



EUROPEAN CENTRAL BANK

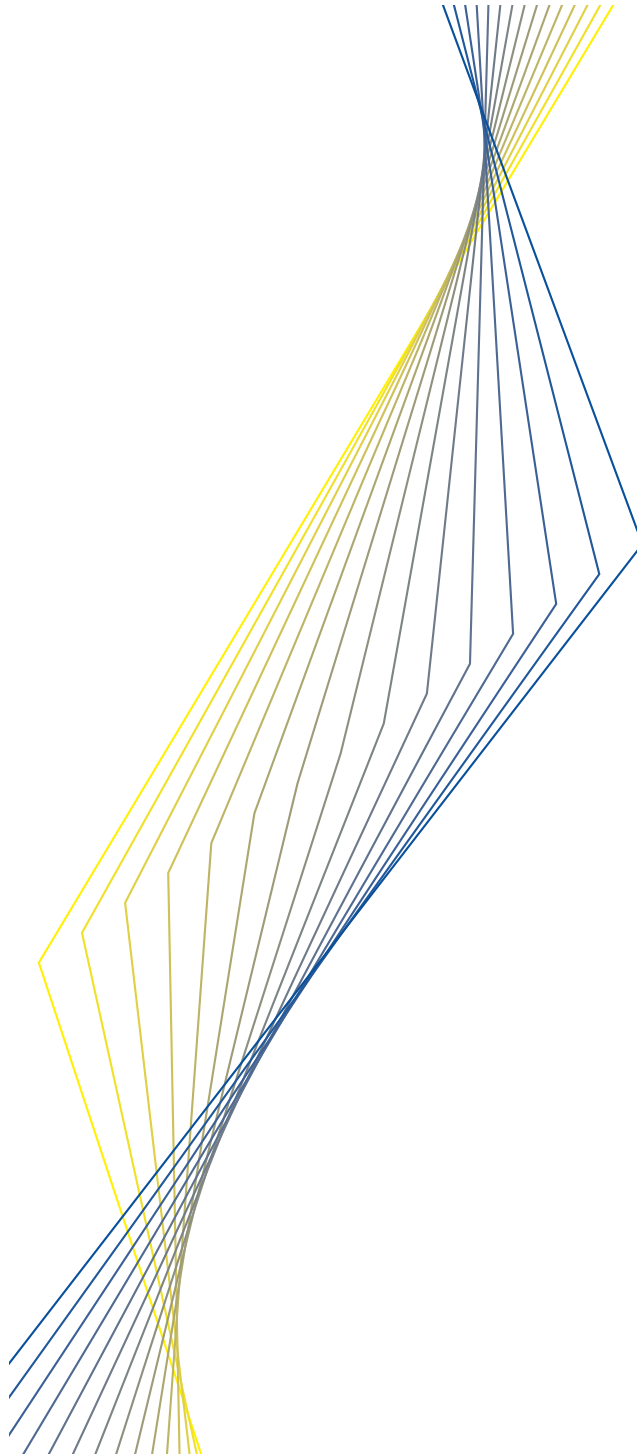
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**M O N T H L Y  
B U L L E T I N**

November 2003



**EUROPEAN CENTRAL BANK**



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B U L L E T I N**

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## Abbreviations

### Countries

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

### Others

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

**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 November 2003, the Governing Council of the ECB decided to leave the minimum bid rate on the main refinancing operations of the Eurosystem unchanged at 2.0%. The interest rates on the marginal lending facility and the deposit facility were also left unchanged at 3.0% and 1.0% respectively.

The decision to keep the key ECB interest rates at their low levels reflects the assessment that, although some further stickiness of inflation rates in the short term is anticipated, the medium-term outlook for price stability remains favourable. Against this background, the Governing Council continued to judge the current stance of monetary policy as appropriate. At the same time, it noted that there are additional signs of a gradual economic recovery in the euro area. The Governing Council will carefully monitor all developments that might affect its assessment of risks to price stability.

Starting with the economic analysis, recent information shows that the recovery of the world economy is clearly making progress. Also for the euro area, the indicators are increasingly pointing towards some improvement in economic activity in the second half of this year. For the time being, this is primarily reflected in business surveys and leading indicators, but the expectation is that forthcoming data on euro area production and demand will confirm that a gradual recovery has started.

Against this background, the main scenario of a gradual improvement in economic activity in the euro area this year, and a broadening and strengthening in the course of 2004, seems to have been confirmed further. This assessment has received support from recently published forecasts of official and private sources, as well as from developments in financial markets. As regards external demand, the expansion of global economic trade and real GDP growth should counteract the effects of the rise in the effective exchange rate of the euro (which has come back to its level of early 1999). On the domestic side,

the conditions for investment should improve further, given the continued adjustment efforts of firms to enhance productivity and profitability, the low level of interest rates and generally favourable financing conditions. Moreover, private consumption should benefit from real disposable income growth, fostered by positive terms-of-trade effects stemming from the past appreciation of the euro.

The short-term risks to this main scenario appear to be balanced. Over a longer horizon, there remain concerns about global economic growth being undermined by persisting imbalances in some regions of the world, related in particular to the sustainability of public finances and to external imbalances.

Recent consumer price developments were broadly in line with expectations. The annual rate of HICP inflation was, according to Eurostat's flash estimate, 2.1% in October. It thus remained unchanged from August and September. Looking ahead, it appears that inflation rates may remain around this level for several months to come and, hence, may not fall as quickly and strongly as had been previously expected. Three factors can be identified as contributing to this stickiness of inflation rates. First, in the remainder of 2003 and early 2004, food prices could imply some further upward pressure as a consequence of this summer's heatwave. Second, oil prices have remained higher than expected, owing mainly to political uncertainties in the Middle East. Last but not least, in the course of 2004, planned increases in indirect taxes and administered prices in some euro area countries will have a temporary upward impact on inflation rates.

However, when taking into account more lasting factors, inflation rates are expected to moderate and to develop in line with price stability, as is also reflected in recently released forecasts. In fact, inflation at the producer level continues to be subdued. Moreover, the past appreciation of the euro should continue to dampen domestic price pressures. At the same time, the expectation

of a favourable outlook over the medium term is largely based on the assumption that wage developments will not be affected by the current inertia of inflation rates, and will remain moderate in the context of an only gradual economic recovery. Not only in this respect, but also generally, developments in inflation expectations warrant close monitoring.

Turning to the monetary analysis, following an extended period of strong M3 growth, liquidity in the euro area remains ample, reflecting past portfolio shifts, precautionary savings and the low level of interest rates. Despite a certain slowdown in monetary expansion over recent months, liquidity in the euro area continues to be significantly higher than is needed to finance non-inflationary economic growth. The low level of interest rates also supports the annual growth of loans to the private sector, which fluctuated between 4½% and 5% in recent months. At the current juncture, the accumulation of excess liquidity should not be of concern for price stability, given the only gradual economic recovery under way. However, if high excess liquidity were still to exist at a time of a significant strengthening of economic activity, it could lead to inflationary pressures in the medium term.

In summary, the economic analysis indicates that the medium-term outlook for price stability remains favourable, in the context of a gradual economic recovery and moderate import price and wage developments. Cross-checking this assessment with the monetary analysis within the two-pillar framework leads to the conclusion that the strong monetary expansion should not, for the time being, be seen as adversely affecting this outlook, in view of the economic situation.

Fiscal developments and the Stability and Growth Pact are now at a critical point at which the credibility of the institutional underpinnings of EMU must be maintained. The Treaty and the Stability and Growth Pact provide an appropriate framework for ensuring fiscal discipline, within adequate

bounds of flexibility. The deficit reference value of 3% of GDP, which is laid down in the Maastricht Treaty itself, is the anchor for the rules and procedures governing fiscal policies in the EU. This anchor must not be placed in doubt.

Fully abiding by the rules and implementing them in every respect has very solid economic justifications, and is not a mere procedural matter. Upholding trust in the soundness of public finances enhances confidence among all economic agents and thereby contributes to sustainable growth in consumption and investment. Stability and growth are thus not conflicting objectives, but rather reinforce each other – a fact which is very well captured in the title of the fiscal framework called the “Stability and Growth Pact”. Concerning recent developments in the context of the excessive deficit procedure, the Governing Council takes the view that the proposals of the Commission push the room for interpretation of the rules and procedures to the limit. As regards future decisions, which are expected in the course of November, the Governing Council strongly urges each institution and government concerned to live up to their responsibilities. It is the overall credibility of the fiscal framework and hence the prospects for economic growth in the euro area that are at stake.

Fiscal consolidation plans are best placed within a comprehensive and credible medium-term strategy. This requires strong emphasis on structural expenditure reforms and the adaptation of public pension and health systems to the challenges arising from the ageing of the population. Moreover, structural reforms in the labour and product markets are needed to allow a better allocation and utilisation of capital and human resources, and to enhance the euro area’s growth potential. The Governing Council strongly supports current efforts by a number of governments in this direction and also encourages social partners to fully commit themselves to the objective of making the euro area a more dynamic and innovative economy.

This issue of the Monthly Bulletin contains three articles. The first reviews the main developments in the debt financing of the euro area private sector over recent years. The second analyses the challenges for the

international community that may stem from the crisis resolution in emerging market economies. The third reviews the main features of the international role of the euro, i.e. its use by non-residents of the euro area.





# Economic and monetary developments in the euro area

## I Monetary and financial developments

### Monetary policy decisions of the Governing Council of the ECB

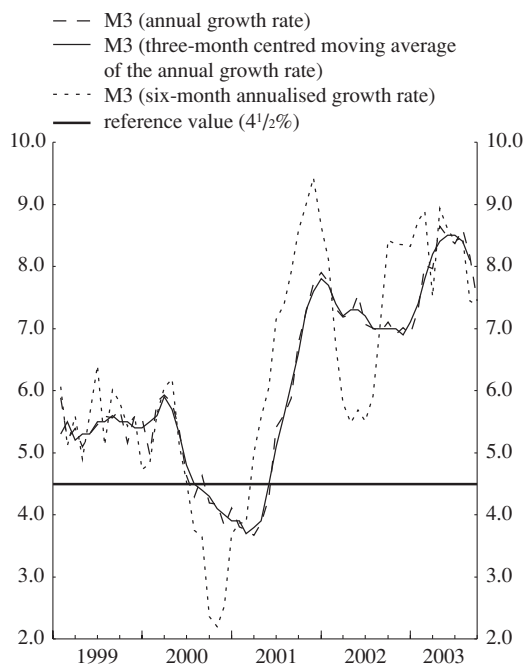
At its meeting on 6 November 2003, the Governing Council of the ECB decided to leave the minimum bid rate in the main refinancing operations, conducted as variable rate tenders, unchanged at 2.0%. The interest rates on both the marginal lending facility and the deposit facility were also kept unchanged, at 3.0% and 1.0% respectively (see Chart 1).

### M3 growth declined further in September

Monetary growth declined further in September 2003 but remained at a high level. The annual growth rate of the broad monetary aggregate M3 declined to 7.4%, down from 8.2% in August (see Chart 2). The three-month average of the annual growth rate of M3 decreased to 8.1% in the period

### Chart 2 M3 growth and the reference value

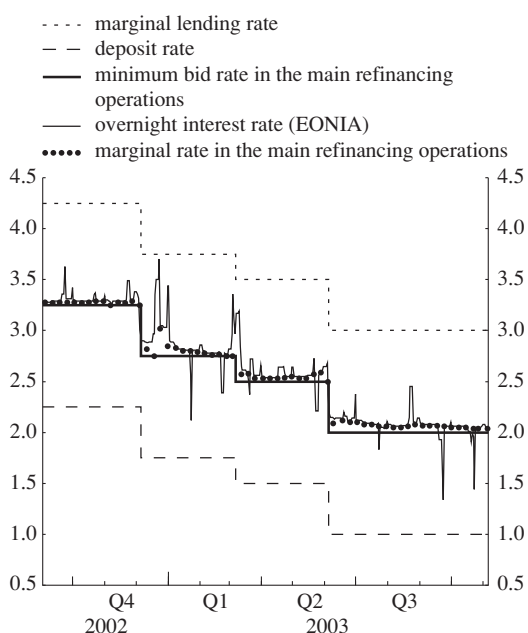
(adjusted for seasonal and calendar effects)



Source: ECB.

### Chart 1 ECB interest rates and money market rates

(percentages per annum; daily data)



Sources: ECB and Reuters.

from July to September, from 8.4% in the period from June to August.

The moderation in M3 growth in August and September may, to some extent, reflect an incipient reversal of past portfolio shifts into monetary assets. Improved conditions in the financial markets may have prompted private investors to re-distribute their portfolios in favour of longer-term assets, such as equity and bonds. There are, however, two caveats to bear in mind. First, part of the fall in the annual growth rate of M3 in September mirrors large treasury operations by a national central government, which are likely to be reversed in the coming months. Treasury operations involving monetary transfers from non-MFIs to central government (e.g. the sale of newly issued government bonds to non-MFIs) have a dampening effect on M3 growth because central government is not part of the money-holding sector. Second and more generally, because of the relatively high volatility of

monetary growth data from month to month, developments over short periods of time can only provide limited indications of underlying trends. Therefore, further evidence needs to be gathered over the next few months before any firm conclusions about a turnaround in M3 growth can be drawn.

Despite the recent moderation in M3 growth, there remains significantly more liquidity in the euro area than is needed to finance non-inflationary economic growth. This excess liquidity is the result of past portfolio shifts, precautionary savings and the low level of interest rates. It should not be a cause for concern in an environment of subdued economic activity such as that observed over the last two years. However, the accumulated liquidity could lead to inflationary pressures in the medium term if it were to persist at a time when economic growth was strengthening significantly. It is therefore important to closely monitor the extent to which past portfolio shifts into money are reversed and whether there is a risk of accumulated liquidity feeding into aggregate spending.

The decline in the annual growth rate of M3 observed in September was spread across all its components. The annual growth rate of

M1 decreased to 11.3% from 11.8% in the previous month. This decrease reflected weaker annual growth in both sub-components of M1: currency in circulation (27.8%, down from 28.8% in August) and overnight deposits (8.8%, down from 9.4%). Despite its decline, the annual growth rate of currency in circulation remained very high as economic agents (both inside and outside the euro area) continued to replenish their currency holdings following the euro cash changeover.

The annual growth rate of short-term deposits other than overnight deposits declined to 5.1% in September from 5.5% in August. This decline reflected a decrease in the annual rate of change of its two sub-components: deposits with an agreed maturity of up to two years (-2.6%, down from -2.0% in August) and deposits redeemable at a period of notice of up to three months (10.9%, down from 11.2% in August).

The annual growth rate of the marketable instruments included in M3 fell to 4.3% in September from 6.3% in the previous month. Here too, the fall in the growth rate was spread across all sub-components: repurchase agreements (-6.7%, down from -3.1% in

**Table I**

**Summary table of monetary variables in the euro area**

(annual percentage changes; quarterly averages; adjusted for seasonal and calendar effects)

	2003 Q1	2003 Q2	2003 Q3	2003 June	2003 July	2003 Aug.	2003 Sep.
<b>M1</b>	10.3	11.4	11.6	11.4	11.5	11.8	11.3
<i>of which: currency in circulation</i>	39.1	35.7	29.6	31.9	30.3	28.8	27.8
<i>of which: overnight deposits</i>	6.6	8.1	8.9	8.5	8.8	9.4	8.8
M2 - M1 (= other short-term deposits)	4.3	5.4	5.5	5.6	5.7	5.5	5.1
<b>M2</b>	7.1	8.2	8.4	8.3	8.5	8.5	8.0
M3 - M2 (= marketable instruments)	10.5	9.8	7.4	8.7	9.5	6.3	4.3
<b>M3</b>	7.6	8.4	8.2	8.4	8.6	8.2	7.4
<b>Longer-term financial liabilities (excluding capital and reserves)</b>							
<b>Credit to euro area residents</b>	5.0	5.1	5.5	5.2	5.4	5.6	5.8
Credit to general government	4.2	4.7	5.3	4.8	5.4	5.5	5.5
<i>of which: loans to general government</i>	2.0	3.5	4.8	3.7	4.9	5.1	5.5
Credit to other euro area residents	-1.2	-0.4	1.0	-0.3	0.9	1.5	1.3
<i>of which: loans to the private sector</i>	4.8	5.1	5.5	5.2	5.6	5.6	5.5
	5.0	4.6	4.9	4.6	4.9	5.0	4.9

Source: ECB.

August), money market fund shares/units (14.6%, down from 15.5% in August) and debt securities issued with a maturity of up to two years (-18.6%, down from -15.4% in August). The significant moderation in the annual growth of these marketable instruments over the last few months supports the view that economic agents may be reallocating their portfolios.

On the liability side of the consolidated balance sheet of the MFI sector, the annual rate of growth of MFIs' longer-term financial liabilities (excluding capital and reserves) increased to 5.8% in September, from 5.6% in the previous month. The gradual upward growth trend in this counterpart of M3 over recent months might have reflected, to some extent, the steepening of the yield curve from June onwards. These developments in longer-term financial liabilities may also be interpreted as evidence of the reallocation of portfolios by economic agents.

### **Annual growth of loans to the private sector remained roughly unchanged in September**

On the asset side of the consolidated MFI balance sheet, the annual growth rate of total credit granted to euro area residents stood at 5.5% in September, unchanged from the previous month. The annual growth rate of credit extended to general government rose to 5.5%, up from 5.1% in August. At the same time, the annual growth rate of credit extended to the private sector declined slightly, to 5.5% from 5.6% in the previous month. Among the sub-components of this item, the annual growth rate of loans to the private sector stood at 4.9%, compared with 5.0% in August. The annual growth in loans to the private sector has remained between 4½% and 5%, since the start of the year, which is consistent with a continuing stabilisation of credit conditions. At the same time, the annualised six-month growth rate of loans to the private sector continued to rise over the last two quarters, which may provide first indications of a pick-up in loan growth.

Quarterly data on the sectoral breakdown of loans to the private sector show that in recent quarters the annual growth rates of both loans to households and loans to non-financial corporations have stabilised within relatively narrow ranges (see Table 2). More precisely, annual growth in loans to households has remained within the range 5½%-6% since the end of 2001, while that in loans to non-financial corporations has remained between 3½% and 4% since the third quarter of 2002.

Annual growth in loans to households increased slightly in the third quarter of 2003 (to 5.8%, from 5.5% in the second quarter). This was largely driven by higher growth in the demand for loans for house purchase, probably reflecting the stimulating effect of low mortgage rates throughout the euro area as well as the ongoing pronounced house price increases in some countries. The annual growth rate of other lending (a broad category including loans for debt consolidation, loans for educational purposes, loans to small firms, etc.) also recorded an increase in the third quarter, to 3.0%, from 2.0% in the second quarter. By contrast, the annual growth rate of consumer credit decreased significantly to 2.4%, from 3.7% in the second quarter.

The annual growth rate of loans to non-financial corporations remained almost unchanged in September 2003 (at 3.7%, compared with 3.6% in the previous quarter). Data on the maturity breakdown show that the dynamics varied significantly across maturities. While the annual growth rate of long-term loans (over five years) remained stable and that of loans of between one and five years increased significantly, the annual rate of growth in short-term corporate loans – which are particularly sensitive to cyclical developments – turned slightly negative.

The results of the Eurosystem's October 2003 bank lending survey also provide indications that credit conditions are continuing to stabilise (see Box 1). In particular, the net percentage of banks

**Table 2****MFI loans to households and non-financial corporations***(end of quarter; not adjusted for seasonal and calendar effects)*

	Outstanding amount as a % of total <sup>1)</sup>	Annual growth rates					
		2002 Q2	2002 Q3	2002 Q4	2003 Q1	2003 Q2	2003 Q3
<b>Non-financial corporations</b>	46.6	4.4	3.5	3.4	3.7	3.6	3.7
Up to 1 year	32.2	-3.1	-2.6	-2.6	-1.0	0.3	-0.9
Over 1 year	67.8	8.8	6.9	6.7	6.3	5.3	6.1
Over 1 and up to 5 years	17.3	12.2	8.9	6.3	5.8	2.4	5.4
Over 5 years	50.5	7.6	6.2	6.8	6.5	6.3	6.3
<b>Households</b> <sup>2)</sup>	53.4	5.7	5.8	5.9	5.9	5.6	5.8
Consumer credit <sup>3)</sup>	13.8	3.3	3.6	4.4	3.4	3.7	2.4
Lending for house purchase <sup>3)</sup>	66.6	7.7	7.7	7.6	7.2	7.1	7.4
Other lending	19.6	1.4	1.7	1.4	3.5	2.0	3.0

Source: ECB money and banking statistics.

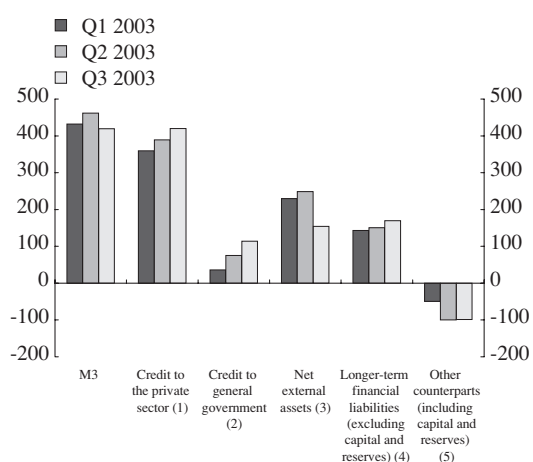
Note: For further details, see footnotes to Table 2.5 in the "Euro area statistics" section of the Monthly Bulletin and the relevant technical notes.

- 1) As at the end of the third quarter of 2003. Sector loans as a percentage of total MFI loans to the non-financial private sector (excluding non-profit institutions serving households); maturity breakdown and breakdown by purpose as a percentage of MFI loans to the respective sector. Figures may not add up exactly due to rounding.
- 2) In line with the ESA 95 definition of households.
- 3) The definitions of consumer credit and lending for house purchase are not fully consistent across the euro area.

reporting tightening credit standards for the approval of loans and credit lines to enterprises in the past three months has continued to fall. However, the net percentage remained above 20%, with only a few banks reporting an overall easing of credit standards. Moreover, the net percentage of banks reporting a tightening of credit standards for the approval of loans to households increased, but remained low. Given that the survey is still very new, its results should be interpreted with a high degree of caution, as there is so far insufficient data from which to evaluate the relationship between the results and actual credit and economic developments.

In September 2003 the net external asset position of the euro area MFI sector decreased by €5 billion in absolute and seasonally adjusted terms. Over the 12 months to September 2003, the net external assets of the MFI sector increased by €153 billion, compared with €161 billion over the 12 months to August and with €207 billion over the 12 months to July. Balance of payments data (available up to August)

suggest that the recent decline in MFI net external assets is mainly attributable to purchases of foreign bonds by euro area residents and sales of euro area securities by non-residents.

**Chart 3****Movements in M3 and its counterparts***(annual flows, end of period; EUR billions; adjusted for seasonal and calendar effects)*

Source: ECB.

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

**Box I****The results of the October 2003 bank lending survey for the euro area**

The ECB conducted its fourth bank lending survey at the beginning of October. The survey provides information on demand and supply conditions in the euro area credit markets and is designed to complement other statistics on bank retail interest rates and credit.<sup>1</sup> This box contains the main results for the third quarter of 2003 and compares them with those of the previous quarter (the July 2003 survey). A more extensive report is published on the ECB's website.

The results of the October 2003 bank lending survey (which are based on the responses of all 86 banks in the sample) show a continued fall in the net percentage of banks reporting a tightening of the credit standards applied to the approval of loans or credit lines to enterprises over the past three months. However, the net percentage remained above 20%, and only few banks reported an overall easing of credit standards. The net percentage of banks reporting a tightening of the credit standards applied to the approval of loans to households remained low.

As regards loans to enterprises, in October a net 23% of banks reported a tightening of credit standards for the period from July to September (see Table A, upper panel). This was slightly above what banks expected in July for the same period (19%), but lower than what was reported in the period April-June (27%) and beforehand (see the first section of the chart). For the first time, a small percentage of banks (3%) reported an overall easing of credit standards. In the third quarter of 2003, the decline in the net percentage of banks reporting a tightening of credit standards was evident for loans to large as well as small and medium-sized enterprises. As regards the original maturity of loans, the net tightening of credit standards continued to decrease for all maturities of loans.

**Table A: Changes in credit standards applied to enterprises***(percentages)*

	Overall		Loans to small and medium-sized enterprises		Loans to large enterprises		Short-term loans		Long-term loans	
	July	October	July	October	July	October	July	October	July	October
<b>a) Over the past three months</b>										
Tightened considerably	0	2	0	2	0	2	0	2	2	2
Tightened somewhat	27	24	32	23	25	18	19	17	28	24
Remained basically unchanged	73	72	65	70	75	77	82	78	68	73
Eased somewhat	0	3	3	5	0	3	0	3	2	1
Eased considerably	0	0	0	0	0	0	0	0	0	0
Total	100	100	100	100	100	100	100	100	100	100
<b>Net percentage<sup>1)</sup></b>	<b>27</b>	<b>23</b>	<b>30</b>	<b>20</b>	<b>25</b>	<b>17</b>	<b>19</b>	<b>16</b>	<b>28</b>	<b>25</b>
Number of banks responding	83	83	81	81	80	80	82	82	83	82
<b>a) Over the next three months</b>										
Tightened considerably	0	0	0	0	2	2	0	2	2	1
Tightened somewhat	23	14	23	14	24	16	11	13	22	19
Remained basically unchanged	72	85	68	82	73	80	82	83	74	78
Eased somewhat	4	1	9	4	1	2	7	1	1	1
Eased considerably	0	0	0	0	0	0	0	0	2	0
Total	100	100	100	100	100	100	100	100	100	100
<b>Net percentage<sup>1)</sup></b>	<b>19</b>	<b>13</b>	<b>14</b>	<b>11</b>	<b>24</b>	<b>16</b>	<b>5</b>	<b>14</b>	<b>21</b>	<b>19</b>
Number of banks responding	83	83	81	81	80	80	81	83	82	83

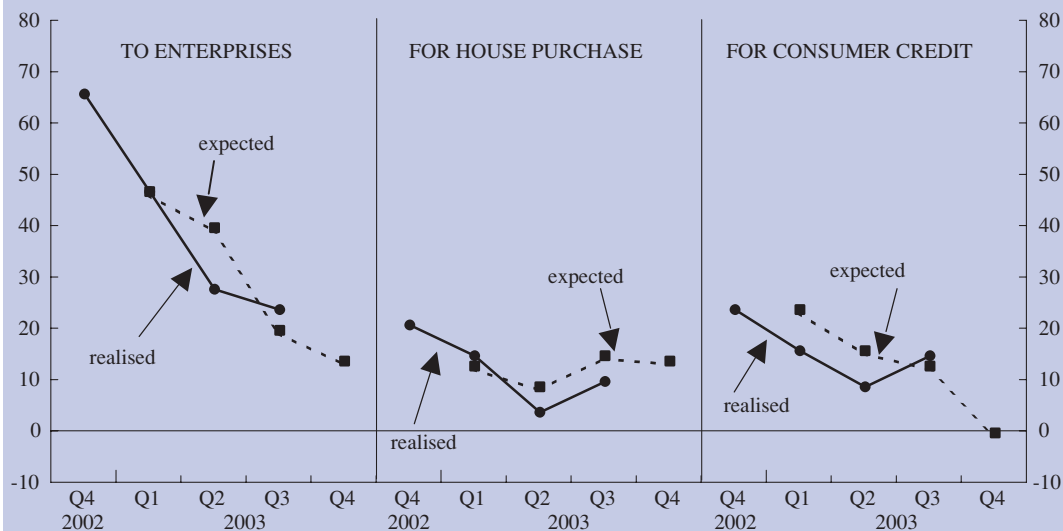
1) The net percentage refers to the difference between the sum of the percentages for "tightened considerably" and "tightened somewhat" and the sum of the percentages for "eased somewhat" and "eased considerably".

As in July, the factor cited as contributing most to the continued overall net tightening of credit standards in the third quarter was risk perception, in particular in terms of the industry or firm-specific outlook, closely

<sup>1</sup> See the article entitled "A bank lending survey for the euro area" in the April 2003 issue of the Monthly Bulletin.

### Credit standards applied to the approval of loans or credit lines

(net percentages of banks reporting tightening standards)



Notes: The net percentage refers to the difference between the sum of the percentages for “tightened considerably” and “tightened somewhat” and the sum of the percentages for “eased somewhat” and “eased considerably”.

“Realised” values refer to the period in which the survey was conducted. “Expected” values are the percentages calculated from the responses given by the banks in the previous survey. For instance, “expected” values for the third quarter of 2003 were reported by banks in the July survey.

followed by expectations regarding general economic activity. The terms and conditions for approving loans or credit lines to enterprises that tended to be tightened most were interest rate margins, the size of the loan or credit line and collateral requirements.

Turning to expectations in respect of credit standards for the fourth quarter of 2003, the net percentage of banks expecting a tightening of credit standards declined to 13% in the October survey, from 19% in the July survey (see Table A, lower panel).

As regards loan demand by enterprises, banks reported a smaller net decrease than before. On balance 17% of respondents indicated in October that they had experienced weaker demand for loans or credit lines to enterprises over the preceding three-month period (down from 25% in the July survey) (see Table B). The main reasons given for the weaker demand were lower financing needs on the part of corporations for fixed investments. At the same

**Table B: Changes in demand for loans or credit lines to enterprises over the past three months**

(percentages)

	Overall		Loans to small and medium-sized enterprises		Loans to large enterprises		Short-term loans		Long-term loans	
	July	October	July	October	July	October	July	October	July	October
Decreased considerably	2	1	2	2	4	2	2	1	3	2
Decreased somewhat	33	29	30	27	25	31	20	26	38	34
Remained basically unchanged	54	57	52	51	57	54	61	60	47	39
Increased somewhat	10	13	16	18	12	13	16	13	10	25
Increased considerably	0	0	0	3	2	0	0	0	2	0
Total	100	100	100	100	100	100	100	100	100	100
<b>Net percentage<sup>1)</sup></b>	<b>-25</b>	<b>-17</b>	<b>-17</b>	<b>-9</b>	<b>-15</b>	<b>-20</b>	<b>-6</b>	<b>-13</b>	<b>-30</b>	<b>-11</b>
Number of banks responding	83	83	81	81	80	80	81	82	82	83

1) The net percentages for the questions on demand for loans are defined as the difference between the sum of the percentages for “increased considerably” and “increased somewhat” and the sum of the percentages for “decreased somewhat” and “decreased considerably”.

time, almost a third of responding banks referred to debt restructuring as a factor leading to higher demand.

Turning to households, a net 9% of banks reported a tightening of the credit standards applied to the approval of loans for house purchase. This net percentage was higher than in July (3%) (see Table C, upper panel) but below earlier expectations for the third quarter of 2003 (14%) (see the second section of the chart). As regards credit standards applied to consumer credit and other loans to households, in October a net 14% of respondents reported a tightening for the period July-September (up from 8% in July), which was slightly above what had been expected for the third quarter (12%) (see the third section of the chart).

As in the previous survey, the factor that contributed most to the slight overall tightening of the credit standards applied to loans to households over the three-month period July to September was expectations for general economic activity. Tighter lending policies, where they occurred, were predominantly expressed via the higher margins applied to riskier loans. At the same time, banks reported a net reduction in their margins on average loans.

As regards expectations for the period from October to December 2003, the expected net tightening for loans to house purchase remains at the same level as in the July survey (13%). However, banks expect a slight easing of the credit standards applied to loans for consumer credit and other lending (see Table C, lower panel).

At the same time, on the demand side, the October 2003 survey showed that on balance 31% of banks reported an increase in the demand for loans for house purchase, as compared with 29% in July (see Table D). By contrast, the demand for consumer credit and other loans to households fell in the same period (net percentage of -7%, down from 5% in the July survey).

Overall, the results of the October 2003 survey point to some signs of improvement in credit conditions for loans to enterprises and to a stabilisation in those applied to households. However, given the newness of the survey, the results should be interpreted with a high degree of caution. It will take some time before it is possible to give a reliable interpretation of these results and determine the relationship between them and actual economic and financial developments.

**Table C: Changes in credit standards applied to households**

(percentages)

	Loans for house purchase		Consumer credit and other lending	
	July	October	July	October
<b>a) Over the past three months</b>				
Tightened considerably	1	0	0	0
Tightened somewhat	12	18	13	19
Remained basically unchanged	77	72	82	76
Eased somewhat	8	9	5	5
Eased considerably	2	0	0	0
Total	100	100	100	100
<b>Net percentage <sup>1)</sup></b>	<b>3</b>	<b>9</b>	<b>8</b>	<b>14</b>
Number of banks responding	80	80	78	78
<b>b) Over the next three months</b>				
Tightened considerably	0	0	0	0
Tightened somewhat	14	19	16	13
Remained basically unchanged	85	76	80	72
Eased somewhat	1	6	4	14
Eased considerably	0	0	0	0
Total	100	100	100	100
<b>Net percentage <sup>1)</sup></b>	<b>14</b>	<b>13</b>	<b>12</b>	<b>-1</b>
Number of banks responding	80	80	78	78

1) See footnote to Table A.

**Table D: Changes in demand for loans to households over the past three months**

(percentages)

	Loans for house purchase		Consumer credit and other lending	
	July	October	July	October
Decreased considerably	0	0	1	1
Decreased somewhat	14	7	18	22
Remained basically unchanged	44	56	58	61
Increased somewhat	30	28	21	14
Increased considerably	12	10	2	2
Total	100	100	100	100
<b>Net percentage <sup>1)</sup></b>	<b>29</b>	<b>31</b>	<b>5</b>	<b>-7</b>
Number of banks responding	80	80	78	78

1) See footnote to Table B.



### Debt securities issuance was stable in August

The annual growth rate of the amount outstanding of debt securities issued by euro area residents decreased slightly to 6.7% in August, from 6.9% in July. Underlying this was a decrease in the annual growth rate of the amount outstanding of short-term debt securities by 2.4 percentage points in August compared with the previous month, to 12.3%. The annual growth rate of the amount outstanding of long-term debt securities remained unchanged at 6.1% in August (see Chart 4).

The currency breakdown shows that the annual growth rate of the amount outstanding of euro-denominated debt securities issued by euro area residents decreased in August by 0.2 percentage point from the previous month to 6.4%.

Turning to the sectoral breakdown of euro-denominated debt securities issuance, the

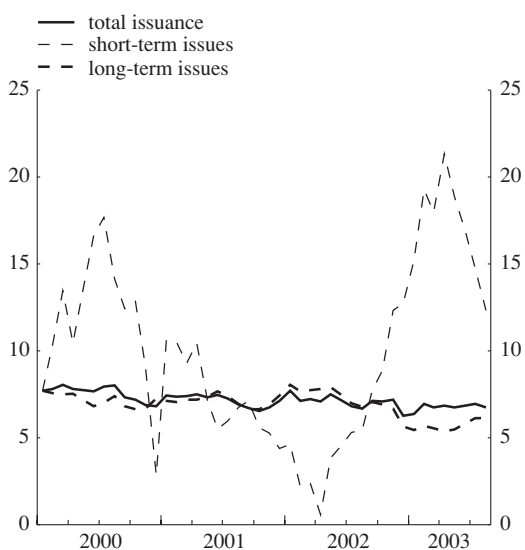
annual growth of the amount outstanding of debt securities issued by MFIs was 3.7% in August, which was 0.1 percentage point lower than in July. Underlying this was a decrease in the annual growth rate of the amount outstanding of short-term securities to 13.6% in August, from 16.1% in the previous month, while the growth rate of short-term deposits on the MFIs' consolidated balance sheet remained broadly unchanged. The annual growth rate of the amount outstanding of long-term securities remained broadly unchanged at 2.5% in August compared with July. Also on a consolidated basis, the annual growth rate of debt securities issued by MFIs and with a maturity of over two years remained unchanged at 7.5% in August.

In the non-MFI sector, which includes both non-monetary financial corporations and non-financial corporations, the annual growth rate of the amount outstanding of euro-denominated debt securities remained broadly unchanged in August at 23.1%. Specifically, the annual growth of the amount outstanding of debt securities issued by non-monetary financial corporations was roughly unchanged at 33.8%. The high growth rate reflects strong securitisation activity by special purpose vehicles. The annual growth of the amount outstanding of debt securities issued by non-financial corporations increased slightly, by 0.5 percentage point, to 13.9%. This is close to its average since the start of Stage Three of Economic and Monetary Union.

Turning to the government sector, the annual rate of growth of the amount outstanding of euro-denominated debt securities issued by the central government sector decreased by 0.3 percentage point to 4.0% in August compared with the previous month. The other general government sector, mainly consisting of state and local governments, decreased its pace of issuance of euro-denominated debt securities. The annual growth rate of the amount outstanding of debt securities was 19.4% in August, compared with 20.2% in July. The still very high issuance activity of this sector can be

**Chart 4**  
**Annual growth rates of debt securities issued by euro area residents**

(annual 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.

explained by the high financing needs of local authorities in a few euro area countries.

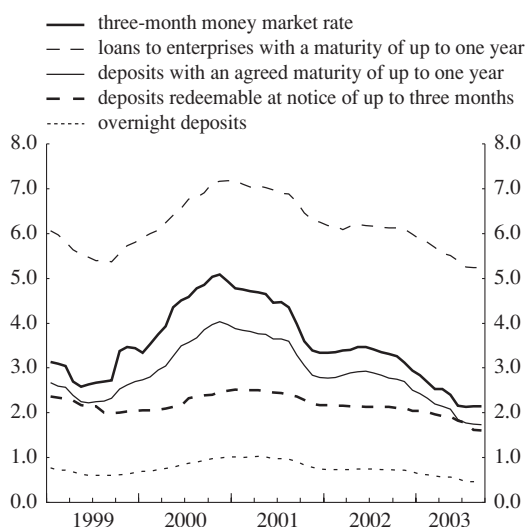
### Mixed developments in retail bank interest rates in September

All short-term retail bank interest rates either remained unchanged or declined slightly in September 2003 (see Chart 5). These rates stood in September at their lowest levels since January 1990, when the data were first reported. Between June 2002, which was the last time most short-term retail interest rates peaked, and September 2003, declines ranged from around 30 basis points for the rate on overnight deposits to around 120 basis points for the rate on time deposits with agreed maturities of up to one year. This compares with a parallel decrease in the three-month money-market interest rate of around 130 basis points over the same period.

At longer maturities, recent developments have been more mixed. Long-term retail bank lending rates on loans to households for the purpose of house purchase increased by 13 basis points in September compared with the previous month,

### Chart 5 Short-term retail bank interest rates and a comparable market rate

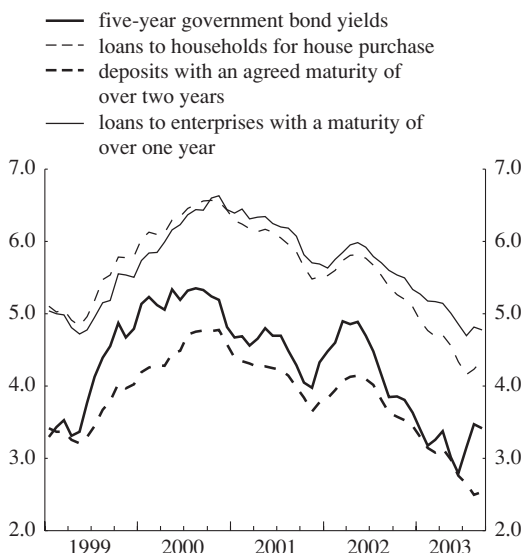
(percentages per annum; monthly averages)



Sources: ECB aggregation of individual country data, which are partly based on national estimates, and Reuters.  
Note: From January 2001, data include Greece.

### Chart 6 Long-term retail bank interest rates and a comparable market rate

(percentages per annum; monthly averages)



Sources: ECB aggregation of individual country data, which are partly based on national estimates, and Reuters.

Note: From January 2001, data include Greece.

reflecting the increase in long-term bond yields which began in mid-June. Long-term deposit rates increased by 4 basis points in September. In contrast, long-term retail bank lending rates on loans to enterprises decreased by 4 basis points in that month, possibly reflecting improvements in credit risk perceptions. The spreads between long-term retail bank lending rates and comparable market rates remained, however, broadly unchanged in September (see Chart 6).

### Money market interest rates increased somewhat at longer maturities in October

After falling in September, money market rates increased somewhat in October and early November 2003, especially at the longer maturities. Shorter-term rates changed little. The slope of the money market yield curve, as measured by the difference between the twelve-month and the one-month EURIBOR rate, which was almost flat at the end of September, consequently became positively sloped at 33 basis points on 5 November.

**Box 2****Monetary policy operations and liquidity conditions in the reserve maintenance period ending on 23 October 2003**

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

**Open market operations**

(EUR billions; interest rates in percentages per annum)

Operation	Date of settlement	Date of maturity	Bids (amount)	Allotment (amount)	Bid-cover ratio	Number of participants	Minimum bid rate	Marginal rate	Weighted average rate
MRO	24/09/2003	08/10/2003	109.74	81.0	1.35	304	2.00	2.06	2.07
MRO	01/10/2003	15/10/2003	164.02	123.0	1.33	292	2.00	2.05	2.06
MRO	08/10/2003	22/10/2003	135.89	82.0	1.66	304	2.00	2.05	2.06
MRO	15/10/2003	27/10/2003	153.30	113.0	1.36	321	2.00	2.05	2.05
MRO	22/10/2003	05/11/2003	119.33	90.0	1.33	310	2.00	2.04	2.05
LTRO	25/09/2003	17/12/2003	28.44	15.0	1.89	106	-	2.10	2.12

Source: ECB.

The marginal and weighted average MRO rates declined gradually from 2.06% to 2.04% and from 2.07% to 2.05% respectively.

Except for the usual increase on the last trading day of the calendar month, the EONIA declined gradually from 2.07% at the beginning of the reserve maintenance period to 2.05% on 16 October. This development is consistent with the comfortable liquidity conditions that prevailed throughout the reserve maintenance period. Indeed, as in the previous maintenance period, the MRO allotment volumes were relatively generous. Over the subsequent days, the EONIA fell to levels close to or slightly below the minimum bid rate of 2.00%, and on 23 October, the last day of the reserve maintenance period, it declined further to 1.44%. The last day of the reserve maintenance period ended with a net recourse to the deposit facility of €1.9 billion.

The average difference between current account holdings of credit institutions with the Eurosystem and the minimum reserve requirements was €0.64 billion.

**Contributions to the banking system's liquidity**

(EUR billions)

Daily average during the reserve maintenance period from 24 September to 23 October 2003

	Liquidity providing	Liquidity absorbing	Net contribution
<b>(a) Monetary policy operations of the Eurosystem</b>	<b>253.5</b>	<b>0.2</b>	<b>+ 253.3</b>
Main refinancing operations	208.4	-	+ 208.4
Longer-term refinancing operations	45.0	-	+ 45.0
Standing facilities	0.1	0.2	-0.1
Other operations	-	-	-
<b>(b) Other factors affecting the banking system's liquidity<sup>1)</sup></b>	<b>321.3</b>	<b>442.7</b>	<b>- 121.4</b>
Banknotes in circulation	-	395.5	- 395.5
Government deposits with the Eurosystem	-	48.3	- 48.3
Net foreign assets (including gold)	315.0	-	+ 321.3
Other factors (net)	-	1.1	-1.1
<b>(c) Credit institutions' holdings on current accounts with the Eurosystem (a) + (b)</b>			<b>131.9</b>
<b>(d) Required reserves</b>			<b>131.2</b>

Source: ECB.

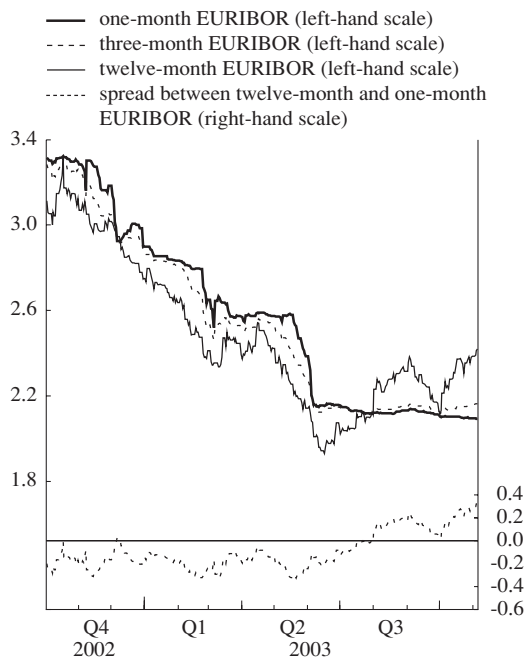
Note: Totals may not add up due to rounding.

1) The published estimates of the average liquidity needs resulting from autonomous factors ranged between €111.6 billion and €141.4 billion. The largest deviation between the published estimate and the actual figure was for the period from 6 October to 14 October and amounted to €2.2 billion.

## 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)



Source: Reuters.

The overnight interest rate, as measured by the EONIA, was between 2.05% and 2.06% for most of the period between end-September and 5 November. In the same period, the two-week EONIA swap rate varied between 2.05% and 2.09%, standing at 2.07% on 5 November. The marginal and average rates of allotment in the Eurosystem's main refinancing operations were, on average, 5 basis points above the minimum bid rate applied to these operations (see Box 2).

Both the one-month and the three-month EURIBOR remained almost unchanged in the period between end-September and 5 November, standing at 2.09% and 2.16% respectively on the latter date (see Chart 7). The marginal and the average interest rates in the Eurosystem's longer-term refinancing operation settled on 30 October were – at 2.13% and 2.14% – respectively 3 and 2 basis points below the then prevailing three-month EURIBOR and 3 and 2 basis points higher than in the longer-term refinancing operation settled on 25 September.

By contrast, money market rates at longer maturities increased somewhat during October and early November. Between end-September and 5 November, the six-month and twelve-month EURIBOR increased by 12 and 29 basis points respectively, to stand at 2.23% and 2.42% on the latter date. The expected path of three-month EURIBOR futures rates rose significantly. Interest rates implied in futures prices on contracts with delivery dates in December 2003 and March and June 2004 increased by 16, 33 and 45 basis points respectively between end-September and 5 November, to stand at 2.19%, 2.33% and 2.56% on the latter date.

### Long-term government bond yields increased in October

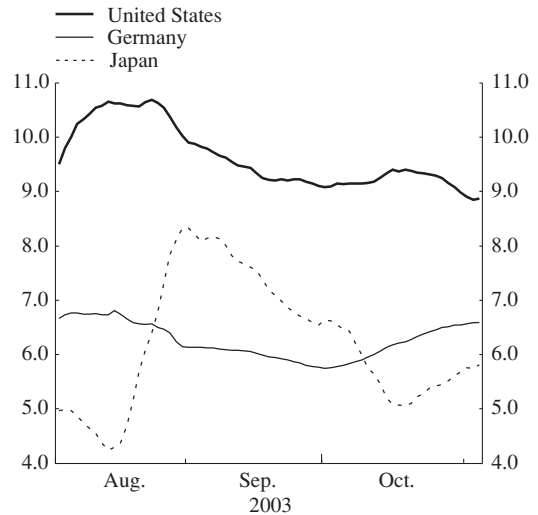
Long-term government bond yields increased in the major markets in October, in most cases offsetting the yield declines observed in September. In the United States and the euro area, ten-year government bond yields rose by 40 basis points between end-September and 5 November, standing in both cases at 4.4% on the latter date (see Chart 8). As a result, the yield differential between US and euro area ten-year government bonds was close to zero on 5 November.

The recent rise in long-term government bond yields in the United States seemed to reflect upward revisions by market participants of both growth and inflation expectations, triggered mainly by more favourable data releases with regard to US economic growth and employment. A more optimistic growth outlook was suggested by a 10 basis point increase in the real yield on ten-year index-linked bonds between end-September and 5 November. Over the same period, higher inflation expectations among market participants were suggested by a 30 basis point rise in the ten-year break-even inflation rate measured by the difference between yields on ten-year nominal and index-linked US government bonds.

**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.*

Market participants' uncertainty about future bond yield movements in the United States remained relatively high. The ten-day moving average of implied volatility on ten-year US Treasury futures contracts remained broadly unchanged in the period under review and stood at 8.9% on 5 November. This was around 0.9 percentage points above its average over the past two years (see Chart 9).

In Japan, ten-year government bond yields increased by 10 basis points between end-September and 5 November, reaching 1.5% on the latter date. This increase in long-term bond yields seemed to be related to a more favourable economic outlook and was in line with developments in other major markets. Uncertainty among market participants decreased, as indicated by declining implied volatility in October (see Chart 9). On 5 November, the ten-day moving average of implied bond market volatility stood at around 5.8%, which was still significantly above its average of 3.4% over the past two years.

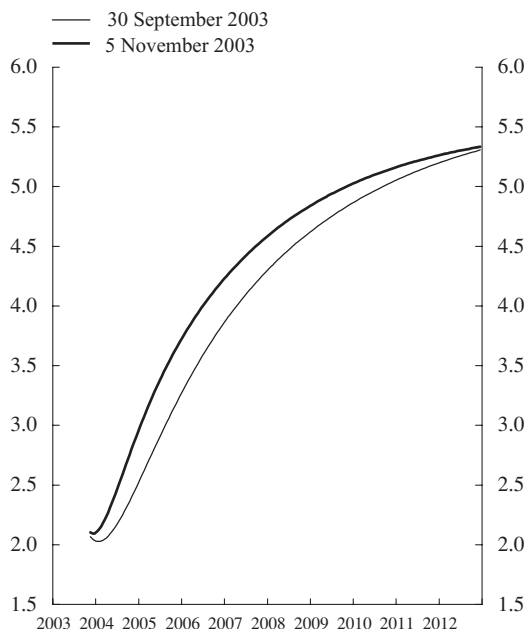
**Chart 9****Implied volatility in major bond markets***(percentages per annum; ten-day moving average of daily data)**Source: Bloomberg.**Notes: The implied volatility series represents the nearby implied volatility on the near-contract generic future, rolled over 20 days prior to expiry, as defined by Bloomberg. This means that 20 days prior to expiry of the contracts, a change in the choice of contracts used to obtain the implied volatility is made, from the contract closest to maturity to the next contract.*

In the euro area, government bond yields rose across the entire maturity spectrum in October. The largest increases were observed at medium-term maturities, which resulted in a steeper slope of the implied forward overnight interest rate curve between short and medium-term horizons (see Chart 10). The general increases in euro area bond yields seem to have been triggered by better than expected data releases for the euro area economy and a more favourable outlook for the world economy.

Upward revisions in market participants' long-term growth expectations were suggested by a 15 basis point increase in the yields on French ten-year index-linked government bonds (indexed on the euro area HICP excluding tobacco) between end-September and 5 November. A more favourable economic assessment for the euro area economy was also reflected in declining corporate bond spreads. For example, the yield spread of BBB-rated corporate bonds against comparable government bonds

**Chart 10**  
**Implied forward euro area overnight interest rates**

(percentages per annum; daily data)



Source: ECB estimate.

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

narrowed by 20 basis points between end-September and 5 November. Standing at 90 basis points on 5 November, this yield spread

reached its lowest level since the introduction of the euro in January 1999.

At the same time, there was a 25 basis point rise in the ten-year break-even inflation rate for the euro area – measured by the difference between nominal and real yields on French government bonds between end-September and 5 November. While some technical factors may account for this increase, it may also indicate a rise in long-term inflation expectations among investors in the euro area.

The degree of uncertainty prevailing in the euro area bond markets, as indicated by the ten-day moving average of implied volatility of options on futures contracts on German ten-year government bonds, increased by 0.8 percentage point between end-September and 5 November. On the latter date, this indicator stood at 6.6%, which was 0.9 percentage point higher than its average over the past two years.

Since the introduction of the euro in 1999, yield spreads between euro area government bonds and German government bonds have narrowed substantially. Box 3 takes a more detailed look at this development and points out that fiscal positions of euro area governments seem recently to have had an impact.

**Box 3****Recent developments in spreads between euro area government bond yields**

In the run-up to Stage Three of Economic and Monetary Union, which started on 1 January 1999, there was a significant convergence in the long-term government bond yields of those countries which subsequently adopted the euro. This convergence was driven by the anticipation of the introduction of the euro and the corresponding elimination of intra-euro area exchange rate risk. Since then, government bond yield spreads between euro area countries have remained, although they have been significantly smaller than those observed before 1999. This suggests that investors differentiate between government bonds across euro area countries in terms of liquidity and to some extent in terms of credit risk.

**Spreads in long-term government bond yields between euro area countries and Germany<sup>1)</sup>**

(basis points)

	Jan. 1999	Oct. 2003	Change from Jan. 1999 to Oct. 2003
Belgium	22	6	-16
Spain	19	1	-18
France	8	2	-6
Ireland	21	0	-21
Italy	23	13	-10
Netherlands	11	2	-9
Austria	18	5	-13
Portugal	22	10	-12
Finland	21	-1	-22
Average	18	4	-14

Sources: Reuters and ECB calculations.

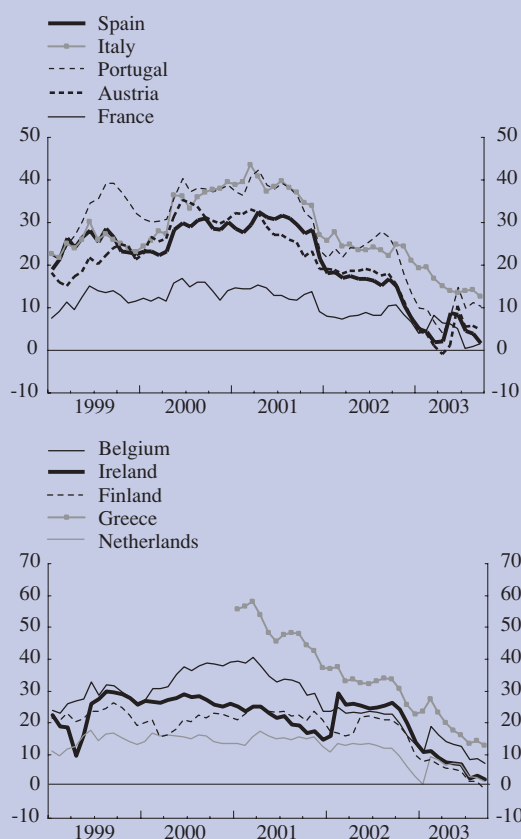
1) Long-term government bond yields refer to ten-year bonds or the closest available maturity.

In 1999, German long-term bond yields were the lowest in the euro area, partly due to the relatively high liquidity of German government bonds. With the exception of France, the financing advantage of the German government compared with other euro area governments in terms of basis points was in the double-digit range. This picture, however, has changed somewhat in recent years. The table above shows that the spreads between ten-year government bond yields of euro area countries against comparable German bond yields narrowed markedly between January 1999 and October 2003. In that period, the average spread fell from 18 to 4 basis points. The countries that in October 2003 showed the largest yield spreads against Germany were Greece, Italy and Portugal. The largest declines in yield spreads since 1999 were observed for Finland, Ireland, Spain and Belgium (see Chart A). There was also a significant decline in Greek government bond spreads after Greece adopted the euro on 1 January 2001.

The convergence in yield spreads since 1999 has not occurred in a continuous manner. Looking in more detail at Chart A, the pattern most noticeable for all countries is that from early 2001 onwards spreads started to

**Chart A: Long-term government bond yield spread against Germany<sup>1)</sup>**

(basis points; monthly data)



Sources: Reuters and ECB calculations.

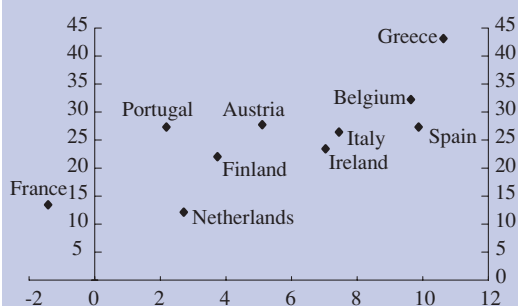
1) Long-term government bond yield refers to ten-year bonds or the closest available maturity.



decline. Among other factors, fiscal developments in the euro area might have contributed to the observed yield convergence since 2001. For example, in Germany the debt-to-GDP ratio worsened relative to that of other euro area countries, except France, between 2001 and 2003.

**Chart B: Changes in relative debt-to-GDP ratios against Germany<sup>1)</sup> and changes in yield spreads<sup>2)</sup> between 2001 and 2003**

(x-axis: percentage points; y-axis: basis points)



Sources: Reuters and ECB calculations.

- 1) X-axis: change in the difference between the debt-to-GDP ratio of Germany and the debt-to-GDP ratio of other euro area countries between 2001 and 2003 (figures for 2003 refer to the October 2003 Commission forecasts).
- 2) Y-axis: decrease in the yield spreads against German ten-year government bonds between January 2001 and October 2003.

Chart B provides some evidence for the relationship between fiscal positions and yield spreads since 2001. It compares the relative change in debt-to-GDP ratios of euro area countries versus the German position over this period with the corresponding change in the government bond yield differential. Chart B indicates that countries which have experienced an improvement in their debt-to-GDP ratio relative to Germany also experienced declines in yield spreads against German government bonds.

Although some technical factors (e.g. related to the liquidity of certain bonds) may have also played a role in the observed decline of some of the spreads, Chart B suggests that market participants seem to take into account the relative fiscal positions of euro area governments when pricing bonds issued by these entities. Bond market investors thus seem to reward – although only moderately – those euro area countries that have followed more prudent fiscal policies, by offering improved financing conditions.

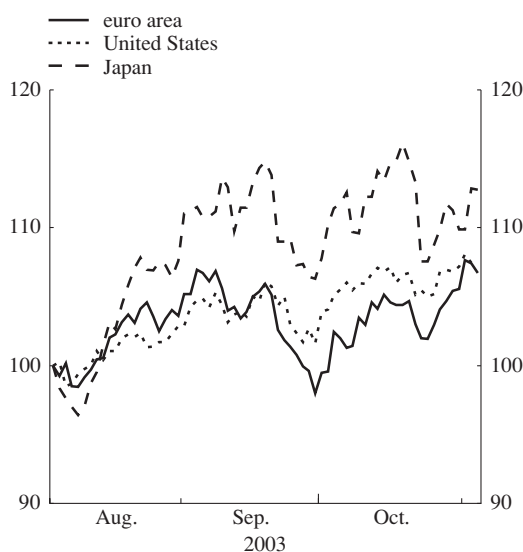
## Global stock prices increased in October

Global stock prices rebounded in October, mainly on the back of improved market expectations regarding the global economic outlook and corporate earnings. Stock prices in the euro area and the United States, as measured by the broad Dow Jones EURO STOXX and the Standard & Poor's 500 indices, respectively, increased by 9% and 6% between end-September and 5 November (see Chart 11). In Japan, stock prices, as measured by the Nikkei 225 index, rose by 6% over the same period.

In the United States, the increase in stock prices in October reflected better than expected corporate earnings reported for the third quarter as well as macroeconomic data releases suggesting a more favourable economic climate in the United States. Stock market uncertainty, as indicated by the ten-day moving average of implied volatility derived from options on the Standard &

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

(index: 1 August 2003 = 100; daily data)



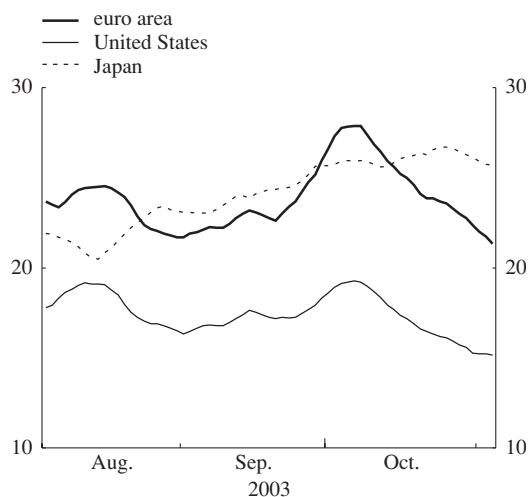
Source: Reuters.

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



**Chart 12**  
**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.

Notes: 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.

Poor's 500 index, declined by about 3 percentage points between end-September and 5 November (see Chart 12). On the latter date, implied volatility stood at 15%, which is significantly below its long-run average. The fall in uncertainty may have also supported the recent rise in stock prices since it implies, in principle, lower risk premia demanded for holding equity. The increase in stock prices was particularly pronounced for technology shares, with the Nasdaq Composite index increasing by 8% between end-September and 5 November.

In Japan, stock prices continued to rise after rapid increases in earlier months. Optimism

about the economic outlook for Japan and about the ability of the banking sector to improve its profitability contributed to this positive development. Meanwhile, the appreciation of the Japanese yen and lower than expected quarterly earnings reported by some large firms exerted downward pressures on stock prices. Uncertainty in the Japanese stock market, as measured by the ten-day moving average of implied volatility extracted from options on the Nikkei 225 index, was unchanged between end-September and 5 November and stood at 26% on the latter date, which was close to its long-run average.

In the euro area, stock prices in October continued the overall upward trend they started in March this year. The October increase largely reflected improvements in actual earnings of euro area firms as well as economic data releases, which strengthened market expectations of an imminent recovery of the euro area economy. This, together with global stock market developments, helped to restore market participants' confidence in euro area equity markets. As a consequence, market participants' uncertainty seems to have declined, as indicated by the decrease in the ten-day moving average of implied volatility extracted from options on the Dow Jones EURO STOXX 50 index, by 5 percentage points between the end of September and 5 November. Implied stock market volatility in the euro area remained well below its long-run average, standing at 21% on 5 November. As in the United States, technology-related shares experienced the strongest price increases between end-September and 5 November, as market participants expected that the technology sector would benefit the most from a global economic recovery.

## 2 Price developments

### HICP inflation is estimated to have remained unchanged in October 2003

According to Eurostat's flash estimate, HICP inflation remained unchanged in October 2003, at 2.1% (see Table 3). Although no detailed HICP breakdown is available for the month, preliminary evidence suggests that overall inflation continued to be influenced by developments in food prices, which have increased after the unusually hot, dry weather during the summer. Energy prices, on the other hand, are not expected to have exerted additional upward pressure on overall inflation in October.

In September 2003 euro area HICP inflation remained at 2.1%, unchanged from August.

There were counterbalancing movements in the annual growth rates of the more volatile components of the HICP (i.e. unprocessed food and energy prices) as well as a slight increase in some of the less volatile components.

The impact on fresh food prices of the unusually hot summer weather and droughts in the euro area, already noticeable in August, became greater in September. Unprocessed food prices increased by 4.2% year on year in September 2003, driven in particular by a substantial rise in vegetable prices (nearly 10% year on year). Upward pressure on overall inflation stemming from unprocessed food prices was, however, largely offset by a slowdown in the annual

**Table 3**  
**Price and cost developments in the euro area**

(annual percentage changes, unless otherwise indicated)

	2000	2001	2002	2002 Q4	2003 Q1	2003 Q2	2003 Q3	2003 May	2003 June	2003 July	2003 Aug.	2003 Sep.	2003 Oct.
<b>Harmonised Index of Consumer Prices (HICP) and its components</b>													
Overall index <sup>1)</sup>	2.1	2.3	2.3	2.3	2.3	1.9	2.0	1.8	1.9	1.9	2.1	2.1	2.1
<i>of which:</i>													
Goods	2.5	2.3	1.7	1.8	2.0	1.5	1.7	1.4	1.6	1.6	1.7	1.8	.
Food	1.4	4.5	3.1	2.2	1.9	2.5	3.2	2.4	2.9	3.0	3.1	3.5	.
Processed food	1.2	2.9	3.1	2.6	3.1	3.3	3.1	3.3	3.2	3.2	3.0	3.1	.
Unprocessed food	1.8	7.0	3.1	1.6	0.1	1.5	3.4	1.1	2.5	2.7	3.3	4.2	.
Industrial goods	3.0	1.2	1.0	1.6	2.0	1.0	1.0	0.9	1.0	1.0	1.0	1.0	.
Non-energy industrial goods	0.5	0.9	1.5	1.2	0.7	0.9	0.7	0.9	0.8	0.7	0.6	0.8	.
Energy	13.0	2.2	-0.6	2.9	7.0	1.5	2.1	0.6	1.6	2.0	2.7	1.7	.
Services	1.5	2.5	3.1	3.1	2.7	2.6	2.5	2.5	2.5	2.3	2.5	2.5	.
<b>Other price and cost indicators</b>													
Industrial producer prices	5.3	2.2	0.0	1.3	2.5	1.5	1.3	1.3	1.4	1.3	1.4	1.1	.
Unit labour costs	1.3	2.5	2.1	1.5	2.0	2.5	.	-	-	-	-	-	-
Labour productivity	1.3	0.2	0.5	1.0	0.7	0.2	.	-	-	-	-	-	-
Compensation per employee	2.6	2.8	2.6	2.5	2.7	2.8	.	-	-	-	-	-	-
Total hourly labour costs	2.8	3.4	3.5	3.5	2.7	2.9	.	-	-	-	-	-	-
Oil prices (EUR per barrel)	31.0	27.8	26.5	26.5	28.4	22.7	25.1	21.9	23.3	25.0	26.5	23.9	24.7
Commodity prices (EUR)	20.4	-8.1	-0.9	5.6	-3.2	-7.9	-5.8	-8.0	-9.6	-7.5	-5.2	-4.7	-3.7

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

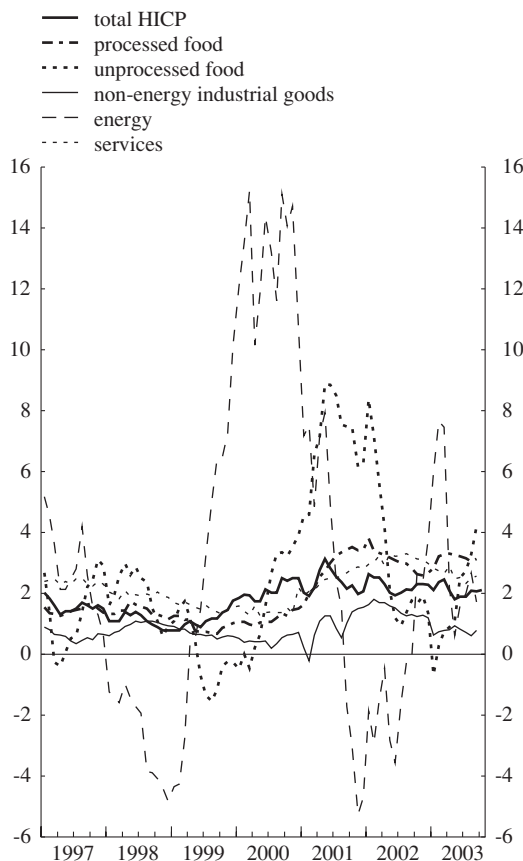
Note: For periods prior to 2001, HICP data do not include Greece. The other price and cost indicators include Greece for periods prior to 2001. For further details on the data, see the "Euro area statistics" section.

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

### Chart 13

#### 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.

growth rate of energy prices (from 2.7% in August to 1.7% in September). This reflected a fall in euro-denominated oil prices of around 10% compared with the average level registered in August. Although largely driven by a decline in US dollar-denominated oil prices, this fall was also accentuated by the further slight appreciation of the euro in September (based on monthly averages).

The annual growth rate of the HICP excluding these more volatile components increased by 0.1 percentage point to stand at 2.0% in September. This rise was related to a slight increase in the annual growth rates of processed food prices and of non-energy industrial goods prices. Clothing and footwear prices, in particular, rebounded in September after a somewhat stronger seasonal decline than in previous years' summer sales. Meanwhile, the annual growth rate of services prices remained unchanged at 2.5%.

Taking a longer-term perspective, Box 4 reviews the recent progress made with regulatory reforms in network industries (such as gas, electricity and telecommunications), as well as price developments since early 2000.

### Box 4

#### Recent developments in network industries

Regulatory reforms in European network industries are widely considered as being beneficial to consumers in terms of entailing lower prices.<sup>1</sup> This box reviews the recent progress made with regulatory reforms in the telecommunications, electricity and gas sectors and describes price developments in these sectors relative to overall HICP developments. Telecommunications, electricity and gas taken together account for almost 6% of the overall euro area HICP.

Regulatory reforms in the telecommunications sector have continued to exert a downward influence on price developments, albeit significantly less than in the initial years following market liberalisation. Increased competition is required, especially in the energy sector.

#### Recent progress in regulatory reforms

The regulatory reform process is most advanced in the **telecommunications sector**, although effective competition in a number of countries and market segments remains rather limited, in particular on account of

<sup>1</sup> See, for example, European Central Bank, "Price effects of regulatory reform in selected network industries", March 2001.

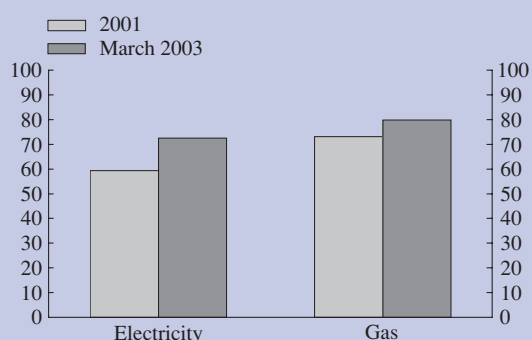
the fact that incumbent operators still retain a significant market share. The mobile phone market share of the subsidiaries of incumbent fixed operators was above 40% in each euro area country in 2002, the most recent year for which information is available.<sup>2</sup> The market share of the incumbents in fixed telecommunications in each euro area country was even larger: generally above 80% for local calls and between 60% and 80% for long-distance and international calls.

In the **electricity market**, several euro area countries have extended the degree of market opening since 2001. The chart below shows the percentage share of the euro area electricity market open to competition by March 2003 and the progress achieved since 2001. More than 70% of the euro area electricity market is now formally open to competition, even if significant differences among euro area countries still exist, with France and Greece having the lowest degree of electricity market opening (slightly above 30%). Despite progress in the formal opening of the electricity market in some countries, competition often remains limited, mainly on account of the position of dominant incumbents and weak regulatory authorities.

The **gas market** has opened up further since 2001. Close to 80% of the euro area gas market is now formally open to competition, but effective competition still seems relatively limited and clearly lower than in the electricity sector. The main obstacles to competition are disparities in network access tariffs across countries and regions, the concentration of gas production and import in a few companies and the slow development of gas trading hubs, preventing new entrants from buying wholesale gas.

All in all, regulatory reforms in network industries progressed further in 2002 and in 2003, albeit with differences across sectors and countries. In November 2002 the EU Transport, Telecommunications and Energy Council set a timetable for full energy market opening, with a deadline of 1 July 2004 for non-household users and 1 July 2007 for household users. This agreement represents an important step forward in the liberalisation of energy markets.

**Percentage share of euro area energy market open for competition**



Sources: European Commission and ECB calculations. The ECB calculation of the euro area market shares is based on electricity and gas demand weights in 2001 and 2002 respectively. For the gas market, data for Greece, Portugal and Finland are missing.

### Price developments in network industries

Following the gradual introduction of regulatory reforms in the **telecommunications sector**, prices in the euro area continued to decline in 2002 and in 2003, albeit at a considerably slower pace than during the period 2000-01 (see the table below). In 2002 and in the period from January to September 2003, the HICP sub-index for telecommunications services continued to contribute negatively to overall HICP inflation, albeit only marginally. Since 2000, however, the cumulative downward effect of the HICP sub-index for telecommunications on total HICP inflation has been quite large and amounts to 0.33 percentage point.

The HICP sub-index for **electricity** for the euro area as a whole rose by 2.8% during the period from January to September 2003, which was higher than overall HICP inflation. However, the average increase over the period 2000-02 was lower than the one for overall HICP. Electricity prices continued to be strongly affected by factors that are independent of the chosen regulatory regime, such as the mix of primary energy sources, fuel prices and country-specific effects (e.g. changes in indirect taxation). Moreover, price developments over recent

<sup>2</sup> The source of market shares data in the telecommunications sector is Eurostat.

### Contribution of telecommunications, electricity and gas prices to the overall euro area HICP

	Annual percentage change				Contribution to HICP (change in percentage points)				
	2000	2001	2002	Jan.-Sep. 2003	2000	2001	2002	Jan.-Sep. 2003	2000-Sep. 2003
Total HICP	2.1	2.3	2.3	2.1					
Telecoms	-8.2	-4.9	-0.6	-0.5	-0.20	-0.11	-0.01	-0.01	-0.33
Electricity	-1.1	2.0	1.8	2.8	-0.02	0.04	0.04	0.06	0.11
Gas	11.6	14.7	-2.3	4.4	0.15	0.21	-0.03	0.06	0.38

Sources: Eurostat and ECB calculations.

years are more likely to have reflected pre-emptive pricing policies by incumbents and price setting by the regulators than the impact of the limited effective competition in the electricity sector. Increased competition will be essential to ensure favourable price developments.

Developments in **gas prices** only partly reflect changes in the level of competition, while prices are largely affected by the underlying evolution of world market energy prices and the exchange rate of the euro. Gas prices in the euro area, as measured by the HICP sub-index, decreased by 2.3% in 2002, with the result that the HICP sub-index for gas contributed negatively to overall HICP inflation. This was reversed in 2003, and the contribution of gas to overall HICP inflation in the euro area during the period from January to September 2003 was 0.06 percentage point. As with the electricity sector, further regulatory reforms are needed to allow more incumbent rents to be distributed to consumers.

Price level dispersion across euro area countries declined slightly last year for national and international telephone calls, gas prices and households' electricity prices. However, significant differences in price developments across countries and types of service still exist in all network industries and reflect, among other things, an uneven progress in the implementation of regulatory reforms and the different regime of indirect taxation across countries.

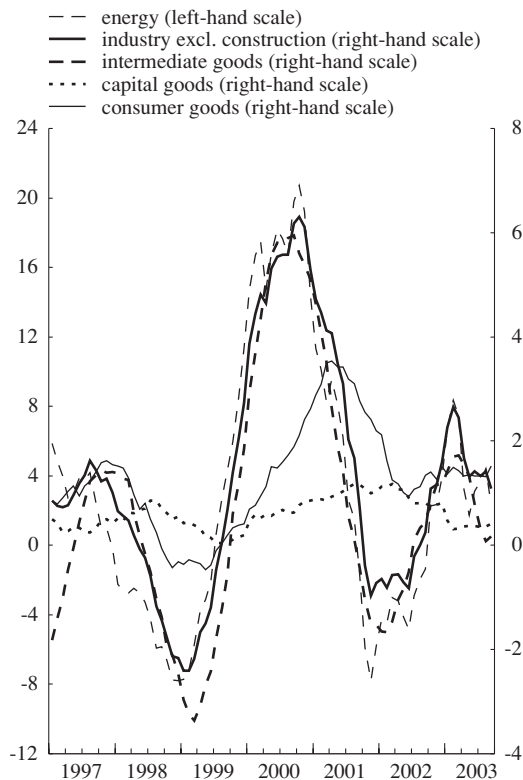
### Industrial producer prices remained subdued in September 2003

After a small increase in August 2003, the annual growth rate of euro area industrial producer prices slowed to 1.1% in September, down from 1.4% in August (see Chart 14). This easing was entirely related to a decline in energy prices that reflected a base effect and possibly the fall in oil prices observed between August and September. In contrast, the annual growth rate of producer prices excluding construction and energy rose marginally, from 0.6% in August to 0.7% in September, reflecting slight increases in most industrial sectors.

Overall, producer price pressures remain subdued. The annual rate of change in producer prices excluding construction and energy has been falling gradually (from 1.2%

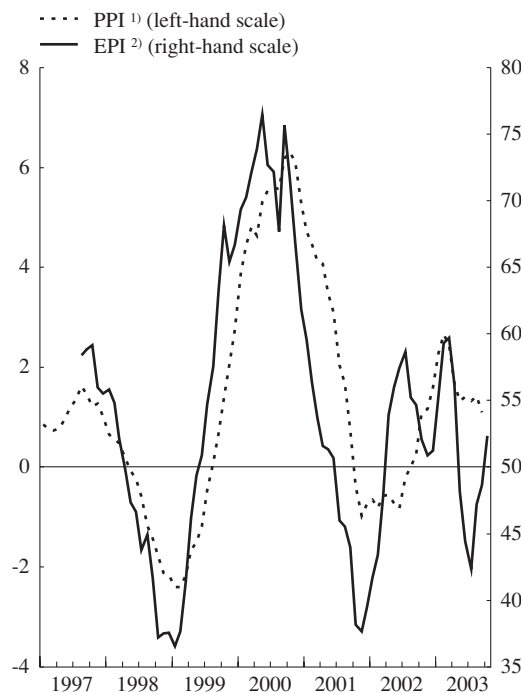
in the first quarter of 2003 to 0.6% in the third). This decline, which in part reflects the impact of the appreciation of the euro, is mainly due to price developments in the intermediate goods industries. In contrast, the annual rates of change in capital and consumer goods prices have remained broadly stable since the beginning of the year.

Survey indicators of producer price developments point to a return of some upward pressures in October (see Chart 15). For the first time in six months, the Eurozone Price Index (EPI) from the Purchasing Managers' Survey rose above the no-change threshold of 50, from 48.7 in September to 52.3 in October, driven up by higher commodity prices resulting mainly from a continued increase in the demand for basic raw materials.

**Chart 14****Breakdown of industrial producer prices for the euro area***(annual percentage changes; monthly data)*

Source: Eurostat.

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

**Chart 15****Overall producer prices and manufacturing input prices for the euro area***(monthly data)*

Sources: Eurostat and Reuters.

1) Producer Price Index; annual percentage changes; excluding construction.

2) Eurozone Price Index; manufacturing input prices from the Purchasing Managers' Survey. An index value above 50 indicates an increase in manufacturing input prices, whereas a value below 50 indicates a decrease. For periods prior to 2001, EPI data do not include Greece.

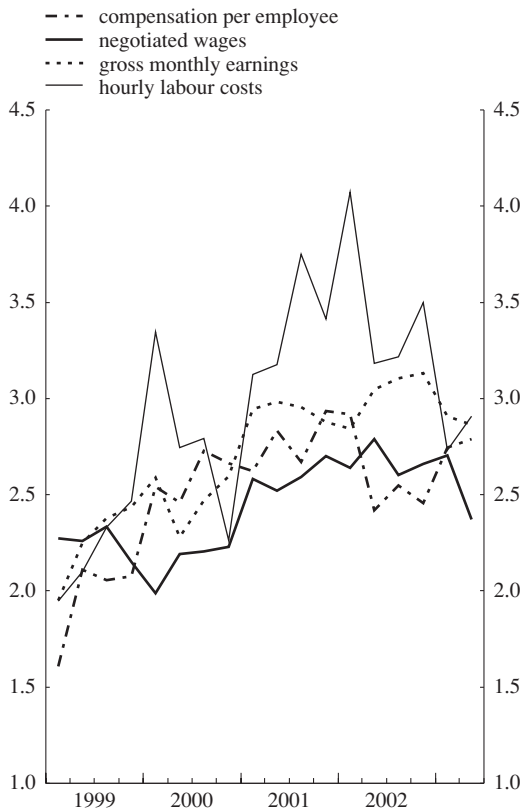
**Wage growth levelling off in the first half of 2003**

Indications from labour cost indicators in the first half of 2003 provide a mixed picture of developments in overall wage growth. Euro area total hourly labour costs in the non-agricultural business sector increased by 2.9% year on year in the second quarter of 2003, a growth rate broadly similar to that recorded in the first quarter (see Chart 16). This implies a noticeable decline (by around 0.5 percentage point) from the average growth rate of hourly labour costs recorded in 2001 and 2002, and also a perceptible fall in the rate of growth of both wage and non-wage costs.

The annual growth rate of negotiated wages declined by 0.3 percentage point to stand at 2.4% in the second quarter of 2003. This fall, however, stemmed partly from a strong discrepancy in Germany between the substantial pay increases awarded last year and the outcome of a lower number of new wage agreements signed this year. Correcting for such effects, negotiated wage growth is likely to have remained broadly unchanged in the second quarter of 2003 and in line with average growth recorded in 2001 and 2002. Data on monthly earnings, available up to the second quarter of 2003, also indicate that annual growth rates have remained broadly in line with those of the previous two years.

**Chart 16**  
**Selected labour cost indicators for the euro area**

(annual percentage changes)



Sources: Eurostat, national data and ECB calculations.

In some contrast, the annual growth rates of compensation per employee, at around 2.7% in the first half of 2003, was slightly above the average for 2002. Sectoral data on compensation per employee are now available for the second quarter of 2003. Growth in compensation per employee in the services sector remained in line with the averages for 2001 and 2002. However, there was a broadly based increase in the annual growth rate of compensation per employee in market-related services (from 2.8% in the first quarter to 3.4% in the second quarter). This increase was partly offset by a decline in the growth of compensation per employee in public administration and related services. In industry the average growth rate of compensation per employee recorded in the first half of the year remained between 0.2

and 0.3 percentage point higher than the averages recorded in 2001 and 2002.

All in all, despite some mixed indications, the evidence gathered still points to a picture of wage growth in the euro area levelling off since the beginning of 2002.

After a gradual improvement in the course of 2002, productivity growth declined further in the second quarter of 2003. As a result, unit labour cost growth increased by 0.5 percentage point to 2.5% in the second quarter of 2003. The year-on-year increase in unit labour costs since the beginning of 2003 appears to be somewhat higher than in 2002, but still lower than in 2001.

#### **HICP inflation expected to continue to hover around 2%**

Looking ahead, inflation rates are likely to hover around 2% for several more months to come. Developments in food prices could imply some further upward pressure for the remainder of 2003 and early 2004 due to the heatwave this summer, while oil prices have remained higher than expected mainly as a result of political uncertainties in the Middle East. Moreover, in the course of 2004, planned increases in indirect taxes and administered prices in some euro area countries will have a temporary upward impact on inflation. This suggests that HICP inflation may not fall as quickly or as strongly as was expected previously.

However, over the medium term, inflation rates should ease, based on the assumption that wage developments will remain moderate. Moreover, the past appreciation of the euro should continue to dampen domestic price pressures. This picture is broadly in line with recently released forecasts by official and private sources (see Box 5 on the results of the 2003 Q4 Survey of Professional Forecasters).



**Box 5****Private sector expectations for inflation and economic activity in the euro area: results of the 2003 Q4 Survey of Professional Forecasters (SPF) and other available indicators**

This box reports the results of the 21st Survey of Professional Forecasters (SPF) conducted by the ECB between 16 and 28 October 2003. The SPF gathers expectations for euro area inflation, economic activity and unemployment from experts affiliated to financial or non-financial institutions based in the European Union. It is important to bear in mind that, given the diversity of the panel of participants, aggregate SPF results can reflect a relatively heterogeneous set of subjective views and assumptions. Whenever possible, SPF results are compared with other available indicators of private sector expectations for the same horizons.<sup>1</sup>

**Inflation expectations for 2003, 2004 and 2005**

Survey participants adjusted HICP expectations slightly upwards as compared with the previous SPF conducted in July 2003. HICP inflation is now expected to stand at 2.0% in 2003 compared with 1.9% in the 2003 Q3 SPF. Considering this was the last SPF of the year, uncertainty surrounding the final outcome for 2003 remains unusually high. Indeed, many participants raised the possibility of unforeseen developments in oil prices as well as some concern over the likely magnitude of the upward pressure on prices resulting from the lagged impact on food prices of the unusually hot summer weather and droughts in the euro area. HICP inflation expectations for 2004 and 2005 have also been revised upwards by 0.1 percentage point as compared with the previous SPF. They now stand at 1.6% and 1.8% respectively. The expected decline in HICP inflation in 2004 is generally attributed to a further gradual appreciation of the euro and a continuation of relatively subdued economic growth. However, the implementation of a number of fiscal measures (such as the planned increases in petrol and tobacco taxes in France or the reform of the health system in Germany) in early 2004 would pose upside risks to the forecast. Overall, most results tend to be slightly above the figures reported in the October 2003 issues of Consensus Economics (see the table below) and the Euro Zone Barometer (2.0% for 2003 and 1.5% for 2004).

**Results from the 2003 Q4 SPF, the 2003 Q3 SPF and Consensus Economics**

(annual percentage changes, unless otherwise indicated)

	Survey horizon					
	2003	Sep. 2004	2004	Sep. 2005	2005	Longer-term <sup>2)</sup>
<b>HICP inflation</b>						
2003 Q4 SPF	2.0	1.6	1.6	1.8	1.8	1.9
Previous SPF (2003 Q3)	1.9	-	1.5	-	1.7	1.9
Consensus (Oct. 2003)	2.0	-	1.5	-	1.7	1.8
<b>Real GDP growth</b>						
2003 Q4 SPF	0.5	1.6	1.7	2.2	2.3	2.4
Previous SPF (2003 Q3)	0.7	-	1.7	-	2.3	2.4
Consensus (Oct. 2003)	0.5	-	1.7	-	2.2	2.1
<b>Unemployment rate<sup>1)</sup></b>						
2003 Q4 SPF	8.8	8.8	8.9	8.5	8.5	7.4
Previous SPF (2003 Q3)	8.9	-	8.9	-	8.5	7.4

1) As a percentage of the labour force.

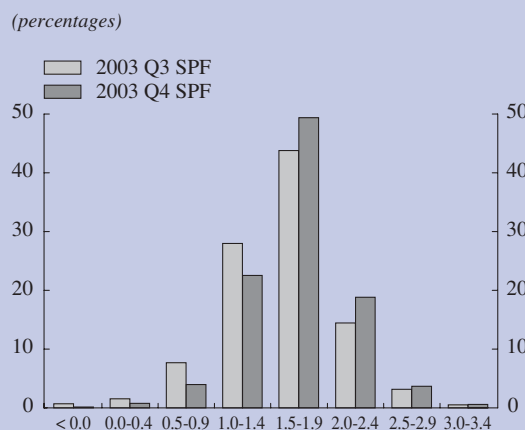
2) Longer-term inflation expectations refer to 2008. The Consensus Economics forecast refers to the period 2009-13 (data published in the October 2003 Consensus Economics Survey).

1) These horizons are the calendar years 2003, 2004, 2005 and "five years ahead, i.e. 2008". Expectations for two additional "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 Q4 SPF, these rolling horizons were September 2004 and 2005 for the HICP inflation rate, the second quarter of 2004 and 2005 for the rate of growth in real GDP and August 2004 and 2005 for the euro area unemployment rate. These rolling horizons may be useful to identify dynamic patterns that are difficult to detect from averages over calendar years.



SPF participants are also asked to assign a probability distribution to their forecasts. This probability distribution is expressed in percentages falling within specific intervals. The probability distribution resulting from the aggregation of responses thus helps to assess how, on average, survey participants gauge the risk of the actual outcome being above or below the most likely range. Chart A reports the aggregate probability distributions for average annual rates of HICP inflation in 2004 in the last two survey rounds. Even though the bulk of the distribution remains centred in the 1.5-1.9% range for expected HICP inflation in 2004, there has been a clear shift to the right.

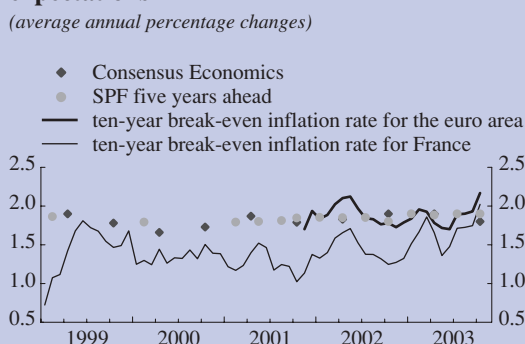
**Chart A: Probability distribution for average inflation in 2004 in the last two SPF rounds**



**Indicators of longer-term inflation expectations**

Longer-term inflation expectations (i.e. five-years ahead) reported by SPF participants remained stable at 1.9%, unchanged for the eighth consecutive SPF. This is broadly consistent with other available measures of longer-term inflation expectations. In October 2003 the Euro Zone Barometer forecast an average inflation rate of 1.9% in 2007, and Consensus Economics published a euro area inflation rate of 1.8% for the period 2009-13 as a whole. However, in financial markets, the ten-year break-even inflation rates derived from French government bonds linked to the euro area HICP (excluding tobacco) rose slightly over recent months (see Chart B), although it needs to be noted that these break-even inflation rates are not pure measures of market participants' long-term inflation expectations. They are affected by a variety of risk premia (including inflation uncertainty and liquidity premia) which might be behind the recent increases.<sup>2</sup>

**Chart B: Indicators of long-term inflation expectations**



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

**Expectations for real GDP growth and unemployment in the euro area**

The outlook for economic activity has been revised downwards for the third consecutive SPF. Compared with the previous SPF, real GDP growth has been revised down by 0.2 percentage point, to 0.5% in 2003. For 2004 and 2005, the outlook remains unchanged from the previous SPF, with average GDP growth expected to stand at 1.7% and 2.3%, respectively. The anticipated pick-up in activity in 2004 is mainly based on the assumed recovery of the world economy and an expected gradual decline in oil prices. Domestic demand is projected to lag somewhat in line with the employment outlook. These forecasts are similar to those published in the October issues of Consensus Economics and the Euro Zone Barometer. Both forecast GDP growth of 0.5% in 2003 and 1.7% in 2004. Finally, the expected long-term growth rate five years ahead (i.e. in 2008) stands at 2.4%, unchanged from the previous SPF survey rounds.

<sup>2</sup> 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.

The unemployment rate in the euro area is now expected to stand at 8.8% in 2003, a slight downward revision as compared with the previous SPF round. The recovery in 2004 is not expected to be strong enough to produce an improvement in the euro area labour market until at least mid-2004. The situation should improve in 2005, as the unemployment rate is expected to decrease to 8.5%. Respondents' optimism with regard to long-term developments nevertheless appears dependent on the implementation of further labour market reforms.

### 3 Output, demand and labour market developments

#### Weak economic activity in the first half of 2003

Eurostat's second estimate of euro area national accounts data for the second quarter of 2003 confirmed the weakness of real GDP growth in the first half of 2003 (see Table 4). In addition, real GDP growth in the fourth quarter of 2002 was revised downwards to zero (from 0.1%).

The composition of real GDP growth from the expenditure side was revised slightly in the latest data release. Domestic demand made a positive contribution to growth in the second quarter of 2003, whereas net exports had a negative impact on growth. The latest data release shows that the positive impact from domestic demand in the second quarter was slightly higher than anticipated in the first estimate, while the contribution

**Table 4**  
**Composition of real GDP growth in the euro area**  
(percentage changes, unless otherwise indicated; seasonally adjusted)

	Annual rates <sup>1)</sup>								Quarterly rates <sup>2)</sup>				
	2000	2001	2002	2002 Q2	2002 Q3	2002 Q4	2003 Q1	2003 Q2	2002 Q2	2002 Q3	2002 Q4	2003 Q1	2003 Q2
Real gross domestic product	3.5	1.6	0.9	0.9	1.0	1.1	0.7	0.2	0.5	0.2	0.0	0.0	-0.1
<i>of which:</i>													
Domestic demand	2.9	1.0	0.2	-0.1	0.4	0.8	1.3	1.3	0.3	0.2	0.3	0.5	0.3
Private consumption	2.7	1.8	0.4	0.1	0.2	0.7	1.6	1.4	0.4	0.3	0.3	0.6	0.2
Government consumption	2.1	2.4	2.8	3.2	3.1	2.1	1.8	1.8	0.7	0.5	0.1	0.4	0.7
Gross fixed capital formation	4.9	-0.1	-2.6	-3.5	-2.7	-1.7	-2.2	-1.0	-1.4	0.0	0.3	-1.2	-0.2
Changes in inventories <sup>3)</sup>	-0.1	-0.5	0.0	0.0	0.3	0.3	0.4	0.3	0.2	-0.1	0.0	0.3	0.1
Net exports <sup>3)</sup>	0.6	0.6	0.7	1.0	0.6	0.3	-0.5	-1.0	0.2	0.1	-0.3	-0.5	-0.4
Exports <sup>4)</sup>	12.6	3.3	1.7	1.7	3.3	4.0	2.2	-1.0	2.5	1.5	-0.2	-1.6	-0.7
<i>of which: goods</i>	12.6	3.1	1.8	1.0	3.5	4.9	2.4	0.0	1.9	2.2	-0.1	-1.6	-0.5
Imports <sup>4)</sup>	11.2	1.7	0.0	-1.1	2.0	3.5	3.9	1.8	2.3	1.5	0.4	-0.4	0.2
<i>of which: goods</i>	11.3	1.1	-0.1	-1.9	2.4	4.0	4.8	3.3	2.1	2.1	0.7	-0.1	0.6
Real gross value added:													
Agriculture and fishing	-0.5	-1.5	-0.5	0.4	-0.6	-2.2	-0.9	-1.2	-0.3	0.2	-0.5	-0.3	-0.6
Industry	3.7	0.5	0.5	0.7	0.8	1.3	0.4	-0.8	0.5	0.2	-0.3	0.1	-0.8
Services	4.0	2.5	1.5	1.6	1.4	1.5	1.1	0.7	0.6	0.2	0.3	0.0	0.2

Sources: Eurostat and ECB calculations.

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

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

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

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

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

from net exports was revised downwards. Although exports contracted in the first half of 2003 as a whole, the decrease was less pronounced in the second quarter than in the first quarter.

Growth differed across the services and industry sectors during the first half of 2003. The services sector expanded in the second quarter, after remaining broadly stable in the first quarter. The latest data confirm that growth in the services sector has slowed to a lesser extent than in other sectors, reflecting the less cyclical nature of the services sector as a whole. They also confirm that the industrial sector contracted in the second quarter of the year, after some signs of a recovery in the first quarter.

### Signs of growth in the industrial sector

Despite a contraction in August, industrial production growth is likely to be positive in the third quarter of 2003. The latest estimates imply that industrial production (excluding construction) fell by 0.6% month on month in August, following an increase of 1.0% in July (see Table 5). In terms of its sectoral components, the decrease in August mainly reflected a contraction in the output of capital

and consumer goods (especially durables). These industrial groupings also experienced the largest rise in production in July. On a three-month moving average basis, all components showed positive growth rates, apart from capital goods production, which remained negative. The production of energy rebounded particularly strongly, while the production of consumer goods also strengthened.

The specific profile of production growth in July and August is partly the result of a holiday effect in Germany. It is more appropriate therefore to assess the latest developments on the basis of average growth over the two months together. This implies an underlying improvement in industrial activity in the third quarter. In the three-month period from June to August 2003, compared with the period from March to May, industrial production stabilised.

According to the latest European Commission Business Survey, capacity utilisation increased in October compared with July (see Table 6). With firms reporting unchanged current production capacity, the latest data for capacity utilisation suggests that there has been a pick-up in industrial production since July.

**Table 5**  
**Industrial production in the euro area**

(annual percentage changes, unless otherwise indicated)

	2001	2002	2003	2003	2003	2003	2003	2003	2003	2003	2003	2003	2003	2003
			June	July	Aug.	June	July	Aug.	Mar.	Apr.	May	June	July	
			month-on-month			three-month moving averages								
Total industry excluding construction	0.5	-0.5	-1.3	0.8	-0.4	0.0	1.0	-0.6	0.2	-0.2	-0.5	-0.5	0.0	
<i>by main industrial groupings:</i>														
Total indus. excl. construction and energy	0.2	-0.7	-1.6	0.5	-0.8	-0.1	1.1	-0.7	-0.1	-0.2	-0.6	-0.6	-0.1	
Intermediate goods	-0.5	0.4	-0.5	0.1	0.4	0.4	0.7	0.1	0.0	0.0	-0.5	-0.6	0.1	
Capital goods	1.6	-1.9	-3.8	1.4	-2.8	-1.2	2.0	-1.6	-0.4	-0.7	-0.8	-0.7	-0.5	
Consumer goods	0.5	-0.4	-0.9	1.5	0.6	0.8	1.3	-0.7	0.0	-0.1	-0.2	-0.3	0.6	
Durable consumer goods	-1.8	-5.3	-6.7	-2.3	-3.8	0.4	2.7	-2.5	-1.7	-1.8	-2.1	-1.0	0.1	
Non-durable consumer goods	0.9	0.6	0.2	2.2	1.2	0.8	1.1	-0.4	0.3	0.2	0.1	-0.2	0.6	
Energy	1.6	1.0	2.0	1.7	3.5	2.0	0.1	0.7	3.1	-0.5	-0.5	-0.1	2.1	
Manufacturing	0.3	-0.7	-1.7	0.7	-0.9	-0.2	1.2	-0.8	-0.1	-0.2	-0.6	-0.5	-0.1	

Sources: Eurostat and ECB calculations.

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

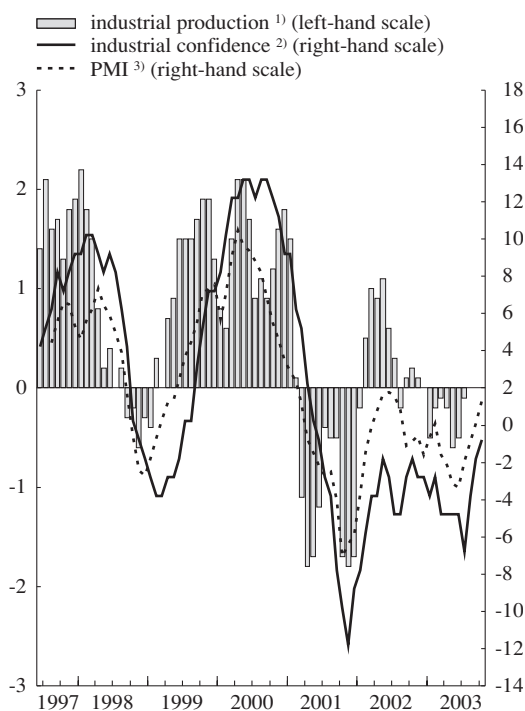
### Survey data for October 2003 underscore improved economic conditions

The results of the European Commission Business Survey for October show a continued improvement in industrial confidence (see Table 6). This development reflects a more optimistic assessment of current order books, although this was partly offset by a slight decline in production expectations. In terms of the main industrial groupings, the increase in industrial confidence was broadly based. Overall, these results point to an upturn in activity in the second half of the year.

The Purchasing Managers' Index (PMI) rose significantly in October, signalling the strongest monthly improvement in business conditions within the manufacturing sector since July 2002 (see Chart 17). In line with industrial confidence, the PMI suggests that the third quarter is likely to see a stabilisation of manufacturing production overall, after a strong fall in the second quarter. Underlying the increase in the PMI in October were, among other factors, an improved assessment of changes in output and new orders to levels not seen since July and May 2002, respectively. Opinion surveys in the services

### 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.

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

### Table 6 Results from European Commission Business and Consumer Surveys for the euro area

(seasonally adjusted data)

	2000	2001	2002	2002	2003	2003	2003	2003	2003	2003	2003	2003	2003
				Q4	Q1	Q2	Q3	May	June	July	Aug.	Sep.	Oct.
Economic sentiment index <sup>1)</sup>	2.5	-3.0	-1.5	-0.1	-0.5	-0.1	0.3	0.1	0.0	-0.1	0.3	0.4	0.2
Consumer confidence indicator <sup>2)</sup>	12	6	0	-3	-8	-8	-6	-9	-8	-7	-6	-6	-6
Industrial confidence indicator <sup>2)</sup>	12	-2	-4	-3	-4	-5	-4	-5	-5	-7	-4	-2	-1
Construction confidence indicator <sup>2)</sup>	16	10	2	-1	1	0	-1	0	-1	1	-2	-2	0
Retail trade confidence indicator <sup>2)</sup>	5	0	-9	-8	-10	-8	-6	-6	-7	-5	-7	-5	-3
Services confidence indicator <sup>2)</sup>	11	-4	-18	-23	-25	-21	-14	-21	-20	-16	-13	-12	-10
Business climate indicator <sup>3)</sup>	1.4	-0.2	-0.5	-0.3	-0.4	-0.6	-0.6	-0.6	-0.6	-0.8	-0.5	-0.4	-0.2
Capacity utilisation (%)	84.5	82.9	81.4	81.5	81.1	80.8	81.0	-	-	80.7	-	-	81.2

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

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

- 1) Percentage changes compared with the previous period.
- 2) Percentage balances; data shown are calculated as deviations from the average over the period since April 1995 for the services confidence indicator, since July 1986 for the retail trade confidence indicator, and since January 1985 for the other confidence indicators.
- 3) Units are defined as points of standard deviation.

sector also recorded strong improvements in October, following significant increases since July. Most components in the Purchasing Managers' Survey for the services sector have risen to levels not seen since the end of 2000.

### Subdued developments in private consumption in the third quarter of 2003

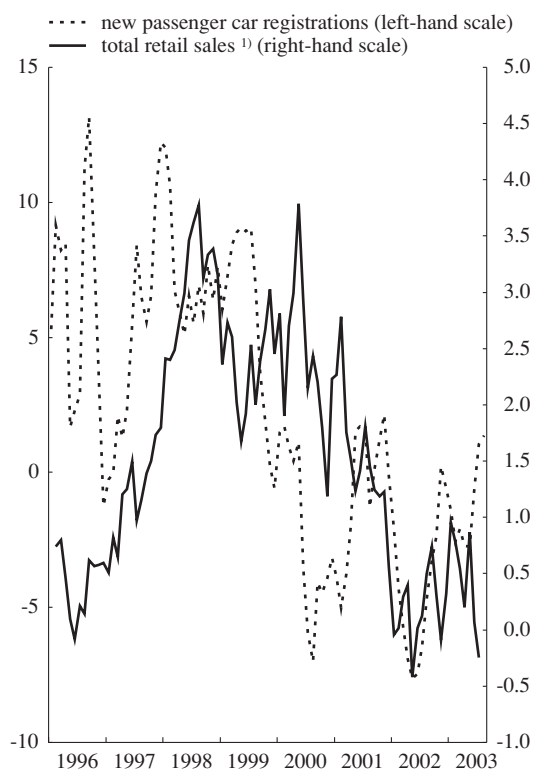
Retail sales volumes decreased slightly in August 2003, after increasing somewhat in July, pointing to subdued developments in private consumption (see Chart 18). The decrease in retail sales in August reflected a decrease in retail sales of non-food products, while sales of food products rose.

Other household spending indicators for September and October, such as new passenger car registrations and consumer and retail trade confidence, also give a mixed signal. On the one hand, new passenger car registrations increased significantly in September, by 1.9% month on month (see Chart 18). On the other hand, consumer confidence remained unchanged in October for the second consecutive month. While unemployment expectations improved, expectations for savings and for the future general economic situation deteriorated slightly. Plans for major current and future purchases, which are not included in the overall confidence indicator, remained broadly unchanged in October.

Confidence in the retail trade sector further improved in October. This was due to both a

### 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.

more favourable assessment of current and future business and lower reported stocks. In contrast, orders placed with suppliers and employment expectations declined in October.

**Table 7****Unemployment in the euro area***(as a percentage of the labour force; seasonally adjusted)*

	2000	2001	2002	2002 Q4	2003 Q1	2003 Q2	2003 Q3	2003 Apr.	2003 May	2003 June	2003 July	2003 Aug.	2003 Sep.
Total	8.5	8.0	8.4	8.6	8.7	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8
Under 25 years <sup>1)</sup>	16.6	15.7	16.2	16.4	16.8	16.8	16.8	16.8	16.8	16.8	16.8	16.8	16.8
25 years and over	7.4	7.0	7.4	7.6	7.7	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8

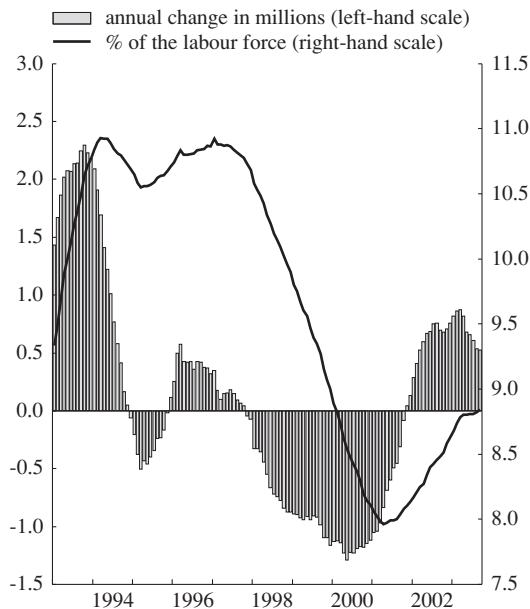
*Source: Eurostat.**Notes: In accordance with ILO recommendations. Data refer to the Euro 12 (including periods prior to 2001).**1) In 2002 this category represented 22.2% of total unemployment.***Labour market conditions remain unchanged**

The euro area unemployment rate remained unchanged at 8.8% in September 2003 (see Chart 19). It reached this level in March and has remained broadly unchanged since then (see Table 7). The number of unemployed rose by 23,000 in September, higher than the

increases recorded in the previous four months. Nevertheless, the monthly increases in unemployment are lower than in the period prior to May 2003.

Overall employment growth remained subdued in the first half of 2003 (see Table 8). On a quarterly basis, employment growth for the whole economy remained at zero in the second quarter of 2003, as in the previous three quarters. The latest figures show that employment expanded in the services and construction sectors in the second quarter of 2003. By contrast, employment growth remained negative in the industrial sector.

Employment expectations surveyed by the European Commission suggest that labour market conditions are unlikely to improve over the remainder of 2003. While there are some signs of improvement in the construction and industrial sector, employment expectations in the services sector remained unchanged in October, and declined in the retail sector. This picture is also confirmed by the PMI survey data concerning labour markets. The PMI for employment rose in October, but it remained well below 50, indicating that developments in manufacturing employment are not expected to be positive in the near future. However, the level of the employment index was the highest since July 2002.

**Chart 19****Unemployment in the euro area***(monthly data; seasonally adjusted)**Source: Eurostat.**Note: Data refer to the Euro 12 (including periods prior to 2001).*

**Table 8****Employment growth in the euro area***(annual percentage changes, unless otherwise indicated; seasonally adjusted)*

	2000	2001	2002	2002	2002	2002	2003	2003	2002	2002	2002	2003	2003
				Q2	Q3	Q4	Q1	Q2	Q2	Q3	Q4	Q1	Q2
	Quarterly rates <sup>1)</sup>												
Whole economy	2.2	1.4	0.4	0.5	0.3	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0
<i>of which:</i>													
Agriculture and fishing	-1.6	-0.8	-2.0	-2.0	-1.9	-1.9	-2.3	-2.3	-0.4	-0.7	-0.4	-0.8	-0.5
Industry	0.9	0.4	-1.2	-1.1	-1.3	-1.6	-1.6	-1.5	-0.3	-0.4	-0.5	-0.3	-0.3
Excluding construction	0.5	0.3	-1.3	-1.2	-1.3	-1.7	-1.8	-2.0	-0.3	-0.4	-0.6	-0.5	-0.5
Construction	1.9	0.4	-1.1	-0.9	-1.3	-1.3	-1.0	-0.4	-0.3	-0.5	-0.2	0.0	0.3
Services	3.0	1.9	1.2	1.3	1.1	0.9	0.7	0.7	0.2	0.1	0.2	0.2	0.2
Trade and transport	3.1	1.6	0.5	0.6	0.2	0.0	-0.2	-0.1	-0.1	-0.1	-0.1	0.1	0.0
Finance and business	5.8	3.9	2.3	2.6	2.1	2.0	1.6	1.2	0.7	0.2	0.5	0.1	0.3
Public administration	1.6	1.3	1.3	1.3	1.4	1.2	1.1	1.1	0.3	0.3	0.3	0.3	0.3

*Sources: Eurostat and ECB calculations.**Note: Data refer to the Euro 12 (including periods prior to 2001). For further details on the data, see the "Euro area statistics" section.**1) Quarterly rates: percentage change compared with the previous quarter.***Increasing signs of an improvement in economic activity**

Real GDP was weak in the first half of the year but there are increasing signs of a pick-up in the second half. Production data up to August suggest positive growth in the third quarter. Business survey data up to October point to improving confidence, while capacity utilisation increased. Forthcoming data on

euro area production and demand should confirm this picture, which is also in line with recent forecasts from official and private sources (see Box 5 on the results of the 2003 Q4 Survey of Professional Forecasters). Taken together, these indications provide further support for the main scenario of a gradual improvement in economic activity this year, broadening and strengthening in the course of 2004.

**4 Exchange rate and balance of payments developments****Euro weakened slightly in October and early November**

Following the somewhat more pronounced fluctuations experienced in September, the movements in the foreign exchange markets were relatively subdued in October. Although the euro fluctuated within fairly narrow ranges against most major currencies as well as in nominal effective terms, in early November it stood somewhat below its level at the end of September. Amid continuing concern about global external imbalances, market analysts focused on economic news viewed as providing indications of the sustainability of the global economic recovery

and its potential implications for interest rates in different countries.

After strengthening quite considerably against the US dollar in September, the euro was broadly stable in October and weakened somewhat in early November amid a broader-based rebound of the US currency (see Chart 20). The stabilisation of the US dollar was mainly attributable to a firming of expectations regarding prospects for economic growth in the United States. In particular, data releases in October suggested robust underlying economic activity in the United States as evidenced by the better than expected advanced real GDP growth estimate



for the third quarter of 2003. However, there were still some uncertainties related to the US current account and budget deficits. The decision by the Federal Open Market Committee at its meeting on 28 October to leave interest rates on hold and to stand by its previous assessment that risks to inflation are biased to the downside, was widely expected and did not have any major

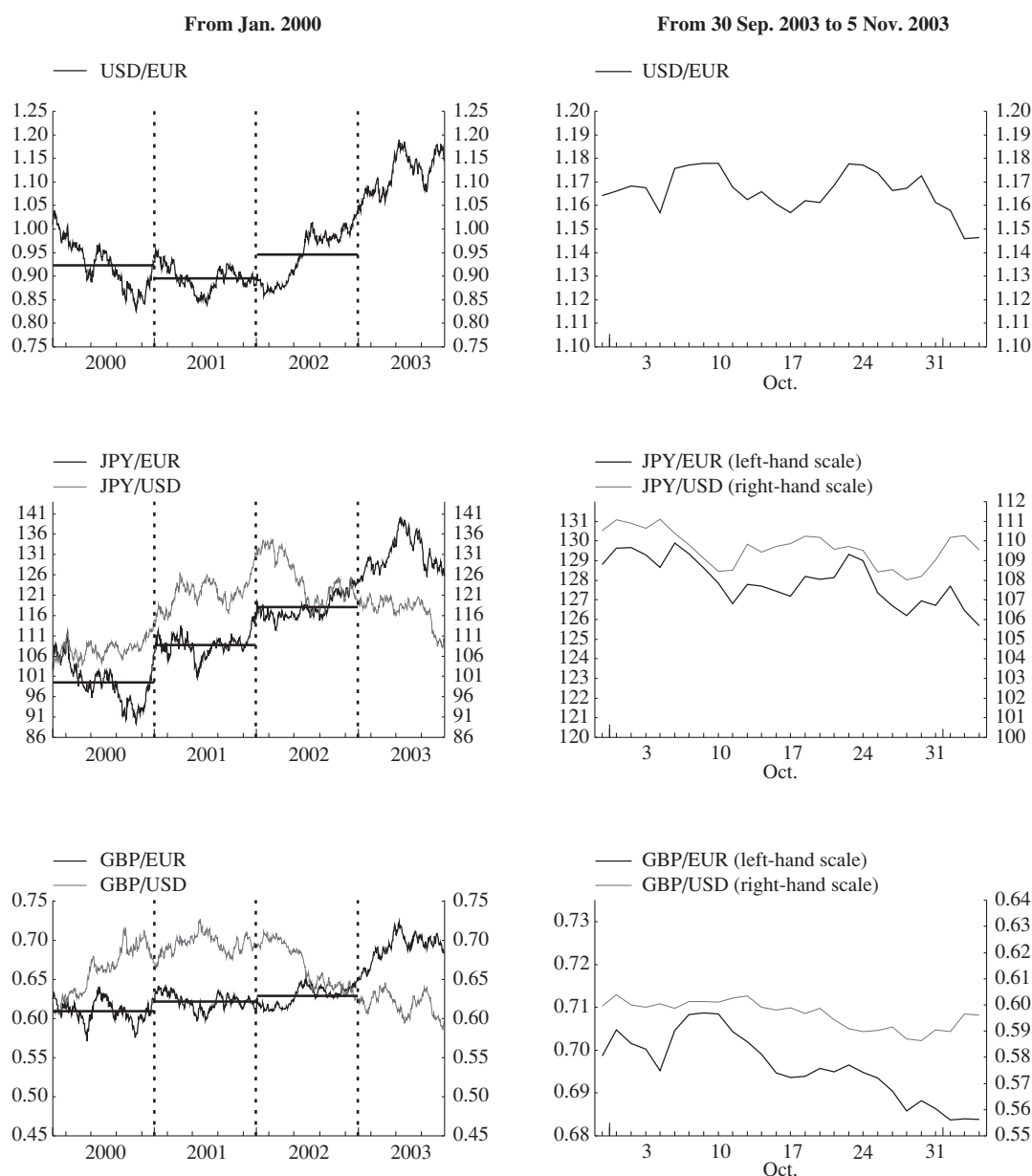
impact on foreign exchange markets. On 5 November the euro stood at USD 1.15, that is 1.5% weaker than its level at the end of September and 21.3% higher than its 2002 average.

The Japanese yen strengthened against the euro in early October as a result of the continuing broad-based upward pressure on

## Chart 20

### Patterns in exchange rates

(daily data)



Source: ECB.

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



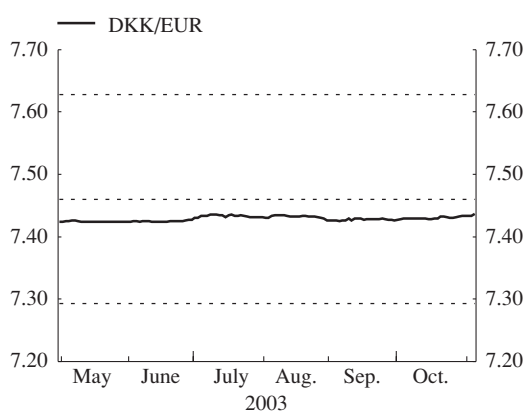
the Japanese currency that had started in late September (see Chart 20). Later in the month the yen broadly stabilised against both the euro and other major currencies, mainly in response to economic news pointing to a likely moderation of the growth rate of the Japanese economy compared with the high rate of growth experienced in the first half of 2003. The Bank of Japan's decision on 10 October to raise the upper bound of its target range for the current account to JPY 32 trillion was also seen as contributing to the stabilisation of the yen as markets interpreted this move as being in line with the foreign exchange policies previously adopted by the Japanese authorities. Towards the end of October and in early November, however, the yen again strengthened against the euro but weakened against the US dollar. On 5 November the euro stood at JPY 125.7, that is 2.4% weaker than at the end of September but 6.5% stronger than its 2002 average.

After some fluctuation during the first half of October, the UK currency experienced a rather broad-based appreciation in the second half of the month (see Chart 20). The pound sterling was supported by expectations of an increase in the UK short-term interest rate, fuelled by the release on 22 October of the minutes of the meeting of the Bank of

England's Monetary Policy Committee held earlier in the month which revealed that the vote to keep interest rates on hold had been closer than anticipated. The announcement also took the UK currency temporarily to a five-year high against the US dollar. Towards the end of the review period, the pound sterling was further supported by news suggesting relatively robust UK economic growth and stronger than expected retail sales in September. On 5 November the euro was quoted at GBP 0.68, that is 2.1% weaker than at the end of September but still 8.7% above its 2002 average.

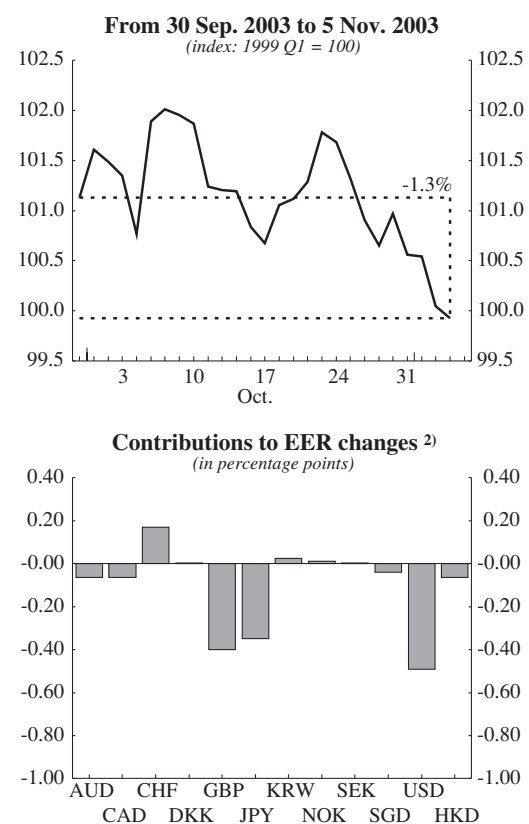
In ERM II, the Danish krone continued to move within a narrow range close to

**Chart 2 I**  
**Patterns in exchange rates within ERM II**  
*(daily data)*



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

**Chart 22**  
**The effective euro exchange rate and its decomposition<sup>1)</sup>**  
*(daily data)*



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

its central parity against the euro (see Chart 21). Turning to other European currencies, after having appreciated sharply in September, the Swedish krona partly consolidated its earlier gains in October and on 5 November was slightly stronger than its average against the euro in 2002. The euro appreciated somewhat against the Swiss franc and was broadly stable against the Norwegian krone in the review period. On 5 November the euro was respectively 6.7% and 9.8% above its 2002 average for these two currencies.

Regarding other currencies in the narrow group of major euro area trading partners, in the review period the euro appreciated somewhat relative to the Korean won while it depreciated significantly against the Canadian and Australian dollars. The

Australian and Canadian currencies were largely buoyed by October's continued rise in commodity prices, to which these two currencies have traditionally been closely linked. Increased market expectations of tighter monetary policy in Australia, which eventually materialised in early November, also contributed to the appreciation of the Australian dollar.

In the light of the above developments, on 5 November the nominal effective exchange rate of the euro – as measured against the currencies of 12 major trading partners – was 1.3% below its level at the end of September, but 11.1% stronger than its average level in 2002 (see Chart 22). Box 6 also reviews developments in the nominal effective exchange rate of the US dollar.

## Box 6

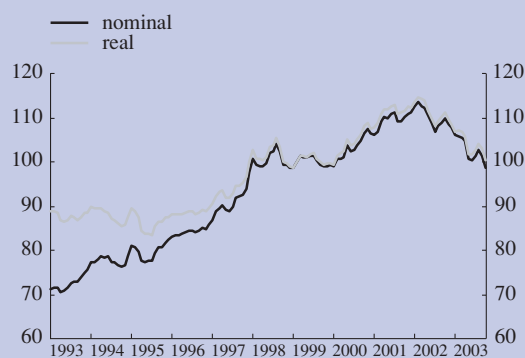
### Developments in the nominal effective exchange rate of the US dollar: a regional perspective

Based on the ECB's measure of the nominal effective exchange rate (NEER) of the US dollar against the currencies of 38 trading partners, the US currency had experienced a depreciation of around 10% by October 2003 compared to its average level in 2002, thereby partly reversing its strong nominal (and real) appreciation over the previous ten years (see Chart A).<sup>1</sup> The magnitude of this decline is somewhat greater than the 8.3% decline in the US Federal Reserve's broad index of the US currency over the same period, which employs a somewhat different methodology and a different set of partner countries.

The decline of the US dollar NEER over this period was not uniformly distributed, however. The depreciation of the US dollar by October 2003 with respect to its 2002 average was particularly pronounced against the euro, the Canadian dollar, and the group of "other countries" (see "absolute change" in Chart B). The latter includes several European currencies, which traditionally exhibit strong co-movement with the euro, the Australian dollar, the New Zealand dollar and the South African rand. Over the reference period, the US dollar also declined – albeit more moderately – against the Japanese yen and the pound sterling. By contrast, the currencies of the countries in Non-Japan Asia (NJA), which taken together have the highest weight in the

**Chart A: EER of the US dollar against the broad group of trading partners**

(Index: 1999 Q1=100)



Source: ECB.

<sup>1</sup> The NEER of the US dollar is based on a consistent trade matrix, which has been employed for the calculation of the NEER of the euro. A detailed account of the methodology is given in L. Buldorini, S. Makrydakakis and C. Thimann (February 2002), "The effective exchange rates of the euro", ECB Occasional Paper No. 2. This paper also provides the regional breakdown of the broad group of 38 trading partners.

ECB's broad NEER index of the US currency, remained quite stable vis-à-vis the US dollar, mainly reflecting the formal/informal peg of several currencies in NJA to the US dollar. The overall depreciation of the US dollar was partly offset by its strengthening against the Mexican peso, which had a significant impact on the US dollar NEER reflecting the importance of Mexico as a trading partner.

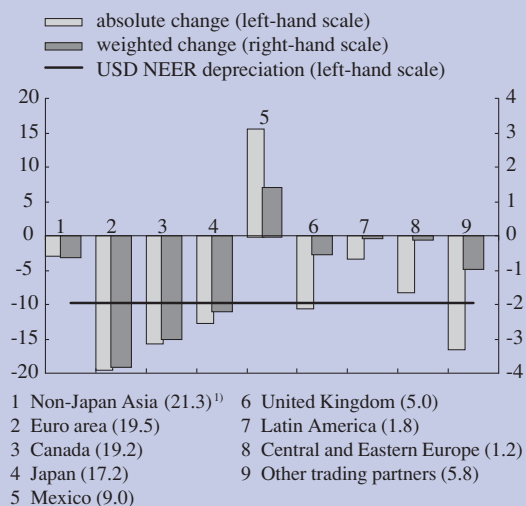
Given the weights in the US dollar NEER and, thus, the importance of the countries/regions as competitors for the US economy, the euro and the Canadian dollar accounted for most of the US dollar depreciation in nominal effective terms (see "weighted change" in Chart B). The appreciation of the euro alone explains almost four percentage points of the roughly 10% decline in the US dollar NEER, while the NJA currencies, which have more weight than the euro in the US dollar NEER index, account for roughly half a percentage point of the decline in the US dollar NEER.

Although the euro accounts for most of the US dollar NEER decline, its strong appreciation in 2002/03 needs to be gauged in the context of its strong depreciation in 1999/2000. As explained in a recent assessment of developments in the euro area's international cost and price competitiveness, the appreciation of the euro in 2002/03 could be largely interpreted as a fairly smooth and orderly return to levels broadly in line with historical averages.<sup>2</sup>

<sup>2</sup> See the article entitled "Developments in the euro area's international cost and price competitiveness" in the August 2003 issue of the Monthly Bulletin.

**Chart B: Change in the external value of the US dollar against selected countries/regions**

(in percentages, October 2003 with respect to 2002 average)



Source: ECB.

<sup>1</sup> Figures in brackets refer to trade weights (in percentages) of the countries/regions in the NEER index.

### Seasonally adjusted current account in surplus in August 2003

In August 2003 the current account of the euro area showed a surplus of €2.8 billion in seasonally adjusted terms. This reflected surpluses in both the goods and services balances that were partly offset by deficits in the income and current transfers balances (see Table 9).

Compared to the revised data for July 2003, the seasonally adjusted current account balance increased by €1.5 billion in August (see Table 9). The reduction in the income deficit of €1.9 billion accounted for most of this development.

From a longer-term perspective, the twelve-month cumulated current account surplus continued to decline reaching €36.1 billion in August 2003, that is €12.2 billion lower than a year earlier (see Chart 23). A lower trade surplus and a higher income deficit were the two driving factors behind this trend. This lower trade surplus has resulted from a small decline in export values, while import values remained broadly unchanged.

Charts 24 and 25 show that the fall in the value of extra-euro area exports of goods was associated with declining export prices and volumes (data available up to July 2003). Both declines related, in part, to the lagged effect of the euro appreciation that has taken

**Table 9****Current account of the euro area***(EUR billions, seasonally adjusted)*

	2003 Mar.	2003 Apr.	2003 May	2003 June	2003 July	2003 Aug.	12-month cumulated figures ending	
							2002 Aug.	2003 Aug.
<b>Current account balance</b>	0.4	-0.6	2.7	0.4	1.3	2.8	48.3	36.1
Goods balance	5.6	10.1	9.0	7.8	10.6	10.2	121.9	113.7
Exports	83.2	87.4	85.5	82.2	86.0	86.6	1,045.6	1,038.3
Imports	77.7	77.3	76.5	74.4	75.4	76.4	923.7	924.7
Services balance	1.9	0.8	0.3	0.9	1.1	1.2	4.5	17.2
Exports	27.5	26.4	25.8	26.0	26.3	26.0	328.5	326.2
Imports	25.6	25.6	25.4	25.1	25.2	24.9	324.0	309.0
Income balance	-3.2	-6.4	-1.9	-3.5	-4.7	-2.8	-28.2	-41.4
Current transfers balance	-3.7	-5.1	-4.8	-4.7	-5.7	-5.7	-49.9	-53.3

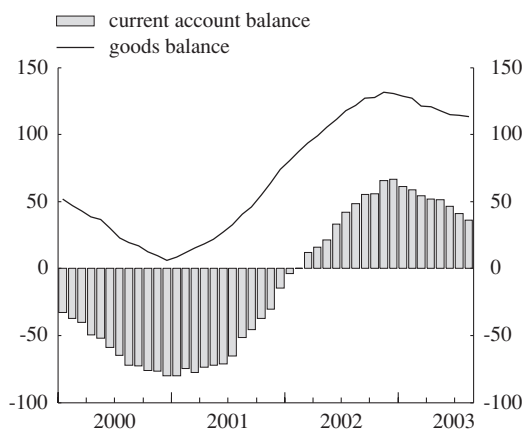
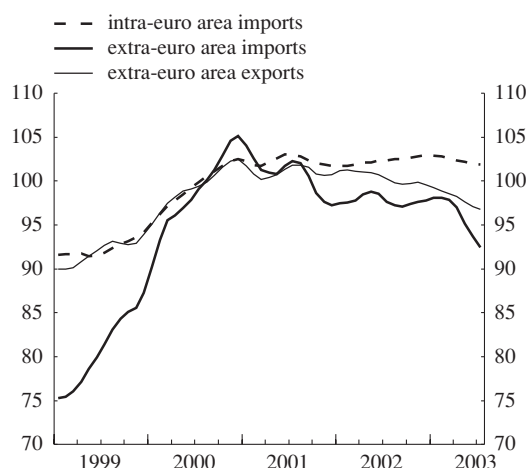
*Source: ECB.**Notes: Figures may not add up due to rounding. A detailed set of tables on Euro 12 balance of payments data can be found on the ECB's website.*

place since the second quarter of 2002, while export volumes also reflected sluggish foreign demand over the same period.

The relative stability of the value of extra-euro area imports has resulted from offsetting movements in import volumes and prices. The euro appreciation lowered import prices. This decline in import prices was particularly pronounced for oil and non-oil commodities – mostly priced in US dollars – reflecting the

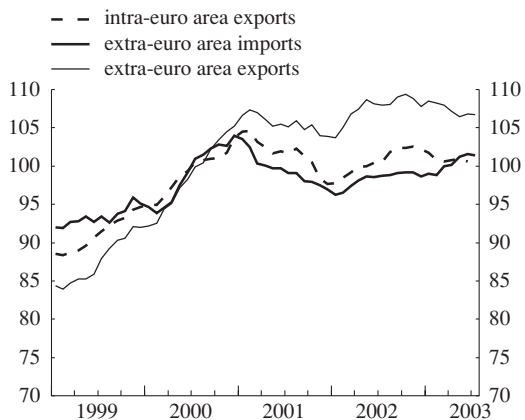
strong appreciation of the euro against the US currency over this period. Meanwhile, the euro appreciation stimulated import volumes, which started to rise in 2003, despite rather weak domestic demand in the euro area.

Data for the second quarter of 2003 show that extra-euro area import prices fell to a greater extent than intra-euro area import prices as the latter are not directly impacted by the euro appreciation (see Chart 24).

**Chart 23****The euro area current account and goods balances***(EUR billions; monthly data; seasonally adjusted; 12-month cumulated figures)**Source: ECB.***Chart 24****Intra- and extra-euro area trade unit value indices<sup>1)</sup>***(index: 2000 = 100, seasonally adjusted, three-month moving average)**Source: ECB calculations based on Eurostat data.**1) Latest observations are for July 2003.*

**Chart 25**  
**Intra- and extra-euro area trade**  
**volumes<sup>1)</sup>**

(index: 2000 = 100, seasonally adjusted, three-month moving average)



Sources: Eurostat and ECB calculations.  
 1) Latest observations are for July 2003.

Furthermore, Chart 25 shows that the lagged impact of the euro appreciation seems to have triggered some substitution towards extra- and away from intra-euro area import volumes.

**Large net outflows in portfolio investment in August 2003**

Following a similar pattern to the previous month, combined direct and portfolio investment of the euro area recorded net outflows of €39.6 billion in August 2003, mainly reflecting net outflows in portfolio investment (see Table 10). The direct investment account registered small net outflows of €1.7 billion.

**Table 10**  
**Balance of payments of the euro area**

(EUR billions; not seasonally adjusted)

							12-month cumulated figures ending	
	2003 Mar.	2003 Apr.	2003 May	2003 June	2003 July	2003 Aug.	2002 Aug.	2003 Aug.
<b>Current account balance</b>	4.3	-10.0	-0.1	3.1	2.0	5.0	47.3	33.9
Goods balance	6.5	6.9	7.6	10.5	15.3	10.6	121.5	113.0
Services balance	1.7	0.4	1.3	2.5	2.8	1.0	4.8	16.7
Income balance	-0.8	-10.9	-3.6	-2.8	-10.1	-1.0	-29.7	-43.0
Current transfers balance	-3.1	-6.5	-5.5	-7.2	-6.1	-5.7	-49.3	-52.8
<b>Capital account balance</b>	0.8	0.1	0.2	1.5	0.8	1.7	5.9	9.7
<b>Financial account balance</b>	6.7	16.1	-33.4	-24.0	-6.1	3.3	-90.9	-124.2
Direct investment	-1.5	-18.4	0.7	23.1	-3.2	-1.7	-24.2	-12.8
Abroad	-14.7	-24.4	-15.6	9.9	-7.6	-5.8	-227.4	-138.9
In the euro area	13.1	6.0	16.3	13.2	4.4	4.1	203.2	126.1
Portfolio investment	14.2	25.1	1.1	16.0	-35.6	-37.9	101.5	38.4
Equities	-4.1	9.0	-17.8	7.0	5.0	-6.3	103.5	31.6
Assets	7.7	-7.1	-10.4	-14.8	-8.1	-0.3	-58.3	-24.7
Liabilities	-11.8	16.0	-7.4	21.8	13.1	-6.0	161.8	56.4
Debt instruments	18.3	16.1	19.0	8.9	-40.6	-31.5	-2.0	6.8
Assets	-14.8	-9.9	-25.2	-28.8	-21.4	-11.7	-157.3	-192.8
Liabilities	33.1	26.1	44.2	37.8	-19.2	-19.8	155.3	199.6
Memo item:								
Combined net direct and portfolio investment	12.7	6.7	1.8	39.1	-38.9	-39.6	77.3	25.7
Financial derivatives	-0.9	-4.7	1.4	0.5	-2.7	-2.3	-14.0	-12.2
Other investment	-10.1	13.3	-37.0	-64.4	33.8	44.8	-158.6	-148.4
Reserve assets	5.0	0.8	0.4	0.9	1.6	0.3	4.5	10.7
<b>Errors and omissions</b>	-11.8	-6.2	33.3	19.4	3.4	-10.0	37.7	80.5

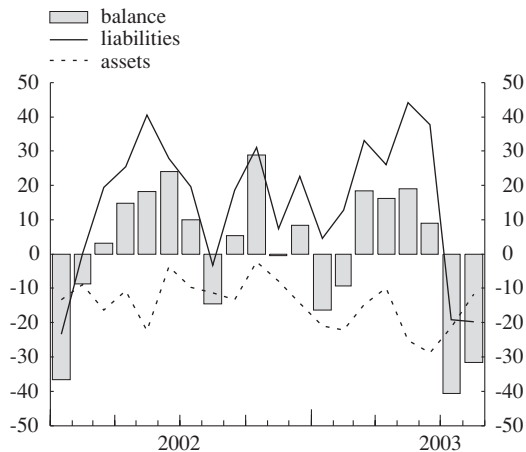
Source: ECB.

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

## Chart 26

### Euro area portfolio investment in debt instruments

(EUR billions, monthly data)



Source: ECB.

Net outflows in debt instruments again largely accounted for developments in portfolio investment in August 2003. In particular, foreign investors, who had been net buyers of euro area debt securities for most of the first half of 2003, were net sellers in July and August (see Chart 26). Moreover, euro area residents continued to be net buyers of debt instruments abroad in August, though to a lesser extent than in the previous three months. The possible portfolio re-balancing of the previous large purchases of euro area debt instruments by foreign investors, together with the sustained acquisitions of

foreign debt instruments by euro area residents, might have been related to yield considerations and market expectations about relative growth prospects.

In August equity portfolio investment also recorded some net outflows, as foreign investors withdrew part of their portfolio from the euro area. This development might have been associated with a strong market interest globally in purchasing Japanese equity securities over the summer, triggered by data releases that suggest an improvement in the economic outlook for this country.

Overall, on a twelve-month cumulated basis, net inflows in combined direct and portfolio investment declined to €25.7 billion for the twelve-month period ending in August 2003, from €77.3 billion a year earlier. This was largely because of the sizeable reduction in net inflows in portfolio investment. In turn, this reduction was related mainly to considerably lower net purchases of euro area equity by non-residents that were only partly offset by smaller net purchases by euro area residents of foreign equity (see Table 10). Moreover, the large net outflows in debt instruments that occurred in July and August 2003 had also contributed to the reduction in the cumulated net inflows in combined direct and portfolio investment.



# Developments in the debt financing of the euro area private sector

*The close monitoring of debt developments in the euro area's non-financial private sectors is an integral part of the ECB's economic and monetary analysis. Developments in debt financing reflect the financing situation and behaviour of the private sector, especially households and non-financial corporations. This is, in turn, of relevance for developments in real economic variables, such as real GDP growth, investment and consumption. Trends in loans granted by monetary financial institutions (MFIs), the most important component of debt financing, help to better understand monetary developments and therefore facilitate the assessment of their information content for inflationary trends over the medium term. Against this background, this article reviews the main developments in debt financing over recent years and analyses the relationship between debt financing and its main determinants.*

*Developments in debt financing typically have a positive relationship with real economic activity and a negative relationship with the costs of debt financing (i.e. interest rates). Occasionally, other factors such as strong merger and acquisition (M&A) activity or large movements in property prices can also significantly affect debt developments. Indeed, these factors played a role in the significant growth of debt financing of the non-financial private sectors in the second half of the 1990s. Since 2001, debt financing growth has decreased substantially, mainly in relation to the economic slowdown and the decline in M&A activity. However, it has remained quite robust in this recent period of weak economic activity, probably in connection with an ongoing adjustment on the part of borrowers to lower interest rate levels in some countries compared with the start of the 1990s.*

## I Introduction

This article focuses on the debt financing of the euro area private sector, with a particular emphasis on developments in the household and non-financial corporation sectors. Debt financing is defined in this article as the sum of financing via loans (granted by euro area MFIs and non-monetary financial institutions), debt securities issued and pension fund reserves of non-financial corporations. Other means of debt financing, such as trade credit, other advances or loans from non-resident MFIs, other non-financial corporations or government, are excluded. Unlike total financing, debt financing excludes the issuance of shares and other equity.

Within debt, loans granted by MFIs play a prominent role. MFI loans to the non-MFI private sector include not only loans granted by MFIs to households and non-financial corporations, but also MFI loans to non-monetary financial institutions (i.e. insurance corporations, pension funds and other financial intermediaries). In addition, MFI loans to the euro area private sector constitute the largest counterpart of M3.

Therefore, the analysis of developments in these loans helps to shed light on the factors underlying monetary dynamics and, hence, on the possible implications of the latter for future inflationary pressures.<sup>1</sup>

This article reviews the main trends in debt financing of the non-financial private sectors in the euro area. After a short analysis of the main trends in MFI loans to the private sector (Section 2), the article focuses on debt financing trends for households (Section 3) and non-financial corporations (Section 4) in the euro area. Section 5 concludes.

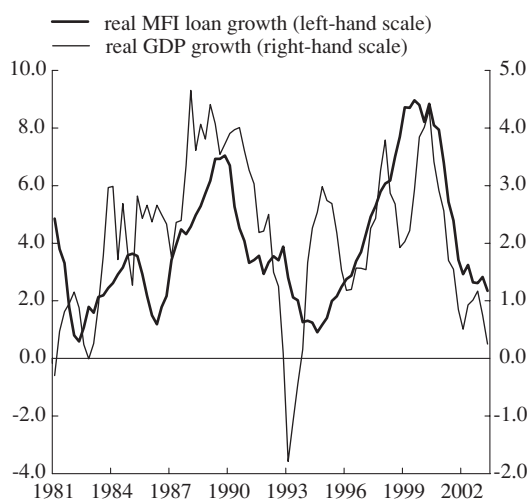
<sup>1</sup> See the article entitled "Framework and tools of monetary analysis" in the May 2001 issue of the Monthly Bulletin.



## 2 Main trends in MFI loans to the private sector

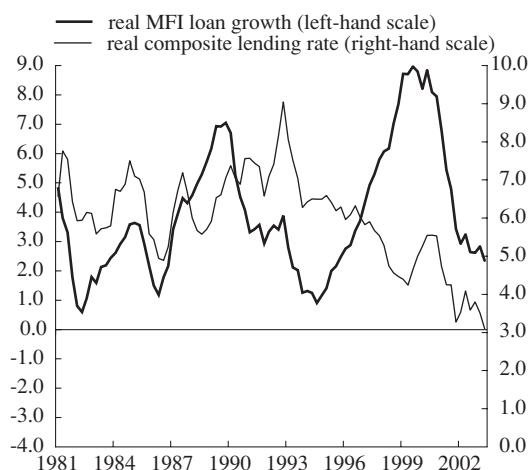
The average annual growth of MFI loans to the private sector in real terms (deflated by the GDP deflator) for the period from the early 1980s to 2003 was 3.9%. The main determinants of real MFI loan growth are typically real economic activity and the financing costs of loans.<sup>2</sup> These determinants can be proxied by real GDP growth and a measure of the real composite MFI lending rate (i.e. the nominal composite lending interest rate minus inflation as measured by annual percentage changes in the GDP deflator).<sup>3</sup> As shown in Chart 1, the developments in euro area loans to the non-MFI private sector and real GDP have been positively correlated over the last 22 years. In this context, it is noteworthy that the average annual growth rate of real loans over this period has exceeded that of real GDP. This can be explained by the fact that funds taken up in the euro area have also been used for transactions outside the euro area and for transactions that are not included in GDP (such as financial transactions or purchases of already existing real estate via secondary markets). As discussed further in the box

**Chart 1**  
Real MFI loan growth and real GDP growth  
(annual percentage changes)



Sources: ECB, Eurostat.  
Note: Real loan growth is deflated by the GDP deflator.

**Chart 2**  
Real MFI loan growth and the real composite lending rate  
(annual percentage changes; percentage points)



Sources: ECB, Eurostat.  
Note: Real loan growth and the real lending rate are deflated by the GDP deflator.

below, real loan growth in the euro area tended on average to lag real GDP growth by three quarters during the last 22 years.

Chart 2 shows the long-term developments in the annual growth of real MFI loans to the private sector and in the real composite lending rate. While on economic grounds a negative link between the cost of loans and loan growth could be expected, for the 1980s such a relationship is not that apparent. Although real loan growth recorded an upward trend for most of the period, real lending rates showed only limited fluctuations. This can be explained for the most part by the fact that the rising trend in real economic growth during this period outweighed the influence of interest rates. By contrast, for most of the 1990s real loan growth and the

<sup>2</sup> See for instance Calza, Manrique and Sousa (2003), "Aggregate loans to the euro area private sector", ECB Working Paper No. 202.

<sup>3</sup> The composite lending rate used is a synthetic indicator of the cost of euro area loans obtained as a weighted average of retail lending rates (with the weights given by the share of each category of loans in the overall amount of loans outstanding).

## Box

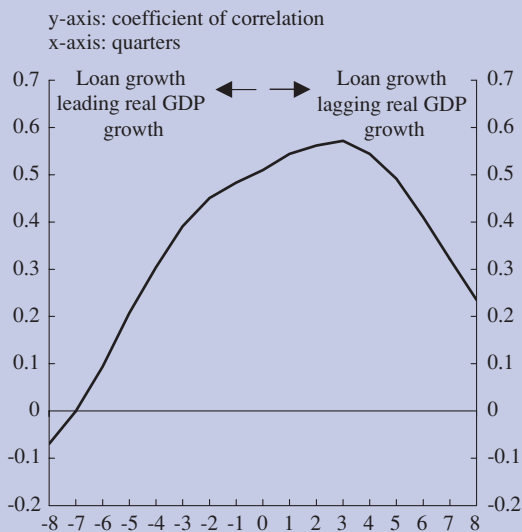
### Do loans lead or lag economic activity?

From a conceptual point of view, it is not clear whether loan growth should be expected to lead, lag or be contemporaneous with real GDP growth.

- First, in cases where expectations have a significant impact on economic agents' behaviour, loan growth may lead economic activity. For instance, following an economic slowdown, expectations of an economic recovery may drive up investment growth before the recovery materialises. Such investment growth needs to be financed by either internal or external funds. Given the contraction of internal sources of finance available to firms that accompanies periods of weak economic growth, firms may at this stage of the cycle need to rely mainly on external financing means such as loans. Therefore, the rise in credit growth in this case would precede that in economic activity. Similarly, from a supply-side perspective, expectations of a turnaround in economic activity may make banks more willing to lend even prior to a fully-fledged recovery or may encourage them to adopt more cautious lending behaviour if they expect a worsening economic situation.
- At the same time, there are also arguments to suggest loan growth may lag real GDP growth. From the demand side, in the early phases of an economic slowdown, the existence of fixed obligations (e.g. purchases previously agreed upon with suppliers), the need to finance rising inventories due to falling demand and contractual rigidities (e.g. costs incurred in adjusting the level of loans) may imply that firms are able to adjust their demand for loans only with a lag to the changing environment. In the early phases of a recovery, moreover, there is likely to be an improvement in the cash flow available to firms, making them less dependent on loans as a source of finance. Taking a supply-side perspective, the deterioration in the collateral of firms due to a lower net worth in periods of weakening economic activity and the associated decline in profitability may only after a while make banks less willing to lend and induce them to tighten credit standards. Similarly, following a recession some time may be needed before it becomes clear that a recovery is under way or for firms' financial positions to recover sufficiently for their creditworthiness to improve. Thus banks may take time to ease access to credit after a recession, waiting for an improvement in the financial position of firms. In this case, loan growth would tend to lag economic activity.

#### Correlation between real MFI loan growth and real GDP growth for different leads and lags

(coefficient of correlation between annual growth rates)



Source: ECB.

- A third possibility is that loan growth and economic activity evolve in a contemporaneous fashion. This could result from the mechanisms described above working in such a way as to offset each other.

A simple way to investigate the lead/lag relationship between loans and economic activity is to calculate correlations between leads and lags of annual real loan growth (deflated by the GDP deflator) and annual real GDP growth. As can be seen in the chart, the correlation between the two variables is strongest when real loan growth lags real GDP growth by three quarters. This result suggests that, on average over the past 22 years, real loan growth tended to slightly lag real GDP growth in the euro area.

This finding lends some support to the above-mentioned theoretical arguments that both borrowers and lenders adjust to the economic situation with a certain delay. However, given the complex interactions between loans and economic activity, the important influence of other factors on loan growth and the fact that there may be common determinants driving all these variables, the result should be interpreted with some caution. Moreover, this lagging pattern does not hold in every period (see Chart 1 in the main text). In fact, several periods can be identified where loan growth has either led or been contemporaneous with real GDP growth. For instance, in the late 1980s loan growth declined before real GDP growth, and the slowdown in real loan growth since 2001 seems to have occurred in parallel with the slowdown in economic activity.

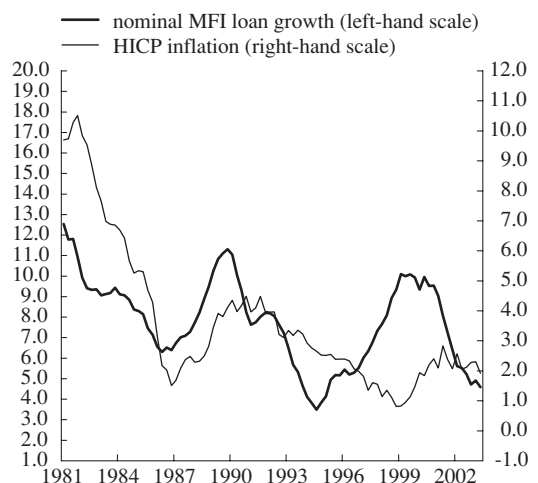
real cost of loans seem to be negatively correlated. During the first half of the decade, the relatively high real lending rate appears to have contributed to the low rate of growth in real loans. Conversely, the trend decline in the real lending rate in the run-up to Stage Three of Economic and Monetary Union (EMU) helps to explain the period of very strong loan growth in the second half of the 1990s. From 1997 onwards, the real cost of loans has remained consistently below its historical average, even at times of strong economic growth. While there was a marked slowdown in real loan growth between early 2001 and end-2002 (which seems to have been mainly related to the weakening of economic activity), it remained relatively high in comparison with earlier phases of weak economic growth. This may be due to a structural downward shift in the real cost of loans.

Loan developments over recent years suggest that the trend decline in real interest rates since the early 1990s has allowed non-financial sectors to hold a higher amount of loans, since lower interest rates imply a lower interest payment burden for a given amount of debt. In this respect, the relatively robust growth of loans to the private sector in the recent period of weak economic growth would seem to indicate an adjustment to such higher levels of indebtedness.

The strong increase in loan financing of the euro area private sector, notably in 1999 and 2000 when real loan growth reached exceptionally high levels, and its relatively quick slowdown thereafter, suggest that factors other than the traditional

determinants may have played an important role during this period. In particular, intense M&A activity on the part of euro area firms, the increased need for funds on the part of telecommunications companies to finance the purchase of UMTS licences and soaring property prices in some euro area countries played a role. Furthermore, the slowdown in loan growth since early 2001 should be seen in the context not only of weakening economic activity, but also of the unwinding of the impact of the strong M&A activity and the UMTS licence purchases. Finally, while it is difficult to disentangle supply and demand factors, banks are likely to have been more cautious in granting loans during this latter period given the weaker financial position of the private sector due to losses on holdings of financial assets following the significant fall

**Chart 3**  
**Growth of MFI loans to the private sector and HICP inflation**  
*(annual percentage changes)*



Sources: ECB, Eurostat.

in stock prices, lower corporate earnings and a rise in company insolvencies.

As regards the relationship between loans to the private sector and inflation, several studies have found that loans have some leading indicator properties for prices.<sup>4</sup> In fact, as can be seen in Chart 3, turning points in nominal loan growth have tended to precede turning points in inflation over the last

20 years. Given that MFI loans are the main counterpart of M3 and that the two variables have moved in parallel over an extended period of time, these leading indicator properties may simply be a reflection of similar indicator properties of M3. At the same time, MFI loan developments may also have some independent information content due to their role in financing economic activity.

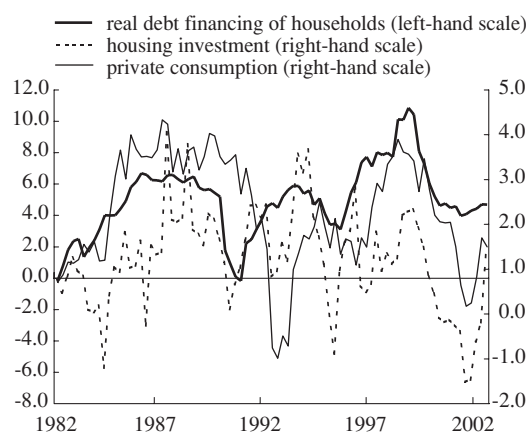
### 3 Developments in debt financing of households

The bulk of the debt assumed by euro area households (including non-profit institutions serving households) is made up of loans granted by MFIs, which account for around 95% of the total. The other source of funds for households is loans from non-monetary financial institutions, which only play a significant role in some euro area countries (namely the Netherlands and Belgium). The financing provided by non-monetary financial institutions to households takes place inter alia through leasing companies, financing institutions granting consumer credit and special purpose vehicles, which are specialised in securitising mortgage loans originally granted by MFIs. (A detailed explanation of the issue of securitisation was given in a box in the article entitled “Recent developments in financial structures of the euro area” in the October 2003 issue of the Monthly Bulletin.)

Loans for house purchase are the most important form of financing for households. At the end of June 2003, they accounted for around 66% of total loans taken out by this sector. The shares in total loans of the two other categories – consumer credit (loans for personal consumption of goods and services) and other loans (loans for debt consolidation, loans for educational purposes, loans to small firms, etc.) – were 15% and 19% respectively.<sup>5</sup> Reflecting this composition, loan financing by households is mostly of a long-term nature, with short-term debt (having an original maturity of up to one year) representing less than 10% of total debt.

**Chart 4**  
Real debt financing of households,  
private consumption and housing  
investment

(annual percentage changes; deflated by the private consumption deflator and the housing investment deflator)



Sources: ECB, Eurostat.

Note: Debt financing has been estimated for Q2 2003 and prior to Q4 1997. Housing investment and private consumption have been estimated prior to 1991.

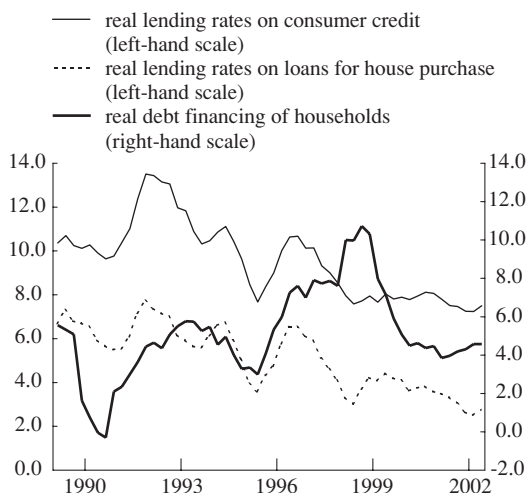
4 For instance, Nicoletti Altimari (2001), “Does money lead inflation in the euro area”, ECB Working Paper No. 63; Agresti and Mojon (2001), “Some stylised facts on the euro area business cycle”, ECB Working Paper No. 95; Calza, Manrique and Sousa (2003), “Aggregate loans to the euro area private sector”, ECB Working Paper No. 202.

5 In the euro area, there is no detailed information on mortgage loans not intended for house purchase. These loans often finance consumption. By contrast with the experience in the United States and the United Kingdom, it appears that these loans are not very significant in the euro area, except in a few countries such as the Netherlands (see “Structural factors in the EU housing markets”, ECB, March 2003). Mortgage credit to finance consumption generates housing equity withdrawals, which reinforce the existing links between housing markets, credit markets and expenditure decisions.

Developments in debt financing of euro area households from the early 1980s onwards appear in real terms to be broadly related to consumption, housing investment and households' financing costs (see Charts 4 and 5). With regard to consumption and housing investment, the overall relationship with debt financing appears to be positive, but it seems that the relative importance of the two variables for the debt financing of households varied over time. While during the 1980s real debt financing of households closely followed developments in private consumption, this relationship appears to have been somewhat weaker in the 1990s. For instance, the decline in debt financing growth in the early 1990s seems to be linked more to lower housing investment growth than to weaker consumption. Similarly, the fact that the growth of real debt financing recovered in the mid-1990s although consumption growth was very weak can be explained mainly by stronger housing investment. In addition to consumption and housing investment, the cost of financing has been a significant factor explaining the developments in household debt. In particular, the trend decline in the cost of financing in the course of the 1990s appears

**Chart 5**  
**Real debt financing of households and retail lending rates**

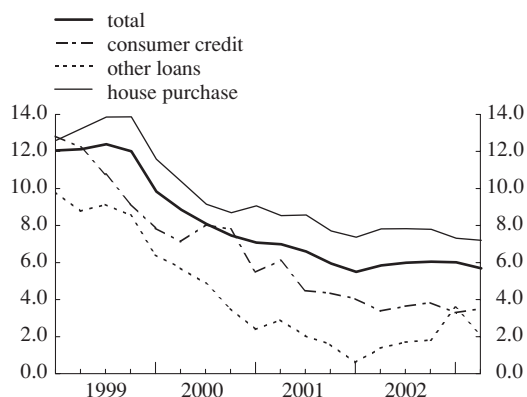
(annual percentage changes and percentages, deflated by the private consumption deflator)



Source: ECB, Eurostat.

**Chart 6**  
**Growth of loans to euro area households by purpose**

(annual percentage changes; quarterly data)



Source: ECB.

Note: Total loans are the sum of loans for house purchase, consumer credit and other loans.

to have stimulated households' demand for debt over recent years.

Looking at the period since 1999 (for which detailed statistics are available), loans for house purchase in the euro area have grown at higher rates than the rest of loans to households (see Chart 6). Despite a deceleration from the beginning of 2000 onwards, they have continued to grow at fairly robust annual rates of between 7% and 8%. This sustained demand for housing loans in recent years has been fuelled by the decline in the real cost of financing. In addition, in some countries strong demand has led to steep increases in house prices, which, in turn, have added to the significant rise in loans for house purchase.<sup>6</sup>

In this regard, there is a clear correlation between the differences observed across countries in house price developments and in the nominal growth rates of loans for house purchase (see Chart 7). As can be seen from the data, the countries in which real interest rates fell more significantly in the run-up to Stage Three of EMU recorded high growth

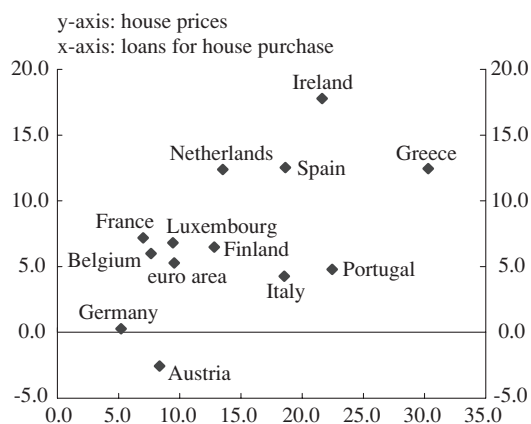
<sup>6</sup> See the article entitled "Recent trends in residential property prices in the euro area" in the May 2003 issue of the Monthly Bulletin.

rates in these loans. At the same time, other factors such as demographic differences and the existence of different tax incentives for housing ownership also explain the diverging developments in housing loans.<sup>7</sup>

Turning to the other categories of loans to households, their growth rates also declined between 1999 and early 2002, although they were more stable thereafter. The annual growth of consumer credit, which includes in particular the financing of purchases of durable consumption goods, declined significantly from 1999 until 2001, remaining thereafter at levels of around 3-3.5% in a context of weak consumer confidence. As for other loans, the annual growth rate has also fallen markedly since 1999 and has stood mostly below those of the other categories of loan. As noted above, the category other loans includes diverse types of loan not classified elsewhere. While developments in this category are therefore difficult to interpret, the rather subdued growth of these loans in comparison with consumer credit can possibly be explained by the substantial fall in the growth of loans to small businesses in recent years.

### Chart 7 Loans for house purchase and house prices

(average of annual percentage changes for the period 1998-2002)

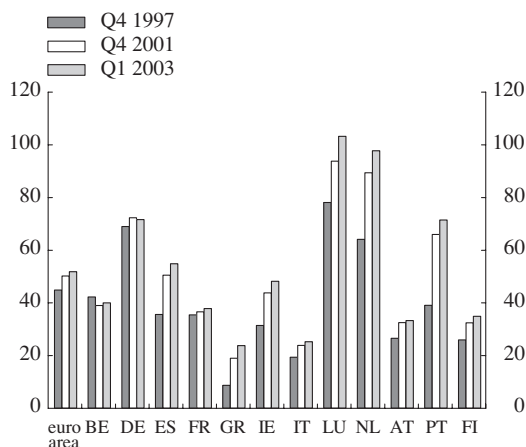


Sources: ECB, national sources.

Note: In the case of Luxembourg, the average growth of house prices refers only to the period 1998-2000. In the case of Greece, the average growth of loans for house purchase refers only to the period 1999-2002.

### Chart 8 Debt-to-GDP ratio of households in the euro area countries

(percentages)



Source: ECB.

Note: Debt data for Finland, Greece, Ireland and Luxembourg refer only to total MFI loans to households. In the case of Greece, the first data available is for Q1 1998 instead of Q4 1997. In the case of Luxembourg annual GDP data for 2002 has been used for the 1st quarter of 2003. Compared with the annual financial accounts, the ratio of debt to GDP on the basis of the quarterly financial accounts is somewhat lower, mainly due to the fact that loans granted by non-financial sectors and by banks outside the euro area are not included.

The previously described loan growth developments have translated into a rise in the debt-to-GDP ratio of households from the second half of the 1990s. In the second quarter of 2003, the ratio is estimated to have stood at 51% (according to the quarterly financial accounts) in the euro area as a whole.

Chart 8 shows that the level of household indebtedness in relation to GDP differs significantly across countries and that there have been large differences in the increases in these debt ratios over recent years. Indeed, in countries such as the Netherlands, Portugal and Spain, where the growth of loans for house purchase has remained at high levels, the rise in debt-to-GDP ratios has been particularly significant. However, in Greece, where the growth of loans for house purchase has also been high, the level of indebtedness has remained subdued.

7 See "Structural factors in the EU housing markets", ECB, March 2003.



Notwithstanding the increase in the level of indebtedness, households' interest payments in relation to disposable income have been contained by the fall in the cost of financing, which has stood at levels below those at the start of the 1990s. Furthermore, it should be noted that the increases in household debt-to-GDP ratios were in many cases accompanied by a rise in household assets given the pronounced increase in the value of

real estate. However, some risks exist. Experience shows that periods of strong house price increases are often followed by a correction. In this case, households would have debt positions which were no longer fully matched by their assets. In some euro area countries, authorities have in fact already expressed concerns about the sustainability of house price developments over recent years.

#### 4 Developments in debt financing of non-financial corporations

Among the different instruments, loans have continued to be the most important source of debt financing for non-financial corporations over the past few years, accounting for more than 80% of the amount outstanding of their debt. While loans granted by MFIs account for the bulk of all loans taken out by non-financial corporations, the share of loans from non-monetary financial institutions has been rising in recent years (from 11% at the end of 1997 to 17% in the first quarter of 2003). The latter development mainly reflects a trend towards securitisation via these institutions, which are often special purpose vehicles used by non-financial corporations to raise capital via the corporate bond market. This generally has several advantages for non-financial corporations. In addition to tax advantages for special purpose vehicles in some countries, the rating of these institutions is generally higher, implying a lower cost of financing and possibly access to financing from institutional investors which are restricted to investing in high-rated bonds.

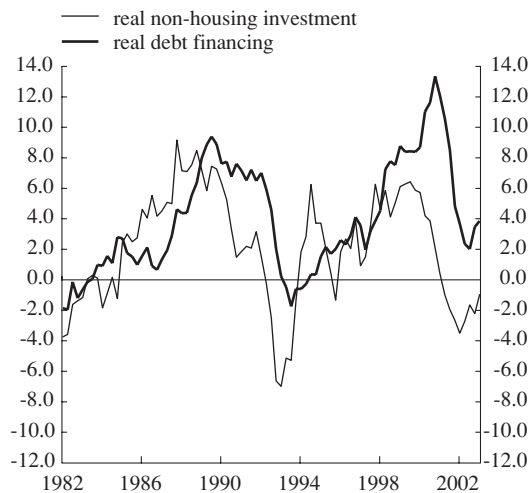
With the emergence of a euro area-wide corporate bond market, the issuance of debt securities by non-financial corporations has gained importance relative to loans in recent years. In the first quarter of 2003, debt securities accounted for nearly 13% of the amount outstanding of non-financial corporation debt, up from 10½% at the end of 1997. Overall, the debt financing of non-financial corporations has thus become increasingly diversified over the past few years.

Looking at the maturity structure, most of the debt of non-financial corporations has a long-term maturity,<sup>8</sup> accounting for 70% of their total debt in the first quarter of 2003. The share of short-term debt thus stood at 30% in early 2003, broadly identical to its level at the end of 1997, following a peak at nearly 34% in late 2000.

Concerning the trends in the growth of debt financing of non-financial corporations, there have been two main cycles since the early 1980s (see Chart 9). The average annual growth of debt financing of non-financial corporations in real terms (deflated by the investment deflator) over the whole period was 4%.

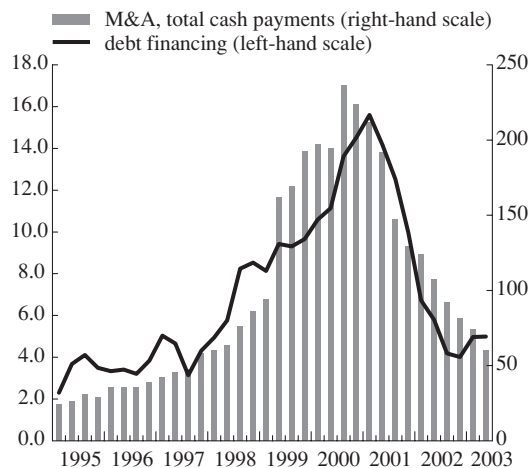
The annual growth of debt financing by non-financial corporations has been closely connected with developments in real non-housing investment (see Chart 9). Non-financial corporations, which are typically net borrowers of funds, take out loans or issue securities to finance capital expenditure and financial acquisitions. During the 1980s real debt financing growth lagged the rise in non-housing investment growth somewhat, whereas during the economic upswing in the second half of the 1990s the two variables developed broadly in parallel. Looking more closely at the period since the start of Stage Three of EMU, it can be seen that the connection between real non-housing

<sup>8</sup> An original maturity of over one year.

**Chart 9****Real debt financing of non-financial corporations and real non-housing investment***(annual percentage changes; debt financing deflated by the investment deflator)**Sources: ECB, Eurostat.**Note: Debt financing has been estimated for Q2 2003 and prior to Q4 1997. Non-housing investment has been estimated prior to 1991.*

investment and real debt financing growth has been somewhat looser. There was a strong increase in the growth of debt financing of non-financial corporations between 1999 and early 2001, which was a lot more pronounced than the increase in real non-housing investment growth. The annual growth of real debt financing peaked at nearly 14% in early 2001, followed by a considerable slowdown in the context of weakening economic activity. Since the end of 2002, the annual growth of debt financing has recovered slightly.

As mentioned in Section 2, the high financing needs of non-financial corporations in 1999 and 2000 were related to intense M&A activity on the part of euro area firms, to a large extent outside the euro area and notably in the United States, and the one-off needs for funds on the part of telecommunications companies to finance the acquisition of UMTS licences. Chart 10 shows that there was a close connection between

**Chart 10****Debt financing and mergers and acquisitions by euro area non-financial corporations***(annual growth rates in percentages; annual flows in EUR billions)**Sources: ECB, Thomson Financial.**Note: Debt financing has been estimated for Q2 2003 and prior to Q4 1997. M&A refers to acquisitions by euro area non-financial corporations in the euro area as well as abroad, paid for in cash.***Chart 11****Real debt financing and cost of debt financing of non-financial corporations***(annual percentage changes; percentages)**Sources: ECB, Bloomberg, Consensus Forecast.**Note: Estimated prior to Q4 1997. Debt financing is deflated by the investment deflator. The real cost of debt financing is a weighted average, based on amounts outstanding, of retail bank lending rates to enterprises and a corporate bond yield index for non-financial corporations, deflated by Consensus Forecast inflation expectations.*



the value of mergers and acquisitions paid for in cash and the annual growth of debt financing in the second half of the 1990s. In particular, growth in short-term debt financing surged during that period, as companies used it to some extent for bridge financing purposes before issuing longer-term securities. Since late 2000, M&A activity has decreased, contributing to the considerable decline in debt financing growth.

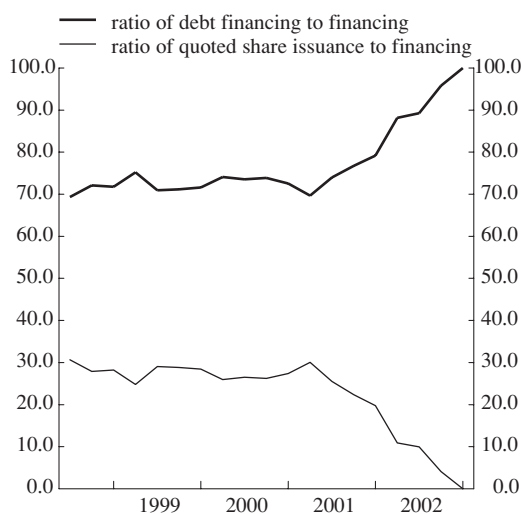
An additional important determinant of developments in debt financing of non-financial corporations is the cost of debt financing. In Chart 11, the cost of debt financing refers to a weighted average of the cost of taking up new loans or debt securities. The trend decline in the cost of debt financing is likely to have fuelled the demand for debt financing on the part of non-financial corporations in the second half of the 1990s.

Another factor supporting the demand for debt financing over the past few years has been the evolution of the cost of equity financing, which rose in early 2003 to high levels as a result of the strong stock market declines since 2000. As

a consequence, in line with the developments in the relative costs of the alternative sources of financing, the share of debt financing in non-financial corporations' overall financing (excluding non-quoted equity) has increased significantly over recent years. In fact, in early 2003, as the issuance of quoted shares came to a virtual halt (and was negative in net terms), non-financial corporations' net incurrence of liabilities consisted exclusively of debt (see Chart 12).

As a result of debt financing developments, the debt-to-GDP ratio as well as the debt-to-gross operating surplus ratio of non-financial corporations in the euro area rose substantially in the second half of the 1990s but broadly stabilised during 2001 and 2002. In the second quarter of 2003, the debt-to-GDP ratio is estimated to have stood at around 63% according to the quarterly financial accounts. At the same time, the valuation of non-financial corporations' financial assets (in part acquired in the late 1990s when earnings expectations in the new technology sectors in particular were very optimistic) declined amid falling stock prices from early 2000. Consequently, the debt-to-financial asset ratio of the sector rose during 2001 and 2002.

**Chart 12**  
**Importance of debt financing in overall financing of non-financial corporations**  
*(annual transactions; percentages of overall financing)*

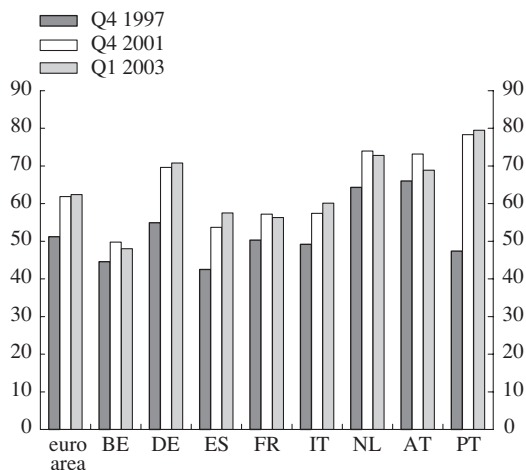


Source: ECB.

Note: Financing here refers to the sum of debt financing and the issuance of quoted shares, i.e. it does not include non-quoted shares.

Despite the rise in debt, the interest payment burden of non-financial corporations in relation to income was at a broadly similar level in 2002 as in 1991 due to the trend decline in interest rates during the 1990s. While relatively low levels of interest rates on average over the business cycle thus made a higher level of indebtedness sustainable, the latter rendered non-financial corporations more vulnerable to strong rises in interest rates, especially where a considerable part of debt was financed at short maturities or at variable interest rates, as well as to income and asset price variations.

Against this background, many non-financial corporations in the euro area have undertaken cost-cutting and internal restructuring measures in order to improve their balance sheets. In particular, companies in some sectors which had increased their indebtedness strongly in the second half of the 1990s (e.g. the

**Chart 13****Debt-to-GDP ratio of non-financial corporations in the euro area countries***(percentages)*

Source: ECB.

Note: Data are not available for Greece, Ireland, Luxembourg and Finland. Compared with the annual financial accounts, the ratio of debt to GDP on the basis of the quarterly financial accounts is somewhat lower, mainly due to the fact that loans granted by non-financial sectors and by banks outside the euro area are not included.

**Conclusions**

There was a strong rise in debt financing growth and, in turn, the debt-to-GDP ratios of households and non-financial corporations in the second half of the 1990s. Part of this rise can be attributed to the trend decline in interest rates during that decade. This decline implied that, notwithstanding the rise in debt, interest payments in relation to sector income were in 2002 at levels below or broadly similar to those at the start of the 1990s for both households and non-financial corporations. Nevertheless, the higher level of indebtedness has increased the vulnerability of these sectors to variations in interest rates, income and asset prices.

The rise in household indebtedness is mainly linked to sustained demand for housing loans. This should be seen against the background of rising house prices in some euro area countries, which were in part fuelled by the trend decline in interest rates and implied an increase in housing wealth.

telecommunications sector) have made progress in deleveraging during recent quarters.

Chart 13 illustrates that in all euro area countries for which data are available the debt-to-GDP ratio of non-financial corporations rose between end-1997 and end-2001.<sup>9</sup> The increase was largest in Germany, Spain and Portugal. For Germany, financial acquisitions and the high financing needs for UMTS licence purchases contributed to the considerable rise in the debt ratio. In the course of 2002 and early 2003, the debt-to-GDP ratio of non-financial corporations broadly stabilised or even declined in many countries. It continued to increase, by contrast, in above all Spain and Italy, possibly related to an ongoing adjustment of debt levels to the lower level of interest rates compared with historical standards in these countries as well as, in the case of Spain, to economic growth considerably above the euro area average.

As regards non-financial corporations, financial acquisitions and the purchase of UMTS licences played an important role in the considerable rise in the debt-to-GDP ratio of this sector in the second half of the 1990s. Following the declines in stock prices between early 2000 and early 2003, many of the financial assets acquired previously by non-financial corporations have lost value, leading to a rise in the debt-to-financial asset ratio. Although companies in the euro area have undertaken cost-cutting and internal restructuring measures in recent quarters, some further adjustment may still be needed.

<sup>9</sup> Quarterly financial accounts are not available for Greece, Ireland, Luxembourg and Finland. Due to differences in the valuation of debt securities between the financial accounts and debt securities issuance statistics, as well as a lack of information on pension fund reserves, debt ratios for non-financial corporations in these countries are not shown in Chart 13.



# Crisis resolution in emerging market economies – challenges for the international community

Since the mid-1990s a number of emerging market economies have experienced severe capital account crises. These crises displayed new features in comparison with earlier balance of payments crises in developing countries. Their causes were broader than in the past, including not only macroeconomic imbalances but also balance sheet weaknesses in the private financial and corporate sector. Moreover, contagion across countries was initially facilitated by the increasing integration of domestic capital markets into the global financial system, the securitisation of debt and a larger range of debt instruments. These crises unfolded very rapidly, manifesting themselves through sudden shifts in the financial account of the balance of payments. They also involved a broader set of actors as regards both debtors (sovereign and private borrowers) and, to a larger extent, creditors (holders of various financial instruments such as bank loans, bonds and foreign direct investment claims).

The recent crises have therefore posed new and difficult challenges in terms of crisis management. Debtor countries, private sector creditors and international financial institutions have all been called upon to adjust their role to the specific circumstances of individual crises. In this context, the IMF has since the late 1990s introduced a number of new instruments and procedures with which to respond to these new challenges. In addition, several policy measures have been adopted or are currently under consideration in each of the three main components of crisis resolution, i.e. domestic adjustment, official financing and private sector involvement. One of the challenges in this ongoing work on crisis resolution is to balance, on the one hand, clarity in the formulation of policy principles and efficiency in the design of instruments, and on the other, flexibility to address the specific circumstances of each crisis.

## I Introduction

The recent crises in emerging market economies, including Mexico in 1994-1995, East Asia in 1997-1998, Russia in 1998, Brazil and Turkey during the period 1999-2001, and Argentina since 2001, share a number of important common features. They were characterised by a sudden reversal of foreign capital inflows and heavy domestic capital flight, pressure on the domestic currency to devalue or depreciate, large adverse movements in domestic asset prices and financial variables, banking crises<sup>1</sup> and a contraction of domestic output. As the crises had their origin mainly in the financial account (formerly known as the capital account) of the balance of payments, they are usually referred to as capital account crises, as opposed to earlier crises that were typically triggered by adverse current account developments.

The high costs associated with these events – as presented in Section 3 – both for the economies directly concerned and the world economy at large, have raised awareness

among the international community of the need for both better crisis prevention and better crisis resolution. The international community has responded by reviewing existing prevention tools and developing a number of new instruments. For example, closer IMF surveillance of the financial sectors in borrowing countries, the development of early warning systems, enhanced transparency of the IMF's activities, and the promotion of standards and codes have all contributed to more effective crisis prevention.<sup>2</sup>

Similarly, the experience with these crises has led to a discussion of ways to improve the resolution of crises. The specific nature of capital account crises implies that determining how best to ensure that macroeconomic and financial stability and

<sup>1</sup> A notable exception is Brazil, where a banking crisis was avoided thanks to hedging through foreign currency futures and dollar-indexed government securities.

<sup>2</sup> The article "Recent developments in international co-operation" in the February 2002 issue of the *Monthly Bulletin* discusses some of the crisis prevention issues.

internal and external sustainability are restored in crisis countries in a timely and orderly manner, in full respect of creditors' rights, is not a straightforward matter. This has necessitated reforms of several of the most important crisis resolution tools.

Orderly crisis resolution is of particular relevance for the ECB because crises in emerging market economies may have significant macroeconomic and financial effects

on the euro area. Moreover, the ECB is involved in discussions on improving crisis resolution through its role in the process of international monetary and financial policy cooperation. Against this background, this article reviews the challenges raised by the recent capital account crises (Section 2) and discusses the policy measures already implemented or under consideration to improve crisis resolution (Section 3).

## 2 Challenges for the resolution of capital account crises

The resolution of the recent capital account crises has been particularly challenging due to a number of features that distinguish them from previous balance of payment crises. First, unlike in the 1980s, the 1990s crises were characterised by the highly significant role played by private financial and corporate institutions in borrower countries, which has made it necessary to monitor closely not only macroeconomic but also financial stability indicators. In addition, these capital account crises were closely related to changes in international financial markets and to the channels for cross-border contagion that such changes produced. They were accompanied by a growing integration of emerging market economies into the global financial system, which was made possible by the removal of restrictions on capital movements in the countries concerned. These developments were part of what came to be known as the "Washington consensus",<sup>3</sup> a wave of measures to liberalise international transactions which took place in the first part of the 1990s, partly as a result of the lessons learnt from the sovereign debt crises of the 1980s. Moreover, the liberalisation took place against the background of a general increase in global financial flows and the development of new financial instruments. Such integration, although still imperfect, is beneficial since it promotes a better international allocation of savings and investment. At the same time, capital market integration and the associated wider use of marketable and liquid instruments increased vulnerability to sudden

stops and reversals of capital flows and reinforced the potential for contagion among countries. Only more recently has this potential been reduced as markets have become more transparent and investors better able to discriminate between borrowers, and as domestic reforms have been carried out in borrowing countries.

A second characteristic of the recent crises is the more substantial involvement of the private sector, both on the creditor and on the debtor side. During the 1980s, crises were mostly confined to sovereign debt and involved a small number of lending banks in mature economies, as the most widely used instrument for borrowing was the syndicated loan. After the debt restructuring at the end of the 1980s with the use of Brady bonds and the ensuing creation of an international market for bonds issued by emerging markets, most emerging market borrowers were able to use bonds alongside bank loans. In addition, the liberalisation of domestic and international capital markets in line with the

3 The term "Washington consensus" was first used by John Williamson to describe the dominant view in the late 1980s and 1990s that economies should increase their reliance on markets. The recommendations made included, in terms of domestic policies, privatisation and deregulation, and in terms of external policies, the opening of highly regulated domestic markets to cross-border transactions. The latter idea was based on the view that market-based economies should participate in the global economic and financial system in order to benefit from enhanced competition. A view became established that the current account should be liberalised first, as this measure was easiest to implement, and that this could then be followed by a relatively rapid liberalisation of the capital and financial accounts.

Washington consensus gave private sector borrowers access to international capital markets. This led to an increase in the number of issuers, as well as in the number of buyers, which included investment funds and retail investors. From the late 1990s, greater use of an additional instrument, foreign direct investment (FDI), further increased the role played by private lenders. On the borrower side, however, sovereign borrowers were still involved in the recent crises on two accounts. First, widespread crises in the corporate and banking sectors led to the involvement of public authorities as providers of a safety net to mitigate the macroeconomic implications of financial instability. Second, a larger role for the private sector in a debtor country does not preclude that the government, owing to unsustainable fiscal and/or monetary policies, may still be the primary counterpart of foreign lenders and the main source of the crisis. As a by-product of the increase in the number of actors involved in emerging market financing, of the liberalisation of cross-border capital flows since the late 1980s and of the securitisation of international debt, the current stock of emerging market debt differs significantly from the roughly homogeneous stock at the end of the 1980s. The stock of debt is now composed not only of syndicated bank loans and official financing, but also of bonds and FDI, with the last component increasing substantially since the late 1990s.

As a result of these specific features, the resolution of capital account crises has become particularly challenging. One of the challenges is related to the speed with which the crises unfold. By contrast with current account crises, which usually build up over time, capital account crises may occur rapidly because capital is highly mobile. Therefore, such crises often require more rapid policy responses on the part of the domestic authorities and the international financial community. Additionally, the increased size of cross-border capital flows made possible by the liberalisation of the late 1980s produces much higher volatility in macroeconomic and financial variables in times of crisis. Loss of market confidence in

the policies or the fundamentals of a country can have such a powerful effect on the price of sovereign and corporate debt, on exchange rates and on interest rates, as to make them swing abruptly and overshoot their new long-term equilibrium level.

A further complication relates to the role played by financial institutions and financial deepening in borrowing countries. In the recent episodes of capital account crisis, assessing the size and the causes of a crisis was complicated by, *inter alia*, the process of financial deepening, which is still bank-based in emerging market economies. Specifically, the liquidity transformation carried out by banks is likely to make the assessment of the payment capacity of borrowers much harder. Moreover, a combination of maturity and currency mismatches significantly aggravated the weakness of banks, as partial dollarisation exposed them or the firms to which they lent to sudden and for the most part unhedged exchange rate movements. Another layer of complication was added where the government of a country acted as guarantor of its financial stability, leading to government involvement in the bailout of domestic banks. Finally, with a banking crisis, instability in the financial sector can spread to the real side of the economy, which can then be cut off from capital inflows. Given the role that banks play as intermediaries, bankruptcies in this sector have a multiplier effect that makes the cost of crises both higher and more difficult to evaluate.

Related to this problem is the fact that it is difficult to assess the capacity and willingness of a borrower country to honour payments to its creditors, which complicates the choice of appropriate policy response. In a capital account crisis, the widening of borrowing spreads, pressure on the exchange rate and an increase in domestic interest rates usually lead to problems for the sovereign debtor in honouring its external payment obligations. In principle, the most appropriate policy response to such payment problems should be determined on the basis of the debt sustainability situation. If the crisis is triggered

by a temporary lack of funds but economic fundamentals are sound and debt remains sustainable (a liquidity crisis), the most appropriate response is to provide additional financing only or to reschedule the debt such that its net present value is maintained but payments are temporarily delayed. In this context, a case can be made for short-term financing from the official sector to provide the additional liquidity needed during the crisis, thus helping the country to smooth its payment obligations over a longer period of time. By contrast, if the crisis is linked to an unsustainable debt burden (a solvency crisis), it is more appropriate to seek a debt restructuring, involving a reduction in the net present value of debt. In times of crisis, however, it often proves extremely difficult to make a firm judgement on debt sustainability, given the difficulties in evaluating the precise nature of a capital account crisis and the fact that events may unfold particularly rapidly.

As a final challenge, coordination among creditors has become more complex with

the use of novel financial instruments and a widening creditor base. During the debt crises of the 1980s, it was relatively straightforward to organise coordination, because the creditors were not numerous and had largely converging interests. Sovereign creditors coordinated their actions through the Paris Club, and commercial banks set up informal coordination mechanisms through the London Club. The increasing number of creditors and financial instruments has now made it much more difficult to achieve coordination, preserve creditors' rights and avoid discrimination between creditors. In addition, when the domestic financial sector owns part of the country's debt, a satisfactory balance has to be found between inter-creditor equity, which implies the full involvement of domestic creditors in a rescheduling or restructuring of debt, and the preservation of domestic financial stability, which may require a more limited involvement of domestic creditors.

### **3 Policy measures to promote orderly crisis resolution**

The experience with recent capital account crises has raised awareness and highlighted a need to reflect on the actions and policies of the different actors involved. Crisis resolution efforts have delivered mixed results, as can be seen from the varying degrees of success in containing their medium-term macroeconomic and financial effects. In a majority of cases, economic growth picked up very rapidly after the crisis, but in some instances a full reversal of the associated output loss was only possible after several years (see Table I). Similarly, high volatility in financial variables, such as interest rates, exchange rates and equity prices, was brought down at a pace that varied from country to country; in some cases market turmoil continued over a prolonged period. Where the external debt situation proved to be unsustainable, the return to a more sustainable path was uneven across countries

and sometimes required lengthy and difficult negotiations. Moreover, the restoration of financial and corporate sector balance sheet health implied, for most countries, heavy fiscal costs and widespread structural reforms involving short-term costs.

One of the main policy challenges to arise throughout these crises was to find an appropriate balance between the three main components of crisis resolution. The first component is domestic adjustment, i.e. the set of policy measures taken by the debtor country to address the causes of the crisis and to restore debt sustainability. The second component is private sector involvement (PSI), i.e. financial flows from private creditors, which may include, in very specific cases, a restructuring of debt with a reduction in net present value. The third component is official financing, i.e. extended by the official



**Table****Real GDP growth in selected emerging market economies***(annual percentage changes)*

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003 <sup>1)</sup>
Argentina	5.8	-2.8	5.5	8.1	3.8	-3.4	-0.8	<b>-4.4</b>	<b>-10.9</b>	5.5
Brazil	5.9	4.2	2.7	3.3	<b>0.1</b>	<b>0.8</b>	4.4	1.4	1.5	1.5
Indonesia	7.5	8.2	8.0	<b>4.5</b>	<b>-13.1</b>	0.8	4.9	3.4	3.7	3.5
South Korea	8.3	8.9	6.8	<b>5.0</b>	<b>-6.7</b>	10.9	9.3	3.1	6.3	2.5
Mexico	<b>4.4</b>	<b>-6.2</b>	5.2	6.8	5.0	3.6	6.6	-0.2	0.7	1.5
Russia	-12.7	-4.1	-3.6	1.4	<b>-5.3</b>	6.3	10.0	5.0	4.3	6.0
Thailand	9.0	9.2	5.9	<b>-1.4</b>	<b>-10.5</b>	4.4	4.6	1.9	5.3	5.0
Turkey	-5.0	6.9	6.9	7.6	3.1	<b>-4.7</b>	7.4	<b>-7.5</b>	7.8	5.3

*Source: IMF, World Economic Outlook, September 2003.**Note: Figures in bold indicate the year(s) in which a capital account crisis occurred.**1) Figures for 2003 are projections.*

sector, notably the IMF, the World Bank, the regional development banks, and, in some cases, bilateral official creditors. These three components are closely related and mutually reinforcing. A quick return of financial flows from private creditors is desirable to limit the costs of the crisis. Without this, domestic asset prices and financial variables may be subject to disruptive developments, thereby making a successful adjustment process less likely. Domestic adjustment is a precondition for effective PSI, since the restoration of market confidence hinges on a sustainable correction of domestic imbalances. Official financing also plays a crucial role, as it may help to reduce the cost of a crisis by providing new money at a time when access to capital markets is difficult. At the same time, such financing should only be extended if there is an appropriate degree of domestic adjustment, since only the correction of macroeconomic imbalances and balance sheet mismatches can provide assurances that the pool of IMF resources will remain available for potential use by other member countries.

In response to these challenges, the international official community, notably the IMF, has continuously reviewed its experience with crisis management, on the basis of both internal and external reports. The Independent Evaluation Office, which was set up by the IMF to provide an objective and

independent evaluation of IMF-related issues, may also be called on to play an increasingly important role in this review process.

The IMF has introduced a series of measures to enhance the timely and orderly resolution of capital account crises. The remainder of this section discusses specific measures that have been taken or are currently under discussion for each of the three components of crisis resolution. At the outset, however, two remarks applicable to all three components should be made.

First, the measures to enhance crisis resolution should strike an appropriate balance between rules and discretion. On the one hand, clear rules are needed to facilitate the coordination of the different parties' expectations and behaviour, as the absence of such rules is likely to lead to an inappropriate structure of incentives for risk-taking behaviour. On the other hand, some degree of discretion is required to tackle the specific problems and challenges of each crisis and to avoid an overly prescriptive and detailed framework that could hinder timely and suitable decisions.

Second, an important criterion by which to determine the most appropriate combination of these components is the debt sustainability situation. If debt is unsustainable, a



combination of domestic adjustment and debt restructuring will be needed. If debt is sustainable, a combination of strong domestic adjustment and ample, but temporary, official financing may facilitate renewed access to private financing and help to stem the crisis. This implies that an adequate assessment of debt sustainability is a key prerequisite for successful crisis resolution. In recognition of this, the IMF has made substantial efforts to improve the techniques used in its debt sustainability assessments and has started to include such assessments more systematically in the documents submitted to its Executive Board. While it should be recognised that the determination of medium-term sustainability is intrinsically a judgemental exercise, and its analytical basis may be subject to wide margins of error, the IMF's continuing efforts to increase the accuracy of the exercise are to be welcomed. In this regard, sustainability analyses should also provide different scenarios reflecting alternative hypotheses for macroeconomic variables and financial flows, so as to give an indication of a potential worst-case outcome. In addition, the IMF has agreed to increase transparency by publishing debt sustainability assessments, thus fostering accuracy in their preparation.

### **Domestic adjustment**

Domestic adjustment is the cornerstone of crisis resolution, as it is a key prerequisite for the restoration of confidence and the resumption of financial inflows. The primary responsibility for such adjustment lies with the policy-makers of the country suffering the crisis. It is in the country's own interest to address the weaknesses that have led to the crisis and to ensure a timely return to macroeconomic and financial stability and debt sustainability. However, the occurrence of capital account crises necessitates a review of the nature of domestic adjustment. Specifically, the novel characteristics of the recent crises, as discussed in Section 2, imply that adjustment measures should not be targeted exclusively at macroeconomic

weaknesses, such as current account deficits and fiscal imbalances. They should also address underlying vulnerabilities in private or public sector balance sheets, such as currency and maturity mismatches, as well as possible weaknesses in the regulatory or supervisory framework. A specific challenge for domestic adjustment is to combine urgent policy action, which may be needed to contain the immediate effects of a crisis, with long-term structural reform, which is required to maintain the long-term growth potential of the economy.

The international official community also plays a role in domestic adjustment through the conditionality of IMF financial programmes. Conditionality ensures that IMF financing is used to resolve the debtor's economic difficulties and that the country will be able to repay the IMF at the end of the programme. It also plays a crucial role in restoring market confidence, as it provides assurances to private creditors with regard to the quality of domestic adjustment. Over the last few years, experience with capital account crises has led the IMF to review a number of elements of its approach to conditionality. First, following the Asian crises of the late 1990s, the IMF increasingly adapted conditionality to ensure it was tailored to the specific problems and needs of the country concerned. Its focus was broadened from macroeconomic policies to include areas such as financial sector policies. While this allowed the structural factors underlying a crisis to be addressed, it was subsequently acknowledged that in certain cases there had been some "overshooting" in the widening of scope. The IMF therefore decided to streamline conditionality by focusing on issues of critical relevance to the resolution of a crisis. Second, there has been increasing consensus that conditionality can only be effective if national authorities have the administrative capacity and the necessary determination and political support to implement corrective action. The IMF has thus increasingly fostered country ownership in programme design.

## Official financing

The shift from current to capital account crises has made it more difficult to determine the appropriate role for official financing. Recent capital account crises have been characterised by very significant external financing needs in the public and private sectors of the debtor country which could not be met in full through available official reserves. The international official community has responded by supplementing these reserves with large financial packages. This approach has led to a debate on the appropriate role for official financing, focusing on the question of whether it could function as an international lender of last resort, along the lines of the role played by central banks in a domestic context. Notwithstanding its appeal, the analogy is subject to a number of limitations. First, a lender of last resort requires very large resources, whereas the resources of international financial institutions are limited. This contrasts with the domestic context, where central banks have – since they can issue their own fiat money – unlimited resources to assist private credit institutions facing liquidity problems. Second, the extension of large packages may lead to increased exposure of the international institutions, mostly the IMF, vis-à-vis a few large borrowers, resulting in an unwelcome concentration of IMF credit and an unacceptable degree of credit risk for the IMF and, indirectly, the international community. Third, in a domestic context the assistance offered by central banks to troubled banks may be accompanied by mandatory changes in corporate governance, including the substitution of incompetent management. In an international context, IMF conditionality may be used to correct unsustainable domestic policies, but its effectiveness is likely to be more limited. Fourth, although practical difficulties in distinguishing liquidity from solvency crises also complicate the performance of a lender of last resort function in a domestic context, they are bound to be more significant at the international level, as balance sheet information is much more difficult to compile

and assess for an entire country than for an individual credit institution.

In view of these limitations, the performance of an international lender of last resort function is likely to be subject to policy errors. Specifically, there is a risk of generous financing being provided to a country that is perceived to have a sustainable debt situation, which subsequently proves to be unsustainable. Over time, performing this function carries the risk that, in the event of a gradual deterioration from a sustainable to an unsustainable situation, the international official community will ultimately have little choice but to roll over its own financing. Finally, moral hazard may arise if official financing distorts the functioning of market discipline, i.e. the incentives that private creditors provide to a debtor country to pursue sound policies in order to generate the required repayment capacity. This may occur if borrowers and lenders perceive that official financing offers some form of free insurance. In this case, borrowing countries may find it less costly to pursue unsustainable policies (debtor moral hazard) and investors may pay less attention to credit risk when making investment choices (creditor moral hazard). Although moral hazard is not specific to international lending and empirical evidence is sparse, large official packages to borrower countries should remain exceptional and should be supported by a strong case. The possibility that moral hazard may be a bigger concern in an international context follows from the fact that, at times of crisis resolution, transferring a share of the costs resulting from unsustainable policies to creditors is more difficult if the creditors and borrower do not fall under the same jurisdiction. In addition, sovereign debt seniority structures tend to be more complex and less clearly defined than those of private institutions.

As a result, it has been recognised that an international lender of last resort function is to a large extent neither feasible nor desirable. The notion that official financing should be subject to clear rules, including

strict access limits, so as to minimise potential distortions of market functioning, should therefore be considered a positive development of this debate.

This view is reflected in the IMF's framework for exceptional access. Under this framework, IMF financing should not, as a rule, go beyond predefined access limits, which are determined as a function of the quota assigned to each IMF member country. As a rule, the amount of financing in any given year should not exceed 100% of the quota (the annual access limit) and the total amount of outstanding IMF lending should remain below 300% of the quota (the cumulative access limit). However, in some cases, the IMF may decide to grant exceptional access by extending financing above these limits. Until March 2003, this was possible in "exceptional circumstances", which were not spelled out in more detail, or through the use of the Supplemental Reserve Facility (SRF), which was not subject to limits (the SRF can be used in cases where the risk of contagion could pose a threat to the international financial system). Since 1995, nine countries – Argentina, Brazil, Indonesia, South Korea, Mexico, Russia, Thailand, Turkey and Uruguay – have benefited from access beyond statutory limits. Moreover, such lending above limits constituted the bulk of total IMF lending in that period.

In March 2003, the IMF decided to strengthen its access policy framework by specifying a number of procedural requirements and substantive criteria for exceptional access. In terms of procedure, the programme documentation is now required to include a more detailed justification of the proposed amount of official financing, the IMF Executive Board has to be consulted at an early stage, and a systematic *ex post* evaluation of programmes supported by exceptional access is expected. The criteria are the presence of exceptional pressures on the financial account of the balance of payments that cannot be met within normal limits, a high probability that debt will remain sustainable, good prospects that the country will regain market

access, and a strong likelihood of the adjustment programme being successful. The exceptional access policy was further strengthened in June 2003, when the IMF agreed on mandatory publication of the reports prepared for decisions on exceptional access from July 2004 onwards, a measure intended to exert a disciplining effect on its decision-making process.

The inclusion of a criterion on debt sustainability could be seen as an element of a lender of last resort function for the IMF, since it means that more substantial amounts may be granted to a country facing a pure liquidity crisis. However, even with this provision, the IMF's role cannot be regarded as that of a lender of last resort as the amounts of official assistance are not open-ended, even in exceptional access cases. The amount of financing is always required to be justified in relation to certain indicators, for instance GDP and the financing gap.

### **Private sector involvement**

Private sector involvement (PSI) is defined in this article in a broad sense and encompasses not only situations where debt is restructured (implying a reduction in net present value, or "haircut") but also where private creditors renew existing or extend new credit without a reduction in net present value. Seen from that broad perspective, PSI constitutes a key element in all crisis cases, for two main reasons. First, it is needed because private financing accounts for the bulk of the external financing of emerging market economies. The other two components of crisis management, domestic adjustment and official financing, are insufficient to cope with the large financing needs that arise in capital account crises. This is because domestic adjustment tends to produce effects mostly over the medium term and may therefore not always deliver immediate results, and because official financing is capped by resource constraints. Second, the participation of private creditors is important in view of moral hazard considerations. As discussed in relation to

official financing, markets can only exert their disciplining function when creditors are encouraged to internalise the risks related to their investment choices. This can only happen if, in the event that these risks materialise, investors are forced to bear at least part of the associated costs.

However, involving the private sector is made difficult by the general challenges discussed in Section 2, such as the speed of unfolding market developments and, more importantly, coordination and information problems. Coordination problems arise when the optimising behaviour of each individual creditor leads to a sub-optimal solution. For example, in the case of a proposed restructuring, each creditor may have an interest in declining the offer and seeking full repayment, in the hope that other creditors will participate in the restructuring and bear the burden (free-rider behaviour). If all creditors pursue the same free-rider strategy, the end result may be disorderly and inferior to a coordinated solution. Information problems relate to the aforementioned difficulties in assessing the actual payment capacity of sovereign debtors, as well as their strategies in the process of debt restructuring. As a result, the negotiation process is surrounded by a considerable degree of uncertainty, which may make private creditors reluctant to accept their involvement in the resolution of a crisis.

To overcome the coordination and information problems, three broad groups of instruments have been proposed. One proposal, which gained attention in the aftermath of the Mexican crisis and was promoted in a report by the Group of Ten countries entitled "The resolution of sovereign liquidity crises" (May 1996), is to modify the contractual framework by including collective action clauses (CACs) in debt contracts (the contractual approach). More recently, the IMF explored the idea of establishing a framework in international law by creating a Sovereign Debt Resolution Mechanism (SDRM) (the statutory approach). And at present work is under way on a third

proposal, the development of a Code of Conduct (the Code-based approach). These three solutions, which are described in greater detail in the following paragraphs, are distinguished by the problems they set out to address and their contractual, statutory or voluntary nature. The contractual approach is mostly targeted at solving the creditor coordination problem. The statutory approach would address the problems of both creditor coordination and information collection and would be encapsulated in a legally binding framework. Finally, the Code-based approach would address both the coordination and information collection problems, but it would be of a non-binding nature.

The contractual approach is based on CACs, i.e. provisions in debt contracts that facilitate coordination among creditors. Notably, they lower the threshold for the approval of a debt restructuring from unanimity to a qualified majority, for example 75% of the amount of outstanding debt (majority restructuring provisions) and thus help to avoid situations where a minority of creditors blocks a restructuring agreement. They also limit the ability of a minority of creditors to initiate legal proceedings against the debtor that could disrupt the restructuring negotiations (majority enforcement provisions). Such clauses are legally possible under nearly all jurisdictions, but until recently had not been used in some key jurisdictions – mainly New York – due to prevailing market practices. It is estimated that, at present, only around one-third of the existing stock of international sovereign bonds includes CACs. Recently, however, significant progress has been made towards a more widespread inclusion of CACs: they have been incorporated in most of the new sovereign bond issues under New York law since March 2003. So far, their inclusion has not had a perceptible impact on borrowing costs, contrary to borrowers' fears that CACs might be perceived by creditors as facilitating undue recourse to debt renegotiations and therefore leading to an increase in risk premia. Progress towards a

broader inclusion of CACs has been helped by intensive work on model clauses in official and private sector fora, including the Working Group on Contractual Clauses of the Group of Ten, in which the ECB also participated. Furthermore, in an effort to lead by example, the EU Member States committed themselves in April 2003 to including CACs in their future bond issues under foreign jurisdictions.

All in all, this suggests that progress towards the broader inclusion of CACs is satisfactory. Nevertheless, the contractual approach alone may not offer a full answer to the challenges related to PSI. A first concern is that it may take many years before CACs are included in the entire stock of sovereign debt. Furthermore, CACs usually apply to one specific debt issue and thus do not provide for aggregation among holders of different issues. Nevertheless, there has been progress in achieving some degree of aggregation under a contractual approach. In particular, bonds recently issued by Uruguay include CACs that provide for a limited form of aggregation. However, including contractual provisions that provide for aggregation is not entirely straightforward and their design is still at a rather experimental stage. Finally, while the contractual approach helps to address problems of coordination among debtors, it may not offer an answer to other challenges raised in the context of crisis resolution, such as the need for a symmetrical information exchange between debtors and creditors. All in all, this suggests that further work and innovative solutions may be required to improve some aspects of this approach.

As an alternative solution, the IMF worked between 2001 and early 2003 on a statutory approach based on a legally binding procedure in the form of an SDRM. This approach was based on the idea that some elements of bankruptcy mechanisms applicable in the domestic context to private or public sector entities could be used in a sovereign context. Under the proposal, the SDRM would have been limited to cases where the debt situation of a country had become unsustainable. It

would have put all relevant debt of a sovereign borrower into a limited number of creditor classes and would have allowed a qualified majority of creditors in each class to agree on a restructuring plan. In addition, it would have been equipped with a dispute resolution forum, empowered to perform administrative functions (e.g. notifications to creditors, registration of claims, administration of the voting process) and to take certain judicial decisions to solve debtor-creditor and inter-creditor disputes.

The statutory approach would provide a strong framework for addressing information and coordination problems. Unlike CACs, it would provide for aggregation across debt contracts of different creditor classes. Moreover, it would be applicable, from the first day of its implementation, to all outstanding debt. It would also be legally binding, as it would be embedded in an international legislative framework, for example via an amendment to the IMF's Articles of Agreement.

However, at the IMF Spring Meetings in April 2003, it became clear that there was not sufficient political support for the creation of an SDRM. Emerging market borrowers were not willing to endorse it because of opposition from private sector creditors and concerns about a possible increase in borrowing costs. Some of the advanced economies were similarly sceptical. Accordingly, the development of the SDRM was put aside for the time being, but it was agreed to continue to study some of its features, which could be of general relevance to the orderly resolution of crises. Looking ahead, it will therefore be important to assess the extent to which these features – such as the enhancement of transparency and disclosure, aggregation across debt issues and the creation of a dispute resolution forum – could be replicated outside an international legal framework.

As a third solution, work is under way on a Code of Conduct, which would set out best practices and guidelines for the borrower,

the lenders and the international official community. Although these best practices would be non-binding, they could improve the process of crisis resolution. At present, a group of private sector representatives and officials from emerging market economies and creditor countries are involved in preparing the ground for such a code to be drafted. The Code would be based on a number of principles for sovereign crisis resolution, such as early consultation between creditors and debtors, early information-sharing and transparency, and fair treatment. Moreover, it would refer to a number of instruments to help implement these principles. The instruments could, for example, include information-sharing mechanisms, CACs and mechanisms to organise the negotiations between a debtor and its creditors. Finally, the implementation of the Code of Conduct

could be ensured through specific monitoring and review procedures.

The Code could help to improve crisis resolution as its policy principles would guide the actions of debtors and creditors and thereby help to address both coordination and information problems. It would also contribute to better crisis prevention, as it would encourage and facilitate ongoing dialogue between the relevant parties and thereby promote sound behaviour and early corrective action. At this stage it remains open whether the Code would include sufficiently strong instruments and incentives to be effective, given its voluntary character. Some observers have argued that such an approach could only be fully effective if it operates “in the shadow of the law”, i.e. if a fully-fledged institutional framework is in place as a fall-back solution.

## 4 Conclusion

This article has reviewed the recent experience with capital account crises in emerging market economies. These crises have proved very difficult to manage, as evidenced by the mixed results in terms of the economic costs and the speed with which confidence and stability have been restored in crisis-hit countries.

The international official community has already drawn lessons from the recent experience and has agreed on a number of measures to maximise the effectiveness of each of the three main elements of crisis resolution, i.e. domestic adjustment, official financing and private sector involvement. In addition to macroeconomic imbalances, vulnerabilities in a country's corporate and financial balance sheets are now recognised to be among the primary sources of instability, with the potential to lead to full-blown crisis. With respect to official financing, the IMF has launched a number of new initiatives, including the adoption, in March 2003, of a new framework to guide decisions on exceptional access to IMF funds during capital account crises, which should

contribute to enhancing accountability and transparency. Finally, in the area of private sector involvement, a number of new proposals have been put forward to address the coordination and information problems that may lead to disruptive market developments. However, no proposal is likely to offer a solution to all the issues that have complicated crisis resolution in the recent past. CACs have the advantage of being comparatively easy to implement, as shown by their widespread inclusion in recent international sovereign bond issues of emerging countries, and of helping to mitigate the problem of intra-creditor coordination. On the other hand, they fail to offer more information to investors and do not facilitate aggregation across different bond issues from the same country. The proposal to create an SDRM has been put on hold for the time being, since a number of interested parties perceived it as being comparatively heavy-handed in dealing with market imperfections. However, some of its elements may merit further consideration, given their potential contribution to solving coordination and information problems in protracted debt

restructuring cases. A third proposal, the preparation of a Code of Conduct, could also help to address both coordination and information problems, but its precise design remains open and its operation on the basis of voluntary best practices is still to be tested.

However, these proposals and their implementation may not exhaust the full range of solutions to be considered in the years to come. Although progress has recently been made in crisis resolution, further efforts are likely to be required on the part of the international community, given the remaining policy challenges.



# The international role of the euro: main developments since the inception of Stage Three of Economic and Monetary Union

This article briefly reviews the main features of the international role of the euro, i.e. its use by non-residents of the euro area. Since 1999, non-resident use of the euro has gradually gained ground. The euro has consolidated its role as second international currency, exhibiting both specific features and characteristics shared with the leading international currency, the US dollar. Among non-residents of the euro area, the main users of the euro include large financial institutions and corporations from industrialised countries. The role of the euro has developed in particular in regions close to the euro area, including the City of London as regards financial markets and the countries of central and south-eastern Europe where the euro's legacy currencies were in circulation before the start of Monetary Union. These developments are essentially market-driven and highlight the degree of confidence of non-euro area residents in the euro. A more analytical "Review of the international role of the euro", providing greater detail, is published each year by the ECB.

## I Developments in the last four years

This article reviews some segments of the international financial markets where currency considerations play a decisive role. It focuses on the issuance and placement of debt securities, foreign exchange activity in the spot market and the international operations of banks – including interbank markets – either cross-border or foreign currency-denominated. Other market segments where currency considerations are less significant – such as equities or some types of derivatives – are not covered in this article.

Looking at the three aforementioned segments, the euro has firmly established its status as second international currency. Its

market share has increased, rising steadily between mid-1999 and mid-2001, and more gradually between mid-2001 and mid-2003 (see Table I).

1) Data on the denomination of amounts outstanding of international debt securities (including bonds, notes and money market instruments) issued in a currency different from the one of the country in which the borrower resides show that the euro's share reached 30% in mid-2003, 9 percentage points higher than in mid-1999 (see also Chart I).

**Table I**  
The international use of currencies – currency shares in selected financial markets

	US dollar	Euro	Japanese yen	Others
Bonds, notes and money market instruments issued by non-residents of the respective domestic financial market <sup>1), 2)</sup>				
June 1999	46.8	21.7	16.6	14.9
June 2001	44.1	27.4	14.3	14.2
June 2003	43.7	30.4	10.5	15.3
Total foreign exchange transactions against local currency outside the euro area <sup>3)</sup>				
April 2001	47.5	16.9	12.5	23.1
International bank liabilities <sup>1), 4)</sup>				
June 1999	55.2	19.6	8.7	16.5
June 2001	54.4	24.1	7.7	13.7
December 2002	53.2	24.6	6.2	16.0

Sources: BIS and ECB calculations.

1) At constant 1994 Q1 exchange rates.

2) Amounts outstanding of debt securities issued in a currency different from that of the borrower's country of residence (for the euro, the entire euro area).

3) Including foreign exchange transactions against the US dollar in the United States and against the Japanese yen in Japan.

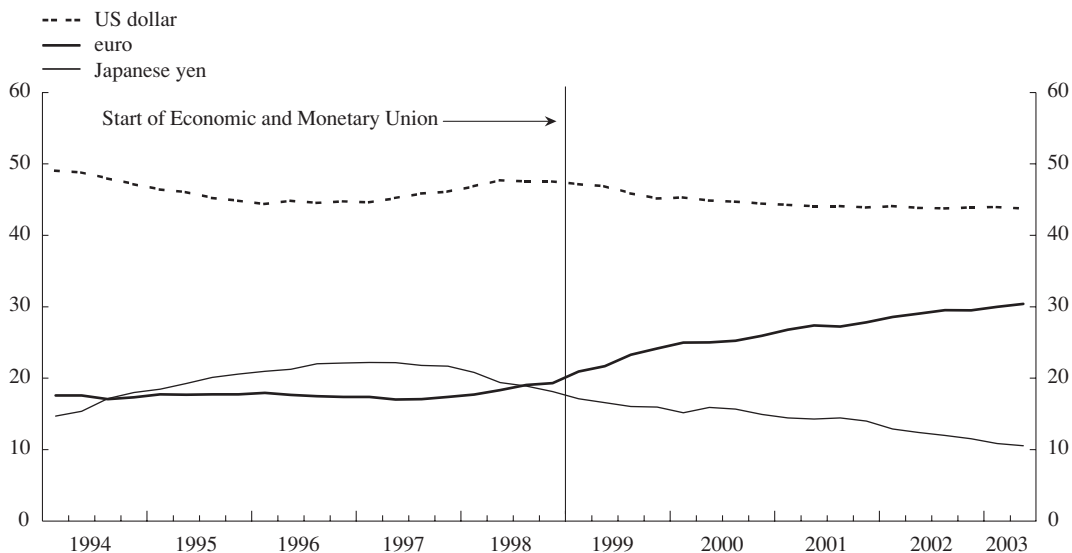
4) Cross-border liabilities of credit institutions and their domestic liabilities in foreign currencies.



## Chart I

### International debt securities stock: currency shares<sup>1)</sup>

(percentages)



Sources: BIS and ECB calculations.

1) Bonds, notes and money market instruments, excluding home currency issuance, as a percentage of the total amount outstanding and at 1994 Q1 exchange rates.

2) In foreign exchange activity (spot, forward and swap markets) in financial centres outside the euro area, the euro was used in about 17% of trades in April 2001,<sup>1</sup> as indicated by data from the BIS Triennial Survey published in 2002. In global foreign exchange markets (including financial centres located in the euro area), the USD/EUR currency pair was that traded most, representing 30% of all trades.<sup>2</sup>

3) Turning to international activity in the banking sector (which includes relations between euro area MFIs and non-euro area residents), the euro represented 24.6% of international bank liabilities and 25.5% of international assets at end-2002. This was an increase of 5 and 6 percentage points respectively compared with mid-1999.

Statistical evidence on the location of non-resident financial activity in euro is fragmentary. However, evidence available for bond issuance, foreign exchange trading and asset management suggests that the City of London plays a crucial role in this respect. According to market sources, in the period

1999-2002, borrowers resident in the United Kingdom accounted for 30% of euro-denominated bonds issued by non-residents of the euro area. Entities based in the United Kingdom represented 60% of what are known as “book runners” (namely the financial institutions organising the underwriting of debt securities in the primary market). In foreign exchange markets outside the euro area, 47% of transactions involving the euro were carried out in the United Kingdom in April 2001.<sup>3</sup> Moreover, the euro-denominated assets and liabilities of banks resident in the United Kingdom accounted for around 60% of total euro-denominated assets and liabilities outside the euro area.

1 A comparison with 1998 BIS data is not straightforward due to the structural break created by the disappearance of foreign exchange trade between legacy currencies with the start of Stage Three of Economic and Monetary Union (EMU) in 1999 (as explained in detail in the article entitled “The international role of the euro” in the August 1999 issue of the Monthly Bulletin).

2 Data on currency pairs (e.g. EUR/USD) are not immediately comparable with the share of individual currencies (e.g. the euro) in foreign exchange markets. The next BIS survey will be conducted in 2004.

3 Foreign exchange activities in euro were also carried out in the United States (23% of trades outside the euro area), Switzerland (7%), and Japan and Singapore (6% each).

**Box I****Benefits and drawbacks of a “narrow” definition of the international role of the euro**

The international role of the euro refers to the use of the single currency by non-euro area residents. From a financing perspective, this means only those securities issued by residents outside the euro area. From an investment perspective, euro area securities held by non-euro area residents should also be accounted for. However, a currency breakdown of foreign holdings of euro area securities does not yet exist. In this article, a “narrow” definition of “international” is used, meaning only those securities issued by residents outside the euro area. In addition to this narrow definition, a “broad” definition exists, whereby the BIS considers a debt security issued by a euro area resident to be international if it is targeted at international investors (e.g. through a syndicate of banks comprising non-euro area financial institutions). The narrow definition excludes assets commonly considered by financial market participants to be genuinely international, even if they originate from the euro area. However, the broad definition includes those cases where both the issuer and the holder of the securities are resident in the euro area, even if the issuance was originally intended to be truly “international”.

The share of the euro in the stock of international debt securities is larger under the broad measure (41.5% in mid-2003) than under the narrow measure. Under the broad definition, the share of the euro is almost the same as that of the US dollar (42.5% in mid-2003). While, in the past, the ECB made reference to both definitions, this article focuses on the narrow definition only, not least for the sake of clarity and simplicity. However, the conclusions would remain the same if the broad definition were to be used instead.

Turning to the use of the euro as a medium of exchange in international trade, the euro has recently also gained greater status as a settlement/invoicing currency. Statistical evidence, currently available for a number of euro area countries, suggests that around 50% of their exports to non-euro area residents and 45% of imports from non-euro area residents are now priced in euro (see Table 2). The difference between the share in imports and that in exports reflects the impact of raw materials – largely invoiced in

US dollars – on imports to the euro area. It is also in line with the hypothesis (also known as “Grassmann’s law”) that economic agents are able to impose their own currency as currency of invoice/settlement more easily for exports than for imports. The increase in the use of the euro began before the introduction of the euro banknotes and coins, but became more evident in 2002. It is possible that the cash changeover may have encouraged exporters and importers to review their invoicing practices in favour of the euro.

**Table 2****The share of the euro as a settlement/invoicing currency of selected euro area countries in extra-euro area trade in goods***(percentages)*

	Exports			Imports		
	2000	2001	2002	2000	2001	2002
Belgium	...	...	53.4	...	...	53.3
France	48.0	49.2	55.3	35.0	39.8	46.8
Germany	...	...	49.0	...	...	48.0
Greece	...	23.5	39.3	...	29.3	35.8
Italy	...	52.7	54.1	...	40.8	44.2
Luxembourg	...	...	51.6	...	...	35.3
Portugal	40.1	43.5	48.5	47.0	53.6	57.6
Spain	49.0	52.0	57.6	44.0	49.7	55.8

Sources: NCBs and ECB calculations.

Note: “...” stands for “not available”. Data refer to the use of the euro as a settlement currency, except in Germany. For Germany, data reflect the average value of data collected in sample surveys carried out on behalf of the Deutsche Bundesbank in the first and third quarters of 2002. All 2000 and 2001 data above include trade settled in euro and in legacy currencies.

## 2 The four main groups of users

Since 1999, four groups of users have shaped the international role of the euro: (i) non-resident private agents, particularly financial institutions and large international corporations; (ii) non-resident public authorities, although to a lesser extent; (iii) euro area investors, as purchasers of euro-denominated bonds issued outside the euro area; and (iv) neighbouring countries of the euro area.

bulk of euro-denominated bonds in the period under review, namely 80% of the total. Table 3 shows the top ten issuers from the non-financial corporate sector. On the investment side, demand from residents outside the euro area was mostly from institutional investors, with a significant share thereof coming from the United Kingdom and European countries outside the euro area. Interest from US investors remained limited.

### Non-resident private agents

Non-resident financial institutions and non-financial corporations, mostly in the United States and the United Kingdom, issued the

### Non-resident public authorities

Issuance by non-euro area governments and public sector entities averaged 14% of total euro-denominated international bonds in the

**Table 3**

#### Top ten non-resident issuers from the non-financial corporate sector (from 1999 to end-August 2003)

Company	Number of issues	Total issuance (EUR billions)	Country of residence
General Electric Capital Corp	71	29.1	United States
Ford Motor Credit Co	19	23.3	United States
General Motors Acceptance Corp – GMAC	21	19.4	United States
Tecnost International Finance NV	4	15.6	Netherlands Antilles
DaimlerChrysler North America Holding Corp	19	12.5	United States
Spintab AB	42	11.0	Sweden
British Telecommunications plc	7	9.5	United Kingdom
Household Finance Corp	12	8.4	United States
BAT International Finance plc	7	4.9	United Kingdom
Vodafone Group plc	7	4.3	United Kingdom

Sources: Dealogic (Bondware) and ECB calculations.

**Table 4**

#### Top ten non-resident issuers from the public sector (from 1999 to end-August 2003)

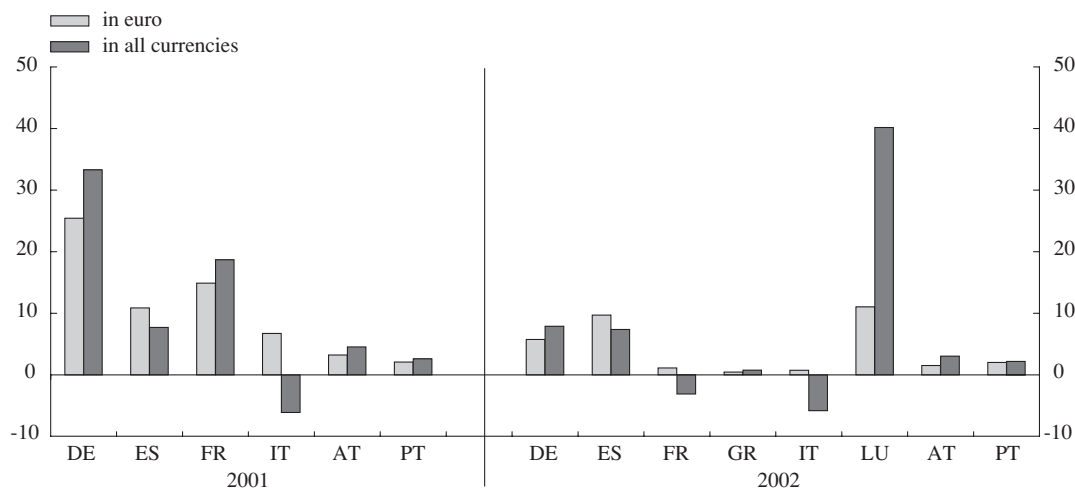
Company	Number of issues	Total issuance (EUR billions)	Country of residence
Federal Home Loan Mortgage Corp – Freddie Mac	12	44.5	United States
Republic of Argentina	35	11.5	Argentina
Republic of Turkey	19	9.1	Turkey
Federative Republic of Brazil	10	6.8	Brazil
Hamburgische LB Finance (Guernsey) Ltd	22	6.8	Guernsey
Swedish National Housing Finance Corp – SBAB	21	4.9	Sweden
Republic of Poland	6	4.6	Poland
Vattenfall Treasury AB	16	4.1	Sweden
Republic of Hungary	7	4.0	Hungary
United Mexican States	4	2.9	Mexico

Sources: Dealogic (Bondware) and ECB calculations.

## Chart 2

### Bonds and notes issued by non-residents: net purchases by residents of selected euro area countries

(EUR billions)



Sources: NCBs and ECB calculations.

Note: The currency identified is that of denomination of the securities, except in Luxembourg, Spain and Greece, where it is the currency of settlement of transactions. Positive (negative) amounts represent net purchases (sales) of bonds and notes by euro area residents from (to) non-euro area residents. Data for Greece and Luxembourg are not available for 2001.

period from 1999 to 2002, with the largest issuer being Freddie Mac, a US federal agency granting mortgage loans (see Table 4).<sup>4</sup> The share of emerging markets' sovereign issuers has decreased over time, especially since the debt default in Argentina.

On the investment side, public authorities do not appear to have been major purchasers for most of the period under review. IMF data show that the share of the euro in central bank reserves increased slightly, from 12.6% in 1999 to 14.6% in 2002. This also reflected stronger interest from emerging market countries, with the share of the euro in their reserves increasing from 14.1% in 1999 to 16.8% in 2002. This is in line with past developments suggesting that the currency composition of reserves changes only gradually.

#### Euro area residents

A significant proportion of euro-denominated bonds and notes issued by non-residents of the euro area is purchased by euro area residents. Statistics on the currency breakdown of the balance of payments

available for some euro area countries suggest that – with the notable exception of Luxembourg – euro area residents have a preference for euro-denominated bonds, as they account for the largest share of their net purchases of bonds in all currencies from non-euro area residents (see Chart 2).

This is further supported by evidence available from market sources on the location of roadshows in the international bond market, showing that international issuers of euro-denominated bonds have explicitly targeted investors located in the euro area, the United Kingdom and Nordic countries.

#### Neighbouring regions of the euro area

The neighbouring regions of the euro area have employed the euro for a much wider range of uses than other regions of the world. This range covers the following four

<sup>4</sup> The Bank of England, formerly on behalf of the UK Treasury and now on its own account, is also an active issuer of euro-denominated debt securities, issuing three-year notes to the value of €6.6 billion between 2001 and 2003. The Bank of England also regularly issues euro short-term bills.

functions: the use of the euro as a financing currency; the use of the euro as a vehicle currency<sup>5</sup> in foreign exchange markets; the use of the euro as a reference currency in exchange rate policies; and, finally, currency and asset substitution, i.e. the use of the euro in cash as well as book-money form outside the euro area.

For some governments, especially in central and eastern Europe, the choice of the euro as the preferred borrowing currency is linked to strategic policy considerations. The authorities of countries acceding to the EU issue euro-denominated government debt, in line with their goal to adopt the euro. In other countries, the choice of the euro as borrowing currency is in line with the very high degree of asset substitution in the banking system (e.g. Croatia), or with the significant use of the euro as invoicing currency for foreign trade (Morocco and Tunisia).

While most transactions between two currencies in global foreign exchange markets are effected through the US dollar, this “vehicle” role is played by the euro in some financial centres close to the euro area. In these countries a large majority (Hungary and Slovenia) or a high share (Czech Republic and Slovakia) of all foreign exchange operations against the local currency involve the euro. The percentage of trades involving the euro is also comparatively high in western European countries outside the euro area (Denmark, Sweden and Switzerland).

In EU neighbouring regions, moreover, several countries run an exchange rate policy that includes a reference to the euro, which may vary from hard pegs to managed floating. Some countries operate a euro-based currency board arrangement (Bosnia and Herzegovina, Bulgaria, Estonia and Lithuania) or have a hard peg to the euro (the countries of the CFA Franc Zone in western and central Africa). Certain territories have unilaterally given the euro the status of official currency (Kosovo and Montenegro). Two EU acceding

countries allow a fluctuation band of 15% on either side of a central rate against the euro (Cyprus and Hungary) and others manage their exchange rate against the euro (Slovenia, Slovakia and Romania). Finally, some countries assign an important role to the euro in the currency basket against which they orient their foreign exchange policy (Latvia, Malta, Morocco and Tunisia).

Parallel currency circulation outside the euro area is mostly found in its immediate geographical vicinity, as recently described in the article entitled “The demand for currency in the euro area and the impact of the euro cash changeover” in the January 2003 issue of the Monthly Bulletin. Data from the Eurosystem on banknote shipments to destinations outside the euro area suggest that, since this article was published, the circulation of euro banknotes has increased further. The amount of euro banknotes sent outside the euro area (net of inflows) has increased from €28 billion (end-2002) to around €38 billion (July 2003). Euro cash transferred through other means (tourism, remittances, grey economy, etc.), however, is not accounted for in this figure.

The euro circulates as a parallel currency especially in some countries of central Europe and the western Balkans and is used in both cash and deposit form. More generally, in around 30 emerging economies in the region neighbouring the euro area for which data are available, euro-denominated deposits rose by €13.5 billion in the months preceding the cash changeover, reaching around €52 billion at end-2001 as people deposited “under the mattress” legacy currency cash holdings in banks.<sup>6</sup> Since then, euro-denominated deposits have increased only slightly in absolute terms, while remaining fairly stable as a share of total deposits.

<sup>5</sup> In foreign exchange markets, transactions between two currencies may be effected through the purchase and sale of a third currency (called the “vehicle” currency), if trades against this latter currency are more liquid, and therefore less expensive to traders.

<sup>6</sup> Figures are based on a survey conducted by the ECB in cooperation with the central banks of 30 neighbouring countries.

### 3 Main determinants shaping the international role of the euro

In the period considered in this article both elements of continuity and factors of change have shaped the international role of the euro.

Balkans and around the Mediterranean have added a new perspective to these links.

#### Elements of continuity

Elements of continuity that shape the euro's international role comprise the heritage from the legacy currencies and the historical, institutional and economic relations of the euro area with its neighbouring regions.

- Owing to the status inherited from some legacy currencies, the euro immediately gained international currency status when it came into being. As a legacy mainly of the Deutsche Mark and the French franc, the euro was immediately used as an international reserve currency and as an anchor in the exchange rate policies of some EU neighbouring countries.
- The regional role of the euro has also been supported by close economic and institutional relations between the euro area and its neighbouring regions, which largely existed prior to the introduction of the euro. The euro area accounts for an overwhelming share of external trade and financial exposure to these neighbouring regions. The prospect of EU enlargement and the launch of association policies by the EU with the countries in the western

#### Factors of change

Factors of change relate to the deepening of euro area financial markets and the increasing internationalisation of the borrowing strategies of international corporations.

- The increase in the size of the euro area financial markets, supported by the creation of payment and security settlement systems for the euro area, has created greater interest among international borrowers in the euro. They can now target investors from an increasingly unified domestic market, therefore benefiting from increased liquidity by comparison with the individual markets of the 12 euro area countries.
- Confronted with the challenge of increasing financial needs, international corporations have endeavoured to enlarge their investor base outside their domestic financial market. This has contributed to reducing their dependence on the domestic investor base, and occasionally to lowering their borrowing costs, when favourable swap opportunities have arisen. For some US and UK corporations, euro-denominated issuance has achieved this aim.

#### Box 2

##### Progress in the set-up of a statistical framework to assess the international role of the euro

As the assessment of the international role of a currency is relevant only to a limited number of currencies, global statistical standards do not deal with the currency of denomination of economic and financial transactions. As a result, the statistical data available for the assessment of the international role of the euro (as well as other currencies) are limited, and very often not obtained through standardised sources. Since 1999, the ECB has devoted significant efforts to identifying relevant sources of information and has in some cases contributed to the collection of additional data, intended to facilitate a better assessment of the various dimensions of the international role of the euro.

### **Key dimensions to be taken into account when assessing the international role of the euro**

The measurement of the international role of a currency covers two dimensions: the functions of the currency and its geographical use. As regards the former, the functions of international currencies were described in the aforementioned article in the August 1999 issue of the Monthly Bulletin: they include (i) private use of a currency, i.e. for the purpose of investment, financing, payment or quotation, and (ii) official use, for the denomination of international reserves, or as a pegging currency.

### **Gradual expansion of the dataset available to measure the international role of the euro**

The sources used in the August 1999 article drew to a large extent on the statistics made available by multilateral agencies, in particular IMF data on the currency composition of reserve assets worldwide and BIS data on the issuance of international debt securities.

Since then, further improvements have been made:

- collection of data on the shipment of euro banknotes outside the euro area;
- use of currency breakdowns in some items of the balance of payments and international investment position of euro area countries: various national central banks of the Eurosystem have been able to identify this currency breakdown for transactions or positions vis-à-vis non-residents of the euro area with regard to transactions in goods and services, as well as holdings of foreign debt securities.

In parallel, the following data are available:

- a currency breakdown of external trade statistics is published in various countries, including Japan, the United Kingdom, Poland, Bulgaria and Tunisia;
- a number of EU neighbouring countries collect data on the currency breakdown of bank deposits.

The Eurosystem plans to further develop its statistical sources regarding transactions between the euro area and non-euro area residents. A systematic collection of a currency breakdown of several balance of payment items is currently under discussion among European compilers of balance of payment statistics.

## **4 Conclusions**

The euro has consolidated its role as second international currency in the first four years of Monetary Union, which highlights the degree of confidence of non-euro area residents in the euro. The ECB closely monitors these developments and publishes a “Review of the international role of the euro” each year. A full-fledged analysis, however, will be deferred until the results of the ongoing further enhancements of the statistics in this field are available.

The international role of the euro has been shaped in particular by non-euro area financial institutions and corporations in industrialised countries, especially the United States and the United Kingdom. In international trade,

the euro has also increased its role as a settlement/invoicing currency, as evidenced by data from a number of euro area countries.

In the first few years since the start of Monetary Union, the increasing use of the euro by non-residents has been most visible in terms of the issuance of euro-denominated debt securities. A variety of other factors have supported the international role of the euro. They include efficiency gains from the broadening of financial markets in the euro area and financing strategies of large corporations in industrialised countries.

The international role of the euro has not increased to the same extent in all regions

of the world. The City of London has seen the largest share of financial activity in euro outside the euro area, especially in debt securities markets and in foreign exchange trading. For a number of countries in the neighbouring regions of the euro area, the euro serves a variety of purposes and is a preferred borrowing currency, a vehicle currency in foreign exchange markets, an anchor for exchange rate policies and, in some countries, also a parallel currency.

These developments have materialised as a result of a market-led process, and therefore reflect the preferences of private agents. The ECB has neither fostered nor hindered this process, in line with its policy position. The leading part has been played by the corporate sector – in financial markets, in foreign exchange transactions and in the invoicing of trade – and, in countries where the euro circulates as a parallel currency, by households.







## **Euro area statistics**



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<sup>1</sup> See the ECB's website ([www.ecb.int](http://www.ecb.int)) for longer runs and more detailed data.

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#### Conventions used in the tables

“-”	data do not exist/data are not applicable
“.”	data are not yet available
“...”	nil or negligible
“billion”	10 <sup>9</sup>
<sup>(p)</sup>	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 <sup>1)</sup>	M2 <sup>1)</sup>	M3 <sup>1)2)</sup>		MFI loans to euro area residents excluding MFIs and general government <sup>1)</sup>	Securities issued by non-financial and non-monetary financial corporations <sup>1)</sup>	3-month interest rate (EURIBOR, % per annum, period averages) <sup>7)</sup>	10-year government bond yield (% per annum, period averages) <sup>8)</sup>
	1	2	3	3-month moving average (centred) <sup>4)</sup>				
2001	3.6	4.2	5.4	-	7.8	27.6	4.26	5.03
2002	7.3	6.5	7.2	-	5.3	21.3	3.32	4.92
2002 Q4	8.8	6.7	7.0	-	4.8	15.9	3.11	4.54
2003 Q1	10.3	7.1	7.6	-	5.0	17.1	2.69	4.16
Q2	11.4	8.2	8.4	-	4.6	20.9	2.37	3.96
Q3	11.6	8.4	8.2	-	4.9	.	2.14	4.16
2003 May	11.4	8.5	8.5	8.5	4.6	20.8	2.41	3.92
June	11.4	8.3	8.4	8.5	4.6	23.2	2.15	3.72
July	11.5	8.5	8.6	8.4	4.9	22.9	2.13	4.06
Aug.	11.8	8.5	8.2	8.1	5.0	23.1	2.14	4.20
Sep.	11.3	8.0	7.4	.	4.9	.	2.15	4.23
Oct.	.	.	.	.	.	.	2.14	4.31

### 2. Price and real economy developments

	HICP <sup>9)</sup>	Industrial producer prices <sup>10)</sup>	Hourly labour costs (whole economy) <sup>11)</sup>	Real GDP <sup>12)</sup>	Industrial production (excluding construction) <sup>13)</sup>	Capacity utilisation in manufacturing (percentages) <sup>14)</sup>	Employment (whole economy) <sup>15)</sup>	Unemployment (% of labour force) <sup>16)</sup>
2001	2.3	2.2	3.4	1.6	0.5	82.9	1.4	8.0
2002	2.3	0.0	3.5	0.9	-0.5	81.4	0.4	8.4
2002 Q4	2.3	1.3	3.5	1.1	1.3	81.5	0.1	8.6
2003 Q1	2.3	2.5	2.7	0.7	1.2	81.1	0.0	8.7
Q2	1.9	1.5	2.9	0.2	-0.5	80.8	0.0	8.8
Q3	2.0	1.3	.	.	.	81.0	.	8.8
2003 May	1.8	1.3	-	-	-1.0	-	-	8.8
June	1.9	1.4	-	-	-1.3	-	-	8.8
July	1.9	1.3	-	-	0.8	80.7	-	8.8
Aug.	2.1	1.4	-	-	-0.4	-	-	8.8
Sep.	2.1	1.1	-	-	.	-	-	8.8
Oct.	2.1	.	-	-	.	81.2	-	.

### 3. Balance of payments, reserve assets and exchange rates

(EUR billions, unless otherwise indicated)

	Balance of payments (net flows)				Reserve assets (end-of-period positions) <sup>21)</sup>	Effective exchange rate of the euro: broad group (1999 Q1 = 100)		USD/EUR exchange rate <sup>24)</sup>
	Current and capital accounts <sup>17)</sup>	Goods <sup>18)</sup>	Direct investment <sup>19)</sup>	Portfolio investment <sup>20)</sup>		Nominal <sup>22)</sup>	Real (CPI) <sup>23)</sup>	
2001	-7.8	73.6	-102.4	68.1	392.7	91.0	87.9	0.896
2002	77.9	130.6	-41.5	103.4	366.1	95.6	91.8	0.946
2002 Q4	25.6	34.5	-6.0	42.0	366.1	99.4	95.2	0.999
2003 Q1	4.4	16.6	-0.9	7.0	339.1	104.1	99.3	1.073
Q2	-5.2	25.1	5.4	42.2	326.1	107.9	103.1	1.137
Q3	.	.	.	.	332.9	106.9	102.0	1.125
2003 May	0.1	7.6	0.7	1.1	323.1	109.1	104.1	1.158
June	4.6	10.5	23.1	16.0	326.1	109.3	104.5	1.166
July	2.8	15.3	-3.2	-35.6	328.9	107.8	102.9	1.137
Aug.	6.7	10.6	-1.7	-37.9	346.8	106.6	101.6	1.114
Sep.	.	.	.	.	332.9	106.4	101.5	1.122
Oct.	.	.	.	.	.	108.3	103.3	1.169

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

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

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

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

# I Monetary policy statistics

**Table 1.1**

## Consolidated financial statement of the Eurosystem

(EUR millions)

### 1. Assets

		Gold and gold receivables	Claims on non-euro area residents in foreign currency	Claims on euro area residents in foreign currency	Claims on non-euro area residents in euro	Lending to euro area credit institutions in euro	Main refinancing operations	Longer-term refinancing operations	Fine-tuning reverse operations
		1	2	3	4	5	6	7	8
2003	6 June	122,245	213,549	16,428	3,487	223,508	178,372	44,988	0
	13	122,245	214,814	15,494	3,322	246,854	201,372	44,988	0
	20	122,244	211,995	16,793	3,446	237,979	191,001	44,988	0
	27	122,244	212,918	17,133	3,411	257,883	212,000	45,000	0
	4 July	119,980	206,413	15,586	3,963	251,103	205,999	45,000	0
	11	119,980	208,438	14,968	3,641	245,051	200,000	45,000	0
	18	119,980	205,363	15,799	4,420	244,057	198,999	45,000	0
	25	119,947	204,022	15,209	4,388	277,751	232,002	45,000	0
	1 Aug.	119,993	203,971	15,194	4,265	252,077	207,000	44,995	0
	8	119,993	203,221	15,241	4,417	262,070	217,000	44,995	0
	15	119,993	202,993	14,651	4,377	250,023	205,000	44,995	0
	22	119,785	202,243	14,849	4,847	251,678	204,998	44,995	0
	29	119,785	203,484	15,186	4,554	264,053	219,000	44,994	0
	5 Sep.	119,785	201,457	15,218	4,449	260,028	215,000	44,994	0
	12	119,785	202,580	14,568	4,541	253,037	207,999	44,994	0
	19	119,779	199,598	16,374	4,452	263,034	218,002	44,994	0
	26	119,722	202,375	14,800	4,579	276,082	231,001	45,000	0
	3 Oct.	130,822	200,970	15,054	5,001	249,311	204,000	45,000	0
	10	130,822	200,836	15,765	4,727	250,032	205,001	45,000	0
	17	130,822	198,294	15,793	4,918	240,255	194,999	45,000	0
	24	130,822	197,989	16,373	5,087	248,044	203,002	45,000	0
	31	130,769	199,673	15,382	5,020	252,050	207,000	44,999	0

### 2. Liabilities

		Banknotes in circulation	Liabilities to euro area credit institutions in euro	Current accounts (covering the minimum reserve system)	Deposit facility	Fixed-term deposits	Fine-tuning reverse operations	Deposits related to margin calls	Other liabilities to euro area credit institutions in euro	Debt certificates issued
		1	2	3	4	5	6	7	8	9
2003	6 June	376,039	112,718	112,667	50	0	0	1	15	2,029
	13	376,498	139,059	139,000	59	0	0	0	15	2,029
	20	375,979	134,360	134,098	262	0	0	0	15	2,029
	27	377,232	130,970	130,891	61	0	0	18	31	2,029
	4 July	383,664	133,314	133,183	109	0	0	22	31	2,029
	11	386,242	130,912	130,866	24	0	0	22	31	2,029
	18	386,913	133,797	133,735	43	0	0	19	31	2,029
	25	386,347	142,560	142,502	34	0	0	24	31	2,029
	1 Aug.	392,088	125,977	125,904	70	0	0	3	31	2,029
	8	395,055	134,631	134,608	19	0	0	4	31	2,029
	15	395,013	129,178	129,166	8	0	0	4	31	2,029
	22	390,047	136,245	134,996	1,240	0	0	9	51	2,029
	29	390,447	131,016	131,001	6	0	0	9	51	2,029
	5 Sep.	393,914	133,418	133,333	75	0	0	10	51	2,029
	12	393,631	131,334	131,310	22	0	0	2	51	2,029
	19	392,056	129,143	128,660	481	0	0	2	51	2,029
	26	391,457	135,669	135,655	14	0	0	0	75	2,029
	3 Oct.	397,614	129,449	129,445	4	0	0	0	115	2,029
	10	397,974	132,750	132,685	63	0	0	2	136	2,029
	17	396,826	131,003	130,263	739	0	0	1	187	2,029
	24	395,434	127,802	127,788	13	0	0	1	187	2,029
	31	398,372	128,223	128,206	14	0	0	3	187	2,029

Source: ECB.



Structural reverse operations	Marginal lending facility	Credits related to margin calls	Other claims on euro area credit institutions in euro	Securities of euro area residents in euro	General government debt in euro	Other assets	Total		
							9	10	11
0	99	49	225	43,067	44,261	110,286	777,056	2003	6 June
0	415	79	347	43,381	44,261	110,952	801,670		13
0	1,922	68	287	43,811	44,261	110,891	791,707		20
0	796	87	244	44,146	44,262	111,327	813,568		27
0	16	88	253	44,099	43,781	116,929	802,107		4 July
0	7	44	259	44,476	43,781	117,402	797,996		11
0	10	48	327	44,530	43,782	117,016	795,274		18
0	702	47	289	46,632	43,782	116,455	828,475		25
0	25	57	212	46,937	43,782	116,511	802,942		1 Aug.
0	14	61	235	47,092	43,788	116,526	812,583		8
0	16	12	236	47,182	43,762	115,175	798,392		15
0	1,671	14	318	47,908	43,763	114,823	800,214		22
0	25	34	346	48,499	43,763	115,140	814,810		29
0	7	27	357	49,344	43,763	115,100	809,501		5 Sep.
0	9	35	301	50,047	43,763	115,736	804,358		12
0	8	30	288	50,444	43,783	115,822	813,574		19
0	49	32	348	51,164	43,783	116,386	829,239		26
0	283	28	358	51,157	43,757	117,182	813,612		3 Oct.
0	0	31	287	51,931	43,757	117,770	815,927		10
0	225	31	386	52,407	43,757	117,046	803,678		17
0	11	31	385	52,517	43,757	117,543	812,517		24
0	23	28	442	53,007	43,776	118,487	818,606		31

Liabilities to other euro area residents in euro	Liabilities to non-euro area residents in euro	Liabilities to euro area residents in foreign currency	Liabilities to non-euro area residents in foreign currency	Counterpart of special drawing rights allocated by the IMF	Other liabilities	Revaluation accounts	Capital and reserves	Total		
								10	11	12
58,912	8,966	961	13,725	6,168	64,606	67,910	65,007	777,056	2003	6 June
55,148	9,020	959	15,216	6,168	64,640	67,910	65,008	801,670		13
48,390	10,583	952	14,626	6,168	65,686	67,910	65,009	791,707		20
72,975	8,738	1,002	16,047	6,168	65,455	67,910	65,011	813,568		27
57,937	8,810	916	16,418	5,997	65,784	62,226	64,981	802,107		4 July
52,121	8,696	911	17,859	5,997	65,990	62,226	64,982	797,996		11
45,723	8,880	882	16,745	5,997	67,068	62,226	64,983	795,274		18
70,574	9,317	874	16,629	5,997	66,906	62,226	64,985	828,475		25
56,814	9,076	888	16,250	5,997	66,580	62,226	64,986	802,942		1 Aug.
55,558	9,032	846	15,781	5,997	66,410	62,226	64,987	812,583		8
48,668	9,409	835	14,812	5,997	65,205	62,226	64,989	798,392		15
48,778	9,319	836	14,927	5,997	64,768	62,226	64,991	800,214		22
66,934	9,419	835	16,539	5,997	64,325	62,226	64,992	814,810		29
57,005	9,659	805	15,029	5,997	64,375	62,226	64,993	809,501		5 Sep.
54,235	9,597	820	14,953	5,997	64,491	62,226	64,994	804,358		12
67,696	9,285	794	13,816	5,997	65,483	62,226	64,998	813,574		19
76,112	9,329	760	15,420	5,997	65,165	62,226	65,000	829,239		26
49,965	9,450	679	17,186	5,991	64,958	71,174	65,002	813,612		3 Oct.
48,196	9,380	661	17,750	5,991	64,882	71,174	65,004	815,927		10
40,409	9,493	643	15,151	5,991	65,767	71,174	65,005	803,678		17
53,524	9,397	651	15,545	5,991	65,776	71,174	65,007	812,517		24
55,000	9,572	828	16,230	5,991	65,991	71,174	65,009	818,606		31

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

With effect from <sup>1)</sup>	Deposit facility		Main refinancing operations			Marginal lending facility	
			Fixed rate tenders	Variable rate tenders			
	Level <sub>1</sub>	Change <sub>2</sub>	Fixed rate	Minimum bid rate		Level <sub>6</sub>	Change <sub>7</sub>
			Level <sub>3</sub>	Level <sub>4</sub>	Change <sub>5</sub>		
1999 1 Jan.	2.00	-	3.00	-	-	4.50	-
4 <sup>2)</sup>	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 <sup>3)</sup>	3.25	...	-	4.25	...	5.25	...
1 Sep.	3.50	0.25	-	4.50	0.25	5.50	0.25
6 Oct.	3.75	0.25	-	4.75	0.25	5.75	0.25
2001 11 May	3.50	-0.25	-	4.50	-0.25	5.50	-0.25
31 Aug.	3.25	-0.25	-	4.25	-0.25	5.25	-0.25
18 Sep.	2.75	-0.50	-	3.75	-0.50	4.75	-0.50
9 Nov.	2.25	-0.50	-	3.25	-0.50	4.25	-0.50
2002 6 Dec.	1.75	-0.50	-	2.75	-0.50	3.75	-0.50
2003 7 Mar.	1.50	-0.25	-	2.50	-0.25	3.50	-0.25
6 June	1.00	-0.50	-	2.00	-0.50	3.00	-0.50

Source: ECB.

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

**Table 1.3****Eurosystem monetary policy operations allotted through tenders<sup>1) 2)</sup>***(EUR millions; interest rates in percentages per annum)***1. Main refinancing operations<sup>3)</sup>**

Date of settlement	Bids (amount)	Allotment (amount)	Fixed rate tenders		Variable rate tenders		Running for (...) days
			Fixed rate	Minimum bid rate	Marginal rate <sup>4)</sup>	Weighted average rate <sup>6)</sup>	
	1	2	3	4	5	6	7
2003 4 June	72,372	72,372	-	2.50	2.50	2.50	14
9	145,751	129,000	-	2.00	2.09	2.11	16
18	111,215	62,000	-	2.00	2.12	2.12	14
25	166,404	150,000	-	2.00	2.10	2.12	14
2 July	111,698	56,000	-	2.00	2.10	2.11	14
9	130,689	101,000	-	2.00	2.08	2.10	14
9	67,965	43,000	-	2.00	2.09	2.10	7
16	147,621	98,000	-	2.00	2.08	2.09	14
23	141,573	134,000	-	2.00	2.06	2.08	14
30	114,569	73,000	-	2.00	2.06	2.07	14
6 Aug.	174,505	144,000	-	2.00	2.05	2.06	14
13	118,015	61,000	-	2.00	2.05	2.06	14
20	192,891	144,000	-	2.00	2.06	2.06	14
27	121,927	75,000	-	2.00	2.08	2.08	14
3 Sep.	185,556	140,000	-	2.00	2.07	2.08	14
10	125,756	68,000	-	2.00	2.07	2.08	14
17	177,865	150,000	-	2.00	2.07	2.08	14
24	109,738	81,000	-	2.00	2.06	2.07	14
1 Oct.	164,023	123,000	-	2.00	2.05	2.06	14
8	135,884	82,000	-	2.00	2.05	2.06	14
15	153,304	113,000	-	2.00	2.05	2.05	12
22	119,327	90,000	-	2.00	2.04	2.05	14
27	135,867	117,000	-	2.00	2.04	2.05	15
5 Nov.	125,765	84,000	-	2.00	2.04	2.05	14

## 2. Longer-term refinancing operations

Date of settlement	Bids (amount)	Allotment (amount)	Fixed rate tenders		Variable rate tenders		Running for (...) days
			Fixed rate	Marginal rate <sup>4)</sup>	Weighted average rate		
	1	2	3	4	5	6	8
2001 29 Nov.	49,135	20,000	-	3.32	3.34	91	
21 Dec.	38,178	20,000	-	3.29	3.31	97	
2002 31 Jan.	44,547	20,000	-	3.31	3.33	84	
28 Feb.	47,001	20,000	-	3.32	3.33	91	
28 Mar.	39,976	20,000	-	3.40	3.42	91	
25 Apr.	40,580	20,000	-	3.35	3.36	91	
30 May	37,602	20,000	-	3.45	3.47	91	
27 June	27,670	20,000	-	3.38	3.41	91	
25 July	28,791	15,000	-	3.35	3.37	98	
29 Aug.	33,527	15,000	-	3.33	3.34	91	
26 Sep.	25,728	15,000	-	3.23	3.26	88	
31 Oct.	27,820	15,000	-	3.22	3.24	91	
28 Nov.	38,644	15,000	-	3.02	3.04	91	
23 Dec.	42,305	15,000	-	2.93	2.95	94	
2003 30 Jan.	31,716	15,000	-	2.78	2.80	90	
27 Feb.	24,863	15,000	-	2.48	2.51	91	
27 Mar.	33,367	15,000	-	2.49	2.51	91	
30 Apr.	35,096	15,000	-	2.50	2.51	92	
29 May	30,218	15,000	-	2.25	2.27	91	
26 June	28,694	15,000	-	2.11	2.12	91	
31 July	25,416	15,000	-	2.08	2.10	91	
28 Aug.	35,940	15,000	-	2.12	2.13	91	
25 Sep.	28,436	15,000	-	2.10	2.12	84	
30 Oct.	32,384	15,000	-	2.13	2.14	91	

## 3. Other tender operations

Date of settlement	Type of operation	Bids (amount)	Allotment (amount)	Fixed rate tenders		Variable rate tenders		Running for (...) days
				Fixed rate	Minimum bid rate	Marginal rate <sup>4)</sup>	Weighted average rate	
	1	2	3	4	5	6	7	8
2000 5 Jan. <sup>5)</sup>	Collection of fixed-term deposits	14,420	14,420	-	-	3.00	3.00	7
21 June	Reverse transaction	18,845	7,000	-	-	4.26	4.28	1
<i>Euro area enlargement</i>								
2001 30 Apr.	Reverse transaction	105,377	73,000	-	4.75	4.77	4.79	7
12 Sep.	Reverse transaction	69,281	69,281	4.25	-	-	-	1
13	Reverse transaction	40,495	40,495	4.25	-	-	-	1
28 Nov.	Reverse transaction	73,096	53,000	-	3.25	3.28	3.29	7
2002 4 Jan.	Reverse transaction	57,644	25,000	-	3.25	3.30	3.32	3
10	Reverse transaction	59,377	40,000	-	3.25	3.28	3.30	1
18 Dec.	Reverse transaction	28,480	10,000	-	2.75	2.80	2.82	6
2003 23 May	Collection of fixed-term deposits	3,850	3,850	2.50	-	-	-	3

Source: ECB.

1) The amounts shown may differ slightly from those in Table 1.1, columns 6 to 8, due to operations allotted but not settled.

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

3) On 8 June 2000 the ECB announced that, starting from the operation to be settled on 28 June 2000, the main refinancing operations of the Eurosystem would be conducted as variable rate tenders. The minimum bid rate refers to the minimum interest rate at which counterparties may place their bids.

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

5) This operation was conducted with a maximum rate of 3.00%.

**Table 1.4****Minimum reserve statistics****1. Reserve base of credit institutions subject to reserve requirements <sup>1)2)</sup>***(EUR billions; end of period)*

Reserve base as at:	Total	Liabilities to which a 2% reserve coefficient is applied		Liabilities to which a 0% reserve coefficient is applied		
		Deposits (overnight, up to 2 years' agreed maturity and notice period)	Debt securities up to 2 years' agreed maturity <sup>3)</sup>	Deposits (over 2 years' agreed maturity and notice period)	Repos	Debt securities over 2 years' agreed maturity
	1	2	3	4	5	6
2002 Sep.	11,054.3	6,055.4	405.0	1,373.5	747.6	2,472.7
Oct.	11,113.6	6,052.0	414.2	1,379.1	790.5	2,477.8
Nov.	11,207.0	6,142.9	426.9	1,365.2	784.2	2,487.7
Dec.	11,116.8	6,139.9	409.2	1,381.9	725.5	2,460.3
2003 Jan.	11,100.8	6,048.5	426.0	1,385.7	773.9	2,466.7
Feb.	11,214.2	6,092.6	434.0	1,396.4	808.2	2,483.0
Mar.	11,229.9	6,117.2	427.4	1,404.1	782.7	2,498.5
Apr.	11,312.6	6,154.9	431.4	1,406.9	815.2	2,504.2
May	11,340.5	6,182.9	423.1	1,401.2	815.9	2,517.3
June	11,381.7	6,217.9	415.4	1,421.4	781.0	2,545.9
July	11,394.7	6,176.0	417.8	1,430.0	800.8	2,570.1
Aug.	11,408.0	6,184.3	404.3	1,442.5	787.6	2,589.3
Sep. <sup>(p)</sup>	11,394.7	6,172.8	405.2	1,432.7	790.8	2,593.2

Source: ECB.

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

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

Maintenance period ending in:	Required reserves <sup>2)</sup>	Actual reserves <sup>3)</sup>	Excess reserves <sup>4)</sup>	Deficiencies <sup>5)</sup>	Interest rate on minimum reserves <sup>6)</sup>
	1	2	3	4	5
2002 Nov.	128.7	129.2	0.5	0.0	3.28
Dec.	128.8	129.4	0.7	0.0	3.06
2003 Jan.	130.9	131.4	0.6	0.0	2.87
Feb.	130.4	131.0	0.6	0.0	2.78
Mar.	128.9	129.5	0.6	0.0	2.67
Apr.	130.0	130.5	0.5	0.0	2.53
May	130.3	130.8	0.5	0.0	2.54
June	131.2	131.7	0.5	0.0	2.34
July	131.6	132.0	0.5	0.0	2.09
Aug.	132.1	132.7	0.6	0.0	2.06
Sep.	131.3	131.8	0.5	0.0	2.07
Oct.	131.2	131.8	0.5	0.0	2.05
Nov. <sup>(p)</sup>	131.0	.	.	.	.

Source: ECB.

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

**Table 1.5**
**Banking system's liquidity position <sup>1)</sup>**
*(EUR billions; period averages of daily positions)*

Maintenance period ending in:	Liquidity-providing factors					Liquidity-absorbing factors					Credit institutions' current accounts <sup>4)</sup>	Base money <sup>5)</sup>
	Monetary policy operations of the Eurosystem					Banknotes in circulation	Central government deposits with the Eurosystem	Other factors (net) <sup>3)</sup>				
	Eurosystem's net assets in gold and foreign currency <sup>1)</sup>	Main refinancing operations	Longer-term refinancing operations	Marginal lending facility	Other liquidity-providing operations <sup>2)</sup>				Deposit facility	Other liquidity-absorbing operations <sup>2)</sup>		
1	2	3	4	5	6	7	8	9	10	11	12	
2002 Sep.	362.3	140.9	50.8	0.1	0.0	0.2	0.0	323.6	49.1	51.7	129.6	453.4
Oct.	370.0	146.1	45.3	0.1	0.0	0.1	0.0	329.2	45.6	58.2	128.3	457.6
Nov.	372.1	147.5	45.0	0.1	0.0	0.1	0.0	334.0	42.8	58.6	129.3	463.4
Dec.	371.5	168.1	45.0	1.1	2.0	0.2	0.0	350.7	51.7	55.5	129.5	480.5
2003 Jan.	360.9	176.3	45.0	0.5	0.0	0.3	0.0	353.9	43.7	53.3	131.6	485.8
Feb.	356.4	168.6	45.0	0.3	0.0	0.3	0.0	340.7	50.2	48.0	131.1	472.2
Mar.	352.5	179.5	45.0	0.2	0.0	0.1	0.0	347.8	59.1	40.6	129.6	477.5
Apr.	337.4	179.4	45.0	0.1	0.0	0.2	0.0	358.5	52.1	20.5	130.6	489.3
May	333.1	177.1	45.0	0.4	0.0	0.2	0.1	366.2	42.6	15.5	130.9	497.3
June	331.3	194.7	45.0	0.4	0.0	0.3	0.2	373.2	52.6	13.2	131.9	505.3
July	320.4	204.7	45.0	0.4	0.0	0.3	0.0	382.7	52.4	2.9	132.2	515.2
Aug.	315.8	213.4	45.0	0.2	0.0	0.1	0.0	391.6	51.5	-1.6	132.8	524.6
Sep.	315.0	214.0	45.0	0.1	0.0	0.6	0.0	391.7	54.4	-4.4	132.0	524.2
Oct. <sup>4)</sup>	321.3	208.4	45.0	0.1	0.0	0.2	0.0	395.5	48.3	-1.1	131.9	527.5

Source: ECB.

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

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

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

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

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

## 2 Monetary developments and investment funds in the euro area

**Table 2.1**

### Aggregated balance sheet of the euro area MFIs

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

#### 1. Assets: levels

	Eurosystème												Total
	Loans to euro area residents	MFIs <sup>1)</sup>			Holdings of securities other than shares issued by euro area residents	MFIs			Holdings of shares/ other equity issued by euro area residents	External assets <sup>1)</sup>	Fixed assets	Re-maining assets	
		General government	Other euro area residents	MFIs		General government	Other euro area residents						
1	2	3	4	5	6	7	8	9	10	11	12	13	
2001	412.7	386.4	25.7	0.6	107.0	3.8	101.8	1.3	13.8	399.0	11.9	54.3	998.6
2002	416.2	391.3	24.2	0.6	94.5	7.6	86.0	0.8	13.2	374.8	11.9	132.3	1,042.8
2003 Q1	411.8	387.0	24.1	0.6	105.4	9.5	95.1	0.8	12.5	350.2	11.9	123.6	1,015.4
2003 Apr.	369.6	344.9	24.1	0.6	107.7	9.6	97.3	0.8	13.0	341.5	12.0	128.3	972.1
May	444.7	420.0	24.0	0.7	113.1	10.4	101.6	1.0	12.2	334.0	11.9	131.0	1,046.9
June	469.3	445.0	23.7	0.6	114.2	10.0	103.1	1.1	12.4	335.2	12.0	131.5	1,074.6
July	437.3	412.9	23.7	0.7	115.3	9.6	104.6	1.1	12.5	337.9	12.2	133.4	1,048.5
Aug.	437.4	413.0	23.7	0.7	117.4	10.0	106.4	1.0	12.5	354.1	12.2	130.1	1,063.7
Sep. <sup>(p)</sup>	462.5	438.1	23.7	0.6	121.6	10.1	110.4	1.1	12.4	341.8	12.3	138.4	1,089.0

#### 2. Liabilities: levels

	Eurosystème										Total
	Currency in circulation	Deposits of euro area residents	MFIs <sup>1)</sup>			Debt securities issued	Capital and reserves	External liabilities <sup>1)</sup>	Remaining liabilities		
			Central government	Other general government/ other euro area residents	MFIs						
1	2	3	4	5	6	7	8	9	10		
2001	285.9	391.9	342.4	35.1	14.4	4.6	209.8	35.6	70.8	998.6	
2002	392.9	328.4	283.3	29.5	15.6	3.6	165.9	32.9	119.1	1,042.8	
2003 Q1	365.4	345.8	279.0	50.7	16.2	2.7	149.5	28.7	123.3	1,015.4	
2003 Apr.	378.7	292.1	233.2	42.0	16.9	2.7	144.9	27.7	126.1	972.1	
May	384.1	361.9	297.6	45.9	18.4	2.7	142.1	28.1	127.9	1,046.9	
June	391.4	379.4	307.9	52.6	18.9	2.6	143.1	29.8	128.3	1,074.6	
July	403.5	334.4	266.1	52.3	16.0	2.6	145.2	31.7	131.1	1,048.5	
Aug.	404.1	335.8	270.3	49.7	15.8	2.6	157.9	32.7	130.6	1,063.7	
Sep. <sup>(p)</sup>	406.4	362.1	289.8	55.0	17.4	2.6	151.1	32.4	134.4	1,089.0	

Source: ECB.

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

**Table 2.1 (cont'd)**
**Aggregated balance sheet of the euro area MFIs**
*(EUR billions; not seasonally adjusted; end of period)*
**3. Assets: levels**

	MFIs excluding the Eurosystem													Total
	Loans to euro area residents	MFIs	General government	Other euro area residents	Holdings of securities other than shares issued by euro area residents	MFIs	General government	Other euro area residents	Money market fund shares/units	Holdings of shares/other equity issued by euro area residents	External assets	Fixed assets	Remaining assets	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
2001	11,134.7	3,794.0	822.0	6,518.7	2,535.9	1,122.9	1,077.4	335.6	38.5	810.8	2,408.8	168.1	1,129.5	18,226.3
2002	11,611.3	4,017.8	812.6	6,780.9	2,671.2	1,170.0	1,135.0	366.2	62.4	827.6	2,465.5	167.6	1,051.8	18,857.4
2003 Q1	11,732.8	4,074.2	804.8	6,853.8	2,830.2	1,234.3	1,210.0	385.9	66.8	818.3	2,545.0	160.8	1,029.7	19,183.6
2003 Apr.	11,796.3	4,106.8	799.2	6,890.2	2,852.5	1,223.0	1,226.2	403.4	69.6	837.2	2,564.8	158.8	1,038.0	19,317.2
May	11,889.6	4,188.7	794.8	6,906.1	2,896.5	1,233.8	1,256.6	406.1	70.7	854.1	2,544.4	159.4	1,073.1	19,487.9
June	11,881.0	4,143.2	794.2	6,943.6	2,886.2	1,241.7	1,239.4	405.1	69.0	853.4	2,624.2	157.9	1,058.1	19,529.8
July	11,865.1	4,099.0	802.2	6,963.9	2,912.0	1,259.3	1,251.1	401.7	68.4	883.6	2,604.6	158.2	1,010.8	19,502.7
Aug.	11,902.3	4,129.9	796.4	6,976.0	2,905.8	1,258.1	1,243.3	404.3	69.6	887.1	2,575.7	158.2	1,009.0	19,507.6
Sep. <sup>(p)</sup>	11,956.9	4,161.5	797.0	6,998.4	2,929.4	1,257.7	1,260.5	411.2	68.8	881.5	2,543.4	158.9	1,046.7	19,585.6

**4. Liabilities: levels**

	MFIs excluding the Eurosystem										Total
	Currency in circulation	Deposits of euro area residents	MFIs	Central government	Other general government/other euro area residents	Money market fund shares/units <sup>1)</sup>	Debt securities issued <sup>1)</sup>	Capital and reserves	External liabilities	Remaining liabilities	
	1	2	3	4	5	6	7	8	9	10	11
2001	0.0	9,696.6	3,829.6	103.9	5,763.1	436.5	2,882.9	1,041.9	2,687.4	1,480.9	18,226.3
2002	0.0	10,197.4	4,136.5	106.9	5,954.1	532.9	2,992.7	1,108.7	2,593.9	1,431.7	18,857.4
2003 Q1	0.0	10,316.8	4,198.7	125.5	5,992.6	617.6	3,045.6	1,115.8	2,665.4	1,422.4	19,183.6
2003 Apr.	0.0	10,348.5	4,200.8	117.8	6,029.9	632.6	3,064.4	1,116.9	2,687.4	1,467.4	19,317.2
May	0.0	10,515.2	4,310.1	124.2	6,080.8	641.9	3,062.5	1,120.5	2,625.4	1,522.5	19,487.9
June	0.0	10,540.5	4,300.1	147.6	6,092.7	640.0	3,083.1	1,126.4	2,641.7	1,498.1	19,529.8
July	0.0	10,497.1	4,255.7	120.7	6,120.7	653.9	3,116.0	1,132.9	2,649.5	1,453.2	19,502.7
Aug.	0.0	10,509.2	4,272.1	112.8	6,124.3	657.3	3,126.9	1,135.4	2,647.1	1,431.8	19,507.6
Sep. <sup>(p)</sup>	0.0	10,568.5	4,313.3	128.8	6,126.4	646.3	3,126.7	1,136.9	2,610.5	1,496.7	19,585.6

1) Amounts held by euro area residents. Amounts held by non-euro area residents are included in external liabilities.



**Table 2.2**
**Consolidated balance sheet of the euro area MFIs**
*(EUR billions; not seasonally adjusted; end of period)*
**1. Assets: levels**

	Loans to euro area residents	General government	Other euro area residents	Holdings of securities other than shares issued by euro area residents	General government	Other euro area residents	Holdings of shares/ other equity issued by other euro area residents	External assets <sup>1)</sup>	Fixed assets	Remaining assets	Total
	1	2	3	4	5	6	7	8	9	10	11
2001	7,367.0	847.7	6,519.3	1,516.1	1,179.2	336.9	568.1	2,807.8	180.0	1,137.6	13,576.7
2002	7,618.3	836.8	6,781.5	1,588.0	1,221.0	367.0	572.7	2,840.3	179.5	1,132.2	13,931.0
2003 Q1	7,683.3	828.9	6,854.4	1,691.8	1,305.1	386.7	565.3	2,895.2	172.7	1,115.1	14,123.4
2003 Apr.	7,714.1	823.3	6,890.9	1,727.7	1,323.5	404.2	584.2	2,906.3	170.8	1,123.8	14,227.0
May	7,725.7	818.9	6,906.8	1,765.2	1,358.2	407.1	596.2	2,878.4	171.3	1,163.8	14,300.6
June	7,762.1	817.9	6,944.2	1,748.7	1,342.5	406.2	592.9	2,959.3	169.9	1,149.2	14,382.1
July	7,790.5	825.9	6,964.6	1,758.5	1,355.7	402.8	615.4	2,942.5	170.4	1,102.1	14,379.5
Aug.	7,796.7	820.0	6,976.7	1,755.1	1,349.8	405.4	619.4	2,929.8	170.4	1,097.7	14,369.1
Sep. <sup>(p)</sup>	7,819.7	820.7	6,999.0	1,783.2	1,370.9	412.3	616.4	2,885.3	171.1	1,143.6	14,419.3

**2. Liabilities: levels**

	Currency in circulation	Deposits of central government	Deposits of other general government/ other euro area residents	Money market fund shares/ units <sup>2)</sup>	Debt securities issued <sup>2)</sup>	Capital and reserves	External liabilities <sup>1)</sup>	Remaining liabilities	Excess of inter-MFI liabilities	Total
	1	2	3	4	5	6	7	8	9	10
2001	239.7	139.0	5,777.6	398.0	1,760.8	995.2	2,723.0	1,551.8	-8.5	13,576.7
2002	341.2	136.4	5,969.6	470.6	1,818.6	1,006.4	2,626.7	1,550.8	10.7	13,931.0
2003 Q1	327.2	176.2	6,008.7	550.8	1,804.5	999.8	2,694.1	1,545.7	16.5	14,123.4
2003 Apr.	336.3	159.7	6,046.8	563.0	1,834.5	995.8	2,715.1	1,593.5	-17.7	14,227.0
May	343.8	170.1	6,099.2	571.1	1,821.0	992.6	2,653.4	1,650.4	-1.0	14,300.6
June	351.0	200.3	6,111.7	571.0	1,833.9	996.5	2,671.6	1,626.4	19.7	14,382.1
July	361.5	173.0	6,136.7	585.5	1,849.7	997.5	2,681.2	1,584.3	10.0	14,379.5
Aug.	362.7	162.5	6,140.1	587.7	1,861.5	1,013.1	2,679.8	1,562.4	-0.6	14,369.1
Sep. <sup>(p)</sup>	364.9	183.8	6,143.8	577.5	1,861.6	1,010.5	2,642.9	1,631.1	3.4	14,419.3

Source: ECB.

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

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

**Table 2.2 (cont'd)**
**Consolidated balance sheet of the euro area MFIs**
*(EUR billions; not seasonally adjusted; transactions during the period)*
**3. Assets: flows <sup>1)</sup>**

	Loans to	General	Other	Holdings	General	Other	Holdings	External	Fixed	Remaining	Total
	euro area										
	residents		residents	of securities		residents	of shares/				
	1	2	3	other than	5	6	other	8	9	10	11
				shares			equity				
				issued			issued				
				by euro			by other				
				area			euro area				
				residents			residents				
				4			7				
2001	365.6	-7.6	373.2	71.5	8.5	62.9	29.8	331.1	8.1	100.6	906.6
2002	299.1	-9.8	308.9	75.9	45.7	30.2	5.5	246.5	-1.3	-20.6	605.2
2003 Q1	87.3	-0.3	87.6	63.0	46.4	16.6	-1.0	90.7	-3.6	-17.0	220.0
2003 Apr.	38.6	-5.4	44.0	33.4	21.0	12.4	15.3	40.0	-1.9	4.8	130.2
May	24.3	-4.0	28.4	33.9	30.7	3.2	11.0	41.8	0.5	39.2	150.9
June	35.3	0.8	34.5	-15.4	-13.9	-1.5	-5.1	40.3	-1.1	-11.7	42.3
July	27.9	7.9	20.0	10.4	12.8	-2.4	-3.1	-33.4	0.4	-49.8	-47.5
Aug.	-0.1	-6.1	6.0	-3.2	-5.1	1.8	3.1	-70.7	0.0	-6.4	-77.4
Sep. <sup>(p)</sup>	33.6	1.0	32.5	31.2	23.2	8.0	-4.1	27.1	0.7	45.9	134.4

**4. Liabilities: flows <sup>1)</sup>**

	Currency	Deposits	Deposits	Money	Debt	Capital	External	Remaining	Excess	Total
	in									
	circulation	central	general	fund	issued <sup>3)</sup>	reserves	liabilities	liabilities	MFIs	
	1	government	government/	shares/	5	6	7	8	liabilities	10
			other	units <sup>3)</sup>						
			euro							
			area							
			residents							
			3							
2001	-116.4	-26.9	385.4	90.9	107.6	81.2	338.4	79.9	-33.5	906.6
2002	101.4	-5.8	221.7	70.1	105.3	39.2	75.6	-35.0	32.6	605.2
2003 Q1	7.7	32.8	48.2	35.7	24.9	1.4	59.8	-4.4	13.8	220.0
2003 Apr.	9.1	-16.5	41.6	11.8	30.0	0.3	44.1	43.2	-33.5	130.2
May	7.4	10.4	60.8	8.8	2.4	-6.5	1.1	52.2	14.4	150.9
June	7.3	30.2	7.6	-0.9	4.3	6.9	-19.1	-16.7	22.5	42.3
July	11.1	-24.6	-8.6	10.3	14.4	8.9	6.4	-57.6	-7.8	-47.5
Aug.	1.2	-10.5	-2.2	2.1	0.7	7.7	-39.3	-26.9	-10.2	-77.4
Sep. <sup>(p)</sup>	2.2	21.3	11.3	-8.2	18.5	3.4	16.6	66.1	3.2	134.4

Source: ECB.

- 1) Calculated from monthly differences in levels adjusted for reclassifications, other revaluations, exchange rate variations and any other changes that do not arise from transactions.
- 2) 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-of-month positions in 1999 and in 2000 (January to October), see the corresponding footnote in the February 2000 and December 2000 issues of the Monthly Bulletin.
- 3) Amounts held by residents of the euro area. Amounts held by non-residents of the euro area are included in external liabilities.

**Table 2.3**
**Monetary aggregates<sup>1)</sup> and counterparts (not seasonally adjusted)**
*(EUR billions and annual percentage growth rates; levels and growth rates at end of period, flows as transactions during the period)*
**1. Levels**

	M3					Longer-term financial liabilities	Credit to general government	Credit to other euro area residents		Net external assets
	M2			M3-M2	Total			euro area residents	Loans	
	M1	M2-M1	Total							
	1	2	3	4	5			6	7	
2001	2,207.9	2,459.8	4,667.7	762.4	5,430.2	3,893.8	2,026.9	7,424.4	6,519.3	84.7
2002	2,425.5	2,537.9	4,963.5	825.1	5,788.6	3,991.1	2,057.8	7,721.2	6,781.5	213.6
2003 Q1	2,396.9	2,587.1	4,984.0	874.2	5,858.2	4,009.8	2,134.0	7,806.5	6,854.4	201.1
2003 Apr.	2,425.7	2,604.3	5,030.0	917.4	5,947.4	4,005.6	2,146.8	7,879.3	6,890.9	191.3
May	2,458.7	2,626.7	5,085.3	907.5	5,992.8	4,011.1	2,177.0	7,910.1	6,906.8	225.0
June	2,501.5	2,604.8	5,106.3	883.5	5,989.8	4,037.3	2,160.4	7,943.3	6,944.2	287.8
July	2,481.4	2,618.0	5,099.3	896.8	5,996.2	4,064.6	2,181.6	7,982.9	6,964.6	261.3
Aug.	2,468.6	2,632.0	5,100.6	893.7	5,994.3	4,101.6	2,169.8	8,001.5	6,976.7	250.0
Sep. <sup>(p)</sup>	2,510.4	2,601.2	5,111.6	877.9	5,989.5	4,098.8	2,191.6	8,027.8	6,999.0	242.4

**2. Flows<sup>2)</sup>**

	M3					Longer-term financial liabilities	Credit to general government	Credit to other euro area residents		Net external assets
	M2			M3-M2	Total			euro area residents	Loans	
	M1	M2-M1	Total							
	1	2	3	4	5			6	7	
2001	106.8	162.2	269.1	114.0	383.0	178.4	0.9	465.9	373.2	-7.3
2002	215.1	88.1	303.2	66.7	369.9	188.5	35.9	344.6	308.9	171.0
2003 Q1	-4.6	51.4	46.7	37.8	84.5	37.2	46.1	103.2	87.6	30.9
2003 Apr.	30.1	18.9	49.0	38.6	87.5	4.8	15.6	71.7	44.0	-4.1
May	36.0	26.5	62.5	-7.9	54.6	18.0	26.7	42.6	28.4	40.8
June	54.3	-24.2	30.1	-24.2	5.8	19.3	-13.0	27.9	34.5	59.4
July	-18.4	12.8	-5.6	10.8	5.2	31.4	20.7	14.5	20.0	-39.8
Aug.	-14.9	11.7	-3.2	-3.2	-6.4	16.9	-11.2	11.0	6.0	-31.4
Sep. <sup>(p)</sup>	45.1	-28.5	16.6	-13.4	3.2	23.3	24.2	36.5	32.5	10.5

**3. Growth rates<sup>3)</sup>**

	M3					Longer-term financial liabilities	Credit to general government	Credit to other euro area residents		Net external assets <sup>4)</sup>
	M2			M3-M2	Total			euro area residents	Loans	
	M1	M2-M1	Total							
	1	2	3	4	5			6	7	
2001	5.1	7.1	6.1	17.7	7.6	4.8	0.0	6.7	6.1	-7.3
2002	9.8	3.6	6.5	8.8	6.8	4.9	1.8	4.7	4.7	171.0
2003 Q1	11.6	4.5	7.8	8.1	7.8	4.3	1.8	4.8	4.7	228.9
2003 Apr.	10.9	5.3	8.0	12.4	8.6	4.6	3.4	5.1	4.7	227.8
May	11.9	5.8	8.7	8.6	8.7	4.4	4.4	5.2	4.7	229.6
June	11.3	5.5	8.3	8.5	8.3	5.0	3.7	5.1	4.6	247.8
July	11.6	5.7	8.5	9.4	8.6	5.1	4.9	5.6	4.9	206.5
Aug.	12.3	5.3	8.6	6.3	8.2	5.2	5.0	5.6	5.0	160.9
Sep. <sup>(p)</sup>	11.2	5.1	8.0	4.3	7.4	5.2	5.5	5.5	4.9	153.2

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. M1 is the sum of currency in circulation and overnight deposits; M2 is the sum of M1, deposits with an agreed maturity of up to two years and deposits redeemable at notice of up to three months; and M3 is the sum of M2, repurchase agreements, money market fund shares/units and debt securities up to two years.
- 2) Calculated from monthly differences in levels adjusted for reclassifications, other revaluations, exchange rate variations and any other changes that do not arise from transactions.
- 3) For the calculation of the growth rates, see the technical notes.
- 4) Sum of 12 monthly flows ending in the period indicated.

**Table 2.3 (cont'd)****Monetary aggregates<sup>1)</sup> and counterparts (not seasonally adjusted)***(EUR billions and annual percentage growth rates; levels and growth rates at end of period, flows as transactions during the period)***4. Levels**

	Currency in circulation 1	Overnight deposits 2	Deposits with agreed maturity up to 2 years 3	Deposits redeemable at notice up to 3 months 4	Repurchase agreements 5	Money market fund shares/units 6	Debt securities up to 2 years 7	Debt securities over 2 years 8	Deposits redeemable at notice over 3 months 9	Deposits with agreed maturity over 2 years 10	Capital and reserves 11
2001	239.7	1,968.2	1,088.8	1,371.0	218.5	398.0	145.9	1,613.6	115.8	1,169.1	995.2
2002	341.2	2,084.4	1,075.5	1,462.4	226.9	470.6	127.7	1,689.7	105.8	1,189.2	1,006.4
2003 Q1	327.2	2,069.7	1,073.2	1,513.9	224.0	550.8	99.4	1,704.2	100.9	1,205.0	999.8
2003 Apr.	336.3	2,089.4	1,081.9	1,522.4	230.5	563.0	124.0	1,709.7	98.3	1,201.7	995.8
May	343.8	2,114.9	1,096.9	1,529.8	231.4	571.1	105.0	1,714.2	96.9	1,207.5	992.6
June	351.0	2,150.5	1,060.0	1,544.8	214.9	571.0	97.6	1,734.5	95.4	1,211.0	996.5
July	361.5	2,119.9	1,063.4	1,554.6	220.1	585.5	91.2	1,756.7	93.3	1,217.1	997.5
Aug.	362.7	2,105.9	1,069.3	1,562.7	217.1	587.7	88.9	1,771.0	91.7	1,225.9	1,013.1
Sep. <sup>(a)</sup>	364.9	2,145.5	1,037.3	1,563.9	211.7	577.5	88.7	1,771.3	91.1	1,225.8	1,010.5

**5. Flows<sup>2)</sup>**

	Currency in circulation 1	Overnight deposits 2	Deposits with agreed maturity up to 2 years 3	Deposits redeemable at notice up to 3 months 4	Repurchase agreements 5	Money market fund shares/units 6	Debt securities up to 2 years 7	Debt securities over 2 years 8	Deposits redeemable at notice over 3 months 9	Deposits with agreed maturity over 2 years 10	Capital and reserves 11
2001	-116.4	223.2	64.3	98.0	25.2	90.9	-2.1	110.2	-10.8	-2.2	81.2
2002	101.4	113.6	-2.8	90.9	9.6	70.1	-13.0	118.4	-10.0	41.0	39.2
2003 Q1	7.7	-12.3	-0.4	51.7	5.8	35.7	-3.7	28.9	-4.9	11.8	1.4
2003 Apr.	9.1	21.0	10.2	8.7	6.4	11.8	20.3	9.8	-2.6	-2.8	0.3
May	7.4	28.6	18.8	7.7	1.0	8.8	-17.7	19.0	-1.3	6.9	-6.5
June	7.3	47.0	-39.0	14.8	-16.5	-0.9	-6.9	11.2	-1.6	2.8	6.9
July	11.1	-29.5	3.1	9.8	5.5	10.3	-5.0	19.4	-2.1	5.2	8.9
Aug.	1.2	-16.1	3.7	8.0	-3.0	2.1	-2.3	3.2	-1.6	7.6	7.7
Sep. <sup>(a)</sup>	2.2	43.0	-29.9	1.5	-4.3	-8.2	-0.9	19.5	-0.6	0.9	3.4

**6. Growth rates<sup>3)</sup>**

	Currency in circulation 1	Overnight deposits 2	Deposits with agreed maturity up to 2 years 3	Deposits redeemable at notice up to 3 months 4	Repurchase agreements 5	Money market fund shares/units 6	Debt securities up to 2 years 7	Debt securities over 2 years 8	Deposits redeemable at notice over 3 months 9	Deposits with agreed maturity over 2 years 10	Capital and reserves 11
2001	-32.7	12.8	6.3	7.7	13.0	29.1	-1.5	7.2	-8.5	-0.2	8.9
2002	42.3	5.8	-0.3	6.6	4.4	17.6	-9.3	7.4	-8.7	3.5	4.0
2003 Q1	37.6	8.2	-0.4	8.4	1.8	16.4	-11.3	6.7	-8.2	3.8	2.4
2003 Apr.	37.4	7.4	0.0	9.5	5.4	16.8	9.6	7.2	-8.9	3.6	3.0
May	34.2	8.8	0.7	9.9	2.8	17.5	-12.4	7.1	-9.2	3.8	1.9
June	31.4	8.5	-1.0	10.4	-2.0	19.3	-13.7	7.2	-10.5	3.8	4.4
July	30.6	8.8	-1.1	10.9	0.8	18.2	-12.4	7.5	-12.5	4.1	4.3
Aug.	29.0	9.8	-2.0	11.0	-3.8	15.5	-15.4	7.5	-14.1	4.6	4.1
Sep. <sup>(a)</sup>	27.4	8.8	-2.6	10.9	-6.7	14.6	-18.6	7.9	-15.0	4.6	3.5

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. M1 is the sum of currency in circulation and overnight deposits; M2 is the sum of M1, deposits with an agreed maturity of up to two years and deposits redeemable at notice of up to three months; and M3 is the sum of M2, repurchase agreements, money market fund shares/units and debt securities up to two years.

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

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

**Table 2.3 (cont'd)**
**Monetary aggregates<sup>1)</sup> and counterparts (seasonally adjusted)**
*(EUR billions and annual percentage growth rates; levels and growth rates at end of period, flows as transactions during the period)*
**7. Levels**

	M3					Longer-term financial liabilities	Credit to general government	Credit to other euro area residents		Net external assets
	M2			M3-M2	Total			Loans		
	M1	M2-M1	Total							
1	2	3	4	5	6	7	8	9	10	
2001	2,151.7	2,450.4	4,602.2	789.2	5,391.3	3,897.3	2,041.0	7,425.5	6,514.7	48.8
2002	2,367.1	2,530.5	4,897.7	853.7	5,751.4	3,994.3	2,073.3	7,724.2	6,780.9	176.9
2003 Q1	2,407.6	2,575.7	4,983.3	856.5	5,839.8	4,002.3	2,120.9	7,786.8	6,846.9	228.3
2003 Apr.	2,426.5	2,592.1	5,018.5	899.2	5,917.8	4,006.6	2,137.3	7,845.8	6,871.3	238.4
May	2,445.8	2,608.5	5,054.3	885.9	5,940.2	4,013.7	2,159.2	7,873.5	6,893.3	266.8
June	2,450.3	2,618.1	5,068.4	888.3	5,956.7	4,028.3	2,143.2	7,912.1	6,913.5	288.5
July	2,473.9	2,628.7	5,102.6	905.6	6,008.2	4,061.5	2,183.4	7,979.5	6,954.9	264.6
Aug.	2,504.2	2,631.2	5,135.3	893.0	6,028.4	4,107.6	2,184.6	8,033.9	7,004.6	243.6
Sep. <sup>(p)</sup>	2,516.2	2,629.3	5,145.4	887.2	6,032.6	4,100.9	2,202.1	8,051.9	7,009.3	220.8

**8. Flows<sup>2)</sup>**

	M3					Longer-term financial liabilities	Credit to general government	Credit to other euro area residents		Net external assets
	M2			M3-M2	Total			Loans		
	M1	M2-M1	Total							
1	2	3	4	5	6	7	8	9	10	
2001	109.7	165.4	275.0	118.3	393.4	178.2	2.5	467.0	377.4	-9.0
2002	213.0	90.0	303.1	68.6	371.7	188.1	37.7	346.6	312.9	170.3
2003 Q1	64.6	47.3	112.0	-8.5	103.5	26.5	17.0	80.5	80.7	94.8
2003 Apr.	20.1	18.1	38.2	38.1	76.3	13.4	19.2	58.0	32.0	15.8
May	22.4	20.6	43.0	-11.5	31.5	19.5	18.5	39.4	34.4	35.5
June	15.7	7.2	22.9	2.2	25.1	7.8	-12.4	33.3	17.3	18.2
July	25.3	10.3	35.6	14.8	50.3	37.3	39.8	42.2	41.0	-37.2
Aug.	28.1	0.2	28.3	-12.7	15.5	26.0	1.7	46.7	43.6	-41.2
Sep. <sup>(p)</sup>	15.3	0.4	15.7	-3.4	12.3	19.4	19.9	28.2	14.9	-4.6

**9. Growth rates<sup>3)</sup>**

	M3						Longer-term financial liabilities	Credit to general government	Credit to other euro area residents		Net external assets <sup>4)</sup>
	M2			M3-M2	Total	3-month moving average (centred)			Loans		
	M1	M2-M1	Total								
1	2	3	4	5	6	7	8	9	10	11	
2001	5.4	7.2	6.4	17.5	7.9	-	4.8	0.1	6.7	6.1	-9.0
2002	9.9	3.7	6.6	8.7	6.9	-	4.9	1.8	4.7	4.8	170.3
2003 Q1	11.8	4.7	8.0	8.0	8.0	-	4.3	1.7	4.8	4.7	229.3
2003 Apr.	11.2	5.2	8.0	12.4	8.6	8.4	4.6	3.4	5.1	4.7	228.0
May	11.4	5.8	8.5	8.7	8.5	8.5	4.4	4.3	5.2	4.6	228.9
June	11.4	5.6	8.3	8.7	8.4	8.5	5.0	3.7	5.2	4.6	248.5
July	11.5	5.7	8.5	9.5	8.6	8.4	5.2	4.9	5.6	4.9	209.0
Aug.	11.8	5.5	8.5	6.3	8.2	8.1	5.2	5.1	5.6	5.0	161.1
Sep. <sup>(p)</sup>	11.3	5.1	8.0	4.3	7.4	.	5.2	5.5	5.5	4.9	154.1

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. M1 is the sum of currency in circulation and overnight deposits; M2 is the sum of M1, deposits with an agreed maturity of up to two years and deposits redeemable at notice of up to three months; and M3 is the sum of M2, repurchase agreements, money market fund shares/units and debt securities up to two years.
- 2) Calculated from monthly differences in levels adjusted for reclassifications, other revaluations, exchange rate variations and any other changes that do not arise from transactions.
- 3) For the calculation of the growth rates, see the technical notes.
- 4) Sum of 12 monthly flows ending in the period indicated.

**Table 2.3 (cont'd)**
**Monetary aggregates<sup>1)</sup> and counterparts (seasonally adjusted)**
*(EUR billions and annual percentage growth rates; levels and growth rates at end of period, flows as transactions during the period)*
**10. Levels**

	Currency in circulation 1	Overnight deposits 2	Deposits with agreed maturity up to 2 years 3	Deposits redeemable at notice up to 3 months 4	Repurchase agreements 5	Money market fund shares/units 6	Debt securities up to 2 years 7	Debt securities over 2 years 8	Deposits redeemable at notice over 3 months 9	Deposits with agreed maturity over 2 years 10	Capital and reserves 11
2001	233.4	1,918.3	1,090.1	1,360.3	231.4	411.9	145.9	1,621.4	113.7	1,166.8	995.3
2002	333.0	2,034.1	1,079.6	1,451.0	240.1	485.9	127.7	1,697.3	103.8	1,186.8	1,006.4
2003 Q1	331.9	2,075.7	1,072.1	1,503.6	209.9	547.2	99.4	1,703.0	100.3	1,200.9	998.0
2003 Apr.	338.0	2,088.5	1,076.5	1,515.5	221.4	553.8	124.0	1,708.5	98.9	1,200.9	998.2
May	342.0	2,103.8	1,081.3	1,527.2	219.0	561.8	105.0	1,711.6	97.9	1,205.3	998.8
June	347.1	2,103.2	1,073.9	1,544.1	218.7	572.0	97.6	1,731.0	96.4	1,209.0	991.9
July	355.2	2,118.7	1,067.2	1,561.5	227.0	587.4	91.2	1,754.8	94.2	1,218.2	994.2
Aug.	359.6	2,144.5	1,057.5	1,573.7	221.7	582.4	88.9	1,774.3	92.3	1,226.7	1,014.4
Sep. <sup>(p)</sup>	366.9	2,149.3	1,050.2	1,579.1	215.6	582.9	88.7	1,772.8	91.1	1,229.2	1,007.9

**11. Flows<sup>2)</sup>**

	Currency in circulation 1	Overnight deposits 2	Deposits with agreed maturity up to 2 years 3	Deposits redeemable at notice up to 3 months 4	Repurchase agreements 5	Money market fund shares/units 6	Debt securities up to 2 years 7	Debt securities over 2 years 8	Deposits redeemable at notice over 3 months 9	Deposits with agreed maturity over 2 years 10	Capital and reserves 11
2001	-112.5	222.1	69.4	96.0	26.8	93.7	-2.1	110.0	-10.6	-2.4	81.3
2002	99.6	113.4	-0.1	90.1	9.9	71.7	-13.0	118.1	-9.9	40.9	39.0
2003 Q1	20.9	43.7	-5.5	52.9	-21.6	16.8	-3.7	20.2	-3.5	10.1	-0.3
2003 Apr.	6.1	14.1	6.0	12.0	11.7	6.2	20.3	9.8	-1.4	0.5	4.6
May	4.0	18.4	8.6	12.0	-2.4	8.6	-17.7	17.6	-1.0	5.5	-2.7
June	5.1	10.6	-9.6	16.8	-0.4	9.5	-6.9	10.3	-1.6	3.0	-3.9
July	8.7	16.6	-7.1	17.3	8.6	11.1	-5.0	21.0	-2.2	8.3	10.1
Aug.	4.4	23.7	-11.8	12.0	-5.4	-5.0	-2.3	8.4	-1.9	7.3	12.3
Sep. <sup>(p)</sup>	7.3	8.1	-5.3	5.7	-5.0	2.5	-0.9	17.6	-1.2	3.5	-0.5

**12. Growth rates<sup>3)</sup>**

	Currency in circulation 1	Overnight deposits 2	Deposits with agreed maturity up to 2 years 3	Deposits redeemable at notice up to 3 months 4	Repurchase agreements 5	Money market fund shares/units 6	Debt securities up to 2 years 7	Debt securities over 2 years 8	Deposits redeemable at notice over 3 months 9	Deposits with agreed maturity over 2 years 10	Capital and reserves 11
2001	-32.4	13.1	6.8	7.6	12.5	28.9	-1.5	7.2	-8.5	-0.2	8.9
2002	42.7	5.9	0.0	6.6	4.3	17.3	-9.3	7.3	-8.7	3.5	4.0
2003 Q1	39.7	8.1	0.0	8.3	1.1	16.4	-11.3	6.7	-8.1	3.8	2.4
2003 Apr.	37.4	7.7	-0.4	9.6	5.3	16.9	9.6	7.2	-8.9	3.6	3.0
May	34.3	8.3	0.8	9.7	2.5	17.7	-12.4	7.1	-9.2	3.8	2.0
June	31.9	8.5	-0.6	10.3	-1.4	19.4	-13.7	7.2	-10.5	3.8	4.4
July	30.3	8.8	-1.1	11.0	1.2	18.3	-12.4	7.5	-12.5	4.1	4.3
Aug.	28.8	9.4	-2.0	11.2	-3.1	15.5	-15.4	7.6	-14.2	4.6	4.2
Sep. <sup>(p)</sup>	27.8	8.8	-2.6	10.9	-6.7	14.6	-18.6	8.0	-15.1	4.6	3.5

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. M1 is the sum of currency in circulation and overnight deposits; M2 is the sum of M1, deposits with an agreed maturity of up to two years and deposits redeemable at notice of up to three months; and M3 is the sum of M2, repurchase agreements, money market fund shares/units and debt securities up to two years.
- 2) Calculated from monthly differences in levels adjusted for reclassifications, other revaluations, exchange rate variations and any other changes that do not arise from transactions.
- 3) For the calculation of the growth rates, see the technical notes.

**Table 2.4****MFI loans, breakdown<sup>1)</sup>***(EUR billions and annual percentage growth rates; not seasonally adjusted; levels and growth rates at end of period, flows as transactions during the period)***1. Loans to financial intermediaries and non-financial corporations: levels**

	Insurance corporations and pension funds		Other financial intermediaries <sup>2)</sup>		Non-financial corporations			
	Total	Up to 1 year	Total	Up to 1 year	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Total
	1	2	3	4	5	6	7	8
2001	34.9	24.8	434.4	276.0	1,019.0	489.8	1,394.5	2,903.3
2002	33.0	19.7	453.9	288.0	980.8	514.3	1,477.2	2,972.3
2003 Q1	42.4	30.0	470.2	301.0	991.2	512.7	1,487.3	2,991.1
2003 Apr.	46.3	33.5	480.7	308.1	992.1	513.4	1,494.5	3,000.0
May	46.2	33.3	484.4	309.7	983.6	509.8	1,502.0	2,995.3
June	44.8	31.3	477.9	304.4	998.7	508.3	1,508.3	3,015.3
July	48.7	32.8	471.6	292.7	985.9	514.3	1,514.6	3,014.8
Aug.	44.1	28.2	468.2	289.4	980.7	519.7	1,523.1	3,023.5
Sep. <sup>(p)</sup>	44.5	28.3	476.3	294.4	972.8	523.7	1,524.1	3,020.6

**2. Loans to financial intermediaries and non-financial corporations: flows<sup>3)</sup>**

	Insurance corporations and pension funds		Other financial intermediaries <sup>2)</sup>		Non-financial corporations			
	Total	Up to 1 year	Total	Up to 1 year	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Total
	1	2	3	4	5	6	7	8
2001	3.6	3.0	46.4	27.7	18.4	55.6	93.6	167.7
2002	-4.4	-5.3	25.5	18.2	-25.9	31.0	94.7	99.8
2003 Q1	11.3	10.3	9.0	5.1	13.1	2.3	16.6	32.1
2003 Apr.	4.0	3.6	11.7	7.9	2.4	1.4	9.6	13.4
May	0.0	-0.1	6.6	3.5	-5.7	-2.8	10.9	2.3
June	-1.4	-2.0	-8.1	-6.3	14.9	-1.6	5.5	18.8
July	3.9	1.5	-6.9	-12.3	-12.4	5.8	6.2	-0.4
Aug.	-4.8	-4.6	-5.4	-4.5	-6.4	4.8	6.9	5.3
Sep. <sup>(p)</sup>	0.6	0.2	12.0	7.5	-6.3	4.6	3.8	2.0

**3. Loans to financial intermediaries and non-financial corporations: growth rates<sup>4)</sup>**

	Insurance corporations and pension funds		Other financial intermediaries <sup>2)</sup>		Non-financial corporations			
	Total	Up to 1 year	Total	Up to 1 year	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Total
	1	2	3	4	5	6	7	8
2001	11.3	13.6	11.8	11.0	2.0	12.8	7.2	6.2
2002	-11.1	-21.2	5.9	6.6	-2.6	6.3	6.8	3.4
2003 Q1	7.2	5.3	1.9	-2.2	-1.0	5.8	6.5	3.7
Q2	4.7	2.9	3.7	0.0	0.3	2.4	6.3	3.6
Q3 <sup>(p)</sup>	10.6	-5.6	5.6	2.1	-0.9	5.4	6.3	3.7

Source: ECB.

1) MFI sector excluding the Eurosystem; sectoral classification is based on ESA 95.

2) This category includes e.g. investment funds.

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

4) For the calculation of the growth rates, see the technical notes.



**Table 2.4 (cont'd)****MFI loans, breakdown<sup>1)</sup>***(EUR billions and annual percentage growth rates; not seasonally adjusted; levels and growth rates at end of period, flows as transactions during the period)***4. Loans to households: levels**

	Households <sup>2)</sup>												
	Consumer credit				Lending for house purchase				Other lending				Total
	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Total	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Total	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Total	
1	2	3	4	5	6	7	8	9	10	11	12	13	
2001	102.5	170.4	224.2	497.1	22.7	61.0	1,937.0	2,020.6	152.8	105.3	370.3	628.3	3,146.1
2002	105.1	178.3	237.0	520.4	25.8	66.5	2,085.8	2,178.0	154.0	99.7	369.7	623.4	3,321.8
2003 Q1	111.2	176.1	208.1	495.4	16.2	68.4	2,124.0	2,208.5	145.2	94.9	406.1	646.2	3,350.1
2003 Apr.	110.9	177.7	206.9	495.5	15.9	68.7	2,134.1	2,218.7	144.6	95.3	409.1	649.0	3,363.2
May	110.3	179.3	206.0	495.5	16.1	68.8	2,149.9	2,234.9	142.9	94.8	412.1	649.8	3,380.3
June	114.9	179.2	209.6	503.7	16.6	68.5	2,166.2	2,251.3	145.2	92.7	412.8	650.6	3,405.6
July	112.6	180.3	211.7	504.6	16.3	69.3	2,188.0	2,273.5	141.3	93.2	416.1	650.6	3,428.7
Aug.	108.2	178.1	202.0	488.3	16.5	69.6	2,203.1	2,289.2	141.7	94.1	426.9	662.7	3,440.2
Sep. <sup>(p)</sup>	109.3	177.7	189.4	476.5	16.8	70.1	2,214.8	2,301.7	145.6	95.5	437.7	678.8	3,457.0

**5. Loans to households: flows<sup>3)</sup>**

	Households <sup>2)</sup>												
	Consumer credit				Lending for house purchase				Other lending				Total
	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Total	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Total	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Total	
1	2	3	4	5	6	7	8	9	10	11	12	13	
2001	-0.4	3.1	12.5	15.2	0.3	-1.8	132.1	130.7	-2.0	3.0	8.8	9.8	155.7
2002	6.0	4.1	11.7	21.8	3.1	3.9	147.4	154.4	-1.7	2.2	8.1	8.6	184.8
2003 Q1	6.1	-3.7	-8.0	-5.6	-9.5	2.0	38.3	30.8	-6.4	-2.2	18.5	9.9	35.2
2003 Apr.	0.6	1.9	-0.2	2.4	-0.3	0.4	10.7	10.8	-1.1	0.3	2.5	1.8	14.9
May	-0.7	1.6	-0.2	0.7	0.3	0.2	16.7	17.2	-1.4	-0.1	3.0	1.5	19.4
June	1.9	1.4	2.2	5.5	0.4	-1.1	18.6	18.0	5.1	-3.1	-0.2	1.8	25.3
July	-2.4	1.5	3.0	2.1	-0.3	0.8	21.4	21.9	-3.3	0.2	2.5	-0.7	23.3
Aug.	-1.2	-0.9	-1.6	-3.7	0.2	0.3	14.6	15.2	-2.9	-0.4	2.8	-0.5	11.0
Sep. <sup>(p)</sup>	2.0	1.0	-2.2	0.9	0.3	0.5	13.1	13.9	3.2	0.1	-0.1	3.1	17.9

**6. Loans to households: growth rates<sup>4)</sup>**

	Households <sup>2)</sup>												
	Consumer credit				Lending for house purchase				Other lending				Total
	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Total	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Total	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Total	
1	2	3	4	5	6	7	8	9	10	11	12	13	
2001	-0.6	1.9	5.9	3.1	1.5	-2.8	7.3	6.9	-1.3	2.9	2.4	1.6	5.2
2002	5.8	2.4	5.2	4.4	13.7	6.4	7.6	7.6	-1.1	2.2	2.2	1.4	5.9
2003 Q1	16.8	-0.4	0.6	3.4	-29.4	10.2	7.5	7.1	-4.2	0.1	7.7	3.5	5.9
Q2	15.5	2.0	-0.1	3.7	-29.3	9.4	7.4	7.0	-6.9	-5.5	8.0	2.0	5.5
Q3 <sup>(p)</sup>	11.9	2.8	-2.0	2.4	-30.8	12.0	7.7	7.4	-5.0	-4.3	8.2	3.0	5.8

Source: ECB.

1) MFI sector excluding the Eurosystem; sectoral classification is based on ESA 95.

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

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

4) For the calculation of the growth rates, see the technical notes.

**Table 2.4 (cont'd)****MFI loans, breakdown <sup>1)</sup>***(EUR billions and annual percentage growth rates; not seasonally adjusted; levels and growth rates at end of period, flows as transactions during the period)***7. Loans to government and non-euro area residents: levels**

	General government				Total	Loans to non-residents				Total
	Central government	Other general government				Banks <sup>2)</sup>	Non-banks			
		State government	Local government	Social security funds			General government	Other	Total	
	1	2	3	4	5	6	7	8	9	10
2001	146.0	298.3	362.9	14.8	822.0	1,095.6	69.9	538.8	608.7	1,704.3
2002	132.3	277.7	382.8	19.7	812.6	1,146.2	64.6	519.3	583.9	1,730.1
2003 Q1	134.3	267.2	379.0	23.9	804.8	1,173.0	59.0	535.0	594.0	1,767.0
Q2 <sup>(p)</sup>	127.7	263.5	379.3	24.7	795.8	1,239.6	59.5	534.5	594.0	1,833.6

**8. Loans to government and non-euro area residents: flows <sup>3)</sup>**

	General government				Total	Loans to non-residents				Total
	Central government	Other general government				Banks <sup>2)</sup>	Non-banks			
		State government	Local government	Social security funds			General government	Other	Total	
	1	2	3	4	5	6	7	8	9	10
2001	-18.3	1.1	9.9	1.3	-6.2	139.7	4.3	80.2	84.5	224.2
2002	-12.2	-21.1	19.9	4.9	-8.3	134.4	-1.2	35.6	34.4	168.8
2003 Q1	0.6	-10.2	4.8	4.1	-0.2	43.8	-5.5	28.5	23.0	66.8
Q2 <sup>(p)</sup>	-6.1	-3.7	0.2	0.9	-8.6	90.5	0.6	15.4	16.0	106.5

**9. Loans to government and non-euro area residents: growth rates <sup>4)</sup>**

	General government				Total	Loans to non-residents				Total
	Central government	Other general government				Banks <sup>2)</sup>	Non-banks			
		State government	Local government	Social security funds			General government	Other	Total	
	1	2	3	4	5	6	7	8	9	10
2001	-11.2	0.4	2.8	9.7	-0.8	14.8	6.2	17.8	16.2	15.4
2002	-8.4	-7.1	5.5	33.2	-1.0	12.8	-1.9	6.7	5.7	10.3
2003 Q1	-13.9	-9.2	7.1	60.2	-1.6	20.6	-13.9	9.9	7.1	15.6
Q2 <sup>(p)</sup>	-8.3	-6.3	5.8	37.4	-0.1	23.9	-7.9	9.7	7.7	18.1

Source: ECB.

1) MFI sector excluding the Eurosystem; sectoral classification is based on ESA 95.

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

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

4) For the calculation of the growth rates, see the technical notes.

**Table 2.5****Deposits held with MFIs, breakdown <sup>1)</sup>***(EUR billions and annual percentage growth rates; not seasonally adjusted; levels and growth rates at end of period, flows as transactions during the period)***1. Deposits by financial intermediaries: levels**

	Insurance corporations and pension funds					Other financial intermediaries <sup>2)</sup>				
	Overnight	With agreed maturity	Redeemable at notice	Repos	Total	Overnight	With agreed maturity	Redeemable at notice	Repos	Total
	1	2	3	4	5	6	7	8	9	10
2001	48.0	427.5	3.4	16.4	495.4	156.5	217.3	5.2	85.3	464.5
2002	55.9	445.6	3.5	17.9	522.8	152.6	237.3	6.6	97.1	493.6
2003 Q1	59.6	454.0	3.7	18.3	535.6	165.3	250.6	8.2	99.6	523.8
2003 Apr.	55.8	457.2	3.3	21.2	537.5	164.4	259.4	8.8	103.8	536.5
May	56.0	458.4	3.2	22.5	540.0	173.9	269.2	9.4	102.6	555.1
June	62.2	450.2	3.0	22.3	537.6	176.5	259.1	9.6	98.0	543.2
July	53.7	458.0	3.1	20.8	535.7	167.2	256.3	9.6	104.7	537.8
Aug.	49.6	463.1	3.2	19.0	534.8	163.7	257.5	9.0	104.9	535.1
Sep. <sup>4)</sup>	55.8	454.9	3.0	18.5	532.2	173.6	252.6	9.4	103.4	538.9

**2. Deposits by financial intermediaries: flows <sup>3)</sup>**

	Insurance corporations and pension funds					Other financial intermediaries <sup>2)</sup>				
	Overnight	With agreed maturity	Redeemable at notice	Repos	Total	Overnight	With agreed maturity	Redeemable at notice	Repos	Total
	1	2	3	4	5	6	7	8	9	10
2001	7.6	9.0	0.3	-1.1	15.8	3.6	1.8	0.6	10.3	16.2
2002	7.9	18.0	0.1	1.4	27.3	-4.7	18.8	-0.2	12.8	26.6
2003 Q1	3.9	7.8	0.2	0.5	12.3	13.4	13.5	1.7	11.0	39.6
2003 Apr.	-3.8	2.9	-0.3	2.9	1.7	-0.4	9.4	0.6	4.2	13.9
May	0.3	1.6	0.1	1.3	3.3	10.5	11.3	0.6	-1.2	21.4
June	6.2	-8.4	-0.2	-0.3	-2.7	2.0	-11.0	0.2	-4.7	-13.5
July	-8.5	7.6	0.2	-1.5	-2.3	-9.4	-2.8	0.0	7.0	-5.3
Aug.	-4.3	4.1	0.1	-2.0	-2.1	-4.6	0.2	-0.7	0.1	-4.9
Sep. <sup>4)</sup>	6.2	-8.0	-0.2	-0.4	-2.4	11.1	-4.9	0.5	-1.7	5.0

**3. Deposits by financial intermediaries: growth rates <sup>4)</sup>**

	Insurance corporations and pension funds					Other financial intermediaries <sup>2)</sup>				
	Overnight	With agreed maturity	Redeemable at notice	Repos	Total	Overnight	With agreed maturity	Redeemable at notice	Repos	Total
	1	2	3	4	5	6	7	8	9	10
2001	18.7	2.2	8.6	-5.1	3.3	2.3	0.6	13.6	14.0	3.7
2002	16.4	4.2	1.9	8.5	5.5	-3.0	8.8	-9.0	14.9	5.7
2003 Q1	36.3	4.7	-8.0	3.3	7.4	5.5	10.1	-0.2	17.7	10.0
Q2	29.2	3.9	-10.8	17.4	6.7	9.1	13.7	78.3	16.3	13.4
Q3 <sup>4)</sup>	11.6	3.5	-15.3	27.3	4.8	11.6	9.8	70.5	8.6	10.7

Source: ECB.

1) MFI sector excluding the Eurosystem; sectoral classification is based on ESA 95.

2) This category includes e.g. investment funds.

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

4) For the calculation of the growth rates, see the technical notes.

**Table 2.5 (cont'd)****Deposits held with MFIs, breakdown <sup>1)</sup>***(EUR billions and annual percentage growth rates; not seasonally adjusted; levels and growth rates at end of period, flows as transactions during the period)***4. Deposits by non-financial corporations and households: levels**

	Non-financial corporations					Households <sup>2)</sup>				
	Overnight	With agreed maturity	Redeemable at notice	Repos	Total	Overnight	With agreed maturity	Redeemable at notice	Repos	Total
	1	2	3	4	5	6	7	8	9	10
2001	575.3	335.2	27.5	36.2	974.2	1,042.4	1,194.6	1,365.7	76.6	3,679.3
2002	595.4	329.0	30.5	34.7	989.6	1,116.7	1,180.8	1,435.9	74.7	3,808.0
2003 Q1	560.1	333.6	34.4	32.3	960.4	1,124.7	1,166.7	1,472.2	70.6	3,834.3
2003 Apr.	567.8	334.6	34.8	31.9	969.1	1,138.5	1,161.7	1,477.7	70.1	3,848.1
May	574.2	343.0	35.6	34.1	986.9	1,147.1	1,157.7	1,480.9	68.6	3,854.2
June	593.6	341.0	36.7	29.8	1,001.1	1,164.8	1,148.1	1,492.7	61.9	3,867.6
July	584.0	347.2	36.8	28.6	996.6	1,200.2	1,147.1	1,499.4	62.5	3,909.3
Aug.	580.6	357.3	37.3	29.3	1,004.6	1,199.1	1,146.5	1,504.8	61.1	3,911.6
Sep. <sup>(p)</sup>	603.3	347.0	38.2	29.4	1,017.9	1,199.8	1,141.5	1,504.0	56.8	3,902.1

**5. Deposits by non-financial corporations and households: flows <sup>3)</sup>**

	Non-financial corporations					Households <sup>2)</sup>				
	Overnight	With agreed maturity	Redeemable at notice	Repos	Total	Overnight	With agreed maturity	Redeemable at notice	Repos	Total
	1	2	3	4	5	6	7	8	9	10
2001	69.6	10.3	2.6	7.4	89.9	132.8	45.3	73.5	7.0	258.5
2002	28.8	22.3	4.1	-1.3	53.9	63.8	-9.3	69.8	-1.9	122.3
2003 Q1	-34.3	5.6	4.0	-2.4	-27.1	8.6	-16.7	36.5	-4.1	24.3
2003 Apr.	8.3	2.1	0.4	-0.4	10.4	14.0	-4.5	5.5	-0.4	14.6
May	7.7	10.1	0.5	2.3	20.7	9.0	-2.7	3.3	-1.6	8.0
June	18.7	-3.1	1.1	-4.3	12.4	17.5	-10.3	11.7	-6.7	12.3
July	-10.5	6.2	0.1	-1.2	-5.4	3.9	-2.0	6.7	0.6	9.2
Aug.	-4.0	9.1	0.5	0.9	6.5	-1.5	-1.5	5.3	-1.4	0.9
Sep. <sup>(p)</sup>	24.3	-8.8	1.0	1.4	17.9	1.1	-3.8	-0.7	-4.3	-7.7

**6. Deposits by non-financial corporations and households: growth rates <sup>4)</sup>**

	Non-financial corporations					Households <sup>2)</sup>				
	Overnight	With agreed maturity	Redeemable at notice	Repos	Total	Overnight	With agreed maturity	Redeemable at notice	Repos	Total
	1	2	3	4	5	6	7	8	9	10
2001	13.6	3.3	10.3	25.8	10.1	14.6	4.0	5.7	12.9	7.6
2002	5.1	6.8	14.8	-3.5	5.6	6.1	-0.8	5.1	-2.5	3.3
2003 Q1	8.0	5.7	29.5	-3.5	7.3	7.4	-1.3	6.6	-12.4	3.9
Q2	8.0	7.2	36.0	-18.0	7.4	7.4	-2.4	8.0	-19.6	4.0
Q3 <sup>(p)</sup>	8.7	8.7	37.2	-15.0	8.6	8.7	-2.8	8.0	-27.5	4.1

Source: ECB.

1) MFI sector excluding the Eurosystem; sectoral classification is based on ESA 95.

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

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

4) For the calculation of the growth rates, see the technical notes.

**Table 2.5 (cont'd)****Deposits held with MFIs, breakdown <sup>1)</sup>***(EUR billions and annual percentage growth rates; not seasonally adjusted; levels and growth rates at end of period, flows as transactions during the period)***7. Deposits by government and non-euro area residents: levels**

	General government					Non-residents				
	Central government	Other general government			Total	Banks <sup>2)</sup>	Non-banks			Total
		State government	Local government	Social security funds			General government	Other	Total	
1	2	3	4	5	6	7	8	9	10	
2001	103.9	29.9	68.9	50.9	253.6	1,696.9	94.1	609.1	703.2	2,400.1
2002	106.9	31.6	69.2	40.7	248.4	1,585.3	97.4	588.7	686.0	2,271.3
2003 Q1	125.5	32.0	65.5	41.0	264.0	1,587.9	97.8	606.3	704.2	2,292.0
Q2 <sup>3)</sup>	147.3	34.2	65.2	44.8	291.4	1,579.3	94.7	599.0	693.7	2,273.1

**8. Deposits by government and non-euro area residents: flows <sup>3)</sup>**

	General government					Non-residents				
	Central government	Other general government			Total	Banks <sup>3)</sup>	Non-banks			Total
		State government	Local government	Social security funds			General government	Other	Total	
1	2	3	4	5	6	7	8	9	10	
2001	-14.1	-0.8	-0.2	2.6	-12.5	130.6	10.2	93.6	103.9	234.5
2002	-0.2	1.8	0.3	-10.3	-8.3	-4.9	3.6	31.9	35.5	30.6
2003 Q1	11.6	0.4	-3.7	0.4	8.7	30.1	0.5	30.7	31.1	61.3
Q2 <sup>3)</sup>	21.8	2.2	-0.3	3.7	27.4	26.2	-3.2	5.8	2.7	28.9

**9. Deposits by government and non-euro area residents: growth rates <sup>4)</sup>**

	General government					Non-residents				
	Central government	Other general government			Total	Banks <sup>3)</sup>	Non-banks			Total
		State government	Local government	Social security funds			General government	Other	Total	
1	2	3	4	5	6	7	8	9	10	
2001	-12.0	-2.6	-0.3	5.3	-4.8	8.7	12.2	18.5	17.6	11.1
2002	-0.2	5.9	0.5	-20.2	-3.3	-0.2	3.9	5.2	5.1	1.3
2003 Q1	13.0	3.7	2.1	-16.9	3.1	1.4	-0.1	7.0	6.0	2.8
Q2 <sup>3)</sup>	29.6	0.4	-0.7	-2.5	12.2	4.4	-0.5	5.7	4.9	4.6

Source: ECB.

1) MFI sector excluding the Eurosystem; sectoral classification is based on ESA 95.

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

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

4) For the calculation of the growth rates, see the technical notes.

**Table 2.6****MFI holdings of securities, breakdown <sup>1)</sup>***(EUR billions and annual percentage growth rates; not seasonally adjusted; levels and growth rates at end of period, flows as transactions during the period)***1. Levels**

	Securities other than shares							Shares and other equity				
	MFIs		General government		Other euro area residents		Total	Non-residents	MFIs	Non-MFIs	Total	Non-residents
	Euro	Non-euro	Euro	Non-euro	Euro	Non-euro						
1	2	3	4	5	6	7	8	9	10	11	12	
2001	1,068.7	54.2	1,059.8	17.6	319.8	15.8	2,535.9	541.0	251.9	559.0	810.8	161.6
2002	1,121.8	48.2	1,119.4	15.5	349.5	16.7	2,671.2	556.6	263.3	564.3	827.6	177.3
2003 Q1	1,172.9	61.4	1,192.3	17.7	366.9	19.0	2,830.2	595.8	260.4	557.9	818.3	181.0
2003 Apr.	1,165.9	57.1	1,209.0	17.2	385.4	17.9	2,852.5	599.8	260.9	576.3	837.2	182.0
May	1,178.4	55.5	1,240.7	15.9	386.9	19.1	2,896.5	592.1	265.6	588.5	854.1	178.7
June	1,182.2	59.5	1,223.2	16.1	386.8	18.3	2,886.2	614.8	268.5	584.9	853.4	174.8
July	1,198.9	60.3	1,234.4	16.7	382.5	19.2	2,912.0	624.9	276.2	607.4	883.6	178.9
Aug.	1,198.9	59.2	1,226.3	17.1	384.8	19.5	2,905.8	635.8	275.8	611.4	887.1	183.0
Sep. <sup>(p)</sup>	1,199.6	58.1	1,243.8	16.7	391.8	19.3	2,929.4	622.2	273.1	608.4	881.5	179.5

**2. Flows <sup>2)</sup>**

	Securities other than shares							Shares and other equity				
	MFIs		General government		Other euro area residents		Total	Non-residents	MFIs	Non-MFIs	Total	Non-residents
	Euro	Non-euro	Euro	Non-euro	Euro	Non-euro						
1	2	3	4	5	6	7	8	9	10	11	12	
2001	82.4	-4.1	13.1	-4.9	63.0	-0.1	149.5	108.9	10.3	29.6	40.0	17.0
2002	47.7	-0.9	41.0	-0.8	27.3	3.2	117.6	57.1	13.7	4.8	18.4	18.7
2003 Q1	41.8	4.0	36.1	1.5	16.4	0.2	99.9	31.2	-1.8	-0.5	-2.4	2.3
2003 Apr.	-1.1	-3.5	18.6	-0.1	13.0	-0.6	26.3	7.6	-0.8	15.3	14.5	0.5
May	13.6	0.4	28.0	-0.4	1.1	2.2	44.8	8.2	4.3	11.0	15.4	-3.3
June	4.0	2.7	-15.7	-0.2	-0.2	-1.4	-10.7	11.4	2.3	-5.4	-3.0	-4.2
July	15.3	0.5	9.9	0.4	-3.2	0.8	23.8	7.5	4.2	-3.2	1.1	2.9
Aug.	0.3	-2.6	-6.8	-0.3	2.3	-0.4	-7.4	-1.0	-0.3	3.1	2.8	3.6
Sep. <sup>(p)</sup>	1.0	0.6	19.2	0.3	7.3	0.7	29.0	2.4	-2.8	-4.1	-6.9	-2.4

**3. Growth rates <sup>3)</sup>**

	Securities other than shares							Shares and other equity				
	MFIs		General government		Other euro area residents		Total	Non-residents	MFIs	Non-MFIs	Total	Non-residents
	Euro	Non-euro	Euro	Non-euro	Euro	Non-euro						
1	2	3	4	5	6	7	8	9	10	11	12	
2001	8.2	-7.1	1.2	-23.4	25.0	-0.4	6.3	25.4	4.2	5.7	5.2	12.0
2002	4.5	-2.5	3.9	-4.3	8.5	21.9	4.6	10.8	5.4	0.9	2.3	11.6
2003 Q1	4.2	-3.4	3.2	7.5	9.9	25.4	4.5	11.9	1.4	2.1	1.9	4.7
2003 Apr.	3.2	-10.0	4.7	5.9	15.5	9.7	5.1	13.8	-1.7	3.7	2.0	6.6
May	3.9	-10.1	6.1	7.7	14.8	22.1	6.0	13.4	-0.2	5.5	3.7	2.1
June	4.2	-9.4	4.9	7.2	15.3	15.8	5.6	16.3	0.4	5.5	3.9	-0.5
July	5.8	-8.2	6.0	6.9	14.6	22.5	6.7	15.8	4.0	7.2	6.2	1.1
Aug.	6.3	-11.8	5.8	5.5	16.4	19.7	7.0	14.4	4.4	6.0	5.5	4.3
Sep. <sup>(p)</sup>	6.1	-7.7	6.4	8.7	15.5	19.7	7.2	13.5	3.5	6.1	5.3	4.1

Source: ECB.

1) MFI sector excluding the Eurosystem.

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

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

**Table 2.7****Revaluation of selected MFI balance sheet items<sup>1)</sup>***(EUR billions; not seasonally adjusted)***1. Write-offs/write-downs of loans to households**

	Households <sup>2)</sup>											
	Consumer credit				Lending for house purchase				Other lending			
	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Total	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Total	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Total
1	2	3	4	5	6	7	8	9	10	11	12	
2001	-	-	-	0.0	-	-	-	0.0	-	-	-	0.0
2002	-	-	-	0.0	-	-	-	0.0	-	-	-	-1.0
2003 Q1	-0.6	-0.1	-0.4	-1.2	-0.1	0.0	-1.0	-1.1	-1.2	-0.1	-1.5	-2.7
2003 Apr.	0.0	-0.1	0.0	-0.1	0.0	0.0	-0.1	-0.1	-0.1	0.0	-0.3	-0.4
May	0.0	0.0	-0.1	-0.1	0.0	0.0	-0.1	-0.1	-0.1	0.0	-0.3	-0.4
June	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	-0.3	-0.4
July	-0.1	0.0	0.0	-0.1	0.0	0.0	-0.3	-0.4	-0.1	0.0	-0.3	-0.5
Aug.	0.0	0.0	-0.1	-0.1	0.0	0.0	0.0	0.0	-0.1	0.0	-0.3	-0.4
Sep. <sup>(p)</sup>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	-0.3	-0.4

**2. Write-offs/write-downs of loans to non-financial corporations and to non-euro area residents**

	Non-financial corporations				Non-residents		
	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Total	Up to 1 year	Over 1 year	Total
	1	2	3	4	5	6	7
2001	-0.8	-5.4	-4.4	-10.6	-	-	-0.4
2002	-1.8	-2.7	-4.7	-9.2	-	-	-6.7
2003 Q1	-4.1	-0.6	-2.8	-7.5	0.0	-0.1	-0.1
2003 Apr.	-0.3	0.0	-0.5	-0.8	0.0	0.0	0.0
May	-0.5	0.0	-0.3	-0.9	0.0	0.0	0.0
June	-0.3	0.0	-0.2	-0.6	-0.3	0.0	-0.3
July	-0.1	0.0	-0.5	-0.7	0.0	0.0	0.0
Aug.	-0.1	-0.1	-0.4	-0.7	0.0	-0.1	0.0
Sep. <sup>(p)</sup>	-0.2	-0.1	-0.3	-0.6	-0.1	0.0	-0.1

**3. Revaluation of securities held by MFIs**

	Securities other than shares								Shares and other equity			
	MFIs		General government		Other euro area residents		Total	Non-residents	MFIs	Non-MFIs	Total	Non-residents
	Euro	Non-euro	Euro	Non-euro	Euro	Non-euro						
	1	2	3	4	5	6	7	8	9	10	11	12
2001	-0.6	0.2	9.8	0.1	5.9	0.1	15.6	-1.5	1.1	7.6	8.7	-1.3
2002	9.8	0.6	11.0	-0.1	5.1	0.2	26.8	4.4	-4.7	0.8	-3.9	-2.7
2003 Q1	-1.8	-0.1	10.3	0.0	-1.4	0.2	7.3	-0.9	-1.1	-7.2	-8.3	1.5
2003 Apr.	-0.4	0.0	-1.7	-0.1	-0.1	-0.2	-2.5	0.4	1.2	3.1	4.3	0.3
May	-0.4	-0.1	3.7	-0.1	0.4	0.0	3.5	-0.2	0.4	1.2	1.5	0.1
June	-0.4	0.0	-1.8	0.0	0.0	0.0	-2.1	0.7	0.7	1.8	2.4	0.3
July	0.5	0.0	-0.8	0.0	0.0	-0.1	-0.4	0.3	4.5	-1.2	3.3	0.7
Aug.	-0.3	0.2	-1.4	0.1	0.0	0.0	-1.5	0.4	-0.1	0.9	0.8	0.6
Sep. <sup>(p)</sup>	-0.1	-0.2	-0.2	-0.1	-0.2	-0.1	-0.9	-0.7	0.0	1.2	1.2	-1.1

Source: ECB.

1) MFI sector excluding the Eurosystem.

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

**Table 2.8****Currency analysis of selected MFI<sup>1)</sup> balance sheet items***(EUR billions; not seasonally adjusted; end of period)***1. Deposits by euro area residents: levels**

	MFIs							Non-MFIs						
	All currencies	Euro <sup>2)</sup>	Non-euro currencies	Non-euro currencies				All currencies	Euro <sup>2)</sup>	Non-euro currencies	Non-euro currencies			
				USD	JPY	CHF	GBP				USD	JPY	CHF	GBP
1	2	3	4	5	6	7	8	9	10	11	12	13	14	
2001	3,829.6	3,359.2	470.3	305.8	33.5	67.2	37.2	5,867.1	5,666.6	200.4	127.0	23.9	10.5	19.6
2002	4,136.5	3,731.6	404.8	252.1	33.2	60.3	28.5	6,062.4	5,885.2	177.3	108.7	20.1	11.3	18.5
2003 Q1	4,198.7	3,800.3	398.4	254.0	28.3	61.5	33.5	6,120.3	5,942.1	178.1	107.8	21.2	10.4	20.1
Q2 <sup>(p)</sup>	4,303.4	3,912.9	390.5	246.3	26.2	61.5	35.0	6,242.1	6,056.1	185.9	112.5	21.2	10.8	21.5

**2. Deposits by non-euro area residents: levels**

	Banks <sup>3)</sup>							Non-banks						
	All currencies	Euro <sup>2)</sup>	Non-euro currencies	Non-euro currencies				All currencies	Euro <sup>2)</sup>	Non-euro currencies	Non-euro currencies			
				USD	JPY	CHF	GBP				USD	JPY	CHF	GBP
1	2	3	4	5	6	7	8	9	10	11	12	13	14	
2001	1,696.9	619.9	1,077.0	788.9	48.5	75.3	1,077.0	703.2	307.0	396.2	288.0	16.8	18.1	56.0
2002	1,585.3	692.0	893.2	621.3	33.5	68.8	893.2	686.0	331.3	354.7	240.3	15.5	13.2	67.3
2003 Q1	1,587.9	731.2	856.6	584.1	34.0	69.6	856.6	704.2	364.3	339.8	225.6	17.6	13.7	62.5
Q2 <sup>(p)</sup>	1,579.3	722.7	856.6	585.6	32.3	66.6	856.6	693.7	362.7	331.0	221.6	15.9	13.0	60.4

**3. Debt securities issued by euro area MFIs: levels**

	Debt securities						
	All currencies	Euro <sup>2)</sup>	Non-euro currencies	Non-euro currencies			
				USD	JPY	CHF	GBP
1	2	3	4	5	6	7	
2001	3,030.2	2,579.5	450.4	247.6	65.2	42.8	67.5
2002	3,138.8	2,680.9	457.5	241.0	55.8	50.8	72.7
2003 Q1	3,197.1	2,724.7	471.9	259.9	50.9	50.3	72.8
Q2 <sup>(p)</sup>	3,228.4	2,763.9	463.9	260.0	46.5	51.5	70.1

Source: ECB.

1) MFI sector excluding the Eurosystem.

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

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



**Table 2.8 (cont'd)**
**Currency analysis of selected MFI<sup>1)</sup> balance sheet items**
*(EUR billions; not seasonally adjusted; end of period)*
**4. Loans to euro area residents: levels**

	MFIs							Non-MFIs						
	All currencies	Euro <sup>2)</sup>	Non-euro currencies				All currencies	Euro <sup>2)</sup>	Non-euro currencies					
			USD	JPY	CHF	GBP			USD	JPY	CHF	GBP		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	
2001	3,794.0	-	-	-	-	-	-	7,340.7	6,999.5	341.2	181.6	47.8	77.5	26.6
2002	4,019.8	-	-	-	-	-	-	7,593.5	7,303.1	290.4	133.7	40.3	83.3	24.4
2003 Q1	4,076.3	-	-	-	-	-	-	7,658.7	7,367.8	290.9	135.1	36.6	85.8	24.9
Q2 <sup>(p)</sup>	4,143.4	-	-	-	-	-	-	7,738.4	7,455.5	282.9	134.1	28.4	87.9	24.3

**5. Loans to non-residents of the euro area: levels**

	Banks <sup>3)</sup>							Non-banks						
	All currencies	Euro <sup>2)</sup>	Non-euro currencies				All currencies	Euro <sup>2)</sup>	Non-euro currencies					
			USD	JPY	CHF	GBP			USD	JPY	CHF	GBP		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	
2001	1,095.6	451.9	643.7	415.7	44.1	37.1	91.7	608.7	201.3	407.3	315.7	11.5	25.6	36.9
2002	1,146.2	553.9	592.3	371.7	51.3	30.4	103.8	583.9	211.4	372.5	278.1	13.6	27.4	32.9
2003 Q1	1,173.0	593.2	579.7	359.2	50.3	31.6	101.4	594.0	226.9	367.2	277.1	11.4	27.1	33.5
Q2 <sup>(p)</sup>	1,239.6	630.5	609.1	381.2	59.0	31.8	97.0	594.0	233.9	360.1	274.1	9.1	25.0	34.1

**6. Holdings of securities other than shares issued by euro area residents: levels**

	Issued by MFIs							Issued by non-MFIs						
	All currencies	Euro <sup>2)</sup>	Non-euro currencies				All currencies	Euro <sup>2)</sup>	Non-euro currencies					
			USD	JPY	CHF	GBP			USD	JPY	CHF	GBP		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	
2001	1,122.9	1,068.7	54.2	37.2	9.0	1.8	15.2	1,413.0	1,379.6	33.4	17.8	10.6	1.1	2.3
2002	1,170.0	1,121.8	48.2	24.8	6.7	1.9	22.9	1,501.2	1,468.9	32.2	14.3	9.8	1.5	5.3
2003 Q1	1,234.3	1,172.9	61.4	20.8	7.9	2.8	11.9	1,595.9	1,559.2	36.7	20.4	10.2	1.0	3.9
Q2 <sup>(p)</sup>	1,243.1	1,183.6	59.5	21.0	6.9	3.2	12.8	1,644.2	1,609.7	34.5	18.5	9.8	1.1	4.0

**7. Holdings of securities other than shares issued by non-euro area residents: levels**

	Issued by banks <sup>3)</sup>							Issued by non-banks						
	All currencies	Euro <sup>2)</sup>	Non-euro currencies				All currencies	Euro <sup>2)</sup>	Non-euro currencies					
			USD	JPY	CHF	GBP			USD	JPY	CHF	GBP		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	
2001	233.0	80.1	152.9	115.6	4.2	2.7	23.8	308.0	127.4	180.7	136.0	18.2	2.6	14.5
2002	239.6	88.4	151.1	109.1	4.1	1.4	31.7	317.1	131.6	185.4	133.1	18.4	2.9	17.6
2003 Q1	256.6	102.1	154.5	93.0	9.4	8.6	30.7	339.2	146.7	192.5	123.7	30.8	2.5	19.9
Q2 <sup>(p)</sup>	259.9	110.1	149.8	88.8	9.0	6.3	35.4	355.3	156.9	198.4	126.9	33.3	2.7	21.4

*Source: ECB.*
*1) MFI sector excluding the Eurosystem.*
*2) Including items expressed in the national denominations of the euro.*
*3) The term "banks" is used in this table to indicate institutions of a similar type to MFIs resident outside the euro area.*

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

									Total
	Deposits	Holdings of securities other than shares			Holdings of shares/ other equity	Holdings of investment fund shares	Fixed assets	Other assets	
			Up to 1 year	Over 1 year					
1	2	3	4	5	6	7	8	9	
2001 Q4	244.6	1,309.9	63.5	1,246.5	1,219.1	209.6	108.9	98.7	3,190.8
2002 Q1	253.6	1,308.7	70.7	1,238.0	1,263.3	224.6	111.0	98.0	3,259.2
Q2	242.8	1,312.6	75.4	1,237.1	1,056.1	215.2	108.0	99.8	3,034.4
Q3	236.7	1,337.4	74.3	1,263.0	844.8	203.4	121.0	103.2	2,846.5
Q4	242.0	1,335.1	72.0	1,263.1	853.2	203.1	122.4	106.6	2,862.3
2003 Q1	217.1	1,331.8	70.6	1,261.2	767.3	205.8	118.6	108.2	2,748.9
Q2 <sup>(p)</sup>	232.5	1,382.2	67.0	1,315.2	878.2	223.7	120.7	118.0	2,955.5

**2. Liabilities**

				Total
	Deposits and loans taken	Investment fund shares	Other liabilities	
	1	2	3	4
2001 Q4	41.1	3,075.6	74.1	3,190.8
2002 Q1	42.6	3,137.7	78.8	3,259.2
Q2	39.1	2,919.8	75.5	3,034.4
Q3	38.9	2,732.3	75.3	2,846.5
Q4	40.2	2,745.2	76.9	2,862.3
2003 Q1	41.1	2,629.4	78.5	2,748.9
Q2 <sup>(p)</sup>	41.8	2,821.8	91.8	2,955.5

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

	Funds by investment policy							Total
	Funds by investment policy					Funds by type of investor		
	Equity funds	Bond funds	Mixed funds	Real estate funds	Other funds	General public funds	Special investors' funds	8
1	2	3	4	5	6	7		
2001 Q4	839.6	1,031.7	810.3	134.0	375.2	2,408.1	782.7	3,190.8
2002 Q1	862.4	1,039.3	820.3	142.3	394.8	2,464.2	794.9	3,259.2
Q2	728.7	1,037.0	762.6	139.2	366.9	2,262.4	772.0	3,034.4
Q3	585.2	1,063.2	699.9	145.6	352.6	2,092.3	754.2	2,846.5
Q4	593.9	1,068.2	701.6	149.4	349.2	2,089.5	772.9	2,862.3
2003 Q1	525.9	1,054.1	675.3	155.9	337.7	1,977.5	771.4	2,748.9
Q2 <sup>(p)</sup>	603.3	1,099.5	720.7	161.5	370.5	2,140.2	815.3	2,955.5

Source: ECB.

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

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

								Total
	Deposits 1	Holdings of securities other than shares 2			Holdings of shares/ other equity 5	Holdings of investment fund shares 6	Other assets 7	8
			Up to 1 year 3	Over 1 year 4				
2001 Q4	39.5	29.0	3.0	26.1	735.2	19.4	16.5	839.6
2002 Q1	39.3	28.7	2.9	25.8	759.1	20.6	14.7	862.4
Q2	34.0	27.4	4.0	23.4	630.0	22.2	15.0	728.7
Q3	29.0	26.5	3.7	22.8	496.5	19.1	14.1	585.2
Q4	26.6	28.0	3.1	24.9	506.0	18.4	14.9	593.9
2003 Q1	24.5	30.3	2.8	27.5	438.6	16.5	16.1	525.9
Q2 <sup>(p)</sup>	27.9	31.6	2.9	28.8	506.4	18.5	18.9	603.3

**2. Liabilities of equity funds**

				Total
	Deposits and loans taken 1	Investment fund shares 2	Other liabilities 3	4
	2001 Q4	2.6	831.4	5.6
2002 Q1	3.5	852.7	6.1	862.4
Q2	4.4	718.7	5.6	728.7
Q3	4.1	576.0	5.1	585.2
Q4	3.9	586.4	3.6	593.9
2003 Q1	3.8	517.6	4.5	525.9
Q2 <sup>(p)</sup>	4.3	592.4	6.5	603.3

**3. Assets of bond funds**

								Total
	Deposits 1	Holdings of securities other than shares 2			Holdings of shares/ other equity 5	Holdings of investment fund shares 6	Other assets 7	8
			Up to 1 year 3	Over 1 year 4				
2001 Q4	73.2	875.5	33.2	842.3	38.5	11.2	33.4	1,031.7
2002 Q1	77.9	874.0	37.3	836.7	42.9	11.5	33.0	1,039.3
Q2	75.9	882.2	38.5	843.8	33.2	10.8	34.9	1,037.0
Q3	78.3	902.1	37.2	865.0	32.6	11.6	38.5	1,063.2
Q4	83.9	902.8	36.6	866.2	31.9	12.3	37.2	1,068.2
2003 Q1	77.5	899.8	35.8	864.0	26.6	18.6	31.5	1,054.1
Q2 <sup>(p)</sup>	82.4	928.2	33.0	895.2	31.1	20.9	36.9	1,099.5

**4. Liabilities of bond funds**

				Total
	Deposits and loans taken 1	Investment fund shares 2	Other liabilities 3	4
	2001 Q4	8.4	1,007.3	16.0
2002 Q1	8.5	1,013.2	17.7	1,039.3
Q2	7.9	1,011.5	17.6	1,037.0
Q3	7.0	1,039.2	17.0	1,063.2
Q4	7.7	1,044.0	16.5	1,068.2
2003 Q1	8.9	1,030.5	14.7	1,054.1
Q2 <sup>(p)</sup>	8.5	1,069.9	21.1	1,099.5

Source: ECB.

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

	Deposits 1	Holdings of securities other than shares 2			Holdings of shares/ other equity 5	Holdings of investment fund shares 6	Fixed assets 7	Other assets 8	Total 9
			Up to 1 year 3	Over 1 year 4					
			2001 Q4	56.9					
2002 Q1	52.6	283.8	18.1	265.7	357.0	100.3	2.3	24.4	820.3
Q2	54.2	286.9	20.6	266.3	298.8	94.6	2.1	26.0	762.6
Q3	53.0	291.7	21.3	270.4	234.3	88.1	5.2	27.7	699.9
Q4	53.9	295.0	21.3	273.7	232.9	87.7	3.4	28.6	701.6
2003 Q1	50.4	300.7	21.8	278.9	209.9	83.7	0.7	29.9	675.3
Q2 <sup>(p)</sup>	49.4	311.8	20.9	290.9	237.0	91.9	0.3	30.3	720.7

**6. Liabilities of mixed funds**

	Deposits and loans taken 1			Investment fund shares 2		Other liabilities 3		Total 4
	2001 Q4	2.9			790.9		16.5	
2002 Q1	2.9			799.4		18.0		820.3
Q2	3.1			741.3		18.2		762.6
Q3	3.5			676.9		19.5		699.9
Q4	3.0			677.1		21.5		701.6
2003 Q1	2.9			649.9		22.5		675.3
Q2 <sup>(p)</sup>	2.6			695.9		22.3		720.7

**7. Assets of real estate funds**

	Deposits 1	Holdings of securities other than shares 2			Holdings of shares/ other equity 5	Holdings of investment fund shares 6	Fixed assets 7	Other assets 8	Total 9
			Up to 1 year 3	Over 1 year 4					
			2001 Q4	8.6					
2002 Q1	11.5	12.9	0.6	12.3	1.1	2.1	108.3	6.4	142.3
Q2	13.5	9.8	0.6	9.2	0.9	3.9	105.1	6.0	139.2
Q3	13.3	10.7	0.6	10.1	0.8	5.1	109.5	6.2	145.6
Q4	10.9	9.5	0.5	8.9	0.7	7.0	114.5	6.9	149.4
2003 Q1	14.7	8.3	0.5	7.7	0.7	8.6	117.1	6.6	155.9
Q2 <sup>(p)</sup>	16.5	9.0	0.6	8.5	0.7	9.1	119.8	6.3	161.5

**8. Liabilities of real estate funds**

	Deposits and loans taken 1			Investment fund shares 2		Other liabilities 3		Total 4
	2001 Q4	25.9			103.3		4.8	
2002 Q1	26.7			110.7		4.9		142.3
Q2	22.3			112.1		4.8		139.2
Q3	22.9			117.7		5.0		145.6
Q4	24.6			119.5		5.4		149.4
2003 Q1	24.0			126.5		5.4		155.9
Q2 <sup>(p)</sup>	24.9			131.1		5.4		161.5

Source: ECB.

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

							Total
	Deposits 1	Holdings of securities other than shares 2	Holdings of shares/ other equity 3	Holdings of investment fund shares 4	Fixed assets 5	Other assets 6	7
2001 Q4	201.0	928.7	949.2	167.0	99.1	63.2	2,408.1
2002 Q1	213.3	921.8	984.8	176.8	100.6	66.9	2,464.2
Q2	199.2	915.7	818.4	166.7	96.1	66.3	2,262.4
Q3	187.9	917.6	654.4	156.0	107.9	68.5	2,092.3
Q4	190.8	904.8	663.2	153.1	107.7	69.8	2,089.5
2003 Q1	165.5	882.6	599.9	155.1	103.2	71.2	1,977.5
Q2 <sup>(p)</sup>	181.5	912.6	691.5	168.3	104.3	82.0	2,140.2

**2. Liabilities of general public funds**

				Total
	Deposits and loans taken 1	Investment fund shares 2	Other liabilities 3	4
2001 Q4	36.4	2,312.9	58.8	2,408.1
2002 Q1	38.1	2,360.2	65.9	2,464.2
Q2	34.0	2,166.0	62.4	2,262.4
Q3	33.0	1,997.8	61.5	2,092.3
Q4	33.7	1,994.0	61.7	2,089.5
2003 Q1	34.6	1,880.0	62.9	1,977.5
Q2 <sup>(p)</sup>	34.7	2,028.7	76.8	2,140.2

**3. Assets of special investors' funds**

							Total
	Deposits 1	Holdings of securities other than shares 2	Holdings of shares/ other equity 3	Holdings of investment fund shares 4	Fixed assets 5	Other assets 6	7
2001 Q4	43.6	381.2	270.0	42.6	9.8	35.6	782.7
2002 Q1	40.3	386.9	278.4	47.8	10.3	31.2	794.9
Q2	43.6	396.9	237.7	48.5	11.9	33.5	772.0
Q3	48.8	419.8	190.3	47.5	13.1	34.7	754.2
Q4	51.2	430.3	190.0	49.9	14.7	36.8	772.9
2003 Q1	51.6	449.2	167.4	50.7	15.4	37.1	771.4
Q2 <sup>(p)</sup>	51.0	469.6	186.7	55.4	16.5	36.0	815.3

**4. Liabilities of special investors' funds**

				Total
	Deposits and loans taken 1	Investment fund shares 2	Other liabilities 3	4
2001 Q4	4.6	762.8	15.3	782.7
2002 Q1	4.5	777.5	12.9	794.9
Q2	5.1	753.8	13.1	772.0
Q3	5.9	734.5	13.8	754.2
Q4	6.5	751.2	15.2	772.9
2003 Q1	6.5	749.3	15.5	771.4
Q2 <sup>(p)</sup>	7.2	793.1	15.0	815.3

Source: ECB.

### 3 Financial markets and interest rates in the euro area

**Table 3.1**

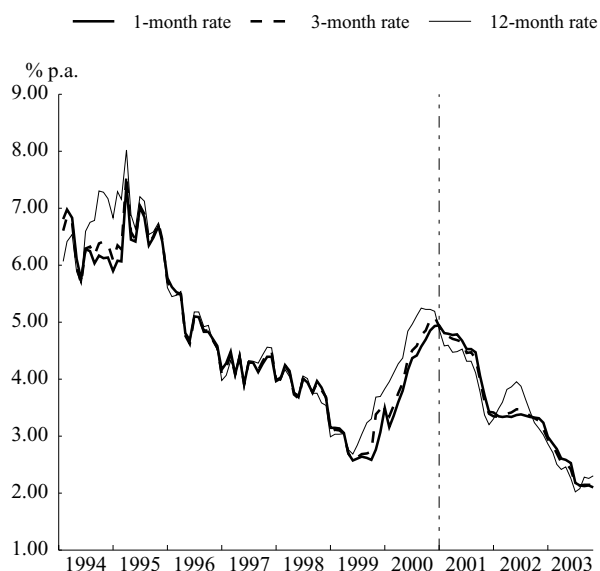
**Money market interest rates<sup>1)</sup>**

(percentages per annum)

	Euro area <sup>4)</sup>					United States <sup>5)</sup>	Japan <sup>6)</sup>
	Overnight deposits <sup>3)</sup> 1	1-month deposits <sup>5)</sup> 2	3-month deposits <sup>5)</sup> 3	6-month deposits <sup>5)</sup> 4	12-month deposits <sup>5)</sup> 5	3-month deposits <sup>6)</sup> 6	3-month deposits <sup>7)</sup> 7
1998	3.09	3.84	3.83	3.78	3.77	5.57	0.66
1999	2.74	2.86	2.96	3.05	3.19	5.42	0.22
2000	4.12	4.24	4.40	4.55	4.78	6.53	0.28
<i>Euro area enlargement</i>							
2001	4.39	4.33	4.26	4.16	4.09	3.78	0.15
2002	3.29	3.30	3.32	3.35	3.49	1.80	0.08
2002 Oct.	3.30	3.31	3.26	3.17	3.13	1.78	0.07
Nov.	3.30	3.23	3.12	3.04	3.02	1.46	0.07
Dec.	3.09	2.98	2.94	2.89	2.87	1.41	0.06
2003 Jan.	2.79	2.86	2.83	2.76	2.71	1.37	0.06
Feb.	2.76	2.77	2.69	2.58	2.50	1.34	0.06
Mar.	2.75	2.60	2.53	2.45	2.41	1.29	0.06
Apr.	2.56	2.58	2.53	2.47	2.45	1.30	0.06
May	2.56	2.52	2.40	2.32	2.26	1.28	0.06
June	2.21	2.18	2.15	2.08	2.01	1.12	0.06
July	2.08	2.13	2.13	2.09	2.08	1.11	0.05
Aug.	2.10	2.12	2.14	2.17	2.28	1.14	0.05
Sep.	2.02	2.13	2.15	2.18	2.26	1.14	0.05
Oct.	2.01	2.10	2.14	2.17	2.30	1.16	0.06
2003 3 Oct.	2.06	2.10	2.13	2.14	2.21	1.15	0.06
10	2.06	2.10	2.14	2.16	2.28	1.15	0.06
17	2.01	2.10	2.15	2.20	2.37	1.17	0.05
24	2.05	2.10	2.15	2.20	2.35	1.16	0.06
31	2.08	2.10	2.16	2.21	2.39	1.17	0.06

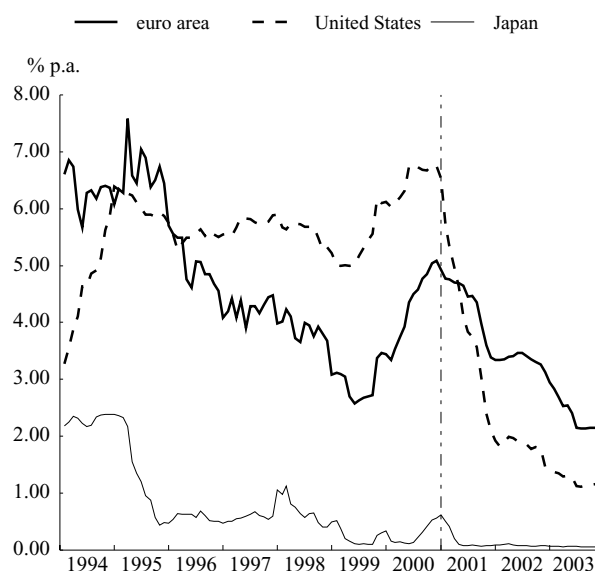
**Euro area money market rates**

(monthly)



**3-month money market rates**

(monthly)



Sources: Reuters and ECB.

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

**Table 3.2**

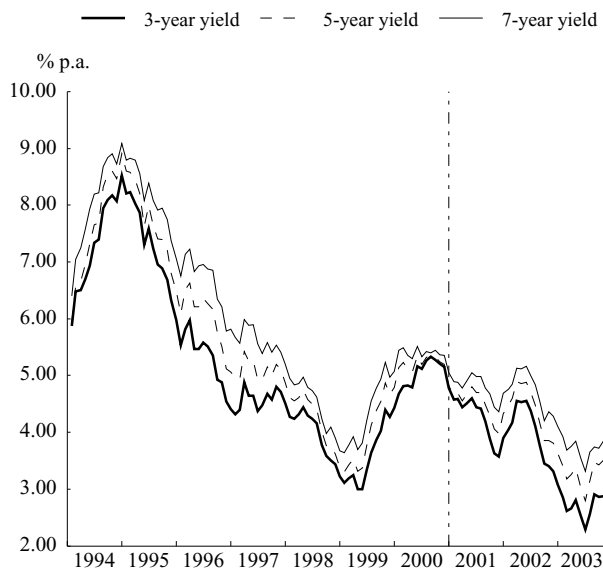
**Government bond yields<sup>1)</sup>**

(percentages per annum)

	Euro area <sup>2)</sup>					United States	Japan
	2 years <sup>1</sup>	3 years <sup>2</sup>	5 years <sup>3</sup>	7 years <sup>4</sup>	10 years <sup>5</sup>	10 years <sup>6</sup>	10 years <sup>7</sup>
1998	3.16	3.22	3.38	3.67	4.71	5.33	1.30
1999	3.38	3.63	4.01	4.38	4.66	5.64	1.75
2000	4.90	5.03	5.19	5.37	5.44	6.03	1.76
<i>Euro area enlargement</i>							
2001	4.11	4.23	4.49	4.79	5.03	5.01	1.34
2002	3.68	3.94	4.35	4.70	4.92	4.60	1.27
2002 Oct.	3.13	3.41	3.86	4.36	4.62	3.91	1.09
Nov.	3.04	3.31	3.81	4.28	4.59	4.04	0.99
Dec.	2.84	3.08	3.63	4.10	4.41	4.03	0.97
2003 Jan.	2.64	2.85	3.40	3.93	4.27	4.02	0.84
Feb.	2.45	2.61	3.18	3.68	4.06	3.90	0.83
Mar.	2.50	2.66	3.26	3.76	4.13	3.79	0.74
Apr.	2.59	2.81	3.38	3.85	4.23	3.94	0.66
May	2.31	2.53	3.02	3.54	3.92	3.56	0.57
June	2.08	2.29	2.79	3.32	3.72	3.32	0.56
July	2.30	2.56	3.15	3.65	4.06	3.93	0.99
Aug.	2.63	2.91	3.47	3.74	4.20	4.44	1.15
Sep.	2.53	2.87	3.42	3.72	4.23	4.29	1.45
Oct.	2.59	2.88	3.50	3.85	4.31	4.27	1.40
2003 3 Oct.	2.55	2.84	3.44	3.79	4.27	4.16	1.40
10	2.53	2.81	3.45	3.80	4.27	4.25	1.35
17	2.69	2.98	3.61	3.93	4.38	4.41	1.43
24	2.61	2.91	3.54	3.88	4.32	4.26	1.36
31	2.67	2.96	3.59	3.92	4.37	4.30	1.46

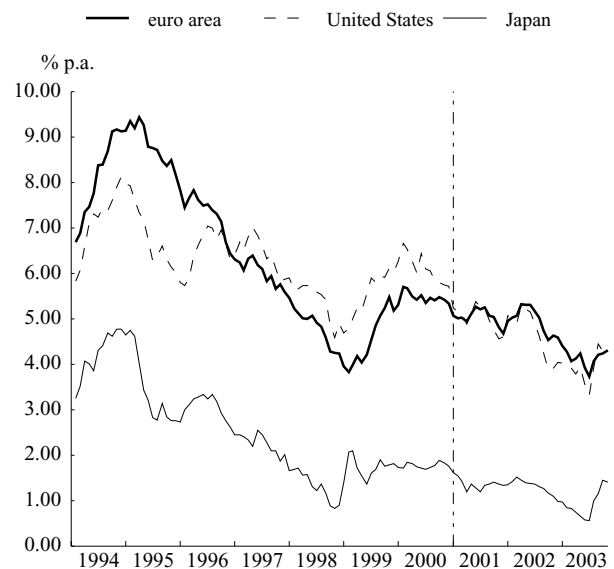
**Euro area government bond yields**

(monthly)



**10-year government bond yields**

(monthly)



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

- 1) To December 1998, 2, 3, 5 and 7-year euro area yields are end-of-period values and 10-year yields are period averages. Thereafter, all yields are period averages.
- 2) To December 1998, euro area yields are calculated on the basis of harmonised national government bond yields weighted by GDP. Thereafter, the weights are the nominal outstanding amounts of government bonds in each maturity band.

**Table 3.3**

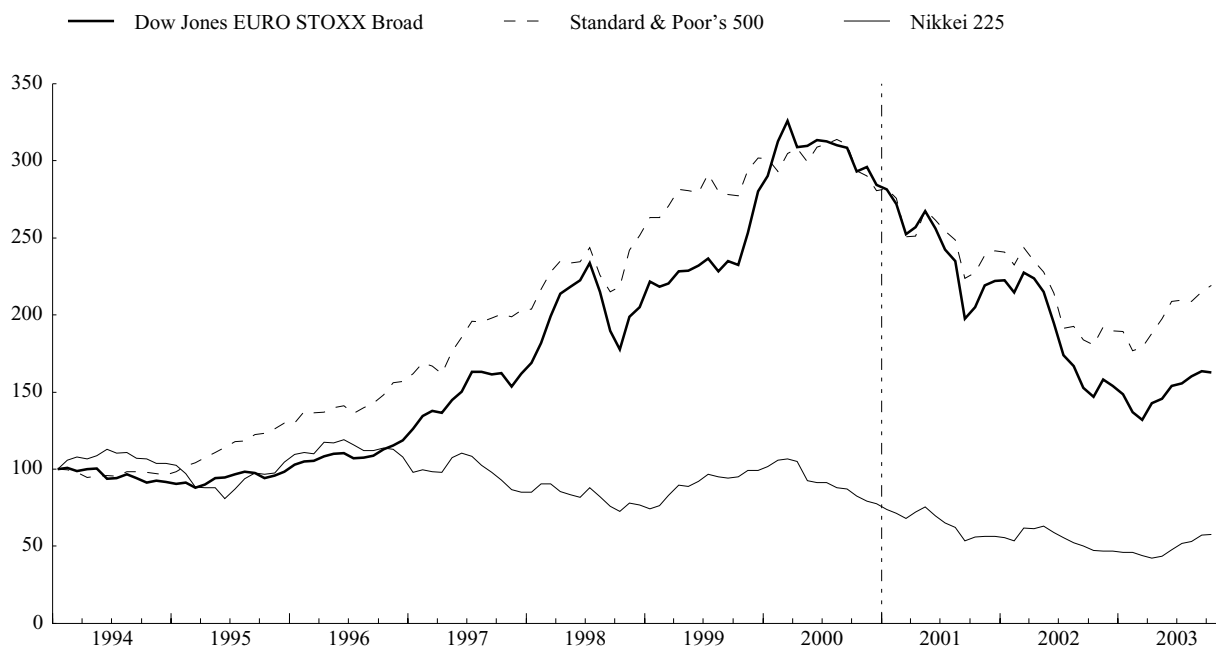
**Stock market indices**

(index levels, in points)<sup>1)</sup>

	Dow Jones EURO STOXX indices												United States	Japan
	Benchmark		Main economic sector indices											
	Broad	50	Basic materials	Consumer cyclical	Consumer non-cyclical	Energy	Financial	Industrial	Technology	Utilities	Telecommunications	Health-care	Standard & Poor's 500	Nikkei 225
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1998	280.5	3,076.3	257.9	245.0	295.5	249.3	281.3	218.4	333.6	282.4	488.1	348.9	1,085.3	15,338.4
1999	325.8	3,787.3	279.2	262.9	327.7	286.0	295.7	285.1	470.4	306.2	717.7	392.6	1,327.8	16,829.9
2000	423.9	5,075.5	299.1	292.9	324.3	342.3	350.7	378.0	963.1	341.7	1,072.5	476.0	1,426.7	17,162.7
<i>Euro area enlargement</i>														
2001	336.3	4,049.4	296.0	228.2	303.3	341.4	321.6	310.0	530.5	309.6	541.2	540.1	1,193.8	12,114.8
2002	259.9	3,023.4	267.5	175.0	266.5	308.9	243.3	252.4	345.1	255.5	349.2	411.8	995.4	10,119.3
2002 Oct.	204.0	2,384.7	214.4	135.3	236.5	272.1	177.8	193.6	235.8	209.6	286.8	345.4	854.6	8,781.1
Nov.	219.5	2,559.0	224.2	145.4	234.8	272.4	197.0	208.8	289.6	215.2	324.5	347.1	910.1	8,699.6
Dec.	213.6	2,475.1	225.3	139.4	226.5	268.8	194.2	205.2	270.4	207.3	322.5	324.4	899.1	8,674.8
2003 Jan.	206.3	2,377.4	213.0	130.9	220.2	262.4	186.5	198.5	250.2	210.0	330.0	313.8	896.0	8,567.4
Feb.	189.8	2,170.9	185.8	121.5	196.5	245.1	172.2	186.0	226.5	198.1	309.4	274.3	836.6	8,535.8
Mar.	183.0	2,086.5	176.1	115.4	188.4	241.1	164.5	181.2	228.2	185.6	292.8	275.2	846.6	8,171.0
Apr.	197.9	2,278.2	193.4	122.5	203.9	250.0	181.0	192.0	251.6	201.0	324.8	288.7	889.6	7,895.7
May	202.0	2,303.0	196.4	124.9	202.3	249.6	187.4	198.5	258.2	208.3	324.9	304.2	935.8	8,122.1
June	213.5	2,443.3	205.0	133.0	206.5	266.1	201.2	207.4	271.5	216.7	340.7	318.9	988.0	8,895.7
July	216.1	2,459.8	218.8	138.1	205.5	260.1	206.1	216.0	274.2	214.6	340.9	306.8	992.6	9,669.8
Aug.	222.3	2,524.1	227.2	144.6	211.9	268.6	211.6	227.0	281.7	217.0	352.4	293.2	989.5	9,884.6
Sep.	226.8	2,553.3	229.5	151.2	221.4	269.0	212.1	232.0	302.1	216.6	349.6	313.2	1,018.9	10,644.8
Oct.	225.5	2,523.3	222.0	150.1	218.9	263.0	212.9	231.5	308.0	210.8	348.4	309.7	1,038.7	10,720.1
2003 3 Oct.	223.9	2,516.5	220.6	146.9	221.0	263.9	210.2	227.5	304.0	211.5	347.0	313.4	1,029.9	10,709.3
10	225.0	2,518.4	220.3	149.8	218.5	263.9	211.3	230.2	309.6	211.1	348.9	308.5	1,038.1	10,786.0
17	228.0	2,550.8	223.7	152.8	222.7	267.7	215.0	234.5	311.3	209.9	349.1	311.6	1,039.3	11,037.9
24	222.5	2,482.6	219.7	148.1	215.7	257.5	210.1	229.7	303.3	208.7	344.8	306.4	1,028.9	10,335.7
31	230.7	2,575.0	230.1	155.0	218.9	261.0	220.9	239.2	318.2	211.7	354.0	310.5	1,050.7	10,559.6

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

(base month: January 1994 = 100; monthly)



Source: Reuters.

1) Monthly and yearly values are period averages.



**Table 3.4**

**Retail bank interest rates**

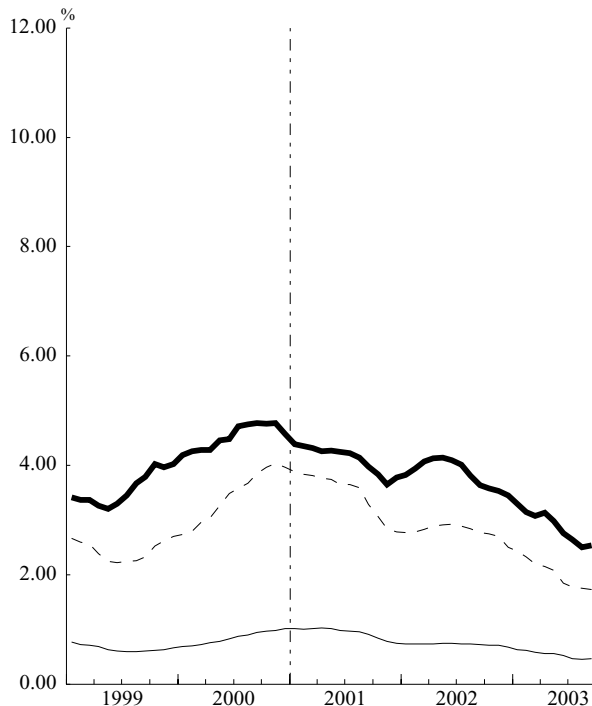
(percentages per annum; period averages)

	Deposit interest rates						Lending interest rates			
	Overnight 1	With agreed maturity			Redeemable at notice		To enterprises		To households	
		Up to 1 year 2	Up to 2 years 3	Over 2 years 4	Up to 3 months 5	Over 3 months 6	Up to 1 year 7	Over 1 year 8	Consumer lending 9	For house purchase 10
2000	0.85	3.45	3.45	4.52	2.25	3.79	6.60	6.23	9.87	6.34
<i>Euro area enlargement</i>										
2001	0.94	3.49	3.49	4.12	2.40	3.59	6.83	6.15	10.12	5.97
2002	0.73	2.80	2.80	3.85	2.13	2.85	6.13	5.71	9.78	5.54
2002 Sep.	0.73	2.77	2.77	3.64	2.13	2.73	6.12	5.61	9.85	5.38
Oct.	0.72	2.74	2.74	3.58	2.11	2.63	6.13	5.54	9.72	5.26
Nov.	0.71	2.70	2.69	3.53	2.11	2.55	6.10	5.50	9.70	5.21
Dec.	0.68	2.51	2.51	3.45	2.05	2.41	5.98	5.34	9.58	5.10
2003 Jan.	0.63	2.43	2.42	3.29	2.04	2.34	5.87	5.27	9.48	4.91
Feb.	0.62	2.32	2.32	3.15	2.02	2.12	5.81	5.18	9.39	4.77
Mar.	0.59	2.20	2.19	3.08	1.97	2.05	5.69	5.17	9.29	4.69
Apr.	0.56	2.15	2.14	3.14	1.93	2.05	5.57	5.14	9.24	4.70
May	0.56	2.08	2.08	2.98	1.91	1.92	5.51	5.01	9.22	4.56
June	0.52	1.85	1.84	2.76	1.83	1.65	5.39	4.86	9.15	4.34
July	0.46	1.78	1.77	2.65	1.77	1.48	5.26	4.70	9.01	4.16
Aug.	0.46	1.75	1.75	2.50	1.61	1.43	5.24	4.82	9.07	4.23
Sep.	0.46	1.73	1.72	2.54	1.60	1.41	5.24	4.78	9.06	4.36

**Deposit interest rates**

(monthly)

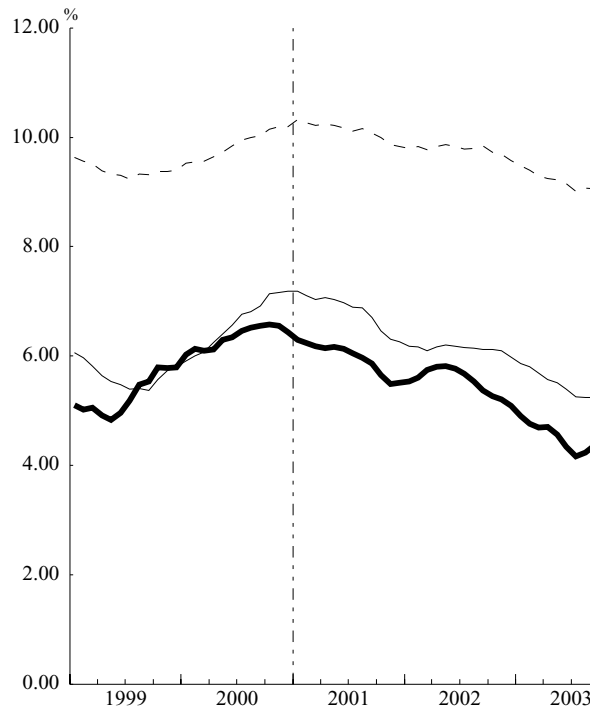
- overnight
- - - agreed maturity up to 1 year
- agreed maturity over 2 years



**Lending interest rates**

(monthly)

- up to 1 year to enterprises
- - - consumer lending
- to households for house purchase



Source: ECB.

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

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

	By euro area residents									
					In euro <sup>1)</sup>				In other	
	Issues	Redemptions	Net issues	Amounts outstanding	Issues	Redemptions	Net issues	Amounts outstanding	Issues	Redemptions
	1	2	3	4	5	6	7	8	9	10
2002 Aug.	384.6	378.2	6.4	775.5	366.2	356.9	9.4	693.0	18.3	21.3
Sep.	414.9	400.7	14.2	792.5	392.1	381.1	11.0	706.5	22.8	19.6
Oct.	468.4	456.5	11.9	805.9	441.9	433.4	8.5	715.2	26.5	23.1
Nov.	435.6	413.1	22.5	830.4	413.6	388.9	24.7	740.1	22.0	24.2
Dec.	406.1	451.6	-45.5	783.4	386.8	429.9	-43.1	695.9	19.3	21.7
2003 Jan.	545.1	487.4	57.7	840.7	518.6	462.7	55.9	750.9	26.5	24.7
Feb.	456.3	428.4	27.9	865.9	433.5	408.3	25.2	775.6	22.8	20.1
Mar.	452.0	440.7	11.3	875.6	433.0	423.1	9.9	785.3	19.0	17.6
Apr.	476.7	456.1	20.6	892.3	454.8	431.8	23.1	807.7	21.9	24.3
May	443.1	435.3	7.8	897.9	415.9	410.7	5.2	812.2	27.2	24.6
June	434.7	454.7	-20.0	877.8	412.4	429.2	-16.8	795.1	22.3	25.6
July	458.8	460.1	-1.3	877.0	436.4	433.1	3.3	798.2	22.3	26.9
Aug.	381.2	392.2	-11.0	864.1	362.2	365.7	-3.5	793.8	18.9	26.5

**2. Long-term**

	By euro area residents									
					In euro <sup>1)</sup>				In other	
	Issues	Redemptions	Net issues	Amounts outstanding	Issues	Redemptions	Net issues	Amounts outstanding	Issues	Redemptions
	1	2	3	4	5	6	7	8	9	10
2002 Aug.	70.5	64.6	6.0	7,331.8	60.6	55.0	5.6	6,686.0	10.0	9.6
Sep.	132.6	97.3	35.3	7,366.7	117.2	84.6	32.6	6,717.8	15.4	12.7
Oct.	125.6	94.8	30.8	7,396.8	107.4	84.0	23.4	6,741.5	18.2	10.8
Nov.	133.1	96.5	36.6	7,430.7	119.4	90.3	29.1	6,770.6	13.7	6.2
Dec.	148.6	179.3	-30.7	7,380.8	136.9	162.8	-25.9	6,743.6	11.7	16.5
2003 Jan.	179.9	134.8	45.0	7,413.6	156.6	125.4	31.2	6,775.4	23.3	9.5
Feb.	164.9	112.7	52.2	7,468.0	146.0	104.0	42.0	6,818.1	18.8	8.7
Mar.	162.5	106.2	56.2	7,520.1	146.6	96.0	50.6	6,869.2	15.9	10.3
Apr.	160.8	125.2	35.6	7,546.5	146.0	115.9	30.1	6,899.5	14.7	9.3
May	174.6	101.0	73.5	7,598.8	160.9	91.5	69.4	6,968.8	13.6	9.5
June	170.1	108.5	61.6	7,672.7	154.7	100.1	54.6	7,024.1	15.4	8.3
July	184.8	140.4	44.4	7,721.4	163.2	133.7	29.5	7,054.5	21.6	6.7
Aug.	78.3	71.1	7.3	7,745.9	68.9	64.1	4.8	7,060.7	9.4	7.0

**3. Total**

	By euro area residents									
					In euro <sup>1)</sup>				In other	
	Issues	Redemptions	Net issues	Amounts outstanding	Issues	Redemptions	Net issues	Amounts outstanding	Issues	Redemptions
	1	2	3	4	5	6	7	8	9	10
2002 Aug.	455.1	442.7	12.4	8,107.4	426.8	411.9	15.0	7,378.9	28.3	30.9
Sep.	547.5	497.9	49.6	8,159.2	509.2	465.7	43.6	7,424.4	38.3	32.2
Oct.	593.9	551.3	42.7	8,202.7	549.2	517.3	31.9	7,456.7	44.7	33.9
Nov.	568.7	509.6	59.1	8,261.1	533.0	479.2	53.8	7,510.7	35.7	30.4
Dec.	554.7	630.9	-76.2	8,164.1	523.7	592.6	-69.0	7,439.5	31.0	38.3
2003 Jan.	725.0	622.3	102.7	8,254.3	675.2	588.1	87.1	7,526.3	49.8	34.2
Feb.	621.2	541.1	80.1	8,333.9	579.5	512.3	67.2	7,593.6	41.6	28.7
Mar.	614.5	546.9	67.5	8,395.7	579.6	519.1	60.5	7,654.4	34.8	27.8
Apr.	637.5	581.3	56.2	8,438.8	600.9	547.7	53.2	7,707.2	36.6	33.6
May	617.6	536.3	81.3	8,496.7	576.8	502.2	74.6	7,781.1	40.8	34.1
June	604.8	563.2	41.6	8,550.6	567.1	529.3	37.8	7,819.2	37.8	33.9
July	643.6	600.4	43.1	8,598.4	599.6	566.8	32.8	7,852.7	44.0	33.6
Aug.	459.5	463.3	-3.7	8,610.0	431.2	429.8	1.3	7,854.5	28.4	33.4

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

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

currencies		By non-residents of the euro area in euro <sup>1)</sup>				Total in euro <sup>1)</sup>				
		Issues	Redemptions	Net issues	Amounts outstanding	Issues	Redemptions	Net issues	Amounts outstanding	
Net issues	Amounts outstanding									
11	12	13	14	15	16	17	18	19	20	
-3.0	82.6	12.1	11.5	0.6	44.9	378.3	368.4	9.9	737.9	2002 Aug.
3.3	86.0	31.7	7.7	24.0	68.9	423.8	388.8	35.0	775.5	Sep.
3.4	90.7	17.1	31.3	-14.2	54.7	458.9	464.6	-5.7	769.9	Oct.
-2.2	90.4	14.6	16.9	-2.3	52.4	428.1	405.8	22.3	792.4	Nov.
-2.4	87.5	23.8	10.6	13.2	65.6	410.6	440.5	-29.9	761.5	Dec.
1.8	89.8	16.3	34.5	-18.2	47.4	534.9	497.2	37.7	798.3	2003 Jan.
2.7	90.4	20.1	14.1	6.0	53.4	453.6	422.5	31.2	828.9	Feb.
1.4	90.4	33.3	9.7	23.6	76.9	466.2	432.8	33.4	862.2	Mar.
-2.4	84.6	14.6	35.8	-21.1	55.8	469.5	467.5	2.0	863.5	Apr.
2.6	85.7	20.9	18.4	2.4	58.2	436.7	429.1	7.7	870.5	May
-3.2	82.8	38.4	10.6	27.9	86.1	450.8	439.7	11.1	881.2	June
-4.6	78.7	.	.	.	.	.	.	.	.	July
-7.5	70.2	.	.	.	.	.	.	.	.	Aug.

currencies		By non-residents of the euro area in euro <sup>1)</sup>				Total in euro <sup>1)</sup>				
		Issues	Redemptions	Net issues	Amounts outstanding	Issues	Redemptions	Net issues	Amounts outstanding	
Net issues	Amounts outstanding									
11	12	13	14	15	16	17	18	19	20	
0.4	645.9	7.0	8.1	-1.2	962.7	67.5	63.1	4.4	7,648.7	2002 Aug.
2.7	648.9	24.3	11.4	12.9	975.6	141.5	96.0	45.5	7,693.5	Sep.
7.4	655.3	13.2	13.1	0.1	975.8	120.6	97.1	23.5	7,717.3	Oct.
7.5	660.1	13.6	12.1	1.6	977.4	133.1	102.4	30.7	7,748.0	Nov.
-4.9	637.1	18.3	10.9	7.4	984.8	155.2	173.6	-18.4	7,728.4	Dec.
13.8	638.2	23.8	7.2	16.6	1,001.4	180.4	132.6	47.8	7,776.8	2003 Jan.
10.2	649.9	26.5	17.7	8.9	1,010.3	172.5	121.7	50.9	7,828.3	Feb.
5.6	650.9	28.7	9.6	19.2	1,029.3	175.3	105.5	69.8	7,898.5	Mar.
5.4	647.0	19.4	9.4	10.0	1,039.5	165.4	125.3	40.1	7,939.0	Apr.
4.1	630.0	25.7	8.3	17.4	1,056.9	186.6	99.8	86.8	8,025.7	May
7.1	648.7	30.0	14.9	15.1	1,071.9	184.7	115.1	69.6	8,095.9	June
14.9	667.0	.	.	.	.	.	.	.	.	July
2.5	685.3	.	.	.	.	.	.	.	.	Aug.

currencies		By non-residents of the euro area in euro <sup>1)</sup>				Total in euro <sup>1)</sup>				
		Issues	Redemptions	Net issues	Amounts outstanding	Issues	Redemptions	Net issues	Amounts outstanding	
Net issues	Amounts outstanding									
11	12	13	14	15	16	17	18	19	20	
-2.6	728.4	19.1	19.7	-0.6	1,007.6	445.9	431.5	14.4	8,386.5	2002 Aug.
6.0	734.9	56.0	19.1	37.0	1,044.6	565.3	484.8	80.5	8,469.0	Sep.
10.8	746.0	30.3	44.3	-14.1	1,030.5	579.5	561.7	17.8	8,487.2	Oct.
5.3	750.5	28.2	29.0	-0.8	1,029.7	561.2	508.1	53.0	8,540.4	Nov.
-7.3	724.6	42.1	21.5	20.6	1,050.4	565.8	614.1	-48.4	8,489.9	Dec.
15.6	728.0	40.1	41.7	-1.6	1,048.8	715.3	629.8	85.5	8,575.1	2003 Jan.
12.9	740.3	46.6	31.8	14.8	1,063.6	626.1	544.1	82.0	8,657.3	Feb.
7.0	741.3	62.0	19.2	42.7	1,106.3	641.6	538.4	103.2	8,760.7	Mar.
3.0	731.6	34.0	45.1	-11.1	1,095.3	634.9	592.8	42.1	8,802.5	Apr.
6.7	715.7	46.5	26.7	19.8	1,115.1	623.3	528.9	94.5	8,896.2	May
3.9	731.4	68.4	25.5	42.9	1,158.0	635.5	554.8	80.7	8,977.2	June
10.4	745.7	.	.	.	.	.	.	.	.	July
-5.1	755.5	.	.	.	.	.	.	.	.	Aug.

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

	By euro area residents						By non-residents			
	Total	MFI (including Eurosystem)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations
	1	2	3	4	5	6	7	8	9	10
2002 Aug.	693.0	269.9	4.3	86.6	328.8	3.3	44.9	18.1	23.9	2.6
Sep.	706.5	276.6	4.1	87.6	335.7	2.6	68.9	26.8	37.3	4.0
Oct.	715.2	284.0	4.2	88.4	335.6	3.0	54.7	20.9	28.1	3.5
Nov.	740.1	304.7	4.7	89.8	337.8	3.1	52.4	18.2	28.1	3.7
Dec.	695.9	281.4	4.3	85.2	321.8	3.2	65.6	20.5	37.9	4.6
2003 Jan.	750.9	313.3	4.5	92.5	337.9	2.6	47.4	18.1	26.4	2.4
Feb.	775.6	318.6	5.9	95.9	352.0	3.2	53.4	21.4	28.9	2.5
Mar.	785.3	314.6	6.3	98.4	362.8	3.2	76.9	27.6	44.6	3.3
Apr.	807.7	323.0	5.9	99.0	376.6	3.3	55.8	21.9	30.8	2.1
May	812.2	317.9	5.9	101.7	383.2	3.5	58.2	22.9	32.1	2.4
June	795.1	309.1	6.1	95.8	380.7	3.5	86.1	32.1	49.5	3.4
July	798.2	310.2	6.2	95.9	382.1	3.8	.	.	.	.
Aug.	793.8	304.1	6.1	95.6	384.8	3.3	.	.	.	.

**2. Long-term**

	By euro area residents						By non-residents			
	Total	MFI (including Eurosystem)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations
	1	2	3	4	5	6	7	8	9	10
2002 Aug.	6,686.0	2,404.5	408.9	375.5	3,337.0	160.1	962.7	245.4	384.8	110.8
Sep.	6,717.8	2,426.2	402.9	378.2	3,348.7	161.8	975.6	246.2	394.1	109.3
Oct.	6,741.5	2,422.3	408.5	377.3	3,367.8	165.5	975.8	247.0	395.7	109.0
Nov.	6,770.6	2,419.8	421.9	380.7	3,381.2	167.0	977.4	249.3	398.1	108.4
Dec.	6,743.6	2,405.6	458.8	382.3	3,328.2	168.7	984.8	251.9	402.7	109.5
2003 Jan.	6,775.4	2,401.0	461.0	388.7	3,351.9	172.7	1,001.4	258.0	411.9	111.0
Feb.	6,818.1	2,411.8	470.3	392.9	3,365.0	178.1	1,010.3	264.6	413.9	112.3
Mar.	6,869.2	2,421.6	479.4	401.4	3,385.7	181.1	1,029.3	274.6	417.6	112.2
Apr.	6,899.5	2,429.2	494.5	409.6	3,381.9	184.3	1,039.5	279.5	424.9	112.3
May	6,968.8	2,445.0	498.8	421.7	3,416.5	186.8	1,056.9	286.5	431.9	110.7
June	7,024.1	2,457.7	513.0	429.4	3,432.8	191.1	1,071.9	290.0	437.4	113.0
July	7,054.5	2,477.4	527.5	430.9	3,427.0	191.7	.	.	.	.
Aug.	7,060.7	2,481.6	528.5	432.3	3,426.5	191.8	.	.	.	.

**3. Total**

	By euro area residents						By non-residents			
	Total	MFI (including Eurosystem)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations
	1	2	3	4	5	6	7	8	9	10
2002 Aug.	7,378.9	2,674.4	413.3	462.0	3,665.8	163.4	1,007.6	263.5	408.7	113.4
Sep.	7,424.4	2,702.7	407.0	465.8	3,684.4	164.4	1,044.6	273.0	431.4	113.3
Oct.	7,456.7	2,706.3	412.8	465.7	3,703.4	168.5	1,030.5	267.9	423.8	112.5
Nov.	7,510.7	2,724.5	426.6	470.6	3,718.9	170.1	1,029.7	267.5	426.2	112.1
Dec.	7,439.5	2,687.0	463.1	467.5	3,650.1	171.9	1,050.4	272.5	440.6	114.1
2003 Jan.	7,526.3	2,714.4	465.5	481.2	3,689.8	175.3	1,048.8	276.1	438.3	113.4
Feb.	7,593.6	2,730.4	476.2	488.7	3,717.0	181.4	1,063.6	286.0	442.8	114.8
Mar.	7,654.4	2,736.2	485.6	499.8	3,748.5	184.3	1,106.3	302.3	462.2	115.5
Apr.	7,707.2	2,752.1	500.4	508.7	3,758.5	187.5	1,095.3	301.5	455.7	114.4
May	7,781.1	2,762.9	504.7	523.4	3,799.7	190.3	1,115.1	309.4	464.1	113.1
June	7,819.2	2,766.8	519.1	525.2	3,813.5	194.6	1,158.0	322.0	486.9	116.4
July	7,852.7	2,787.6	533.7	526.8	3,809.2	195.5	.	.	.	.
Aug.	7,854.5	2,785.7	534.6	527.8	3,811.3	195.1	.	.	.	.

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

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

of the euro area			Total							
Central government	Other general government	International organisations	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	International organisations	
11	12	13	14	15	16	17	18	19	20	
0.1	0.0	0.1	737.9	288.0	28.2	89.2	329.0	3.4	0.1	2002 Aug.
0.2	0.0	0.6	775.5	303.3	41.4	91.6	335.9	2.7	0.6	Sep.
0.1	0.2	1.8	769.9	304.9	32.4	91.9	335.7	3.2	1.8	Oct.
0.1	0.2	2.0	792.4	322.9	32.9	93.5	337.8	3.3	2.0	Nov.
0.0	0.2	2.4	761.5	302.0	42.2	89.8	321.9	3.4	2.4	Dec.
0.0	0.1	0.4	798.3	331.4	30.9	95.0	338.0	2.7	0.4	2003 Jan.
0.0	0.1	0.4	828.9	340.0	34.9	98.3	352.0	3.4	0.4	Feb.
0.0	0.2	1.2	862.2	342.2	50.9	101.7	362.8	3.4	1.2	Mar.
0.0	0.2	0.8	863.5	344.9	36.7	101.1	376.6	3.4	0.8	Apr.
0.0	0.2	0.7	870.5	340.8	38.0	104.1	383.2	3.7	0.7	May
0.0	0.2	1.0	881.2	341.1	55.5	99.2	380.7	3.7	1.0	June
.	.	.	.	.	.	.	.	.	.	July
.	.	.	.	.	.	.	.	.	.	Aug.

of the euro area			Total							
Central government	Other general government	International organisations	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	International organisations	
11	12	13	14	15	16	17	18	19	20	
93.4	14.6	113.6	7,648.7	2,649.9	793.8	486.3	3,430.4	174.7	113.6	2002 Aug.
94.1	14.7	117.3	7,693.5	2,672.4	797.0	487.5	3,442.8	176.5	117.3	Sep.
93.6	14.6	115.9	7,717.3	2,669.3	804.2	486.3	3,461.4	180.1	115.9	Oct.
93.1	14.6	113.8	7,748.0	2,669.1	820.0	489.1	3,474.3	181.6	113.8	Nov.
92.7	14.3	113.6	7,728.4	2,657.5	861.5	491.9	3,420.9	183.0	113.6	Dec.
92.2	14.0	114.4	7,776.8	2,659.1	872.9	499.7	3,444.0	186.7	114.4	2003 Jan.
92.7	14.9	111.8	7,828.3	2,676.3	884.2	505.2	3,457.8	193.0	111.8	Feb.
92.7	15.4	116.9	7,898.5	2,696.2	896.9	513.7	3,478.4	196.5	116.9	Mar.
90.7	15.3	116.8	7,939.0	2,708.7	919.3	522.0	3,472.7	199.6	116.8	Apr.
95.3	16.1	116.3	8,025.7	2,731.5	930.7	532.5	3,511.9	202.9	116.3	May
94.5	16.2	120.8	8,095.9	2,747.7	950.5	542.4	3,527.4	207.3	120.8	June
.	.	.	.	.	.	.	.	.	.	July
.	.	.	.	.	.	.	.	.	.	Aug.

of the euro area			Total							
Central government	Other general government	International organisations	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	International organisations	
11	12	13	14	15	16	17	18	19	20	
93.5	14.7	113.7	8,386.5	2,937.9	821.9	575.5	3,759.4	178.1	113.7	2002 Aug.
94.3	14.7	117.9	8,469.0	2,975.7	838.4	579.2	3,778.7	179.1	117.9	Sep.
93.7	14.8	117.7	8,487.2	2,974.2	836.6	578.3	3,797.2	183.2	117.7	Oct.
93.2	14.8	115.9	8,540.4	2,992.0	852.8	582.7	3,812.1	184.9	115.9	Nov.
92.7	14.5	116.0	8,489.9	2,959.5	903.7	581.6	3,742.8	186.3	116.0	Dec.
92.2	14.1	114.8	8,575.1	2,990.4	903.8	594.6	3,782.0	189.4	114.8	2003 Jan.
92.8	15.0	112.2	8,657.3	3,016.3	919.0	603.5	3,809.8	196.4	112.2	Feb.
92.7	15.5	118.1	8,760.7	3,038.4	947.8	615.3	3,841.2	199.8	118.1	Mar.
90.7	15.5	117.5	8,802.5	3,053.6	956.0	623.1	3,849.2	203.0	117.5	Apr.
95.4	16.3	117.0	8,896.2	3,072.3	968.7	636.5	3,895.1	206.6	117.0	May
94.5	16.4	121.8	8,977.2	3,088.8	1,006.0	641.6	3,908.0	211.0	121.8	June
.	.	.	.	.	.	.	.	.	.	July
.	.	.	.	.	.	.	.	.	.	Aug.

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

	By euro area residents						By non-residents			
	Total	MFI (including Eurosystem)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations
	1	2	3	4	5	6	7	8	9	10
2002 Aug.	366.2	257.8	1.8	51.0	53.9	1.8	12.1	4.5	6.8	0.6
Sep.	392.1	278.4	1.9	56.8	53.0	2.0	31.7	11.1	18.0	2.0
Oct.	441.9	319.4	2.2	64.8	53.1	2.3	17.1	5.0	9.0	1.3
Nov.	413.6	302.9	2.4	58.3	47.7	2.3	14.6	4.7	8.4	1.2
Dec.	386.8	291.3	2.2	46.4	44.3	2.6	23.8	6.3	15.6	1.3
2003 Jan.	518.6	375.7	2.1	66.0	72.9	1.9	16.3	6.3	9.4	0.3
Feb.	433.5	308.0	2.2	56.7	64.4	2.1	20.1	7.2	11.6	1.0
Mar.	433.0	301.5	2.3	62.9	63.7	2.6	33.3	10.2	20.7	1.4
Apr.	454.8	308.5	1.8	70.9	71.7	1.9	14.6	5.1	9.1	0.2
May	415.9	284.7	2.0	66.7	60.4	2.1	20.9	7.5	12.2	1.1
June	412.4	283.8	2.7	64.1	59.7	2.1	38.4	12.7	23.4	1.6
July	436.4	304.9	1.6	64.4	63.1	2.5	.	.	.	.
Aug.	362.2	243.3	1.5	57.7	58.1	1.7	.	.	.	.

**2. Long-term**

	By euro area residents						By non-residents			
	Total	MFI (including Eurosystem)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations
	1	2	3	4	5	6	7	8	9	10
2002 Aug.	60.6	28.2	3.7	2.2	25.2	1.3	7.0	3.1	2.7	0.3
Sep.	117.2	47.4	12.2	4.5	50.4	2.6	24.3	5.2	12.6	0.2
Oct.	107.4	39.1	11.0	0.9	52.1	4.4	13.2	4.6	6.7	0.3
Nov.	119.4	48.1	16.3	3.5	48.0	3.6	13.6	5.6	6.6	0.8
Dec.	136.9	45.6	45.2	7.9	34.4	3.7	18.3	6.1	8.8	2.2
2003 Jan.	156.6	58.4	6.7	8.9	76.3	6.3	23.8	7.9	12.4	1.7
Feb.	146.0	55.4	13.7	8.7	61.9	6.3	26.5	10.9	6.7	3.5
Mar.	146.6	53.8	15.6	10.4	63.1	3.7	28.7	13.2	8.2	0.6
Apr.	146.0	51.0	18.7	11.0	61.7	3.7	19.4	8.6	8.9	1.0
May	160.9	54.1	9.4	16.2	78.0	3.2	25.7	9.8	9.2	0.3
June	154.7	56.3	18.7	12.6	61.4	5.7	30.0	9.3	10.4	2.9
July	163.2	61.3	19.9	7.9	71.3	2.8	.	.	.	.
Aug.	68.9	36.6	5.4	3.1	22.4	1.5	.	.	.	.

**3. Total**

	By euro area residents						By non-residents			
	Total	MFI (including Eurosystem)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations
	1	2	3	4	5	6	7	8	9	10
2002 Aug.	426.8	285.9	5.5	53.1	79.0	3.2	19.1	7.7	9.5	0.9
Sep.	509.2	325.8	14.1	61.3	103.5	4.6	56.0	16.3	30.7	2.1
Oct.	549.2	358.5	13.1	65.7	105.2	6.7	30.3	9.6	15.8	1.6
Nov.	533.0	351.0	18.7	61.7	95.7	5.8	28.2	10.3	15.0	2.0
Dec.	523.7	336.9	47.4	54.3	78.7	6.4	42.1	12.4	24.4	3.5
2003 Jan.	675.2	434.0	8.8	74.9	149.2	8.2	40.1	14.2	21.8	2.1
Feb.	579.5	363.5	15.9	65.3	126.3	8.4	46.6	18.1	18.4	4.5
Mar.	579.6	355.3	17.9	73.4	126.7	6.3	62.0	23.5	28.9	2.0
Apr.	600.9	359.5	20.4	82.0	133.4	5.6	34.0	13.7	18.0	1.2
May	576.8	338.8	11.5	82.8	138.4	5.3	46.5	17.3	21.4	1.4
June	567.1	340.0	21.4	76.7	121.2	7.8	68.4	22.0	33.8	4.5
July	599.6	366.2	21.5	72.3	134.4	5.2	.	.	.	.
Aug.	431.2	279.9	6.9	60.8	80.4	3.1	.	.	.	.

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

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

of the euro area			Total							
Central government	Other general government	International organisations	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	International organisations	
11	12	13	14	15	16	17	18	19	20	
0.0	0.0	0.1	378.3	262.3	8.6	51.6	53.9	1.8	0.1	2002 Aug.
0.1	0.0	0.5	423.8	289.5	19.9	58.7	53.1	2.0	0.5	Sep.
0.0	0.1	1.6	458.9	324.5	11.2	66.1	53.1	2.5	1.6	Oct.
0.0	0.0	0.2	428.1	307.6	10.8	59.5	47.7	2.3	0.2	Nov.
0.0	0.0	0.5	410.6	297.5	17.8	47.7	44.3	2.7	0.5	Dec.
0.0	0.1	0.1	534.9	382.0	11.5	66.4	72.9	2.0	0.1	2003 Jan.
0.0	0.0	0.2	453.6	315.3	13.9	57.7	64.4	2.1	0.2	Feb.
0.0	0.0	0.9	466.2	311.7	23.0	64.3	63.7	2.6	0.9	Mar.
0.0	0.1	0.2	469.5	313.6	10.9	71.1	71.7	2.0	0.2	Apr.
0.0	0.0	0.1	436.7	292.2	14.2	67.8	60.4	2.1	0.1	May
0.0	0.1	0.7	450.8	296.4	26.1	65.7	59.8	2.2	0.7	June
.	.	.	.	.	.	.	.	.	.	July
.	.	.	.	.	.	.	.	.	.	Aug.

of the euro area			Total							
Central government	Other general government	International organisations	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	International organisations	
11	12	13	14	15	16	17	18	19	20	
0.3	0.1	0.5	67.5	31.3	6.4	2.5	25.5	1.4	0.5	2002 Aug.
0.7	0.2	5.5	141.5	52.6	24.8	4.7	51.1	2.7	5.5	Sep.
0.2	0.0	1.3	120.6	43.7	17.7	1.2	52.2	4.4	1.3	Oct.
0.0	0.0	0.5	133.1	53.7	22.9	4.3	48.0	3.6	0.5	Nov.
0.4	0.0	0.8	155.2	51.7	54.1	10.1	34.8	3.7	0.8	Dec.
0.5	0.0	1.3	180.4	66.3	19.1	10.6	76.8	6.3	1.3	2003 Jan.
3.3	1.0	1.1	172.5	66.3	20.4	12.1	65.2	7.4	1.1	Feb.
0.4	0.6	5.7	175.3	67.0	23.8	11.0	63.5	4.3	5.7	Mar.
0.1	0.0	0.8	165.4	59.6	27.6	12.0	61.8	3.7	0.8	Apr.
5.1	0.8	0.5	186.6	63.8	18.7	16.5	83.2	3.9	0.5	May
1.5	0.1	5.7	184.7	65.6	29.1	15.6	62.9	5.7	5.7	June
.	.	.	.	.	.	.	.	.	.	July
.	.	.	.	.	.	.	.	.	.	Aug.

of the euro area			Total							
Central government	Other general government	International organisations	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	International organisations	
11	12	13	14	15	16	17	18	19	20	
0.3	0.1	0.6	445.9	293.6	15.0	54.0	79.4	3.3	0.6	2002 Aug.
0.8	0.2	6.0	565.3	342.1	44.8	63.4	104.2	4.8	6.0	Sep.
0.2	0.1	2.9	579.5	368.2	28.9	67.3	105.3	6.9	2.9	Oct.
0.0	0.0	0.7	561.2	361.4	33.7	63.8	95.7	5.9	0.7	Nov.
0.4	0.0	1.3	565.8	349.2	71.9	57.8	79.1	6.4	1.3	Dec.
0.5	0.1	1.4	715.3	448.2	30.6	77.0	149.7	8.3	1.4	2003 Jan.
3.3	1.0	1.3	626.1	381.6	34.3	69.8	129.7	9.5	1.3	Feb.
0.4	0.6	6.6	641.6	378.7	46.8	75.3	127.2	6.9	6.6	Mar.
0.1	0.1	0.9	634.9	373.2	38.5	83.1	133.5	5.7	0.9	Apr.
5.2	0.8	0.6	623.3	356.1	32.8	84.2	143.6	6.1	0.6	May
1.5	0.2	6.4	635.5	362.0	55.2	81.2	122.7	7.9	6.4	June
.	.	.	.	.	.	.	.	.	.	July
.	.	.	.	.	.	.	.	.	.	Aug.

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

	By euro area residents						By non-residents			
	Total	MFIs (including Eurosystem)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations
	1	2	3	4	5	6	7	8	9	10
2002 Aug.	9.4	1.5	0.2	0.5	7.2	0.0	0.6	-0.2	1.1	-0.2
Sep.	11.0	4.1	-0.3	1.0	6.9	-0.7	24.0	8.6	13.5	1.4
Oct.	8.5	7.5	0.2	0.8	-0.3	0.3	-14.2	-5.8	-9.1	-0.5
Nov.	24.7	20.5	0.5	1.4	2.2	0.1	-2.3	-2.7	0.0	0.2
Dec.	-43.1	-22.2	-0.4	-4.7	-15.9	0.1	13.2	2.3	9.8	0.9
2003 Jan.	55.9	32.8	0.3	7.4	16.1	-0.6	-18.2	-2.5	-11.6	-2.1
Feb.	25.2	5.8	1.4	3.3	14.0	0.6	6.0	3.4	2.6	0.0
Mar.	9.9	-3.8	0.3	2.5	10.9	0.0	23.6	6.2	15.7	0.8
Apr.	23.1	9.1	-0.4	0.6	13.7	0.1	-21.1	-5.7	-13.8	-1.2
May	5.2	-4.4	0.0	2.7	6.6	0.3	2.4	0.9	1.3	0.3
June	-16.8	-8.5	0.2	-5.9	-2.5	0.0	27.9	9.2	17.3	1.1
July	3.3	1.4	0.1	0.0	1.5	0.3	.	.	.	.
Aug.	-3.5	-5.2	-0.1	-0.3	2.7	-0.5	.	.	.	.

**2. Long-term**

	By euro area residents						By non-residents			
	Total	MFIs (including Eurosystem)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations
	1	2	3	4	5	6	7	8	9	10
2002 Aug.	5.6	-0.7	1.4	-1.9	5.9	0.9	-1.2	-0.6	-0.3	0.1
Sep.	32.6	8.5	7.9	2.8	11.7	1.7	12.9	0.8	9.3	-1.5
Oct.	23.4	-4.4	5.6	-0.8	19.3	3.7	0.1	0.8	1.5	-0.3
Nov.	29.1	0.3	13.3	0.7	13.3	1.5	1.6	2.3	2.4	-0.6
Dec.	-25.9	-14.3	37.0	2.6	-52.9	1.7	7.4	2.6	4.7	1.1
2003 Jan.	31.2	-5.0	2.2	6.4	23.6	4.0	16.6	6.1	9.2	1.4
Feb.	42.0	10.0	9.2	4.2	13.2	5.4	8.9	6.5	2.0	1.4
Mar.	50.6	9.4	9.1	8.6	20.5	2.9	19.2	10.1	3.7	-0.1
Apr.	30.1	7.3	15.1	8.2	-3.8	3.2	10.0	4.8	7.2	0.1
May	69.4	15.9	4.3	12.1	34.6	2.5	17.4	7.0	7.1	-1.6
June	54.6	12.0	14.3	7.7	16.3	4.3	15.1	3.4	5.6	2.3
July	29.5	18.7	14.2	1.8	-5.8	0.6	.	.	.	.
Aug.	4.8	2.8	1.0	1.4	-0.5	0.1	.	.	.	.

**3. Total**

	By euro area residents						By non-residents			
	Total	MFIs (including Eurosystem)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations
	1	2	3	4	5	6	7	8	9	10
2002 Aug.	15.0	0.9	1.6	-1.3	13.0	0.8	-0.6	-0.8	0.8	-0.1
Sep.	43.6	12.5	7.7	3.8	18.6	1.0	37.0	9.4	22.7	-0.1
Oct.	31.9	3.1	5.7	0.0	19.1	4.0	-14.1	-5.0	-7.6	-0.8
Nov.	53.8	20.8	13.8	2.1	15.5	1.6	-0.8	-0.4	2.4	-0.4
Dec.	-69.0	-36.5	36.7	-2.0	-68.9	1.8	20.6	4.9	14.4	2.0
2003 Jan.	87.1	27.8	2.5	13.8	39.7	3.4	-1.6	3.6	-2.4	-0.7
Feb.	67.2	15.8	10.7	7.5	27.2	6.0	14.8	9.9	4.6	1.4
Mar.	60.5	5.6	9.4	11.1	31.4	2.9	42.7	16.3	19.4	0.7
Apr.	53.2	16.4	14.8	8.8	9.9	3.3	-11.1	-0.9	-6.6	-1.1
May	74.6	11.6	4.3	14.7	41.3	2.8	19.8	8.0	8.4	-1.3
June	37.8	3.5	14.4	1.8	13.8	4.2	42.9	12.6	22.9	3.3
July	32.8	20.1	14.4	1.8	-4.4	0.9	.	.	.	.
Aug.	1.3	-2.4	0.9	1.0	2.2	-0.4	.	.	.	.

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

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



of the euro area			Total							
Central government	Other general government	International organisations	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	International organisations	
11	12	13	14	15	16	17	18	19	20	
0.0	0.0	-0.1	9.9	1.3	1.3	0.3	7.1	0.0	-0.1	2002 Aug.
0.1	0.0	0.5	35.0	12.7	13.2	2.4	6.9	-0.7	0.5	Sep.
-0.1	0.1	1.2	-5.7	1.7	-9.0	0.3	-0.3	0.5	1.2	Oct.
0.0	0.0	0.2	22.3	17.8	0.5	1.6	2.1	0.1	0.2	Nov.
-0.1	0.0	0.3	-29.9	-20.0	9.4	-3.8	-16.0	0.1	0.3	Dec.
0.0	-0.1	-2.0	37.7	30.3	-11.3	5.2	16.1	-0.7	-2.0	2003 Jan.
0.0	0.0	0.0	31.2	9.1	4.0	3.4	14.0	0.7	0.0	Feb.
0.0	0.0	0.8	33.4	2.4	16.0	3.3	10.8	0.0	0.8	Mar.
0.0	0.0	-0.4	2.0	3.4	-14.2	-0.6	13.7	0.1	-0.4	Apr.
0.0	0.0	-0.1	7.7	-3.4	1.3	2.9	6.7	0.3	-0.1	May
0.0	0.1	0.3	11.1	0.7	17.5	-4.8	-2.5	0.0	0.3	June
.	.	.	.	.	.	.	.	.	.	July
.	.	.	.	.	.	.	.	.	.	Aug.

of the euro area			Total							
Central government	Other general government	International organisations	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	International organisations	
11	12	13	14	15	16	17	18	19	20	
0.3	0.0	-0.7	4.4	-1.3	1.1	-1.7	6.2	0.9	-0.7	2002 Aug.
0.7	0.0	3.7	45.5	9.3	17.2	1.3	12.4	1.7	3.7	Sep.
-0.5	-0.1	-1.4	23.5	-3.6	7.1	-1.1	18.8	3.6	-1.4	Oct.
-0.5	0.0	-2.0	30.7	2.6	15.7	0.1	12.9	1.5	-2.0	Nov.
-0.4	-0.3	-0.3	-18.4	-11.7	41.7	3.8	-53.4	1.4	-0.3	Dec.
-0.5	-0.3	0.7	47.8	1.0	11.4	7.8	23.1	3.7	0.7	2003 Jan.
0.6	0.9	-2.6	50.9	16.6	11.2	5.5	13.7	6.3	-2.6	Feb.
-0.1	0.5	5.1	69.8	19.5	12.8	8.5	20.5	3.4	5.1	Mar.
-1.9	-0.1	-0.1	40.1	12.1	22.3	8.3	-5.7	3.1	-0.1	Apr.
4.6	0.8	-0.5	86.8	23.0	11.4	10.5	39.2	3.3	-0.5	May
-0.8	0.1	4.5	69.6	15.5	19.8	9.9	15.5	4.4	4.5	June
.	.	.	.	.	.	.	.	.	.	July
.	.	.	.	.	.	.	.	.	.	Aug.

of the euro area			Total							
Central government	Other general government	International organisations	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	International organisations	
11	12	13	14	15	16	17	18	19	20	
0.3	0.0	-0.8	14.4	0.1	2.4	-1.4	13.3	0.8	-0.8	2002 Aug.
0.8	0.0	4.2	80.5	22.0	30.4	3.7	19.3	1.0	4.2	Sep.
-0.6	0.1	-0.2	17.8	-2.0	-1.9	-0.8	18.5	4.1	-0.2	Oct.
-0.5	0.0	-1.8	53.0	20.4	16.1	1.7	15.0	1.6	-1.8	Nov.
-0.5	-0.3	0.1	-48.4	-31.6	51.1	0.0	-69.4	1.5	0.1	Dec.
-0.5	-0.4	-1.2	85.5	31.4	0.1	13.0	39.2	3.1	-1.2	2003 Jan.
0.6	0.9	-2.6	82.0	25.7	15.2	8.9	27.8	7.0	-2.6	Feb.
-0.1	0.5	5.9	103.2	21.9	28.8	11.8	31.3	3.4	5.9	Mar.
-1.9	-0.1	-0.6	42.1	15.5	8.1	7.7	8.0	3.2	-0.6	Apr.
4.6	0.8	-0.6	94.5	19.5	12.7	13.4	45.9	3.5	-0.6	May
-0.8	0.1	4.8	80.7	16.1	37.3	5.1	13.0	4.4	4.8	June
.	.	.	.	.	.	.	.	.	.	July
.	.	.	.	.	.	.	.	.	.	Aug.

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

	In all currencies combined						
	Total		MFIs (including Eurosystem)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government
	1	Index Dec.01= 100 2					
2002 Aug.	5.4	112.2	4.8	0.6	-18.1	15.2	-1.3
Sep.	7.7	114.3	8.9	0.8	-17.1	16.3	-19.4
Oct.	8.9	116.0	10.5	14.9	-18.6	17.9	-0.9
Nov.	12.3	119.3	18.6	23.3	-14.7	15.6	-5.3
Dec.	12.7	112.7	14.7	30.4	-10.5	19.3	-14.3
2003 Jan.	15.2	121.0	17.6	28.9	-7.3	21.1	-15.2
Feb.	19.3	125.1	22.4	60.3	-1.6	23.0	0.6
Mar.	18.0	126.7	19.4	53.1	2.0	21.4	5.7
Apr.	21.3	129.7	20.9	36.8	7.4	26.1	18.1
May	18.9	130.8	17.4	65.5	12.5	21.7	22.5
June	16.9	127.9	15.5	61.5	17.2	17.7	18.7
July	14.7	127.7	11.7	53.7	11.5	18.2	14.8
Aug.	12.3	126.1	8.2	43.6	11.0	16.6	-1.5

**2. Long-term**

	In all currencies combined						
	Total		MFIs (including Eurosystem)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government
	1	Index Dec.01= 100 2					
2002 Aug.	6.8	104.6	6.6	25.7	9.2	3.3	33.6
Sep.	7.0	105.1	6.4	26.4	12.0	3.6	30.6
Oct.	6.9	105.5	5.7	25.5	12.6	3.9	29.4
Nov.	6.7	106.1	5.1	25.7	8.1	4.3	28.8
Dec.	5.6	105.6	4.3	24.8	7.1	2.9	29.1
2003 Jan.	5.4	106.3	4.1	24.4	7.5	2.7	29.5
Feb.	5.7	107.0	3.7	26.0	7.9	3.0	34.2
Mar.	5.6	107.8	3.1	27.0	9.6	3.0	32.1
Apr.	5.4	108.3	3.2	27.2	10.3	2.4	30.6
May	5.5	109.4	2.9	24.0	11.9	3.1	27.5
June	5.8	110.3	3.1	26.6	12.2	3.2	28.4
July	6.1	110.9	4.1	27.7	12.1	3.2	21.9
Aug.	6.1	111.0	4.3	27.3	12.9	3.0	21.3

**3. Total**

	In all currencies combined						
	Total		MFIs (including Eurosystem)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government
	1	Index Dec.01= 100 2					
2002 Aug.	6.7	105.3	6.4	25.4	3.4	4.3	32.6
Sep.	7.1	105.9	6.7	26.1	5.7	4.6	29.1
Oct.	7.1	106.5	6.2	25.4	5.7	5.0	28.7
Nov.	7.2	107.3	6.6	25.7	3.4	5.2	27.8
Dec.	6.3	106.3	5.4	24.8	3.7	4.1	27.7
2003 Jan.	6.4	107.6	5.6	24.4	4.6	4.1	28.3
Feb.	6.9	108.7	5.8	26.3	6.1	4.6	33.3
Mar.	6.7	109.5	4.9	27.2	8.2	4.5	31.4
Apr.	6.9	110.3	5.1	27.3	9.8	4.3	30.4
May	6.7	111.3	4.5	24.3	12.0	4.7	27.4
June	6.8	111.9	4.4	26.8	13.0	4.5	28.2
July	6.9	112.4	4.9	27.9	12.0	4.5	21.8
Aug.	6.7	112.4	4.8	27.4	12.6	4.2	20.8

Source: ECB.

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

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

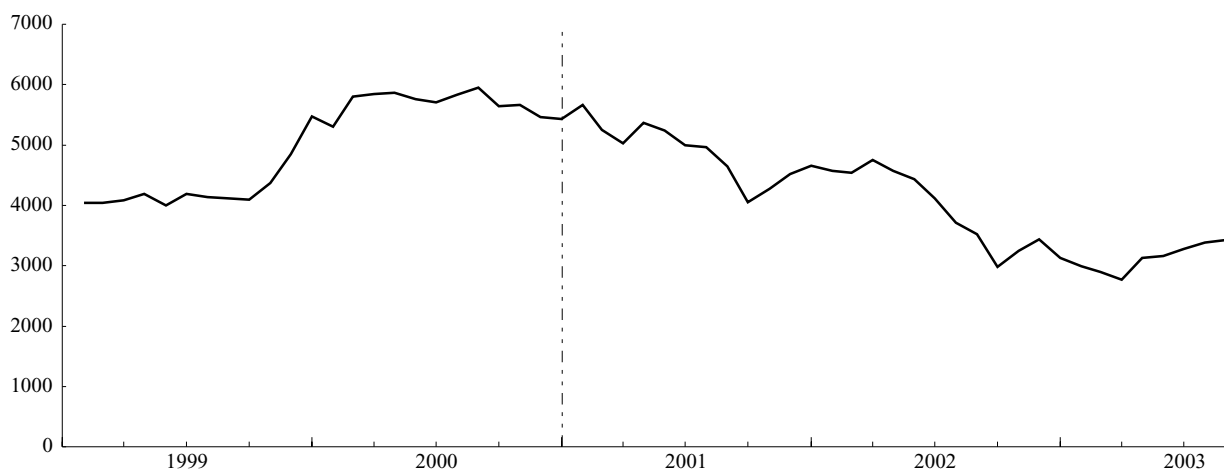
In euro <sup>3)</sup>								
Total	Index Dec.01= 100	MFIs (including Eurosystem)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government		
								8
5.7	113.4	6.1	-1.8	-19.5	15.0	-7.0	2002 Aug.	
7.7	115.2	9.0	-1.8	-18.2	16.7	-28.9	Sep.	
7.5	116.6	8.1	12.1	-20.4	18.1	-11.8	Oct.	
12.3	120.6	20.4	20.6	-16.0	15.9	-14.0	Nov.	
13.6	113.6	16.6	27.3	-11.5	20.3	-23.4	Dec.	
16.1	122.7	20.5	26.0	-8.2	21.1	-27.0	2003 Jan.	
20.1	126.9	25.8	57.4	-2.8	22.7	-9.0	Feb.	
18.5	128.5	21.5	50.3	0.9	21.3	-2.7	Mar.	
23.2	132.3	26.1	34.1	6.4	26.0	8.9	Apr.	
20.5	133.1	20.9	62.2	12.6	21.9	17.6	May	
18.4	130.4	18.7	62.7	16.6	18.0	14.4	June	
17.0	130.9	16.1	54.6	11.2	18.7	13.1	July	
14.9	130.3	13.6	44.3	10.2	17.0	-0.3	Aug.	

In euro <sup>3)</sup>								
Total	Index Dec.01= 100	MFIs (including Eurosystem)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government		
								8
6.2	104.3	4.5	31.5	13.2	3.3	34.9	2002 Aug.	
6.4	104.8	4.6	32.2	14.5	3.4	31.8	Sep.	
6.2	105.2	3.7	29.5	15.2	3.9	29.4	Oct.	
6.2	105.6	3.7	30.3	9.7	4.3	28.8	Nov.	
5.2	105.2	2.9	30.3	8.7	2.8	29.0	Dec.	
5.0	105.7	2.6	30.1	8.8	2.5	29.1	2003 Jan.	
5.1	106.3	2.1	31.3	8.9	2.7	33.8	Feb.	
5.0	107.1	1.5	32.0	11.2	2.8	31.5	Mar.	
4.8	107.6	1.4	32.8	11.8	2.3	29.5	Apr.	
5.0	108.7	1.5	29.6	13.3	2.8	26.3	May	
5.3	109.5	1.4	33.0	14.1	3.0	27.1	June	
5.6	110.0	2.4	33.8	13.8	2.9	20.4	July	
5.6	110.1	2.5	33.6	14.8	2.7	19.8	Aug.	

In euro <sup>3)</sup>								
Total	Index Dec.01= 100	MFIs (including Eurosystem)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government		
								8
6.2	105.1	4.7	31.0	5.2	4.2	33.7	2002 Aug.	
6.5	105.7	5.0	31.8	6.6	4.5	30.0	Sep.	
6.4	106.2	4.2	29.3	6.2	5.0	28.4	Oct.	
6.8	106.9	5.3	30.2	3.7	5.3	27.6	Nov.	
5.9	105.9	4.2	30.3	4.3	4.1	27.4	Dec.	
6.0	107.2	4.4	30.1	5.0	4.0	27.7	2003 Jan.	
6.4	108.1	4.4	31.5	6.4	4.3	32.7	Feb.	
6.3	109.0	3.5	32.2	9.0	4.3	30.7	Mar.	
6.5	109.8	3.8	32.8	10.7	4.3	29.0	Apr.	
6.5	110.8	3.4	29.9	13.2	4.5	26.2	May	
6.5	111.4	3.1	33.2	14.5	4.3	26.9	June	
6.6	111.8	3.8	34.0	13.4	4.3	20.2	July	
6.4	111.8	3.7	33.8	13.9	4.0	19.4	Aug.	

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

	Total 1	MFIs 2	Non-monetary financial corporations 3	Non-financial corporations 4
2000 Aug.	5,953.5	742.1	700.4	4,510.9
Sep.	5,640.6	730.3	687.7	4,222.7
Oct.	5,669.6	719.0	664.4	4,286.3
Nov.	5,468.5	674.5	673.5	4,120.5
Dec.	5,431.7	687.0	675.0	4,069.6
<i>Euro area enlargement</i>				
2001 Jan.	5,669.1	762.2	706.3	4,200.5
Feb.	5,250.1	710.1	661.6	3,878.4
Mar.	5,029.0	686.2	620.4	3,722.4
Apr.	5,367.8	718.2	643.4	4,006.1
May	5,237.3	701.0	627.0	3,909.3
June	4,994.4	679.5	635.1	3,679.7
July	4,960.3	650.1	572.4	3,737.9
Aug.	4,648.6	646.1	576.6	3,426.0
Sep.	4,057.7	538.7	485.4	3,033.6
Oct.	4,277.7	554.4	497.8	3,225.5
Nov.	4,520.7	587.7	512.1	3,421.0
Dec.	4,656.4	617.3	511.1	3,528.0
2002 Jan.	4,575.2	623.9	518.8	3,432.5
Feb.	4,545.6	622.5	509.8	3,413.4
Mar.	4,753.9	665.3	536.6	3,551.9
Apr.	4,570.2	678.1	517.4	3,374.7
May	4,432.4	666.3	484.8	3,281.3
June	4,118.3	614.9	463.4	3,040.1
July	3,710.7	515.7	395.4	2,799.6
Aug.	3,520.2	521.7	371.0	2,627.5
Sep.	2,981.8	412.6	276.0	2,293.2
Oct.	3,251.6	446.9	321.2	2,483.4
Nov.	3,435.5	487.4	346.0	2,602.1
Dec.	3,132.4	450.7	283.6	2,398.1
2003 Jan.	2,992.0	425.8	261.1	2,305.1
Feb.	2,897.6	425.3	270.8	2,201.5
Mar.	2,773.9	413.0	236.2	2,124.7
Apr.	3,125.4	471.4	291.8	2,362.3
May	3,158.6	476.7	291.4	2,390.5
June	3,273.6	506.5	300.6	2,466.4
July	3,384.0	530.3	330.9	2,522.8
Aug.	3,429.5	506.2	325.2	2,598.1

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

Source: ECB.



## 4 HICP and other prices in the euro area

**Table 4.1**

### Harmonised Index of Consumer Prices

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

#### 1. Total index and goods and services

	Total		Goods		Services		Total (s.a.)		Goods (s.a.)	Services (s.a.)
	Index 1996 = 100		Index 1996 = 100		Index 1996 = 100		Index 1996 = 100	% change on previous period	Index 1996 = 100	Index 1996 = 100
Weight in the total (%) <sup>1)</sup>	100.0	100.0	59.1	59.1	40.9	40.9	100.0	100.0	59.1	40.9
	1	2	3	4	5	6	7	8	9	10
1999	103.8	1.1	102.7	0.9	106.0	1.5	-	-	-	-
2000	106.0	2.1	105.3	2.5	107.5	1.5	-	-	-	-
<i>Euro area enlargement</i>										
2001	108.5	2.3	107.7	2.3	110.2	2.5	-	-	-	-
2002	110.9	2.3	109.5	1.7	113.6	3.1	-	-	-	-
2002 Q4	111.7	2.3	110.1	1.8	114.5	3.1	111.7	0.5	110.0	114.8
2003 Q1	112.5	2.3	110.8	2.0	115.3	2.7	112.6	0.8	111.1	115.4
Q2	113.2	1.9	111.5	1.5	116.1	2.6	112.8	0.2	111.0	116.1
Q3	113.3	2.0	111.0	1.7	117.3	2.5	113.4	0.6	111.5	116.9
2002 Nov.	111.5	2.3	110.0	1.8	114.2	3.1	111.7	0.0	109.9	114.8
Dec.	112.0	2.3	110.2	1.9	115.2	3.0	111.9	0.2	110.1	115.1
2003 Jan.	111.9	2.1	110.2	1.6	115.0	2.8	112.3	0.3	110.7	115.2
Feb.	112.4	2.4	110.6	2.1	115.4	2.7	112.7	0.3	111.1	115.4
Mar.	113.1	2.4	111.6	2.2	115.6	2.6	112.9	0.2	111.5	115.6
Apr.	113.2	2.1	111.6	1.5	116.0	2.9	112.8	-0.1	111.1	115.9
May	113.1	1.8	111.5	1.4	116.0	2.5	112.7	-0.1	110.8	116.1
June	113.2	1.9	111.5	1.6	116.4	2.5	113.0	0.2	111.0	116.4
July	113.1	1.9	110.7	1.6	117.1	2.3	113.1	0.1	111.2	116.4
Aug.	113.3	2.1	110.8	1.7	117.5	2.5	113.4	0.3	111.5	116.9
Sep.	113.6	2.1	111.7	1.8	117.2	2.5	113.8	0.3	111.9	117.2
Oct. <sup>2)</sup>	.	2.1	.	.	.	.	.	.	.	.

#### 2. Breakdown of goods and services

	Goods						Services				
	Food <sup>3)</sup>			Industrial goods			Housing	Transport	Communi- cation	Recreation and personal	Miscellan- eous
	Total	Processed food <sup>3)</sup>	Unprocessed food	Total	Non-energy industrial goods	Energy					
Weight in the total (%) <sup>1)</sup>	19.3	11.7	7.6	39.8	31.6	8.2	10.4	6.3	2.9	14.9	6.4
	11	12	13	14	15	16	17	18	19	20	21
1999	0.6	0.9	0.0	1.0	0.7	2.4	1.8	2.1	-4.4	2.0	1.8
2000	1.4	1.2	1.8	3.0	0.5	13.0	1.5	2.5	-7.1	2.4	2.5
<i>Euro area enlargement</i>											
2001	4.5	2.9	7.0	1.2	0.9	2.2	1.8	3.6	-4.1	3.6	2.7
2002	3.1	3.1	3.1	1.0	1.5	-0.6	2.4	3.2	-0.3	4.2	3.4
2002 Q4	2.2	2.6	1.6	1.6	1.2	2.9	2.5	3.0	-0.2	4.0	3.4
2003 Q1	1.9	3.1	0.1	2.0	0.7	7.0	2.4	3.2	-0.8	3.0	3.7
Q2	2.5	3.3	1.5	1.0	0.9	1.5	2.4	3.0	-0.5	2.9	3.5
Q3	3.2	3.1	3.4	1.0	0.7	2.1	2.4	2.9	-0.4	2.6	3.2
2002 Nov.	2.3	2.6	1.9	1.5	1.3	2.4	2.5	3.2	-0.4	4.0	3.4
Dec.	2.1	2.7	1.3	1.7	1.2	3.8	2.5	2.8	-0.5	3.8	3.5
2003 Jan.	1.4	2.8	-0.7	1.7	0.6	6.0	2.5	3.3	-0.7	3.2	3.6
Feb.	2.0	3.2	0.3	2.2	0.7	7.7	2.4	3.3	-0.9	3.0	3.7
Mar.	2.2	3.3	0.7	2.2	0.8	7.5	2.4	3.0	-0.7	2.8	3.7
Apr.	2.3	3.3	0.9	1.1	0.8	2.2	2.4	3.2	-0.6	3.5	3.6
May	2.4	3.3	1.1	0.9	0.9	0.6	2.4	2.8	-0.5	2.5	3.5
June	2.9	3.2	2.5	1.0	0.8	1.6	2.3	2.9	-0.6	2.7	3.5
July	3.0	3.2	2.7	1.0	0.7	2.0	2.4	2.6	-0.5	2.3	3.3
Aug.	3.1	3.0	3.3	1.0	0.6	2.7	2.3	2.8	-0.4	2.7	3.2
Sep.	3.5	3.1	4.2	1.0	0.8	1.7	2.4	3.3	-0.3	2.6	3.1
Oct.	.	.	.	.	.	.	.	.	.	.	.

Sources: Eurostat and ECB calculations.

1) Referring to the index period 2003.

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

3) Including alcoholic beverages and tobacco.

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

	Industrial producer prices											World market prices of raw materials <sup>1)</sup>	Oil prices <sup>2)</sup> (EUR per barrel)	
	Industry excluding construction <sup>3)</sup>									Construc- tion <sup>4)</sup>	Manu- facturing			
	Total		Industry excluding construction and energy						Energy					
	Index 2000 = 100		Total	Inter- mediate goods	Capital goods	Consumer goods								
						Total	Durable consumer goods	Non-durable consumer goods						
1	2	3	4	5	6	7	8	9	10	11	12	Total excluding energy	13	14
1997	96.0	1.1	0.4	0.2	0.3	0.7	0.6	1.2	3.0	1.4	0.8	0.3	10.7	17.0
1998	95.4	-0.7	0.1	-0.4	0.6	0.7	0.7	0.5	-4.6	0.3	-0.5	-21.9	-14.7	12.0
1999	95.0	-0.4	-0.6	-1.5	0.2	0.6	0.7	-0.2	0.2	1.3	0.1	14.6	-6.4	17.1
2000	100.0	5.3	2.5	5.1	0.6	1.4	1.4	1.6	17.3	2.5	4.8	51.9	20.4	31.0
<i>Euro area enlargement</i>														
2001	102.2	2.2	1.7	1.2	1.0	3.0	2.0	3.1	2.7	2.3	1.2	-8.3	-8.1	27.8
2002	102.1	0.0	0.5	-0.3	0.9	1.3	1.6	1.3	-1.9	2.7	0.3	-4.1	-0.9	26.5
2002 Q3	102.3	0.0	0.6	0.3	0.8	1.2	1.5	1.1	-2.1	2.6	0.4	-4.6	1.1	27.2
Q4	102.6	1.3	1.0	1.0	0.8	1.4	1.3	1.4	2.8	3.0	1.5	12.6	5.6	26.5
2003 Q1	104.1	2.5	1.2	1.6	0.4	1.4	0.9	1.5	7.5	2.1	2.2	9.1	-3.2	28.4
Q2	103.6	1.5	1.0	1.2	0.4	1.3	0.7	1.4	2.7	2.4	0.8	-13.7	-7.9	22.7
Q3	103.6	1.3	0.6	0.2	0.4	1.4	0.9	1.5	3.5	.	0.5	-6.5	-5.8	25.1
2002 Oct.	102.7	1.1	0.9	0.8	0.7	1.4	1.4	1.4	2.3	-	1.3	13.2	10.2	27.9
Nov.	102.4	1.2	1.0	1.2	0.8	1.3	1.2	1.3	2.4	-	1.3	9.1	3.9	24.2
Dec.	102.7	1.6	1.1	1.2	0.8	1.5	1.3	1.5	3.9	-	1.8	15.6	2.9	27.1
2003 Jan.	103.7	2.3	1.1	1.4	0.5	1.4	1.0	1.4	6.7	-	2.0	15.4	-1.1	28.3
Feb.	104.2	2.7	1.2	1.7	0.3	1.5	1.0	1.6	8.4	-	2.5	15.8	-2.1	29.8
Mar.	104.3	2.4	1.2	1.7	0.3	1.4	0.8	1.5	7.4	-	2.2	-2.2	-6.4	27.2
Apr.	103.8	1.7	1.1	1.6	0.4	1.3	0.7	1.4	3.2	-	1.1	-15.2	-6.2	22.9
May	103.4	1.3	1.0	1.3	0.4	1.3	0.7	1.4	1.7	-	0.6	-16.6	-8.0	21.9
June	103.4	1.4	0.9	0.8	0.4	1.3	0.8	1.4	3.1	-	0.7	-8.9	-9.6	23.3
July	103.5	1.3	0.6	0.3	0.3	1.3	1.0	1.4	3.7	-	0.6	-4.4	-7.5	25.0
Aug.	103.7	1.4	0.5	0.1	0.4	1.3	0.8	1.4	4.4	-	0.6	-2.9	-5.2	26.5
Sep.	103.7	1.1	0.7	0.2	0.4	1.5	1.0	1.6	2.3	-	0.3	-11.8	-4.7	23.9
Oct.	.	.	.	.	.	.	.	.	.	-	.	-8.2	-3.7	24.7

**2. Deflators of gross domestic product<sup>5)</sup>**
*(annual percentage changes, unless otherwise indicated; seasonally adjusted)*

	Total		Domestic demand	Private consumption	Government consumption	Gross fixed capital formation	Exports <sup>6)</sup>	Imports <sup>6)</sup>
	Index 1995 = 100							
1996	102.0		2.0	2.1	2.4	2.2	0.8	0.7
1997	103.6		1.5	1.7	2.0	1.3	1.8	2.6
1998	105.3		1.7	1.3	1.4	1.2	0.9	-1.5
1999	106.4		1.1	1.2	1.1	1.9	0.8	-0.3
2000	107.9		1.4	2.6	2.2	2.6	2.5	8.3
<i>Euro area enlargement</i>								
2001	110.9		2.5	2.2	2.3	2.5	1.9	0.7
2002	113.6		2.4	2.1	2.4	1.9	2.0	-1.7
2001 Q4	112.0		2.8	1.8	1.9	2.3	1.5	-3.6
2002 Q1	112.9		2.7	2.3	2.1	2.1	1.9	-2.0
Q2	113.2		2.3	1.9	2.4	1.8	2.1	-2.3
Q3	114.0		2.6	2.0	2.4	1.9	1.8	-2.3
Q4	114.5		2.2	2.2	2.5	1.9	2.0	-0.3
2003 Q1	115.1		1.9	1.9	2.2	1.9	1.5	0.2
Q2	115.7		2.2	1.6	1.8	1.6	1.1	-1.7

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

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

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

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

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

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

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

## 5 Real economy indicators in the euro area

**Table 5.1**

### National accounts<sup>1)</sup>

#### GDP and expenditure components

##### 1. Current prices

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

	GDP								
	Total	Domestic demand					External balance <sup>3)</sup>		
		Total	Private consumption	Government consumption	Gross fixed capital formation	Changes in inventories <sup>2)</sup>	Total	Exports <sup>3)</sup>	Imports <sup>3)</sup>
1	2	3	4	5	6	7	8	9	
1998	5,883.5	5,743.7	3,330.8	1,176.3	1,203.5	33.2	139.8	1,948.9	1,809.1
1999	6,150.0	6,048.9	3,506.7	1,229.4	1,292.2	20.6	101.1	2,051.2	1,950.1
2000	6,452.2	6,385.0	3,680.7	1,287.6	1,388.7	28.0	67.3	2,416.8	2,349.5
<i>Euro area enlargement</i>									
2001	6,843.0	6,728.4	3,921.7	1,370.8	1,442.9	-6.9	114.6	2,563.6	2,448.9
2002	7,069.3	6,885.2	4,029.1	1,436.4	1,432.4	-12.7	184.1	2,590.6	2,406.5
2002 Q1	1,747.5	1,704.2	994.2	353.5	359.2	-2.6	43.2	631.0	587.7
Q2	1,760.6	1,715.8	1,003.9	357.8	356.2	-2.1	44.9	646.4	601.5
Q3	1,776.3	1,726.4	1,011.5	361.4	357.2	-3.7	49.8	656.5	606.7
Q4	1,784.9	1,738.8	1,019.5	363.7	359.8	-4.2	46.1	656.7	610.6
2003 Q1	1,794.5	1,758.5	1,032.5	366.8	356.6	2.7	35.9	647.6	611.7
Q2	1,802.6	1,765.7	1,036.0	370.0	356.7	3.0	36.9	638.7	601.8

##### 2. Constant prices

(ECU billions at 1995 prices, seasonally adjusted)

	GDP								
	Total	Domestic demand					External balance <sup>3)</sup>		
		Total	Private consumption	Government consumption	Gross fixed capital formation	Changes in inventories <sup>2)</sup>	Total	Exports <sup>3)</sup>	Imports <sup>3)</sup>
10	11	12	13	14	15	16	17	18	
1998	5,667.2	5,544.6	3,186.0	1,142.2	1,190.9	25.5	122.7	1,939.1	1,816.5
1999	5,826.2	5,738.3	3,299.2	1,164.1	1,260.9	14.1	87.9	2,039.7	1,951.8
2000	6,029.6	5,905.2	3,388.7	1,188.2	1,322.0	6.3	124.4	2,295.8	2,171.4
<i>Euro area enlargement</i>									
2001	6,233.8	6,080.2	3,526.4	1,232.1	1,345.9	-24.2	153.6	2,400.0	2,246.4
2002	6,287.8	6,092.8	3,539.6	1,266.7	1,310.4	-23.9	195.0	2,441.5	2,246.5
2002 Q1	1,564.6	1,517.2	880.3	314.0	330.9	-8.0	47.4	594.7	547.3
Q2	1,571.8	1,521.9	883.8	316.3	326.1	-4.2	49.9	609.8	559.9
Q3	1,575.4	1,524.5	886.3	318.0	326.2	-6.0	50.9	619.2	568.4
Q4	1,576.0	1,529.2	889.2	318.5	327.3	-5.7	46.8	617.7	570.9
2003 Q1	1,575.9	1,536.7	894.5	319.7	323.5	-1.0	39.2	607.9	568.7
Q2	1,575.0	1,541.4	896.2	321.9	322.9	0.4	33.7	603.6	569.9
<i>(annual percentage changes)</i>									
1998	2.9	3.5	3.0	1.4	5.1	-	-	7.4	10.0
1999	2.8	3.5	3.6	1.9	5.9	-	-	5.2	7.5
2000	3.5	2.9	2.7	2.1	4.8	-	-	12.6	11.3
<i>Euro area enlargement</i>									
2001	1.6	1.0	1.8	2.4	-0.1	-	-	3.3	1.7
2002	0.9	0.2	0.4	2.8	-2.6	-	-	1.7	0.0
2002 Q1	0.5	-0.3	0.5	2.8	-2.7	-	-	-2.1	-4.3
Q2	0.9	-0.1	0.1	3.2	-3.5	-	-	1.7	-1.1
Q3	1.0	0.4	0.2	3.1	-2.7	-	-	3.3	2.0
Q4	1.1	0.8	0.7	2.1	-1.7	-	-	4.0	3.5
2003 Q1	0.7	1.3	1.6	1.8	-2.2	-	-	2.2	3.9
Q2	0.2	1.3	1.4	1.8	-1.0	-	-	-1.0	1.8

Source: Eurostat.

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

2) Including acquisitions less disposals of valuables.

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



## Value added by economic activity

### 3. Current prices

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

	Gross value added							Intermediate consumption of FISIM <sup>1)</sup>	Taxes less subsidies on products
	Total	Agriculture, hunting, forestry and fishing activities	Manufacturing, energy and mining	Construction	Trade, repairs, hotels and restaurants, transport and communication	Financial, real estate, renting and business activities	Public administration, education, health and other services		
	1	2	3	4	5	6	7	8	9
1998	5,471.1	138.7	1,276.8	295.4	1,139.7	1,445.9	1,174.6	202.2	614.6
1999	5,689.0	136.7	1,295.9	311.4	1,185.3	1,534.0	1,225.6	201.6	662.7
2000	5,972.1	137.6	1,352.1	328.9	1,248.9	1,627.2	1,277.4	208.4	688.5
<i>Euro area enlargement</i>									
2001	6,347.8	151.3	1,411.2	351.6	1,349.3	1,723.0	1,361.2	222.0	717.3
2002	6,557.3	149.8	1,428.4	362.8	1,385.7	1,803.7	1,426.9	227.3	739.4
2002 Q1	1,622.6	38.2	353.7	91.0	343.3	445.0	351.4	56.4	181.3
Q2	1,633.9	37.0	356.7	89.9	345.3	449.8	355.2	56.6	183.3
Q3	1,646.6	37.4	359.6	90.5	348.0	452.7	358.5	56.7	186.3
Q4	1,654.2	37.1	358.4	91.3	349.2	456.2	361.9	57.7	188.4
2003 Q1	1,662.9	37.1	360.9	91.6	348.5	459.9	364.9	57.8	189.4
Q2	1,671.3	37.3	357.5	93.0	351.8	464.7	367.1	58.2	189.5

### 4. Constant prices

(ECU billions at 1995 prices, seasonally adjusted)

	Gross value added							Intermediate consumption of FISIM <sup>1)</sup>	Taxes less subsidies on products
	Total	Agriculture, hunting, forestry and fishing activities	Manufacturing, energy and mining	Construction	Trade, repairs, hotels and restaurants, transport and communication	Financial, real estate, renting and business activities	Public administration, education, health and other services		
	10	11	12	13	14	15	16	17	18
1998	5,319.5	142.4	1,256.5	291.9	1,114.4	1,388.3	1,126.0	222.4	570.1
1999	5,462.6	146.4	1,269.1	298.9	1,163.6	1,440.0	1,144.8	231.7	595.3
2000	5,668.0	146.0	1,319.6	305.9	1,222.0	1,506.2	1,168.4	247.9	609.5
<i>Euro area enlargement</i>									
2001	5,870.3	151.8	1,343.2	311.6	1,289.1	1,573.6	1,200.9	264.5	628.0
2002	5,938.6	151.1	1,355.9	307.8	1,306.9	1,587.9	1,229.0	262.7	612.0
2002 Q1	1,476.6	37.9	336.4	77.9	324.5	395.1	304.8	65.3	153.3
Q2	1,484.8	37.8	339.6	76.7	326.4	397.5	306.8	65.1	152.1
Q3	1,488.1	37.8	340.6	76.6	327.7	397.3	308.0	65.8	153.1
Q4	1,489.1	37.6	339.3	76.5	328.2	398.1	309.4	66.5	153.4
2003 Q1	1,489.4	37.5	340.2	75.9	327.8	398.2	309.9	66.7	153.1
Q2	1,488.4	37.3	336.7	76.2	328.2	399.2	310.8	66.6	153.2
<i>(annual percentage changes)</i>									
1998	2.9	1.5	3.2	0.5	4.0	3.7	1.5	3.6	2.6
1999	2.7	2.8	1.0	2.4	4.4	3.7	1.7	4.2	4.4
2000	3.8	-0.3	4.0	2.3	5.0	4.6	2.1	7.0	2.4
<i>Euro area enlargement</i>									
2001	1.8	-1.5	0.6	-0.3	3.0	3.1	1.3	5.2	0.9
2002	1.2	-0.5	0.9	-1.2	1.4	0.9	2.3	-0.7	-2.6
2002 Q1	0.8	0.6	-0.8	0.1	1.0	1.2	2.1	-0.3	-2.7
Q2	1.3	0.4	1.1	-1.3	1.3	1.2	2.5	-1.7	-3.8
Q3	1.2	-0.6	1.4	-1.7	1.5	0.7	2.4	-0.9	-2.2
Q4	1.3	-2.2	2.1	-2.0	1.7	0.6	2.3	0.3	-1.5
2003 Q1	0.9	-0.9	1.1	-2.7	1.0	0.8	1.7	2.1	-0.1
Q2	0.2	-1.2	-0.9	-0.7	0.6	0.5	1.3	2.4	0.7

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<sup>1)</sup>**
**1. Industrial production**
*(annual percentage changes, unless otherwise indicated)*

	Total	Industry excluding construction <sup>2)</sup>									Construction	Manufacturing
		Total		Industry excluding construction and energy						Energy		
		Index (s.a.) 2000 = 100		Total	Inter- mediate goods	Capital goods	Consumer goods					
							Total	Durable consumer goods	Non-durable consumer goods			
1	2	3	4	5	6	7	8	9	10	11	12	
1999	2.1	95.0	1.9	1.9	1.9	2.3	1.5	1.4	1.5	0.7	4.1	1.9
2000	4.9	100.1	5.3	5.3	5.9	8.4	1.9	6.1	1.2	1.7	2.4	5.6
<i>Euro area enlargement</i>												
2001	0.3	100.6	0.5	0.2	-0.5	1.6	0.5	-1.8	0.9	1.6	0.5	0.3
2002	-0.5	100.1	-0.5	-0.7	0.4	-1.9	-0.4	-5.3	0.6	1.0	0.6	-0.7
2002 Q3	0.0	100.2	0.1	-0.2	1.4	-1.1	-0.6	-4.1	0.0	1.8	0.4	0.0
Q4	1.0	100.4	1.3	1.5	2.8	1.3	0.8	-4.0	1.7	-0.6	-0.7	1.6
2003 Q1	0.9	100.5	1.2	0.8	1.5	1.5	-0.7	-4.8	0.1	4.7	-2.2	0.9
Q2	-0.4	100.0	-0.5	-1.0	-0.2	-1.6	-0.9	-6.0	0.0	2.0	-0.6	-1.0
Q3	.	.	.	.	.	.	.	.	.	.	.	.
2002 Nov.	2.2	100.9	2.7	3.2	4.8	3.3	2.0	-2.0	2.8	-1.6	0.7	3.3
Dec.	-0.1	99.6	-0.3	0.3	1.9	0.1	-0.3	-6.5	0.8	-4.4	-1.6	0.4
2003 Jan.	1.1	100.5	1.3	0.9	2.8	1.5	-0.6	-4.1	0.0	1.4	-1.4	1.1
Feb.	1.4	100.9	2.3	0.9	1.1	3.1	-0.3	-4.4	0.4	10.0	-3.9	1.2
Mar.	0.2	100.1	0.1	0.6	0.6	0.1	-1.0	-5.7	-0.1	3.3	-1.5	0.6
Apr.	0.5	100.6	0.9	-0.1	0.7	-0.4	0.8	-4.8	1.9	3.0	-1.9	-0.1
May	-1.0	99.7	-1.0	-1.3	-0.9	-0.5	-2.6	-6.5	-1.8	1.0	-1.9	-1.1
June	-0.5	99.7	-1.3	-1.6	-0.5	-3.8	-0.9	-6.7	0.2	2.0	2.7	-1.7
July	.	100.6	0.8	0.5	0.1	1.4	1.5	-2.3	2.2	1.7	.	0.7
Aug.	.	100.0	-0.4	-0.8	0.4	-2.8	0.6	-3.8	1.2	3.5	.	-0.9
Sep.	.	.	.	.	.	.	.	.	.	.	.	.

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

	Retail sales (s.a.)									New passenger car registrations	
	Current prices			Constant prices						Thousands <sup>3)</sup> (s.a.)	
	Total		Index 2000 = 100	Total		Food, beverages, tobacco	Non-food				
	Index 2000 = 100			Index 2000 = 100				Textiles, clothing, footwear	Household equipment		
13	14	15	16	17	18	19	20	21	22		
1999	96.0	3.0	97.8	2.4	2.9	2.2	1.4	2.5	973	5.4	
2000	99.9	4.1	100.0	2.3	1.8	2.1	1.6	4.4	952	-2.1	
<i>Euro area enlargement</i>											
2001	104.1	4.2	101.7	1.7	1.8	1.5	0.7	-0.2	968	-0.8	
2002	106.1	1.9	101.7	0.0	0.9	-0.3	-1.9	-1.7	926	-4.3	
2002 Q3	106.7	1.9	102.2	0.5	1.2	0.4	-2.3	-0.5	918	-4.7	
Q4	106.6	1.5	101.7	-0.1	1.2	-0.6	-1.2	-2.4	950	0.2	
2003 Q1	107.9	2.7	102.3	0.8	2.3	0.5	-1.8	0.2	897	-2.6	
Q2	107.6	1.7	102.1	0.9	1.7	-0.3	-1.6	0.2	888	-2.8	
Q3	.	.	.	.	.	.	.	.	929	1.4	
2002 Nov.	106.2	0.8	101.7	-0.7	1.3	-1.6	-5.4	-2.9	941	-1.2	
Dec.	106.2	0.3	100.8	-1.1	0.0	-1.8	-1.9	-2.9	980	6.1	
2003 Jan.	108.1	3.5	103.4	2.9	4.2	2.0	2.5	0.6	883	-5.3	
Feb.	108.1	2.7	102.4	1.1	2.6	0.4	-3.6	-0.2	899	-3.5	
Mar.	107.6	1.8	101.0	-1.6	0.3	-0.9	-4.1	0.3	910	0.6	
Apr.	107.7	1.8	102.9	2.2	2.5	0.2	-1.0	1.1	877	-3.8	
May	107.4	1.6	101.8	0.1	1.4	-0.5	-2.4	-0.6	869	-5.3	
June	107.7	1.7	101.6	0.4	1.2	-0.6	-1.5	0.2	917	0.8	
July	107.6	1.3	101.9	-0.2	1.1	-1.3	-2.2	-1.1	925	2.6	
Aug.	107.5	0.3	101.8	-0.9	1.3	-2.5	-7.4	-1.0	922	-0.9	
Sep.	.	.	.	.	.	.	.	.	940	1.7	

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

Table 5.3

European Commission Business and Consumer Surveys <sup>1)</sup>

## 1. Economic sentiment indicator, manufacturing industry and consumer surveys

(percentage balances <sup>2)</sup>, unless otherwise indicated; seasonally adjusted)

	Economic sentiment indicator <sup>3)</sup> (index 2000 = 100)	Manufacturing industry					Consumer confidence indicator				
		Industrial confidence indicator				Capacity utilisation <sup>4)</sup> (percentages)	Total <sup>5)</sup>	Financial situation over next 12 months	Economic situation over next 12 months	Unemployment situation over next 12 months	Savings over next 12 months
		Total <sup>5)</sup>	Order books	Stocks of finished products	Production expectations						
1	2	3	4	5	6	7	8	9	10	11	
1999	97.6	-7	-16	11	6	82.6	-3	3	-4	11	1
2000	100.0	5	2	4	16	84.5	1	4	1	1	2
2001	97.0	-9	-15	14	1	82.9	-5	2	-10	14	2
2002	95.6	-11	-25	11	3	81.4	-11	-1	-12	26	-3
2002 Q3	95.4	-11	-27	11	4	81.5	-10	-1	-11	26	-3
Q4	95.3	-10	-23	10	4	81.5	-14	-3	-15	30	-8
2003 Q1	94.9	-11	-24	10	0	81.1	-19	-5	-23	39	-9
Q2	94.8	-12	-27	9	0	80.8	-19	-4	-22	41	-9
Q3	95.0	-11	-27	11	4	81.0	-17	-4	-20	38	-8
2002 Oct.	95.6	-9	-25	10	7	81.7	-12	-2	-12	27	-7
Nov.	95.3	-10	-22	10	3	-	-14	-4	-15	30	-7
Dec.	95.1	-10	-22	10	1	-	-16	-4	-19	33	-9
2003 Jan.	94.9	-11	-22	9	-1	81.3	-18	-5	-21	36	-9
Feb.	95.1	-10	-23	10	2	-	-19	-5	-23	39	-9
Mar.	94.6	-12	-26	10	0	-	-21	-6	-26	42	-9
Apr.	94.7	-12	-27	10	1	80.8	-19	-5	-22	40	-9
May	94.8	-12	-27	9	0	-	-20	-4	-23	43	-9
June	94.8	-12	-28	9	0	-	-19	-4	-22	40	-8
July	94.7	-14	-28	12	-1	80.7	-18	-4	-21	39	-9
Aug.	95.0	-11	-26	11	4	-	-17	-4	-20	37	-7
Sep.	95.4	-9	-26	10	9	-	-17	-4	-18	37	-8
Oct.	95.6	-8	-22	10	8	81.2	-17	-5	-18	36	-9

## 2. Construction industry, retail trade and services surveys

(percentage balances <sup>2)</sup>, seasonally adjusted)

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

Source: European Commission Business and Consumer Surveys.

1) Data refer to the Euro 12.

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

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

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

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

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

	Whole economy		By employment status		By economic activity					
	Millions		Employees	Self-employed	Agriculture, hunting, forestry and fishing	Manufacturing, energy and mining	Construction	Trade, repairs, hotels and restaurants, transport and communication	Financial, real estate, renting and business services	Public administration, education, health and other services
Weight in the total <sup>2)</sup>	100.0	100.0	84.2	15.8	4.7	19.3	7.0	25.1	14.3	29.6
	1	2	3	4	5	6	7	8	9	10
1998	122.360	1.8	2.0	0.9	-1.3	1.0	0.1	2.1	5.3	1.6
1999	124.605	1.8	2.3	-0.6	-2.5	-0.2	1.9	2.2	5.7	1.9
2000	127.396	2.2	2.5	0.8	-1.5	0.6	1.8	3.2	5.9	1.6
<i>Euro area enlargement</i>										
2001	133.156	1.4	1.6	0.2	-0.8	0.3	0.4	1.6	3.9	1.3
2002	133.705	0.4	0.5	-0.3	-2.0	-1.3	-1.1	0.5	2.3	1.3
2002 Q2	133.762	0.5	0.7	-0.5	-2.0	-1.2	-0.9	0.6	2.6	1.3
Q3	133.709	0.3	0.5	-0.4	-1.9	-1.3	-1.3	0.2	2.1	1.4
Q4	133.659	0.1	0.1	0.2	-1.9	-1.7	-1.3	0.0	2.0	1.2
2003 Q1	133.657	0.0	-0.2	0.8	-2.3	-1.8	-1.0	-0.2	1.6	1.1
Q2	133.714	0.0	-0.2	1.1	-2.3	-2.0	-0.4	-0.1	1.2	1.1

**2. Unemployment**
*(seasonally adjusted)*

	Total		By age <sup>3)</sup>				By gender <sup>4)</sup>			
			Adult		Youth		Male		Female	
	Millions	% of labour force	Millions	% of labour force	Millions	% of labour force	Millions	% of labour force	Millions	% of labour force
	11	12	13	14	15	16	17	18	19	20
1998	13.270	10.2	10.146	8.9	3.124	20.0	6.445	8.6	6.825	12.5
1999	12.247	9.3	9.431	8.2	2.815	18.0	5.901	7.8	6.345	11.4
2000	11.104	8.4	8.555	7.3	2.549	16.2	5.286	7.0	5.818	10.3
<i>Euro area enlargement</i>										
2001	11.062	8.0	8.535	7.0	2.527	15.7	5.313	6.7	5.749	9.7
2002	11.689	8.4	9.095	7.4	2.595	16.2	5.762	7.3	5.927	9.9
2002 Q3	11.786	8.5	9.183	7.4	2.603	16.3	5.829	7.4	5.957	9.9
Q4	11.970	8.6	9.345	7.6	2.625	16.4	5.940	7.5	6.030	10.0
2003 Q1	12.213	8.7	9.530	7.7	2.683	16.8	6.076	7.7	6.137	10.2
Q2	12.333	8.8	9.649	7.8	2.684	16.8	6.136	7.7	6.197	10.2
Q3	12.364	8.8	9.689	7.8	2.674	16.8	6.142	7.7	6.221	10.2
2002 Sep.	11.829	8.5	9.228	7.5	2.601	16.2	5.854	7.4	5.975	9.9
Oct.	11.885	8.5	9.282	7.5	2.603	16.3	5.888	7.4	5.997	9.9
Nov.	11.978	8.6	9.350	7.6	2.629	16.5	5.943	7.5	6.035	10.0
Dec.	12.046	8.6	9.403	7.6	2.643	16.5	5.990	7.6	6.057	10.0
2003 Jan.	12.134	8.7	9.463	7.6	2.671	16.7	6.038	7.6	6.096	10.1
Feb.	12.220	8.7	9.534	7.7	2.686	16.8	6.082	7.7	6.138	10.2
Mar.	12.286	8.8	9.595	7.7	2.691	16.8	6.108	7.7	6.178	10.2
Apr.	12.330	8.8	9.642	7.8	2.688	16.8	6.133	7.7	6.197	10.2
May	12.330	8.8	9.646	7.8	2.685	16.8	6.137	7.7	6.194	10.2
June	12.338	8.8	9.658	7.8	2.680	16.8	6.139	7.7	6.199	10.2
July	12.344	8.8	9.670	7.8	2.674	16.8	6.135	7.7	6.209	10.2
Aug.	12.362	8.8	9.688	7.8	2.673	16.8	6.140	7.7	6.222	10.2
Sep.	12.385	8.8	9.710	7.8	2.675	16.8	6.152	7.8	6.233	10.3

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

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

2) In 2002.

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

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

### 3. Unit labour costs, compensation per employee and labour productivity

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

	Total		By economic activity					
	Index 2000=100		Agriculture, hunting, forestry and fishing	Manufacturing, energy and mining	Construction	Trade, repairs, hotels and restaurants, transport and communication	Financial, real estate renting and business services	Public administration, education, health and other services
	1	2	3	4	5	6	7	8
	Unit labour costs <sup>1)</sup>							
2000	100.0	1.3	1.6	-0.3	1.8	-0.4	4.4	2.0
	<i>Euro area enlargement</i>							
2001	102.5	2.5	3.2	2.6	3.7	1.4	2.1	3.2
2002	104.7	2.1	1.6	0.5	3.6	1.4	3.4	1.7
2002 Q2	104.4	2.0	-0.9	0.4	3.6	1.3	2.8	1.7
Q3	104.8	1.9	-1.4	0.3	3.3	1.0	3.5	1.7
Q4	105.4	1.5	4.7	-0.8	3.7	0.8	3.5	0.9
2003 Q1	106.3	2.0	2.8	0.3	4.8	1.8	3.2	1.7
Q2	107.0	2.5	6.3	1.8	4.2	3.0	3.6	1.7
	Compensation per employee							
2000	100.0	2.5	2.9	3.1	2.3	1.4	3.1	2.4
	<i>Euro area enlargement</i>							
2001	102.8	2.8	2.5	2.9	3.0	2.9	1.4	3.1
2002	105.4	2.6	3.2	2.8	3.4	2.3	2.0	2.7
2002 Q2	105.0	2.4	1.5	2.8	3.1	2.0	1.4	2.9
Q3	105.8	2.5	0.0	3.0	3.0	2.3	2.0	2.7
Q4	106.4	2.5	4.4	3.1	2.9	2.5	2.2	2.0
2003 Q1	107.4	2.7	4.3	3.3	3.1	3.0	2.4	2.3
Q2	107.9	2.8	7.5	2.9	3.8	3.7	2.9	1.8
	Labour productivity <sup>2)</sup>							
2000	100.0	1.2	1.3	3.4	0.5	1.8	-1.2	0.4
	<i>Euro area enlargement</i>							
2001	100.2	0.2	-0.7	0.3	-0.7	1.5	-0.7	-0.1
2002	100.7	0.5	1.6	2.3	-0.2	0.9	-1.4	1.0
2002 Q2	100.6	0.4	2.5	2.4	-0.4	0.7	-1.4	1.1
Q3	100.9	0.7	1.4	2.7	-0.3	1.2	-1.4	1.1
Q4	101.0	1.0	-0.3	3.9	-0.8	1.7	-1.3	1.1
2003 Q1	101.0	0.7	1.5	3.0	-1.7	1.2	-0.8	0.5
Q2	100.9	0.2	1.2	1.1	-0.3	0.6	-0.7	0.1

### 4. Hourly labour cost indicators

(annual percentage changes, unless otherwise indicated)

	Total <sup>3)</sup>		By component		By selected economic activity		
	Index (s.a.) 2000=100		Wages and salaries	Employers' social contributions	Manufacturing, energy and mining	Construction	Services
	9	10	11	12	13	14	15
2000	100.0	2.8	3.0	2.0	3.3	3.3	2.2
	<i>Euro area enlargement</i>						
2001	103.3	3.4	3.5	2.9	3.2	3.6	3.6
2002	106.9	3.5	3.4	3.9	3.2	3.5	3.7
2002 Q2	106.4	3.2	3.0	3.7	2.8	3.0	3.5
Q3	107.2	3.2	3.1	3.6	2.9	3.4	3.3
Q4	108.1	3.5	3.4	3.9	3.5	3.0	3.5
2003 Q1	108.9	2.7	2.6	3.2	2.8	2.3	2.5
Q2	109.6	2.9	2.8	3.2	3.4	3.3	2.9

Sources: ECB calculations based on Eurostat data (columns 1 to 8 and 15) and Eurostat (columns 9 to 14).

1) Compensation (at current prices) per employee divided by value added (at constant prices) per person employed.

2) Value added (at constant prices) per person employed.

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

## 6 Saving, investment and financing in the euro area

**Table 6.1**

### Financial investment and financing of non-financial sectors <sup>1)</sup>

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

#### Amounts outstanding

##### 1. Main financial assets <sup>2)</sup>

	Currency and deposits									Memo: deposits of non-banks with banks outside the euro area <sup>3)</sup>
	Total	Currency	Deposits of non-financial sectors other than central government with euro area MFIs					Deposits of central government with euro area MFIs	Deposits with non-MFIs <sup>4)</sup>	
			Total	Overnight	With agreed maturity	Redeemable at notice	Repurchase agreements			
	1	2	3	4	5	6	7	8	9	10
1999 Q2	4,704.4	324.8	4,114.2	1,321.8	1,418.3	1,315.7	58.4	125.0	140.4	242.7
Q3	4,716.7	328.3	4,112.8	1,324.6	1,416.5	1,313.1	58.7	133.3	142.3	238.6
Q4	4,859.1	350.8	4,215.1	1,370.9	1,457.7	1,323.5	63.0	142.0	151.2	229.7
2000 Q1	4,838.4	335.5	4,222.3	1,379.6	1,462.5	1,303.3	76.8	130.2	150.5	260.5
Q2	4,895.0	342.0	4,256.9	1,409.7	1,485.7	1,282.6	78.9	146.0	150.1	247.1
Q3	4,915.8	339.8	4,266.5	1,396.9	1,524.0	1,263.7	81.9	159.2	150.2	253.9
Q4	5,032.2	348.4	4,361.6	1,464.4	1,542.4	1,269.1	85.6	164.5	157.8	230.1
<i>Euro area enlargement</i>										
2001 Q1	5,138.1	336.3	4,494.1	1,446.1	1,620.9	1,314.6	112.6	150.3	157.3	259.6
Q2	5,236.2	333.0	4,579.4	1,526.3	1,616.7	1,321.1	115.3	165.5	158.3	268.8
Q3	5,225.6	309.6	4,609.0	1,547.9	1,605.2	1,333.7	122.2	147.8	159.1	265.6
Q4	5,366.7	239.7	4,816.3	1,690.3	1,613.0	1,396.3	116.7	139.0	171.7	298.1
2002 Q1	5,363.7	254.3	4,774.3	1,637.4	1,604.8	1,413.0	119.1	157.5	177.6	301.7
Q2	5,447.0	285.7	4,827.6	1,703.6	1,593.8	1,412.5	117.6	155.0	178.7	278.1
Q3	5,461.2	306.7	4,827.4	1,699.6	1,585.8	1,423.3	118.8	146.3	180.8	289.0
Q4	5,624.4	341.2	4,953.6	1,790.2	1,582.0	1,469.6	111.9	136.4	193.3	293.0
2003 Q1	5,650.2	327.2	4,950.0	1,759.2	1,573.3	1,511.3	106.2	176.2	196.8	323.0
Q2	.	351.0	5,030.9	1,840.5	1,562.1	1,533.9	94.4	200.3	.	.
	Securities other than shares			Shares <sup>5)</sup>				Insurance technical reserves		
	Total	Short-term	Long-term	Total	Quoted shares	Mutual fund shares	Money market fund shares	Total	Net equity of households in life insurance reserves and pension fund reserves	Prepayments of insurance premiums and reserves for outstanding claims
	11	12	13	14	15	16	17	18	19	20
1999 Q2	1,499.9	156.9	1,343.0	4,140.0	2,422.5	1,717.5	211.4	2,758.4	2,471.6	286.8
Q3	1,504.9	143.3	1,361.6	4,059.2	2,334.3	1,724.9	210.0	2,800.9	2,510.1	290.7
Q4	1,563.8	169.6	1,394.1	4,796.8	2,976.6	1,820.3	204.2	2,952.3	2,652.3	300.0
2000 Q1	1,554.0	178.4	1,375.6	4,872.1	2,952.9	1,919.2	214.9	3,065.6	2,764.8	300.8
Q2	1,583.0	183.7	1,399.2	4,781.3	2,888.4	1,892.9	204.6	3,113.2	2,808.6	304.6
Q3	1,667.2	202.6	1,464.6	4,825.4	2,918.3	1,907.1	204.1	3,168.8	2,860.3	308.5
Q4	1,752.9	220.5	1,532.4	4,844.6	2,985.8	1,858.7	200.1	3,200.7	2,892.0	308.7
<i>Euro area enlargement</i>										
2001 Q1	1,861.7	285.4	1,576.3	4,527.1	2,706.6	1,820.6	224.0	3,253.0	2,939.1	313.9
Q2	1,858.7	245.1	1,613.6	4,492.3	2,644.6	1,847.7	232.3	3,312.1	2,995.4	316.7
Q3	1,890.7	240.4	1,650.3	4,000.8	2,272.7	1,728.1	253.1	3,289.0	2,968.0	321.0
Q4	1,926.2	228.1	1,698.1	4,349.1	2,527.4	1,821.8	260.0	3,378.7	3,053.6	325.0
2002 Q1	1,979.2	266.5	1,712.7	4,436.5	2,582.5	1,854.0	290.5	3,402.4	3,070.7	331.7
Q2	2,004.1	229.9	1,774.2	4,048.6	2,293.0	1,755.6	292.8	3,422.8	3,087.4	335.4
Q3	2,060.8	255.8	1,805.0	3,443.6	1,726.0	1,717.6	309.2	3,448.6	3,110.4	338.2
Q4	2,059.6	248.4	1,811.2	3,435.3	1,738.0	1,697.3	304.3	3,518.6	3,174.6	344.0
2003 Q1	2,055.7	238.2	1,817.6	3,295.4	1,586.2	1,709.1	379.2	3,575.8	3,227.0	348.8
Q2	.	.	.	.	.	.	.	.	.	.

Source: ECB.

- 1) Non-financial sectors comprise general government (S.13), non-financial corporations (S.11), and households (S.14) including non-profit institutions serving households (S.15).
- 2) Most of the financial asset and liability categories defined in the ESA 95 are covered. Financial derivatives, loans granted by general government and non-financial corporations, unquoted shares and other equity, and other receivables and payables are not included.
- 3) BIS international banking statistics. The BIS definition of banks is close to that of MFIs.
- 4) Covering deposits with euro area central government (S.1311), other financial intermediaries (S.123) and insurance corporations and pension funds (S.125).
- 5) Excluding unquoted shares.

## 2. Main liabilities <sup>1)</sup>

	Loans taken from euro area MFIs and other financial corporations by											Memo: loans taken from banks outside the euro area by non-banks <sup>2)</sup>
	Total	Taken from euro area MFIs	General government			Non-financial corporations			Households <sup>3)</sup>			
			Total	Short-term	Long-term <sup>4)</sup>	Total	Short-term	Long-term	Total	Short-term	Long-term	
1	2	3	4	5	6	7	8	9	10	11	12	
1999 Q2	6,415.1	5,817.5	897.3	38.6	858.7	2,684.7	963.3	1,721.4	2,833.1	254.2	2,578.8	183.3
Q3	6,482.9	5,886.6	882.4	37.5	844.9	2,699.7	942.8	1,756.9	2,900.8	253.9	2,646.9	191.4
Q4	6,660.4	6,039.5	902.4	41.7	860.7	2,791.4	978.6	1,812.9	2,966.6	262.6	2,704.1	201.5
2000 Q1	6,805.6	6,156.4	893.1	40.7	852.3	2,890.2	1,036.8	1,853.4	3,022.3	264.0	2,758.3	221.1
Q2	6,952.8	6,262.2	887.9	41.6	846.3	2,989.6	1,088.8	1,900.7	3,075.3	272.7	2,802.6	219.7
Q3	7,097.8	6,379.6	868.4	39.5	828.8	3,097.5	1,150.6	1,947.0	3,131.9	274.2	2,857.7	252.3
Q4	7,261.5	6,500.5	884.2	41.7	842.5	3,196.3	1,166.1	2,030.3	3,181.1	279.3	2,901.8	245.2
<i>Euro area enlargement</i>												
2001 Q1	7,455.1	6,671.7	897.6	42.3	855.3	3,322.9	1,243.9	2,079.1	3,234.5	278.9	2,955.6	257.3
Q2	7,561.3	6,762.2	882.7	42.2	840.5	3,394.6	1,265.6	2,129.0	3,284.0	284.8	2,999.1	279.2
Q3	7,632.6	6,805.2	876.1	45.3	830.9	3,434.5	1,243.2	2,191.3	3,321.9	280.3	3,041.6	249.7
Q4	7,751.1	6,897.7	903.1	50.0	853.2	3,474.3	1,226.0	2,248.4	3,373.6	281.6	3,092.0	268.9
2002 Q1	7,812.9	6,960.5	904.5	53.4	851.1	3,501.6	1,222.0	2,279.6	3,406.8	277.2	3,129.6	278.5
Q2	7,907.2	7,017.6	877.7	53.4	824.3	3,547.0	1,206.7	2,340.4	3,482.4	287.9	3,194.5	245.5
Q3	7,952.5	7,053.0	870.1	54.7	815.4	3,554.3	1,188.7	2,365.6	3,528.0	284.1	3,244.0	238.0
Q4	8,064.5	7,131.5	883.2	60.6	822.6	3,594.2	1,172.7	2,421.6	3,587.1	289.3	3,297.8	240.2
2003 Q1	8,116.5	7,170.3	874.8	68.3	806.5	3,622.5	1,188.0	2,434.5	3,619.2	276.9	3,342.3	239.4
Q2	.	7,240.1	.	.	.	.	.	.	.	.	.	.

	Securities other than shares issued by								Quoted shares issued by non-financial corporations	Deposit liabilities of central government	Pension fund reserves of non- financial corporations
	Total	General government			Non-financial corporations						
		Total	Short-term	Long-term	Total	Short-term	Long-term				
13	14	15	16	17	18	19	20	21	22		
1999 Q2	3,951.7	3,612.1	458.2	3,153.8	339.7	66.2	273.5	3,090.6	139.6	221.9	
Q3	3,930.1	3,577.4	448.1	3,129.2	352.7	73.9	278.8	3,015.8	141.7	224.2	
Q4	3,896.5	3,533.3	419.7	3,113.6	363.2	77.4	285.8	4,193.5	148.9	226.5	
2000 Q1	3,950.7	3,586.0	425.1	3,160.9	364.7	77.0	287.7	4,536.4	148.2	228.4	
Q2	3,984.8	3,607.7	425.6	3,182.1	377.1	87.8	289.3	4,381.0	147.9	230.2	
Q3	4,018.7	3,622.1	422.0	3,200.1	396.6	94.6	302.0	4,222.7	147.9	232.1	
Q4	4,068.1	3,650.2	400.5	3,249.6	417.9	100.8	317.1	4,069.6	155.3	233.9	
<i>Euro area enlargement</i>											
2001 Q1	4,245.6	3,790.9	429.7	3,361.2	454.8	111.4	343.4	3,722.4	154.7	236.1	
Q2	4,296.1	3,815.9	441.2	3,374.7	480.2	122.5	357.7	3,679.7	155.2	238.3	
Q3	4,380.4	3,880.8	450.1	3,430.7	499.7	137.1	362.6	3,033.6	156.3	240.5	
Q4	4,394.2	3,875.1	434.3	3,440.8	519.0	136.9	382.1	3,528.0	168.6	241.4	
2002 Q1	4,452.3	3,929.0	446.6	3,482.4	523.3	141.7	381.6	3,551.9	174.6	243.8	
Q2	4,543.2	4,025.5	481.6	3,543.9	517.7	126.9	390.8	3,040.1	175.7	246.2	
Q3	4,653.0	4,122.3	479.9	3,642.4	530.8	133.8	396.9	2,293.2	177.6	248.6	
Q4	4,660.2	4,125.9	480.0	3,646.0	534.3	140.2	394.1	2,398.1	190.1	251.1	
2003 Q1	4,814.0	4,248.8	521.4	3,727.4	565.2	161.8	403.4	2,124.7	193.7	254.6	
Q2	.	.	.	.	.	.	.	2,466.4	.	.	

Source: ECB.

- 1) Most of the financial asset and liability categories defined in the ESA 95 are covered. Financial derivatives, loans granted by general government and non-financial corporations, unquoted shares and other equity, and other receivables and payables are not included.
- 2) BIS international banking statistics. The BIS definition of banks is close to that of MFIs.
- 3) Including non-profit institutions serving households.
- 4) Including all loans taken by central government from MFIs in the euro area.

**Table 6.1 (cont'd)**
**Financial investment and financing of non-financial sectors<sup>1)</sup>**
*(EUR billions; not seasonally adjusted)*
**Transactions**
**1. Main financial assets<sup>2)</sup>**

	Currency and deposits									Memo: deposits of non-banks with banks outside the euro area <sup>3)</sup>		
	Total	Currency	Deposits of non-financial sectors other than central government with euro area MFIs					Deposits of central government with euro area MFIs	Deposits with non-MFIs <sup>4)</sup>			
			Total	Overnight	With agreed maturity	Redeemable at notice	Repurchase agreements					
	1	2	3	4	5	6	7	8	9	10		
1999 Q2	22.9	6.2	34.2	81.3	-48.9	9.4	-7.6	-8.4	-9.1	-4.4		
Q3	13.9	3.5	0.2	3.5	-1.1	-2.6	0.3	8.3	1.9	-2.7		
Q4	133.6	22.3	95.1	44.2	36.4	10.3	4.2	8.7	7.6	-14.5		
2000 Q1	-27.6	-15.3	0.4	6.1	0.9	-20.4	13.7	-11.9	-0.7	25.9		
Q2	52.1	6.7	30.0	31.9	17.8	-21.8	2.1	15.8	-0.4	-12.8		
Q3	7.0	-2.2	-4.2	-17.3	28.8	-18.5	2.9	13.3	0.1	-2.1		
Q4	129.7	8.6	108.3	71.4	27.3	5.7	3.8	5.3	7.6	-16.5		
				<i>Euro area enlargement</i>								
2001 Q1	84.8	-19.8	120.6	-23.8	72.6	44.9	26.9	-15.6	-0.5	13.3		
Q2	94.8	-3.3	82.0	77.3	-4.3	6.3	2.7	15.1	1.0	4.6		
Q3	7.9	-23.4	48.1	25.2	3.0	13.0	7.0	-17.7	0.8	3.9		
Q4	143.7	-69.9	209.9	142.3	10.6	62.5	-5.4	-8.8	12.5	12.2		
2002 Q1	-0.7	14.6	-40.2	-53.4	-4.1	14.9	2.3	19.0	6.0	2.7		
Q2	103.2	31.4	73.2	72.2	0.9	1.7	-1.7	-2.5	1.1	-10.0		
Q3	11.2	21.0	0.6	-4.4	-7.3	10.6	1.7	-12.5	2.1	9.1		
Q4	173.0	34.5	135.9	83.8	12.4	46.6	-6.9	-9.9	12.5	9.8		
2003 Q1	40.6	7.7	-3.5	-29.5	-10.2	41.9	-5.6	32.8	3.6	31.7		
Q2	.	23.8	85.3	82.8	-8.3	22.5	-11.8	24.1	.	.		

	Securities other than shares			Shares <sup>5)</sup>				Insurance technical reserves				
	Total	Short-term	Long-term	Total	Quoted shares	Mutual fund shares	Money market fund shares	Total	Net equity of households in life insurance reserves and pension fund reserves	Prepayments of insurance premiums and reserves for outstanding claims		
											11	12
1999 Q2	-36.0	-8.4	-27.6	150.6	65.9	84.7	15.5	55.0	49.3	5.7		
Q3	-3.2	-14.6	11.4	86.3	46.5	39.8	-2.1	57.6	52.1	5.5		
Q4	61.2	25.2	36.0	-16.7	14.3	-31.0	-12.7	75.4	70.4	4.9		
2000 Q1	10.1	21.8	-11.6	-16.3	-64.4	48.1	13.5	79.9	74.3	5.6		
Q2	40.9	4.3	36.6	68.1	49.2	18.9	-7.4	55.4	52.8	2.7		
Q3	75.0	22.3	52.7	104.8	97.3	7.4	-1.3	55.5	52.7	2.7		
Q4	17.4	6.5	10.9	177.7	139.6	38.1	-5.1	59.2	61.3	-2.2		
				<i>Euro area enlargement</i>								
2001 Q1	104.3	66.4	37.8	45.9	-1.6	47.5	22.0	68.2	60.9	7.3		
Q2	-2.1	-34.2	32.2	42.1	35.6	6.5	3.4	53.2	49.7	3.6		
Q3	31.2	-5.8	36.9	55.1	29.0	26.1	14.0	51.0	45.9	5.1		
Q4	3.5	-18.2	21.7	-0.2	-23.3	23.2	3.1	56.6	54.4	2.2		
2002 Q1	68.3	36.3	32.0	47.7	4.9	42.8	26.3	65.3	55.6	9.7		
Q2	-11.1	-42.5	31.4	26.5	12.8	13.7	-1.5	50.2	46.2	4.0		
Q3	46.7	27.4	19.3	44.4	20.5	23.9	13.7	47.8	43.8	4.0		
Q4	-17.9	-16.0	-1.9	-34.7	-46.7	12.1	-7.6	57.6	56.5	1.1		
2003 Q1	-5.2	-4.7	-0.5	61.6	5.5	56.1	30.3	65.6	59.7	6.0		
Q2	.	.	.	.	.	.	.	.	.	.		

Source: ECB.

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

2) Most of the financial asset and liability categories defined in the ESA 95 are covered. Financial derivatives, loans granted by general government and non-financial corporations, unquoted shares and other equity, and other receivables and payables are not included.

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

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

5) Excluding unquoted shares.



## 2. Main liabilities<sup>1)</sup>

	Loans taken from euro area MFIs and other financial corporations by											Memo: loans taken from banks outside the euro area by non-banks <sup>2)</sup>
	Total	Taken from euro area MFIs	General government			Non-financial corporations			Households <sup>3)</sup>			
			Total	Short-term	Long-term <sup>4)</sup>	Total	Short-term	Long-term	Total	Short-term	Long-term	
1	2	3	4	5	6	7	8	9	10	11	12	
1999 Q2	162.3	133.2	-4.1	2.7	-6.8	89.4	41.0	48.4	77.0	3.8	73.2	23.8
Q3	70.4	71.6	-14.7	-1.1	-13.6	17.4	-16.7	34.1	67.7	-0.3	68.1	8.5
Q4	175.8	146.3	19.7	4.2	15.5	87.7	33.6	54.2	68.4	8.4	60.0	-7.1
2000 Q1	141.9	108.8	-7.9	-0.9	-7.0	91.9	55.0	36.9	58.0	1.5	56.5	15.0
Q2	162.6	118.2	-5.5	0.9	-6.4	112.3	61.8	50.6	55.8	9.7	46.1	-0.8
Q3	132.8	91.6	-15.9	-2.1	-13.8	96.9	53.6	43.3	51.8	0.0	51.8	23.0
Q4	188.2	140.1	16.1	2.2	13.9	119.5	20.4	99.0	52.7	5.3	47.4	2.1
<i>Euro area enlargement</i>												
2001 Q1	103.6	89.7	-6.3	0.0	-6.3	63.3	38.5	24.8	46.6	-5.2	51.8	9.1
Q2	109.8	88.0	-15.3	-0.1	-15.2	68.1	20.1	48.1	57.0	6.0	51.0	16.7
Q3	88.0	57.8	-6.1	3.1	-9.1	55.3	-16.4	71.7	38.7	-4.2	42.9	-21.3
Q4	119.1	92.5	26.1	4.7	21.4	40.6	-19.6	60.2	52.4	1.4	51.0	4.2
2002 Q1	60.1	61.9	1.0	3.4	-2.4	20.2	-7.1	27.3	39.0	-4.9	43.9	8.4
Q2	113.3	82.8	-25.2	0.1	-25.3	63.9	-3.8	67.7	74.6	10.7	63.9	-18.7
Q3	43.2	34.2	-7.9	1.3	-9.1	2.4	-17.7	20.1	48.6	-3.9	52.6	-9.0
Q4	122.3	95.6	13.5	5.9	7.6	46.2	-11.1	57.3	62.6	6.1	56.5	8.9
2003 Q1	81.2	66.3	-0.6	8.0	-8.6	41.9	14.9	27.0	39.9	-10.0	49.8	1.8
Q2	.	86.0	.	.	.	.	.	.	.	.	.	.

	Securities other than shares issued by							Quoted shares issued by non-financial corporations	Deposit liabilities of central government	Pension fund reserves of non- financial corporations
	Total	General government			Non-financial corporations					
		Total	Short-term	Long-term	Total	Short-term	Long-term			
13	14	15	16	17	18	19	20	21	22	
1999 Q2	39.6	29.0	-7.7	36.7	10.6	2.5	8.1	34.7	-9.2	2.8
Q3	55.8	38.6	-10.0	48.6	17.2	7.6	9.6	34.7	2.1	2.8
Q4	-12.1	-19.8	-27.9	8.1	7.7	3.6	4.1	42.1	7.2	2.8
2000 Q1	60.9	61.0	10.9	50.0	-0.1	-0.5	0.4	20.9	-0.7	2.8
Q2	39.3	23.5	-1.3	24.8	15.8	10.9	4.9	29.0	-0.3	2.8
Q3	48.6	25.8	-2.3	28.1	22.8	7.0	15.8	69.0	0.0	2.8
Q4	0.8	-20.3	-27.4	7.2	21.0	7.4	13.6	55.1	7.4	2.8
<i>Euro area enlargement</i>										
2001 Q1	74.9	37.6	32.5	5.1	37.3	10.9	26.4	51.4	-0.6	3.1
Q2	85.4	59.3	10.8	48.6	26.1	11.7	14.4	43.8	0.5	3.1
Q3	50.6	29.6	8.8	20.8	21.0	14.6	6.4	9.2	1.1	3.1
Q4	9.7	-7.9	-21.9	14.0	17.6	-0.8	18.3	5.9	12.3	1.8
2002 Q1	102.7	93.3	21.7	71.7	9.4	5.2	4.1	9.4	6.0	3.3
Q2	60.7	61.9	33.9	28.1	-1.2	-15.2	13.9	4.7	1.1	3.3
Q3	56.1	46.2	-0.9	47.1	9.9	7.0	2.8	-0.4	1.9	3.8
Q4	2.9	-0.6	-8.4	7.8	3.5	6.5	-3.0	-6.2	12.4	2.5
2003 Q1	159.1	128.9	50.1	78.8	30.2	22.1	8.1	-4.5	3.6	3.4
Q2	.	.	.	.	.	.	.	.	.	.

Source: ECB.

1) Most of the financial asset and liability categories defined in the ESA 95 are covered. Financial derivatives, loans granted by general government and non-financial corporations, unquoted shares and other equity, and other receivables and payables are not included.

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

3) Including non-profit institutions serving households.

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

**Table 6.2**
**Financial investment and financing of insurance corporations and pension funds**
*(EUR billions; not seasonally adjusted; end of period)*
**Amounts outstanding**

	Main financial assets <sup>1)</sup>										
	Deposits with euro area MFIs					Loans			Securities other than shares		
	Total	Overnight	With agreed maturity	Redeemable at notice	Repurchase agreements	Total	Short-term	Long-term	Total	Short-term	Long-term
1	2	3	4	5	6	7	8	9	10	11	
1999 Q2	430.9	36.4	380.5	3.3	10.7	321.7	42.5	279.2	1,024.1	37.1	987.0
Q3	436.6	32.0	389.8	3.3	11.5	313.6	41.3	272.3	1,031.2	34.0	997.2
Q4	447.5	32.2	400.3	3.3	11.7	313.6	41.1	272.5	1,035.1	38.5	996.6
2000 Q1	458.9	35.4	407.1	3.2	13.1	317.4	45.0	272.4	1,064.4	40.4	1,024.0
Q2	460.8	34.6	411.1	3.5	11.6	316.1	46.3	269.8	1,091.1	45.1	1,046.0
Q3	464.6	34.1	413.8	3.7	12.9	317.2	46.9	270.3	1,091.4	45.6	1,045.9
Q4	477.6	40.6	418.5	3.2	15.3	311.3	50.1	261.1	1,085.2	40.4	1,044.8
<i>Euro area enlargement</i>											
2001 Q1	483.8	38.2	423.3	3.5	18.8	313.1	51.9	261.2	1,126.8	40.3	1,086.5
Q2	486.3	41.4	424.2	3.8	16.9	316.1	52.2	263.9	1,150.5	55.0	1,095.5
Q3	487.8	39.3	426.9	3.8	17.9	316.5	53.1	263.4	1,165.2	50.1	1,115.1
Q4	495.4	48.0	427.5	3.4	16.4	320.2	56.7	263.5	1,187.2	44.3	1,142.9
2002 Q1	498.6	43.9	433.0	4.0	17.7	325.2	59.5	265.7	1,252.5	52.9	1,199.5
Q2	503.9	48.4	432.9	3.7	19.0	331.7	65.2	266.5	1,242.7	40.8	1,201.9
Q3	506.3	50.1	437.9	3.9	14.4	334.3	69.2	265.1	1,301.0	50.8	1,250.2
Q4	522.8	55.9	445.6	3.5	17.9	337.0	70.7	266.3	1,345.4	54.1	1,291.3
2003 Q1	535.5	59.7	454.0	3.7	18.2	343.9	71.6	272.3	1,379.1	64.5	1,314.6
Q2	537.7	62.2	450.3	3.0	22.3	.	.	.	.	.	.

	Main financial assets <sup>1)</sup>					Main liabilities <sup>1)</sup>						
	Shares <sup>2)</sup>				Prepayments of insurance premiums and reserves for outstanding claims	Loans taken from euro area MFIs and other financial corporations		Securities other than shares	Quoted shares	Insurance technical reserves		
	Total	Quoted shares	Mutual fund shares	Money market fund shares		Total	Taken from euro area MFIs			Total	Net equity of households in life insurance reserves and pension fund reserves	Prepayments of insurance premiums and reserves for outstanding claims
12												
1999 Q2	1,002.0	580.8	421.2	36.6	71.3	54.4	40.4	3.8	279.7	2,590.5	2,186.3	404.2
Q3	1,012.4	586.3	426.1	33.7	72.5	56.4	41.9	4.5	272.1	2,633.7	2,221.9	411.7
Q4	1,232.8	719.7	513.1	33.4	75.5	44.1	29.6	4.5	332.4	2,780.4	2,359.7	420.7
2000 Q1	1,348.7	777.9	570.8	37.1	78.0	52.3	37.1	5.1	363.4	2,897.3	2,467.4	429.9
Q2	1,363.1	771.6	591.5	40.6	78.9	54.2	38.8	5.1	332.2	2,941.9	2,507.9	434.0
Q3	1,412.0	797.3	614.6	37.4	80.0	49.0	33.1	7.9	359.0	2,994.4	2,556.2	438.2
Q4	1,331.6	726.9	604.7	36.9	78.4	47.3	31.5	9.1	326.3	3,019.8	2,582.2	437.6
<i>Euro area enlargement</i>												
2001 Q1	1,305.9	709.7	596.1	44.8	80.8	51.3	36.4	9.2	311.9	3,072.6	2,624.6	448.0
Q2	1,343.2	736.3	606.8	46.5	81.7	51.2	36.2	9.7	315.6	3,130.5	2,677.8	452.7
Q3	1,212.9	648.0	564.9	45.9	83.6	52.1	37.4	9.7	221.5	3,108.4	2,648.0	460.4
Q4	1,310.7	704.0	606.7	46.0	92.2	48.5	34.9	10.3	234.7	3,207.3	2,730.9	476.4
2002 Q1	1,389.2	765.8	623.4	47.5	96.5	52.5	38.9	10.3	257.0	3,235.9	2,743.5	492.5
Q2	1,270.6	672.6	598.0	50.1	97.5	55.9	42.5	10.6	226.5	3,254.6	2,756.6	498.0
Q3	1,130.3	562.8	567.5	48.7	98.7	56.4	42.1	10.8	127.2	3,280.1	2,775.8	504.3
Q4	1,160.5	584.4	576.1	55.3	98.7	43.4	33.0	10.8	113.3	3,342.2	2,836.0	506.2
2003 Q1	1,120.4	543.5	577.0	55.9	100.1	56.4	42.4	10.9	103.3	3,401.3	2,888.0	513.2
Q2	.	.	.	.	.	.	44.6	.	136.5	.	.	.

Source: ECB.

1) Most of the financial asset and liability categories defined in the ESA 95 are covered. Financial derivatives, loans granted by general government and non-financial corporations, unquoted shares and other equity, and other receivables and payables are not included.

2) Excluding unquoted shares.

## Transactions

	Main financial assets <sup>1)</sup>										
	Deposits with euro area MFIs					Loans			Securities other than shares		
	Total	Overnight	With agreed maturity	Redeemable at notice	Repurchase agreements	Total	Short-term	Long-term	Total	Short-term	Long-term
1	2	3	4	5	6	7	8	9	10	11	
1999 Q2	4.8	4.3	0.4	0.3	-0.2	-1.7	-0.1	-1.6	18.1	-2.2	20.4
Q3	5.8	-4.4	9.3	0.0	0.8	-8.4	-1.2	-7.2	18.1	-2.8	20.9
Q4	10.5	0.2	10.1	0.0	0.2	-0.1	-0.3	0.2	4.3	3.8	0.5
2000 Q1	11.4	3.2	6.8	0.0	1.4	4.0	4.0	0.1	22.1	2.2	19.9
Q2	1.9	0.3	2.8	0.3	-1.5	-0.9	1.3	-2.2	23.2	4.7	18.6
Q3	1.2	-0.7	0.4	0.2	1.3	1.2	0.5	0.6	9.3	0.4	8.9
Q4	13.0	6.5	4.6	-0.5	2.4	-5.5	3.3	-8.8	-9.9	-6.0	-3.9
<i>Euro area enlargement</i>											
2001 Q1	6.2	-2.5	4.8	0.3	3.5	2.0	1.7	0.3	29.9	-0.2	30.1
Q2	2.8	3.4	1.0	0.3	-1.9	3.0	0.5	2.5	28.7	14.6	14.1
Q3	1.5	-2.1	2.7	-0.1	1.0	0.5	0.8	-0.3	10.6	-4.9	15.5
Q4	7.6	8.8	0.6	-0.3	-1.4	5.3	3.6	1.7	27.1	-5.9	33.0
2002 Q1	3.0	-4.2	5.3	0.5	1.3	3.2	1.2	2.0	55.3	8.5	46.8
Q2	5.3	4.5	-0.1	-0.3	1.2	5.5	4.3	1.3	-6.2	-12.4	6.2
Q3	2.5	1.7	5.1	0.3	-4.6	1.1	2.5	-1.4	39.1	9.8	29.3
Q4	16.5	5.8	7.7	-0.4	3.5	3.0	1.5	1.5	33.5	1.9	31.6
2003 Q1	12.2	3.9	7.8	0.2	0.4	10.0	3.5	6.6	42.4	10.8	31.7
Q2	2.5	2.7	-3.8	-0.4	4.0	.	.	.	.	.	.

	Main financial assets <sup>1)</sup>					Main liabilities <sup>1)</sup>						
	Shares <sup>2)</sup>				Prepayments of insurance premiums and reserves for outstanding claims	Loans taken from euro area MFIs and other financial corporations		Securities other than shares	Quoted shares	Insurance technical reserves		
	Total	Quoted shares	Mutual fund shares	Money market fund shares		Total	Taken from euro area MFIs			Total	Net equity of households in life insurance reserves and pension fund reserves	Prepayments of insurance premiums and reserves for outstanding claims
1999 Q2	23.4	12.8	10.6	3.0	1.2	4.2	4.2	1.8	0.3	53.5	45.9	7.6
Q3	15.0	11.9	3.1	-2.8	1.3	2.0	1.8	0.4	0.2	56.4	48.8	7.7
Q4	50.8	11.2	39.6	-0.3	3.0	-12.8	-12.5	0.6	-0.4	75.5	66.4	9.1
2000 Q1	41.9	4.6	37.3	4.4	2.4	7.9	7.3	0.5	0.7	78.8	69.5	9.3
Q2	33.6	8.8	24.8	3.4	0.9	1.9	1.7	0.0	1.9	53.5	49.4	4.1
Q3	36.3	18.8	17.5	-3.2	1.1	-5.7	-6.2	2.7	0.2	53.8	49.5	4.3
Q4	17.0	2.6	14.4	-0.5	-1.6	-1.4	-1.2	1.0	0.1	57.3	57.8	-0.5
<i>Euro area enlargement</i>												
2001 Q1	46.4	28.9	17.6	8.2	2.4	3.8	4.3	0.1	-0.9	66.9	56.0	10.9
Q2	14.7	11.2	3.5	1.3	0.9	0.3	-0.2	0.6	-1.0	51.7	46.6	5.1
Q3	23.8	19.7	4.1	-0.7	1.9	2.0	2.0	0.2	4.0	51.2	43.0	8.2
Q4	34.6	7.9	26.8	0.0	8.6	-3.7	-2.9	0.6	0.6	67.5	51.1	16.4
2002 Q1	31.6	16.2	15.3	1.5	4.3	3.7	3.9	0.2	0.2	66.7	50.7	16.0
Q2	18.0	5.6	12.4	2.6	1.0	4.2	4.7	0.4	0.2	47.6	42.1	5.5
Q3	11.4	7.9	3.5	-1.4	1.3	-2.1	-2.6	0.1	0.0	45.4	39.2	6.2
Q4	14.5	-3.0	17.5	6.7	0.0	-11.6	-9.2	0.3	0.5	54.7	52.9	1.8
2003 Q1	20.3	6.5	13.8	0.5	1.4	14.8	11.3	0.0	0.2	65.9	58.8	7.0
Q2	.	.	.	.	.	.	2.4	.	.	.	.	.

Source: ECB.

1) Most of the financial asset and liability categories defined in the ESA 95 are covered. Financial derivatives, loans granted by general government and non-financial corporations, unquoted shares and other equity, and other receivables and payables are not included.

2) Excluding unquoted shares.

**Table 6.3****Saving, investment and financing<sup>1)</sup>***(EUR billions, unless otherwise indicated)***1. All sectors in the euro area<sup>2)</sup>**

	Net acquisition of non-financial assets					Net acquisition of financial assets							
	Total	Gross fixed capital formation	Consumption of fixed capital (-)	Changes in inventories <sup>3)</sup>	Non-produced assets	Total	Monetary gold and SDRs	Currency and deposits	Securities other than shares <sup>4)</sup>	Loans	Shares and other equity	Insurance technical reserves	Other investment (net) <sup>5)</sup>
	1	2	3	4	5	6	7	8	9	10	11	12	13
1996	340.4	1,122.4	-783.9	1.6	0.4	1,730.1	-3.0	395.3	397.7	383.7	313.2	193.6	49.7
1997	353.0	1,139.3	-797.1	10.7	0.0	1,912.7	-0.2	394.4	332.2	449.8	485.7	222.0	28.7
1998	412.4	1,203.5	-823.6	32.3	0.2	2,379.7	11.0	422.7	357.4	522.9	827.2	215.9	22.6
1999	449.4	1,292.2	-863.7	20.8	0.2	3,068.5	1.3	557.7	427.4	880.7	905.1	261.1	35.2
2000	486.7	1,388.7	-913.1	27.8	-16.6	2,800.8	1.3	349.6	267.8	809.3	1,126.4	252.9	-6.4
<i>Euro area enlargement</i>													
2001	465.3	1,442.9	-973.6	-5.9	1.9	2,575.3	-0.5	574.1	431.2	729.9	627.3	243.0	-29.7
2002	374.9	1,432.4	-1,048.4	-10.4	1.3	2,219.2	0.9	581.2	332.4	524.1	483.7	227.5	69.4

	Changes in net worth <sup>6)</sup>				Net incurrence of liabilities							
	Total	Gross saving	Consumption of fixed capital (-)	Net capital transfers receivable	Total	Currency and deposits	Securities other than shares <sup>7)</sup>	Loans	Shares and other equity	Insurance technical reserves		
	14	15	16	17	18	19	20	21	22	23		
1996	410.7	1,190.0	-783.9	4.6	1,659.8	472.4	383.4	334.9	272.9	196.3		
1997	455.7	1,241.8	-797.1	11.0	1,809.9	511.6	317.7	378.5	372.2	229.9		
1998	486.6	1,299.1	-823.6	11.1	2,305.5	648.4	322.5	481.3	631.8	221.5		
1999	498.3	1,352.0	-863.7	10.0	3,019.6	929.1	504.0	764.6	557.5	264.5		
2000	514.8	1,419.4	-913.1	8.5	2,772.7	532.3	413.8	851.3	722.3	253.0		
<i>Euro area enlargement</i>												
2001	483.5	1,449.4	-973.6	7.7	2,557.1	660.2	493.1	608.1	545.8	249.9		
2002	525.3	1,560.7	-1,048.4	12.9	2,068.8	534.4	452.8	463.9	376.8	240.9		

**2. Non-financial corporations**

	Net acquisition of non-financial assets			Net acquisition of financial assets					Changes in net worth <sup>6)</sup>		Net incurrence of liabilities			
	Total	Gross fixed capital formation	Consumption of fixed capital (-)	Total	Currency and deposits	Securities other than shares <sup>6)</sup>	Loans	Shares and other equity	Total	Gross saving	Total	Securities other than shares <sup>6)</sup>	Loans	Shares and other equity
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1996	132.2	567.3	-437.3	258.5	54.1	-13.9	55.1	87.5	120.1	514.5	270.5	7.0	143.5	112.4
1997	151.8	592.0	-451.9	239.6	25.3	-13.0	46.3	97.0	106.5	521.5	285.0	12.1	153.7	109.7
1998	195.3	635.2	-469.1	406.9	45.7	-10.0	96.3	185.5	149.2	569.2	453.0	22.7	252.8	166.9
1999	213.6	684.2	-489.0	605.8	26.9	89.1	169.1	299.1	109.0	548.0	710.4	48.6	423.3	222.0
2000	309.4	748.6	-521.5	829.5	71.8	88.7	193.0	457.7	86.2	561.3	1,052.6	59.5	559.6	425.5
<i>Euro area enlargement</i>														
2001	215.8	771.8	-554.5	623.1	103.7	40.5	143.3	242.5	85.1	581.2	753.7	102.0	325.2	315.1
2002	180.3	758.3	-574.6	364.0	19.2	16.5	46.3	263.6	120.9	631.3	423.4	21.5	202.4	185.6

**3. Households<sup>7)</sup>**

	Net acquisition of non-financial assets			Net acquisition of financial assets					Changes in net worth <sup>6)</sup>		Net incurrence of liabilities		Memo:	
	Total	Gross fixed capital formation	Consumption of fixed capital (-)	Total	Currency and deposits	Securities other than shares <sup>6)</sup>	Shares and other equity	Insurance technical reserves	Total	Gross saving	Total	Loans	Disposable income	Gross saving ratio <sup>8)</sup>
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1996	168.2	384.7	-217.5	437.9	146.2	25.1	93.0	189.0	444.7	646.9	161.3	160.1	3,789.8	17.1
1997	165.9	377.9	-213.1	425.6	70.4	-19.0	193.7	215.8	423.0	617.2	168.5	167.1	3,818.0	16.2
1998	175.9	389.8	-218.0	442.3	96.3	-118.8	288.1	210.7	406.7	594.5	211.5	210.1	3,925.3	15.1
1999	187.5	418.7	-233.6	477.5	119.2	-24.1	189.7	247.6	391.6	582.5	273.4	271.9	4,089.3	14.2
2000	195.4	440.2	-242.8	420.3	65.6	42.0	114.1	247.0	393.9	597.3	221.8	220.1	4,278.0	14.0
<i>Euro area enlargement</i>														
2001	190.2	455.8	-264.0	402.6	172.8	86.3	58.2	223.5	423.4	653.8	169.4	167.5	4,575.5	14.3
2002	147.0	466.2	-313.5	554.3	227.0	65.3	-7.0	215.5	487.8	769.5	213.4	211.3	4,807.1	16.0

Source: ECB.

1) Non-consolidated data.

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

3) Including net acquisition of valuables.

4) Excluding financial derivatives.

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

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

7) Including non-profit institutions serving households.

8) Gross saving as a percentage of disposable income.

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

**Table 7.1**

## Revenue, expenditure and deficit / surplus <sup>1)</sup>

(as a percentage of GDP)

### 1. Euro area – revenue

	Total	Current revenue	Direct taxes			Indirect taxes	Received by EU institutions	Social contributions	Employers		Sales	Capital revenue	Capital taxes	Memo: fiscal burden <sup>2)</sup>
			Households	Corporations	Employers				Employees					
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1993	48.0	47.5	12.1	9.8	2.0	13.2	0.8	17.5	8.7	5.6	2.5	0.5	0.3	43.1
1994	47.6	47.1	11.6	9.3	1.9	13.4	0.8	17.5	8.5	5.7	2.5	0.4	0.2	42.8
1995	47.2	46.6	11.6	9.2	2.0	13.3	0.9	17.3	8.4	5.6	2.5	0.5	0.3	42.6
1996	48.0	47.5	12.0	9.4	2.3	13.4	0.8	17.6	8.7	5.6	2.5	0.5	0.3	43.3
1997	48.2	47.6	12.2	9.3	2.5	13.5	0.7	17.6	8.8	5.6	2.5	0.6	0.4	43.7
1998	47.6	47.2	12.4	9.6	2.5	14.1	0.7	16.5	8.5	5.0	2.5	0.4	0.3	43.3
1999	48.2	47.7	12.8	9.8	2.6	14.3	0.6	16.4	8.5	5.0	2.5	0.5	0.3	43.8
2000	47.8	47.3	13.0	10.0	2.7	14.2	0.6	16.2	8.4	4.9	2.4	0.5	0.3	43.6
<i>Euro area enlargement</i>														
2001	47.1	46.6	12.6	9.8	2.5	13.9	0.6	16.0	8.4	4.8	2.3	0.5	0.3	42.7
2002	46.5	45.9	12.1	9.5	2.4	13.8	0.5	16.0	8.4	4.7	2.3	0.5	0.3	42.2

### 2. Euro area – expenditure

	Total	Current expenditure								Capital expenditure	Investment	Capital transfers	Paid by EU institutions	Memo: primary expenditure <sup>4)</sup>
		Total	Compensation of employees	Intermediate consumption	Interest	Current transfers	Social payments <sup>5)</sup>	Subsidies	Paid by EU institutions					
1993	53.7	49.2	11.6	5.1	5.9	26.6	23.0	2.5	0.6	4.6	3.1	1.6	0.1	47.9
1994	52.7	48.3	11.3	4.9	5.5	26.6	23.0	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	22.9	2.2	0.6	4.5	2.7	1.8	0.1	46.5
1996	52.3	48.3	11.2	4.8	5.7	26.6	23.3	2.2	0.6	4.0	2.6	1.4	0.0	46.6
1997	50.9	47.2	11.0	4.7	5.1	26.3	23.2	2.1	0.6	3.7	2.4	1.3	0.1	45.7
1998	49.9	46.0	10.7	4.6	4.7	26.0	22.7	2.0	0.5	3.9	2.4	1.5	0.1	45.2
1999	49.4	45.4	10.7	4.7	4.2	25.8	22.6	2.0	0.5	4.0	2.5	1.5	0.1	45.2
2000	48.7	44.7	10.5	4.7	4.0	25.5	22.3	1.9	0.5	4.0	2.5	1.4	0.0	44.7
<i>Euro area enlargement</i>														
2001	48.7	44.6	10.5	4.7	4.0	25.4	22.3	1.9	0.5	4.2	2.5	1.6	0.0	44.8
2002	48.7	44.8	10.6	4.8	3.7	25.7	22.8	1.8	0.5	3.9	2.4	1.5	0.0	45.1

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

	Deficit (-) / surplus (+)					Primary deficit (-) / surplus (+)	Government consumption <sup>6)</sup>							
	Total	Central government	State government	Local government	Social security funds		Total	Compensation of employees	Intermediate consumption	Transfers in kind via market producers	Consumption of fixed capital	Sales (minus)	Government collective consumption	Government individual consumption
1993	-5.7	-5.0	-0.4	-0.2	-0.1	0.2	21.2	11.6	5.1	5.0	2.0	-2.5	9.0	12.2
1994	-5.1	-4.4	-0.5	-0.2	0.0	0.4	20.8	11.3	4.9	5.1	1.9	-2.5	8.7	12.1
1995	-5.1	-4.2	-0.5	-0.1	-0.3	0.6	20.5	11.2	4.8	5.1	1.9	-2.5	8.6	11.9
1996	-4.3	-3.6	-0.4	0.0	-0.2	1.4	20.6	11.2	4.8	5.2	1.9	-2.5	8.6	12.0
1997	-2.6	-2.3	-0.4	0.1	0.0	2.5	20.4	11.0	4.7	5.1	1.9	-2.5	8.4	11.9
1998	-2.3	-2.2	-0.2	0.1	0.0	2.4	20.0	10.7	4.6	5.1	1.8	-2.5	8.2	11.8
1999	-1.3	-1.6	-0.1	0.1	0.4	2.9	20.0	10.7	4.7	5.1	1.8	-2.5	8.2	11.8
2000	-0.9	-1.3	-0.1	0.1	0.4	3.1	20.0	10.5	4.7	5.2	1.8	-2.4	8.1	11.9
<i>Euro area enlargement</i>														
2001	-1.7	-1.5	-0.4	0.0	0.3	2.3	20.0	10.5	4.7	5.2	1.8	-2.3	8.1	11.9
2002	-2.3	-1.9	-0.5	-0.1	0.2	1.4	20.3	10.6	4.8	5.3	1.8	-2.3	8.2	12.2

### 4. Euro area countries – deficit (-) / surplus (+) <sup>6)</sup>

	BE <sup>1)</sup>	DE <sup>2)</sup>	GR <sup>3)</sup>	ES <sup>4)</sup>	FR <sup>5)</sup>	IE <sup>6)</sup>	IT <sup>7)</sup>	LU <sup>8)</sup>	NL <sup>9)</sup>	AT <sup>10)</sup>	PT <sup>11)</sup>	FI <sup>12)</sup>
1999	-0.4	-1.5	-1.8	-1.2	-1.8	2.4	-1.7	3.5	0.7	-2.3	-2.8	2.2
2000	0.2	1.3	-1.9	-0.8	-1.4	4.4	-0.6	6.4	2.2	-1.5	-2.8	7.1
2001	0.6	-2.8	-1.5	-0.3	-1.5	0.9	-2.6	6.1	0.0	0.3	-4.2	5.2
2002	0.1	-3.5	-1.2	0.1	-3.1	-0.2	-2.3	2.5	-1.6	-0.2	-2.7	4.2

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

1) Revenue, expenditure and deficit / surplus based on the ESA 95, but the figures exclude proceeds from the sale of UMTS (Universal Mobile Telecommunications Systems) licences in 2000 (the euro area deficit / surplus including those proceeds is equal to 0.2). Transactions between countries and EU institutions are included and consolidated. Transactions among governments are not consolidated.

2) The fiscal burden comprises taxes and social contributions.

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

4) Comprises total expenditure minus interest expenditure.

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

6) Including proceeds from the sale of UMTS licences.

**Table 7.2****Debt<sup>1)</sup>***(as a percentage of GDP)***1. Euro area – government debt by financial instrument and sector of the holder**

	Total	Financial instrument				Holder				
		Coins and deposits	Loans	Short-term securities	Long-term securities	Domestic creditors <sup>2)</sup>				Other creditors <sup>3)</sup>
						Total	MFI	Other financial corporations	Other sectors	
1	2	3	4	5	6	7	8	9	10	
1993	67.3	2.7	17.0	10.0	37.6	52.5	27.6	8.8	16.1	14.8
1994	70.0	2.9	16.1	10.3	40.6	55.8	29.8	10.0	15.9	14.2
1995	74.2	2.9	17.7	9.9	43.8	58.3	30.5	11.0	16.8	15.9
1996	75.4	2.9	17.2	9.9	45.5	58.9	30.3	13.2	15.4	16.5
1997	74.9	2.8	16.3	8.9	46.8	56.9	29.1	14.5	13.3	17.9
1998	73.2	2.8	15.1	7.9	47.3	53.4	27.0	16.3	10.1	19.8
1999	72.1	2.9	14.2	6.9	48.1	49.8	25.2	14.9	9.7	22.3
2000	69.6	2.7	13.0	6.2	47.6	46.0	22.8	13.3	9.8	23.6
<i>Euro area enlargement</i>										
2001	69.2	2.6	12.5	6.3	47.8	44.7	22.5	12.5	9.6	24.5
2002	69.0	2.5	11.8	6.7	48.0	43.1	21.4	12.1	9.5	25.9

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

	Total	Issued by <sup>4)</sup>				Original maturity			Residual maturity			Currency		
		Central government	State government	Local government	Social security funds	Up to 1 year	Over 1 year	Variable interest rate	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Euro or participating currency <sup>5)</sup>	Non-domestic currency	Other currencies
1993	67.3	55.2	5.2	6.3	0.6	11.9	55.4	6.6	18.4	24.4	24.4	65.6	2.9	1.7
1994	70.0	57.9	5.4	6.1	0.5	11.2	58.8	7.4	16.5	26.8	26.7	68.1	3.0	1.9
1995	74.2	61.7	5.7	6.0	0.8	10.6	63.6	6.8	17.6	26.4	30.2	72.5	2.9	1.7
1996	75.4	62.9	6.1	5.9	0.5	10.2	65.2	6.3	19.2	25.4	30.8	73.7	2.7	1.8
1997	74.9	62.3	6.3	5.6	0.6	8.8	66.0	6.0	18.6	25.4	30.8	73.0	2.8	1.9
1998	73.2	61.1	6.3	5.4	0.4	7.7	65.4	5.5	16.4	26.1	30.7	71.6	3.2	1.5
1999	72.1	60.2	6.2	5.3	0.3	6.5	65.6	5.0	14.4	26.9	30.7	70.3	-	1.7
2000	69.6	58.1	6.1	5.1	0.3	5.7	63.8	4.4	14.3	27.6	27.7	67.8	-	1.7
<i>Euro area enlargement</i>														
2001	69.2	57.8	6.2	4.9	0.3	6.0	63.2	3.2	14.6	26.3	28.3	67.6	-	1.6
2002	69.0	57.5	6.4	4.9	0.3	6.2	62.8	3.3	15.4	25.1	28.5	67.6	-	1.4

**3. Euro area countries – government debt**

	BE	DE	GR	ES	FR	IE	IT	LU	NL	AT	PT	FI
	1	2	3	4	5	6	7	8	9	10	11	12
1999	114.9	61.2	105.2	63.1	58.5	48.6	114.9	5.9	63.1	67.5	54.3	47.0
2000	109.6	60.2	106.2	60.5	57.2	38.4	110.6	5.5	55.9	66.8	53.3	44.6
2001	108.5	59.5	106.9	56.8	56.8	36.1	109.5	5.5	52.9	67.3	55.5	44.0
2002	105.8	60.8	104.7	53.8	59.0	32.4	106.7	5.7	52.4	67.3	58.1	42.7

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

1) Data are partially estimated. General government gross consolidated debt at nominal value at the end of the year.

Holdings by other governments are not consolidated.

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

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

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

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

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

	Total	Source of change				Financial instrument				Holder			
		Borrowing requirement <sup>2)</sup>	Valuation effects <sup>3)</sup>	Other changes in volume <sup>4)</sup>	Aggregation effect <sup>5)</sup>	Coins and deposits	Loans	Short-term securities	Long-term securities	Domestic creditors <sup>6)</sup>	MFIs	Other financial corporations	Other creditors <sup>7)</sup>
	1	2	3	4	5	6	7	8	9	10	11	12	13
1993	8.0	7.5	0.4	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	2.3	-0.2	0.2	2.3	0.0	5.2	5.3	2.2	1.5	2.4
1996	3.8	4.2	-0.2	0.1	-0.3	0.1	0.1	0.4	3.2	2.6	0.8	2.6	1.2
1997	2.3	2.4	0.2	-0.2	0.0	0.0	-0.2	-0.6	3.1	0.2	-0.1	1.8	2.0
1998	1.7	1.9	-0.2	0.0	0.0	0.1	-0.4	-0.6	2.6	-1.0	-0.8	2.4	2.6
1999	1.7	1.4	0.3	0.1	0.0	0.2	-0.4	-0.7	2.6	-1.5	-0.7	-0.7	3.2
2000	0.9	0.8	0.1	-0.1	0.0	0.0	-0.5	-0.3	1.7	-1.5	-1.3	-0.9	2.4
<i>Euro area enlargement</i>													
2001	1.7	1.7	0.0	0.0	0.0	0.0	-0.2	0.4	1.4	0.2	0.1	0.0	1.4
2002	2.0	2.5	-0.5	0.0	0.0	0.0	-0.4	0.6	1.7	-0.2	-0.3	0.0	2.2

**2. Euro area – deficit-debt adjustment**

	Change in debt	Deficit (-) / surplus (+) <sup>3)</sup>	Deficit-debt adjustment <sup>9)</sup>											Other <sup>11)</sup>
			Total	Transactions in main financial assets held by general government							Valuation effects	Exchange rate effects	Other changes in volume	
				Total	Currency and deposits	Securities <sup>10)</sup>	Loans	Shares and other equity	Privatisations	Equity injections				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1993	8.0	-5.7	2.3	1.5	1.3	0.2	0.3	-0.2	-0.3	0.1	0.4	0.3	0.1	0.3
1994	6.0	-5.1	0.9	0.0	-0.2	0.1	0.3	-0.1	-0.4	0.2	0.2	0.0	0.7	0.1
1995	7.8	-5.1	2.7	0.6	0.1	-0.1	0.5	0.1	-0.4	0.2	0.2	-0.1	2.3	-0.3
1996	3.8	-4.3	-0.5	-0.2	-0.1	0.0	-0.1	-0.1	-0.3	0.2	-0.2	-0.1	0.1	-0.2
1997	2.3	-2.6	-0.3	-0.5	0.2	-0.1	0.0	-0.5	-0.8	0.3	0.2	0.2	-0.2	0.2
1998	1.7	-2.3	-0.6	-0.5	0.1	0.0	-0.1	-0.6	-0.8	0.3	-0.2	0.0	0.0	0.1
1999	1.7	-1.3	0.4	-0.1	0.5	0.1	0.0	-0.7	-0.9	0.1	0.3	0.2	0.1	0.1
2000	0.9	0.2	1.1	0.9	0.7	0.1	0.2	-0.2	-0.4	0.1	0.1	0.0	-0.1	0.1
<i>Euro area enlargement</i>														
2001	1.7	-1.6	0.1	-0.4	-0.6	0.1	0.2	-0.1	-0.4	0.2	0.0	0.0	0.0	0.5
2002	2.0	-2.3	-0.2	0.3	0.2	0.1	0.1	0.0	-0.3	0.1	-0.5	-0.1	0.0	0.0

Source: ECB.

- 1) Data are partially estimated. Annual change in gross nominal consolidated debt expressed as a percentage of GDP [ $debt(t) - debt(t-1) \div GDP(t)$ ].
- 2) The borrowing requirement is by definition equal to transactions in government debt.
- 3) Includes, in addition to the impact of foreign exchange movements, effects arising from measurement at nominal value (e.g. premia or discounts on securities issued).
- 4) Comprises, in particular, the impact of the reclassification of units and certain types of debt assumption.
- 5) The difference between the changes in the aggregated debt, resulting from the aggregation of countries' debt, and the aggregation of countries' change in debt, due to variations in the exchange rates used for aggregation before 1999.
- 6) Holders resident in the country whose government has issued the debt.
- 7) Includes residents of euro area countries other than the country whose government has issued the debt.
- 8) Including proceeds from sales of UMTS licences.
- 9) The difference between the annual change in gross nominal consolidated debt and the deficit as a percentage of GDP.
- 10) Excluding financial derivatives.
- 11) Comprises mainly transactions in other assets and liabilities (trade credit, other receivables/payables and financial derivatives).

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

**Table 8.1**

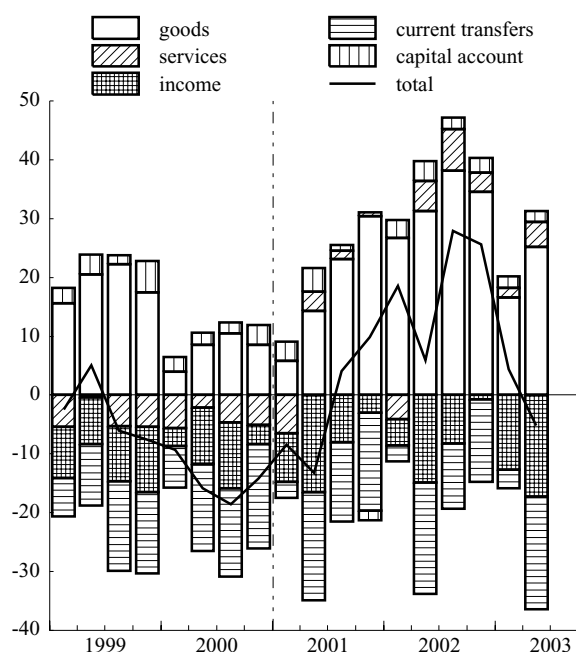
### Summary balance of payments<sup>1) 2)</sup>

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

	Current account					Capital account	Financial account						Errors and omissions
	Total	Goods	Services	Income	Current transfers		Total	Direct investment	Portfolio investment	Financial derivatives	Other investment	Reserve assets	
	1	2	3	4	5	6	7	8	9	10	11	12	13
1997	56.7	116.4	-2.3	-15.2	-42.2	13.0	.	-44.4	-24.1	.	.	.	.
1998	26.7	109.0	-6.3	-28.8	-47.2	12.4	-67.0	-81.3	-109.9	-8.2	124.2	8.2	27.9
1999	-23.8	75.7	-16.5	-37.0	-46.1	12.8	13.5	-119.5	-41.4	3.3	161.0	10.1	-2.5
2000	-67.6	31.6	-17.5	-27.1	-54.6	9.8	68.4	-14.9	-111.6	-3.4	180.8	17.6	-10.7
<i>Euro area enlargement</i>													
2001	-14.5	73.6	-1.1	-35.7	-51.3	6.7	-24.4	-102.4	68.1	-1.5	-6.4	17.8	32.2
2002	67.0	130.6	11.3	-28.2	-46.7	10.9	-97.2	-41.5	103.4	-10.2	-146.6	-2.3	19.3
2002 Q2	2.6	31.3	5.1	-14.9	-18.9	3.4	-3.3	-6.8	81.0	-3.1	-81.2	6.7	-2.6
Q3	25.8	38.1	7.0	-8.2	-11.2	2.0	-53.6	-10.8	19.9	-9.0	-49.1	-4.6	25.8
Q4	23.1	34.5	3.4	-0.7	-14.0	2.4	-48.5	-6.0	42.0	-2.9	-80.3	-1.3	22.9
2003 Q1	2.4	16.6	1.6	-12.7	-3.1	2.0	-25.1	-0.9	7.0	-2.5	-40.7	11.9	20.7
Q2	-7.0	25.1	4.3	-17.2	-19.2	1.8	-41.3	5.4	42.2	-2.8	-88.1	2.0	46.5
2002 June	7.5	13.9	2.8	-2.1	-7.2	1.1	-38.8	-18.3	20.7	-2.3	-35.4	-3.5	30.2
July	8.2	16.0	2.9	-7.5	-3.3	0.4	-16.9	-6.0	8.7	-8.3	-8.7	-2.6	8.3
Aug.	9.3	11.3	0.5	0.6	-3.1	0.6	-30.4	1.5	-9.6	-1.7	-22.4	1.8	20.5
Sep.	8.4	10.8	3.7	-1.3	-4.8	1.0	-6.3	-6.3	20.7	1.0	-18.0	-3.8	-3.0
Oct.	4.6	12.5	0.5	-2.1	-6.3	1.4	-13.9	-6.9	27.6	0.5	-37.2	2.1	7.9
Nov.	10.6	12.4	1.6	0.4	-3.9	0.3	-18.9	7.3	15.1	-0.8	-38.1	-2.4	8.0
Dec.	7.9	9.6	1.2	1.0	-3.8	0.8	-15.7	-6.4	-0.7	-2.5	-5.0	-1.1	7.0
2003 Jan.	-5.2	1.5	-0.5	-9.4	3.2	2.1	-12.2	-2.2	-0.6	-1.5	-9.4	1.5	15.3
Feb.	3.4	8.7	0.4	-2.6	-3.2	-0.9	-19.6	2.9	-6.6	-0.1	-21.2	5.3	17.2
Mar.	4.3	6.5	1.7	-0.8	-3.1	0.8	6.7	-1.5	14.2	-0.9	-10.1	5.0	-11.8
Apr.	-10.0	6.9	0.4	-10.9	-6.5	0.1	16.1	-18.4	25.1	-4.7	13.3	0.8	-6.2
May	-0.1	7.6	1.3	-3.6	-5.5	0.2	-33.4	0.7	1.1	1.4	-37.0	0.4	33.3
June	3.1	10.5	2.5	-2.8	-7.2	1.5	-24.0	23.1	16.0	0.5	-64.4	0.9	19.4
July	2.0	15.3	2.8	-10.1	-6.1	0.8	-6.1	-3.2	-35.6	-2.7	33.8	1.6	3.4
Aug.	5.0	10.6	1.0	-1.0	-5.7	1.7	3.3	-1.7	-37.9	-2.3	44.8	0.3	-10.0

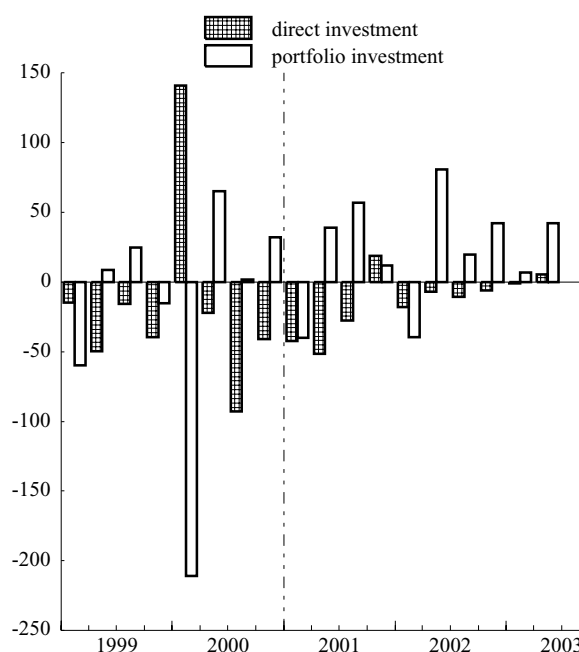
### Current and capital accounts

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



### Direct and portfolio investment

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



Source: ECB.

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

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



Table 8.2

## Balance of payments: current and capital accounts

(EUR billions (ECU billions to end-1998))

## 1. Main items

	Current account											Capital account	
	Total			Goods		Services		Income		Current transfers		Credit 12	Debit 13
	Credit 1	Debit 2	Net 3	Credit 4	Debit 5	Credit 6	Debit 7	Credit 8	Debit 9	Credit 10	Debit 11		
1997	1,218.5	1,161.8	56.7	754.6	638.3	214.3	216.5	189.5	204.7	60.0	102.3	18.9	5.9
1998	1,277.3	1,250.6	26.7	784.4	675.4	231.6	237.9	198.5	227.3	62.9	110.1	17.7	5.3
1999	1,337.0	1,360.8	-23.8	818.3	742.5	246.7	263.2	207.3	244.2	64.8	110.9	19.1	6.3
2000	1,612.1	1,679.7	-67.6	989.8	958.3	287.5	304.9	268.1	295.2	66.7	121.3	18.3	8.5
<i>Euro area enlargement</i>													
2001	1,714.4	1,728.9	-14.5	1,033.8	960.3	324.5	325.6	277.3	313.0	78.8	130.0	17.4	10.7
2002	1,728.8	1,661.8	67.0	1,059.6	929.0	332.2	320.8	251.3	279.6	85.7	132.4	18.9	8.0
2002 Q2	432.6	430.0	2.6	267.6	236.3	83.9	78.9	65.6	80.4	15.5	34.4	5.0	1.6
Q3	431.9	406.1	25.8	263.3	225.2	91.3	84.2	58.5	66.7	18.8	29.9	4.1	2.0
Q4	443.3	420.1	23.1	273.6	239.2	84.4	81.0	64.9	65.6	20.4	34.4	5.2	2.7
2003 Q1	414.3	411.8	2.4	252.6	236.0	75.7	74.1	53.4	66.1	32.6	35.7	5.3	3.4
Q2	408.3	415.3	-7.0	253.5	228.3	78.2	73.9	61.4	78.6	15.2	34.4	4.4	2.6
2002 June	145.9	138.4	7.5	89.9	76.0	28.6	25.7	22.6	24.6	4.8	12.0	1.6	0.6
July	154.0	145.8	8.2	94.1	78.1	32.5	29.6	21.0	28.4	6.4	9.7	1.1	0.7
Aug.	135.6	126.3	9.3	81.1	69.8	29.1	28.6	19.3	18.7	6.1	9.2	1.3	0.7
Sep.	142.3	133.9	8.4	88.1	77.3	29.6	25.9	18.3	19.6	6.2	11.0	1.6	0.6
Oct.	151.9	147.3	4.6	97.6	85.1	28.8	28.3	20.3	22.4	5.2	11.5	2.0	0.6
Nov.	146.2	135.6	10.6	92.1	79.7	26.6	25.0	20.4	20.0	7.1	11.0	1.1	0.8
Dec.	145.1	137.2	7.9	83.9	74.3	29.0	27.8	24.1	23.2	8.1	11.9	2.1	1.3
2003 Jan.	144.0	149.2	-5.2	82.2	80.7	25.6	26.1	18.4	27.7	17.8	14.6	2.6	0.5
Feb.	131.4	128.0	3.4	83.1	74.4	23.6	23.2	16.9	19.5	7.8	10.9	1.5	2.5
Mar.	138.9	134.6	4.3	87.3	80.9	26.4	24.7	18.1	18.9	7.0	10.1	1.2	0.4
Apr.	136.5	146.5	-10.0	85.3	78.4	25.4	24.9	21.0	31.9	4.8	11.3	0.5	0.4
May	134.4	134.6	-0.1	83.7	76.1	25.6	24.3	19.9	23.5	5.1	10.6	1.4	1.2
June	137.4	134.2	3.1	84.4	73.9	27.2	24.7	20.5	23.3	5.2	12.5	2.6	1.0
July	147.9	145.9	2.0	91.7	76.4	30.7	27.9	19.6	29.6	5.9	12.0	1.3	0.5
Aug.	126.7	121.7	5.0	77.1	66.5	26.8	25.8	17.4	18.4	5.4	11.1	2.1	0.4

## 2. Main current account items (seasonally adjusted)

	Current account										
	Total			Goods		Services		Income		Current transfers	
	Credit 1	Debit 2	Net 3	Credit 4	Debit 5	Credit 6	Debit 7	Credit 8	Debit 9	Credit 10	Debit 11
2001 Q2	432.0	443.1	-11.0	261.3	246.0	82.1	81.7	68.7	80.5	20.0	35.0
Q3	426.9	426.7	0.2	257.6	239.1	81.9	81.8	68.3	75.0	19.1	30.7
Q4	424.4	418.4	6.0	254.1	228.6	82.1	81.3	68.7	75.2	19.5	33.2
2002 Q1	429.6	412.7	16.9	263.5	228.9	81.4	81.3	64.9	70.2	19.8	32.3
Q2	431.5	421.3	10.1	266.5	233.4	82.7	80.7	62.4	72.6	19.9	34.7
Q3	435.3	413.0	22.3	266.3	232.3	84.8	79.4	61.4	69.4	22.8	31.9
Q4	432.0	414.5	17.5	262.9	233.8	82.9	79.3	62.9	67.3	23.2	34.1
2003 Q1	418.8	414.5	4.4	258.2	233.3	83.6	77.9	55.7	69.6	21.2	33.7
Q2	411.8	409.3	2.5	255.1	228.2	78.2	76.1	58.8	70.6	19.8	34.4
2002 June	145.5	140.5	5.1	90.1	79.1	27.9	26.8	21.1	23.0	6.5	11.6
July	144.1	137.3	6.8	88.0	77.0	27.8	26.7	20.8	23.5	7.5	10.1
Aug.	146.4	138.5	7.9	88.9	77.8	27.8	27.0	21.8	23.3	7.8	10.4
Sep.	144.8	137.2	7.6	89.5	77.5	29.2	25.6	18.8	22.6	7.4	11.4
Oct.	142.9	140.3	2.6	87.7	78.4	27.6	26.7	20.5	23.5	7.1	11.7
Nov.	148.4	139.1	9.4	89.1	77.9	28.2	26.2	22.7	23.6	8.4	11.4
Dec.	140.7	135.1	5.6	86.1	77.4	27.2	26.4	19.7	20.3	7.6	11.0
2003 Jan.	143.0	140.9	2.2	88.1	78.4	28.7	26.4	19.0	24.6	7.3	11.4
Feb.	139.6	137.9	1.7	87.0	77.3	27.5	25.9	18.4	23.4	6.8	11.3
Mar.	136.2	135.8	0.4	83.2	77.7	27.5	25.6	18.3	21.6	7.2	10.9
Apr.	140.8	141.3	-0.6	87.4	77.3	26.4	25.6	20.8	27.2	6.2	11.3
May	137.1	134.5	2.7	85.5	76.5	25.8	25.4	19.4	21.3	6.5	11.3
June	133.9	133.5	0.4	82.2	74.4	26.0	25.1	18.6	22.1	7.1	11.8
July	138.4	137.1	1.3	86.0	75.4	26.3	25.2	19.3	24.0	6.8	12.5
Aug.	139.7	136.9	2.8	86.6	76.4	26.0	24.9	20.2	23.0	6.8	12.6

Source: ECB.

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

	Total		Compensation of employees		Investment income							
	Credit 1	Debit 2	Credit 3	Debit 4	Total		Direct investment		Portfolio investment		Other investment	
					Credit 5	Debit 6	Credit 7	Debit 8	Credit 9	Debit 10	Credit 11	Debit 12
1999	207.3	244.2	12.6	4.9	194.7	239.3	42.7	51.2	64.2	102.2	87.8	85.8
2000	268.1	295.2	13.2	5.3	254.9	289.9	60.4	65.1	76.7	107.4	117.9	117.5
<i>Euro area enlargement</i>												
2001	277.3	313.0	14.7	5.9	262.6	307.1	60.6	59.0	85.0	116.8	117.0	131.2
2002	251.3	279.6	14.7	6.0	236.7	273.6	67.0	57.1	86.4	123.9	83.3	92.6
2002 Q2	65.6	80.4	3.5	1.5	62.0	78.9	19.4	16.7	23.0	39.7	19.6	22.5
Q3	58.5	66.7	3.7	1.6	54.9	65.1	13.4	12.5	21.0	30.6	20.4	22.0
Q4	64.9	65.6	3.9	1.6	61.0	64.0	19.5	15.2	21.1	26.2	20.4	22.6
2003 Q1	53.4	66.1	3.6	1.2	49.8	64.9	10.1	13.0	19.0	31.8	20.7	20.1
Q2	61.4	78.6	3.6	1.4	57.8	77.2	17.1	19.3	22.0	36.8	18.7	21.2

	Income on direct investment				Income on portfolio investment			
	Equity		Debt		Equity		Debt	
	Credit 13	Debit 14	Credit 15	Debit 16	Credit 17	Debit 18	Credit 19	Debit 20
1999	36.2	46.7	6.5	4.6	9.5	34.0	54.7	68.3
2000	49.5	57.4	10.9	7.7	14.3	30.6	62.4	76.8
<i>Euro area enlargement</i>								
2001	50.4	49.8	10.2	9.2	17.9	44.7	67.0	72.1
2002	59.1	51.2	7.9	5.9	20.4	52.7	65.9	71.2
2002 Q2	17.7	15.4	1.8	1.3	6.6	24.3	16.4	15.4
Q3	12.0	11.1	1.4	1.4	4.5	10.6	16.5	20.0
Q4	17.1	13.3	2.4	1.9	4.5	9.1	16.6	17.1
2003 Q1	8.4	11.1	1.7	1.9	3.7	8.4	15.4	23.4
Q2	14.3	17.0	2.8	2.3	6.9	20.7	15.1	16.1

Source: ECB.

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

	By resident units abroad							By non-resident units in the euro area						
	Total	Equity capital and reinvested earnings			Other capital (mostly inter-company loans)			Total	Equity capital and reinvested earnings			Other capital (mostly inter-company loans)		
		Total	MFIs <sup>2)</sup>	Non-MFIs	Total	MFIs <sup>2)</sup>	Non-MFIs		Total	MFIs <sup>2)</sup>	Non-MFIs	Total	MFIs <sup>2)</sup>	Non-MFIs
1	2	3	4	5	6	7	8	9	10	11	12	13	14	
1997	-93.2	.	.	.	.	.	48.7	.	.	.	.	.	.	
1998	-172.7	.	.	.	.	.	91.4	.	.	.	.	.	.	
1999	-320.9	-239.5	-25.0	-214.6	-81.3	-0.6	-80.7	201.3	145.7	3.5	142.2	55.6	0.2	55.4
2000	-442.3	-350.7	-35.5	-315.2	-91.5	0.3	-91.8	427.3	301.6	12.4	289.2	125.8	0.1	125.7
<i>Euro area enlargement</i>														
2001	-305.0	-234.7	-19.9	-214.8	-70.3	-0.1	-70.2	202.6	148.8	4.4	144.4	53.8	0.9	52.9
2002	-183.5	-156.7	-17.3	-139.3	-26.8	0.0	-26.8	142.0	95.7	3.1	92.6	46.3	0.5	45.8
2002 Q2	-45.3	-35.2	-2.7	-32.5	-10.0	0.0	-10.0	38.5	21.1	1.4	19.6	17.5	0.0	17.4
Q3	-32.6	-39.8	-5.1	-34.7	7.2	0.0	7.2	21.8	12.3	0.7	11.5	9.5	0.6	9.0
Q4	-41.2	-34.2	-5.7	-28.6	-6.9	0.0	-6.9	35.1	34.2	0.7	33.5	0.9	0.0	1.0
2003 Q1	-36.5	-19.3	-1.9	-17.4	-17.2	-0.1	-17.1	35.6	25.6	0.8	24.8	10.0	-0.1	10.1
Q2	-30.1	-21.2	5.4	-26.6	-8.9	-0.3	-8.5	35.4	29.4	1.9	27.6	6.0	0.0	6.0
2002 June	-21.2	-16.4	-0.9	-15.5	-4.7	0.0	-4.7	2.8	6.0	0.3	5.7	-3.1	0.1	-3.2
July	-12.7	-14.8	-3.3	-11.6	2.1	0.0	2.1	6.7	2.9	0.2	2.7	3.8	-0.1	3.9
Aug.	-2.1	-9.1	-0.2	-8.8	6.9	0.0	6.9	3.6	3.0	0.3	2.7	0.7	0.7	-0.1
Sep.	-17.8	-15.9	-1.5	-14.4	-1.9	0.0	-1.9	11.4	6.4	0.3	6.1	5.0	-0.1	5.1
Oct.	-14.5	-8.0	-0.9	-7.1	-6.6	0.0	-6.6	7.6	6.7	0.2	6.5	0.9	-0.1	0.9
Nov.	-15.4	-7.9	-1.2	-6.7	-7.4	0.0	-7.4	22.7	15.9	0.0	15.9	6.8	0.0	6.8
Dec.	-11.3	-18.4	-3.6	-14.7	7.1	0.0	7.1	4.8	11.6	0.4	11.1	-6.7	0.0	-6.7
2003 Jan.	-14.7	-8.5	-0.7	-7.8	-6.2	0.0	-6.2	12.5	10.9	0.2	10.6	1.7	0.0	1.7
Feb.	-7.1	-5.3	-0.4	-4.9	-1.8	0.0	-1.8	10.0	6.2	0.8	5.4	3.7	-0.1	3.8
Mar.	-14.7	-5.4	-0.7	-4.7	-9.3	-0.1	-9.2	13.1	8.5	-0.2	8.7	4.6	0.0	4.7
Apr.	-24.4	-7.9	-1.3	-6.6	-16.5	-0.3	-16.2	6.0	7.5	0.2	7.3	-1.5	0.0	-1.5
May	-15.6	-16.2	-0.7	-15.5	0.6	0.0	0.6	16.3	15.2	0.2	15.0	1.0	-0.1	1.1
June	9.9	2.8	7.3	-4.5	7.1	0.0	7.1	13.2	6.7	1.5	5.2	6.5	0.1	6.4
July	-7.6	-6.2	-0.9	-5.3	-1.4	0.0	-1.4	4.4	3.9	0.1	3.8	0.5	-0.7	1.2
Aug.	-5.8	-9.8	-0.5	-9.4	4.0	0.0	4.0	4.1	0.2	0.1	0.2	3.9	0.1	3.8

Source: ECB.

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

2) Excluding the Eurosystem.

**Table 8.5**
**Balance of payments: portfolio investment account <sup>1)</sup>**
*(EUR billions (ECU billions to end-1998); net flows)*
**1. By instrument**

	Total		Equity		Debt instruments					
	Assets	Liabilities	Assets	Liabilities	Assets			Liabilities		
					Total	Bonds and notes	Money market instruments	Total	Bonds and notes	Money market instruments
1	2	3	4	5	6	7	8	9	10	
1998	-363.3	253.3	-116.2	104.0	-247.1	-238.9	-8.2	149.4	121.3	28.1
1999	-311.3	269.8	-156.5	93.0	-154.8	-154.9	0.1	176.8	117.0	59.9
2000	-410.7	299.1	-285.9	49.9	-124.7	-114.3	-10.5	249.2	239.2	10.0
<i>Euro area enlargement</i>										
2001	-288.2	356.3	-104.8	233.2	-183.5	-155.8	-27.6	123.1	114.0	9.1
2002	-173.9	277.3	-40.2	90.8	-133.7	-88.9	-44.8	186.6	127.7	58.9
2002 Q2	-48.9	129.9	-12.2	36.0	-36.7	-29.2	-7.5	93.9	66.1	27.7
Q3	-21.6	41.5	12.7	6.4	-34.3	-19.1	-15.2	35.1	8.1	27.0
Q4	-32.8	74.8	-8.4	13.5	-24.4	-20.0	-4.4	61.3	46.7	14.7
2003 Q1	-47.3	54.3	10.8	3.7	-58.0	-49.9	-8.1	50.6	47.9	2.7
Q2	-96.3	138.5	-32.3	30.5	-64.0	-53.9	-10.1	108.0	97.5	10.5
2002 June	-9.6	30.3	-5.9	2.5	-3.7	-2.1	-1.6	27.8	21.8	6.1
July	-16.2	24.9	-6.4	5.2	-9.8	-1.9	-7.8	19.7	10.5	9.2
Aug.	-5.9	-3.7	5.4	-0.4	-11.3	-11.4	0.2	-3.3	-10.8	7.5
Sep.	0.4	20.3	13.7	1.6	-13.3	-5.7	-7.5	18.7	8.4	10.3
Oct.	-3.0	30.6	-0.7	-0.6	-2.3	-5.7	3.4	31.2	19.6	11.6
Nov.	-7.6	22.7	0.2	15.3	-7.8	-4.4	-3.4	7.4	5.5	1.9
Dec.	-22.3	21.5	-8.0	-1.2	-14.3	-9.9	-4.4	22.7	21.6	1.2
2003 Jan.	-18.7	18.1	2.3	13.5	-21.0	-15.1	-6.0	4.6	5.5	-0.9
Feb.	-21.5	14.9	0.8	2.1	-22.2	-20.3	-2.0	12.8	4.3	8.5
Mar.	-7.1	21.3	7.7	-11.8	-14.8	-14.6	-0.2	33.1	38.1	-4.9
Apr.	-17.0	42.1	-7.1	16.0	-9.9	-14.7	4.7	26.1	10.1	15.9
May	-35.7	36.8	-10.4	-7.4	-25.2	-17.6	-7.6	44.2	42.4	1.8
June	-43.6	59.6	-14.8	21.8	-28.8	-21.6	-7.2	37.8	44.9	-7.2
July	-29.5	-6.1	-8.1	13.1	-21.4	-27.2	5.8	-19.2	-17.4	-1.8
Aug.	-12.0	-25.9	-0.3	-6.0	-11.7	-12.4	0.7	-19.8	-7.0	-12.8

**2. Assets by instrument and sector of holder**

	Equity					Debt instruments										
	Euro-system	MFIs <sup>2)</sup>	Non-MFIs			Euro-system	MFIs <sup>2)</sup>	Bonds and notes			Money market instruments					
			Total	General government	Other sectors			Euro-system	MFIs <sup>2)</sup>	Non-MFIs			Euro-system	MFIs <sup>2)</sup>	Non-MFIs	
										Total	General government	Other sectors			Total	General government
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15		
1999	0.1	-1.5	-155.1	-2.1	-153.0	0.1	-15.4	-139.6	-1.7	-137.9	0.9	-8.1	7.3	-0.1	7.5	
2000	-0.1	-4.3	-281.6	-2.6	-278.9	-1.9	-46.3	-66.1	-1.5	-64.6	2.2	-15.5	2.9	-1.0	3.9	
<i>Euro area enlargement</i>																
2001	-0.4	4.0	-108.4	-2.1	-106.4	0.2	-67.1	-89.0	-1.2	-87.8	-2.4	-40.7	15.4	-0.1	15.5	
2002	-0.4	-7.8	-32.0	-4.4	-27.6	-0.6	-14.6	-73.8	-1.0	-72.7	2.1	-33.0	-13.9	-1.0	-12.9	
2002 Q2	-0.1	-3.7	-8.4	-1.2	-7.2	-0.3	-3.1	-25.7	0.2	-26.0	0.0	-1.9	-5.5	-0.1	-5.4	
Q3	-0.1	3.2	9.5	-0.6	10.1	-0.5	-4.1	-14.6	-0.3	-14.2	0.9	-13.3	-2.7	0.2	-2.9	
Q4	-0.2	-2.7	-5.6	-1.2	-4.4	0.0	-1.9	-18.1	-0.4	-17.7	0.4	-4.8	0.0	0.1	-0.2	
2003 Q1	-0.1	-3.7	14.6	-0.6	15.2	-0.4	-22.9	-26.6	0.2	-26.9	-1.4	-7.3	0.6	-1.6	2.2	
Q2	-0.2	0.7	-32.9	-0.8	-32.2	-0.2	-21.2	-32.4	0.0	-32.4	1.1	-4.4	-6.7	1.0	-7.8	
2003 Mar.	0.0	-3.8	11.6	.	.	-0.4	-1.3	-12.9	.	.	-0.2	6.2	-6.2	.	.	
Apr.	-0.1	0.7	-7.6	.	.	-0.1	-7.3	-7.3	.	.	0.5	2.9	1.3	.	.	
May	0.0	0.2	-10.6	.	.	-0.2	-2.0	-15.4	.	.	0.9	-6.2	-2.3	.	.	
June	0.0	-0.1	-14.6	.	.	0.1	-12.0	-9.7	.	.	-0.4	-1.1	-5.7	.	.	
July	0.0	-2.5	-5.6	.	.	-0.1	-2.3	-24.8	.	.	0.1	-2.9	8.6	.	.	
Aug.	0.0	-0.5	0.2	.	.	-0.6	-3.8	-8.1	.	.	0.0	3.6	-2.9	.	.	

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

**Table 8.6****Balance of payments: other investment account and reserve assets***(EUR billions (ECU billions to end-1998); net flows)***1. Other investment by sector<sup>1)</sup>**

	Total		Eurosysteem		General government		MFIs (excluding the Eurosystem)						Other sectors	
	Assets 1	Liabilities 2	Assets 3	Liabilities 4	Assets 5	Liabilities 6	Total		Long-term		Short-term		Assets 13	Liabilities 14
							Assets 7	Liabilities 8	Assets 9	Liabilities 10	Assets 11	Liabilities 12		
1998	-81.5	205.6	-0.7	3.5	-1.0	-6.1	-22.6	192.4	-37.6	40.4	15.0	152.0	-57.1	15.9
1999	-31.8	192.7	-1.9	6.6	3.3	-13.0	16.3	161.2	-47.2	53.8	63.5	107.4	-49.4	37.9
2000	-179.0	359.8	-1.1	0.9	-2.2	0.7	-130.4	288.8	-50.0	52.5	-80.4	236.3	-45.4	69.5
<i>Euro area enlargement</i>														
2001	-267.6	261.2	0.6	4.4	3.0	-0.4	-229.1	232.4	-46.1	21.8	-183.0	210.5	-42.1	24.8
2002	-205.4	58.8	-1.2	19.3	0.0	-8.2	-164.8	28.4	-31.4	52.5	-133.4	-24.1	-39.5	19.3
2002 Q2	-75.5	-5.7	-0.6	3.4	0.9	3.8	-65.2	-12.3	-5.7	19.5	-59.5	-31.8	-10.7	-0.5
Q3	-59.9	10.8	0.3	3.6	-0.6	-2.8	-33.3	13.9	-5.4	6.2	-28.0	7.6	-26.3	-3.9
Q4	-99.2	18.9	-0.4	6.2	0.3	-1.0	-88.1	0.8	-19.2	16.3	-68.8	-15.6	-11.0	12.9
2003 Q1	-114.7	74.0	-0.6	-4.4	-1.8	-8.4	-65.4	60.2	-15.1	10.1	-50.4	50.0	-46.9	26.6
Q2	-120.2	32.1	0.2	2.3	-1.5	3.9	-103.2	27.0	-11.5	12.1	-91.7	14.9	-15.6	-1.0
2002 June	30.9	-66.3	-0.1	3.9	-0.7	-1.8	22.6	-70.6	3.3	4.4	19.3	-74.9	9.1	2.2
July	-1.9	-6.8	0.4	5.4	-0.5	-1.2	13.6	-9.8	2.2	1.5	11.5	-11.3	-15.4	-1.1
Aug.	8.3	-30.7	0.1	-5.0	-0.3	-2.2	12.6	-17.7	0.0	2.1	12.6	-19.8	-4.2	-5.8
Sep.	-66.3	48.3	-0.2	3.3	0.2	0.6	-59.6	41.4	-7.6	2.7	-52.0	38.7	-6.7	3.1
Oct.	-69.5	32.3	-0.1	0.9	-0.4	1.3	-54.8	22.6	-5.6	8.2	-49.2	14.4	-14.2	7.6
Nov.	-77.2	39.1	0.9	2.0	-1.6	-0.3	-66.5	35.1	-8.3	-6.1	-58.2	41.2	-10.0	2.3
Dec.	47.6	-52.6	-1.3	3.3	2.3	-2.0	33.2	-57.0	-5.4	14.2	38.6	-71.2	13.3	3.1
2003 Jan.	-9.8	0.4	0.5	-2.4	-2.4	-6.2	3.1	1.6	-3.7	1.3	6.8	0.3	-11.0	7.4
Feb.	-83.3	62.1	-0.5	-2.0	-3.8	-2.2	-54.9	54.1	-6.3	4.5	-48.6	49.6	-24.1	12.2
Mar.	-21.6	11.5	-0.5	0.0	4.4	0.1	-13.7	4.4	-5.1	4.2	-8.6	0.2	-11.8	7.0
Apr.	-42.8	56.1	0.0	-0.3	0.9	2.7	-32.7	52.1	-3.7	2.0	-29.1	50.1	-11.0	1.6
May	-46.8	9.9	0.7	0.9	-3.5	1.3	-35.2	3.8	-1.7	2.8	-33.5	1.0	-8.8	3.9
June	-30.5	-33.9	-0.5	1.6	1.1	-0.2	-35.3	-28.9	-6.2	7.3	-29.1	-36.2	4.2	-6.5
July	34.8	-0.9	0.1	1.5	-2.7	1.8	43.7	2.7	-5.1	7.5	48.8	-4.8	-6.3	-7.0
Aug.	75.7	-30.9	0.3	0.4	0.4	0.5	72.0	-32.2	-2.8	1.8	74.8	-34.0	3.0	0.3

**2. Other investment by sector and instrument<sup>1)</sup>****2.1. Eurosystem**

	Loans/currency and deposits			Other assets/liabilities		
	Assets 1	Liabilities 2	Balance 3	Assets 4	Liabilities 5	Balance 6
1999	-1.1	6.7	5.6	-0.8	-0.1	-0.9
2000	-1.1	0.9	-0.2	0.0	0.0	0.0
<i>Euro area enlargement</i>						
2001	0.6	4.5	5.0	0.0	0.0	0.0
2002	-1.2	19.3	18.2	0.0	0.0	0.0
2002 Q2	-0.6	3.4	2.8	0.0	0.0	0.0
Q3	0.3	3.6	3.9	0.0	0.0	0.0
Q4	-0.4	6.3	5.8	0.0	0.0	0.0
2003 Q1	-0.6	-4.4	-4.9	0.0	0.0	0.0
Q2	0.2	2.3	2.4	0.0	0.0	0.0

Source: ECB.

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

**Table 8.6 (cont'd)**
**Balance of payments: other investment account and reserve assets**
*(EUR billions; net flows)*
**2.2. General government**

	Trade credits			Loans/currency and deposits			Other assets/liabilities		
	Assets 7	Liabilities 8	Balance 9	Assets 10	Liabilities 11	Balance 12	Assets 13	Liabilities 14	Balance 15
1999	0.0	0.0	0.0	4.4	-13.1	-8.7	-1.2	0.2	-1.0
2000	0.1	0.0	0.1	-1.4	0.6	-0.8	-0.9	0.1	-0.8
<i>Euro area enlargement</i>									
2001	-0.1	0.0	-0.1	4.4	-0.5	3.9	-1.3	0.1	-1.3
2002	1.5	0.0	1.4	-0.6	-8.0	-8.6	-0.9	-0.2	-1.1
2002 Q2	1.4	0.0	1.4	-0.2	3.6	3.4	-0.3	0.2	-0.2
Q3	0.0	0.0	0.0	-0.3	-2.7	-3.0	-0.2	0.0	-0.3
Q4	0.0	0.0	0.0	0.2	-0.9	-0.6	0.1	-0.1	-0.1
2003 Q1	0.0	0.0	0.0	-1.2	-8.3	-9.6	-0.5	-0.1	-0.6
Q2	0.0	0.0	0.0	-1.2	3.6	2.4	-0.3	0.3	0.0

**2.3. MFIs (excluding the Eurosystem)**

	Loans/currency and deposits			Other assets/liabilities		
	Assets 16	Liabilities 17	Balance 18	Assets 19	Liabilities 20	Balance 21
1999	15.5	160.5	176.0	0.8	0.7	1.5
2000	-126.3	283.5	157.1	-4.1	5.3	1.3
<i>Euro area enlargement</i>						
2001	-215.1	222.2	7.1	-14.0	10.2	-3.9
2002	-161.0	31.2	-129.8	-3.8	-2.8	-6.6
2002 Q2	-64.1	-11.1	-75.2	-1.0	-1.3	-2.3
Q3	-31.0	11.8	-19.2	-2.3	2.1	-0.3
Q4	-93.1	10.4	-82.7	5.1	-9.6	-4.6
2003 Q1	-63.5	59.7	-3.8	-1.9	0.5	-1.5
Q2	-103.9	28.7	-75.2	0.7	-1.6	-1.0

**2.4. Other sectors**

	Trade credits			Loans/currency and deposits			Other assets/liabilities		
	Assets 22	Liabilities 23	Balance 24	Assets 25	Liabilities 26	Balance 27	Assets 28	Liabilities 29	Balance 30
1999	-7.5	4.8	-2.7	-18.9	21.7	2.9	-23.0	11.3	-11.7
2000	-14.6	10.5	-4.0	-25.2	64.0	38.8	-5.7	-5.0	-10.7
<i>Euro area enlargement</i>									
2001	-3.5	1.3	-2.2	-29.6	18.3	-11.3	-8.9	5.2	-3.8
2002	-3.5	-3.0	-6.4	-34.1	16.0	-18.1	-1.9	6.3	4.3
2002 Q2	-2.5	-1.3	-3.8	-8.5	-0.2	-8.8	0.3	1.0	1.4
Q3	-1.8	1.9	0.1	-24.6	-8.0	-32.6	0.1	2.2	2.3
Q4	0.2	-3.0	-2.8	-10.6	14.2	3.6	-0.5	1.7	1.2
2003 Q1	-1.3	5.1	3.8	-39.8	18.2	-21.6	-5.8	3.2	-2.6
Q2	-1.4	-0.9	-2.2	-6.7	-6.4	-13.2	-7.5	6.3	-1.2

**3. Reserve assets<sup>1)</sup>**

	Total 1	Monetary gold 2	Special drawing rights 3	Reserve position in the IMF 4	Foreign exchange							Other claims 12
					Total 5	Currency and deposits		Securities			Financial derivatives 11	
						With monetary authorities and the BIS 6	With banks 7	Equity 8	Bonds and notes 9	Money market instruments 10		
1999	10.1	0.3	1.0	2.0	6.1	12.5	-12.1	0.2	3.5	2.0	-0.1	0.8
2000	17.6	1.0	0.3	2.9	13.3	4.3	4.6	0.0	-5.6	10.1	-0.1	0.0
<i>Euro area enlargement</i>												
2001	17.8	0.6	-1.0	-4.2	22.5	10.0	-5.3	-1.1	20.4	-1.6	0.0	0.0
2002	-2.3	0.7	0.2	-2.0	-1.2	-2.3	-15.3	0.0	8.1	8.5	-0.2	0.0
2002 Q2	6.7	0.5	0.5	-2.0	7.8	-0.6	1.2	0.0	4.2	3.1	-0.2	0.0
Q3	-4.6	-0.1	-0.2	0.2	-4.6	-2.4	-3.0	0.0	1.9	-1.2	0.0	0.0
Q4	-1.3	0.4	-0.1	0.3	-1.9	2.3	-1.2	0.0	-2.3	-0.9	0.0	0.0
2003 Q1	11.9	0.5	0.0	-0.2	11.5	0.8	-0.6	0.0	9.6	1.7	0.0	0.0
Q2	2.0	0.0	0.0	-2.6	4.5	-0.5	0.0	-0.1	4.8	0.2	0.0	0.0

Source: ECB.

1) Increase (-); decrease (+)

**Table 8.7****Monetary presentation of the euro area balance of payments <sup>1)</sup>***(EUR billions)*

	Current and capital accounts	Direct investment		Portfolio investment			Other investment		Financial derivatives	Errors and omissions	Total <sup>5)</sup>	Memo item: transactions in the external counterpart of M3 <sup>6)</sup>
		By resident units abroad (non-MFIs)	By non-resident units in the euro area <sup>2)</sup>	Assets	Liabilities		Assets	Liabilities				
					Non-MFIs	Equity <sup>3)</sup>						
1	2	3	4	5	6	7	8	9	10	11	12	
2000	-57.7	-407.0	427.2	-344.7	37.2	211.5	-47.6	70.2	-3.4	-10.7	-125.1	141.7
2000 Q1	-9.3	-68.2	217.8	-129.9	-103.3	38.9	-40.3	10.6	1.3	-35.8	-118.0	117.9
Q2	-15.8	-88.6	71.8	-67.3	66.9	71.4	-5.5	4.1	4.4	3.7	45.1	-35.3
Q3	-18.5	-121.1	40.5	-75.3	28.9	55.9	-12.3	38.3	0.1	23.2	-40.4	51.5
Q4	-14.2	-129.1	97.2	-72.3	44.7	45.3	10.5	17.1	-9.3	-1.9	-11.8	7.6
<i>Euro area enlargement</i>												
2001	-7.8	-285.0	201.7	-182.0	172.9	84.3	-39.1	24.4	-1.5	32.2	0.2	7.3
2002	77.9	-166.2	141.6	-119.7	54.0	176.1	-39.5	11.0	-10.2	19.3	144.4	-171.0
2001 Q1	-8.5	-67.0	29.4	-44.4	4.0	19.9	-7.3	-7.6	0.7	-29.9	-110.6	105.6
Q2	-13.2	-83.6	37.8	-66.5	88.1	8.4	-0.4	13.1	12.1	-6.7	-11.0	17.8
Q3	4.0	-58.9	32.5	-19.6	40.1	27.7	-6.8	14.7	-8.5	48.2	73.5	-74.4
Q4	9.8	-75.5	102.1	-51.5	40.7	28.2	-24.7	4.2	-5.7	20.6	48.3	-41.7
2002 Q1	18.5	-60.6	46.6	-48.5	15.5	-4.6	7.8	2.5	4.8	-26.8	-44.6	27.0
Q2	5.9	-42.5	38.5	-39.7	38.5	86.9	-9.8	3.3	-3.1	-2.6	75.4	-77.1
Q3	27.9	-27.6	21.2	-7.7	-4.2	42.2	-26.9	-6.7	-9.0	25.8	35.1	-33.9
Q4	25.6	-35.5	35.2	-23.8	4.1	51.5	-10.7	11.9	-2.9	22.9	78.5	-87.0
2003 Q1	4.4	-34.5	35.7	-11.4	6.6	45.7	-48.7	18.2	-2.5	20.7	34.3	-30.9
Q2	-5.2	-35.1	35.4	-72.1	34.1	110.2	-17.1	2.8	-2.8	46.5	96.8	-96.1

Source: ECB.

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

2) Including all transactions of the non-MFI sector, and MFI sector transactions in equity capital and reinvested earnings.

3) Excluding money market fund shares/units.

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

5) Sum of columns 1 to 10; errors and omissions (column 10) are those shown in Table 8.1 (column 13) of the Monthly Bulletin; remaining differences (in absolute values) with column 12 are explained in a methodological note available on the statistics section of the ECB's website ([www.ecb.int](http://www.ecb.int)).

6) Source: Monthly Bulletin, Table 2.3.2, column 10.

**Table 8.8****International investment position<sup>1)</sup> and reserve assets outstanding***(EUR billions (ECU billions in 1997); end-of-period positions)***1. Summary international investment position**

	Total		Direct investment <sup>3)</sup>	Portfolio investment <sup>4)</sup>	Financial derivatives <sup>5)</sup>	Other investment <sup>6)</sup>	Reserve assets <sup>7)</sup>
	1	as % of GDP <sup>2)</sup>					
<b>Net international investment position<sup>2)3)</sup></b>							
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
<b>Outstanding assets</b>							
1999	5,796.7	92.5	1,174.5	2,058.1	111.1	2,070.8	382.2
2000	6,740.0	102.5	1,609.7	2,344.1	117.9	2,277.9	390.4
2001	7,459.4	109.0	1,859.9	2,499.8	123.7	2,583.4	392.7
<b>Outstanding liabilities</b>							
1999	6,094.0	97.2	804.9	2,939.3	95.1	2,254.7	-
2000	7,154.7	108.8	1,181.2	3,149.1	109.3	2,715.1	-
2001	7,611.6	111.2	1,329.2	3,182.5	129.5	2,970.5	-

**2. Direct investment**

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

**3.1. Portfolio investment by instrument**

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

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

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

Source: ECB.

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

2) Assets minus liabilities.

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

4) Excluding the Eurosystem.



#### 4. Other investment by sector and instrument

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

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

#### 5. Reserves and related assets of the Eurosysteem and of the European Central Bank <sup>1)</sup>

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

	Reserve assets														Memo: related assets	
	Total	Monetary gold		Special drawing rights	Reserve position in the IMF	Foreign exchange								Other claims		Claims on euro area residents denominated in foreign currency
		In fine troy ounces (millions) <sup>2)</sup>	Total			Currency and deposits		Securities			Financial derivatives					
						With monetary authorities and the BIS <sup>7)</sup>	With banks	Total	Equities	Bonds and notes		Money market instruments				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15		
<b>Eurosysteem <sup>3)</sup></b>																
1998 Dec. <sup>4)</sup>	329.4	99.6	404.131	5.2	23.4	201.2	12.6	19.6	169.0	0.0	116.6	52.4	0.0	0.0	7.6	
1999 Dec.	372.1	116.4	402.758	4.5	24.3	226.9	13.5	23.0	190.7	0.0	133.9	56.8	-0.2	0.0	14.6	
2000 Dec.	377.2	117.1	399.537	4.3	20.8	235.0	9.7	20.1	204.4	0.0	154.0	50.4	0.7	0.0	15.8	
<i>Euro area enlargement</i>																
2001 1 Jan.	390.4	118.4	404.157	4.3	21.2	246.5	16.8	20.5	208.5	0.0	158.1	50.4	0.7	0.0	16.3	
2001 Dec.	392.7	126.1	401.876	5.5	25.3	235.8	8.0	25.9	201.5	1.2	147.0	53.3	0.4	0.0	24.7	
2002 Dec.	366.1	130.4	399.022	4.8	25.0	205.8	10.3	35.3	159.8	-	-	-	0.4	0.0	22.4	
2003 June	326.1	120.0	396.229	4.6	25.5	176.1	8.3	34.8	132.2	-	-	-	0.8	0.0	18.2	
July	328.9	124.2	396.277	4.5	25.5	174.7	9.4	32.3	132.3	-	-	-	0.8	0.0	18.1	
Aug.	346.8	136.0	395.632	4.7	26.6	179.5	11.0	30.8	137.3	-	-	-	0.4	0.0	18.1	
Sep.	332.9	131.7	395.444	4.6	26.1	170.5	9.5	30.3	130.4	-	-	-	0.3	0.0	17.1	
<b>European Central Bank <sup>5)</sup></b>																
1999 Dec.	49.3	7.0	24.030	0.0	0.0	42.3	0.3	7.8	34.3	0.0	27.8	6.5	0.0	0.0	2.6	
2000 Dec.	45.3	7.0	24.030	0.0	0.0	38.2	0.6	6.8	30.6	0.0	20.4	10.2	0.3	0.0	3.8	
<i>Euro area enlargement</i>																
2001 Dec.	49.3	7.8	24.656	0.1	0.0	41.4	0.8	7.0	33.6	0.0	23.5	10.1	0.0	0.0	3.6	
2002 Dec.	45.5	8.1	24.656	0.2	0.0	37.3	1.2	9.9	26.1	-	-	-	0.0	0.0	3.0	
2003 June	39.3	7.5	24.656	0.2	0.0	31.6	0.9	7.1	23.6	-	-	-	0.0	0.0	2.8	
July	41.3	7.7	24.656	0.2	0.0	33.4	0.8	6.7	25.9	-	-	-	0.0	0.0	2.3	
Aug.	42.7	8.5	24.656	0.2	0.0	34.0	0.9	5.7	27.4	-	-	-	0.0	0.0	2.7	
Sep.	40.7	8.2	24.656	0.2	0.0	32.3	0.9	4.5	26.9	-	-	-	0.0	0.0	2.4	

Source: ECB.

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

2) Changes in the gold holdings of the Eurosysteem are due to transactions in gold within the terms of the Central Bank Gold Agreement of 26 September 1999.

3) The figures are not fully comparable with those in Table 1.1 owing to differences in coverage and valuation.

4) Position as at 1 January 1999.

5) Part of the Eurosysteem's reserves.

## 9 External trade in goods of the euro area

Table 9

### 1. Values, volumes and unit values by commodity<sup>1) 2)</sup>

(not seasonally adjusted, unless otherwise indicated)

	Exports of goods (f.o.b.)					Imports of goods (c.i.f.)					Total (s.a.) (2000=100)		
	Total				Memo: Manufactures 5	Total				Memo: Oil 11	Exports 12	Imports 13	
	1	Inter- mediate 2	Capital 3	Consump- tion 4		6	Inter- mediate 7	Capital 8	Consump- tion 9				Manufac- tures 10
Values (EUR billions; 2000=100 for columns 12 and 13)													
1999	832.8	386.5	183.2	224.2	725.0	781.2	423.2	143.6	192.1	590.6	61.5	82.5	78.1
2000	1,013.7	482.6	221.7	265.4	883.2	1,008.4	579.8	179.4	218.1	730.2	118.9	100.0	100.0
<i>Euro area enlargement</i>													
2001	1,060.8	491.6	235.8	287.0	930.8	1,011.1	575.1	178.2	226.1	738.1	107.5	106.2	98.9
2002	1,080.2	496.5	227.6	304.7	941.1	983.2	554.1	162.3	231.3	712.4	105.2	108.2	96.2
2002 Q2	273.9	128.6	57.5	75.2	238.9	251.3	143.8	40.8	57.7	182.4	26.6	108.8	97.0
Q3	267.4	121.9	55.5	76.6	232.8	236.8	133.0	38.5	57.6	172.1	26.8	108.6	96.1
Q4	278.7	125.5	60.9	79.2	242.0	252.9	140.3	43.3	59.4	180.9	28.2	107.3	96.4
2003 Q1	257.7	119.7	52.0	72.8	223.5	250.5	142.8	40.2	57.6	178.6	29.5	106.4	97.8
Q2	258.2	120.3	53.0	69.9	224.1	242.9	134.1	39.3	58.2	176.3	24.9	103.6	95.0
2003 Mar.	89.6	41.2	18.8	25.1	77.9	86.1	48.9	14.2	19.6	61.8	10.0	103.8	97.5
Apr.	86.7	40.2	17.4	24.0	74.8	83.5	46.6	13.7	19.7	60.1	9.5	105.2	96.7
May	85.4	40.5	16.8	23.1	73.9	80.6	44.9	12.8	19.0	58.0	7.7	102.8	94.4
June	86.0	39.6	18.8	22.8	75.4	78.8	42.6	12.8	19.4	58.1	7.7	102.9	93.9
July	92.7	41.4	20.5	25.9	81.8	79.3	43.1	12.5	20.0	57.5	8.8	103.9	92.9
Aug.	76.5	35.6	15.8	21.3	66.6	70.0	38.4	10.2	18.1	49.5	8.6	106.9	96.4
Volumes (annual percentage changes; 2000=100 for columns 12 and 13)													
1999	2.2	2.8	-0.8	3.3	1.4	6.1	3.5	12.9	7.7	7.1	6.0	88.2	93.8
2000	12.4	12.5	12.7	12.7	13.6	5.9	6.8	11.7	4.5	8.9	4.7	100.0	100.0
<i>Euro area enlargement</i>													
2001	5.1	1.8	8.6	7.9	5.8	-1.2	-1.0	-3.9	-0.1	-1.7	-1.6	105.3	98.8
2002	1.8	1.0	-3.5	4.3	1.2	-1.5	-2.5	-8.2	1.6	-2.7	-1.5	107.9	98.4
2002 Q2	3.1	3.7	-2.4	5.5	2.6	-0.2	-0.1	-8.9	3.7	-1.9	0.6	108.1	98.6
Q3	5.5	5.1	0.1	7.6	4.7	2.4	1.4	1.6	4.3	2.2	0.6	109.0	99.0
Q4	3.3	3.6	-2.0	6.1	2.5	1.5	-0.1	-0.7	5.1	1.0	2.1	107.8	98.7
2003 Q1	1.7	1.4	-0.1	1.9	1.2	3.4	1.0	8.2	5.3	4.7	-3.4	108.0	100.0
Q2	-2.1	-3.4	-3.1	-3.7	-2.6	1.7	-1.6	4.3	4.4	1.5	3.9	106.8	101.5
2003 Mar.	-1.2	-1.9	-2.1	-0.4	-1.3	5.0	2.5	8.2	7.0	5.7	2.4	105.7	100.4
Apr.	-1.5	-1.8	-5.4	-2.7	-2.4	-0.4	-2.4	-0.3	2.9	-0.2	8.1	107.7	100.9
May	-3.3	-5.0	-5.8	-3.1	-4.0	2.7	-0.2	3.4	5.1	1.1	2.8	106.1	102.3
June	-1.6	-3.2	1.7	-5.3	-1.4	2.9	-2.2	10.8	5.1	3.9	0.1	106.7	101.4
July	-0.4	-2.4	7.6	-3.4	0.7	0.8	-1.9	5.1	-0.1	0.2	4.0	107.4	100.6
Aug.	.	.	.	.	.	.	.	.	.	.	.	.	.
Unit values (annual percentage changes; 2000=100 for columns 12 and 13)													
1999	2.3	1.7	2.7	1.4	2.4	3.5	3.9	3.4	1.4	2.0	39.4	92.4	82.1
2000	8.3	11.0	7.4	5.1	7.2	21.9	28.3	11.8	8.7	13.5	84.8	100.0	100.0
<i>Euro area enlargement</i>													
2001	1.0	0.7	0.3	1.9	1.0	0.2	-1.3	1.6	2.8	1.7	-11.0	101.0	100.2
2002	-0.7	-1.4	-0.5	0.5	-0.7	-2.4	-2.8	-2.1	-1.0	-1.6	-3.8	100.3	97.8
2002 Q2	-0.7	-1.4	-0.3	0.4	-0.6	-3.2	-4.2	-1.8	-1.1	-1.6	-8.4	100.7	98.3
Q3	-1.9	-2.7	-1.8	-0.6	-1.9	-3.4	-3.6	-3.4	-2.8	-2.8	-4.6	99.6	97.6
Q4	-1.1	-1.1	-1.5	-0.6	-1.2	0.6	2.5	-2.7	-1.4	-1.5	19.3	99.7	98.1
2003 Q1	-2.6	-2.0	-3.1	-3.1	-2.9	0.1	3.2	-6.4	-3.4	-3.7	29.2	98.4	97.3
Q2	-3.6	-3.2	-4.8	-3.4	-3.7	-5.0	-5.2	-7.7	-3.5	-4.8	-9.8	97.1	93.4
2003 Mar.	-3.0	-2.2	-4.1	-3.6	-3.3	-1.3	1.6	-7.5	-4.1	-4.4	22.1	98.0	96.6
Apr.	-3.1	-2.8	-3.5	-3.0	-3.2	-3.5	-3.2	-7.2	-2.7	-4.0	-3.2	97.7	95.1
May	-4.0	-3.0	-6.5	-3.7	-4.0	-6.1	-6.7	-8.1	-4.3	-5.3	-16.5	97.2	92.4
June	-3.9	-3.7	-4.5	-3.6	-4.0	-5.2	-5.7	-7.7	-3.3	-5.1	-9.5	96.5	92.8
July	-2.7	-2.9	-1.7	-2.6	-2.7	-4.4	-5.2	-6.1	-2.3	-4.4	-7.1	96.8	93.2
Aug.	.	.	.	.	.	.	.	.	.	.	.	.	.

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

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

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

## 2. Geographical breakdown<sup>1)</sup>

(EUR billions; not seasonally adjusted, unless otherwise indicated)

	Total 1	Total (s.a.) 2	United Kingdom 3	Sweden 4	Denmark 5	Acceding countries 6	Switzer- land 7	United States 8	Japan 9	Asia excl. Japan 10	Africa 11	Latin America 12	Other countries 13
Exports (f.o.b.)													
1999	832.8	-	161.4	33.1	21.1	77.3	56.1	135.1	26.8	119.2	48.4	39.1	113.6
2000	1,013.7	-	189.7	38.8	23.2	94.6	63.4	171.4	34.2	151.6	56.1	46.7	141.6
<i>Euro area enlargement</i>													
2001	1,060.8	-	201.9	36.9	24.3	105.9	66.3	180.0	34.5	165.3	60.3	49.8	135.6
2002	1,080.2	-	205.7	37.0	24.8	112.0	63.9	182.4	32.7	170.1	59.9	43.2	148.4
2002 Q2	273.9	272.4	52.0	9.3	6.3	28.7	16.2	46.0	7.8	42.7	15.7	11.3	37.7
Q3	267.4	271.9	50.7	8.4	6.0	27.7	15.7	44.7	8.3	42.7	14.9	10.6	37.7
Q4	278.7	268.7	50.5	10.1	6.5	29.2	16.1	46.7	8.6	45.2	15.2	11.0	39.6
2003 Q1	257.7	266.2	49.1	9.7	6.4	27.6	16.5	42.0	7.8	40.3	13.7	9.6	35.1
Q2	258.2	259.4	46.2	9.5	6.0	29.3	15.5	41.0	7.2	40.7	14.9	9.5	.
2003 Mar.	89.6	86.6	17.7	3.5	2.5	9.5	5.6	13.9	2.7	13.9	4.7	3.4	12.3
Apr.	86.7	87.8	15.8	3.3	2.0	9.7	5.1	13.8	2.6	13.7	5.1	3.1	12.5
May	85.4	85.7	15.1	3.2	2.1	9.8	5.2	14.0	2.3	13.5	4.9	3.0	12.4
June	86.0	85.9	15.3	3.0	1.9	9.8	5.2	13.2	2.3	13.5	4.9	3.4	.
July	92.7	86.7	16.6	2.6	1.9	10.4	5.4	14.6	2.8	15.1	5.5	3.4	.
Aug.	76.5	89.2	.	.	.	.	.	.	.	.	.	.	.
% change versus previous year													
2003 Aug.	-6.1	-	.	.	.	.	.	.	.	.	.	.	.
Imports (c.i.f.)													
1999	781.2	-	131.0	33.2	18.6	60.3	43.2	113.2	53.9	151.8	49.0	30.4	95.4
2000	1,008.4	-	156.6	38.0	21.8	76.8	49.8	140.7	65.5	211.6	72.2	39.7	134.0
<i>Euro area enlargement</i>													
2001	1,011.1	-	154.0	34.3	21.3	88.8	52.9	138.1	58.6	207.9	74.0	40.9	140.3
2002	983.2	-	149.0	35.6	22.7	93.5	52.0	125.7	52.7	204.7	68.4	39.4	139.7
2002 Q2	251.3	248.5	39.1	9.2	5.5	23.9	13.6	33.2	13.6	49.0	17.1	10.7	36.5
Q3	236.8	246.0	34.9	8.3	5.5	22.7	12.3	28.8	12.6	51.7	16.3	10.0	33.8
Q4	252.9	246.8	37.4	9.5	6.3	24.7	13.3	30.7	13.7	54.6	17.2	9.4	36.1
2003 Q1	250.5	250.3	35.3	9.1	5.9	24.6	13.4	28.6	13.5	54.3	19.0	9.1	37.9
Q2	242.9	243.2	33.5	9.3	5.6	25.2	12.4	28.7	13.4	51.3	16.5	10.3	.
2003 Mar.	86.1	83.2	12.7	3.3	1.9	8.7	4.7	9.8	4.7	18.1	6.4	3.2	12.7
Apr.	83.5	82.6	11.3	3.2	1.9	8.5	4.1	10.1	4.8	17.7	6.1	3.6	12.2
May	80.6	80.5	10.9	3.0	1.8	8.2	4.3	9.7	4.4	16.8	5.3	3.5	12.5
June	78.8	80.1	11.3	3.0	1.9	8.4	4.0	8.9	4.2	16.7	5.0	3.2	.
July	79.3	79.3	10.6	2.5	1.6	8.9	4.3	8.8	4.1	17.3	5.8	3.4	.
Aug.	70.0	82.3	.	.	.	.	.	.	.	.	.	.	.
% change versus previous year													
2003 Aug.	-3.8	-	.	.	.	.	.	.	.	.	.	.	.
Balance													
1999	51.6	-	30.4	-0.1	2.6	17.0	12.9	21.9	-27.1	-32.6	-0.6	8.7	18.2
2000	5.3	-	33.1	0.8	1.4	17.8	13.6	30.7	-31.3	-60.0	-16.1	7.0	7.6
<i>Euro area enlargement</i>													
2001	49.7	-	47.8	2.7	3.0	17.1	13.4	42.0	-24.1	-42.5	-13.7	8.9	-4.7
2002	97.0	-	56.7	1.4	2.2	18.5	12.0	56.7	-20.0	-34.5	-8.5	3.8	8.7
2002 Q2	22.5	23.9	13.0	0.1	0.8	4.8	2.7	12.8	-5.8	-6.3	-1.5	0.6	1.2
Q3	30.5	25.9	15.9	0.1	0.5	5.0	3.3	15.8	-4.3	-9.0	-1.4	0.5	3.8
Q4	25.9	21.9	13.1	0.5	0.3	4.5	2.8	16.0	-5.1	-9.5	-1.9	1.6	3.5
2003 Q1	7.2	15.9	13.8	0.6	0.5	3.0	3.1	13.4	-5.7	-14.0	-5.3	0.5	-2.8
Q2	15.3	16.1	12.7	0.3	0.5	4.2	3.0	12.3	-6.2	-10.5	-1.6	-0.9	.
2003 Mar.	3.5	3.4	5.0	0.2	0.6	0.8	0.9	4.1	-2.0	-4.2	-1.7	0.2	-0.4
Apr.	3.2	5.2	4.5	0.1	0.2	1.2	1.0	3.8	-2.2	-4.0	-1.1	-0.5	0.3
May	4.8	5.2	4.2	0.1	0.3	1.6	0.9	4.3	-2.1	-3.3	-0.4	-0.5	-0.1
June	7.3	5.7	4.0	0.1	0.0	1.4	1.2	4.3	-1.9	-3.2	-0.1	0.2	.
July	13.3	7.5	6.0	0.1	0.3	1.5	1.2	5.8	-1.3	-2.2	-0.3	0.0	.
Aug.	6.5	6.9	.	.	.	.	.	.	.	.	.	.	.

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

1) Owing to differences in definitions, coverage and time of recording, trade data (as compiled by Eurostat) are not fully comparable with the goods item in the balance of payments statistics compiled by the ECB (Tables 8.1 and 8.2).

# 10 Exchange rates

**Table 10**

## Exchange rates

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

	Effective exchange rate of the euro <sup>1)</sup>								Bilateral ECU or euro exchange rates <sup>2)</sup>	
	Narrow group						Broad group		US dollar	Japanese yen
	Nominal	Real CPI	Real PPI	Real GDP deflator	Real ULCM	Real ULCT	Nominal	Real CPI		
1	2	3	4	5	6	7	8	9	10	
1997	99.1	99.4	99.2	98.3	101.0	101.6	90.4	96.7	1.1340	137.09
1998	101.5	101.3	101.6	100.9	99.8	101.5	96.6	99.2	1.1211	146.41
1999	95.7	95.7	95.9	95.6	96.2	95.8	96.6	95.9	1.0658	121.32
2000	85.7	86.3	87.6	85.4	87.2	85.1	88.2	86.2	0.9236	99.47
<i>Euro area enlargement</i>										
2001	87.3	88.6	89.9	88.1	88.5	86.4	91.0	87.9	0.8956	108.68
2002	90.0	92.5	93.5	92.3	90.9	90.3	95.6	91.8	0.9456	118.06
2001 Q1	88.6	89.5	91.2	88.9	90.2	87.3	91.4	88.4	0.9232	109.06
Q2	86.0	87.3	88.6	86.5	87.6	85.1	89.5	86.6	0.8725	106.93
Q3	87.0	88.3	89.6	87.7	87.6	85.7	91.2	87.8	0.8903	108.27
Q4	87.5	89.3	90.4	89.2	88.6	87.5	92.0	88.6	0.8959	110.45
2002 Q1	87.1	89.4	90.4	88.8	87.8	87.5	91.3	87.8	0.8766	116.07
Q2	88.8	91.4	92.2	90.9	89.7	89.2	93.9	90.3	0.9188	116.46
Q3	91.3	93.9	95.1	93.8	92.6	91.5	97.9	93.9	0.9838	117.25
Q4	92.5	95.4	96.3	95.6	93.6	92.8	99.4	95.2	0.9994	122.42
2003 Q1	96.9	100.1	100.8	100.2	97.7	97.7	104.1	99.3	1.0731	127.59
Q2	101.3	104.9	104.9	105.0	102.4	102.4	107.9	103.1	1.1372	134.74
Q3	100.5	104.2	104.0	-	-	-	106.9	102.0	1.1248	132.14
2001 Jan.	89.2	89.9	91.6	-	-	-	91.7	88.7	0.9383	109.57
Feb.	88.3	89.1	90.9	-	-	-	91.0	88.0	0.9217	107.08
Mar.	88.4	89.4	91.1	-	-	-	91.4	88.5	0.9095	110.33
Apr.	87.6	88.8	90.2	-	-	-	91.0	88.1	0.8920	110.36
May	85.9	87.2	88.4	-	-	-	89.3	86.4	0.8742	106.50
June	84.7	86.0	87.2	-	-	-	88.1	85.2	0.8532	104.30
July	85.4	86.8	87.9	-	-	-	89.1	86.0	0.8607	107.21
Aug.	87.7	89.0	90.3	-	-	-	91.8	88.4	0.9005	109.34
Sep.	88.0	89.3	90.6	-	-	-	92.6	89.1	0.9111	108.20
Oct.	88.0	89.6	90.8	-	-	-	92.8	89.3	0.9059	109.86
Nov.	86.8	88.4	89.7	-	-	-	91.3	87.8	0.8883	108.68
Dec.	87.7	89.8	90.8	-	-	-	91.9	88.7	0.8924	113.38
2002 Jan.	87.6	89.9	91.0	-	-	-	91.6	88.1	0.8833	117.12
Feb.	86.8	89.0	90.1	-	-	-	91.1	87.4	0.8700	116.23
Mar.	86.8	89.3	90.2	-	-	-	91.2	87.9	0.8758	114.75
Apr.	87.2	89.7	90.6	-	-	-	91.7	88.2	0.8858	115.81
May	88.6	91.1	92.0	-	-	-	93.7	90.0	0.9170	115.86
June	90.6	93.2	94.0	-	-	-	96.4	92.6	0.9554	117.80
July	91.7	94.4	95.4	-	-	-	98.2	94.3	0.9922	117.11
Aug.	91.1	93.6	94.9	-	-	-	97.7	93.6	0.9778	116.31
Sep.	91.2	93.7	95.1	-	-	-	98.0	93.8	0.9808	118.38
Oct.	91.7	94.3	95.3	-	-	-	98.5	94.4	0.9811	121.57
Nov.	92.5	95.1	96.0	-	-	-	99.3	94.9	1.0014	121.65
Dec.	93.6	96.7	97.5	-	-	-	100.4	96.2	1.0183	124.20
2003 Jan.	95.8	98.8	99.9	-	-	-	103.0	98.1	1.0622	126.12
Feb.	97.1	100.2	101.1	-	-	-	104.4	99.4	1.0773	128.60
Mar.	97.9	101.2	101.4	-	-	-	105.1	100.3	1.0807	128.16
Apr.	98.6	102.1	102.2	-	-	-	105.2	100.6	1.0848	130.12
May	102.5	106.1	106.2	-	-	-	109.1	104.1	1.1582	135.83
June	102.7	106.6	106.4	-	-	-	109.3	104.5	1.1663	138.05
July	101.4	105.2	105.0	-	-	-	107.8	102.9	1.1372	134.99
Aug.	100.3	103.9	103.8	-	-	-	106.6	101.6	1.1139	132.38
Sep.	99.9	103.6	103.2	-	-	-	106.4	101.5	1.1222	128.94
Oct.	101.3	105.1	104.6	-	-	-	108.3	103.3	1.1692	128.12
% ch. vs. <sup>4)</sup> prev. month										
2003 Oct.	1.4	1.5	1.4	-	-	-	1.8	1.8	4.2	-0.6
% ch. vs. <sup>4)</sup> prev. year										
2003 Oct.	10.5	11.4	9.8	-	-	-	9.9	9.4	19.2	5.4

Source: ECB.

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

2) To December 1998, rates for the ECU (source BIS); from January 1999, rates for the euro.

Bilateral ECU or euro exchange rates <sup>3)</sup>										
Swiss franc	Pound sterling	Swedish krona	Danish krone	Norwegian krone	Canadian dollar	Australian dollar	Hong Kong dollar <sup>5)</sup>	South Korean won <sup>3)</sup>	Singapore dollar <sup>3)</sup>	
11	12	13	14	15	16	17	18	19	20	
1.6440	0.69230	8.6512	7.4836	8.0186	1.5692	1.5281	8.7498	1,069.75	1.6777	1997
1.6220	0.67643	8.9159	7.4993	8.4659	1.6651	1.7867	8.6946	1,568.89	1.8764	1998
1.6003	0.65874	8.8075	7.4355	8.3104	1.5840	1.6524	8.2694	1,267.26	1.8064	1999
1.5579	0.60948	8.4452	7.4538	8.1129	1.3706	1.5889	7.1972	1,043.50	1.5923	2000
<i>Euro area enlargement</i>										
1.5105	0.62187	9.2551	7.4521	8.0484	1.3864	1.7319	6.9855	1,154.83	1.6039	2001
1.4670	0.62883	9.1611	7.4305	7.5086	1.4838	1.7376	7.3750	1,175.50	1.6912	2002
1.5334	0.63260	9.0038	7.4639	8.2024	1.4099	1.7405	7.2007	1,174.68	1.6164	2001 Q1
1.5283	0.61437	9.1261	7.4593	8.0109	1.3450	1.7013	6.8051	1,138.94	1.5829	Q2
1.5070	0.61940	9.4067	7.4438	8.0094	1.3743	1.7341	6.9439	1,150.05	1.5823	Q3
1.4735	0.62090	9.4810	7.4415	7.9693	1.4157	1.7508	6.9873	1,155.22	1.6344	Q4
1.4733	0.61471	9.1589	7.4318	7.8117	1.3978	1.6923	6.8368	1,155.27	1.6072	2002 Q1
1.4648	0.62853	9.1584	7.4343	7.5175	1.4275	1.6662	7.1664	1,157.79	1.6567	Q2
1.4636	0.63533	9.2301	7.4281	7.3991	1.5361	1.7965	7.6731	1,172.73	1.7295	Q3
1.4667	0.63611	9.0946	7.4281	7.3192	1.5687	1.7913	7.7941	1,215.37	1.7671	Q4
1.4662	0.66961	9.1822	7.4305	7.5706	1.6203	1.8095	8.3695	1,288.92	1.8724	2003 Q1
1.5180	0.70169	9.1425	7.4250	7.9570	1.5889	1.7742	8.8692	1,373.83	1.9872	Q2
1.5451	0.69888	9.1631	7.4309	8.2472	1.5533	1.7089	8.7674	1,321.05	1.9699	Q3
1.5291	0.63480	8.9055	7.4642	8.2355	1.4098	1.6891	7.3182	1,194.92	1.6302	2001 Jan.
1.5358	0.63400	8.9770	7.4630	8.2125	1.4027	1.7236	7.1889	1,153.81	1.6067	Feb.
1.5355	0.62915	9.1264	7.4643	8.1600	1.4167	1.8072	7.0939	1,173.40	1.6114	Mar.
1.5287	0.62168	9.1120	7.4633	8.1146	1.3903	1.7847	6.9568	1,183.45	1.6165	Apr.
1.5334	0.61328	9.0576	7.4612	7.9927	1.3473	1.6813	6.8182	1,133.74	1.5855	May
1.5225	0.60890	9.2106	7.4539	7.9360	1.3016	1.6469	6.6542	1,104.12	1.5497	June
1.5135	0.60857	9.2637	7.4447	7.9714	1.3153	1.6890	6.7130	1,120.28	1.5691	July
1.5144	0.62672	9.3107	7.4450	8.0552	1.3857	1.7169	7.0236	1,153.99	1.5855	Aug.
1.4913	0.62291	9.6744	7.4413	7.9985	1.4260	1.8036	7.1063	1,178.27	1.5929	Sep.
1.4793	0.62393	9.5780	7.4367	7.9970	1.4224	1.7955	7.0655	1,178.62	1.6397	Oct.
1.4663	0.61838	9.4166	7.4452	7.9224	1.4153	1.7172	6.9284	1,137.48	1.6254	Nov.
1.4749	0.62012	9.4359	7.4431	7.9911	1.4075	1.7348	6.9595	1,146.99	1.6389	Dec.
1.4745	0.61659	9.2275	7.4329	7.9208	1.4135	1.7094	6.8886	1,160.78	1.6247	2002 Jan.
1.4775	0.61160	9.1828	7.4299	7.7853	1.3880	1.6963	6.7857	1,147.18	1.5935	Feb.
1.4678	0.61574	9.0594	7.4324	7.7183	1.3903	1.6695	6.8308	1,157.30	1.6016	Mar.
1.4658	0.61407	9.1358	7.4341	7.6221	1.4008	1.6537	6.9091	1,163.18	1.6191	Apr.
1.4572	0.62823	9.2208	7.4356	7.5207	1.4210	1.6662	7.1521	1,150.08	1.6506	May
1.4721	0.64405	9.1137	7.4330	7.4043	1.4627	1.6793	7.4523	1,160.62	1.7029	June
1.4624	0.63870	9.2689	7.4301	7.4050	1.5321	1.7922	7.7389	1,169.16	1.7395	July
1.4636	0.63633	9.2489	7.4270	7.4284	1.5333	1.8045	7.6265	1,167.08	1.7164	Aug.
1.4649	0.63059	9.1679	7.4271	7.3619	1.5434	1.7927	7.6500	1,182.57	1.7320	Sep.
1.4650	0.62994	9.1051	7.4297	7.3405	1.5481	1.7831	7.6521	1,211.92	1.7511	Oct.
1.4673	0.63709	9.0818	7.4280	7.3190	1.5735	1.7847	7.8098	1,208.19	1.7666	Nov.
1.4679	0.64218	9.0961	7.4264	7.2948	1.5872	1.8076	7.9409	1,226.88	1.7858	Dec.
1.4621	0.65711	9.1733	7.4324	7.3328	1.6364	1.8218	8.2841	1,250.06	1.8433	2003 Jan.
1.4674	0.66977	9.1455	7.4317	7.5439	1.6299	1.8112	8.4022	1,282.82	1.8803	Feb.
1.4695	0.68255	9.2265	7.4274	7.8450	1.5943	1.7950	8.4279	1,335.44	1.8954	Mar.
1.4964	0.68902	9.1541	7.4255	7.8317	1.5851	1.7813	8.4605	1,337.38	1.9282	Apr.
1.5155	0.71322	9.1559	7.4246	7.8715	1.6016	1.7866	9.0321	1,390.03	2.0074	May
1.5411	0.70224	9.1182	7.4250	8.1619	1.5798	1.7552	9.0955	1,392.33	2.0233	June
1.5476	0.70045	9.1856	7.4332	8.2893	1.5694	1.7184	8.8689	1,342.27	1.9956	July
1.5400	0.69919	9.2378	7.4322	8.2558	1.5570	1.7114	8.6873	1,312.67	1.9531	Aug.
1.5474	0.69693	9.0682	7.4273	8.1952	1.5330	1.6967	8.7377	1,306.88	1.9591	Sep.
1.5485	0.69763	9.0105	7.4301	8.2274	1.5489	1.6867	9.0530	1,364.70	2.0282	Oct.
0.1	0.1	-0.6	0.0	0.4	1.0	-0.6	3.6	4.4	3.5	% ch. vs. <sup>4)</sup> prev. month 2003 Oct.
5.7	10.7	-1.0	0.0	12.1	0.0	-5.4	18.3	12.6	15.8	% ch. vs. <sup>4)</sup> prev. year 2003 Oct.

3) Indicative rates for these currencies are shown up to September 2000, as the ECB did not provide official reference rates for these currencies before that.

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

## II Economic and financial developments in the other EU Member States

**Table 11**

### Economic and financial developments

(annual percentage changes, unless otherwise indicated)

	HICP	General government deficit (-)/surplus (+) as a % of GDP	General government gross debt as a % of GDP	Long-term government bond yield <sup>1)</sup> as a % per annum	Exchange rate <sup>2)</sup> as national currency per euro	Current and new capital account as a % of GDP	Unit labour costs <sup>3)</sup>	Real GDP	Industrial production index <sup>4)</sup>	Standardised unemployment rate as a % of labour force (s.a.)	Broad money <sup>5)</sup>	3-month interest rate <sup>1)</sup> as a % per annum
	1	2	3	4	5	6	7	8	9	10	11	12
Denmark												
1999	2.1	3.3	53.0	4.91	7.44	1.8	2.4	2.6	0.1	4.8	-0.2	3.44
2000	2.7	2.6	47.3	5.64	7.45	1.5	1.4	2.9	5.7	4.4	1.1	5.00
2001	2.3	3.1	45.4	5.08	7.45	3.1	3.7	1.4	1.3	4.3	5.7	4.70
2002	2.4	2.1	45.5	5.06	7.43	2.6	1.2	2.1	1.4	4.5	3.5	3.54
2002 Q2	2.1	-	-	5.36	7.43	3.3	0.0	3.4	4.6	4.4	2.8	3.71
Q3	2.4	-	-	4.92	7.43	3.2	1.0	1.6	0.9	4.6	2.6	3.57
Q4	2.7	-	-	4.74	7.43	1.6	0.4	1.5	1.0	4.7	6.1	3.27
2003 Q1	2.8	-	-	4.30	7.43	2.6	0.9	1.4	1.6	5.0	19.1	2.83
Q2	2.2	-	-	4.12	7.43	3.8	2.9	-1.0	-1.2	5.2	22.2	2.48
Q3	1.6	-	-	4.31	7.43	.	.	.	.	5.4	19.3	2.18
2003 May	2.1	-	-	4.09	7.42	-	-	-	-1.4	5.2	24.2	2.54
June	2.0	-	-	3.85	7.42	-	-	-	-1.8	5.3	21.8	2.22
July	1.8	-	-	4.17	7.43	-	-	-	1.6	5.3	21.6	2.18
Aug.	1.5	-	-	4.35	7.43	-	-	-	0.8	5.4	20.2	2.19
Sep.	1.7	-	-	4.40	7.43	-	-	-	.	5.5	16.2	2.19
Oct.	.	-	-	4.44	7.43	-	-	-	.	.	.	2.20
Sweden												
1999	0.6	1.5	62.7	4.98	8.81	2.6	-1.2	4.6	2.2	6.7	6.8	3.32
2000	1.3	3.4	52.8	5.37	8.45	3.8	5.0	4.4	6.3	5.6	6.2	4.07
2001	2.7	4.5	54.4	5.11	9.26	3.8	5.8	1.1	-0.3	4.9	3.4	4.11
2002	2.0	1.3	52.7	5.31	9.16	4.3	2.1	1.9	-1.2	4.9	5.4	4.24
2002 Q2	1.9	-	-	5.64	9.16	5.3	0.8	3.1	0.1	4.9	5.3	4.43
Q3	1.5	-	-	5.16	9.23	4.1	1.4	2.4	-1.1	4.9	6.0	4.41
Q4	1.6	-	-	5.00	9.09	2.5	1.7	1.3	-2.5	5.1	3.4	4.09
2003 Q1	2.9	-	-	4.59	9.18	5.4	-0.5	1.9	-2.0	5.3	5.6	3.72
Q2	2.1	-	-	4.43	9.14	4.1	0.5	0.7	0.4	5.4	5.5	3.28
Q3	2.3	-	-	4.65	9.16	.	.	.	.	5.4	5.2	2.86
2003 May	2.0	-	-	4.37	9.16	-	-	-	-2.1	5.4	7.0	3.35
June	2.0	-	-	4.20	9.12	-	-	-	1.6	5.4	5.0	2.93
July	2.4	-	-	4.51	9.19	-	-	-	1.7	5.4	5.1	2.83
Aug.	2.2	-	-	4.70	9.24	-	-	-	2.0	5.4	5.5	2.87
Sep.	2.3	-	-	4.73	9.07	-	-	-	.	5.5	4.9	2.88
Oct.	.	-	-	4.85	9.01	-	-	-	.	.	.	2.86
United Kingdom												
1999	1.3	1.0	45.1	5.01	0.659	-2.2	2.6	2.8	1.2	5.9	5.5	5.54
2000	0.8	3.8	42.1	5.33	0.609	-1.9	2.5	3.8	2.0	5.4	6.6	6.19
2001	1.2	0.7	38.9	5.01	0.622	-1.7	3.9	2.1	-1.6	5.0	8.1	5.04
2002	1.3	-1.5	38.5	4.91	0.629	-1.7	2.2	1.7	-2.7	5.1	6.0	4.06
2002 Q2	0.9	-4.1	38.1	5.28	0.629	-3.3	2.9	1.5	-2.4	5.1	5.7	4.17
Q3	1.1	-0.9	37.7	4.71	0.635	-0.7	1.8	1.9	-2.7	5.2	5.7	4.01
Q4	1.6	-3.3	38.2	4.52	0.636	-1.7	1.5	2.0	-1.1	5.0	6.3	3.98
2003 Q1	1.5	0.1	37.6	4.34	0.670	0.1	1.9	1.8	-0.4	5.0	6.8	3.80
Q2	1.3	-5.6	38.4	4.35	0.702	-4.0	1.2	2.0	-1.1	5.0	8.2	3.64
Q3	1.4	-2.5	38.9	4.63	0.699	.	.	.	.	.	7.4	3.57
2003 May	1.2	-7.6	37.9	4.31	0.713	-	-	-	-2.6	4.9	8.3	3.63
June	1.1	-6.7	38.4	4.19	0.702	-	-	-	2.3	5.0	8.2	3.64
July	1.3	0.5	38.5	4.47	0.700	-	-	-	0.4	5.0	7.9	3.49
Aug.	1.4	-5.5	38.4	4.65	0.699	-	-	-	-1.7	.	7.0	3.52
Sep.	1.4	-2.4	38.9	4.76	0.697	-	-	-	.	.	7.3	3.70
Oct.	.	.	.	4.96	0.698	-	-	-	.	.	.	3.80

Sources: Eurostat (columns 1, 8, 9 and 10); European Commission (Economic and Financial Affairs DG and Eurostat) (columns 2 (annual) and 3 (annual)); Reuters (column 12); national data (columns 2 (quarterly and monthly), 3 (quarterly and monthly), 4, 5, 7 (except Sweden) and 11); ECB calculations (columns 6 and 7 (Sweden)).

1) Average-of-period values.

2) For more information, see Table 10.

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

4) Total excluding construction; adjusted for working days.

5) Average of end-month values; M3; M4 for the United Kingdom.

# 12 Economic and financial developments outside the EU

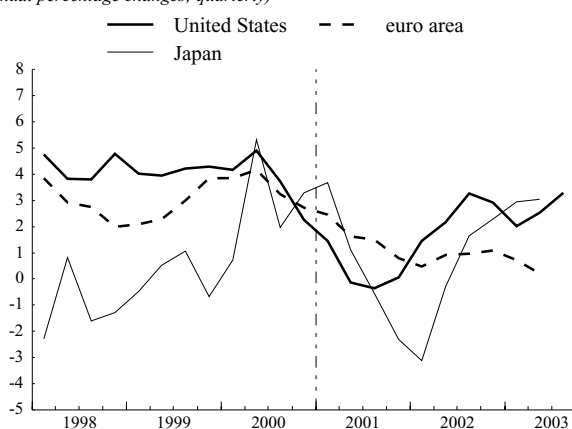
**Table 12.1**  
**Economic and financial developments**

(annual percentage changes, unless otherwise indicated)

	Consumer price index	Unit labour costs <sup>1)</sup>	Real GDP	Industrial production index <sup>1)</sup>	Unemployment rate as a % of labour force (s.a.)	Broad money <sup>2)</sup>	3-month interbank deposit rate <sup>3)</sup> as a % per annum	10-year government bond yield <sup>3)</sup> as a % per annum	Exchange rate <sup>4)</sup> as national currency per euro	Fiscal deficit (-)/surplus (+) <sup>5)</sup> as a % of GDP	Gross public debt <sup>6)</sup> as a % of GDP
	1	2	3	4	5	6	7	8	9	10	11
<b>United States</b>											
1999	2.2	-1.1	4.1	5.0	4.2	8.7	5.42	5.64	1.066	0.7	49.6
2000	3.4	3.2	3.8	5.2	4.0	9.4	6.53	6.03	0.924	1.4	44.2
2001	2.8	0.7	0.3	-4.1	4.8	11.4	3.78	5.01	0.896	-0.5	43.6
2002	1.6	-1.3	2.4	-1.0	5.8	8.0	1.80	4.60	0.946	-3.4	45.8
2002 Q2	1.3	-1.4	2.2	-1.5	5.8	7.9	1.92	5.08	0.919	-3.3	44.2
Q3	1.6	-1.9	3.3	0.5	5.8	7.2	1.81	4.25	0.984	-3.4	44.9
Q4	2.2	-0.8	2.9	1.1	5.9	6.4	1.55	3.99	0.999	-3.9	45.8
2003 Q1	2.9	0.6	2.0	0.4	5.8	6.3	1.33	3.90	1.073	-4.2	46.3
Q2	2.1	0.7	2.5	-1.3	6.2	6.9	1.24	3.61	1.137	-4.7	47.1
Q3	2.2	.	3.3	-1.2	6.1	7.6	1.13	4.22	1.125	.	.
2003 May	2.1	-	-	-1.3	6.1	6.8	1.28	3.56	1.158	-	-
June	2.1	-	-	-1.6	6.4	7.3	1.12	3.32	1.166	-	-
July	2.1	-	-	-1.3	6.2	8.3	1.11	3.93	1.137	-	-
Aug.	2.2	-	-	-1.7	6.1	7.7	1.14	4.44	1.114	-	-
Sep.	2.3	-	-	-0.5	6.1	6.9	1.14	4.29	1.122	-	-
Oct.	.	-	-	.	.	.	1.16	4.27	1.169	-	-
<b>Japan</b>											
1999	-0.3	-1.8	0.1	0.2	4.7	3.7	0.22	1.75	121.3	-7.2	118.2
2000	-0.7	-6.0	2.8	5.7	4.7	2.1	0.28	1.76	99.5	-7.4	126.1
2001	-0.7	5.1	0.4	-6.8	5.0	2.8	0.15	1.34	108.7	-6.1	134.6
2002	-0.9	-3.0	0.1	-1.2	5.4	3.3	0.08	1.27	118.1	.	.
2002 Q2	-0.9	-1.7	-0.3	-3.5	5.4	3.5	0.08	1.37	116.5	.	.
Q3	-0.8	-6.7	1.7	3.3	5.4	3.3	0.07	1.24	117.2	.	.
Q4	-0.5	-8.4	2.3	6.0	5.4	2.9	0.07	1.01	122.4	.	.
2003 Q1	-0.2	-6.9	2.9	5.5	5.4	1.9	0.06	0.80	127.6	.	.
Q2	-0.2	-3.6	3.0	2.2	5.4	1.6	0.06	0.60	134.7	.	.
Q3	-0.2	.	.	0.7	.	1.8	0.05	1.20	132.1	.	.
2003 May	-0.2	-2.3	-	1.3	5.4	1.6	0.06	0.57	135.8	-	-
June	-0.4	-3.6	-	2.4	5.3	1.8	0.06	0.56	138.1	-	-
July	-0.2	.	-	-0.3	5.3	1.8	0.05	0.99	135.0	-	-
Aug.	-0.3	.	-	-1.3	.	2.0	0.05	1.15	132.4	-	-
Sep.	-0.2	.	-	3.4	.	1.8	0.05	1.45	128.9	-	-
Oct.	.	.	-	.	.	.	0.06	1.40	128.1	-	-

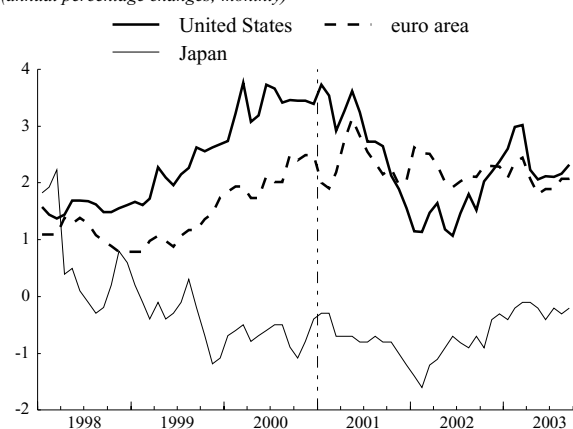
### Real gross domestic product

(annual percentage changes; quarterly)



### Consumer price indices

(annual percentage changes; monthly)



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

1) Manufacturing.

2) Average-of-period values; M3 for US, M2+CDs for Japan.

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

4) For more information, see Table 10.

5) Financial accounts sources for 1999.

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

**Table 12.2**

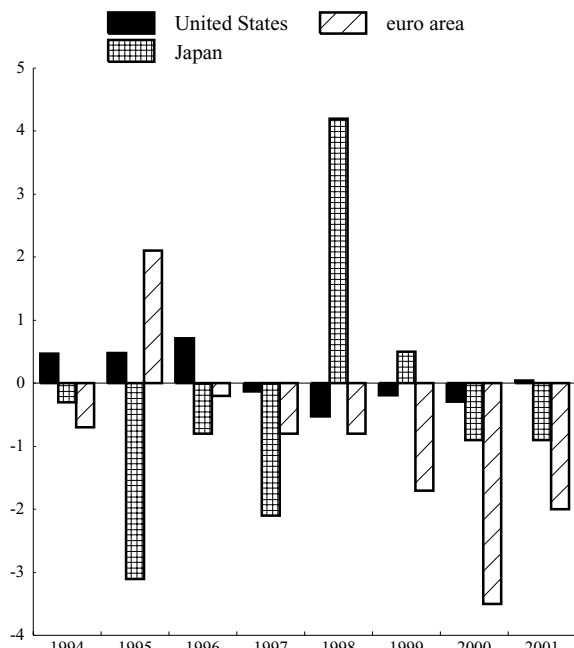
**Saving, investment and financing**

(as a percentage of GDP)

	National saving and investment			Investment and financing of non-financial corporations						Investment and financing of households <sup>1)</sup>			
	Gross saving	Gross capital formation	Net lending to the rest of the world	Gross capital formation	Gross fixed capital formation	Net acquisition of financial assets	Gross saving	Net incurrence of liabilities	Securities and shares	Capital expenditure	Net acquisition of financial assets	Gross saving	Net incurrence of liabilities
	1	2	3	4	5	6	7	8	9	10	11	12	13
United States													
1999	18.4	20.9	-3.0	9.5	8.9	10.5	8.2	10.6	2.9	12.4	4.8	11.2	6.3
2000	18.4	21.1	-4.0	9.7	9.1	12.3	7.5	12.6	2.7	12.5	4.0	11.5	5.8
2001	16.5	19.1	-3.7	7.9	8.5	1.9	7.7	1.8	1.9	13.0	6.5	11.6	5.8
2002	15.0	18.6	-4.7	7.7	7.6	1.7	7.7	2.0	0.2	12.8	6.1	12.5	7.0
2001 Q3	16.5	18.8	-3.5	7.7	8.3	0.1	7.8	0.3	0.5	12.9	9.1	12.8	9.2
Q4	15.9	18.2	-3.6	7.1	8.0	2.1	8.5	0.8	2.2	13.4	3.5	10.9	3.5
2002 Q1	15.5	18.6	-4.1	7.5	7.8	1.8	7.9	1.5	0.4	12.8	6.1	12.3	6.9
Q2	15.5	18.7	-4.8	7.7	7.6	2.6	7.7	2.6	1.0	12.7	5.8	12.7	5.9
Q3	14.6	18.6	-4.7	7.8	7.6	0.3	7.5	1.0	-1.4	12.9	4.7	12.5	6.8
Q4	14.3	18.7	-5.1	7.8	7.5	2.3	7.6	2.8	0.7	12.7	7.6	12.2	8.4
2003 Q1	14.0	18.4	-5.2	7.4	7.4	2.1	7.4	2.5	0.5	12.7	7.3	12.1	8.3
Q2	13.9	18.2	-5.2	7.3	7.4	4.1	8.0	3.6	2.4	12.9	12.2	12.2	12.6
Japan													
1999	27.8	25.9	2.2	14.4	14.8	0.5	13.7	-5.0	0.6	5.2	5.7	11.5	0.3
2000	27.7	26.2	2.3	15.8	15.4	0.9	14.3	-1.0	0.2	5.2	3.9	10.7	-0.1
2001	26.4	25.6	2.0	15.7	15.2	-2.8	14.1	-6.3	0.2	4.9	2.8	8.6	0.2
2002	.	23.7	.	.	.	-2.9	.	-7.0	-0.9	.	0.7	.	-2.1
2001 Q3	25.9	25.3	2.1	.	.	3.0	.	-8.4	-1.5	.	-5.6	.	3.2
Q4	25.5	25.5	2.0	.	.	4.3	.	5.7	-0.3	.	9.9	.	-0.6
2002 Q1	29.6	22.8	3.4	.	.	9.1	.	-4.8	-3.0	.	-6.6	.	2.5
Q2	.	22.7	.	.	.	-27.8	.	-23.6	0.8	.	5.8	.	-8.5
Q3	.	23.7	.	.	.	1.2	.	-9.7	-2.3	.	-6.8	.	-0.6
Q4	.	25.0	.	.	.	5.9	.	9.2	0.7	.	9.4	.	-1.5
2003 Q1	.	22.9	.	.	.	16.1	.	-5.1	0.4	.	-11.3	.	3.4
Q2	.	23.3	.	.	.	-23.7	.	-22.2	0.1	.	3.0	.	-5.5

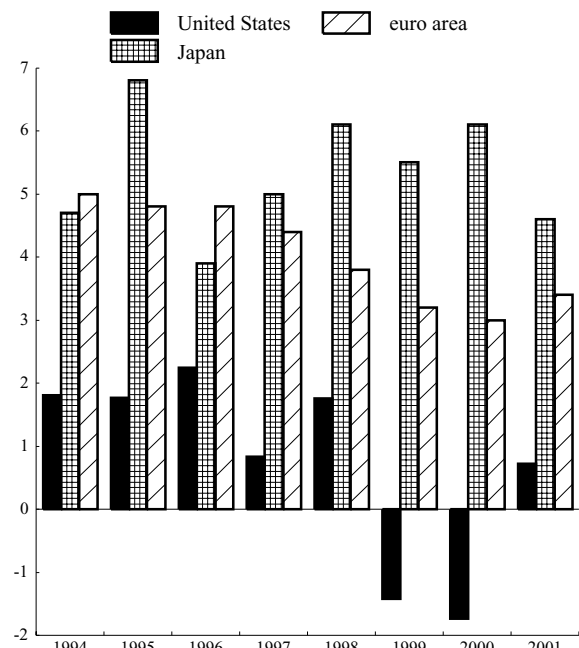
**Net lending of non-financial corporations**

(as a percentage of GDP)



**Net lending of households<sup>1)</sup>**

(as a percentage of GDP)



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

1) Households including non-profit institutions serving households.



## Technical notes

### Relating to the euro area overview table (I. Monetary developments and interest rates)

The average growth rate for the quarter ending in month  $t$  is calculated as:

$$a) \left( \frac{0.5I_t + \sum_{i=1}^2 I_{t-i} + 0.5I_{t-3}}{0.5I_{t-12} + \sum_{i=1}^2 I_{t-i-12} + 0.5I_{t-15}} - 1 \right) \times 100$$

where  $I_t$  is the index of adjusted stocks as at month  $t$  (see also below). Likewise, for the year ending in month  $t$ , the average growth rate is calculated as:

$$b) \left( \frac{0.5I_t + \sum_{i=1}^{11} I_{t-i} + 0.5I_{t-12}}{0.5I_{t-12} + \sum_{i=1}^{11} I_{t-i-12} + 0.5I_{t-24}} - 1 \right) \times 100$$

### Relating to Tables 2.1 to 2.8

#### 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 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:

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

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

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

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  $t$ .

For those quarterly series for which monthly observations are now available (see below), the

quarterly flow can equivalently be derived as sum of the three monthly flows in the quarter.

#### Calculation of growth rates for monthly series

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:

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

The base of the index (of the non-seasonally adjusted series) is currently set as December 2001 = 100. Time series of the index of adjusted stocks are available on the ECB's website ([www.ecb.int](http://www.ecb.int)) under the "Monetary statistics" item of the statistics section.

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:

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

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

Unless otherwise indicated, the annual percentage changes refer to the end of the indicated period. For example, the annual percentage change for the year 2002 is calculated in g) by dividing the index of December 2002 by the index of December 2001.

Percentage changes for intra-annual growth rates may be derived by adapting formula g). For example, the month-on-month growth rate  $a_t^M$  may be calculated as:

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

Finally, the three-month moving average for the annual percentage change of M3 is obtained as  $(a_t + a_{t-1} + a_{t-2})/3$ , where  $a_t$  is defined as in f) or g) above.

## Calculation of growth rates for quarterly series

Following the entry into force on 1 January 2003 of ECB Regulation ECB/2001/13, a number of breakdowns of MFI balance-sheet data, previously reported at a quarterly frequency, are now available monthly – thus providing monthly data on, for example, loans to households. However, for the time being and until at least a full year of monthly data becomes available, growth rates will continue to be calculated on the basis of the quarterly data.

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:

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

The annual percentage change in the four quarters ending in month  $t$ , i.e.  $a_t$ , may be calculated using formula g).

## Seasonal adjustment of the euro area monetary statistics<sup>1</sup>

The approach used relies on a multiplicative decomposition through X-12-ARIMA.<sup>2</sup> The seasonal adjustment may include a day-of-the-week adjustment, and for some series is carried out indirectly by means of a linear combination of components. In particular, this is the case for M3, derived by aggregating the seasonally adjusted series for M1, M2 less M1, and M3 less M2.

The seasonal adjustment procedures are first applied to the index of adjusted stocks.<sup>3</sup> The resulting 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 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:

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

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

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

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

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

<sup>1</sup> For details, see “Seasonal adjustment of monetary aggregates and HICP for the euro area”, ECB (August 2000) and the statistics section of the ECB’s website ([www.ecb.int](http://www.ecb.int)), under the “Monetary statistics” item.

<sup>2</sup> 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, pp. 127-152, or “X-12-ARIMA Reference Manual”, *Time Series Staff*, Bureau of the Census, Washington, D.C.

For internal purposes, the model-based approach of TRAMO-SEATS is also used. For details on TRAMO-SEATS, see Gomez, V. and Maravall, A. (1996), “Programs TRAMO and SEATS: Instructions for the User”, Banco de España, Working Paper No. 9628, Madrid.

<sup>3</sup> 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.

## Relating to Table 4.1

### Seasonal adjustment of the HICP<sup>4</sup>

The approach used relies on multiplicative decomposition through X-12-ARIMA (see footnote 2 on page 86\*). The seasonal adjustment of the overall HICP for the euro area is carried out indirectly by aggregating the seasonally adjusted euro area series for processed food, unprocessed food, industrial goods excluding energy, and services. Energy is added without adjustment since there is no statistical evidence of seasonality. Seasonal factors are revised at annual intervals or as required.

## Relating to Table 8.2

### Seasonal adjustment of the balance of payments current account

The approach relies on multiplicative decomposition through X-12-ARIMA (see footnote 2 on page 86\*). The raw data for goods and services are pre-adjusted to take “working day” and “Easter” effects into account. Data on income credits are subject to a “working day” pre-adjustment. The seasonal adjustment for these items is carried out using these pre-adjusted series. Income debits and current transfers are not pre-adjusted. 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 semi-annual intervals or as required.

<sup>4</sup> See footnote 1 on page 86\*.



## General notes

The basis for the statistics compiled by the European Central Bank (ECB) is presented in the document entitled “Statistical information collected and compiled by the ESCB”, dated May 2000. This document is an update of the report entitled “Statistical requirements for Stage Three of Monetary Union (Implementation Package)” of July 1996. The document covers money and banking and related statistics, balance of payments statistics, international investment position statistics and financial accounts statistics. The ECB’s requirements for statistics on prices and costs, national accounts, the labour market, government receipts and expenditure, short-term indicators of output and demand, and the European Commission Business and Consumer Surveys are set out in the document entitled “Requirements in the field of general economic statistics” of August 2000.<sup>1</sup>

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](http://www.ecb.int)). Services available under “Statistics on-line” include a browser interface with search facilities, subscription to different datasets and a facility allowing data to be downloaded directly in compressed Comma Separated Value (CSV) files.

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

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

As a general rule, the cut-off date for the statistics included in the Monthly Bulletin is the day preceding the first meeting in the month of the Governing Council. For this issue, the cut-off date was 5 November 2003.

Recent data are often provisional and may be revised. Discrepancies between totals and their components may arise from rounding.

Statistical series relating to the euro area cover EU Member States that had adopted the euro at the time to which the statistics relate. This means that euro area data up to end-2000 cover the Euro 11 and, from the beginning of 2001, data cover the Euro 12. Exceptions to this rule are indicated where appropriate.

In the tables, the break is shown by means of a line marked “Euro area enlargement”. In the charts, the break is indicated by a dotted line. Where possible, absolute and percentage changes for 2001 calculated from a base in 2000 use a series which takes into account the impact of Greece’s entry into the euro area.

Data for the euro area plus Greece up to end-2000 can be downloaded (CSV files) from the ECB’s website ([www.ecb.int](http://www.ecb.int)).

The group “acceding countries” consists of the Czech Republic, Estonia, Cyprus, Latvia, Lithuania, Hungary, Malta, Poland, Slovenia and Slovakia.

### Overview

Key developments in the euro area are summarised in an overview table.

<sup>1</sup> The ECB is responsible for money, banking and financial markets statistics at the European level; responsibility for balance of payments, international investment position and financial accounts statistics is shared with the European Commission (Eurostat); price, cost and other economic statistics are the responsibility of the European Commission (Eurostat).

## Monetary policy statistics

Tables 1.1 to 1.5 show the consolidated financial statement of the Eurosystem, data on Eurosystem operations, statistics relating to minimum reserves, and the banking system's liquidity position. Tables 1.2 and 1.3 reflect the switch to variable rate tenders in June 2000.

## Monetary developments and investment funds

Table 2.1 shows the aggregated balance sheet of the monetary financial institution (MFI) sector, i.e. the sum of the harmonised balance sheets of all MFIs resident in the euro area. Table 2.2 shows the consolidated balance sheet of the MFI sector, which is obtained by netting the aggregated balance sheet positions between MFIs in the euro area. Due to limited heterogeneity in recording practices, the sum of the inter-MFI positions is not necessarily zero; the balance is shown in column 9 of the liabilities side of Table 2.2. Table 2.3 sets out the euro area monetary aggregates and counterparts. These are derived from the consolidated MFI balance sheet; they also take account of some monetary assets/liabilities of central government. Statistics on monetary aggregates and counterparts are presented with reference to both unadjusted data (panels 1-6) and data adjusted for seasonal and trading-day effects (panels 7-12). Whereas in Tables 2.1 and 2.2, the holdings by non-euro area residents of i) shares/units issued by money market funds located in the euro area and ii) debt securities issued with a maturity of up to two years by MFIs located in the euro area are shown in the external liabilities item, in Table 2.3, these holdings are excluded from the monetary aggregates and contribute to the item net external assets. Table 2.4 provides an analysis by sector, type and original maturity of loans granted by MFIs other than the Eurosystem (the banking system) resident in the euro area. Table 2.5 shows a sectoral and instrument analysis of deposits held with the

euro area banking system. Table 2.6 shows the securities held by the euro area banking system, by type of issuer. Tables 2.2 to 2.6 include flows adjusted for reclassifications, revaluations, exchange rate variations and any other changes which do not arise from transactions. Table 2.7 shows selected revaluations for which the flows are adjusted. Tables 2.3 to 2.6 also provide growth rates in terms of annual percentage changes based on the adjusted flows. Table 2.8 shows a quarterly currency analysis of selected MFI balance sheet items.

A complete list of MFIs is published on the ECB's website. Details of the sector definitions are set out in the "Money and Banking Statistics Sector Manual: guidance for the statistical classification of customers" (ECB, November 1999). The "Guidance Notes to Regulation ECB/2001/13 on the MFI Balance Sheet Statistics" (ECB, November 2002) explains practices recommended to be followed by the NCBs. From 1 January 1999 the statistical information has been 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).

Following the entry into force of Regulation ECB/2001/13, the balance sheet item "money market paper" has been merged with the item "debt securities" on both the assets and liabilities side of the MFI balance sheet.

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

fund sector as identified by investment policy, and Table 2.11 shows the aggregated balance sheet broken down by type of investor.

### Financial markets and interest rates

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

Statistics on securities issues cover securities other than shares (debt securities), which are presented in Tables 3.5, 3.6 and 3.7, as well as quoted shares, which are presented in Table 3.8. Debt securities are broken down into short-term and long-term securities. "Short-term" means securities with an original maturity of one year or less (in exceptional cases, and in accordance with the ESA 95, two years or less). Securities with a longer maturity, or with optional maturity dates, the latest of which is more than one year away, or with indefinite maturity dates, are classified as long-term. The statistics on debt securities are estimated to cover approximately 95% of total issues by euro area residents.

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

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

area. The term "international organisations" includes the European Investment Bank. The ECB is included in the Eurosystem.

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

Table 3.7 shows annual growth rates for debt securities issued by euro area residents (broken down 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).

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, the NCBs of the euro area member countries (S.121) and other monetary financial institutions (S.122); non-monetary financial corporations, which comprises other financial intermediaries (S.123), financial auxiliaries (S.124) and insurance corporations and pension funds (S.125); non-financial corporations (S.11); central government (S.1311); and other general government, which comprises state government (S.1312), local government (S.1313) and social security funds (S.1314).

## HICP and other prices

The data described in this section and the “Real economy indicators” section are, with a few exceptions, produced by the European Commission (mainly Eurostat) and national statistical authorities. Euro area results are obtained by aggregating data for individual countries. As far as possible, the data are harmonised and comparable. As a general rule, however, the availability of comparable data is better for the more recent periods than for earlier periods.

The Harmonised Index of Consumer Prices (HICP) for the euro area (Table 4.1) is available from 1995 onwards. The index is based on national HICPs, which 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). The HICP covers monetary expenditure on final consumption by households on the economic territory of the euro area. The table includes seasonally adjusted HICP data which are compiled by the ECB.

## Real economy indicators

With regard to statistics on national accounts (Tables 4.2 and 5.1), the implementation of the ESA 95 from 1999 has begun to pave the way for fully comparable data, including quarterly summary accounts, across the euro area. For data before 1999, the deflators of GDP in Table 4.2.2 are derived from national data in domestic currency. National accounts in the Monthly Bulletin 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 products applied in Tables 4.2.1 and 5.2.1 is the harmonised sub-division of industry excluding construction

(NACE sections C to E) into Main Industrial Groupings as defined by Commission Regulation (EC) No. 586/2001 of 26 March 2001.

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

Employment data (Table 5.4) are based on the ESA 95. Whenever coverage of the euro area is incomplete, some data are estimated by the ECB on the basis of the information available. Unemployment rates conform to International Labour Organization (ILO) guidelines. The labour force estimates underlying the unemployment rate are different from the sum of the employment and unemployment levels published in Table 5.4.

## Saving, investment and financing

Table 6.1 shows quarterly data on financial accounts for non-financial sectors in the euro area, comprising general government (S.13), non-financial corporations (S.11), and households (S.14) including non-profit institutions serving households (S.15). The data cover amounts outstanding and transactions classified according to the ESA 95 and show the main financial investment and financing activities of the non-financial sectors. On the financing side (liabilities) the data are presented by ESA 95 sector and original maturity. Whenever possible the financing taken from MFIs is presented separately. The information on financial investment (assets) is currently less detailed than that on financing, especially since a breakdown by sector is not possible.

Table 6.2 shows quarterly data on financial accounts for insurance corporations and pensions funds (S.125) in the euro area. As in Table 6.1, the data cover amounts outstanding and financial transactions and show the main financial investment and financing activities of this sector.



The quarterly data in both tables are based on quarterly national financial accounts, MFI balance sheet and securities issues statistics. Table 6.1 also refers to data taken from BIS international banking statistics. Although all euro area countries contribute to the MFI balance sheet and securities issues statistics, Ireland and Luxembourg do not yet provide quarterly national financial accounts data.

Table 6.3 shows annual data on saving, investment (financial and non-financial) and financing for the euro area sectors as a whole, and for non-financial corporations and households separately. These annual data provide, in particular, fuller sectoral information on the acquisition of financial assets and are consistent with the quarterly data in the two previous tables.

### **General government fiscal position**

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

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

mainly explained by government transactions in financial assets and by foreign exchange valuation effects.

### **Balance of payments and international investment position (including reserves)**

The concepts and definitions used in balance of payments statistics (Tables 8.1 to 8.6) and international investment position statistics (Tables 8.8.1 to 8.8.4) generally conform to the 5th edition of the IMF Balance of Payments Manual (October 1993), to the ECB Guideline of May 2003 (ECB/2003/7) on the statistical reporting requirements of the ECB, and to Eurostat's documentation.

The euro area balance of payments (b.o.p.) data are compiled by the ECB. Data up to December 1998 are expressed in ECU. The recent monthly figures should be regarded as provisional. Data are revised with the publication of the figures for the next month and of the detailed quarterly b.o.p. data. Earlier data are revised periodically or as a result of methodological changes in the compilation of the source data. In line with the revision practice, this issue contains revisions of balance of payments statistics from 2000 to July 2003. The revisions comprise an estimation of the increase of holdings of euro banknotes by non-residents of the euro area compared with previous holdings of banknotes denominated in legacy currencies. This has been recorded under other investment/liabilities of the Eurosystem.

Some earlier data have been partially estimated and may not be fully comparable with more recent observations. Table 8.5.2 provides a sectoral breakdown of euro area purchasers of securities issued by non-euro area residents. For the time being, it is not possible to show a sectoral breakdown of euro area issuers of securities acquired by non-residents.

A specific methodological note on the monetary presentation of the euro area b.o.p. (Table 8.7) is available in the statistics

section of the ECB's website ([www.ecb.int](http://www.ecb.int)). See also Box 1 on page 15 of the June 2003 issue of the ECB's Monthly Bulletin.

The euro area international investment position (i.i.p.) is compiled on the basis of euro area member countries' positions vis-à-vis non-euro area residents (i.e. considering the euro area as a single economy) from end-1999 data onwards, with the result that euro area assets and liabilities are shown separately (see also Box 9 on page 71 of the December 2002 issue of the Monthly Bulletin). For end-1997 and end-1998 positions, the i.i.p. is compiled on a "net" basis, i.e. by aggregating national data. The "net" and the "extra-euro area" based compilation methodologies may not give fully comparable results. The i.i.p. is valued at current market prices, with the exception of direct investment stocks, where book values are used to a large extent.

The outstanding amounts of the Eurosystem's international reserves and related assets are shown in Table 8.8.5 with the corresponding reserves and related assets held by the ECB. The data in Table 8.8.5 are in line with the recommendations for the IMF/BIS template on international reserves and foreign currency liquidity. Earlier data are continually revised. Reserve assets data before end-1999 are not fully comparable with later observations. A publication on the statistical treatment of the Eurosystem's international reserves is available on the ECB's website ("Statistical treatment of the Eurosystem's international reserves", October 2000).

### External trade in goods

Table 9 shows data on euro area external trade in goods. The main source for the data is Eurostat. The ECB derives volume indices from Eurostat value and unit value indices, and performs seasonal adjustment of unit value indices, while value data are seasonally and working-day adjusted by Eurostat.

The commodity breakdown is in accordance with the classification by Broad Economic Categories (based on the SITC Rev. 3 definition) for intermediate, capital and consumption goods, and with the SITC Rev. 3 for manufactured goods and oil. The geographical breakdown shows main trading partners, individually or in regional groups.

Owing to differences in definitions, classification, coverage and time of recording, external trade data, in particular imports, are not fully comparable with the goods item in the balance of payments statistics (Tables 8.1 and 8.2). Part of the difference arises from the inclusion of insurance and freight services in the recording of goods imported, which accounted for about 3.8% of the value of imports (c.i.f.) in 1998 (ECB estimates).

### Exchange rates

Table 10 shows ECB calculations of nominal and real effective exchange rate indices for the euro based on weighted averages of bilateral euro exchange rates. Weights are based on 1995-97 manufactured goods trade with the trading partners and capture third-market effects. Up to December 2000, the narrow group is composed of the countries whose currencies are shown in the table plus Greece. When Greece joined the euro area in January 2001, it ceased to be a partner country in the effective exchange rate of the euro and the weighting scheme has been adjusted accordingly. In addition, the broad group includes the following countries: Algeria, Argentina, Brazil, China, Croatia, Cyprus, the Czech Republic, Estonia, Hungary, India, Indonesia, Israel, Malaysia, Mexico, Morocco, New Zealand, the Philippines, Poland, Romania, Russia, Slovakia, Slovenia, South Africa, Taiwan, Thailand and Turkey. Real rates are calculated using consumer prices (CPI), producer prices (PPI), gross domestic product (GDP deflator), unit labour costs in manufacturing (ULCM) and unit labour costs in the total economy (ULCT). Where deflators are not yet available, estimates are used. Rates using the

GDP deflator and the ULCT index as deflators refer to the Euro 12, i.e. they include Greece for the entire period.

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 on the calculation of effective exchange rates, see the article entitled "Developments in the euro area's international cost and price competitiveness" in the August 2003 issue of the Monthly Bulletin (page 67) and the ECB's Occasional Paper No. 2 ("The effective

exchange rates of the euro", Luca Buldorini, Stelios Makrydakis and Christian Thimann, February 2002), which can be downloaded from the ECB's website.

### **Economic and financial developments outside the euro area**

Statistics on other EU Member States (Table 11) follow the same principles as those for data relating to the euro area. Data for the United States and Japan contained in Tables/Charts 12.1 and 12.2 are obtained from national sources.



# Chronology of monetary policy measures of the Eurosystem<sup>1</sup>

## 2 January 2001

On 1 January 2001 the euro was introduced in Greece. Greece thus became the twelfth EU Member State to adopt the single currency and the first to do so since the start of Stage Three of Economic and Monetary Union (EMU) on 1 January 1999. As a result, the Bank of Greece is now a full member of the Eurosystem, with the same rights and obligations as the 11 national central banks of the EU Member States which previously adopted the euro. In accordance with Article 49 of the Statute of the European System of Central Banks and of the European Central Bank, the Bank of Greece pays up the remainder of its contribution to the capital of the ECB, as well as its share of the ECB's reserves, and also transfers to the ECB its contribution to the foreign reserve assets of the ECB.

Further to the announcement on 29 December 2000, the first main refinancing operation of 2001, in which the Greek counterparties of the Eurosystem participate for the first time, is successfully conducted. The allotment volume of €101 billion takes into account the additional liquidity needs of the euro area banking system resulting from the integration of the Greek Monetary Financial Institutions.

## 4 January 2001

The Governing Council of the ECB decides that the minimum bid rate for the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 4.75%, 5.75% and 3.75% respectively.

In addition, it decides on an allotment amount of €20 billion per operation for the longer-term refinancing operations to be conducted in 2001. This amount takes into consideration the expected liquidity needs of the euro area banking system in 2001 and the desire of the Eurosystem to continue to provide the bulk of refinancing of the financial sector through its main refinancing operations. The Governing Council may adjust the allotment amount in the course of the year in

the event of unexpected developments in liquidity needs.

## 18 January, 1 February, 15 February, 1 March, 15 March, 29 March, 11 April, 26 April 2001

The Governing Council of the ECB decides that the minimum bid rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 4.75%, 5.75% and 3.75% respectively.

## 10 May 2001

The Governing Council of the ECB decides to lower the minimum bid rate on the main refinancing operations by 0.25 percentage point to 4.50%, with effect from the operation to be settled on 15 May 2001. In addition, it decides to lower the interest rates on both the marginal lending facility and the deposit facility by 0.25 percentage point, to 5.50% and 3.50% respectively, both with effect from 11 May 2001.

## 23 May, 7 June, 21 June, 5 July, 19 July, 2 August 2001

The Governing Council of the ECB decides that the minimum bid rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 4.50%, 5.50% and 3.50% respectively.

## 30 August 2001

The Governing Council of the ECB decides to lower the minimum bid rate on the main refinancing operations by 0.25 percentage point to 4.25%, with effect from the operation to be settled on 5 September 2001. In

<sup>1</sup> 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.

addition, it decides to lower the interest rates on both the marginal lending facility and the deposit facility by 0.25 percentage point, to 5.25% and 3.25% respectively, both with effect from 31 August 2001.

### **13 September 2001**

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

### **17 September 2001**

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

### **27 September, 11 October, 25 October 2001**

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

### **8 November 2001**

The Governing Council of the ECB decides to lower the minimum bid rate on the main refinancing operations by 0.50 percentage point to 3.25%, starting from the operation to be settled on 14 November 2001. In addition, it decides to lower the interest rates on both the marginal lending facility and the

deposit facility by 0.50 percentage point, to 4.25% and 2.25% respectively, both with effect from 9 November 2001.

### **6 December 2001**

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

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

### **3 January 2002**

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

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

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

The Governing Council of the ECB decides that the minimum bid rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit

facility will remain unchanged at 3.25%, 4.25% and 2.25% respectively.

### **10 July 2002**

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

### **1 August, 12 September, 10 October, 7 November 2002**

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

### **5 December 2002**

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

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

### **9 January 2003**

The Governing Council of the ECB decides that the minimum bid rate on the main refinancing

operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 2.75%, 3.75% and 1.75% respectively.

### **23 January 2003**

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

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

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

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

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

### **6 February 2003**

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

### **6 March 2003**

The Governing Council of the ECB decides to lower the minimum bid rate on the main refinancing operations by 0.25 percentage point to 2.50%, starting from the operation to be settled on 12 March 2003. It also decides to lower the interest rates on both the marginal lending facility and the deposit facility by 0.25 percentage point, to 3.50% and 1.50% respectively, both with effect from 7 March 2003.

### **3 April 2003**

The Governing Council of the ECB decides that the minimum bid rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 2.50%, 3.50% and 1.50% respectively.

### **8 May 2003**

The Governing Council of the ECB decides that the minimum bid rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 2.50%, 3.50% and 1.50% respectively.

It also announces the results of its evaluation of the ECB's monetary policy strategy. This strategy, which was announced on 13 October 1998, consists of three main elements: a quantitative definition of price stability, a prominent role for money in the assessment of risks to price stability, and a broadly based assessment of the outlook for price developments.

The Governing Council confirms the definition of price stability formulated in October 1998, namely that "price stability is defined as a year-on-year increase in the Harmonised Index of Consumer Prices (HICP) for the euro area of below 2%. Price stability is to be maintained over the medium term". At the same time, the Governing Council agrees that in the pursuit of

price stability it will aim to maintain inflation rates close to 2% over the medium term.

The Governing Council confirms that its monetary policy decisions will continue to be based on a comprehensive analysis of the risks to price stability. At the same time, the Governing Council decides to clarify in its communication the respective roles played by economic and monetary analysis in the process of coming to the Council's overall assessment of risks to price stability.

To underscore the longer-term nature of the reference value for monetary growth as a benchmark for the assessment of monetary developments, the Governing Council also decides that it will no longer conduct a review of the reference value on an annual basis. However, it will continue to assess the underlying conditions and assumptions.

### **5 June 2003**

The Governing Council of the ECB decides to lower the minimum bid rate on the main refinancing operations by 0.50 percentage point to 2.0%, starting from the operation to be settled on 9 June 2003. It also decides to lower the interest rates on both the marginal lending facility and the deposit facility by 0.50 percentage point, to 3.0% and 1.0% respectively, both with effect from 6 June 2003.

### **10 July, 31 July, 4 September, 2 October, 6 November 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 2.0%, 3.0% and 1.0% respectively.



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  - "Annual Report 2001", April 2002.
  - "Annual Report 2002", April 2003.
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## Convergence Report

- "Convergence Report 2000", May 2000.
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## Monthly Bulletin

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