



EUROPEAN CENTRAL BANK

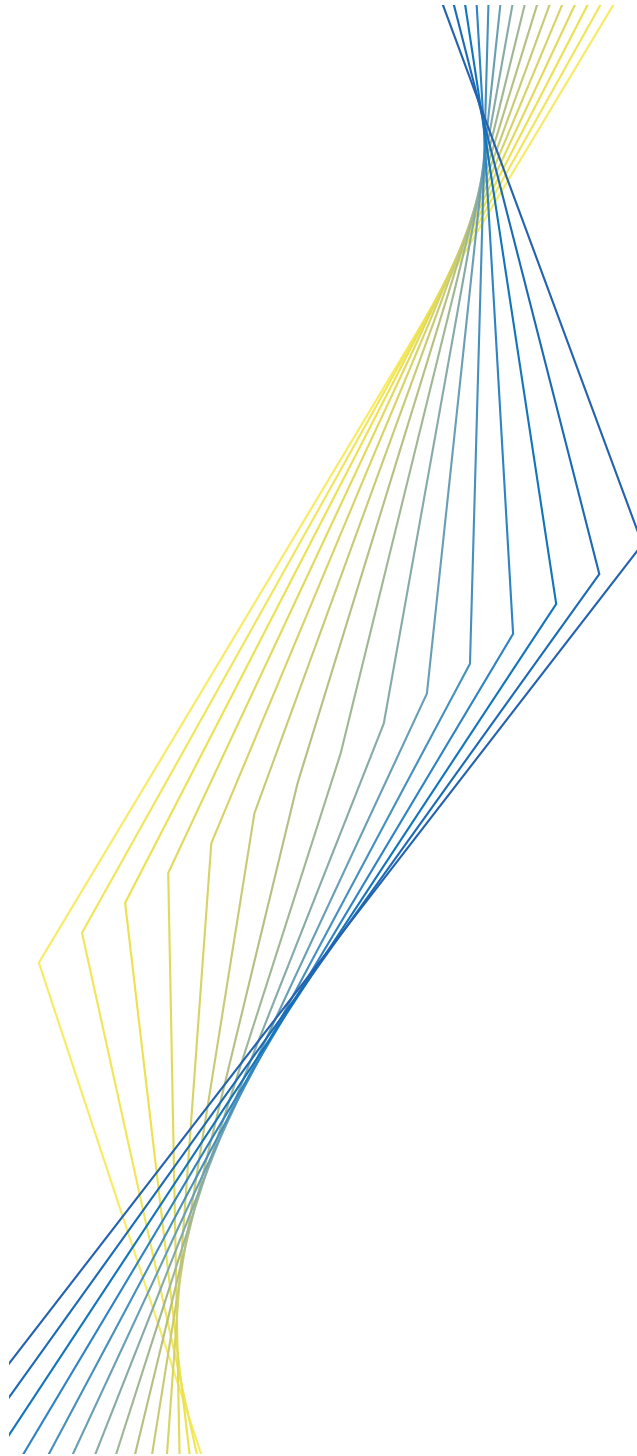
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**M O N T H L Y
B U L L E T I N**

August 2003



EUROPEAN CENTRAL BANK



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Contents

Editorial	5
Economic and monetary developments in the euro area	7
Monetary and financial developments	7
Price developments	21
Output, demand and labour market developments	27
Exchange rate and balance of payments developments	32
Boxes:	
1 The results of the July 2003 bank lending survey for the euro area	10
2 Monetary policy operations and liquidity conditions in the reserve maintenance period ending on 23 July 2003	16
3 Private sector expectations for inflation and economic activity in the euro area: the results of the 2003 Q3 Survey of Professional Forecasters (SPF) and other available indicators	24
4 Recent developments in extra-euro area trade volumes and prices	36
Changes to the Eurosystem's operational framework for monetary policy	41
Recent developments in the euro area banking sector	55
Developments in the euro area's international cost and price competitiveness	67
Euro area statistics	1*
Chronology of monetary policy measures of the Eurosystem	97*
Documents published by the European Central Bank	101*

Abbreviations

Countries

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

Others

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

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

Editorial

At its meeting on 31 July 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.

Recent economic and monetary information confirmed the assessment that the current monetary policy stance is appropriate as the outlook for price stability over the medium term remains favourable. The Governing Council will continue to monitor carefully all factors that might affect this assessment.

As regards the economic analysis underlying this assessment, economic activity in the euro area remained subdued in the first half of 2003, broadly in line with previous expectations. At the same time, there is increasing reason to expect that economic activity will recover gradually in the second half of 2003 and strengthen further in 2004. In the euro area, there are signs that economic confidence is stabilising. The increase in real disposable income owing to past improvements in the terms of trade of the euro area should favour consumption growth, while the low level of interest rates and, more generally, favourable financing conditions should support investment. In addition, there are increasing signs that external demand will contribute to the recovery in the euro area, as recent economic data in several regions of the world tend to confirm earlier expectations of some strengthening in economic activity. This should help to compensate for the negative effects on external demand from the appreciation of the exchange rate of the euro. Financial market developments are also in line with expectations of a gradual recovery of economic growth in the euro area and elsewhere.

Risks to this main scenario remain, however, on the downside, although they may have slightly declined recently. In particular, the need for a further correction of

macroeconomic imbalances outside the euro area may still hamper a sustained recovery in the global economy. In the euro area, uncertainty surrounds the extent of the adjustment still needed in the corporate sector to enhance productivity and profitability, although the prolonged period of low interest rates should have largely facilitated this process and should therefore help to safeguard against downside risks to economic growth.

Concerning the outlook for prices, developments in food prices (partly reflecting weather conditions) and in oil prices may contribute to some temporary and limited volatility in inflation rates. However, annual HICP inflation rates should still hover around 2% over the remainder of the year. Beyond the short term, the outlook continues to be favourable. Annual inflation rates are expected to fall in 2004 and remain below 2%. In addition to base effects, further dampening effects on inflation stemming from the pass-through of the past appreciation of the exchange rate of the euro are expected. The gradual economic recovery should be accompanied by moderate wage developments and price-setting behaviour and is not therefore expected to contribute to price pressures. This picture is reflected in available forecasts and projections, as well as in information implied in bond yields, which all indicate that inflation expectations in the euro area are firmly anchored at a level below but close to 2% over the medium term.

Turning to the monetary analysis, liquidity has continued to accumulate in the euro area and therefore remains ample, significantly above what is needed to finance non-inflationary growth. The low level of interest rates in the euro area across the maturity spectrum has contributed to high demand for liquid assets. The current level of interest rates is helping to counteract the negative effects on credit demand resulting from the weak economic activity in the euro area. In fact, in the course of this year, growth in loans to the private sector seems to have

stabilised, at levels which are not very low by historical standards. Overall, even though a large part of the excess liquidity in the euro area has been caused by portfolio shifts, the ample liquidity needs to be closely monitored.

In sum, the economic analysis confirms the expectation that inflation will be below but close to 2% over the medium term. This picture is consistent with expectations of a gradual recovery occurring in 2003, followed by a further strengthening later on, and takes into account the effects of the past appreciation of the euro. At the same time, the strong expansion of M3 should, in view of the current economic situation, not be seen as adversely affecting this outlook for the time being. Hence, cross-checking the information from the two pillars points to a favourable outlook for price stability over the medium term, which is the horizon relevant for monetary policy.

At the current juncture, it is important that all policy-makers in the euro area contribute to creating a climate conducive to a recovery in confidence of economic agents. In the area of fiscal policy, when the budget plans for 2004 are being finalised, the correction of

severe disequilibria in public finances in some countries must be a priority. In full respect of the Stability and Growth Pact rules and in strict compliance with the recommendations of the ECOFIN Council, governments should stick to credible medium-term consolidation strategies. These strategies should aim to restore private incentives to work and invest, thereby underpinning the growth potential of the euro area economy, and should include a frontloaded and durable retrenchment of primary public spending. Such efforts on the fiscal front should be accompanied by decisive steps in the field of structural reform in product and labour markets, which would lead to a more efficient allocation of resources by removing rigidities constraining the growth potential of the euro area.

This issue of the Monthly Bulletin contains three articles. The first reviews and explains the reasons for the changes to the Eurosystem's operational framework for monetary policy, which will be effective as from March 2004. The second provides an overview of recent developments in the euro area banking sector. The third analyses the developments in the international cost and price competitiveness of euro area firms.

Economic and monetary developments in the euro area

I Monetary and financial developments

Monetary policy decisions of the Governing Council of the ECB

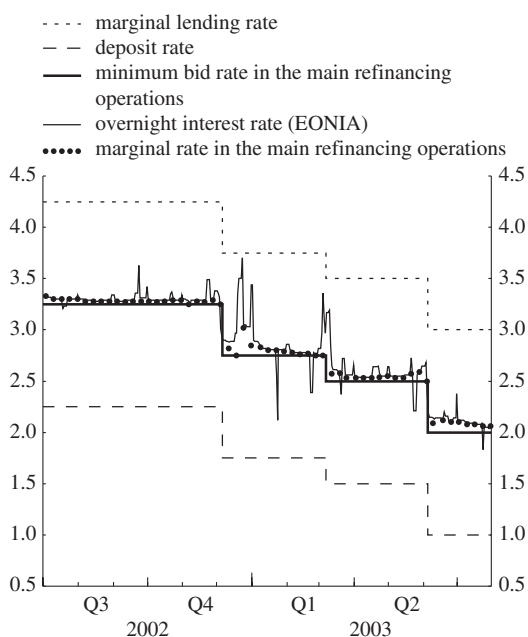
At its meeting on 31 July 2003, the Governing Council of the ECB decided to leave the minimum bid rate in the main refinancing operations, conducted as variable rate tenders, unchanged at 2.0%. The interest rates on both the marginal lending facility and the deposit facility were also kept unchanged, at 3.0% and 1.0% respectively (see Chart 1).

Annual M3 growth remained high in June

In June 2003, the annual growth rate of the broad monetary aggregate M3 was 8.3%, down from 8.5% in the previous month (see Chart 2). The three-month average of the annual growth rates of M3 stood at 8.5% in the period from April to June 2003, compared with 8.4% in the period from March to May 2003.

Chart 1 ECB interest rates and money market rates

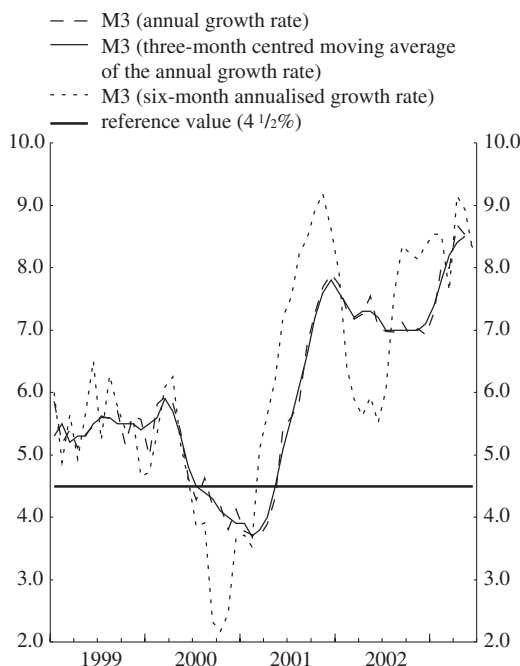
(percentages per annum; daily data)



Sources: ECB and Reuters.

Chart 2 M3 growth and the reference value

(adjusted for seasonal and calendar effects)



Source: ECB.

Monetary developments up to June indicate that non-MFI investors did not reverse past portfolio shifts to any significant extent, despite the decline in geopolitical uncertainties and stock market volatility over previous months. The continued strong monetary growth is likely to be related mainly to the low level of interest rates all along the maturity spectrum. This resulted in relatively low opportunity costs of holding money and reduced the attractiveness of alternative investment opportunities. In addition to the low level of government bond yields prevailing until June, the high bond market volatility at the time may also have supported investors' preference for short-term liquid assets. The strong monetary growth may also be seen as an indication that investors are still reluctant to invest in equity, given the substantial losses encountered on stock market investments in recent years. Finally, uncertainties about economic growth and labour market prospects may have continued to foster precautionary savings.

As a consequence of the extended period of high M3 growth, substantial excess liquidity has been accumulated in the euro area. This excess liquidity is not likely to imply risks to price stability against the background of the current economic situation in the euro area. However, if it were to persist at the time of a significant strengthening of economic activity, this ample liquidity could cause inflationary pressures to build up over the medium term. Therefore, the extent to which past portfolio shifts are reversed in the future and the extent to which there is a risk that they feed into aggregate spending at a time of stronger economic growth have to be monitored closely.

Turning to the main components of M3, the annual growth rate of the narrow monetary aggregate M1 remained unchanged at 11.5% in June (see Table 1). Within M1, the annual growth rate of currency in circulation declined to 31.9% in June, from 34.3% in the previous month. The short-run dynamics of currency in circulation remained relatively strong, although the process of rebuilding currency holdings slowed down as these holdings approach values close to the trend levels observed prior to the euro cash

changeover. The annual growth rate of overnight deposits increased further to 8.6%, from 8.3% in May. The strong dynamics of overnight deposits are likely to be mainly related to the low level of their opportunity costs.

As for the other components of M3, the annual rate of growth of short-term deposits other than overnight deposits dropped to 5.6% in June, from 5.9% in May. This reflected the decrease in the annual rate of change of deposits with an agreed maturity of up to two years, to -1.0%, from 0.8% in May. By contrast, the annual growth rate of deposits redeemable at a period of notice of up to three months increased further to 10.5% in June, from 9.9% in the previous month. These divergent developments probably reflect the narrowing of the spread between the retail interest rates on these types of deposits in recent months (see Chart 5), which reduced the attractiveness of time deposits over savings deposits.

The annual rate of growth of marketable instruments included in M3 declined to 8.2% in June, from 8.6% in May. This development was due to a decrease in the annual rates of

Table 1
Summary table of monetary variables in the euro area

(annual percentage changes; quarterly averages)

	2002 Q4	2003 Q1	2003 Q2	2003 Mar.	2003 Apr.	2003 May	2003 June
<i>Adjusted for seasonal and calendar effects</i>							
M1	8.8	10.3	11.5	11.8	11.2	11.5	11.5
<i>of which: currency in circulation</i>	12.9	39.1	35.8	39.9	37.5	34.3	31.9
<i>of which: overnight deposits</i>	8.1	6.6	8.1	8.1	7.7	8.3	8.6
M2 - M1 (= other short-term deposits)	4.9	4.3	5.4	4.7	5.2	5.9	5.6
M2	6.7	7.1	8.2	8.0	8.0	8.5	8.3
M3 - M2 (= marketable instruments)	8.6	10.5	9.7	8.0	12.5	8.6	8.2
M3	7.0	7.6	8.5	8.0	8.7	8.5	8.3
<i>Not adjusted for seasonal and calendar effects</i>							
Longer-term financial liabilities (excluding capital and reserves)	5.2	5.0	5.2	5.0	5.2	5.2	5.3
Credit to euro area residents	4.1	4.2	4.7	4.1	4.7	5.0	4.8
Credit to general government	1.9	2.0	3.5	1.8	3.5	4.4	3.7
<i>of which: loans to general government</i>	-1.2	-1.1	-0.4	-1.8	-0.1	-0.2	-0.3
Credit to other euro area residents	4.7	4.8	5.1	4.7	5.1	5.2	5.1
<i>of which: loans to the private sector</i>	4.8	4.9	4.6	4.7	4.7	4.6	4.5

Source: ECB.

change of both repurchase agreements (to -2.1%, from 2.8% in May) and debt securities issued with a maturity of up to two years (to -15.3%, from -12.3% in May). By contrast, the annual growth rate of money market fund shares and units increased to 19.2%, from 17.5% in the previous month. Given that the latter instruments are particularly suited for parking money in times of uncertainty, this supports the hypothesis of continuing high demand for monetary assets for precautionary reasons.

As regards the counterparts of M3 in the MFI balance sheets, the annual growth rate of MFIs' longer-term financial liabilities (excluding capital and reserves) increased slightly to 5.3%, from 5.2% in May.

Stable annual growth of loans to the private sector in June

Turning to the asset side of the consolidated balance sheet of the MFI sector, the annual growth rate of total credit granted to euro area residents went down to 4.8%, from 5.0% in May. This was due to a decline in the annual growth rates both of credit extended to general government (to 3.7% in June, from 4.4% in the previous month) and of credit extended to the private sector (to 5.1%, from 5.2% in May). The annual rate of growth of loans to the private sector stood at 4.5% in June, compared with 4.6% in May. The annual rate of growth of loans to the private sector has been hovering between 4½% and 5% over recent months, indicating that the downward trend in the growth of loans observed since late 2000 came to an end in late 2002. At the same time, there are no clear signs that a pick-up in the growth of loans is under way. In view of the economic environment, however, the current level of growth of MFI loans to the private sector, in real terms, is not low from a longer-term perspective.

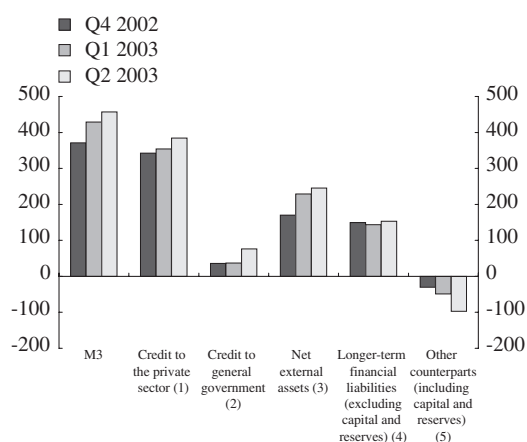
A tendency towards a stabilisation of credit conditions is also reflected in the results of the Eurosystem's July 2003 bank lending survey (see Box 1). Although banks have

still reported, on balance, tightened credit standards for the approval of loans or credit lines to enterprises over the past three months, the percentages have dropped significantly from those reported in the April survey. For loans to households most banks reported unchanged credit standards in July. This notwithstanding, for the time being, the results of the bank lending survey need to be interpreted with a high degree of caution, as there is little knowledge as yet on the relationship between the answers to the survey and actual credit and economic developments.

In June 2003, the net external asset position of the euro area MFI sector increased by €56 billion in absolute and non-seasonally adjusted terms. Over the 12 months up to June, the net external assets of the MFI sector went up by €245 billion, compared with a rise of €230 billion over the 12 months up to May. Euro area balance of payments data up to May suggest that the strong increase in the net external asset position of the euro area MFI sector in the 12 months up to May was related to large inflows into the euro area that were linked to purchases of euro area debt instruments by non-euro area residents and, to a lesser extent, to the euro area current account surplus.

Chart 3 Movements in M3 and its counterparts

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



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

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

As indicated in the article entitled “The bank lending survey for the euro area”, published in the April 2003 issue of the Monthly Bulletin, a quarterly bank lending survey has been developed by the Eurosystem in order to enhance the understanding of bank lending behaviour in the euro area. The survey is designed to complement existing statistics on bank retail interest rates and credit with information on demand and supply conditions in the euro area credit markets. The bank lending survey was implemented for the first time in January 2003 and for the second time in April 2003. In the May 2003 issue of the Monthly Bulletin, the main results of the first two surveys were presented. This box contains the main results obtained from the third survey and compares them with those of the previous surveys. A more extensive report is published on the ECB’s website.

The results of the July 2003 bank lending survey (which are based on the responses of all 86 banks in the sample) indicate that although banks have still reported, on balance, tightened credit standards to the approval of loans or credit lines to enterprises over the past three months, the net percentage of banks reporting a tightening has dropped significantly against the April survey. For loans to households, most banks reported unchanged credit standards in the July survey.

As regards loans to enterprises, the July 2003 survey indicated that the net percentage of banks reporting a net tightening of credit standards was 27% for the period from April to June (see Table A, upper panel). This figure was below both what banks had expected in April for that period (39%) and what had been reported for the period from January to March (46%) (see Chart, first section). There was a significant decline in the percentage of banks reporting a net tightening of credit standards on loans to large enterprises, while the percentage of banks reporting a net tightening of credit standards for small and medium-sized enterprises was broadly unchanged compared with the results of the April survey. Regarding the original maturity of loans, as in the April survey, the net tightening reported in the July survey was more pronounced for long-term loans than for short-term loans, although both dropped in comparison with the figures of the April survey.

As in the April survey, the factor cited as contributing most to the overall net tightening of credit standards over the period from April to June 2003 was risk perception, in particular that related to the industry or firm-specific

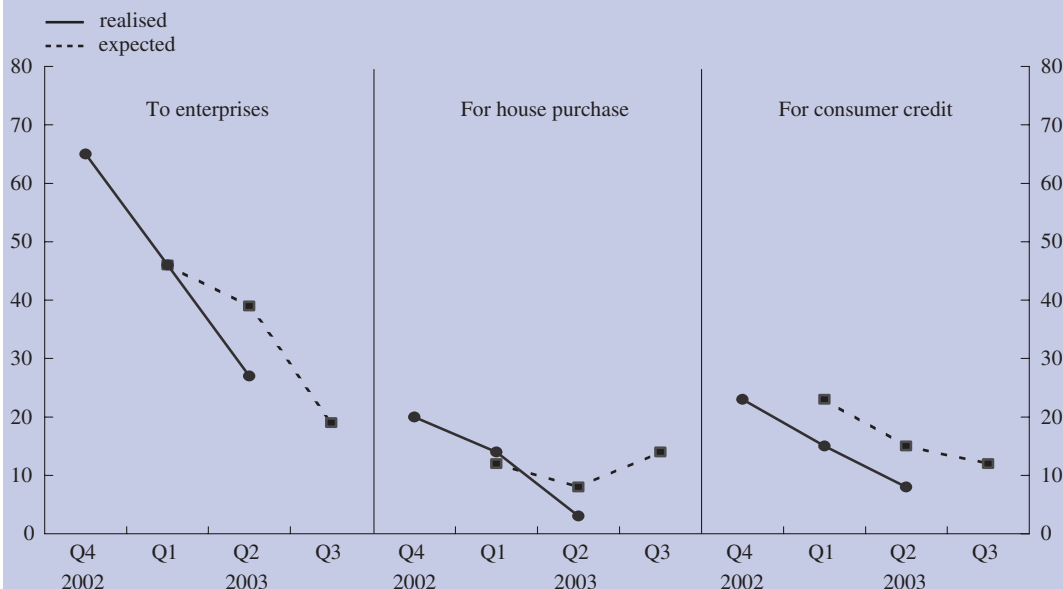
Table A: Changes in credit standards applied to enterprises*(percentages)*

	Overall		Loans to small and medium-sized enterprises		Loans to large enterprises		Short-term loans		Long-term loans	
	July	April	July	April	July	April	July	April	July	April
a) Over the past three months										
Tightened considerably	0	1	0	0	0	8	0	0	2	8
Tightened somewhat	27	45	32	34	25	43	19	32	28	35
Remained basically unchanged	73	54	65	64	75	49	82	68	68	57
Eased somewhat	0	0	3	3	0	0	0	0	2	0
Eased considerably	0	0	0	0	0	0	0	0	0	0
<i>Net percentage</i> ¹⁾	27	46	30	31	25	51	19	32	28	43
Number of banks responding	83	83	81	80	80	80	82	83	83	83
b) Over the next three months										
Tighten considerably	0	2	0	2	2	4	0	3	2	4
Tighten somewhat	23	36	23	35	24	33	11	26	22	37
Remain basically unchanged	72	61	68	61	73	61	82	71	74	58
Ease somewhat	4	0	9	3	1	2	7	0	1	2
Ease considerably	0	0	0	0	0	0	0	0	2	0
<i>Net percentage</i> ¹⁾	19	39	14	35	24	36	5	29	21	39
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”.*

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 net 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 April survey.

outlook, closely followed by expectations regarding the general economic outlook. The tightening took place, in particular, through a widening of margins, although non-price terms and conditions were reportedly also tightened.

With respect to expectations of credit standards for the third quarter of 2003, the net percentage of banks expecting a tightening of credit standards declined to 19% in the July survey, from 39% in the April survey (see Table A, lower panel). In particular, banks expect a lower degree of tightening for small and medium-sized enterprises.

As regards loan demand by enterprises, banks continued to report a net overall decrease, regardless of the size of the enterprise. Overall, 25% of the respondents (net) indicated in the July survey that they had experienced weaker demand for loans or credit lines to enterprises over the past three months, down from 31% in the April survey (see

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	April	July	April	July	April	July	April	July	April
Decreased considerably	2	0	2	2	4	7	2	0	3	1
Decreased somewhat	33	41	30	34	25	34	20	18	38	41
Remained basically unchanged	54	48	52	47	57	45	61	67	47	29
Increased somewhat	10	10	16	16	12	15	16	14	10	28
Increased considerably	0	0	0	0	2	0	0	0	2	0
Total	100	100	100	100	100	100	100	100	100	100
Net percentage¹⁾	-25	-31	-17	-19	-15	-26	-6	-4	-30	-14
Number of banks responding	83	82	81	81	80	80	81	83	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”.

Table B). The net percentage indicating a decrease in the demand for loans or credit lines fell particularly strongly in the case of large enterprises.

Turning to loans to households, the net percentage indicating a tightening of credit standards for loans for house purchase was only 3% in the July survey, down from 14% in the April survey (see Table C, upper panel), and was also below earlier expectations of 8% for the second quarter of 2003 (see Chart, second section). As regards consumer credit and other loans to households, the net percentage of banks reporting a tightening of credit standards fell to 8% in the July survey, from 15% in the April survey and below earlier expectations of 14% for the second quarter (see Chart, third section).

For those banks that continued to report a net tightening, the factor that contributed most to the tightening of the credit standards applied to loans to households over the past three months were weak expectations for general economic activity, followed – in the case of loans for house purchase – by an assessment of deteriorating housing market prospects and – with respect to consumer and other loans to households – by a deterioration of the creditworthiness of consumers. At the same time, the factor pointing to an easing of credit conditions mostly reported by banks was increased competition from other banks and financial intermediaries.

Regarding expectations for the third quarter of 2003, the results of the July 2003 survey indicate that, on balance, banks expect a further overall tightening of the credit standards applied to the approval of loans to households (see Table C, lower panel).

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	April	July	April
Decreased considerably	0	5	1	3
Decreased somewhat	14	18	18	24
Remained basically unchanged	44	35	58	47
Increased somewhat	30	33	21	20
Increased considerably	12	9	2	5
Total	100	100	100	100
Net percentage ¹⁾	29	19	5	-2
Number of banks responding	80	80	78	78

1) See footnote to Table B.

Table C: Changes in credit standards applied to households

(percentages)

	Loans for house purchase		Consumer credit and other lending	
	July	April	July	April
a) Over the past three months				
Tightened considerably	1	0	0	0
Tightened somewhat	12	19	13	17
Remained basically unchanged	77	77	82	81
Eased somewhat	8	5	5	2
Eased considerably	2	0	0	0
Total	100	100	100	100
Net percentage ¹⁾	3	14	8	15
Number of banks responding	80	80	78	77
b) Over the next three months				
Tighten considerably	0	2	0	1
Tighten somewhat	14	16	16	20
Remain basically unchanged	85	71	80	73
Ease somewhat	1	10	4	7
Ease considerably	0	0	0	0
Total	100	100	100	100
Net percentage ¹⁾	14	8	12	14
Number of banks responding	80	80	78	78

1) See footnote to Table A.

At the same time, on the demand side, the July 2003 survey showed a net percentage of banks reporting an increase in the demand for loans for house purchase of 29%, compared with 19% in the April survey (see Table D). Furthermore, banks for the first time observed a slight increase in net terms in the demand for consumer credit and other loans to households over the same period.

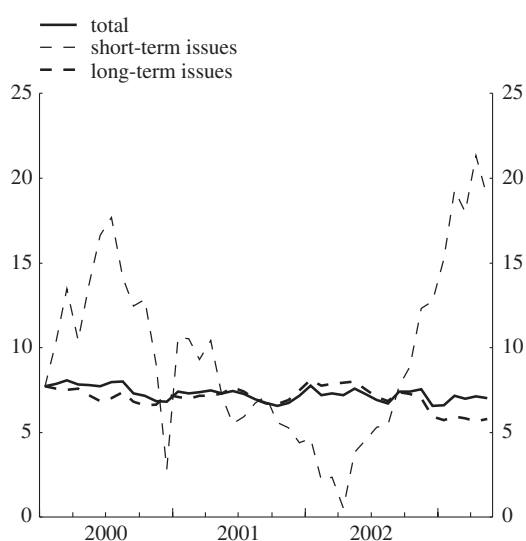
Overall, while these results point to a degree of stabilisation in credit conditions, the results should be interpreted with a high degree of caution in view of the novelty of the survey. It will take some time and experience to assess the specific interpretation of these results and to judge the relationship between them and actual economic and financial developments.

Debt securities issuance was stable in May

The annual rate of growth in the amount outstanding of debt securities issued by euro area residents was 7.0% in May 2003, unchanged from the previous month (see Chart 4). Underlying this overall figure were a 0.2 percentage point increase in the annual rate of growth in the amount outstanding of long-term debt securities, to 5.8%, and a 2.4 percentage point decrease in the annual rate of growth in the amount outstanding of short-term debt securities, to 18.9%.

The currency breakdown shows that, at 6.7% in May, the annual rate of growth in the amount outstanding of euro-denominated debt securities issued by euro area residents remained unchanged from the previous month. By contrast, the annual rate of growth in non-euro-denominated debt securities issued by euro area residents decreased from 11.9% in April to 10.9% in May.

Chart 4
Annual growth in debt securities issued by euro area residents
(percentage changes)



Source: ECB.

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

Turning to the sectoral breakdown of euro-denominated debt securities issuance, the annual rate of growth in the amount outstanding of debt securities issued by MFIs was 4.0% in May, 0.3 percentage point lower than in the previous month. Underlying this was a decline in the annual rate of growth in the amount outstanding of short-term debt securities issued, from 26.1% in April to 20.9% in May.

In the non-MFI corporate sector, which includes both non-monetary financial and non-financial corporations, the annual rate of growth in the amount outstanding of euro-denominated debt securities issued increased for the fourth consecutive month in May, rising to 20.7%, from 20.2% in April. Within this sector, the annual rate of growth in the amount outstanding of euro-denominated debt securities issued by non-financial corporations increased from 10.5% in April to 13.1% in May, the highest annual growth rate recorded in a year. This was the result of increases in the rates of growth in both short-term and long-term debt securities issuance. While the pick-up in the growth of short-term debt securities issuance may be indicative of higher working capital needs among corporations, the pick-up in longer-term issuance may indicate higher financing needs for fixed capital investment. In addition, issuers may have decided to take advantage of the lower funding costs in the corporate bond markets arising from the significant drop in corporate bond spreads vis-à-vis government bond yields over previous months. At the same time, in an environment of very low government bond yields, financial investors in search of higher-yielding assets and seemingly less concerned about credit risk may have been attracted by the additional yield offered by corporate bonds.

As regards non-monetary financial corporations, the annual rate of growth in the amount outstanding of euro-denominated debt securities issued declined slightly from 31.4% in April to 29.2% in May. Notwithstanding this slight decline, growth in the stock of debt securities issued by this

sector has been rather buoyant since June 1999. Issuance by this sector has tended to be concentrated in a few countries where tax advantages have encouraged corporations to use special purpose vehicles (SPVs) and other financing agencies to raise capital more cheaply via the corporate bond market.

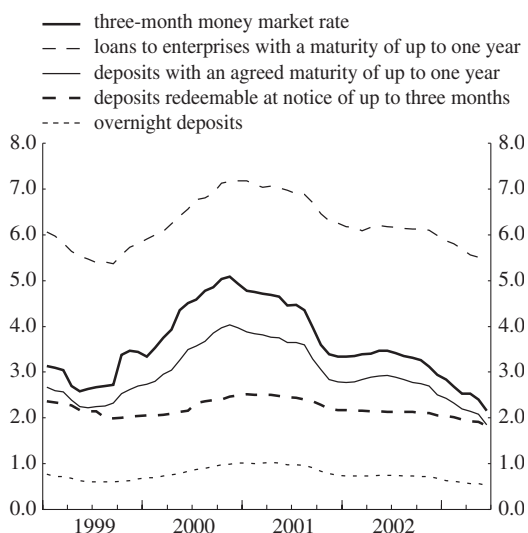
Turning to the government sector, the annual rate of growth in the amount outstanding of euro-denominated debt securities issued by the central government sector increased slightly from 4.3% in April to 4.5% in May. By contrast, the other general government sector, which consists mainly of state and local governments, reduced its pace of issuance of euro-denominated debt securities, with the annual rate of growth in the amount outstanding falling from 29.0% in April to 26.2% in May.

Retail bank interest rates fell to very low levels in June

Following the reduction of the ECB interest rates in early June, short-term retail bank interest rates declined further in June 2003, and by significant amounts, bringing many of them to the lowest levels seen since January 1999. The average retail bank interest rate on deposits with an agreed maturity of up to one year fell by 23 basis points in June 2003, from the previous month. Compared with June 2002, when this rate last peaked, it had fallen by around 110 basis points by June 2003. This compared with a decline in the three-month money market interest rate of around 130 basis points over the same period. At the same time, the average retail bank interest rate on loans with a maturity of up to one year to enterprises fell by around 80 basis points, taking it back to the lowest levels recorded in the third quarter of 1999 (see Chart 5). By contrast, the average interest rate on deposits redeemable at a period of notice of up to three months declined by just 30 basis points between June

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

(percentages per annum; monthly averages)



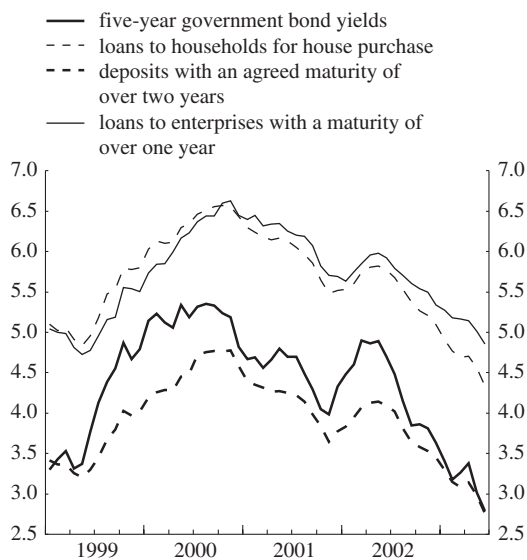
Sources: ECB aggregation of individual country data and Reuters.
Note: From January 2001, data include Greece.

2002 and June 2003, in line with the typically more sluggish adjustment of these rates to market developments.

Reflecting the decline in long-term bond yields to very low levels in the first few months of 2003, long-term retail bank interest rates continued the general downward trend that began in June 2002 to reach very low levels in June 2003 (see Chart 6). Between May 2002 and June 2003, the average retail bank interest rate on deposits with an agreed maturity of over two years dropped by around 140 basis points. Over the same period, interest rates on housing loans to households and on long-term lending to enterprises fell by around 150 and 110 basis points respectively. These declines compare with a fall of around 190 basis points in the average five-year government bond yield between May 2002 and June 2003. The changes in long-term retail bank interest rates were in line with the usual lags in the pass-through from longer-term market interest rates.

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

(percentages per annum; monthly averages)



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

Money market yield curve flattened somewhat in July

In July money market rates declined slightly at the very short end of the money market yield curve, but increased slightly at the longer end of the curve (see Chart 7). As a consequence, the slope of the money market yield curve, as measured by the difference between the twelve-month and the one-month EURIBOR, which was negative at the end of June, became flat on 30 July.

The overnight interest rate, as measured by the EONIA, gradually fell closer towards the level of the minimum bid rate of 2% of the ECB main refinancing operation in the course of July, reaching a level of 2.07% on 30 July, with only one larger movement downwards to 1.83% on 23 July, which was the last day of the maintenance period (see Box 2). Between end-June and 30 July, the two-week EONIA swap rate fell from 2.11% to 2.07%. The marginal and average rates of allotment in the Eurosystem's main refinancing operations between end-June and 30 July also fell

gradually in the course of July, reaching 2.06% and 2.07% in the operation settled on 30 July.

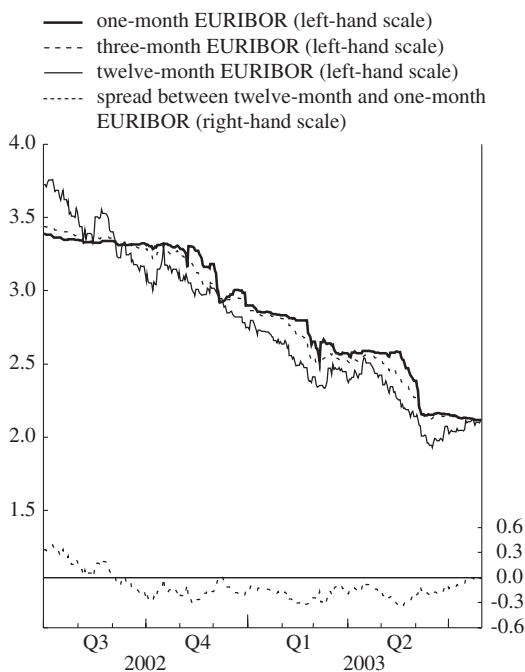
The one-month and three-month EURIBOR decreased slightly in the period between end-June and 30 July, by 4 and 3 basis points respectively, and both stood at 2.12% on the latter date.

Between end-June and 30 July, the six-month and twelve-month EURIBOR, by contrast, increased by 2 and 7 basis points to stand respectively at 2.11% and 2.13% on the latter date. The slope of the money market yield curve, as measured by the difference between the twelve-month and the one-month EURIBOR, which was -10 basis points at the end of June, was flat on 30 July.

The expected path of the three-month EURIBOR, as implied in the rates on futures contracts with delivery dates in the second half of 2003 and the first half of 2004, moved

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.

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

In the reserve maintenance period under review, the Eurosystem conducted six 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	Fixed rate
MRO	25/06/2003	09/07/2003	166.40	150.00	1.11	297	2.00	2.10	2.12	-
MRO	02/07/2003	16/07/2003	111.70	56.00	1.99	227	2.00	2.10	2.11	-
MRO	09/07/2003	16/07/2003	67.96	43.00	1.58	122	2.00	2.09	2.10	-
MRO	09/07/2003	23/07/2003	130.69	101.00	1.29	287	2.00	2.08	2.10	-
MRO	16/07/2003	30/07/2003	147.62	98.00	1.88	262	2.00	2.08	2.09	-
MRO	23/07/2003	06/08/2003	141.57	134.00	1.06	292	2.00	2.06	2.08	-
LTRO	26/06/2003	25/09/2003	28.69	15.0	1.91	124	-	2.11	2.12	-

Source: ECB.

On 9 July, a split tender operation, consisting of two simultaneous MROs with one- and two-week maturities respectively, was carried out in order to rebalance the sizes of the two outstanding MROs, which had become unbalanced following an episode of underbidding in early June. While the bid-cover ratio of the MROs remained, on average, at around 1.5 in the reserve maintenance period, it was relatively low in the first and last operations, although no decrease in the number of participants was observed in either case.

At the beginning of the reserve maintenance period, the EONIA remained stable at around 2.12%, with the exception of Monday, 30 June, when it increased to 2.38% on account of the end-of-semester effect. Subsequently, the EONIA gradually declined from 2.12% on 4 July to 2.08% on 21 July. The MRO settled on the last day of the reserve maintenance period provided sufficient reserves for a comfortable ending of the

Contributions to the banking system's liquidity

(EUR billions)

Daily average during the reserve maintenance period from 24 June to 23 July 2003

	Liquidity providing	Liquidity absorbing	Net contribution
(a) Monetary policy operations of the Eurosystem	250.1	0.3	+ 249.9
Main refinancing operations	204.7	-	+ 204.7
Longer-term refinancing operations	45.0	-	+ 45.0
Standing facilities	0.4	0.3	+0.1
Other operations	-	-	-
(b) Other factors affecting the banking system's liquidity¹⁾	320.4	438.1	- 117.7
Banknotes in circulation	-	382.7	- 382.7
Government deposits with the Eurosystem	-	52.4	- 52.4
Net foreign assets (including gold)	320.4	-	+ 320.4
Other factors (net)	-	2.9	- 2.9
(c) Credit institutions' holdings on current accounts with the Eurosystem (a) + (b)			132.2
(d) Required reserves			131.6

Source: ECB.

Note: Totals may not add up due to rounding.

1) The published estimates of the average liquidity needs stemming from autonomous factors ranged between €111.6 billion and €125.6 billion. The largest deviation between the published estimate and the actual figure occurred for the period from 14 to 22 July and amounted to €2.5 billion.

maintenance period. As a consequence, the EONIA declined to 1.83% on 23 July, and the maintenance period ended with net recourse of €5.2 billion to the deposit facility.

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

upwards somewhat in July. Between end-June and 30 July, the rates on futures contracts with delivery in September and December 2003 and in March and June 2004 rose by between 11 and 19 basis points to stand at 2.07%, 2.00%, 2.09% and 2.29% respectively on 30 July.

Long-term government bond yields increased in July

The upturn in long-term government bond yields that began in mid-June in all major bond markets continued in July 2003. In the euro area and the United States, ten-year government bond yields increased by 30 and 80 basis points, respectively, between the end of June and 30 July, reaching 4.2% and 4.3%,

respectively, on the latter date (see Chart 8). As a result, the differential between US and euro area ten-year government bond yields turned positive for the first time since early April 2002, standing at around 10 basis points on 30 July.

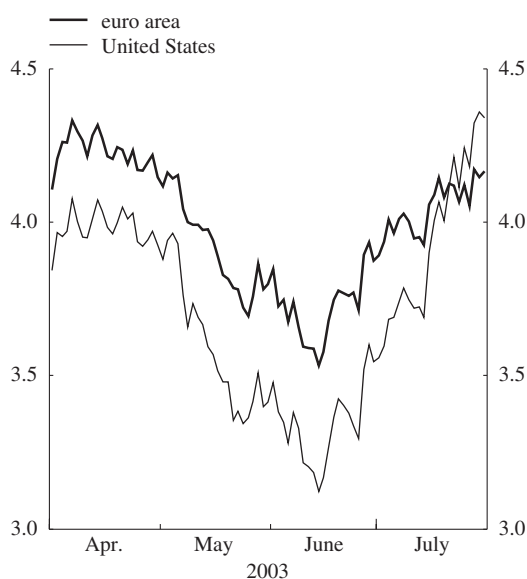
The marked increase in long-term government bond yields in the United States seemed to mainly reflect upward revisions among market participants of their growth and inflation expectations. A growing optimism among investors about the outlook for economic activity in the United States was suggested by a 50 basis point rise in the real yield on ten-year index-linked government bonds between the end of June and 30 July. Investors' optimism seemed to have been spurred by generally better-than-expected macroeconomic data releases and upward revisions in real GDP growth projections. Related to the perceptions of improved prospects for the US economy, market participants apparently also saw little likelihood of a substantial fall in inflation from its already low level, a scenario that had placed significant downward pressure on long-term bond yields in earlier months. Indeed, investors' long-term average inflation expectations seemed to have increased, as indicated by a pick-up in the ten-year break-even inflation rate – measured by the difference between yields on ten-year nominal and index-linked US government bonds – by about 30 basis points between the end of June and 30 July.

With the sharp upward correction in long-term bond yields in July, market participants apparently became somewhat more uncertain about future bond yield movements in the US market. This was suggested by a rise in the ten-day moving average of implied volatility on ten-year US Treasury futures contracts by

Chart 8

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

(percentages per annum; daily data)

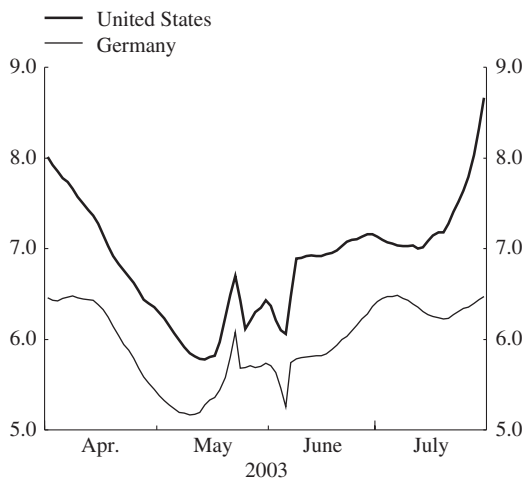


Source: Reuters.

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

Chart 9
Implied volatility for futures contracts on the ten-year German Bund and the ten-year US Treasury note

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



Source: Bloomberg.

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 implied volatility is made, from the contract closest to maturity to the next contract.

about 1.5 percentage points between the end of June and 30 July. On the latter date, the ten-day moving average of implied bond volatility was 8.7%, which was around 1 percentage point above its average over the past two years.

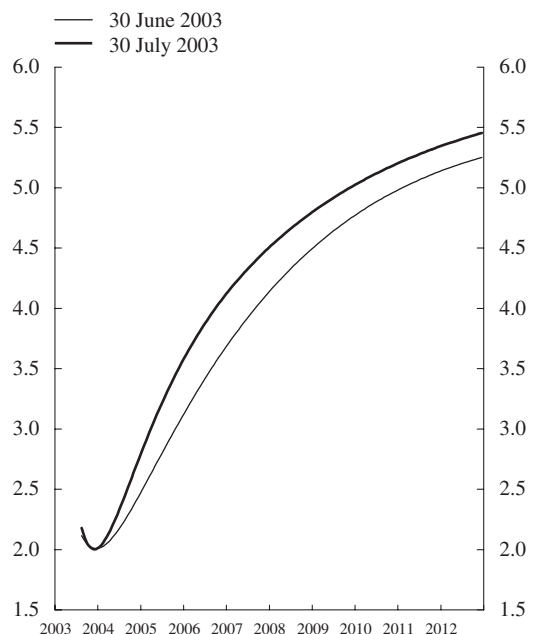
In the Japanese government bond market, long-term bond yields continued to increase in July, albeit less markedly than in the previous month. Between the end of June and 30 July, ten-year government bond yields increased by around 10 basis points, reaching 1.0% on the latter date. Continued portfolio shifts from the bond to the stock market, together with a more optimistic assessment among market participants of future economic activity in Japan, contributed to the rise. Uncertainty among market participants remained relatively high in July, as indicated by the level of implied bond market volatility. On 30 July, the ten-day moving average of implied bond market volatility stood at 4.8%, which compares with an average of 3.1% for this measure of bond market uncertainty over the past two years.

In the euro area, the rise in government bond yields took place across the entire maturity spectrum in July. The largest increases were seen at the longer maturities, which was reflected in a slightly steeper slope of the implied forward overnight interest rate curve (see Chart 10). To some extent, the rise in euro area bond yields seemed to have been due to spillovers from the surge in US bond yields. In addition, slight upward revisions to market participants' medium-term to long-term growth and inflation expectations for the euro area seemed also to have contributed to the rise in yields, although economic data releases for the euro area appeared to have been perceived as being more mixed than in the United States.

Regarding investors' long-term growth expectations, ten-year index-linked bond yields (indexed on the euro area HICP

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.

excluding tobacco) increased by about 10 basis points between the end of June and 30 July. At the same time, market participants' long-term inflation expectations seemed also to have increased. This was indicated by a rise of about 20 basis points in the break-even inflation rate – measured as the difference between ten-year nominal and real yields – over the same period, to 1.9% on 30 July.

The degree of uncertainty prevailing in the euro area bond market, as gauged by the implied volatility of options on futures contracts on German long-term government bonds, remained broadly unchanged between the end of June and 30 July (see Chart 9). On the latter date, the ten-day moving average of implied bond market volatility stood at 6.5%, which was about 1 percentage point higher than the average over the past two years.

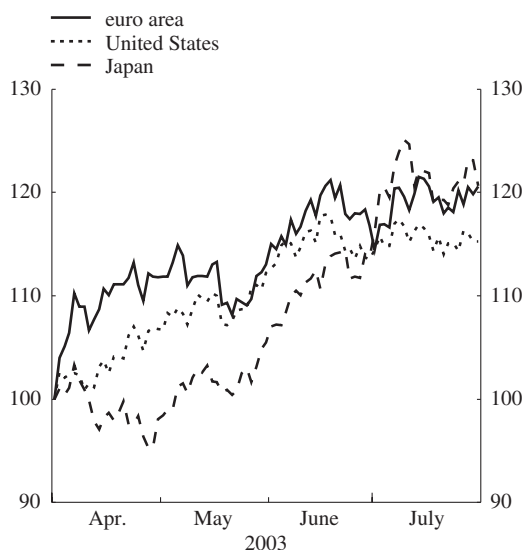
Stock prices consolidated their gains amid declining volatility in July

In an environment characterised by improving expectations for global economic growth, stock prices continued to increase in July, albeit only slightly, consolidating the recovery in global stock markets that began in mid-March 2003. Between the end of June and 30 July, stock prices in the euro area, as measured by the broad Dow Jones EURO STOXX index, increased by 3% (see Chart 11). Over the same period, stock prices in the United States, as measured by the Standard & Poor's 500 index, also rose by 1%, while the Japanese Nikkei 225 index increased by 3%.

In the United States, the limited overall increase in stock prices in July, which had left the Standard & Poor's 500 index up by 12% by 30 July, compared with end-December 2002, seemed to have been primarily associated with growing optimism among market participants about the prospects for economic activity and for corporate earnings following a series of better-than-expected

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

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



Source: Reuters.

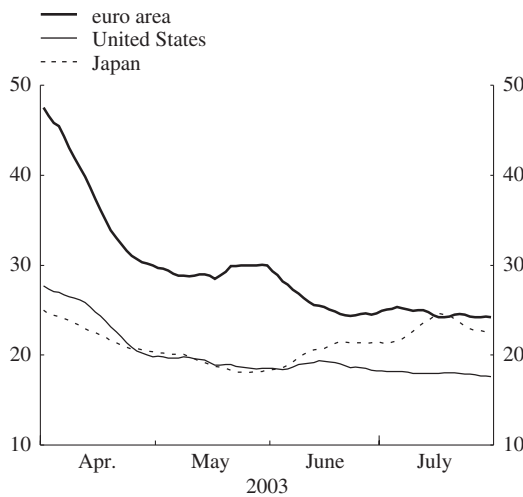
Notes: Dow Jones EURO STOXX broad (stock price) index for the euro area, Standard & Poor's 500 for the United States and Nikkei 225 for Japan.

economic data releases. In addition, the market benefited from a decline in the degree of uncertainty prevailing among market participants about future stock price movements, as indicated by a drop of almost 1 percentage point in the ten-day moving average of the implied volatility derived from options on the Standard & Poor's 500 index between end-June and 30 July. By the latter date, this measure of stock market uncertainty was about 7 percentage points lower than its two-year average (see Chart 12). The rise in US stock prices in July was particularly strong for technology shares, as reflected by a rise of 6% in the Nasdaq Composite index between end-June and 30 July, leaving this index around 29% higher than at end-December 2002.

Japanese stock prices, as measured by the Nikkei 225 index, increased by 3% between end-June and 30 July. At the same time, however, the degree of uncertainty prevailing in the Japanese stock market, as gauged by the ten-day moving average of implied volatility extracted from options

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 and Poor's 500 for the United States and the Nikkei 225 for Japan.

on the Nikkei 225 index, rose by around 1 percentage point between end-June and

30 July, although it still remained slightly below the average for the last two years. The increase in stock prices seemed to reflect perceptions among market participants of an improved outlook for the Japanese economy, and was supported by significant foreign investment in Japanese equities.

In the euro area, the rise in stock prices in July seemed to mainly reflect expectations of a general economic recovery and, concomitantly, of higher corporate profits. In this vein, by 30 July stock prices had risen by 6% compared with end-December 2002. Other factors underlying the strength in the equity market included a continued decline in the equity risk premia demanded by investors, as reflected in a further drop of 1 percentage point in the ten-day moving average of the implied stock market volatility extracted from options on the Dow Jones EURO STOXX 50 index between end-June and 30 July. By the latter date, this measure of stock market uncertainty stood about 10 percentage points lower than its two-year average. Among the different sectors, the industrial sector showed the strongest increase, rising by 8% between end-June and 30 July.

2 Price developments

Flash estimate for HICP inflation points to 1.9% in July 2003

According to Eurostat's flash estimate, euro area HICP inflation is expected to stand at 1.9% in July 2003, compared with 2.0% in June (see Table 2). A detailed HICP breakdown is not yet available for July, and the estimate is surrounded, as usual, by some uncertainty.

In June 2003 euro area HICP inflation increased to 2.0%, from 1.9% in May, owing to a rise in the annual rates of change in unprocessed food and energy prices (see Chart 13). The annual rate of change in the HICP excluding unprocessed food and energy remained unchanged at 2.0%.

The annual rate of change in unprocessed food prices increased significantly to 2.6% in June 2003, from 1.2% in May. While partly attributable to a base effect, this increase also reflected recent movements in fruit and vegetable prices, probably as a consequence of poor harvests due to late frosts and a lack of rainfall in many euro area countries. This led to an increase in the contribution of unprocessed food prices to overall HICP inflation by 0.1 percentage point. The annual rate of change in energy prices rose to 1.6% in June, from 0.6% in May, largely owing to a base effect related to the strong month-on-month decline in energy prices recorded in June last year, which in turn reflected a strong fall in oil prices at that time.

Table 2
Price and cost developments in the euro area

(annual percentage changes, unless otherwise indicated)

	2000	2001	2002	2002 Q3	2002 Q4	2003 Q1	2003 Q2	2003 Feb.	2003 Mar.	2003 Apr.	2003 May	2003 June	2003 July
Harmonised Index of Consumer Prices (HICP) and its components													
Overall index ¹⁾	2.1	2.3	2.3	2.1	2.3	2.3	2.0	2.4	2.4	2.1	1.9	2.0	1.9
<i>of which:</i>													
Goods	2.5	2.3	1.7	1.3	1.8	2.0	1.5	2.1	2.2	1.5	1.4	1.7	.
Food	1.4	4.5	3.1	2.3	2.3	2.0	2.6	2.1	2.3	2.4	2.5	3.0	.
Processed food	1.2	2.9	3.1	2.9	2.7	3.2	3.4	3.3	3.3	3.4	3.4	3.3	.
Unprocessed food	1.8	7.0	3.1	1.4	1.7	0.2	1.6	0.3	0.8	1.0	1.2	2.6	.
Industrial goods	3.0	1.2	1.0	0.8	1.6	2.0	1.0	2.2	2.2	1.1	0.9	1.0	.
Non-energy industrial goods	0.5	0.9	1.5	1.3	1.2	0.7	0.9	0.7	0.8	0.8	0.9	0.8	.
Energy	13.0	2.2	-0.6	-0.7	2.9	7.0	1.5	7.7	7.5	2.2	0.6	1.6	.
Services	1.5	2.5	3.1	3.3	3.1	2.7	2.6	2.7	2.6	2.9	2.5	2.5	.
Other price and cost indicators													
Industrial producer prices	5.3	2.2	0.0	0.0	1.3	2.4	.	2.6	2.4	1.7	1.3	.	.
Unit labour costs	1.3	2.7	2.1	1.8	1.4	1.7	.	-	-	-	-	-	-
Labour productivity	1.3	0.1	0.4	0.6	1.0	0.8	.	-	-	-	-	-	-
Compensation per employee	2.6	2.8	2.5	2.5	2.4	2.5	.	-	-	-	-	-	-
Total hourly labour costs	2.8	3.3	3.7	3.5	3.7	2.7	.	-	-	-	-	-	-
Oil prices (EUR per barrel)	31.0	27.8	26.5	27.2	26.5	28.4	22.7	29.8	27.2	22.9	21.9	23.3	24.9
Commodity prices (EUR)	16.7	-7.6	-1.7	-1.6	4.4	-4.2	-8.0	-3.7	-7.2	-6.7	-8.7	-8.6	-5.6

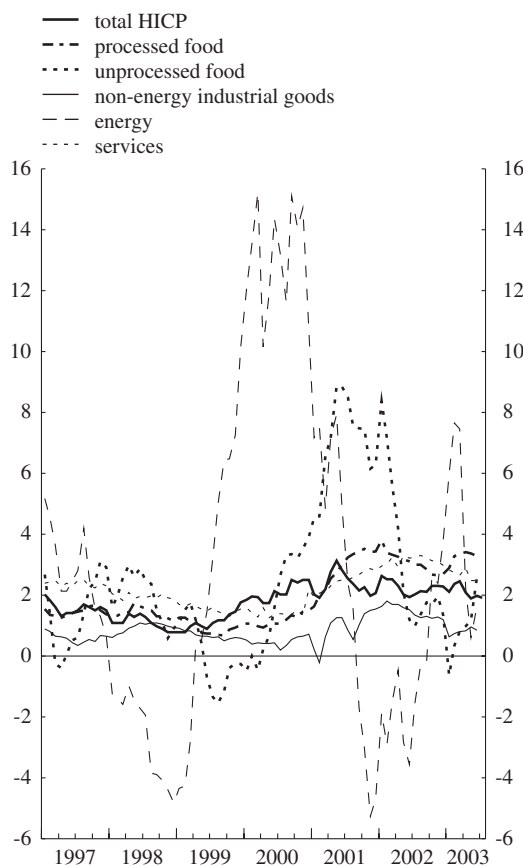
Sources: Eurostat, national data, Thomson Financial Datastream, HWWA (Hamburg Institute of International Economics) and ECB calculations.

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 July 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.

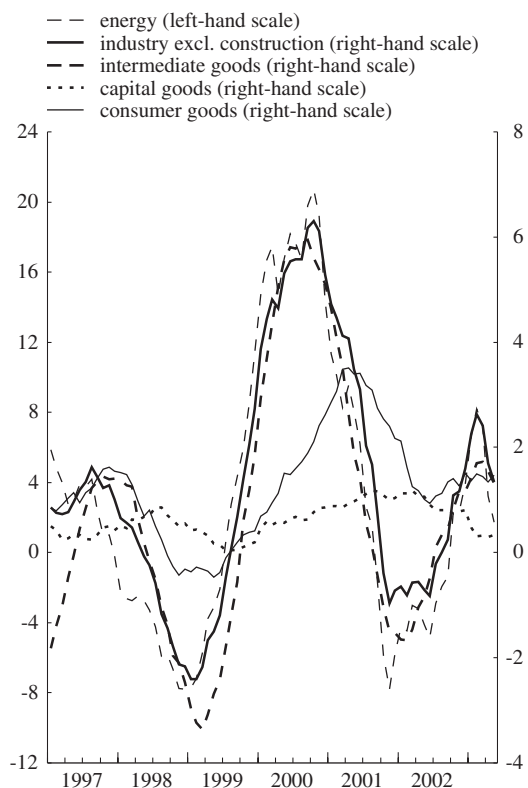
The annual rate of change in the HICP excluding the volatile components, unprocessed food and energy, remained unchanged at 2.0% in June, with services price inflation unchanged at 2.5%, although the annual rates of change in both processed food and non-energy industrial goods prices were down by 0.1 percentage point. The fall in the annual rate of change in processed food prices to 3.3% in June mostly reflected base effects in alcohol and tobacco prices, while the decline in the annual rate of change in non-energy industrial goods prices to 0.8% was mainly related to a seasonal decline in clothing prices in the context of the 2003 summer sales.

Moderate price pressure at the producer level

As reported in the previous issue of the Monthly Bulletin, the annual rate of change in industrial producer prices (excluding construction) in the euro area stood at 1.3% in May 2003 (see Chart 14). This rate has been falling for most of this year, mainly as a result of the lower contribution of energy prices. Nevertheless, the annual rate of increase in producer prices excluding energy, which stood at 1.0% in May, has also slowed somewhat since early 2003. This reflects, *inter alia*, lagged downward effects of the overall appreciation of the euro and weak domestic activity.

Chart 14
Breakdown of industrial producer prices for the euro area

(annual percentage changes; monthly data)

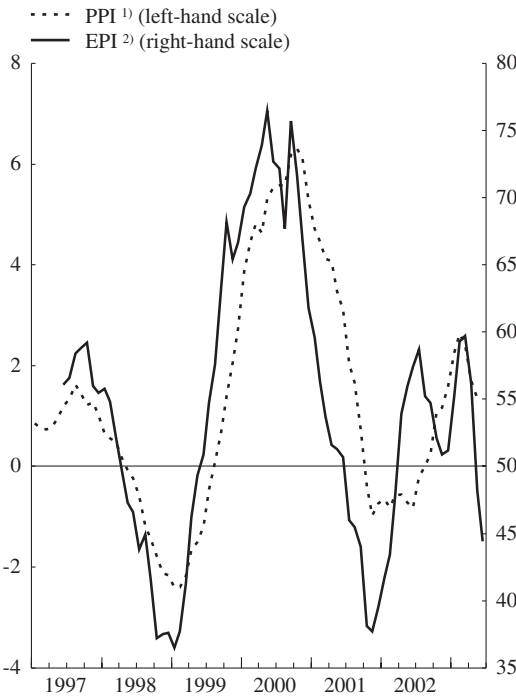


Source: Eurostat.
 Note: Data refer to the Euro 12 (including periods prior to 2001).

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.

Regarding producer price developments since May 2003, the Eurozone Price Index (EPI) for manufacturing from the Purchasing Managers' Survey fell in June (see Chart 15), signalling further declines in manufacturing input prices. While the increase in oil prices on international markets since mid-May could imply some upward pressure, overall producer price developments should remain moderate, providing favourable indications for future consumer prices.

Broadly stable wage growth in the first quarter of 2003

According to Eurostat's second estimate, the annual rate of change in total hourly labour

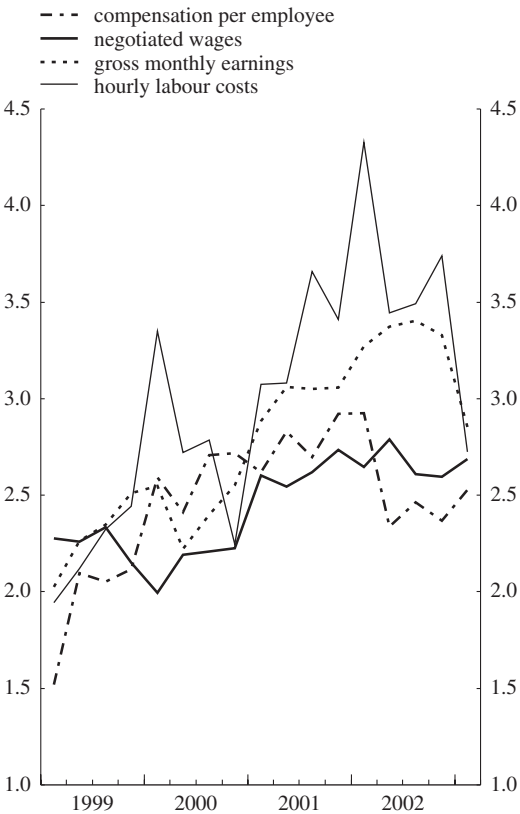
costs in the non-agricultural business sector decreased by 1.0 percentage point between the last quarter of 2002 and the first quarter of 2003, to stand at 2.7%. However, this strong fall in hourly labour cost growth is largely explained by special factors, such as working day and base effects, meaning that this decline should be interpreted with caution.

Compensation per employee increased by 2.5% year on year in the first quarter of 2003, which is 0.1 percentage point higher than in the last quarter of 2002. It is likely that this increase is related to higher social security contributions and a rise in negotiated wage growth of 0.1 percentage point to 2.7%. However, the rise in both labour cost indicators must be assessed taking their usual volatility into account. Indeed, following some

Chart 16

Selected labour cost indicators for the euro area

(annual percentage changes)



Sources: Eurostat, national data and ECB calculations.

data revisions, the annual rate of change in compensation per employee has fluctuated around 2.4% since the second quarter of 2002 (see Chart 16). This supports the earlier assessment that labour cost growth levelled off over the course of 2002.

The annual growth rate of labour productivity declined by 0.2 percentage point to 0.8% in the first quarter of 2003, reflecting continued weak economic activity. Following a strong decline in the course of 2002, unit labour cost growth increased by 0.3 percentage point to 1.7% in the first quarter of 2003, reflecting both the slight increase in growth in compensation per employee and the cyclical decline in labour productivity growth. Nonetheless, the growth rate of unit labour costs remained moderate compared with the peak of 3.2% observed in the first quarter of 2002.

HICP inflation expected to continue to fluctuate around 2% for the remainder of this year

In the short term, some volatility in HICP inflation may arise from recent oil price

movements as well as from a rise in food prices due to the persistent drought across large parts of the euro area. At the current juncture it is difficult to assess how important these effects will be and when they will unwind, but it is reasonable to assume that they are of a limited and temporary nature. Overall, while some higher volatility cannot be ruled out, HICP inflation is expected to remain at around 2% for the remainder of this year and then to fall below 2% in early 2004. Beyond the short term, given the overall appreciation of the euro over the past year and in the context of a gradual economic recovery, the outlook for inflation remains favourable. Assuming broadly stable oil prices, exchange rates and wage growth, inflation rates are expected to be in line with price stability over the medium term. This assessment is shared by the participants in the Survey of Professional Forecasters conducted by the ECB in the third quarter of 2003 and is also reflected in other available indicators of private sector inflation expectations (see Box 3).

Box 3

Private sector expectations for inflation and economic activity in the euro area: the results of the 2003 Q3 Survey of Professional Forecasters (SPF) and other available indicators

The ECB conducted the 20th Survey of Professional Forecasters (SPF) between 16 and 23 July 2003. This survey asks experts affiliated with financial and non-financial institutions based in the European Union for their expectations of euro area inflation, economic activity and unemployment. It is important to bear in mind that, since the participants are not provided with a common set of assumptions, SPF aggregate results reflect a relatively heterogeneous set of subjective views and assumptions. Whenever possible, the data are presented together with other sources of private sector expectations for the same horizons.¹

Inflation expectations for 2003, 2004 and 2005

Survey participants expect HICP inflation to average 1.9% in 2003, i.e. a 0.1 percentage point downward revision from the previous SPF. They also expect inflation developments in the second half of 2003 to be

¹ These horizons are the calendar years 2003, 2004, 2005 and 2008. In addition, the expectations from the 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 Q3 SPF, these rolling horizons were June 2004 and 2005 for the HICP inflation rate, the first quarter of 2004 and 2005 for the rate of growth in real GDP, and May 2004 and 2005 for the unemployment rate. These rolling horizons may be useful for identifying dynamic patterns that are difficult to detect from averages over calendar years.

Results from the 2003 Q3 SPF, the 2003 Q2 SPF and Consensus Economics (July 2003)

(annual percentage changes, unless otherwise indicated)

	Survey horizon					
	2003	June 2004	2004	June 2005	2005	Longer term ²⁾
HICP inflation						
2003 Q3 SPF	1.9	1.5	1.5	1.7	1.7	1.9
Previous SPF (2003 Q2)	2.0	-	1.7	-	-	1.9
Consensus (July 2003)	1.9	-	1.4	-	-	1.9
Real GDP growth						
2003 Q3 SPF	0.7	1.2	1.7	2.1	2.3	2.4
Previous SPF (2003 Q2)	1.0	-	2.1	-	-	2.4
Consensus (July 2003)	0.6	-	1.7	-	-	2.2
Unemployment rate¹⁾						
2003 Q3 SPF	8.9	8.9	8.9	8.6	8.5	7.4
Previous SPF (2003 Q2)	8.8	-	8.7	-	-	7.5

1) As a percentage of the labour force.

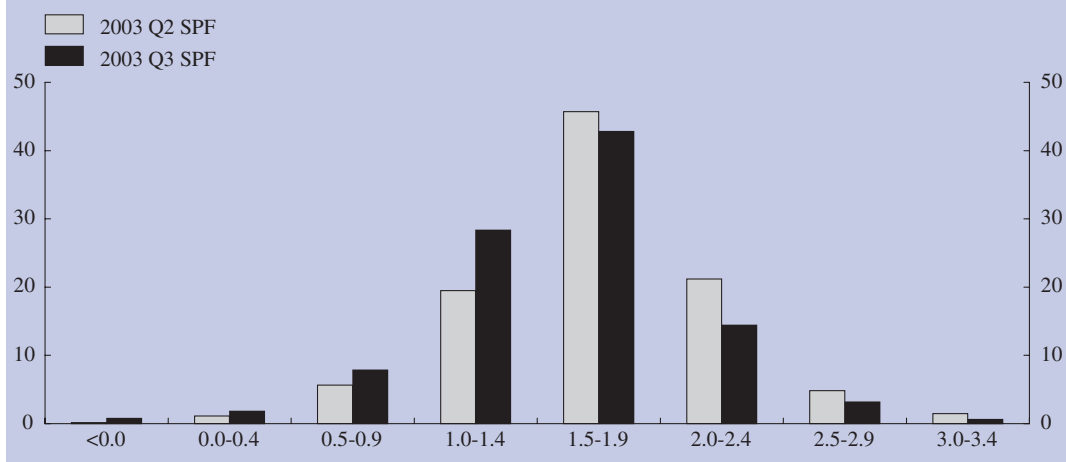
2) In the 2003 Q3 SPF longer-term expectations refer to 2008 whereas in the 2003 Q2 SPF these referred to 2007. The Consensus Economics forecast refers to the period 2009-13 (data published in the April 2003 Consensus Economics Survey).

influenced by more subdued energy prices and by weaker than previously expected real GDP growth. However, some temporary upward pressure on prices is judged to be possible on account of the hot weather and droughts that have affected several European countries so far this summer. HICP inflation for 2004 was revised downwards from the previous SPF (by 0.2 percentage point) and is now expected to average 1.5%. This revision is partly explained by lower GDP growth expectations among survey participants. Beyond 2004 inflation is expected to remain clearly below 2%, although a slight rise is expected from an average of 1.5% in 2004 to 1.7% in 2005. Overall, these results are broadly in line with the figures reported in the July 2003 issue of Consensus Economics (see table) as well as in the July 2003 Euro Zone Barometer for the same horizons (1.9% for 2003 and 1.4% for 2004).

The SPF questionnaire also asks survey participants to assign a probability to actual outcomes falling within specific intervals. The probability distribution resulting from the aggregation of responses helps to assess how survey participants, on average, gauge the risk of the actual outcome being above or below the most likely range. Chart A shows the aggregate probability distributions for annual average rates of HICP inflation in 2004 in the last two survey rounds. Although both distributions are centred on the interval 1.5-1.9%, which accumulates more than 40% of the probability mass in both cases, the main difference is a marked downward shift in the assessment of risks to inflation in 2004. According to qualitative information supplied by

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

(percentages)



participants, this change in the assessment is in all likelihood related to a worsening in growth prospects for 2004 (see the section on growth prospects below). The probability assigned by respondents to inflation being above 2% declined to 18% in the 2003 Q3 SPF, from 28% in the 2003 Q2 SPF. The probability of inflation averaging below 1.5% now stands at around 39%, while in the 2003 Q2 SPF this probability was 26%. However, participants clearly dismiss the possibility of there being any deflation in 2004.

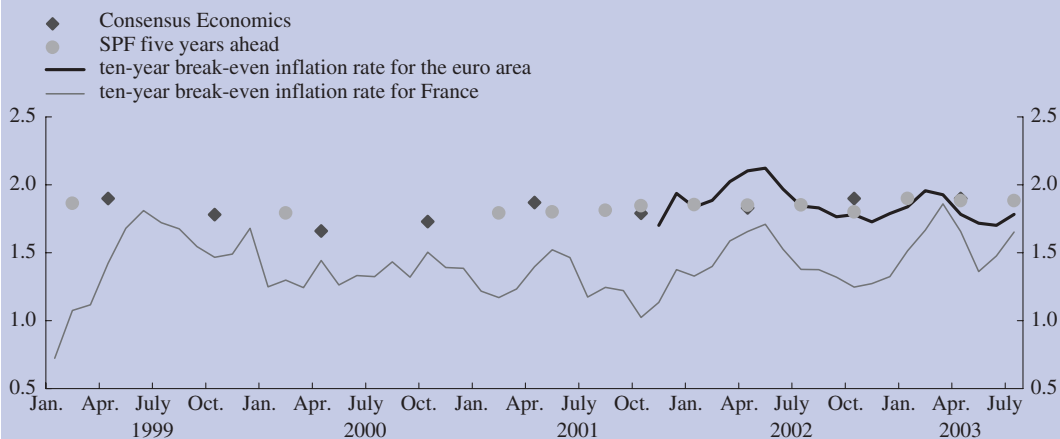
Indicators of longer-term inflation expectations

According to the 2003 Q3 SPF, longer-term average inflation (i.e. five-year ahead) is expected to be 1.9%, unchanged from the previous round. This is also broadly consistent with other available measures of longer-term inflation expectations. For example, in April 2003 Consensus Economics also expected an inflation rate in the euro area of 1.9% for the period 2009-13 as a whole.² Meanwhile, the longer-term expectations published by the July 2003 Euro Zone Barometer have been revised downwards by 0.2 percentage point and now indicate an expected average rate of inflation of 1.7% in 2007.

Indicators of long-term inflation expectations extracted from financial market prices also convey the message that euro area price developments are expected to remain in line with price stability over the longer term. Chart B shows the ten-year break-even inflation rates extracted from French bonds linked to the French CPI and to the euro area HICP (both excluding tobacco). Both rates remain below 2%. Note, however, that these break-even inflation rates are not a pure measure of the market's inflation expectations, since they are affected by a variety of risk premia (including an inflation uncertainty premium and a liquidity premium).³

Chart B: Indicators of long-term inflation expectations

(average annual percentage changes)



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

Expectations for euro area real GDP growth and unemployment

SPF participants have revised downwards their expectations for the average annual growth rate of real GDP to 0.7% in 2003, and to 1.7% in 2004, i.e. by 0.3 and 0.4 percentage point respectively compared with the previous survey round (see table). According to the participants, these downward revisions result from

2 Note that, before December 2002, the Consensus Economics figure for the euro area was constructed using national figures for Germany, Spain, France, Italy and the Netherlands, which represent around 85% of the euro area aggregate, and these are the figures depicted in Chart B.

3 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.

continued uncertainty regarding foreign demand, the appreciation of the euro/US dollar exchange rate, and weaker prospects for private investment. According to the July 2003 issues of Consensus Economics Forecasts and the Euro Zone Barometer, euro area annual rates of real GDP growth are expected to average 0.6% in 2003 and to increase to 1.7% in 2004. Long-term growth prospects, at 2.4% for 2008 according to the 2003 Q3 SPF, 2.2% on average for the period 2009-13 on the basis of the information published by Consensus Economics, and 2.3% for 2007 according to the July 2003 Euro Zone Barometer, remain in line with the range of estimates of trend potential growth in the euro area.

According to the latest SPF, the euro area unemployment rate is expected to rise to 8.9% on average in 2003 and in 2004, reflecting the delayed adjustment to the past slowdown in activity and further weak growth prospects for the euro area in 2003. Thereafter it is expected to average 8.5% in 2005 and 7.4% in 2008. These results are also broadly in line with those of the July 2003 Euro Zone Barometer (8.8%, 8.8% and 7.9% in 2003, 2004 and 2007 respectively) and the July 2003 Consensus Economics (9.0% in both 2003 and 2004).

3 Output, demand and labour market developments

Real GDP growth at 0.1% in the first quarter of 2003

Euro area real GDP growth in the first quarter of 2003 has been revised slightly

upwards, to 0.1% quarter on quarter, i.e. the same rate of growth as observed in the fourth quarter of 2002 (see Table 3). This small upward revision reflects a somewhat higher contribution to growth from final domestic

Table 3
Composition of real GDP growth in the euro area

(percentage changes, unless otherwise indicated; seasonally adjusted)

	Annual rates ¹⁾								Quarterly rates ²⁾				
	2000	2001	2002	2002 Q1	2002 Q2	2002 Q3	2002 Q4	2003 Q1	2002 Q1	2002 Q2	2002 Q3	2002 Q4	2003 Q1
Real gross domestic product	3.5	1.5	0.8	0.4	0.8	1.0	1.2	0.8	0.4	0.4	0.3	0.1	0.1
<i>of which:</i>													
Domestic demand	2.9	1.0	0.2	-0.2	-0.2	0.5	0.8	1.4	-0.1	0.2	0.3	0.4	0.5
Private consumption	2.5	1.8	0.5	0.4	0.2	0.6	1.0	1.5	-0.1	0.3	0.5	0.4	0.4
Government consumption	2.1	2.2	2.7	2.6	3.0	2.9	2.5	1.9	0.9	0.8	0.5	0.3	0.3
Gross fixed capital formation	4.9	-0.6	-2.6	-3.0	-3.3	-2.5	-1.7	-2.3	-0.6	-1.4	0.1	0.2	-1.2
Changes in inventories ³⁾	0.0	-0.4	-0.1	-0.3	-0.2	0.1	0.1	0.6	0.0	0.1	-0.1	0.1	0.5
Net exports ³⁾	0.6	0.5	0.6	0.6	1.0	0.5	0.4	-0.5	0.4	0.2	0.1	-0.3	-0.5
Exports ⁴⁾	12.6	3.0	1.2	-2.7	1.1	3.1	3.7	3.1	-0.1	2.2	2.0	-0.4	-0.6
<i>of which: goods</i>	12.6	3.0	1.5	-2.5	0.7	3.6	4.4	2.9	0.3	1.8	2.7	-0.4	-1.1
Imports ⁴⁾	11.3	1.7	-0.4	-4.5	-1.7	1.9	2.7	4.8	-1.4	1.6	1.9	0.5	0.6
<i>of which: goods</i>	11.4	1.0	-0.4	-4.8	-2.3	2.1	3.7	5.3	-1.3	1.5	2.3	1.1	0.3
Real gross value added:													
Agriculture and fishing	-0.6	-1.3	-0.7	-0.6	0.0	-0.9	-1.3	0.6	-1.0	-0.1	0.3	-0.5	0.9
Industry	3.7	0.8	0.5	-0.9	0.7	0.8	1.3	0.4	0.8	0.6	0.3	-0.4	-0.2
Services	4.0	2.3	1.6	1.5	1.7	1.6	1.7	1.3	0.5	0.6	0.3	0.3	0.1

Sources: Eurostat and ECB calculations.

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

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

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

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

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

demand, due to slightly stronger growth in both private and government consumption and a smaller decline in fixed capital formation. However, this revision does not change the picture of subdued economic activity in the euro area at the beginning of this year. Compared with the fourth quarter of last year, the contribution of private consumption to growth remained broadly stable, while the contribution of fixed capital formation was lower. This lower contribution was due to the decline in both construction and non-construction investment. At the same time, the contribution of net exports to GDP growth was also somewhat more negative in the first quarter of 2003 than in the fourth quarter of 2002 owing mainly to a stronger decline in exports. These negative effects on real GDP growth were counterbalanced by an unusually strong increase in the contribution from changes in inventories.

Industrial production declined in May 2003

Euro area industrial production (excluding construction) declined by 0.9% month on month in May 2003, following an increase of 0.4% in April (see Table 4). In terms of three-month averages, industrial production

declined by 0.3% between March and May as compared with the period from December 2002 to February 2003. This points to some contraction of production in the second quarter as a whole, following zero growth in the first quarter. The decline in industrial production (excluding construction and energy) in the period from March to May 2003 was due to negative contributions from industries producing capital and consumer goods, while growth in intermediate goods industries remained unchanged.

Survey data also point to weak industrial activity in the second quarter. The Purchasing Managers' Index (PMI), which declined to 46.4 in June, continued to indicate a contraction in the manufacturing sector (see Chart 17). Most components of the PMI declined in June, including the index for new orders, which has fallen significantly since the beginning of this year, and the index for output, which has remained below the threshold signalling no change in production for the three-month period up to June. Firms' assessment of stocks of purchased goods also decreased slightly in June, falling to the levels observed late last year.

Following some improvement in June, euro area industrial confidence from the European

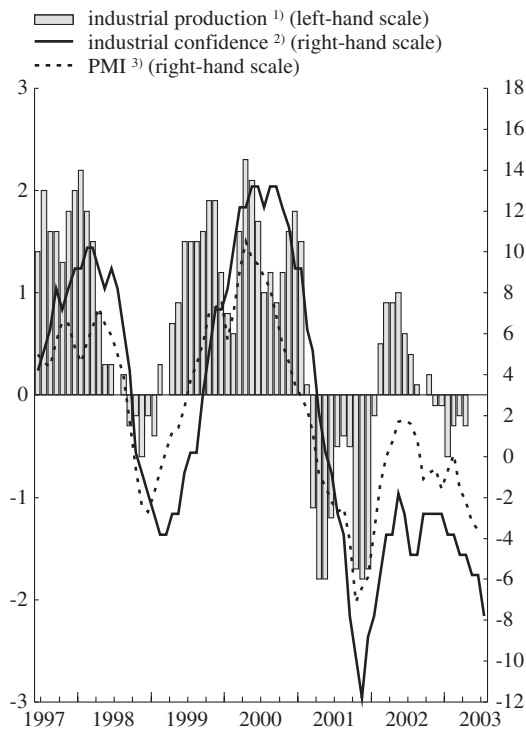
Table 4
Industrial production in the euro area

(annual percentage changes, unless otherwise indicated)

	2001	2002	2003	2003	2003	2003	2003	2003	2002	2003	2003	2003	2003
			Mar.	Apr.	May	Mar.	Apr.	May	Dec.	Jan.	Feb.	Mar.	Apr.
			month-on-month			three-month moving averages							
Total industry excluding construction	0.4	-0.6	0.0	0.6	-1.3	-0.8	0.4	-0.9	-0.1	-0.4	0.0	0.0	-0.3
<i>by main industrial groupings:</i>													
Total indus. excl. construction and energy	0.2	-0.8	-0.2	0.2	-1.7	-0.5	0.4	-1.3	-0.2	-0.7	-0.3	-0.2	-0.4
Intermediate goods	-0.6	0.3	0.7	1.0	-1.4	0.3	0.3	-1.5	-0.4	-0.8	0.2	0.3	0.3
Capital goods	1.4	-2.1	0.1	-0.7	-0.9	-1.6	0.7	-0.8	0.3	-0.2	-0.3	-0.5	-0.8
Consumer goods	0.5	-0.6	-1.2	0.2	-2.8	-0.5	0.6	-1.6	-0.2	-0.8	-0.5	-0.2	-0.4
Durable consumer goods	-1.8	-5.5	-5.9	-5.2	-6.9	-1.3	-0.1	-2.0	-1.6	-2.8	-1.6	-1.9	-2.0
Non-durable consumer goods	1.0	0.3	-0.3	1.3	-2.0	-0.3	0.8	-1.5	0.1	-0.4	-0.3	0.1	-0.1
Energy	1.5	0.9	2.8	3.1	1.6	-4.3	1.1	0.0	-0.3	2.5	2.8	2.6	-0.8
Manufacturing	0.3	-0.8	0.5	-0.4	-1.5	-0.3	0.0	-0.9	-0.1	-0.6	-0.3	-0.2	-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.

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 economic activity.

Commission Business Surveys fell slightly in July (see Table 5). The decline in July was due to a deterioration in production expectations for the months ahead and the assessment of current order books, as well as a significant increase in inventories. In terms of the main industrial groupings, the decline was limited to the intermediate goods industry, while confidence improved in the consumer goods sector. In addition, construction confidence increased slightly after having remained unchanged in June. Capacity utilisation remained broadly unchanged compared with the level three months ago.

Consumption indicators continue to send mixed signals

Short-term indicators of private consumption continue to provide somewhat mixed signals for consumption in the second quarter of 2003. Retail sales volumes increased by 1.6% month on month in April 2003, following positive growth in the first quarter of 2003 (see Chart 18). However, it should be borne in mind that retail sales data have shown significant volatility, with strong increases in January and April and decreases in February and March. New car registrations increased strongly in June, by 5.2% month on month following declines in April and May. However,

Table 5**Results from European Commission Business and Consumer Surveys for the euro area***(seasonally adjusted data)*

	2000	2001	2002	2002 Q3	2002 Q4	2003 Q1	2003 Q2	2003 Feb.	2003 Mar.	2003 Apr.	2003 May	2003 June	2003 July
Economic sentiment index ¹⁾	2.4	-2.9	-1.7	-0.5	-0.3	-0.6	-0.1	0.1	-0.6	0.3	0.0	0.0	-0.1
Consumer confidence indicator ²⁾	12	6	0	1	-3	-8	-8	-8	-10	-8	-9	-8	-7
Industrial confidence indicator ²⁾	12	-2	-4	-4	-3	-4	-6	-4	-5	-5	-6	-6	-8
Construction confidence indicator ²⁾	16	10	1	-2	-3	0	-1	0	0	0	-2	-2	-1
Retail trade confidence indicator ²⁾	5	0	-9	-10	-8	-10	-8	-6	-11	-10	-6	-7	-4
Services confidence indicator ²⁾	11	-4	-18	-20	-23	-24	-21	-23	-26	-23	-21	-20	-16
Business climate indicator ³⁾	1.4	-0.2	-0.5	-0.5	-0.3	-0.4	-0.6	-0.3	-0.7	-0.6	-0.7	-0.7	-0.9
Capacity utilisation (%)	84.4	82.9	81.4	81.5	81.5	81.1	80.7	-	-	80.8	-	-	80.6

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.

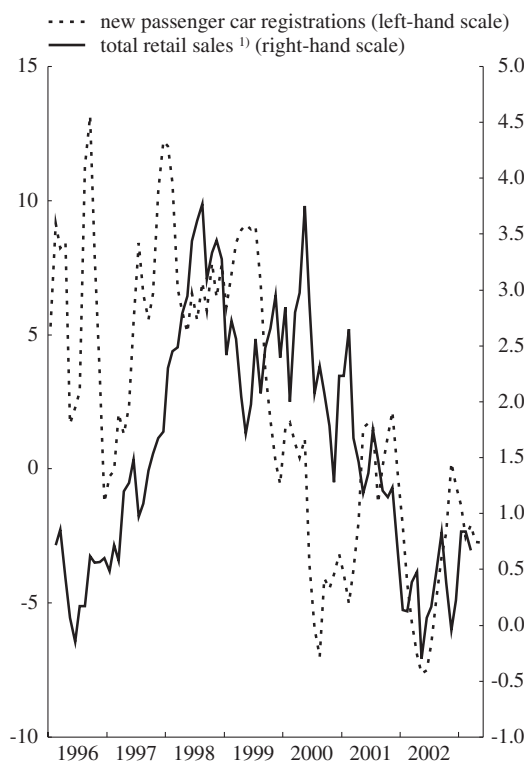
2) Percentage balances; data shown are calculated as deviations from the average over the period since April 1995 for the services confidence indicator, since July 1986 for the retail trade confidence indicator, and since January 1985 for the other confidence indicators.

3) Units are defined as points of standard deviation.

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.

car registrations declined somewhat in the second quarter as a whole compared with the first quarter.

According to the European Commission Business and Consumer Surveys, consumer

confidence improved somewhat in July, following a slight increase in June (see Table 5). This development reflects, on the one hand, an improvement in households' expectations with regard to the economic situation and unemployment. On the other hand, households' expectations of their own financial situation remained unchanged, with expected savings declining slightly. In line with consumer confidence developments, confidence in the retail trade and services sectors improved in July, following some improvement in the second quarter compared with the first quarter. This reflects, for the retail trade sector in particular, a more optimistic assessment of expected business conditions together with lower inventories.

Unemployment rate unchanged in May 2003

As reported in the previous issue of the Monthly Bulletin, the standardised unemployment rate in the euro area was 8.8% in May, i.e. unchanged as compared with April 2003 and 0.5 percentage point higher than in May 2002 (see Chart 19). The increase in the number of unemployed in May, at approximately 25,000, was considerably lower than in previous months and mainly reflected country-specific factors. In terms of the breakdown by age, the unemployment rate for those aged 25 and above increased by 0.1 percentage point, to 7.8%, while the unemployment rate for those under 25 remained unchanged at 17.0% (see Table 6).

Table 6

Unemployment in the euro area

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

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

Source: Eurostat.

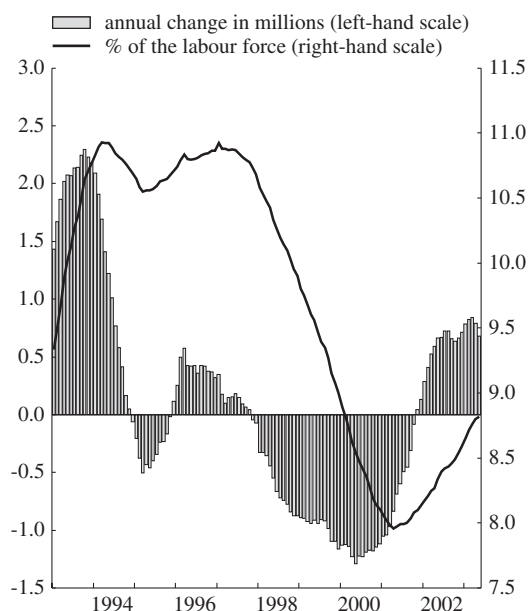
Notes: In accordance with ILO recommendations. Data refer to the Euro 12 (including periods prior to 2001).

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

Chart 19

Unemployment in the euro area

(monthly data; seasonally adjusted)



Source: Eurostat.

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

Available information at the country level points to a broadly unchanged unemployment rate in June 2003, which would imply a further increase in the second quarter compared with the first quarter of the year.

Employment remained unchanged in the first quarter of 2003

Quarter-on-quarter employment growth was zero in the first quarter of 2003, i.e. the same rate as that recorded in the previous two quarters (see Table 7). Total employment in the first quarter continued to reflect positive employment growth in the services sector (0.2%), while employment growth became even more negative in industry (-0.5% compared with -0.4% in the previous quarter).

Despite some recent improvement, employment expectations continue to point to weak underlying trends in the labour market. Employment expectations from the European Commission Business Surveys in July 2003 recorded small increases in manufacturing and construction, although remaining at levels below and similar to those registered in the first half of the year, respectively. Employment expectations in retail trade and services improved in July to levels clearly above those of the first two quarters of the year.

Table 7

Employment growth in the euro area

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

	2000	2001	2002	2002	2002	2002	2002	2003	2002	2002	2002	2002	2003
				Q1	Q2	Q3	Q4	Q1	Q1	Q2	Q3	Q4	Q1
Quarterly rates ¹⁾													
Whole economy	2.2	1.4	0.4	0.7	0.5	0.3	0.2	0.1	0.1	0.1	0.0	0.0	0.0
of which:													
Agriculture and fishing	-1.6	-0.6	-1.9	-2.1	-1.9	-1.8	-1.9	-2.1	-0.4	-0.5	-0.6	-0.5	-0.5
Industry	0.9	0.4	-1.2	-1.0	-1.1	-1.3	-1.5	-1.6	-0.4	-0.3	-0.4	-0.4	-0.5
Excluding construction	0.6	0.3	-1.2	-1.0	-1.2	-1.3	-1.5	-1.6	-0.4	-0.3	-0.4	-0.4	-0.5
Construction	1.8	0.4	-1.1	-0.9	-0.9	-1.4	-1.4	-1.3	-0.4	-0.1	-0.6	-0.3	-0.3
Services	2.9	1.9	1.3	1.6	1.3	1.1	1.0	0.8	0.4	0.2	0.2	0.2	0.2
Trade and transport	3.1	1.6	0.7	1.3	0.8	0.4	0.3	0.2	0.3	0.0	0.0	0.0	0.2
Finance and business	5.7	3.8	1.9	2.3	2.1	1.7	1.6	1.4	0.2	0.6	0.2	0.5	0.0
Public administration	1.6	1.3	1.4	1.5	1.5	1.5	1.3	1.1	0.5	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.

A gradual strengthening of economic growth is expected in the second half of the year

The weak growth in economic activity in the first quarter of 2003 appears to have continued in the second quarter. This is indicated both by continued weakness in the survey data for the industrial sector and by the latest developments in industrial production. First indications for the third quarter, based on confidence indicators, provide positive signals in retail trade and services sectors, while industrial activity appears to remain subdued.

The main scenario remains that of a gradual strengthening of economic growth in the euro area from the second half of 2003 onwards. Factors supporting this gradual recovery include higher real disposable income, following the expected further decline in inflation, the low level of interest rates and the envisaged global recovery. However, there continue to be downside risks to this main scenario, stemming from the past accumulation of macroeconomic imbalances outside the euro area and from the fact that the degree of adjustment needed to enhance productivity and profitability in the euro area corporate sector is still uncertain.

4 Exchange rate and balance of payments developments

Euro broadly unchanged in July

Following its depreciation towards the end of June, the euro continued to decline in the first half of July amid the positively revised market expectations about the economic recovery in major partner countries. In the second half of the month, however, the euro underwent a rather broad-based strengthening and subsequently stabilised towards the end of the reference period. As a result, on 30 July the euro was, in nominal effective terms, almost unchanged from its end-June level.

The decline of the euro against the US dollar in the first half of July was mainly associated with an upward revision of market expectations for US economic activity, as evidenced, for instance, by US data releases indicating an improvement in business and consumer confidence, strong retail sales and a robust housing market (see Chart 20). In the same vein, the US currency was temporarily supported by statements that suggested a strong rebound of the US economy in the second half of this year and buoyant activity in 2004. These developments were also reflected in a stronger increase in bond yields in the United States than in the euro area in July. Although the long-term

interest rate differential turned in favour of US assets in the second half of July, the euro rebounded and then stabilised against the US currency by the end of the period under review. This movement took place against a background of some rather mixed data releases both in the euro area and in the United States, while technical factors might have also played a role in this development. On 30 July the euro stood at USD 1.14, i.e. unchanged from its end-June 2003 level and 20.8% stronger than its 2002 average.

In the wake of more favourable prospects for a recovery of the Japanese economy, as suggested by leading indicators and a strong rise in industrial production in Japan, the euro continued to weaken against the Japanese yen in the first half of July (see Chart 20). Meanwhile, Japanese stock prices rose significantly – fuelled by a strong demand from foreign investors for Japanese equities – and Japanese long-term bond yields increased notably over the same period. In the second half of the month, however, bond yields as well as stock prices moderated again, accompanied by a partial reversal of the previous strengthening of the yen. On 30 July the euro was quoted at JPY 137, close to its end-June level and 16% higher than its 2002 average.

Following a very brief decline at the beginning of the month, the euro appreciated more steadily against the pound sterling in July (see Chart 20). This development was related to subdued economic activity in the United Kingdom – as corroborated in early July by weak manufacturing data, for example – and the decision of the Bank of England on 10 July to lower its policy rates. Further evidence of the sluggishness of the UK economy became available later in the month when a survey on

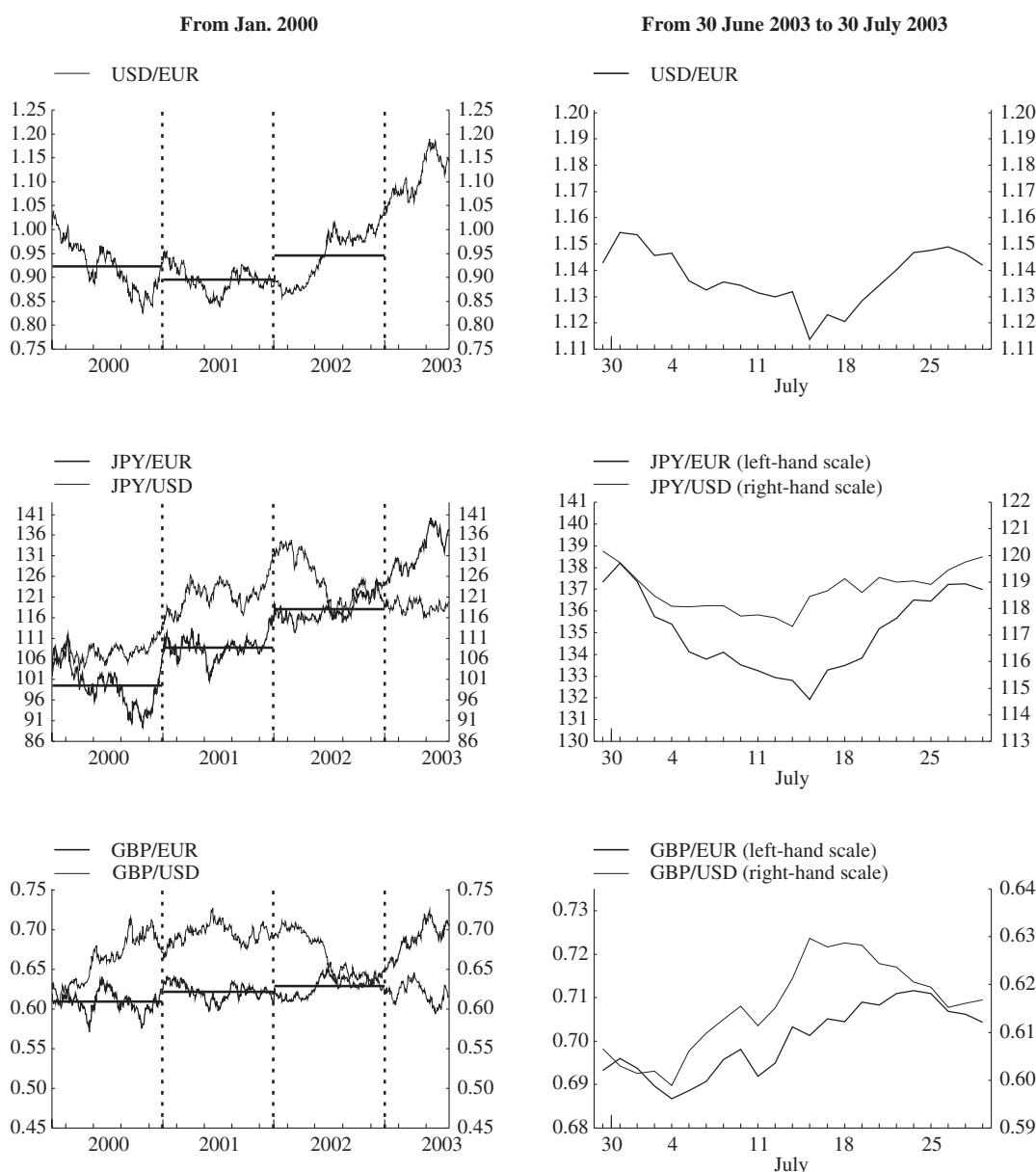
industrial trends pointed to weak order positions. Towards the end of the month, however, the pound sterling recovered part of its earlier losses against the euro. On 30 July the euro traded against the pound sterling at GBP 0.70, i.e. 1.6% higher than at the end of June and 12% above its 2002 average.

With regard to other European currencies, the Danish krone continued to fluctuate in a

Chart 20

Patterns in exchange rates

(daily data)



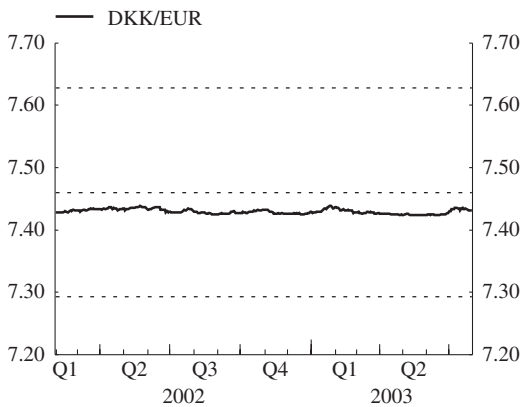
Source: ECB.

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

Chart 21

Patterns in exchange rates within ERM II

(daily data)



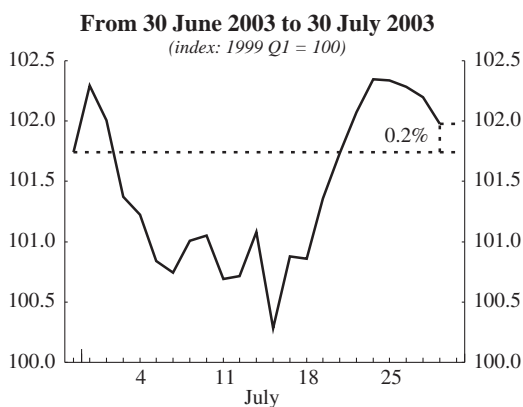
Source: ECB.

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

Chart 22

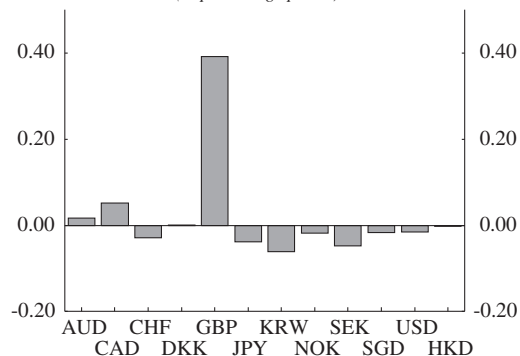
The effective euro exchange rate and its decomposition¹⁾

(daily data)



Contributions to EER changes²⁾

(in percentage points)



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.

narrow range slightly above its central parity in ERM II (see Chart 21). In July the euro remained broadly stable vis-à-vis the Swiss franc and depreciated moderately against the Swedish krona and the Norwegian krone.

In the light of these developments, on 30 July the euro stood, in nominal effective terms, as measured against the currencies of 12 major trading partners, 0.2% higher than its end-June level and 13.3% above its average level in 2002 (see Chart 22). This mainly reflects the strengthening of the euro against the pound sterling in the period under review, which was partly offset by the modest depreciation of the euro against the currencies of several partner countries. In this respect, this issue of the Monthly Bulletin contains an article entitled “Developments in the euro area’s international cost and price competitiveness”.

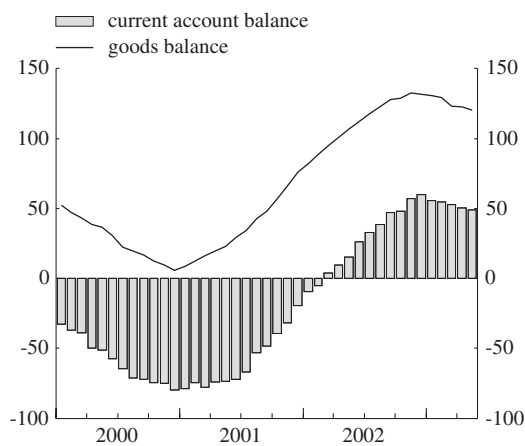
Seasonally adjusted current account in surplus in May 2003

Following a deficit of €1.0 billion in April, the seasonally adjusted current account of the euro area showed a surplus of €2.0 billion in May 2003 (corresponding to a deficit of €0.4 billion in non-seasonally adjusted terms). As shown in Table 8, this reflected a surplus of €9.5 billion for goods, which was only partly offset by deficits for income (€3.0 billion) and current transfers (€4.6 billion). The services item was balanced.

The seasonally adjusted current account surplus in May was somewhat lower than the monthly surpluses recorded earlier in 2003, with the exception of April, and significantly smaller than those observed in the second half of 2002. Taking a longer-term perspective, the continuing decline in the current account surplus can be seen in the 12-month cumulated data, which show a peak of €59.7 billion at around the end of last year and then a moderate decline during the first five months of 2003, reaching €49.1 billion for the 12-month period ending in May 2003 (see Chart 23). This was mainly

Table 8**Current account of the euro area***(EUR billions, seasonally adjusted)*

	2002	2003	2003	2003	2003	2003	12-month cumulated figures ending	
	Dec.	Jan.	Feb.	Mar.	Apr.	May	2002 May	2003 May
Current account balance	3.5	3.2	3.0	2.1	-1.0	2.0	15.2	49.1
Goods balance	7.9	10.6	10.3	5.5	9.8	9.5	106.7	120.3
Exports	85.7	89.0	87.9	83.2	87.3	86.2	1,038.7	1,053.0
Imports	77.9	78.5	77.6	77.7	77.5	76.7	932.0	932.7
Services balance	0.8	1.9	1.8	2.6	0.6	0.0	-0.2	17.0
Exports	27.4	28.6	27.8	28.5	26.9	25.7	327.6	332.4
Imports	26.5	26.7	26.0	25.9	26.3	25.6	327.9	315.3
Income balance	-1.7	-5.4	-4.8	-2.2	-6.6	-3.0	-38.2	-41.2
Current transfers balance	-3.4	-3.8	-4.3	-3.8	-4.8	-4.6	-53.0	-47.0

*Source: ECB.**Notes: Figures may not add up due to rounding. A detailed set of tables on euro area balance of payments data can be found on the ECB's website.***Chart 23****The euro area current account and goods balances***(EUR billions; monthly data; seasonally adjusted; 12-month cumulated figures)**Source: ECB.*

attributable to a decrease in the goods surplus, reflecting somewhat lower exports. The weakness of global demand and the appreciation of the euro are the main factors behind the recent fall in export volumes and prices (see Box 4 for a more detailed assessment of recent developments in trade volumes and prices). Meanwhile, the value of exports of services also registered month-on-month declines in both April and May 2003. Turning to imports of goods, rising oil prices up to the first quarter of this year seem to have offset the downward pressure on import prices expected from the appreciation of the euro (see also Box 4). However, the lower value of goods imports in April and May 2003, as compared with the levels observed earlier in the year, could suggest that the decline in oil prices in these two months may have begun to feed through to import prices.

Box 4

Recent developments in extra-euro area trade volumes and prices

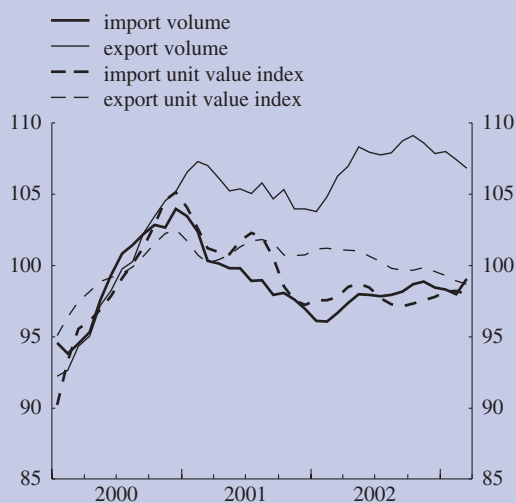
In view of the strong appreciation of the euro since the second quarter of 2002, this box takes a closer look at recent developments in the volumes and prices of extra-euro area exports and imports of *goods*, with a particular focus on the period between the beginning of 2002 and the first quarter of 2003. Trade data that have been disaggregated by both commodity category and trading partner are used to shed light on the likely factors accounting for recent movements in aggregate trade volumes and trade prices (unit value indices are used as a proxy for the latter). Overall, the appreciation of the euro has been associated with declines in both export volumes and export prices, while weak foreign demand has also affected export volumes. Thus these factors explain the recent fall in export values which, in turn, largely account for the decreases in both the goods and current account surpluses. At the same time, weak euro area demand seems to have partly offset the potential upward impact of the appreciation on import volumes, while the expected downward pressure of the strengthening of the euro on import prices seems, thus far, to have been largely counterbalanced by rising oil prices.

Chart A shows recent developments in extra-euro area trade volumes and unit value indices of goods up to the first quarter of 2003. *Export volumes*, after growing strongly in the first few months of 2002, started to flatten out before declining in both the fourth quarter of 2002 and the first quarter of 2003. This slowdown and subsequent decline in exports reflects both a weakening of foreign demand and a decline in price competitiveness arising from the appreciation of the euro, which began in the second quarter of 2002. However, compared with the decline in export volumes in 2001, which was largely due to falling foreign demand, the current fall in exports has, so far, been fairly moderate. Chart B shows that the recent downturn in export volumes was spread fairly broadly across all major export markets of the euro area. However, until the latter part of last year, exports to Asia and to the central and eastern European countries had been growing rapidly, while growth in exports to the United States was somewhat weaker and exports to the United Kingdom registered a significant decline. Taking into account the growth of total import volumes in these markets, the weakness of euro area exports to the United Kingdom and the United States in 2002 and early 2003 implies some decline in the euro area's export market share in these two countries over this period. Meanwhile, it seems that there has only been a slight loss in the euro area's export market share in Asia, with virtually no loss in its market share for exports to central and eastern European countries.

Turning to a breakdown of exports into different product categories, export volumes of capital, consumer and intermediate goods have all shown declines in recent months (see Chart C). However, exports of consumer goods have proved to be more resilient than the other two categories since the second quarter of 2002. Moreover, it should be borne in mind that, despite recent declines, export volumes remain at comparatively high levels, reflecting the significant earlier rise in the euro area's export market share associated with the previous gains in international price competitiveness resulting from the depreciation of the euro in 1999 and 2000. Furthermore, as emphasised in the article entitled "Developments in the euro area's international cost and price competitiveness" that appears in this issue of the

Chart A: Extra-euro area trade volumes and unit value indices¹⁾

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



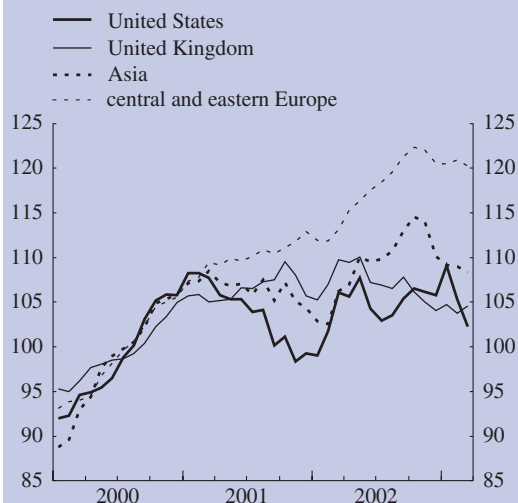
Sources: Eurostat and ECB calculations.

1) Latest observations are for March 2003.

Monthly Bulletin, the international cost and price competitiveness of the euro area is currently at levels similar to those seen at the time of the launch of the euro, and is broadly in line with historical averages.

Chart B: Extra-euro area export volumes to selected trading partners¹⁾

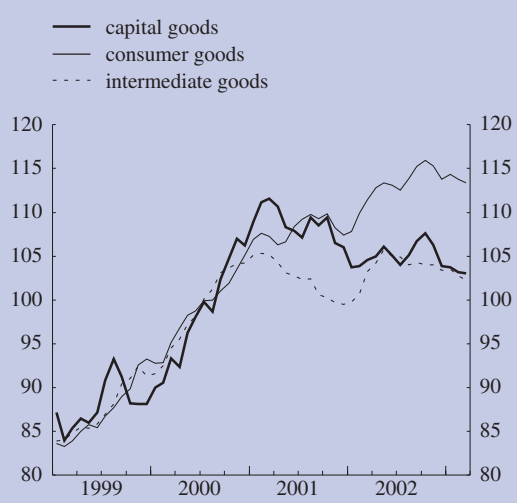
(index: 2000 = 100; seasonally adjusted; three-month moving averages)



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

Chart C: Extra-euro area export volumes for selected commodities¹⁾

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



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

Despite rising costs – as measured by unit labour costs or producer prices – *export prices* have fallen by around 2.5% since the euro began to appreciate in the second quarter of 2002 (see Chart A). This suggests that euro area exporters are cutting profit margins in an effort to partially offset the effects of the loss in price competitiveness resulting from the appreciation of the exchange rate. The mechanisms behind this adjustment are essentially a mirror image of those at play during the earlier depreciation of the euro when euro area exporters increased their prices in excess of rising costs, thereby increasing their profit margins. However, it must be considered that changes in unit value indices, which are used as a proxy for euro area external trade prices (as the latter are unavailable), reflect not only changes in prices but also changes in the composition and product characteristics of trade at both the detailed and aggregate level.

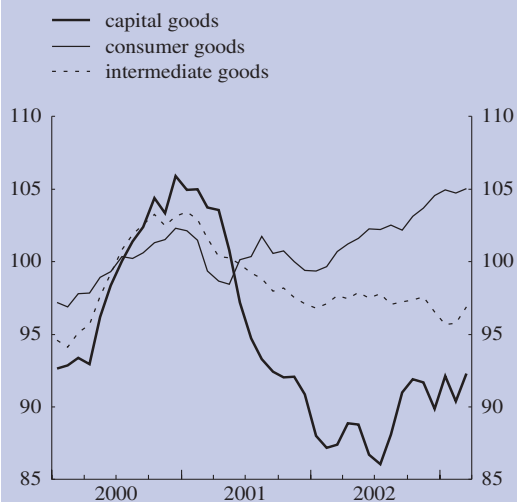
Meanwhile, after falling throughout 2001, *import volumes* began to grow as from the beginning of 2002, but at a fairly sluggish pace, particularly when considering that the appreciation of the euro should have provided a boost to import volumes by improving their price competitiveness vis-à-vis domestic euro area producers (see Chart A). It thus seems that weak euro area demand, especially for the import-intensive categories of expenditure – such as capital expenditure and exports – may have partly offset the upward impact on import volumes that should have resulted, *ceteris paribus*, from the appreciation of the euro. Chart D shows that import volumes of capital goods fell sharply in 2001 and grew only sluggishly in the second half of 2002 and early 2003, in conjunction with weak euro area capital expenditure. By contrast, imports of consumer goods seem to have shown a more sustained increase in 2002 and the first quarter of 2003, which may be linked to the import-boosting effects of the appreciation of the euro. Meanwhile, over the same period, developments in euro area aggregate demand, rather than movements in the exchange rate, seem to explain the weakness of imports of intermediate goods.

Thus far, *import prices* of goods have shown little response to the appreciation of the euro (see Chart A). This is largely because the expected downward pressure on import prices resulting from the strengthening of the euro was more or less offset by rising oil prices, particularly during the build-up to the military operations in Iraq in the first quarter of 2003 (as shown in Chart E). However, import prices of manufactured goods – which

are not directly affected by fluctuations in oil prices – fell by around 3.5% between the second quarter of 2002 and the first quarter of 2003, thereby reflecting the rise in the nominal effective exchange rate (NEER) of the euro.

Chart D: Extra-euro area import volumes for selected commodities¹⁾

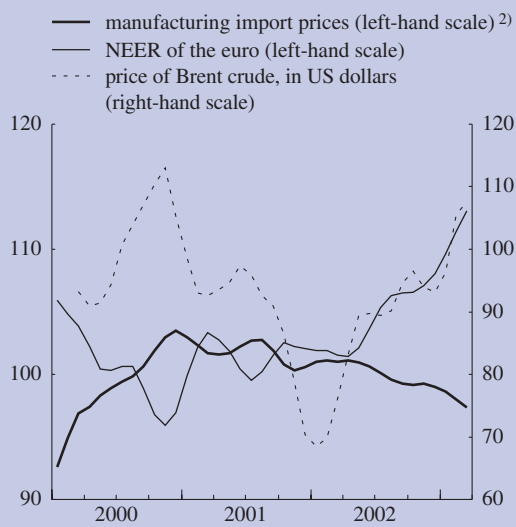
(index: 2000 = 100; seasonally adjusted; three-month moving averages)



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

Chart E: Extra-euro area manufacturing import prices, oil prices and NEER of the euro¹⁾

(index: 2000 = 100; three-month moving averages)



Sources: Eurostat and ECB calculations.
1) Latest observations are for March 2003.
2) Seasonally adjusted data.

Increased net inflows in debt instruments in May 2003

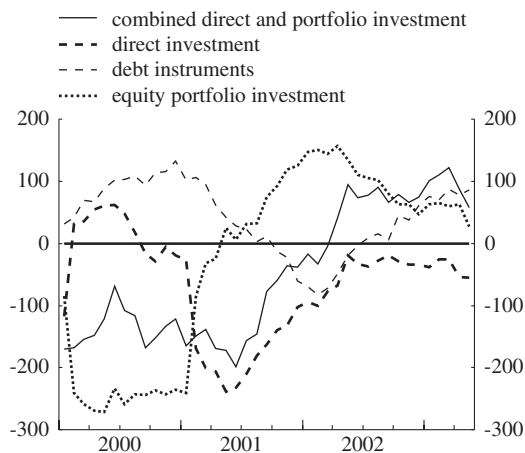
Combined direct and portfolio investment in the euro area balance of payments recorded net inflows of €6.7 billion in May 2003. This development was accounted for by net inflows of €7.0 billion in portfolio investment, whereas direct investment registered net outflows of €0.3 billion (see Table 9).

The salient feature of the financial account in May was net inflows of €27.3 billion in bonds and notes, reflecting mainly sizeable net purchases of such securities by non-residents (€46.0 billion). The increased inflows in bonds and notes were partly offset by net outflows in portfolio equities (€13.7 billion) and in money market instruments (€6.5 billion) as shown in Table 8.5 of the “Euro area statistics”. Chart 24 shows that, in terms of 12-month cumulated data, there has been a trend towards increased net inflows in debt instruments and declining net inflows in equity portfolio investment in recent

months. By contrast, net outflows in direct investment have remained relatively subdued since the end of 2001.

Chart 24 Net flows in direct and portfolio investment

(EUR billions; monthly data; 12-month cumulated figures)



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

Table 9**Balance of payments of the euro area***(EUR billions; not seasonally adjusted)*

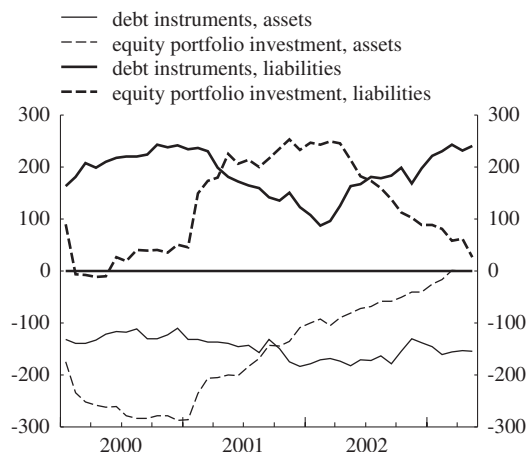
	2002	2003	2003	2003	2003	2003	12-month cumulated figures ending	
	Dec.	Jan.	Feb.	Mar.	Apr.	May	2002 May	2003 May
Current account balance	7.1	-4.8	3.5	4.0	-8.6	-0.4	15.1	46.5
Goods balance	9.6	2.1	9.1	6.2	7.4	8.3	106.5	119.8
Services balance	1.4	-0.6	0.1	1.5	0.8	1.5	-0.1	16.5
Income balance	-0.2	-9.4	-2.6	-0.6	-10.5	-4.6	-39.6	-42.7
Current transfers balance	-3.7	3.2	-3.1	-3.0	-6.3	-5.6	-51.7	-47.0
Capital account balance	0.9	2.1	-0.9	0.8	0.1	0.4	8.8	8.5
Financial account balance	-16.2	-12.7	-25.8	7.9	7.8	-31.0	-74.5	-198.0
Direct investment	2.5	-3.1	3.2	-7.7	-20.2	-0.3	-19.7	-55.4
Abroad	-1.3	-16.8	-6.8	-17.1	-22.8	-1.2	-193.4	-147.0
In the euro area	3.9	13.6	10.0	9.4	2.6	0.9	173.7	91.7
Portfolio investment	-5.3	-2.8	-12.0	17.6	9.3	7.0	114.6	113.0
Equities	-8.9	15.7	2.5	-3.4	7.1	-13.7	134.2	26.8
Assets	-7.1	2.3	0.3	7.4	-3.0	-5.8	-80.2	0.2
Liabilities	-1.8	13.4	2.2	-10.8	10.2	-7.9	214.4	26.6
Debt instruments	3.6	-18.6	-14.4	21.0	2.1	20.7	-19.6	86.1
Assets	-13.0	-22.7	-23.9	-14.8	-9.1	-24.6	-182.4	-154.3
Liabilities	16.6	4.1	9.5	35.8	11.2	45.4	162.8	240.5
Memo item:								
Combined net direct and portfolio investment	-2.8	-6.0	-8.8	9.9	-10.9	6.7	94.9	57.6
Financial derivatives	-2.5	-0.8	0.6	0.2	-4.6	0.6	-17.4	-20.0
Other investment	-9.9	-7.4	-22.9	-7.2	22.9	-39.7	-164.2	-240.0
Reserve assets	-1.0	1.5	5.3	5.0	0.5	1.4	12.1	4.4
Errors and omissions	8.2	15.3	23.2	-12.7	0.7	31.0	50.6	143.0

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 area balance of payments data can be found on the ECB's website.

Looking at portfolio flows in more detail reveals that the overall shift towards flows in debt instruments was accounted for by the investment decisions of both euro area residents and non-residents. In terms of 12-month cumulated flows, both assets and liabilities of equity portfolio investment have been declining significantly, especially over the past 12 months (see Chart 25). By contrast, net inflows in investment by non-residents in debt instruments increased over the same period, reaching a cumulated €240.5 billion (12-month period ending in May 2003) compared with €162.8 billion a year earlier, whereas net outflows in investment by euro area residents in debt instruments declined slightly (see Table 9).

Overall, flows in debt instruments continued to dominate developments in the euro area

Chart 25**Flows in equity portfolio investment and debt instruments***(EUR billions; monthly data; 12-month cumulated figures)*

Source: ECB.

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

financial account. Uncertainty about the economic outlook in the major economies may explain the continued preference of investors for bonds and notes as investment instruments. Moreover, yield considerations and expectations of capital gains are likely to have played a role in explaining the acceleration of inflows in investment by non-residents in euro area bonds and notes in recent months.

Changes to the Eurosystem's operational framework for monetary policy

In January 2003 the Governing Council of the ECB decided on two changes to the Eurosystem's framework for monetary policy implementation. First, the timing of reserve maintenance periods would be adjusted so that the periods 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. Changes in standing facility rates would be aligned with the start of the new reserve maintenance period. Second, the maturity of the MROs would be shortened from two weeks to one week. Owing to technical and legal lead times, the agreed changes will be effective from March 2004.

Together, these two changes aim to stabilise the conditions in which bidding in the MROs takes place by neutralising the impact of interest rate change speculation within a maintenance period. Thus, in periods characterised by expectations of interest rate reductions, the agreed changes will strongly reduce the likelihood of underbidding. Furthermore, in periods of expectations of an interest rate increase, the changes should prevent very short-term market rates and the MRO tender rates from increasing significantly above the minimum bid rate in the case of variable rate tenders, thereby removing any potential source of noise in the signalling of the monetary policy stance. In addition, they should prevent excessive overbidding from occurring in the case of fixed rate tenders due to expectations of rising interest rates.

This article explains the reasons for these changes and reviews a number of more technical issues concerning the implementation of the changes.

I Introduction

On 23 January 2003 the Governing Council of the ECB decided on some changes to the Eurosystem's operational framework for monetary policy. The changes, which will be effective from March 2004, are expected to improve further the efficiency of the framework and, in particular, to contribute towards stabilising the conditions in which credit institutions bid in the Eurosystem's MROs. The main objective of the measures is to prevent the impact of interest rate change speculation during a maintenance period from affecting very short-term money market conditions. Thereby, the agreed changes will be an important factor in reducing the occasional volatility of short-term money market interest rates experienced in the past.

The changes are as follows:

- The timing of reserve maintenance periods will be adjusted so that these periods always start on the settlement day of the MRO following the Governing Council meeting at which the monthly assessment of the monetary policy stance is pre-scheduled. Currently, reserve maintenance

periods start on the 24th calendar day of one month and end on the 23rd calendar day of the subsequent month, irrespective of the Governing Council's meeting schedule. As a complement to this redefinition of the reserve maintenance period, changes in standing facility rates will, as a rule, be implemented on the first day of the new maintenance period. Currently, changes in standing facility rates are effective from the day after the meeting of the Governing Council.

- The maturity of the MROs will be shortened from two weeks to one week. Together with the above-mentioned changes, this implies that MROs will no longer straddle reserve maintenance periods.

Prior to the decision to implement the above changes, a public consultation was conducted to gather the views of European credit institutions and banking associations both on the measures proposed and on an additional proposal to suspend the longer-

term refinancing operations (LTROs). The public consultation was carried out in October and November 2002, and around 60 credit institutions and associations transmitted their views to the ECB.¹ While the opinions submitted generally supported the two aforementioned measures, they did not back the suspension of the LTROs. This contributed to the Governing Council's decision not to suspend the LTROs.

This article aims to explain further the motivation for the agreed changes to the operational framework for monetary policy.

2 Episodes of unbalanced bidding in the current framework and the underlying factors

Generally, the framework for monetary policy implementation can be assessed positively. The volatility of short-term money market rates has, on average, been low in the euro area, both in comparison with European national money markets prior to January 1999 and by international standards. This low degree of volatility has been fostered by the use of averaging provisions by the Eurosystem's minimum reserve system, with little need for the ECB to conduct fine-tuning operations. Moreover, credit institutions have had only limited recourse to the standing facilities, which indicates that the money market has been working efficiently. The small and fairly stable spread between the ECB's main refinancing rate and the short-term money market rates has also demonstrated the ECB's ability to closely steer short-term interest rates in line with its intentions. Finally, the ECB's operational framework has been robust when faced with a series of exceptional challenges (e.g. the transition to the year 2000 and the terrorist attacks of 11 September 2001) and has shown a very high degree of flexibility to deal with unforeseen circumstances.

The Eurosystem's framework for monetary policy implementation has only been subject to a few occasions of minor tension. Typically,

Section 2 describes the factors underlying credit institutions' bidding behaviour within the present framework and how unstable bidding has on occasions led to excessive volatility in short-term money market rates and created a source of noise in the implementation of monetary policy. Section 3 examines how the changes to the framework are envisaged to contribute to the stabilisation of the conditions in which bidding in MROs takes place and reviews a number of more technical issues concerning the implementation of the changes.

such strains emerged when high expectations of changes in the key ECB interest rates translated into instability in bidding by credit institutions taking part in the Eurosystem's MROs. Two types of instability were experienced, namely "underbidding" and "overbidding". More precisely, underbidding refers to the submission by credit institutions of aggregate bids which fall short of the amount needed to allow for a smooth fulfilment of reserve requirements in the period until the next MRO is conducted. This has occurred a total of nine times since 1999. Overbidding refers to the phenomenon of credit institutions submitting high and even continuously increasing bids to MROs (which were conducted as fixed rate tenders from January 1999 to May 2000), such that the ratio between allotment and bid amount falls to very low levels. This section addresses the factors underlying such unbalanced bidding behaviour and reviews some of the relevant episodes.

¹ For more detailed information on this public consultation and for the decision of the Governing Council, see the public consultation document entitled "Summary of comments received on the measures proposed to improve the operational framework for monetary policy" and the ECB press release "Measures to improve the efficiency of the operational framework for monetary policy", both dated 23 January 2003, on the ECB's website (www.ecb.int).

Unbalanced bidding and the underlying factors

The ECB's MROs play a pivotal role in steering interest rates, managing the liquidity situation in the market and signalling the stance of monetary policy. Currently, the minimum bid rate in the variable rate tender plays the key role of signalling the monetary policy stance, a role which was previously performed by the rate in fixed rate tenders.² The bidding behaviour of credit institutions in MROs is driven by two main factors: the spread between the two-week money market rate and the pre-announced minimum bid rate in the variable rate tender (the fixed tender rate prior to June 2000), and credit institutions' liquidity needs.³ Indeed, bidding encompasses two components, a quantity component (the bid amount) and a price component (the interest rate), both of which depend on the tender regime used for MROs. Normally, bidding should be such that an arbitrage equilibrium between obtaining liquidity directly from the central bank and obtaining it from the money market prevails. In the case of high expectations of a decline in key ECB rates, the minimum bid rate would be binding and credit institutions would tend to adjust the amount of bids downwards, instead of adjusting bid rates. Conversely, expectations of rising interest rates may lead to very large bids in fixed rate tenders.

In addition to the key monetary policy signalling role of the minimum bid rate (or fixed rate), three other elements of the monetary policy framework are instrumental in understanding how the current framework affects short-term interest rates and credit institutions' bidding behaviour in MROs: (i) the reserve requirement system with an averaging provision and a maintenance period starting on the 24th calendar day of each month and ending on the 23rd calendar day of the subsequent month; (ii) the possibility of changes in the key ECB rates during the reserve maintenance period; and (iii) the two-week maturity of the weekly MROs.

Considering these features one by one, the following can be regarded as key. First, the

reserve requirement system with monthly averaging provisions means that holding reserves on a specific day of the maintenance period is, in principle, a substitute for holding reserves on any other day of the relevant maintenance period. Thus, the monthly averaging mechanism provides credit institutions with some flexibility for managing their daily reserves within the maintenance period. Second, the current definition of reserve maintenance periods, however, also implies that changes in the key ECB interest rate may occur in the course of a maintenance period. Indeed, the assessment by the Governing Council of the monetary policy stance normally occurs at the first of its two meetings of the month, which is typically on the first or second Thursday of the month,⁴ and therefore does not coincide with the start of the maintenance period. Rate change expectations within the prevailing reserve maintenance period imply that overnight interest rates may deviate from the rates used by the ECB to signal its monetary policy stance (minimum bid rate or fixed tender rate), even if neutral liquidity conditions are expected for the end of the reserve maintenance period. Indeed, overnight interest rates depend not only on the expected accumulated liquidity conditions over the relevant maintenance period, as mentioned above, but also on the expected level of the key ECB rates. Third, the two-week maturity of the weekly MROs implies that at least the last MRO of each reserve maintenance period overlaps with the subsequent period. Therefore, it cannot be excluded that expectations of a rate change to take place in the subsequent reserve maintenance period could also destabilise bidding at the end of the prevailing maintenance period (the Box below presents a detailed discussion of the interaction between the key ECB rates, the liquidity conditions of the banking

² For the switch from fixed rate tenders to variable rate tenders with a minimum bid rate, see the ECB press releases "Monetary policy decisions" of 8 June 2000 and "Switch to variable rate tenders in main refinancing operations: some technical details" of 16 June 2000. For further details, see the article entitled "The switch to variable rate tenders in the main refinancing operations" in the July 2000 issue of the ECB's Monthly Bulletin.

³ See the article entitled "Bidding behaviour of counterparties in the Eurosystem's regular open market operations" in the October 2001 issue of the ECB's Monthly Bulletin.

⁴ On 8 November 2001 the Governing Council announced that it would, as a rule, assess the stance of the ECB's monetary policy and change rates only at its first meeting of each month.

Box

The interbank unsecured overnight rate in the euro area

Any substantial spread between the fixed or minimum bid tender rate and market rates of comparable maturity has a major influence on the bidding behaviour of credit institutions. It is therefore important to examine the factors that drive short-term money market rates away from the main refinancing rate in order to understand the nature of unbalanced bidding behaviour. The overnight interest rate, as the shortest maturity and hence the starting point of the yield curve, also plays a fundamental role in determining, for example, the two-week rate which is most relevant for bidding in MROs. This box aims to describe how the Eurosystem's operational framework and, in particular, the key ECB interest rates and liquidity management affect the overnight rate. For the purpose of clarifying the theoretical argument, three standard assumptions are made about the money market in the euro area:

1. Market participants are risk neutral. Furthermore, they are indifferent concerning the days in a reserve maintenance period on which they actually hold their required reserves.
2. The level of reserve requirements and the provision of liquidity by the central bank are such that, before the last day of the reserve maintenance period, credit institutions are neither confronted with the likelihood of going overdrawn, i.e. of having to take recourse to the marginal lending facility, nor with the likelihood that they fulfil their required reserves for the relevant reserve maintenance period ahead of time.
3. There are no transaction costs and the costs related to the use of collateral are negligible.

While these assumptions are not fully satisfied in practice, the analysis below shows that they seem to point to fairly reasonable results in the case of the euro area.

Together with the averaging provision of the Eurosystem's reserve system, the above assumptions imply that credit institutions consider reserve holdings on different days within a reserve maintenance period to be perfect substitutes for fulfilling their reserve requirements. Therefore, the price on reserves, i.e. the overnight rate (r_t), should, on any day, be the same as the expected overnight rate on any future day within the same reserve maintenance period, including the last day (T) of the reserve maintenance period. If this is not the case, credit institutions would have the opportunity to perform inter-temporal arbitrage. Indeed, if the overnight rate on a particular day is higher (or lower) than the level expected for day T, credit institutions would sell (or acquire) funds in the overnight market, thereby making an expected profit corresponding to the difference between the prevailing and the expected future overnight rate.

In turn, the overnight rate expected for day T reflects market participants' expectations about the liquidity conditions (and thus the "marginal value of holding liquidity") on that day. If, on day T, there is an accumulated liquidity surplus, i.e. if the market is "loose" in the sense that more reserves are available than credit institutions need to fulfil their reserve requirements, interest rates will drop towards the rate of the deposit facility and the marginal value of liquidity will be the rate of the deposit facility (r_T^D). Conversely, if the market is "tight", such that a liquidity deficit necessitates recourse to the marginal lending facility, interest rates will tend to rise towards the rate of the marginal lending facility, and the marginal value of liquidity will be the rate of the marginal lending facility (r_T^M). In sum, under the above assumptions, r_t depends on the expected rates applied to the standing facilities on day T, and on the expected accumulated liquidity conditions over the relevant reserve maintenance period, whereby the latter determines the probability that the marginal value of liquidity on day T will be either the rate of the deposit facility (P^{loose}) or the rate of the marginal lending facility (P^{tight}):

$$\text{Equation 1: } r_t = E_t(r_T) = E_t(r_T^M) \cdot P^{tight} + E_t(r_T^D) \cdot P^{loose}$$

where E_t is an expectations operator. Bearing in mind that, since April 1999, the width of the corridor set by the standing facilities of the Eurosystem has been two percentage points and symmetric around the main

refinancing rate (r_T^{mro}), i.e. the fixed or the minimum bid rate in the MROs, equation 1 can be rewritten as follows:

$$\text{Equation 2: } r_t = E_t(r_T) = E_t(r_T^{mro} + 1) \cdot P^{tight} + E_t(r_T^{mro} - 1) \cdot P^{loose} = E_t(r_T^{mro}) + P^{tight} - P^{loose}$$

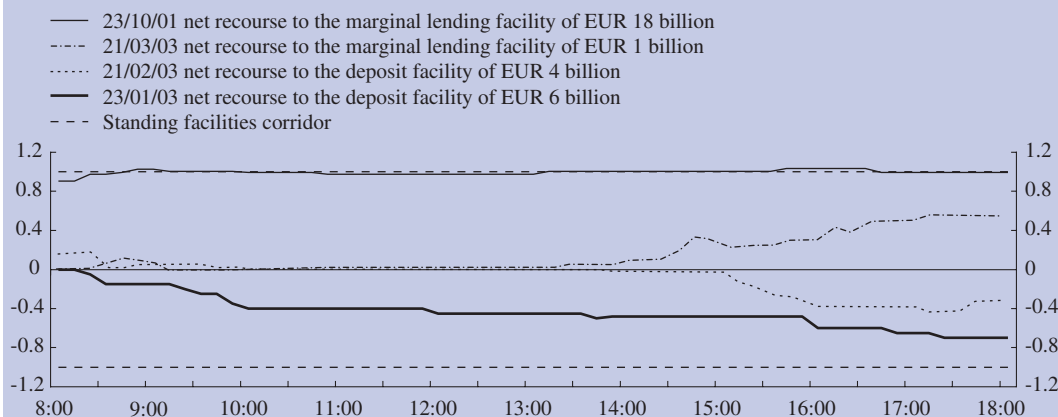
This illustrates that the overnight rate should always reflect the expected level of the main refinancing rate at the end of the reserve maintenance period, plus the difference between the perceived probability that the maintenance period will end on the tight or on the loose side. Specifically, if the accumulated liquidity conditions are perceived as being neutral, in the sense that both probabilities are equal to 0.5, and if at the same time the key ECB rates are expected to remain unchanged until the end of the prevailing reserve maintenance period, the overnight spread, i.e. r_t minus r_T^{mro} , should be zero.

While market expectations of liquidity conditions cannot directly be steered, it can be assumed that in normal conditions market participants have generally expected the ECB to offset any accumulated liquidity imbalances in the last MRO of the reserve maintenance period. However, after the last MRO, market participants have generally not expected the ECB to offset any liquidity imbalance. This has implied that perceptions in the market about non-neutral accumulated liquidity conditions have normally only prevailed after the last MRO of the reserve maintenance period – especially on the last day – or after a case of underbidding. Accordingly, the overnight spread has usually been more volatile during these periods than it has been from the start of the reserve maintenance period until the last MRO allotment (or until an episode of underbidding). Therefore, in order to assess the relevance of the expectations about the liquidity conditions, the intra-day evolution of the level of the spread between the overnight rate and the main refinancing rate (i.e. the overnight spread) on the last day of the reserve maintenance period is considered.

On the last day of the reserve maintenance period, interest rate change expectations for the relevant reserve maintenance period no longer prevail and the liquidity conditions can no longer be affected through the regular open market operations. From Chart A, it follows that the overnight rate typically approaches, at least to some extent, the rate of one of the two standing facilities towards the end of the last day of the reserve maintenance period, when the market realises, with increasing confidence, that the accumulated liquidity conditions are either tight or loose. Generally, the larger the accumulated liquidity imbalance (i.e. net recourse to one of the standing facilities), the sooner the market will recognise the liquidity conditions prevailing and

Chart A: Spread between the overnight rate and the ECB main refinancing rate on the last day of four selected maintenance periods ¹⁾

(x-axis: timestamp; y-axis: the overnight spread in percentage points)



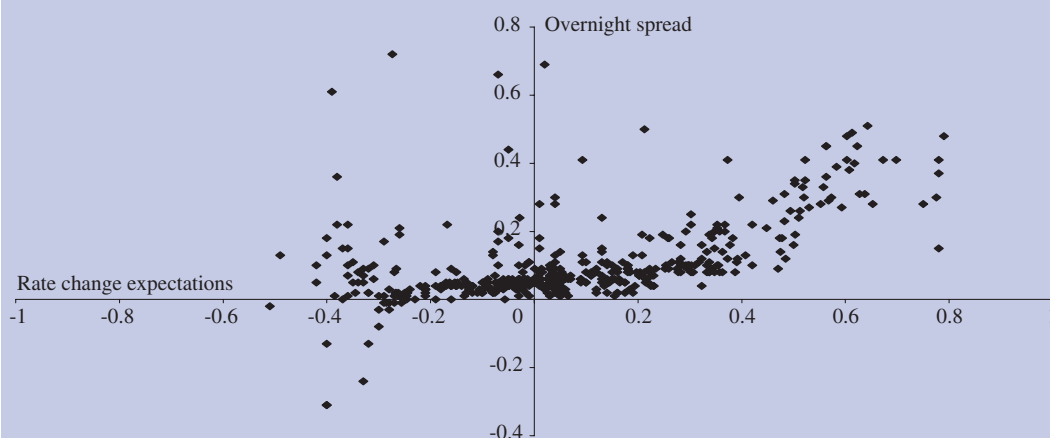
Sources: ECB and Reuters.

1) The four reserve maintenance periods were selected on the basis of the liquidity conditions prevailing on the last day of the period, as quantified by the net recourse to the standing facilities on that day. For the two selected maintenance periods which ended on a Friday (21 February and 21 March 2003), the accumulated net recourse from Friday to Sunday is reported.

therefore the sooner the overnight rate will move. For instance, on 23 October 2001, when there was a relatively large recourse of €18 billion to the marginal lending facility, the overnight rate was already close to the rate on the marginal lending facility before the last day of the maintenance period. By contrast, on 21 March 2003, when the accumulated deficit amounted to only €1 billion, the rate moved only late during the day.

As noted above, the overnight rate should also depend on expectations about the key ECB rates. While these cannot be directly observed, one can equate the prevailing interest rate expectations to the forward rates. In Chart B the spread between the one-month forward rate starting in one month and the main refinancing rate is used for quantifying interest rate change expectations.

Chart B: Relationship between rate change expectations¹⁾ and the overnight spread²⁾ – April 1999 to June 2003³⁾
(percentage points)



Sources: ECB and Reuters.

1) Spread between the one-month forward rate starting in one month and the ECB main refinancing rate.

2) Spread between the EONIA and the ECB main refinancing rate.

3) Only including those days on which at least one meeting of the Governing Council with a prescheduled press conference took place later in the same reserve maintenance period.

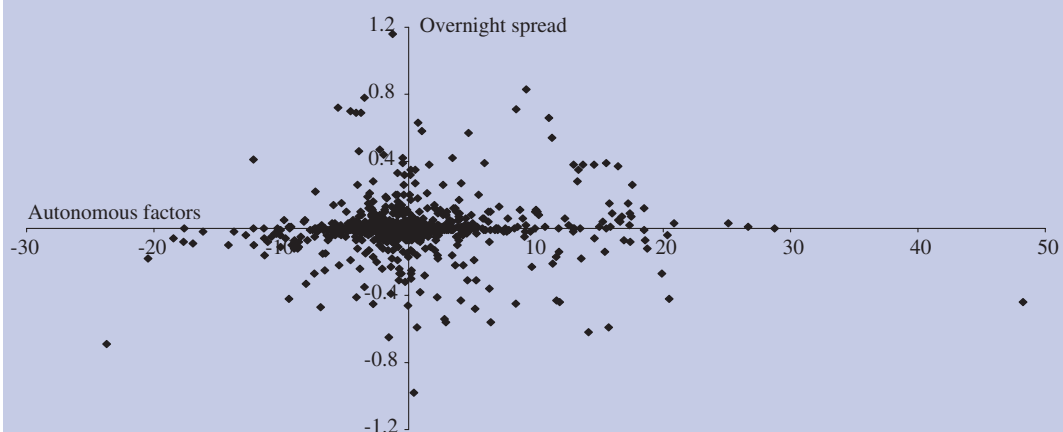
Chart B confirms that there is indeed a correlation between rate change expectations and the overnight spread. However, such a correlation is mainly observed for expectations of interest rate increases, i.e. when there is a positive forward spread, as can be seen in the upper right quadrant of Chart B. The rather vague correlation between expectations of interest rate decreases and the overnight spread (which is visible from the left half of Chart B) is likely to be related to the risk that underbidding may occur and result in tight liquidity conditions. The upward pressure on the spread resulting from the latter appears, in most circumstances, to have counterbalanced the downward pressure resulting from expectations of an interest rate reduction.

Finally, it is also of interest to study whether liquidity conditions before the end of the maintenance period affect the overnight rate. If the three assumptions given above are not too restrictive for the euro area, daily fluctuations of the autonomous liquidity factors prior to the last MRO in a maintenance period should not lead to significant movements in the overnight rate. Indeed, if such co-movements were to be observed, it would indicate that market participants require a premium for replacing current with future reserve holdings (and vice versa). However, it follows from Chart C that increases (and decreases) in the daily liquidity caused by changes in the autonomous factors have so far not led to systematic increases (or decreases) in the overnight spread, suggesting that the assumptions may be reasonable for the euro area. This does not mean that there is no limit in practice to the extent to which market participants are willing to replace current with future reserve holdings. For instance, if very large reserve deficits accumulate over several days, such as after the underbidding

episode in March 2003, this may, independently of the expectations about the accumulated liquidity conditions at the end of the maintenance period, lead to increases of the overnight spread.

Chart C: Daily changes of autonomous factors and daily changes of the overnight spread¹⁾ – April 1999 to June 2003

(x-axis: EUR billions; y-axis: percentage points)



Sources: ECB and Reuters.

1) Daily changes of the spread between the EONIA and the ECB main refinancing rate (in percentage points).

In conclusion, this box has shown that there are two main factors influencing the level of the overnight rate, namely expected liquidity conditions at the end of the maintenance period and expectations of future monetary policy changes. At the same time, in the past, daily fluctuations in liquidity prior to the last MRO in a maintenance period have not had significant influence on the overnight rate.

system, and short-term market rates within the current framework).

The combination of the three features described above and the presence of the minimum bid rate (or fixed tender rate) make the expectations of a change in the key ECB interest rates occurring within one or even two maintenance periods particularly relevant for credit institutions when these prepare their bids. Indeed, expectations of an interest rate change within the same reserve maintenance period have normally given rise to spreads (positive or negative) between the ECB's main refinancing rate and the corresponding money market rates, thereby providing credit institutions with arbitrage opportunities or disincentive to participate in the MROs. Consequently, credit institutions have, at times, submitted very low bids (underbidding) or high bids (overbidding, which has only occurred in the fixed rate tenders) in MROs.

Underbidding has generally occurred when short-term money market rates were below the minimum bid rate in the MRO, triggering an insufficient amount of bids immediately prior to the Governing Council meeting at which the monetary policy stance was discussed. This underbidding subsequently resulted in tight liquidity conditions and probably also affected market uncertainty of liquidity conditions for the remainder of the maintenance period (see Box). Short-term interest rates have tended to be driven up by the shortfall of liquidity and volatility in very short-term overnight interest rates has risen. Moreover, in situations where the key ECB rates were reduced, the temporary upward movement of the overnight rate associated with underbidding created a source of noise, at least temporarily, in the signalling of the monetary policy stance.

By contrast, overbidding in fixed rate tenders has generally occurred when, due to

expectations of an increase in interest rates, the short-term money market rates stood at a level clearly above the fixed tender rate, as was often the case in the second half of 1999 and the first half of 2000. In response, in June 2000 the ECB switched from fixed rate tender MROs to variable rate tenders with a minimum bid rate. Since this changeover, no further cases of overbidding have occurred.

Episodes of unbalanced bidding

The Eurosystem has experienced nine episodes of underbidding since January 1999. In all but one episode, the underbidding occurred in an environment of high expectations of an imminent reduction in the key ECB rates, of which there were eventually five. On several occasions underbidding in one MRO was followed by allotments in the remaining MROs of the reserve maintenance period, which did not allow credit institutions to compensate fully for the under-fulfilment of reserve requirements during the week after the underbidding occurred. Credit institutions faced the risk of running short of liquidity at the end of the maintenance period and had to take recourse to the marginal lending facility. All cases triggered significant temporary volatility in the short-term money market rates as indicated by the chart below, which addresses the six most recent episodes of underbidding and highlights their specific features (see also Table I for all episodes of underbidding).

The underbidding episode of 9 October 2001 took place in an environment of expectations of a reduction of the key ECB interest rates, as indicated by the level of the one-month forward rate starting in one month, which had fallen below the minimum bid rate level (see Panel (a) of the chart). As the liquidity deficit that consequently accumulated in the following week was only partially offset by the relatively high allotment in the subsequent MRO, credit institutions had to take substantial recourse to the marginal lending facility in order to fulfil their reserve requirements. Until the end of the

maintenance period, the overnight rate was driven substantially upward towards the marginal lending facility rate.

In the episode of 6 November 2001, despite the underbidding, the credit institutions did not have to resort to the marginal lending facility in order to fulfil their reserve requirements, mainly due to the allotment amounts in the remainder of the maintenance period and other liquidity factors. The overnight rate, which had edged upwards on the day of the announcement of the underbid MRO (T-2 in Panel (b) of the chart), returned to the minimum bid rate level a few days later. By contrast, in the episode of 3 March 2003, very large reserve deficits accumulated after the announcement of underbidding of €42 billion. The overnight rate remained above the former minimum bid rate, even after the expected decrease in interest rates had materialised (see Panel (e) of the chart). In order to facilitate liquidity management without generating a considerable difference between the sizes of the two outstanding MROs, the ECB decided the following week to conduct an additional MRO with a maturity of one week in parallel to the regular MRO. As a result, liquidity conditions were perceived as satisfactory and credit institutions only had to take a small net recourse to the marginal lending facility.

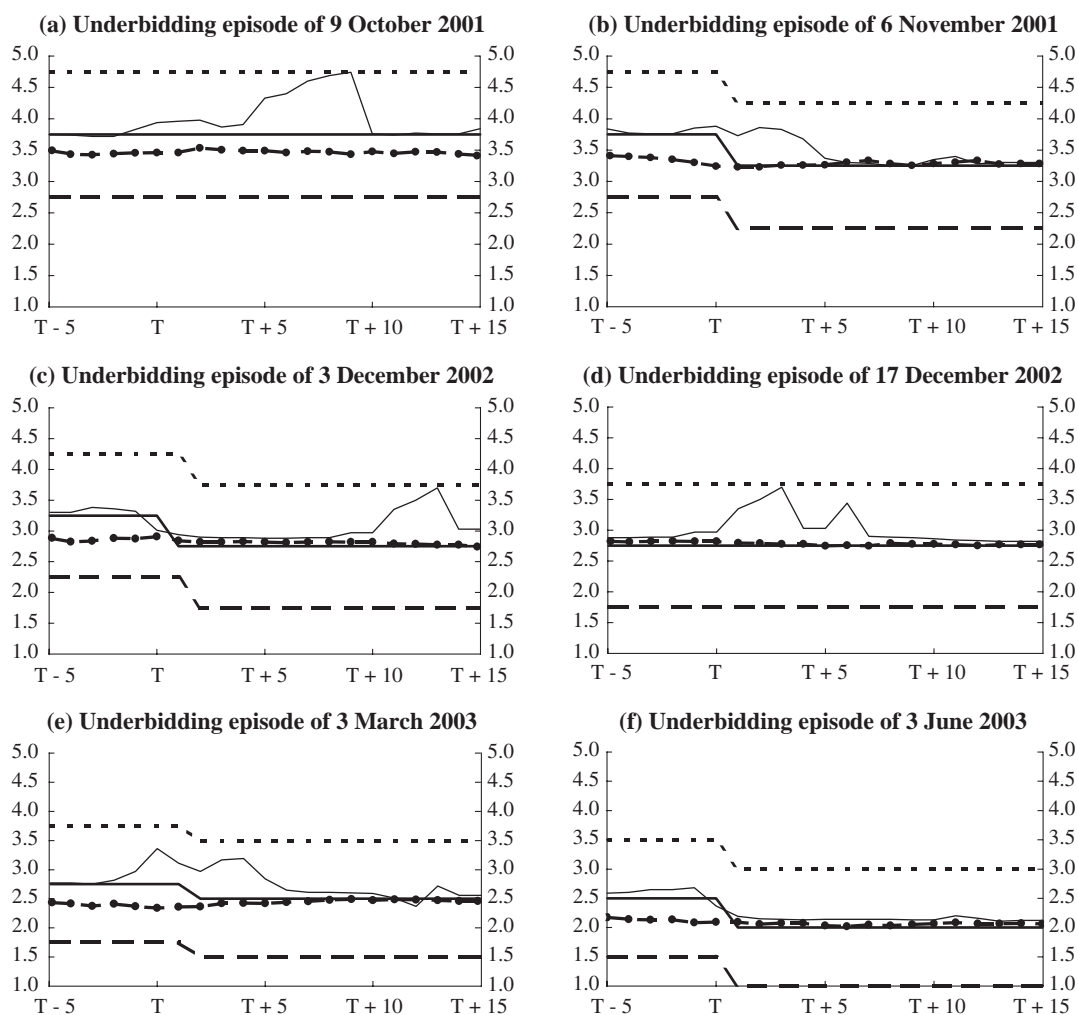
The underbidding episode of 3 December 2002 should be analysed in conjunction with the episode of 17 December 2002, as they both impacted on liquidity conditions in the same reserve maintenance period. While the episode of 3 December took place in an environment of expectations of interest rate reductions and entailed a fairly marginal underbidding amount, the one on 17 December 2002 appeared atypical insofar as it did not seem to be related to expectations of reductions in the key ECB interest rates (see Panels (c) and (d) of the chart). Indeed, the spread between the two-week swap rate and the tender rate was positive at the time of bid submission (see Table I). Anecdotal evidence suggests that underbidding on 17 December 2002 was related to the reluctance of credit institutions to participate

Chart

Overnight rates, key ECB interest rates and related spreads on the six most recent underbidding episodes

(percentages; time in days relative to settlement date T)

- overnight interest rate (EONIA)
- minimum bid rate in the main refinancing operations
- - - marginal lending rate
- - - deposit rate
- one-month/one-month forward rate (OIS based)¹⁾



Source: ECB.

1) The forward rate is derived from overnight indexed swaps, i.e. EONIA swaps, in which the fixed leg is exchanged against a variable leg. The variable leg is the result of the compounded EONIA.

in an MRO with maturity on 31 December, which was considered to be a particularly unattractive day for the settlement of the tender. This episode was even more atypical as it occurred in the last MRO of the maintenance period, implying that the related liquidity deficit could not be offset before the end of the maintenance period, unless a liquidity-providing fine-tuning operation was

conducted. Actually, on this specific occasion, the ECB conducted a fine-tuning refinancing operation on the settlement day of the underbid MRO with a view to reducing the liquidity shortage. The allotment amount reflected a balance between the ECB's aim to restore normal liquidity conditions, while at the same time preserving incentives for credit institutions to bid sufficiently in MROs.

Table I
Episodes of underbidding

(EUR billions)

Date of allotment of MRO	Bid volume (= actual allotment)	Allotment volume that would have allowed smooth fulfilment of reserve requirements ¹⁾	Underbidding amount	Spread between two-week swap rate and tender rate (in basis points) ²⁾	Number of days between the settlement day and the end of the maintenance period	Total net recourse to marginal lending facility ³⁾	Number of MROs after underbidding and until the end of the maintenance period
06/04/99	67	96	29		16	11.35	2
13/02/01	65	88	23	-1	9	71.71	1
10/04/01	25	53	28	-7	12	61.40	1
09/10/01	61	79	18	-3	13	24.73	1
06/11/01	38	66	28	-9	16	-2.74	2
03/12/02	112	116	4	-14	19	25.08	2
17/12/02	104	118	14	22	5	21.82	0
03/03/03	54	97	43	-4	19	1.89	2
03/06/03	72	92	20	-12	19	5.22	2

Source: ECB.

1) The benchmark allotment is calculated on the basis of the liquidity needs of the banking system arising from autonomous factors and minimum reserve requirements over the maintenance period (see the article entitled "The liquidity management of the ECB" in the May 2002 issue of the ECB's Monthly Bulletin).

2) Spread between the two-week rate at 9.15 a.m. on the allotment day and the key ECB interest rate (fixed rate or minimum rate).

3) Accumulated net recourse to the marginal lending facility for the period between the MRO and the end of the reserve maintenance period.

Finally, most recently, underbidding occurred on 3 June 2003. Again, underbidding took place in a environment of strong expectations of interest rate decreases, as indicated by the level of the one-month forward rate starting in one month compared with the ECB minimum bid rate level (see Panel (f) of the chart). As, however, underbidding turned out to be less significant than initially expected, overnight rates fell after the tender result was announced. Apart from the very end of the maintenance period, the overnight rate presented a pattern similar to that observed in the underbidding episode of 3 December 2002.

Overall, all these episodes show that no instrument is available to the Eurosystem to prevent the occasional tensions, which arise within the current framework. On the one hand, the ECB cannot immediately compensate for any shortfall in liquidity created by interest rate speculation and needs to preserve incentives for bidding. On the other hand, the resulting temporary volatility in money market rates is undesirable.

Turning now to overbidding, several episodes occurred in the period from mid-1999 to mid-2000, when the Eurosystem conducted the MROs through a fixed rate tender procedure in an environment of strong expectations of interest rate increases. Over that period, the allotment ratio reached extremely low levels, dropping to 0.87% on 31 May 2000. In addition to a general downward trend, this allotment ratio was volatile, implying that it was difficult for participants in the MROs to predict the amount of liquidity they would actually receive. During the overbidding period, when the corresponding market rates tended to be above the fixed tender rate, credit institutions faced difficulties in forecasting precisely the rather volatile allotment ratio and, accordingly, the risk of receiving significantly more or less liquidity in the tender than desired. Furthermore, some credit institutions most likely felt uncomfortable bidding for amounts which exceeded the collateral they had available. As the fixed rate tender system did not allow these issues to be addressed, these factors led the ECB to change the tender procedure to variable rate tenders.

3 The changes to the framework and their implementation

As previously mentioned, the changes to the framework for monetary policy implementation agreed by the Governing Council will align the start of the reserve maintenance period with the implementation of changes in the key ECB interest rates. This will also avoid a situation whereby an MRO overlaps with the subsequent maintenance period. This section briefly recalls how these measures should contribute to the stabilisation of the conditions in which bidding in MROs takes place by neutralising the impact of interest rate change speculation. It also reviews a series of more technical issues concerning the implementation of the changes.

The changes to the framework

The direct relationship between the start of the maintenance period, on the one hand, and the implementation of interest rate change decisions, on the other, will help remove expectations of changes in interest rates during the relevant maintenance period. Consequently, within a maintenance period, the overnight rate will normally no longer be affected by rate change expectations. Hence, the overnight rate will tend, due to the generally neutral liquidity management policy of the ECB, to remain close to the minimum bid rate.⁵ This should eventually prevent speculative considerations from disrupting the bidding of credit institutions in MROs. In addition, the spillover of interest rate expectations and liquidity conditions between maintenance periods should be eliminated.

In sum, these measures will (i) strongly reduce the likelihood of underbidding in periods of expectations of interest rate decreases and (ii) prevent overbidding in periods of expectations of interest rate increases even in the case of fixed rate tenders. The measures will also prevent short-term market rates and the MRO tender rates from increasing significantly above the minimum bid rate of variable rate tenders, which could potentially be a source of noise

for the signalling of the monetary policy stance.

Implementation issues

In practical terms, the implementation of the changes to the framework for the conduct of monetary policy will have a bearing on several other features of the current set-up of the Eurosystem's operational framework. In addition to reviewing these features, the timing of the phasing-in of the changes and the new timing of LTROs are addressed below.

Instead of starting and ending on fixed calendar days, the reserve maintenance period will start and end on different calendar days throughout the year. The tender calendar will depend on the calendar of Governing Council meetings. Furthermore, the maintenance periods will no longer last one calendar month, but will instead vary in length. For instance, taking 2004 as an example, the duration of maintenance periods will range from 28 to 46 days (see Table 2). In this context, it should be noted that a particularly long maintenance period was already experienced by credit institutions in 1999, when the first maintenance period after the start of Economic and Monetary Union had a duration of 54 days.

Two further effects of the new timing of the reserve maintenance period should also be mentioned. First, the new timing will ensure that the reserve maintenance period always starts on TARGET operating days, i.e. days when the payment system TARGET is operating, as MROs are always settled on such days. At the same time, reserve maintenance periods ending on non-TARGET days will be rare since they would occur only if an MRO were settled just after a non-TARGET day and would therefore

⁵ For a further detailed discussion of this issue, see the article entitled "The liquidity management of the ECB" in the May 2002 issue of the ECB's Monthly Bulletin.

Table 2
Indicative maintenance period calendar for 2004

Date of relevant Governing Council meeting	Start of maintenance period	End of maintenance period	Reserve base data for credit institutions reporting monthly	Reserve base data for credit institutions reporting quarterly	Length in days of the maintenance period
-	24 January 2004	9 March 2004	December 2003	September 2003	46
4 March 2004	10 March 2004	6 April 2004	January 2004	December 2003	28
1 April 2004	7 April 2004	11 May 2004	February 2004	December 2003	35
6 May 2004	12 May 2004	8 June 2004	March 2004	December 2003	28
3 June 2004	9 June 2004	6 July 2004	April 2004	March 2004	28
1 July 2004	7 July 2004	10 August 2004	May 2004	March 2004	35
5 August 2004	11 August 2004	7 September 2004	June 2004	March 2004	28
2 September 2004	8 September 2004	11 October 2004	July 2004	June 2004	34
7 October 2004	12 October 2004	8 November 2004	August 2004	June 2004	28
4 November 2004	9 November 2004	7 December 2004	September 2004	June 2004	29
2 December 2004	8 December 2004	19 January 2005	October 2004	September 2004	43

require a very atypical calendar. Moreover, maintenance periods will no longer start and will rarely end on a weekend, thus practically eliminating the occasional occurrence of days at the beginning and end of maintenance periods on which reserve holdings of, or the use of standing facilities by, credit institutions cannot be adjusted. Second, the last MRO of the maintenance period will always be settled six days prior to the end of the maintenance period, a period longer than the current average of around half a week. All things being equal, this extension implies, on average, a higher risk of accumulated forecasting errors by the ECB at the end of the reserve maintenance period. In this respect, it should be stressed that the Eurosystem has embarked upon a continuing process of improving the predictability of autonomous liquidity factors. Ultimately, of course, fine-tuning operations will always be available to the ECB to cope with extreme cases of unbalanced liquidity conditions.

For the sake of clarity and in order to help credit institutions prepare the timely management of their reserves, the ECB will publish a maintenance period calendar together with the indicative tender calendar, on a yearly basis and three months before the start of the relevant year.

In terms of the calculation of the reserve base, i.e. the sum of the liabilities which constitute the basis for calculating the reserve requirement of a credit institution, it should be noted that the gap between the date on which the reserve base is calculated, i.e. the last day of the month, and the start of the relevant reserve maintenance period will continue to be at least as long as it is at present. For credit institutions reporting on a monthly and quarterly basis, there will be a full month and a two-month gap, respectively, between the month on which the reserve base is calculated and the month on which the reserve maintenance starts. For instance, for a credit institution reporting on a monthly basis, the reserve requirement for a maintenance period starting in April would be calculated using the reserve base data from the end of February. In the case of credit institutions reporting on a quarterly basis, the reserve requirement for maintenance periods in June, July and August would be calculated using the reserve base data from the end of March (see Table 2).⁶

⁶ For background information on the calculation of these requirements, see "The single monetary policy in the euro area – General Documentation on Eurosystem monetary policy instruments and procedures", ECB, April 2002.

As a result of the implied discontinuation of overlap between two MROs, the average allotment amount in MROs will approximately double in order to allot, in each future MRO, the amount which is currently allotted in two operations. Although this does not imply a change in the total amount of collateral to be used by credit institutions, the weekly turnover of collateral will be higher. To address the operational and settlement issues associated with the higher weekly turnover, there might be a need for some credit institutions to review their strategies of refinancing and to optimise the use of collateral. Overall, however, the liquidity management of credit institutions is facilitated by the discontinuation of the overlap between MROs, which will allow liquidity to be managed in closed weekly cycles.

Finally, the supporting legal and technical documentation will be amended to reflect the changes agreed by the Governing Council of the ECB. The legal and technical documentation encompasses the following: the Regulation of the European Central Bank of 1 December 1998 on the application of minimum reserves (ECB/1998/15) as amended, the document entitled "The single monetary policy in the euro area – General documentation on Eurosystem monetary policy instruments and procedures" (April 2002) and its subsequent transposition into the national legislation of the euro area countries.

4 Conclusions

It is generally recognised that the operational framework for the monetary policy of the Eurosystem has been functioning well since the launch of the euro in 1999, providing stable money market conditions with low volatility of short-term interest rates and a clear signalling of the monetary policy stance. The framework has also been robust when faced with a series of unforeseen developments, showing a high degree of flexibility. In general, there have only been few cases of tensions. Notably, in periods of

Given the lead-times required to revise the underlying legal documentation and transpose it into national legislation, and to carry out the necessary adaptation of the information systems which support the implementation of monetary policy, the two agreed measures are scheduled to come into effect in March 2004. To phase in the new definition of reserve maintenance periods, a transitory extended maintenance period will start on 24 January and end on 9 March 2004. Reserve requirements for the transitory maintenance period will be calculated using the reserve data as at 31 December 2003. The reserve base as at 30 September 2003 will be used for credit institutions reporting on a quarterly basis. On 9 March 2004, the first one-week MRO will be allotted and the first reserve maintenance period, being defined fully in accordance with the amended framework, will start on 10 March 2004.

In addition, in order to minimise disruption to the current timetable of LTROs, the link between the maintenance period and LTRO allotment days will be discontinued. Currently, LTROs are allotted on the first Wednesday of each reserve maintenance period. From 26 February 2004 onwards, LTROs will normally be allotted on the last Wednesday before the end of the month, with the exception of December. The schedule of MROs and LTROs will, as in the past, be announced at least three months before the start of the relevant calendar year.

high expectations of imminent changes in the key ECB interest rates, interest rate speculation has resulted in large demand fluctuations in the MROs accompanied by high temporary money market volatility.

In reaction to these occasional disturbances, the Governing Council of the ECB decided in January 2003 to implement two changes to the Eurosystem's operational framework, with effect from March 2004, also taking account of the feedback from a public

consultation on the issue. First, the start of reserve maintenance periods will be aligned with the implementation of changes in the key ECB rates. Second, the maturity of the MROs will be shortened from two weeks to one. The primary objective of these measures is to limit the impact of interest rate speculation on very short-term money market conditions during a maintenance period and hence to contribute to the

stabilisation of the environment in which bidding in MROs takes place. The measures should thus further enhance the efficiency of the operational framework by significantly reducing occurrences of high volatility in short-term money market rates and thereby further support the signalling of the monetary policy stance provided by the minimum bid rate in the MROs.

Recent developments in the euro area banking sector

This article provides an overview of euro area banks' performance in 2002 and early 2003. Profit and loss and balance-sheet information for the 50 largest euro area banks shows that their performance deteriorated significantly compared with 2001 owing primarily to a persistently weak macroeconomic situation and subdued financial market activity. Nonetheless, solvency levels have so far provided ample cushioning against weaker income developments and continuing problems with asset quality. Furthermore, the outlook for the banking sector appears more favourable, underpinned by the return to profitability in early 2003 of some of the weaker banks and by the prospect of a general economic recovery late in 2003.

Section 1 of this article reviews the financial condition of euro area banks in 2002 and early 2003, focusing predominantly on income and profitability results. The main forces behind these developments, in particular, changes in the underlying income and asset quality, are covered in Section 2. Section 3 evaluates, on the basis of market-based indicators, the financial standing of the banking sector up to the first quarter of 2003. The final section elaborates on the outlook for the remainder of 2003 and early 2004.

I Euro area banks' financial condition

In 2002 the average income performance and profitability of euro area banks deteriorated further from the already weak results seen in 2001 mainly as a result of a further weakening in the macroeconomy and continued turbulence in financial markets. This was also reflected in the general slowdown in banking activity, visible in the fall in the aggregated consolidated total assets of 50 large euro area banks in 2002 for the first time in many years. The return on equity in the 50 largest euro area banks declined for the second consecutive year to 6%, i.e. less than half of its value in 2000 (see Table I). However, at the same time these banks maintained a high dividend pay-out ratio, which may signal that banks expect profitability to recover in the near future in line with expectations of a gradual economic recovery and financial market stabilisation. Furthermore, positive developments were observed in banks' first quarter results for 2003.

The analysis of the performance indicators across individual banks shows that the banks in the lowest decile fell very close to the break-even point in terms of return on equity (or assets) (see Table I), which can be attributed to a larger-than-average increase in provisioning needs and large differences in operating efficiency. Operating efficiency, measured by the cost-income ratio, varied between 40% and 85% for the lowest and

highest deciles. The fall in many of the banks' operating efficiency was mainly due to reductions in income. Whereas banks' income from retail operations remained robust and became the backbone of their profitability in 2002, banks' commission income related to investment banking operations and asset management declined significantly as capital market activity continued to remain depressed and retail clients' investment in securities slowed down. These developments resulted in a further significant decline in the share of non-interest income in banks' total income (see Table I).

As a consequence of income and cost pressures, many banks have undertaken or announced substantial cost restructuring programmes, involving a reduction in the number of staff and branches. The reduction in the number of branches and employees began in 2001 and is most evident in those banking systems identified as being in need of substantial restructuring. The cost restructuring is likely to be spread over 2003, but provisional figures reveal some impact already. This year's first quarter average return on equity after tax (ROE) for a sample of 30 major euro area banks recovered from 9.1% to 11.5%, and the average cost-to-income ratio decreased from 63.3% to 59.8% compared with end-2002.

Table I**Indicators of the asset quality, profitability, solvency and liquidity of the largest 50 euro area banks**

(percentage)

	Weighted average			Lowest and highest decile		
	2000	2001	2002	2000	2001	2002
Growth in total assets	16.2	9.2	-2.5	[3.6,37.1]	[-1.4,30.8]	[-12.0,14.0]
Asset quality						
Loan-loss provisions/total operating income	6.7	9.4	12.3	[1.4,22.1]	[3.1,22.4]	[4.9,35.7]
Loan-loss provisions/total loans	0.4	0.5	0.7	[0.1,0.8]	[0.2,1.0]	[0.2,1.3]
Non-performing loans/total loans	3.1	2.6	3.1	[0.8,7.6]	[0.8,6.4]	[0.8,6.4]
Profitability						
Non-interest income/total operating income	55.8	51.4	49.2	[19.3,73.0]	[17.1,66.0]	[16.3,65.0]
Total operating cost/total operating income ¹⁾	67.7	71.0	72.0	[40.3,78.1]	[42.6,82.2]	[40.4,84.6]
Return on equity (after tax)	14.0	8.7	6.0	[6.4,23.0]	[2.6,18.6]	[0.0,15.2]
Return on assets (after tax)	0.7	0.4	0.3	[0.1,1.5]	[0.1,1.1]	[0.0,0.9]
Dividend pay-out ratio (dividend/profit after tax)	23.2	32.8	33.2	[5.9,51.4]	[8.7,81.6]	[0.0,88.8]
Solvency²⁾						
Total capital ratio	11.0	11.2	11.4	[8.5,13.2]	[8.9,13.7]	[9.2,15.0]
Tier 1 ratio	7.7	7.7	8.1	[5.3,10.4]	[5.5,10.8]	[5.6,10.8]
Liquidity						
Customer deposits and short-term liabilities/ total liabilities	65.4	64.2	64.5	[44.6,84.0]	[45.7,84.0]	[44.6,77.0]
Liquid assets/total assets	17.9	17.4	18.0	[7.4,34.9]	[8.7,31.3]	[5.1,29.1]
Loans/customer deposits and short-term liabilities	77.0	89.3	90.0	[46.2,122]	[46.0,152]	[41.0,138]

Source: ECB calculations based on Fitch Ibcabankscope (May 2003) consolidated data for the 50 largest banks (accounting for over 40% of euro area banks' total assets). Lower and upper deciles refer to the 10% tail of the distribution of each indicator.

1) Total operating cost includes personnel expenses, and other administrative and operating expenses.

2) Solvency ratios are calculated as unweighted averages. Figures are not comparable with those reported in the August 2002 Monthly Bulletin owing to differences in sample selection and weighting schemes.

Overall profitability in 2002 was also dented by a further deterioration in banks' asset quality following an increase in corporate sector bankruptcies. Loan-loss provisions of the 50 largest banks increased to 0.7% of total loans and to 12.3% of total operating income in 2002 (i.e. by around 40% compared with the previous year). For the institutions in the highest decile, loan-loss provisions, as a fraction of total loans, increased from 0.98% in 2001 to 1.32% in 2002, whereas non-performing loans remained at 6.4% of total loans. The main motive for this increase in provisioning was the deterioration in asset quality. Non-performing loans increased to an average of 3.1% of total loans in 2002, which is, however, not alarming compared with past business cycle downturns. Provisioning increased substantially in the fourth quarter of 2002, reflecting some of the usual quarterly variations, but also the typically delayed impact of business cycle weakening on banks' provisions. Provisioning

declined in most of the group of 30 banks reporting 2003 first quarter results, and variations across these banks also fell. The simple average provisioning decreased as a percentage of total loans from 0.59% to 0.45%.

In spite of the reduced profitability, the solvency ratios of the 50 major euro area banks remained quite stable and even increased somewhat in 2002, both on average and in the lowest decile. The average total capital ratios remained significantly above the regulatory minimum (i.e. 8%). Also, the core capital ratios (Tier 1) generally remained sound. Hence, euro area banks still appear to have sufficient capital buffers to absorb any further potential losses. Many banks seem to have continued to actively manage their capital so as to maintain a constant buffer above the regulatory requirements, regardless of the change in business conditions. This is supported by the announcements made by

individual banks of active capital management and asset-reduction strategies aimed at maintaining solvency ratios. In the case of some banks, these strategies involved significant sales of “non-core” assets, including participations and minority stakes in other financial firms. These sales significantly boosted these banks’ profitability. Without the income from these transactions, the average return on equity in the 50 leading banks would have been close to 5% (instead of 6%) in 2002. These sales also led to a reduction in risk-weighted assets, which supported banks’ solvency ratio, but possibly at the expense of reduced hidden reserves.

Euro area banks’ balance-sheet liquidity positions remained largely unchanged in 2002. The share of deposits and short-term liabilities remained at around 65% of total liabilities. At the same time, liquid assets were

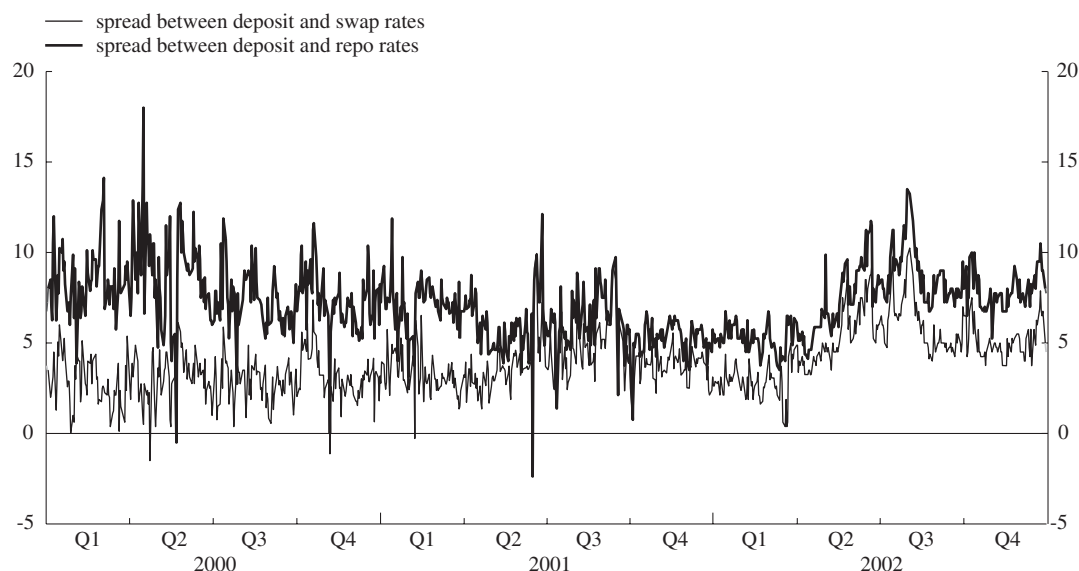
maintained at around 18% of total assets, but fell from 8.7% to 5% in the lowest decile.

The availability and cost of money market liquidity can be decisive for banks’ ongoing liquidity management. In this respect, credit conditions have remained broadly unchanged since the decline seen in 2002. This can be seen from the spreads between the unsecured interbank deposit rates and the EONIA swap and, in particular, secured repo rates (see Chart 1). Both spreads indicate the pricing of banks’ credit risk in the interbank money market. In early 2003 the average spread against the swap rates stood at around 5 basis points, while the average spread between the deposit and repo rates stood at around 8 basis points. Both figures were down from the higher levels observed in late 2002, but still remained somewhat high.

Chart 1

Euro area interbank money market spreads

(average spread in basis points calculated from quotations in the two-week, one-month and one-year segment)



Source: ECB.

2 Main factors affecting banks' performance

The financial condition of banks reflects a number of factors which materialised in the period under review, notably affecting banks' income composition and asset quality. In addition, some other factors related to equity market developments are also worth noting.

2.1 Income composition and evolution

Banks' net interest income was affected by turbulence in credit markets owing to the economic situation and the conflict in Iraq. During the course of 2002 growth in loans to non-financial corporations failed to recover from the downward trend observed over the last three years. Growth in lending to the corporate sector continued to fall until December 2002, settling just above 3% (see Chart 2a). More recently it has started to pick up, reaching almost 4%. By contrast, lending to households grew at close to 6% throughout 2002, driven primarily by property-related lending, but it was still well below the peak of close to 12% observed in 1999. Much of the increase was sustained by lending for house purchases, which nonetheless started to grow at slightly

lower rates in the first quarter of 2003. Hence banks' net interest income has been increasingly reliant on household lending.

ECB retail interest rate figures suggest that euro area banks continued to widen interest margins on lending to households and non-financial corporations in 2002 (see Chart 2b), reportedly owing to a low demand for loans. The widening of margins has evolved over the last two years, and is particularly evident in lending to the non-financial corporate sector. Wider margins on lending to firms and also households have not supported a higher overall intermediation margin, however. The latter narrowed as a consequence of lower margins on deposits, as banks have been unable or unwilling to provide lower interest rates to depositors. Figures for the first quarter of 2003 indicate a stabilisation of margins on corporate and household sector lending and some reversal in the deposit margin, thereby stabilising the overall margin.

Important changes in banks' lending behaviour are also evident from the results of the second ECB Bank Lending Survey in April 2003, in which a net tightening of banks' credit standards was

Table 2
Income structure of the 50 largest euro area banks
(percentage of total assets)

	Weighted average			Lowest and highest decile		
	2000	2001	2002	2000	2001	2002
Total operating income	2.74	2.58	2.58	[1.11,4.36]	[0.88,4.42]	[0.87,4.39]
Net interest income	1.21	1.25	1.31	[0.63,2.43]	[0.59,2.68]	[0.52,2.80]
Net non-interest income	1.53	1.32	1.27	[0.17,2.06]	[0.15,1.83]	[0.14,1.80]
Of which: net commission income	0.60	0.56	0.56	[0.00,1.27]	[0.00,1.30]	[0.00,1.34]
net fee income	0.21	0.17	0.17	[0.00,0.34]	[0.00,1.40]	[0.00,0.38]
net trading income	0.52	0.41	0.32	[0.00,0.80]	[-0.01,0.76]	[-0.04,0.67]
Total operating cost	1.88	1.78	1.78	[0.59,2.52]	[0.56,2.55]	[0.62,2.65]
Loan-loss provisions	0.18	0.24	0.32	[0.05,0.43]	[0.07,0.51]	[0.09,0.63]
Net operating result	0.69	0.49	0.42	[0.17,1.46]	[0.10,1.39]	[-0.05,1.28]
Net non-operating income	0.09	0.06	0.08	[-0.10,0.23]	[-0.04,0.32]	[-0.04,0.34]
Net extraordinary income	0.07	0.03	-0.02	[-0.08,0.31]	[-0.10,0.14]	[-0.13,0.06]
Pre-tax profit	0.86	0.59	0.48	[0.22,1.65]	[0.18,1.37]	[0.04,1.16]

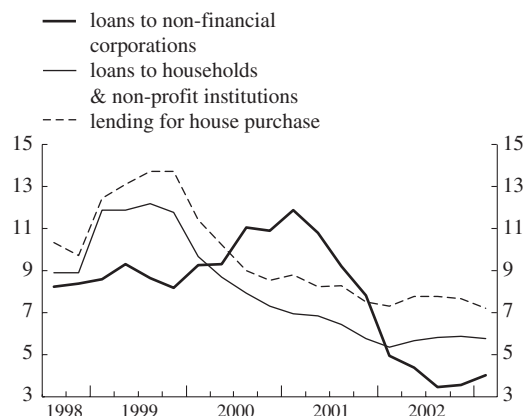
Source: ECB calculations based on Fitch IBCA Bankscope (May 2003) consolidated data for the 50 largest banks. Lower and upper deciles refer to the 10% tail of the distribution of each indicator.

Chart 2

Credit market conditions in the euro area

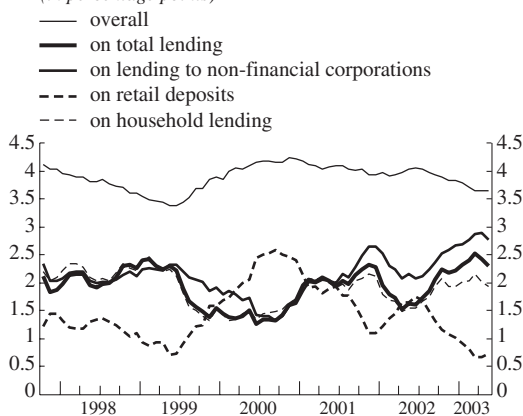
a) Euro area loan growth

(annual percentage change)



b) Margins on euro area banks' retail interest rates

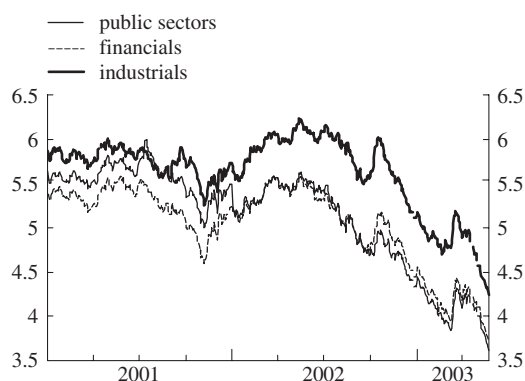
(in percentage points)



Note: See report entitled "EU Banking Sector Stability", ECB, February 2003, for definitions.

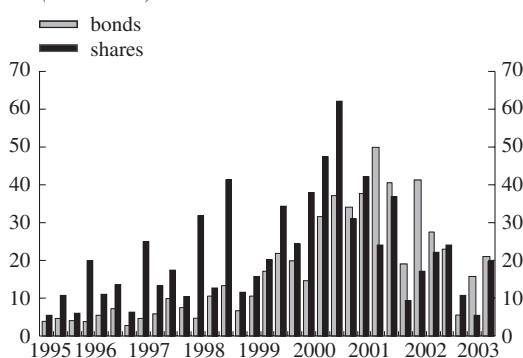
c) Yields on euro-denominated bond indices

(all ratings and maturities, in percentage points)



d) Bond and equity issuance activity in the European Union

(EUR billions)



Sources: ECB, Dealogic and JP Morgan.

identified as an ongoing development in the first few months of 2003. The survey identified the general economic situation and the industrial or firm-specific outlook as the main motives behind a tightening in corporate lending conditions – primarily wider interest rate margins, loan covenants, collateral requirements and the size of the credit lines. With regard to lending to households, the main factors underlying a milder tightening of credit standards were again the general economic situation as well as expectations of deteriorating housing market conditions and lower consumer creditworthiness. In this case also, riskier loans were subject to wider margins.

Driven by lower financing needs for fixed investments, M&A activity and restructuring, the demand for corporate loans was reported in the survey to have fallen, particularly from large enterprises. Lower expectations were also partially discernible for household lending not related to house purchase. Continued weaker growth in lending would naturally limit banks' possibilities for generating net interest income this year, unless improving economic conditions were to reverse this trend.

The reduced economic growth in the euro area was also reflected in banks' geographical

portfolio composition. Cross-border lending out of the euro area rose much faster than domestic lending (growth rates above 15% compared with rates below 4%), continuing the upward trend seen over the past two years. The growing importance of non-domestic assets in banks' balance sheets also reflects a longer-term internationalisation tendency owing to maturing euro area financial markets and banks' desire to exploit expertise and portfolio diversification benefits abroad.

Euro area banks' holdings of fixed income securities increased more strongly than loans. Fixed income security holdings by euro area banks rose by around 6% in the second half of 2002 and the first quarter of 2003 (following a peak of 11% in January 2002). The lower yields in the government and corporate bond markets (see Chart 2c), however, reduced the amount of income obtainable from these securities. Also, in the case of fixed income securities, holdings of non-domestic assets by euro area banks have grown faster than the holdings of domestic assets, which have remained relatively unchanged since 2000.

The decline in investment banking and asset management activities which began in mid-2000 tended to reduce euro area banks' non-interest income from fees and commissions. In 2002 consolidated non-interest income accounted for 49% of the 50 largest euro area banks' total operating income, down from 56% in 2000 (see Table 1). In relation to total assets, total net income fell from 1.53% to 1.27% over the same period (see Table 2). For the five largest banks active in the securities field, the share of non-interest income amounted to 65% of total net income in 2002, down from 73% in 2000, or 1.80% of total assets, down from 2.06%. For the five most retail-oriented banks, non-interest income accounted for slightly more than 15% of net income in 2002, or 0.14% of total assets. These developments and the negative impact on profitability have been small, and consequently these banks have been able to maintain relatively stable profitability.

Investors' increased appetite for fixed income securities has created some renewed activity in the primary corporate bond markets in the first quarter of 2003, up from the depressed levels seen in the last quarter of 2002 (see Chart 2d). Similarly, the more favourable equity market developments since early-2003 have supported an increase in equity market issuance. While the issuance levels are still modest compared with the peak times, these changes have interrupted the downward trend since mid-2000, which has depressed banks' investment banking income.

The withdrawal of funds from equity markets contributed to reducing the role of this segment as the main financial assets of the euro area non-financial sector. In 2000 the value of direct and indirect fund holdings of shares surpassed the value of deposits with euro area banks. However, in 2001 deposits re-emerged as the dominant form of saving, representing 44% of households' net acquisition of financial assets. Fixed income securities continued to increase their share, exceeding 12% of net acquisition of financial assets in 2001. These developments reduced banks' income from retail asset management services, while increasing their net interest income through deposit margins.

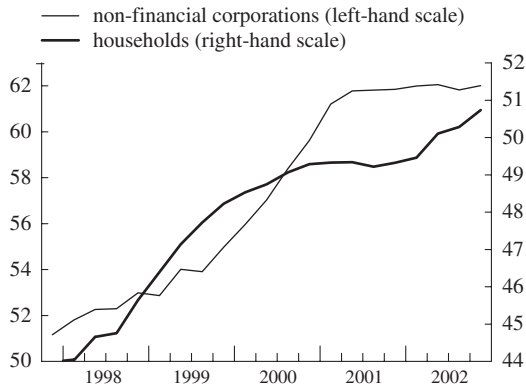
2.2 Asset quality developments

The increase in euro area banks' non-performing loans in 2002 mainly reflected the deterioration in corporate sector financial conditions and the increased number of bankruptcies. However, the outlook may be improving thanks to the stabilisation of corporate sector indebtedness observed since late-2001 (see Chart 3a). The euro area corporate sector debt-to-GDP ratio has settled at around 62%. This owes much to debt reduction programmes and the slowed pace of bank borrowing and issuance of debt instruments. While clear signs of major corporate sector de-leveraging in the euro area have not yet emerged, the decline in interest rate level has significantly reduced the debt-servicing burden of euro area firms.

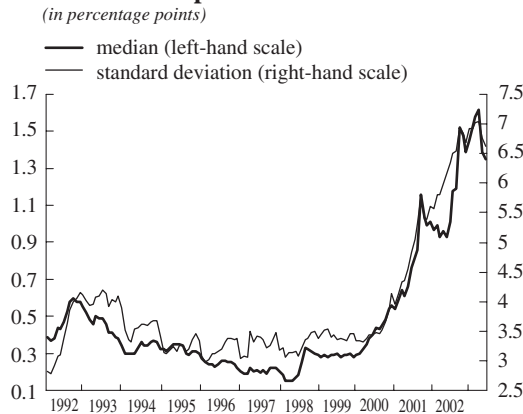
Chart 3

Credit risk indicators for the euro area

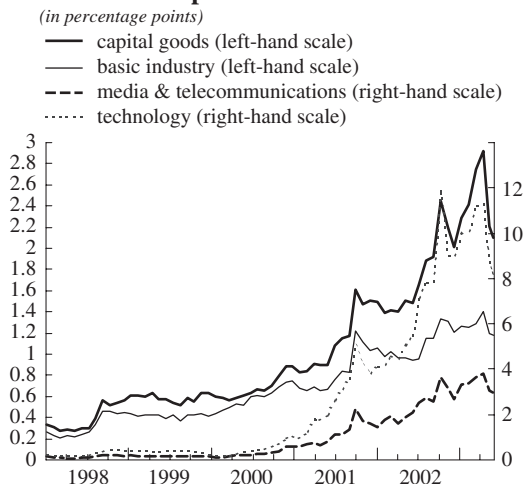
a) Debt as a percentage of GDP



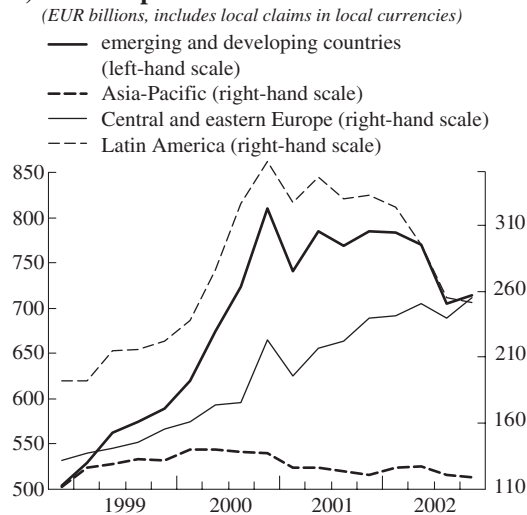
b) Expected default frequencies for euro area corporations¹⁾



c) Expected default frequencies for selected euro area corporate sectors¹⁾



d) Gross exposures of euro area banks



Sources: ECB, Moody's KMV, JP Morgan and BIS.

1) The EDFs represent the probability of a default in a year's time estimated on the basis of stock market information.

In accordance with the expected default frequency (EDF) for next year provided by Moody's KMV, the risk profile of euro area firms has deteriorated since late 2000. This is in line with banks' increased asset quality problems. Whereas the risk profile continued to deteriorate in all industries in the second half of 2002 and first quarter of 2003 (see Chart 3b), some sectors faced a notable increase in the EDF median (see Chart 3c), in particular the capital goods sector and above all the technology sector, which has remained the highest-risk industry in accordance with this measure. The most recent figures, however, indicate an improvement.

The media and telecommunications sector experienced positive developments into May 2003, but its EDF median was still significantly higher than the euro area average.

The deterioration in corporate sector credit quality was also evident in the rather high corporate bond default rates in late 2002 and early 2003. According to Standard & Poor's, the EU 12-month average speculative grade default rate remained very high in the first quarter of 2003 at 12.3%, after reaching 13.5% in December 2002. More recently, this default rate decreased substantially to 8.1% in May 2003. Also firms' ratings tended to worsen

with a total of over €80.5 billion of European corporate debt (41 names) being downgraded by Standard & Poor's in the first quarter of 2003, compared with less than €1.3 billion (two names) which was upgraded. In late-2002 and early-2003, European insurance companies suffered most of all. However, strong corporate earnings in some sectors for the first quarter of 2003 could potentially be marking a turning point in credit quality, as also suggested by significantly narrowed corporate bond spreads.

The fact that euro area banks' loan losses have remained relatively contained may reflect improved risk management by banks, to some extent in anticipation of the new risk-sensitive Basel capital requirements, but perhaps also due to the wider use of credit risk transfer instruments. Banks typically run well-diversified portfolios, and the exposure to individual higher risk industries is relatively limited. On the basis of recent analyses, on average no more than 15% of the own funds of European banks are invested in industries such as technology and transport (including airlines), and insurance.¹ The deterioration in the quality of corporate lending due to increased insolvency rates in 2002 and early 2003 also seems to have triggered a shift of new lending to lower risk sectors.

Household sector indebtedness, having shown some stability at around 50% of GDP until 2001, experienced a slight increase in 2002 (see Chart 3a). The higher growth rates in household sector loans, particularly for housing purposes, and the relatively high level of lending by banks to finance construction and real estate could indicate some shifting of banks' risk exposure to these areas. The reduced level of interest rates has tended to keep mortgage servicing costs stable in relation to disposable income.

Euro area banks' exposure to emerging market economies has tended to fall since mid-2002. This owes much to greater

stability in Latin America following the resolution of political uncertainty in Brazil and Argentina, as well as to positive developments in Argentina's IMF negotiations. Notwithstanding the brighter outlook in this region, a shift in lending volumes has occurred away from Latin America and Asia towards central and eastern European countries, also reflecting progress in the accession process (see Chart 3d).

2.3 Market-related risks

Euro area banks' equity holdings are on average small, around 5% of their total assets, which has mitigated the impact of the stock market fall since mid-2000 on their financial condition. However, the indirect macroeconomic effects of the stock market fall – through higher costs of capital and falls in financial wealth – have been significant. Indirect exposures have also materialised through affiliated insurance companies with significant stock market exposures and through the poor general economic performance. Some euro area banks with sizeable insurance affiliates had to write down some of the value of their insurance participations in 2002 and some were forced to inject more capital into the insurance business. The wealth effect of the stock market fall on households was somewhat mitigated by the positive real estate market price developments in many of the affected countries.

Euro area banks' direct market risk exposures can be observed, for example, in their disclosed value-at-risk measures, or market risk-related capital requirements, which are small. Similarly, interest rate risks are typically well covered. However, banks are naturally exposed to exchange rate and interest rate movements, like stock price movements, through the impact of these changes on their borrowers' and affiliated companies' financial condition.

¹ See report entitled "EU banking sector stability", ECB, February 2003.

3 Market indicators of banks' condition

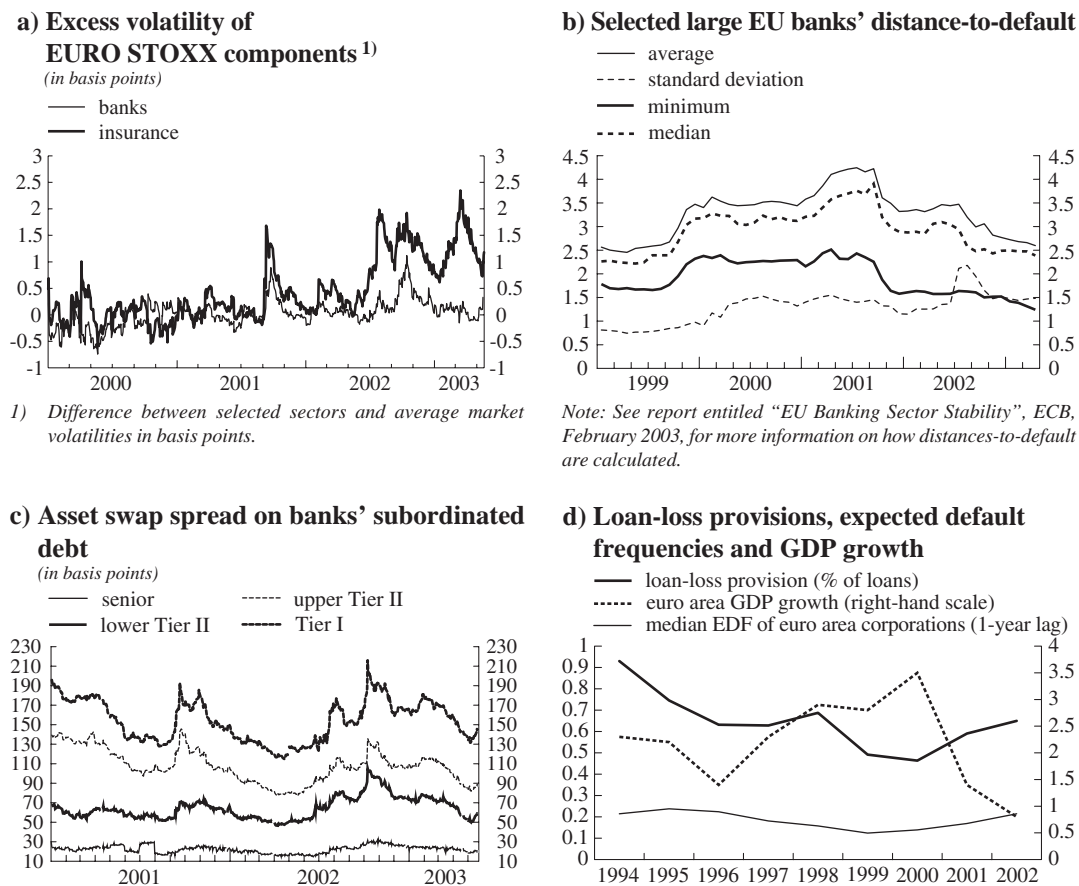
Financial market indicators are a complementary source of information on banks' financial health, risks and earnings outlook. As a whole, market-based measures of banks' fragility indicate good resilience in the sector following the marked deterioration in credit risk at the end of 2002 and early 2003.

Simple stock market measures suggest that conditions for euro area banks are stabilising and possibly even improving. Whereas the index of euro area banking stocks declined over 2002 by 27%, market and insurance sector stock indices declined by 35% and 52%, respectively. In addition, clearer signs of a recovery than in the market as a whole can be observed in the decrease in the volatility

of banks' stocks since March 2003 (see Chart 4a).

Euro area banks' stock volatility, measured in excess of market volatility, was high in the autumn of 2002 after some of the major rating agencies revised the ratings of a number of large banks. Since then, volatility has come down to normal market-wide levels. Banking sector volatility has been much lower than that of the insurance sector, suggesting more contained risks. The reasons for the dismal performance of insurance sector stocks are the large portfolio losses incurred by many major insurance companies in 2002 and the weakened short-term prospects.

Chart 4
Market indicators of euro area banks' health



Sources: Moody's KMV Datastream, JP Morgan, and ECB calculations.

A more direct indication of the default risk in the banking sector can be obtained from distances-to-default (DD), which provide a measure of the financial stress level on the basis of the bank's leverage, risk profile and earnings expectations. The DD median across banks reveals some deterioration in 2002, but looks as though it is stabilising in 2003 (see Chart 4b). The minimum DD has also stabilised, and variability across banks, while still high, decreased following the peak in late 2002. In addition, DDs for most banks also point to their ability to withstand any further deterioration, as the increases seen suggest that there are ample buffers in place to protect them from any default risk.

4 Outlook

The past analysis suggests that the difficult conditions towards the end of 2002 and very early in 2003 considerably affected euro area banks. The quick resolution of the war in Iraq, the parallel decrease in oil prices, and the subsequent stock market rebound significantly reduced economic uncertainty in the second quarter of 2003. It is nevertheless important to remain vigilant as banks are only just recovering from a rather difficult period of over two years, and activity in euro area financial markets depends, to no small degree, on the performance of the real sector. In this respect, the financial health of the European corporate sector still remains the most relevant cause for concern. In particular, lower corporate sector leverage ratios are important for the improvement of banks' condition. Furthermore, a strengthening of economic growth is essential to restore sound conditions among euro area corporates so as to relieve pressure on the quality of banks' assets.

Experience suggests that deteriorating corporate and household financial conditions have a delayed impact on the banking sector. In particular, this has been evident for non-performing assets and loan-loss provisions, where an approximate one-year lag of the overall sectoral risk indicator (the median of all sectors' EDF) correlates with non-

Banks' subordinated debt spreads also reflect banks' default risk, and more so than the spreads on senior debt instruments, as subordinated debt represents a junior claim on banks' assets. Asset swap spreads on euro area banks' euro-denominated subordinated debt declined quite substantially in late 2002 and early 2003, while tending to rise slightly in May 2003 (see Chart 4c). While this development can be partly attributed to the resolution of the Iraq conflict and the narrowing of the spreads in corporate bond markets, it also partly reflects a more positive assessment by markets of banks' credit risk.

performing loans and loan-loss provisions (see Chart 4d). While the increase in banks' loan-loss provisioning was significant in 2002, it is still possible that the lagged effect could cause some further short-term pressure on banks' provisioning needs even below the baseline economic projections. Consumer cyclical goods, the technology, energy and utilities industries could remain fragile. Hence, banks with substantial exposures to those industries may continue to see adverse conditions.

The ECB's baseline macroeconomic scenario of a very gradual recovery in the latter half of 2003 and in 2004 would likely imply a bottoming-out of adverse conditions for the banking sector in the remainder of 2003. This could also mean a corresponding gradual increase in banks' income towards the end of the year. The expected recovery in 2003 could be assisted by more buoyant activity in financial markets, the beginning of which may have been observed in the second quarter of 2003. In particular, firms in need of liquidity could profit from more favourable conditions in bond and equity markets. Increased activity in primary markets would also positively affect the fee income performance of banks active in these markets, as well as facilitate the re-financing of exposure to the corporate sector.

The residential and commercial property markets may embody downside risks for banks in some euro area countries. However, a relatively stable euro area household debt level which is significantly lower than in the United States, for instance, provides some reassurance. Also positive in this respect are the results from the bank lending survey. On the other hand, lower lending levels could reduce income for banks with important retail operations. The recent positive contribution of the household sector to euro banks' profitability relies to some extent on households' ability to acquire or refinance residential property. Their willingness and capacity to sustain current levels of debt will also depend on the economy's capacity to return to reasonable growth levels and to sustain higher levels of employment.

Insurance sector developments still deserve careful attention. Anecdotal information suggests that large reinsurance and life insurance players, by increasing their participation in the market for credit protection, also play an important role in absorbing risks from the banking sector. The deterioration in these sectors, which began in 2001 and which continued to intensify in 2002, weakened their ability to raise capital on favourable terms, thus also limiting their ability to sell credit protection. Furthermore, the apparent restructuring of their portfolios and the corresponding reduction in stock market exposure following the sharp correction in equity markets only compounded the fall in equity prices. Some of the slack appears to have been taken up by mutual and pension funds, but the sharp downgrading of a number of insurers in the first quarter of 2003 and the prospect of their further withdrawing from the credit protection market could

impinge on banks' willingness and ability to assume further credit risk.

Finally, investors' preference for fixed income securities may have depressed the yields on government and corporate securities (see Chart 2c). Spreads on corporate bonds, in particular, continued to decrease markedly, while bond default rates remained rather high. The historically high prices and sharply narrowed spreads have raised some concerns about a rapid unwinding of positions by investors and reductions in market prices of these securities (i.e. a corresponding increase in long-term interest rates). These risks for banks should remain contained, however, since their interest rate risk positions are typically small and to a large extent hedged. However, as noted before, more important could be the indirect implications of such events for banks through their effects on economic and financial market developments. The same also applies to any sudden exchange rate movements.

In sum, the higher risks in the operating environment of euro area banks over the past two years or so have tested both their ability to manage in adverse conditions and the resilience of their intermediation function. Overall, the sector has accommodated this deterioration without any major disruptions, and has managed any significant exposures to fragile counterparties very well. Most importantly, solvency levels have been maintained well above regulatory requirements. The outlook for the banking sector has also tended to stabilise and more recently even to improve, but the extent of this improvement depends, to no small degree, on the extent and timing of the expected economic recovery.

Developments in the euro area's international cost and price competitiveness

Against the background of the strong appreciation of the euro in 2002 and in the first half of 2003, this article assesses developments in the international cost and price competitiveness of euro area firms. It discusses the merits and limitations of real exchange rates based on various cost and price deflators as measures of the euro area's international cost and price competitiveness and it introduces two new real effective exchange rate (REER) indices for the euro. The new indicators extend the set of euro REERs for the narrow group of euro area partner countries to encompass developments in relative GDP deflators and in relative unit labour costs in the total economy (ULCT). This variety of indicators facilitates a cross-checking of findings and suggests that by the second quarter of 2003, the international cost and price competitiveness of the euro area had broadly returned to the levels seen at the time of the launch of the euro and was broadly in line with historical averages. This result is robust to the use of alternative deflators, the time horizon considered and the degree of coverage of partner countries.

I Introduction

In its four-and-a-half years of existence, the euro has experienced sizeable exchange rate fluctuations, which have had a notable impact on the international cost and price competitiveness of the euro area. The strong appreciation of the currencies of major euro area trading partners in 1999-00 – most notably the US dollar, the Japanese yen and the pound sterling – entailed a significant improvement in the position of euro area firms in terms of cost and price competitiveness. The euro depreciated by 17% in nominal effective terms against the currencies of 12 important trading partners (the so-called narrow group) between the first quarter of 1999 and the fourth quarter of 2000 (see Chart 1). After reaching a historical

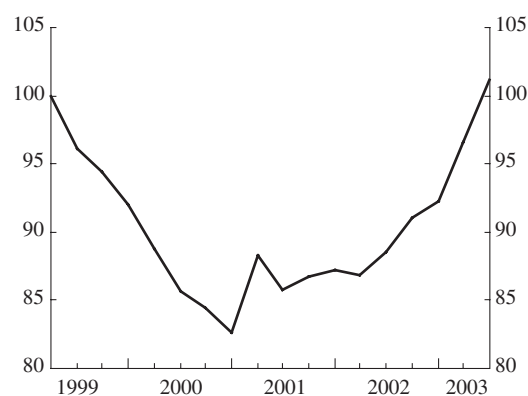
trough in October 2000, the euro started to recover fairly steadily – most notably in 2002 and in the first half of 2003 – thereby reversing the earlier gains in international cost and price competitiveness. The effect of this appreciation on extra-euro area trade is assessed in more detail in Box 4 in the “Exchange rate and balance of payments developments” section of this issue.

Against this background, this article provides a detailed appraisal of developments in the international cost and price competitiveness of euro area firms, taking primarily a medium to long-term perspective. Moreover, as international cost and price competitiveness depends on the relative price of goods and not just nominal exchange rates, the article considers relative developments in domestic and foreign prices, focusing on real exchange rate trends.

A general note of caution is necessary with regard to the interpretation of movements in the real external value of a currency, as an appreciation does not automatically imply a deterioration in international competitiveness when more broadly defined. First, the price of a product is only one parameter in the decision to buy a certain good. Another important dimension of competitiveness includes developments in non-price characteristics of products, such as the quality of goods or the availability and reliability of supplementary

Chart 1
Nominal effective exchange rate of the euro

(quarterly data; index: 1999 Q1 = 100)



Source: ECB.

services. The analysis in Box I suggests, however, that the real exchange rate remains an important determinant of overall competitiveness. Second, the causal relationship between the economic performance of a country and its relative international price and cost position may be bi-directional. In other words, changes in the real exchange rate may reflect economic developments as well as contribute to changes in economic conditions. This discussion is connected to the relationship between economic fundamentals and the exchange rate of the euro, which was examined in the article entitled “Economic fundamentals and the exchange rate of the euro” in the January 2002 issue of the

Monthly Bulletin. Third, the interpretation of indicators of international cost and price competitiveness depends on the underlying cost and price measures employed.

The merits and limitations of various real exchange rate indices for gauging developments in international cost and price competitiveness are discussed in the following section. Subsequently, developments in the euro area’s cost and price competitiveness are reviewed. Overall, the analysis suggests that, compared with historical experience, the competitive position of euro area firms in international markets currently remains broadly in line with long-term average levels.

Box I

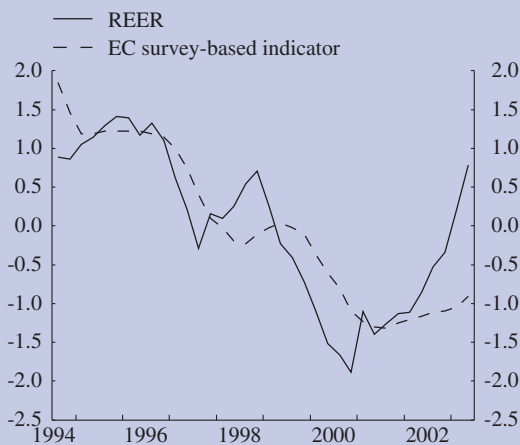
Can indicators of international cost and price competitiveness provide an important insight into overall competitiveness?

Real effective exchange rates (REERs) of the euro are commonly employed as a means of assessing the competitive position of euro area firms in international markets. It is frequently suggested that caution should be exercised when interpreting real exchange rates as indicators of international cost and price competitiveness, since the real exchange rate – as a relative price – only encompasses changes in cost and price competitiveness and fails to take into account non-price dimensions of competitiveness (such as the quality of goods and the reliability or availability of servicing networks). The potential importance of price factors for the overall competitive position of euro area firms can be reviewed by building on data from the Business and Consumer Survey Database of the European Commission (EC). The analysis of the relationship between the REER and

the EC survey data indicates that there are, for the time being, no clear signs that the quality of the euro REER, as an indicator of the overall competitiveness of euro area firms in international markets, has diminished.

EC survey-based competitiveness indicator and CPI-based REER of the euro

(quarterly data; normalised data)



Sources: European Commission and ECB.

Note: Cumulated industry survey data from the EC Business and Consumer Survey Database are used.

The European Commission conducts a broad range of qualitative economic surveys on the economic situation in the European Union (EU). In particular, the EC Business and Consumer Survey asks more than 20,000 economic units across the euro area to assess their competitive position outside the EU in the recent past. The respondents have three options to choose from – “up” (for an improvement), “unchanged” or “down” (for a deterioration) – which are subsequently aggregated into balances (i.e. the total of the “ups” minus that of the “downs”). As this survey asks firms to judge their overall competitive position, it effectively goes beyond the more limited concept of cost and price competitiveness as reflected in the real exchange rate index.

The chart shows the CPI-based REER of the euro for the narrow group of partner countries and the EC survey-based competitiveness indicator. The data are normalised (in logarithms) to have the same mean and variance over the sample period. An increase of the indicator reflects in both cases a decline in international competitiveness. Since in the questionnaire the European Commission asks about recent changes in the competitive position, the EC survey-based series has been cumulated in order to compare it with developments in the level of the euro REER. This calls for caution to be exercised, as factors related to non-price competitiveness may be feeding into a changing perception of overall competitiveness only very gradually, and in a quarter-to-quarter assessment, non-price factors might be partly concealed by more volatile determinants of competitiveness such as movements in the nominal exchange rate. Accordingly, the establishment of a relationship between the real exchange rate and the survey data would provide an indication that cost and price competitiveness is indeed important, but it must not be interpreted as indicating that factors related to non-price competitiveness are irrelevant.

The normalised data for the real exchange rate and the EC survey-based indices exhibit some degree of co-movement. More formal tests confirm a long-term link between the two series and suggest that causality runs from the real exchange rate to the EC survey index. According to these results, in the medium term, relative prices seem to play an important role in determining and gauging the competitive position of the euro area vis-à-vis major trading partners, while in the short term, it may be disguised by other factors such as pricing strategies of firms. Consequently, the real exchange rate can serve as a useful proxy for the overall international competitiveness of euro area firms.

However, there are some statistical and technical issues which need to be kept in mind as they may impede a fully coherent comparison of the trends in the real euro exchange rate and the EC survey-based competitiveness indicator. In particular, while the EC survey refers to the international competitiveness of euro area companies vis-à-vis the countries outside the EU, the REER of the euro refers to the cost and price competitiveness of euro area firms vis-à-vis all major trading partners outside the euro area, i.e. including the EU countries outside the euro area.

2 What is the appropriate relative price concept?

The interpretation of measures of international cost and price competitiveness is complicated by the properties of available cost and price measures. An ideal indicator of international cost and price competitiveness should be computable on the basis of readily available and reliable statistical information not subject to significant revisions. In addition, it should represent (comprehensively) those sectors of the economy which are subject to international competition, whilst also taking into account the fact that their competitive position may be affected by cost and price developments in sectors producing inputs which might not be traded internationally. In any case, the longer the underlying assessment horizon, the more disputable a separation into traded and non-traded goods, because in an increasingly

globalised world, international factor mobility and knowledge spillovers blur the borderline between tradables and non-tradables. In the presence of a non-traded goods sector, however, traded and non-traded goods prices may diverge over time as a result of asymmetric productivity shocks (following the well-known Balassa-Samuelson argument), which implies that REERs based on broad price indices could be misleading indicators of traded goods competitiveness. This argument, however, seems to be more relevant for emerging economies in a catching-up process than for industrialised countries.

Moreover, if international cost and price competitiveness is defined as the *ability* to sell products in foreign markets, it should not be affected by “pricing-to-market”

strategies of firms. Pricing-to-market behaviour refers to a pricing strategy whereby firms (partly) offset variations in the exchange rate by adjusting their profit margins, instead of instantly passing the movement in the exchange rate on to prices charged to foreign customers. To assess the international cost and price competitiveness of euro area firms, it thus appears more relevant to apply a measure that reflects a price at which a product could principally be offered in view of the cost structure and including a normal mark-up margin, rather than the price actually charged. In fact, the latter might partly reflect an undue short-term expansion or contraction of profit margins. Naturally, none of the indicators employed in practice can fully satisfy all above-mentioned conditions. Consequently, it seems appropriate to examine and compare a wide range of REER indicators based on various cost and price measures, such as consumer price indices (CPIs), producer price indices (PPIs), GDP deflators and unit labour costs (ULC), in order to cross-check the findings.

REER indices based on CPIs are the most widely used indicators of cost and price competitiveness, as they have two important advantages: (i) the definition of CPIs is fairly homogeneous across countries; and (ii) they are available on a timely basis and are only subject to minor revisions. From a conceptual point of view, however, CPI-based REERs have a number of potential drawbacks. First, CPIs include prices of goods imported solely for consumption purposes. At the same time, CPIs exclude prices of important tradable goods, such as capital and intermediate goods, which also enter the production process as inputs. Second, indirect taxes and subsidies may distort the interpretability of CPI-deflated REERs as competitiveness indicators. Third, CPIs contain a significant share of non-traded goods and, in particular, non-traded consumer services.

The REER based on GDP deflators has the advantage over the CPI-deflated REER of shifting the focus from the consumption to the production side of the economy, which

appears to better reflect international cost and price competitiveness considerations. However, this indicator also includes non-tradable as well as tradable goods, thereby sharing a potential conceptual shortcoming with the CPI-based index. In addition, GDP deflators are also subject to distortions owing to taxes and subsidies. By contrast with CPI-based indicators, REERs based on GDP deflators are less timely, subject to significant revisions and less comparable across countries.

REER indices based on PPIs seem to constitute a natural alternative to indices based on CPIs or GDP deflators. As with GDP deflators, the weighting scheme of the PPIs is based on the production side of the economy. PPIs also seem to better accommodate the issue of tradability. Although it may be that some goods in the PPI basket are not actually extensively traded internationally, PPI baskets do include a broad range of industrial goods and products that are subject to international competition. PPI-based REER indicators have the salient feature of encompassing goods which would potentially be traded internationally if the relative prices were more favourable, whereas indices based on export prices, for instance, would select only those products which are effectively sold at current prices on international markets. However, PPIs have the disadvantage relative to CPIs of being less comparable across countries. They also exclude services prices, which are becoming increasingly important in international trade. Finally, they share the limitation of the other price measures discussed above in that they may be subject to pricing-to-market behaviour which weakens their interpretability.

In order to avoid the adverse impact of pricing-to-market behaviour, one option could be to move from price to cost measures. Unit labour costs in manufacturing (ULCM) indices are commonly available and take better account of traded goods as they encompass the manufacturing industry. However, they are subject to bigger problems of measurement,

definition and comparability across countries. For instance, in the case of Germany this kind of indicator has shown a strong upward trend compared with all other cost and price measures. However, this rather peculiar trend appears to be due to measurement problems rather than reflecting an actual significant deterioration in Germany's international cost and price competitiveness.¹ Although the ULCM-based REER indicator for the euro area as a whole does not reveal such a trend, the German ULCM-based indicator suggests the need for a rather cautious interpretation of ULCM-based REERs. The index based on ULCT does not exhibit the same peculiar pattern for Germany as the ULCM index, meaning that this potential practical limitation of ULC-based indicators does not apply in every case. However, ULC-based REER indicators also have some other more general conceptual drawbacks. For instance, ULCs represent only a fraction of the total costs of a company, ignoring the influence of, for instance, R&D expenditure, distribution costs and capital costs. In this context, the costs of intermediate inputs, which themselves may include labour costs in the non-traded goods sector, may also be relevant. In addition to the above-mentioned shortcomings, ULC movements may reflect factor substitution without necessarily implying more cost-efficient production and a consequent gain in international competitiveness. Finally, limitations

are commonly observed: (i) in the timeliness of the publication of ULC series; (ii) in their cross-country comparability; and (iii) in terms of the frequency and magnitude of data revisions.

For the narrow group of trading partners (which comprises 12 major trading partners of the euro area), the ECB has so far compiled REER indicators on the basis of CPIs, PPIs and ULCM. In this article, the ECB introduces two additional REER indicators based on (i) ULCT and (ii) GDP deflators.² As is the case for the ULCM-based REER index, both new indicators are available at a quarterly frequency (with a lag of roughly one quarter), as opposed to the REER indices based on CPIs or PPIs which are available on a monthly basis. The underlying series are constructed back to 1990 for the measures based on CPIs, PPIs and ULCM, while the new indicators go back to 1991. Prior to 1999, a "synthetic" euro exchange rate has been employed in the construction of all REER indicators (for details see Box 2).

- 1 See Deutsche Bundesbank (1998), "The indicator quality of different definitions of the real external value of the Deutsche Mark", *Monthly Report*, November, pp. 39-52, and Deutsche Bundesbank (1995), "Overall determinants and trends in the real external value of the Deutsche Mark", *Monthly Report*, August, pp. 17-37.
- 2 For a detailed account of the computation of the NEER and REER of the euro, see L. Buldorini, S. Makrydakis and C. Thimann (2002), "The effective exchange rates of the euro", *ECB Occasional Paper No. 2*.

Box 2

Sources and compilation methods of the price and cost deflators for euro REER indicators

This box provides an overview of the sources, data availability, frequency and timeliness of the relative price and cost indicators used to compile the euro REER indicators. Euro REERs are now available on the basis of five alternative price and cost indicators, namely CPIs, PPIs, ULCM, ULCT and GDP deflators. The latter two indicators are published for the first time in this issue of the *Monthly Bulletin* and have been included in Table 10 of the "Euro area statistics" section. In addition, some improvements have been made to the previously published indicators, e.g. by using more comparable data which have recently become available.

For all price and cost indices, harmonised European statistics – provided by Eurostat – have been used to the extent possible for the countries of the European Union, Norway and the acceding countries (most of which are included in the broad group of partner countries). Wherever these data were not available, the calculations have been based mainly on IMF and OECD databases as well as national sources. The index based on consumer price developments employs HICPs for most European countries, while the all-item national CPIs are used for all other countries. Producer prices refer to the domestic sales of the manufacturing industries for

all European countries; similar definitions are employed for all other countries. ULCM – defined as the ratio of compensation per employee to real value added per person employed in the manufacturing industry – are derived from ESA 95 national accounts sources for the euro area, the United Kingdom and Denmark. For other partner countries, they are derived from the respective national accounts sources or from different and not fully comparable indicators of wages and production in industry. ULCT – defined as the ratio of total compensation per employee in the economy to real GDP per person employed – are derived from national accounts. For some non-European countries, the coverage of the economy is only partial and depends on the available data sources (e.g. the deflator for the United States refers to ULCs in private non-agricultural business). GDP deflators are also derived from ESA 95 national accounts sources for European countries; for the other countries of the narrow group, deflators are computed using information from databases of international organisations.

In terms of data availability, CPI and PPI deflators are available on a monthly basis, while ULCM, ULCT and GDP deflators are available on a quarterly basis. Where national data are published at a lower frequency than needed, available series have been interpolated. Moreover, there are differences with regard to the timeliness of the underlying cost and price deflators. Most CPI and PPI statistics become available after a relatively short time-lag (two to five weeks) and are usually only subject to minor revisions. Accordingly, the calculation of the associated REER only requires an estimate of CPI and PPI data for the most recent month. By contrast, ULCT, ULCM and GDP deflators are released with a significant time-lag and are subject to more pronounced revisions. Owing to the lag in the publication of the underlying data, REERs based on these price and cost indices contain a more significant forecast element for the latest quarter. When the country coverage is too low as a result of insufficient timeliness of underlying deflators, the publication of these REERs, as is the case in Table 10 of the “Euro area statistics”, lags behind that of the REERs based on CPI and PPI indicators.

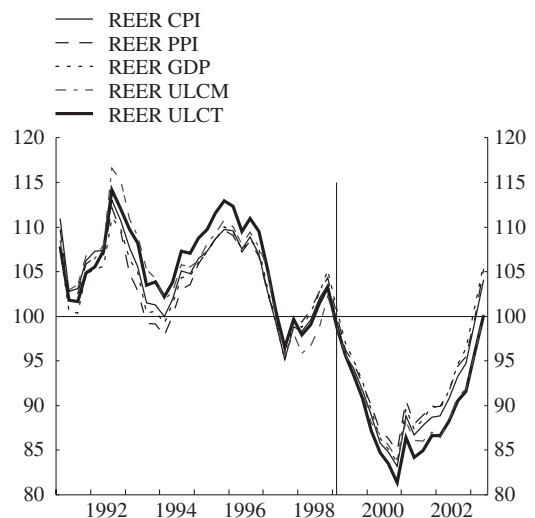
3 Developments in euro area cost and price competitiveness

Real effective exchange rate versus the narrow group of trading partners

In spite of the previously outlined measurement difficulties, the REER indices of the euro vis-à-vis the narrow group of trading partners exhibit a high degree of co-movement (see Chart 2), suggesting that overall they provide a reasonable representation of the euro area’s international cost and price competitiveness. Moreover, the NEERs and the REERs move closely together, mainly reflecting similar inflation rates in the narrow group of partner countries and the euro area.

Chart 2 shows that the REER indices fluctuated without a clear trend in the first half of the 1990s. In 1996-97, euro area firms experienced a significant improvement in their international cost and price competitiveness as a result of the strong appreciation of the partner countries’ currencies vis-à-vis the euro legacy currencies. This trend was temporarily reversed in 1998

Chart 2
Real effective exchange rates of the euro based on different deflators¹⁾
(quarterly data; index: average (1991 Q1 - 2003 Q2) = 100)



Source: ECB.

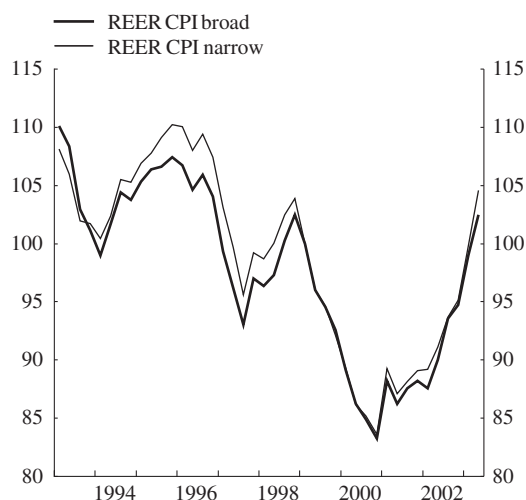
¹⁾ An upward movement of the index represents an appreciation of the euro. The latest observations for REERs based on ULCM, ULCT, and GDP deflators are estimates.

owing to a recovery of the legacy currencies, but resumed in 1999-00 when the euro came under strong downward pressure. Since the end of 2000, the downward movement observed in 1999-00 has been completely reversed. Compared with the 1990s, the current competitive position of euro area firms remains well within historical ranges despite the strong appreciation of the euro in 2002 and in the first half of 2003. Specifically, in the second quarter of 2003, all indices stood fairly close to their average levels over the periods for which they are available. The main finding that the cost and price competitiveness of euro area firms is within historical ranges can be examined in more detail by considering an extension of the country coverage or an extension of the time horizon.

Extending the country coverage

The real exchange rate indicator based on a broader set of partner countries is useful to ascertain whether the change in the euro

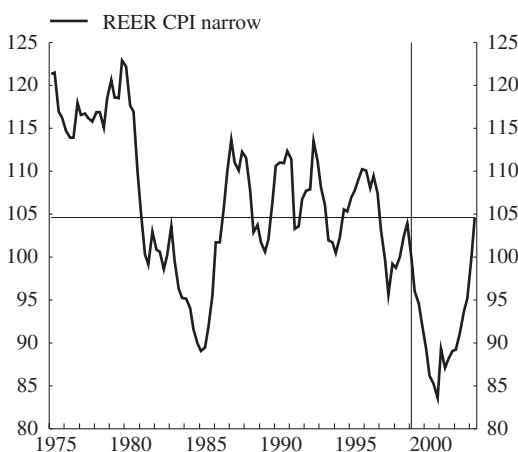
Chart 3
Real effective exchange rates of the euro: narrow group versus broad group¹⁾
(quarterly data; index: 1999 Q1 = 100)



Source: ECB.

1) An upward movement of the index represents an appreciation of the euro.

Chart 4
Historical real effective exchange rate of the euro¹⁾
(quarterly data; index: 1999 Q1 = 100)



Source: ECB.

1) An upward movement of the index represents an appreciation of the euro. The horizontal line indicates the average since 1975.

area's international cost and price competitiveness vis-à-vis the narrow group of partner countries has been amplified or offset by a change in cost and price competitiveness against other trading partners (particularly emerging market economies). This comparison allows for further verification of the overall conclusions drawn from the analysis presented above. Owing to data limitations, the broad index is only available in CPI terms as of 1993. It includes 26 emerging economies in addition to the industrialised countries (including Hong Kong, South Korea and Singapore) covered in the narrow index. In the broad index, the weight of the additional countries amounts to slightly more than 30%, while the narrow group covers the remaining 70% of euro area trade. Given the way in which the series are constructed, a rather high degree of co-movement could be expected, but the actual degree of correlation is surprisingly high (see Chart 3), particularly if the sometimes erratic movements of the currencies of emerging markets, which are subject to episodes of exchange rate turbulence, are considered.

Extending the time horizon

To assess developments over a longer time horizon, the REER indicator based on consumer price developments has been backcast to 1975 (see Chart 4), using a method consistent with the officially published ECB series. Given the high correlation among the indicators in the 1990s, this should be an acceptable proxy for developments in the euro area's international cost and price competitiveness over the past

28 years. Compared with the mid-1980s, when the US dollar was widely perceived to be overvalued, euro area firms were actually more (price) competitive at the end of 2000. The subsequent appreciation of the euro naturally resulted in a deterioration of the euro area firms' competitive position in international markets. However, in the second quarter of 2003, the euro area's cost and price competitiveness stood close to its average over the past 28 years (shown by the horizontal line in Chart 4).

4 Conclusions

This article has examined developments in the euro area's international cost and price competitiveness in the light of the broad-based appreciation of the euro exchange rate in 2002 and in the first half of 2003 following the strong depreciation of the euro in 1999-00. It has shown that, by the second quarter of 2003 all measures of the international cost and price competitiveness of euro area firms had returned to the levels seen at the time of the launch of the euro. Using longer-term averages as a rough benchmark for assessing current levels of the euro's REER, euro area cost and price competitiveness is found to now be broadly consistent with its historical averages. This finding is robust to the use of various deflators, the time horizon considered and the degree of coverage of partner countries.

Moreover, two new measures of the REER of the euro – based on ULCT and GDP deflators – were introduced. Since none of the employed REER indicators satisfy all the conditions which characterise an ideal indicator of international cost and price competitiveness, a more pragmatic approach was taken by comparing five different real exchange rate measures as a means of cross-checking the findings. Indeed, the euro REER indices vis-à-vis the narrow group of trading partners exhibit a very high degree of co-movement, suggesting that overall they provide a reasonable picture of the euro area's international cost and price competitiveness.



Euro area statistics



Contents¹

	Euro area overview table	5*
I	Monetary policy statistics	
	1.1 Consolidated financial statement of the Eurosystem	6*
	1.2 Key ECB interest rates	8*
	1.3 Eurosystem monetary policy operations allotted through tenders	8*
	1.4 Minimum reserve statistics	10*
	1.5 Banking system's liquidity position	11*
2	Monetary developments and investment funds in the euro area	
	2.1 Aggregated balance sheet of the Eurosystem	12*
	2.2 Aggregated balance sheet of the euro area MFIs, excluding the Eurosystem	13*
	2.3 Consolidated balance sheet of the euro area MFIs, including the Eurosystem	14*
	2.4 Monetary aggregates and counterparts	16*
	2.5 MFI loans by counterpart, type and original maturity	21*
	2.6 Deposits held with MFIs, by counterpart and instrument	24*
	2.7 Main MFI claims on and liabilities to non-residents of the euro area	26*
	2.8 Currency analysis of certain liabilities and assets of the euro area MFIs	28*
	2.9 Aggregated balance sheet of euro area investment funds	30*
	2.10 Aggregated balance sheet of euro area investment funds broken down by investment policy	31*
	2.11 Aggregated balance sheet of euro area investment funds broken down by type of investor	33*
3	Financial markets and interest rates in the euro area	
	3.1 Money market interest rates	34*
	3.2 Government bond yields	35*
	3.3 Stock market indices	36*
	3.4 Retail bank interest rates	37*
	3.5 Securities issues other than shares by original maturity, residency of the issuer and currency denomination	38*
	3.6 Euro-denominated securities other than shares by original maturity, residency and sector of the issuer	40*
	3.7 Annual growth rates of securities other than shares issued by euro area residents	46*
	3.8 Quoted shares issued by euro area residents	48*
4	HICP and other prices in the euro area	
	4.1 Harmonised Index of Consumer Prices	50*
	4.2 Selected other price indicators	51*
5	Real economy indicators in the euro area	
	5.1 National accounts	52*
	5.2 Selected other real economy indicators	54*
	5.3 European Commission Business and Consumer Surveys	55*
	5.4 Labour market indicators	56*
6	Saving, investment and financing in the euro area	
	6.1 Financial investment and financing of non-financial sectors	58*
	6.2 Financial investment and financing of insurance corporations and pension funds	62*
	6.3 Saving, investment and financing	64*

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

7	General government fiscal position in the euro area and in the euro area countries	
7.1	Revenue, expenditure and deficit / surplus	65*
7.2	Debt	66*
7.3	Change in debt	67*
8	Balance of payments and international investment position of the euro area (including reserves)	
8.1	Summary balance of payments	68*
8.2	Balance of payments: current and capital accounts	69*
8.3	Balance of payments: income account	70*
8.4	Balance of payments: direct investment account	71*
8.5	Balance of payments: portfolio investment account	72*
8.6	Balance of payments: other investment account and reserve assets	73*
8.7	Monetary presentation of the euro area balance of payments	75*
8.8	International investment position and reserve assets outstanding	76*
9	External trade in goods of the euro area	78*
10	Exchange rates	80*
11	Economic and financial developments in the other EU Member States	82*
12	Economic and financial developments outside the EU	
12.1	Economic and financial developments	83*
12.2	Saving, investment and financing	84*
	Technical notes	85*
	General notes	89*

What's new ?

Two new real effective exchange rates of the euro are presented in Table 10 using the GDP deflator (column 4) and the Unit Labour Costs in the Total Economy index (column 6) as deflators. 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 this issue of the Monthly Bulletin, and the Explanatory note for Table 10 and the ECB's Occasional Paper No. 2, both of which are available on the ECB's website.

Conventions used in the tables

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

Euro area overview table

Summary table of economic indicators for the euro area

(annual percentage changes, unless otherwise indicated)

1. Monetary developments and interest rates

	M1 ¹⁾	M2 ¹⁾	M3 ¹⁾²⁾		MFI loans to euro area residents excluding MFIs and general government ¹⁾	Securities issued by non-financial and non-monetary financial corporations ¹⁾	3-month interest rate (EURIBOR, % per annum, period averages) ⁷⁾	10-year government bond yield (% per annum, period averages) ⁸⁾
	1	2	3	3-month moving average (centred) ⁴⁾				
2001	3.6	4.2	5.3	-	7.8	27.6	4.26	5.03
2002	7.3	6.5	7.2	-	5.3	22.1	3.32	4.92
2002 Q3	7.6	6.5	7.0	-	5.2	18.3	3.36	4.77
Q4	8.8	6.7	7.0	-	4.8	16.5	3.11	4.54
2003 Q1	10.3	7.1	7.6	-	4.9	16.6	2.69	4.16
Q2	11.5	8.2	8.5	-	4.6	.	2.37	3.96
2003 Feb.	10.5	7.4	8.0	7.8	5.1	16.9	2.69	4.06
Mar.	11.8	8.0	8.0	8.2	4.6	18.9	2.53	4.13
Apr.	11.2	8.0	8.7	8.4	4.6	20.2	2.54	4.23
May	11.5	8.5	8.5	8.5	4.6	20.7	2.41	3.92
June	11.5	8.3	8.3	.	4.5	.	2.15	3.72
July	.	.	.	.	.	.	2.13	4.05

2. Price and real economy developments

	HICP ⁹⁾	Industrial producer prices ¹⁰⁾	Hourly labour costs (whole economy) ¹¹⁾	Real GDP ¹²⁾	Industrial production (excluding construction) ¹³⁾	Capacity utilisation in manufacturing (percentages) ¹⁴⁾	Employment (whole economy) ¹⁵⁾	Unemployment (% of labour force) ¹⁶⁾
2001	2.3	2.2	3.3	1.5	0.4	82.9	1.4	8.0
2002	2.3	0.0	3.7	0.8	-0.6	81.4	0.4	8.4
2002 Q3	2.1	0.0	3.5	1.0	0.0	81.5	0.3	8.4
Q4	2.3	1.3	3.7	1.2	1.2	81.5	0.2	8.5
2003 Q1	2.3	2.4	2.7	0.8	1.0	81.1	0.1	8.7
Q2	2.0	.	.	.	.	80.7	.	.
2003 Feb.	2.4	2.6	-	-	2.1	-	-	8.7
Mar.	2.4	2.4	-	-	0.0	-	-	8.8
Apr.	2.1	1.7	-	-	0.6	80.8	-	8.8
May	1.9	1.3	-	-	-1.3	-	-	8.8
June	2.0	.	-	-	.	-	-	.
July	1.9	.	-	-	.	80.6	-	.

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) ²¹⁾	Effective exchange rate of the euro: broad group (1999 Q1 = 100)		USD/EUR exchange rate ²⁴⁾
	Current and capital accounts ¹⁷⁾	Goods ¹⁸⁾	Direct investment ¹⁹⁾	Portfolio investment ²⁰⁾		Nominal ²²⁾	Real (CPI) ²³⁾	
2001	-9.8	75.5	-102.8	64.7	392.7	91.0	87.7	0.896
2002	71.2	131.1	-33.6	108.4	366.1	95.6	91.7	0.946
2002 Q3	25.3	38.5	-12.0	35.7	380.9	97.9	93.8	0.984
Q4	25.1	34.6	3.6	36.2	366.1	99.4	94.9	0.999
2003 Q1	4.7	17.3	-7.7	2.8	339.1	104.1	99.2	1.073
Q2	.	.	.	.	326.1	107.9	102.7	1.137
2003 Feb.	2.6	9.1	3.2	-12.0	352.2	104.4	99.4	1.077
Mar.	4.9	6.2	-7.7	17.6	339.1	105.1	100.1	1.081
Apr.	-8.5	7.4	-20.2	9.3	332.4	105.2	100.3	1.085
May	-0.1	8.3	-0.3	7.0	323.1	109.1	103.8	1.158
June	.	.	.	.	326.1	109.3	104.0	1.166
July	.	.	.	.	.	107.8	102.5	1.137

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 28 Feb.	130,314	228,349	17,331	5,926	223,186	178,001	45,000	0
7 Mar.	130,314	227,928	17,384	6,164	182,175	137,090	45,000	0
14	130,314	226,868	17,048	5,511	270,123	225,091	45,000	0
21	130,314	223,947	17,725	5,121	234,917	189,001	45,000	0
28	130,314	224,146	16,800	5,202	232,049	187,000	45,000	0
4 Apr.	122,728	216,872	17,072	4,783	220,040	174,999	45,000	0
11	122,728	215,994	16,736	4,496	217,097	172,000	44,973	0
18	122,728	215,786	16,528	4,551	223,000	177,998	44,973	0
25	122,274	215,757	16,919	4,575	247,011	201,999	44,973	0
2 May	122,274	214,456	16,721	4,597	207,989	163,001	44,979	0
9	122,274	214,120	17,116	4,821	211,999	166,992	44,979	0
16	122,274	215,054	16,946	4,493	218,054	173,001	44,979	0
23	122,274	216,212	17,234	3,656	238,095	192,998	44,979	0
30	122,246	214,154	17,283	3,384	247,352	202,001	44,988	0
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

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 28 Feb.	345,414	125,405	125,346	59	0	0	0	62	2,029
7 Mar.	350,078	89,529	89,431	98	0	0	0	62	2,029
14	350,014	177,351	177,262	89	0	0	0	15	2,029
21	350,482	128,616	127,972	623	0	0	21	15	2,029
28	351,783	129,392	129,356	23	0	0	13	15	2,029
4 Apr.	357,775	131,573	131,477	90	0	0	6	76	2,029
11	360,186	128,359	128,321	29	0	0	9	76	2,029
18	367,559	132,655	132,436	216	0	0	3	15	2,029
25	363,873	147,509	147,427	80	0	0	2	15	2,029
2 May	367,432	122,600	122,512	87	0	0	1	15	2,029
9	368,111	129,360	129,284	75	0	0	1	15	2,029
16	366,888	128,610	128,532	77	0	0	1	15	2,029
23	365,344	126,340	121,748	741	3,850	0	1	15	2,029
30	371,002	134,948	134,842	105	0	0	1	15	2,029
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

Source: ECB.

Structural reverse operations	Marginal lending facility	Credits related to margin calls	Other claims on euro area credit institutions in euro	Securities of euro area residents in euro	General government debt in euro	Other assets	Total	
							9	10	11	12	13	14	15	16
0	148	37	552	33,484	44,355	107,151	790,649	2003 28 Feb.
0	50	35	938	33,495	44,340	107,218	749,960	7 Mar.
0	2	30	473	36,694	44,342	107,546	838,923	14
0	889	27	276	37,823	44,345	107,801	802,273	21
0	10	39	275	38,149	44,344	107,391	798,674	28
0	3	38	289	38,760	44,318	109,563	774,429	4 Apr.
0	109	15	164	39,658	44,322	109,351	770,550	11
0	14	15	134	39,785	44,279	109,666	776,461	18
0	30	9	116	40,185	44,273	109,529	800,643	25
0	1	8	111	40,295	44,273	109,631	760,351	2 May
0	0	28	195	40,543	44,274	109,789	765,135	9
0	53	21	197	40,996	44,270	109,580	771,868	16
0	90	28	158	42,348	44,266	109,647	793,894	23
0	313	50	330	42,294	44,260	110,128	801,435	30
0	99	49	225	43,067	44,261	110,286	777,056	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

Liabilities to other euro area residents in euro	Liabilities to non-euro area residents in euro	Liabilities to euro area residents in foreign currency	Liabilities to non-euro area residents in foreign currency	Counterpart of special drawing rights allocated by the IMF	Other liabilities	Revaluation accounts	Capital and reserves	Total	
								10	11	12	13	14	15	16	17	18
70,147	8,704	1,024	14,054	6,339	70,187	82,840	64,444	790,649	2003 28 Feb.
60,226	8,659	1,050	14,772	6,339	69,932	82,840	64,444	749,960	7 Mar.
60,064	8,607	1,054	16,093	6,339	70,055	82,840	64,462	838,923	14
72,700	8,441	1,076	14,706	6,339	70,565	82,840	64,464	802,273	21
73,624	8,395	1,071	14,490	6,339	64,227	82,840	64,469	798,674	28
53,949	8,858	1,081	15,366	6,168	65,081	68,005	64,468	774,429	4 Apr.
51,602	8,717	1,005	14,572	6,168	65,227	68,005	64,604	770,550	11
44,996	9,172	1,045	14,304	6,168	65,907	68,005	64,606	776,461	18
59,278	8,455	1,048	14,132	6,168	65,475	68,005	64,656	800,643	25
40,143	9,506	1,048	12,990	6,168	65,853	67,910	64,657	760,351	2 May
37,661	8,904	1,032	13,626	6,168	65,634	67,910	64,685	765,135	9
46,332	8,803	1,029	13,644	6,168	65,729	67,910	64,711	771,868	16
69,296	9,551	987	16,002	6,168	65,231	67,910	65,021	793,894	23
65,536	8,815	1,049	14,022	6,168	64,918	67,910	65,023	801,435	30
58,912	8,966	961	13,725	6,168	64,606	67,910	65,007	777,056	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

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

With effect from ¹⁾	Deposit facility		Main refinancing operations			Marginal lending facility	
			Fixed rate tenders	Variable rate tenders			
	Level 1	Change 2	Fixed rate	Minimum bid rate	Change 5	Level 6	Change 7
			Level 3	Level 4			
1999 1 Jan.	2.00	-	3.00	-	-	4.50	-
4 ²⁾	2.75	0.75	3.00	-	...	3.25	-1.25
22	2.00	-0.75	3.00	-	...	4.50	1.25
9 Apr.	1.50	-0.50	2.50	-	-0.50	3.50	-1.00
5 Nov.	2.00	0.50	3.00	-	0.50	4.00	0.50
2000 4 Feb.	2.25	0.25	3.25	-	0.25	4.25	0.25
17 Mar.	2.50	0.25	3.50	-	0.25	4.50	0.25
28 Apr.	2.75	0.25	3.75	-	0.25	4.75	0.25
9 June	3.25	0.50	4.25	-	0.50	5.25	0.50
28 ³⁾	3.25	...	-	4.25	...	5.25	...
1 Sep.	3.50	0.25	-	4.50	0.25	5.50	0.25
6 Oct.	3.75	0.25	-	4.75	0.25	5.75	0.25
2001 11 May	3.50	-0.25	-	4.50	-0.25	5.50	-0.25
31 Aug.	3.25	-0.25	-	4.25	-0.25	5.25	-0.25
18 Sep.	2.75	-0.50	-	3.75	-0.50	4.75	-0.50
9 Nov.	2.25	-0.50	-	3.25	-0.50	4.25	-0.50
2002 6 Dec.	1.75	-0.50	-	2.75	-0.50	3.75	-0.50
2003 7 Mar.	1.50	-0.25	-	2.50	-0.25	3.50	-0.25
6 June	1.00	-0.50	-	2.00	-0.50	3.00	-0.50

Source: ECB.

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

Table 1.3**Eurosystem monetary policy operations allotted through tenders ^{1) 2)}***(EUR millions; interest rates in percentages per annum)***1. Main refinancing operations ³⁾**

Date of settlement	Bids (amount)	Allotment (amount)	Fixed rate tenders		Variable rate tenders		Running for (...) days
			Fixed rate	Minimum bid rate	Marginal rate ⁴⁾	Weighted average rate	
	1	2	3	4	5	6	7
2003 4 Mar.	54,090	54,090	-	2.75	2.75	2.75	15
12	126,251	106,000	-	2.50	2.57	2.63	13
12	75,870	65,000	-	2.50	2.55	2.64	7
19	129,827	83,000	-	2.50	2.58	2.59	14
25	115,518	104,000	-	2.50	2.53	2.55	15
2 Apr.	112,031	71,000	-	2.50	2.53	2.54	14
9	133,547	101,000	-	2.50	2.53	2.53	14
16	126,889	77,000	-	2.50	2.53	2.54	14
23	156,979	125,000	-	2.50	2.54	2.55	14
30	106,071	38,000	-	2.50	2.55	2.55	14
7 May	120,843	76,000	-	2.50	2.53	2.54	14
7	67,356	53,000	-	2.50	2.53	2.54	7
14	145,595	97,000	-	2.50	2.53	2.54	14
21	157,067	96,000	-	2.50	2.57	2.58	14
28	184,856	106,000	-	2.50	2.59	2.61	12
4 June	72,372	72,372	-	2.50	2.50	2.50	14
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

2. Longer-term refinancing operations

Date of settlement	Bids (amount)	Allotment (amount)	Fixed rate tenders	Variable rate tenders		Running for (...) days
			Fixed rate	Marginal rate ⁴⁾	Weighted average rate		5
1	2	3	4	5	6	7
2001 30 Aug.	37,855	20,000	-	4.20	4.23	91
27 Sep.	28,269	20,000	-	3.55	3.58	85
25 Oct.	42,308	20,000	-	3.50	3.52	98
29 Nov.	49,135	20,000	-	3.32	3.34	91
21 Dec.	38,178	20,000	-	3.29	3.31	97
2002 31 Jan.	44,547	20,000	-	3.31	3.33	84
28 Feb.	47,001	20,000	-	3.32	3.33	91
28 Mar.	39,976	20,000	-	3.40	3.42	91
25 Apr.	40,580	20,000	-	3.35	3.36	91
30 May	37,602	20,000	-	3.45	3.47	91
27 June	27,670	20,000	-	3.38	3.41	91
25 July	28,791	15,000	-	3.35	3.37	98
29 Aug.	33,527	15,000	-	3.33	3.34	91
26 Sep.	25,728	15,000	-	3.23	3.26	88
31 Oct.	27,820	15,000	-	3.22	3.24	91
28 Nov.	38,644	15,000	-	3.02	3.04	91
23 Dec.	42,305	15,000	-	2.93	2.95	94
2003 30 Jan.	31,716	15,000	-	2.78	2.80	90
27 Feb.	24,863	15,000	-	2.48	2.51	91
27 Mar.	33,367	15,000	-	2.49	2.51	91
30 Apr.	35,096	15,000	-	2.50	2.51	92
29 May	30,218	15,000	-	2.25	2.27	91
26 June	28,694	15,000	-	2.11	2.12	91
31 July	25,416	15,000	-	2.08	2.10	91

3. Other tender operations

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

Source: ECB.

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

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

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

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

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

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

Reserve base as at:	Total	Liabilities to which a 2% reserve coefficient is applied		Liabilities to which a 0% reserve coefficient is applied		
		Deposits (overnight, up to 2 years' agreed maturity and notice period)	Debt securities up to 2 years' agreed maturity ³⁾	Deposits (over 2 years' agreed maturity and notice period)	Repos	Debt securities over 2 years' agreed maturity
	1	2	3	4	5	6
2002 June	11,009.1	6,083.3	407.5	1,355.3	699.2	2,463.9
July	10,999.6	6,069.3	408.6	1,368.0	691.0	2,462.7
Aug.	10,952.0	6,010.3	401.5	1,359.7	703.2	2,477.2
Sep.	11,054.3	6,055.4	405.0	1,373.5	747.6	2,472.7
Oct.	11,113.6	6,052.0	414.2	1,379.1	790.5	2,477.8
Nov.	11,207.0	6,142.9	426.9	1,365.2	784.2	2,487.7
Dec.	11,116.8	6,139.9	409.2	1,381.9	725.5	2,460.3
2003 Jan.	11,100.8	6,048.5	426.0	1,385.7	773.9	2,466.7
Feb.	11,214.2	6,092.6	434.0	1,396.4	808.2	2,483.0
Mar.	11,229.9	6,117.2	427.4	1,404.1	782.7	2,498.5
Apr.	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 ^(p)	11,369.3	6,216.1	412.3	1,421.5	783.2	2,536.2

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 ¹⁾*(EUR billions; interest rates as annual percentages)*

Maintenance period ending in:	Required reserves ²⁾	Actual reserves ³⁾	Excess reserves ⁴⁾	Deficiencies ⁵⁾	Interest rate on minimum reserves ⁶⁾
	1	2	3	4	5
2002 Aug.	129.3	129.7	0.5	0.0	3.29
Sep.	129.0	129.5	0.5	0.0	3.28
Oct.	127.7	128.2	0.5	0.0	3.28
Nov.	128.7	129.2	0.5	0.0	3.28
Dec.	128.8	129.4	0.7	0.0	3.06
2003 Jan.	130.9	131.4	0.6	0.0	2.87
Feb.	130.4	131.0	0.6	0.0	2.78
Mar.	128.9	129.5	0.6	0.0	2.67
Apr.	130.0	130.5	0.5	0.0	2.53
May	130.3	130.8	0.5	0.0	2.54
June	131.2	131.7	0.5	0.0	2.34
July	131.6	132.0	0.5	0.0	2.09
Aug. ^(p)	132.0	.	.	.	.

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 ¹⁾
(EUR billions; period averages of daily positions)

Maintenance period ending in:	Liquidity-providing factors					Liquidity-absorbing factors					Credit institutions' current accounts ⁴⁾	Base money ⁵⁾
	Monetary policy operations of the Eurosystem					Deposit facility	Other liquidity-absorbing operations ²⁾	Banknotes in circulation	Central government deposits with the Eurosystem	Other factors (net) ³⁾		
	Eurosystem's net assets in gold and foreign currency ¹⁾	Main refinancing operations	Longer-term refinancing operations	Marginal lending facility	Other liquidity-providing operations ²⁾							
1	2	3	4	5	6	7	8	9	10	11	12	
2002 June	396.2	112.6	60.0	0.5	0.0	0.4	0.0	300.8	45.1	91.2	131.8	433.0
July	369.1	130.4	60.0	0.2	0.0	0.2	0.0	313.4	54.4	60.3	131.4	445.0
Aug.	360.0	139.2	55.2	0.1	0.0	0.1	0.0	322.8	50.9	50.8	129.9	452.8
Sep.	362.3	140.9	50.8	0.1	0.0	0.2	0.0	323.6	49.1	51.7	129.6	453.4
Oct.	370.0	146.1	45.3	0.1	0.0	0.1	0.0	329.2	45.6	58.2	128.3	457.6
Nov.	372.1	147.5	45.0	0.1	0.0	0.1	0.0	334.0	42.8	58.6	129.3	463.4
Dec.	371.5	168.1	45.0	1.1	2.0	0.2	0.0	350.7	51.7	55.5	129.5	480.5
2003 Jan.	360.9	176.3	45.0	0.5	0.0	0.3	0.0	353.9	43.7	53.3	131.6	485.8
Feb.	356.4	168.6	45.0	0.3	0.0	0.3	0.0	340.7	50.2	48.0	131.1	472.2
Mar.	352.5	179.5	45.0	0.2	0.0	0.1	0.0	347.8	59.1	40.6	129.6	477.5
Apr.	337.4	179.4	45.0	0.1	0.0	0.2	0.0	358.5	52.1	20.5	130.6	489.3
May	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 ⁶⁾	320.4	204.7	45.0	0.4	0.0	0.3	0.0	382.7	52.4	2.9	132.2	515.2

Source: ECB.

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

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

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

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

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

2 Monetary developments and investment funds in the euro area

Table 2.1

Aggregated balance sheet of the Eurosystem

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

1. Assets

	Loans to euro area residents				Holdings of securities other than shares issued by euro area residents ²⁾				Holdings of shares/other equity issued by euro area residents			External assets ¹⁾	Fixed assets	Re-remaining assets	Total	
	1	MFIs ¹⁾	General government	Other euro area residents	5	6	General government	Other euro area residents	8	9	10					Other euro area residents	11	12	13	14	15
2000	445.0	427.4	17.1	0.5	97.4	2.5	93.6	1.3	15.3	4.3	11.0	380.7	11.2	56.1	1,005.7	
<i>Euro area enlargement</i>																
2001 Q2	426.0	398.2	27.2	0.6	105.8	3.1	101.5	1.2	14.2	4.6	9.6	414.7	11.9	54.5	1,027.2	
Q3	388.2	360.4	27.2	0.6	106.6	3.7	101.9	1.1	13.1	4.8	8.3	397.1	11.9	54.8	971.7	
Q4	412.7	386.4	25.7	0.6	107.0	3.8	101.8	1.3	13.8	4.6	9.2	399.0	11.9	54.3	998.6	
2002 Q1	381.3	354.9	25.8	0.6	106.5	4.1	101.0	1.4	13.8	4.7	9.1	414.4	11.9	101.5	1,029.4	
2002 June	387.7	361.3	25.7	0.6	107.9	4.9	101.6	1.4	12.9	4.7	8.2	372.7	12.0	108.7	1,001.8	
July	364.0	337.7	25.7	0.6	108.8	5.3	101.9	1.7	12.7	4.7	7.9	376.8	12.1	111.3	985.8	
Aug.	363.4	337.5	25.3	0.6	110.8	5.4	103.3	2.1	12.8	4.8	8.0	377.7	12.1	111.0	987.8	
Sep.	365.6	339.6	25.3	0.6	112.5	5.8	104.6	2.2	12.3	4.8	7.5	386.0	12.1	112.4	1,000.9	
Oct.	370.8	344.8	25.3	0.6	113.5	6.5	106.1	0.9	13.0	4.8	8.2	379.3	12.1	115.7	1,004.4	
Nov.	377.3	351.3	25.3	0.6	115.0	7.0	107.1	0.9	13.5	4.8	8.6	378.4	9.8	119.8	1,013.8	
Dec.	416.2	391.3	24.2	0.6	94.5	7.6	86.0	0.8	13.2	4.8	8.3	374.8	11.9	132.3	1,042.8	
2003 Jan.	412.3	387.5	24.2	0.6	96.7	8.5	87.4	0.8	13.0	4.9	8.1	373.3	12.1	116.9	1,024.8	
Feb.	410.2	385.4	24.1	0.6	100.7	9.1	90.8	0.8	12.9	5.0	7.9	363.3	12.0	121.1	1,020.5	
Mar.	411.8	387.0	24.1	0.6	105.2	9.5	94.8	0.8	12.5	5.1	7.5	349.7	11.9	123.6	1,015.1	
Apr.	369.6	344.9	24.1	0.6	107.6	9.6	97.1	0.8	13.0	5.1	7.9	341.0	12.0	128.2	971.9	
May	444.7	420.0	24.0	0.7	112.0	10.4	100.5	1.0	12.2	4.4	7.7	333.4	11.9	131.0	1,045.8	
June ^(p)	469.3	445.0	23.7	0.6	114.2	10.0	103.1	1.1	12.4	4.4	8.0	334.6	12.0	131.4	1,074.6	

2. Liabilities

	Currency in circulation	Deposits of euro area residents		Central government		Other general government/other euro area residents	Debt securities issued ²⁾	Capital and reserves	External liabilities ¹⁾	Remaining liabilities	Total
	1	2	MFIs ¹⁾	4	5	6	7	8	9	10	
2000	390.2	327.3	270.4	47.1	9.8	3.8	197.5	29.9	57.0	1,005.7	
<i>Euro area enlargement</i>											
2001 Q2	368.8	342.2	274.1	51.8	16.3	5.6	223.7	32.6	54.2	1,027.2	
Q3	346.1	323.6	269.4	37.6	16.6	5.5	209.2	30.0	57.3	971.7	
Q4	285.9	391.9	342.4	35.1	14.4	4.6	209.8	35.6	70.8	998.6	
2002 Q1	309.1	355.1	282.4	56.3	16.4	4.6	217.8	36.9	105.9	1,029.4	
2002 June	329.2	354.3	285.2	51.5	17.5	4.6	182.3	31.0	100.5	1,001.8	
July	339.9	316.0	247.4	52.9	15.6	4.6	183.7	35.1	106.5	985.8	
Aug.	342.3	318.7	255.8	47.3	15.6	4.6	186.4	31.0	104.9	987.8	
Sep.	347.0	317.6	258.9	41.7	17.0	4.6	190.2	32.5	109.1	1,000.9	
Oct.	355.3	313.5	254.4	40.8	18.3	4.6	187.9	31.4	111.9	1,004.4	
Nov.	360.8	319.3	255.2	46.2	17.9	3.6	185.7	31.5	112.9	1,013.8	
Dec.	392.9	328.4	283.3	29.5	15.6	3.6	165.9	32.9	119.1	1,042.8	
2003 Jan.	352.1	348.3	284.1	49.3	15.0	3.6	164.2	30.2	126.4	1,024.8	
Feb.	358.1	346.0	276.9	54.2	14.9	2.8	159.5	28.6	125.5	1,020.5	
Mar.	365.4	345.8	279.0	50.7	16.2	2.7	149.2	28.7	123.3	1,015.1	
Apr.	378.7	292.1	233.2	42.0	16.9	2.7	144.6	27.7	126.1	971.9	
May	384.1	361.9	297.6	45.9	18.4	2.7	141.0	28.1	127.9	1,045.8	
June ^(p)	391.4	379.4	307.9	52.6	18.9	2.6	143.2	29.8	128.1	1,074.6	

Source: ECB.

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

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

Table 2.3

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

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

1. Assets: levels

	Loans to euro area residents		Holdings of securities other than shares issued by euro area residents ²⁾		Holdings of shares/ other equity issued by other euro area residents		External assets ³⁾	Fixed assets	Remaining assets	Total	
	1	2	3	4	5	6					7	8	9	10	11
2001 Dec.	7,367.0	847.7	6,519.3	1,516.1	1,179.2	336.9	568.1	2,807.8	180.0	1,137.6	13,576.7
2002 Jan.	7,379.2	844.8	6,534.4	1,548.3	1,206.3	341.9	568.1	2,830.6	177.5	1,163.7	13,667.3
Feb.	7,396.2	847.5	6,548.7	1,557.7	1,207.8	349.9	566.7	2,835.9	176.6	1,124.1	13,657.2
Mar.	7,458.8	852.6	6,606.1	1,575.7	1,229.1	346.6	560.5	2,845.2	176.4	1,077.7	13,694.3
Apr.	7,473.6	832.4	6,641.2	1,572.2	1,229.3	342.9	566.8	2,826.0	176.2	1,065.4	13,680.2
May	7,488.9	829.2	6,659.7	1,587.2	1,242.3	345.0	568.9	2,845.8	176.4	1,044.4	13,711.5
June	7,521.2	830.1	6,691.1	1,582.0	1,239.0	343.0	563.9	2,731.2	176.2	1,067.5	13,642.1
July	7,521.1	828.5	6,692.6	1,582.7	1,237.4	345.3	549.1	2,755.6	176.7	1,093.6	13,678.9
Aug.	7,510.4	818.0	6,692.3	1,576.0	1,235.0	341.0	559.1	2,745.1	177.7	1,080.8	13,649.1
Sep.	7,547.5	820.8	6,726.8	1,603.9	1,253.2	350.8	549.1	2,813.5	178.3	1,130.0	13,822.2
Oct.	7,563.1	820.4	6,742.7	1,601.6	1,248.5	353.1	561.6	2,862.9	179.3	1,095.4	13,863.9
Nov.	7,583.7	829.2	6,754.5	1,611.1	1,254.4	356.7	566.9	2,936.6	177.0	1,135.7	14,010.9
Dec.	7,618.3	836.8	6,781.5	1,588.1	1,221.0	367.1	572.7	2,840.3	179.5	1,132.2	13,931.1
2003 Jan.	7,633.6	828.9	6,804.7	1,650.3	1,275.5	374.8	567.5	2,851.9	176.3	1,092.4	13,972.8
Feb.	7,659.6	828.3	6,831.3	1,679.7	1,298.6	381.1	564.1	2,908.9	174.9	1,124.4	14,112.1
Mar.	7,683.6	828.7	6,854.9	1,691.4	1,304.8	386.6	565.4	2,894.8	172.7	1,114.9	14,123.4
Apr.	7,714.7	823.3	6,891.4	1,727.4	1,323.3	404.1	584.2	2,905.8	170.8	1,123.5	14,226.9
May	7,726.1	818.9	6,907.3	1,764.0	1,357.0	406.9	596.2	2,877.8	171.3	1,163.4	14,299.5
June ⁴⁾	7,764.5	819.6	6,944.9	1,748.3	1,341.6	406.7	590.4	2,959.5	170.4	1,152.1	14,385.8

2. Liabilities: levels

	Currency in circulation	Deposits of central government	Deposits of other general government/ other euro area residents	Over-night	With agreed maturity	Redeemable at notice	Repurchase agreements	Money market fund shares/ units ⁴⁾	Debt securities issued ²⁴⁾	Capital and reserves	External liabilities ³⁾	Re-maining liabilities	Excess of inter-MFI liabilities	Total
2001 Dec.	239.7	139.0	5,777.6	1,896.2	2,257.9	1,405.0	218.5	398.0	1,760.8	995.2	2,723.0	1,551.8	-8.5	13,576.7
2002 Jan.	246.5	148.9	5,736.9	1,847.8	2,254.1	1,418.8	216.2	416.6	1,775.9	1,007.5	2,759.4	1,573.6	2.0	13,667.3
Feb.	240.3	155.7	5,736.7	1,843.3	2,251.4	1,420.9	221.1	427.0	1,778.2	1,011.5	2,768.0	1,538.8	1.1	13,657.2
Mar.	254.3	157.5	5,758.5	1,839.1	2,266.7	1,423.0	229.6	431.2	1,793.1	1,010.7	2,791.3	1,496.6	1.3	13,694.3
Apr.	261.7	157.5	5,781.8	1,869.7	2,269.3	1,414.7	228.1	437.5	1,785.5	1,004.6	2,773.9	1,486.6	-8.9	13,680.2
May	273.8	149.0	5,799.3	1,869.8	2,279.1	1,415.5	234.8	442.6	1,805.0	1,008.8	2,755.0	1,485.2	-7.3	13,711.5
June	285.7	155.0	5,823.9	1,916.0	2,256.6	1,421.7	229.6	439.2	1,788.3	985.8	2,619.9	1,533.6	10.7	13,642.1
July	296.6	151.9	5,802.6	1,885.4	2,264.1	1,424.3	228.8	450.3	1,796.1	993.4	2,648.2	1,542.7	-2.9	13,678.9
Aug.	301.1	141.0	5,783.6	1,851.6	2,265.7	1,429.8	236.5	463.4	1,814.3	1,004.3	2,616.3	1,525.4	-0.2	13,649.1
Sep.	306.7	146.3	5,822.2	1,908.0	2,243.1	1,432.8	238.3	460.4	1,813.0	1,015.9	2,674.8	1,588.0	-5.0	13,822.2
Oct.	313.9	151.8	5,829.1	1,891.4	2,264.1	1,438.1	235.6	462.7	1,823.0	1,014.0	2,697.9	1,568.2	3.3	13,863.9
Nov.	321.4	147.5	5,881.7	1,943.2	2,260.2	1,448.7	229.6	477.1	1,831.1	1,016.2	2,737.7	1,601.5	-3.4	14,010.9
Dec.	341.2	136.4	5,971.1	1,999.8	2,264.8	1,479.6	226.9	470.6	1,818.6	1,006.5	2,627.2	1,550.8	8.8	13,931.1
2003 Jan.	312.1	154.7	5,947.5	1,947.9	2,269.1	1,497.5	233.0	535.0	1,793.6	1,016.3	2,662.9	1,541.0	9.7	13,972.8
Feb.	319.3	175.8	5,970.4	1,947.5	2,278.1	1,511.0	233.8	547.4	1,803.1	1,009.4	2,714.5	1,559.8	12.5	14,112.1
Mar.	327.2	176.2	6,010.3	1,986.1	2,277.8	1,522.3	224.0	550.8	1,804.6	999.5	2,694.6	1,545.8	14.3	14,123.4
Apr.	336.3	159.7	6,048.5	2,006.1	2,283.6	1,528.4	230.5	563.0	1,834.7	995.6	2,715.6	1,593.6	-20.1	14,226.9
May	343.8	170.1	6,101.4	2,032.3	2,305.0	1,532.7	231.4	571.1	1,821.1	991.4	2,653.4	1,650.6	-3.4	14,299.5
June ⁴⁾	351.0	200.0	6,113.8	2,081.6	2,271.8	1,545.6	214.8	570.3	1,831.9	1,000.7	2,674.4	1,621.7	21.9	14,385.8

Source: ECB.

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

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

3) See Table 2.1, footnote 1.

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

3. Assets: flows ¹⁾

	Loans to euro area residents		Other euro area residents	Holdings of securities other than shares issued by euro area residents ²⁾	General government		Holdings of shares/ other equity issued by other euro area residents	External assets ³⁾	Fixed assets	Remaining assets	Total
	1	2			3	4						5	6	7	8	9	10	11
2002 Jan.	9.5	-3.1	12.6	27.1	21.9	5.2	-0.3	0.9	-2.5	25.5	60.2
Feb.	19.0	2.7	16.2	9.2	1.2	8.0	0.6	3.0	-0.9	-41.0	-10.1
Mar.	64.2	5.2	59.0	14.1	16.9	-2.9	-7.6	19.9	0.0	-45.4	45.1
Apr.	21.7	-20.0	41.7	-1.9	1.5	-3.3	6.3	17.5	-0.2	-12.7	30.8
May	25.4	-2.8	28.2	12.7	9.7	3.0	0.9	73.8	0.2	-21.2	91.9
June	40.7	1.4	39.3	-3.0	-1.3	-1.7	-5.1	-26.8	-0.2	23.5	29.0
July	-4.7	-1.8	-2.9	-2.5	-2.0	-0.5	-11.7	-3.5	0.5	24.9	3.0
Aug.	-10.6	-10.9	0.3	-5.7	-3.1	-2.6	9.4	-10.7	1.0	-12.8	-27.5
Sep.	38.3	2.8	35.4	20.8	11.5	9.3	-4.4	65.5	0.6	47.6	168.3
Oct.	18.2	-0.4	18.6	-0.4	-2.6	2.2	10.5	55.1	0.9	-35.3	49.2
Nov.	25.7	9.0	16.7	9.4	6.1	3.4	2.2	84.4	-2.3	39.6	159.0
Dec.	50.1	8.0	42.0	-3.9	-14.1	10.2	4.6	-33.2	1.7	-13.3	5.8
2003 Jan.	25.9	1.3	24.7	24.1	20.0	4.1	-0.6	18.0	-2.0	-25.7	40.3
Feb.	28.5	-2.4	30.8	24.5	17.8	6.7	-2.3	67.1	-1.5	29.0	145.2
Mar.	32.0	0.6	31.4	14.3	8.6	5.7	2.0	6.6	-0.2	-20.1	34.8
Apr.	38.8	-5.2	44.0	33.4	21.0	12.4	15.4	39.7	-1.9	4.6	129.9
May	24.1	-4.0	28.1	33.9	30.7	3.2	11.1	41.9	0.5	39.2	150.8
June ⁶⁾	34.5	0.6	34.0	-15.9	-15.1	-0.8	-7.8	40.5	-0.8	-10.6	39.9

4. Liabilities: flows ¹⁾

	Currency in circulation	Deposits of central government	Deposits of other general government/ other euro area residents	Over-night	With agreed maturity	Redeemable at notice	Repurchase agreements	Money market fund shares/ units ⁴⁾	Debt securities issued ^{2a)}	Capital and reserves	External liabilities ³⁾	Re-maining liabilities	Excess of inter-MFI liabilities	Total
2002 Jan.	6.8	10.4	-42.5	-49.5	-3.1	12.4	-2.3	19.5	10.4	14.2	14.2	15.7	11.3	60.2
Feb.	-6.2	6.9	0.2	-4.3	-2.5	2.1	4.9	10.4	4.8	-0.8	11.2	-35.8	-0.7	-10.1
Mar.	14.0	1.7	22.8	-3.8	16.1	2.2	8.4	3.3	18.4	2.7	25.5	-52.5	9.3	45.1
Apr.	7.4	0.0	27.6	32.1	5.2	-8.2	-1.5	7.9	-1.6	-5.2	20.5	-16.3	-9.6	30.8
May	12.2	-8.5	24.6	2.4	14.4	1.1	6.7	4.0	29.7	3.7	34.8	-10.1	1.5	91.9
June	11.8	6.0	31.1	48.2	-17.3	6.4	-6.1	-7.3	1.5	-17.1	-67.8	55.1	15.6	29.0
July	10.9	-3.1	-24.5	-31.8	5.4	2.5	-0.7	12.0	5.3	9.6	-5.0	11.3	-13.5	3.0
Aug.	4.5	-11.0	-4.7	-33.6	15.7	5.5	7.7	12.3	4.1	9.0	-24.8	-19.7	2.8	-27.5
Sep.	5.6	1.6	39.5	56.4	-22.3	3.0	2.4	-2.7	15.7	9.3	47.4	53.9	-1.9	168.3
Oct.	7.2	5.5	7.8	-16.4	21.7	5.3	-2.8	2.1	11.3	0.4	25.5	-20.0	9.4	49.2
Nov.	7.5	-4.3	54.9	52.2	-3.6	10.6	-4.4	14.7	11.6	2.4	49.5	28.6	-5.9	159.0
Dec.	19.8	-11.0	86.3	49.2	8.6	31.2	-2.8	-6.1	-6.0	8.7	-55.0	-43.2	12.3	5.8
2003 Jan.	-7.4	15.2	-16.5	-50.3	1.1	18.1	14.7	19.4	12.4	11.0	10.7	-9.5	5.0	40.3
Feb.	7.2	18.6	23.0	-0.4	9.1	13.5	0.9	12.2	10.0	-4.3	56.4	16.6	5.4	145.2
Mar.	7.9	-1.0	41.8	39.3	0.9	11.4	-9.8	4.2	2.6	-5.4	-7.2	-11.1	3.1	34.8
Apr.	9.1	-16.5	41.8	21.3	7.8	6.2	6.4	11.8	30.1	-0.1	44.1	43.2	-33.7	129.9
May	7.4	10.4	61.2	29.3	26.4	4.6	1.0	8.8	2.4	-6.9	0.6	52.6	14.3	150.8
June ⁶⁾	7.3	29.9	7.7	47.6	-36.0	12.7	-16.6	-1.6	2.5	9.9	-16.0	-25.7	25.9	39.9

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

	M2							
	M1				Deposits with agreed maturity up to 2 years	Deposits redeemable at notice up to 3 months	Total	Index Dec. 01=100 ³⁾
	Currency in circulation ¹⁾	Overnight deposits ²⁾	Total	Index Dec. 01=100 ³⁾				
					1	2	3	4	5	6	7	8
2001 Dec.	239.7	1,968.2	2,207.9	100.00	1,088.8	1,371.0	4,667.7	100.00
2002 Jan.	246.5	1,921.9	2,168.4	98.16	1,081.0	1,389.9	4,639.2	99.36
Feb.	240.3	1,917.1	2,157.4	97.67	1,076.8	1,394.2	4,628.4	99.14
Mar.	254.3	1,914.2	2,168.5	98.19	1,088.5	1,397.7	4,654.7	99.72
Apr.	261.7	1,945.5	2,207.2	100.01	1,092.1	1,391.4	4,690.6	100.57
May	273.8	1,945.4	2,219.3	100.66	1,099.6	1,393.5	4,712.4	101.16
June	285.7	1,992.1	2,277.8	103.40	1,074.9	1,399.6	4,752.2	102.15
July	296.6	1,959.4	2,255.9	102.36	1,083.7	1,402.7	4,742.3	101.81
Aug.	301.1	1,927.4	2,228.6	101.13	1,096.9	1,408.8	4,734.2	101.65
Sep.	306.7	1,984.4	2,291.1	103.96	1,073.6	1,411.4	4,776.1	102.55
Oct.	313.9	1,968.4	2,282.2	103.57	1,093.7	1,418.4	4,794.4	102.95
Nov.	321.4	2,020.5	2,341.9	106.30	1,086.4	1,430.0	4,858.3	104.34
Dec.	341.2	2,084.4	2,425.5	109.76	1,075.5	1,463.5	4,964.6	106.53
2003 Jan.	312.1	2,031.6	2,343.7	107.11	1,077.9	1,485.2	4,906.7	105.81
Feb.	319.3	2,032.5	2,351.8	107.48	1,080.6	1,501.0	4,933.4	106.39
Mar.	327.2	2,070.5	2,397.8	109.61	1,073.6	1,514.3	4,985.6	107.55
Apr.	336.3	2,090.3	2,426.6	110.99	1,082.2	1,522.8	5,031.6	108.61
May	343.8	2,115.2	2,458.9	112.61	1,097.0	1,530.1	5,086.1	109.94
June ^(p)	351.0	2,164.5	2,515.5	115.12	1,059.5	1,545.1	5,120.0	110.59

2. Monetary aggregates: flows ⁴⁾

	M2							
	M1				Deposits with agreed maturity up to 2 years	Deposits redeemable at notice up to 3 months	Total	Annual growth rate ³⁾ (%)
	Currency in circulation ¹⁾	Overnight deposits ²⁾	Total	Annual growth rate ³⁾ (%)				
					1	2	3	4	5	6	7	8
2002 Jan.	6.8	-47.4	-40.6	6.7	-6.7	17.5	-29.9	6.7
Feb.	-6.2	-4.6	-10.8	6.3	-4.0	4.4	-10.5	6.4
Mar.	14.0	-2.5	11.5	6.3	12.3	3.5	27.3	6.4
Apr.	7.4	32.8	40.2	6.6	5.4	-6.2	39.4	6.4
May	12.2	2.1	14.3	6.4	10.9	2.4	27.6	6.7
June	11.8	48.6	60.5	7.3	-20.6	6.3	46.2	6.6
July	10.9	-33.8	-22.9	7.3	4.2	3.0	-15.8	6.4
Aug.	4.5	-31.7	-27.1	8.0	13.5	6.2	-7.5	6.6
Sep.	5.6	56.9	62.5	8.0	-23.3	2.6	41.8	6.4
Oct.	7.2	-15.9	-8.7	8.3	20.6	7.1	19.0	6.8
Nov.	7.5	52.6	60.1	9.5	-7.3	11.6	64.4	7.0
Dec.	19.8	56.5	76.3	9.8	-7.8	33.8	102.2	6.5
2003 Jan.	-7.4	-51.2	-58.6	9.1	3.4	21.8	-33.4	6.5
Feb.	7.2	0.9	8.1	10.0	2.8	15.9	26.8	7.3
Mar.	7.9	38.7	46.7	11.6	-6.1	13.3	53.9	7.9
Apr.	9.1	21.0	30.1	11.0	10.2	8.7	49.0	8.0
May	7.4	28.0	35.4	11.9	18.6	7.6	61.7	8.7
June ^(p)	7.3	47.6	54.9	11.3	-39.7	14.7	29.9	8.3

Source: ECB.

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

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

M3 ²⁾						
Repurchase agreements	Money market fund shares/units	Debt securities up to 2 years ⁵⁾	Total	Index Dec. 01=100 ³⁾		
9	10	11	12	13		
218.5	398.0	145.9	5,430.2	100.00	2001 Dec.	
216.2	416.6	141.8	5,413.9	99.76	2002 Jan.	
221.1	427.0	138.8	5,415.2	99.78	Feb.	
229.6	431.2	137.2	5,452.8	100.50	Mar.	
228.1	437.5	134.7	5,490.9	101.28	Apr.	
234.8	442.6	144.0	5,533.8	102.17	May	
229.6	439.2	132.8	5,553.8	102.64	June	
228.8	450.3	125.5	5,546.9	102.40	July	
236.5	463.4	126.5	5,560.7	102.65	Aug.	
238.3	460.4	131.3	5,606.1	103.48	Sep.	
235.6	462.7	133.7	5,626.4	103.86	Oct.	
229.6	477.1	131.1	5,696.2	105.19	Nov.	
226.9	470.6	127.7	5,789.8	106.85	Dec.	
233.0	535.0	108.3	5,782.9	106.97	2003 Jan.	
233.8	547.4	108.8	5,823.4	107.72	Feb.	
224.0	550.8	99.4	5,859.8	108.42	Mar.	
230.5	563.0	124.0	5,948.9	110.04	Apr.	
231.4	571.1	105.0	5,993.6	111.03	May	
214.8	570.3	95.7	6,000.9	111.09	June ⁶⁾	

M3 ²⁾						
Repurchase agreements	Money market fund shares/units	Debt securities up to 2 years ⁵⁾	Total	Annual growth rate ³⁾ (%)		
9	10	11	12	13		
-2.3	19.5	-0.3	-12.9	7.7	2002 Jan.	
4.9	10.4	-3.9	0.9	7.3	Feb.	
8.4	3.3	0.2	39.1	7.3	Mar.	
-1.5	7.9	-3.4	42.4	7.2	Apr.	
6.7	4.0	9.8	48.1	7.5	May	
-6.1	-7.3	-7.4	25.5	7.2	June	
-0.7	12.0	-8.7	-13.2	6.9	July	
7.7	12.3	1.1	13.6	7.1	Aug.	
2.4	-2.7	3.6	45.1	7.0	Sep.	
-2.8	2.1	2.6	20.8	6.9	Oct.	
-4.4	14.7	-2.7	72.1	7.2	Nov.	
-2.8	-6.1	-3.9	89.5	6.8	Dec.	
14.7	19.4	6.2	6.8	7.2	2003 Jan.	
0.9	12.2	0.3	40.1	8.0	Feb.	
-9.8	4.2	-10.2	38.0	7.9	Mar.	
6.4	11.8	20.3	87.5	8.6	Apr.	
1.0	8.8	-17.7	53.8	8.7	May	
-16.6	-1.6	-8.8	3.0	8.2	June ⁶⁾	

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

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

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

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

	M2								
	M1				Other short-term deposits ⁵⁾			Total	Index ⁴⁾
	Currency in circulation ¹⁾	Overnight deposits ²⁾	Total	Index ⁴⁾	Total	Index ⁴⁾			
			3	4	5	6	7	8	
2001 Dec.	233.3	1,917.8	2,151.1	97.43	2,450.9	99.64	4,602.1	98.59	
2002 Jan.	251.7	1,924.5	2,176.2	98.52	2,452.4	99.68	4,628.6	99.13	
Feb.	244.8	1,932.3	2,177.1	98.56	2,449.3	99.57	4,626.4	99.09	
Mar.	254.1	1,921.7	2,175.9	98.52	2,471.6	100.50	4,647.5	99.57	
Apr.	263.4	1,939.3	2,202.7	99.80	2,476.9	100.80	4,679.6	100.33	
May	272.5	1,945.4	2,217.9	100.60	2,480.6	101.10	4,698.5	100.86	
June	281.7	1,948.2	2,230.0	101.23	2,486.1	101.50	4,716.1	101.37	
July	292.1	1,959.4	2,251.5	102.16	2,496.8	101.74	4,748.4	101.94	
Aug.	299.1	1,971.0	2,270.0	103.01	2,503.3	102.02	4,773.4	102.49	
Sep.	307.5	1,988.6	2,296.0	104.19	2,511.5	102.35	4,807.6	103.22	
Oct.	315.7	1,996.0	2,311.7	104.91	2,532.7	103.24	4,844.4	104.03	
Nov.	321.9	2,017.4	2,339.3	106.18	2,534.2	103.30	4,873.4	104.66	
Dec.	332.7	2,033.5	2,366.2	107.07	2,532.6	103.37	4,898.7	105.12	
2003 Jan.	317.4	2,043.1	2,360.5	107.87	2,538.9	103.67	4,899.3	105.66	
Feb.	323.6	2,059.2	2,382.8	108.90	2,553.1	104.26	4,936.0	106.45	
Mar.	332.4	2,077.4	2,409.8	110.16	2,575.0	105.19	4,984.7	107.53	
Apr.	338.7	2,088.7	2,427.4	111.03	2,594.3	106.05	5,021.8	108.40	
May	342.3	2,106.6	2,448.9	112.15	2,614.8	107.06	5,063.7	109.46	
June ⁶⁾	347.6	2,118.0	2,465.7	112.84	2,619.4	107.15	5,085.1	109.83	

4. Seasonally adjusted flows ⁷⁾

	M2										
	M1					Other short-term deposits ⁵⁾			Total	Monthly growth rate ³⁾ (%)	Annual growth rate ³⁾ (%)
	Currency in circulation ¹⁾	Overnight deposits ²⁾	Total	Monthly growth rate ⁴⁾ (%)	Annual growth rate ⁴⁾ (%)	Total	Monthly growth rate ⁴⁾ (%)	Annual growth rate ⁴⁾ (%)			
			3	4	5	6	7	8	9	10	11
2002 Jan.	18.4	5.6	24.1	1.1	6.6	1.1	0.0	6.9	25.2	0.5	6.8
Feb.	-6.9	8.0	1.0	0.0	6.1	-2.8	-0.1	6.5	-1.8	0.0	6.3
Mar.	9.3	-10.2	-0.9	0.0	6.0	22.9	0.9	6.5	22.0	0.5	6.3
Apr.	9.3	19.0	28.3	1.3	6.7	7.3	0.3	6.2	35.5	0.8	6.4
May	9.1	8.4	17.5	0.8	6.8	7.3	0.3	6.6	24.8	0.5	6.7
June	9.2	4.8	14.0	0.6	6.9	9.8	0.4	6.0	23.8	0.5	6.4
July	10.4	10.1	20.4	0.9	7.6	5.9	0.2	5.5	26.4	0.6	6.5
Aug.	7.0	11.8	18.8	0.8	7.7	6.9	0.3	5.4	25.6	0.5	6.5
Sep.	8.4	17.6	26.0	1.1	8.1	8.2	0.3	5.1	34.2	0.7	6.5
Oct.	8.2	7.6	15.8	0.7	8.3	21.7	0.9	5.4	37.5	0.8	6.8
Nov.	6.2	21.8	28.0	1.2	9.0	1.6	0.1	4.9	29.6	0.6	6.8
Dec.	10.8	8.9	19.7	0.8	9.9	1.7	0.1	3.7	21.4	0.4	6.6
2003 Jan.	6.6	11.1	17.7	0.7	9.5	7.5	0.3	4.0	25.2	0.5	6.6
Feb.	6.3	16.1	22.4	0.9	10.5	14.3	0.6	4.7	36.7	0.7	7.4
Mar.	8.8	18.9	27.6	1.2	11.8	22.8	0.9	4.7	50.4	1.0	8.0
Apr.	6.3	12.6	18.9	0.8	11.2	21.1	0.8	5.2	40.0	0.8	8.0
May	3.6	21.0	24.6	1.0	11.5	24.6	0.9	5.9	49.1	1.0	8.5
June ⁶⁾	5.3	9.7	15.0	0.6	11.5	2.3	0.1	5.6	17.3	0.3	8.3

Source: ECB.

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

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

3) Loans, with other components of credit, are shown without seasonal adjustment on page 20*.

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

M3 ²⁾				Loans to other euro area residents (excluding general government) ³⁾		
Marketable instruments ⁶⁾		Total	Index ⁴⁾	Total	Index ⁴⁾	
Total	Index ⁴⁾					
9	10	11	12	13	14	
789.1	103.50	5,391.1	99.28	6,513.1	99.91	2001 Dec.
778.5	102.73	5,407.0	99.64	6,534.3	100.19	2002 Jan.
780.9	102.95	5,407.3	99.63	6,558.6	100.59	Feb.
784.5	103.49	5,432.0	100.12	6,595.8	101.19	Mar.
787.6	104.00	5,467.2	100.84	6,625.1	101.74	Apr.
800.7	105.67	5,499.3	101.53	6,661.8	102.45	May
802.2	105.75	5,518.3	101.98	6,660.8	102.56	June
809.9	106.70	5,558.2	102.60	6,680.5	102.79	July
823.9	108.45	5,597.3	103.32	6,718.4	103.38	Aug.
838.3	110.30	5,645.8	104.21	6,737.2	103.69	Sep.
838.6	110.33	5,683.0	104.91	6,757.2	104.04	Oct.
843.6	111.22	5,717.1	105.58	6,764.4	104.22	Nov.
853.7	112.55	5,752.4	106.16	6,778.5	104.67	Dec.
879.4	114.50	5,778.7	106.90	6,806.3	105.12	2003 Jan.
883.3	114.95	5,819.2	107.64	6,842.3	105.75	Feb.
858.9	111.78	5,843.7	108.12	6,843.3	105.88	Mar.
903.6	117.00	5,925.4	109.60	6,873.6	106.47	Apr.
884.7	114.79	5,948.4	110.20	6,908.9	107.20	May
882.4	114.46	5,967.5	110.47	6,913.1	107.21	June ⁶⁾

M3 ²⁾							Loans to other euro area residents (excluding general government) ³⁾			
Marketable instruments ⁶⁾			Total	Monthly growth rate ⁴⁾ (%)	Annual growth rate ⁴⁾ (%)	3-month moving average (centred) (%)	Total	Monthly growth rate ⁴⁾ (%)	Annual growth rate ⁴⁾ (%)	
Total	Monthly growth rate ⁴⁾ (%)	Annual growth rate ⁴⁾ (%)								
12	13	14	15	16	17	18	19	20	21	
-5.9	-0.7	13.9	19.3	0.4	7.7	7.6	18.7	0.3	5.7	2002 Jan.
1.7	0.2	13.4	-0.1	0.0	7.3	7.4	26.2	0.4	5.6	Feb.
4.1	0.5	12.8	26.2	0.5	7.2	7.2	38.7	0.6	5.5	Mar.
3.9	0.5	12.6	39.4	0.7	7.3	7.3	36.0	0.5	5.5	Apr.
12.6	1.6	12.9	37.4	0.7	7.5	7.3	46.4	0.7	5.8	May
0.6	0.1	10.9	24.4	0.4	7.1	7.2	6.9	0.1	5.4	June
7.2	0.9	10.2	33.6	0.6	7.0	7.0	15.3	0.2	5.1	July
13.3	1.6	9.9	38.9	0.7	7.0	7.0	38.4	0.6	5.4	Aug.
14.1	1.7	10.8	48.2	0.9	7.1	7.0	19.9	0.3	5.1	Sep.
0.2	0.0	7.8	37.7	0.7	6.9	7.0	22.6	0.3	4.9	Oct.
6.8	0.8	8.1	36.4	0.6	7.0	7.0	12.0	0.2	4.4	Nov.
10.1	1.2	8.7	31.5	0.5	6.9	7.1	29.1	0.4	4.8	Dec.
14.8	1.7	11.5	40.0	0.7	7.3	7.4	29.3	0.4	4.9	2003 Jan.
3.4	0.4	11.7	40.1	0.7	8.0	7.8	40.2	0.6	5.1	Feb.
-24.4	-2.8	8.0	26.0	0.4	8.0	8.2	8.9	0.1	4.6	Mar.
40.1	4.7	12.5	80.2	1.4	8.7	8.4	37.7	0.6	4.6	Apr.
-17.1	-1.9	8.6	32.1	0.5	8.5	8.5	47.6	0.7	4.6	May
-2.6	-0.3	8.2	14.7	0.2	8.3	.	0.6	0.0	4.5	June ⁶⁾

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

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

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

Table 2.4 (cont'd)

Monetary aggregates ¹⁾ and counterparts

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

5. Main counterparts of M3: levels at the end of the period

	Longer-term MFI liabilities				Credit ²⁾				Net external assets	Fixed assets
	Deposits with agreed maturity over 2 years	Deposits redeemable at notice over 3 months	Debt securities over 2 years	Capital and reserves	Credit to general government	Credit to other euro area residents	Of which loans	Index Dec. 01 =100 ³⁾		
2001 Dec.	1,169.1	115.8	1,613.6	995.2	2,026.9	7,424.4	6,519.3	100.00	84.7	180.0
2002 Jan.	1,173.2	112.3	1,632.9	1,007.5	2,051.1	7,444.4	6,534.4	100.19	71.2	177.5
Feb.	1,174.7	111.2	1,638.8	1,011.5	2,055.3	7,465.4	6,548.7	100.44	68.0	176.6
Mar.	1,178.2	109.9	1,655.8	1,010.7	2,081.7	7,513.2	6,606.1	101.35	54.0	176.4
Apr.	1,177.3	108.0	1,650.2	1,004.6	2,061.7	7,550.9	6,641.2	101.99	52.1	176.2
May	1,179.6	106.8	1,660.6	1,008.8	2,071.5	7,573.6	6,659.7	102.42	90.7	176.4
June	1,181.7	106.6	1,655.2	985.8	2,069.1	7,598.0	6,691.1	103.02	111.3	176.2
July	1,180.4	106.6	1,670.1	993.4	2,065.9	7,587.0	6,692.6	102.98	107.5	176.7
Aug.	1,168.9	106.8	1,687.1	1,004.3	2,053.0	7,592.5	6,692.3	102.98	128.8	177.7
Sep.	1,169.5	107.2	1,680.8	1,015.9	2,073.9	7,626.6	6,726.8	103.53	138.7	178.3
Oct.	1,170.5	106.2	1,688.7	1,014.0	2,068.8	7,657.4	6,742.7	103.81	165.0	179.3
Nov.	1,174.0	105.7	1,698.5	1,016.2	2,083.6	7,678.1	6,754.5	104.07	198.8	177.0
Dec.	1,189.5	105.8	1,689.7	1,006.5	2,057.8	7,721.2	6,781.5	104.72	213.1	179.5
2003 Jan.	1,191.5	103.7	1,684.5	1,016.3	2,104.4	7,747.0	6,804.7	105.10	189.0	176.3
Feb.	1,198.4	102.5	1,693.7	1,009.4	2,126.8	7,776.5	6,831.3	105.58	194.4	174.9
Mar.	1,205.4	100.9	1,704.4	999.5	2,133.5	7,806.9	6,854.9	106.06	200.2	172.7
Apr.	1,202.1	98.3	1,709.9	995.6	2,146.6	7,879.7	6,891.4	106.74	190.2	170.8
May	1,208.4	96.9	1,714.3	991.4	2,175.9	7,910.5	6,907.3	107.18	224.4	171.3
June ^(p)	1,212.6	95.5	1,734.4	1,000.7	2,161.2	7,942.0	6,944.9	107.71	285.1	170.4

6. Main counterparts of M3: flows ⁴⁾

	Longer-term MFI liabilities				Credit ²⁾				Net external assets	Fixed assets
	Deposits with agreed maturity over 2 years	Deposits redeemable at notice over 3 months	Debt securities over 2 years	Capital and reserves	Credit to general government	Credit to other euro area residents	Of which loans	Annual growth rate ³⁾ (%)		
2002 Jan.	3.6	-3.6	10.8	14.2	18.7	17.5	12.6	5.7	-13.3	-2.5
Feb.	1.6	-1.0	9.2	-0.8	3.9	24.9	16.2	5.6	-8.2	-0.9
Mar.	3.7	-1.3	18.8	2.7	22.1	48.5	59.0	5.5	-5.6	0.0
Apr.	-0.2	-1.9	1.3	-5.2	-18.5	44.6	41.7	5.5	-3.0	-0.2
May	3.5	-1.2	20.0	3.7	6.9	32.1	28.2	5.8	39.0	0.2
June	3.3	-0.2	9.0	-17.1	0.1	32.5	39.3	5.4	41.0	-0.2
July	1.3	0.0	13.8	9.6	-3.8	-15.1	-2.9	5.1	1.5	0.5
Aug.	2.2	0.2	2.8	9.0	-14.0	7.1	0.3	5.4	14.1	1.0
Sep.	1.0	0.4	12.0	9.3	14.3	40.3	35.4	5.1	18.1	0.6
Oct.	1.3	-1.0	9.0	0.4	-3.0	31.3	18.6	5.0	29.7	0.9
Nov.	3.7	-0.5	13.4	2.4	15.1	22.2	16.7	4.4	34.9	-2.3
Dec.	16.5	0.1	-1.8	8.7	-6.1	56.8	42.0	4.7	21.8	1.7
2003 Jan.	-2.3	-2.1	6.5	11.0	21.3	28.1	24.7	4.9	7.2	-2.0
Feb.	6.9	-1.2	10.1	-4.3	15.5	35.2	30.8	5.1	10.6	-1.5
Mar.	7.2	-1.6	12.4	-5.4	9.2	39.1	31.4	4.7	13.9	-0.2
Apr.	-2.7	-2.6	9.9	-0.1	15.8	71.7	44.0	4.7	-4.4	-1.9
May	7.4	-1.3	19.0	-6.9	26.7	42.4	28.1	4.6	41.3	0.5
June ^(p)	3.6	-1.5	11.3	9.9	-14.5	25.4	34.0	4.5	56.5	-0.8

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

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

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

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

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

	Non-monetary financial intermediaries except insurance corporations and pension funds			Insurance corporations and pension funds			General government							
	Total		Index Dec.01 =100 ²⁾	Total		Index Dec.01 =100 ²⁾	Central government ³⁾	Other general government					Total	Index Dec.01 =100 ²⁾
	1	Up to 1 year		2	Up to 1 year			3	State government		Local government				Social security funds
			8			Over 5 years			9	Over 5 years	10	11				12
13	14													
2001 Q3	409.0	256.8	93.7	37.4	26.9	107.3	167.3	293.9	254.1	349.7	312.0	18.9	829.8	98.0
Q4	434.4	276.0	100.0	34.9	24.8	100.0	170.1	298.3	252.0	362.9	322.3	16.4	847.7	100.0
2002 Q1	459.4	305.3	105.9	38.9	28.3	111.3	180.3	294.0	248.2	361.8	317.9	16.4	852.6	100.6
Q2	461.1	303.4	106.3	42.5	30.5	120.8	163.0	280.9	245.8	366.6	314.5	19.5	830.1	98.0
Q3	452.4	288.0	104.3	42.1	30.1	113.6	156.4	274.7	241.6	367.8	315.6	21.9	820.8	96.9
Q4	453.9	288.0	105.4	33.0	19.7	88.9	155.2	277.7	237.0	382.8	327.1	21.2	836.8	98.8
2003 Q1 ⁴⁾	470.2	301.0	107.5	42.4	30.0	119.3	158.7	267.2	229.2	382.2	330.0	21.1	829.1	97.8

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

	Non-monetary financial intermediaries except insurance corporations and pension funds			Insurance corporations and pension funds			General government							
	Total		Annual growth rate ²⁾ (%)	Total		Annual growth rate ²⁾ (%)	Central government ³⁾	Other general government					Total	Annual growth rate ²⁾ (%)
	1	Up to 1 year		2	Up to 1 year			3	State government		Local government				Social security funds
			8			Over 5 years			9	Over 5 years	10	11				12
13	14													
2001 Q4	27.5	21.3	12.0	-2.5	-2.1	11.5	1.9	4.4	-2.1	13.2	10.3	-2.5	16.9	-0.9
2002 Q1	25.6	29.8	10.5	3.9	3.5	7.5	10.1	-4.3	-3.8	-1.1	-4.4	0.1	4.8	0.0
Q2	1.6	-1.8	9.0	3.3	2.1	17.4	-16.2	-13.1	-2.4	4.8	-3.5	3.1	-21.4	-0.6
Q3	-8.7	-15.4	11.3	-2.5	-0.4	5.9	-6.7	-6.8	-4.7	1.2	1.1	2.4	-9.9	-1.1
Q4	4.7	3.4	5.4	-9.2	-10.5	-11.1	-0.8	3.1	-4.6	15.0	11.5	-0.7	16.6	-1.2
2003 Q1 ⁴⁾	9.0	5.1	1.5	11.3	10.3	7.2	2.2	-10.5	-7.9	-0.6	3.2	-0.1	-9.0	-2.8

Source: ECB.

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

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

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

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

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

	Non-financial corporations					Consumer credit ³⁾				
	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Total	Index Dec.01 =100 ²⁾	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Total	Index Dec.01 =100 ²⁾
	1	2	3	4	5	6	7	8	9	10
2001 Q3	1,027.2	467.3	1,372.1	2,866.6	98.7	100.6	170.7	219.6	490.9	98.9
Q4	1,019.0	489.8	1,394.5	2,903.3	100.0	102.5	170.4	224.2	497.1	100.0
2002 Q1	1,018.8	494.8	1,418.9	2,932.5	100.8	99.3	170.5	226.5	496.2	99.8
Q2	1,008.4	502.7	1,434.1	2,945.2	102.1	102.2	173.6	230.1	505.9	101.3
Q3	992.9	505.4	1,450.4	2,948.8	102.2	104.1	175.6	233.8	513.5	102.4
Q4	980.8	514.3	1,477.2	2,972.3	103.5	102.2	179.1	236.4	517.8	103.8
2003 Q1 ^(p)	991.3	512.6	1,487.3	2,991.3	104.6	110.9	176.0	208.1	495.0	103.1

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

	Non-financial corporations					Consumer credit ³⁾				
	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Total	Annual growth rate ²⁾ (%)	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Total	Annual growth rate ²⁾ (%)
	1	2	3	4	5	6	7	8	9	10
2001 Q4	-9.1	23.2	22.4	36.5	7.8	1.8	-0.7	4.6	5.7	4.2
2002 Q1	-2.1	4.7	20.3	22.8	5.0	-4.2	1.2	2.3	-0.7	4.0
Q2	-2.3	13.3	27.5	38.6	4.4	2.9	0.7	3.7	7.3	3.4
Q3	-13.1	0.2	14.9	2.0	3.5	1.9	0.0	3.7	5.6	3.6
Q4	-8.4	12.8	34.8	39.2	3.5	2.5	3.0	1.5	7.0	3.8
2003 Q1 ^(p)	13.1	2.3	16.2	31.6	3.8	8.3	-4.6	-7.5	-3.8	3.2

Source: ECB.

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

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

Households												
Lending for house purchase ³⁾					Other lending ⁵⁾					Total	Index Dec.01 =100 ²⁾	
Up to 1 year	Over 1 and up to 5 years	Over 5 years	Total	Index Dec.01 =100 ²⁾	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Total	Index Dec.01 =100 ²⁾			
11	12	13	14	15	16	17	18	19	20	21	22	
22.5	61.1	1,907.4	1,991.0	98.6	153.4	104.2	368.6	626.2	99.4	3,108.8	98.8	2001 Q3
22.7	61.0	1,937.0	2,020.6	100.0	152.8	105.3	370.3	628.3	100.0	3,146.7	100.0	Q4
23.1	60.7	1,975.0	2,058.7	101.9	150.6	104.7	364.5	619.8	99.5	3,175.4	101.1	2002 Q1
23.7	60.7	2,019.1	2,103.5	104.1	157.6	107.2	367.5	632.3	101.7	3,242.3	103.2	Q2
24.6	60.7	2,059.1	2,144.4	106.1	151.3	103.7	370.0	625.0	101.1	3,283.5	104.5	Q3
25.8	64.9	2,087.3	2,177.9	107.7	157.1	98.9	370.0	626.0	101.7	3,322.3	105.9	Q4
16.1	69.0	2,125.5	2,210.6	109.3	145.7	94.1	405.3	645.1	102.7	3,351.0	107.0	2003 Q1 ^(p)

Households												
Lending for house purchase ³⁾					Other lending ⁵⁾					Total	Annual growth rate ²⁾ (%)	
Up to 1 year	Over 1 and up to 5 years	Over 5 years	Total	Annual growth rate ²⁾ (%)	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Total	Annual growth rate ²⁾ (%)			
11	12	13	14	15	16	17	18	19	20	21	22	
0.1	-0.1	29.2	29.3	7.5	-0.6	2.2	2.3	4.0	1.7	39.0	5.8	2001 Q4
0.4	-0.4	38.1	38.1	7.2	-1.7	-0.3	-1.2	-3.1	0.6	34.2	5.4	2002 Q1
0.6	0.0	44.2	44.8	7.7	7.1	2.8	3.7	13.7	1.4	65.8	5.7	Q2
0.9	0.0	39.6	40.5	7.7	-6.3	-1.5	3.8	-4.0	1.7	42.2	5.8	Q3
1.2	2.3	27.8	31.3	7.7	2.4	0.3	1.4	4.1	1.7	42.9	5.9	Q4
-9.5	4.2	38.3	32.9	7.3	-9.1	-2.2	17.4	6.1	3.2	34.9	5.9	2003 Q1 ^(p)

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

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

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

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

	Non-monetary financial intermediaries except insurance corporations and pension funds					Insurance corporations and pension funds					General government					
	Total ²⁾				Index Dec.01 =100 ³⁾	Total ²⁾				Index Dec.01 =100 ³⁾	Central government	Other general government			Total	Index Dec.01 =100 ³⁾
	Over-night	With agreed maturity	Repos			Over-night	With agreed maturity	Repos				State government	Local government	Social security funds		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
2001 Q3	455.3	162.7	201.8	85.6	98.8	487.8	39.3	426.9	17.9	98.5	147.8	33.3	67.4	60.4	308.9	103.3
Q4	465.8	157.9	217.3	85.3	100.0	495.4	48.0	427.5	16.4	100.0	139.0	30.0	68.9	61.0	299.0	100.0
2002 Q1	485.5	157.8	228.8	92.8	103.8	498.6	43.9	433.0	17.7	100.6	157.5	31.0	64.2	61.8	314.5	105.4
Q2	492.4	164.0	229.9	93.0	104.8	503.9	48.4	432.9	19.0	101.7	155.0	34.2	65.7	59.8	314.7	105.4
Q3	488.5	158.2	219.4	105.2	106.4	506.3	50.1	437.9	14.4	102.2	146.3	34.3	63.8	55.0	299.4	99.1
Q4	483.4	153.7	226.0	97.1	105.5	522.8	55.9	445.6	17.9	105.5	136.4	31.7	69.2	52.4	289.8	95.9
2003 Q1 ⁴⁾	524.7	166.4	250.6	99.6	116.2	535.2	59.7	454.0	18.2	107.8	170.9	32.2	65.9	53.1	322.1	104.7

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

	Non-monetary financial intermediaries except insurance corporations and pension funds					Insurance corporations and pension funds					General government					
	Total ²⁾				Annual growth rate ³⁾ (%)	Total ²⁾				Annual growth rate ³⁾ (%)	Central government	Other general government			Total	Annual growth rate ³⁾ (%)
	Over-night	With agreed maturity	Repos			Over-night	With agreed maturity	Repos				State government	Local government	Social security funds		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
2001 Q4	5.7	-4.7	10.5	-0.2	4.2	7.6	8.8	0.6	-1.4	3.8	-8.8	-3.4	1.5	0.7	-10.0	-6.9
2002 Q1	17.7	0.0	9.6	7.4	5.5	3.0	-4.2	5.3	1.3	3.1	19.0	1.0	-4.7	0.7	16.1	3.8
Q2	4.8	5.8	1.4	-0.4	4.2	5.3	4.5	-0.1	1.2	3.6	-2.5	3.3	1.5	-2.1	0.2	-2.9
Q3	7.3	-6.2	1.2	12.2	7.7	2.5	1.7	5.1	-4.6	3.8	-12.5	0.1	-1.9	-4.7	-19.0	-4.1
Q4	-3.9	-4.5	6.1	-6.5	5.5	16.5	5.8	7.7	3.5	5.5	-9.9	-2.6	5.5	-2.6	-9.5	-4.1
2003 Q1 ⁴⁾	48.9	13.4	24.8	11.0	12.0	11.6	3.9	7.9	0.4	7.2	28.9	0.5	-3.3	0.6	26.7	-0.6

Source: ECB.

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

2) Including deposits redeemable at notice.

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

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

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

	Non-financial corporations						Households ²⁾					
	Overnight	With agreed maturity	Redeemable at notice	Repos	Total	Index Dec.01 =100 ³⁾	Overnight	With agreed maturity	Redeemable at notice	Repos	Total	Index Dec.01 =100 ³⁾
	1	2	3	4	5	6	7	8	9	10	11	12
2001 Q3	514.8	318.4	25.4	32.0	890.7	91.5	963.6	1,203.8	1,305.3	84.6	3,557.3	96.5
Q4	577.1	335.2	27.5	36.2	976.0	100.0	1,043.5	1,194.6	1,365.7	76.6	3,680.4	100.0
2002 Q1	529.1	344.5	27.5	33.8	934.9	95.7	1,039.1	1,180.1	1,382.6	80.6	3,682.4	100.1
Q2	555.7	337.5	27.7	37.0	957.9	99.9	1,076.3	1,174.7	1,382.0	77.0	3,710.0	100.9
Q3	562.3	337.9	28.7	36.4	965.3	100.7	1,066.7	1,172.2	1,391.8	78.4	3,709.0	100.9
Q4	596.9	340.3	30.5	34.7	1,002.4	105.6	1,117.7	1,180.8	1,435.9	74.7	3,809.0	103.3
2003 Q1 ⁴⁾	561.9	333.2	34.4	32.4	959.7	101.8	1,126.5	1,167.5	1,472.6	70.6	3,835.7	104.0

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

	Non-financial corporations						Households ²⁾					
	Overnight	With agreed maturity	Redeemable at notice	Repos	Total	Annual growth rate ³⁾ (%)	Overnight	With agreed maturity	Redeemable at notice	Repos	Total	Annual growth rate ³⁾ (%)
	1	2	3	4	5	6	7	8	9	10	11	12
2001 Q4	62.1	14.4	2.0	4.3	82.8	12.4	80.1	-4.1	60.3	-8.0	128.3	10.4
2002 Q1	-48.5	9.2	0.0	-2.5	-41.8	8.0	-4.5	-10.1	15.1	4.0	4.5	6.5
Q2	33.0	4.6	0.2	3.0	40.8	10.3	36.9	-5.1	1.6	-3.7	29.7	5.7
Q3	5.6	1.4	0.9	0.0	8.0	10.1	-9.2	-2.8	9.7	1.4	-0.8	4.5
Q4	38.3	7.7	2.8	-1.7	47.1	5.6	40.5	8.6	43.4	-3.7	88.8	3.3
2003 Q1 ⁴⁾	-34.1	-6.2	4.0	-2.3	-36.9	6.3	9.3	-15.9	36.9	-4.1	23.2	3.8

Source: ECB.

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

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

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

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

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

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

2. Flows ⁴⁾

	Loans to non-residents							Holdings of securities other than shares issued by non-residents								
	Banks ¹⁾²⁾		Non-banks				Total	Annual growth rate ³⁾ (%)	Banks ¹⁾		Non-banks				Total	Annual growth rate ³⁾ (%)
	Total	Annual growth rate ³⁾ (%)	General govern- ment	Other	Total	Annual growth rate ³⁾ (%)			Total	Annual growth rate ³⁾ (%)	General govern- ment	Other	Total	Annual growth rate ³⁾ (%)		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
2001 Q4	29.2	14.0	0.1	6.1	6.2	16.0	35.4	14.7	26.0	33.3	16.7	-2.1	14.6	7.3	40.6	14.3
2002 Q1	-17.3	4.4	3.6	11.8	15.4	6.3	-2.0	5.1	25.6	35.7	-10.9	-2.8	-13.7	0.9	11.9	10.7
Q2	50.2	9.1	-3.6	18.1	14.5	10.6	64.7	9.7	-3.8	24.7	-34.1	27.5	-6.6	-1.2	-10.4	6.5
Q3	28.4	8.5	3.0	5.3	8.3	7.4	36.7	8.1	2.3	24.1	4.6	14.0	18.6	2.9	20.9	9.2
Q4	91.6	14.2	-4.3	-0.2	-4.5	5.5	87.1	11.2	1.4	10.9	-5.2	12.1	6.9	1.3	8.3	4.4
2003 Q1 ^(p)	55.6	21.5	-8.9	20.5	11.6	5.0	67.2	15.5	14.1	5.8	-9.7	15.9	6.2	5.5	20.3	5.6

Source: ECB.

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

2) Deposits placed by MFIs with banks located outside the euro area are included.

Table 2.7 (cont'd)

Holdings of shares and other equity issued by non-residents ⁵⁾						Deposits held by non-residents								
Banks ¹⁾		Other		Total	Index Dec.01 =100 ³⁾	Banks ¹⁾		Non-banks				Total	Index Dec.01 =100 ³⁾	
Total	Index Dec.01 =100 ³⁾	Total	Index Dec.01 =100 ³⁾			Total	Index Dec.01 =100 ³⁾	General government	Other	Total	Index Dec.01 =100 ³⁾			
17	18	19	20	21	22	23	24	25	26	27	28	29	30	
63.6	90.9	89.9	99.2	153.5	95.6	1,710.8	100.7	93.0	588.5	681.5	97.2	2,392.3	99.7	2001 Q3
73.1	100.0	89.8	100.0	162.9	100.0	1,718.4	100.0	95.3	615.0	710.3	100.0	2,428.8	100.0	Q4
77.1	104.5	98.5	110.9	175.6	108.0	1,740.4	100.4	99.0	636.8	735.9	103.3	2,476.3	101.3	2002 Q1
77.0	104.2	100.9	113.4	177.9	109.3	1,605.9	98.9	96.2	607.6	703.8	104.6	2,309.7	100.6	Q2
79.5	107.6	94.3	105.9	173.9	106.7	1,644.0	99.3	102.5	613.5	715.9	105.8	2,359.9	101.2	Q3
78.7	107.4	98.7	113.2	177.4	110.6	1,607.9	99.9	98.7	591.2	689.9	104.5	2,297.8	101.2	Q4
-	-	-	-	-	-	1,611.1	101.8	98.4	604.4	702.8	108.4	2,313.9	103.7	2003 Q1 ⁶⁾

Holdings of shares and other equity issued by non-residents ⁵⁾						Deposits held by non-residents								
Banks ¹⁾		Other		Total	Annual growth rate ³⁾ (%)	Banks ¹⁾		Non-banks				Total	Annual growth rate ³⁾ (%)	
Total	Annual growth rate ³⁾ (%)	Total	Annual growth rate ³⁾ (%)			Total	Annual growth rate ³⁾ (%)	General government	Other	Total	Annual growth rate ³⁾ (%)			
17	18	19	20	21	22	23	24	25	26	27	28	29	30	
6.3	11.8	0.8	12.9	7.1	12.4	-12.0	8.7	2.3	17.5	19.8	18.0	7.8	11.2	2001 Q4
3.3	12.0	9.8	6.1	13.0	8.4	7.6	-2.9	4.2	19.0	23.2	9.9	30.8	0.6	2002 Q1
-0.2	19.1	2.3	5.5	2.1	10.6	-26.1	-4.2	-2.8	12.3	9.5	10.9	-16.6	-0.1	Q2
2.5	18.4	-6.7	6.8	-4.1	11.7	5.8	-1.4	6.1	2.2	8.2	8.9	14.1	1.5	Q3
-0.1	7.4	6.5	13.2	6.3	10.6	9.9	-0.1	-3.7	-5.1	-8.9	4.5	1.0	1.2	Q4
-	-	-	-	-	-	31.0	1.4	-0.3	26.2	25.9	5.0	56.8	2.5	2003 Q1 ⁶⁾

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

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

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

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

	MFIs								Non-MFIs							
	All currencies 1	Euro ²⁾ 2	Other EU currencies 3	Other currencies 4	Other currencies				All currencies 9	Euro ²⁾ 10	Other EU currencies 11	Other currencies 12	Other currencies			
					USD 5	JPY 6	CHF 7	Other 8					USD 13	JPY 14	CHF 15	Other 16
2001 Q3	4,108.4	3,628.3	48.9	431.2	300.6	41.7	71.0	17.9	5,700.0	5,503.7	28.2	168.1	125.7	19.4	10.8	12.2
Q4	4,171.9	3,699.5	46.6	425.9	307.6	33.5	67.2	17.6	5,916.6	5,715.8	26.0	174.8	127.4	23.9	10.5	13.0
2002 Q1	4,134.6	3,645.4	46.1	443.0	315.8	40.6	65.6	21.0	5,915.9	5,712.5	28.8	174.6	126.8	22.4	10.7	14.6
Q2	4,211.9	3,771.7	41.3	398.8	276.4	40.8	62.8	18.8	5,978.9	5,791.1	26.7	161.0	115.0	22.3	10.9	12.8
Q3	4,219.7	3,799.3	38.8	381.6	266.0	37.1	58.1	20.4	5,968.5	5,782.3	27.3	158.9	115.6	20.8	9.5	13.0
Q4	4,419.8	4,014.2	36.6	369.0	252.9	33.2	60.3	22.6	6,107.4	5,929.8	24.2	153.4	109.0	20.1	11.3	13.0
2003 Q1 ^(p)	4,476.2	4,076.4	38.8	361.0	251.8	32.1	58.6	18.5	6,177.3	5,999.5	25.6	152.2	107.4	20.9	11.7	12.2

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

	Banks ³⁾								Non-banks							
	All currencies 1	Euro ²⁾ 2	Other EU currencies 3	Other currencies 4	Other currencies				All currencies 9	Euro ²⁾ 10	Other EU currencies 11	Other currencies 12	Other currencies			
					USD 5	JPY 6	CHF 7	Other 8					USD 13	JPY 14	CHF 15	Other 16
2001 Q3	1,710.8	664.3	140.3	906.2	745.2	53.5	76.3	31.2	681.5	297.7	69.2	314.5	263.0	18.4	17.1	16.0
Q4	1,718.4	631.1	132.3	955.1	799.1	48.5	75.3	32.1	710.3	308.1	60.8	341.4	293.9	16.8	18.1	12.6
2002 Q1	1,740.4	661.8	144.8	933.8	781.0	44.4	74.6	33.8	735.9	312.7	66.6	356.6	302.8	20.0	18.9	14.8
Q2	1,605.9	648.9	141.6	815.4	665.8	40.5	73.4	35.7	703.8	322.4	63.3	318.1	268.7	19.4	17.8	12.2
Q3	1,644.0	703.2	147.8	793.0	649.0	37.7	73.0	33.3	715.9	335.7	68.2	312.1	261.7	17.7	16.4	16.4
Q4	1,607.9	701.0	140.7	766.2	634.9	33.5	68.8	29.0	689.9	332.5	71.9	285.5	242.9	15.5	13.2	13.9
2003 Q1 ^(p)	1,611.1	740.9	133.8	736.3	598.7	33.9	70.6	33.1	702.8	363.4	66.6	272.8	224.8	17.6	14.0	16.4

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

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

Source: ECB.

1) Levels at the end of the period. Data are partially estimated. For further details, see the technical notes.

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

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

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

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

	MFIs								Non-MFIs							
	All currencies	Euro ²⁾	Other EU currencies	Other currencies					All currencies	Euro ²⁾	Other EU currencies	Other currencies				
					USD	JPY	CHF	Other					USD	JPY	CHF	Other
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
2001 Q3	4,089.7	-	-	-	-	-	-	-	7,251.7	6,907.3	30.9	313.5	178.2	52.1	77.3	5.8
Q4	4,180.4	-	-	-	-	-	-	-	7,367.0	7,025.2	29.8	312.0	181.6	47.8	77.5	5.1
2002 Q1	4,133.3	-	-	-	-	-	-	-	7,458.8	7,106.7	30.5	321.5	187.4	51.0	76.8	6.3
Q2	4,201.2	-	-	-	-	-	-	-	7,521.2	7,209.0	28.9	283.3	152.5	46.7	78.3	5.8
Q3	4,224.7	-	-	-	-	-	-	-	7,547.5	7,238.6	28.4	280.5	148.1	45.4	81.2	5.8
Q4	4,411.0	-	-	-	-	-	-	-	7,618.3	7,327.4	28.1	262.8	133.7	40.3	83.3	5.5
2003 Q1 ¹⁾	4,451.8	-	-	-	-	-	-	-	7,685.7	7,394.0	27.5	264.2	136.3	36.9	83.9	7.1

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

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

6. Loans to non-residents of the euro area

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

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

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

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

									Total 9
	Deposits 1	Holdings of securities other than shares 2	Holdings of securities		Holdings of shares/ other equity 5	Holdings of investment fund shares 6	Fixed assets 7	Other assets 8	
			Up to 1 year 3	Over 1 year 4					
2001 Q3	242.4	1,293.9	62.6	1,231.4	1,053.9	192.4	105.0	90.4	2,977.9
Q4	244.6	1,309.9	63.5	1,246.5	1,219.1	209.6	108.9	98.7	3,190.8
2002 Q1	253.6	1,308.7	70.7	1,238.0	1,263.3	224.6	111.0	98.0	3,259.2
Q2	242.8	1,312.6	75.4	1,237.1	1,056.1	215.2	108.0	99.8	3,034.4
Q3	236.7	1,337.4	74.3	1,263.0	844.8	203.4	121.0	103.2	2,846.5
Q4	242.0	1,335.3	72.2	1,263.2	853.2	203.1	123.7	106.4	2,863.7
2003 Q1 ^(p)	216.9	1,331.6	70.7	1,260.9	767.0	205.4	120.0	108.5	2,749.3

2. Liabilities

				Total 4
	Deposits and loans taken 1	Investment fund shares 2	Other liabilities 3	
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	2,746.6	76.9	2,863.7
2003 Q1 ^(p)	41.0	2,629.8	78.5	2,749.3

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

	Funds by investment policy						Funds by type of investor		Total 8
	Equity funds 1	Bond funds 2	Mixed funds 3	Real estate funds 4	Other funds 5	General public funds 6	Special investors' funds 7		
								2001 Q3		738.2	1,019.1	756.0	127.0	337.7	2,241.8	736.1	2,977.9
Q4	839.6	1,031.7	810.3	134.0	375.2	2,408.1	782.7	3,190.8	
2002 Q1	862.4	1,039.3	820.3	142.3	394.8	2,464.2	794.9	3,259.2	
Q2	728.7	1,037.0	762.6	139.2	366.9	2,262.4	772.0	3,034.4	
Q3	585.2	1,063.2	699.9	145.6	352.6	2,092.3	754.2	2,846.5	
Q4	593.9	1,068.2	701.6	150.8	349.2	2,090.9	772.9	2,863.7	
2003 Q1 ^(p)	525.7	1,054.2	675.3	157.3	336.8	1,978.9	770.4	2,749.3	

Source: ECB.

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

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

								Total
	Deposits 1	Holdings of securities other than shares 2			Holdings of shares/ other equity 5	Holdings of investment fund shares 6	Other assets 7	8
			Up to 1 year 3	Over 1 year 4				
2001 Q3	41.2	30.6	4.2	26.4	636.1	16.7	13.6	738.2
Q4	39.5	29.0	3.0	26.1	735.2	19.4	16.5	839.6
2002 Q1	39.3	28.7	2.9	25.8	759.1	20.6	14.7	862.4
Q2	34.0	27.4	4.0	23.4	630.0	22.2	15.0	728.7
Q3	29.0	26.5	3.7	22.8	496.5	19.1	14.1	585.2
Q4	26.6	28.2	3.4	24.9	506.0	18.4	14.7	593.9
2003 Q1 ^(p)	24.5	30.4	3.0	27.4	438.4	16.4	16.0	525.7

2. Liabilities of equity funds

				Total
	Deposits and loans taken 1	Investment fund shares 2	Other liabilities 3	4
	2001 Q3	4.1	727.9	6.1	738.2
Q4	2.6	831.4	5.6	839.6
2002 Q1	3.5	852.7	6.1	862.4
Q2	4.4	718.7	5.6	728.7
Q3	4.1	576.0	5.1	585.2
Q4	3.9	586.3	3.6	593.9
2003 Q1 ^(p)	3.8	517.4	4.5	525.7

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 Q3	74.9	865.5	32.2	833.3	34.3	12.7	31.6	1,019.1
Q4	73.2	875.5	33.2	842.3	38.5	11.2	33.4	1,031.7
2002 Q1	77.9	874.0	37.3	836.7	42.9	11.5	33.0	1,039.3
Q2	75.9	882.2	38.5	843.8	33.2	10.8	34.9	1,037.0
Q3	78.3	902.1	37.2	865.0	32.6	11.6	38.5	1,063.2
Q4	83.9	902.8	36.5	866.3	31.9	12.3	37.2	1,068.2
2003 Q1 ^(p)	77.5	899.7	35.8	863.9	26.6	18.6	31.7	1,054.2

4. Liabilities of bond funds

				Total
	Deposits and loans taken 1	Investment fund shares 2	Other liabilities 3	4
	2001 Q3	8.1	991.2	19.8	1,019.1
Q4	8.4	1,007.3	16.0	1,031.7
2002 Q1	8.5	1,013.2	17.7	1,039.3
Q2	7.9	1,011.5	17.6	1,037.0
Q3	7.0	1,039.2	17.0	1,063.2
Q4	7.7	1,044.0	16.5	1,068.2
2003 Q1 ^(p)	8.9	1,030.5	14.7	1,054.2

Source: ECB.

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

									Total
	Deposits 1	Holdings of securities other than shares 2			Holdings of shares/ other equity 5	Holdings of investment fund shares 6	Fixed assets 7	Other assets 8	9
			Up to 1 year 3	Over 1 year 4					
2001 Q3	55.2	290.4	16.4	274.0	297.5	85.7	2.5	24.8	756.0
Q4	56.9	286.5	17.0	269.5	347.5	92.7	2.4	24.3	810.3
2002 Q1	52.6	283.8	18.1	265.7	357.0	100.3	2.3	24.4	820.3
Q2	54.2	286.9	20.6	266.3	298.8	94.6	2.1	26.0	762.6
Q3	53.0	291.7	21.3	270.4	234.3	88.1	5.2	27.7	699.9
Q4	53.9	295.6	21.2	274.4	233.0	87.7	3.4	28.0	701.6
2003 Q1 ^(p)	50.4	301.2	21.8	279.5	210.0	83.7	0.7	29.4	675.3

6. Liabilities of mixed funds

				Total
	Deposits and loans taken 1	Investment fund shares 2	Other liabilities 3	4
2001 Q3		3.3	734.4	756.0
Q4		2.9	790.9	810.3
2002 Q1		2.9	799.4	820.3
Q2		3.1	741.3	762.6
Q3		3.5	676.9	699.9
Q4		3.0	677.2	701.6
2003 Q1 ^(p)		2.9	650.0	675.3

7. Assets of real estate funds

									Total
	Deposits 1	Holdings of securities other than shares 2			Holdings of shares/ other equity 5	Holdings of investment fund shares 6	Fixed assets 7	Other assets 8	9
			Up to 1 year 3	Over 1 year 4					
2001 Q3	9.8	7.6	0.5	7.1	0.9	1.5	102.3	4.9	127.0
Q4	8.6	10.7	0.5	10.1	1.0	2.0	106.1	5.7	134.0
2002 Q1	11.5	12.9	0.6	12.3	1.1	2.1	108.3	6.4	142.3
Q2	13.5	9.8	0.6	9.2	0.9	3.9	105.1	6.0	139.2
Q3	13.3	10.7	0.6	10.1	0.8	5.1	109.5	6.2	145.6
Q4	10.9	9.5	0.5	8.9	0.7	7.0	115.8	6.9	150.8
2003 Q1 ^(p)	14.7	8.3	0.6	7.7	0.7	8.6	118.4	6.6	157.3

8. Liabilities of real estate funds

				Total
	Deposits and loans taken 1	Investment fund shares 2	Other liabilities 3	4
2001 Q3		24.8	97.9	127.0
Q4		25.9	103.3	134.0
2002 Q1		26.7	110.7	142.3
Q2		22.3	112.1	139.2
Q3		22.9	117.7	145.6
Q4		24.6	120.9	150.8
2003 Q1 ^(p)		24.0	127.9	157.3

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 Q3	196.4	912.1	820.2	151.6	96.4	65.1	2,241.8
Q4	201.0	928.7	949.2	167.0	99.1	63.2	2,408.1
2002 Q1	213.3	921.8	984.8	176.8	100.6	66.9	2,464.2
Q2	199.2	915.7	818.4	166.7	96.1	66.3	2,262.4
Q3	187.9	917.6	654.4	156.0	107.9	68.5	2,092.3
Q4	190.8	905.1	663.2	153.1	109.0	69.6	2,090.9
2003 Q1 ^(p)	165.5	882.5	599.8	155.0	104.6	71.5	1,978.9

2. Liabilities of general public funds

				Total
	Deposits and loans taken 1	Investment fund shares 2	Other liabilities 3	4
2001 Q3	37.4	2,137.4	67.0	2,241.8
Q4	36.4	2,312.9	58.8	2,408.1
2002 Q1	38.1	2,360.2	65.9	2,464.2
Q2	34.0	2,166.0	62.4	2,262.4
Q3	33.0	1,997.8	61.5	2,092.3
Q4	33.7	1,995.4	61.7	2,090.9
2003 Q1 ^(p)	34.6	1,881.4	63.0	1,978.9

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 Q3	46.0	381.8	233.7	40.7	8.6	25.3	736.1
Q4	43.6	381.2	270.0	42.6	9.8	35.6	782.7
2002 Q1	40.3	386.9	278.4	47.8	10.3	31.2	794.9
Q2	43.6	396.9	237.7	48.5	11.9	33.5	772.0
Q3	48.8	419.8	190.3	47.5	13.1	34.7	754.2
Q4	51.2	430.3	190.0	49.9	14.7	36.8	772.9
2003 Q1 ^(p)	51.4	449.1	167.1	50.3	15.4	37.0	770.4

4. Liabilities of special investors' funds

				Total
	Deposits and loans taken 1	Investment fund shares 2	Other liabilities 3	4
2001 Q3	4.2	721.4	10.5	736.1
Q4	4.6	762.8	15.3	782.7
2002 Q1	4.5	777.5	12.9	794.9
Q2	5.1	753.8	13.1	772.0
Q3	5.9	734.5	13.8	754.2
Q4	6.5	751.2	15.2	772.9
2003 Q1 ^(p)	6.5	748.4	15.5	770.4

Source: ECB.

3 Financial markets and interest rates in the euro area

Table 3.1

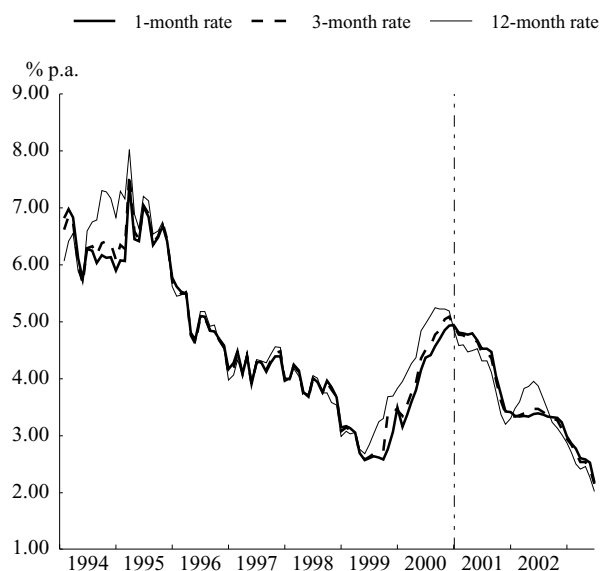
Money market interest rates ¹⁾

(percentages per annum)

	Euro area ⁴⁾					United States ⁶⁾	Japan ⁶⁾
	Overnight deposits ²⁾³⁾ 1	1-month deposits ⁵⁾ 2	3-month deposits ⁵⁾ 3	6-month deposits ⁵⁾ 4	12-month deposits ⁵⁾ 5	3-month deposits ⁶⁾ 6	3-month deposits ⁷⁾ 7
1998	3.09	3.84	3.83	3.78	3.77	5.57	0.66
1999	2.74	2.86	2.96	3.06	3.19	5.42	0.22
2000	4.12	4.24	4.40	4.55	4.78	6.53	0.28
<i>Euro area enlargement</i>							
2001	4.39	4.33	4.26	4.16	4.09	3.78	0.15
2002	3.29	3.30	3.32	3.35	3.49	1.80	0.08
2002 July	3.30	3.36	3.41	3.48	3.64	1.85	0.07
Aug.	3.29	3.33	3.35	3.38	3.44	1.78	0.07
Sep.	3.32	3.32	3.31	3.27	3.24	1.80	0.07
Oct.	3.30	3.31	3.26	3.17	3.13	1.78	0.07
Nov.	3.30	3.23	3.12	3.04	3.02	1.46	0.07
Dec.	3.09	2.98	2.94	2.89	2.87	1.41	0.06
2003 Jan.	2.79	2.86	2.83	2.76	2.71	1.37	0.06
Feb.	2.76	2.77	2.69	2.58	2.50	1.34	0.06
Mar.	2.75	2.60	2.53	2.45	2.41	1.29	0.06
Apr.	2.56	2.58	2.54	2.47	2.45	1.30	0.06
May	2.56	2.52	2.41	2.32	2.26	1.28	0.06
June	2.21	2.18	2.15	2.08	2.01	1.12	0.06
July ⁸⁾	2.08	2.13	2.13	2.09	2.07	1.11	0.05
2003 4 July	2.12	2.15	2.14	2.08	2.04	1.11	0.05
11	2.09	2.13	2.13	2.08	2.05	1.11	0.05
18	2.08	2.13	2.13	2.11	2.10	1.11	0.05
25	2.05	2.12	2.12	2.10	2.10	1.11	0.05

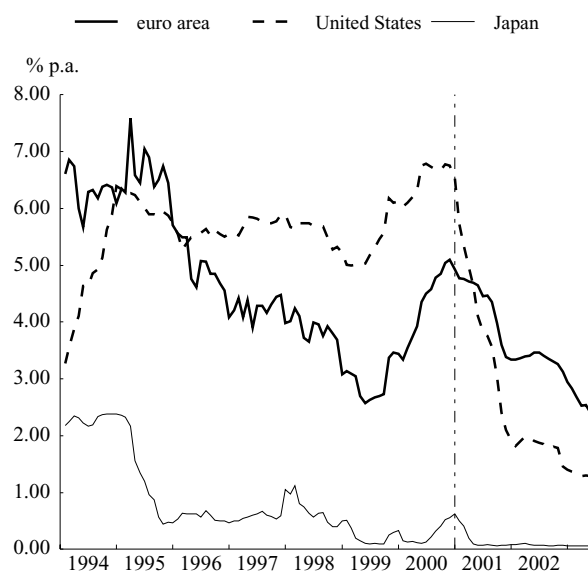
Euro area money market rates

(monthly)



3-month money market rates

(monthly)



Sources: Reuters and ECB.

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

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

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

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

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

6) London interbank offered rates (LIBOR).

Table 3.2

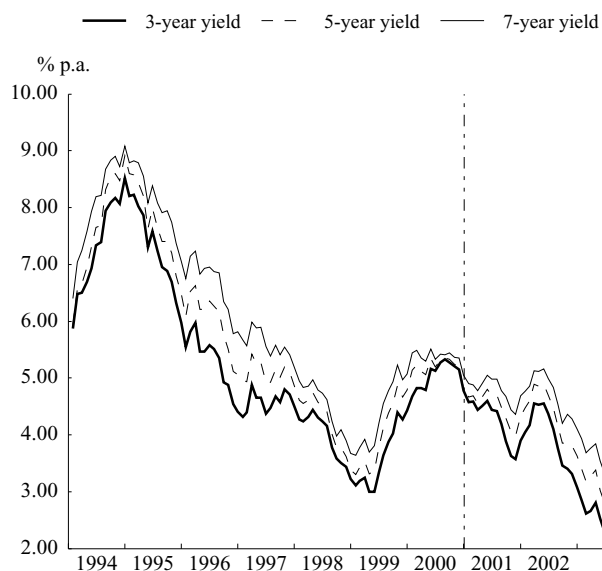
Government bond yields ¹⁾

(percentages per annum)

	Euro area ²⁾					United States	Japan
	2 years ¹	3 years ²	5 years ³	7 years ⁴	10 years ⁵	10 years ⁶	10 years ⁷
1998	3.16	3.22	3.38	3.67	4.71	5.33	1.30
1999	3.38	3.63	4.01	4.38	4.66	5.64	1.75
2000	4.90	5.03	5.19	5.37	5.44	6.03	1.76
<i>Euro area enlargement</i>							
2001	4.11	4.23	4.49	4.79	5.03	5.01	1.34
2002	3.68	3.94	4.35	4.70	4.92	4.60	1.27
2002 July	3.83	4.10	4.48	4.84	5.03	4.62	1.30
Aug.	3.47	3.76	4.15	4.54	4.73	4.24	1.26
Sep.	3.19	3.46	3.85	4.20	4.52	3.88	1.16
Oct.	3.13	3.41	3.86	4.36	4.62	3.91	1.09
Nov.	3.04	3.31	3.81	4.28	4.59	4.04	0.99
Dec.	2.84	3.08	3.63	4.10	4.41	4.03	0.97
2003 Jan.	2.64	2.85	3.40	3.93	4.27	4.02	0.84
Feb.	2.45	2.61	3.18	3.68	4.06	3.90	0.83
Mar.	2.50	2.66	3.26	3.76	4.13	3.79	0.74
Apr.	2.59	2.81	3.38	3.85	4.23	3.94	0.66
May	2.31	2.53	3.02	3.54	3.92	3.56	0.57
June	2.08	2.29	2.79	3.32	3.72	3.32	0.56
July ^(p)	2.29	2.55	3.13	3.63	4.05	3.91	1.00
2003 4 July	2.17	2.43	3.01	3.53	3.96	3.66	1.05
11	2.20	2.45	3.01	3.53	3.95	3.69	0.98
18	2.33	2.59	3.17	3.67	4.08	3.96	0.96
25	2.34	2.61	3.18	3.66	4.05	4.14	0.96

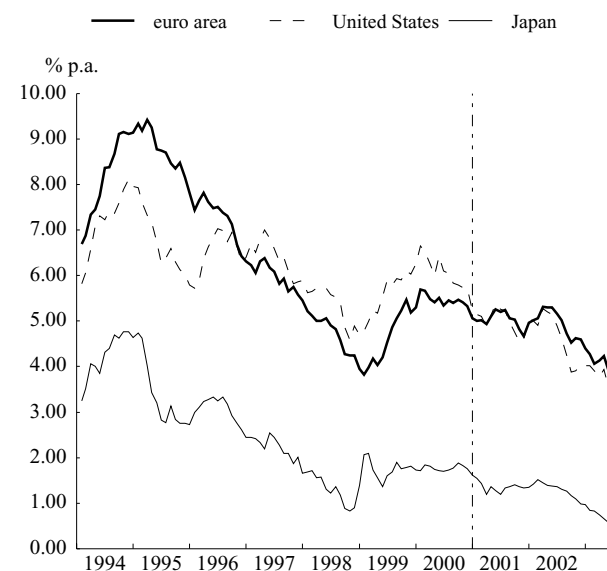
Euro area government bond yields

(monthly)



10-year government bond yields

(monthly)



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

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

Table 3.3

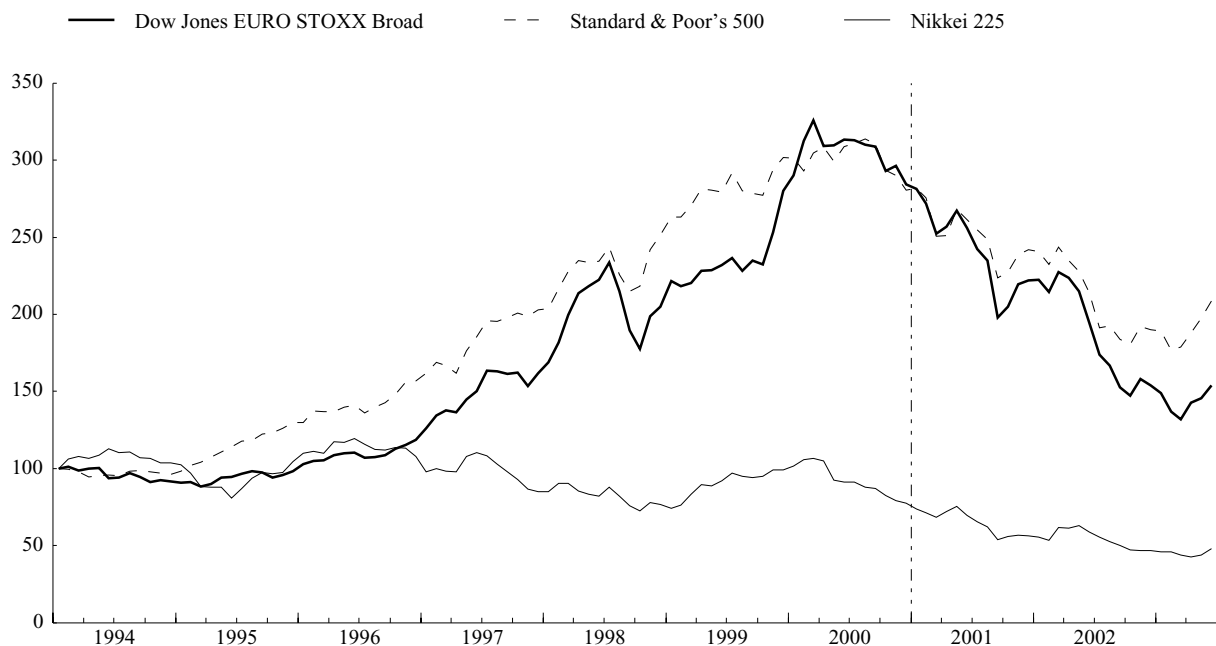
Stock market indices

(index levels, in points)¹⁾

	Dow Jones EURO STOXX indices												United States	Japan
	Benchmark		Main economic sector indices											
	Broad	50	Basic materials	Consumer cyclical	Consumer non-cyclical	Energy	Financial	Industrial	Technology	Utilities	Telecommunications	Health-care			Standard & Poor's 500	Nikkei 225
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1998	280.5	3,076.3	257.9	245.0	295.5	249.3	281.3	218.4	333.6	282.4	488.1	348.9	1,085.3	15,338.4
1999	325.8	3,787.3	279.2	262.9	327.7	286.0	295.7	285.1	470.4	306.2	717.7	392.6	1,327.8	16,829.9
2000	423.9	5,075.5	299.1	292.9	324.3	342.3	350.7	378.0	963.1	341.7	1,072.5	476.0	1,426.7	17,162.7
<i>Euro area enlargement</i>														
2001	336.3	4,049.4	296.0	228.2	303.3	341.4	321.6	310.0	530.5	309.6	541.2	540.1	1,193.8	12,114.8
2002	259.9	3,023.4	267.5	175.0	266.5	308.9	243.3	252.4	345.1	255.5	349.2	411.8	995.4	10,119.3
2002 July	241.2	2,810.6	267.8	160.9	252.1	298.6	229.2	248.8	282.1	244.0	300.4	370.6	905.5	10,352.3
Aug.	231.3	2,697.4	243.6	152.9	250.1	290.9	217.4	227.9	258.8	236.7	310.0	376.6	912.6	9,751.2
Sep.	211.8	2,450.2	227.2	140.6	241.2	274.0	193.1	215.3	229.0	221.2	283.1	337.0	870.1	9,354.8
Oct.	204.0	2,384.7	214.4	135.3	236.5	272.1	177.8	193.6	235.8	209.6	286.8	345.4	854.6	8,781.1
Nov.	219.5	2,559.0	224.2	145.4	234.8	272.4	197.0	208.8	289.6	215.2	324.5	347.1	910.1	8,699.6
Dec.	213.6	2,475.1	225.3	139.4	226.5	268.8	194.2	205.2	270.4	207.3	322.5	324.4	899.1	8,674.8
2003 Jan.	206.3	2,377.4	213.0	130.9	220.2	262.4	186.5	198.5	250.2	210.0	330.0	313.8	896.0	8,567.4
Feb.	189.8	2,170.9	185.8	121.5	196.5	245.1	172.2	186.0	226.5	198.1	309.4	274.3	836.6	8,535.8
Mar.	183.0	2,086.5	176.1	115.4	188.4	241.1	164.5	181.2	228.2	185.6	292.8	275.2	846.6	8,171.0
Apr.	197.9	2,278.2	193.4	122.5	203.9	250.0	181.0	192.0	251.6	201.0	324.8	288.7	889.6	7,895.7
May	202.0	2,303.0	196.4	124.9	202.3	249.6	187.4	198.5	258.2	208.3	324.9	304.2	935.8	8,122.1
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 ^(p)	215.8	2,456.1	217.7	137.8	205.4	260.3	205.5	215.2	273.5	214.6	340.6	307.3	992.1	9,674.7
2003 4 July	211.4	2,408.2	208.7	135.6	202.9	259.4	199.4	208.7	265.4	210.9	340.3	304.8	985.7	9,547.7
11	217.1	2,477.7	218.9	139.1	205.6	262.0	205.3	216.2	283.6	215.1	339.9	313.6	998.1	9,635.4
18	216.7	2,458.9	224.9	138.3	206.4	261.7	208.4	218.1	266.5	213.4	339.0	306.0	993.3	9,527.7
25	215.5	2,442.1	221.1	138.6	205.1	255.9	206.8	216.8	267.9	216.0	339.1	303.5	998.7	9,648.0

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

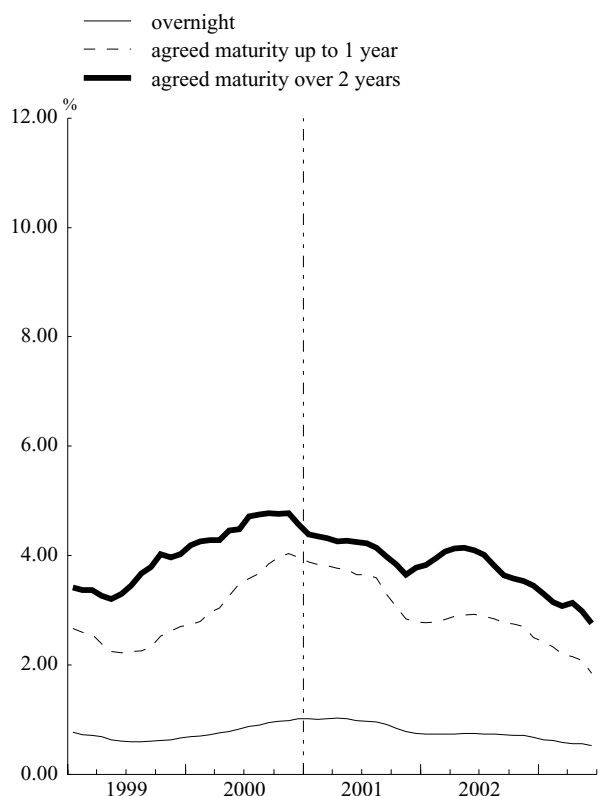
Retail bank interest rates

(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 June	0.74	2.93	2.94	4.09	2.13	3.08	6.18	5.92	9.83	5.77
July	0.74	2.89	2.90	4.02	2.13	3.02	6.16	5.79	9.78	5.68
Aug.	0.73	2.84	2.85	3.81	2.12	2.94	6.15	5.71	9.79	5.53
Sep.	0.73	2.77	2.77	3.64	2.13	2.73	6.12	5.61	9.85	5.38
Oct.	0.72	2.74	2.74	3.58	2.11	2.63	6.13	5.54	9.72	5.26
Nov.	0.71	2.70	2.69	3.53	2.11	2.55	6.10	5.50	9.70	5.21
Dec.	0.68	2.51	2.51	3.45	2.05	2.41	5.98	5.34	9.58	5.10
2003 Jan.	0.63	2.43	2.42	3.30	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	9.23	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	9.18	4.34

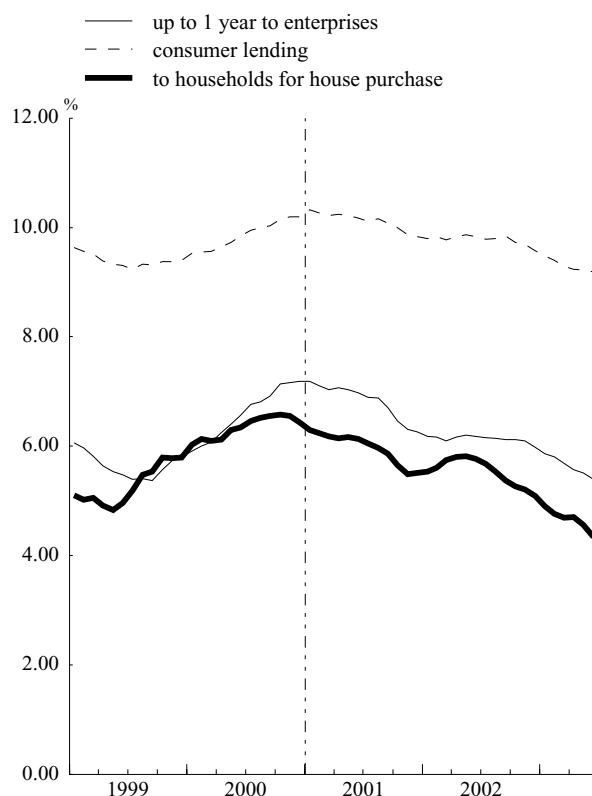
Deposit interest rates

(monthly)



Lending interest rates

(monthly)



Source: ECB.

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

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

	By euro area residents									
					In euro ¹⁾				In other	
	Issues	Redemptions	Net issues	Amounts outstanding	Issues	Redemptions	Net issues	Amounts outstanding	Issues	Redemptions
1	2	3	4	5	6	7	8	9	10	
2002 May	402.1	379.9	22.2	770.5	378.2	358.7	19.5	677.7	23.9	21.2
June	337.6	342.2	-4.6	766.2	317.0	319.1	-2.1	676.8	20.7	23.1
July	406.0	392.2	13.8	772.6	382.4	371.4	11.0	685.0	23.6	20.9
Aug.	384.5	378.1	6.4	775.6	366.2	356.8	9.3	693.1	18.3	21.3
Sep.	414.9	400.6	14.3	792.7	392.1	381.0	11.0	706.7	22.8	19.6
Oct.	468.3	456.4	11.9	806.1	441.8	433.3	8.5	715.3	26.5	23.1
Nov.	435.5	413.0	22.5	830.5	413.5	388.9	24.6	740.1	22.0	24.2
Dec.	406.1	451.6	-45.5	783.5	386.8	429.9	-43.1	696.0	19.3	21.7
2003 Jan.	545.1	487.4	57.7	840.8	518.6	462.7	55.9	751.0	26.5	24.7
Feb.	456.3	428.4	27.9	866.0	433.5	408.3	25.2	775.6	22.8	20.1
Mar.	452.0	440.7	11.3	875.7	433.0	423.1	9.9	785.3	19.0	17.6
Apr.	476.7	456.1	20.6	892.4	454.8	431.8	23.1	807.7	21.9	24.3
May	443.0	435.3	7.7	897.9	415.8	410.7	5.1	812.2	27.2	24.6

2. Long-term

	By euro area residents									
					In euro ¹⁾				In other	
	Issues	Redemptions	Net issues	Amounts outstanding	Issues	Redemptions	Net issues	Amounts outstanding	Issues	Redemptions
1	2	3	4	5	6	7	8	9	10	
2002 May	149.6	87.9	61.7	7,281.7	127.0	76.0	51.0	6,635.6	22.6	12.0
June	133.5	95.4	38.1	7,296.5	123.4	87.5	35.8	6,667.5	10.1	7.8
July	133.3	114.2	19.1	7,327.0	116.2	104.7	11.6	6,682.6	17.1	9.6
Aug.	69.7	64.7	5.0	7,329.4	59.8	55.1	4.7	6,686.8	9.9	9.6
Sep.	141.5	87.2	54.2	7,383.1	122.1	75.3	46.8	6,732.8	19.3	11.9
Oct.	124.0	92.5	31.5	7,414.0	105.9	81.7	24.2	6,757.3	18.1	10.8
Nov.	133.1	96.4	36.7	7,448.0	119.4	90.3	29.1	6,786.3	13.7	6.1
Dec.	140.9	173.6	-32.7	7,396.0	129.3	160.4	-31.2	6,754.0	11.7	13.2
2003 Jan.	179.1	134.3	44.8	7,428.4	155.9	125.1	30.7	6,785.2	23.2	9.2
Feb.	163.8	112.1	51.7	7,482.3	145.3	103.6	41.7	6,827.6	18.5	8.5
Mar.	161.2	101.4	59.8	7,535.7	145.8	92.2	53.6	6,879.3	15.4	9.1
Apr.	160.7	124.6	36.1	7,562.7	146.0	115.3	30.7	6,910.1	14.7	9.3
May	173.9	99.4	74.5	7,616.0	160.8	90.5	70.3	6,980.4	13.1	8.9

3. Total

	By euro area residents									
					In euro ¹⁾				In other	
	Issues	Redemptions	Net issues	Amounts outstanding	Issues	Redemptions	Net issues	Amounts outstanding	Issues	Redemptions
1	2	3	4	5	6	7	8	9	10	
2002 May	551.7	467.8	83.9	8,052.2	505.2	434.7	70.6	7,313.3	46.5	33.2
June	471.1	437.6	33.6	8,062.8	440.3	406.6	33.7	7,344.3	30.8	31.0
July	539.3	506.5	32.8	8,099.7	498.6	476.0	22.6	7,367.6	40.7	30.4
Aug.	454.2	442.8	11.4	8,105.1	426.0	411.9	14.1	7,379.9	28.2	30.9
Sep.	556.4	487.8	68.5	8,175.8	514.2	456.4	57.8	7,439.5	42.2	31.5
Oct.	592.3	548.9	43.4	8,220.0	547.7	515.0	32.7	7,472.6	44.6	33.9
Nov.	568.6	509.4	59.1	8,278.5	532.8	479.2	53.7	7,526.5	35.7	30.3
Dec.	547.0	625.2	-78.2	8,179.5	516.0	590.3	-74.3	7,450.0	31.0	34.9
2003 Jan.	724.2	621.8	102.5	8,269.2	674.5	587.8	86.6	7,536.1	49.7	33.9
Feb.	620.1	540.5	79.6	8,348.3	578.8	511.9	66.9	7,603.2	41.3	28.5
Mar.	613.2	542.0	71.2	8,411.4	578.8	515.3	63.5	7,664.6	34.4	26.7
Apr.	637.5	580.7	56.8	8,455.1	600.8	547.1	53.8	7,717.8	36.6	33.6
May	616.9	534.7	82.2	8,513.8	576.6	501.1	75.5	7,792.6	40.3	33.5

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

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

currencies		By non-residents of the euro area in euro ¹⁾				Total in euro ¹⁾				
		Net issues	Amounts outstanding	Issues	Redemptions	Net issues	Amounts outstanding	Issues	Redemptions		Net issues	Amounts outstanding
11	12	13	14	15	16	17	18	19	20	
2.6	92.8	13.7	13.4	0.3	41.5	391.9	372.1	19.8	719.3	2002 May
-2.4	89.5	20.9	8.0	12.9	54.4	337.9	327.1	10.7	731.2	June
2.7	87.6	14.7	24.8	-10.1	44.4	397.1	396.2	0.9	729.4	July
-3.0	82.6	12.1	11.5	0.6	44.9	378.3	368.4	9.9	738.0	Aug.
3.3	86.0	31.7	7.7	24.0	68.9	423.8	388.7	35.1	775.6	Sep.
3.4	90.7	17.1	31.3	-14.2	54.7	458.8	464.5	-5.7	770.1	Oct.
-2.2	90.4	14.6	16.9	-2.3	52.4	428.0	405.7	22.3	792.5	Nov.
-2.4	87.5	23.8	10.6	13.2	65.6	410.6	440.5	-29.9	761.6	Dec.
1.8	89.8	16.3	34.5	-18.2	47.4	534.9	497.2	37.7	798.4	2003 Jan.
2.7	90.4	20.1	14.1	5.9	53.3	453.6	422.5	31.1	828.9	Feb.
1.4	90.4	33.2	9.7	23.5	76.9	466.2	432.8	33.4	862.2	Mar.
-2.4	84.6	.	.	.	.	.	.	.	.	Apr.
2.6	85.7	.	.	.	.	.	.	.	.	May

currencies		By non-residents of the euro area in euro ¹⁾				Total in euro ¹⁾				
		Net issues	Amounts outstanding	Issues	Redemptions	Net issues	Amounts outstanding	Issues	Redemptions		Net issues	Amounts outstanding
11	12	13	14	15	16	17	18	19	20	
10.6	646.1	26.3	8.2	18.0	942.3	153.3	84.2	69.1	7,577.9	2002 May
2.3	629.0	29.3	11.0	18.3	960.5	152.7	98.6	54.1	7,628.0	June
7.5	644.4	11.6	8.2	3.4	964.0	127.9	112.9	15.0	7,646.6	July
0.2	642.6	7.0	8.1	-1.1	962.8	66.8	63.2	3.6	7,649.7	Aug.
7.4	650.3	24.3	11.4	12.9	975.8	146.5	86.7	59.7	7,708.6	Sep.
7.3	656.7	13.2	13.1	0.1	975.9	119.1	94.8	24.3	7,733.2	Oct.
7.6	661.7	13.6	12.1	1.6	977.5	133.0	102.4	30.6	7,763.8	Nov.
-1.5	642.0	18.3	10.9	7.4	984.9	147.6	171.3	-23.7	7,738.9	Dec.
14.0	643.2	23.8	7.2	16.6	1,001.6	179.7	132.3	47.4	7,786.8	2003 Jan.
10.0	654.8	26.5	17.7	8.8	1,010.4	171.8	121.3	50.5	7,838.0	Feb.
6.3	656.5	28.7	9.6	19.2	1,029.5	174.6	101.8	72.7	7,908.8	Mar.
5.4	652.6	.	.	.	.	.	.	.	.	Apr.
4.2	635.6	.	.	.	.	.	.	.	.	May

currencies		By non-residents of the euro area in euro ¹⁾				Total in euro ¹⁾				
		Net issues	Amounts outstanding	Issues	Redemptions	Net issues	Amounts outstanding	Issues	Redemptions		Net issues	Amounts outstanding
11	12	13	14	15	16	17	18	19	20	
13.3	738.9	39.9	21.6	18.3	983.9	545.2	456.3	88.9	8,297.2	2002 May
-0.1	718.5	50.2	19.1	31.2	1,014.9	490.6	425.7	64.9	8,359.2	June
10.2	732.1	26.4	33.0	-6.7	1,008.3	525.0	509.0	15.9	8,375.9	July
-2.7	725.2	19.1	19.7	-0.6	1,007.7	445.1	431.6	13.5	8,387.6	Aug.
10.7	736.3	56.0	19.1	37.0	1,044.7	570.3	475.4	94.8	8,484.3	Sep.
10.7	747.4	30.3	44.3	-14.1	1,030.6	577.9	559.3	18.6	8,503.3	Oct.
5.5	752.1	28.2	29.0	-0.8	1,029.9	561.0	508.1	52.9	8,556.3	Nov.
-3.9	729.5	42.1	21.5	20.6	1,050.5	558.1	611.8	-53.6	8,500.5	Dec.
15.8	733.1	40.1	41.7	-1.6	1,049.0	714.6	629.5	85.1	8,585.1	2003 Jan.
12.7	745.2	46.6	31.8	14.7	1,063.7	625.4	543.8	81.6	8,666.9	Feb.
7.7	746.9	61.9	19.2	42.7	1,106.3	640.7	534.6	106.2	8,770.9	Mar.
3.0	737.3	.	.	.	.	.	.	.	.	Apr.
6.7	721.3	.	.	.	.	.	.	.	.	May

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

	By euro area residents						By non-residents			
	Total	MFIs (including Eurosystem)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations
	1	2	3	4	5	6	7	8	9	10
2002 May	677.7	266.9	3.7	89.9	314.3	3.0	41.5	18.3	19.2	3.5
June	676.8	265.4	3.8	82.0	322.5	3.0	54.4	21.3	28.0	4.4
July	685.0	269.7	4.1	86.2	321.7	3.4	44.4	18.3	22.8	2.8
Aug.	693.1	269.9	4.3	86.7	328.8	3.3	44.9	18.1	23.9	2.6
Sep.	706.7	276.6	4.1	87.7	335.7	2.6	68.9	26.8	37.3	4.0
Oct.	715.3	284.0	4.2	88.5	335.6	3.0	54.7	20.9	28.1	3.5
Nov.	740.1	304.7	4.7	89.9	337.8	3.1	52.4	18.2	28.1	3.7
Dec.	696.0	281.4	4.3	85.3	321.8	3.2	65.6	20.5	37.9	4.6
2003 Jan.	751.0	313.3	4.5	92.6	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	53.3	21.4	28.9	2.5
Mar.	785.3	314.6	6.3	98.4	362.8	3.2	76.9	27.6	44.5	3.3
Apr.	807.7	323.0	5.9	99.1	376.6	3.3	.	.	.	.
May	812.2	317.9	5.9	101.6	383.2	3.5	.	.	.	.

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 May	6,635.6	2,393.3	401.6	370.3	3,322.4	147.9	942.3	238.6	367.5	111.5
June	6,667.5	2,403.2	406.0	373.8	3,334.1	150.4	960.5	246.0	381.0	111.0
July	6,682.6	2,401.7	414.4	376.1	3,331.1	159.2	964.0	246.0	385.3	110.7
Aug.	6,686.8	2,400.7	415.0	374.1	3,337.0	160.1	962.8	245.4	385.0	110.8
Sep.	6,732.8	2,422.3	423.3	376.8	3,348.7	161.8	975.8	246.2	394.3	109.3
Oct.	6,757.3	2,418.3	429.7	375.9	3,367.8	165.5	975.9	247.0	395.9	109.0
Nov.	6,786.3	2,415.9	443.0	379.2	3,381.2	167.0	977.5	249.3	398.2	108.4
Dec.	6,754.0	2,401.6	474.6	380.8	3,328.2	168.7	984.9	251.9	402.9	109.5
2003 Jan.	6,785.2	2,397.0	476.3	387.3	3,351.9	172.7	1,001.6	258.0	412.1	111.0
Feb.	6,827.6	2,408.0	485.0	391.4	3,365.0	178.1	1,010.4	264.5	414.1	112.3
Mar.	6,879.3	2,416.9	497.0	398.6	3,385.7	181.1	1,029.5	274.6	417.8	112.2
Apr.	6,910.1	2,424.3	512.8	406.8	3,381.9	184.3	.	.	.	.
May	6,980.4	2,440.2	517.9	418.9	3,416.5	186.9	.	.	.	.

3. Total

	By euro area residents						By non-residents			
	Total	MFIs (including Eurosystem)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations
	1	2	3	4	5	6	7	8	9	10
2002 May	7,313.3	2,660.1	405.4	460.2	3,636.7	150.9	983.9	256.9	386.7	115.0
June	7,344.3	2,668.5	409.9	455.8	3,656.7	153.4	1,014.9	267.3	408.9	115.4
July	7,367.6	2,671.4	418.6	462.3	3,652.8	162.6	1,008.3	264.3	408.0	113.5
Aug.	7,379.9	2,670.6	419.4	460.7	3,665.8	163.4	1,007.7	263.5	408.9	113.4
Sep.	7,439.5	2,698.8	427.3	464.6	3,684.4	164.4	1,044.7	272.9	431.6	113.3
Oct.	7,472.6	2,702.3	433.9	464.5	3,703.4	168.5	1,030.6	267.9	424.0	112.5
Nov.	7,526.5	2,720.6	447.7	469.2	3,718.9	170.1	1,029.9	267.5	426.4	112.1
Dec.	7,450.0	2,683.1	478.9	466.1	3,650.1	171.9	1,050.5	272.4	440.8	114.1
2003 Jan.	7,536.1	2,710.3	480.8	479.9	3,689.8	175.3	1,049.0	276.1	438.5	113.4
Feb.	7,603.2	2,726.6	490.9	487.3	3,717.0	181.4	1,063.7	285.9	443.0	114.8
Mar.	7,664.6	2,731.5	503.3	497.0	3,748.5	184.3	1,106.3	302.2	462.3	115.5
Apr.	7,717.8	2,747.3	518.6	505.8	3,758.5	187.5	.	.	.	.
May	7,792.6	2,758.2	523.8	520.5	3,799.7	190.4	.	.	.	.

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	
0.1	0.1	0.4	719.3	285.2	22.9	93.4	314.4	3.1	0.4	2002 May
0.2	0.1	0.5	731.2	286.7	31.8	86.4	322.7	3.1	0.5	June
0.2	0.0	0.2	729.4	288.0	26.9	89.0	321.8	3.4	0.2	July
0.1	0.0	0.1	738.0	288.0	28.2	89.3	329.0	3.4	0.1	Aug.
0.2	0.0	0.6	775.6	303.3	41.4	91.8	335.9	2.7	0.6	Sep.
0.1	0.2	1.8	770.1	304.9	32.4	92.1	335.7	3.2	1.8	Oct.
0.1	0.2	2.0	792.5	322.9	32.9	93.6	337.8	3.3	2.0	Nov.
0.0	0.2	2.4	761.6	302.0	42.2	89.8	321.9	3.4	2.4	Dec.
0.0	0.1	0.4	798.4	331.4	30.9	95.1	338.0	2.7	0.4	2003 Jan.
0.0	0.1	0.4	828.9	339.9	34.9	98.4	352.0	3.4	0.4	Feb.
0.0	0.2	1.2	862.2	342.2	50.8	101.7	362.8	3.4	1.2	Mar.
.	.	.	.	.	.	.	.	.	.	Apr.
.	.	.	.	.	.	.	.	.	.	May

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	
95.1	14.6	115.1	7,577.9	2,631.9	769.2	481.8	3,417.5	162.5	115.1	2002 May
93.2	14.6	114.7	7,628.0	2,649.2	787.0	484.8	3,427.3	165.0	114.7	June
93.1	14.6	114.3	7,646.6	2,647.7	799.7	486.8	3,424.2	173.8	114.3	July
93.4	14.6	113.6	7,649.7	2,646.0	800.0	484.9	3,430.4	174.7	113.6	Aug.
94.1	14.7	117.3	7,708.6	2,668.4	817.6	486.1	3,442.8	176.5	117.3	Sep.
93.6	14.6	115.9	7,733.2	2,665.3	825.5	484.9	3,461.4	180.1	115.9	Oct.
93.1	14.6	113.8	7,763.8	2,665.2	841.2	487.7	3,474.3	181.6	113.8	Nov.
92.7	14.3	113.6	7,738.9	2,653.5	877.5	490.4	3,420.9	183.0	113.6	Dec.
92.2	14.0	114.4	7,786.8	2,655.0	888.4	498.2	3,444.0	186.7	114.4	2003 Jan.
92.7	14.9	111.8	7,838.0	2,672.5	899.1	503.7	3,457.8	193.0	111.8	Feb.
92.7	15.4	116.9	7,908.8	2,691.4	914.8	510.8	3,478.4	196.5	116.9	Mar.
.	.	.	.	.	.	.	.	.	.	Apr.
.	.	.	.	.	.	.	.	.	.	May

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	
95.2	14.6	115.5	8,297.2	2,917.1	792.0	575.2	3,731.9	165.5	115.5	2002 May
93.4	14.7	115.2	8,359.2	2,935.9	818.8	571.2	3,750.0	168.1	115.2	June
93.3	14.7	114.5	8,375.9	2,935.7	826.6	575.8	3,746.1	177.3	114.5	July
93.5	14.7	113.7	8,387.6	2,934.1	828.2	574.2	3,759.4	178.1	113.7	Aug.
94.3	14.7	117.9	8,484.3	2,971.8	858.9	577.9	3,778.7	179.1	117.9	Sep.
93.7	14.8	117.7	8,503.3	2,970.3	857.9	577.0	3,797.2	183.2	117.7	Oct.
93.2	14.8	115.9	8,556.3	2,988.1	874.1	581.3	3,812.1	184.9	115.9	Nov.
92.7	14.5	116.0	8,500.5	2,955.5	919.7	580.2	3,742.8	186.3	116.0	Dec.
92.2	14.1	114.8	8,585.1	2,986.4	919.3	593.3	3,782.0	189.4	114.8	2003 Jan.
92.8	15.0	112.2	8,666.9	3,012.5	934.0	602.1	3,809.8	196.4	112.2	Feb.
92.7	15.5	118.1	8,770.9	3,033.6	965.7	612.5	3,841.2	199.8	118.1	Mar.
.	.	.	.	.	.	.	.	.	.	Apr.
.	.	.	.	.	.	.	.	.	.	May

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

	By euro area residents						By non-residents			
	Total	MFIs (including Eurosystem)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations
	1	2	3	4	5	6	7	8	9	10
2002 May	378.2	255.0	2.1	62.5	57.0	1.6	13.7	5.2	7.1	1.2
June	317.0	208.1	2.5	51.7	52.5	2.2	20.9	6.3	12.6	1.8
July	382.4	260.2	1.8	65.6	52.6	2.2	14.7	5.9	8.2	0.6
Aug.	366.2	257.8	1.8	50.9	53.9	1.8	12.1	4.5	6.8	0.6
Sep.	392.1	278.4	1.9	56.8	53.0	2.0	31.7	11.1	18.0	2.0
Oct.	441.8	319.4	2.2	64.7	53.1	2.3	17.1	5.0	9.0	1.3
Nov.	413.5	302.9	2.4	58.2	47.7	2.3	14.6	4.7	8.4	1.2
Dec.	386.8	291.3	2.2	46.4	44.3	2.6	23.8	6.3	15.6	1.3
2003 Jan.	518.6	375.7	2.1	66.0	72.9	1.9	16.3	6.3	9.4	0.3
Feb.	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	33.2	10.2	20.6	1.4
Apr.	454.8	308.5	1.8	70.9	71.7	1.9	.	.	.	.
May	415.8	284.7	2.0	66.6	60.4	2.1	.	.	.	.

2. Long-term

	By euro area residents						By non-residents			
	Total	MFIs (including Eurosystem)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations
	1	2	3	4	5	6	7	8	9	10
2002 May	127.0	41.5	16.2	7.4	55.3	6.6	26.3	5.7	10.1	3.2
June	123.4	48.2	13.6	7.4	51.3	2.9	29.3	9.9	17.7	0.7
July	116.2	37.9	14.6	6.1	48.2	9.4	11.6	2.9	6.9	0.4
Aug.	59.8	28.1	3.1	2.1	25.2	1.3	7.0	3.1	2.7	0.3
Sep.	122.1	52.3	12.3	4.5	50.4	2.6	24.3	5.2	12.6	0.2
Oct.	105.9	39.0	9.5	0.9	52.1	4.4	13.2	4.6	6.7	0.3
Nov.	119.4	48.1	16.2	3.5	48.0	3.6	13.6	5.6	6.6	0.8
Dec.	129.3	45.6	37.7	7.9	34.4	3.7	18.3	6.1	8.8	2.2
2003 Jan.	155.9	58.3	6.1	8.9	76.3	6.3	23.8	7.9	12.4	1.7
Feb.	145.3	55.6	12.9	8.6	61.9	6.3	26.5	10.8	6.7	3.5
Mar.	145.8	53.8	14.8	10.4	63.1	3.7	28.7	13.2	8.2	0.6
Apr.	146.0	50.3	19.3	11.0	61.7	3.7	.	.	.	.
May	160.8	54.0	9.3	16.2	78.0	3.3	.	.	.	.

3. Total

	By euro area residents						By non-residents			
	Total	MFIs (including Eurosystem)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations
	1	2	3	4	5	6	7	8	9	10
2002 May	505.2	296.5	18.3	69.9	112.3	8.2	39.9	10.9	17.2	4.4
June	440.3	256.2	16.1	59.1	103.8	5.2	50.2	16.3	30.3	2.5
July	498.6	298.1	16.4	71.7	100.8	11.6	26.4	8.8	15.1	1.0
Aug.	426.0	285.9	4.9	53.1	79.0	3.2	19.1	7.7	9.6	0.9
Sep.	514.2	330.7	14.2	61.3	103.5	4.6	56.0	16.3	30.7	2.1
Oct.	547.7	358.5	11.7	65.6	105.2	6.7	30.3	9.6	15.8	1.6
Nov.	532.8	351.0	18.7	61.6	95.7	5.8	28.2	10.3	15.0	2.0
Dec.	516.0	336.8	39.9	54.3	78.7	6.4	42.1	12.4	24.4	3.5
2003 Jan.	674.5	434.0	8.2	74.9	149.2	8.2	40.1	14.2	21.9	2.1
Feb.	578.8	363.6	15.1	65.3	126.3	8.4	46.6	18.1	18.4	4.5
Mar.	578.8	355.3	17.2	73.4	126.7	6.3	61.9	23.5	28.9	2.0
Apr.	600.8	358.8	21.1	81.9	133.4	5.6	.	.	.	.
May	576.6	338.7	11.3	82.7	138.4	5.4	.	.	.	.

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	391.9	260.2	9.2	63.8	57.0	1.6	0.1	2002 May
0.0	0.0	0.1	337.9	214.4	15.1	53.5	52.5	2.2	0.1	June
0.0	0.0	0.0	397.1	266.1	10.0	66.2	52.6	2.2	0.0	July
0.0	0.0	0.1	378.3	262.3	8.6	51.5	53.9	1.8	0.1	Aug.
0.1	0.0	0.5	423.8	289.5	19.9	58.7	53.1	2.0	0.5	Sep.
0.0	0.1	1.6	458.8	324.5	11.2	66.0	53.1	2.5	1.6	Oct.
0.0	0.0	0.2	428.0	307.6	10.8	59.4	47.7	2.3	0.2	Nov.
0.0	0.0	0.5	410.6	297.5	17.8	47.7	44.3	2.7	0.5	Dec.
0.0	0.1	0.1	534.9	382.0	11.5	66.4	72.9	2.0	0.1	2003 Jan.
0.0	0.0	0.2	453.6	315.2	13.9	57.6	64.4	2.1	0.2	Feb.
0.0	0.0	0.9	466.2	311.7	22.9	64.3	63.7	2.6	0.9	Mar.
.	.	.	.	.	.	.	.	.	.	Apr.
.	.	.	.	.	.	.	.	.	.	May

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	
2.0	0.0	5.3	153.3	47.2	26.3	10.6	57.2	6.6	5.3	2002 May
0.1	0.1	0.7	152.7	58.1	31.4	8.1	51.4	3.0	0.7	June
0.9	0.1	0.3	127.9	40.8	21.5	6.5	49.1	9.5	0.3	July
0.3	0.1	0.5	66.8	31.2	5.8	2.4	25.5	1.4	0.5	Aug.
0.7	0.2	5.5	146.5	57.5	24.9	4.7	51.1	2.7	5.5	Sep.
0.2	0.0	1.3	119.1	43.7	16.2	1.2	52.2	4.4	1.3	Oct.
0.0	0.0	0.5	133.0	53.7	22.9	4.3	48.0	3.6	0.5	Nov.
0.4	0.0	0.8	147.6	51.6	46.5	10.0	34.8	3.7	0.8	Dec.
0.5	0.0	1.3	179.7	66.2	18.5	10.6	76.8	6.3	1.3	2003 Jan.
3.3	1.0	1.1	171.8	66.4	19.6	12.1	65.2	7.4	1.1	Feb.
0.4	0.6	5.7	174.6	67.0	23.1	11.0	63.5	4.3	5.7	Mar.
.	.	.	.	.	.	.	.	.	.	Apr.
.	.	.	.	.	.	.	.	.	.	May

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	
2.0	0.0	5.5	545.2	307.4	35.5	74.3	114.3	8.2	5.5	2002 May
0.2	0.1	0.9	490.6	272.5	46.4	61.6	103.9	5.3	0.9	June
1.0	0.1	0.4	525.0	306.9	31.5	72.8	101.8	11.7	0.4	July
0.3	0.1	0.6	445.1	293.5	14.4	54.0	79.4	3.3	0.6	Aug.
0.8	0.2	6.0	570.3	347.0	44.8	63.4	104.2	4.8	6.0	Sep.
0.2	0.1	2.9	577.9	368.1	27.4	67.2	105.3	6.9	2.9	Oct.
0.0	0.0	0.7	561.0	361.4	33.7	63.7	95.7	5.9	0.7	Nov.
0.4	0.0	1.3	558.1	349.2	64.3	57.8	79.1	6.4	1.3	Dec.
0.5	0.1	1.4	714.6	448.2	30.0	77.0	149.7	8.3	1.4	2003 Jan.
3.3	1.0	1.3	625.4	381.7	33.5	69.7	129.7	9.5	1.3	Feb.
0.4	0.6	6.6	640.7	378.7	46.0	75.3	127.2	6.9	6.6	Mar.
.	.	.	.	.	.	.	.	.	.	Apr.
.	.	.	.	.	.	.	.	.	.	May

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

	By euro area residents						By non-residents			
	Total	MFIs (including Eurosystem)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations
	1	2	3	4	5	6	7	8	9	10
2002 May	19.5	7.6	-0.8	-2.7	15.5	0.0	0.3	0.1	0.5	-0.3
June	-2.1	-2.5	0.1	-8.1	8.3	0.0	12.9	3.0	8.8	1.0
July	11.0	7.1	0.3	4.1	-0.9	0.3	-10.1	-3.0	-5.2	-1.6
Aug.	9.3	1.5	0.2	0.5	7.2	0.0	0.6	-0.2	1.1	-0.2
Sep.	11.0	4.1	-0.3	1.1	6.9	-0.7	24.0	8.6	13.5	1.4
Oct.	8.5	7.5	0.2	0.8	-0.3	0.3	-14.2	-5.8	-9.1	-0.5
Nov.	24.6	20.5	0.5	1.4	2.2	0.1	-2.3	-2.7	0.0	0.2
Dec.	-43.1	-22.2	-0.4	-4.7	-15.9	0.1	13.2	2.3	9.8	0.9
2003 Jan.	55.9	32.8	0.3	7.4	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	5.9	3.3	2.6	0.0
Mar.	9.9	-3.8	0.3	2.5	10.9	0.0	23.5	6.2	15.6	0.8
Apr.	23.1	9.1	-0.4	0.6	13.7	0.1	.	.	.	.
May	5.1	-4.4	0.0	2.6	6.6	0.3	.	.	.	.

2. Long-term

	By euro area residents						By non-residents			
	Total	MFIs (including Eurosystem)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations
	1	2	3	4	5	6	7	8	9	10
2002 May	51.0	12.9	11.2	5.3	16.1	5.5	18.0	3.6	6.7	2.8
June	35.8	13.8	4.4	3.5	11.7	2.5	18.3	7.4	13.5	-0.6
July	11.6	-5.0	8.4	2.3	-3.0	8.9	3.4	0.0	4.3	-0.3
Aug.	4.7	-0.8	0.6	-1.9	5.9	0.9	-1.1	-0.6	-0.2	0.1
Sep.	46.8	22.4	8.2	2.8	11.7	1.7	12.9	0.8	9.3	-1.5
Oct.	24.2	-4.4	6.4	-0.8	19.3	3.7	0.1	0.8	1.5	-0.3
Nov.	29.1	0.2	13.2	0.8	13.3	1.5	1.6	2.3	2.4	-0.6
Dec.	-31.2	-14.4	31.8	2.6	-52.9	1.7	7.4	2.6	4.7	1.1
2003 Jan.	30.7	-5.1	1.6	6.6	23.6	4.0	16.6	6.1	9.2	1.4
Feb.	41.7	10.3	8.7	4.1	13.2	5.4	8.8	6.5	2.0	1.4
Mar.	53.6	9.4	12.1	8.6	20.5	2.9	19.2	10.1	3.7	-0.1
Apr.	30.7	7.3	15.7	8.2	-3.8	3.2	.	.	.	.
May	70.3	15.9	5.1	12.1	34.6	2.6	.	.	.	.

3. Total

	By euro area residents						By non-residents			
	Total	MFIs (including Eurosystem)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations
	1	2	3	4	5	6	7	8	9	10
2002 May	70.6	20.4	10.5	2.6	31.6	5.5	18.3	3.7	7.2	2.5
June	33.7	11.3	4.5	-4.6	20.0	2.5	31.2	10.4	22.4	0.4
July	22.6	2.2	8.7	6.4	-3.9	9.2	-6.7	-3.0	-1.0	-1.9
Aug.	14.1	0.8	0.8	-1.4	13.0	0.8	-0.6	-0.8	0.9	-0.1
Sep.	57.8	26.4	8.0	3.8	18.6	1.0	37.0	9.4	22.7	-0.1
Oct.	32.7	3.1	6.5	0.0	19.1	4.0	-14.1	-5.0	-7.6	-0.8
Nov.	53.7	20.6	13.7	2.2	15.5	1.6	-0.8	-0.4	2.4	-0.4
Dec.	-74.3	-36.6	31.4	-2.0	-68.9	1.8	20.6	4.9	14.4	2.0
2003 Jan.	86.6	27.7	1.9	13.9	39.7	3.4	-1.6	3.6	-2.3	-0.7
Feb.	66.9	16.1	10.1	7.4	27.2	6.0	14.7	9.8	4.6	1.4
Mar.	63.5	5.6	12.4	11.1	31.4	2.9	42.7	16.3	19.3	0.7
Apr.	53.8	16.4	15.3	8.8	9.9	3.3	.	.	.	.
May	75.5	11.5	5.2	14.7	41.3	2.8	.	.	.	.

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

of the euro area			Total							
Central government	Other general government	International organisations	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	International organisations	
11	12	13	14	15	16	17	18	19	20	
0.0	0.0	-0.1	19.8	7.7	-0.3	-3.0	15.5	0.0	-0.1	2002 May
0.0	0.0	0.1	10.7	0.5	8.9	-7.1	8.3	0.0	0.1	June
0.0	0.0	-0.2	0.9	4.2	-4.9	2.5	-0.9	0.3	-0.2	July
0.0	0.0	-0.1	9.9	1.3	1.3	0.3	7.1	0.0	-0.1	Aug.
0.1	0.0	0.5	35.1	12.7	13.2	2.5	6.9	-0.7	0.5	Sep.
-0.1	0.1	1.2	-5.7	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	1.5	2.1	0.1	0.2	Nov.
-0.1	0.0	0.3	-29.9	-20.0	9.4	-3.8	-16.0	0.1	0.3	Dec.
0.0	-0.1	-2.0	37.7	30.3	-11.3	5.2	16.1	-0.7	-2.0	2003 Jan.
0.0	0.0	0.0	31.1	9.1	4.0	3.3	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.
.	.	.	.	.	.	.	.	.	.	Apr.
.	.	.	.	.	.	.	.	.	.	May

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	
0.9	0.0	4.1	69.1	16.4	18.0	8.1	17.0	5.5	4.1	2002 May
-1.9	0.0	-0.3	54.1	21.2	17.9	3.0	9.8	2.5	-0.3	June
-0.1	0.0	-0.5	15.0	-5.0	12.7	2.0	-3.1	8.9	-0.5	July
0.3	0.0	-0.7	3.6	-1.4	0.4	-1.7	6.2	0.9	-0.7	Aug.
0.7	0.0	3.7	59.7	23.2	17.5	1.3	12.4	1.7	3.7	Sep.
-0.5	-0.1	-1.4	24.3	-3.7	7.9	-1.1	18.8	3.6	-1.4	Oct.
-0.5	0.0	-2.0	30.6	2.5	15.6	0.2	12.9	1.5	-2.0	Nov.
-0.4	-0.3	-0.3	-23.7	-11.7	36.5	3.7	-53.4	1.4	-0.3	Dec.
-0.5	-0.3	0.7	47.4	1.0	10.8	8.0	23.1	3.7	0.7	2003 Jan.
0.6	0.9	-2.6	50.5	16.8	10.7	5.5	13.7	6.3	-2.6	Feb.
-0.1	0.5	5.1	72.7	19.5	15.8	8.5	20.5	3.4	5.1	Mar.
.	.	.	.	.	.	.	.	.	.	Apr.
.	.	.	.	.	.	.	.	.	.	May

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	
0.9	0.0	4.0	88.9	24.1	17.7	5.0	32.5	5.5	4.0	2002 May
-1.8	0.0	-0.3	64.9	21.7	26.9	-4.2	18.2	2.6	-0.3	June
-0.1	0.0	-0.7	15.9	-0.8	7.7	4.5	-4.0	9.2	-0.7	July
0.3	0.0	-0.8	13.5	0.0	1.7	-1.4	13.3	0.8	-0.8	Aug.
0.8	0.0	4.2	94.8	35.9	30.7	3.7	19.3	1.0	4.2	Sep.
-0.6	0.1	-0.2	18.6	-2.0	-1.1	-0.8	18.5	4.1	-0.2	Oct.
-0.5	0.0	-1.8	52.9	20.3	16.1	1.7	15.0	1.6	-1.8	Nov.
-0.5	-0.3	0.1	-53.6	-31.7	45.9	0.0	-69.4	1.5	0.1	Dec.
-0.5	-0.4	-1.2	85.1	31.3	-0.5	13.2	39.2	3.1	-1.2	2003 Jan.
0.6	0.9	-2.6	81.6	25.9	14.7	8.8	27.8	7.0	-2.6	Feb.
-0.1	0.5	5.9	106.2	22.0	31.7	11.9	31.3	3.4	5.9	Mar.
.	.	.	.	.	.	.	.	.	.	Apr.
.	.	.	.	.	.	.	.	.	.	May

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

	In all currencies combined						
	Total		MFIs (including Eurosystem)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government
	1	Index Dec.01= 100 2					
2002 May	3.8	110.0	2.2	-32.8	-8.3	10.5	27.8
June	4.5	109.4	0.4	-25.1	-15.2	16.7	50.8
July	5.3	111.3	3.8	-16.4	-14.0	14.6	-3.1
Aug.	5.4	112.3	4.8	0.6	-18.0	15.2	-1.3
Sep.	7.8	114.3	8.9	0.8	-17.0	16.3	-19.4
Oct.	8.9	116.0	10.5	14.9	-18.5	17.9	-0.9
Nov.	12.3	119.3	18.6	23.3	-14.6	15.6	-5.3
Dec.	12.7	112.7	14.7	30.4	-10.4	19.3	-14.3
2003 Jan.	15.2	121.0	17.6	28.9	-7.2	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	2.1	21.4	5.7
Apr.	21.3	129.7	20.9	36.8	7.5	26.1	18.1
May	18.9	130.8	17.4	65.5	12.5	21.7	22.4

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 May	8.0	103.8	8.1	32.9	14.6	3.5	29.3
June	7.5	104.3	7.8	30.4	13.0	3.1	31.4
July	7.1	104.6	6.8	27.8	11.8	3.1	36.3
Aug.	6.9	104.7	6.5	27.3	9.0	3.3	34.0
Sep.	7.4	105.4	7.1	28.1	11.8	3.6	30.9
Oct.	7.3	105.9	6.3	27.3	12.4	3.9	29.7
Nov.	7.0	106.4	5.8	27.5	8.0	4.3	29.0
Dec.	5.9	105.9	5.0	25.6	6.9	2.9	29.4
2003 Jan.	5.7	106.6	4.7	24.5	7.3	2.7	29.9
Feb.	5.9	107.3	4.4	25.6	7.7	3.0	34.6
Mar.	5.8	108.2	3.8	26.7	9.4	3.0	32.4
Apr.	5.6	108.7	3.9	26.7	10.1	2.4	30.9
May	5.8	109.8	3.6	24.2	11.7	3.1	27.8

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 May	7.6	104.3	7.4	32.0	9.8	4.1	29.3
June	7.3	104.8	6.9	29.6	7.3	4.2	31.7
July	6.9	105.2	6.4	27.3	6.4	4.1	35.1
Aug.	6.7	105.4	6.3	27.0	3.2	4.3	32.9
Sep.	7.4	106.2	7.3	27.8	5.6	4.6	29.4
Oct.	7.4	106.8	6.8	27.2	5.5	5.0	28.9
Nov.	7.5	107.6	7.2	27.5	3.2	5.2	28.1
Dec.	6.6	106.6	6.0	25.7	3.6	4.1	28.0
2003 Jan.	6.6	107.9	6.1	24.6	4.5	4.1	28.7
Feb.	7.2	108.9	6.3	25.9	5.9	4.6	33.7
Mar.	7.0	109.9	5.5	26.9	8.0	4.5	31.7
Apr.	7.1	110.6	5.7	26.8	9.7	4.3	30.6
May	7.0	111.7	5.2	24.5	11.9	4.7	27.7

Source: ECB.

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

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

In euro ²⁾							
Total	Index Dec.01= 100	MFIs (including Eurosystem)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	
3.3	110.5	1.0	-32.8	-10.1	10.6	26.0	2002 May
4.2	110.1	-0.8	-27.1	-16.6	16.5	51.6	June
5.1	111.9	3.6	-18.5	-15.6	14.5	-7.0	July
5.7	113.5	6.1	-1.8	-19.4	15.0	-7.0	Aug.
7.7	115.3	9.0	-1.8	-18.1	16.7	-28.9	Sep.
7.6	116.6	8.1	12.1	-20.3	18.1	-11.8	Oct.
12.3	120.7	20.4	20.6	-15.9	15.9	-14.0	Nov.
13.6	113.6	16.6	27.3	-11.4	20.3	-23.4	Dec.
16.1	122.8	20.5	26.0	-8.1	21.1	-27.0	2003 Jan.
20.1	126.9	25.7	57.4	-2.7	22.7	-9.0	Feb.
18.5	128.5	21.5	50.3	0.9	21.3	-2.7	Mar.
23.3	132.3	26.1	34.1	6.5	26.0	8.9	Apr.
20.5	133.1	20.9	62.2	12.6	21.9	17.6	May

In euro ²⁾							
Total	Index Dec.01= 100	MFIs (including Eurosystem)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	
7.4	103.5	5.9	42.8	17.4	3.6	30.2	2002 May
7.0	104.1	5.7	39.3	15.9	3.2	32.3	June
6.5	104.3	4.5	34.3	15.8	3.1	37.6	July
6.3	104.3	4.4	33.2	12.9	3.3	35.0	Aug.
6.7	105.1	5.1	34.0	14.3	3.4	31.8	Sep.
6.5	105.4	4.3	31.4	14.9	3.9	29.5	Oct.
6.5	105.9	4.2	32.0	9.5	4.3	28.8	Nov.
5.4	105.4	3.5	30.0	8.4	2.8	29.0	Dec.
5.1	105.9	3.1	28.9	8.5	2.5	29.1	2003 Jan.
5.2	106.5	2.7	29.6	8.7	2.7	33.8	Feb.
5.2	107.4	2.1	30.6	11.0	2.8	31.5	Mar.
5.0	107.8	2.0	31.3	11.6	2.3	29.5	Apr.
5.2	108.9	2.1	28.9	13.2	2.8	26.4	May

In euro ²⁾							
Total	Index Dec.01= 100	MFIs (including Eurosystem)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	
7.0	104.1	5.4	41.3	10.8	4.2	30.1	2002 May
6.7	104.6	5.0	38.1	8.4	4.2	32.7	June
6.3	104.9	4.4	33.4	8.4	4.1	36.2	July
6.2	105.1	4.6	32.7	5.0	4.2	33.7	Aug.
6.8	105.9	5.5	33.5	6.4	4.5	30.0	Sep.
6.6	106.4	4.7	31.2	6.1	5.0	28.4	Oct.
7.1	107.2	5.8	31.9	3.5	5.3	27.6	Nov.
6.1	106.1	4.7	29.9	4.1	4.1	27.4	Dec.
6.1	107.4	4.9	28.9	4.9	4.0	27.7	2003 Jan.
6.6	108.3	4.9	29.9	6.2	4.3	32.7	Feb.
6.4	109.2	4.0	30.8	8.8	4.3	30.7	Mar.
6.7	110.0	4.3	31.4	10.5	4.3	29.0	Apr.
6.7	111.1	4.0	29.2	13.1	4.5	26.2	May

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 May	5,752.7	673.4	648.2	4,431.2
June	5,707.4	680.6	645.7	4,381.0
July	5,835.4	700.3	696.3	4,438.9
Aug.	5,948.9	742.1	700.4	4,506.4
Sep.	5,640.6	730.3	687.7	4,222.7
Oct.	5,667.9	718.9	664.4	4,284.5
Nov.	5,466.7	674.4	673.5	4,118.7
Dec.	5,431.7	687.0	675.0	4,069.6
<i>Euro area enlargement</i>				
2001 Jan.	5,668.5	762.2	706.3	4,200.0
Feb.	5,249.6	710.1	661.6	3,877.9
Mar.	5,029.0	686.3	620.4	3,722.4
Apr.	5,365.9	715.3	643.4	4,007.2
May	5,235.2	697.9	627.0	3,910.4
June	4,991.3	676.5	635.1	3,679.7
July	4,959.8	647.0	572.4	3,740.4
Aug.	4,648.2	643.2	576.6	3,428.4
Sep.	4,054.6	535.7	485.3	3,033.6
Oct.	4,277.9	551.5	497.7	3,228.7
Nov.	4,523.9	587.5	512.0	3,424.3
Dec.	4,656.4	617.3	511.1	3,528.0
2002 Jan.	4,575.1	623.8	518.8	3,432.5
Feb.	4,545.6	622.4	509.8	3,413.4
Mar.	4,748.1	665.3	536.6	3,546.2
Apr.	4,569.8	678.0	517.5	3,374.2
May	4,432.0	666.3	484.9	3,280.9
June	4,113.0	614.8	463.4	3,034.8
July	3,709.7	515.6	395.4	2,798.7
Aug.	3,519.2	521.7	371.0	2,626.5
Sep.	2,977.8	412.6	276.0	2,289.2
Oct.	3,250.9	446.9	321.2	2,482.8
Nov.	3,434.7	487.3	346.0	2,601.4
Dec.	3,130.5	450.7	283.6	2,396.2
2003 Jan.	2,993.8	425.8	261.1	2,306.9
Feb.	2,900.4	425.2	270.8	2,204.4
Mar.	2,772.6	413.0	236.2	2,123.5
Apr.	3,127.5	471.4	291.8	2,364.4
May	3,160.8	476.6	291.4	2,392.8

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

Source: ECB.



4 HICP and other prices in the euro area

Table 4.1

Harmonised Index of Consumer Prices

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

1. Total index and goods and services

	Total		Goods		Services		Total (s.a.)		Goods (s.a.)	Services (s.a.)
	Index 1996 = 100		Index 1996 = 100		Index 1996 = 100		Index 1996 = 100	% change on previous period	Index 1996 = 100	Index 1996 = 100
Weight in the total (%) ¹⁾	100.0	100.0	59.1	59.1	40.9	40.9	100.0	100.0	59.1	40.9
	1	2	3	4	5	6	7	8	9	10
1999	103.8	1.1	102.7	0.9	106.0	1.5	-	-	-	-
2000	106.0	2.1	105.3	2.5	107.5	1.5	-	-	-	-
<i>Euro area enlargement</i>										
2001	108.5	2.3	107.7	2.3	110.2	2.5	-	-	-	-
2002	110.9	2.3	109.5	1.7	113.6	3.1	-	-	-	-
2002 Q3	111.1	2.1	109.2	1.3	114.5	3.3	111.2	0.4	109.6	114.1
Q4	111.7	2.3	110.1	1.8	114.5	3.1	111.8	0.5	110.0	114.8
2003 Q1	112.5	2.3	110.8	2.0	115.3	2.7	112.6	0.8	111.1	115.4
Q2	113.2	2.0	111.6	1.5	116.1	2.6	112.9	0.2	111.1	116.1
2002 Aug.	111.0	2.1	108.9	1.4	114.6	3.3	111.2	0.2	109.6	114.1
Sep.	111.3	2.1	109.7	1.4	114.2	3.2	111.5	0.3	109.9	114.3
Oct.	111.6	2.3	110.1	1.8	114.2	3.1	111.7	0.2	110.1	114.6
Nov.	111.5	2.3	110.0	1.8	114.2	3.1	111.7	0.0	109.9	114.8
Dec.	112.0	2.3	110.2	1.9	115.2	3.0	111.9	0.2	110.1	115.1
2003 Jan.	111.9	2.1	110.2	1.6	115.0	2.8	112.3	0.4	110.7	115.2
Feb.	112.4	2.4	110.7	2.1	115.4	2.7	112.6	0.3	111.1	115.4
Mar.	113.1	2.4	111.7	2.2	115.6	2.6	113.0	0.3	111.5	115.6
Apr.	113.2	2.1	111.7	1.5	116.0	2.9	112.8	-0.1	111.1	115.9
May	113.2	1.9	111.6	1.4	116.0	2.5	112.8	0.0	110.9	116.1
June	113.3	2.0	111.6	1.7	116.3	2.5	113.0	0.2	111.1	116.4
July ²⁾	.	1.9	.	.	.	.	.	.	.	.

2. Breakdown of goods and services

	Goods						Services				
	Food ³⁾			Industrial goods			Housing	Transport	Communi- cation	Recreation and personal	Miscellan- eous
	Total	Processed food ³⁾	Unprocessed food	Total	Non-energy industrial goods	Energy					
Weight in the total (%) ¹⁾	19.3	11.7	7.6	39.8	31.6	8.2	10.4	6.3	2.9	14.9	6.4
	11	12	13	14	15	16	17	18	19	20	21
1999	0.6	0.9	0.0	1.0	0.7	2.4	1.8	2.1	-4.4	2.0	1.8
2000	1.4	1.2	1.8	3.0	0.5	13.0	1.5	2.5	-7.1	2.4	2.5
<i>Euro area enlargement</i>											
2001	4.5	2.9	7.0	1.2	0.9	2.2	1.8	3.6	-4.1	3.6	2.7
2002	3.1	3.1	3.1	1.0	1.5	-0.6	2.4	3.2	-0.3	4.2	3.4
2002 Q3	2.3	2.9	1.4	0.8	1.3	-0.7	2.4	3.4	0.0	4.3	3.5
Q4	2.3	2.7	1.7	1.6	1.2	2.9	2.5	3.0	-0.2	4.0	3.4
2003 Q1	2.0	3.2	0.2	2.0	0.7	7.0	2.4	3.2	-0.8	3.0	3.7
Q2	2.6	3.4	1.6	1.0	0.9	1.5	2.4	3.0	-0.7	2.9	3.5
2002 Aug.	2.3	3.0	1.4	0.9	1.3	-0.3	2.4	3.6	-0.1	4.4	3.5
Sep.	2.4	2.8	1.7	0.9	1.3	-0.2	2.4	3.2	0.1	4.3	3.4
Oct.	2.3	2.7	1.7	1.5	1.2	2.6	2.4	3.0	0.1	4.3	3.3
Nov.	2.4	2.6	2.0	1.5	1.3	2.4	2.5	3.2	-0.4	4.0	3.4
Dec.	2.2	2.7	1.3	1.7	1.2	3.8	2.5	2.8	-0.5	3.8	3.5
2003 Jan.	1.5	2.9	-0.6	1.7	0.6	6.0	2.5	3.3	-0.7	3.2	3.6
Feb.	2.1	3.3	0.3	2.2	0.7	7.7	2.4	3.3	-0.9	3.0	3.7
Mar.	2.3	3.3	0.8	2.2	0.8	7.5	2.4	3.0	-0.7	2.8	3.7
Apr.	2.4	3.4	1.0	1.1	0.8	2.2	2.4	3.2	-0.6	3.5	3.6
May	2.5	3.4	1.2	0.9	0.9	0.6	2.4	2.8	-0.5	2.5	3.5
June	3.0	3.3	2.6	1.0	0.8	1.6	2.3	2.8	-0.9	2.7	3.5
July	.	.	.	.	.	.	.	.	.	.	.

Sources: Eurostat and ECB calculations.

1) Referring to the index period 2003.

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

3) Including alcoholic beverages and tobacco.

Table 4.2

Selected other price indicators

1. Industry and commodity prices

(annual percentage changes, unless otherwise indicated)

	Industrial producer prices											World market prices of raw materials ¹⁾		Oil prices ²⁾ (EUR per barrel)
	Industry excluding construction ³⁾									Construc- tion ⁴⁾	Manu- facturing	Total excluding energy		
	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	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	10.7	14.6	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	-21.0	-12.5	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	15.8	-5.9	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	50.8	16.7	31.0
<i>Euro area enlargement</i>														
2001	102.2	2.2	1.7	1.2	1.0	3.0	1.8	3.1	2.7	2.3	1.2	-8.8	-7.6	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	-3.2	-1.7	26.5
2002 Q2	102.1	-0.7	0.2	-0.8	1.0	1.1	1.7	1.0	-4.1	2.5	-0.3	-8.7	-5.5	27.8
Q3	102.3	0.0	0.6	0.3	0.8	1.2	1.5	1.1	-2.1	2.6	0.4	-4.2	-1.6	27.2
Q4	102.6	1.3	1.0	1.0	0.8	1.4	1.3	1.4	2.8	3.1	1.5	14.0	4.4	26.5
2003 Q1	104.1	2.4	1.2	1.6	0.4	1.4	0.9	1.5	7.3	2.0	2.2	10.2	-4.2	28.4
Q2	.	.	.	.	.	.	.	.	.	.	.	-13.5	-8.0	22.7
2002 July	102.1	-0.2	0.5	0.1	0.8	1.1	1.4	1.0	-2.9	-	0.2	-10.2	-7.6	25.9
Aug.	102.2	0.0	0.6	0.3	0.8	1.1	1.6	1.1	-1.9	-	0.5	-4.3	-1.3	27.0
Sep.	102.5	0.2	0.7	0.4	0.8	1.3	1.6	1.3	-1.4	-	0.6	2.4	4.7	28.9
Oct.	102.7	1.1	0.9	0.8	0.7	1.4	1.4	1.4	2.3	-	1.3	14.3	7.8	27.9
Nov.	102.4	1.2	1.0	1.2	0.8	1.3	1.2	1.3	2.4	-	1.3	10.5	3.4	24.2
Dec.	102.7	1.6	1.1	1.2	0.8	1.5	1.3	1.5	3.9	-	1.8	17.2	2.1	27.1
2003 Jan.	103.7	2.3	1.1	1.4	0.5	1.4	1.1	1.4	6.7	-	2.0	17.2	-1.5	28.3
Feb.	104.1	2.6	1.2	1.7	0.3	1.5	1.0	1.6	8.2	-	2.4	16.8	-3.7	29.8
Mar.	104.3	2.4	1.2	1.7	0.3	1.4	0.8	1.5	7.2	-	2.1	-1.7	-7.2	27.2
Apr.	103.8	1.7	1.1	1.5	0.3	1.3	0.6	1.4	3.2	-	1.1	-15.2	-6.7	22.9
May	103.5	1.3	1.0	1.3	0.3	1.5	0.7	1.6	1.7	-	0.6	-16.6	-8.7	21.9
June	.	.	.	.	.	.	.	.	.	-	.	-8.3	-8.6	23.3
July	.	.	.	.	.	.	.	.	.	-	.	-3.5	-5.6	24.9

2. Deflators of gross domestic product ⁵⁾

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

	Total		Domestic demand	Private consumption	Government consumption	Gross fixed capital formation	Exports ⁶⁾	Imports ⁶⁾	
	Index 1995 = 100								
									15	16	17	18	19	20	21	22
1996	102.0		2.0	2.1	2.4	2.2	0.9	0.8	0.7
1997	103.6		1.5	1.7	2.0	1.3	1.0	1.8	2.6
1998	105.3		1.7	1.3	1.4	1.2	0.9	-0.1	-1.5
1999	106.4		1.1	1.2	1.1	1.9	0.8	-0.5	-0.3
2000	107.9		1.4	2.6	2.2	2.6	2.5	4.7	8.2
<i>Euro area enlargement</i>									
2001	111.0		2.5	2.3	2.4	2.4	2.0	1.4	0.7
2002	113.6		2.4	2.2	2.4	1.8	1.9	-0.6	-1.5
2001 Q3	111.1		2.3	2.2	2.4	2.2	2.1	0.5	0.1
Q4	112.2		3.0	1.8	2.1	2.3	1.7	-0.6	-3.6
2002 Q1	112.9		2.7	2.4	2.6	2.0	1.9	-0.9	-1.7
Q2	113.3		2.3	2.0	2.3	1.7	2.1	-1.1	-2.0
Q3	114.0		2.6	2.1	2.3	1.8	1.9	-0.3	-2.0
Q4	114.5		2.1	2.2	2.4	1.7	2.0	-0.3	-0.2
2003 Q1	115.2		2.1	1.9	2.3	2.1	1.9	0.1	-0.3

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

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

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

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

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

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

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

5 Real economy indicators in the euro area

Table 5.1

National accounts ¹⁾

GDP and expenditure components

1. Current prices

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

	GDP								
	Total	Domestic demand					External balance ³⁾		
		Total	Private consumption	Government consumption	Gross fixed capital formation	Changes in inventories ²⁾	Total	Exports ³⁾	Imports ³⁾
1	2	3	4	5	6	7	8	9	
1998	5,883.6	5,743.8	3,330.7	1,176.4	1,203.6	33.0	139.9	1,949.1	1,809.2
1999	6,150.4	6,048.5	3,506.9	1,230.0	1,291.8	19.7	101.9	2,052.4	1,950.6
2000	6,453.1	6,385.2	3,675.2	1,289.2	1,389.1	31.5	67.9	2,416.7	2,348.8
<i>Euro area enlargement</i>									
2001	6,840.1	6,727.7	3,921.0	1,369.3	1,437.4	-0.1	112.5	2,556.1	2,443.7
2002	7,063.5	6,889.3	4,037.0	1,431.6	1,427.6	-6.9	174.1	2,571.2	2,397.0
2001 Q4	1,727.3	1,690.2	988.6	348.1	357.6	-4.1	37.2	630.0	592.8
2002 Q1	1,745.6	1,705.8	996.5	352.4	357.8	-0.8	39.8	627.3	587.5
Q2	1,758.5	1,716.1	1,004.3	356.8	354.8	0.2	42.4	640.0	597.6
Q3	1,775.0	1,726.6	1,014.1	359.8	356.3	-3.6	48.3	652.7	604.4
Q4	1,784.5	1,740.8	1,022.1	362.7	358.7	-2.7	43.6	651.2	607.6
2003 Q1	1,796.6	1,762.7	1,034.7	366.7	356.3	5.0	33.9	647.6	613.8

2. Constant prices

(ECU billions at 1995 prices, seasonally adjusted)

	GDP								
	Total	Domestic demand					External balance ³⁾		
		Total	Private consumption	Government consumption	Gross fixed capital formation	Changes in inventories ²⁾	Total	Exports ³⁾	Imports ³⁾
10	11	12	13	14	15	16	17	18	
1998	5,667.3	5,544.7	3,186.1	1,142.2	1,191.0	25.4	122.5	1,939.1	1,816.6
1999	5,826.5	5,738.1	3,299.1	1,164.7	1,260.6	13.8	88.4	2,040.3	1,951.9
2000	6,029.9	5,906.3	3,382.8	1,189.5	1,322.1	11.9	123.6	2,295.3	2,171.7
<i>Euro area enlargement</i>									
2001	6,227.3	6,079.4	3,521.5	1,231.0	1,339.0	-12.2	148.0	2,391.7	2,243.7
2002	6,279.4	6,092.4	3,540.9	1,264.6	1,303.9	-17.0	187.0	2,421.6	2,234.6
2001 Q4	1,556.2	1,518.5	881.7	310.5	331.1	-4.8	37.7	591.2	553.4
2002 Q1	1,562.4	1,517.7	880.4	313.3	329.0	-5.0	44.7	590.5	545.8
Q2	1,568.6	1,520.1	883.1	315.8	324.5	-3.2	48.5	603.2	554.7
Q3	1,573.6	1,524.0	887.1	317.3	324.9	-5.3	49.6	615.1	565.5
Q4	1,574.8	1,530.6	890.3	318.2	325.6	-3.4	44.2	612.8	568.6
2003 Q1	1,575.7	1,538.7	894.0	319.3	321.6	3.8	37.0	608.8	571.8
<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	3.5	2.0	5.8	-	-	5.2	7.4
2000	3.5	2.9	2.5	2.1	4.9	-	-	12.5	11.3
<i>Euro area enlargement</i>									
2001	1.5	1.0	1.8	2.2	-0.6	-	-	3.0	1.7
2002	0.8	0.2	0.5	2.7	-2.6	-	-	1.2	-0.4
2001 Q4	0.6	0.2	1.6	2.0	-2.3	-	-	-2.4	-3.7
2002 Q1	0.4	-0.2	0.4	2.6	-3.0	-	-	-2.7	-4.5
Q2	0.8	-0.2	0.2	3.0	-3.3	-	-	1.1	-1.7
Q3	1.0	0.5	0.6	2.9	-2.5	-	-	3.1	1.9
Q4	1.2	0.8	1.0	2.5	-1.7	-	-	3.7	2.7
2003 Q1	0.8	1.4	1.5	1.9	-2.3	-	-	3.1	4.8

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 ¹⁾	Taxes less subsidies on products
	Total	Agriculture, hunting, forestry and fishing activities ²	Manufacturing, energy and mining ³	Construction ⁴	Trade, repairs, hotels and restaurants, transport and communication ⁵	Financial, real estate, renting and business activities ⁶	Public administration, education, health and other services ⁷		
	1	2	3	4	5	6	7	8	9
1998	5,471.0	138.7	1,276.8	295.4	1,139.8	1,441.3	1,179.0	202.2	614.8
1999	5,689.3	136.0	1,293.3	310.7	1,191.2	1,527.6	1,230.6	201.6	662.7
2000	5,974.1	136.9	1,347.3	327.5	1,261.2	1,620.3	1,280.9	212.1	691.0
<i>Euro area enlargement</i>									
2001	6,346.0	151.6	1,412.0	349.1	1,356.5	1,719.7	1,357.0	228.7	722.8
2002	6,560.0	149.7	1,430.8	360.7	1,394.4	1,797.8	1,426.6	237.9	741.3
2001 Q4	1,603.6	38.4	350.7	88.8	342.7	438.0	345.1	58.0	181.7
2002 Q1	1,620.8	37.8	354.0	90.1	345.1	443.5	350.3	58.5	183.3
Q2	1,634.5	37.2	357.5	89.4	347.7	447.8	354.9	59.2	183.2
Q3	1,648.0	37.6	360.2	90.1	350.0	451.3	358.7	59.6	186.6
Q4	1,656.8	37.1	359.0	91.1	351.6	455.2	362.8	60.6	188.3
2003 Q1	1,666.8	37.3	362.9	90.7	352.2	457.9	365.9	60.7	190.5

4. Constant prices

(ECU billions at 1995 prices, seasonally adjusted)

	Gross value added							Intermediate consumption of FISIM ¹⁾	Taxes less subsidies on products
	Total	Agriculture, hunting, forestry and fishing activities ¹¹	Manufacturing, energy and mining ¹²	Construction ¹³	Trade, repairs, hotels and restaurants, transport and communication ¹⁴	Financial, real estate, renting and business activities ¹⁵	Public administration, education, health and other services ¹⁶		
	10	11	12	13	14	15	16	17	18
1998	5,319.6	142.3	1,256.7	291.9	1,114.4	1,388.3	1,126.0	222.4	570.1
1999	5,462.5	146.0	1,268.3	299.2	1,164.2	1,441.4	1,143.4	231.2	595.2
2000	5,667.4	145.6	1,319.0	306.2	1,220.6	1,508.2	1,167.8	247.6	610.1
<i>Euro area enlargement</i>									
2001	5,865.3	151.8	1,348.6	311.0	1,282.4	1,569.5	1,202.1	264.7	626.8
2002	5,937.9	150.8	1,359.1	308.2	1,299.3	1,589.0	1,231.5	271.0	612.5
2001 Q4	1,467.5	38.1	333.5	78.0	321.1	394.4	302.6	66.9	155.6
2002 Q1	1,475.7	37.7	336.9	77.8	323.1	395.2	305.0	66.9	153.6
Q2	1,483.9	37.7	340.3	76.8	324.6	397.1	307.3	67.2	151.9
Q3	1,488.3	37.8	341.7	76.8	325.5	397.8	308.7	68.1	153.4
Q4	1,490.1	37.6	340.2	76.8	326.1	398.9	310.5	68.9	153.6
2003 Q1	1,491.0	37.9	340.9	75.4	326.5	399.3	310.9	69.3	154.0
<i>(annual percentage changes)</i>									
1998	2.9	1.5	3.2	0.4	4.0	3.7	1.5	3.6	2.6
1999	2.7	2.6	0.9	2.5	4.5	3.8	1.5	4.0	4.4
2000	3.8	-0.3	4.0	2.3	4.8	4.6	2.1	7.1	2.5
<i>Euro area enlargement</i>									
2001	1.7	-1.3	1.1	-0.6	2.6	2.6	1.4	5.4	0.7
2002	1.2	-0.7	0.8	-0.9	1.3	1.2	2.4	2.4	-2.3
2001 Q4	0.9	-0.7	-1.2	0.0	1.4	2.0	1.6	4.2	-0.2
2002 Q1	0.8	-0.6	-1.2	0.1	1.1	1.5	2.1	2.4	-2.3
Q2	1.3	0.0	1.0	-1.0	1.3	1.3	2.5	1.8	-3.7
Q3	1.3	-0.9	1.3	-1.2	1.4	1.1	2.6	2.4	-1.8
Q4	1.5	-1.3	2.0	-1.5	1.6	1.1	2.6	3.0	-1.3
2003 Q1	1.0	0.6	1.2	-3.0	1.1	1.0	2.0	3.7	0.3

Source: Eurostat.

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

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

	Total		Industry excluding construction ²⁾								Construction	Manufacturing
	Total		Industry excluding construction and energy						Energy			
	Index (s.a.) 2000 = 100		Total	Inter- mediate goods	Capital goods	Consumer goods						
						Total	Durable consumer goods ⁸⁾	Non-durable consumer goods ⁹⁾				
1	2	3	4	5	6	7	8	9	10	11	12	
1999	2.1	95.0	1.9	2.0	1.9	2.3	1.7	1.4	1.7	0.7	4.1	1.9
2000	4.9	100.1	5.3	5.6	5.9	8.5	2.0	6.4	1.1	1.9	2.4	5.6
<i>Euro area enlargement</i>												
2001	0.3	100.6	0.4	0.2	-0.6	1.4	0.5	-1.8	1.0	1.5	0.3	0.3
2002	-0.7	99.9	-0.6	-0.8	0.3	-2.1	-0.6	-5.5	0.3	0.9	-0.1	-0.8
2002 Q2	-1.0	100.1	-0.7	-1.0	0.0	-2.1	-0.8	-6.2	0.2	2.2	-0.2	-0.8
Q3	-0.1	100.2	0.0	-0.2	1.1	-1.1	-1.1	-4.4	-0.5	1.5	0.1	-0.1
Q4	0.7	100.2	1.2	1.5	2.5	1.4	0.5	-4.3	1.5	-0.9	-1.7	1.5
2003 Q1	0.5	100.2	1.0	0.5	1.0	1.5	-0.9	-5.0	-0.2	4.5	-3.2	0.8
Q2	.	.	.	.	.	.	.	.	.	.	.	.
2002 Aug.	-0.9	100.1	-0.7	-1.0	-0.1	-1.3	-1.7	-9.1	-0.6	0.9	-0.5	-0.8
Sep.	0.0	100.2	0.1	-0.1	1.7	-1.8	-0.7	-3.5	-0.2	1.0	0.4	0.0
Oct.	0.5	100.4	1.3	0.7	1.6	0.2	0.4	-3.8	1.2	4.8	-2.3	1.0
Nov.	2.0	100.8	2.8	3.4	4.3	3.9	1.9	-2.1	2.6	-1.7	-0.6	3.4
Dec.	-0.5	99.4	-0.6	0.2	1.3	-0.1	-0.8	-7.5	0.4	-4.7	-2.2	0.2
2003 Jan.	0.9	100.2	1.1	0.8	1.8	1.5	-1.0	-4.6	-0.4	1.8	-0.7	0.8
Feb.	1.3	100.6	2.1	0.9	0.7	3.2	-0.5	-4.5	0.2	9.2	-3.8	1.1
Mar.	-0.5	99.8	0.0	-0.2	0.7	0.1	-1.2	-5.9	-0.3	2.8	-5.0	0.5
Apr.	.	100.2	0.6	0.2	1.0	-0.7	0.2	-5.2	1.3	3.1	.	-0.4
May	.	99.2	-1.3	-1.7	-1.4	-0.9	-2.8	-6.9	-2.0	1.6	.	-1.5
June	.	.	.	.	.	.	.	.	.	.	.	.

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

	Retail sales (s.a.)									New passenger car registrations	
	Current prices			Constant prices						Thousands ³⁾ (s.a.)	
	Total		Index 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	2.7	2.2	1.4	2.3	973	5.4	
2000	99.9	4.1	100.0	2.3	2.1	2.1	1.5	4.4	952	-2.1	
<i>Euro area enlargement</i>											
2001	104.1	4.2	101.6	1.6	1.8	1.5	0.9	-0.3	968	-0.8	
2002	105.9	1.7	101.7	0.1	0.5	-0.2	-0.9	-1.9	926	-4.3	
2002 Q2	105.6	1.6	101.3	-0.3	0.2	0.0	-1.4	-2.1	914	-7.6	
Q3	106.3	1.6	102.2	0.5	0.8	0.4	-1.4	-0.7	920	-4.8	
Q4	106.4	1.4	101.7	0.0	0.8	-0.4	-0.6	-2.5	950	0.2	
2003 Q1	108.1	2.9	102.4	0.8	2.5	0.5	-1.7	0.1	896	-2.6	
Q2	.	.	.	.	.	.	.	.	885	-2.8
2002 Aug.	106.7	2.1	102.6	0.6	1.3	0.3	0.1	-1.9	927	-4.1	
Sep.	106.4	1.3	101.8	0.1	0.3	0.1	-4.4	-0.4	932	-2.5	
Oct.	107.1	3.2	102.6	1.8	1.7	1.9	5.0	-1.4	930	-3.3	
Nov.	106.1	0.7	101.7	-0.7	1.1	-1.5	-4.8	-3.1	942	-1.2	
Dec.	106.1	0.3	101.0	-1.2	-0.4	-1.7	-1.8	-2.9	979	6.1	
2003 Jan.	108.0	3.4	103.3	2.6	4.2	1.7	2.6	0.1	884	-5.3	
Feb.	108.2	2.9	102.5	1.1	2.9	0.4	-3.9	-0.6	897	-3.5	
Mar.	108.0	2.4	101.4	-1.2	0.3	-0.4	-3.7	0.8	908	0.6	
Apr.	108.0	2.3	103.0	2.1	2.5	0.5	-0.6	0.6	876	-3.9	
May	.	.	.	.	.	.	.	.	867	-5.3
June	.	.	.	.	.	.	.	.	912	0.8

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

Table 5.3

European Commission Business and Consumer Surveys ¹⁾

1. Economic sentiment indicator, manufacturing industry and consumer surveys

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

	Economic sentiment indicator ³⁾ (index 1995 = 100)	Manufacturing industry					Consumer confidence indicator				
		Industrial confidence indicator				Capacity utilisation ³⁾ (percentages)	Total ⁵⁾	Financial situation over next 12 months	Economic situation over next 12 months	Unemployment situation over next 12 months	Savings over next 12 months
		Total ⁵⁾	Order books	Stocks of finished products ⁴⁾	Production expectations						
	1	2	3	4	5	6	7	8	9	10	11
1999	101.4	-7	-16	11	7	82.6	-3	3	-4	11	1
2000	103.8	5	2	4	16	84.4	1	4	1	1	2
2001	100.8	-9	-15	14	1	82.9	-5	2	-10	14	2
2002	99.1	-11	-25	11	3	81.4	-11	-1	-12	26	-3
2002 Q2	99.5	-10	-24	11	6	81.4	-8	-1	-9	22	-3
Q3	99.0	-11	-27	11	4	81.5	-10	-1	-11	26	-3
Q4	98.7	-10	-23	10	3	81.5	-14	-3	-15	30	-8
2003 Q1	98.2	-11	-24	10	0	81.1	-19	-5	-23	39	-9
Q2	98.1	-13	-28	10	-1	80.7	-19	-4	-22	41	-9
2002 July	99.0	-12	-27	11	2	81.2	-10	-1	-10	26	-4
Aug.	98.8	-12	-28	10	2	-	-11	-1	-12	27	-4
Sep.	99.2	-10	-26	12	7	-	-9	-1	-10	24	-2
Oct.	99.0	-10	-25	10	6	81.7	-12	-2	-12	27	-7
Nov.	98.7	-10	-22	10	3	-	-14	-4	-15	30	-7
Dec.	98.5	-10	-22	10	1	-	-16	-4	-19	33	-9
2003 Jan.	98.3	-11	-22	9	-1	81.3	-18	-5	-21	36	-9
Feb.	98.4	-11	-23	11	2	-	-19	-5	-23	39	-9
Mar.	97.8	-12	-26	10	-1	-	-21	-6	-26	42	-9
Apr.	98.1	-12	-27	10	0	80.8	-19	-5	-22	40	-9
May	98.1	-13	-28	9	-1	-	-20	-4	-23	43	-9
June	98.1	-13	-28	10	-1	-	-19	-4	-22	40	-8
July	98.0	-15	-29	13	-2	80.6	-18	-4	-21	39	-9

2. Construction industry, retail trade and services surveys

(percentage balances ²⁾, seasonally adjusted)

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

Source: European Commission Business and Consumer Surveys.

1) Data refer to the Euro 12.

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

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

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

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

Table 5.4

Labour market indicators ¹⁾

1. Employment

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

	Whole economy		By employment status		By economic activity					
	Millions		Employees	Self-employed	Agriculture, hunting, forestry and fishing	Manufacturing, energy and mining	Construction	Trade, repairs, hotels and restaurants, transport and communication	Financial, real estate, renting and business services	Public administration, education, health and other services
Weight in the total ²⁾	100.0	100.0	84.2	15.8	4.7	19.3	7.0	25.2	14.2	29.6
	1	2	3	4	5	6	7	8	9	10
1998	122.361	1.8	2.0	0.9	-1.3	1.0	0.1	2.1	5.3	1.6
1999	124.607	1.8	2.3	-0.6	-2.5	-0.2	1.9	2.3	5.6	1.9
2000	127.378	2.2	2.5	0.8	-1.5	0.6	1.7	3.1	5.8	1.6
<i>Euro area enlargement</i>										
2001	133.125	1.4	1.6	0.2	-0.6	0.3	0.4	1.6	3.8	1.3
2002	133.709	0.4	0.6	-0.6	-1.9	-1.2	-1.1	0.7	1.9	1.4
2002 Q1	133.643	0.7	0.9	-0.4	-2.1	-1.0	-0.9	1.3	2.3	1.5
Q2	133.739	0.5	0.8	-0.7	-1.9	-1.2	-0.9	0.8	2.1	1.5
Q3	133.709	0.3	0.5	-0.8	-1.8	-1.3	-1.4	0.4	1.7	1.5
Q4	133.743	0.2	0.3	-0.4	-1.9	-1.5	-1.4	0.3	1.6	1.3
2003 Q1	133.735	0.1	0.1	0.0	-2.1	-1.6	-1.3	0.2	1.4	1.1

2. Unemployment

(seasonally adjusted)

	Total		By age ³⁾				By gender ⁴⁾			
			Adult		Youth		Male		Female	
	Millions	% of labour force	Millions	% of labour force	Millions	% of labour force	Millions	% of labour force	Millions	% of labour force
	11	12	13	14	15	16	17	18	19	20
1998	13.270	10.2	10.146	8.9	3.124	20.0	6.445	8.6	6.825	12.5
1999	12.247	9.3	9.431	8.2	2.815	18.0	5.901	7.8	6.345	11.4
2000	11.104	8.4	8.555	7.3	2.549	16.2	5.286	7.0	5.818	10.3
<i>Euro area enlargement</i>										
2001	11.062	8.0	8.535	7.0	2.527	15.7	5.313	6.7	5.749	9.7
2002	11.667	8.4	9.061	7.4	2.606	16.3	5.770	7.3	5.897	9.8
2002 Q1	11.401	8.2	8.834	7.2	2.567	16.0	5.576	7.0	5.825	9.8
Q2	11.602	8.3	8.994	7.3	2.607	16.2	5.724	7.2	5.878	9.8
Q3	11.749	8.4	9.131	7.4	2.618	16.3	5.834	7.4	5.915	9.9
Q4	11.918	8.5	9.273	7.5	2.645	16.6	5.948	7.5	5.970	9.9
2003 Q1	12.186	8.7	9.475	7.6	2.711	16.9	6.096	7.7	6.090	10.1
2002 May	11.607	8.3	9.007	7.3	2.600	16.2	5.729	7.2	5.879	9.8
June	11.690	8.4	9.048	7.3	2.643	16.4	5.788	7.3	5.902	9.8
July	11.721	8.4	9.100	7.4	2.621	16.3	5.812	7.3	5.910	9.9
Aug.	11.748	8.4	9.130	7.4	2.619	16.3	5.835	7.4	5.913	9.9
Sep.	11.778	8.5	9.164	7.4	2.614	16.3	5.856	7.4	5.923	9.9
Oct.	11.834	8.5	9.214	7.5	2.620	16.4	5.894	7.4	5.940	9.9
Nov.	11.922	8.5	9.274	7.5	2.648	16.6	5.950	7.5	5.972	9.9
Dec.	11.997	8.6	9.331	7.5	2.666	16.7	6.000	7.6	5.997	10.0
2003 Jan.	12.103	8.7	9.405	7.6	2.698	16.9	6.055	7.6	6.048	10.0
Feb.	12.191	8.7	9.477	7.6	2.714	17.0	6.102	7.7	6.089	10.1
Mar.	12.263	8.8	9.544	7.7	2.719	17.0	6.132	7.7	6.131	10.2
Apr.	12.326	8.8	9.604	7.7	2.722	17.0	6.165	7.7	6.161	10.2
May	12.349	8.8	9.628	7.8	2.721	17.0	6.179	7.8	6.170	10.2

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

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

2) In 2002.

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

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

3. Unit labour costs, compensation per employee and labour productivity

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

	Total		By economic activity					
	Index 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 ¹⁾								
2000	100.0	1.3	1.6	-0.3	1.9	0.0	4.2	1.8
<i>Euro area enlargement</i>								
2001	102.7	2.7	3.5	1.9	4.1	1.8	2.7	3.1
2002	104.8	2.1	1.9	0.9	3.1	1.7	2.8	1.4
2002 Q1	104.4	3.2	6.5	2.8	3.5	2.9	3.4	2.5
Q2	104.5	2.0	-0.5	0.7	3.2	1.6	2.3	1.4
Q3	104.9	1.8	-1.2	0.6	2.9	1.3	2.7	1.2
Q4	105.4	1.4	3.0	-0.5	2.6	1.1	2.9	0.5
2003 Q1	106.3	1.7	-0.1	0.5	3.9	1.6	2.6	1.4
Compensation per employee								
2000	100.0	2.6	2.8	3.0	2.5	1.7	3.0	2.3
<i>Euro area enlargement</i>								
2001	102.8	2.8	2.7	2.7	3.0	2.8	1.5	3.2
2002	105.4	2.5	3.2	3.0	3.3	2.3	2.2	2.4
2002 Q1	104.5	2.9	8.2	2.7	4.6	2.6	2.5	3.1
Q2	105.0	2.3	1.4	2.9	3.1	2.1	1.6	2.4
Q3	105.7	2.5	-0.3	3.2	3.1	2.3	2.1	2.3
Q4	106.3	2.4	3.6	3.1	2.5	2.3	2.5	1.8
2003 Q1	107.2	2.5	2.7	3.3	2.1	2.5	2.3	2.2
Labour productivity ²⁾								
2000	100.0	1.2	1.2	3.3	0.6	1.7	-1.1	0.5
<i>Euro area enlargement</i>								
2001	100.1	0.1	-0.7	0.8	-1.0	1.0	-1.1	0.1
2002	100.5	0.4	1.3	2.1	0.3	0.6	-0.6	1.0
2002 Q1	100.1	-0.3	1.6	-0.1	1.0	-0.2	-0.8	0.6
Q2	100.4	0.3	1.9	2.2	0.0	0.5	-0.7	1.0
Q3	100.7	0.6	1.0	2.6	0.2	1.0	-0.6	1.1
Q4	100.8	1.0	0.7	3.6	-0.1	1.2	-0.4	1.3
2003 Q1	100.9	0.8	2.8	2.8	-1.7	0.9	-0.3	0.8

4. Hourly labour cost indicators

(annual percentage changes, unless otherwise indicated)

	Total ³⁾		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	3.4	3.3	1.7	
<i>Euro area enlargement</i>								
2001	103.3	3.3	3.4	2.9	3.1	3.6	4.1	
2002	107.2	3.7	3.7	4.0	3.3	3.6	3.9	
2002 Q1	106.4	4.3	4.3	4.4	3.7	4.6	5.4	
Q2	106.5	3.4	3.3	3.8	2.8	3.1	3.8	
Q3	107.4	3.5	3.4	3.8	3.0	3.5	3.2	
Q4	108.4	3.7	3.7	4.0	3.5	3.3	3.3	
2003 Q1	109.2	2.7	2.6	3.1	2.8	2.4	2.2	

Sources: ECB calculations based on Eurostat data (columns 1 to 8 and 15) and Eurostat (columns 9 to 14).

1) Compensation (at current prices) per employee divided by value added (at constant prices) per person employed.

2) Value added (at constant prices) per person employed.

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

6 Saving, investment and financing in the euro area

Table 6.1

Financial investment and financing of non-financial sectors ¹⁾

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

Amounts outstanding

1. Main financial assets ²⁾

	Currency and deposits										Memo: deposits of non-banks with banks outside the euro area ³⁾
	Total	Currency	Deposits of non-financial sectors other than central government with euro area MFIs					Deposits of central government with euro area MFIs	Deposits with non-MFIs ⁴⁾		
			Total	Overnight	With agreed maturity	Redeemable at notice	Repurchase agreements				
	1	2	3	4	5	6	7	8	9	10	
1999 Q1	4,677.3	318.6	4,075.8	1,239.1	1,464.6	1,306.2	66.0	133.4	149.5	243.9	
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	157.4	259.6	
Q2	5,236.1	333.0	4,579.2	1,526.1	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	5,635.6	341.2	4,964.8	1,790.2	1,593.2	1,469.6	111.9	136.4	193.2	291.6	
2003 Q1	.	327.2	4,946.2	1,759.3	1,572.1	1,509.4	105.5	176.2	.	.	

	Securities other than shares			Shares ⁵⁾				Insurance technical reserves		
	Total	Short-term	Long-term	Total	Quoted shares	Mutual fund shares	Money market fund shares	Total	Net equity of households in life insurance reserves and pension fund reserves	Prepayments of insurance premiums and reserves for outstanding claims
1999 Q1	1,575.5	154.1	1,421.3	4,044.3	2,425.8	1,618.5	194.9	2,686.3	2,403.5	282.8
Q2	1,488.2	144.3	1,343.9	4,166.4	2,448.9	1,717.5	211.4	2,755.8	2,468.9	286.9
Q3	1,493.6	133.1	1,360.5	4,083.1	2,358.2	1,724.9	210.0	2,798.0	2,507.2	290.8
Q4	1,559.2	166.3	1,392.9	4,823.8	3,003.8	1,819.9	204.2	2,943.1	2,649.0	294.1
2000 Q1	1,549.0	174.3	1,374.7	4,888.8	2,970.4	1,918.4	214.9	3,061.4	2,760.6	300.8
Q2	1,580.2	180.4	1,399.8	4,801.1	2,908.8	1,892.2	204.6	3,108.1	2,803.5	304.7
Q3	1,663.0	198.7	1,464.3	4,843.9	2,938.4	1,905.5	204.1	3,163.0	2,854.5	308.5
Q4	1,746.1	216.6	1,529.5	4,867.5	3,009.2	1,858.3	200.1	3,192.8	2,885.3	307.5
<i>Euro area enlargement</i>										
2001 Q1	1,855.1	276.4	1,578.7	4,544.8	2,725.2	1,819.6	224.0	3,243.6	2,930.1	313.4
Q2	1,852.4	237.0	1,615.5	4,513.4	2,664.6	1,848.8	232.3	3,302.4	2,986.8	315.7
Q3	1,887.0	233.4	1,653.6	4,023.8	2,296.2	1,727.7	253.1	3,277.6	2,958.2	319.4
Q4	1,917.7	225.0	1,692.7	4,375.8	2,553.2	1,822.5	260.1	3,370.8	3,050.1	320.7
2002 Q1	1,974.9	265.7	1,709.2	4,464.3	2,610.2	1,854.2	290.7	3,406.3	3,076.6	329.7
Q2	1,996.5	229.7	1,766.8	4,078.9	2,321.8	1,757.1	292.8	3,425.4	3,091.9	333.5
Q3	2,045.6	253.5	1,792.0	3,472.4	1,753.5	1,718.9	309.9	3,452.1	3,115.5	336.6
Q4	2,071.0	255.4	1,815.5	3,478.9	1,777.2	1,701.7	308.1	3,506.0	3,168.2	337.8
2003 Q1	.	.	.	.	.	.	.	.	.	.

Source: ECB.

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

2) Most of the financial asset and liability categories defined in the ESA 95 are covered. Financial derivatives, loans granted by general government and non-financial corporations, unquoted shares and other equity, and other receivables and payables are not included.

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

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

5) Excluding unquoted shares.

2. Main liabilities ¹⁾

	Loans taken from euro area MFIs and other financial corporations by											Memo: loans taken from banks outside the euro area by non-banks ²⁾
	Total	Taken from euro area MFIs	General government			Non-financial corporations			Households ³⁾			
			Total	Short-term	Long-term ⁴⁾	Total	Short-term	Long-term	Total	Short-term	Long-term	
1	2	3	4	5	6	7	8	9	10	11	12	
1999 Q1	6,250.2	5,682.6	900.5	36.0	864.5	2,590.9	919.8	1,671.1	2,758.8	250.5	2,508.4	156.8
Q2	6,413.8	5,817.3	897.9	38.6	859.3	2,682.9	962.5	1,720.4	2,833.0	254.2	2,578.8	183.3
Q3	6,481.7	5,886.4	883.1	37.5	845.5	2,697.9	942.0	1,755.9	2,900.8	253.9	2,646.8	191.4
Q4	6,654.3	6,039.0	898.5	41.7	856.7	2,789.7	977.8	1,811.9	2,966.1	262.2	2,703.9	201.4
2000 Q1	6,799.2	6,155.9	889.1	40.8	848.3	2,888.2	1,036.0	1,852.3	3,021.9	263.6	2,758.2	221.1
Q2	6,946.5	6,261.7	884.0	41.6	842.3	2,987.7	1,088.0	1,899.7	3,074.9	272.3	2,802.6	219.7
Q3	7,091.7	6,379.2	864.5	39.6	825.0	3,095.7	1,149.7	1,946.0	3,131.5	273.9	2,857.6	252.3
Q4	7,255.3	6,500.0	880.3	41.7	838.6	3,194.4	1,165.2	2,029.2	3,180.6	278.9	2,901.7	245.2
<i>Euro area enlargement</i>												
2001 Q1	7,452.7	6,671.1	896.3	41.8	854.5	3,321.6	1,243.2	2,078.4	3,234.8	278.6	2,956.2	257.3
Q2	7,558.0	6,761.6	880.4	42.1	838.3	3,393.3	1,265.5	2,127.8	3,284.3	284.6	2,999.7	279.2
Q3	7,629.9	6,804.6	874.2	45.1	829.1	3,433.6	1,243.6	2,190.1	3,322.1	280.1	3,042.0	249.7
Q4	7,749.0	6,897.1	901.3	50.6	850.7	3,474.0	1,226.7	2,247.2	3,373.7	281.5	3,092.3	268.9
2002 Q1	7,823.2	6,959.9	905.6	53.3	852.3	3,508.8	1,223.1	2,285.8	3,408.8	277.1	3,131.7	278.5
Q2	7,907.3	7,017.0	878.5	53.5	825.0	3,549.0	1,207.9	2,341.1	3,479.8	287.8	3,192.1	245.5
Q3	7,946.9	7,052.4	869.6	54.8	814.8	3,554.6	1,189.6	2,365.1	3,522.7	283.8	3,238.9	238.0
Q4	8,066.1	7,131.3	884.6	60.7	823.9	3,597.7	1,172.7	2,425.0	3,583.8	289.2	3,294.6	240.2
2003 Q1	.	7,172.4	.	.	.	.	.	.	.	.	.	.

	Securities other than shares issued by								Quoted shares issued by non-financial corporations	Deposit liabilities of central government	Pension fund reserves of non- financial corporations
	Total	General government			Non-financial corporations						
		Total	Short-term	Long-term	Total	Short-term	Long-term				
13	14	15	16	17	18	19	20	21	22		
1999 Q1	3,967.8	3,634.9	465.8	3,169.1	333.0	64.3	268.7	2,968.2	148.8	219.6	
Q2	3,952.9	3,612.1	458.2	3,153.8	340.8	66.6	274.2	3,090.6	139.6	221.9	
Q3	3,931.9	3,577.4	448.1	3,129.2	354.6	75.0	279.6	3,015.8	141.7	224.2	
Q4	3,898.3	3,533.3	419.7	3,113.6	364.9	78.3	286.7	4,196.1	148.9	226.5	
2000 Q1	3,953.7	3,586.0	425.1	3,160.9	367.7	78.8	289.0	4,535.8	148.2	228.4	
Q2	3,987.5	3,607.7	425.6	3,182.1	379.8	88.9	290.9	4,381.0	147.9	230.2	
Q3	4,020.2	3,621.0	422.0	3,199.0	399.2	95.6	303.6	4,222.7	147.9	232.1	
Q4	4,066.7	3,647.8	400.5	3,247.2	418.9	101.1	317.9	4,069.6	155.3	233.9	
<i>Euro area enlargement</i>											
2001 Q1	4,243.5	3,787.5	429.8	3,357.7	456.0	112.1	343.9	3,722.4	154.7	236.1	
Q2	4,292.7	3,811.8	441.6	3,370.2	481.0	123.1	357.9	3,679.7	155.2	238.3	
Q3	4,377.7	3,879.7	450.3	3,429.4	498.1	137.1	360.9	3,033.6	156.3	240.5	
Q4	4,389.9	3,874.6	434.3	3,440.3	515.3	136.0	379.4	3,528.0	168.7	241.4	
2002 Q1	4,445.7	3,925.5	446.7	3,478.7	520.2	141.3	378.9	3,546.2	174.6	243.8	
Q2	4,535.9	4,021.6	481.7	3,539.9	514.2	126.9	387.3	3,034.8	175.7	246.2	
Q3	4,647.4	4,119.3	480.0	3,639.3	528.0	134.4	393.6	2,289.2	177.6	248.6	
Q4	4,655.7	4,124.5	480.1	3,644.4	531.2	140.6	390.5	2,396.2	190.1	251.1	
2003 Q1	.	.	.	.	.	.	.	2,123.5	.	.

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

3) Including non-profit institutions serving households.

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

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

	Currency and deposits										Memo: deposits of non-banks with banks outside the euro area ³⁾
	Total	Currency	Deposits of non-financial sectors other than central government with euro area MFIs					Deposits of central government with euro area MFIs	Deposits with non-MFIs ⁴⁾		
			Total	Overnight	With agreed maturity	Redeemable at notice	Repurchase agreements				
	1	2	3	4	5	6	7	8	9	10	
1999 Q1	2.8	-5.2	2.4	-12.6	0.7	26.9	-12.5	-4.2	9.8	23.4	
Q2	22.6	6.2	33.9	81.3	-49.1	9.3	-7.6	-8.4	-9.1	-4.3	
Q3	13.7	3.5	0.0	3.5	-1.2	-2.6	0.3	8.3	1.9	-2.8	
Q4	132.8	22.3	94.2	44.2	35.7	10.2	4.2	8.7	7.6	-14.2	
2000 Q1	-28.4	-15.3	-0.4	6.1	0.3	-20.5	13.7	-11.9	-0.7	26.1	
Q2	52.1	6.7	30.0	31.9	17.8	-21.8	2.1	15.8	-0.4	-12.8	
Q3	5.7	-2.2	-5.5	-17.4	27.7	-18.7	2.9	13.3	0.1	-1.7	
Q4	130.9	8.6	109.5	71.5	28.3	5.8	3.8	5.3	7.6	-16.7	
<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	13.6	
Q2	94.7	-3.3	81.8	77.1	-4.3	6.3	2.7	15.1	1.0	4.8	
Q3	8.1	-23.4	48.3	25.4	3.0	13.0	7.0	-17.7	0.8	3.4	
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	9.2	
Q4	173.4	34.5	136.3	83.8	12.8	46.6	-6.9	-9.9	12.5	8.5	
2003 Q1	.	7.7	-16.3	-28.7	-21.2	40.0	-6.4	32.8	.	.	

	Securities other than shares			Shares ⁵⁾				Insurance technical reserves		
	Total	Short-term	Long-term	Total	Quoted shares	Mutual fund shares	Money market fund shares	Total	Net equity of households in life insurance reserves and pension fund reserves	Prepayments of insurance premiums and reserves for outstanding claims
1999 Q1	52.6	4.3	48.3	105.3	1.7	103.5	4.3	63.9	58.1	5.8
Q2	-41.1	-12.2	-28.9	152.2	67.5	84.7	15.6	53.2	49.0	4.2
Q3	-1.7	-12.5	10.8	87.6	47.5	40.1	-2.0	56.0	51.9	4.1
Q4	67.8	32.1	35.7	-17.5	13.5	-31.0	-12.6	74.3	70.9	3.5
2000 Q1	5.7	19.9	-14.2	-16.9	-64.8	47.8	13.5	80.6	73.8	6.8
Q2	42.6	5.3	37.3	67.8	48.5	19.3	-7.2	56.9	53.0	3.9
Q3	75.7	21.3	54.4	105.8	98.2	7.6	-1.2	57.0	53.0	3.9
Q4	17.6	6.7	10.9	179.6	141.1	38.5	-5.0	60.4	61.4	-1.0
<i>Euro area enlargement</i>										
2001 Q1	100.0	60.5	39.5	45.1	-2.2	47.3	22.1	61.9	56.0	5.9
Q2	-2.3	-34.1	31.9	41.0	34.4	6.6	3.4	56.6	54.3	2.2
Q3	31.9	-4.3	36.3	57.5	31.1	26.4	14.1	51.8	48.1	3.8
Q4	3.3	-12.9	16.2	-0.7	-24.4	23.6	3.0	60.2	58.9	1.3
2002 Q1	63.4	36.5	26.9	47.5	5.0	42.5	26.4	70.2	61.1	9.1
Q2	-10.0	-42.2	32.2	25.2	12.2	13.1	-1.5	51.4	47.6	3.7
Q3	38.9	24.9	14.0	45.2	21.7	23.5	13.6	51.4	48.2	3.2
Q4	-2.5	-6.5	4.1	-34.9	-45.5	10.6	-4.3	57.2	56.0	1.2
2003 Q1	.	.	.	.	.	.	.	.	.	.

Source: ECB.

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

2) Most of the financial asset and liability categories defined in the ESA 95 are covered. Financial derivatives, loans granted by general government and non-financial corporations, unquoted shares and other equity, and other receivables and payables are not included.

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

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

5) Excluding unquoted shares.

2. Main liabilities ¹⁾

	Loans taken from euro area MFIs and other financial corporations by											Memo: loans taken from banks outside the euro area by non-banks ²⁾
	Total	Taken from euro area MFIs	General government			Non-financial corporations			Households ³⁾			
			Total	Short-term	Long-term ⁴⁾	Total	Short-term	Long-term	Total	Short-term	Long-term	
1	2	3	4	5	6	7	8	9	10	11	12	
1999 Q1	141.2	127.3	-8.6	0.1	-8.8	47.9	34.9	13.1	101.9	15.0	86.9	1.7
Q2	162.3	133.1	-4.1	2.7	-6.7	89.3	41.0	48.4	77.0	3.8	73.2	23.9
Q3	70.5	71.5	-14.7	-1.1	-13.6	17.4	-16.7	34.1	67.7	-0.3	68.1	8.4
Q4	171.2	146.3	15.0	4.2	10.9	87.9	33.6	54.2	68.3	8.4	59.9	-7.0
2000 Q1	141.4	108.8	-7.9	-0.9	-7.0	91.3	54.7	36.6	58.0	1.5	56.5	15.1
Q2	162.9	118.4	-5.5	0.9	-6.4	112.6	61.5	51.0	55.8	9.7	46.1	-0.8
Q3	132.8	91.6	-15.8	-2.1	-13.7	96.8	53.4	43.5	51.7	-0.1	51.8	23.2
Q4	188.0	140.2	16.1	2.2	13.9	119.3	20.2	99.0	52.7	5.3	47.4	1.9
<i>Euro area enlargement</i>												
2001 Q1	156.4	137.2	-3.6	-0.5	-3.2	106.8	67.0	39.8	53.2	-0.3	53.6	9.2
Q2	109.2	88.0	-16.2	0.3	-16.5	68.3	20.7	47.6	57.1	6.0	51.1	16.8
Q3	88.5	57.9	-5.7	2.9	-8.7	55.3	-15.9	71.2	38.9	-4.2	43.1	-21.4
Q4	118.6	92.4	26.2	5.5	20.8	40.5	-19.1	59.6	51.8	1.4	50.4	4.2
2002 Q1	74.9	61.9	4.2	2.7	1.5	28.9	-5.8	34.7	41.8	-4.9	46.7	8.4
Q2	103.3	83.0	-25.6	0.2	-25.8	58.3	-3.9	62.2	70.5	10.9	59.6	-18.7
Q3	38.3	34.2	-9.1	1.3	-10.4	1.6	-17.6	19.2	45.8	-4.0	49.8	-9.0
Q4	134.4	98.7	15.8	5.9	9.9	53.0	-11.9	64.9	65.6	6.3	59.3	8.9
2003 Q1	.	60.6	.	.	.	.	.	.	.	.	.	.

	Securities other than shares issued by							Quoted shares issued by non-financial corporations	Deposit liabilities of central government	Pension fund reserves of non- financial corporations
	Total	General government			Non-financial corporations					
		Total	Short-term	Long-term	Total	Short-term	Long-term			
13	14	15	16	17	18	19	20	21	22	
1999 Q1	74.0	60.6	1.2	59.4	13.4	10.4	3.0	10.9	9.6	2.8
Q2	39.0	29.0	-7.7	36.7	10.0	2.3	7.8	34.7	-9.2	2.8
Q3	56.5	38.6	-10.0	48.6	17.9	8.2	9.7	34.7	2.1	2.8
Q4	-12.2	-19.8	-27.9	8.1	7.6	3.4	4.1	42.1	7.2	2.8
2000 Q1	62.0	61.0	10.9	50.1	1.0	0.5	0.5	20.7	-0.7	2.8
Q2	38.9	23.5	-1.3	24.8	15.4	10.2	5.2	28.9	-0.3	2.8
Q3	48.8	25.8	-2.3	28.1	23.0	7.0	16.0	68.8	0.0	2.8
Q4	-0.7	-20.2	-27.4	7.2	19.6	6.5	13.1	55.0	7.4	2.8
<i>Euro area enlargement</i>										
2001 Q1	75.1	37.8	32.5	5.3	37.3	11.5	25.8	52.4	-0.6	3.1
Q2	85.1	59.4	10.7	48.6	25.7	11.6	14.1	45.0	0.5	3.1
Q3	47.9	29.6	8.8	20.8	18.3	13.9	4.3	10.2	1.1	3.1
Q4	7.1	-8.5	-22.2	13.8	15.6	-1.8	17.4	7.3	12.3	1.8
2002 Q1	102.6	93.0	21.7	71.3	9.7	5.6	4.1	9.4	6.0	3.3
Q2	59.7	62.0	33.9	28.1	-2.3	-15.2	12.9	4.7	1.1	3.3
Q3	56.5	46.0	-0.9	46.9	10.4	7.7	2.8	-0.3	1.9	3.8
Q4	2.3	-0.7	-8.4	7.7	3.0	6.1	-3.2	-6.1	12.4	2.5
2003 Q1	.	.	.	.	.	.	.	.	.	.

Source: ECB.

1) Most of the financial asset and liability categories defined in the ESA 95 are covered. Financial derivatives, loans granted by general government and non-financial corporations, unquoted shares and other equity, and other receivables and payables are not included.

2) BIS international banking statistics. The BIS definition of banks is closer 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 ¹⁾										
	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 Q1	426.0	32.1	380.1	3.0	10.8	323.3	42.6	280.8	1,007.1	37.1	970.1
Q2	430.9	36.4	380.5	3.3	10.7	321.7	42.5	279.2	1,020.5	35.7	984.8
Q3	436.6	32.0	389.8	3.3	11.5	313.6	41.3	272.3	1,032.2	35.1	997.1
Q4	447.5	32.2	400.3	3.3	11.7	313.6	41.1	272.5	1,035.2	38.5	996.7
2000 Q1	458.9	35.4	407.1	3.2	13.1	317.1	45.1	272.0	1,068.3	45.2	1,023.1
Q2	460.8	34.6	411.1	3.5	11.6	316.1	46.5	269.6	1,089.6	46.4	1,043.2
Q3	464.6	34.1	413.8	3.7	12.9	317.3	47.1	270.2	1,089.1	46.1	1,043.1
Q4	477.6	40.6	418.5	3.2	15.3	311.6	50.5	261.1	1,085.3	40.4	1,044.8
	<i>Euro area enlargement</i>										
2001 Q1	483.8	38.2	423.3	3.5	18.8	310.4	50.8	259.6	1,120.7	41.8	1,078.9
Q2	486.3	41.4	424.2	3.8	16.9	315.4	53.6	261.8	1,130.6	43.9	1,086.7
Q3	487.8	39.3	426.9	3.8	17.9	313.8	53.1	260.8	1,149.3	44.4	1,104.9
Q4	495.4	48.0	427.5	3.4	16.4	316.3	55.8	260.5	1,185.1	44.2	1,140.9
2002 Q1	498.6	43.9	433.0	4.0	17.7	328.3	56.1	272.2	1,236.2	54.2	1,182.0
Q2	503.9	48.4	432.9	3.7	19.0	332.6	60.6	272.0	1,223.0	40.9	1,182.2
Q3	506.3	50.1	437.9	3.9	14.4	330.4	61.6	268.9	1,280.4	51.1	1,229.3
Q4	522.8	55.9	445.6	3.5	17.9	327.1	60.5	266.7	1,297.9	53.9	1,243.9
2003 Q1	535.2	59.5	453.8	3.7	18.2	.	.	.	.	.	.

	Main financial assets ¹⁾					Main liabilities ¹⁾						
	Shares ²⁾				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 Q1	932.3	538.9	393.4	33.7	70.1	49.8	36.1	1.6	293.1	2,444.6	2,124.0	320.6
Q2	1,002.0	580.7	421.2	36.6	71.3	54.4	40.4	3.8	279.7	2,512.0	2,186.4	325.6
Q3	1,012.3	586.2	426.1	33.7	72.5	56.4	41.9	4.5	272.1	2,552.7	2,222.0	330.7
Q4	1,232.6	719.5	513.1	33.4	75.5	44.1	29.6	4.5	332.4	2,697.0	2,359.8	337.2
2000 Q1	1,348.0	777.2	570.8	37.1	78.0	52.3	37.1	5.1	363.4	2,814.4	2,467.5	346.8
Q2	1,362.7	771.2	591.5	40.6	78.9	54.2	38.8	5.1	332.2	2,859.4	2,508.1	351.3
Q3	1,411.5	796.8	614.6	37.4	80.0	49.0	33.1	7.9	358.9	2,912.7	2,556.8	355.9
Q4	1,331.3	726.6	604.7	36.9	78.4	47.3	31.5	9.1	326.3	2,938.1	2,582.4	355.7
	<i>Euro area enlargement</i>											
2001 Q1	1,326.7	730.2	596.6	44.8	80.8	51.3	36.4	9.1	311.8	2,988.0	2,623.6	364.4
Q2	1,364.7	757.0	607.6	46.5	81.7	51.2	36.2	9.6	315.6	3,045.4	2,678.1	367.3
Q3	1,232.2	666.4	565.9	45.9	83.6	52.2	37.4	9.6	221.5	3,021.4	2,648.1	373.3
Q4	1,331.8	723.8	608.0	46.0	92.2	48.5	34.9	10.0	234.7	3,118.2	2,730.3	387.9
2002 Q1	1,418.6	793.9	624.7	47.5	96.5	54.5	38.9	10.2	257.0	3,155.5	2,753.0	402.5
Q2	1,299.3	699.9	599.4	50.1	97.4	59.2	42.5	10.5	226.5	3,172.9	2,765.9	407.0
Q3	1,150.7	585.8	564.9	48.7	98.7	63.3	42.1	10.6	127.2	3,198.8	2,786.3	412.4
Q4	1,183.1	608.2	574.9	52.8	98.9	48.1	33.0	10.6	113.3	3,251.9	2,838.5	413.4
2003 Q1	.	.	.	.	.	.	42.1	.	103.3	.	.	.

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 ¹⁾										
	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 Q1	18.4	3.9	12.6	1.1	0.7	2.1	1.3	0.8	27.0	0.8	26.2
Q2	4.8	4.3	0.4	0.3	-0.2	-1.7	-0.1	-1.6	18.9	-1.5	20.4
Q3	5.8	-4.4	9.3	0.0	0.8	-8.4	-1.2	-7.2	20.5	-0.3	20.8
Q4	10.5	0.2	10.1	0.0	0.2	-0.1	-0.3	0.2	3.2	2.7	0.5
2000 Q1	11.4	3.2	6.8	0.0	1.4	3.8	4.1	-0.2	33.2	7.3	25.9
Q2	1.9	0.3	2.8	0.3	-1.5	-0.7	1.3	-2.0	17.9	1.0	16.8
Q3	1.2	-0.7	0.4	0.2	1.3	1.4	0.7	0.7	5.2	-0.2	5.4
Q4	13.0	6.5	4.6	-0.5	2.4	-5.5	3.1	-8.6	-11.1	-6.5	-4.6
<i>Euro area enlargement</i>											
2001 Q1	6.2	-2.5	4.8	0.3	3.5	-1.2	0.3	-1.5	21.5	1.3	20.2
Q2	2.8	3.4	1.0	0.3	-1.9	5.0	2.9	2.2	17.3	2.1	15.1
Q3	1.5	-2.1	2.7	-0.1	1.0	-1.6	-0.6	-1.0	28.8	0.5	28.3
Q4	7.6	8.8	0.6	-0.3	-1.4	3.7	2.7	1.0	23.2	-0.7	23.9
2002 Q1	3.0	-4.2	5.3	0.5	1.3	12.4	0.9	11.4	57.2	10.3	46.9
Q2	5.3	4.5	-0.1	-0.3	1.2	5.1	5.1	0.0	-15.4	-12.9	-2.5
Q3	2.5	1.7	5.1	0.3	-4.6	-1.5	1.6	-3.1	33.4	10.2	23.2
Q4	16.5	5.8	7.7	-0.4	3.5	-2.7	-0.5	-2.2	16.1	1.8	14.3
2003 Q1	11.6	3.7	7.4	0.2	0.4	.	.	.	.	.	.

	Main financial assets ¹⁾						Main liabilities ¹⁾						
	Shares ²⁾				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	13	14	15	16	17	18	19	20	21	22	23
1999 Q1	20.9	5.4	15.5	5.5	2.1	9.5	9.0	-0.4	0.4	62.7	54.5	8.2	
Q2	23.2	12.6	10.6	3.0	1.2	4.3	4.3	1.8	0.3	50.8	45.7	5.2	
Q3	14.9	11.8	3.1	-2.8	1.3	1.7	1.5	0.4	0.2	53.8	48.6	5.2	
Q4	51.2	11.6	39.6	-0.3	3.0	-12.6	-12.4	0.6	-0.4	73.4	66.8	6.7	
2000 Q1	46.1	8.9	37.3	4.4	2.4	8.2	7.5	0.5	0.7	78.7	69.0	9.7	
Q2	32.5	7.7	24.8	3.4	0.9	1.9	1.7	0.0	1.9	54.2	49.7	4.5	
Q3	35.7	18.2	17.5	-3.2	1.1	-5.2	-5.7	2.7	0.2	54.5	49.8	4.7	
Q4	14.4	0.0	14.4	-0.5	-1.6	-1.7	-1.6	1.0	0.1	57.7	57.8	-0.1	
<i>Euro area enlargement</i>													
2001 Q1	47.9	30.3	17.6	8.2	2.4	3.9	4.9	0.0	-0.9	59.7	51.0	8.7	
Q2	16.7	13.3	3.4	1.3	0.9	0.0	-0.2	0.6	-1.0	54.2	51.3	2.9	
Q3	24.6	20.7	3.9	-0.7	1.9	1.2	1.5	0.1	4.0	51.2	45.1	6.0	
Q4	36.3	9.7	26.6	0.0	8.6	-3.8	-2.5	0.5	0.6	70.2	55.6	14.6	
2002 Q1	31.3	16.0	15.3	1.5	4.3	6.0	3.9	0.1	0.2	71.2	56.6	14.6	
Q2	21.3	8.8	12.5	2.6	1.0	4.4	3.3	0.2	0.2	48.0	43.5	4.5	
Q3	7.9	8.2	-0.3	-1.4	1.3	1.9	-2.5	-0.1	0.0	49.0	43.6	5.4	
Q4	14.2	-4.7	18.9	4.1	0.2	-15.2	-9.2	0.1	0.5	53.8	52.8	1.0	
2003 Q1	.	.	.	.	.	.	10.9	.	.	.	.	.

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 ¹⁾***(EUR billions, unless otherwise indicated)***1. All sectors in the euro area ²⁾**

	Net acquisition of non-financial assets					Net acquisition of financial assets							
	Total	Gross fixed capital formation	Consumption of fixed capital (-)	Changes in inventories ³⁾	Non-produced assets	Total	Monetary gold and SDRs	Currency and deposits	Securities other than shares ⁴⁾	Loans	Shares and other equity	Insurance technical reserves	Other investment (net) ⁵⁾
	1	2	3	4	5	6	7	8	9	10	11	12	13
1995	368.2	1,093.3	-751.7	26.4	0.1	1,601.0	0.7	500.7	223.0	422.0	164.5	202.6	87.6
1996	340.8	1,122.7	-783.9	1.6	0.4	1,730.2	-3.0	396.2	398.1	383.0	315.0	195.5	45.4
1997	353.2	1,139.5	-797.1	10.8	0.1	1,917.7	-0.2	394.4	332.3	449.9	485.6	223.7	32.0
1998	412.5	1,203.6	-823.6	32.3	0.2	2,396.3	11.0	430.7	361.0	523.3	831.2	216.0	23.0
1999	448.0	1,291.8	-863.7	19.8	0.1	3,063.4	1.3	557.7	435.9	880.6	906.8	255.1	26.0
2000	490.8	1,389.1	-913.1	31.3	-16.6	2,779.0	1.3	349.9	242.6	796.3	1,123.7	257.7	7.5
<i>Euro area enlargement</i>													
2001	465.1	1,437.4	-973.6	-0.7	2.0	2,540.5	-0.5	587.6	406.3	705.8	599.3	238.3	3.7

	Changes in net worth ⁶⁾				Net incurrence of liabilities						
	Total	Gross saving	Consumption of fixed capital (-)	Net capital transfers receivable	Total	Currency and deposits	Securities other than shares ⁴⁾	Loans	Shares and other equity	Insurance technical reserves	
	14	15	16	17	18	19	20	21	22	23	
1995	413.0	1,159.8	-751.7	5.0	1,556.1	495.4	277.7	437.2	139.8	206.0	
1996	410.7	1,190.0	-783.9	4.6	1,660.3	472.3	378.2	335.3	278.2	196.3	
1997	456.1	1,241.8	-797.1	11.4	1,814.7	511.6	319.0	378.6	375.6	229.9	
1998	486.5	1,299.1	-823.6	11.1	2,322.3	648.4	325.1	481.8	645.5	221.5	
1999	498.3	1,352.0	-863.7	10.0	3,013.1	929.1	496.9	762.5	559.7	264.9	
2000	514.4	1,419.4	-913.1	8.1	2,755.4	531.1	413.7	825.5	728.0	257.2	
<i>Euro area enlargement</i>											
2001	483.4	1,449.4	-973.6	7.6	2,522.2	676.0	476.9	583.0	534.5	251.8	

2. Non-financial corporations

	Net acquisition of non-financial assets			Net acquisition of financial assets					Changes in net worth ⁶⁾		Net incurrence of liabilities			
	Total	Gross fixed capital formation	Consumption of fixed capital (-)	Total	Currency and deposits	Securities other than shares ⁴⁾	Loans	Shares and other equity	Total	Gross saving	Total	Securities other than shares ⁴⁾	Loans	Shares and other equity
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1995	155.0	569.8	-438.7	255.4	34.7	10.1	40.0	64.7	270.4	531.1	140.0	-87.3	126.0	90.6
1996	136.3	589.4	-454.8	267.3	54.2	-12.9	55.1	87.5	126.2	538.1	277.3	7.0	143.8	119.0
1997	157.5	615.2	-469.3	245.3	25.3	-13.6	46.3	95.9	113.6	546.1	289.2	12.1	154.5	113.0
1998	202.4	660.3	-487.9	417.3	54.1	-6.9	96.4	185.8	150.6	590.3	468.1	23.8	253.1	180.6
1999	221.9	708.2	-508.5	599.4	27.0	87.0	169.4	296.0	113.9	573.4	710.4	48.9	420.7	224.3
2000	323.7	775.5	-543.2	813.3	69.5	93.8	166.0	424.5	97.4	594.0	1,037.7	58.9	544.8	425.9
<i>Euro area enlargement</i>														
2001	226.9	801.1	-577.3	605.2	82.8	73.5	136.7	222.3	93.7	617.9	738.0	96.9	321.0	308.1

3. Households ⁷⁾

	Net acquisition of non-financial assets			Net acquisition of financial assets					Changes in net worth ⁶⁾		Net incurrence of liabilities		Memo:	
	Total	Gross fixed capital formation	Consumption of fixed capital (-)	Total	Currency and deposits	Securities other than shares ⁴⁾	Shares and other equity	Insurance technical reserves	Total	Gross saving	Total	Loans	Disposable income	Gross saving ratio ⁸⁾
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1995	167.7	351.6	-186.4	394.7	190.1	82.5	0.8	180.1	425.5	606.7	136.9	135.8	3,602.8	16.8
1996	164.3	361.8	-198.9	433.4	146.6	22.7	94.4	190.9	436.4	620.0	161.3	160.1	3,761.0	16.5
1997	160.2	353.7	-194.7	422.1	70.4	-18.3	195.0	217.4	413.8	589.1	168.5	167.1	3,787.9	15.6
1998	169.0	363.7	-198.1	442.6	96.3	-117.6	292.7	210.9	401.0	568.0	211.5	210.1	3,896.8	14.6
1999	177.4	392.5	-212.7	482.0	119.2	-15.8	193.4	241.6	384.4	553.3	273.4	271.9	4,058.2	13.6
2000	184.9	411.8	-219.8	415.6	53.1	35.1	132.9	251.7	377.7	555.9	222.0	220.3	4,228.5	13.1
<i>Euro area enlargement</i>														
2001	179.8	420.2	-239.6	396.9	177.9	50.0	59.0	226.2	397.1	594.5	172.7	170.8	4,512.7	13.2

Source: ECB.

1) Non-consolidated data.

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

3) Including net acquisition of valuables.

4) Excluding financial derivatives.

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

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

7) Including non-profit institutions serving households.

8) Gross saving as a percentage of disposable income.

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

Table 7.1

Revenue, expenditure and deficit / surplus ¹⁾

(as a percentage of GDP)

1. Euro area – revenue

	Total	Current revenue					Indirect taxes	Received by EU institutions	Social contributions	Employers		Sales	Capital revenue		Memo: fiscal burden ²⁾
		Direct taxes	Households	Corporations	Employers	Employees				Capital taxes					
	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	48.3	47.6	12.2	9.3	2.5	13.5	0.7	17.6	8.8	5.6	2.5	0.7	0.4	43.7	
1998	47.7	47.2	12.4	9.6	2.5	14.1	0.7	16.5	8.5	5.0	2.5	0.5	0.3	43.3	
1999	48.2	47.7	12.8	9.8	2.6	14.3	0.6	16.4	8.5	5.0	2.5	0.5	0.3	43.8	
2000	47.8	47.3	13.0	10.0	2.7	14.2	0.6	16.2	8.4	4.9	2.4	0.5	0.3	43.6	
<i>Euro area enlargement</i>															
2001	47.1	46.6	12.6	9.8	2.5	13.9	0.6	16.0	8.4	4.8	2.3	0.5	0.3	42.8	
2002	46.6	46.0	12.1	9.5	2.4	13.8	0.5	16.0	8.4	4.7	2.3	0.6	0.3	42.3	

2. Euro area – expenditure

	Total	Current expenditure								Capital expenditure				Memo: primary expenditure ⁴⁾
		Total	Compensation of employees	Intermediate consumption	Interest	Current transfers	Social payments ³⁾	Subsidies	Paid by EU institutions	Investment	Capital transfers	Paid by EU institutions		
													1		2	3	4	5	6	7	8	9	10	11	12	13	14
1993	53.7	49.2	11.6	5.1	5.9	26.6	22.9	2.5	0.6	4.6	3.1	1.6	0.1	47.9
1994	52.7	48.3	11.3	5.0	5.5	26.5	23.0	2.4	0.6	4.3	2.9	1.5	0.0	47.2
1995	52.2	47.7	11.2	4.8	5.7	26.1	22.9	2.2	0.6	4.5	2.7	1.8	0.1	46.5
1996	52.3	48.3	11.2	4.8	5.7	26.6	23.3	2.2	0.6	4.0	2.6	1.4	0.0	46.6
1997	50.9	47.2	11.0	4.7	5.1	26.3	23.2	2.1	0.6	3.7	2.4	1.3	0.1	45.8
1998	50.0	46.0	10.7	4.6	4.7	26.0	22.7	2.0	0.5	3.9	2.4	1.5	0.1	45.3
1999	49.5	45.4	10.7	4.7	4.2	25.8	22.6	2.0	0.5	4.0	2.5	1.5	0.1	45.3
2000	48.7	44.8	10.5	4.7	4.0	25.5	22.3	1.9	0.5	3.9	2.5	1.4	0.0	44.7
<i>Euro area enlargement</i>														
2001	48.7	44.6	10.5	4.7	4.0	25.4	22.3	1.9	0.5	4.2	2.5	1.6	0.0	44.8
2002	48.8	44.8	10.6	4.8	3.7	25.7	22.8	1.8	0.5	4.0	2.4	1.6	0.0	45.1

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

	Deficit (-) / surplus (+)					Primary deficit (-) / surplus (+)	Government consumption ⁵⁾							
	Total	Central government	State government	Local government	Social security funds		Total	Compensation of employees	Intermediate consumption	Transfers in kind via market producers	Consumption of fixed capital	Sales (minus)	Government collective consumption	Government individual consumption
1993	-5.7	-5.0	-0.4	-0.2	-0.1	0.2	21.2	11.6	5.1	5.0	2.0	-2.5	9.0	12.2
1994	-5.1	-4.4	-0.5	-0.2	0.0	0.4	20.8	11.3	5.0	5.1	1.9	-2.5	8.7	12.1
1995	-5.1	-4.2	-0.5	-0.1	-0.3	0.6	20.5	11.2	4.8	5.1	1.9	-2.5	8.6	11.9
1996	-4.3	-3.6	-0.4	0.0	-0.2	1.4	20.6	11.2	4.8	5.2	1.9	-2.5	8.6	12.0
1997	-2.6	-2.3	-0.4	0.1	0.0	2.5	20.4	11.0	4.7	5.1	1.9	-2.5	8.4	11.9
1998	-2.3	-2.2	-0.3	0.1	0.0	2.4	20.0	10.7	4.6	5.1	1.8	-2.5	8.2	11.8
1999	-1.3	-1.6	-0.1	0.1	0.4	2.9	20.0	10.7	4.7	5.1	1.8	-2.5	8.2	11.8
2000	-1.0	-1.3	-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	-1.6	-1.6	-0.4	0.0	0.3	2.3	20.0	10.5	4.7	5.2	1.8	-2.3	8.1	11.9
2002	-2.3	-1.9	-0.5	-0.1	0.2	1.5	20.3	10.6	4.8	5.3	1.8	-2.3	8.2	12.2

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

	BE	DE	GR	ES	FR	IE	IT	LU	NL	AT	PT	FI
	1	2	3	4	5	6	7	8	9	10	11	12
1999	-0.5	-1.5	-1.8	-1.2	-1.8	2.3	-1.7	3.5	0.7	-2.3	-2.8	2.0
2000	0.1	1.1	-1.9	-0.8	-1.4	4.3	-0.6	6.1	2.2	-1.5	-2.8	6.9
2001	0.4	-2.8	-1.4	-0.1	-1.5	1.1	-2.6	6.4	0.1	0.3	-4.2	5.1
2002	0.0	-3.6	-1.2	-0.1	-3.1	-0.1	-2.3	2.6	-1.1	-0.6	-2.7	4.7

Sources: ECB for euro area aggregated data; European Commission for data relating to countries' deficit / surplus.

1) Revenue, expenditure and deficit / surplus based on the ESA 95, but the figures exclude proceeds from the sale of UMTS (Universal Mobile Telecommunications Systems) licences in 2000 (the euro area deficit / surplus including those proceeds is equal to 0.1). Transactions between countries and EU institutions are included and consolidated. Transactions among governments are not consolidated.

2) The fiscal burden comprises taxes and social contributions.

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

4) Comprises total expenditure minus interest expenditure.

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

6) Including proceeds from the sale of UMTS licences.

Table 7.2**Debt ¹⁾***(as a percentage of GDP)***1. Euro area – government debt by financial instrument and sector of the holder**

	Total	Financial instrument				Holder				
		Coins and deposits	Loans	Short-term securities	Long-term securities	Domestic creditors ²⁾				Other creditors ³⁾
						Total	MFIs	Other financial corporations	Other sectors	
1	2	3	4	5	6	7	8	9	10	
1993	67.3	2.7	17.0	10.0	37.6	52.5	27.6	8.8	16.2	14.8
1994	70.0	2.9	16.1	10.3	40.6	55.8	29.8	10.0	16.0	14.2
1995	74.2	2.9	17.7	9.9	43.8	58.3	30.5	11.0	16.8	15.9
1996	75.4	2.9	17.2	9.9	45.5	58.9	30.3	13.2	15.4	16.5
1997	74.9	2.8	16.3	8.9	46.8	56.9	29.0	14.5	13.4	17.9
1998	73.2	2.8	15.1	7.9	47.3	53.4	27.0	16.3	10.2	19.8
1999	72.1	2.9	14.2	6.9	48.1	49.8	25.2	14.9	9.7	22.3
2000	69.6	2.7	13.0	6.2	47.6	45.9	22.8	13.3	9.8	23.6
<i>Euro area enlargement</i>										
2001	69.2	2.6	12.5	6.3	47.8	44.6	22.5	12.5	9.6	24.6
2002	69.1	2.5	11.8	6.7	48.0	43.4	21.7	12.1	9.5	25.7

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

	Total	Issued by ⁴⁾				Original maturity			Residual maturity			Currency		
		Central government	State government	Local government	Social security funds	Up to 1 year	Over 1 year	Variable interest rate	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Euro or participating currency ⁵⁾	Non-domestic currency	Other currencies
1993	67.3	55.2	5.2	6.3	0.6	11.9	55.4	6.6	18.4	24.4	24.4	65.6	2.9	1.7
1994	70.0	57.9	5.4	6.1	0.5	11.2	58.8	7.4	16.5	26.8	26.7	68.1	3.0	1.9
1995	74.2	61.7	5.7	6.0	0.8	10.6	63.6	6.8	17.6	26.4	30.2	72.3	2.9	1.9
1996	75.4	62.9	6.1	5.9	0.5	10.2	65.2	6.3	19.2	25.4	30.8	73.5	2.7	1.9
1997	74.9	62.3	6.3	5.6	0.6	8.8	66.0	6.0	18.6	25.4	30.8	72.8	2.8	2.0
1998	73.2	61.1	6.3	5.4	0.4	7.7	65.4	5.5	16.4	26.1	30.7	71.4	3.2	1.7
1999	72.1	60.2	6.2	5.3	0.3	6.5	65.6	5.0	14.4	26.9	30.7	70.2	-	1.9
2000	69.6	58.1	6.1	5.1	0.3	5.7	63.8	4.4	14.3	27.6	27.7	67.7	-	1.9
<i>Euro area enlargement</i>														
2001	69.2	57.8	6.2	4.9	0.3	6.0	63.2	3.2	14.6	26.3	28.3	67.5	-	1.8
2002	69.1	57.5	6.4	4.8	0.3	6.2	62.8	3.2	15.7	24.8	28.5	67.5	-	1.6

3. Euro area countries – government debt

	BE	DE	GR	ES	FR	IE	IT	LU	NL	AT	PT	FI
	1	2	3	4	5	6	7	8	9	10	11	12
1999	114.9	61.2	105.1	63.1	58.5	49.3	114.9	6.0	63.1	67.5	54.3	47.0
2000	109.6	60.2	106.2	60.5	57.2	39.3	110.6	5.6	55.8	66.8	53.3	44.5
2001	108.5	59.5	107.0	56.9	56.8	36.8	109.5	5.6	52.8	67.3	55.6	43.8
2002	105.4	60.8	104.9	54.0	59.1	34.0	106.7	5.7	52.6	67.9	58.0	42.7

Sources: ECB for euro area aggregated data; European Commission for data relating to countries' debt.

1) Data are partially estimated. General government gross consolidated debt at nominal value at the end of the year.

Holdings by other governments are not consolidated.

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

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

4) Excludes debt held by general government in the country whose government has issued it.

5) Before 1999, comprises debt in ECU, in domestic currency and in the currencies of other Member States which have adopted the euro.

Table 7.3

Change in debt ¹⁾

(as a percentage of GDP)

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

	Total	Source of change				Financial instrument				Holder			
		Borrowing requirement ²⁾	Valuation effects ³⁾	Other changes in volume ⁴⁾	Aggregation effect ⁵⁾	Coins and deposits	Loans	Short-term securities	Long-term securities	Domestic creditors ⁶⁾	MFIs	Other financial corporations	Other creditors ⁷⁾
	1	2	3	4	5	6	7	8	9	10	11	12	13
1993	8.0	7.5	0.3	0.1	0.1	0.2	1.2	0.1	6.5	3.6	2.0	1.3	4.4
1994	6.0	5.2	0.2	0.7	0.0	0.4	-0.1	0.9	4.9	5.9	3.6	1.7	0.2
1995	7.8	5.5	0.2	2.2	-0.2	0.2	2.3	0.0	5.2	5.3	2.2	1.5	2.4
1996	3.8	4.2	-0.2	0.1	-0.3	0.1	0.1	0.4	3.2	2.6	0.8	2.6	1.2
1997	2.3	2.4	0.2	-0.2	0.0	0.0	-0.2	-0.6	3.1	0.2	-0.1	1.8	2.0
1998	1.7	1.9	-0.2	0.0	0.0	0.1	-0.4	-0.6	2.6	-1.0	-0.8	2.4	2.6
1999	1.7	1.4	0.3	0.1	0.0	0.2	-0.4	-0.7	2.6	-1.5	-0.7	-0.7	3.2
2000	0.9	0.8	0.1	-0.1	0.0	0.0	-0.5	-0.3	1.7	-1.5	-1.3	-0.9	2.4
<i>Euro area enlargement</i>													
2001	1.7	1.7	0.0	0.0	0.0	0.0	-0.2	0.4	1.4	0.2	0.1	-0.1	1.5
2002	2.0	2.5	-0.1	-0.4	0.0	0.0	-0.4	0.6	1.7	0.2	0.0	0.0	1.9

2. Euro area – deficit-debt adjustment

	Change in debt	Deficit (-)/surplus (+) ⁸⁾	Deficit-debt adjustment ⁹⁾											Other ¹¹⁾
			Total	Transactions in main financial assets held by general government							Valuation effects	Exchange rate effects	Other changes in volume	
				Total	Currency and deposits	Securities ¹⁰⁾	Loans	Shares and other equity	Privatisations	Equity injections				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1993	8.0	-5.7	2.3	1.5	1.3	0.2	0.3	-0.2	-0.3	0.1	0.3	0.3	0.1	0.3
1994	6.0	-5.1	0.9	0.0	-0.2	0.1	0.3	-0.1	-0.4	0.2	0.2	0.0	0.7	0.1
1995	7.8	-5.1	2.7	0.6	0.1	-0.1	0.5	0.1	-0.4	0.2	0.2	0.0	2.2	-0.3
1996	3.8	-4.3	-0.5	-0.2	-0.1	0.0	-0.1	-0.1	-0.3	0.2	-0.2	-0.1	0.1	-0.2
1997	2.3	-2.6	-0.3	-0.5	0.2	-0.1	0.0	-0.5	-0.8	0.3	0.2	0.2	-0.2	0.2
1998	1.7	-2.3	-0.6	-0.5	0.1	0.0	-0.1	-0.6	-0.8	0.3	-0.2	0.0	0.0	0.1
1999	1.7	-1.3	0.4	-0.1	0.5	0.1	0.0	-0.7	-0.9	0.2	0.3	0.2	0.1	0.1
2000	0.9	0.1	1.0	0.9	0.7	0.1	0.2	-0.2	-0.4	0.2	0.1	0.0	-0.1	0.1
<i>Euro area enlargement</i>														
2001	1.7	-1.6	0.1	-0.4	-0.6	0.1	0.2	-0.1	-0.3	0.2	0.0	0.0	0.0	0.5
2002	2.0	-2.3	-0.2	0.2	0.3	0.0	0.1	-0.2	-0.4	0.1	-0.1	-0.1	-0.4	0.0

Source: ECB.

- 1) Data are partially estimated. Annual change in gross nominal consolidated debt expressed as a percentage of GDP $[debt(t) - debt(t-1)] \div GDP(t)$.
- 2) The borrowing requirement is by definition equal to transactions in government debt.
- 3) Includes, in addition to the impact of foreign exchange movements, effects arising from measurement at nominal value (e.g. premia or discounts on securities issued).
- 4) Comprises, in particular, the impact of the reclassification of units and certain types of debt assumption.
- 5) The difference between the changes in the aggregated debt, resulting from the aggregation of countries' debt, and the aggregation of countries' change in debt, due to variations in the exchange rates used for aggregation before 1999.
- 6) Holders resident in the country whose government has issued the debt.
- 7) Includes residents of euro area countries other than the country whose government has issued the debt.
- 8) Including proceeds from sales of UMTS licences.
- 9) The difference between the annual change in gross nominal consolidated debt and the deficit as a percentage of GDP.
- 10) Excluding financial derivatives.
- 11) Comprises mainly transactions in other assets and liabilities (trade credit, other receivables/payables and financial derivatives).

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

Table 8.1

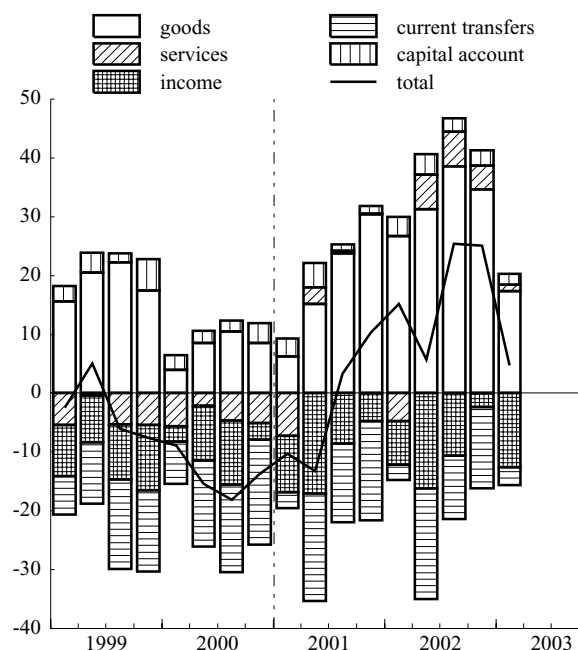
Summary balance of payments ^{1) 2)}

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

	Current account					Capital account	Financial account						Errors and omissions
	Total	Goods	Services	Income	Current transfers		Total	Direct investment	Portfolio investment	Financial derivatives	Other investment	Reserve assets	
	1	2	3	4	5	6	7	8	9	10	11	12	13
1997	56.7	116.4	-2.3	-15.2	-42.2	13.0	.	-44.4	-24.1	.	.	.	.
1998	26.7	109.0	-6.3	-28.8	-47.2	12.4	-67.0	-81.3	-109.9	-8.2	124.2	8.2	27.9
1999	-23.8	75.7	-16.5	-37.0	-46.1	12.8	13.5	-119.5	-41.4	3.3	161.0	10.1	-2.5
2000	-66.0	31.6	-17.5	-25.5	-54.6	9.8	66.9	-16.5	-111.6	-3.4	180.8	17.6	-10.7
<i>Euro area enlargement</i>													
2001	-19.4	75.5	-3.7	-39.9	-51.2	9.5	-24.9	-102.8	64.7	-3.5	-1.1	17.8	34.7
2002	59.6	131.1	11.1	-36.6	-46.0	11.6	-132.1	-33.6	108.4	-14.0	-190.7	-2.2	60.9
2002 Q1	12.0	26.7	-4.7	-7.4	-2.6	3.2	-8.2	-16.0	-35.8	2.5	44.1	-3.1	-6.9
Q2	2.2	31.3	5.9	-16.2	-18.8	3.5	-19.8	-9.2	72.2	-2.8	-86.7	6.7	14.1
Q3	23.0	38.5	5.9	-10.7	-10.7	2.3	-50.3	-12.0	35.7	-9.6	-59.7	-4.6	24.9
Q4	22.4	34.6	4.0	-2.4	-13.8	2.6	-53.9	3.6	36.2	-4.0	-88.4	-1.3	28.8
2003 Q1	2.8	17.3	1.1	-12.6	-3.0	1.9	-30.5	-7.7	2.8	-0.1	-37.5	11.9	25.8
2002 Mar.	7.4	13.5	-0.8	-0.8	-4.4	0.3	17.9	-8.1	6.4	-2.9	22.7	-0.2	-25.6
Apr.	-5.8	7.3	0.6	-7.7	-6.0	1.3	14.8	8.1	16.0	1.4	-19.1	8.4	-10.3
May	0.7	10.3	2.1	-6.4	-5.3	1.0	5.6	1.5	34.2	-2.0	-30.0	1.9	-7.3
June	7.4	13.7	3.2	-2.1	-7.5	1.1	-40.2	-18.8	22.0	-2.2	-37.7	-3.5	31.8
July	4.8	15.3	1.7	-9.0	-3.1	0.5	-17.4	-6.7	10.7	-8.2	-10.7	-2.6	12.1
Aug.	9.9	12.2	0.4	0.3	-3.0	0.6	-11.5	1.7	8.3	-2.1	-21.1	1.8	1.0
Sep.	8.3	11.1	3.9	-2.0	-4.6	1.2	-21.3	-7.0	16.7	0.7	-27.9	-3.8	11.8
Oct.	4.7	12.4	0.9	-2.4	-6.2	1.4	-17.4	-6.2	25.9	-0.1	-39.3	2.1	11.3
Nov.	10.6	12.6	1.7	0.2	-3.9	0.3	-20.2	7.2	15.6	-1.4	-39.2	-2.4	9.3
Dec.	7.1	9.6	1.4	-0.2	-3.7	0.9	-16.2	2.5	-5.3	-2.5	-9.9	-1.0	8.2
2003 Jan.	-4.8	2.1	-0.6	-9.4	3.2	2.1	-12.7	-3.1	-2.8	-0.8	-7.4	1.5	15.3
Feb.	3.5	9.1	0.1	-2.6	-3.1	-0.9	-25.8	3.2	-12.0	0.6	-22.9	5.3	23.2
Mar.	4.0	6.2	1.5	-0.6	-3.0	0.8	7.9	-7.7	17.6	0.2	-7.2	5.0	-12.7
Apr.	-8.6	7.4	0.8	-10.5	-6.3	0.1	7.8	-20.2	9.3	-4.6	22.9	0.5	0.7
May	-0.4	8.3	1.5	-4.6	-5.6	0.4	-31.0	-0.3	7.0	0.6	-39.7	1.4	31.0

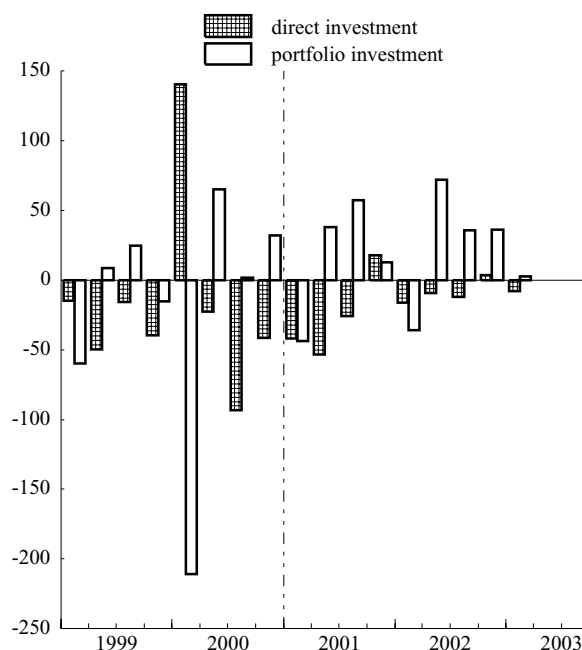
Current and capital accounts

(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 ¹⁾***(EUR billions (ECU billions to end-1998))***1. Main items**

	Current account											Capital account	
	Total			Goods		Services		Income		Current transfers		Credit 12	Debit 13
	Credit 1	Debit 2	Net 3	Credit 4	Debit 5	Credit 6	Debit 7	Credit 8	Debit 9	Credit 10	Debit 11		
1997	1,218.5	1,161.8	56.7	754.6	638.3	214.3	216.5	189.5	204.7	60.0	102.3	18.9	5.9
1998	1,277.3	1,250.6	26.7	784.4	675.4	231.6	237.9	198.5	227.3	62.9	110.1	17.7	5.3
1999	1,337.0	1,360.8	-23.8	818.3	742.5	246.7	263.2	207.3	244.2	64.8	110.9	19.1	6.3
2000	1,613.1	1,679.1	-66.0	989.8	958.3	287.5	304.9	269.1	294.6	66.7	121.3	18.3	8.5
<i>Euro area enlargement</i>													
2001	1,716.3	1,735.7	-19.4	1,033.0	957.6	325.0	328.7	283.1	322.9	75.3	126.5	17.0	7.5
2002	1,713.4	1,653.8	59.6	1,059.3	928.2	332.0	320.9	238.0	274.6	84.2	130.2	18.9	7.3
2002 Q1	416.5	404.6	12.0	254.9	228.2	72.5	77.3	58.3	65.7	30.8	33.4	4.7	1.5
Q2	429.3	427.1	2.2	267.3	236.0	84.5	78.6	62.5	78.6	15.1	33.9	5.0	1.5
Q3	426.8	403.8	23.0	263.2	224.7	89.8	83.9	55.4	66.0	18.4	29.2	4.1	1.7
Q4	440.8	418.4	22.4	273.9	239.3	85.2	81.1	61.9	64.2	19.9	33.7	5.2	2.5
2003 Q1	411.8	409.0	2.8	252.6	235.3	75.3	74.3	51.3	63.8	32.6	35.6	5.2	3.3
2002 Mar.	142.0	134.5	7.4	91.8	78.3	25.1	25.9	18.7	19.6	6.3	10.8	0.7	0.5
Apr.	141.4	147.2	-5.8	88.4	81.1	27.5	26.8	20.2	27.9	5.3	11.3	1.9	0.6
May	143.0	142.3	0.7	88.9	78.6	28.2	26.1	20.5	26.9	5.3	10.6	1.5	0.4
June	144.9	137.6	7.4	89.9	76.3	28.8	25.6	21.7	23.8	4.5	12.0	1.6	0.5
July	151.1	146.3	4.8	93.5	78.2	31.3	29.6	20.1	29.1	6.3	9.4	1.1	0.6
Aug.	134.9	125.1	9.9	81.7	69.5	28.9	28.6	18.3	18.0	6.0	9.0	1.3	0.7
Sep.	140.8	132.4	8.3	88.1	77.0	29.6	25.7	17.0	19.0	6.1	10.7	1.6	0.4
Oct.	151.3	146.6	4.7	97.7	85.2	29.1	28.2	19.5	21.9	5.1	11.3	2.0	0.6
Nov.	145.6	134.9	10.6	92.2	79.7	26.8	25.1	19.6	19.4	6.9	10.8	1.1	0.8
Dec.	144.0	136.9	7.1	84.0	74.4	29.2	27.8	22.8	23.0	7.9	11.6	2.1	1.2
2003 Jan.	143.7	148.5	-4.8	82.4	80.3	25.5	26.2	18.0	27.4	17.8	14.6	2.6	0.5
Feb.	131.0	127.5	3.5	83.3	74.2	23.4	23.3	16.5	19.0	7.8	10.9	1.5	2.4
Mar.	137.1	133.1	4.0	86.9	80.7	26.4	24.8	16.8	17.4	7.0	10.1	1.2	0.3
Apr.	138.8	147.4	-8.6	86.3	78.9	26.4	25.7	21.3	31.8	4.7	11.0	0.5	0.4
May	135.5	135.9	-0.4	84.3	76.0	26.1	24.6	20.0	24.6	5.1	10.7	1.4	1.0

2. Main current account items (seasonally adjusted)

	Current account										
	Total			Goods		Services		Income		Current transfers	
	Credit 1	Debit 2	Net 3	Credit 4	Debit 5	Credit 6	Debit 7	Credit 8	Debit 9	Credit 10	Debit 11
2001 Q1	433.6	441.7	-8.0	261.5	245.8	78.8	81.9	74.4	84.4	18.9	29.5
Q2	430.8	442.6	-11.8	260.6	244.3	81.5	82.3	69.6	82.4	19.1	33.6
Q3	428.2	430.4	-2.2	257.4	239.1	82.1	82.5	70.1	78.0	18.5	30.8
Q4	422.4	419.7	2.6	253.7	228.3	81.8	81.7	68.3	76.9	18.5	32.8
2002 Q1	426.4	411.0	15.3	263.7	228.8	81.6	81.8	61.6	68.9	19.5	31.5
Q2	427.4	417.2	10.2	266.3	232.7	82.9	80.7	58.2	70.1	20.0	33.7
Q3	430.9	412.1	18.7	266.2	232.3	83.7	78.8	58.5	68.6	22.5	32.4
Q4	429.1	413.6	15.4	263.5	234.4	83.4	79.4	59.9	66.5	22.2	33.4
2003 Q1	420.6	412.2	8.3	260.1	233.8	84.9	78.6	54.6	67.0	20.9	32.9
2002 Mar.	141.8	137.6	4.1	89.1	77.3	27.1	27.1	19.2	21.7	6.3	11.6
Apr.	142.0	140.9	1.1	88.0	77.9	27.9	27.6	19.2	24.1	6.9	11.3
May	141.8	138.4	3.4	88.5	76.7	27.2	26.6	19.5	24.0	6.6	11.2
June	143.6	137.9	5.7	89.7	78.1	27.8	26.5	19.5	22.0	6.6	11.2
July	141.4	138.4	3.0	87.2	77.0	27.0	26.6	19.8	24.3	7.4	10.5
Aug.	145.4	137.9	7.5	89.8	77.7	27.6	26.9	20.3	22.7	7.7	10.7
Sep.	144.0	135.8	8.2	89.2	77.6	29.1	25.3	18.4	21.7	7.4	11.2
Oct.	143.1	139.5	3.5	88.3	78.5	27.8	26.6	19.8	23.0	7.2	11.4
Nov.	146.6	138.2	8.4	89.4	78.1	28.3	26.2	21.2	22.7	7.7	11.2
Dec.	139.4	135.9	3.5	85.7	77.9	27.4	26.5	19.0	20.7	7.3	10.8
2003 Jan.	143.6	140.4	3.2	89.0	78.5	28.6	26.7	18.8	24.3	7.2	11.0
Feb.	140.6	137.6	3.0	87.9	77.6	27.8	26.0	18.1	22.9	6.7	11.1
Mar.	136.3	134.3	2.1	83.2	77.7	28.5	25.9	17.6	19.8	7.0	10.8
Apr.	140.5	141.5	-1.0	87.3	77.5	26.9	26.3	20.1	26.7	6.3	11.0
May	137.4	135.4	2.0	86.2	76.7	25.7	25.6	19.1	22.0	6.5	11.1

Source: ECB.

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

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

	Total		Compensation of employees		Investment income							
	Credit 1	Debit 2	Credit 3	Debit 4	Total		Direct investment		Portfolio investment		Other investment	
					Credit 5	Debit 6	Credit 7	Debit 8	Credit 9	Debit 10	Credit 11	Debit 12
1999	207.3	244.2	12.6	4.9	194.7	239.3	42.7	51.2	64.2	102.2	87.8	85.8
2000	269.1	294.6	13.2	5.3	255.9	289.4	61.3	64.5	76.7	107.4	117.9	117.5
<i>Euro area enlargement</i>												
2001	283.1	322.9	14.0	5.9	269.1	317.0	69.5	68.9	82.5	118.2	117.1	129.8
2002	238.0	274.6	14.5	5.7	223.5	268.9	56.1	53.7	83.8	123.3	83.6	91.8
2002 Q1	58.3	65.7	3.5	1.2	54.7	64.5	11.3	12.9	20.6	26.4	22.8	25.1
Q2	62.5	78.6	3.5	1.4	58.9	77.2	17.2	16.3	22.0	38.6	19.8	22.3
Q3	55.4	66.0	3.6	1.6	51.8	64.5	10.9	11.8	20.5	31.0	20.3	21.6
Q4	61.9	64.2	3.8	1.5	58.1	62.7	16.6	12.7	20.8	27.3	20.7	22.7
2003 Q1	51.3	63.8	3.6	1.2	47.7	62.6	8.9	12.5	18.1	30.1	20.7	20.0

	Income on direct investment				Income on portfolio investment			
	Equity		Debt		Equity		Debt	
	Credit 13	Debit 14	Credit 15	Debit 16	Credit 17	Debit 18	Credit 19	Debit 20
1999	36.2	46.7	6.5	4.6	9.5	34.0	54.7	68.3
2000	50.5	56.8	10.9	7.7	14.3	30.6	62.4	76.8
<i>Euro area enlargement</i>								
2001	59.3	60.1	10.2	8.9	17.3	43.8	65.2	74.4
2002	48.4	48.0	7.7	5.7	20.6	53.0	63.2	70.3
2002 Q1	9.3	11.6	2.1	1.3	4.8	8.8	15.7	17.6
Q2	15.4	15.1	1.8	1.2	6.5	23.8	15.5	14.8
Q3	9.5	10.5	1.4	1.3	4.4	10.4	16.1	20.6
Q4	14.2	10.9	2.3	1.8	4.9	10.0	15.8	17.3
2003 Q1	7.6	10.5	1.3	1.9	3.5	8.3	14.5	21.8

Source: ECB.

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

	By resident units abroad							By non-resident units in the euro area						
	Total	Equity capital and reinvested earnings			Other capital (mostly inter-company loans)			Total	Equity capital and reinvested earnings			Other capital (mostly inter-company loans)		
		Total	MFIs ²⁾	Non-MFIs	Total	MFIs ²⁾	Non-MFIs		Total	MFIs ²⁾	Non-MFIs	Total	MFIs ²⁾	Non-MFIs
1	2	3	4	5	6	7	8	9	10	11	12	13	14	
1997	-93.2	.	.	.	.	.	48.7	.	.	.	.	.	.
1998	-172.7	.	.	.	.	.	91.4	.	.	.	.	.	.
1999	-320.9	-239.5	-25.0	-214.6	-81.3	-0.6	-80.7	201.3	145.7	3.5	142.2	55.6	0.2	55.4
2000	-443.3	-351.7	-35.5	-316.2	-91.5	0.3	-91.8	426.7	301.0	12.4	288.6	125.8	0.1	125.7
<i>Euro area enlargement</i>														
2001	-259.2	-167.0	-13.9	-153.1	-92.1	-0.6	-91.6	156.4	99.9	5.3	94.6	56.5	0.7	55.8
2002	-163.5	-135.8	-19.3	-116.6	-27.6	-0.5	-27.1	129.8	93.2	4.3	88.9	36.6	0.7	35.9
2002 Q1	-55.5	-41.6	-2.5	-39.1	-13.9	0.0	-13.8	39.5	26.3	1.2	25.2	13.1	0.0	13.1
Q2	-47.0	-28.8	-6.0	-22.7	-18.2	-0.3	-17.9	37.7	22.1	2.8	19.3	15.6	0.1	15.6
Q3	-32.5	-36.2	-5.2	-31.0	3.7	-0.1	3.8	20.5	12.2	-0.4	12.6	8.4	0.6	7.8
Q4	-28.5	-29.3	-5.6	-23.7	0.7	-0.1	0.8	32.1	32.6	0.7	31.9	-0.5	0.0	-0.5
2003 Q1	-40.7	-19.7	-2.0	-17.7	-21.0	-0.1	-20.9	33.0	21.2	0.7	20.5	11.9	-0.1	12.0
2002 Mar.	-27.4	-27.9	-1.5	-26.4	0.5	-0.1	0.5	19.3	20.2	-0.1	20.3	-0.9	0.0	-0.8
Apr.	-7.7	-2.3	-4.1	1.8	-5.4	0.0	-5.4	15.8	9.4	2.0	7.4	6.4	0.0	6.4
May	-18.0	-10.5	-1.0	-9.5	-7.4	0.0	-7.4	19.4	6.5	0.7	5.8	13.0	0.0	12.9
June	-21.3	-15.9	-0.9	-15.0	-5.4	-0.3	-5.1	2.5	6.2	0.1	6.2	-3.7	0.1	-3.8
July	-13.1	-14.5	-3.4	-11.1	1.4	0.0	1.4	6.4	2.8	0.9	1.9	3.6	0.0	3.6
Aug.	-1.1	-6.6	-0.3	-6.3	5.5	-0.1	5.5	2.8	2.4	-0.8	3.2	0.4	0.7	-0.3
Sep.	-18.3	-15.2	-1.5	-13.7	-3.1	0.0	-3.1	11.3	7.0	-0.6	7.5	4.3	-0.1	4.4
Oct.	-12.6	-6.9	-0.9	-6.0	-5.7	0.0	-5.7	6.4	6.0	0.3	5.8	0.4	0.0	0.4
Nov.	-14.6	-6.8	-1.2	-5.5	-7.8	0.0	-7.8	21.8	15.1	0.0	15.1	6.7	0.0	6.6
Dec.	-1.3	-15.6	-3.5	-12.1	14.3	0.0	14.3	3.9	11.4	0.4	11.0	-7.6	0.0	-7.6
2003 Jan.	-16.8	-8.5	-0.7	-7.8	-8.3	0.0	-8.3	13.6	10.8	0.2	10.6	2.8	0.0	2.8
Feb.	-6.8	-5.4	-0.5	-4.8	-1.5	0.0	-1.5	10.0	6.2	0.8	5.4	3.8	-0.1	3.9
Mar.	-17.1	-5.8	-0.7	-5.1	-11.3	-0.1	-11.2	9.4	4.1	-0.3	4.4	5.3	0.0	5.3
Apr.	-22.8	-7.0	-1.3	-5.6	-15.8	-0.3	-15.5	2.6	1.4	0.1	1.3	1.2	0.0	1.2
May	-1.2	-3.8	-0.9	-2.9	2.6	-0.1	2.7	0.9	-0.6	0.2	-0.8	1.5	-0.1	1.6

Source: ECB.

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

2) Excluding the Eurosystem.

Table 8.5
Balance of payments: portfolio investment account ¹⁾
(EUR billions (ECU billions to end-1998); net flows)
1. By instrument ²⁾

	Total		Equity		Debt instruments					
	Assets	Liabilities	Assets	Liabilities	Assets			Liabilities		
					Total	Bonds and notes	Money market instruments	Total	Bonds and notes	Money market instruments
	1	2	3	4	5	6	7	8	9	10
1998	-363.3	253.3	-116.2	104.0	-247.1	-238.9	-8.2	149.4	121.3	28.1
1999	-311.3	269.8	-156.5	93.0	-154.8	-154.9	0.1	176.8	117.0	59.9
2000	-409.0	297.4	-285.9	49.9	-123.1	-114.3	-8.8	247.5	239.2	8.3
<i>Euro area enlargement</i>										
2001	-291.0	355.8	-108.3	233.2	-182.7	-160.1	-22.6	122.5	115.1	7.4
2002	-177.8	286.2	-40.8	88.2	-137.1	-80.6	-56.4	198.0	133.5	64.5
2002 Q1	-75.0	39.2	-32.1	34.5	-42.9	-21.9	-21.0	4.8	7.1	-2.3
Q2	-54.2	126.5	-13.9	36.0	-40.3	-25.3	-15.0	90.5	61.4	29.1
Q3	-19.8	55.5	12.7	6.0	-32.5	-17.3	-15.2	49.5	26.3	23.2
Q4	-28.8	65.0	-7.5	11.8	-21.3	-16.1	-5.2	53.3	38.6	14.6
2003 Q1	-51.4	54.2	10.0	4.9	-61.4	-51.0	-10.4	49.3	49.7	-0.3
2002 Mar.	-28.9	35.2	-9.9	11.7	-19.0	-13.2	-5.8	23.5	17.5	6.0
Apr.	-13.2	29.3	-1.9	6.5	-11.3	-10.1	-1.2	22.8	15.1	7.7
May	-29.5	63.7	-5.8	27.8	-23.6	-14.7	-9.0	35.9	22.8	13.1
June	-11.6	33.5	-6.2	1.7	-5.4	-0.6	-4.8	31.8	23.5	8.3
July	-15.8	26.5	-6.4	4.5	-9.4	-1.3	-8.1	22.0	13.4	8.6
Aug.	-4.4	12.7	5.1	-0.3	-9.5	-10.1	0.5	13.0	2.1	10.9
Sep.	0.4	16.4	14.0	1.9	-13.6	-6.0	-7.7	14.5	10.8	3.7
Oct.	-1.6	27.6	-0.6	-1.1	-1.0	-4.1	3.1	28.7	17.2	11.5
Nov.	-7.0	22.6	0.3	14.7	-7.3	-3.7	-3.7	7.9	6.0	2.0
Dec.	-20.1	14.8	-7.1	-1.8	-13.0	-8.3	-4.7	16.6	15.4	1.2
2003 Jan.	-20.4	17.5	2.3	13.4	-22.7	-15.6	-7.1	4.1	5.5	-1.4
Feb.	-23.6	11.7	0.3	2.2	-23.9	-20.3	-3.6	9.5	3.4	6.1
Mar.	-7.4	25.0	7.4	-10.8	-14.8	-15.0	0.3	35.8	40.8	-5.1
Apr.	-12.1	21.4	-3.0	10.2	-9.1	-16.1	7.1	11.2	0.5	10.7
May	-30.4	37.5	-5.8	-7.9	-24.6	-18.8	-5.9	45.4	46.0	-0.7

2. Assets by instrument and sector of holder

	Equity					Debt instruments									
	Euro-system	MFIs ³⁾	Non-MFIs			Euro-system	MFIs ³⁾	Bonds and notes			Money market instruments				
			Total	General government	Other sectors			Euro-system	MFIs ³⁾	Non-MFIs		Euro-system	MFIs ³⁾	Non-MFIs	
										Total	General government			Other sectors	Total	General government	Other sectors
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
1999	0.1	-1.5	-155.1	-2.1	-153.0	0.1	-15.4	-139.6	-1.7	-137.9	0.9	-8.1	7.3	-0.1	7.5
2000	-0.1	-4.3	-281.6	-2.6	-278.9	-1.9	-46.3	-66.1	-1.5	-64.6	2.2	-15.5	4.6	-1.0	5.5
<i>Euro area enlargement</i>															
2001	-0.4	3.8	-111.8	-2.1	-109.8	1.9	-71.1	-90.9	-1.2	-89.6	-2.3	-34.5	14.3	-0.2	14.5
2002	-0.4	-9.7	-30.7	-5.2	-25.5	3.2	-11.3	-72.5	-1.0	-71.5	2.1	-34.9	-23.7	-0.9	-22.7
2002 Q1	0.0	-4.8	-27.3	-1.4	-25.8	0.4	-4.7	-17.5	-0.5	-17.0	0.8	-13.0	-8.8	-1.1	-7.7
Q2	-0.1	-3.7	-10.1	-2.0	-8.1	2.4	-2.3	-25.4	0.2	-25.6	0.0	-1.9	-13.1	-0.1	-13.0
Q3	-0.1	2.8	10.0	-0.6	10.6	-1.1	-2.9	-13.3	-0.3	-13.0	0.9	-13.3	-2.7	0.2	-3.0
Q4	-0.2	-3.9	-3.4	-1.2	-2.2	1.6	-1.4	-16.3	-0.4	-15.8	0.4	-6.6	1.0	0.1	0.8
2003 Q1	-0.1	-3.8	13.9	-0.6	14.5	-1.6	-22.9	-26.5	0.3	-26.8	-1.4	-7.1	-1.9	-1.6	-0.3
2002 Dec.	0.0	-0.6	-6.5	.	.	0.2	5.3	-13.8	.	.	0.1	-0.5	-4.3	.	.
2003 Jan.	0.0	1.5	0.7	.	.	-0.7	-12.0	-3.0	.	.	-0.3	-12.7	6.0	.	.
Feb.	-0.1	-1.5	1.9	.	.	-0.2	-9.6	-10.5	.	.	-0.9	-0.7	-2.0	.	.
Mar.	0.0	-3.9	11.3	.	.	-0.7	-1.3	-13.0	.	.	-0.2	6.3	-5.9	.	.
Apr.	-0.1	0.6	-3.5	.	.	-0.8	-7.6	-7.8	.	.	0.5	2.3	4.3	.	.
May	0.0	0.4	-6.3	.	.	-0.2	-1.3	-17.3	.	.	0.9	-7.2	0.4	.	.

Source: ECB.

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

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

3) Excluding the Eurosystem.

Table 8.6
Balance of payments: other investment account and reserve assets
(EUR billions (ECU billions to end-1998); net flows)
1. Other investment by sector ¹⁾²⁾

	Total		Eurosysteem		General government		MFIs (excluding the Eurosystem)						Other sectors	
	Assets 1	Liabilities 2	Assets 3	Liabilities 4	Assets 5	Liabilities 6	Total		Long-term		Short-term		Assets 13	Liabilities 14
							Assets 7	Liabilities 8	Assets 9	Liabilities 10	Assets 11	Liabilities 12		
1998	-81.5	205.6	-0.7	3.5	-1.0	-6.1	-22.6	192.4	-37.6	40.4	15.0	152.0	-57.1	15.9
1999	-31.8	192.7	-1.9	6.6	3.3	-13.0	16.3	161.2	-47.2	53.8	63.5	107.4	-49.4	37.9
2000	-179.0	359.8	-1.1	0.9	-2.2	0.7	-130.4	288.8	-50.0	52.5	-80.4	236.3	-45.4	69.5
<i>Euro area enlargement</i>														
2001	-250.2	249.0	0.6	4.4	2.9	-0.5	-227.6	233.5	-45.3	22.4	-182.3	211.1	-26.1	11.6
2002	-220.8	30.1	-1.2	0.1	0.0	-8.3	-164.3	23.1	-29.6	51.5	-134.7	-28.4	-55.4	15.2
2002 Q1	19.8	24.3	-0.4	1.2	-0.6	-8.3	18.7	25.8	-2.5	11.4	21.2	14.4	2.2	5.6
Q2	-77.6	-9.1	-0.6	-3.5	0.9	3.8	-62.7	-11.8	-4.4	19.8	-58.3	-31.6	-15.2	2.4
Q3	-62.1	2.3	0.3	-0.1	-0.5	-2.8	-34.9	9.6	-4.7	4.6	-30.2	5.0	-26.9	-4.3
Q4	-101.0	12.6	-0.4	2.5	0.3	-1.0	-85.3	-0.4	-17.9	15.7	-67.4	-16.2	-15.5	11.6
2003 Q1	-105.9	68.4	-0.6	-4.4	-1.6	-8.5	-60.1	59.2	-13.4	8.6	-46.7	50.7	-43.6	22.1
2002 Mar.	-9.2	31.9	0.4	2.4	-0.2	2.1	-1.4	12.9	6.2	3.8	-7.5	9.1	-8.0	14.5
Apr.	-42.2	23.1	-0.4	-4.3	1.7	5.6	-30.1	22.2	-4.2	7.1	-25.9	15.1	-13.3	-0.4
May	-64.2	34.2	-0.1	-0.5	0.0	0.0	-56.0	36.4	-3.9	8.2	-52.1	28.2	-8.0	-1.7
June	28.8	-66.4	-0.1	1.3	-0.7	-1.8	23.4	-70.4	3.7	4.4	19.7	-74.8	6.2	4.5
July	-2.3	-8.4	0.4	2.7	-0.2	-1.2	14.0	-9.8	2.8	1.6	11.2	-11.4	-16.5	-0.1
Aug.	8.5	-29.7	0.1	-5.0	-0.6	-2.2	12.8	-17.9	0.4	2.0	12.4	-19.9	-3.8	-4.6
Sep.	-68.3	40.4	-0.2	2.1	0.3	0.6	-61.7	37.3	-7.9	0.9	-53.8	36.3	-6.6	0.4
Oct.	-70.2	31.0	-0.1	-0.3	-0.4	1.3	-53.9	22.3	-5.2	8.0	-48.7	14.2	-15.9	7.8
Nov.	-77.1	37.9	0.9	1.2	-1.6	-0.3	-65.6	34.7	-7.8	-6.3	-57.8	41.0	-10.8	2.3
Dec.	46.4	-56.3	-1.3	1.6	2.3	-2.0	34.1	-57.4	-5.0	14.0	39.1	-71.4	11.2	1.5
2003 Jan.	-8.1	0.7	0.5	-2.4	-2.4	-6.2	4.6	2.9	-3.6	2.7	8.2	0.3	-10.8	6.5
Feb.	-84.3	61.4	-0.5	-2.0	-3.8	-2.2	-55.9	54.1	-6.3	4.5	-49.6	49.6	-24.0	11.4
Mar.	-13.5	6.3	-0.5	0.0	4.6	-0.1	-8.7	2.2	-3.5	1.4	-5.3	0.8	-8.8	4.2
Apr.	-40.3	63.2	0.0	-0.3	1.1	2.7	-32.6	55.8	-3.4	2.9	-29.2	53.0	-8.8	4.9
May	-48.4	8.7	0.7	0.9	-3.1	1.1	-36.3	4.8	-2.0	2.7	-34.3	2.1	-9.6	2.0

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

	Loans/currency and deposits			Other assets/liabilities		
	Assets 1	Liabilities 2	Balance 3	Assets 4	Liabilities 5	Balance 6
1999	-1.1	6.7	5.6	-0.8	-0.1	-0.9
2000	-1.1	0.9	-0.2	0.0	0.0	0.0
<i>Euro area enlargement</i>						
2001	0.6	4.4	5.0	0.0	0.0	0.0
2002	-1.2	0.0	-1.1	0.0	0.0	0.0
2002 Q1	-0.4	1.2	0.7	0.0	0.0	0.0
Q2	-0.6	-3.5	-4.1	0.0	0.0	0.0
Q3	0.3	-0.2	0.1	0.0	0.0	0.0
Q4	-0.4	2.6	2.1	0.0	0.0	0.0
2003 Q1	-0.6	-4.4	-4.9	0.0	0.0	0.0

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

Table 8.6 (cont'd)
Balance of payments: other investment account and reserve assets
(EUR billions; net flows)
2.2. General government

	Trade credits			Loans/currency and deposits			Other assets/liabilities		
	Assets 7	Liabilities 8	Balance 9	Assets 10	Liabilities 11	Balance 12	Assets 13	Liabilities 14	Balance 15
1999	0.0	0.0	0.0	4.4	-13.1	-8.7	-1.2	0.2	-1.0
2000	0.1	0.0	0.1	-1.4	0.6	-0.8	-0.9	0.1	-0.8
<i>Euro area enlargement</i>									
2001	-0.1	0.0	-0.1	4.4	-0.6	3.9	-1.4	0.1	-1.3
2002	1.5	0.0	1.4	-0.6	-8.0	-8.6	-0.8	-0.3	-1.1
2002 Q1	0.0	0.0	0.0	-0.3	-8.0	-8.3	-0.3	-0.3	-0.6
Q2	1.4	0.0	1.4	-0.2	3.6	3.4	-0.3	0.2	-0.2
Q3	0.0	0.0	0.0	-0.3	-2.7	-3.0	-0.2	0.0	-0.3
Q4	0.0	0.0	0.0	0.2	-0.9	-0.6	0.1	-0.1	-0.1
2003 Q1	0.0	0.0	0.0	-1.2	-8.3	-9.6	-0.4	-0.2	-0.6

2.3. MFIs (excluding the Eurosystem)

	Loans/currency and deposits			Other assets/liabilities		
	Assets 16	Liabilities 17	Balance 18	Assets 19	Liabilities 20	Balance 21
1999	15.5	160.5	176.0	0.8	0.7	1.5
2000	-126.3	283.5	157.1	-4.1	5.3	1.3
<i>Euro area enlargement</i>						
2001	-213.6	223.7	10.0	-13.9	9.8	-4.1
2002	-160.6	26.0	-134.6	-3.7	-2.9	-6.6
2002 Q1	24.1	19.7	43.9	-5.5	6.0	0.5
Q2	-61.8	-10.5	-72.3	-0.9	-1.3	-2.2
Q3	-32.6	7.6	-25.0	-2.3	2.0	-0.3
Q4	-90.4	9.2	-81.2	5.0	-9.6	-4.6
2003 Q1	-58.1	58.8	0.6	-2.0	0.5	-1.5

2.4. Other sectors

	Trade credits			Loans/currency and deposits			Other assets/liabilities		
	Assets 22	Liabilities 23	Balance 24	Assets 25	Liabilities 26	Balance 27	Assets 28	Liabilities 29	Balance 30
1999	-7.5	4.8	-2.7	-18.9	21.7	2.9	-23.0	11.3	-11.7
2000	-14.6	10.5	-4.0	-25.2	64.0	38.8	-5.7	-5.0	-10.7
<i>Euro area enlargement</i>									
2001	-0.4	0.6	0.1	-25.3	10.6	-14.7	-0.3	0.4	0.1
2002	-8.7	-3.8	-12.6	-43.8	15.5	-28.3	-2.9	3.6	0.7
2002 Q1	-1.2	-0.5	-1.7	5.0	5.3	10.3	-1.6	0.8	-0.8
Q2	-3.6	-1.4	-5.0	-11.4	2.9	-8.6	-0.1	0.9	0.8
Q3	-2.8	0.9	-1.9	-23.9	-7.2	-31.2	-0.1	2.0	1.9
Q4	-1.1	-2.9	-4.0	-13.4	14.6	1.2	-1.1	-0.1	-1.2
2003 Q1	-1.6	5.3	3.8	-36.3	15.5	-20.7	-5.8	1.2	-4.5

3. Reserve assets ¹⁾

	Total 1	Monetary gold 2	Special drawing rights 3	Reserve position in the IMF 4	Foreign exchange							Other claims 12
					Total 5	Currency and deposits		Securities			Financial derivatives 11	
						With monetary authorities and the BIS 6	With banks 7	Equity 8	Bonds and notes 9	Money market instruments 10		
1999	10.1	0.3	1.0	2.0	6.1	12.5	-12.1	0.2	3.5	2.0	-0.1	0.8
2000	17.6	1.0	0.3	2.9	13.3	4.3	4.6	0.0	-5.6	10.1	-0.1	0.0
<i>Euro area enlargement</i>												
2001	17.8	0.6	-1.0	-4.2	22.5	10.0	-5.3	-1.1	20.4	-1.6	0.0	0.0
2002	-2.2	0.7	0.2	-2.0	-1.2	-2.3	-15.3	0.0	8.2	8.4	-0.2	0.0
2002 Q1	-3.1	-0.2	0.0	-0.4	-2.4	-1.7	-12.4	0.0	4.2	7.4	0.0	0.0
Q2	6.7	0.5	0.5	-2.1	7.8	-0.6	1.2	0.0	4.3	3.1	-0.2	0.0
Q3	-4.6	-0.1	-0.2	0.2	-4.6	-2.4	-3.0	0.0	1.9	-1.2	0.0	0.0
Q4	-1.3	0.4	-0.1	0.3	-1.9	2.3	-1.2	0.0	-2.3	-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

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

Table 8.7
Monetary presentation of the euro area balance of payments ¹⁾
(EUR billions)

	Current and capital accounts	Direct investment		Portfolio investment			Other investment		Financial derivatives	Errors and omissions	Total ⁵⁾	Memo item: transactions in the external counterpart of M3 ⁶⁾
		By resident units abroad (non-MFIs)	By non-resident units in the euro area ²⁾	Assets		Liabilities	Assets	Liabilities				
				Non-MFIs	Equity ³⁾	Debt instruments ⁴⁾						
1	2	3	4	5	6	7	8	9	10	11	12	
2000	-56.2	-408.0	426.7	-343.1	37.2	209.8	-47.6	70.2	-3.4	-10.7	-125.1	142.2
2000 Q1	-8.9	-68.4	217.6	-129.2	-103.3	38.2	-40.3	10.6	1.3	-35.8	-118.0	118.0
Q2	-15.4	-88.8	71.6	-66.7	66.9	70.7	-5.5	4.1	4.4	3.7	45.1	-35.2
Q3	-18.1	-121.4	40.3	-75.1	28.9	55.7	-12.3	38.3	0.1	23.2	-40.4	51.6
Q4	-13.8	-129.4	97.1	-72.1	44.7	45.1	10.5	17.1	-9.3	-1.9	-11.8	7.8
<i>Euro area enlargement</i>												
2001	-9.8	-244.7	155.7	-188.4	172.9	83.7	-23.2	11.1	-3.5	34.7	-11.4	7.9
2002	71.2	-143.7	129.1	-126.9	51.4	187.6	-55.4	6.9	-14.0	60.9	167.3	-170.0
2001 Q1	-10.3	-72.9	35.4	-46.0	1.7	22.4	2.8	-12.1	1.4	-32.5	-110.1	105.8
Q2	-13.2	-91.2	43.2	-70.1	89.6	5.1	0.8	9.5	12.0	-2.0	-16.3	18.0
Q3	3.4	-56.1	31.3	-22.9	42.0	27.8	-3.5	11.9	-10.3	47.4	71.0	-74.3
Q4	10.3	-24.6	45.8	-49.4	39.6	28.3	-23.2	1.8	-6.6	21.8	43.9	-41.6
2002 Q1	15.2	-53.0	39.5	-53.6	15.2	3.9	1.6	-2.7	2.5	-6.9	-38.4	27.1
Q2	5.7	-40.7	37.7	-48.6	38.5	83.6	-14.3	6.2	-2.8	14.1	79.3	-77.0
Q3	25.3	-27.2	19.9	-6.0	-4.6	56.7	-27.4	-7.1	-9.6	24.9	44.8	-33.8
Q4	25.1	-22.8	32.1	-18.7	2.4	43.5	-15.2	10.5	-4.0	28.8	81.6	-86.3
2003 Q1	4.7	-38.6	33.1	-14.5	7.8	44.5	-45.2	13.6	-0.1	25.8	31.1	-31.7

Source: ECB.

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

2) Including all transactions of the non-MFI sector, and MFI sector transactions in equity capital and reinvested earnings.

3) Excluding money market fund shares/units.

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

5) Sum of columns 1 to 10; errors and omissions (column 10) are those shown in Table 8.1 (column 13) of the Monthly Bulletin; remaining differences (in absolute values) with column 12 are explained in a methodological note available on the statistics section of the ECB's website (www.ecb.int).

6) Source: Monthly Bulletin, Table 2.4.6, column 9.

Table 8.8**International investment position ¹⁾ and reserve assets outstanding***(EUR billions (ECU billions in 1997); end-of-period positions)***1. Summary international investment position**

	Total		Direct investment 3	Portfolio investment 4	Financial derivatives 5	Other investment 6	Reserve assets 7
	1	as % of GDP 2					
Net international investment position ²⁾³⁾							
1997	16.3	0.3	181.5	-750.5	-5.9	223.8	367.3
1998	-170.1	-2.8	152.0	-748.5	2.3	86.5	337.6
1999	-297.3	-4.7	369.6	-881.2	16.0	-183.9	382.2
2000	-414.7	-6.3	428.4	-804.9	8.5	-437.2	390.4
2001	-152.2	-2.2	530.7	-682.7	-5.9	-387.0	392.7
Outstanding assets							
1999	5,796.7	92.5	1,174.5	2,058.1	111.1	2,070.8	382.2
2000	6,740.0	102.5	1,609.7	2,344.1	117.9	2,277.9	390.4
2001	7,459.4	109.1	1,859.9	2,499.8	123.7	2,583.4	392.7
Outstanding liabilities							
1999	6,094.0	97.2	804.9	2,939.3	95.1	2,254.7	-
2000	7,154.7	108.8	1,181.2	3,149.1	109.3	2,715.1	-
2001	7,611.6	111.3	1,329.2	3,182.5	129.5	2,970.5	-

2. Direct investment

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

3.1. Portfolio investment by instrument

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

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

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

Source: ECB.

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

2) Assets minus liabilities.

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

4) Excluding the Eurosystem.

4. Other investment by sector and instrument

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

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

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

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

	Reserve assets													Memo: related assets		
	Total	Monetary gold	In fine troy ounces (millions) ³⁾	Special drawing rights	Reserve position in the IMF	Foreign exchange									Other claims	Claims on euro area residents denomi- nated in foreign currency
						Total	Currency and deposits		Securities				Financial deriva- tives			
							With monetary authorities and the BIS	With banks	Total	Equities	Bonds and notes	Money market instru- ments				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15		
Eurosysteem ³⁾																
1998 Dec. ⁴⁾	329.4	99.6	404.131	5.2	23.4	201.2	12.6	19.6	169.0	0.0	116.6	52.4	0.0	0.0	7.6	
1999 Dec.	372.1	116.4	402.758	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 Mar.	339.1	122.3	397.765	4.7	24.4	187.7	7.9	36.4	142.8	-	-	-	0.6	0.0	18.9	
Apr.	332.4	119.9	396.324	4.5	25.0	183.1	7.6	33.6	141.0	-	-	-	0.9	0.0	18.4	
May	323.1	121.1	396.233	4.5	24.2	173.3	6.9	33.6	131.6	-	-	-	1.1	0.0	18.7	
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	
European Central Bank ⁵⁾																
1999 Dec.	49.3	7.0	24.030	0.0	0.0	42.3	0.3	7.8	34.3	0.0	27.8	6.5	0.0	0.0	2.6	
2000 Dec.	45.3	7.0	24.030	0.0	0.0	38.2	0.6	6.8	30.6	0.0	20.4	10.2	0.3	0.0	3.8	
<i>Euro area enlargement</i>																
2001 Dec.	49.3	7.8	24.656	0.1	0.0	41.4	0.8	7.0	33.6	0.0	23.5	10.1	0.0	0.0	3.6	
2002 Dec.	45.5	8.1	24.656	0.2	0.0	37.3	1.2	9.9	26.1	-	-	-	0.0	0.0	3.0	
2003 Mar.	40.5	7.6	24.656	0.2	0.0	32.8	0.9	9.3	22.6	-	-	-	0.0	0.0	3.0	
Apr.	40.7	7.5	24.656	0.2	0.0	33.1	0.9	6.8	25.4	-	-	-	0.0	0.0	2.5	
May	39.2	7.5	24.656	0.2	0.0	31.4	0.8	8.0	22.6	-	-	-	0.0	0.0	2.4	
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	

Source: ECB.

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

2) Changes in the gold holdings of the Eurosysteem are due to transactions in gold within the terms of the Central Bank Gold Agreement of 26 September 1999.

3) The figures are not fully comparable with those in Table 1.1 owing to differences in coverage and valuation.

4) Position as at 1 January 1999.

5) Part of the Eurosysteem's reserves.

9 External trade in goods of the euro area

Table 9

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

(not seasonally adjusted, unless otherwise indicated)

	Exports of goods (f.o.b.)					Imports of goods (c.i.f.)						Total (s.a.) (2000=100)	
	Total				Memo: Manufac- tures 5	Total				Memo:		Exports 12	Imports 13
	1	Inter- mediate 2	Capital 3	Consump- tion 4		6	Inter- mediate 7	Capital 8	Consump- tion 9	Manufac- tures 10	Oil 11		
Values (EUR billions; 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	1,077.9	493.9	226.8	302.7	939.3	977.2	548.5	160.7	229.4	709.7	102.6	108.0	95.6
2002 Q1	259.2	119.7	53.5	73.0	226.5	240.5	135.6	39.3	56.1	176.6	22.7	107.5	94.5
Q2	273.4	127.8	57.5	74.7	238.6	249.4	142.1	40.7	57.3	181.4	25.8	108.6	96.4
Q3	267.1	121.4	55.2	76.2	232.7	235.0	131.5	37.8	56.8	171.2	26.1	108.4	95.3
Q4	278.3	124.9	60.6	78.9	241.5	252.3	139.3	43.0	59.1	180.4	28.1	107.4	96.2
2003 Q1	255.4	116.9	51.4	72.3	221.7	248.6	140.1	39.1	56.8	177.1	29.4	105.4	97.0
2002 Dec.	85.1	38.0	19.6	22.7	73.4	77.9	42.2	13.4	18.2	54.7	9.4	105.6	94.5
2003 Jan.	82.5	38.2	16.0	23.4	71.4	83.7	46.7	13.5	19.4	59.4	10.1	107.0	97.4
Feb.	84.6	38.5	16.9	24.2	73.6	79.2	44.9	11.8	18.2	56.1	9.4	106.3	96.5
Mar.	88.3	40.1	18.4	24.7	76.7	85.7	48.5	13.8	19.2	61.5	10.0	103.0	97.0
Apr.	86.0	39.9	17.3	23.8	74.3	82.5	46.0	13.4	19.6	59.5	9.3	104.6	95.8
May	83.8	40.3	16.4	22.5	72.8	80.1	44.8	13.4	18.4	58.2	7.6	101.1	93.8
Volumes (annual percentage changes; 2000=100 for columns 12 and 13)													
1999	2.2	2.8	-0.8	3.3	1.4	6.1	3.5	12.9	7.7	7.1	6.0	89.3	95.2
2000	12.4	12.5	12.7	12.7	13.6	5.9	6.8	11.7	4.5	8.9	4.7	100.0	100.0
<i>Euro area enlargement</i>													
2001	5.1	1.8	8.6	7.9	5.8	-1.2	-1.0	-3.9	-0.1	-1.7	-1.6	105.3	98.8
2002	1.8	1.0	-3.5	4.3	1.2	-1.5	-2.5	-8.2	1.6	-2.7	-1.5	107.8	97.8
2002 Q1	-2.0	-3.2	-7.8	2.1	-2.8	-5.8	-5.5	-18.7	-0.7	-8.7	-0.9	106.4	97.2
Q2	2.9	3.1	-2.4	4.8	2.5	-1.1	-1.4	-9.5	2.7	-2.6	-2.4	107.9	98.4
Q3	5.4	4.7	-0.4	7.1	4.6	1.4	0.1	-0.7	2.5	1.4	-2.7	109.0	97.6
Q4	3.1	3.2	-2.5	5.7	2.3	1.1	-1.0	-1.7	4.2	0.5	1.2	107.7	98.1
2003 Q1	0.9	-0.6	-1.3	2.0	0.4	3.4	0.1	6.3	4.9	4.2	0.2	107.0	99.7
2002 Dec.	5.2	6.2	-0.8	5.9	4.0	4.7	1.3	1.1	9.7	4.8	2.0	106.5	96.3
2003 Jan.	3.9	2.6	0.3	5.5	3.1	2.4	-2.6	13.8	5.1	4.1	-4.6	108.5	99.3
Feb.	1.9	0.0	1.1	2.3	1.6	1.5	-0.6	-0.8	2.9	2.0	-2.8	107.7	99.3
Mar.	-2.4	-3.9	-3.6	-0.7	-2.5	5.5	2.9	6.1	6.1	5.6	7.6	104.9	100.4
Apr.	-2.2	-2.1	-5.7	-3.5	-3.0	-1.0	-3.1	-1.9	2.4	-0.8	7.7	107.2	101.1
May	-5.1	-4.9	-9.1	-5.0	-5.5	3.7	1.2	9.2	3.7	3.1	4.6	103.8	102.4
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 Q1	0.9	-0.5	1.5	2.9	0.9	-3.4	-5.7	-0.6	1.1	-0.6	-16.8	101.0	97.3
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	98.1
Q3	-1.9	-2.7	-1.8	-0.6	-1.9	-3.4	-3.6	-3.4	-2.8	-2.8	-4.6	99.5	97.7
Q4	-1.1	-1.1	-1.5	-0.6	-1.2	0.6	2.5	-2.7	-1.4	-1.5	19.3	99.8	98.2
2003 Q1	-2.4	-1.7	-3.0	-3.1	-2.7	0.2	3.5	-6.4	-3.4	-3.5	29.5	98.6	97.4
2002 Dec.	-2.3	-1.9	-2.7	-2.5	-2.6	0.2	2.9	-3.9	-3.2	-2.7	24.9	99.2	98.3
2003 Jan.	-2.4	-1.9	-2.8	-2.5	-2.6	1.4	4.6	-6.0	-1.8	-2.6	32.6	98.7	98.2
Feb.	-2.1	-1.1	-2.1	-3.3	-2.3	0.4	4.1	-5.6	-4.2	-3.7	34.0	98.8	97.3
Mar.	-2.9	-2.1	-4.0	-3.4	-3.3	-1.2	1.8	-7.6	-4.1	-4.3	22.6	98.2	96.8
Apr.	-3.2	-3.0	-3.4	-2.9	-3.3	-3.4	-2.9	-7.2	-2.7	-4.0	-2.6	97.7	94.8
May	-3.7	-3.1	-5.4	-3.5	-3.7	-6.7	-6.9	-9.2	-5.8	-6.2	-17.1	97.4	91.7

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

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

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

2. Geographical breakdown ¹⁾

(EUR billions; not seasonally adjusted, unless otherwise indicated)

	Total	Total	United	Sweden	Denmark	Acceding	Switzer-	United	Japan	Asia excl.	Africa	Latin	Other
	1	(s.a.)	Kingdom	4	5	countries	land	States	9	Japan	11	America	countries
	1	2	3	4	5	6	7	8	9	10	11	12	13
Exports (f.o.b.)													
1999	832.8	-	161.4	33.1	21.1	77.3	56.1	135.1	26.8	119.2	48.4	39.1	113.6
2000	1,013.7	-	189.7	38.8	23.2	94.6	63.4	171.4	34.2	151.6	56.1	46.7	141.6
<i>Euro area enlargement</i>													
2001	1,060.8	-	201.9	36.9	24.3	105.9	66.3	180.0	34.5	165.3	60.3	49.8	135.6
2002	1,077.9	-	204.3	36.9	24.7	112.1	63.9	181.8	32.6	170.3	59.8	43.1	148.5
2002 Q1	259.2	269.0	52.1	9.2	6.0	26.3	15.9	44.8	7.9	39.4	14.1	10.2	33.3
Q2	273.4	271.9	51.6	9.3	6.2	28.7	16.2	46.0	7.8	42.8	15.6	11.3	37.8
Q3	267.1	271.3	50.4	8.4	6.0	27.8	15.7	44.3	8.3	43.0	14.9	10.6	37.8
Q4	278.3	268.8	50.3	10.0	6.5	29.2	16.1	46.7	8.6	45.1	15.2	11.0	39.7
2003 Q1	255.4	263.9	49.0	9.7	6.3	27.6	16.4	41.4	7.8	39.3	13.6	9.5	.
2002 Dec.	85.1	88.1	15.0	2.8	1.9	8.4	4.8	13.9	2.6	14.9	5.0	3.4	12.4
2003 Jan.	82.5	89.3	15.5	3.1	1.9	9.0	5.4	14.3	2.5	12.3	4.6	3.1	11.1
Feb.	84.6	88.7	15.9	3.2	2.0	9.2	5.5	13.7	2.7	13.3	4.4	3.0	11.7
Mar.	88.3	85.9	17.6	3.5	2.4	9.4	5.6	13.5	2.6	13.7	4.7	3.3	.
Apr.	86.0	87.3	15.7	3.3	2.0	9.6	5.1	13.7	2.7	13.5	5.0	3.1	.
May	83.8	84.3	.	.	.	.	.	.	.	.	.	.	.
% change versus previous year 2003 May -8.6													
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	977.2	-	145.2	35.4	22.2	93.5	51.9	125.1	52.6	203.9	68.4	39.1	140.0
2002 Q1	240.5	241.9	36.5	8.5	5.3	22.2	12.7	33.0	12.8	49.2	17.8	9.3	33.2
Q2	249.4	246.8	37.7	9.2	5.4	23.9	13.6	32.9	13.5	48.8	17.1	10.7	36.6
Q3	235.0	244.0	34.0	8.3	5.3	22.6	12.3	28.7	12.6	51.2	16.2	9.9	33.9
Q4	252.3	246.3	37.0	9.5	6.2	24.7	13.3	30.5	13.6	54.6	17.2	9.3	36.3
2003 Q1	248.6	248.3	35.1	9.0	5.8	24.7	13.0	28.3	13.5	53.8	18.6	8.8	.
2002 Dec.	77.9	80.7	12.0	2.9	2.1	7.4	4.0	9.0	4.0	16.7	5.4	2.6	11.7
2003 Jan.	83.7	83.2	11.0	2.8	2.0	8.0	4.1	9.8	4.7	18.7	6.2	3.0	13.4
Feb.	79.2	82.3	11.3	3.0	2.0	7.9	4.3	8.8	4.2	17.1	6.0	2.7	12.0
Mar.	85.7	82.8	12.7	3.2	1.9	8.8	4.6	9.7	4.7	18.1	6.4	3.1	.
Apr.	82.5	81.8	11.1	3.2	1.8	8.5	4.1	9.8	4.7	17.5	6.1	3.6	.
May	80.1	80.1	.	.	.	.	.	.	.	.	.	.	.
% change versus previous year 2003 May -3.3													
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	100.7	-	59.1	1.5	2.5	18.5	11.9	56.7	-19.9	-33.6	-8.7	4.0	8.5
2002 Q1	18.7	27.1	15.7	0.6	0.7	4.1	3.2	11.8	-4.9	-9.8	-3.8	1.0	0.1
Q2	24.0	25.1	13.8	0.1	0.9	4.8	2.7	13.1	-5.7	-6.0	-1.5	0.6	1.2
Q3	32.0	27.3	16.4	0.2	0.7	5.2	3.3	15.6	-4.3	-8.2	-1.4	0.7	3.9
Q4	26.0	22.5	13.2	0.6	0.3	4.5	2.8	16.2	-5.0	-9.5	-2.0	1.7	3.3
2003 Q1	6.8	15.6	13.9	0.6	0.5	2.9	3.4	13.1	-5.7	-14.5	-5.0	0.7	.
2002 Dec.	7.2	7.4	3.0	-0.1	-0.1	1.0	0.8	4.9	-1.4	-1.8	-0.4	0.8	0.7
2003 Jan.	-1.1	6.1	4.4	0.3	-0.1	1.0	1.2	4.5	-2.1	-6.4	-1.7	0.1	-2.3
Feb.	5.4	6.4	4.6	0.1	0.0	1.3	1.2	4.9	-1.5	-3.7	-1.6	0.3	-0.3
Mar.	2.6	3.1	4.9	0.2	0.6	0.6	1.0	3.8	-2.0	-4.4	-1.7	0.2	.
Apr.	3.5	5.5	4.6	0.1	0.2	1.1	1.0	3.9	-2.0	-4.0	-1.0	-0.5	.
May	3.7	4.3	.	.	.	.	.	.	.	.	.	.	.

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

1) Owing to differences in definitions, coverage and time of recording, trade data (as compiled by Eurostat) are not fully comparable with the goods item in the balance of payments statistics compiled by the ECB (Tables 8.1 and 8.2).

10 Exchange rates

Table 10

Exchange rates

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

	Effective exchange rate of the euro ¹⁾								Bilateral ECU or euro exchange rates ²⁾	
	Narrow group						Broad group		US dollar	Japanese yen
	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	99.3	98.3	100.6	101.6	90.4	96.5	1.134	137.1
1998	101.5	101.3	101.6	100.9	99.5	101.5	96.6	99.1	1.121	146.4
1999	95.7	95.7	95.7	95.6	96.1	95.7	96.6	95.8	1.066	121.3
2000	85.7	86.3	87.1	85.4	87.2	85.1	88.2	86.0	0.924	99.5
<i>Euro area enlargement</i>										
2001	87.3	88.6	89.3	88.1	88.0	86.5	91.0	87.7	0.896	108.7
2002	90.0	92.5	92.9	92.3	90.6	90.2	95.6	91.7	0.946	118.1
2001 Q1	88.6	89.5	90.6	88.9	89.4	87.3	91.4	88.4	0.923	109.1
Q2	86.0	87.3	87.9	86.5	87.2	85.1	89.5	86.4	0.873	106.9
Q3	87.0	88.3	89.0	87.7	87.1	85.9	91.2	87.7	0.890	108.3
Q4	87.5	89.3	89.9	89.2	88.1	87.6	92.0	88.4	0.896	110.5
2002 Q1	87.1	89.4	89.9	88.8	87.5	87.6	91.3	87.8	0.877	116.1
Q2	88.8	91.4	91.6	90.9	89.4	89.2	93.9	90.2	0.919	116.5
Q3	91.3	93.9	94.4	93.8	92.3	91.5	97.9	93.8	0.984	117.2
Q4	92.5	95.4	95.5	95.6	93.0	92.6	99.4	94.9	0.999	122.4
2003 Q1	96.9	100.1	99.8	100.2	97.2	97.0	104.1	99.2	1.073	127.6
Q2	101.3	104.9	105.3	-	-	-	107.9	102.7	1.137	134.7
2001 Jan.	89.2	89.9	91.0	-	-	-	91.7	88.6	0.938	109.6
Feb.	88.3	89.1	90.4	-	-	-	91.0	88.1	0.922	107.1
Mar.	88.4	89.4	90.5	-	-	-	91.4	88.4	0.910	110.3
Apr.	87.6	88.8	89.6	-	-	-	91.0	88.0	0.892	110.4
May	85.9	87.2	87.7	-	-	-	89.3	86.2	0.874	106.5
June	84.7	86.0	86.4	-	-	-	88.1	85.0	0.853	104.3
July	85.4	86.8	87.2	-	-	-	89.1	85.9	0.861	107.2
Aug.	87.7	89.0	89.6	-	-	-	91.8	88.3	0.900	109.3
Sep.	88.0	89.3	90.0	-	-	-	92.6	89.0	0.911	108.2
Oct.	88.0	89.6	90.1	-	-	-	92.8	89.1	0.906	109.9
Nov.	86.8	88.4	89.2	-	-	-	91.3	87.6	0.888	108.7
Dec.	87.7	89.8	90.3	-	-	-	91.9	88.5	0.892	113.4
2002 Jan.	87.6	89.9	90.5	-	-	-	91.6	88.1	0.883	117.1
Feb.	86.8	89.0	89.6	-	-	-	91.1	87.4	0.870	116.2
Mar.	86.8	89.3	89.7	-	-	-	91.2	87.8	0.876	114.7
Apr.	87.2	89.7	90.1	-	-	-	91.7	88.1	0.886	115.8
May	88.6	91.1	91.4	-	-	-	93.7	89.9	0.917	115.9
June	90.6	93.2	93.4	-	-	-	96.4	92.5	0.955	117.8
July	91.7	94.4	94.7	-	-	-	98.2	94.2	0.992	117.1
Aug.	91.1	93.6	94.2	-	-	-	97.7	93.5	0.978	116.3
Sep.	91.2	93.7	94.4	-	-	-	98.0	93.7	0.981	118.4
Oct.	91.7	94.3	94.5	-	-	-	98.5	94.2	0.981	121.6
Nov.	92.5	95.1	95.3	-	-	-	99.3	94.6	1.001	121.7
Dec.	93.6	96.7	96.8	-	-	-	100.4	96.0	1.018	124.2
2003 Jan.	95.8	98.8	99.0	-	-	-	103.0	98.1	1.062	126.1
Feb.	97.1	100.2	100.1	-	-	-	104.4	99.4	1.077	128.6
Mar.	97.9	101.2	100.2	-	-	-	105.1	100.1	1.081	128.2
Apr.	98.6	102.1	102.1	-	-	-	105.2	100.3	1.085	130.1
May	102.5	106.0	106.8	-	-	-	109.1	103.8	1.158	135.8
June	102.7	106.5	107.1	-	-	-	109.3	104.0	1.166	138.1
July	101.4	105.2	105.9	-	-	-	107.8	102.5	1.137	135.0
% ch. vs. ⁴⁾ prev. month										
2003 July	-1.3	-1.1	-1.2	-	-	-	-1.4	-1.5	-2.5	-2.2
% ch. vs. ⁴⁾ prev. year										
2003 July	10.6	11.5	11.8	-	-	-	9.8	8.9	14.6	15.3

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 ²⁾										
Swiss franc	Pound sterling	Swedish krona	Danish krone	Norwegian krone	Canadian dollar	Australian dollar	Hong Kong dollar ⁵⁾	Korean won ³⁾	Singapore dollar ³⁾	
11	12	13	14	15	16	17	18	19	20	
1.644	0.692	8.65	7.48	8.02	1.569	1.528	8.75	1,069.8	1.678	1997
1.622	0.676	8.92	7.50	8.47	1.665	1.787	8.69	1,568.9	1.876	1998
1.600	0.659	8.81	7.44	8.31	1.584	1.652	8.27	1,267.3	1.806	1999
1.558	0.609	8.45	7.45	8.11	1.371	1.589	7.20	1,043.5	1.592	2000
Euro area enlargement										
1.511	0.622	9.26	7.45	8.05	1.386	1.732	6.99	1,154.8	1.604	2001
1.467	0.629	9.16	7.43	7.51	1.484	1.738	7.37	1,175.5	1.691	2002
1.533	0.633	9.00	7.46	8.20	1.410	1.741	7.20	1,174.7	1.616	2001 Q1
1.528	0.614	9.13	7.46	8.01	1.345	1.701	6.81	1,138.9	1.583	Q2
1.507	0.619	9.41	7.44	8.01	1.374	1.734	6.94	1,150.1	1.582	Q3
1.473	0.621	9.48	7.44	7.97	1.416	1.751	6.99	1,155.2	1.634	Q4
1.473	0.615	9.16	7.43	7.81	1.398	1.692	6.84	1,155.3	1.607	2002 Q1
1.465	0.629	9.16	7.43	7.52	1.428	1.666	7.17	1,157.8	1.657	Q2
1.464	0.635	9.23	7.43	7.40	1.536	1.796	7.67	1,172.7	1.729	Q3
1.467	0.636	9.09	7.43	7.32	1.569	1.791	7.79	1,215.4	1.767	Q4
1.466	0.670	9.18	7.43	7.57	1.620	1.809	8.37	1,288.9	1.872	2003 Q1
1.518	0.702	9.14	7.43	7.96	1.589	1.774	8.87	1,373.8	1.987	Q2
1.529	0.635	8.91	7.46	8.24	1.410	1.689	7.32	1,194.9	1.630	2001 Jan.
1.536	0.634	8.98	7.46	8.21	1.403	1.724	7.19	1,153.8	1.607	Feb.
1.535	0.629	9.13	7.46	8.16	1.417	1.807	7.09	1,173.4	1.611	Mar.
1.529	0.622	9.11	7.46	8.11	1.390	1.785	6.96	1,183.5	1.617	Apr.
1.533	0.613	9.06	7.46	7.99	1.347	1.681	6.82	1,133.7	1.586	May
1.522	0.609	9.21	7.45	7.94	1.302	1.647	6.65	1,104.1	1.550	June
1.514	0.609	9.26	7.44	7.97	1.315	1.689	6.71	1,120.3	1.569	July
1.514	0.627	9.31	7.45	8.06	1.386	1.717	7.02	1,154.0	1.586	Aug.
1.491	0.623	9.67	7.44	8.00	1.426	1.804	7.11	1,178.3	1.593	Sep.
1.479	0.624	9.58	7.44	8.00	1.422	1.796	7.07	1,178.6	1.640	Oct.
1.466	0.618	9.42	7.45	7.92	1.415	1.717	6.93	1,137.5	1.625	Nov.
1.475	0.620	9.44	7.44	7.99	1.408	1.735	6.96	1,147.0	1.639	Dec.
1.475	0.617	9.23	7.43	7.92	1.413	1.709	6.89	1,160.8	1.625	2002 Jan.
1.477	0.612	9.18	7.43	7.79	1.388	1.696	6.79	1,147.2	1.594	Feb.
1.468	0.616	9.06	7.43	7.72	1.390	1.669	6.83	1,157.3	1.602	Mar.
1.466	0.614	9.14	7.43	7.62	1.401	1.654	6.91	1,163.2	1.619	Apr.
1.457	0.628	9.22	7.44	7.52	1.421	1.666	7.15	1,150.1	1.651	May
1.472	0.644	9.11	7.43	7.40	1.463	1.679	7.45	1,160.6	1.703	June
1.462	0.639	9.27	7.43	7.40	1.532	1.792	7.74	1,169.2	1.740	July
1.464	0.636	9.25	7.43	7.43	1.533	1.805	7.63	1,167.1	1.716	Aug.
1.465	0.631	9.17	7.43	7.36	1.543	1.793	7.65	1,182.6	1.732	Sep.
1.465	0.630	9.11	7.43	7.34	1.548	1.783	7.65	1,211.9	1.751	Oct.
1.467	0.637	9.08	7.43	7.32	1.574	1.785	7.81	1,208.2	1.767	Nov.
1.468	0.642	9.10	7.43	7.29	1.587	1.808	7.94	1,226.9	1.786	Dec.
1.462	0.657	9.17	7.43	7.33	1.636	1.822	8.28	1,250.1	1.843	2003 Jan.
1.467	0.670	9.15	7.43	7.54	1.630	1.811	8.40	1,282.8	1.880	Feb.
1.469	0.683	9.23	7.43	7.84	1.594	1.795	8.43	1,335.4	1.895	Mar.
1.496	0.689	9.15	7.43	7.83	1.585	1.781	8.46	1,337.4	1.928	Apr.
1.516	0.713	9.16	7.42	7.87	1.602	1.787	9.03	1,390.0	2.007	May
1.541	0.702	9.12	7.42	8.16	1.580	1.755	9.10	1,392.3	2.023	June
1.548	0.700	9.19	7.43	8.29	1.569	1.718	8.87	1,342.3	1.996	July
0.4	-0.3	0.7	0.1	1.6	-0.7	-2.1	-2.5	-3.6	-1.4	% ch. vs. ⁴⁾ prev. month 2003 July
5.8	9.7	-0.9	0.0	11.9	2.4	-4.1	14.6	14.8	14.7	% ch. vs. ⁴⁾ prev. year 2003 July

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 ¹⁾ as a % per annum	Exchange rate ²⁾ as national currency per euro	Current and new capital account as a % of GDP	Unit labour costs ³⁾	Real GDP	Industrial production index ⁴⁾	Standardised unemployment rate as a % of labour force (s.a.)	Broad money ⁵⁾	3-month interest rate ¹⁾ as a % per annum
	1	2	3	4	5	6	7	8	9	10	11	12
Denmark												
1999	2.1	3.3	53.0	4.91	7.44	1.8	2.4	2.6	0.1	4.8	-0.2	3.44
2000	2.7	2.6	47.4	5.64	7.45	1.5	1.4	2.9	5.7	4.4	1.1	5.00
2001	2.3	3.1	45.4	5.08	7.45	3.1	3.7	1.4	1.3	4.3	5.7	4.70
2002	2.4	1.9	45.2	5.06	7.43	2.8	1.4	2.1	1.5	4.5	3.5	3.54
2002 Q1	2.5	-	-	5.21	7.43	2.6	3.0	1.7	-0.6	4.3	2.3	3.63
Q2	2.1	-	-	5.36	7.43	3.1	0.6	3.4	4.5	4.4	2.8	3.71
Q3	2.4	-	-	4.92	7.43	3.6	1.0	1.6	0.9	4.6	2.6	3.57
Q4	2.7	-	-	4.74	7.43	2.0	1.0	1.5	1.1	4.7	6.1	3.27
2003 Q1	2.8	-	-	4.30	7.43	3.0	0.4	1.4	1.5	5.0	19.1	2.83
Q2	2.2	-	-	4.12	7.43	.	.	.	.	.	.	2.48
2003 Feb.	2.9	-	-	4.21	7.43	-	-	-	3.0	5.0	21.1	2.83
Mar.	2.8	-	-	4.26	7.43	-	-	-	2.1	5.0	18.5	2.67
Apr.	2.5	-	-	4.41	7.43	-	-	-	-0.1	5.0	20.6	2.67
May	2.1	-	-	4.09	7.42	-	-	-	-0.9	5.2	24.4	2.54
June	2.0	-	-	3.85	7.42	-	-	-	.	.	.	2.22
July	.	-	-	4.15	7.43	-	-	-	.	.	.	2.18
Sweden												
1999	0.6	1.5	62.7	4.98	8.81	2.6	-1.2	4.6	2.2	6.7	6.8	3.32
2000	1.3	3.4	52.8	5.37	8.45	3.8	5.0	4.4	6.3	5.6	6.2	4.07
2001	2.7	4.5	54.4	5.11	9.26	3.8	5.8	1.1	-0.3	4.9	3.4	4.11
2002	2.0	1.2	52.4	5.31	9.16	4.1	2.1	1.9	-1.2	4.9	5.4	4.24
2002 Q1	2.9	-	-	5.42	9.16	5.5	4.7	0.8	-1.2	4.9	7.0	4.00
Q2	1.9	-	-	5.64	9.16	5.3	0.8	3.1	0.1	4.8	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	1.8	1.7	1.3	-2.5	5.1	3.4	4.09
2003 Q1	2.9	-	-	4.59	9.18	5.5	-0.5	2.2	-2.0	5.3	5.6	3.72
Q2	2.1	-	-	4.43	9.14	.	.	.	.	.	5.5	3.28
2003 Feb.	3.3	-	-	4.48	9.15	-	-	-	-2.4	5.2	5.7	3.75
Mar.	2.9	-	-	4.57	9.23	-	-	-	-4.6	5.3	5.8	3.56
Apr.	2.3	-	-	4.73	9.15	-	-	-	1.9	5.4	4.4	3.56
May	2.0	-	-	4.37	9.16	-	-	-	-1.9	5.4	7.0	3.35
June	2.0	-	-	4.20	9.12	-	-	-	.	.	5.0	2.93
July	.	-	-	4.49	9.19	-	-	-	.	.	.	2.83
United Kingdom												
1999	1.3	1.1	45.1	5.01	0.659	-2.1	2.8	2.4	0.8	5.9	5.5	5.54
2000	0.8	3.9	42.1	5.33	0.609	-1.8	2.4	3.1	1.6	5.4	6.6	6.19
2001	1.2	0.8	39.0	5.01	0.622	-1.1	4.0	2.1	-2.1	5.0	8.1	5.04
2002	1.3	-1.4	38.6	4.91	0.629	-0.8	2.3	1.9	-3.5	5.1	6.0	4.06
2002 Q1	1.5	2.8	37.7	5.13	0.615	-0.2	2.8	1.4	-5.9	5.1	6.1	4.08
Q2	0.9	-3.9	38.1	5.28	0.629	-2.1	2.8	1.8	-4.3	5.1	5.7	4.17
Q3	1.1	-0.7	37.8	4.71	0.635	0.0	1.7	2.3	-2.4	5.2	5.7	4.01
Q4	1.6	-3.2	38.3	4.52	0.636	-1.0	1.7	2.3	-1.2	5.0	6.3	3.98
2003 Q1	1.5	-0.4	37.6	4.34	0.670	1.8	1.7	2.1	-0.8	5.0	6.8	3.80
Q2	1.3	-5.3	38.4	4.35	0.702	.	.	.	.	.	8.0	3.64
2003 Feb.	1.6	-0.5	37.3	4.29	0.670	-	-	-	-0.3	5.1	6.7	3.75
Mar.	1.6	-4.7	37.6	4.41	0.683	-	-	-	-1.2	5.0	7.1	3.66
Apr.	1.5	-3.0	37.5	4.56	0.689	-	-	-	-0.9	.	8.0	3.65
May	1.2	-7.7	37.9	4.31	0.713	-	-	-	-4.1	.	8.2	3.63
June	1.1	-5.2	38.4	4.19	0.702	-	-	-	.	.	7.9	3.64
July	.	.	.	4.46	0.700	-	-	-	.	.	.	3.49

Sources: Eurostat (columns 1, 8, 9 and 10); European Commission (Economic and Financial Affairs DG and Eurostat) (columns 2 (annual) and 3 (annual)); Reuters (column 12); national data (columns 2 (quarterly and monthly), 3 (quarterly and monthly), 4, 5, 7 (except Sweden) and 11); ECB calculations (columns 6 and 7 (Sweden)).

1) Average-of-period values.

2) For more information, see Table 10.

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

4) Total excluding construction; adjusted for working days.

5) Average of end-month values; M3; M4 for the United Kingdom.

12 Economic and financial developments outside the EU

Table 12.1

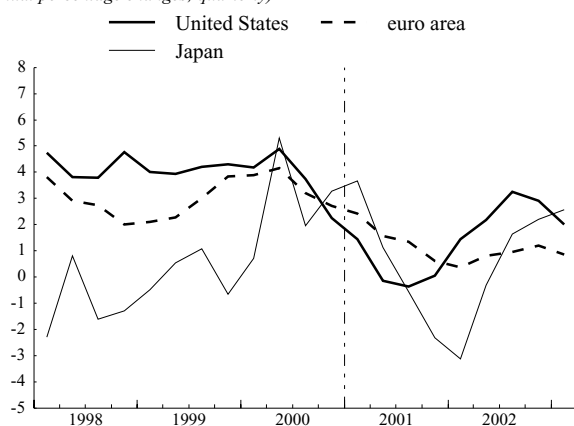
Economic and financial developments

(annual percentage changes, unless otherwise indicated)

	Consumer price index	Unit labour costs ¹⁾	Real GDP	Industrial production index ¹⁾	Unemployment rate as a % of labour force (s.a.)	Broad money ²⁾	3-month interbank deposit rate ³⁾ as a % per annum	10-year government bond yield ³⁾ as a % per annum	Exchange rate ⁴⁾ as national currency per euro	Fiscal deficit (-)/surplus (+) ⁵⁾ as a % of GDP	Gross public debt ⁶⁾ as a % of GDP
	1	2	3	4	5	6	7	8	9	10	11
United States											
1999	2.2	-1.1	4.1	5.0	4.2	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	44.3
2001	2.8	0.7	0.3	-4.1	4.8	11.4	3.78	5.01	0.896	-0.5	44.0
2002	1.6	-1.1	2.4	-1.0	5.8	8.0	1.80	4.60	0.946	-3.4	46.2
2002 Q1	1.3	-0.8	1.4	-4.0	5.6	10.7	1.90	5.06	0.877	-3.0	44.3
Q2	1.3	-1.5	2.2	-1.5	5.8	7.8	1.92	5.08	0.919	-3.3	44.6
Q3	1.6	-1.9	3.3	0.5	5.8	7.2	1.81	4.25	0.984	-3.4	45.3
Q4	2.2	-0.3	2.9	1.1	5.9	6.3	1.55	3.99	0.999	-3.8	46.2
2003 Q1	2.9	1.2	2.0	0.4	5.8	6.3	1.33	3.90	1.073	-4.0	46.8
Q2	2.1	.	.	-1.2	6.2	6.8	1.24	3.61	1.137	.	.
2003 Feb.	3.0	.	.	0.5	5.8	6.2	1.34	3.90	1.077	.	.
Mar.	3.0	.	.	0.0	5.8	6.3	1.29	3.79	1.081	.	.
Apr.	2.2	.	.	-1.0	6.0	6.5	1.30	3.94	1.085	.	.
May	2.1	.	.	-1.3	6.1	6.9	1.28	3.56	1.158	.	.
June	2.1	.	.	-1.2	6.4	7.1	1.12	3.32	1.166	.	.
July	.	.	.	.	.	.	1.11	.	1.137	.	.
Japan											
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	-1.4	5.4	3.3	0.08	1.27	118.1	.	.
2002 Q1	-1.4	5.4	-3.1	-9.9	5.3	3.6	0.10	1.46	116.1	.	.
Q2	-0.9	-1.7	-0.3	-3.8	5.4	3.5	0.08	1.37	116.5	.	.
Q3	-0.8	-6.7	1.6	3.2	5.4	3.3	0.07	1.24	117.2	.	.
Q4	-0.5	-8.4	2.2	5.9	5.4	2.9	0.07	1.01	122.4	.	.
2003 Q1	-0.2	-6.9	2.6	5.6	5.4	1.9	0.06	0.80	127.6	.	.
Q2	-0.2	.	.	2.6	.	1.6	0.06	0.60	134.7	.	.
2003 Feb.	-0.2	-6.1	.	4.8	5.2	1.9	0.06	0.83	128.6	.	.
Mar.	-0.1	-5.1	.	4.1	5.4	1.7	0.06	0.74	128.2	.	.
Apr.	-0.1	-4.8	.	3.3	5.4	1.3	0.06	0.66	130.1	.	.
May	-0.2	.	.	1.7	5.4	1.6	0.06	0.57	135.8	.	.
June	-0.4	.	.	2.8	.	1.8	0.06	0.56	138.1	.	.
July	.	.	.	.	.	.	0.05	.	135.0	.	.

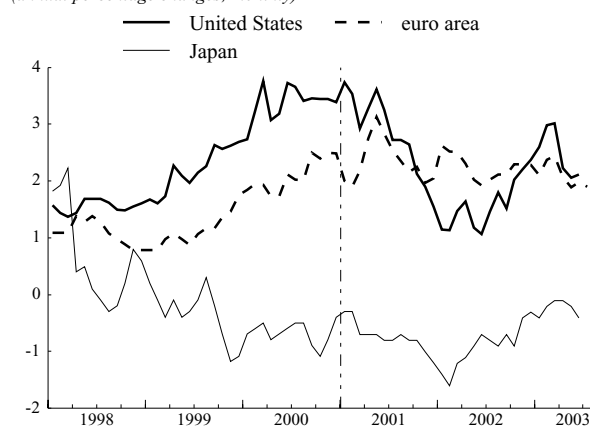
Real gross domestic product

(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.

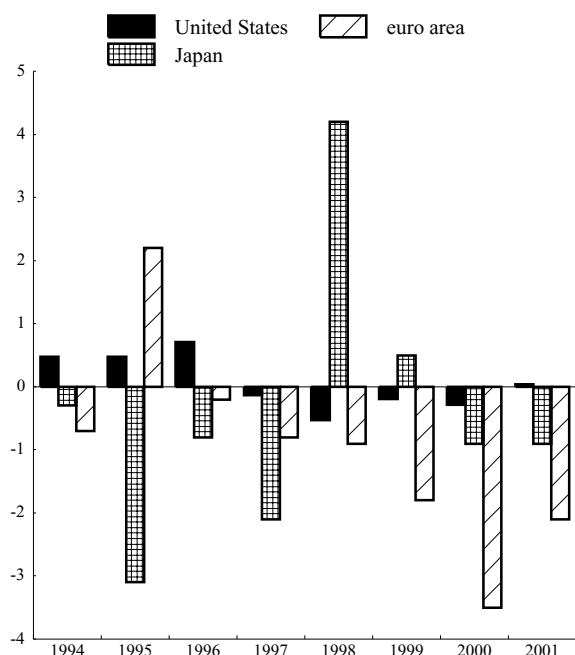
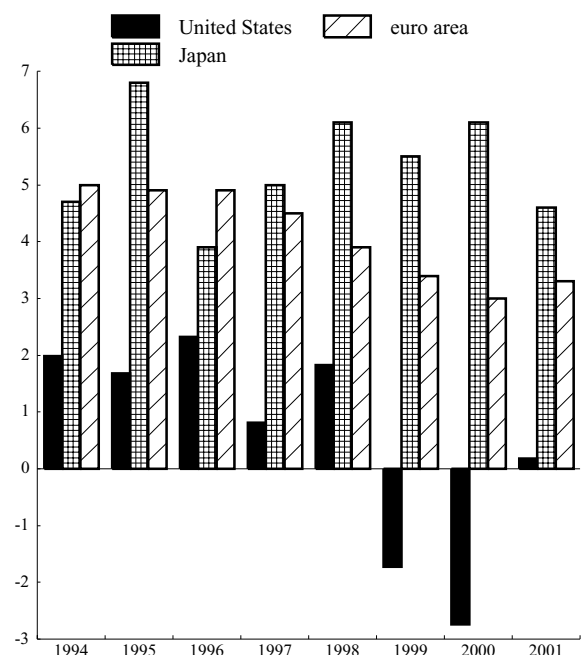
4) For more information, see Table 10.

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 ¹⁾			
	Gross saving	Gross capital formation	Net lending to the rest of the world	Gross capital formation	Gross fixed capital formation	Net acquisition of financial assets	Gross saving	Net incurrence of liabilities	Securities and shares	Capital expenditure	Net acquisition of financial assets	Gross saving	Net incurrence of liabilities
	1	2	3	4	5	6	7	8	9	10	11	12	13
United States													
1999	18.4	20.9	-3.0	9.5	8.9	10.5	8.2	10.6	2.9	12.4	4.5	11.2	6.2
2000	18.4	21.1	-4.0	9.7	9.1	12.3	7.5	12.6	2.7	12.5	3.0	11.5	5.7
2001	16.5	19.1	-3.7	7.9	8.5	1.9	7.7	1.8	2.1	13.0	5.9	11.6	5.8
2002	15.1	18.6	-4.7	7.7	7.6	1.6	7.7	1.8	0.3	12.8	6.6	12.5	7.0
2001 Q2	16.6	19.3	-3.8	8.1	8.6	1.4	7.4	1.7	2.8	12.9	6.0	11.2	6.7
Q3	16.5	18.8	-3.5	7.7	8.3	0.1	7.8	0.3	0.9	12.9	8.9	12.8	9.1
Q4	15.9	18.2	-3.6	7.1	8.0	2.1	8.5	0.8	2.4	13.4	2.5	10.9	3.6
2002 Q1	15.5	18.6	-4.1	7.5	7.8	1.7	7.9	1.5	0.3	12.8	6.5	12.3	6.8
Q2	15.5	18.7	-4.8	7.7	7.6	2.9	7.7	2.9	1.1	12.7	5.6	12.7	5.9
Q3	14.6	18.6	-4.7	7.8	7.6	0.0	7.5	0.6	-1.4	12.9	4.7	12.5	6.6
Q4	14.6	18.7	-5.1	7.8	7.5	1.8	7.6	2.2	1.1	12.7	9.4	12.5	8.5
2003 Q1	14.2	18.5	-5.2	7.5	7.4	2.6	7.3	3.1	0.8	12.7	8.3	12.4	8.4
Japan													
1999	27.8	25.9	2.2	14.4	14.8	2.4	13.7	-3.5	1.7	5.2	5.1	11.5	0.2
2000	27.7	26.2	2.3	15.8	15.4	2.4	14.3	0.3	1.2	5.2	4.1	10.7	0.0
2001	26.4	25.6	2.0	15.7	15.2	-2.3	14.1	-5.7	1.7	4.9	3.0	8.6	-0.1
2002	.	23.7	.	.	.	-3.0	.	-6.6	-0.3	.	1.5	.	-2.1
2001 Q2	24.2	25.4	1.7	.	.	-26.7	.	-15.3	4.0	.	11.8	.	-4.5
Q3	25.9	25.3	2.1	.	.	6.3	.	-8.9	-1.1	.	-5.2	.	2.6
Q4	25.5	25.5	2.0	.	.	2.3	.	3.2	1.5	.	8.8	.	-1.5
2002 Q1	29.6	22.8	3.4	.	.	10.0	.	-6.7	-2.5	.	-6.5	.	2.5
Q2	.	22.7	.	.	.	-25.0	.	-19.0	2.0	.	7.4	.	-8.0
Q3	.	23.7	.	.	.	-0.8	.	-7.5	-2.6	.	-4.3	.	-0.1
Q4	.	25.0	.	.	.	3.8	.	6.1	1.5	.	8.5	.	-2.5
2003 Q1	.	22.9	.	.	.	23.3	.	13.9	0.2	.	-6.9	.	2.7

Net lending of non-financial corporations
(as a percentage of GDP)

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


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

1) Households including non-profit institutions serving households.

Technical notes

Relating to Tables 2.3 to 2.7

Calculation of flows

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

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

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

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

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

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

Relating to Table 2.4

Calculation of growth rates

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

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

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

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

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

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

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

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

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

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

Seasonal adjustment of the euro area monetary aggregates and loans¹

The approach used relies on a multiplicative decomposition through X-12-ARIMA.² Seasonal adjustment for monetary aggregates includes a day-of-the-week adjustment for some components of M2. The seasonal adjustment of M3 is carried out indirectly by aggregating the seasonally adjusted series of M1, M2 less M1, and M3 less M2.

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

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

² For details, see Findley, D., Monsell, B., Bell, W., Otto, M. and Chen, B. C. (1998), "New Capabilities and Methods of the X-12-ARIMA Seasonal Adjustment Program", *Journal of Business and Economic Statistics*, 16, 2, 127-152, or "X-12-ARIMA Reference Manual", Time Series Staff, Bureau of the Census, Washington, D.C.

For internal purposes, multiplicative models of TRAMO-SEATS also are used. For details on TRAMO-SEATS, see Gomez, V. and Maravall, A. (1996), "Programs TRAMO and SEATS: Instructions for the User", Bank of Spain, Working Paper No. 9628, Madrid.

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

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

Relating to Tables 2.5 to 2.8

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

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

Calculation of growth rates

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

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

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

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

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

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

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

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

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

Relating to Table 3.7

Calculation of growth rates

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

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

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

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

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

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

Relating to Table 4.1

Seasonal adjustment of the HICP⁴

The approach used relies on multiplicative decomposition through X-12-ARIMA (see footnote 2 on page 85*). The seasonal adjustment of the total HICP for the euro area is carried out indirectly by aggregating the seasonally adjusted euro area series for processed food, unprocessed food, industrial goods excluding energy and services. Energy is added without adjustment since there is no statistical evidence of seasonality. Seasonal factors are revised at annual intervals or as required.

Relating to Table 8.2

Seasonal adjustment of the balance of payments current account

The approach relies on multiplicative decomposition through X-12-ARIMA (see footnote 2 on page 85*). Goods raw data are first pre-adjusted to take into

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

⁴ See footnote 1 on page 85*.



General notes

The basis for the statistics compiled by the European Central Bank (ECB) is presented in the document entitled “Statistical information collected and compiled by the ESCB”, dated May 2000. This document is an update of the report entitled “Statistical requirements for Stage Three of Monetary Union (Implementation Package)” of July 1996. The document covers money and banking and related statistics, balance of payments statistics, international investment position statistics and financial accounts statistics. The ECB’s requirements for statistics on prices and costs, national accounts, the labour market, government receipts and expenditure, short-term indicators of output and demand, and the European Commission Business and Consumer Surveys are set out in the document entitled “Requirements in the field of general economic statistics” of August 2000.¹

The focus of these statistics is the euro area as a whole. New data will appear in the ECB’s Monthly Bulletin as they become available. More detailed and longer runs of data, with further explanatory notes, are available on the statistics section of the ECB’s website (www.ecb.int). The services available within “Statistics on-line” include a Browser interface with search facilities, subscription to different datasets and the possibility to download data directly in compressed Comma Separated Value (CSV) files.

Given that the composition of the ECU does not coincide with the currencies of the countries which have adopted the single currency, pre-1999 amounts converted from the participating currencies into ECU at current ECU exchange rates are affected by movements in the currencies of EU Member States which have not adopted the euro. To avoid this effect in the monetary statistics, the pre-1999 data in Tables 2.1 to 2.8 are expressed in units converted from national currencies at the irrevocable euro exchange rates established on 31 December 1998. Unless indicated otherwise, price and cost statistics before 1999 are based on the data expressed in national currency terms.

Methods of aggregation and/or consolidation (including cross-country consolidation) have been used where appropriate.

As a general rule, the cut-off date for the statistics included in the ECB’s Monthly Bulletin is the day preceding the first meeting in the month of the Governing Council of the ECB. For this issue, the cut-off date was 30 July 2003.

Recent data are often provisional and may be revised. Discrepancies between totals and their components may arise from rounding.

Reference statistical series relating to the euro area cover EU Member States that had adopted the euro at the time to which the statistics relate. This means that euro area data up to end-2000 cover the Euro 11 and, from the beginning of 2001, data cover the Euro 12. Exceptions to this rule are indicated where appropriate.

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

Data for the euro area plus Greece up to end-2000 can be downloaded (CSV files) from the ECB’s website (www.ecb.int).

The group “acceding countries” consists of the Czech Republic, Estonia, Cyprus, Latvia, Lithuania, Hungary, Malta, Poland, Slovenia and Slovakia.

¹ The ECB is responsible for money, banking and financial markets statistics at the European level; responsibility for balance of payments, international investment position and financial accounts statistics is shared with the European Commission (Eurostat); price and cost and other economic statistics are the responsibility of the European Commission (Eurostat).

Overview

Key developments in the euro area are summarised in an overview table.

Monetary policy statistics

Tables 1.1 to 1.5 show the consolidated financial statement of the Eurosystem, data on Eurosystem operations, statistics relating to minimum reserves, and the banking system's liquidity position. Tables 1.2 and 1.3 reflect the switch to variable rate tenders in June 2000.

Monetary developments and investment funds

Monetary data relating to Monetary Financial Institutions (MFIs), including the Eurosystem, are shown in Tables 2.1 to 2.3. Table 2.3 is consolidated; inter-MFI positions within the euro area are not shown, but any difference between the sum total of such claims and liabilities as recorded is shown in column 13. Table 2.4 sets out monetary aggregates drawn from the consolidated MFI balance sheet; they also include some (monetary) liabilities of central government. The M3 data shown in Table 2.4 exclude holdings by non-residents of the euro area of i) shares/units issued by money market funds located in the euro area, and ii) debt securities issued with a maturity of up to two years by MFIs located in the euro area. Accordingly, these holdings are included in the external liabilities item shown in Table 2.3 and, as a result, have an impact on the item net external assets shown in Table 2.4. Table 2.5 shows a quarterly sectoral and maturity analysis of loans by MFIs to euro area residents. Table 2.6 shows a quarterly analysis of deposits held by euro area residents with MFIs. Table 2.7 provides a quarterly analysis of MFI claims on and

liabilities to non-residents of the euro area. Table 2.8 shows a quarterly currency analysis of certain MFI balance sheet items. Tables 2.5 to 2.7 show flows adjusted for reclassifications, other revaluations, exchange rate variations and any other changes which do not arise from transactions, and annual percentage changes. A complete list of MFIs is published on the ECB's website. Details of the sector definitions are set out in the "Money and Banking Statistics Sector Manual: guidance for the statistical classification of customers" (ECB, November 1999). The "Guidance Notes to Regulation ECB/2001/13 on the MFI Balance Sheet Statistics" (ECB, November 2002) explains recommended practices to be followed by the NCBs. From 1 January 1999 the statistical information is collected and compiled on the basis of the ECB Regulation concerning the consolidated balance sheet of the Monetary Financial Institutions sector (ECB/1998/16, as replaced from January 2003 by ECB/2001/13).

Further to the entry into force of Regulation ECB/2001/13, the balance sheet item "money market paper" has been merged with the item "debt securities" on both the assets and liabilities side of the MFI balance sheet.

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

Financial markets and interest rates

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

Statistics on securities issues cover securities other than shares (debt securities), which are presented in Tables 3.5, 3.6 and 3.7 as well as quoted shares, which are presented in Table 3.8. Debt securities are broken down into short-term and long-term securities. “Short-term” means securities with an original maturity of one year or less (in exceptional cases, in accordance with the ESA 95, two years or less). Securities with a longer maturity, or with optional maturity dates, the latest of which is more than one year away, or with indefinite maturity dates, are classified as long-term. The statistics on debt securities are estimated to cover approximately 95% of total issues by euro area residents.

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

Table 3.6 contains a sectoral breakdown of issuers of euro-denominated securities, whether resident in the euro area or elsewhere. For euro area residents, the sectoral breakdown is in line with the European System of Accounts 1995 (ESA 95).² For non-euro area residents, the term “banks (including central banks)” is used to indicate institutions of a similar type to MFIs (including the Eurosystem) resident outside the euro area. The term “international organisations” includes the European Investment Bank. The ECB is included in the Eurosystem.

The totals (columns 1, 7 and 14) in Table 3.6 are identical to the data on amounts

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

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

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

HICP and other prices

The data described in this section and the “Real economy indicators” section are with a few exceptions, produced by the European Commission (mainly Eurostat) and national statistical authorities. Euro area results are obtained by aggregating data for individual countries. As far as possible, the data are

² The code numbers in the ESA 95 for the sectors shown in tables in the ECB's Monthly Bulletin are: MFIs (including the Eurosystem) which comprises the ECB and the national central banks of the euro area member countries (S.121) and other monetary financial institutions (S.122); non-monetary financial corporations, which comprises other financial intermediaries (S.123), financial auxiliaries (S.124) and insurance corporations and pension funds (S.125); non-financial corporations (S.11); central government (S.1311); and other general government, which comprises state government (S.1312), local government (S.1313) and social security funds (S.1314).

harmonised and comparable. As a general rule, however, the availability of comparable data is better for the more recent periods than for earlier periods.

The Harmonised Index of Consumer Prices (HICP) for the euro area (Table 4.1) is available from 1995 onwards. The index is based on national HICPs that follow the same methodology in all euro area countries. The breakdown by goods and services components is derived from the Classification of individual consumption by purpose (Coicop) used for the HICP. The HICP covers monetary expenditure on final consumption by households on the economic territory of the euro area. The table includes seasonally adjusted HICP data which are compiled by the ECB.

Real economy indicators

With regard to statistics on national accounts (Tables 4.2 and 5.1), the implementation of the ESA 95 from 1999 has begun to pave the way for fully comparable data, including quarterly summary accounts, across the euro area. Before 1999 the deflators of GDP in Table 4.2.2 are derived from national data in domestic currency. National accounts in this issue are based on the ESA 95.

Table 5.2 shows selected other real economy indicators. The implementation of Council Regulation (EC) No. 1165/98 of 19 May 1998 concerning short-term statistics will enlarge the range of available euro area data. The breakdown by end-use of the products applied in Tables 4.2.1 and 5.2.1 represents the harmonised sub-division of industry excluding construction (NACE sections C to E) into Main Industrial Groupings as defined by Commission Regulation (EC) No. 586/2001 of 26 March 2001.

Opinion survey data (Table 5.3) draw on the European Commission Business and Consumer Surveys.

Employment data (Table 5.4) are based on the ESA 95. Whenever coverage of the euro area is incomplete, some data are estimated by the ECB on the basis of the information available. Unemployment rates conform to International Labour Organization (ILO) guidelines. The labour force estimates underlying the unemployment rate are different from the sum of the employment and unemployment levels published in Table 5.4.

Saving, investment and financing

Table 6.1 shows quarterly data on financial accounts for non-financial sectors in the euro area, comprising general government (S.13), non-financial corporations (S.11), and households (S.14) including non-profit institutions serving households (S.15). The data cover amounts outstanding and transactions classified according to the ESA 95 and show the main financial investment and financing activities of the non-financial sectors. On the financing side (liabilities) the data are presented by ESA 95 sector and original maturity. Whenever possible the financing taken from MFIs is presented separately. The information on financial investment (assets) is currently less detailed than that on financing, especially since a breakdown by sector is not possible.

Table 6.2 shows quarterly data on financial accounts for insurance corporations and pensions funds (S.125) in the euro area. As in Table 6.1, the data cover amounts outstanding and financial transactions and show the main financial investment and financing activities of this sector.

The quarterly data in both tables are based on quarterly national financial accounts, MFI balance sheet and securities issues statistics. Table 6.1 also refers to data taken from BIS international banking statistics. Although all euro area countries contribute to the MFI balance sheet and securities issues statistics, Ireland and Luxembourg do not yet provide quarterly national financial accounts data.

Table 6.3 shows annual data on saving, (financial and non-financial) investment and financing for the euro area sectors as a whole, and for the non-financial corporations and households separately. These annual data provide, in particular, fuller sector information on the acquisition of financial assets and are consistent with the quarterly data in the two previous tables.

General government fiscal position

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

Table 7.1 shows general government revenue and expenditure on the basis of definitions laid down in Commission Regulation (EC) No. 1500/2000 of 10 July 2000 amending the ESA 95. Table 7.2 shows details of general government gross consolidated debt at nominal value in accordance with the Treaty provisions on the excessive deficit procedure. Tables 7.1 and 7.2 include summary data for individual euro area countries owing to their importance in the framework of the Stability and Growth Pact. Table 7.3 analyses changes in general government debt. The difference between the change in government debt and government deficit – the deficit-debt adjustment – is mainly explained by government transactions in financial assets and by foreign exchange valuation effects.

Balance of payments and international investment position (including reserves)

The concepts and definitions used in balance of payments statistics (Tables 8.1 to 8.6) and

international investment position (Tables 8.8.1 to 8.8.4) statistics generally conform to the 5th edition of the IMF Balance of Payments Manual (October 1993), to the ECB Guideline of May 2003 (ECB/2003/7) on the statistical reporting requirements of the ECB, and to Eurostat's documentation.

The euro area balance of payments (b.o.p.) data are compiled by the ECB. Data up to December 1998 are expressed in ECU. The recent monthly figures for b.o.p. statistics should be regarded as provisional. Data are revised with the publication of the update for the next month and of the detailed quarterly b.o.p. data. Earlier data are revised periodically or as a result of methodological changes in the compilation of the source data.

Some earlier data have been partially estimated and may not be fully comparable with more recent observations. Table 8.5.2 provides a sectoral breakdown of euro area purchasers of securities issued by non-residents of the euro area. For the time being, it is not possible to show a sectoral breakdown of euro area issuers of securities acquired by non-residents.

A 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). See also Box 1 on page 15 of the June 2003 issue of the ECB's Monthly Bulletin.

The euro area i.i.p. (Tables 8.8.1 to 8.8.4) is compiled on the basis of euro area member countries' positions vis-à-vis non-euro area residents (i.e. considering the euro area as a whole economy) from end-1999 positions with the result that euro area assets and liabilities are shown separately (see also Box 9 in the December 2002 issue). The i.i.p. is compiled on a "net" basis, i.e. by aggregating national data regarding end-1997 and end-1998 positions. The "net" and the "extra-euro area" based compilation methodologies may not give fully comparable results. The i.i.p. is valued at current market prices with the exception of direct investment

stocks, where book values are used to a large extent.

The outstanding amounts of the Eurosystem's international reserves and related assets are shown in Table 8.8.5 with the corresponding reserves and related assets held by the ECB. The data in Table 8.8.5 are in line with the recommendations for the IMF/BIS template on international reserves and foreign currency liquidity. Earlier data are continually revised. Reserve assets data before end-1999 are not fully comparable with later observations. A publication on the statistical treatment of the Eurosystem's international reserves is available on the ECB's website ("Statistical treatment of the Eurosystem's international reserves", October 2000).

External trade in goods

Table 9 shows data on euro area external trade in goods. The main source for the data is Eurostat. The ECB derives volume indices from Eurostat value and unit value indices, and performs seasonal adjustment of unit value indices, while value data are seasonally and working day adjusted by Eurostat.

The commodity breakdown is in accordance with the classification by Broad Economic Categories (based on the SITC Rev. 3 definition) for intermediate, capital and consumption goods, and with the SITC Rev. 3 for manufactured goods and oil. The geographical breakdown shows main trading partners, individually or in regional groups.

Owing to differences in definitions, classification, coverage and time of recording, external trade data, in particular imports, are not fully comparable with the goods item in the balance of payments statistics (Tables 8.1 and 8.2). Part of the difference arises from the inclusion of insurance and freight services in the recording of goods imported, which accounted for about 3.8% of the value of imports (c.i.f.) in 1998 (ECB estimates).

Exchange rates

Table 10 shows ECB calculations of nominal and real effective exchange rate indices for the euro based on weighted averages of bilateral euro exchange rates. Weights are based on 1995-97 manufactured goods trade with the trading partners and capture third-market effects. Up to December 2000, the narrow group is composed of the countries whose currencies are shown in the table plus Greece. When Greece joined the euro area in January 2001, it ceased to be a partner country in the effective exchange rate of the euro and the weighting scheme has been adjusted accordingly. In addition, the broad group includes the following countries: Algeria, Argentina, Brazil, China, Croatia, Cyprus, the Czech Republic, Estonia, Hungary, India, Indonesia, Israel, Malaysia, Mexico, Morocco, New Zealand, the Philippines, Poland, Romania, Russia, Slovakia, Slovenia, South Africa, Taiwan, Thailand and Turkey. Real rates are calculated using consumer prices (CPI), producer prices (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 this issue of the Monthly Bulletin 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 Eurosystem¹

2 January 2001

On 1 January 2001 the euro was introduced in Greece. Greece thus became the twelfth EU Member State to adopt the single currency and the first to do so since the start of Stage Three of Economic and Monetary Union (EMU) on 1 January 1999. As a result, the Bank of Greece is now a full member of the Eurosystem, with the same rights and obligations as the 11 national central banks of the EU Member States which previously adopted the euro. In accordance with Article 49 of the Statute of the European System of Central Banks and of the European Central Bank, the Bank of Greece pays up the remainder of its contribution to the capital of the ECB, as well as its share of the ECB's reserves, and also transfers to the ECB its contribution to the foreign reserve assets of the ECB.

Further to the announcement on 29 December 2000, the first main refinancing operation of 2001, in which the Greek counterparties of the Eurosystem participate for the first time, is successfully conducted. The allotment volume of €101 billion takes into account the additional liquidity needs of the euro area banking system resulting from the integration of the Greek Monetary Financial Institutions.

4 January 2001

The Governing Council of the ECB decides that the minimum bid rate for the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 4.75%, 5.75% and 3.75% respectively.

In addition, it decides on an allotment amount of €20 billion per operation for the longer-term refinancing operations to be conducted in 2001. This amount takes into consideration the expected liquidity needs of the euro area banking system in 2001 and the desire of the Eurosystem to continue to provide the bulk of refinancing of the financial sector through its main refinancing operations. The

Governing Council may adjust the allotment amount in the course of the year in the event of unexpected developments in liquidity needs.

18 January, 1 February, 15 February, 1 March, 15 March, 29 March, 11 April, 26 April 2001

The Governing Council of the ECB decides that the minimum bid rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 4.75%, 5.75% and 3.75% respectively.

10 May 2001

The Governing Council of the ECB decides to lower the minimum bid rate on the main refinancing operations by 0.25 percentage point to 4.50%, with effect from the operation to be settled on 15 May 2001. In addition, it decides to lower the interest rates on both the marginal lending facility and the deposit facility by 0.25 percentage point, to 5.50% and 3.50% respectively, both with effect from 11 May 2001.

23 May, 7 June, 21 June, 5 July, 19 July, 2 August 2001

The Governing Council of the ECB decides that the minimum bid rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 4.50%, 5.50% and 3.50% respectively.

30 August 2001

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

¹ The chronology of monetary policy measures of the Eurosystem taken in 1999 and 2000 can be found on pages 176 to 179 of the ECB Annual report 1999 and on pages 205 to 208 of the ECB Annual report 2000 respectively.

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

13 September 2001

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

17 September 2001

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

27 September, 11 October, 25 October 2001

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

8 November 2001

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

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

6 December 2001

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

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

3 January 2002

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

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

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

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

10 July 2002

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

**1 August, 12 September, 10 October,
7 November 2002**

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

5 December 2002

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

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

9 January 2003

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

23 January 2003

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

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

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

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

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

6 February 2003

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

6 March 2003

The Governing Council of the ECB decides to lower the minimum bid rate on the main refinancing operations by 0.25 percentage point to 2.50%, starting from the operation to be settled on 12 March 2003. It also decides to lower the interest rates on both the marginal lending facility and the deposit facility by 0.25 percentage point, to 3.50% and 1.50% respectively, both with effect from 7 March 2003.

3 April 2003

The Governing Council of the ECB decides that the minimum bid rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 2.50%, 3.50% and 1.50% respectively.

8 May 2003

The Governing Council of the ECB decides that the minimum bid rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 2.50%, 3.50% and 1.50% respectively.

It also announces the results of its evaluation of the ECB's monetary policy strategy. This strategy, which was announced on 13 October 1998, consists of three main elements: a quantitative definition of price stability, a prominent role for money in the assessment of risks to price stability, and a broadly based assessment of the outlook for price developments.

The Governing Council confirms the definition of price stability formulated in October 1998, namely that "price stability is defined as a year-on-year increase in the Harmonised Index of Consumer Prices (HICP) for the euro area of below 2%. Price stability is to be maintained over the medium term". At the same time, the Governing Council agrees that in the pursuit of price stability it will aim to maintain inflation rates close to 2% over the medium term.

The Governing Council confirms that its monetary policy decisions will continue to be based on a comprehensive analysis of the risks to price stability. At the same time, the Governing Council decides to clarify in its communication the respective roles played by economic and monetary analysis in the process of coming to the Council's overall assessment of risks to price stability.

To underscore the longer-term nature of the reference value for monetary growth as a benchmark for the assessment of monetary developments, the Governing Council also decides that it will no longer conduct a review of the reference value on an annual basis. However, it will continue to assess the underlying conditions and assumptions.

5 June 2003

The Governing Council of the ECB decides to lower the minimum bid rate on the main refinancing operations by 0.50 percentage point to 2.0%, starting from the operation to be settled on 9 June 2003. It also decides to lower the interest rates on both the marginal lending facility and the deposit facility by 0.50 percentage point, to 3.0% and 1.0% respectively, both with effect from 6 June 2003.

10 July, 31 July 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 1999", April 2000.
 - "Annual Report 2000", May 2001.
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