monetary financial corporations 9	corporations
2001 Nov.	-7.0	-10.3	0.1	-4.1	7.1	0.2	3.3	0.3	3.0	-0.6
Dec.	-45.8	-11.4	-0.5	-10.6	-23.8	0.6	6.9	0.2	5.0	1.0
2002 Jan.	31.3	15.7	0.2	4.6	11.4	-0.6	-12.9	-5.0	-5.5	-1.3
Feb.	-0.8	-6.6	0.2	-2.2	7.8	0.0	1.7	1.1	0.1	0.5
Mar.	16.8	5.3	0.4	-1.1	12.4	-0.2	16.4	6.5	7.2	2.8
Apr.	-7.6	-2.8	0.2	-4.4	-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	-3.1	-3.5	0.1	-8.0	8.3	0.0	12.9	3.0	8.6	1.0
July	10.1	6.2	0.3	4.1	-0.8	0.3	-10.1	-3.0	-5.2	-1.6
Aug.	9.1	1.2	0.3	0.4	7.2	0.0	0.6	-0.2	1.1	-0.2
Sep.	11.3	4.3	-0.4	1.2	6.9	-0.7	24.0	8.6	13.5	1.4
Oct.	8.5	7.5	0.2	0.8	-0.3	0.3				
Nov.	23.9	19.8	0.5	1.3	2.2	0.1	•			

2. Long-term

			By euro are	a residents					E	y non-residents
-	Total 1	MFIs (including Eurosystem) 2		Non-financial corporations 4	Central government 5	Other general government 6	Total 7	Banks (including central banks) 8	Non-monetary financial corporations 9	corporations
2001 Nov.	29.2	2.0	8.4	16.9	0.1	1.8	22.8	4.2	11.5	4.4
Dec.	37.0	3.2	29.7	5.6	-2.6	1.2	0.8	2.3	-0.4	1.1
2002 Jan.	51.3	6.5	5.7	5.5	30.7	2.9	12.7	0.1	3.6	3.4
Feb.	32.8	20.0	4.5	3.2	5.4	-0.4	5.9	3.5	2.8	0.9
Mar.	52.2	23.0	5.6	0.3	18.7	4.6	13.5	2.4	10.7	1.7
Apr.	40.9	8.3	10.6	5.5	12.0	4.6	15.4	2.7	5.5	0.5
May	51.0	12.5	11.6	5.3	16.1	5.5	18.0	3.6	6.9	2.8
June	35.6	13.8	4.0	3.7	11.7	2.4	18.4	7.1	13.6	-0.6
July	10.1	-4.6	6.8	2.2	-3.0	8.9	3.5	0.1	3.6	-0.4
Aug.	4.4	-0.6	0.0	-1.8	5.9	0.9	-1.0	-0.6	0.4	0.1
Sep.	47.7	22.5	8.5	3.2	11.7	1.7	12.9	0.8	4.3	-1.5
Oct.	22.3	-4.3	5.0	-1.5	19.4	3.7				
Nov.	26.4	0.9	10.3	0.2	13.5	1.5				

3. Total

			By euro are	a residents					E	y non-residents
	Total	MFIs (including Eurosystem)	Non-monetary financial corporations	corporations	Central government	Other general government	Total	(including central banks)	financial corporations	corporations
	1	2	3	4	3	6	/	8	9	10
2001 Nov.	22.2	-8.4	8.6	12.8	7.2	2.0	26.0	4.5	14.5	3.7
Dec.	-8.8	-8.3	29.2	-5.1	-26.4	1.7	7.7	2.5	4.5	2.1
2002 Jan.	82.6	22.2	5.9	10.0	42.2	2.3	-0.1	-4.9	-1.8	2.2
Feb.	32.0	13.4	4.7	1.0	13.2	-0.4	7.5	4.6	2.9	1.3
Mar.	69.0	28.4	6.0	-0.7	31.1	4.3	29.9	8.9	17.9	4.5
Apr.	33.3	5.5	10.8	1.0	11.8	4.3	-3.0	-5.4	-2.2	-2.1
May	69.9	19.4	10.9	2.5	31.6	5.5	18.3	3.7	7.4	2.5
June	32.6	10.3	4.1	-4.3	20.0	2.5	31.3	10.1	22.2	0.4
July	20.3	1.6	7.0	6.3	-3.9	9.2	-6.6	-2.9	-1.6	-2.0
Aug.	13.5	0.6	0.4	-1.4	13.0	0.8	-0.5	-0.8	1.5	-0.1
Sep.	59.0	26.8	8.2	4.4	18.6	1.0	36.9	9.4	17.9	-0.1
Oct.	30.8	3.3	5.2	-0.7	19.1	4.0				
Nov.	50.3	20.8	10.7	1.5	15.7	1.6				

				Fotal]				rea	of the euro a
		Other general government	Central government	corporations	Non-monetary financial corporations	Banks (including central banks)	Total		Other general government	Central government
	20	19	18	17	16	15	14	13	12	11
2001 Nov.	0.4	0.4	7.1	-4.7	3.2	-10.1	-3.7	0.4	0.1	0.0
Dec.	0.7	0.6	-23.9	-9.6	4.5	-11.2	-38.9	0.7	0.1	0.0
2002 Jan.	-1.1	-0.7	11.5	3.3	-5.2	10.7	18.5	-1.1	-0.1	0.0
Feb.	0.2	-0.2	7.8	-1.7	0.3	-5.6	0.8	0.2	-0.2	0.0
Mar.	0.0	-0.3	12.4	1.7	7.6	11.8	33.2	0.0	0.0	0.0
Apr.	0.1	-0.3	-0.3	-7.0	-7.5	-10.9	-26.0	0.1	0.0	-0.1
May	-0.1	0.0	15.5	-3.1	-0.3	7.1	19.1	-0.1	0.0	0.0
June	0.1	0.3	8.3	-7.0	8.7	-0.5	9.8	0.1	0.3	0.0
July	-0.2	0.3	-0.8	2.5	-4.9	3.2	0.0	-0.2	0.0	0.0
Aug.	-0.1	-0.1	7.1	0.2	1.5	1.0	9.6	-0.1	0.0	0.0
Sep.	0.5	-0.8	6.9	2.6	13.2	12.9	35.3	0.5	-0.1	0.1
Oct. Nov.										

of the euro an	rea]	Fotal				
Central government	Other general government		Total	Banks (including central banks)		corporations	Central government	Other general government		
11	12	13	14	15	16	17	18	19	20	
-0.4	0.4	2.7	52.0	6.2	19.9	21.2	-0.3	2.2	2.7	2001 Nov.
0.6	0.0	-2.8	37.8	5.4	29.3	6.7	-2.0	1.2	-2.8	Dec.
-0.8	4.8	1.5	64.1	6.6	9.3	8.9	29.9	7.7	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	65.7	25.4	16.3	2.0	18.8	4.5	-1.4	Mar.
1.8	5.0	-0.1	56.3	10.9	16.0	6.0	13.9	9.6	-0.1	Apr.
0.9	-0.1	4.1	69.1	16.0	18.5	8.1	17.0	5.4	4.1	May
-1.9	0.5	-0.3	54.1	21.0	17.6	3.1	9.8	2.9	-0.3	June
-0.1	0.7	-0.5	13.6	-4.5	10.3	1.8	-3.1	9.5	-0.5	July
0.3	-0.5	-0.7	3.4	-1.2	0.4	-1.7	6.2	0.4	-0.7	Aug.
0.7	4.9	3.7	60.6	23.3	12.9	1.7	12.4	6.6	3.7	Sep.
										Oct.
										Nov.

of the euro a	rea				1	Fotal				
Central	Other general	International organisations	Total	Banks (including				Other general government	International organisations	
8	8			central banks)	corporations		8	8		
11	12	13	14	15	16	17	18	19	20	
-0.3	0.5	3.1	48.2	-3.9	23.1	16.5	6.9	2.6	3.1	2001 Nov.
0.6	0.0	-2.2	-1.1	-5.7	33.8	-2.9	-25.9	1.8	-2.2	Dec.
-0.8	4.7	0.5	82.5	17.3	4.1	12.2	41.4	7.1	0.5	2002 Jan.
0.7	-0.3	-1.7	39.5	18.0	7.5	2.4	14.0	-0.7	-1.7	Feb.
0.1	-0.1	-1.4	98.9	37.2	23.9	3.7	31.2	4.3	-1.4	Mar.
1.8	5.0	0.0	30.3	0.0	8.6	-1.1	13.5	9.3	0.0	Apr.
0.9	-0.1	4.0	88.2	23.1	18.2	5.0	32.5	5.3	4.0	May
-1.8	0.7	-0.3	63.9	20.4	26.3	-3.9	18.2	3.2	-0.3	June
-0.1	0.7	-0.7	13.6	-1.3	5.4	4.3	-3.9	9.9	-0.7	July
0.3	-0.5	-0.8	13.0	-0.2	1.9	-1.5	13.3	0.3	-0.8	Aug.
0.8		4.2	95.9	36.2	26.0		19.3	5.8	4.2	Sep.
										Oct.
										Nov.

Table 3.7

Annual growth rates of securities other than shares issued by euro area residents ¹) (percentage changes)

1. Short-term

			In a	ll currencies combine	d		
	Total Index Dec.01=100		MFIs (including Index Eurosystem)		Non-financial corporations	Central government	Other general government
	1	2	3	4	5	6	7
2001 Nov.	5.0	106.4	-2.1	-14.9	21.5	8.1	40.9
Dec.	4.0	100.0	-2.7	-23.3	12.1	9.4	63.7
2002 Jan.	3.7	104.6	-0.6	-27.2	12.2	6.5	22.6
Feb.	1.3	104.3	-5.0	-21.7	5.7	7.4	55.3
Mar.	1.4	106.8	-4.4	-16.3	4.1	7.5	48.8
Apr.	-0.5	106.1	-5.2	-18.0	1.4	4.4	36.1
May	2.7	109.3	-0.1	-32.8	-8.3	10.3	27.8
June	3.3	108.5	-2.1	-25.1	-15.1	16.5	50.8
July	3.8	110.3	0.7	-16.4	-13.9	14.4	-3.1
Aug.	4.0	111.1	1.6	2.9	-18.0	15.1	-1.3
Sep.	6.3	113.2	5.7	0.8	-16.9	16.2	-19.4
Oct.	7.4	114.8	7.1	14.9	-18.4	17.9	-0.9
Nov.	10.9	118.0	15.3	23.3	-14.6	15.6	-5.1

2. Long-term

			In a	11 currencies combine	d		
	Total	MFIs (including		Non-monetary financial	Non-financial corporations	Central government	Other general government
	1	Index Dec.01= 100 2	Eurosystem)	corporations 4	5	6	7
2001 Nov.	6.9	99.4	7.7	27.0	23.2	1.9	21.9
Dec.	7.4	100.0	7.9	32.0	23.3	2.2	21.9
2002 Jan.	8.2	100.9	7.4	33.6	24.6	3.7	23.7
Feb.	7.8	101.4	6.8	32.1	23.5	3.7	21.5
Mar.	7.9	102.3	7.7	30.9	15.8	4.0	23.6
Apr.	7.9	102.9	7.6	32.5	16.3	3.8	25.4
May	8.0	103.8	8.1	33.1	14.5	3.5	29.5
June	7.6	104.3	7.8	30.5	13.0	3.1	31.6
July	7.1	104.6	6.8	27.4	11.8	3.1	36.6
Aug.	6.9	104.7	6.6	26.7	9.0	3.3	34.2
Sep.	7.4	105.5	7.3	27.4	11.9	3.6	31.1
Oct.	7.3	105.9	6.5	26.1	12.3	3.9	29.9
Nov.	6.9	106.3	6.0	25.5	7.4	4.3	29.2

3. Total

			In a	11 currencies combined	d		
	Total		MFIs (including	Non-monetary financial	Non-financial corporations	Central government	Other general government
	1	Index Dec.01=100 2	Eurosystem)	corporations 4	5	6	7
2001 Nov.	6.7	100.1	6.6	26.5	22.8	2.4	22.4
Dec.	7.1	100.0	6.6	31.3	21.0	2.8	22.9
2002 Jan.	7.7	101.2	6.4	32.7	21.9	4.0	23.7
Feb.	7.1	101.6	5.4	31.4	19.6	4.0	22.3
Mar.	7.2	102.7	6.2	30.3	13.4	4.2	24.2
Apr.	7.1	103.2	6.0	31.7	13.3	3.9	25.6
May	7.5	104.3	7.1	32.2	9.7	4.0	29.5
June	7.1	104.7	6.6	29.7	7.2	4.2	32.0
July	6.8	105.1	6.1	26.9	6.4	4.0	35.3
Aug.	6.6	105.3	6.0	26.4	3.2	4.3	33.1
Sep.	7.3	106.2	7.1	27.1	5.6	4.6	29.6
Oct.	7.3	106.7	6.6	26.0	5.4	5.0	29.1
Nov.	7.3	107.4	7.0	25.4	2.7	5.2	28.3

Source: ECB.

For the calculation of the index and the growth rates, see the technical notes.
 Including items expressed in the national denomination of the euro.

			In euro ²⁾				
Total	Index Dec.01= 100	MFIs (including Eurosystem)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	
	9	10	11	12	13	14	
5.4	107.5	-2.9	-14.9	21.1	8.1	43.3	2001 Nov.
3.9	100.0	-3.1	-23.3	10.4	8.5	66.7	Dec.
3.5	105.1	-2.1	-27.2	11.2	6.6	23.0	2002 Jan.
1.6	105.0	-6.0	-21.7	4.5	8.0	58.5	Feb.
1.9	107.7	-4.9	-16.3	2.4	8.1	52.5	Mar.
-1.1	106.5	-7.5	-18.0	-0.1	4.7	38.6	Apr.
2.2	109.6	-1.6	-32.8	-10.1	10.6	26.0	May
3.0	109.1	-3.8	-27.1	-16.4	16.5	51.6	June
3.7	110.7	0.2	-18.5	-15.5	14.5	-7.0	July
4.3	112.2	2.5	0.5	-19.4	15.0	-7.0	Aug.
6.3	114.0	5.5	-1.8	-18.0	16.7	-29.0	Sep.
6.2	115.4	4.6	12.1	-20.2	18.1	-11.8	Oct.
10.9	119.3	16.6	20.6	-15.9	15.9	-13.7	Nov.

				In euro 2)			
	Other general government	Central government	Non-financial corporations	Non-monetary financial corporations	Index Dec.01= 100		Total
	14	13	12	11	10	9	8
2001 Nov.	22.8	1.9	21.3	39.8	6.2	99.4	6.3
Dec.	22.9	2.3	21.9	45.8	6.4	100.0	6.9
2002 Jan.	24.7	3.8	23.9	47.0	5.6	100.8	7.6
Feb.	22.5	3.7	23.2	45.2	5.2	101.3	7.3
Mar.	24.7	3.9	18.7	43.2	5.7	102.1	7.4
Apr.	26.4	3.8	19.3	44.4	5.8	102.8	7.5
May	30.5	3.6	17.2	42.9	6.0	103.6	7.5
June	32.6	3.2	15.8	39.4	5.8	104.1	7.0
July	37.8	3.1	15.7	33.7	4.7	104.3	6.5
Aug.	35.2	3.3	12.8	32.5	4.6	104.3	6.3
Sep.	32.0	3.4	14.3	33.5	5.3	105.1	6.7
Oct.	29.7	3.9	14.7	30.6	4.4	105.4	6.5
Nov.	29.0	4.3	9.1	30.4	4.4	105.8	6.5

			In euro ²⁾				
Total	Index Dec.01= 100	MFIs (including Eurosystem)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	
8	9	10	11	12	13	14	
6.2	100.1	5.2	38.7	21.2	2.4	23.4	2001 Nov.
6.7	100.0	5.4	44.6	19.2	2.8	23.9	Dec.
7.2	101.2	4.8	45.6	20.9	4.0	24.7	2002 Jan.
6.8	101.6	4.0	44.0	18.6	4.1	23.2	Feb.
6.9	102.6	4.6	42.1	14.8	4.3	25.2	Mar.
6.7	103.1	4.3	43.2	14.8	3.9	26.7	Apr.
7.0	104.1	5.2	41.5	10.7	4.2	30.4	May
6.6	104.5	4.8	38.2	8.3	4.2	32.9	June
6.2	104.8	4.2	32.9	8.2	4.0	36.5	July
6.1	105.0	4.4	32.1	4.9	4.2	34.0	Aug.
6.7	105.9	5.3	33.0	6.4	4.5	30.2	Sep.
6.5	106.3	4.4	30.4	5.9	5.0	28.6	Oct.
6.9	107.0	5.6	30.3	3.2	5.3	27.8	Nov.

Table 3.8

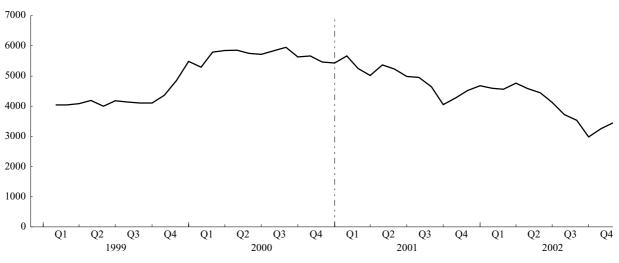
Quoted shares issued by euro area residents

(EUR billions; end-of-period stocks; market values)

Amounts outstanding

	Total	MFIs	Non-monetary financial	Non-financial corporations
	1	2	corporations 3	4
1999 Nov.	4.843.7	597.0	581.0	3,665.7
Dec.	5,489.2	653.7	642.2	4,193.3
				,
2000 Jan.	5,296.6	628.9	582.3	4,085.3
Feb.	5,794.1	647.8	600.1	4,546.2
Mar.	5,840.8	658.2	649.3	4,533.4
Apr.	5,859.6	670.4	654.4	4,534.8
May	5,750.6	673.4 692.0	647.7 645.3	4,429.5
June	5,716.0	700.3	695.8	4,378.8
July	5,833.2			4,437.2
Aug.	5,946.7	742.1	699.9 687.2	4,504.7
Sep.	5,638.2	730.3 719.0		4,220.7 4,282.9
Oct.	5,665.8	674.5	663.9	
Nov.	5,464.8	674.5 687.0	673.0 674.6	4,117.4
Dec.	5,429.9		0/4.0	4,068.3
		area enlargement —		
2001 Jan.	5,666.7	762.2	705.8	4,198.7
Feb.	5,247.4	710.1	661.1	3,876.2
Mar.	5,019.7	686.3	619.9	3,713.5
Apr.	5,363.9	715.3	643.0	4,005.6
May	5,233.4	697.9	626.5	3,909.0
June	4,983.7	676.5	634.7	3,672.5
July	4,959.3	647.0	571.9	3,740.4
Aug.	4,649.9	643.2	576.2	3,430.5
Sep.	4,052.0	535.7	484.9	3,031.5
Oct.	4,277.4	551.5	497.3	3,228.7
Nov.	4,522.3	587.5	511.5	3,423.2
Dec.	4,677.3	617.3	529.4	3,530.6
2002 Jan.	4,590.8	623.8	535.6	3,431.4
Feb.	4,561.7	622.4	525.9	3,413.4
Mar.	4,766.2	665.3	552.7	3,548.2
Apr.	4,585.8	678.0	533.5	3,374.2
May	4,447.2	666.3	500.0	3,280.9
June	4,126.8	614.8	476.9	3,035.1
July	3,720.5	515.6	406.2	2,798.7
Aug.	3,530.7	521.6	382.5	2,626.6
Sep.	2,985.0	412.6	284.7	2,287.7
Oct.	3,262.0	446.8	332.7	2,482.5
Nov.	3,445.8	487.3	357.1	2,601.4

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



Source: ECB.

ECB • Monthly Bulletin • February 2003

HICP and other prices in the euro area 4

Table 4.1

Harmonised Index of Consumer Prices

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

1. Total index and goods and services

	Tota	ıl	Goo	ods	Serv	vices	Tota	ll (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
1999 2000	103.8 106.3	1.1 2.3	102.7 105.5	0.9 2.7	106.0 107.8	1.5 1.7	-	-	-	-
				– Euro	area enlarge	ement —				
2001 2002	108.9 111.3	2.5 2.2	108.1 109.9	2.5 1.7	110.4 113.9	2.5 3.2	-	-	-	-
2002 Q1 Q2 Q3 Q4	110.4 111.5 111.5 112.0	2.6 2.1 2.0 2.3	109.1 110.3 109.6 110.5	2.2 1.4 1.3 1.8	112.6 113.5 114.8 114.7	3.1 3.2 3.3 3.1	110.4 111.1 111.6 112.1	0.7 0.6 0.4 0.5	109.3 109.8 110.1 110.5	112.6 113.6 114.4 115.1
2002 Feb. Mar. Apr. May June July Aug. Sep. Oct. Nov. Dec.	110.2 110.8 111.4 111.5 111.5 111.3 111.4 111.7 112.0 111.9 112.1	2.5 2.4 2.0 1.8 1.9 2.1 2.1 2.3 2.2 2.3	$108.8 \\ 109.7 \\ 110.4 \\ 110.4 \\ 110.2 \\ 109.4 \\ 109.4 \\ 110.1 \\ 110.6 \\ 110.5 \\ 110.6 \\ 110.$	2.1 2.0 2.0 1.3 1.0 1.2 1.4 1.4 1.7 1.8 1.9	112.7 113.0 113.2 113.6 113.9 114.8 115.0 114.7 114.7 114.6 114.9	3.0 3.2 3.0 3.3 3.2 3.2 3.3 3.3 3.3 3.2 3.1 3.1	110.3 110.7 111.0 111.2 111.2 111.3 111.6 111.9 112.1 112.0 112.2	$\begin{array}{c} 0.1\\ 0.3\\ 0.3\\ 0.2\\ 0.0\\ 0.1\\ 0.2\\ 0.3\\ 0.2\\ 0.0\\ 0.2\\ \end{array}$	109.2 109.5 109.9 109.9 109.8 109.8 110.0 110.3 110.5	112.6 113.0 113.1 113.7 113.9 114.1 114.4 114.7 115.0 115.1 115.3
2003 Jan. 2)		2.1								

2. Breakdown of goods and services

			Go	ods			Services				
		Food 3)]	Industrial goo	ds	Housing	Transport	Communi- cation	Recreation	Miscellan- eous
-	Total	Processed food 3)	Unprocessed food	Total	Non-energy industrial goods	Energy				personal	
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
1999 2000	0.6 1.4	0.9 1.1	0.0 1.7	1.0 3.4	0.7 0.7	2.4 13.3	1.8 1.6	2.1 2.6	-4.4 -4.2	2.0 2.3	1.8 2.4
				— <i>Eu</i>	ro area enla	rgement					
2001 2002	4.5 3.0	2.8 3.0	7.0 3.0	1.5 1.0	1.1 1.5	2.7 -0.7	1.9 2.4	3.5 3.4	-2.8 -0.9	3.3 4.1	2.6 3.3
2002 Q1 Q2 Q3 Q4	4.9 2.8 2.2 2.2	3.5 3.1 2.9 2.6	7.0 2.4 1.3 1.6	0.9 0.7 0.9 1.6	1.8 1.7 1.4 1.3	-2.1 -2.4 -0.9 2.7	2.3 2.4 2.5 2.6	3.6 3.4 3.6 3.2	-1.2 -0.8 -0.7 -0.7	4.0 4.2 4.3 4.0	3.2 3.3 3.4 3.4
2002 Feb. Mar. Apr. May June July Aug. Sep. Oct. Nov. Dec.	4.8 4.2 3.6 2.7 2.3 2.1 2.3 2.2 2.3 2.2 2.3 2.1	3.3 3.3 3.2 3.1 3.1 2.9 2.9 2.8 2.6 2.5 2.6	$\begin{array}{c} 7.1 \\ 5.5 \\ 4.1 \\ 2.1 \\ 1.1 \\ 0.9 \\ 1.3 \\ 1.7 \\ 1.6 \\ 1.8 \\ 1.3 \end{array}$	$\begin{array}{c} 0.7 \\ 1.0 \\ 1.2 \\ 0.6 \\ 0.3 \\ 0.7 \\ 0.9 \\ 1.0 \\ 1.5 \\ 1.5 \\ 1.8 \end{array}$	$ \begin{array}{c} 1.9\\ 1.8\\ 1.8\\ 1.7\\ 1.6\\ 1.5\\ 1.4\\ 1.4\\ 1.3\\ 1.3\\ 1.3 \end{array} $	-2.9 -1.6 -0.5 -2.9 -3.6 -1.7 -0.5 -0.4 2.3 2.1 3.6	2.2 2.3 2.5 2.4 2.4 2.5 2.5 2.5 2.5 2.5 2.6	3.5 3.7 3.2 3.5 3.5 3.5 3.5 3.9 3.4 3.2 3.3 3.0	$\begin{array}{c} -1.2\\ -1.0\\ -0.9\\ -0.7\\ -0.8\\ -0.8\\ -0.7\\ -0.6\\ -0.5\\ -0.7\\ -1.0\end{array}$	4.0 4.2 3.8 4.4 4.3 4.2 4.3 4.2 4.3 4.3 4.2 4.0 3.9	3.2 3.2 3.3 3.4 3.3 3.4 3.5 3.5 3.5 3.5 3.5
2003 Jan.											

Sources: Eurostat and ECB calculations.

Referring to the index period 2002.
 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)

					Indus	trial pro	ducer prices					World market prices of raw materials 1)		(ÉUR per
			Industr	y excludin	g construct	tion 3)				Construc- tion 4)	Manu- facturing		Total	barrel)
	Tot	al	Iı	ndustry ex	cluding co	construction and energy			Energy		8		excluding energy	
	Index $1995 = 100$		Total	Inter- mediate	Capital goods	(Consumer ge	oods					8,	
	1995 - 100			goods	goods	Total		Non-durable						
							consumer goods	consumer goods						
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1997	101.4	1.1	0.6	0.2	0.3	1.1	0.6	1.2	3.2	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 2000	100.2 105.7	-0.4 5.5	-0.6 2.6	-1.5 5.0	0.2 0.6	-0.1 1.5	0.7 1.4	-0.2 1.6	0.5 19.0	1.2 2.4	0.2 5.2	15.8 50.8	-5.9 16.7	17.1 31.0
2000	105.7	5.5	2.0	5.0	0.0					2.4	5.2	50.8	10.7	51.0
2001	108.2	2.2	1.8	1.2	1.0	3.0	uro area el 2.1	nlargement 3.1	2.8	2.2	1.3	-8.8	-7.6	27.8
2001	108.2	-0.1	0.6	-0.4	1.0	1.3	1.4	1.2	-2.5	2.2	0.2	-3.2	-1.7	27.8
2001 Q4	107.3	-0.8	0.7	-1.2	1.0	2.3	1.9	2.4	-7.6	1.3	-1.2	-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	-0.5	-10.5	-3.6	24.6
Q2	108.0	-0.8	0.3	-0.8	1.0	1.0	1.5	1.0	-4.8	1.7	-0.3	-8.7	-5.5	27.8
Q3	108.2	-0.1	0.7	0.1	0.9	1.1	1.3	1.1	-2.7	1.8	0.3	-4.2	-1.6	27.2
Q4	108.5	1.2	1.0	0.8	0.9	1.3	1.2	1.3	2.7		1.4	14.0	4.4	26.5
2002 Jan		-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		-0.9	0.2	-1.8	1.2	1.6	1.7	1.6	-5.4	-	-0.8	-15.2	-4.0	23.5
Ma		-0.7	0.2	-1.5	1.2	1.2	1.7	1.2	-3.7	-	-0.3	-1.6	-0.3	27.9
Apı Ma		-0.6 -0.8	0.3 0.3	-1.1 -0.9	$1.0 \\ 1.1$	1.2 1.0	1.6 1.5	1.1 0.9	-3.8 -4.9	-	-0.2 -0.4	-1.2 -9.5	-1.4 -6.8	29.3 28.1
Jun		-0.8	0.3	-0.9	1.1	0.9	1.3	0.9	-5.6	-	-0.4	-14.9	-0.8	25.8
July		-0.3	0.6	0.0	0.9	1.1	1.2	1.1	-3.6	-	0.1	-10.2	-7.6	25.9
Au		-0.1	0.7	0.2	0.9	1.0	1.3	1.0	-2.6	-	0.4	-4.3	-1.3	27.0
Sep		0.1	0.8	0.3	0.9	1.2	1.4	1.2	-2.0	-	0.5	2.4	4.7	28.9
Oct		0.9	0.9	0.6	0.9	1.3	1.2	1.3	1.9	-	1.2	14.3	7.8	27.9
Nov Dec		1.1 1.5	$1.0 \\ 1.1$	0.8 0.9	0.9 0.9	1.2 1.4	1.1 1.1	1.2 1.4	2.2 4.0	-	1.3 1.8	10.5 17.2	3.4 2.1	24.2 27.1
		1.5	1.1	0.9	0.9	1.4	1.1	1.4	4.0	-	1.8			
2003 Jan		•	•	•		•			•	-		16.9	-2.3	28.3

2. Deflators of gross domestic product ⁵⁾

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

	Total		Domestic demand	Private	Government	Gross fixed	Exports 6)	Imports 6)
	Index 1995 = 100		demand	consumption	consumption	capital		
	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	103.5	1.5	1.7	2.0	1.3	0.9	1.8	2.6
1998	105.3	1.7	1.3	1.4	1.2	1.0	-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
			— Euro	area enlargeme	ent —			
2001	110.8	2.4	2.2	2.4	2.3	2.0	1.5	0.8
2001 Q1	109.9	2.2	2.5	2.5	2.5	2.3	3.1	3.8
Q2	110.6	2.5	2.5	2.8	2.5	2.0	2.4	2.5
Q3	111.0	2.2	2.0	2.4	2.1	2.1	0.7	0.0
Q4	111.9	2.8	1.7	2.0	2.0	1.5	0.0	-2.9
2002 Q1	112.5	2.4	2.0	2.3	1.6	1.7	0.0	-1.3
Q2	112.9	2.1	1.7	1.8	1.4	1.9	-0.4	-1.7
Q3	113.6	2.4	1.7	1.8	1.5	1.8	0.4	-1.7

Sources: Eurostat, except columns 12 and 13 (HWWA - Hamburg Institute of International Economics), column 14 (Thomson Financial Datastream) and Sources: Eurostat, except columns 12 and 13 (119 WA - Hambarg Institute of International Economics), 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.

Data to end-1998 are based on national data expressed in domestic currency.
 Deflators for exports and imports refer to goods and services and include cross-border trade within the euro area.

Real economy indicators in the euro area 5

Table 5.1

National accounts 1)

GDP and expenditure components

1. Current prices

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

					GDP				
	Total		Do	mestic demand				External balance	e ³⁾
	1	Total	Private consumption	Government consumption	Gross fixed capital formation	Changes in inventories ²⁾ 6	Total	Exports 3)	Imports ³⁾
1997 1998 1999 2000	5,648.7 5,883.2 6,151.1 6,448.5	5,500.4 5,743.4 6,049.7 6,379.3	3,201.0 3,332.0 3,507.4 3,674.2	1,150.7 1,176.4 1,230.4 1,286.5	1,138.5 1,202.5 1,292.4 1,388.2	10.2 32.6 19.6 30.5	148.3 139.8 101.5 69.2	1,827.3 1,949.2 2,052.4 2,416.6	1,678.9 1,809.5 1,950.9 2,347.5
	,	,	,	- Euro area	enlargement			,	
2001	6,824.4	6,711.3	3,920.2	1,361.0	1,433.4	-3.3	113.1	2,550.3	2,437.2
2001 Q2 Q3 Q4	1,702.1 1,710.7 1,721.1	1,681.5 1,681.7 1,681.4	980.0 984.9 988.7	339.0 341.5 344.8	358.9 358.5 356.2	3.7 -3.1 -8.3	20.6 29.0 39.7	639.4 635.0 630.8	618.7 605.9 591.1
2002 Q1 Q2 Q3	1,737.5 1,749.4 1,766.1	1,695.8 1,706.1 1,713.1	994.9 1,001.4 1,010.3	348.5 352.3 354.6	354.9 352.3 354.6	-2.6 0.1 -6.3	41.7 43.3 52.9	629.1 640.0 655.4	587.3 596.7 602.5

2. Constant prices

(ECU billions at 1995 prices, seasonally adjusted)

					GDP				
-	Total		Do	mestic demand				External balanc	e 3)
	10	Total	Private consumption 12	Government consumption	Gross fixed capital formation	Changes in inventories ²⁾	Total	Exports 3)	Imports 3)
				13	14	15	16	17	18
1997 1998 1999 2000	5,509.1 5,667.5 5,826.4 6,027.9	5,354.3 5,545.1 5,737.5 5,902.2	3,093.3 3,187.9 3,300.3 3,382.7	1,126.1 1,142.2 1,164.8 1,186.9	1,132.1 1,189.8 1,260.7 1,320.8	2.8 25.1 11.7 11.8	154.8 122.4 88.9 125.8	1,806.3 1,939.2 2,040.5 2,297.0	1,651.5 1,816.9 1,951.6 2,171.2
					enlargement				
2001	6,221.5	6,071.0	3,521.3	1,225.2	1,336.4	-11.9	150.5	2,387.6	2,237.1
2001 Q2 Q3 Q4	1,554.9 1,557.7 1,553.9	1,521.6 1,517.5 1,513.5	880.8 881.9 882.6	305.6 306.9 308.4	335.5 333.0 330.4	-0.2 -4.3 -7.9	33.3 40.3 40.4	596.7 596.2 589.8	563.5 556.0 549.4
2002 Q1 Q2 Q3	1,560.3 1,565.6 1,570.7	1,514.6 1,518.4 1,520.2	881.7 884.0 888.4	311.0 313.1 313.9	327.2 323.3 323.5	-5.2 -2.0 -5.6	45.8 47.2 50.6	590.0 600.0 613.0	544.2 552.8 562.5
(annual pe	rcentage changes))							
1997 1998 1999 2000	2.3 2.9 2.8 3.5	1.7 3.6 3.5 2.9	1.6 3.1 3.5 2.5	1.3 1.4 2.0 1.9	2.4 5.1 6.0 4.8	-	- - -	10.4 7.4 5.2 12.6	9.0 10.0 7.4 11.3
				Euro area	enlargement				
2001	1.4	0.9	1.8	1.9	-0.7	-	-	2.7	1.4
2001 Q2 Q3 Q4	1.5 1.3 0.5	1.3 0.7 -0.2	1.8 1.8 1.7	2.0 2.2 1.6	-0.2 -1.6 -2.5	- -	- -	4.3 1.4 -2.6	3.8 -0.3 -4.4
2002 Q1 Q2 Q3	0.3 0.7 0.8	-0.3 -0.2 0.2	0.6 0.4 0.7	2.2 2.5 2.3	-3.1 -3.6 -2.9	-	- -	-2.5 0.5 2.8	-4.2 -1.9 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.

Decemption section of the generation of septements of permits of permits of permits of the proceeding acquisitions less disposals of valuables.
 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 add	ed			Intermediate consumption of	Taxes less subsidies on
	Total	Agriculture, hunting,		Construction	Trade, repairs, hotels and	Financial, real estate, renting		FISIM 1)	products
		forestry and fishing activities	mining		restaurants, transport and communication	and business activities			
	1	2	3	4	5	6	7	8	9
1997	5,270.4	138.6	1,227.8	291.7	1,086.1	1,382.4	1,143.8	203.7	582.1
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	5,690.4	136.0	1,293.6	310.3	1,191.6	1,529.3	1,229.6	202.4	663.1
2000	5,972.3	136.7	1,348.4	325.9	1,261.1	1,621.3	1,278.9	211.9	688.1
				Euro area	enlargement				
2001	6,337.9	151.5	1,410.0	346.7	1,355.8	1,721.4	1,352.4	230.7	717.3
2001 Q2	1,579.6	37.4	352.8	86.1	338.1	428.9	336.3	57.4	179.9
Q3	1,589.6	38.6	353.2	86.9	340.5	431.0	339.3	58.3	179.4
Q4	1,600.2	38.3	348.9	88.1	342.6	438.6	343.6	58.7	179.6
2002 Q1	1,611.4	38.9	350.4	89.2	345.5	439.8	347.7	57.6	183.7
Q2	1,623.7	38.0	353.3	88.8	347.3	444.7	351.5	57.5	183.2
Q3	1,637.3	38.7	356.4	89.2	350.0	447.3	355.7	58.5	187.3

4. Constant prices (ECU billions at 1995 prices, seasonally adjusted)

			(Gross value adde	ed			Intermediate consumption of	Taxes less subsidies on
	Total	Agriculture, hunting, forestry and fishing activities	Manufacturing, energy and mining 12	Construction	Trade, repairs, hotels and restaurants, transport and communication 14	Financial, real estate, renting and business activities	Public administration, education, health and other services 16	FISIM ¹⁾	products
1997	5,167.8	140.2	1,217.6	290.1	1,071.3	1,339.1	1,109.4	214.6	555.9
1998	5,319.0	142.5	1,256.7	291.3	1,114.1	1,388.3	1,126.0	222.3	570.8
1999	5,461.5	146.1	1,269.1	298.7	1,163.9	1,441.1	1,142.7	231.0	595.8
2000	5,663.2	145.3	1,320.6	305.1	1,219.2	1,507.4	1,165.5	245.5	610.3
2001	5,860.8	151.6	1,349.0	Euro area 310.1	enlargement 1,281.5	1,570.9	1,197.8	263.0	623.7
2001 Q2	1,463.8	37.6	337.4	77.4	320.3	392.2	298.9	65.6	156.7
Q3	1,468.3	38.3	337.5	77.5	321.0	394.3	299.7	66.0	155.5
Q4	1,465.3	38.1	332.2	77.6	321.1	395.1	301.2	66.7	155.4
2002 Q1	1,470.7	38.1	334.7	77.1	322.1	395.9	302.9	66.2	155.8
Q2	1,476.6	38.0	336.3	76.2	323.5	397.9	304.6	66.1	155.1
Q3	1,480.8	38.4	338.1	76.0	324.4	398.4	305.7	67.2	157.1
(annual perce	entage changes)								
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	2.5	4.5	3.8	1.5	3.9	4.4
2000	3.7	-0.5	4.1	2.2	4.8	4.6	2.0	6.3	2.4
2001	1.7	-1.2	1.0	Euro area -0.6	enlargement 2.6	2.8	1.3	5.7	0.2
2001 Q2	1.9	-1.8	1.4	-0.8	3.0	3.0	1.0	5.9	0.1
Q3	1.6	-1.1	0.8	-0.7	2.5	2.7	1.3	5.2	0.1
Q4	0.7	-0.6	-1.7	-0.5	1.3	2.2	1.4	4.9	-0.1
2002 Q1	0.5	1.1	-2.1	-0.7	1.0	1.7	1.6	2.2	-0.3
Q2	0.9	1.1	-0.3	-1.6	1.0	1.5	1.9	0.9	-1.0
Q3	0.9	0.2	0.2	-1.9	1.1	1.0	2.0	1.8	1.0

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			Indust	ry excluding	g construct	ion 2)				Construction	Manufacturing
		Total			Industry ex	cluding co	onstruction	n and energy		Energy		
		Index (s.a.) 1995 = 100		Total	Inter- mediate	Capital goods	C	Consumer go	ods			
	1	2	3	4	goods	6	Total	Durable consumer goods 8	Non-durable consumer goods 9	10	11	12
1999 2000	2.1 5.0	111.3 117.5	1.9 5.5	2.0 6.0	1.9 5.9	2.5 9.4	1.5 2.2	1.4 6.4	1.6 1.4	0.9 1.8	4.1 2.0	1.9 5.9
					Euro d	area enla	rgement					
2001 2002	0.2	118.1	0.4	0.2	-0.8	1.3	0.4		1.0	1.2	0.0	0.2
2001 Q4	-2.9	116.1	-3.6	-4.7	-6.0	-4.8	-2.7	-7.4	-1.7	3.5	1.4	-4.6
2002 Q1 Q2 Q3 Q4	-2.4 -1.1 -1.0	116.6 117.4 117.4	-2.7 -0.6 -0.6	-3.2 -0.9 -0.8	-2.1 0.3 0.7	-6.5 -2.6 -2.0	-1.2 -0.9 -1.9	-6.7 -5.9 -4.2	-0.1 0.1 -1.4	1.5 2.4 0.8	1.3 -1.8 -2.6	
2002 Feb. Mar. Apr. May June July Aug. Sep. Oct.	-2.6 -2.0 -0.6 -1.8 -0.9 -0.6 -1.5 -1.1 -0.7	116.5 116.8 117.3 117.0 117.8 117.2 117.5 117.5 117.7	-3.0 -2.2 -0.6 -0.8 -0.3 -0.2 -1.2 -0.4 0.7	-3.6 -2.4 -0.8 -1.1 -0.7 -0.4 -1.4 -0.7 0.1	$\begin{array}{c} -2.5 \\ -0.4 \\ 0.4 \\ 0.6 \\ 0.0 \\ 0.5 \\ 0.0 \\ 1.4 \\ 1.2 \end{array}$	-7.1 -6.1 -2.2 -4.3 -1.5 -0.7 -2.5 -2.7 -0.7	-1.2 -1.6 -1.3 -0.5 -1.0 -1.7 -2.6 -1.5 -0.4	-6.2 -7.2 -5.8 -6.8 -5.0 -2.2 -9.2 -3.0 -2.5	-0.1 -0.4 -0.3 0.8 -0.1 -1.6 -1.5 -1.2 0.0	1.5 0.6 1.7 2.1 3.3 1.5 0.0 0.9 4.4	0.4 2.2 0.5 -3.2 -2.5 -1.4 -2.6 -3.8 -6.2	-0.7 0.0 -1.6 -0.4 0.4
Nov. Dec.	1.6	118.8	2.8	3.3	4.2	3.6	1.6	1.2	1.7	-0.1	-4.6	2.7

2. Retail sales and car registrations

(annual percentage changes, unless otherwise indicated)

				Retail sal	es (s.a.)				New passer registrat	
	Current pric	es			Constan	t prices				
	Total		Total		Food, beverages,	Non-food			Thousands ³⁾ (s.a.)	
	Index 1995 = 100		Index 1995 = 100		tobacco		Textiles, clothing, footwear	Household equipment		
	13	14	15	16	17	18	19	20	21	22
1999 2000	111.6 116.2	3.2 4.1	107.3 109.8	2.4 2.3	2.9 1.9	2.3 2.2	1.2 1.7	2.6 4.6	973 952	5.4 -2.1
				– Eur	ro area enlarg	gement —				
2001 2002	121.3	4.0	111.3	1.4	1.3	1.4	1.2	-0.2	968 927	-0.8 -4.3
2001 Q4	122.4	3.3	111.5	1.0	1.1	1.0	0.2	-0.7	956	2.1
2002 Q1 Q2 Q3 Q4	122.7 123.0 123.9	2.7 1.3 1.5	111.8 111.4 112.1	0.8 0.0 0.7	1.3 0.4 1.1	0.2 0.2 0.8	0.3 -1.0 -0.9	-2.3 -2.4 -1.2	913 913 920 960	-4.1 -7.9 -4.7 0.6
2002 Feb. Mar Apr May June July Aug Sep. Oct. Nov Dec	123.6 122.6 123.7 123.7 123.6 123.6 123.6 123.2 124.5	$\begin{array}{c} 3.1 \\ 3.1 \\ 2.0 \\ 1.7 \\ 0.2 \\ 1.8 \\ 2.0 \\ 0.8 \\ 3.0 \\ 0.7 \\ \end{array}$	111.7 112.2 111.2 111.9 111.1 112.0 112.8 111.6 112.6 112.0	1.1 1.2 0.3 0.5 -0.8 1.0 0.9 0.1 1.9 -0.4	$\begin{array}{c} 1.4\\ 2.2\\ 0.6\\ 1.3\\ -0.6\\ 1.1\\ 1.5\\ 0.6\\ 1.9\\ 1.2\\ \end{array}$	0.6 0.3 0.6 0.3 -0.3 1.2 0.5 0.6 2.0 -1.3	0.3 1.3 0.8 -2.9 -0.7 1.3 0.4 -4.4 5.5 -4.4	-1.5 -3.1 -2.6 -1.6 -3.0 0.1 -2.2 -1.3 -1.7 -3.1	920 893 895 915 930 901 927 933 934 950 996	-3.2 -6.2 -7.9 -6.8 -9.2 -6.6 -4.5 -2.4 -3.2 -1.5 7.7

Sources: Eurostat, except columns 21 and 22 (ECB calculation based on data from the ACEA, European Automobile Manufacturers' Association).

Adjusted for variations in the number of working days.
 Breakdown in accordance with the harmonised definition of Main Industrial Groupings.
 Annual and quarterly figures are averages of monthly totals.

Table 5.3 European Commission Business and Consumer Surveys ¹⁾

1. Economic sentiment indicator, manufacturing industry and consumer surveys

(percentage balances²), unless otherwise indicated; seasonally adjusted)

	Economic sentiment		Ν	Manufacturin	g industry			Cons	umer confide	ence indicator	
	indicator 3) (index			nfidence ind		Capacity utilisation 4)	Total 5)	Financial situation	situation	Unemployment situation	Savings over next
	1995 = 100)	Total 5)	Order books	Stocks of finished products	Production expectations	(percentages)		over next 12 months	over next 12 months	over next 12 months	12 months
	1	2	3	4	5	6	7	8	9	10	11
1999	101.2	-7	-16	12	6	82.3	-3	3	-4	11	1
2000	103.7	5	3	5	16	84.4	1	4	1	1	2
2001	100.8	-8	-14	13	1	83.1	-5	2	-10	14	2 2
2002	99.0	-12	-25	12	3	81.2	-11	-1	-12	26	-3
2001 Q4	98.7	-18	-27	17	-9	81.6	-12	0	-18	30	2
2002 Q1	99.1	-14	-26	14	-1	81.1	-10	0	-12	28	0
Q2	99.4	-11	-25	12	4	81.1	-8	-1	-9	22	-3
Q3	98.9	-12	-27	11	4	81.3	-10	-1	-11	26	-3
Q4	98.6	-10	-23	11	3	81.3	-14	-3	-15	30	-8
2002 Jan.	99.0	-15	-28	14	-2	81.1	-11	0	-14	29	1
Feb.		-14	-26	14	-3	-	-10	0	-11	28	0
Mar		-12	-25	13	3	-	-9	0	-10	26	0
Apr.		-11	-26	12	4	81.2	-9	-1	-10	23	-3 -2 -3
May		-10	-23	11	4	-	-8	-1	-8	22	-2
June		-11	-25	12	4	-	-8	0	-8	22	-3
July		-11	-26	11	4	81.0	-10	-1	-10	26	-4
Aug		-12	-30	10	4	-	-11	-1	-12	27	-4
Sep.	99.0	-12	-26	12	3	-	-9	-1	-10	24	-2
Oct.		-11	-25	10	3	81.5	-12	-2	-12	27	-7
Nov		-11	-23	12	2	-	-14	-4	-15	30	-7
Dec	. 98.6	-9	-22	10	4	-	-16	-4	-19	33	-9
2003 Jan.	98.4	-10	-22	10	2	81.1	-17	-4	-21	36	-8

2. Construction industry, retail trade and services surveys

(percentage balances²⁾, seasonally adjusted)

	Construction	n confiden	ce indicator	Reta	il trade confi	dence indicate	or	Se	ervices con	fidence indic	ator
	Total 5)	Order books	Employment expectations	Total 5)	Present business situation	Volume of stocks	Expected business situation	Total 5)	Business climate	Demand in recent months	Demand in the months ahead
	12	13	14	15	16	17	18	19	20	21	22
1999	-10	-17	-2	-7	-7	17	2	27	25	26	31
2000	-5	-13	3	-2 -7	1	17	9	30	36	23	33
2001	-11	-16	-4		-7	17	2	15	16	8	20
2002	-20	-28	-12	-16	-23	18	-9	1	-4	-6	13
2001 Q4	-15	-20	-8	-11	-14	16	-3	-5	-5	-8	-2
2002 Q1	-16	-23	-9	-16	-22	20	-6	3	3	-14	21
Q2	-18	-24	-10	-18	-24	20	-9	5	1	1	14
Q3	-23	-32	-14	-17	-23	15	-11	-1	-5	-8	11
Q4	-24	-31	-16	-15	-21	16	-8	-4	-13	-4	4
2002 Jan.	-17	-25	-9	-13	-17	16	-6	1	0	-15	17
Feb.	-15	-22	-8	-18	-28	20	-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	-24	21	-8	6	3	1	14
June	-18	-25	-11	-18	-23	18	-12	3	-3	1	10
July	-21	-31	-10	-17	-23	17	-11	0	-4	-7	10
Aug.	-25	-34	-16	-16	-22	14	-12	-2	-4	-12	11
Sep.	-23	-30	-15	-17	-25	15	-11	0	-6	-5	12 5
Oct. Nov.	-23 -25	-32 -32	-14 -18	-16 -14	-21 -17	15 18	-11 -7	-4 -4	-13 -13	-4 -4	5
Dec.	-23	-32	-18	-14 -16	-17	16	-7	-4	-13	-4 -4	2
								-		-	-
2003 Jan.	-22	-29	-15	-19	-29	18	-10	-4	-15	-11	15

Source: European Commission Business and Consumer Surveys.

1) Data refer to the Euro 12.

1) Dura type to the Data type t derived from quarterly averages.

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

Table 5.4

Labour market indicators

1. Employment and unemployment in the whole economy ¹⁾

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

			Employ	yment				Un	employment	
	Total		By employs	ment status	By selected	sector	To	tal	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
1998	122.154	1.8	1.9	0.8	1.0	2.4	13.270	10.2	8.9	20.0
1999	124.369	1.8	2.2	-0.5	-0.2	2.7	12.249	9.3	8.2	18.0
2000	127.058	2.2	2.4	0.6	0.7	2.9	11.117	8.4	7.3	16.2
					ro area enlarge					
2001	132.783	1.4	1.6	0.2	0.3	1.9	11.038	8.0	7.0	15.7
2002	•	•	•	•	•		11.526	8.3	7.3	16.0
2001 Q1	132.371	2.0	2.2	1.0	1.2	2.5	11.051	8.0	7.0	15.7
Q2	132.670	1.5	1.7	0.5	0.7	2.0	10.983	8.0	7.0	15.6
Q3	132.928	1.2	1.4	-0.1	0.0	1.8	11.015	8.0	7.0	15.6
Q4	133.162	0.8	1.1	-0.6	-0.6	1.5	11.129	8.0	7.0	15.7
2002 Q1	133.331	0.7	1.0	-0.7	-1.1	1.6	11.279	8.1	7.1	15.9
Q2	133.398	0.5	0.8	-0.8	-1.1	1.3	11.452	8.2	7.2	16.1
Q3	133.299	0.3	0.6	-1.2	-1.2	1.0	11.607	8.3	7.3	16.1
Q4							11.779	8.5	7.4	16.2
2001 Dec.	-	-	-	-	-	-	11.158	8.1	7.0	15.8
2002 Jan.	-	-	-	-	-	-	11.220	8.1	7.1	15.8
Feb.	-	-	-	-	-	-	11.284	8.1	7.1	15.8
Mar.	-	-	-	-	-	-	11.333	8.2	7.1	15.9
Apr.	-	-	-	-	-	-	11.361	8.2	7.2	15.9
May	-	-	-	-	-	-	11.456	8.2	7.2	16.0
June	-	-	-	-	-	-	11.538	8.3	7.3	16.2
July	-	-	-	-	-	-	11.576	8.3	7.3	16.2
Aug.	-	-	-	-	-	-	11.609	8.3	7.3	16.2
Sep.	-	-	-	-	-	-	11.638	8.4	7.4	16.1
Oct.	-	-	-	-	-	-	11.703	8.4	7.4	16.2
Nov.	-	-	-	-	-	-	11.781	8.5	7.4	16.2
Dec.	-	-	-	-	-	-	11.851	8.5	7.5	16.3

2. Labour costs and productivity

(annual percentage changes)

		r cost in the who nd components (Ι	abour cost indices 3)			Earnings per employee in manufacturing
	Unit labour	Compensation	Labour	Total	By co	mponent	By selecte	d sector	
	cost	per employee	productivity	-	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	3.3	3.4	2.5	3.2	2.9	2.7
				- Euro are	ea enlargemen	<i></i>			
2001	2.6	2.7	0.1	3.4	3.6	2.6	3.2	3.2	3.1
2001 Q1	2.1	2.5	0.4	3.4	3.7	2.2	3.1	3.3	3.4
Q2	2.7	2.8	0.0	3.0	3.2	2.3	3.1	2.2	
Q3	2.5	2.6	0.2	3.7	3.9	3.1	3.6	3.7	3.3
Q4	3.2	2.8	-0.4	3.4	3.5	2.9	3.0	3.6	
2002 Q1 Q2 Q3	3.1 2.4 2.3	2.7 2.5 2.8	-0.4 0.1 0.6	4.0 3.6 3.7	4.2 3.6 3.7	3.6 3.6 3.5	3.7 3.0 3.3	4.2 3.9 3.8	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).
Data for employment are based on the ESA 95. Data for unemployment follow ILO recommendations.
Adult: 25 years and over; youth: below 25 years; expressed as a percentage of the labour force for the relevant age group.
Hourly labour costs for the whole economy, excluding the agriculture, public administration, education and health sectors. Owing to differences in converte are not convictent with the total

coverage, components are not consistent with the total.

Saving, investment and financing in the 6 euro area

Table 6.1

Financial investment and financing of non-financial sectors ¹⁾ (EUR billions; not seasonally adjusted; end of period)

Amounts outstanding

1. Main financial assets 2)

		Currency and deposits Total Currency Deposits of non-financial sectors other than central government Deposits of Deposits with Deposite deposits of Deposite d										
	Total	Currency	Deposits o		l sectors other with euro area M		vernment	Deposits of central government	Deposits with non-MFIs ⁴⁾	deposits of non-banks with banks outside the		
			Total	Overnight	With agreed maturity	Redeemable at notice	Repurchase agreements	with euro area MFIs		euro area 3)		
	1	2	3	4	5	6	7	8	9	10		
1998 Q3 Q4	4,677.4 4,825.9	311.8 323.4	4 4,211.2 1,282.9 1,463.3 1,386.3 78.6 149.8 141.5									
1999 Q1 Q2 Q3 Q4	4,676.1 4,702.4 4,713.7 4,859.9	318.6 324.8 328.3 350.8	4,075.8 4,114.2 4,112.8 4,215.1	1,239.1 1,321.8 1,324.6 1,370.9	1,464.6 1,418.3 1,416.5 1,457.7	1,306.2 1,315.7 1,313.1 1,323.5	66.0 58.4 58.7 63.0	133.4 125.0 133.3 142.0	148.3 138.4 139.4 152.0	243.9 242.7 238.6 229.7		
2000 Q1 Q2 Q3 Q4	4,837.9 4,894.9 4,915.1 5,030.3	335.5 342.0 339.8 348.4	4,222.3 4,256.9 4,266.5 4,361.6	1,379.6 1,409.7 1,396.9 1,464.4	1,462.5 1,485.7 1,524.0 1,542.4	1,303.3 1,282.6 1,263.7 1,269.1	76.8 78.9 81.9 85.6	130.2 146.0 159.2 164.5	150.0 150.0 149.6 155.9	260.5 247.1 253.9 230.1		
				– Euro	area enlarge	ement —						
2001 Q1 Q2 Q3 Q4	5,140.9 5,238.8 5,226.7 5,362.7	336.3 333.0 309.6 239.7	4,494.11,446.11,620.91,314.6112.6150.3160.14,579.21,526.11,616.71,321.1115.3165.5161.04,609.01,547.91,605.21,333.7122.2147.8160.24,816.41,690.31,613.01,396.3116.7139.0167.6									
2002 Q1 Q2 Q3	5,365.0 5,449.1	254.3 285.8 306.7	4,775.4 4,828.0 4,825.9	1,637.6 1,703.9 1,699.2	1,605.0 1,593.9 1,585.6	1,413.0 1,412.5 1,423.2	119.8 117.6 117.8	157.5 155.0 146.3	177.8 180.3	300.6 277.2		

	Securi	ities other than	shares		Sha	ares 5)		Insurar	nce technical res	erves
	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 Q4	1,546.6 1,539.8	156.7 155.7	1,389.9 1,384.1	3,366.3 3,825.5	1,929.8 2,307.8	1,436.5 1,517.7	187.9 172.7	2,520.6 2,622.8	2,248.9 2,351.0	271.7 271.8
1999 Q1 Q2 Q3 Q4	1,587.2 1,505.0 1,514.0 1,593.1	136.5 126.7 114.2 166.7	1,450.7 1,378.2 1,399.8 1,426.5	4,129.3 4,251.7 4,185.1 4,924.7	2,502.4 2,525.3 2,451.2 3,094.1	1,626.9 1,726.4 1,733.9 1,830.6	194.8 211.6 210.8 203.9	2,679.5 2,750.1 2,793.9 2,937.1	2,401.8 2,468.2 2,507.3 2,648.6	277.6 282.0 286.6 288.5
2000 Q1 Q2 Q3 Q4	1,598.5 1,636.2 1,712.7 1,800.7	186.9 191.8 210.5 228.3	1,411.6 1,444.4 1,502.2 1,572.5	5,053.4 4,971.4 5,047.1 5,094.7	3,124.6 3,069.3 3,130.2 3,226.0	1,928.7 1,902.2 1,916.8 1,868.7	215.9 206.4 204.7 200.4	3,054.1 3,100.9 3,155.8 3,186.6	2,759.4 2,802.2 2,853.2 2,884.9	294.7 298.6 302.7 301.7
					o area enlar	0				
2001 Q1 Q2 Q3 Q4	1,928.4 1,914.0 1,942.0 1,954.6	315.8 268.8 264.0 252.4	1,612.6 1,645.3 1,678.0 1,702.1	4,778.3 4,750.9 4,243.9 4,607.2	2,945.9 2,895.3 2,509.0 2,783.4	1,832.4 1,855.5 1,735.0 1,823.8	225.3 232.2 252.8 260.0	3,236.8 3,295.9 3,271.3 3,366.3	2,929.4 2,986.2 2,957.9 3,048.7	307.4 309.6 313.4 317.6
2002 Q1 Q2 Q3	2,014.8 2,044.3	294.0 256.2	1,720.8 1,788.1	4,699.2 4,286.7	2,838.2 2,522.6	1,861.0 1,764.1	290.3 293.3	3,450.6 3,442.4	3,124.0 3,112.3	326.7 330.1

Source: ECB.

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

 Covering deposits with euro
 Excluding unquoted shares. Covering deposits with euro area central government (S.1311), other financial intermediaries (S.123) and insurance corporations and pension funds (S.125).

Table 6.1 (cont'd)

Financial investment and financing of non-financial sectors ¹⁾ (EUR billions; not seasonally adjusted; end of period)

Amounts outstanding

2. Main liabilities ²⁾

]	Loans taken	from euro are	a MFIs and	other finan	cial corporati	ons by			Memo: loans
	Total	Faken from	Gene	ral governm	ent	Non-fir	nancial corpo	orations	Н	ouseholds 4)		taken from banks
		euro area MFIs	Total	Short-term I	Long-term ⁵⁾	Total	Short-term	Long-term	Total	Short-term	Long-term	outside the euro area by non-banks ³⁾
	1	2	3	4	5	6	7	8	9	10	11	12
1998 Q3 Q4	6,081.8 6,227.5	5,524.1 5,663.5	903.5 911.2	33.3 36.0	870.2 875.1	2,528.7 2,600.7	866.2 902.9	1,662.5 1,697.8	2,649.6 2,715.6	233.8 240.8	2,415.9 2,474.8	147.4 151.3
1999 Q1 Q2 Q3 Q4	6,259.4 6,423.4 6,491.4 6,665.1	5,682.7 5,817.5 5,886.6 6,039.5	902.1 899.5 884.7 900.1	36.3 39.0 37.9 42.1	865.8 860.6 846.8 858.0	2,595.9 2,688.1 2,703.0 2,795.4	921.3 964.2 943.7 979.8	1,674.6 1,724.0 1,759.3 1,815.6	2,761.3 2,835.7 2,903.6 2,969.5	251.8 255.6 255.4 264.1	2,509.6 2,580.1 2,648.3 2,705.4	156.8 183.3 191.4 201.4
2000 Q1 Q2 Q3 Q4	6,809.9 6,958.8 7,103.4 7,265.6	6,156.4 6,262.2 6,379.6 6,500.5	890.4 886.0 866.2 881.4	41.1 42.0 39.9 42.0	849.3 844.0 826.3 839.4	2,894.2 2,994.4 3,102.3 3,199.5	1,038.0 1,090.7 1,152.4 1,167.3	1,856.2 1,903.7 1,949.9 2,032.2	3,025.2 3,078.3 3,134.9 3,184.6	265.6 274.4 275.9 281.0	2,759.7 2,804.0 2,859.0 2,903.6	221.1 219.7 252.3 245.2
						area enla	0					
2001 Q1 Q2 Q3 Q4	7,452.3 7,557.6 7,629.5 7,741.2	6,671.7 6,762.2 6,805.2 6,897.5	895.8 879.8 873.3 897.2	41.8 42.1 45.1 50.6	854.0 837.6 828.2 846.6	3,320.7 3,392.5 3,433.1 3,471.5	1,243.9 1,266.5 1,244.6 1,226.3	2,076.8 2,126.1 2,188.5 2,245.2	3,235.8 3,285.3 3,323.2 3,372.6	279.3 285.3 280.7 282.9	2,956.5 3,000.1 3,042.4 3,089.6	257.3 279.2 249.7 268.6
2002 Q1 Q2 Q3	7,815.7 7,900.7	6,960.9 7,020.7 7,058.4	901.5 874.3	53.3 53.5	848.2 820.8	3,508.4 3,555.8	1,224.4 1,211.0	2,283.9 2,344.7	3,405.8 3,470.6	278.3 285.5	3,127.5 3,185.1	285.5 251.8

			Securiti	es other than	shares issued by	у		Quoted shares	Deposit liabilities of	Pension fund
	Total	Ge	neral governm	ent	Non-	financial corpo	orations	issued by non-financial	central government	reserves of non-
		Total	Short-term	Long-term	Total	Short-term	Long-term		8	financial corporations
	13	14	15	16	17	18	19	20	21	22
1998 Q3 Q4	3,925.8 3,928.3	3,592.3 3,593.2	498.6 468.2	3,093.7 3,125.0	333.5 335.1	55.3 55.0	278.2 280.1	2,446.1 2,815.2	133.8 140.3	215.3 217.2
1999 Q1 Q2 Q3 Q4	3,972.4 3,955.4 3,934.3 3,897.2	3,636.1 3,613.2 3,578.9 3,529.8	466.9 459.3 449.6 421.1	3,169.2 3,153.9 3,129.2 3,108.7	336.3 342.2 355.4 367.3	65.7 66.4 74.8 78.2	270.6 275.8 280.6 289.1	3,087.2	146.9 136.6 137.6 149.8	219.6 221.9 224.2 226.5
2000 Q1 Q2 Q3 Q4	3,954.1 3,986.3 4,022.5 4,067.5	3,584.9 3,605.6 3,621.4 3,648.9	425.3 425.8 421.8 400.8	3,159.6 3,179.8 3,199.6 3,248.1	369.2 380.6 401.1 418.6	78.7 88.7 95.6 100.6	290.5 291.9 305.5 318.0	4,378.8 4,220.7	147.6 147.6 147.2 153.7	228.4 230.2 232.1 233.9
				— Euro	o area enlarg	ement –				
2001 Q1 Q2 Q3 Q4	4,247.9 4,294.5 4,377.9 4,391.7	3,790.6 3,812.9 3,879.6 3,874.5	429.3 440.7 449.9 434.3	3,361.3 3,372.2 3,429.7 3,440.2	457.3 481.7 498.3 517.2	111.5 122.2 135.9 134.8	345.8 359.4 362.4 382.3	3,672.5	154.7 155.2 155.4 165.5	236.1 238.3 240.5 240.0
2002 Q1 Q2 Q3	4,451.5 4,541.0	3,928.4 4,024.9	446.8 481.8	3,481.6 3,543.1	523.1 516.2	141.0 125.5	382.1 390.7	3,548.2 3,035.1 2,287.7	174.8 176.1	242.4 244.8

Source: ECB.

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). 1)

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

3)

Transactions

1. Main financial assets ¹⁾

					Currency ar	nd deposits				Memo: deposits of
	Total	Currency	Deposits of		sectors 3) other ith euro area N	r than central g AFIs	overnment	Deposits of central government	Deposits with non-MFIs ⁴⁾	non-banks with banks outside the
		-	Total	Overnight	With agreed maturity	Redeemable at notice	Repurchase agreements	with euro area MFIs		euro area ²⁾
	1	2	3	4	5	6	7	8	9	10
1998 Q3 Q4	-14.0 148.5	-3.7 11.6	-18.5 137.0	-17.7 98.1	2.7 13.0	-0.2 44.8	-3.3 -18.9	9.0 -6.6	-0.7 6.5	2.8 -24.5
1999 Q1 Q2 Q3 Q4	-40.3 22.0 12.9 138.7	-5.2 6.2 3.5 22.3	-37.7 34.2 0.2 95.1	-19.4 81.3 3.5 44.2	-15.7 -48.9 -1.1 36.4	10.1 9.4 -2.6 10.3	-12.7 -7.6 0.3 4.2	-4.2 -8.4 8.3 8.7	6.8 -9.9 1.0 12.7	23.4 -4.3 -2.8 -14.2
2000 Q1 Q2 Q3 Q4	-28.9 52.6 6.4 128.4	-15.3 6.7 -2.2 8.6	0.4 30.0 -4.2 108.3	6.1 31.9 -17.3 71.4	0.9 17.8 28.8 27.3	-20.4 -21.8 -18.5 5.7	13.7 2.1 2.9 3.8	-11.9 15.8 13.3 5.3	-2.1 0.1 -0.5 6.3	26.1 -12.8 -1.7 -16.7
				– Euro	area enlarge	ement —				
2001 Q1 Q2 Q3 Q4	-17.3 94.6 6.4 138.3	-19.8 -3.3 -23.4 -69.9	13.9 81.8 48.3 209.7	-34.4 77.1 25.4 142.4	42.6 -4.3 3.0 10.3	-6.1 6.3 13.0 62.5	11.8 2.7 7.0 -5.4	-15.6 15.1 -17.7 -8.8	4.2 0.9 -0.8 7.4	13.6 4.8 3.4 12.2
2002 Q1 Q2 Q3	4.5 104.1	14.6 31.5 20.9	-39.3 72.5 -2.4	-53.3 72.4 -5.1	-3.9 0.9 -8.1	14.9 1.7 10.6	3.0 -2.4 0.2	19.0 -2.5 -12.5	10.2 2.5	2.0 -9.9

	Securi	ities other than	shares		Sha	ares 5)		Insurar	nce technical res	serves
	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 Q4	-12.2 -13.8	-11.2 -2.2	-1.1 -11.5	102.6 81.9	17.1 62.8	85.6 19.1	1.0 -16.1	43.0 49.7	40.3 47.6	2.7 2.1
1999 Q1 Q2 Q3 Q4	31.2 -41.0 -3.3 90.1	-13.1 -11.9 -13.0 50.4	44.2 -29.0 9.7 39.7	102.9 148.3 94.7 -14.6	2.6 64.9 55.2 19.0	100.4 83.4 39.4 -33.6	2.9 16.8 -0.4 -6.8	64.2 54.1 57.2 70.4	58.2 49.6 52.5 68.2	6.0 4.5 4.8 2.1
2000 Q1 Q2 Q3 Q4	2.5 49.2 84.3 24.1	26.8 4.4 19.5 7.2	-24.2 44.8 64.7 16.9	-11.1 62.9 148.7 219.2	-58.4 44.1 140.2 181.6	47.3 18.8 8.4 37.6	12.9 -9.7 -2.0 -4.3	78.7 55.9 56.0 60.9	72.6 51.9 52.0 61.9	6.2 4.0 4.1 -1.0
				— Eur	o area enlar	gement -				
2001 Q1 Q2 Q3 Q4	126.6 -8.6 36.7 -3.8	89.5 -41.7 -4.9 -16.7	37.2 33.1 41.6 12.9	66.0 47.2 75.4 0.5	27.9 41.2 49.4 -22.2	38.1 6.0 25.9 22.7	24.7 6.3 20.0 6.7	60.2 56.9 51.0 66.8	54.5 54.5 47.3 62.8	5.7 2.4 3.7 4.0
2002 Q1 Q2 Q3	90.4 6.0	44.3 -39.3	46.1 45.3	50.2 26.1	5.5 12.0	44.8 14.1	30.1 2.6	70.0 51.9	61.5 49.1	8.4 2.9

Source: ECB.

ś) 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.

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

Table 6.1 (cont'd)

Financial investment and financing of non-financial sectors ¹⁾ (EUR billions; not seasonally adjusted)

Transactions

2. Main liabilities ²⁾

			Lo	ans taken fro	om euro area	MFIs and c	other financia	al corporation	s by			Memo: loans
	Total	aken from	Gene	ral governm	ent	Non-fit	nancial corpo	orations	Н	ouseholds 4)		taken from banks
		euro area MFIs	Total S	Short-term I	Long-term ⁵⁾	Total	Short-term	Long-term	Total	Short-term	Long-term	outside the euro area by non-banks ³⁾
	1	2	3	4	5	6	7	8	9	10	11	12
1998 Q3 Q4	81.1 160.2	82.2 151.0	2.8 8.3	1.4 2.8	1.4 5.5	27.6 75.8	-15.0 37.3	42.6 38.5	50.7 76.0	1.2 7.1	49.4 68.9	-0.7 3.5
1999 Q1 Q2 Q3 Q4	89.6 162.7 70.6 170.4	75.6 133.2 71.5 146.6	-7.7 -4.1 -14.7 15.1	0.3 2.7 -1.1 4.2	-7.9 -6.7 -13.6 10.9	21.1 89.6 17.3 86.4	23.3 41.2 -16.7 34.0	-2.2 48.4 34.0 52.4	76.2 77.2 67.9 68.8	9.2 3.9 -0.3 8.8	67.0 73.3 68.2 60.0	1.7 23.9 8.4 -7.0
2000 Q1 Q2 Q3 Q4	141.6 164.6 132.1 185.2	108.8 118.4 91.6 140.1	-8.3 -4.7 -16.2 15.6	-0.9 0.9 -2.1 2.1	-7.4 -5.6 -14.1 13.5	91.9 113.4 96.6 116.3	54.7 62.2 53.4 19.6	37.2 51.3 43.2 96.7	58.0 55.9 51.8 53.2	1.6 9.8 0.0 5.3	56.4 46.1 51.8 47.9	15.1 -0.8 23.2 1.9
					– Euro	area enla	rgement					·
2001 Q1 Q2 Q3 Q4	95.8 105.5 83.6 108.7	78.5 88.0 57.9 92.3	-3.7 -16.4 -6.0 23.0	-0.5 0.3 2.9 5.5	-3.3 -16.7 -8.9 17.5	62.4 64.7 50.6 36.3	39.6 20.9 -15.8 -17.0	22.8 43.7 66.4 53.2	37.1 57.2 38.9 49.5	-5.1 6.0 -4.2 2.2	42.2 51.2 43.1 47.3	9.2 16.8 -21.4 4.1
2002 Q1 Q2 Q3	73.6 111.4	62.6 85.6 37.0	4.2 -26.1	2.7 0.2	1.5 -26.3	30.6 73.8	-3.8 -5.3	34.4 79.0	38.8 63.7	-5.2 7.5	44.0 56.2	15.8 -18.4

			Securiti	es other than	shares issued by	y		Quoted shares	Deposit liabilities of	Pension fund
	Total	Ge	neral governm	ent	Non-	financial corpo	rations	issued by non-financial	central government	reserves of non-
		Total	Short-term	Long-term	Total	Short-term	Long-term	corporations	8	financial corporations
	13	14	15	16	17	18	19	20	21	22
1998 Q3 Q4	61.3 -10.5	54.0 -15.4	2.1 -31.0	52.0 15.6	7.3 4.8	1.6 0.5	5.7 4.4	9.4 39.0	-0.4 6.4	2.2 1.9
1999 Q1 Q2 Q3 Q4	73.9 37.9 55.7 -12.0	60.5 29.3 37.8 -19.7	1.1 -7.4 -10.8 -27.7	59.4 36.7 48.6 8.0	13.4 8.5 17.9 7.7	10.5 0.6 8.3 3.3	2.9 7.9 9.6 4.3	9.4 32.7 34.3 41.6	6.6 -10.3 1.0 12.1	2.3 2.3 2.3 2.3
2000 Q1 Q2 Q3 Q4	60.7 37.2 48.8 -0.5	58.9 23.1 25.5 -17.9	10.0 -1.0 -2.7 -27.0	48.9 24.1 28.2 9.1	1.8 14.1 23.3 17.4	0.5 10.2 7.2 5.2	1.3 3.9 16.1 12.2	19.6 27.8 68.1 53.9	-2.2 0.0 -0.4 6.4	1.9 1.9 1.9 1.8
				— Euro	o area enlarg	ement –				
2001 Q1 Q2 Q3 Q4	74.2 83.8 47.6 9.0	37.5 58.7 29.6 -8.0	32.3 10.7 8.7 -22.2	5.2 48.0 20.8 14.2	36.6 25.1 18.0 17.0	11.0 11.0 14.1 -1.9	25.6 14.1 3.9 18.8	51.4 44.3 9.6 6.8	1.1 0.4 0.2 10.1	2.2 2.2 2.2 -0.5
2002 Q1 Q2 Q3	103.0 59.0	93.2 62.4	21.8 33.9	71.4 28.5	9.8 -3.3	6.8 -15.8	3.0 12.4	9.4 5.3	9.3 1.3	2.4 2.4

Source: ECB.

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). 1)

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

3)

Including non-profit institutions serving households.
 Including all loans taken by central government from MFIs in the euro area.

Table 6.2

Saving, investment and financing ¹⁾

(EUR billions, unless otherwise indicated)

1. All sectors in the euro area ²⁾

		Net acquisi	tion of non-finan	cial assets				Net	acquisition of f	inancial asse	ets		
	Total	Gross fixed capital formation	Consumption of fixed capital (-)	Changes in inven- tories 3)	Non- produced assets	Total	Monetary gold and SDRs	Currency and deposits	Securities other than shares 4)	Loans	Shares and other equity	Insurance technical reserves	Other investment (net) 5)
	1	2	3	4	5	6	7	8	9	10	11	12	13
1995	368.4	1,093.3	-751.7	26.6	0.1	1,537.9	0.7	489.7	222.7	422.3	164.6	201.1	36.6
1996	340.9	1,122.7	-783.9	1.7	0.4	1,726.4	-3.0	395.1	397.7	383.8	312.5	193.6	46.7
1997	353.2	1,139.5	-797.1	10.8	0.1	1,912.8	-0.2	393.2	332.4	449.7	483.5	222.0	32.2
1998	412.9	1,203.5	-823.3	32.5	0.2	2,374.6	11.0	430.2	361.6	519.7	813.4	210.3	28.6
1999	451.3	1,293.1	-861.8	19.9	0.1	3,038.8	1.3	554.3	435.2	879.9	897.8	253.5	16.7
2000	489.5	1,388.9	-912.4	29.4	-16.4	2,778.9	1.3	351.4	248.5	807.5	1,116.5	254.5	-0.7
					— Eu	ro area en	largement						
2001	458.7	1,434.3	-971.0	-5.0	0.5	2,480.2	-0.5	587.3	451.8	699.0	550.1	241.9	-49.4

		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	412.1	1,158.7	-751.7	5.0	1,494.2	486.7	277.7	384.2	140.0	205.5
1996	409.9	1,189.1	-783.9	4.6	1,657.3	472.2	378.0	335.1	275.8	196.3
1997	455.6	1,241.2	-797.1	11.5	1,810.5	510.3	319.1	378.0	373.2	229.9
1998	486.5	1,298.7	-823.3	11.1	2,301.0	646.0	322.5	481.2	632.0	219.4
1999	499.8	1,351.5	-861.8	10.1	2,990.3	926.6	493.9	755.8	551.2	262.7
2000	514.7	1,418.7	-912.4	8.4	2,753.7	534.6	410.5	833.5	721.7	253.3
				— Euro	area enlarge	ement –				
2001	485.7	1,448.8	-971.0	7.9	2,453.2	675.8	474.1	570.5	489.0	243.7

2. Non-financial corporations

		Net acquisitio non-financial a			Net acqu	isition of financ	ial assets		Chan; net w	ges in orth ⁶⁾	Ne	et incurrence of	f liabilities	
	Total			Total					Total		Total			
		Gross fixed	Consumption		Currency	Securities	Loans	Shares		Gross	Г	Securities	Loans	Shares
		capital	of fixed		and	other than		and other		saving		other than		and other
		formation	capital (-)		deposits	shares 4)		equity				shares 4)		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	64.6	270.1	530.7	139.9	-87.3	126.0	90.5
1996	137.4	589.9	-454.4	262.2	54.4	-13.9	55.1	86.0	124.3	536.3	275.4	6.8	143.8	117.1
1997	158.7	615.9	-468.9	240.1	24.4	-13.3	46.3	94.8	111.4	544.2	287.5	12.1	154.5	111.4
1998	203.7	661.4	-487.4	429.0	55.0	-8.7	96.7	200.0	149.4	590.6	483.4	25.8	252.6	196.3
1999	222.2	708.6	-508.2	602.6	28.3	58.6	169.9	303.8	110.4	570.6	714.4	47.5	422.0	230.2
2000	322.2	776.5	-541.6	812.1	69.6	62.3	168.0	420.6	97.4	593.2	1,036.9	56.5	551.7	424.5
						Euro area	enlargeme	ent						
2001	219.5	798.9	-575.7	538.4	83.1	45.0	138.0	183.7	71.2	596.6	686.8	96.7	316.8	266.5

3. Households 7)

		Net acquisition non-financial a			Net acqu	isition of finar	icial assets			es in net orth ⁶⁾	Net incu of liabi		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	161.0	351.3	-192.7	395.0	185.2	82.1	1.2	178.7	419.1	606.5	136.9	135.8	3,604.3	16.8
1996 1997	158.7 154.6	361.3	-204.0 -199.4	435.5 425.4	145.6	24.5	93.6	189.0 215.8	432.8	621.0 590.9	161.3	160.1 167.1	3,763.8 3,791.5	16.5
1997	154.6	352.7 362.2	-199.4 -203.5	425.4	69.1 95.5	-17.8 -117.3	194.3 288.8	215.8	411.6 395.7	568.2	$168.5 \\ 212.7$	211.4	3,791.5	15.6 14.6
1999	174.8	393.0	-216.1	477.6	115.3	8.0	196.4	241.0	384.2	556.1	268.2	266.7	4.062.6	13.7
2000	178.1	409.9	-225.7	414.0	53.0	82.5	132.1	247.8	370.0	554.7	222.1	220.4	4,228.1	13.1
						Euro area	enlargemen	t –						
2001	174.0	417.2	-242.8	395.6	179.3	97.2	67.6	228.3	400.5	598.6	169.1	167.3	4,518.7	13.2

Source: ECB.

1) Non-consolidated data.

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

a) 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 received
7) Including non-profit institutions serving households.
8) Gross saving as a percentage of disposable income. Arising from saving and net capital transfers receivable, after allowance for consumption of fixed capital (-). Including non-profit institutions serving households.

General government fiscal position in the 7 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										Capital		Memo:
		revenue	Direct _			Indirect		Social			Sales	revenue	Capital	fiscal
			taxes	House-	Corpo-	taxes	Received		Employers Em	ployees			taxes	burden 2)
				holds	rations		by EU	butions						
	1	2	2	4	5	6	institutions	0	0	10	11	12	13	14
	1	2	3	4	3	6	/	0	9	10	11	12	15	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	13.5	0.7	17.6	8.8	5.5	2.5	0.7	0.4	43.7
1998	47.7	47.2	12.4	9.9	2.5	14.1	0.7	16.5	8.5	4.9	2.5	0.5	0.3	43.3
1999	48.2	47.7	12.8	10.1	2.6	14.3	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
					- 1	Euro area e	nlargement							
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				Curren	t expenditur	e			Capital				Memo:
						-				expenditure	Invest-	Capital		primary
		Total		Inter-	Interest	Current					ment	transfers	Paid	expend-
			sation of	mediate		transfers	Social	Subsidies					by EU	iture 4)
			employees	consumption			payments 3)		Paid by EU				institu-	
		2		4	5	6	7	8	institutions 9	10	11	12	tions 13	14
	1	2	3	4	5	0	/	8	9	10	11	12	15	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
						Euro a	rea enlargem	ent						
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

		Defic	it (-) / surp	lus (+)		Primary deficit (-) /				Governmen	t consumption	1 ⁵⁾		
	Total	Central	State	Local	Social	surplus (+)	Total						Government	Government
		govern- ment	govern- ment	govern- ment	security funds			Compen- sation of	Inter- mediate	Transfers in kind	Consump- tion	Sales (minus)	collective consump-	individual consump-
		ment	ment	ment	Tunus			employees	consump-	via market	of fixed	(mmus)	tion	tion
	1	2	3	4	5	6	7	8	tion 9	producers 10	capital	12	13	14
1002	10				-	0	20.0	11.4	<i></i>					
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	-5.1	-4.2	-0.5	-0.1	-0.3	0.6	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	-2.7	-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	-2.3	-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
						— Eu	iro area er	nlargement						
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 c	ountrie	s – de	ficit (-)	/ surpl	us (+) %								
		BE 1	DE 2	G	R 3	ES 4	FR 5	IE 6	IT 7	LU 8	NL 9	AT 10		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	
1999		-0.5	-1.5	-1.			-1.6	2.2	-1.8	3.6	0.7	-2.3	-2.4	1.9
2000		0.1	1.1	-1.			-1.3	4.4	-0.5	5.6	2.2	-1.5		7.0
2001		0.4	-2.8	-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.

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. 1)

The fiscal burden comprises taxes and social contributions. 2)

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

4) 5) 6)

Comprises total expenditure minus interest expenditure. Corresponds to final consumption expenditure (P.3) of the general government in the ESA 95. 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 ins	strument				Holder		
		Coins and	Loans	Short-term securities	Long-term securities	E	omestic credi	tors ²⁾		Other creditors 3)
		deposits				Total	MFIs	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
				- Euro are	ea enlargement					
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		Issue	d by 4)		0	riginal matu	ırity	Re	esidual maturit	y	(Currency	
		Central	State	Local	Social	Up to	Over		Up to	Over 1 and	Over	Euro or		Other
		govern-	govern-	govern-	security	1 year	1 year	Variable	1 year	up to 5	5 years	participating N	on-domestic	currencies
		ment	ment	ment	funds			interest rate		years		currency 5)	currency	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
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
						— E	luro area e	nlargement	-					
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 1	DE 2	GR 3	ES 4	FR 5	IE 6	IT 7	LU 8	NL 9	AT 10	PT 11	FI 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.

Data can be can be can be used and greater and a can be open commission for data retaining to commiss debi.
 Data can partially estimated. General government gross consolidated debt at nominal value at the end of the year. Holdings by other governments are not consolidated.
 Holders resident in the country whose government has issued the debt.
 Includes residents of euro area countries other than the country whose government has issued the debt.
 Excludes debt held by general government in the country whose government has issued it.

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 debt¹⁾

(as a percentage of GDP)

1. Euro area - change in government debt by source, financial instrument and sector of the holder

	Total		Source of	fchange			Financial	instrument			He	older	
		Borrowing	Valuation	Other	Aggregation	Coins	Loans	Short-term	Long-term	Domestic _			Other
		require-	effects 3)	changes	effect 5)	and		securities	securities	creditors 6)	MFIs	Other	creditors 7)
		ment ²⁾		in volume 4)		deposits						financial corporations	
	1	2	3	4		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
					— Eur	o area enl	argemen	t –					
2001	1.7	1.7	0.0	0.1	0.0	0.0	-0.1	0.4	1.3	0.4	-0.1	-0.3	1.3

2. Euro area - deficit-debt adjustment

	Change in debt	Deficit (-) / surplus (+) ⁸⁾						Deficit-deb	t adjustment	?)				
		Surprus (1)	Total		Transaction	s in main fina	ncial assets l	held by genera	l government	:	Valuation effects	Exchange	Other changes in	Other 11)
			E F	Total	Currency	Securities 10)	Loans	Shares and				rate	volume	
					and			other	Privatisa-	Equity		effects		
					deposits			equity	tions	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	-2.7	-0.4	-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	-2.3	-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
						- Euro	area enlar	gement						
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.

 Data are partially estimated. Annual change in gross nominal consolidated debt expressed as a percentage of GDP [debt(t) - debt(t-1)] ÷ GDP(t).
 The borrowing requirement is by definition equal to transactions in government debt.
 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).

Comprises, in particular, the impact of the reclassification of units and certain types of debt assumption. 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. Holders resident in the country whose government has issued the debt. Includes residents of euro area countries other than the country whose government has issued the debt. 4) 5)

6)

7)

ś) Including proceeds from sales of UMTS licences.

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

Excluding financial derivatives.
 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

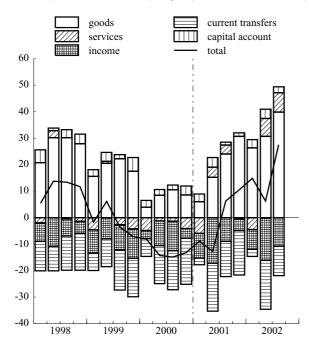
Summary balance of payments ^{1) 2)}

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

		Cu	irrent accou	int		Capital account			Financi	al account			Errors and
	Total	Goods	Services	Income	Current transfers	account	Total	Direct investment	Portfolio investment	Financial derivatives	Other investment	Reserve assets	omissions
	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
						Euro a	rea enlar	gement					
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	2.9	30.7	6.7	-16.0	-18.6	3.5	-29.0	-7.9	57.4	-3.1	-82.2	6.7	22.7
Q3	25.2	39.8	7.3	-10.8	-11.1	2.3	-55.7	-6.7	29.7	-9.9	-64.2	-4.6	28.1
2001 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.	-5.3	7.8	0.5	-7.8	-5.8	1.3	13.6	9.3	12.0	1.5	-17.5	8.4	-9.7
May	2.3	10.0	3.8	-6.3	-5.2	1.0	2.3	1.3	29.8	-2.3	-28.4	1.9	-5.7
June	5.8	12.9	2.4	-1.9	-7.5	1.1	-45.0	-18.5	15.6	-2.3	-36.3	-3.5	38.1
July	5.7	16.2	1.7	-9.2	-3.0	0.5	-20.9	-6.6	6.9	-8.2	-10.5	-2.6	14.7
Aug.	10.9	12.1	1.6	0.4	-3.2	0.6	-13.4	3.1	6.0	-2.3	-22.0	1.8	1.9
Sep.	8.7	11.6	4.0	-2.0	-4.9	1.1	-21.3	-3.2	16.8	0.6	-31.7	-3.8	11.5
Oct.	3.7	11.7	1.4	-3.1	-6.3	1.5	-21.5	-5.0	19.4	0.0	-38.0	2.1	16.3
Nov.	10.3	13.6	0.7	-0.1	-3.9	0.4	-28.6	3.9	9.7	-1.1	-38.5	-2.6	17.9

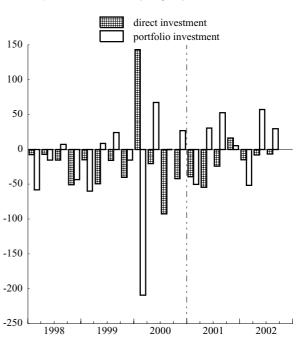
Current and capital accounts

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



Direct and portfolio investment

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



Source: ECB.

Inflows (+); outflows (-). Reserve assets: increase (-); decrease (+).
 For the comparability of recent and some earlier data, see the general notes.

Balance of payments: current and capital accounts ¹⁾ (EUR billions (ECU billions to end-1998))

(EOK billions (ECO billions to ena-1998

1. Main items

					Curr	ent account						Capital ac	count
		Total		Good	s	Servi	ces	Inco	me	Current tra	unsfers		
	Credit	Debit	Net	Credit	Debit	Credit	Debit	Credit	Debit	Credit	Debit	Credit	Debit
	1	2	3	4	5	6	7	8	9	10	11	12	13
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
		-			Euro	area enla	rgement						
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	428.6	425.8	2.9	266.8	236.0	83.9	77.2	62.6	78.6	15.3	33.9	4.9	1.5
Q3	425.1	399.8	25.2	262.8	223.0	89.0	81.7	55.1	65.9	18.2	29.2	4.0	1.7
2001 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. Feb. Mar. Apr. May June July Aug. Sep. Oct. Nov.	141.5 132.3 141.5 140.7 144.0 143.8 150.6 134.5 140.0 150.2 141.6	141.6 127.9 134.0 146.0 141.7 138.0 144.9 123.6 131.3 146.5 131.3	-0.1 4.4 7.4 -5.3 2.3 5.8 5.7 10.9 8.7 3.7 10.3	79.5 83.2 91.5 88.3 88.8 89.7 93.1 81.6 88.1 97.6 90.6	76.4 73.2 78.3 80.5 78.7 76.8 77.0 69.5 76.5 85.9 77.0	24.0 22.7 24.9 26.9 29.1 27.9 31.0 28.7 29.4 28.7 25.0	26.4 24.4 25.3 26.4 25.3 25.5 29.3 27.1 25.4 27.3 24.3	20.4 19.2 18.7 20.1 20.7 21.8 20.0 18.3 16.7 18.7 19.2	26.8 19.2 19.6 27.9 27.0 23.7 29.3 18.0 18.7 21.8 19.4	$17.5 \\ 7.2 \\ 6.3 \\ 5.4 \\ 5.5 \\ 4.5 \\ 6.4 \\ 6.0 \\ 5.8 \\ 5.1 \\ 6.8 \\ 6.8 \\$	$ \begin{array}{c} 11.9\\ 11.0\\ 10.8\\ 11.2\\ 10.7\\ 12.0\\ 9.4\\ 9.1\\ 10.7\\ 11.4\\ 10.7\\ \end{array} $	$\begin{array}{c} 3.0 \\ 0.8 \\ 0.8 \\ 1.9 \\ 1.4 \\ 1.6 \\ 1.1 \\ 1.3 \\ 1.6 \\ 2.1 \\ 1.2 \end{array}$	$\begin{array}{c} 0.5 \\ 0.6 \\ 0.5 \\ 0.6 \\ 0.4 \\ 0.5 \\ 0.6 \\ 0.7 \\ 0.4 \\ 0.6 \\ 0.8 \end{array}$

2. Main current account items (seasonally adjusted)

					Curr	ent account					
		Total		Goods		Servic	es	Incom	ne	Current trai	nsfers
	Credit	Debit	Net	Credit	Debit	Credit	Debit	Credit	Debit	Credit	Debit
	1	2	3	4	5	6	7	8	9	10	11
2000 Q3 Q4	410.5 431.7	426.4 449.5	-16.0 -17.8	252.9 264.8	245.0 259.8 o area enlar	71.6 75.5	74.2 80.9	70.2 73.8	79.0 76.8	15.8 17.5	28.2 32.1
2001 Q1	431.0	438.6	-7.6	261.1	245.9	78.3	79.5	72.6	83.7	19.1	29.5
Q2	430.5	440.2	-9.7	260.7	243.4	80.9	80.5	70.1	82.5	18.8	33.8
Q3	428.8	429.0	-0.1	258.0	239.0	81.0	80.4	71.0	78.8	18.8	30.7
Q4	421.3	416.7	4.7	253.7	228.6	80.8	79.9	67.8	75.5	19.0	32.7
2002 Q1	423.9	409.4	14.5	264.2	229.2	80.2	79.7	59.7	68.7	19.7	31.7
Q2	425.8	415.8	10.0	265.1	232.5	81.9	78.7	59.2	70.5	19.6	34.1
Q3	430.6	409.7	20.9	266.2	230.3	82.7	78.4	59.3	68.9	22.4	32.1
2001 Sep.	140.8	141.1	-0.2	84.2	78.1	26.4	26.6	23.4	25.8	6.8	10.5
Oct.	141.6	138.1	3.5	85.3	76.1	26.6	26.2	22.8	25.2	6.9	10.7
Nov.	137.4	137.4	0.0	84.4	76.9	26.4	26.6	20.7	22.9	6.0	11.0
Dec.	142.3	141.2	1.1	84.0	75.6	27.8	27.1	24.4	27.4	6.2	11.0
2002 Jan. Feb. Mar. Apr. May June July Aug. Sep. Oct. Nov.	$\begin{array}{c} 142.1\\ 141.4\\ 140.3\\ 141.4\\ 141.9\\ 142.4\\ 141.0\\ 145.7\\ 143.9\\ 142.4\\ 143.6\end{array}$	135.5 137.8 136.1 140.6 136.6 138.6 136.6 137.2 135.9 139.2 136.8	$\begin{array}{c} 6.7 \\ 3.6 \\ 4.3 \\ 0.9 \\ 5.3 \\ 3.8 \\ 4.4 \\ 8.5 \\ 8.0 \\ 3.2 \\ 6.8 \end{array}$	86.7 88.2 89.3 87.6 88.2 89.4 86.9 90.2 89.2 88.0 88.1	75.4 76.5 77.3 77.2 76.2 75.9 77.3 77.1 78.4 76.5	26.8 26.5 26.8 27.2 27.5 27.2 26.6 27.2 28.8 27.3 27.4	26.8 26.7 26.2 26.8 25.7 26.2 26.4 26.4 25.6 26.1 25.8	21.5 20.6 17.6 20.1 19.7 19.4 20.2 20.5 18.6 19.8 20.4	24.5 23.3 21.0 25.3 23.5 21.8 24.0 23.0 21.9 22.9 23.0	7.0 6.1 6.6 6.5 6.6 6.5 7.4 7.8 7.3 7.3 7.7	8.8 11.3 11.6 11.4 11.2 11.5 10.3 10.5 11.4 11.8 11.5

Source: ECB.

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

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

	Tota	1	Compensat					Investme	nt income			
			empioy		Tota	1	Direct inve	stment	Portfolio inv	vestment	Other inve	stment
	Credit 1	Debit 2	Credit 3	Debit 4	Credit 5	Debit 6	Credit 7	Debit 8	Credit 9	Debit 10	Credit 11	Debit 12
1999 2000	207.0 267.9	244.3 295.0	12.7 13.2	5.0 5.4	194.4 254.8	239.4 289.5	42.7 60.1	51.2 64.3	63.9 76.4	102.3 107.5	87.8 118.3	85.8 117.7
2001	282.0	321.7	14.2	6.4	Euro ar 267.8	ea enlarge 315.3	ement – 68.8	67.4	81.9	117.7	117.1	130.2
2001 Q3 Q4	65.9 70.2	74.9 74.6	3.5 3.7	1.8 1.5	62.4 66.6	73.1 73.1	15.0 19.0	15.0 20.8	19.9 21.9	27.4 22.3	27.5 25.7	30.7 30.0
2002 Q1 Q2 Q3	58.3 62.6 55.1	65.7 78.6 65.9	3.5 3.7 3.7	1.2 1.6 1.8	54.8 59.0 51.4	64.5 77.1 64.2	11.6 17.1 10.9	12.7 16.0 11.5	20.1 22.1 20.3	26.6 38.8 31.1	23.0 19.7 20.2	25.2 22.3 21.5

	Ir	ncome on direct in	nvestment		Inc	ome on portfolio	investment	
_	Equity		Debt		Equity		Debt	
	Credit	Debit	Credit	Debit	Credit	Debit	Credit	Debit
	13	14	15	16	17	18	19	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
			— Euro are	a enlargement				
2001	58.7	58.7	10.2	8.7	17.3	43.8	64.5	73.9
2001 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	15.3	14.8	1.8	1.2	6.8	23.9	15.4	14.9
Q3	9.5	10.2	1.5	1.3	4.3	10.6	16.0	20.6

Source: ECB.

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

			By	resident	units abroad	1				By non	-resident	units in the	e euro area	
	Total		uity capita nvested ear			er capital ter-compar	ny loans)	Total		uity capital		(mostly in	Other cap nter-compar	
	-	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 1998	-93.1 -172.8				•	•	:	48.6 91.5						•
1999 2000	-320.5 -436.3	-239.2 -344.8	-25.0 -35.8	-214.2 -309.0	-81.3 -91.5	-0.6 -0.3	-80.7 -91.2	$\begin{array}{c} 200.4\\ 424.0\end{array}$	146.6 298.1	3.5 12.2	143.0 285.9	53.8 125.9	0.2 0.1	53.6 125.8
						Euro are	a enlarge	ement						
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 Q4	-55.6 -28.2	-36.2 -26.9	-1.0 -3.1	-35.2 -23.7	-19.5 -1.3	-0.3 -0.1	-19.1 -1.3	31.3 44.7	24.7 16.6	-0.7 8.4	25.4 8.2	6.6 28.1	0.1 0.1	6.6 28.0
2002 Q1 Q2 Q3	-56.0 -45.8 -27.7	-42.2 -29.1 -31.8	-2.2 -6.5 -5.2	-40.0 -22.5 -26.7	-13.8 -16.8 4.2	0.0 -0.3 -0.1	-13.8 -16.5 4.3	41.0 37.9 21.0	26.1 21.3 12.2	1.1 2.6 -0.5	24.9 18.7 12.8	15.0 16.6 8.8	$0.0 \\ 0.1 \\ 0.6$	15.0 16.5 8.2
2001 Sep. Oct. Nov. Dec.	-20.4 7.3 -17.8 -17.8	-5.5 -8.2 -7.8 -10.8	0.3 -0.6 0.3 -2.8	-5.8 -7.6 -8.1 -8.0	-14.9 15.5 -9.9 -6.9	-0.2 0.0 0.0 0.0	-14.7 15.6 -9.9 -6.9	4.8 -3.3 29.5 18.6	6.9 -9.6 14.2 12.0	-0.1 0.2 1.9 6.3	7.0 -9.8 12.3 5.7	-2.1 6.2 15.3 6.6	$\begin{array}{c} 0.1 \\ 0.1 \\ 0.0 \\ 0.0 \end{array}$	-2.2 6.2 15.2 6.6
2002 Jan. Feb. Mar. Apr. May June July Aug. Sep. Oct. Nov.	-8.5 -20.1 -27.5 -6.8 -17.8 -21.2 -12.7 -0.2 -14.7 -11.4 -10.5	-9.4 -5.0 -27.8 -2.3 -10.7 -16.1 -14.0 -6.1 -11.7 -6.4 -5.9	-0.5 -0.3 -1.4 -4.2 -1.2 -1.1 -3.4 -0.3 -1.5 -0.8 -0.4	-8.9 -4.7 -26.3 1.9 -9.5 -14.9 -10.6 -5.9 -10.2 -5.7 -5.5	$\begin{array}{c} 1.0 \\ -15.1 \\ 0.3 \\ -4.5 \\ -7.1 \\ -5.2 \\ 1.3 \\ 5.9 \\ -3.0 \\ -5.0 \\ -4.6 \end{array}$	$\begin{array}{c} 0.0\\ 0.0\\ -0.1\\ 0.0\\ 0.0\\ -0.3\\ 0.0\\ -0.1\\ 0.0\\ 0.0\\ 0.0\\ 0.0\\ \end{array}$	$\begin{array}{c} 0.9 \\ -15.1 \\ 0.4 \\ -4.5 \\ -7.1 \\ -4.9 \\ 1.3 \\ 6.0 \\ -3.0 \\ -4.9 \\ -4.5 \end{array}$	$\begin{array}{c} 8.5\\ 11.2\\ 21.4\\ 16.1\\ 19.1\\ 2.7\\ 6.1\\ 3.4\\ 11.5\\ 6.4\\ 14.4 \end{array}$	$\begin{array}{c} 3.0\\ 3.3\\ 19.7\\ 9.3\\ 6.2\\ 5.8\\ 2.8\\ 2.6\\ 6.8\\ 5.4\\ 7.2 \end{array}$	$\begin{array}{c} 0.2 \\ 1.1 \\ -0.2 \\ 1.9 \\ 0.6 \\ 0.0 \\ 0.9 \\ -0.8 \\ -0.6 \\ 0.1 \\ -0.4 \end{array}$	2.8 2.2 19.9 7.3 5.6 5.8 1.9 3.4 7.4 5.3 7.6	5.57.81.66.812.9-3.13.30.74.71.07.1	$\begin{array}{c} 0.1 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.1 \\ 0.0 \\ 0.7 \\ -0.1 \\ -0.3 \\ 0.0 \end{array}$	5.5 7.8 1.7 6.9 12.9 -3.2 3.4 0.0 4.8 1.3 7.1

Source: ECB.
 Inflows (+); outflows (-).
 Excluding the Eurosystem.

Balance of payments: portfolio investment account¹⁾ (EUR billions (ECU billions to end-1998); net flows)

1. By instrument ²⁾

	То	tal	Equi	ty			Debt inst	ruments		
_						Assets			Liabilities	
	Assets	Liabilities	Assets	Liabilities 4	Total 5	Bonds and notes	Money market instruments 7	Total 8	Bonds and notes	Money market instruments 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
				– Euro	area enlargei	nent —				
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	-52.1	109.6	-13.6	30.9	-38.5	-23.4	-15.1	78.7	52.5	26.2
Q3	-18.5	48.1	12.9	4.1	-31.4	-17.0	-14.4	44.0	23.0	21.0
2001 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.	-13.0	25.0	-1.7	5.0	-11.2	-9.7	-1.5	20.0	12.7	7.3
May	-29.1	58.9	-5.8	26.8	-23.3	-14.3	-9.0	32.1	18.8	13.3
June	-10.1	25.7	-6.1	-0.9	-4.0	0.6	-4.6	26.6	21.0	5.6
July	-16.1	23.0	-6.3	3.3	-9.8	-1.4	-8.4	19.7	10.5	9.2
Aug.	-3.4	9.4	5.2	-0.7	-8.6	-10.0	1.5	10.1	0.0	10.1
Sep.	1.1	15.7	14.1	1.5	-13.0	-5.5	-7.5	14.2	12.5	1.8
Oct.	-2.4	21.8	0.6	-4.2	-3.0	-6.7	3.7	26.0	12.1	13.9
Nov.	-11.7	21.4	1.6	14.5	-13.3	-6.9	-6.3	6.8	12.1	-5.3

2. Assets by instrument and sector of holder

			Equity							Det	ot instrume	nts			
					-		Bonds a	ind notes				Money m	arket instr	uments	
	Euro- system	MFIs 3)	1	Non-MFIs		Euro- system	MFIs 3)]	Non-MFIs	5	Euro- system	MFIs 3)	1	Non-MFIs	
	system	-	Total	General govern- ment	Other sectors		-	Total	General govern- ment	Other sectors	-	_	Total	General govern- ment	Other sectors
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1999 2000	0.1 -0.1	-1.5 -4.3	-155.1 -283.5	-2.1 -2.6	-153.0 -280.9	0.1 -1.9	-15.4 -46.3	-139.7 -66.4	-1.7 -1.5	-138.0 -64.9	0.9 2.2	-8.1 -15.5	7.3 4.5	-0.1 -1.0	7.5 5.5
						— Ei	uro area	enlargem	ent						
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 Q4	-0.1 -0.1	3.5 4.7	-4.6 -29.4	-0.4 -0.5	-4.1 -28.9	1.0 -0.7	5.6 -38.1	-22.2 -12.4	-0.1 -0.3	-22.0 -12.2	0.1 -0.3	-13.9 -3.8	4.3 -6.8	-0.5 1.9	4.8 -8.8
2002 Q1 Q2 Q3	0.0 -0.1 -0.1	-4.9 -3.6 2.8	-28.7 -10.0 10.2	-1.4 -2.0 -0.6	-27.3 -7.9 10.8	0.4 2.4 -1.1	-4.5 -2.1 -3.5	-16.7 -23.7 -12.4	-0.5 0.2 -0.3	-16.2 -23.9 -12.1	0.8 0.0 0.9	-13.6 -2.4 -13.6	-5.8 -12.7 -1.7	-1.2 -0.1 0.2	-4.6 -12.6 -1.9
2002 Jun July Au Sep Oct No	y -0.2 g0.3 b. 0.4 t0.2	-0.5 0.5 3.2 -0.9 -0.6 -0.4	-5.5 -6.6 2.3 14.6 1.5 1.9			-0.6 -0.7 0.0 -0.4 -0.5 0.2	2.7 1.5 -5.1 0.2 3.2 -6.9	-1.5 -2.2 -4.9 -5.3 -9.5 -0.2			0.4 0.5 -0.1 0.4 0.4 -0.1	1.1 -7.5 0.0 -6.1 2.8 -8.9	-6.1 -1.4 1.6 -1.9 0.6 2.7		

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

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)}

	Tot	al	Eurosy	stem	Gene goverr			MFIs (excluding t	he Eurosys	stem)		Other se	ectors
							Tot	al	Long-	term	Short-	term		
	Assets 1	Liabil- ities 2	Assets 3	Liabil- ities 4	Assets 5	Liabil- ities 6	Assets 7	Liabil- ities 8	Assets 9	Liabil- ities 10	Assets 11	Liabil- ities 12	Assets 13	Liabil- ities 14
1998 1999 2000	-81.9 -31.9 -178.9	204.9 192.7 361.0	-0.7 -2.0 -1.1	3.5 6.6 0.9	-1.0 3.3 -2.2	-6.1 -13.0 0.9	-22.6 16.3 -130.3	192.4 161.2 289.4	-37.6 -47.2 -50.0	40.4 53.8 53.0	15.0 63.5 -80.4	152.0 107.4 236.3	-57.6 -49.4 -45.3	15.2 37.8 69.8
						Euro a	rea enlarg	ement						
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 Q4	-57.0 -61.3	-16.5 11.0	1.0 -0.4	-1.0 3.7	-1.0 1.9	0.1 4.2	-55.0 -45.9	-27.2 4.7	-8.7 -17.6	12.0 -8.7	-46.3 -28.3	-39.2 13.4	-2.0 -16.9	11.6 -1.7
2002 Q1 Q2 Q3	19.1 -73.9 -65.1	22.8 -8.3 0.8	-0.4 -0.6 0.3	1.2 -3.5 -0.1	-0.7 0.9 -0.6	-8.4 3.9 -2.8	18.4 -62.4 -35.7	25.8 -11.2 9.1	-2.1 -7.5 -4.9	10.2 20.3 5.9	20.4 -54.9 -30.8	15.6 -31.6 3.2	1.8 -11.8 -29.1	4.1 2.5 -5.4
2001 Sep. Oct. Nov. Dec.	-71.7 -35.4 -61.4 35.5	21.0 13.5 25.7 -28.3	0.1 -0.5 0.0 0.1	1.9 4.5 2.0 -2.8	-0.4 -0.6 2.5 0.1	1.7 2.1 2.5 -0.4	-67.7 -23.2 -53.3 30.5	13.3 6.6 22.4 -24.3	-1.7 -3.7 -9.6 -4.3	6.3 1.9 -13.3 2.7	-66.0 -19.5 -43.6 34.8	7.0 4.7 35.7 -27.0	-3.8 -11.1 -10.6 4.8	4.2 0.3 -1.2 -0.8
2002 Jan. Feb. Mar. Apr. May June July Aug. Sep. Oct. Nov.	-41.1 -63.2 30.4 -1.2 . 7.1 -70.9 -69.6	-7.0 -1.8 31.6 23.5 34.8 -66.7 -9.3 -29.1 39.2 31.6 42.5	$\begin{array}{c} -0.7 \\ -0.1 \\ 0.4 \\ -0.4 \\ -0.1 \\ -0.1 \\ 0.4 \\ 0.1 \\ -0.2 \\ -0.1 \\ 0.9 \end{array}$	2.6 -3.8 2.4 -4.3 -0.5 1.3 2.7 -5.0 2.1 -0.3 1.2	-1.4 1.0 -0.2 1.7 -0.1 -0.7 -0.2 -0.6 0.3 -0.4 -1.6	-8.8 -1.6 2.1 5.7 -0.1 -1.7 -1.2 -2.2 0.6 1.4 0.5	14.3 5.3 -1.3 -29.8 -56.0 23.5 13.6 12.7 -61.9 -53.9 -65.6	0.5 12.3 13.0 22.5 36.5 -70.2 -10.1 -17.9 37.1 22.0 34.7	-1.5 -6.6 6.0 -4.2 -5.2 1.9 3.0 0.3 -8.2 -4.4 -7.3	5.5 1.2 3.5 7.7 8.2 4.4 2.9 2.0 0.9 7.4 -7.5	15.9 11.9 -7.3 -25.6 -50.8 21.5 10.6 12.4 -53.8 -49.5 -58.3	-5.0 11.1 9.5 14.8 28.3 -74.6 -13.0 -19.9 36.2 14.6 42.1	-10.9 20.1 -7.3 -12.5 -7.0 7.7 -14.9 -5.1 -9.0 -15.2 -14.7	-1.3 -8.8 14.2 -0.3 -1.1 3.9 -0.7 -4.0 -0.6 8.5 6.1

2. Other investment by sector and instrument ¹⁾

2.1. Eurosystem

	Loans/c	urrency and deposits		Othe	r assets/liabilities	
	Assets 1	Liabilities 2	Balance 3	Assets 4	Liabilities 5	Balance 6
1999 2000	-1.2 -1.1	6.7 0.9	5.5 -0.2	-0.8 0.0	-0.1 0.0	-0.9 0.0
		— Euro area	enlargement -			
2001	0.6	4.4	5.0	0.0	0.0	0.0
2001 Q3 Q4	1.0 -0.4	-1.0 3.8	0.0 3.4	0.0 0.0	$\begin{array}{c} 0.0\\ 0.0\end{array}$	$\begin{array}{c} 0.0\\ 0.0\end{array}$
2002 Q1 Q2 Q3	-0.4 -0.6 0.3	1.2 -3.5 -0.2	0.7 -4.1 0.1	0.0 0.0 0.0	$0.0 \\ 0.0 \\ 0.0$	$0.0 \\ 0.0 \\ 0.0$

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/c	urrency and depos	its	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	
				Euro area e	nlargement					
2001	-0.1	0.0	-0.1	4.4	-1.1	3.3	-1.4	0.1	-1.3	
2001 Q3 Q4	$\begin{array}{c} 0.0\\ 0.0 \end{array}$	$\begin{array}{c} 0.0\\ 0.0\end{array}$	$\begin{array}{c} 0.0\\ 0.0 \end{array}$	-0.7 2.1	0.2 4.1	-0.6 6.2	-0.3 -0.1	0.0 0.1	-0.3 -0.1	
2002 Q1 Q2 Q3	$0.0 \\ 1.4 \\ 0.0$	$0.0 \\ 0.0 \\ 0.0$	$0.0 \\ 1.4 \\ 0.0$	-0.4 -0.3 -0.3	-8.1 3.8 -2.8	-8.5 3.5 -3.1	-0.3 -0.3 -0.2	-0.3 0.2 0.0	-0.6 -0.2 -0.2	

2.3. MFIs (excluding the Eurosystem)

	Loans/c	surrency 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		
2001	-213.3	224.3	Euro area enlargemen 10.9	t	9.8	-4.1		
2001 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	-61.4	-9.9	-71.4	-0.9	-1.3	-2.2		
Q3	-33.4	7.1	-26.3	-2.3	2.0	-0.3		

2.4. Other sectors

		Trade credits		Loans/c	urrency and depos	its	Other assets/liabilities			
	Assets	Liabilities	Balance	Assets	Liabilities	Balance	Assets	Liabilities	Balance	
	22	23	24	25	26	27	28	29	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	
				Euro area e	nlargement					
2001	-0.6	0.7	0.1	-16.2	10.9	-5.3	-0.3	0.6	0.3	
2001 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	-3.4	-0.8	-4.2	-8.3	2.3	-5.9	-0.1	0.9	0.8	
Q3	-2.9	0.6	-2.3	-26.1	-7.3	-33.5	-0.1	1.4	1.3	

3. Reserve assets ¹⁾

	Total	Monetary gold	Special drawing	Reserve position in			Fo	oreign excha	nge			Other claims
		Ũ	rights	the IMF	Total	Currency and	d deposits		Securities		Financial derivatives	
						With monetary authorities and the BIS	With banks	Equity	notes	Money market instruments		
	1	2	3	4	5	6	7	8	9	10	11	12
1999 2000	10.1 17.6	0.3 1.0	1.0 0.3	2.0 2.9	6.1 13.3	12.5 4.3	-12.1 4.6	0.2 0.0	3.5 -5.6	2.0 10.1	-0.1 -0.1	$\begin{array}{c} 0.8 \\ 0.0 \end{array}$
					Euro	area enlarge	ment					
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 Q3 Q4	2.5 3.3	0.2 0.1	0.1 -0.1	-4.5 0.8	6.7 2.4	-0.9 2.7	3.1 1.7	$\begin{array}{c} 0.0\\ 0.0\end{array}$	4.9 4.8	-0.4 -6.9	$\begin{array}{c} 0.0\\ 0.0\end{array}$	$\begin{array}{c} 0.0\\ 0.0\end{array}$
2002 Q1 Q2 Q3	-3.1 6.7 -4.6	-0.2 0.5 -0.1	0.0 0.5 -0.2	-0.4 -2.1 0.2	-2.4 7.8 -4.6	-1.7 -0.6 -2.4	-12.4 1.2 -3.0	$\begin{array}{c} 0.0 \\ 0.0 \\ 0.0 \end{array}$	4.2 4.3 1.9	7.4 3.1 -1.2	0.0 -0.2 0.0	$0.0 \\ 0.0 \\ 0.0$

Source: ECB. 1) Increase (-); decrease (+)

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	Portfolio	Financial	Other	Reserve
		as % of GDP	investment	investment	derivatives	investment	assets
	1	2	3	4	5	6	7
			Net international in	vestment 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
			Outstan	ding assets			
1999	5,796.7	92.5	1,174.5	2,058.1	111.1	2,070.8	382.2
2000	6,740.0	102.6	1,609.7	2,344.1	117.9	2,277.9	390.4
2001	7,459.4	109.3	1,859.9	2,499.8	123.7	2,583.4	392.7
			Outstandi	ng liabilities			
1999	6,094.0	97.2	804.9	2,939.3	95.1	2,254.7	-
2000	7,154.7	108.9	1,181.2	3,149.1	109.3	2,715.1	-
2001	7,611.6	111.5	1,329.2	3,182.5	129.5	2,970.5	-

2. Direct investment

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

3.1. Portfolio investment by instrument

	Equ	uity		Debt instruments							
				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			
1999 2000 2001	1,013.6 1,183.6 1,111.5	1,698.1 1,627.6 1,577.6	1,044.4 1,160.5 1,388.3	937.2 1,038.4 1,208.1	107.2 122.1 180.1	1,241.2 1,521.5 1,604.9	1,138.5 1,399.9 1,505.5	102.7 121.6 99.4			

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

			Equity							Debt in	nstrument	s			
							Bo	nds and r	otes			Money	y market	instruments	8
	Euro- system	MFIs 4)	1	Non-MFIs		Euro- system	MFIs ⁴⁾		Non-MFIs		Euro- system	MFIs ⁴⁾		Non-MFIs	
			Total	General govern-	Other sectors	5		Total	General govern-	Other sectors	5		Total	General govern-	Other sectors
	9	10	11	ment 12	13	14	15	16	ment 17	18	19	20	21	ment 22	23
1999 2000	0.4	25.9	987.3 1.140.0	4.1	983.2	4.5	257.2 328.5	675.4 706.5	6.2	669.3 700.9	2.6	68.5	36.1	0.2	35.9 35.8
2000	0.9 1.2	42.7 43.7	1,140.0		1,134.4 1,060.0	3.4 2.1	328.5 422.1	706.5 784.0	5.7 8.0	700.9 776.0	$0.5 \\ 2.8$	85.6 125.2	36.0 52.1	0.1 0.2	55.8 51.9

Source: ECB.

Data refer to the Euro 12, i.e. they include Greece.
 Assets minus liabilities.

For the comparability of recent and some earlier data, see the general notes.
 Excluding the Eurosystem.

4. O	ther	investment	by	sector	and	instrument
-------------	------	------------	----	--------	-----	------------

			Euros	/stem						Genera	al governme	ent		
	То	tal	Loans/cu and de		Other a liabili		Tot	al	Trade c	redits	Loans/cu and dep		Other as liabilit	
	Assets	Liabil- ities	Assets	Liabil- ities	Assets	Liabil- ities	Assets	Liabil- ities	Assets	Liabil- ities 10	Assets	Liabil- ities 12	Assets 13	Liabil- ities 14
1999 2000 2001	3.1 3.0 3.0	27.4 32.2 36.4	3.0 2.9 2.9	27.1 31.9 36.2	0.1 0.1 0.1	0.3 0.3 0.2	125.5 133.8 132.5	57.3 60.0 63.8	2.5 2.8 3.1	0.1 0.2 0.2	72.4 77.5 73.6	45.4 47.7 51.4	50.6 53.5 55.9	11.8 12.1 12.3

		MFIs	s (excludin	ig the Euro	system)					Other se	ctors			
	Tc	otal	Loans/c and de		Other a liabili		Tot	al	Trade c	redits	Loans/cu and dej		Other assets/ liabilities	
	Assets 15	Liabil- ities 16	Assets	Liabil- ities 18	Assets 19	Liabil- ities 20	Assets 21	Liabil- ities 22	Assets 23	Liabil- ities 24	Assets 25	Liabil- ities 26	Assets 27	Liabil- ities 28
1999 2000 2001	1,458.5	2,168.4	1,291.8 1,421.4 1,668.6	2,126.4	25.9 37.1 50.9	25.5 42.0 53.2	624.5 682.6 728.4	346.5 454.5 462.9	161.0 179.5 177.6	90.7 110.2 109.7	394.2 418.9 478.4	225.7 314.8 321.9	69.3 84.2 72.4	30.1 29.5 31.4

5. Reserves and related assets of the Eurosystem and of the European Central Bank ¹) (EUR billions; end-of-period positions, unless otherwise indicated)

						I	Reserve assets	5							Memo: related assets
-	Total	Monetary			Reserve			For	eign exc	hange				Other claims	Claims
		gold	In fine troy ounces	drawing rights	in the IMF	Total	Currency deposit			Securi	ties		Financial deriva- tives	claims	on euro area residents denomin-
			(millions) ²⁾				With monetary authorities and the BIS	With banks		Equities	Bonds and notes	market instru- ments			ated in foreign currency
	1	2	3	4	5	6	Eurosysten	8	9	10	11	12	13	14	15
1000 D 4)	220.4	99.6	404.131	5.2	23.4	201.2	12.6		1(0.0	0.0	116.6	52.4	0.0	0.0	7.6
1998 Dec. 4)	329.4			5.2				19.6	169.0		116.6	52.4	0.0	0.0	7.6
1999 Dec.	372.1	116.4	402.758	4.5	24.3	226.9	13.5	23.0	190.7	0.0		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
2001 1 Jan.	300 1	118.4	404.157	4.3	21.2	Euro 246.5	area enlarg 16.8	ement 20.5	208.5	0.0	158.1	50.4	0.7	0.0	16.3
2001 <i>T Sun</i> . 2001 Dec.	392.7	126.1	404.157	5.5	25.3	235.8	8.0	25.9	208.5		147.0	53.3	0.7	0.0	24.7
										1.2	147.0	33.3			
2002 Sep. Oct.	380.9 375.5	131.4 128.5	400.278 400.114	4.9 4.9	26.3 25.9	218.3 216.1	13.1 10.4	36.5 40.9	168.4 164.4	-	-	-	0.4 0.5	$\begin{array}{c} 0.0\\ 0.0\end{array}$	18.5 20.8
Nov.	372.6	128.5	399.951	5.0	25.4	213.7	10.4	39.0	164.5	-	-	-	0.2	0.0	21.8
Dec.	366.1	130.4	399.022	4.8	25.0	205.8	10.3	35.3	159.8	-	-	-	0.4	0.0	22.4
						Euro	pean Centra	l 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
						Euro	area enlarg	ement							
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 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
Nov. Dec.	45.1 45.5	7.9 8.1	24.656 24.656	0.2 0.2	$\begin{array}{c} 0.0\\ 0.0\end{array}$	37.0 37.3	1.4 1.2	9.4 9.9	26.2 26.1	-	-	-	$\begin{array}{c} 0.0 \\ 0.0 \end{array}$	0.0 0.0	3.3 3.0
Dec.	43.3	0.1	24.030	0.2	0.0	57.5	1.2	9.9	20.1	-	-	-	0.0	0.0	5.0

Source: ECB.

Source: ECB.
 More comprehensive data in accordance with the template on international reserves and foreign currency liquidity can be found on the ECB's website.
 Changes in the gold holdings of the Eurosystem are due to transactions in gold within the terms of the Central Bank Gold Agreement of 26 September 1999.
 The figures are not fully comparable with those in Table 1.1 owing to differences in coverage and valuation.
 Position as at 1 January 1999.
 Part of the Eurosystem's reserves.

External trade in goods of the euro area 9

Table 9

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

(not seasonally adjusted, unless otherwise indicated)

		Exports	of goods (f.	.o.b.)			Im	ports of goo	ods (c.i.f.)			Total (2000=	
	Total				Memo:	Total				Mem	10:	(2000-	100)
		Inter- mediate	Capital C	Consump- tion	Manufac- tures	Γ	Inter- mediate	Capital C	Consump- tion	Manufac- tures	Oil	Exports	Imports
	1	2	3 Values (F	4	5	6 lions to end-	7	8 =100 for co	9	10	11	12	13
1998 1999 2000	797.1 832.8 1,013.7	369.9 386.5 482.6	179.9 183.2 221.7	214.0 224.2 265.4	697.8 725.0 883.2	711.4 781.2 1,008.4	393.5 423.2 579.8	123.0 143.6 179.4	175.9 192.1 218.1	540.3 590.6 730.2	41.6 61.5 118.9	79.2 82.5 100.0	71.1 78.1 100.0
2001	1,060.0	491.3	235.7	286.7	— Eu 930.3	ro area enl 1,010.7	argement 574.8	178.3	225.8	737.8	107.4	106.2	98.9
2001 Q3 Q4	258.2 272.3	119.1 122.1	56.5 63.2	71.5 74.9	226.7 238.6	239.5 247.2	135.9 136.7	39.3 45.0	56.7 57.1	173.1 181.5	28.0 23.1	106.4 104.6	98.4 94.0
2002 Q1 Q2 Q3	258.5 272.1 264.9	118.8 126.6 119.4	53.8 57.7 55.1	72.8 74.6 75.3	225.9 237.7 231.0	239.5 247.9 232.2	134.8 141.2 128.6	39.5 40.6 37.4	55.8 56.9 55.8	175.8 180.1 168.6	22.7 25.7 25.7	107.3 107.7 107.9	94.2 95.6 94.3
2002 June July Aug. Sep. Oct. Nov.	90.6 94.6 81.2 89.2 98.2 93.0	41.8 42.5 36.6 40.3 42.2 42.2	19.4 19.5 17.5 18.1 19.4 19.2	24.8 27.0 22.5 25.8 27.3 26.4	79.5 82.7 70.8 77.6 82.2 80.8	79.7 80.7 71.2 80.3 88.8 83.1	45.4 44.5 39.1 45.0 50.2 44.7	12.5 12.6 11.5 13.3 14.0 13.9	18.8 19.7 17.4 18.7 20.8 18.9	58.3 58.7 51.5 58.5 64.2 60.1	8.1 8.5 8.4 8.7 10.0 7.8	106.0 105.7 109.5 108.4 106.8 109.4	94.0 93.4 95.0 94.4 95.5 96.1
			Vo	lumes (an	nual percent	age changes	; 2000=100	for columns	12 and 13	3)			
1998 1999 2000	3.6 2.2 12.4	4.2 2.8 12.5	6.0 -0.8 12.7	3.8 3.3 12.7	4.0 1.4 13.6	11.4 6.1 5.9	8.2 3.5 6.8	21.8 12.9 11.7	7.7 7.7 4.5	13.4 7.1 8.9	-4.5 6.0 4.7	87.1 88.8 100.0	89.0 94.4 100.0
2001	4.9	1.7	8.5	7.6	— Eu 5.7	ro area enl -1.2	argement -1.0	-3.9	-0.2	-1.7	-1.6	103.8	100.1
2001 Q3 Q4	2.8 -0.5	-2.2 -3.9	6.5 0.9	8.7 2.9	3.5 -0.6	-4.0 -5.7	-4.4 -4.9	-9.7 -12.9	0.4 -1.9	-4.9 -8.1	-2.9 0.2	103.4 102.3	98.3 98.6
2002 Q1 Q2 Q3	-2.3 2.5 4.5	-3.8 2.1	-7.1 -1.7	1.9 4.5	-3.0 2.2	-6.1 -1.6 0.5	-6.3 -2.0	-18.0 -9.4	-1.0 2.3	-8.8 -2.9	-1.5 -3.4	103.7 105.8	96.5 99.0
2002 June July Aug. Sep. Oct. Nov.	0.4 4.4 0.5 8.8 0.7	-0.4 1.5 -1.2	-3.3 -2.3 -3.2	0.5 7.0 2.7	-0.2 3.1 -0.1	-3.4 1.1 -3.1 3.4 0.3	-3.1 -1.9 -5.1	-13.0 -3.9 -1.2	-0.1 3.4 -3.9	-4.6 0.5 -3.4	-5.3 -0.4 -5.7	103.6 108.7 108.1	96.0 100.0 98.3
		•	Unit	values (a	nnual percer	ntage change	s; 2000=100) for columr	ns 12 and		•	•	
1998 1999 2000	0.9 2.3 8.3	-0.7 1.7 11.0	0.8 2.7 7.4	2.0 1.4 5.1	1.5 2.4 7.2	-5.4 3.5 21.9	-6.5 3.9 28.3	-3.6 3.4 11.8	1.2 1.4 8.7	-1.1 2.0 13.5	-30.4 39.4 84.8	90.5 92.4 100.0	79.4 82.1 100.0
2001	1.0	0.7	0.2	2.0	- Eu 1.0	ro area enl 0.2	argement -1.3	1.6	2.8	1.6	-11.0	101.0	100.2
2001 Q3 Q4	0.9 -1.6	1.1 -3.1	-0.1 -0.3	1.4 0.3	1.0 -1.0	-0.8 -7.5	-2.6 -11.5	1.0 -2.7	2.5 -0.9	1.0 -2.6	-12.4 -34.5	$\begin{array}{c} 101.1\\ 101.0 \end{array}$	100.6 97.6
2002 Q1 Q2 Q3	0.9 -0.7 -1.8	-0.5 -1.5	1.4 -0.5	2.9 0.5	0.9 -0.7	-3.3 -3.1 -3.5	-5.4 -4.1	-0.6 -1.8	1.1 -1.2	-0.7 -1.8	-16.4 -7.8	101.3 100.8	97.7 98.3
2002 June July Aug. Sep. Oct. Nov.	-1.9 -2.4 -1.6 -1.5 -0.5	-2.6 -3.2 -2.1	-0.9 -1.5 -2.4	-0.9 -1.7 -0.1	-1.7 -2.5 -1.4	-5.2 -5.4 -3.9 -1.3 0.8	-7.0 -5.9 -3.6	-2.8 -5.3 -4.5	-2.4 -3.8 -3.3	-2.9 -3.9 -3.6	-16.9 -10.8 -3.6	100.2 99.1 99.3	97.0 96.8 96.7

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

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).
 The commodity breakdown in columns 2 to 4 and 7 to 9 is in accordance with the Classification by Broad Economic Categories. Manufactured goods

(columns 5 and 10) and oil (column 11) are in accordance with the SITC Rev.3.

2. Geographical breakdown ¹⁾

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

$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$		1		,,,	2									
$\begin{tabular}{ c c c c c c c c c c c c c c c c c c c$		Total	Total (s.a.)		Sweden	Denmark				Japan		Africa		
		1	2		4	5	6	7		9		11		
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	1008	707 1		150.5	31.6	20.6			120.3	23.0	114.0	49.7	42.4	90.5
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	1998		-											
2001 1,060.0 - 201.0 36.9 24.3 137.1 66.3 180.0 34.5 165.4 60.3 49.8 104.4 2001 235.5 266.4 90.6 8.3 5.9 32.9 16.1 43.9 8.2 40.4 14.5 12.6 28.4 2002 21 256.5 268.7 51.8 9.2 6.0 33.9 15.9 44.6 7.9 39.4 14.0 10.2 25.6 202 21.1 267.4 50.5 39.3 6.2 38.4 16.2 45.7 7.8 42.9 15.6 11.3 28.1 28.1 18.0 3.6 28.4 15.7 2.9 13.3 5.3 40.0 10.8 4.8 3.3 18.7 5.3 3.4 10.0 2.5 13.3 4.8 3.3 8.4 Aug. 81.2 91.4 14.9 2.7 1.8 18.0 3.4 14.2 2.6 14.3 3.3 8.4 May. 90.4 14.2 3.1 12.3 5.1	2000		-			23.2	131.0		171.4			56.1	46.7	107.8
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	2001	1,060.0	-	201.0	36.9					34.5	165.4	60.3	49.8	104.4
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	2001 Q3 04													
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	-													
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		272.1	269.4	50.5							42.9			
	Q3	264.9	270.0	49.8	8.3	6.0	36.4	15.6	44.1	8.3	42.7	14.8	10.5	•
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	2002 June													
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$														
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$														0.4

$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Nov.	93.0	91.3											
$\begin{array}{c c c c c c c c c c c c c c c c c c c $			year											
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	2002 1007.	1.5		•	•	•	Imports	·	•	•	•	•	•	•
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	1009	711.4		122 (20.0	17.4			104.9	40.5	122.0	45.9	20.2	(7.(
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$														
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	2000													
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	2001	1 010 7	-	153.5	34 3			0		58.7	207.9	74.0	40.9	112.0
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		/												
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$														
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	2002 Q1												9.3	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$														
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	-													
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$														
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$														
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$														
	Oct.				3.2	1.9	11.9	4.9	10.6	4.8	19.4	6.4	3.7	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Nov.	83.1	82.0	•	•	•	•	•	•	•	•	•	•	•
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$			year _											
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$							Bala	ince						
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	1008	85.7	_	28.0	0.7	3.2			15.5	-24.6	-17.1	3.0	13.1	22.0
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	1999													
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	2000													
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	2001	49.3	-	47.5	2.6			0		-24.2	-42.5	-13.7	8.9	-7.6
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$			14.3											
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$											-7.1			
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	2002 Q1	19.0	27.4		1.0	0.9	4.6	3.2	11.7	-4.9	-9.8	-3.8	1.0	-0.5
2002 June 10.9 8.3 4.7 0.0 0.4 2.3 1.2 4.6 -1.7 -1.1 -0.1 0.4 0.1 July 13.9 8.9 6.2 0.0 0.3 2.1 1.0 5.9 -1.4 -1.9 -0.4 0.4 1.6 Aug. 9.9 10.5 5.0 0.4 0.1 2.0 1.2 4.6 -1.2 -2.8 0.2 0.3 0.2 Sep. 8.9 10.9 5.4 0.2 0.4 2.2 1.0 5.5 -1.4 -3.6 -1.2 0.0 . Oct. 9.4 7.6 5.7 0.4 0.3 2.0 0.8 5.7 -1.7 -3.6 -1.1 0.5 .	Q2	24.2	24.9	13.7	0.4		7.1	2.7	12.9	-5.7		-1.5	0.7	-1.1
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$														
Aug. 9.9 10.5 5.0 0.4 0.1 2.0 1.2 4.6 -1.2 -2.8 0.2 0.3 0.2 Sep. 8.9 10.9 5.4 0.2 0.4 2.2 1.0 5.5 -1.4 -3.6 -1.2 0.0 . Oct. 9.4 7.6 5.7 0.4 0.3 2.0 0.8 5.7 -1.7 -3.6 -1.1 0.5 .														
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$														
Oct. 9.4 7.6 5.7 0.4 0.3 2.0 0.8 5.7 -1.7 -3.6 -1.1 0.5		8.9	10.9	5.4		0.4		1.0	5.5	-1.4	-3.6		0.0	
Nov. 9.9 9.2	Oct.				0.4					-1.7	-3.6		0.5	
	Nov.	9.9	9.2	•	•		•		•	•	•	•		•

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

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).

IO Exchange rates

Table 10

Exchange rates

(period averages; units of national currency per ECU or euro (bilateral); index 1999 Q1=100 (effective))

		1	Effective exc of the				Bilate	ral ECU or eur	o exchange	rates 2)
-		Narrow gi	oup		Broad group		US dollar	Japanese yen	Swiss franc	Pound sterling
	Nominal	Real CPI	Real PPI	Real ULCM	Nominal	Real CPI		yon	inune	sterning
	1	2	3	4	5	6	7	8	9	10
1997	99.1	99.4	99.4	100.5	90.4	96.6	1.134	137.1	1.644	0.692
1998	101.5	101.3	101.6	99.8	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	87.1	86.9	88.2	86.3	0.924	99.5	1.558	0.609
				Euro area	enlargement					
2001	87.3	88.9	89.3	88.1	91.0	88.1	0.896	108.7	1.511	0.622
2002	90.0	92.8	92.8	90.6	95.6	92.0	0.946	118.1	1.467	0.629
2001 Q1	88.6	89.8	90.6	89.4	91.4	88.7	0.923	109.1	1.533	0.633
02	86.0	87.7	87.9	87.1	89.5	86.8	0.923	106.9	1.528	0.614
O_3^2	87.0	88.7	88.9	87.5	91.2	88.0	0.875	100.9	1.507	0.619
Q4	87.5	89.6	89.9	88.5	92.0	88.7	0.896	110.5	1.473	0.621
2002 Q1	87.1	89.7	89.9	87.9	91.3	88.1	0.877	116.1	1.473	0.615
Q2	88.8	91.7	91.6	90.3	93.9	90.5	0.919	116.5	1.465	0.629
Õ3	91.3	94.3	94.4	93.5	97.9	94.1	0.984	117.2	1.464	0.635
Q4	92.5	95.7	95.5	-	99.4	95.2	0.999	122.4	1.467	0.636
2001 Jan.	89.2	90.2	90.9	_	91.7	89.0	0.938	109.6	1.529	0.635
Feb.	88.3	89.4	90.3	_	91.0	88.3	0.922	107.1	1.536	0.634
Mar.	88.4	89.8	90.5	_	91.4	88.9	0.910	110.3	1.535	0.629
	87.6	89.8	90.5 89.6	-	91.4 91.0	88.4	0.892	110.3	1.535	0.629
Apr.								106.5		0.622
May	85.9	87.6	87.7	-	89.3	86.7	0.874		1.533	
June	84.7	86.3	86.4	-	88.1	85.3	0.853	104.3	1.522	0.609
July	85.4	87.1	87.2	-	89.1	86.2	0.861	107.2	1.514	0.609
Aug.	87.7	89.3	89.6	-	91.8	88.6	0.900	109.3	1.514	0.627
Sep.	88.0	89.7	90.0	-	92.6	89.3	0.911	108.2	1.491	0.623
Oct.	88.0	90.0	90.1	-	92.8	89.5	0.906	109.9	1.479	0.624
Nov.	86.8	88.8	89.2	-	91.3	88.0	0.888	108.7	1.466	0.618
Dec.	87.7	89.9	90.3	-	91.9	88.6	0.892	113.4	1.475	0.620
2002 Jan.	87.6	90.3	90.5	-	91.6	88.4	0.883	117.1	1.475	0.617
Feb.	86.8	89.3	89.6	-	91.1	87.8	0.870	116.2	1.477	0.612
Mar.	86.8	89.6	89.6	-	91.2	88.2	0.876	114.7	1.468	0.616
Apr.	87.2	90.1	90.0	-	91.7	88.5	0.886	115.8	1.466	0.614
May	88.6	91.5	91.4	-	93.7	90.4	0.917	115.9	1.457	0.628
June	90.6	93.5	93.4	-	96.4	92.8	0.955	117.8	1.472	0.644
July	91.7	94.7	94.7	_	98.2	94.4	0.992	117.1	1.462	0.639
Aug.	91.1	94.0	94.1		97.7	93.8	0.972	116.3	1.464	0.636
Sep.	91.2	94.0	94.3		98.0	94.1	0.978	118.4	1.465	0.631
Oct.	91.2	94.8	94.5		98.5	94.1	0.981	121.6	1.465	0.630
Nov.	92.5	95.5	95.3	-	99.3	95.0	1.001	121.7	1.467	0.637
Dec.	93.6	96.8	96.7	-	100.4	96.1	1.018	124.2	1.468	0.642
2003 Jan.	95.8	99.3	99.2	-	103.0	98.5	1.062	126.1	1.462	0.657
% ch. vs. ⁴⁾ prev. month 2003 Jan.	2.3	2.7	2.5		2.6	2.5	4.3	1.5	-0.4	2.3
2003 Jall.	2.3	2.1	2.3	-	2.0	2.5	4.3	1.5	-0.4	2.3
% ch. vs. 4) prev. year										
2003 Jan.	9.3	10.0	9.5	-	12.4	11.5	20.3	7.7	-0.8	6.6

Source: ECB.

More details of the calculation are given in the general notes.
 To December 1998, rates for the ECU (source BIS); from January 1999, rates for the euro.
 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.

	Singapore dollar ³⁾	Korean won ³⁾	Hong Kong dollar ³⁾	Australian dollar	Canadian dollar	Norwegian krone	Danish krone	Swedish krona
	18	17	16	15	14	13	12	11
1997	1.678	1,069.8	8.75	1.528	1.569	8.02	7.48	8.65
1998	1.876	1,568.9	8.69	1.787	1.665	8.47	7.50	8.92
1999 2000	1.806 1.592	1,267.3 1,043.5	8.27 7.20	1.652 1.589	1.584 1.371	8.31 8.11	7.44 7.45	8.81 8.45
2000	1.392	1,045.5				0.11	7.45	0.45
2001	1.604	1.154.8	6.99	Euro area enla 1.732	1.386	8.05	7.45	9.26
2001 2002	1.691	1,175.5	7.37	1.732	1.484	7.51	7.43	9.20
		· · · · · · · · · · · · · · · · · · ·						
2001 Q1	1.616 1.583	1,174.7 1,138.9	7.20 6.81	$1.741 \\ 1.701$	1.410 1.345	8.20 8.01	7.46 7.46	9.00 9.13
Q2 03	1.585	1,158.9	6.94	1.701	1.343	8.01	7.40	9.13 9.41
Q3 Q4	1.634	1,155.2	6.99	1.751	1.416	7.97	7.44	9.48
2002 Q1	1.607	1,155.3	6.84	1.692	1.398	7.81	7.43	9.16
2002 Q1 O2	1.657	1,155.5	7.17	1.666	1.398	7.52	7.43	9.16
03 03	1.729	1,172.7	7.67	1.796	1.536	7.40	7.43	9.23
Q4	1.767	1,215.4	7.79	1.791	1.569	7.32	7.43	9.09
2001 Jan.	1.630	1,194.9	7.32	1.689	1.410	8.24	7.46	8.91
Feb.	1.607	1,153.8	7.19	1.724	1.403	8.24	7.46	8.98
Mar.	1.611	1,173.4	7.09	1.807	1.405	8.16	7.46	9.13
Apr.	1.617	1,183.5	6.96	1.785	1.390	8.11	7.46	9.11
May	1.586	1,133.7	6.82	1.681	1.347	7.99	7.46	9.06
June	1.550	1,104.1	6.65	1.647	1.302	7.94	7.45	9.21
July	1.569	1,120.3	6.71	1.689	1.315	7.97	7.44	9.26
Aug.	1.586 1.593	1,154.0	7.02 7.11	1.717	1.386	8.06	7.45 7.44	9.31 9.67
Sep. Oct.	1.640	1,178.3 1.178.6	7.07	1.804 1.796	1.426 1.422	$8.00 \\ 8.00$	7.44	9.67 9.58
Nov.	1.625	1,137.5	6.93	1.790	1.415	7.92	7.45	9.42
Dec.	1.639	1,147.0	6.96	1.735	1.408	7.99	7.44	9.44
2002 Jan.	1.625	1,160.8	6.89	1.709	1.413	7.92	7.43	9.23
Feb.	1.594	1,147.2	6.79	1.696	1.388	7.79	7.43	9.23
Mar.	1.602	1,157.3	6.83	1.669	1.390	7.72	7.43	9.06
Apr.	1.619	1,163.2	6.91	1.654	1.401	7.62	7.43	9.14
May	1.651	1,150.1	7.15	1.666	1.421	7.52	7.44	9.22
June	1.703	1,160.6	7.45	1.679	1.463	7.40	7.43	9.11
July	1.740	1,169.2	7.74	1.792	1.532	7.40	7.43	9.27
Aug. Sep.	1.716 1.732	1,167.1 1.182.6	7.63 7.65	1.805 1.793	1.533 1.543	7.43 7.36	7.43 7.43	9.25 9.17
Oct.	1.751	1,182.0	7.65	1.793	1.545	7.36	7.43	9.17
Nov.	1.767	1,208.2	7.81	1.785	1.574	7.32	7.43	9.08
Dec.	1.786	1,226.9	7.94	1.808	1.587	7.29	7.43	9.10
2003 Jan.	1.843	1,250.1	8.28	1.822	1.636	7.33	7.43	9.17
% ch. vs. 4) prev 2003 Jan.	3.2	1.9	4.3	0.8	3.1	0.5	0.1	0.8
% ch. vs. 4) prev 2003 Jan.	13.5	7.7	20.3	6.6	15.8	-7.4	0.0	-0.6

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 govern- ment deficit (-)/ surplus (+) as a % of GDP	govern- ment gross debt as a % of GDP	yield ¹⁾ as a % per annum	rate ²⁾ as national currency per ECU or euro	Current and new capital account as a % of GDP	Unit labour costs ³⁾		Industrial production index 4)	Standard- ised unemploy- ment 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 Denmark	7	8	9	10	11	12
1999 2000 2001	2.1 2.7 2.3	3.1 2.5 2.8	52.7 46.8 44.7	4.91 5.64 5.08	7.44 7.45 7.45	1.8 1.4 3.0	2.4 1.7 3.4	2.6 2.8 1.4	1.8 6.2 1.7	4.8 4.4 4.3	-0.2 1.1 5.7	3.44 5.00 4.70
2002	2.4			5.06	7.43					4.5	3.5	3.54
2001 Q3 Q4	2.3 2.0	-	-	5.18 4.83	7.44 7.44	4.1 0.6	3.5 3.5	$1.7 \\ 1.0$	2.0 -1.3	4.3 4.3	8.0 9.6	4.73 3.77
2002 Q1 Q2 Q3 Q4	2.5 2.1 2.4 2.7	- - -	- - -	5.21 5.36 4.92 4.74	7.43 7.43 7.43 7.43	2.8 2.6 3.7	2.3 0.5 0.9	1.2 3.0 1.1	-3.2 3.9 -1.2	4.3 4.4 4.6 4.7	2.3 2.8 2.6 6.2	3.63 3.71 3.57 3.27
2002 Aug. Sep. Oct. Nov. Dec.	2.4 2.5 2.7 2.8 2.6	- - -	- - -	4.88 4.74 4.81 4.79 4.61	7.43 7.43 7.43 7.43 7.43 7.43				-2.0 0.3 3.0 -0.8	4.5 4.7 4.7 4.7 4.7	1.7 2.2 3.1 4.7 11.2	3.58 3.45 3.44 3.31 3.07
2003 Jan.		-	-	4.43	7.43	-	-	-				2.97
						Sweden						
1999 2000 2001 2002	0.6 1.3 2.7 2.0	1.5 3.7 4.8	65.0 55.3 56.6	4.98 5.37 5.11 5.31	8.81 8.45 9.26 9.16	2.6 3.8 3.8	-1.2 5.0 6.1	4.6 4.4 0.8	2.2 6.3 -0.3	6.7 5.6 4.9 4.9	6.8 6.2 3.4	3.32 4.07 4.11 4.24
2001 Q3 Q4	3.1 3.0	-	-	5.28 5.12	9.41 9.48	4.6 4.4	7.2 5.9	-0.4 0.5	-1.9 -2.3	4.8 4.9	3.9 6.2	4.34 3.85
2002 Q1 Q2 Q3 Q4	2.9 1.9 1.5 1.6			5.42 5.64 5.16 5.00	9.16 9.16 9.23 9.09	5.7 5.4 3.9	4.8 0.9 1.3	0.5 2.8 2.3	-1.1 0.5 -0.9	5.0 4.9 4.8 5.0	7.0 5.3 5.8	4.00 4.43 4.41 4.09
2002 Aug. Sep. Oct. Nov. Dec.	1.7 1.2 1.7 1.4 1.7	- - -	- - -	5.14 4.97 5.07 5.05 4.89	9.25 9.17 9.11 9.08 9.10				-2.4 -1.8 -2.6 -1.2	4.7 5.0 5.0 5.0 5.0	6.7 4.8 2.4	4.41 4.38 4.30 4.12 3.85
2003 Jan.		-	-	4.71	9.17	-	-	-				3.83
					Ur	ited Kingdon	n					
1999 2000 2001 2002	1.3 0.8 1.2 1.3	1.1 3.9 0.8	45.1 42.1 39.1	5.01 5.33 5.01 4.91	0.659 0.609 0.622 0.629	-2.1 -1.8 -1.5	2.9 2.3 4.1	2.4 3.1 2.0 1.7	0.8 1.6 -2.1	5.9 5.4 5.0	5.5 6.6 8.0 5.9	5.54 6.19 5.04 4.06
2001 Q3 Q4	1.5 1.0	1.2 -1.9	38.7 38.7	5.13 4.82	0.619 0.621	-0.8 -2.2	3.8 3.4	1.8 1.6	-2.7 -5.6	5.0 5.1	7.8 7.7	5.00 4.16
2002 Q1 Q2 Q3 Q4	1.5 0.9 1.1 1.6	2.7 -3.7 -1.2 -3.3	37.8 38.2 37.9 38.5	5.13 5.28 4.71 4.52	0.615 0.629 0.635 0.636	-0.5 -1.9 -0.2	2.7 2.6 1.5	1.1 1.5 2.1 2.2	-5.7 -4.3 -2.3	5.1 5.1 5.2	6.1 5.8 5.7 6.2	4.08 4.17 4.01 3.98
2002 Aug. Sep. Oct. Nov. Dec.	1.0 1.0 1.4 1.6 1.7	-2.6 -5.7 2.5 -7.5 -4.8	37.2 37.9 37.8 37.8 38.5	4.67 4.45 4.53 4.55 4.49	$0.636 \\ 0.631 \\ 0.630 \\ 0.637 \\ 0.642$		- - -		-3.5 -1.8 -0.2 -1.2	5.2 5.2 5.1	5.8 5.6 5.5 6.0 7.0	3.99 3.99 3.96 3.97 4.02
2003 Jan.				4.32	0.657	-	-	-				3.98

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.

ź) For more information, see Table 10.

ś) Whole economy; data for the United Kingdom exclude employers' contributions to social security.

Total excluding construction; adjusted for working days.
 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

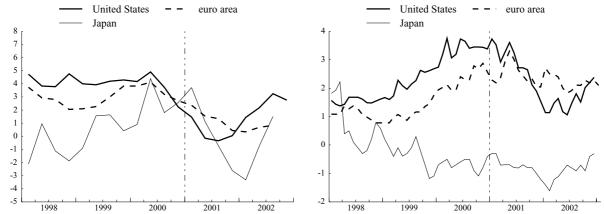
(annual percentage changes, unless otherwise indicated)

	Consumer price index	Unit labour costs ¹⁾	Real GDP	Industrial production index 1)	Unemploy- ment rate as a % of labour force (s.a.)	M2 ²⁾	3-month interbank deposit rate ³⁾ as a % per annum	government bond yield ³⁾ as a % per annum	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 United	6 States	7	8	9	10	11
1999 2000 2001 2002	2.2 3.4 2.8 1.6	-1.1 3.2 0.6	4.1 3.8 0.3 2.4	5.0 5.2 -4.1 -0.9	4.2 4.0 4.8 5.8	7.6 6.1 8.7 7.7	5.42 6.53 3.78 1.80	5.64 6.03 5.01 4.60	1.066 0.924 0.896 0.946	0.7 1.4 -0.5	50.4 45.2 44.8
2001 Q3 Q4	2.7 1.9	0.1 0.9	-0.4 0.1	-5.4 -6.2	4.8 5.6	9.4 10.3	3.46 2.15	4.98 4.74	0.890 0.896	-1.7 -1.0	44.1 44.8
2002 Q1 Q2 Q3 Q4	1.3 1.3 1.6 2.2	-1.3 -2.2 -2.0	1.4 2.2 3.3 2.8	-4.0 -1.5 0.5 1.5	5.6 5.9 5.7 5.9	9.1 7.5 7.3 7.0	1.90 1.92 1.81 1.55	5.06 5.08 4.25 3.99	0.877 0.919 0.984 0.999	-3.0 -3.3 -3.3	45.2 45.4 46.0
2002 Aug. Sep. Oct. Nov. Dec.	1.8 1.5 2.0 2.2 2.4			0.6 1.0 1.1 1.6 1.8	5.7 5.6 5.7 6.0 6.0	7.9 6.1 7.1 7.2 6.5	1.78 1.80 1.78 1.46 1.41	4.24 3.88 3.91 4.04 4.03	0.978 0.981 0.981 1.001 1.018	- - - -	- - -
2003 Jan.		-	-				1.37	4.02	1.062	-	-
					Jap						
1999 2000 2001 2002	-0.3 -0.7 -0.7 -0.9	-2.4 -6.3 5.8	0.7 2.4 0.3	0.8 5.9 -7.8 -1.5	4.7 4.7 5.0	3.7 2.1 2.8 3.3	0.22 0.28 0.15 0.08	1.75 1.76 1.34 1.27	121.3 99.5 108.7 118.1	-7.2 -7.4 -6.1	118.2 126.1 134.6
2001 Q3 Q4	-0.8 -1.0	9.2 11.1	-0.7 -2.6	-10.8 -13.5	5.1 5.4	3.1 3.2	0.07 0.08	1.36 1.35	108.3 110.5		•
2002 Q1 Q2 Q3 Q4	-1.4 -0.9 -0.8 -0.5	6.6 -1.7 -7.6	-3.3 -0.7 1.5	-10.9 -3.6 3.7 5.8	5.3 5.3 5.4	3.6 3.5 3.3 2.9	0.10 0.08 0.07 0.07	1.46 1.37 1.24 1.01	116.1 116.5 117.2 122.4		
2002 Aug. Sep. Oct. Nov. Dec.	-0.9 -0.7 -0.9 -0.4 -0.3	-6.1 -8.6 -8.8		1.9 5.3 5.4 5.1 6.7	5.5 5.4 5.5 5.3	3.4 3.2 3.3 3.2 2.2	0.07 0.07 0.07 0.07 0.06	1.26 1.16 1.09 0.99 0.97	116.3 118.4 121.6 121.7 124.2		-
2003 Jan.		•	-				0.06	0.84	126.1	-	-

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)
- 2) 3)
- Manufacturing. Average-of-period values; M2 and CDs for Japan. For more information, see Tables 3.1 and 3.2.

4) 5)

For more information, see Table 10. Japan: the 1998 deficit includes a large debt assumption; financial accounts sources for 1999.

Table 12.2

Saving, investment and financing

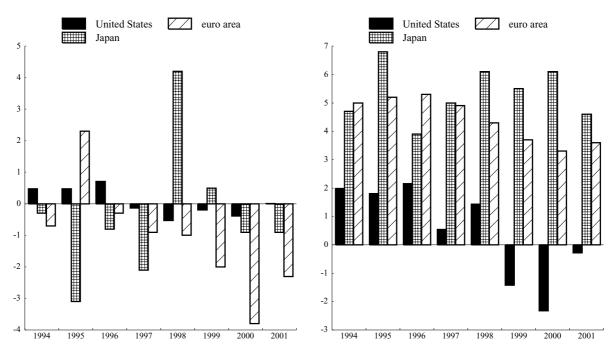
(as a percentage of GDP)

	National s	saving and i	nvestment	Inve	estment and	financing of	non-finan	cial corporat	tions	Investme	nt and financ	ing of hou	seholds 1)
	Gross saving	Gross capital formation		Gross capital formation	Gross fixed capital formation	Net acquisi- tion of financial assets	Gross saving	Net incurrence of liabilities	Secur- ities and shares	Capital expend- iture	Net acquisi- tion of financial assets	Gross saving	Net incurr- ence of liabilities
	1	2	3	4	5	6	7	8	9	10	11	12	13
						United S	States						
1998 1999 2000 2001	18.8 18.4 18.4 16.5	20.7 20.9 21.1 19.1	-2.3 -3.0 -4.0 -3.7	9.4 9.5 9.7 7.9	8.6 8.9 9.1 8.5	6.5 10.5 7.7 2.9	8.2 8.2 7.5 7.7	7.0 10.6 8.1 2.8	1.4 2.7 2.4 1.8	12.3 12.4 12.5 13.0	6.9 4.8 3.3 5.4	12.8 11.2 11.5 11.6	5.5 6.2 5.7 5.7
2000 Q4	17.8	20.9	-4.3	9.5	9.0	5.2	7.3	5.5	0.1	12.3	0.1	11.4	3.8
2001 Q1 Q2 Q3 Q4	16.9 16.6 16.5 15.9	20.0 19.3 18.8 18.2	-4.1 -3.8 -3.5 -3.6	8.6 8.1 7.7 7.1	8.9 8.6 8.3 8.0	3.3 1.9 3.3 2.9	7.1 7.4 7.8 8.5	4.4 2.3 2.9 1.9	2.1 2.4 0.6 2.1	12.9 12.9 12.9 13.4	4.5 6.3 9.0 2.0	11.4 11.2 12.8 10.9	3.5 6.5 9.1 3.8
2002 Q1 Q2 Q3	15.6 15.5 15.0	18.6 18.7 18.5	-4.1 -4.8 -4.7	7.5 7.7 7.7	7.8 7.6 7.6	2.2 2.0 0.8	7.9 7.7 7.5	2.3 2.4 1.3	0.0 1.1 -1.2	12.8 12.7 12.9	6.7 7.0 4.6	12.3 12.7 12.7	6.7 5.8 6.6
						Japa	n						
1998 1999 2000 2001	29.0 27.8 27.7 26.4	26.8 25.9 26.2 25.6	2.6 2.2 2.3 2.0	15.4 14.4 15.8 15.7	15.4 14.8 15.4 15.2	-5.9 2.4 2.4 -2.3	13.3 13.7 14.3 14.1	-8.3 -3.5 0.3 -5.7	-0.4 1.7 1.2 1.7	5.3 5.2 5.2 4.9	6.2 5.1 4.1 3.0	11.6 11.5 10.7 8.6	-0.9 0.2 0.0 -0.1
2000 Q4	27.0	27.7	1.7			6.9		12.6	2.7		7.4		0.5
2001 Q1 Q2 Q3 Q4	33.4	26.4 25.4 25.3 25.5	2.3			8.9 -26.7 6.3 2.3		-2.4 -15.3 -8.9 3.2	2.2 4.0 -1.1 1.5		-4.1 11.8 -5.2 8.8		3.2 -4.5 2.6 -1.5
2002 Q1 Q2 Q3	•	22.8 22.7 23.7				10.0 -25.0 -0.7		-6.7 -19.0 -7.2	-2.5 2.0 -1.8		-6.5 7.4 -5.5		2.5 -8.0 -0.1

Net lending of non-financial corporations

(as a percentage of GDP)

Net lending of households ¹⁾ (as a percentage of GDP)



Sources: ECB, Federal Reserve Board, Bank of Japan and Economic and Social Research Institute.
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:

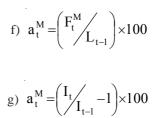
c)
$$I_t = I_{t-1} \times \left(1 + \frac{F_t}{L_{t-1}}\right)$$

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

e)
$$a_t = \begin{pmatrix} I_t \\ I_{t-12} \end{pmatrix} \times 100$$

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



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

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

² For details, see Findley, D., Monsell, B., Bell, W., Otto, M. and Chen, B. C. (1998), "New Capabilities and Methods of the X-12-Arima Seasonal Adjustment Program", Journal of Business and Economic Statistics, 16, 2, 127-152, or "X-12-ARIMA Reference Manual, Version 0.2.2", December 1998, Time Series Staff, Bureau of the Census, Washington, D.C. For internal purposes, multiplicative models of TRAMO-SEATS also are used. For details on TRAMO-SEATS see Gomez, V. and Maravall, A. (1996), "Programs TRAMO and SEATS: Instructions for the User", Bank of Spain, Working Paper No. 9628, Madrid.

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)
$$a_t^Q = \begin{pmatrix} F_t^Q \\ L_{t-3} \end{pmatrix} \times 100$$

(l) $a_t^Q = \begin{pmatrix} I_t \\ I_{t-3} \end{pmatrix} \times 100$

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

Relating to Table 3.7

Calculation of growth rates

Growth rates are calculated on the basis of financial transactions and therefore exclude reclassifications, revaluations, exchange rate variations and any other changes which do not arise from transactions. They may be calculated from flows or from the index of adjusted stocks. If N_t^M represents the flow (net issues) in month t and L_t the level outstanding at the end of the month t, the index I_t of adjusted stocks in month t is defined as:

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

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

n)
$$\mathbf{a}_{t} = \left[\prod_{i=0}^{11} \left(1 + \frac{N_{t-i}^{M}}{L_{t-1-i}}\right) - 1\right] \times 100$$

o) $\mathbf{a}_{t} = \left(\frac{I_{t}}{I_{t-12}} - 1\right) \times 100$

The method to calculate the growth rates in the field of securities issues statistics is the same as the one used for the monetary aggregates with the only difference being that an "N" is used here rather than an "F". The reason is to distinguish the different ways of obtaining "flows" used for the monetary aggregates and "net issues" for securities issues statistics, where the ECB collects information on gross issues and redemptions separately.

Relating to Table 4.1

Seasonal adjustment of the HICP⁴

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

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.

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 page 81^*). Goods raw data are first pre-adjusted to

4 See footnote 1 on page 81*.

ECB • Monthly Bulletin • February 2003

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, shortterm 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 5 February 2003.

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 I.I to I.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

I 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 I 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).

Table 2.9 shows end-quarter outstanding stocks for the balance sheet of the euro area investment funds (other than money market funds). The balance sheet is aggregated and thus includes among the liabilities holdings by investment funds of shares/units issued by other investment funds. Total assets/liabilities are also broken down by investment policy (equity funds, bond funds, mixed funds, real estate funds, and other funds) and by type of investor (general public funds and special investors' funds). Table 2.10 shows the aggregated balance sheet for each investment fund sector as identified by investment policy, and Table 2.11 shows the aggregated balance sheet broken down by type of investor.

Statistics on money market interest rates, long-term government bond yields and stock market indices (Tables 3.1 to 3.3) are produced by the ECB using data from wire services. For details concerning the statistics on retail bank interest rates (Table 3.4), see the footnote at the bottom of the relevant page.

Statistics on securities issues cover securities other than shares (debt securities), which are presented in Tables 3.5, 3.6 and 3.7 as well as quoted shares, which are presented in Table 3.8. Debt securities are broken down into short-term and long-term securities. "Shortterm" 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 debt securities are estimated to cover approximately 95% of total issues by euro area residents.

Table 3.5 shows securities issued, redemptions and amounts outstanding, broken down into short-term securities and long-term securities. Net issues differ from the change in amounts outstanding owing to valuation changes, reclassifications and other adjustments.

Table 3.6 contains a sectoral breakdown of issuers of euro-denominated securities, whether resident in the euro area or elsewhere. For euro area residents, the sectoral breakdown is in line with the European System of Accounts 1995 (ESA 95).² For non-euro area residents, the term "banks (including central banks)" is used to indicate

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).

institutions of a similar type to MFIs (including the Eurosystem) resident outside the euro area. The term "international organisations" includes the European Investment Bank. (The ECB is included in the Eurosystem.)

The totals (columns 1, 7 and 14) in Table 3.6 are identical to the data on amounts outstanding (columns 8, 16 and 20), gross issues (columns 5, 13 and 17) and net issues (columns 7, 15 and 19) of euro-denominated securities in Table 3.5. The amounts outstanding of securities issued by MFIs (column 2) in Table 3.6 are broadly comparable with money market paper and debt securities issued as shown on the liabilities side of the aggregated MFI balance sheet in Table 2.8.3 (columns 2 and 10), although the coverage of securities issues statistics is at present somewhat narrower.

Table 3.7 shows annual growth rates for debt securities issued by euro area residents and by sector of the issuer, which are based on financial transactions that occur when an institutional unit acquires or disposes of financial assets and incurs or repays liabilities. The annual growth rates therefore exclude reclassifications, revaluations, exchange rate variations and any other changes which do not arise from transactions.

Table 3.8 shows the outstanding amounts of quoted shares issued by euro area residents broken down by issuing sector. The monthly data for quoted shares issued by non-financial corporations correspond to the quarterly series shown in Table 6.1 (Main liabilities, column 20).

Prices and real economy indicators

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

The Harmonised Index of Consumer Prices (HICP) for the euro area (Table 4.1) is available from 1995 onwards. The index is based on national HICPs that follow the same methodology in all euro area countries. The breakdown by goods and services components is derived from the Classification of individual consumption by purpose (Coicop) used for the HICP. 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 shows annual data on saving, (financial and non-financial) investment and financing for the euro area sectors as a whole, and for the non-financial corporations and households separately. These annual data provide, in particular, fuller sector information on the acquisition of financial assets and are consistent with the quarterly data in Table 6.1.

General government fiscal position

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

Table 7.1 shows general government revenue and expenditure on the basis of definitions laid down in Commission Regulation No. 1500/2000 of 10 July 2000 amending the ESA 95. Table 7.2 shows details of general government gross consolidated debt at nominal value in accordance with the Treaty provisions on the excessive deficit procedure. Tables 7.1 and 7.2 include summary data for individual euro area countries owing to their importance in the framework of the Stability and Growth Pact. Table 7.3 analyses changes in general government debt. The difference between the change in government debt and deficit. deficit-debt government the 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/2000/4) 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 nonresidents 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 the December 2002 issue). The i.i.p. is compiled on a "net" basis, i.e. by aggregating national data regarding end-1997 and end-1998 positions. The "net" and the "extra euro area" based compilation methodologies may not give fully comparable results. The i.i.p. is valued at current market prices with the exception of direct investment stocks, where book values are used to a large extent.

The outstanding amounts of the Eurosystem's international reserves and related assets are shown in Table 8.7.5 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 I3 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 thirdmarket 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 Eurosystem'

2 January 200 I

On I 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 I 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 \in 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 \in 20 billion per operation for the longerterm 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, I 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

I The chronology of monetary policy measures of the Eurosystem taken in 1999 and 2000 can be found on pages 176 to 179 of the ECB Annual report 1999 and on pages 205 to 208 of the ECB Annual report 2000 respectively.

refinancing operations by 0.25 percentage point to 4.25%, with effect from the operation to be settled on 5 September 2001. In addition, it decides to lower the interest rates on both the marginal lending facility and the deposit facility by 0.25 percentage point, to 5.25% and 3.25% respectively, both with effect from 31 August 2001.

13 September 2001

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

17 September 2001

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

27 September, 11 October, 25 October 2001

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

8 November 2001

The Governing Council of the ECB decides to lower the minimum bid rate on the main

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

6 December 2001

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

In addition, it decides that the reference value for the annual growth rate of the broad monetary aggregate M3 will remain at $4\frac{1}{2}$ %.

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 $\in 20$ billion per operation for the longer-term refinancing operations to be conducted in 2002. This amount takes into consideration the expected liquidity needs of the euro area banking system in 2002 and the desire of the Eurosystem to continue to provide the bulk of refinancing of the financial sector through its main refinancing operations. The Governing Council may adjust the allotment amount in the course of the year in the event of unexpected developments in liquidity needs.

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

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

10 July 2002

The Governing Council of the ECB decides to reduce the allotment amount for each of the longer-term refinancing operations to be conducted in the second half of 2002 from \in 20 billion to \in 15 billion. This latter amount takes into consideration the expected liquidity needs of the euro area banking system in the second half of 2002 and reflects the desire of the Eurosystem to continue to provide the bulk of liquidity through its main refinancing operations.

I 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 $4\frac{1}{2}$ %.

9 January 2003

The Governing Council of the ECB decides that the minimum bid rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 2.75%, 3.75% and 1.75% respectively.

23 January 2003

The Governing Council of the ECB decides to implement the following two measures to improve the operational framework for monetary policy:

Firstly, the timing of the reserve maintenance period will be changed so that it will always start on the settlement day of the main refinancing operation (MRO) following the Governing Council meeting at which the monthly assessment of the monetary policy stance is pre-scheduled. Furthermore, as a rule, the implementation of changes to the standing facility rates will be aligned with the start of the new reserve maintenance period.

Secondly, the maturity of the MROs will be shortened from two weeks to one week.

These measures are scheduled to come into effect during the first quarter of 2004.

Further to the press release of 10 July 2002, the Governing Council also decides to maintain at $\in 15$ billion the allotment amount for each of the longer-term refinancing operations to be conducted in the year 2003. This amount takes into consideration the expected liquidity needs of the euro area banking system in 2003 and reflects the desire of the Eurosystem to continue to provide the bulk of liquidity through its main refinancing operations.

6 February 2003

The Governing Council of the ECB decides that the minimum bid rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 2.75%, 3.75% and 1.75% respectively.

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"Annual Report 1999", April 2000.

"Annual Report 2000", May 2001.

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Convergence Report

"Convergence Report 2000", May 2000.

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