



EUROPEAN CENTRAL BANK

MONTHLY BULLETIN 10 | 2004

01 | 2004

02 | 2004

03 | 2004

04 | 2004

05 | 2004

06 | 2004

07 | 2004

08 | 2004

09 | 2004

**10 | 2004**

11 | 2004

12 | 2004

MONTHLY BULLETIN  
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## MONTHLY BULLETIN OCTOBER 2004

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## CONTENTS

<b>EDITORIAL</b>	<b>5</b>
<b>ECONOMIC AND MONETARY DEVELOPMENTS</b>	<b>9</b>
The external environment of the euro area	<b>9</b>
Monetary and financial developments	<b>12</b>
Prices and costs	<b>25</b>
Output, demand and the labour market	<b>29</b>
Exchange rate and balance of payments developments	<b>35</b>
<b>Boxes:</b>	
1 Developments in total hours worked in the euro area	<b>33</b>
2 The geographical composition of euro area foreign demand	<b>39</b>
<b>ARTICLES</b>	
Monetary analysis in real time	<b>43</b>
Economic integration in selected regions outside the European Union	<b>67</b>
<b>EURO AREA STATISTICS</b>	<b>SI</b>
<b>CHRONOLOGY OF MONETARY POLICY MEASURES OF THE EUROSISTEM</b>	<b>I</b>
<b>DOCUMENTS PUBLISHED BY THE EUROPEAN CENTRAL BANK SINCE 2003</b>	<b>V</b>
<b>GLOSSARY</b>	<b>XI</b>

## ABBREVIATIONS

### COUNTRIES

BE	Belgium	HU	Hungary
CZ	Czech Republic	MT	Malta
DK	Denmark	NL	Netherlands
DE	Germany	AT	Austria
EE	Estonia	PL	Poland
GR	Greece	PT	Portugal
ES	Spain	SI	Slovenia
FR	France	SK	Slovakia
IE	Ireland	FI	Finland
IT	Italy	SE	Sweden
CY	Cyprus	UK	United Kingdom
LV	Latvia	JP	Japan
LT	Lithuania	US	United States
LU	Luxembourg		

### OTHERS

BIS	Bank for International Settlements
b.o.p.	balance of payments
BPM5	IMF Balance of Payments Manual (5th edition)
CD	certificate of deposit
c.i.f.	cost, insurance and freight at the importer's border
CPI	Consumer Price Index
ECB	European Central Bank
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
HWWA	Hamburg Institute of International Economics
ILO	International Labour Organization
IMF	International Monetary Fund
MFI	monetary financial institution
NACE Rev. 1	Statistical classification of economic activities in the European Community
NCB	national central bank
PPI	Producer Price Index
SITC Rev. 3	Standard International Trade Classification (revision 3)
ULCM	unit labour costs in manufacturing
ULCT	unit labour costs in the total economy

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



## EDITORIAL

At its meeting on 7 October 2004, the Governing Council of the ECB decided to leave the minimum bid rate on the main refinancing operations of the Eurosystem unchanged at 2.0%. The interest rates on the marginal lending facility and the deposit facility were also left unchanged at 3.0% and 1.0% respectively.

The decision to leave the key ECB interest rates unchanged reflects the Governing Council's assessment that the overall outlook remains consistent with price stability over the medium term. The level of interest rates continues to be very low by historical standards, in both nominal and real terms. As regards economic growth, while some uncertainty has arisen recently concerning the expected strengthening of activity, the economic recovery in the euro area is ongoing. Looking at price developments, high oil prices have had a visible direct impact on inflation rates this year. While the risk of second-round effects still seems to be contained, strong vigilance is warranted with regard to all developments which could imply risks to price stability over the medium term.

Starting with the economic analysis underlying the Governing Council's assessment, the information available to date indicates that the economic recovery in the euro area is continuing. In particular, survey indicators up to September point to ongoing growth in industrial production and the services sector. Moreover, the gradual recovery in consumer confidence is proceeding, and there are some tentative signs of an improvement in the prospects for employment, although available indicators for household spending do not yet point to an immediate strengthening of consumption growth.

All in all, the growth momentum seen in the euro area in the first half of 2004 should be broadly maintained in the coming quarters, in line with available forecasts from international organisations. On the external side, euro area exports should continue to benefit from favourable global demand conditions, not least from trade with the new EU Member States,

where import demand has been strengthening. On the domestic side, investment should benefit from the positive global environment and the very favourable financing conditions in the euro area. As companies restructure, improvements in corporate efficiency and higher profits are also supporting business investment. Moreover, there is scope for a recovery in euro area private consumption, in line with growth in real disposable income.

Any central scenario for future developments is surrounded by significant uncertainty, which at present is related particularly to oil prices. If oil prices were to remain high, or even increase further, they could dampen the strength of the recovery, both inside and outside the euro area, even though the oil intensity of production has fallen significantly since the 1970s and 1980s. All in all, while the burden resulting from higher oil prices cannot be avoided, its medium-term impact should be of a more limited magnitude than in the past. Obviously, for this to be the case, all parties concerned will have to assume their respective responsibilities.

Turning to consumer prices, oil market developments have had a direct impact on the euro area HICP. Following an annual rate of inflation of 1.7% in the first quarter of 2004, inflation reached 2.3% in the second quarter and remained at that level in July and August. According to Eurostat's flash estimate, annual HICP inflation seems to have fallen slightly in September, to 2.2%. Higher energy prices may have been more than compensated by lower food prices, partly due to base effects resulting from last year's strong increases in this sub-category. Still, on the basis of current market expectations for oil prices, it appears unlikely that annual inflation rates will return to levels below 2% in the remainder of this year.

Nevertheless, looking further ahead, the available information does not indicate that stronger underlying inflationary pressures are building up domestically. Recent wage developments have remained moderate, and this trend should continue. On the basis of this

assumption, and provided that there are no further significant shocks to prices, annual inflation rates should drop below 2% in 2005.

Several upward risks to the outlook for price stability continue to exist. Concerns again relate to oil price developments, in particular if second-round effects stemming from wage and price-setting behaviour materialise. It is therefore of the utmost importance that inappropriate reactions, as observed in previous episodes of strong oil price increases, are avoided. A further upward risk relates to the future development of indirect taxes and administered prices. These upside risks call for ongoing vigilance, which is a necessary condition for keeping medium to long-term inflation expectations in line with the ECB's definition of price stability.

As regards the monetary analysis, M3 growth remains resilient. The downward trend in annual M3 growth since mid-2003 appears to have halted over the summer months, and the shorter-term dynamics of M3 have strengthened. This reflects the fact that the historically low level of interest rates in the euro area continues to support monetary expansion, especially of the most liquid assets included in the narrow aggregate M1.

The low level of interest rates also fuels the growth of credit by monetary financial institutions. The annual growth rate of loans to the private sector remains robust, largely driven by the dynamism of mortgage loans. These are also supported by strong house price increases in several euro area countries.

There remains substantially more liquidity in the euro area than is needed to finance non-inflationary growth. At present, it is not clear how this excess liquidity, which is mainly the result of past portfolio shifts, will be used in the future. If significant parts of these liquid holdings were to be transformed into transaction balances, particularly at a time when confidence and economic activity were strengthening, inflationary risks would rise. In

addition, high excess liquidity and strong credit growth could become a source of substantial asset price increases.

To sum up, annual inflation rates should fall below 2% in 2005, but a number of medium-term upside risks to price stability need to be carefully monitored. Cross-checking with the monetary analysis also supports the case for strong vigilance with regard to the materialisation of risks to price stability.

As regards fiscal developments, the latest budgetary news is a source of concern. While some euro area countries will maintain a sound budgetary position, a significant number are expected to record deficits close to or above 3%. The aggregate euro area fiscal deficit-to-GDP ratio is expected to increase somewhat, as is the debt-to-GDP ratio. In the coming years, important challenges for the consolidation of public finances will have to be faced. Member States need to renew their consolidation efforts and should not rely on one-off measures, so as to comply with their commitments under the Stability and Growth Pact and to foster confidence. They must also set the right priorities in public finances, towards structural reform, innovation and competitiveness. This would very much support the Lisbon agenda and thereby promote economic growth, foster job creation and reduce unemployment.

Concerning the European fiscal framework, the Governing Council is convinced that substantial improvements in the implementation of the Stability and Growth Pact are possible and would be beneficial. At the same time, the Governing Council warns against changes to the text of the Treaty or the Regulations which form the basis of the Pact. The Pact is key to ensuring macroeconomic stability on a sustainable basis. It is a framework which is necessary to preserve sound fiscal policies in the euro area, for which strict surveillance and effective peer pressure on national budget policies are indispensable.

It is of vital importance to the credibility of budgetary surveillance that the reliable compilation and timely reporting of government finance statistics are ensured. The European accounting rules must be fully respected when recording all types of expenditure and revenue. This should be done in a manner that is consistent and stable over time and homogeneous across countries. The procedures must not be vulnerable to political and electoral cycles, as stated by the ECOFIN Council. Countries should consider the quality and integrity of their statistics as a matter of priority.

The Governing Council analysed employment and unemployment developments in the euro area in depth. Two observations stand out when looking at the period of relatively slow real GDP expansion since early 2001. First, after an initial rise, the euro area unemployment rate has remained broadly unchanged since early 2003. Second, there seems to have been a relatively limited negative impact on employment growth over the past few years. The following factors might help to explain this pattern. While the period of slow growth has been relatively long from a historical perspective, the cyclical amplitudes have been smaller and have not, therefore, triggered very sharp reactions of employment and unemployment. In addition, wage developments have been more subdued than in previous episodes, and firms may have – to a greater extent than in the past – adjusted labour input downwards in terms of hours rather than in terms of employees. This in turn might indicate that firms have gained an element of flexibility to adjust costs.

Looking ahead, from a cyclical point of view, employment should recover and unemployment could start falling in the course of next year if overall demand develops as expected. This should support economic growth through an increase in labour income and a positive impact on consumer confidence, and thus on consumption. However, large structural problems remain. This is highlighted, for example, by the fact that over 40% of all those

unemployed in the euro area have been without a job for more than a year. In order to decisively overcome the obstacles towards greater employment growth and to reduce the trend or structural level of unemployment, further comprehensive labour market reforms are of the essence.

This issue of the Monthly Bulletin contains two articles. The first article illustrates how, over recent years, the ECB has developed and used tools for monetary analysis to identify monetary signals concerning risks to future price stability. The second article analyses different patterns of economic integration in selected regions outside the European Union.





# ECONOMIC AND MONETARY DEVELOPMENTS

## I THE EXTERNAL ENVIRONMENT OF THE EURO AREA

Overall activity outside the euro area remained strong during the summer and world trade has been vigorous, although oil price developments have been a source of concern. Despite this serious risk for the world economy, the outlook is favourable.

### DEVELOPMENTS IN THE WORLD ECONOMY

After moderating in the second quarter of 2004, the pace of activity in the global economy seems to have gained some momentum during the summer. Manufacturing activity has picked up in most economies and it is likely that world trade has expanded further. Global financial conditions have been broadly favourable, with long-term bond yields even easing and global stock prices remaining mostly flat.

The price of crude oil reached historically high levels during the summer. However, CPI inflation has moderated in most economies (see Chart 1) and evidence of a transmission of the energy price rise to a broad range of other goods and services is still limited.

In the United States, real GDP grew by 3.3% (quarter on quarter, annualised) in the second quarter of 2004, after having advanced by 4.5% in the first three months of the year. This decline in output growth stemmed primarily from a marked slowdown in real personal consumption expenditure and a negative contribution of net exports to GDP growth. By contrast, business fixed investment accelerated substantially, growing by 13.9% compared with 4.5% in the previous quarter. The most recent information points to a possible recovery in consumer expenditure and industrial production, both of which had shown signs of weakness during the second quarter.

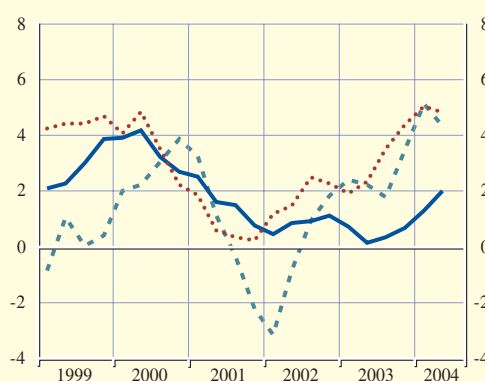
In August annual CPI inflation declined to 2.7%, down from 3.0% in July. Excluding food and energy, annual consumer price inflation decreased by 0.1 percentage point compared with July, to 1.7%. At its meeting on 21 September, the Federal Open Market Committee increased its target for the federal funds rate by 25 basis points for the third consecutive time, to 1.75%, stating that the current monetary policy stance remains accommodative.

In Japan, the economy continues on its recovery path, although momentum has slowed

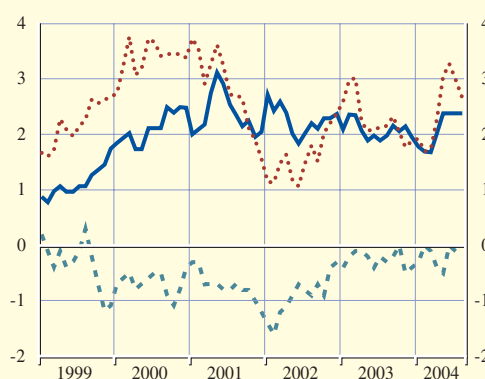
Chart 1 Main developments in major industrialised economies

— euro area  
- - - United States  
- - - Japan

**Output growth<sup>1)</sup>**  
(annual percentage changes; quarterly data)



**Inflation rates**  
(annual percentage changes; monthly data)



Sources: National data, BIS, Eurostat and ECB calculations.  
1) Eurostat data are used for the euro area; for the United States and Japan national data are used. For all countries, GDP figures have been seasonally adjusted.

compared with the robust growth performance at the turn of the year. This is, for example, evidenced by the second quarter GDP data, which showed that the rate of expansion had slowed to 0.3% quarter on quarter. In August weaker export growth and a strengthening of imports driven by high commodity prices caused the trade surplus to decline from the level one year earlier for the first time in more than a year. Given encouraging corporate profit trends, recovering demand for labour and the improving situation in the household sector, the outlook for domestic private demand remains relatively good. In August consumer prices decreased by 0.2% (year on year), after a 0.1% decrease in July. Corporate goods prices have been increasing since the beginning of the year (1.7% year on year in August).

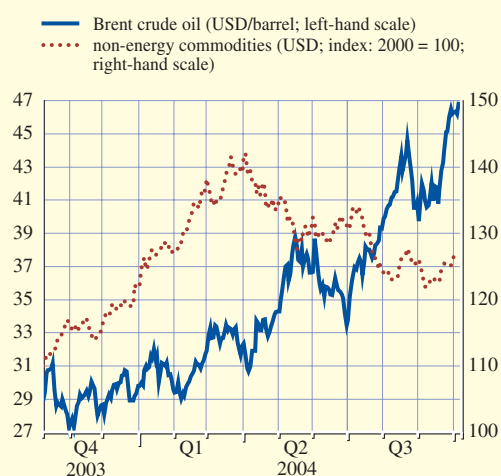
In the United Kingdom, the picture is still one of relatively strong overall growth. Real GDP rose by a quarterly rate of 0.9% in the second quarter of 2004, compared with 0.7% in the first quarter. Growth continued to be driven by domestic demand, with investment playing a major role. Annual HICP inflation stood at 1.3% in August, down from 1.4% in July.

In Sweden, real GDP grew by a revised quarterly rate of 1.0% in the second quarter of 2004, while annual HICP inflation stood at 1.2% in August, the same rate as in the previous two months. Growth was modest in Denmark in the second quarter, with real GDP up by a quarterly rate of 0.2%, while HICP inflation stood at 0.9% in August, unchanged from July. In most of the other non-euro area EU Member States, GDP growth remained strong. HICP inflation has increased noticeably in most of these Member States, largely on account of indirect tax changes, administered price and food price increases and a pick-up in energy prices.

In non-Japan Asia, the latest information indicates that export growth may have peaked. At the same time, domestic demand is exhibiting considerable strength in most economies, with the exception of South Korea. In China, economic activity has continued to decelerate gradually since the second quarter of 2004 as a result of tightening policies. In August growth in fixed asset investment declined to 26.2% (year on year) and bank lending growth fell to below 15% (year on year), compared with around 20% at the beginning of the year. In South Korea, export growth declined to 23.5% (year on year) in September, the lowest growth in 2004, while retail sales rose by only 0.3% (year on year) in July.

In Latin America, the most recent information indicates that growth momentum remained very robust in the third quarter, with growth in industrial production exceeding 10% (year on year) in Brazil during July and in Argentina during August, and standing at 3.8% in Mexico during July. Export growth – while abating somewhat – is still supporting economic activity and continues to spill over into stronger domestic demand.

**Chart 2 Main developments in commodity markets**



Sources: Bloomberg and HWWA.

## COMMODITY MARKETS

Oil prices reached new highs in early October, pushed upward by a combination of buoyant demand, supply-side concerns and limited spare capacity. World demand for oil has continued to soar, led by strong demand from Asia and the United States. The recent rise in global oil supplies has not been able to cool the market as dwindling spare capacity has left only a very limited cushion in the event of oil market disruptions. Oil prices consequently reacted strongly when supply-side concerns re-emerged in several oil-producing countries. The price of Brent crude oil stood at USD 47 (€38.2) on 6 October. Market participants expect oil prices to remain near their current levels throughout the remainder of the year and to decline only gradually thereafter. Nevertheless, the current level of prices seems to contain a sizeable premium that appears not to be fully explained by oil market fundamentals, but could be related to concerns about possible future supply disruptions.

In other commodity markets, the prices of non-energy commodities have eased over recent months after reaching their highest levels for many years at the beginning of April 2004. Nevertheless, in US dollar terms, non-energy commodity prices in August 2004 were 21.5% higher than a year earlier.

## OUTLOOK FOR THE EXTERNAL ENVIRONMENT

Overall, the global economic outlook remains favourable, with the possibility that growth will gradually stabilise in the following months to levels lower than those experienced earlier this year. However, the uncertainty surrounding oil prices remains very high and entails some risks to inflation and aggregate demand developments, particularly if signs of second-round effects emerge.



## 2 MONETARY AND FINANCIAL DEVELOPMENTS

### 2.1 MONEY AND MFI CREDIT

The gradual moderation of M3 growth observed from mid-2003 appears to have come to a halt over the summer months. The data for August 2004 reflect the two opposing factors currently influencing monetary growth. On the one hand, the normalisation of agents' portfolio allocation behaviour following the exceptional portfolio shifts into M3 between 2001 and 2003 continues to dampen M3 growth. On the other hand, the low level of interest rates is stimulating the demand for the most liquid components of M3 and supporting continued robust growth in MFI credit to the private sector, in particular loans for house purchase. Overall, the former factor seems to have been waning somewhat in recent months, allowing the latter factor to play a more prominent role in monetary dynamics.

#### THE BROAD MONETARY AGGREGATE M3

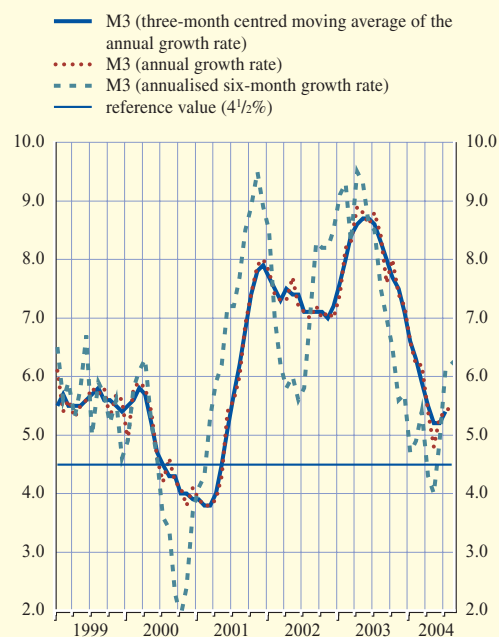
The annual growth rate of the broad monetary aggregate M3 increased to 5.5% in August 2004, from 5.4% in the previous month (see Chart 3). The three-month average of the annual growth rates of M3 rose to 5.4% in the period between June and August, from 5.2% in the period between May and July 2004. The shorter-term dynamics of M3, as measured, for instance, by the six-month annualised rate of growth, remained relatively strong in August.

The gradual moderation of M3 growth observed from mid-2003 appears to have come to a halt over the summer months. The data for August 2004 reflect the two opposing factors which are currently influencing monetary growth. On the one hand, the normalisation of agents' portfolio allocation behaviour following the exceptional portfolio shifts into monetary assets between 2001 and 2003 continues to dampen M3 growth. On the other hand, the low level of interest rates is stimulating the demand for the most liquid components of M3 and for MFI credit to the private sector. While the dampening impact of the former factor has tended to dominate over the last year, the data for recent months suggest that it may now be waning, allowing the latter, stimulating factor to play a more prominent role in overall monetary dynamics.

As a consequence of recent monetary trends, there remains significantly more liquidity in the euro area than is needed to finance non-inflationary economic growth. If significant parts of these liquid holdings were to be transformed into transaction balances, particularly at a time when confidence and economic activity were strengthening, inflationary risks would rise. The ample

Chart 3 M3 growth and the reference value

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



Source: ECB.

liquidity conditions may also support strong asset price increases, for example in housing markets.

### MAIN COMPONENTS OF M3

The annual growth rate of the narrow monetary aggregate M1 declined to 9.3% in August, from 10.1% in July (see Table 1), reflecting a moderation in the relatively high annual rate of growth in overnight deposits (7.5% in August, compared with 8.5% in the previous month). The decline in the annual rate of growth of overnight deposits in August largely reflects the unwinding of a special factor which had exerted an upward influence on the July data. The annual rate of growth of currency in circulation remained very high and, at 20.3%, was broadly unchanged from that observed in the previous month. There was strong demand for euro area banknotes from both inside the euro area, particularly in countries where high denomination banknotes did not exist prior to the cash changeover, and outside the euro area. More generally, the buoyant demand for the liquid instruments included in M1 primarily reflects the low opportunity cost of holding them, which, in turn, is explained by the low level of interest rates.

The annual rate of growth of short-term deposits other than overnight deposits increased somewhat in August, to 2.0%, from 1.7% in July. This mainly reflected a moderation in the annual rate of decline in deposits with an agreed maturity of up to and including two years, while the relatively high annual rate of growth in deposits redeemable at a period of notice of up to and including three months remained practically unchanged. The subdued demand for the former type of deposits is likely to reflect the fact that, especially compared with overnight deposits, a slightly higher rate of return does not compensate for a relative disadvantage in terms of lower liquidity.

The annual growth rate of marketable instruments included in M3 rose significantly in August, to 4.5%, from 2.5% in July. This increase reflected positive contributions from all sub-components (money market fund shares and units, repurchase agreements, and debt securities issued with a

Table 1 Summary table of monetary variables

(quarterly figures are averages; adjusted for seasonal and calendar effects)

	Outstanding amount as a percentage of M3 <sup>1)</sup>	Annual growth rates							
		2003 Q2	2003 Q3	2003 Q4	2004 Q1	2004 Q2	2004 July	2004 Aug.	
<b>M1</b>	<b>44.5</b>	<b>11.3</b>	<b>11.4</b>	<b>11.0</b>	<b>11.1</b>	<b>10.2</b>	<b>10.1</b>	<b>9.3</b>	
Currency in circulation	6.8	35.7	29.6	26.5	24.0	21.6	20.0	20.3	
Overnight deposits	37.7	8.2	8.9	8.8	9.1	8.5	8.5	7.5	
M2 - M1 (= other short-term deposits)	40.8	5.7	5.8	4.9	3.3	1.7	1.7	2.0	
Deposits with an agreed maturity of up to and including two years	15.6	0.2	-1.3	-2.9	-4.4	-7.0	-6.3	-5.7	
Deposits redeemable at notice of up to and including three months	25.2	10.1	11.6	11.1	9.2	8.1	7.4	7.5	
<b>M2</b>	<b>85.3</b>	<b>8.4</b>	<b>8.6</b>	<b>7.9</b>	<b>7.2</b>	<b>6.0</b>	<b>5.9</b>	<b>5.7</b>	
M3 - M2 (= marketable instruments)	14.7	10.3	7.7	5.8	2.4	1.7	2.5	4.5	
<b>M3</b>	<b>100.0</b>	<b>8.7</b>	<b>8.4</b>	<b>7.6</b>	<b>6.5</b>	<b>5.3</b>	<b>5.4</b>	<b>5.5</b>	
<b>Credit to euro area residents</b>	<b>169.4</b>	<b>4.8</b>	<b>5.3</b>	<b>5.9</b>	<b>5.8</b>	<b>6.0</b>	<b>6.3</b>	<b>6.1</b>	
Credit to general government	36.7	3.4	4.8	6.6	6.1	6.5	6.4	6.6	
Loans to general government	13.3	-0.4	1.0	1.5	1.2	2.2	2.5	2.6	
Credit to the private sector	132.7	5.1	5.5	5.7	5.7	5.9	6.3	6.0	
Loans to the private sector	115.5	4.7	4.9	5.3	5.4	5.6	6.2	6.0	
<b>Longer-term financial liabilities (excluding capital and reserves)</b>	<b>52.2</b>	<b>5.6</b>	<b>5.8</b>	<b>6.7</b>	<b>7.4</b>	<b>8.4</b>	<b>8.6</b>	<b>8.8</b>	

Source: ECB.

1) As at the end of the last month available. Figures may not add up due to rounding.

maturity of up to two years). While month-on-month volatility in the annual rate of growth of marketable instruments is high and should thus be interpreted with caution, in particular the strengthening in August of the demand for money market fund shares and units might indicate that the pace of normalisation of portfolio allocation behaviour and the consequent shift in wealth holdings towards longer-term assets is moderating.

### MAIN COUNTERPARTS OF M3

The annual rate of growth in MFI loans to the private sector remained robust at 6.0% in August, having stood at 6.2% in July. This continues to mask divergent developments across the main sub-sectors (see Table 2). On the one hand, the annual rate of growth of MFI loans to households increased further in August, supported, in particular, by the buoyant growth of loans for house purchases (which reached 9.3% year on year). Strong mortgage borrowing is associated with low mortgage lending rates across the euro area and strong housing market dynamics in several euro area countries. On the other hand, the annual growth in MFI loans to non-financial corporations remained comparatively subdued, although slightly more robust than over the last two years.

On the basis of these developments, the annual rate of growth of the broader aggregate MFI credit to the private sector declined marginally in August (to 6.0%, compared with 6.3% in July). In the same month, the annual growth rate of MFI credit extended to the general government rose slightly (to 6.6%, compared with 6.4% in the previous month).

Among the other counterparts of M3, the annual rate of growth of MFI longer-term financial liabilities (excluding capital and reserves) increased slightly in August, to 8.8% (8.6% in July). The strong growth of the demand for these instruments suggests that some portfolio reallocation out of monetary assets has continued in recent months. Finally, the annual flow in the net external asset position of the euro area MFI sector rose to €108 billion in August, from an increase of €46 billion over the twelve months up to July. Although short-term movements in this volatile indicator should not be overemphasised, the August data point to an interruption of the previous downward trend.

**Table 2 MFI loans to the private sector**

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

	Outstanding amount as a percentage of total <sup>1)</sup>	Annual growth rates					
		2003 Q3	2003 Q4	2004 Q1	2004 Q2	2004 July	2004 Aug.
<b>Non-financial corporations</b>	<b>42.1</b>	<b>3.6</b>	<b>3.5</b>	<b>3.2</b>	<b>4.0</b>	<b>4.3</b>	<b>4.0</b>
Up to one year	30.5	-1.0	-0.8	-2.5	-2.1	-1.2	-1.8
Over one and up to five years	17.6	4.6	3.1	3.7	6.5	6.0	5.7
Over five years	51.9	6.5	6.6	6.9	7.1	7.3	7.2
<b>Households <sup>2)</sup></b>	<b>50.5</b>	<b>5.8</b>	<b>6.4</b>	<b>6.6</b>	<b>7.2</b>	<b>7.3</b>	<b>7.5</b>
Consumer credit <sup>3)</sup>	13.6	3.0	2.9	4.4	5.5	5.4	6.5
Lending for house purchase <sup>3)</sup>	67.7	7.4	8.1	8.4	9.0	9.2	9.3
Other lending	18.7	2.5	3.3	2.3	2.3	2.4	2.0
<b>Insurance corporations and pension funds</b>	<b>0.7</b>	<b>9.7</b>	<b>11.9</b>	<b>8.7</b>	<b>18.8</b>	<b>15.2</b>	<b>21.6</b>
<b>Other non-monetary financial intermediaries</b>	<b>6.7</b>	<b>6.0</b>	<b>11.8</b>	<b>8.9</b>	<b>8.7</b>	<b>8.9</b>	<b>7.1</b>

Source: ECB.

Notes: MFI sector including Eurosystem; sectoral classification based on the ESA 95. For further details, see footnote 2 to Table 2.4 in the "Euro area statistics" section and the relevant technical notes.

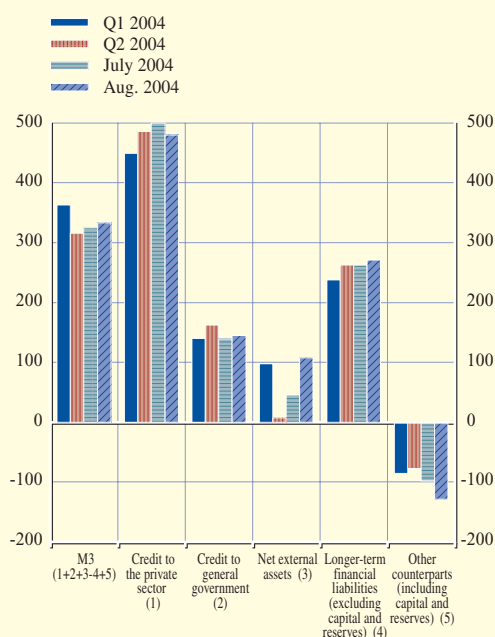
1) As at the end of the last month available. Sector loans as a percentage of total MFI loans to the private sector; maturity breakdown and breakdown by purpose as a percentage of MFI loans to the respective sector. Figures may not add up due to rounding.

2) As defined in the ESA 95.

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

**Chart 4 Movements in M3 and its counterparts**

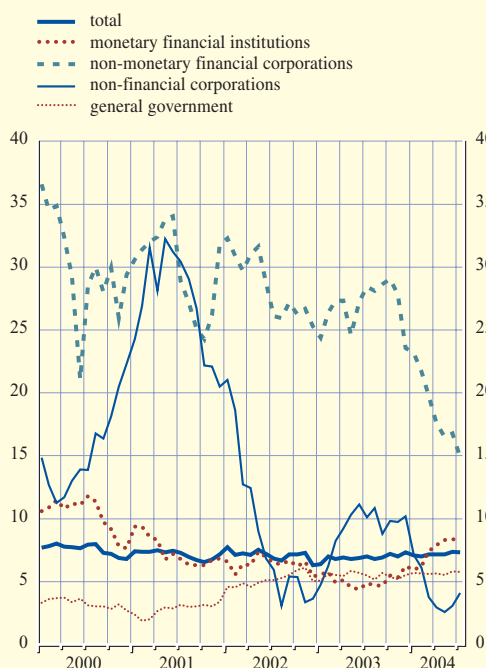
(annual flows; end of period; EUR billions; adjusted for seasonal and calendar effects)



Source: ECB.

**Chart 5 Sectoral breakdown of debt securities issued by euro area residents**

(annual growth rates)



Source: ECB.  
Note: Growth rates are calculated on the basis of financial transactions.

Summing up the information from the counterparts of M3, the continued strong expansion of MFI longer-term financial liabilities (excluding capital and reserves) contributed to a dampening of M3 growth (see Chart 4). Conversely, the relatively robust expansion of MFI credit to euro area residents, driven by the low level of interest rates, continues to have a strong positive impact on M3 growth.

## 2.2 SECURITIES ISSUANCE

*The annual rate of growth of debt securities issued by euro area residents decreased slightly in July 2004, compared with the previous month. While remaining at a relatively low level compared with the average in 2003, the annual growth rate of debt securities issued by non-financial corporations increased for the second consecutive month in July. In the same period, the annual growth rate of quoted shares issued by euro area residents decreased marginally and overall remained at the subdued level observed over the past two years.*

### DEBT SECURITIES

The annual growth rate of debt securities issued by euro area residents decreased slightly to 7.3% in July 2004 from 7.4% in June (see Chart 5). The annual growth rate of short-term debt securities issuance continued to be moderate, standing at 3.6% in July. At the same time, the annual growth rate of long-term debt securities issuance remained robust at 7.7%.



Turning to the sectoral breakdown, the annual growth rate of debt securities issued by MFIs remained unchanged at 8.4% in July 2004 (see Table 3). MFIs' debt securities issuance thereby continued at a robust pace, which may reflect the improved financing and credit conditions for MFIs, as for example illustrated by the rising number of credit rating upgrades in this sector, as well as an increasing need to fund the higher loan growth observed in recent months.

The annual growth rate of debt securities issued by the non-MFI corporate sector, which includes non-monetary financial corporations and non-financial corporations, decreased slightly by 0.4 percentage point to 9.7% in July 2004. Underlying this decline was a 1.9 percentage point decrease in the annual growth rate of debt securities issued by non-monetary financial corporations, which fell to 14.9% in the same period. The decline in July seems to be due mainly to a base effect and, overall, the issuance activity of non-monetary financial institutions remains at a high level, partly reflecting indirect debt issuance by non-financial corporations via financial subsidiaries and special purpose vehicles as well as strong securitisation activity (in particular by MFIs). The direct debt securities issuance activity of non-financial corporations increased for the second consecutive month, with an annual growth rate of 4.1% in July. While this may point to a gradual turnaround in the non-financial corporate bond market, primary activity in this market is still considerably below the level observed in 2003 (when the average annual growth rate was 8.9%). The still modest rate of annual growth in July most likely reflected increased internal financing and ongoing debt restructuring efforts that may have continued to limit euro area companies' demand for external debt financing.

Regarding the general government sector, the annual growth rate of debt securities issued by the general government remained broadly unchanged at 5.7% in July 2004. The annual growth rate of debt securities issued by the central government sector stood at 5.2% in July, unchanged from the previous month. In recent months, the central government sector has increasingly turned to issuing debt securities of long-term maturity (an annual growth rate of 5.4% was recorded in July, compared with an average annual growth rate of 3.2% in 2003), while the issuance of short-term debt securities has slowed (down to 3.4% in July, from an average annual growth rate of 19.3% in 2003). These developments may partly reflect that government bond issuers are trying to lock in the current low long-term financing costs in anticipation of rising interest rates. In addition,

**Table 3 Securities issued by euro area residents**

Issuing sector	Amount outstanding (EUR billions) 2004 Q2	Annual growth rates <sup>1)</sup>					
		2003 Q3	2003 Q4	2004 Q1	2004 Q2	2004 June	2004 July
<b>Debt securities:</b>	<b>9,173</b>	<b>6.9</b>	<b>7.1</b>	<b>7.1</b>	<b>7.2</b>	<b>7.4</b>	<b>7.3</b>
MFIs	3,477	4.7	5.4	6.3	8.0	8.4	8.4
Non-monetary financial corporations	720	28.2	27.6	22.1	17.4	16.8	14.9
Non-financial corporations	603	10.3	9.7	6.7	3.0	3.1	4.1
General government	4,373	5.4	5.4	5.6	5.6	5.8	5.7
<i>of which:</i>							
Central government	4,135	4.7	4.6	4.9	5.0	5.2	5.2
Other general government	238	22.8	22.4	21.4	18.4	17.4	16.0
<b>Quoted shares:</b>	<b>3,790</b>	<b>1.1</b>	<b>1.1</b>	<b>1.3</b>	<b>1.1</b>	<b>1.1</b>	<b>0.9</b>
MFIs	583	0.8	1.3	1.9	2.3	2.7	1.8
Non-monetary financial corporations	362	2.1	2.4	3.1	1.7	1.4	1.9
Non-financial corporations	2,845	1.0	0.9	0.9	0.8	0.7	0.6

Source: ECB.

1) For details, see the technical notes for Tables 4.3 and 4.4 of the "Euro area statistics" section.

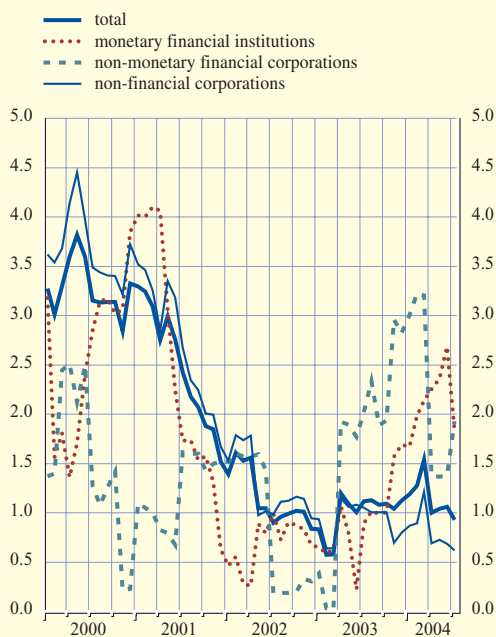
issuers may be responding to increasing investor demand for longer-dated securities. The annual growth rate of debt securities issued by other parts of general government, which mainly include state and local governments, continued its decreasing trend (albeit from a high level), falling to 16.0% in July.

### QUOTED SHARES

The annual growth rate of quoted shares issued by euro area residents remained at a very low level, decreasing further from 1.1% in June 2004 to 0.9% in July (see Chart 6 and Table 3). Underlying this development was a further weakening of growth in quoted shares issued by non-financial corporations, which stood at only 0.6% year on year in July, a slight decline compared with the previous month. Moreover, the annual growth rate of quoted shares issued by MFIs decreased by 0.9 percentage point to 1.8% in July, having shown some signs of improvement in the first half of 2004. Finally, the annual growth rate of quoted shares issued by non-monetary financial corporations, including insurance corporations, increased somewhat to 1.9% in the same period. The overall subdued activity in the primary equity market in recent quarters may be due to perceived weak investor demand as well as the currently limited financing needs of the corporate sector, in an environment where the cost of equity may be seen by issuing companies to be still relatively high.

**Chart 6 Sectoral breakdown of quoted shares issued by euro area residents**

(annual growth rates)



Source: ECB.

Note: Growth rates are calculated on the basis of financial transactions.

### 2.3 MONEY MARKET INTEREST RATES

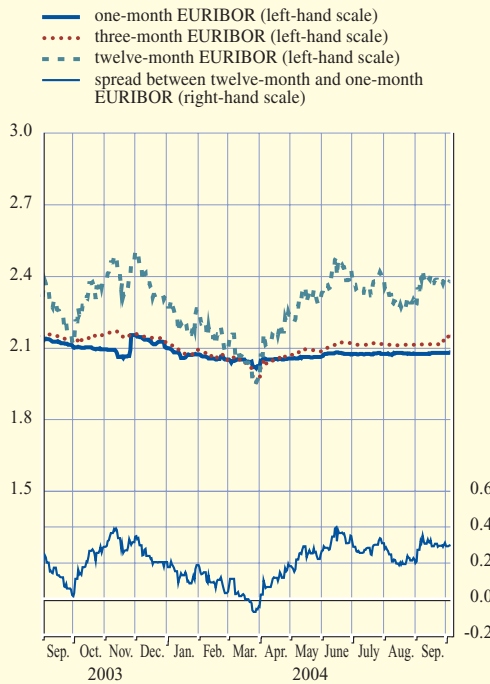
*Having decreased significantly in August, long-term money market interest rates rose at the beginning of September, and then remained stable at these new higher levels. With short-term money market interest rates staying broadly unchanged, the slope of the money market yield curve has steepened since the end of August.*

After decreasing from the peak observed in mid-June 2004, long-term money market interest rates increased at the beginning of September and remained stable thereafter (see Chart 7). As a result, on 6 October long-term money market rates were up to 8 basis points higher than at the end of August 2004. At the same time, interest rates at the very short end of the money market yield curve remained stable, in line with key ECB interest rates (see Chart 8). As a consequence, the slope of the money market yield curve has steepened since the end of August. The twelve-month EURIBOR was 29 basis points higher than the one-month rate on 6 October.

In September market participants' expectations of short-term interest rates for the coming months rose slightly. There was a moderate increase in the rates implied by three-month EURIBOR

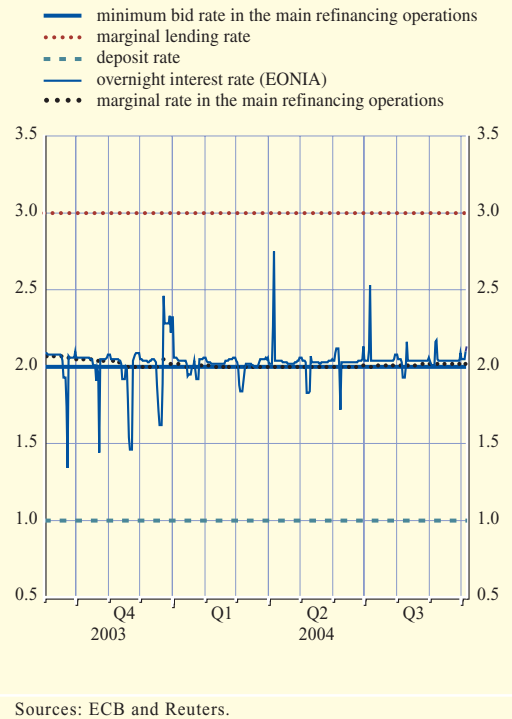
**Chart 7 Short-term market interest rates**

(percentages per annum; percentage points; daily data)



**Chart 8 ECB interest rates and the overnight interest rate**

(percentages per annum; daily data)



futures contracts. The rates implied in futures prices on contracts maturing in December 2004 and March and June 2005 increased by between 4 and 9 basis points between the end of August and 6 October.

Liquidity conditions and interest rates at the shortest maturity were very stable between the end of August and 6 October. Indeed, the allotment rates in the Eurosystem's main refinancing operations (MROs) have been remarkably stable for several months. Both the marginal and weighted average rates in the MROs remained just above the minimum bid rate of 2.00% throughout September. The EONIA (euro overnight index average) stood at around 2.04% for most of the month, except during the last few days of the reserve maintenance period ending on 7 September. In the Eurosystem's longer-term refinancing operation allotted on 30 September, the marginal and weighted average rates were 2.06% and 2.08% respectively, slightly below the three-month EURIBOR interest rate prevailing at that time.

## 2.4 BOND MARKETS

*In September long-term government bond yields changed little overall in the euro area and the United States. This seems to reflect broadly unchanged expectations among market participants concerning the macroeconomic outlook. Implied bond market volatility, an indicator of market participants' uncertainty regarding future bond yield developments, remained broadly unchanged in the euro area in September, while it declined slightly in the United States.*

## UNITED STATES

In the United States, long-term nominal bond yields increased by 10 basis points between the end of August and 6 October, to stand at around 4.3% on the latter date (see Chart 9).

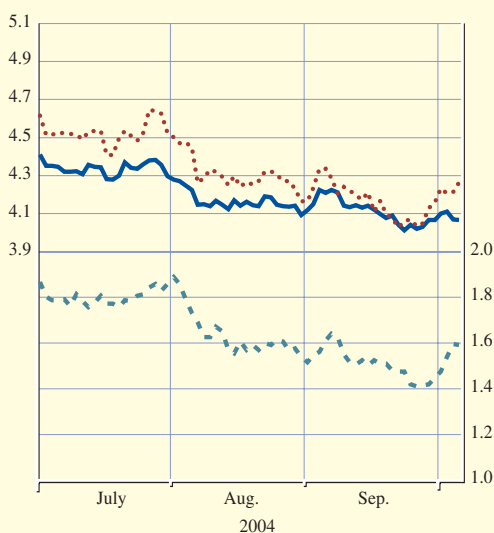
While bond yields increased only slightly at the long end of the yield curve, bond yields at short and medium-term maturities rose more significantly over the same period. These developments seemed to reflect that some economic data releases toward the end of the review period were better than expected by the markets. Real bond yields, measured by yields on ten-year index-linked government bonds, and the break-even inflation rate, measured as the difference between nominal and index-linked bond yields, increased slightly, by 10 and 5 basis points respectively, between end-August and 6 October.

Market participants' uncertainty regarding future developments in long-term bond yields in the United States, as measured by implied bond market volatility, declined slightly in September, to stand at a level somewhat below its average since January 1999 (see Chart 10).

Chart 9 Long-term government bond yields

(percentages per annum; daily data)

- euro area (left-hand scale)
- ..... United States (left-hand scale)
- - - Japan (right-hand scale)

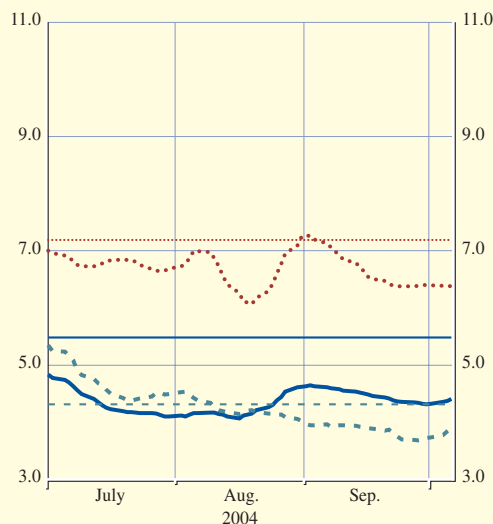


Sources: Reuters and Thomson Financial Datastream.  
Note: Long-term government bond yields refer to ten-year bonds or to the closest available bond maturity.

Chart 10 Implied bond market volatility

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

- Germany
- ..... United States
- - - Japan
- Germany average since 1999
- ..... United States average since 1999
- - - Japan average since 1999



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

## JAPAN

Long-term government bond yields in Japan increased by 5 basis points between end-August and 6 October, to stand at 1.6% on the latter date. Higher bond yields were supported by better than expected economic data releases towards the end of the review period. These releases seemed to offset market participants' concerns regarding the pace of economic growth in Japan, which have increased due to the high level of oil prices.

Market participants' uncertainty about future bond yield developments, as measured by implied bond market volatility, remained broadly unchanged in September, at a level which was close to its average since 1999.

## EURO AREA

In the euro area, long-term government bond yields remained almost unchanged between end-August and 6 October. On the latter date they stood at 4.1%, bringing the differential between yields in the United States and in the euro area up to around 20 basis points.

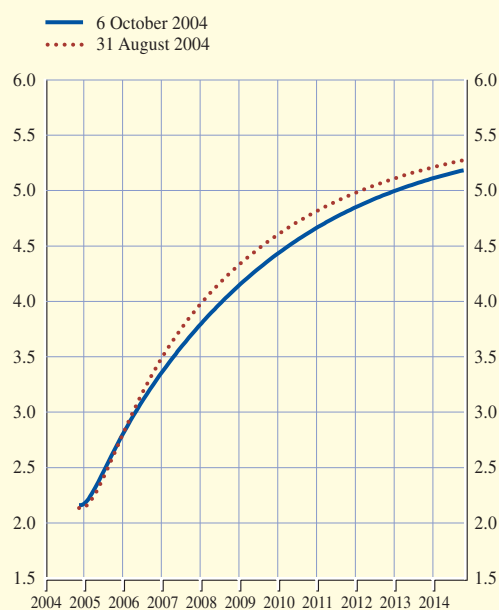
The level of government bond yields in the euro area seemed to result from a slight readjustment of market participants' expectations for economic growth and inflation amid persistently high oil prices. Real bond yields, as measured by yields on ten-year index-linked government bonds, declined slightly – around 10 basis points – between end-August and 6 October. At the same time, the ten-year break-even inflation rate derived from the difference between the yields on ten-year nominal and index-linked government bonds (indexed to the euro area HICP excluding tobacco) – which reflects, among other things, market participants' long-term inflation expectations – increased by around 5 basis points over the same period. On 6 October the break-even inflation rate in the euro area stood at 2.2%. Although the level of this indicator should be interpreted with some caution, since various premia may create distortions, it should nonetheless be observed that the indicator is relatively high by historical standards.

Developments in the implied forward overnight interest rate curve (see Chart 11) show that, at the medium and long ends, forward rates declined somewhat between end-August and 6 October, while for short-term maturities (up to two years) forward rates increased slightly.

The degree of uncertainty prevailing in the euro area bond markets, as measured by implied bond market volatility, remained broadly unchanged in September at a level somewhat below its average since January 1999.

Chart 11 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 Monthly Bulletin. The data used in the estimate are derived from swap contracts.

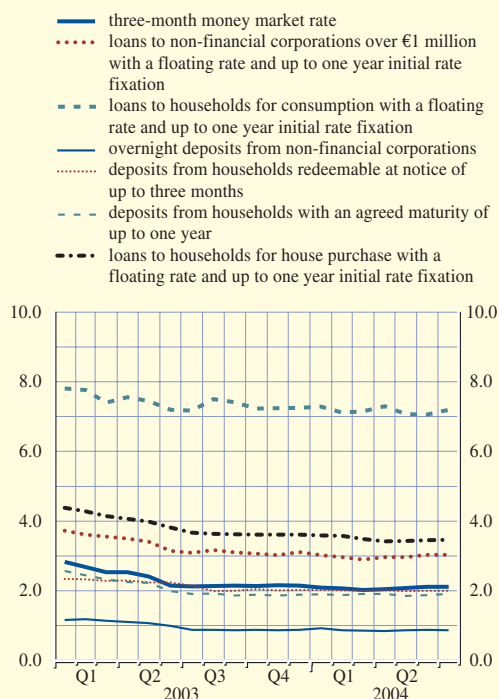
## 2.5 INTEREST RATES ON LOANS AND DEPOSITS

*In the three months to July 2004 developments in MFI interest rates on new business were mixed, broadly in line with developments in comparable market rates.*

Most short-term MFI interest rates on new business increased slightly in July 2004 (see Chart 12 and Table 4) as well as over the three months to July and were thus broadly in line with the movements in money market rates (e.g. the three-month money market rate increased by 7 basis points in the same period). Taking a somewhat longer perspective, in the first seven months of 2004 most short-term MFI interest rates either were unchanged or declined marginally. For example, between December 2003 and July 2004 the short-term rates on deposits from households and the short-term rates on time deposits from non-financial corporations were basically unchanged. In the same period, short-term rates on lending to households declined overall by up to 15 basis points, while the short-term rates on lending to non-financial corporations fell by less than 10 basis points. In comparison, the three-month money market rate declined by 3 basis points over the same period.

**Chart 12 Short-term MFI interest rates and a short-term market rate**

(percentages per annum; rates on new business; weight-adjusted<sup>1)</sup>)

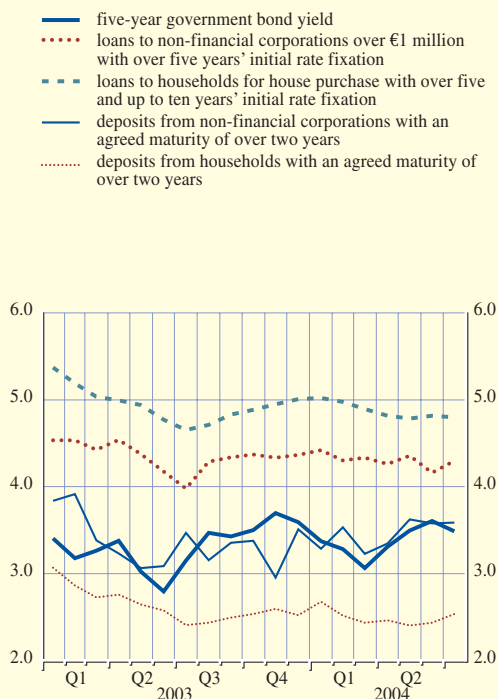


Source: ECB.

1) For the period from December 2003 onwards, the weight-adjusted MFI interest rates are calculated using country weights constructed from a 12-month moving average of new business volumes. For the preceding period, from January to November 2003, the weight-adjusted MFI interest rates are calculated using country weights constructed from the average of new business volumes in 2003. For further information, see the box entitled "Analysing MFI interest rates at the euro area level" on pages 28-30 in the August 2004 issue of the Monthly Bulletin.

**Chart 13 Long-term MFI interest rates and a long-term market rate**

(percentages per annum; rates on new business; weight-adjusted<sup>1)</sup>)



Source: ECB.

1) For the period from December 2003 onwards, the weight-adjusted MFI interest rates are calculated using country weights constructed from a 12-month moving average of new business volumes. For the preceding period, from January to November 2003, the weight-adjusted MFI interest rates are calculated using country weights constructed from the average of new business volumes in 2003. For further information, see the box entitled "Analysing MFI interest rates at the euro area level" on pages 28-30 in the August 2004 issue of the Monthly Bulletin.

Most long-term MFI interest rates increased slightly in July 2004, while developments over the three months to July were mixed, perhaps reflecting the lack of a clear trend in market rates of a comparable maturity over the period (see Chart 13). Looking at a longer horizon, between December 2003 and July 2004 most long-term rates declined somewhat, which was in line with comparable market rates (e.g. the 5-year government bond yield declined by 10 basis points in the same period). Long-term MFI interest rates were much less volatile than comparable market rates over that period, reflecting the traditionally sluggish pass-through from changes in market rates to bank rates. In general, the changes in long-term MFI interest rates on new business were relatively moderate in the first seven months of 2004, with the exception of the rate on loans to households for house purchase with initial rate fixation over five years and up to ten years, which declined by more than 20 basis points over the period, thereby narrowing somewhat the spread relative to the comparable market rate. The narrower spread may to some extent be related to a perceived improvement in the credit quality of borrowers in an environment of better economic conditions.

**Table 4 MFI interest rates on new business**

(percentages per annum; basis points; weight-adjusted<sup>1)</sup>)

								Change in basis points up to July 2004			
	2004 Feb.	2004 Mar.	2004 Apr.	2004 May	2004 June	2004 July	2003 Jan.	2003 Dec.	2004 Apr.	2004 June	
<b>MFI interest rates on deposits</b>											
Deposits from households											
with agreed maturity up to one year	1.88	1.91	1.91	1.86	1.88	1.91	-66	2	0	3	
with agreed maturity over two years	2.52	2.44	2.46	2.40	2.43	2.53	-54	1	7	10	
redeemable at notice up to three months	2.02	2.00	2.01	2.00	2.00	2.00	-34	-2	-1	0	
redeemable at notice over three months	2.63	2.59	2.57	2.55	2.54	2.54	-74	-14	-3	0	
Overnight deposits from non-financial corporations											
with agreed maturity up to one year	1.98	1.96	1.97	1.96	1.99	2.00	-71	0	3	1	
with agreed maturity over two years	3.53	3.23	3.35	3.62	3.58	3.59	-25	8	24	1	
<b>MFI interest rates on loans</b>											
Loans to households for consumption											
with a floating rate and initial rate fixation up to one year	7.12	7.15	7.29	7.07	7.06	7.19	-61	-7	-10	13	
Loans to households for house purchase											
with a floating rate and initial rate fixation up to one year	3.58	3.49	3.42	3.43	3.45	3.46	-92	-15	4	1	
with initial rate fixation over five and up to ten years	4.97	4.89	4.82	4.78	4.81	4.80	-57	-21	-2	-1	
Bank overdrafts to non-financial corporations											
with a floating rate and initial rate fixation up to one year	5.63	5.56	5.52	5.46	5.44	5.36	-84	-22	-16	-8	
Loans up to €1 million to non-financial corporations											
with a floating rate and initial rate fixation up to one year	4.04	3.98	3.94	3.96	3.96	4.02	-87	-1	8	6	
with initial rate fixation over 5 years	4.79	4.80	4.70	4.63	4.72	4.68	-49	-9	-2	-4	
Loans over €1 million to non-financial corporations											
with a floating rate and initial rate fixation up to one year	2.97	2.90	2.97	2.96	3.03	3.04	-68	-7	7	1	
with initial rate fixation over five years	4.30	4.33	4.26	4.36	4.16	4.30	-24	-6	4	14	
<b>Memo items</b>											
Three-month money market interest rate	2.07	2.03	2.05	2.09	2.11	2.12	-71	-3	7	1	
Two-year government bond yield	2.38	2.16	2.39	2.55	2.74	2.70	6	12	31	-4	
Five-year government bond yield	3.28	3.06	3.31	3.50	3.60	3.49	9	-10	18	-11	

Source: ECB.

1) For the period from December 2003 onwards, the weight-adjusted MFI interest rates are calculated using country weights constructed from a 12-month moving average of new business volumes. For the preceding period, from January to November 2003, the weight-adjusted MFI interest rates are calculated using country weights constructed from the average of new business volumes in 2003. For further information, see the box entitled "Analysing MFI interest rates at the euro area level" on pages 28-30 in the August 2004 issue of the Monthly Bulletin.

## 2.6 EQUITY MARKETS

Stock prices in the euro area and in the United States increased in September, supported by positive releases concerning corporate profitability. At the same time, implied stock market volatility declined.

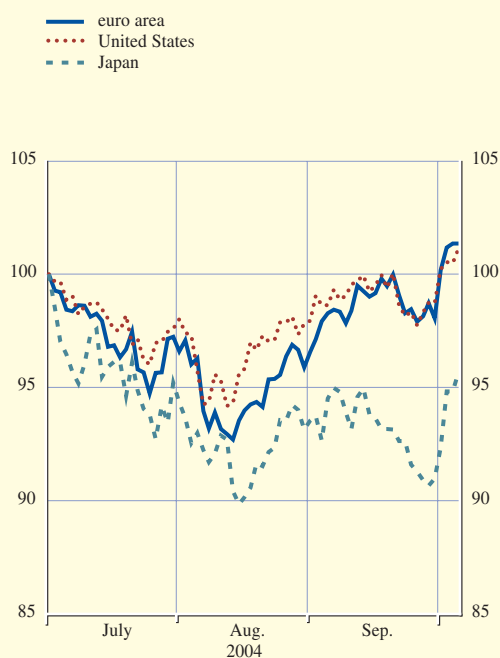
### UNITED STATES

Between end-August and 6 October the broad-based Standard & Poor's 500 index increased by around 3% (see Chart 14). Several countervailing factors seem to have played a role in determining these developments in stock prices. On the one hand, persistently high oil prices exerted downward pressure on stock prices. On the other hand, positive corporate earnings releases provided support to stock price changes. The sector showing the most significant overall increase in September was the energy sector, which benefited from developments in oil prices.

Uncertainty in the US stock market, as measured by the implied volatility derived from options on the Standard & Poor's 500 index, declined between end-August and 6 October to stand at levels well below its average since 1999 (see Chart 15).

Chart 14 Stock price indices

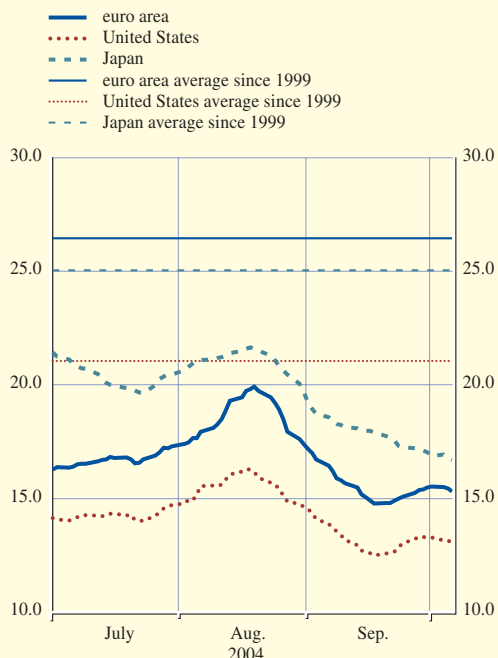
(index: 1 July 2004 = 100; daily data)



Source: Reuters.  
Note: The Dow Jones EURO STOXX broad index for the euro area, the Standard & Poor's 500 index for the United States and the Nikkei 225 index for Japan.

Chart 15 Implied stock market volatility

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



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



## **JAPAN**

In Japan, stock prices, as measured by the Nikkei 225 index, increased by around 3% between end-August and 6 October. This seems to have reflected domestic macroeconomic data releases towards the end of the review period that were better than expected by the market. These releases seem to have offset the downward pressures on stock prices due to market participants' concerns about the impact of the high level of oil prices on a number of countries which are important markets for Japanese exporters.

Implied volatility extracted from options on the Nikkei 225 index, a measure of uncertainty in the Japanese stock market, declined between end-August and 6 October to stand on the latter date at a level well below its average since 1999.

## **EURO AREA**

In the euro area, stock prices increased by around 6% between end-August and 6 October. The upward revision of corporate earnings expectations over the forthcoming quarters as well as positive actual earnings releases supported stock prices. This seems to have offset any negative impact that rising oil prices may have had via their perceived effects on input costs and more generally on economic activity.

Stock market uncertainty in the euro area, as indicated by implied volatility extracted from options on the Dow Jones EURO STOXX 50 index, declined between end-August and 6 October and remained well below its average since 1999.

Regarding sectoral developments within the euro area over the same period, stock prices increased for all sectors of the Dow Jones EURO STOXX index, although the technology sector recorded the most significant gains. Stocks in this sector, which tend to be highly volatile and had performed poorly in the previous month, seem to have benefited most from better than expected corporate earnings releases.

## 3 PRICES AND COSTS

According to Eurostat's flash estimate, euro area inflation declined slightly from 2.3% in August 2004 to 2.2% in September. The rate of HICP inflation had remained unchanged between August and July; lower annual price increases for food were offset by higher increases for energy and non-energy industrial goods prices. At an earlier stage of the production chain, some upward pressure on producer prices is expected to continue on account of higher commodity prices. Regarding labour cost developments, the latest data support the view that annual wage growth in the euro area was moderate in the first half of 2004. Looking ahead, it is unlikely that annual inflation rates will return to levels below 2% during the rest of this year, but medium-term prospects remain in line with price stability. However, there are upside risks to this outlook.

### 3.1 CONSUMER PRICES

#### FLASH ESTIMATE FOR SEPTEMBER 2004

According to Eurostat's flash estimate, euro area HICP inflation stood at 2.2% in September 2004, down by 0.1 percentage point from the previous month (see Table 5). Although no detailed breakdown is currently available, it appears that a further rise in the annual rate of change in energy prices has been more than offset by a further decline in the annual rate of change in unprocessed food prices. Given the preliminary nature of the data, there is some uncertainty surrounding this estimate.

#### HICP INFLATION IN AUGUST 2004

HICP inflation in the euro area stood at 2.3% in August 2004, i.e. unchanged from July. Lower annual price increases for food were offset by higher increases in energy and non-energy industrial goods prices.

Regarding the more volatile components of the HICP, the annual rate of change in unprocessed food prices declined to -0.2% in August, from 0.7% in July (see Chart 16). This reflected both a stronger decline than normal in August 2004 and a less pronounced decline than normal one year ago (i.e. a base effect). The recent decrease was mainly due to lower prices for fruit and vegetables, which were in ample supply as a result of this summer's favourable weather conditions.

**Table 5 Price developments**

(annual percentage changes, unless otherwise indicated)

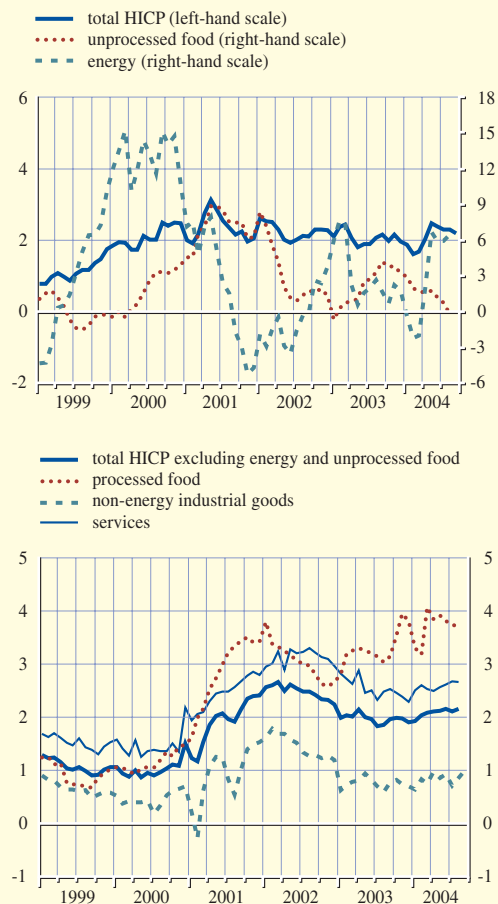
	2002	2003	2004 Apr.	2004 May	2004 June	2004 July	2004 Aug.	2004 Sep.
<b>HICP and its components</b>								
Overall index <sup>1)</sup>	2.3	2.1	2.0	2.5	2.4	2.3	2.3	2.2
Energy	-0.6	3.0	2.0	6.7	5.9	5.9	6.5	.
Unprocessed food	3.1	2.1	1.6	1.7	1.2	0.7	-0.2	.
Processed food	3.1	3.3	3.9	3.9	3.8	3.8	3.6	.
Non-energy industrial goods	1.5	0.8	1.0	0.9	0.9	0.7	0.9	.
Services	3.1	2.5	2.5	2.6	2.6	2.7	2.7	.
<b>Other price indicators</b>								
Industrial producer prices	-0.1	1.4	1.4	2.4	2.4	2.9	3.1	.
Oil prices (EUR per barrel)	26.5	25.1	27.6	30.9	29.3	30.7	34.1	35.0
Non-energy commodity prices	-0.9	-4.5	19.7	21.1	21.9	18.0	11.0	6.9

Sources: Eurostat, Thomson Financial Datastream and HWWA.

1) HICP inflation in September 2004 refers to Eurostat's flash estimate.

**Chart 16 Breakdown of HICP inflation: main sub-components**

(annual percentage changes; monthly data)



Source: Eurostat.

The annual rate of change in energy prices in the HICP increased by 0.6 percentage point, reaching 6.5% in August, chiefly as a result of a further rise in euro-denominated oil prices.

The annual rate of change in the HICP excluding unprocessed food and energy edged up by 0.1 percentage point between July and August 2004 to stand at 2.2%. This increase was due to a rise in the annual rate of change in non-energy industrial goods prices (see Chart 16). Importantly, this rise mainly reflects developments in the highly seasonal prices of garments and should thus not be seen as a sign of an indirect effect resulting from the recent increase in energy prices. In contrast to industrial goods prices, the annual rate of change in processed food prices declined between July and August. At the same time, the annual rate of change in services prices remained unchanged in August, masking a further rise in the annual price increase of package holidays, which was counterbalanced by smaller price declines for a number of other services (e.g. transport, accommodation services).

### 3.2 INDUSTRIAL PRODUCER PRICES

The annual rate of change in the overall PPI excluding construction increased to 3.1% in August, from 2.9% in July, largely as a result of higher annual increases in energy and

intermediate goods prices (see Chart 17). Meanwhile, the annual rate of change in the PPI excluding construction and energy has risen slightly between July and August.

The annual rate of change in energy producer prices increased to 5.4% in August, from 5.2% in July. This mainly reflects the strong increase in oil prices observed in August in euro terms, which was partly offset by a favourable base effect. The annual rate of change in intermediate goods prices also rose further in August to reach 4.8%.

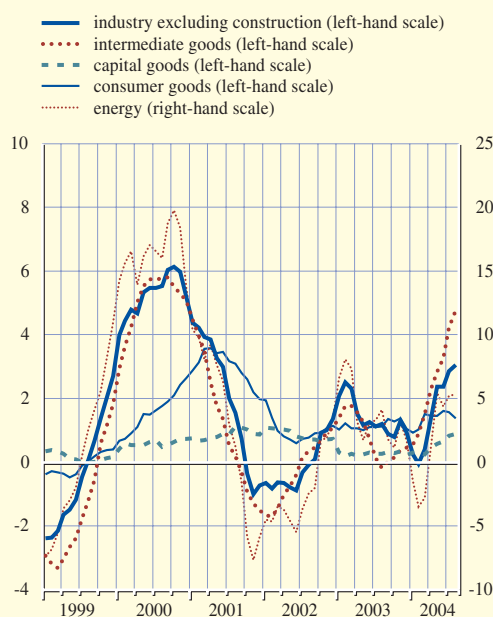
In the consumer goods industries, the annual rate of price changes decreased to 1.4% in August, due to a decline in the annual growth rate of prices of non-durables. Within this component, the annual rate of change in food and beverage prices decreased in August, while past tobacco price increases continued to contribute significantly to the annual rate of change in non-durable consumer goods prices. The annual rate of change in prices of durable consumer goods, by contrast, remained unchanged in August. In the capital goods industries, the annual rate of change edged up slightly further in August.

In addition, survey data on input prices suggest that further increases in producer prices can be expected. The manufacturing sector Eurozone Input Price Index from the Purchasing Managers' survey for September rose sharply to 71.3 in September. The level of this indicator remains well above 50 and thereby indicates that survey respondents perceive considerable pressure on their input costs. The increase in the index between August and September was due to further increases in energy prices as well as to rising costs of a variety of key non-fuel inputs (e.g. steel and electronic components). Meanwhile, reflecting the impact of the above input cost developments, prices charged by manufacturers rose for the seventh successive month in September. In the services sector, by contrast, the Eurozone Input Price Index decreased to 58.3 in September, although still indicating increases in input costs as well.

Overall, recent data on price developments in earlier stages of the production process may point to some further upward pressures, but there is so far no clear sign of indirect effects from energy prices on consumer goods prices.

**Chart 17 Breakdown of industrial producer prices**

(annual percentage changes; monthly data)



Sources: Eurostat and ECB calculations.

### 3.3 LABOUR COST INDICATORS

Indications of euro area labour cost developments in the second quarter of 2004 are available from the indicator of negotiated wages and the first estimate of the hourly labour cost index (see Table 6). Broadly in line with expectations, the annual growth of negotiated wages declined slightly to 2.2% in the second quarter, from 2.3% in the first quarter. Euro area hourly labour costs grew by 2.2% annually in the second quarter, down from 2.7% in the first quarter.

**Table 6 Labour cost indicators**

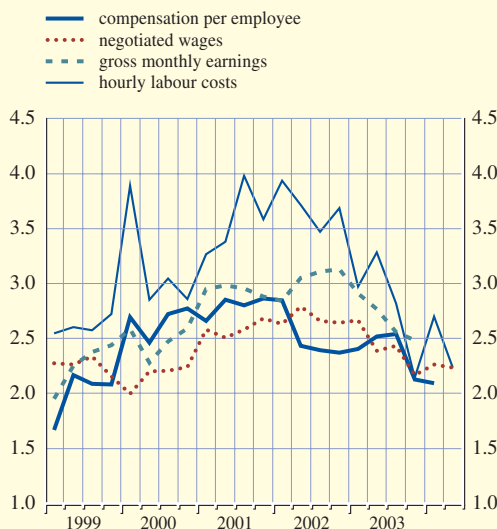
(annual percentage changes, unless otherwise indicated)

	2002	2003	2003 Q2	2003 Q3	2003 Q4	2004 Q1	2004 Q2
Negotiated wages	2.7	2.4	2.4	2.4	2.2	2.3	2.2
Total hourly labour costs	3.7	2.8	3.3	2.8	2.1	2.7	2.2
Gross monthly earnings	3.0	2.7	2.8	2.6	2.5	.	.
Compensation per employee	2.5	2.4	2.5	2.5	2.1	2.1	.
<i>Memo items:</i>							
Labour productivity	0.3	0.3	0.0	0.2	0.5	1.1	1.8
Unit labour costs	2.2	2.1	2.5	2.4	1.6	1.0	.

Sources: Eurostat, national data and ECB calculations.

**Chart 18 Selected labour cost indicators**

(annual percentage changes)



Sources: Eurostat, national data and ECB calculations.

Annual growth in compensation per employee stood at 2.1% in the first quarter of 2004, thus confirming the downward movement observed over the last couple of years. In addition, an estimate of euro area compensation per employee for the second quarter, based on available country data with a euro area coverage of approximately 90%, suggests that the annual growth rate could have decreased slightly between the first and second quarters.

All labour cost indicators continue to support the view that wage growth has slowed down recently, to around 2.0-2.5% on average in the first half of 2004, after having grown at a faster rate for most of 2002 and 2003 (see Chart 18). Unit labour cost growth is likely to decline further in the second quarter, due to a notable further increase in productivity growth. Looking ahead, continued moderate wage growth, due to the weakness in the labour market, combined with favourable labour

productivity growth should lead to moderate growth rates in unit labour costs over the coming quarters.

### 3.4 THE OUTLOOK FOR INFLATION

Looking ahead, the recent increase in oil prices could put further upward pressure on HICP inflation in the short term. On the basis of current market expectations for oil prices, it appears unlikely that inflation rates will return to levels below 2% in the remainder of this year. Looking beyond the short term, however, inflation rates should fall below 2% in 2005 and there are no indications as yet of stronger underlying inflationary pressure building up domestically. Recent wage developments have been moderate and, in view of the continued high level of unemployment in the euro area, this trend is expected to continue for some time to come. However, this assessment is based on the assumption that oil prices will fall in line with futures prices in the coming quarters. A further upward risk relates to future developments in indirect taxes and administered prices. Although there is no strong evidence of indirect effects and of second-round effects from higher commodity prices at the current juncture, the possible emergence of such effects needs to be monitored closely.

## 4 OUTPUT, DEMAND AND THE LABOUR MARKET

The first release of euro area national accounts data for the second quarter of 2004 showed a real GDP quarter-on-quarter growth rate of 0.5%, slightly down from 0.6% in the first quarter. Net trade again played an important role in supporting euro area activity, while the contribution from domestic demand remained modest. Regarding the third quarter, surveys generally point to broadly stable growth in both manufacturing and services. The labour market is showing some tentative signs of improvement, but developments thus far remain relatively subdued. Looking forward, the recovery is expected to continue in coming quarters, at a pace broadly in line with that observed in the recent past.

### 4.1 OUTPUT AND DEMAND DEVELOPMENTS

#### REAL GDP AND EXPENDITURE COMPONENTS

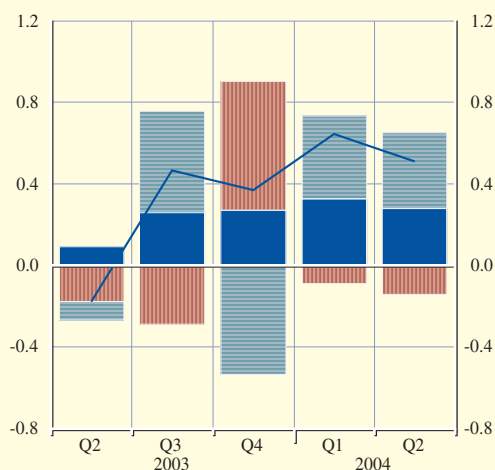
As expected, the first release of national accounts data for the second quarter shows that the recovery proceeded at a relatively sustained pace in the first half of 2004. Following a quarter-on-quarter growth rate of 0.6% in the first quarter, euro area real GDP increased by 0.5% in the second quarter, confirming the flash estimate released by Eurostat a month earlier (see Chart 19).

As in the first quarter, economic activity in the second quarter of 2004 was driven primarily by a significant contribution from net trade, while domestic demand remained relatively weak and inventory changes contributed negatively to growth. Exports accelerated further in the second quarter, driven by robust external demand. However, the contribution from net trade was unchanged from the first quarter, owing to a significant acceleration in imports. Turning to domestic demand, private consumption growth decreased in the second quarter, partly reflecting the negative impact of strong oil price increases on real incomes. However, consumer spending

Chart 19 Contributions to real GDP growth

(quarterly percentage point contributions; seasonally adjusted)

- domestic demand (excl. inventories)
- changes in inventories
- net exports
- total GDP growth (%)

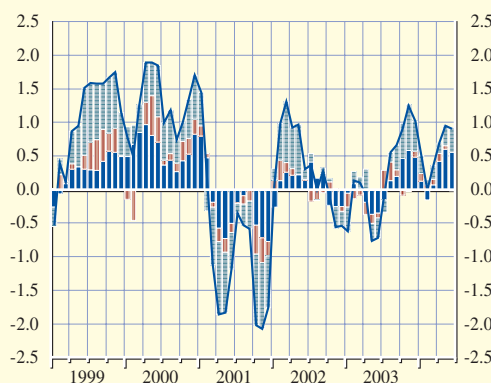


Sources: Eurostat and ECB calculations.

Chart 20 Contributions to growth in industrial production

(percentage point contributions; seasonally adjusted)

- capital goods
- consumer goods
- intermediate goods
- total excl. construction and energy (%)



Sources: Eurostat and ECB calculations.  
Note: Data shown are calculated as three-month centred moving averages against the corresponding average three months earlier.

also slowed down in nominal terms, which suggests that other factors, such as a correction from strong consumption in the first quarter, were at play. Investment increased only slightly in the second quarter, while the figures for the first quarter of 2004 were revised significantly downward. The weak investment in the first half of the year reflected, for the most part, a significant decline in construction investment, while other capital spending increased more in line with the pace of overall economic activity.

### SECTORAL OUTPUT AND INDUSTRIAL PRODUCTION

Industrial activity was relatively robust in the second quarter, and available data up to July show that the momentum was broadly maintained at the start of the third quarter. Euro area industrial production (excluding construction) increased by 0.3%, month-on-month, in July and continued to grow, on a three-month moving-average basis, at a rate slightly below 1% (see Chart 20).

Over recent months, developments in the three main industrial sectors have differed significantly. Production of capital goods has risen strongly, with growth at around 2.0% on a three-month moving-average basis in July. The production of intermediate goods increased less rapidly, while output of consumer goods remained broadly unchanged in the three months to July, as compared with the previous three months. This pattern is relatively typical of an upturn, although the production of consumer goods currently remains relatively weak.

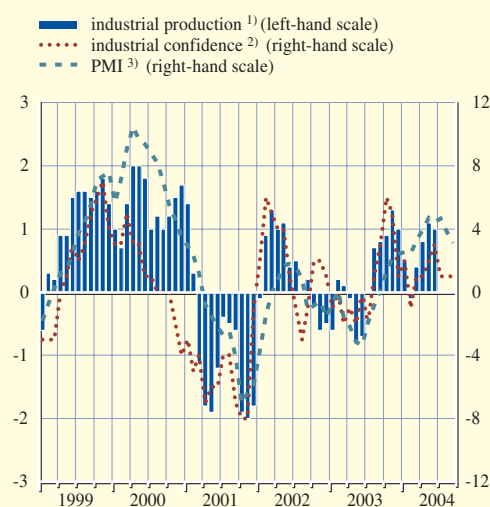
### SURVEY DATA FOR MANUFACTURING AND SERVICES SECTORS

Survey data for the manufacturing sector sent partly contrasting signals in the third quarter, but tended to indicate a relatively stable momentum in manufacturing activity compared with the second quarter. A similar picture of broadly stable growth also emerged from surveys in the services sector.

Figures on industrial confidence from the European Commission Business Surveys have become available for August and September, and show a slight improvement in September, after remaining unchanged in the three preceding months (see Chart 21). Confidence is thus seen to have increased in the third quarter as a whole, mainly due to an improved assessment of order books, while production expectations declined slightly from the second quarter. Recent developments in the Purchasing Managers' Index (PMI) for the manufacturing sector contrasted with those in industrial confidence in the third quarter. The PMI declined in September for the second consecutive month, implying a lower average value in the third quarter than in the second quarter. The decline in the PMI was driven by the components relating to output, new orders and suppliers' delivery times. However, the PMI still signals ongoing, albeit slightly moderating, growth in manufacturing output during the third quarter.

**Chart 21 Industrial production, industrial confidence and the PMI**

(monthly data; seasonally adjusted)



Sources: Eurostat, European Commission Business and Consumer Surveys, Reuters and ECB calculations.  
 1) Manufacturing; three-month on three-month percentage changes.  
 2) Percentage balances; changes compared with three months earlier.  
 3) Purchasing Managers' Index; deviations from an index value of 50.

Survey results are also consistent with ongoing growth in the services sector during the third quarter, at a rate close to or somewhat below that observed in the second quarter. In September, European Commission surveys showed a slight decline in confidence in services, due to a deterioration in the general business climate and recent trends in demand, which was only partially offset by stronger demand expectations. In a longer-term perspective, however, the confidence indicator has continued to be close to its average value since the start of the year. The PMI for business activity in the services sector also decreased in September, to 53.3, thereby extending a downward trend observed since the end of last year. Despite the further declines recently, the index remains at a level consistent with continued growth in services during the third quarter of 2004.

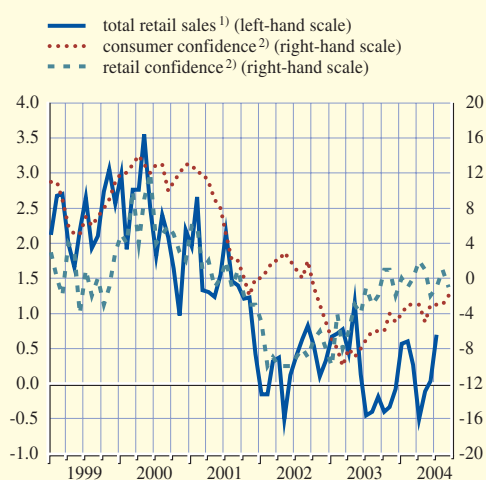
### INDICATORS OF HOUSEHOLD SPENDING

Available monthly indicators on household spending remain rather mixed for the third quarter.

Retail sales volumes are estimated to have declined by 1.3%, month-on-month, in August, while the July data were revised downward to show zero growth. The decline in August was distributed equally across food and non-food products. As usual, further details on sub-components will only become available with the revised data next month. Despite relatively unfavourable developments in July and August, three-month on three-month and annual growth rates improved with the latest data, mainly reflecting the impact of the strong monthly increase in June (see Chart 22). As regards other indicators of household spending, new passenger car registrations declined significantly in July and August to stand 4.5% below their average level in the second quarter. Overall, recent developments in retail trade and new car registrations would not point to a significant strengthening of private consumption in the third quarter of 2004.

**Chart 22 Retail sales and confidence in the retail trade and household sectors**

(monthly data)



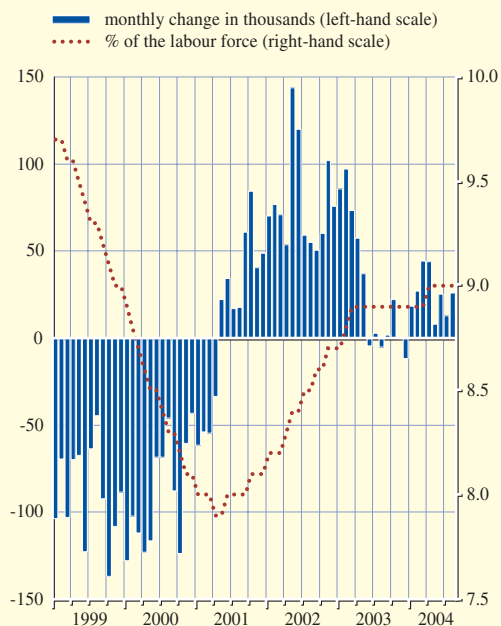
Sources: European Commission Business and Consumer Surveys and Eurostat.

1) Annual percentage changes; three-month centred moving averages; working day adjusted.

2) Percentage balances; seasonally and mean adjusted. For consumer confidence, euro area results from January 2004 onwards are not fully comparable with previous figures due to changes in the questionnaire used for the French survey.

**Chart 23 Unemployment**

(monthly data; seasonally adjusted)



Source: Eurostat.



Nevertheless, consumer confidence improved slightly in September, and in the third quarter as a whole, thereby continuing the gradual upward movement observed since early 2003. Consumers' expectations of the economic situation, as well as their unemployment expectations, were more positive in September. However, responses to questions relating specifically to consumption and savings indicate that euro area consumers may not have changed their current or planned spending patterns significantly in the course of the third quarter.

## 4.2 LABOUR MARKET

### UNEMPLOYMENT

The euro area unemployment rate remained at 9.0% in August, unchanged since April 2004 (see Chart 23). The number of unemployed increased somewhat more in August than in July, but developments over the last two months suggest a lower average increase in unemployment in the third quarter than in the second quarter, which in turn was lower than that recorded in the first quarter of the year.

Together with indications that the decline in the number of vacancies may have slowed somewhat towards the middle of this year, this points to a possible stabilisation of labour market conditions.

### EMPLOYMENT

Employment is estimated to have increased by 0.1% in the second quarter of 2004, compared with zero growth in the first quarter (see Table 7). The increase reflects a smaller contraction in industrial employment and slightly stronger employment growth in services. Labour productivity per employee accelerated further in the second quarter, to 1.8% year-on-year, for the first time since early 2000 exceeding its average rate of growth over the 1990s. The recent acceleration of productivity per employee mainly reflects the usual lags in the adjustment of employment to stronger real GDP growth. There is also tentative evidence that hours worked per person employed, which may have been adjusted downward during the recent period of slow growth, are increasing in the current phase of recovery (see Box 1 entitled "Developments in total hours worked in the euro area").

As regards developments in the third quarter, employment surveys generally point to broadly stable conditions compared with the second quarter. According to the latest European

**Table 7 Employment growth**

(percentage changes compared with the previous period; seasonally adjusted)

	Annual rates		Quarterly rates				
	2002	2003	2003 Q2	2003 Q3	2003 Q4	2004 Q1	2004 Q2
Whole economy	0.5	0.1	0.1	0.0	0.0	0.0	0.1
<i>of which:</i>							
Agriculture and fishing	-2.1	-1.9	-0.2	0.1	0.1	-0.9	-0.5
Industry	-1.2	-1.5	-0.3	-0.5	-0.5	-0.3	-0.2
Excluding construction	-1.4	-2.0	-0.5	-0.5	-0.6	-0.4	-0.3
Construction	-0.6	-0.2	0.4	-0.4	-0.2	0.1	0.1
Services	1.4	0.9	0.3	0.2	0.2	0.2	0.3
Trade and transport	0.4	0.5	0.3	0.4	0.2	0.1	0.2
Finance and business	2.4	1.2	0.1	0.4	0.6	0.4	0.4
Public administration	1.8	1.0	0.3	-0.1	0.1	0.1	0.2

Sources: Eurostat and ECB calculations.

Commission surveys, employment expectations in the manufacturing sector improved marginally in September, but did not change significantly for the third quarter as a whole, while they worsened somewhat for the services sector in September and for the third quarter as a whole. The PMI for both manufacturing and services employment improved slightly in September and, on average, in the third quarter.

### 4.3 THE OUTLOOK FOR ECONOMIC ACTIVITY

Recent data have confirmed that the recovery in the euro area is proceeding broadly as expected. In particular, surveys are consistent with ongoing growth in the third quarter of 2004.

Looking forward, although some uncertainty has recently arisen concerning the expected strengthening of activity, relating partly to further unfavourable developments on the oil markets, the recovery is expected to continue in coming quarters, at a pace broadly in line with that observed in the recent past. Euro area foreign demand is expected to remain sustained, thereby providing further support to export growth, while conditions are in place for a gradual strengthening of domestic demand. In particular, investment should benefit from the current environment of low interest rates, restored corporate profitability and positive growth expectations. Moreover, there is scope for a recovery in private consumption in line with growth in real disposable income, which is expected to be further underpinned by a gradual recovery in employment.

#### Box 1

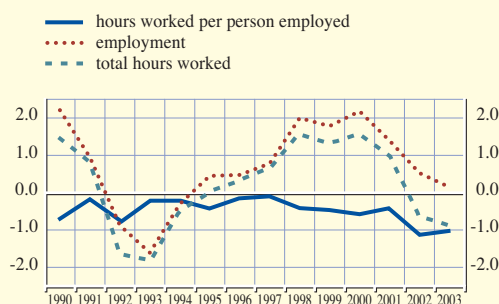
#### DEVELOPMENTS IN TOTAL HOURS WORKED IN THE EURO AREA

In order to minimise costs over the business cycle, companies attempt to adjust the amount of inputs used (including labour) to match developments in product demand. Due to fixed costs in adjusting employment in terms of the number of persons employed, the adjustment in labour input at the company level often takes place partly in terms of hours worked per person employed. The purpose of this box is to discuss available euro area evidence on the cyclical adjustment of total hours worked. Developments in an ECB estimate of total hours worked in the euro area indicate that firms may indeed have adjusted their labour input downwards in terms of hours worked per person employed to a larger extent during the recent period of slow growth than was the case during the slowdown in the early 1990s. However, due to the fact that it is difficult to distinguish clearly between a possible cyclical decline and other factors (including trend developments) that affect hours worked, these conclusions remain somewhat tentative.

The analysis of cyclical developments in hours worked in the euro area is limited by a lack of official data. An estimate of total hours worked has been constructed using annual data on hours worked per person employed from the European Labour Force Survey (LFS) multiplied by the total number of employed persons. Developments in total hours worked thus reflect changes in the number of persons employed and in the actual hours worked per person of both part-time and full-time employed persons. Actual hours worked do not take into account absences due to, for example, annual leave and sickness, while they include data on overtime hours.

## Total hours worked, employment and hours worked per person employed

(annual percentage changes; annual data)



Sources: Eurostat and ECB calculations.

during this period than during the relatively more marked slowdown in economic activity in the early 1990s.<sup>1</sup> However, it is important to note that it is difficult to distinguish clearly between a possible cyclical decline and other short-term movements in hours worked, including working-day effects and reductions in average working hours in some euro area countries. Therefore, conclusions about the role of hours worked during the recent period of slow growth remain somewhat tentative.

Developments in the estimate of total hours worked suggest that firms may have gained more flexibility to reduce costs by adjusting hours worked in the course of the 1990s. Anecdotal evidence supports the view that firms have adjusted hours worked per person employed in a number of ways. The regulatory framework for annual hours worked in the euro area is governed by legislation and, within this framework, the details of a specific scheme are normally set at the company level – often through collective agreements. According to the European Industrial Relations Observatory (EIRO),<sup>2</sup> major general cuts in weekly hours worked have been rare in recent years, while smaller reductions have been negotiated at the firm level. These agreements relate mostly to cuts in weekly working hours, reductions of annual working hours and/or the introduction of additional leave. Furthermore, flexible arrangements such as the annualisation of hours worked, allowing working time to be calculated and scheduled flexibly over the year, are becoming more widely used. In general, these arrangements reduce the need for firms to adjust employment over the business cycle by shifting adjustment to hours worked per person employed, thus lowering costs associated with hiring and firing permanent full-time staff.

Looking forward, the possible downward adjustment of hours worked during the recent period of slow growth would imply that in the course of the recovery firms are likely to increase hours worked per person before increasing employment. Some recent evidence suggests that hours worked per person employed in the euro area have indeed been increasing since mid-2003. This rise in hours worked is expected to be followed by a gradual increase in employment.

1 The decline in hours worked per person employed since 2001 has been broadly based across most euro area countries, although it has been stronger in France due to the introduction of the 35-hour week. However, the main conclusions of the analysis remain even if France is excluded.

2 A tripartite monitoring agency, based on a network of research institutes, which monitors labour market developments in the European Union (for more information, see: [www.eiro.eurofound.eu.int](http://www.eiro.eurofound.eu.int)).

The estimate of hours worked shows a trend decline in hours worked per person employed over the 1990s, as well as evidence of cyclical changes in both total hours worked and employment (see chart). Based on correlations with activity over the past two decades, total hours worked are clearly procyclical. In addition, this evidence suggests that total hours worked appear to react somewhat faster to changes in economic activity than employment. With regard to the recent period of slow growth, there is some evidence that hours worked per person employed may have declined somewhat more

## 5 EXCHANGE RATE AND BALANCE OF PAYMENTS DEVELOPMENTS

### 5.1 EXCHANGE RATES

In September and early October 2004 the euro appreciated slightly against most major currencies. However, amid lingering uncertainty about the medium-term growth and inflation prospects in all major economic areas, the key exchange rates remained broadly within the ranges observed since May 2004, with economic news having only a temporary impact on exchange rate levels. The euro continued to depreciate moderately relative to the Swedish krona and the currencies of the three largest new EU Member States, particularly the Polish zloty.

#### US DOLLAR/EURO

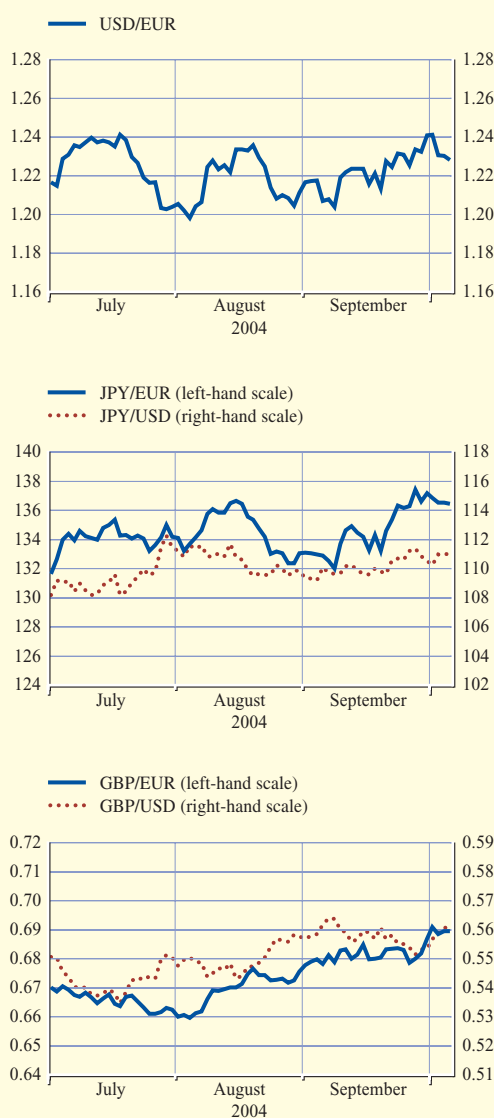
Having depreciated in the second half of August, the euro gradually appreciated somewhat vis-à-vis the US dollar during most of September (see Chart 24). During this period indications of moderating inflationary pressures in the United States contributed to a decline in US bond yields and may have exerted some downward pressure on the US currency. Other economic data releases seemed, however, to have a rather limited impact on the US dollar/euro currency pair. In particular, data showing a further widening of the US current account deficit in the second quarter of 2004 had been widely anticipated – after the earlier monthly trade data releases had shown increasing trade deficits – and thus did not have a marked negative impact on the US currency. Similarly, the decision by the Federal Open Market Committee on 21 September to raise interest rates by 25 basis points had been well priced in by the market and therefore provided no lasting support for the US currency. In early October the US dollar appreciated slightly against all major currencies. On 6 October the euro stood at USD 1.23, 1.4% stronger than its end-August level and 8.6% higher than its 2003 average.

#### JAPANESE YEN/EURO

In September the euro also appreciated somewhat against the Japanese yen (see Chart 24). At the same time, the Japanese currency remained broadly stable vis-à-vis the US dollar. Data released in September suggesting a slowdown in Japanese industrial production and an increase in the Japanese unemployment rate may have had a negative impact on market sentiment regarding the yen. These pressures

Chart 24 Patterns in exchange rates

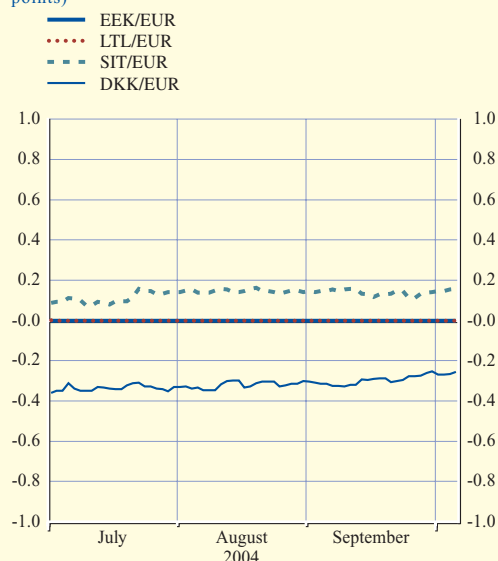
(daily data)



Source: ECB.

**Chart 25 Patterns in exchange rates within ERM II**

(daily data; deviation from central parity in percentage points)



Source: ECB.

Note: A positive/negative deviation from the central parity implies that the currency is at the weak/strong side of the band. For the Danish krone the fluctuation band is  $\pm 2.25\%$ ; for all other currencies the standard fluctuation band of  $\pm 15\%$  applies.

were further accentuated by the temporary decline in Japanese equity prices observed in the second half of September, a decline which occurred despite relatively favourable developments in corporate profitability and confidence in Japan. Towards the end of the period under review, however, the Japanese currency appreciated with the release of a relatively positive Tankan business survey index, that survey also contributing to a recovery in stock prices. On 6 October the euro was quoted at JPY 136.5, 2.6% stronger than its end-August level and 4.2% higher than its 2003 average.

#### EU MEMBER STATES' CURRENCIES

In ERM II, the Danish krone and the Slovenian tolar continued to move within narrow ranges close to their respective central parities (see Chart 25). The Estonian kroon and the Lithuanian litas remained unchanged relative to their central parities, in line with the unilateral commitments made by Estonia and Lithuania to maintain currency board arrangements within the standard ERM II fluctuation bands.

The euro also appreciated moderately against the pound sterling in September and early October (see Chart 24). The weakening of the pound over this period continued to be associated primarily with more moderate market expectations regarding the future pace of monetary tightening in the United Kingdom against the background of market perceptions that increases in house prices had possibly slowed down over the past few months. On 6 October the euro traded against the pound sterling at GBP 0.69, 2.1% higher than its level at the end of August and close to its 2003 average. In September the euro depreciated vis-à-vis the Swedish krona, the Polish zloty, the Czech koruna and the Hungarian forint. The euro appreciated relative to the Latvian lats, while it remained broadly unchanged against the Cyprus pound, the Slovak koruna and the Maltese lira.

#### OTHER CURRENCIES

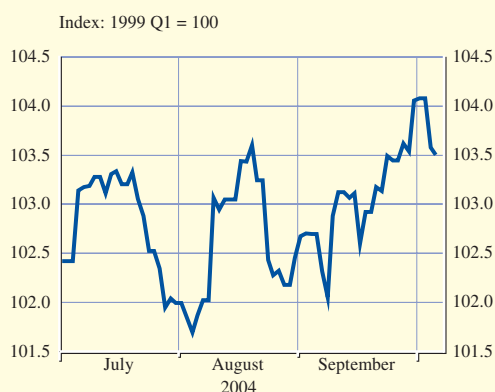
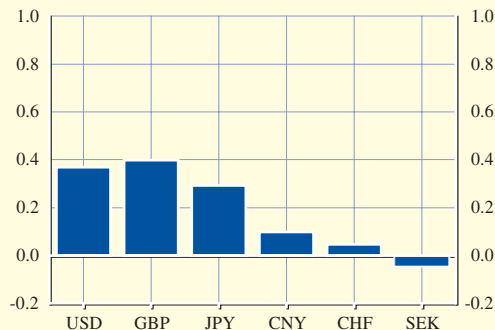
The euro appreciated slightly vis-à-vis the Swiss franc, while it depreciated against the Canadian dollar and the Norwegian krone, which benefited from the continued rise in oil prices and the relatively high level of non-oil commodity prices. At the same time, the euro appreciated not only against the Asian currencies directly linked to the US dollar – such as the Chinese renminbi and the Hong Kong dollar – but also against the South Korean won.

#### EFFECTIVE EXCHANGE RATE OF THE EURO

On 6 October the nominal effective exchange rate of the euro – as measured against the currencies of 23 of the euro area's most important trading partners – was 1% higher than its end-August level and 3.6% higher than its average level in 2003 (see Chart 26). The overall appreciation of the euro in effective terms in September was mainly a reflection of its strength against the US dollar, the pound sterling and the Japanese yen (i.e. currencies with considerable relative weight in the

**Chart 26 Euro effective exchange rate and its decomposition<sup>1)</sup>**

(daily data)

**Contributions to EER changes<sup>2)</sup>**From 31 August to 6 October 2004  
(in percentage points)

Source: ECB.

1) An upward movement of the index represents an appreciation of the euro against the currencies of 23 major trading partners of the euro area.

2) Contributions to EER-23 changes are displayed only for the currencies of the six main trading partners of the euro area. Changes are calculated using the corresponding overall trade weights in the EER-23 index.

trade-weighted effective exchange rate basket), which was partly counterbalanced by its moderate depreciation against the currencies of commodity exporting countries and some new EU Member States.

## 5.2 BALANCE OF PAYMENTS

In July the value of exports of goods grew by 0.7% compared with the previous month, while imports rose by 1.1%, partially on account of rising oil prices. Taking a longer-term perspective, the 12-month cumulated current account surplus has been rising continuously since the end of 2003, mainly reflecting strong export growth resulting from robust foreign demand. In the financial account, large net outflows in combined direct and portfolio investment were recorded in the 12-month period to July 2004. However, net outflows in cumulated portfolio investment have been declining since the second quarter of 2004, possibly as a result of the improved economic performance of the euro area.

## CURRENT ACCOUNT AND TRADE

In July 2004 the seasonally adjusted euro area current account registered a surplus of €1.8 billion (corresponding to a €3.1 billion surplus in non-seasonally adjusted terms). This mainly reflected a surplus in goods, which was only partially offset by a deficit for current transfers, while services and the income account were virtually in balance (see Table 7.1 of the “Euro area statistics” section). In

comparison with the previous month, the current account surplus increased by €1.4 billion, primarily on account of a fall (of €4.2 billion) in the income deficit, which was partly offset by a decrease (of €1.2 billion) in the services surplus and an increase (of €1.3 billion) in the deficit for current transfers.

In July the value of exports of goods grew by 0.7% compared with the previous month, partly reflecting strong foreign demand, while imports rose by 1.1%, boosted by rising oil prices and supported by the ongoing growth in euro area demand. By contrast, exports of services fell significantly over the same period, while imports of services declined by a smaller amount. Accordingly, the three-month moving average for the value of exports of goods and services flattened out in July, while imports of goods and services continued to show robust growth (see Chart 27).

**Chart 27 Euro area exports and imports of goods and services**

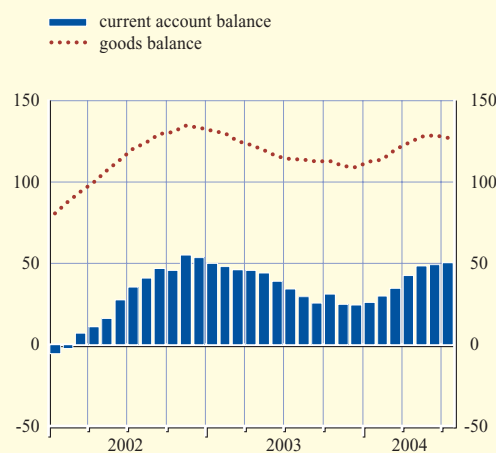
(EUR billions; three-month moving averages; seasonally adjusted)



Source: ECB.

**Chart 28 The euro area current account and goods balances**

(EUR billions; monthly data; seasonally adjusted; 12-month cumulated data)



Source: ECB.

Taking a longer-term perspective, the 12-month cumulated current account surplus of the euro area has been rising continuously, from a low of around €24 billion at the end of 2003 to €50.1 billion in July 2004 (see Chart 28). Developments in the goods surplus and in the income account have been the main factors behind this increase. In the 12-month period to July 2004 the cumulated value of extra-euro area exports and imports rose by 4.2% and 3.3% respectively in comparison with the previous 12 months. While the rise in import figures was partly on account of higher oil prices, strong foreign demand was a key factor in the expansion in exports. A detailed description of the geographical composition of euro area foreign demand over a longer horizon is provided in Box 2. In the 12-month period to July 2004 the cumulated income deficit decreased by €15.8 billion, primarily as a result of a decline in income payments.

Looking at the breakdown of trade flows into volumes and prices – based on Eurostat’s external trade statistics up to June 2004 – the increase in export values observed in the second quarter of 2004 seems to be due to a rise in both export volumes and prices (see Table 7.3 of the “Euro area statistics” section). The rise in export volumes is consistent with the strong foreign demand observed in the second quarter, which may also partly explain the rise in export prices recorded over this period. Indeed, euro area exporters may have taken advantage of favourable demand conditions to increase their prices and their profit margins, which had been declining since the second quarter of 2002, when the euro started to appreciate. Meanwhile, the rise in import values recorded in the second quarter of 2004 seems to have been due predominantly to a rise in import prices. Those price increases were largely attributable to a rise in the price of oil in US dollar terms, a rise compounded by the moderate depreciation of the euro against the dollar over this period.

### FINANCIAL ACCOUNT

Combined direct and portfolio investment recorded net outflows of €38.7 billion in July 2004. In particular, the euro area registered relatively large net outflows (totalling €30.5 billion) in portfolio investment, primarily reflecting net outflows (of €36.7 billion) in debt instruments, which were only partially counterbalanced by net inflows (of €6.2 billion) in equity securities.

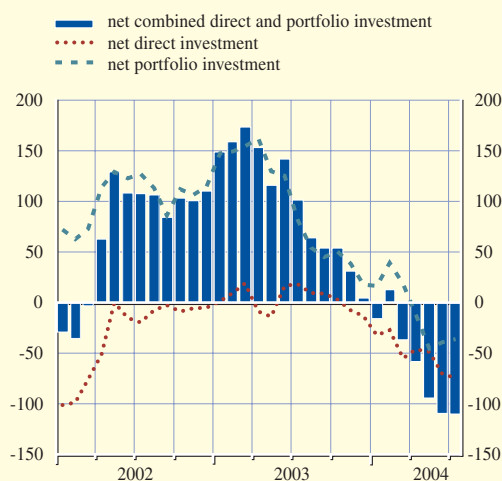
Net outflows in debt instruments were mainly related to the net acquisition of foreign debt securities by euro area residents, which totalled €30.1 billion. Direct investment recorded net outflows of €8.3 billion in July, reflecting net outflows in both equity capital – particularly on account of euro area investment abroad – and the category “other capital” (which mostly comprises inter-company loans).

In the 12-month period to July 2004 cumulated net combined direct and portfolio investment showed net outflows of €110.1 billion, compared with net inflows of €101.2 billion a year earlier. Net cumulated outflows in combined direct and portfolio investment prevailed for the fifth consecutive month in July. Those developments over the 12 months to July 2004 were accounted for by a reversal of a similar magnitude in portfolio and in direct investment, with both moving from net inflows to net outflows (see Chart 29). The shift in net direct investment stemmed mainly from a gradual decline in direct investment inflows into the euro area (from €140.9 billion to €33.8 billion), while euro area direct investment abroad remained relatively stable over that period. The shift in portfolio investment was largely the result of a decrease (of €90.4 billion) in net purchases of euro area debt instruments by non-residents and, to a lesser extent, an increase (of €73.5 billion) in the net acquisition of foreign equity securities by euro area residents.

Overall, cumulated portfolio investment continues to record net outflows, although these have been declining since the second quarter of 2004, possibly as a result of the improved economic performance of the euro area. Moreover, given the reduction in geopolitical uncertainty after the war in Iraq, the rebalancing of international portfolios seen since mid-2003, specifically in fixed-income securities, may now gradually be coming to an end.

**Chart 29 Net direct and portfolio investment flows**

(EUR billions; 12-month cumulated data)



Source: ECB.

Note: A positive (negative) number indicates a net inflow (outflow) into (out of) the euro area.

## Box 2

### THE GEOGRAPHICAL COMPOSITION OF EURO AREA FOREIGN DEMAND

This box briefly reviews developments in the value of extra-euro area exports of goods over recent years and describes changes in the composition of euro area foreign demand.<sup>1</sup>

Euro area exports to non-Japan Asia and the new EU Member States have been particularly buoyant over the past few years, with annual growth rates averaging between 5% and 10% in

<sup>1</sup> The measure of euro area foreign demand referred to in this box is defined as a weighted geometric average of the imports of extra-euro area trading partners. The weights used for each country/region are based on bilateral trade flows.



value terms (see Chart A). Exports to China have grown even more rapidly, with growth rates ranging between 10% and 25% from 2002 to the beginning of 2004. However, total extra-euro area exports decreased by 2.6% in 2003. In particular, exports to the United States, Japan and the United Kingdom decreased by 9.8%, 5.7% and 6.2% respectively. These developments reflect the effects of the euro appreciation that began in the second quarter of 2002 and the muted demand for imports observed in these countries in the second half of 2002 and the first half of 2003.

Despite the decline in exports to the United States, Japan and the United Kingdom in 2003, euro area exports have benefited from the more dynamic growth of import demand in other regions. In particular, non-Japan Asia and the new Member States have contributed positively to euro area exports since 2001, thereby partly offsetting the decreases observed in exports to other regions (see Chart B), especially in 2003. More recently, euro area exporters have taken advantage of the strong recovery in foreign demand witnessed across most export markets from the second half of 2003 onwards.

As a result, the geographical composition of extra-euro area exports has changed slightly in the past few years. The most striking development concerns the growing share of the new EU Member States, which now account for more than 11% of extra-euro area exports; in the second half of the 1990s they accounted for less than 9% on average. Overall, the share of euro area exports to non-euro area EU countries increased from 34.4% in the second half of the 1990s to 35.4% in 2003. The United Kingdom accounted for more than half of such demand in 2003 (making up 18.3% of total foreign demand), while the new Member States accounted for almost one-third. The United States, non-Japan Asia and Switzerland were the other main trading partners of the euro area (making up 15.7%, 13.2% and 6.0% of total foreign demand respectively).

Although non-Japan Asia's share has remained broadly constant (between 12% and slightly above 13%), its composition has changed considerably. China currently absorbs almost one-quarter of euro area exports to this region, while it accounted for roughly one-sixth in the second half of the 1990s. The significant increase in the Chinese weight has been at the expense of the ASEAN countries, whose weight in euro area exports to non-Japan Asia has decreased

#### Shares in euro area foreign demand

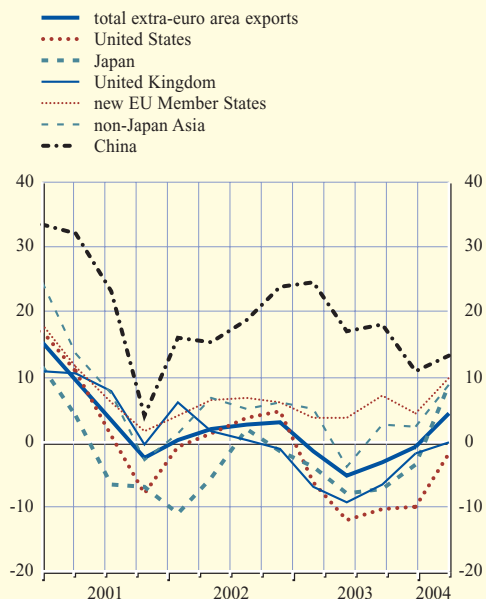
(in percentages)

	1995-2000	2001	2002	2003
United States	14.7	17.0	17.0	15.7
Japan	3.6	3.2	3.1	3.0
Non-euro area EU countries	34.4	34.8	35.1	35.4
<i>of which</i> United Kingdom	18.8	19.0	19.0	18.3
Sweden	4.0	3.5	3.4	3.6
Denmark	2.6	2.3	2.3	2.4
New EU Member States	8.9	10.0	10.3	11.1
Switzerland	6.8	6.2	5.9	6.0
Non-Japan Asia	13.0	12.3	12.7	13.2
<i>of which</i> ASEAN	3.8	3.2	2.9	2.8
China	1.9	2.4	2.8	3.3
Other countries	27.6	26.4	26.3	26.7
Total extra-euro area trade	100.0	100.0	100.0	100.0

Sources: Eurostat, ECB calculations (on the basis of values in EUR billions).

**Chart A Euro area export growth to selected partners**

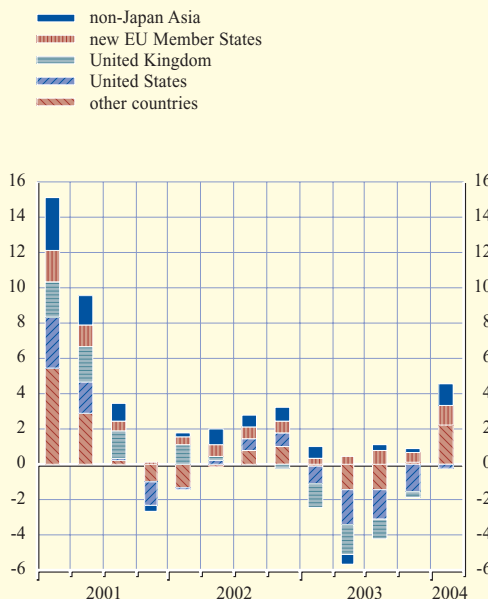
(annual percentage changes)



Sources: Eurostat, ECB calculations.

**Chart B Contribution of selected partners to euro area exports**

(percentage points)



Sources: Eurostat, ECB calculations.

from one-third to one-fifth over the same period. Hence, in 2003 China accounted for 3.3% of euro area foreign demand, while it represented less than 2% on average in the second half of the 1990s. Over the same period the share of ASEAN countries decreased from 3.8% to 2.8%.





## ARTICLES

### MONETARY ANALYSIS IN REAL TIME

*The primary objective of the ECB is to maintain price stability in the euro area. In both theoretical and empirical economic literature, it is widely recognised that the money stock and the price level are closely related in the long run. Given that inflation is thus a monetary phenomenon over the medium to long term, the ECB has assigned a very important role to money in its monetary policy strategy. Cross-checking with economic analysis, monetary analysis thereby contributes significantly to the decision-making process of the Governing Council of the ECB and to the ECB's monetary policy.*

*This article illustrates how tools developed and used by ECB staff and others have been employed over recent years to identify the monetary signals concerning risks to future price stability. Undertaking such analysis has proved challenging, since the exceptional economic, financial and geopolitical uncertainties between 2001 and 2003 affected short-run monetary dynamics and thus complicated the extraction of signals regarding risks to price stability from monetary developments. Nevertheless, using a combination of institutional and model-based analyses, it has been possible to assess in real time the implications of monetary developments for future price changes.*

#### I INTRODUCTION

Many empirical studies have demonstrated that monetary developments contain information relevant for the assessment of medium to longer-term risks to price stability.<sup>1</sup> As a result, in October 1998 a prominent role was assigned to money in the ECB's monetary policy strategy.<sup>2</sup>

At the time, empirical analyses of the euro area relied on "synthetic" data constructed from national statistics. Because the euro area was an entirely new economic entity, no genuine euro area time series existed. Euro area data now span a period of more than five years – still a short sample for analytical purposes, but nonetheless sufficient to develop an insight into the behaviour of the new area-wide economy.

Exploiting the available data and, more generally, using the experience of implementing monetary policy in the euro area since 1999, the Governing Council of the ECB undertook an evaluation of its monetary policy strategy in May 2003.<sup>3</sup> One aspect of this evaluation was an assessment of the role played by monetary analysis. A number of empirical studies were undertaken.<sup>4</sup> Moreover, recent developments in literature on money and monetary policy were reviewed.<sup>5</sup> The evaluation confirmed the very important role of money in the ECB's monetary

policy strategy. The Governing Council clarified that monetary analysis is used, from a medium to longer-term perspective, to cross-check the assessment of short to medium-term risks to price stability obtained from the economic analysis (which focuses on shorter-term cost developments and demand-supply imbalances).

This cross-checking is an essential feature of the ECB's monetary policy strategy. It helps to ensure that the Governing Council, in forming its overall judgement of the risks to price stability, does not overlook important information concerning future price trends. All complementarities between the monetary analysis and the economic analysis are

- 1 For a review, see G. T. McCandless and W. E. Weber (1995), "Some monetary facts", Federal Reserve Bank of Minneapolis, Quarterly Review 19 (3), pp. 2-11, and M. A. King (2002), "No money, no inflation – the role of money in the economy", Bank of England, Quarterly Bulletin, Summer 2002, pp. 162-177.
- 2 See "A stability-oriented monetary policy strategy for the ESCB", ECB press release, 13 October 1998, and "The stability-oriented monetary policy strategy of the Eurosystem", Monthly Bulletin, January 1999, pp. 39-50.
- 3 See "The outcome of the ECB's evaluation of its monetary policy strategy", Monthly Bulletin, June 2003, pp. 79-92.
- 4 For a review of these studies, see O. Issing (2003), "Background studies for the ECB's evaluation of its monetary policy strategy", ECB, Frankfurt am Main.
- 5 As part of this exercise, the renewed academic interest in the relationship between monetary developments and asset prices was also critically surveyed (see the box entitled "The link between asset prices and monetary developments", Monthly Bulletin, September 2004, pp. 20-21).

exploited to ensure that the broadest possible set of information is used in a consistent and efficient manner. This approach stimulates a deeper understanding of the overall economic situation and reduces the risk of policy mistakes caused by over-reliance on a single indicator, forecast or model. Such an approach enhances the robustness of the ECB's monetary policy in an inevitably uncertain environment. Moreover, by giving appropriate consideration to monetary analysis in the policy-making process, the cross-checking also guarantees that monetary policy maintains a firm medium-term orientation.

Implementing such cross-checking in practice is typically a challenging exercise. Short-run monetary developments are often affected by transitory shocks. Similarly, price developments at short horizons are strongly influenced by many non-monetary phenomena. Therefore, the short-run relationship between monetary developments and inflation is complex. Recognising this complexity, the Governing Council has always emphasised that monetary policy does not react mechanically to monetary developments, but rather responds to the information in monetary aggregates that is relevant for the maintenance of price stability over the medium term. Monetary analysis must therefore be able to see through the noise in the monetary data to recover those underlying trends which are relevant for monetary policy decisions. The challenge for monetary analysis is thus to extract the signal contained in monetary developments regarding medium to longer-term inflationary risks.

Meeting this challenge has not been straightforward in recent years. The protracted decline in stock market indices after spring 2000 and the exceptionally high financial, economic and geopolitical uncertainty between 2001 and 2003 blurred the underlying signal from money regarding the outlook for price developments. Nonetheless, through the application of a thorough institutional analysis<sup>6</sup> and a variety of statistical and econometric techniques, the ECB has been able to identify

the main drivers of monetary developments in real time and to extract information about risks to price stability of relevance for monetary policy decisions.

Against this background, this article illustrates some major elements of the monetary analysis conducted within the ECB over recent years. Due to space constraints and for expositional convenience, the article does not attempt to be fully comprehensive. It focuses mainly on the analysis of developments in M3 and, in particular, on some of the methods used to extract signals in M3 developments regarding risks to price stability. Other important elements of the monetary analysis are not covered in detail.

The remainder of the article consists of five sections. First, a brief overview of monetary developments since 1999 is presented. Second, these developments are analysed using conventional money demand models. Third, several measures of underlying monetary dynamics are constructed in an attempt to capture those M3 developments that are most likely to embody risks to future price stability. Fourth, some of these measures of underlying monetary developments are used to construct a scenario-based assessment of the risks to future price stability stemming from the monetary analysis. Finally, some brief concluding remarks are offered.

## 2 REVIEW OF MONETARY DEVELOPMENTS SINCE 1999

In the first year of EMU, annual M3 growth hovered somewhat above the ECB's reference value of 4½% for monetary growth, despite the very strong growth of loans granted by monetary financial institutions (MFIs) to the private sector at that time (see Chart 1). In

<sup>6</sup> The institutional analysis is defined here as the analysis of monetary developments that combines information from a number of sources such as MFI balance sheet items, components and counterparts of M3, financial accounts data, balance of payments data and financial data. This analysis is to an important extent based on judgement.

retrospect, it appears that euro area residents were borrowing heavily in order to finance investment in or acquisitions of foreign companies at the height of the “New Economy” boom in the United States. This boom reached its peak in early 2000. From that point onwards, loans to the private sector moderated and M3 growth declined modestly, falling below the reference value in mid-2000.

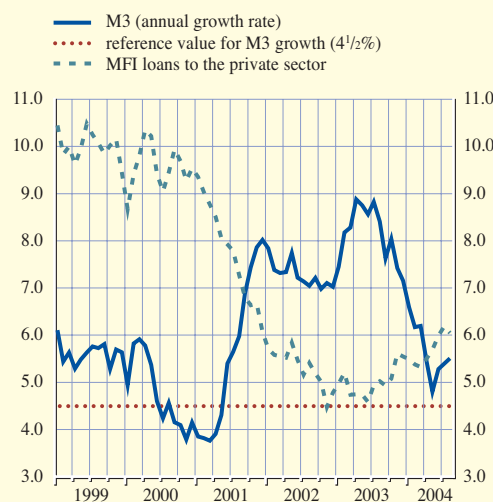
After declining between the spring of 2000 and early 2001, the annual growth rate of M3 rose significantly from April 2001, reaching levels well above the ECB’s reference value for monetary growth. At the time, it was noted that this upswing in monetary growth initially reflected an equilibrating process, since monetary growth had been relatively weak in the preceding period.

However, with the benefit of hindsight, it appears that other factors were also at play, factors which became progressively more important over the subsequent months and quarters. These factors were recognised in the ECB’s analyses from mid-2001 onwards. Specifically, early 2001 marked the start of extraordinary portfolio shifts into M3, as the combination of declining equity prices and worsening economic conditions led to a rise in the demand for safe and liquid monetary assets. This process received a significant additional impetus in the aftermath of the terrorist attacks on 11 September 2001, which led to a considerable further rise in financial, economic and geopolitical uncertainty. By the end of 2001, the annual rate of M3 growth stood at close to 8%, more than twice the rate recorded at the start of the year.

The sharp increase in M3 growth in 2001 also had a significant impact on various measures of so-called “excess liquidity”. Excess liquidity can be defined as the deviation of the actual money stock from its estimated equilibrium level. Of course, the estimated stock of excess liquidity will depend crucially on how the equilibrium level of money is defined. Alternative methods of estimating the

**Chart 1 M3 growth, reference value and growth of MFI loans to the private sector**

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



Source: ECB.

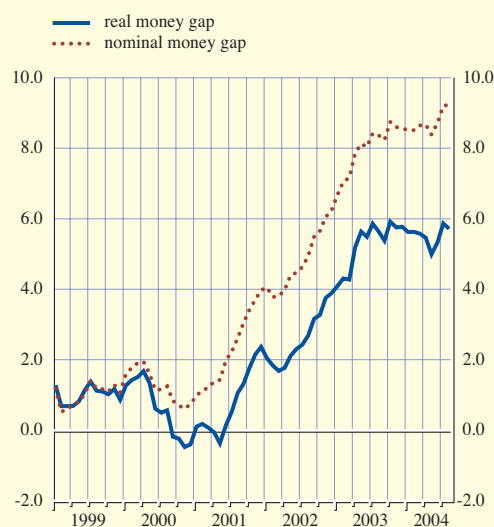
equilibrium stock of money will result in different measures of excess liquidity. Two specific measures of excess liquidity are monitored regularly at the ECB and published in the Monthly Bulletin, namely the nominal and the real money gap. The nominal money gap, which is typically shown in the Bulletin, is defined as the difference between the actual level of M3 and the level of M3 that would have resulted from constant M3 growth at its reference value of 4½% since December 1998. The real money gap corrects the nominal money gap for the accumulated deviation of inflation from the ECB’s definition of price stability. In calculating measures of excess liquidity in this way, it should be recognised that the choice of December 1998 as the base period is arbitrary. The level of the gap measures therefore has to be interpreted with caution.<sup>7</sup>

Both the nominal and the real money gap measures rose sharply in the course of 2001, starting an upward trend that continued over the

<sup>7</sup> For a discussion of these measures, see “Framework and tools of monetary analysis”, Monthly Bulletin, May 2001, especially pp. 48-50, and the box entitled “Estimates of the nominal and real money gap in the euro area”, Monthly Bulletin, June 2001, pp. 9-10.

## Chart 2 Estimates of the nominal and real money gaps

(as percentages of the stock of M3; adjusted for seasonal and calendar effects; December 1998 = 0)



Source: ECB.

Note: The measure of the nominal money gap is defined as the difference between the actual level of M3 and the level of M3 that would have resulted from constant M3 growth at its reference value of 4½% since December 1998 (taken as the base period). The measure of the real money gap is defined as the difference between the actual level of M3 deflated by the HICP and the deflated level of M3 that would have resulted from constant nominal M3 growth at its reference value of 4½% and HICP inflation in line with the ECB's definition of price stability, again taking December 1998 as the base period.

ensuing two years (see Chart 2). However, the two measures rose to different extents. The nominal money gap reached a level of almost 9% in the summer of 2003 and, after stabilising, increased further in July 2004, while the real money gap reached 6% in late 2003. These differences beg the question of which measure is the more relevant estimate of excess liquidity. The real money gap takes into account the fact that part of the excess liquidity accumulated over the past few years has, in the meantime, been absorbed by higher prices, reflecting upward deviations of inflation rates from the ECB's objective of price stability.

In this respect, it is important to recall that the shocks to euro area inflation between 2000 and 2004 (such as those stemming from oil and food price increases) were mainly one-off in nature. To the extent that these shocks were not

followed by significant second-round effects, the real money gap should, in principle, be regarded as a more appropriate indicator of recent risks to future price stability.

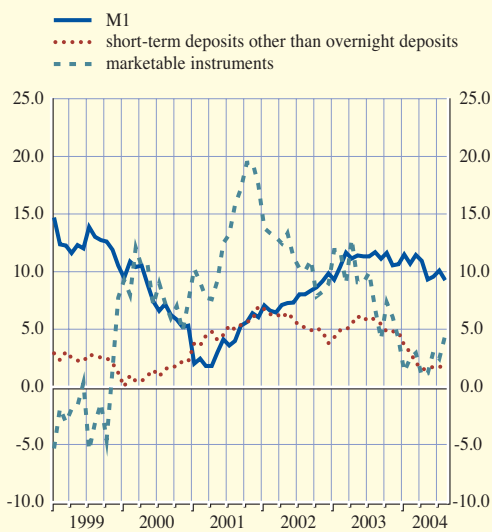
Although tentative signs of a moderation in monetary growth were observed in the first few months of 2002, following a temporary recovery in the equity market, M3 subsequently accelerated again as equity prices resumed their fall and financial uncertainty increased further. In early 2003 these factors were compounded by rising geopolitical tensions in the Middle East. In the spring and summer of 2003, the annual growth rate of M3 fluctuated around 8½%. Given the prevailing low level of inflation, the first half of 2003 represents one of the periods of most rapid money creation in real terms over the last thirty years. Moreover, the strong monetary growth during this period added considerably to the stock of excess liquidity in the euro area, as measured by both the nominal and the real money gaps.

Developments in the components and counterparts of M3 supported the view that the increase in monetary growth in 2001 was associated with extraordinary portfolio shifts into money. First, on the components side, marketable instruments in general, and money market fund shares/units in particular, grew rapidly during this period (see Chart 3). These components are often used by firms and households to store funds temporarily in a safe and liquid form at times of heightened uncertainty. Second, on the counterparts side, MFIs' net external assets rose significantly between 2001 and 2003. Since this counterpart reflects transactions between the euro area money-holding sector and non-residents, the rise observed in MFIs' net external assets was consistent with reduced purchases of foreign securities by euro area residents and thus with portfolio shifts by the money-holding sector out of riskier instruments and into money (see Box 1).

Although extraordinary portfolio shifts into M3 played a dominant role in driving strong

Chart 3 Main components of M3

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



Source: ECB.

monetary growth from 2001 to 2003, other factors also supported the strength of M3 dynamics. Concerns about future labour market prospects appear to have led to an increase in the precautionary demand for money. Moreover, after a series of reductions in key

ECB interest rates between May 2001 and June 2003, M3 growth was also fuelled by the historically low level of interest rates in the euro area and, hence, of the low opportunity costs of holding money. The latter phenomenon influenced in particular the demand for the most liquid components of M3. As a result, the narrow aggregate M1 became a very important contributor to monetary growth.

In the summer of 2003, annual M3 growth started to moderate, a process which continued through the rest of the year and into 2004. The portfolio shifts into monetary assets halted and then began to unwind as economic and financial uncertainty receded in the context of a gradual recovery of economic activity in the euro area. However, this moderation in monetary growth proceeded more slowly than would have been expected on the basis of prior experience, as the liquidity preference of euro area firms and households remained strong. It is possible that the experience of significant capital losses in equity markets from 2000 has permanently raised the risk aversion of euro area households and thus increased their preference for liquidity. Despite the moderation of monetary growth, the nominal and real money gaps merely stabilised in the second half of 2003.

## Box 1

### WHAT WERE THE COUNTERPARTS TO THE EXTRAORDINARY PORTFOLIO SHIFTS INTO MONETARY ASSETS BETWEEN 2001 AND 2003?

From 2001 to 2003, the money-holding sector in the euro area (essentially households, non-financial corporations and non-monetary financial corporations) shifted funds from longer-term securities into monetary assets. As discussed in the main text, these extraordinary portfolio shifts reflected an increased demand for safe and liquid monetary assets at a time of heightened economic, financial and geopolitical uncertainty.

If longer-term financial assets sold or issued by one entity in the money-holding sector are purchased by another entity in the money-holding sector, a transfer of money holdings *within that sector* takes place, leaving the aggregate money stock unchanged. Such transactions cannot therefore explain the overall increase in monetary growth seen between 2001 and 2003. To have an impact on monetary dynamics, transactions must involve transfers of money from the money-holding sector to *another sector*, either MFIs or non-residents. In order to understand these



transactions, additional information on the counterpart in the purchase of longer-term financial assets must be gathered.

To analyse the monetary implications of portfolio shifts, a monthly estimate of the *net purchases of non-monetary securities by the money-holding sector from MFIs and non-residents* is constructed below. While certain simplifying assumptions are necessary for statistical reasons, conceptually the construction of this estimate relies on the consolidated balance sheet identity of the money-holding sector, expressed in flow terms.

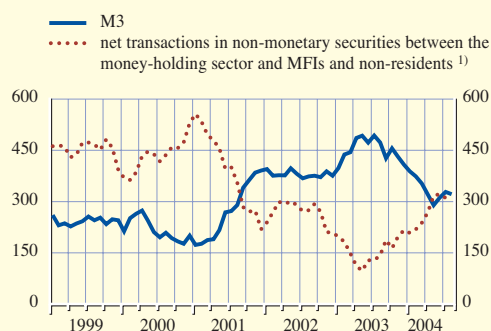
This estimate of the net purchases by the money-holding sector of non-monetary securities from MFIs and non-residents is shown in Chart A, together with the annual flows into M3. The strong negative correlation between these two series illustrated in the chart confirms the existence of sizeable shifts between holdings of non-monetary securities and M3 in the portfolio of the money-holding sector in recent years.

Solely by analysing this estimate of the money-holding sector's purchases of non-monetary securities it is not possible to distinguish whether MFIs or non-residents were the main counterparts for the transactions underlying portfolio shifts into monetary assets. In order to address this issue, it is necessary to distinguish the net securities transactions of the money-holding sector with MFIs on the one hand and non-residents on the other. The latter transactions are encompassed in MFIs' net external assets.

Chart B shows a strong correlation between the evolution of the net securities transactions of the money-holding sector with non-residents, as reflected in the MFIs' net external assets, and the overall net purchases of non-monetary securities since the middle of 2001. This correlation suggests that non-residents have been the main counterparts of the portfolio shifts from non-monetary securities into money over recent years.

**Chart A M3 and net purchases of non-monetary securities by the consolidated money-holding sector**

(annual flows; € billions)

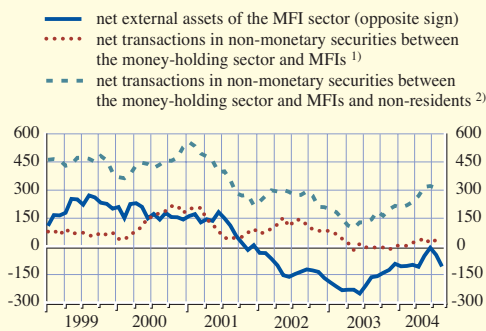


Source: ECB, ECB calculations.

1) Calculated as loans to euro area residents plus issuance of securities by the consolidated money-holding sector plus current account balance minus instruments included in M3, minus long-term deposits with MFIs and net external transactions of the money-holding sector other than in securities.

**Chart B Net purchases of non-monetary securities by the consolidated money-holding sector by counterpart sector**

(annual flows; € billions)



Source: ECB, ECB calculations.

1) Calculated as long-term financial liabilities issued by MFIs and held by the money-holding sector except long-term deposits minus securities issued by euro area residents purchased by MFIs.

2) See footnote 1 to Chart A.

The counterparts analysis presented in this box is one example of how the transactions underlying the portfolio shifts into money that have been observed in recent years may be investigated more deeply. The analysis reveals that M3 dynamics have been associated in large part with transactions involving non-residents, thereby focusing attention on international financial flows.

### 3 ASSESSING RECENT MONETARY DEVELOPMENTS USING CONVENTIONAL MONEY DEMAND MODELS

So far monetary developments have been examined in isolation. However, in order to develop a full picture, developments in money must be analysed in the context of other macroeconomic variables. Evidence on the behaviour of money relative to other macroeconomic variables can be derived using money demand models. Conventional money demand models explain the dynamics of monetary aggregates on the basis of developments in fundamental determinants, such as the price level, economic activity and interest rates. Money demand models constitute a natural benchmark against which to assess monetary developments. In particular, they provide a framework to distinguish between those changes in M3 that can be explained on the basis of developments in other macroeconomic variables (assuming that historical experience is a good guide to the present) and those changes in M3 which are specific to the situation at hand.

Tracking the evolution of actual M3 developments against the paths implied by estimated money demand models is an important component of the ECB's monetary analysis.<sup>8</sup> A number of such models are now available for the euro area.<sup>9</sup> Of course, these models only constitute a meaningful benchmark against which to compare observed monetary developments if they exhibit certain statistical properties, notably parameter stability. In order to check whether they meet this criterion, the ECB closely monitors the stability of various money demand models on an ongoing basis, using a variety of institutional analyses and statistical techniques.

The annex summarises an ECB study of long-run money demand stability from an econometric point of view. Keeping in mind the difficulties of detecting instabilities in economic time series relationships at the end of the sample period, the annex concludes that there are no clear indications as yet that the long-run money demand relationship in the euro area has broken down.

Analysis based on money demand models suggests that factors other than the traditional determinants of money have played a significant role in recent monetary dynamics. This is illustrated in Chart 4, which shows the residuals derived from a quarterly model of euro area money demand estimated by ECB staff.<sup>10</sup> The residuals should be interpreted as the changes in M3 that cannot be explained using the conventional determinants of money demand (i.e. real GDP, the price level and interest rates). Prior to 2001, the residuals are evenly distributed around zero and generally not very large. This suggests that, at the time, the estimated model provided a good explanation of M3 developments.

By contrast, the residuals of this model show a succession of relatively large positive values after mid-2001. In particular, following the terrorist attacks on 11 September 2001, a very

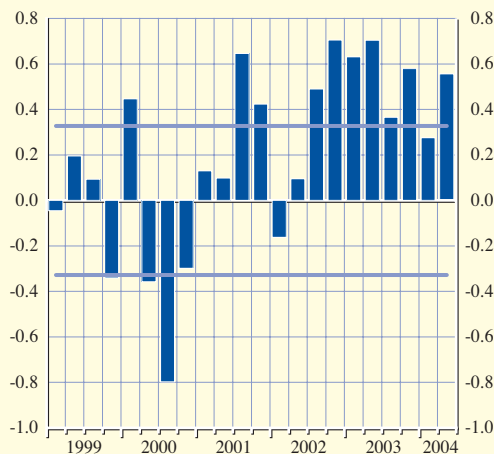
8 See "Framework and tools of monetary analysis", Monthly Bulletin, May 2001, especially pp. 42-47, and K. Masuch, H. Pill and C. Willeke (2001), "Framework and tools of monetary analysis", pp. 117-144 in H.-J. Klöckers and C. Willeke (eds.), "Monetary analysis: Tools and applications", ECB, Frankfurt am Main.

9 For a review of existing studies see O. Issing (2003), *op. cit.*

10 See A. Calza, D. Gerdesmeier and J. Levy (2001), "Euro area money demand: Measuring the opportunity costs appropriately", IMF working paper No 01/179. Given the potential instability of the short-run parameters of the money demand equation after the second quarter of 2001, the parameters have been kept fixed at the level estimated using a sample up to this quarter.

**Chart 4 Residuals of a euro area M3 demand model**

(percentage points)



Source: ECB.

Note: The residual is the difference between the observed value of M3 growth and the value of M3 growth predicted by the model (the "fitted value"). The lines denote one standard error confidence bands. Residuals are derived from the model presented in A. Calza, D. Gerdesmeier and J. Levy (2001), "Euro area money demand: Measuring the opportunity costs appropriately," IMF working paper No. 01/179.

large positive money demand shock was recorded in the third quarter of 2001. Although the residuals could not be distinguished from zero during the first half of 2002 as monetary growth stabilised temporarily,<sup>11</sup> a series of further positive residuals was recorded during the second half of 2002 and throughout 2003 as M3 growth increased again. The size of these residuals diminished in early 2004, suggesting a moderation in the exceptional factors that had contributed to the increase in M3 growth. This is consistent with the improvement in financial market conditions and the outlook for economic activity in the euro area, and with the associated normalisation of portfolio behaviour after mid-2003.

Further insights into the behaviour of money demand in the past few years can be drawn from a decomposition of the quarterly nominal rate of growth in M3 into the contributions stemming from each of the determinants of money demand. In quantitative terms, the contributions approximate the impact on

monetary growth of current and lagged developments of the various explanatory variables, such as output, prices and interest rates. Of course, such an exercise is model-specific, in that the contributions will depend on which explanatory variables are included in the model and the estimated parameter values. After completing this exercise, an "unexplained" component of monetary growth remains. This component embodies the impact of current and lagged unmodelled influences on money demand. As compared with Chart 4, the unexplained component can be regarded as the cumulative effect of all previous residuals to the money demand equation on the current quarter-on-quarter growth rate of M3.

Applying this decomposition technique to euro area money demand demonstrates that the rise in annualised quarter-on-quarter M3 growth after the third quarter of 2001 cannot be accounted for on the basis of increased contributions from the conventional determinants of money demand (see Chart 5). Indeed, developments in the traditional determinants suggest that M3 growth should have remained close to the reference value between 2001 and 2003, contrary to what has been observed. Thus, based on this simple exercise, the conclusion can be drawn that the strong monetary growth observed between mid-2001 and the summer of 2003 was entirely due to the impact of unmodelled – i.e. exceptional – factors.

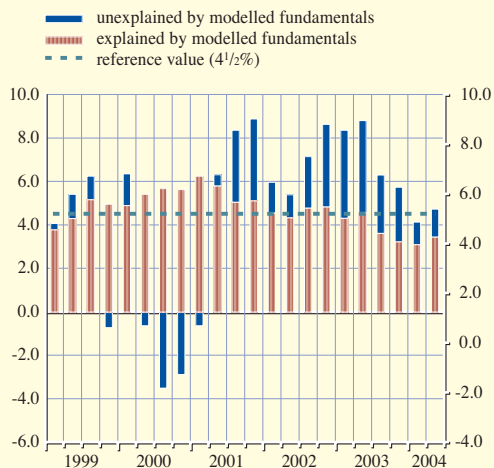
#### 4 DERIVING MEASURES OF UNDERLYING MONETARY DYNAMICS

The institutional analysis in Section 2 suggested that extraordinary portfolio shifts into money have strongly influenced monetary developments in recent years. The assessment based on money demand models in Section 3 confirmed that monetary growth in the same period cannot be explained using the conventional determinants of money demand. Against this background, a crucial element of

<sup>11</sup> The residuals fell into the one standard error confidence bands.

**Chart 5 Decomposition of quarterly nominal M3 growth in the euro area using a money demand model**

(annualised quarterly percentage changes)

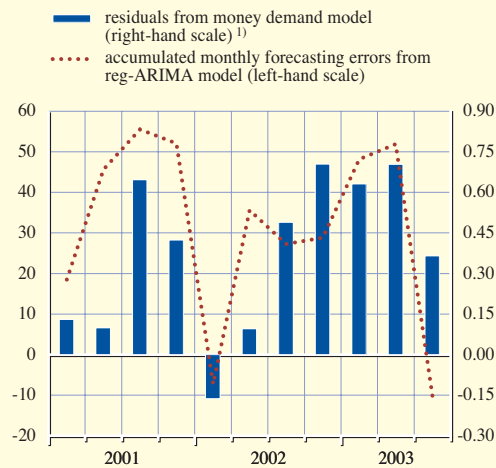


Source: ECB.

Note: Contributions are derived from the model presented in A. Calza, D. Gerdesmeier and J. Levy (2001), "Euro area money demand: Measuring the opportunity costs appropriately", IMF working paper No. 01/179.

**Chart 6 One-step-ahead forecasting errors from a univariate time series model and residuals from a money demand model**

(€ billions; percentage points)



Source: ECB.

1) See Chart 4.

any quantitative assessment of recent monetary developments and their implications for price stability is thus the estimation of measures of M3 corrected for the estimated impact of portfolio shifts.

Broadly speaking, two approaches are possible. First, one could attempt to smooth or filter the official M3 series so as to recover the underlying trend in monetary dynamics. This approach is discussed in Box 2 and is, in principle, quite general in nature. By using structural filters that take into account information from inflation, M3 growth and indicators of real activity, the box demonstrates that monetary growth mainly impacts inflation over the medium to longer term. This relationship holds even in periods where inflation is relatively low and does not show a clear trend. The application of the filter produces a smoothed M3 series, which should provide information on inflationary pressures at horizons relevant for monetary policy.

Alternatively, one could attempt to estimate the magnitude of portfolio shifts more directly

and to use these estimates to adjust the official series. Of course, by its nature, such an approach is specific to the particular circumstances associated with the portfolio shifts seen in recent quarters and relies more heavily on judgement and institutional analysis.

In pursuing the latter approach, a box in an earlier issue of the Monthly Bulletin has already provided some quantitative estimates of the magnitude of portfolio shifts.<sup>12</sup> A variety of techniques were presented on that occasion. In this article, only a simple univariate method of estimating the size of recent portfolio shifts is considered. This is based on the analysis of a univariate time-series model of M3, i.e. a model in which the current dynamics of M3 are explained on the basis of previous developments in M3.<sup>13</sup> The pattern of one-step-ahead forecast errors generated by the univariate model is similar to the residuals from

12 See the box entitled "Estimating the size of portfolio shifts from equity to money", Monthly Bulletin, May 2003, pp. 11-14.

13 See "Framework and tools of monetary analysis", Monthly Bulletin, May 2001, especially pp. 56-57, for further details of the model.

Box 2

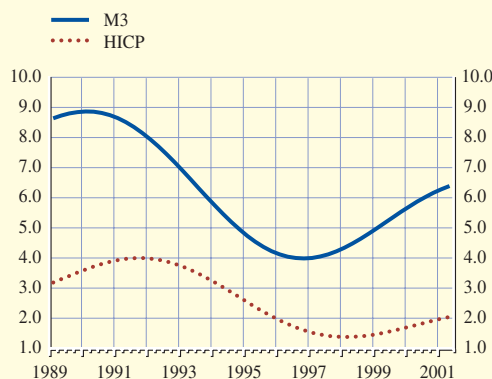
**THE USE OF SIMPLE STRUCTURAL FILTERS TO EXTRACT MONETARY SIGNALS CONCERNING RISKS TO FUTURE PRICE STABILITY**

Evidence of a positive relationship between monetary growth and inflation over longer horizons is widespread and robust. However, in the short run, transitory shocks to either money or inflation can obscure the signals concerning future price developments stemming from money. From a monetary policy perspective, it is important to identify those movements in M3 that are associated with longer-term inflationary pressures and discard other movements which constitute “noise”. Beyond the information obtained from various econometric models and detailed expert institutional analysis discussed in the main text, the use of a structural filter – a statistical procedure that identifies and extracts specific underlying components of time series dynamics – may serve as a useful complementary tool in identifying the risks to price stability associated with monetary developments.

A recent ECB study shows that medium to longer-term movements in monetary growth and inflation have been highly correlated within the period from 1986 to 2004 (see Chart A).<sup>1</sup> Moreover, the study demonstrates that indicators of real activity only provide additional information about inflation dynamics at business cycle frequencies (here defined as developments with a persistence of between one-and-a-half and eight years) and that the information from money at that frequency is rather modest (see Chart B). Finally, the study provides evidence confirming that there is no close relationship between monetary

**Chart A Longer-term components of HICP and M3**

(annual percentage changes)

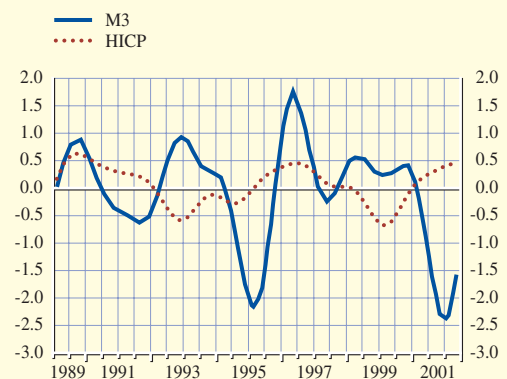


Source: ECB calculations.

Note: The longer-term components of inflation and M3 growth (defined as cycles with a length of above 8 years) were derived as residual using the difference between the observed series and the sum of the cyclical and the short-term components (see Charts B and C) using the symmetric version of the band-pass filter as described in Christiano, L.J. and T.J. Fitzgerald, (2003), “The Band Pass Filter,” *International Economic Review*, 44 (2), pp. 435-465.

**Chart B Cyclical components of HICP and M3**

(annual percentage changes)



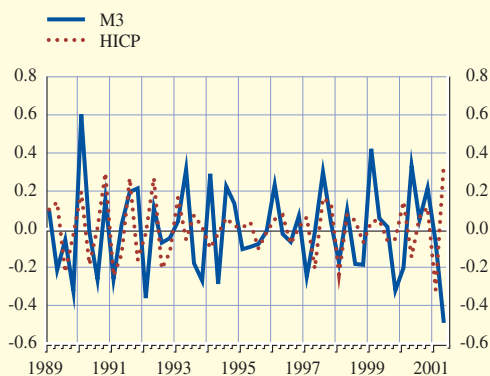
Source: ECB calculations.

Note: The cyclical components of inflation and M3 growth were derived using the Christiano-Fitzgerald band-pass filter (symmetric version) including all frequencies between 6 and 32 quarters. Technically, the application of such a filter results in a loss of data at the start and the end of the sample.

<sup>1</sup> See A. Bruggeman, G. Camba-Mendez, B. Fischer and J. Sousa (2004), “Structural filters for monetary analysis: inflationary movements of money in the euro area”, forthcoming ECB Working Paper. The sample period has been chosen because formal tests demonstrate that euro area inflation can be considered as stationary over this period.

**Chart C Short-term components of HICP and M3**

(annual percentage changes)

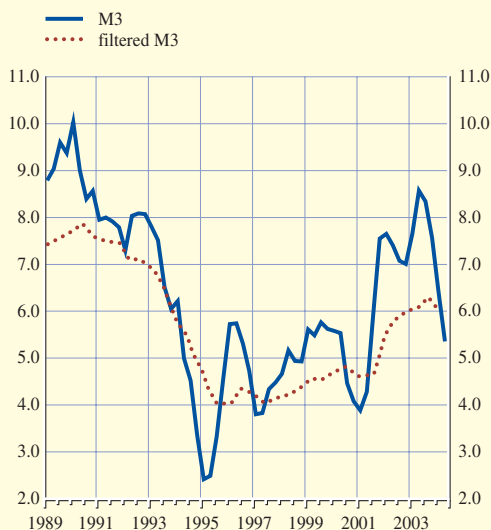


Source: ECB calculations.

Note: The short-term components of inflation and M3 growth were derived using the Christiano-Fitzgerald band-pass filter (symmetric version) including cycle lengths of below six quarters. Technically, the application of such a filter results in a loss of data at the start and the end of the sample period.

**Chart D M3 and filtered M3**

(annual percentage changes)



Source: ECB.

Note: The filtered series is based on the statistical procedure outlined in A. Bruggeman et al. (2004), "Structural filters for monetary analysis: Inflationary movements of money in the euro area", forthcoming ECB Working Paper.

developments and inflation in the short run (defined as developments with a persistence of less than one-and-a-half years) (see Chart C).

On the basis of these results, the study has attempted to extract those components of M3 growth that are linked to inflation using a simple model of monetary growth, inflation and real activity. In order to extract this information (i.e. to apply the statistical filter to the most recent data), it is necessary to construct forecasts of future money growth. Therefore, the quality of the filtered series hinges on the quality of the money forecasts and thus on the reliability of the forecasting model.

One estimate of "underlying" monetary growth constructed using this filtering procedure is shown in Chart D, together with the official M3 series. The filter smooths money growth considerably. For example, the strong portfolio shifts affecting M3 growth between 1993 and 1996 – which subsequently appear to have had no impact on inflation – are to a large extent removed by the filter from the underlying money growth series. Using the filtered series would have led to the exclusion of these developments from the analysis and thus given a more accurate impression of the inflationary risks stemming from monetary developments. As shown in the study, the proposed filtering methodology could have detected this result relatively well in real time, since it was possible to make sufficiently good forecasts of money growth.

Over the past few years, the estimated measure of underlying M3 growth that is linked to inflationary pressures again differed significantly from the growth rate of the official M3 series. The strong downward movements of M3 growth in 2000 and the strong increases between 2001 and 2003 are to a large extent smoothed out by the filtering procedure. Nonetheless, underlying M3 growth is currently clearly above the reference value of 4½%. It is noteworthy that the pattern of underlying monetary growth over the period

from 2001 to 2003 is broadly comparable to that of the M3 series corrected for the impact of portfolio shifts discussed in the main text. The similarity between these two series indicates that the general direction of the adjustments made to the official M3 series in the monetary analysis is appropriate.

These techniques demonstrate that longer-term movements in monetary growth and inflation are highly correlated. This applies even to the period between 1986 and 2004, when inflation did not exhibit a clear trend. Although they only constitute one additional tool in the monetary analysis, simple structural filters for money growth appear able to help identify and extract that component of monetary developments which has a persistent impact on price dynamics. However, the tools presented in this box should be seen as simple illustrations of the underlying techniques and the results therefore have to be assessed with caution. Nonetheless, the filtering techniques have the important advantage that they are general in nature rather than specific to a particular situation. As shown by the analysis of the most recent quarters, their most useful role may be in providing a robustness check for other tools that are designed for a specific set of circumstances.

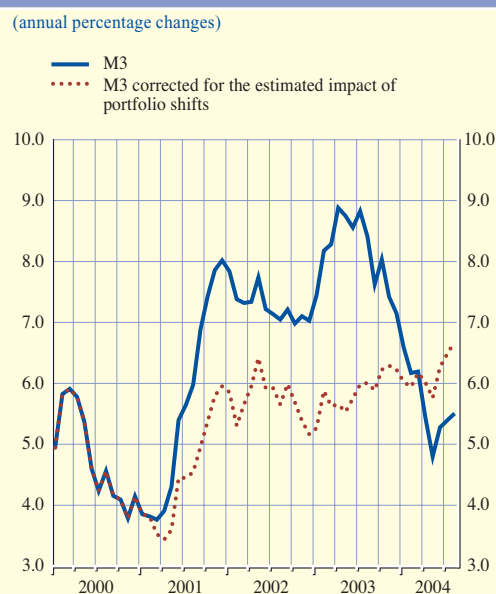
a money demand model. Specifically, there is a prolonged sequence of positive forecast errors with similar peaks for the period between 2001 and 2003 (see Chart 6).

A number of additional intervention variables (i.e. dummies and trends) aiming to capture the impact of portfolio shifts are introduced in the model. These intervention variables are constructed and calibrated on the basis of the institutional analysis. However, since the univariate model cannot, by its nature, distinguish the impact of portfolio shifts from the effects of other variables, such as the low level of interest rates, on monetary dynamics, and because the construction of the intervention variables is to some extent arbitrary, the resulting estimates of portfolio shifts should be interpreted with caution.

Chart 7 shows annual M3 growth for both the official M3 series and a measure of M3 corrected for the estimated impact of the extraordinary portfolio shifts on the basis of the univariate time series model. Divergences between the two growth rates were greatest in the last quarter of 2001 and the first half of 2003, corresponding to the two periods of greatest portfolio shifts identified by both the institutional analysis in Section 2 and the model-based analysis in Section 3. Nonetheless, it should be recognised that even the series corrected for the estimated impact of portfolio shifts has grown relatively

robustly, at annual rates close to 6% over the past few years. In the second quarter of 2004, the annual growth rate of the adjusted series has, for the first time in the period covered by Chart 7, grown more rapidly than the official series, consistent with a continuing unwinding of past portfolio shifts.

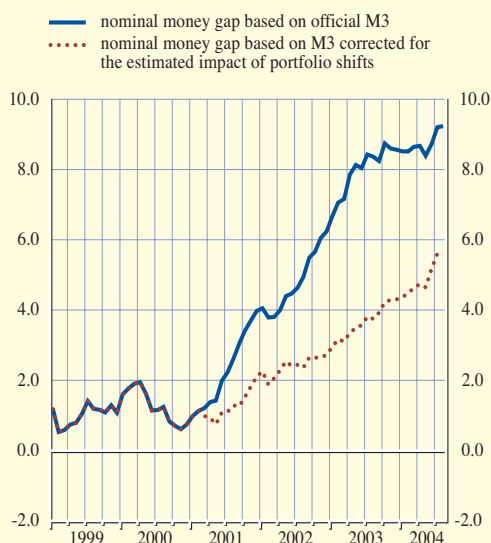
**Chart 7 M3 and M3 corrected for the estimated impact of portfolio shifts**



Source: ECB.  
Note: Estimates of the magnitude of portfolio shifts into M3 are constructed using the univariate time series model approach discussed in the main text.

**Chart 8 Estimates of the nominal money gap**

(as percentage of the stock of M3; adjusted for seasonal and calendar effects; December 1998 = 0)

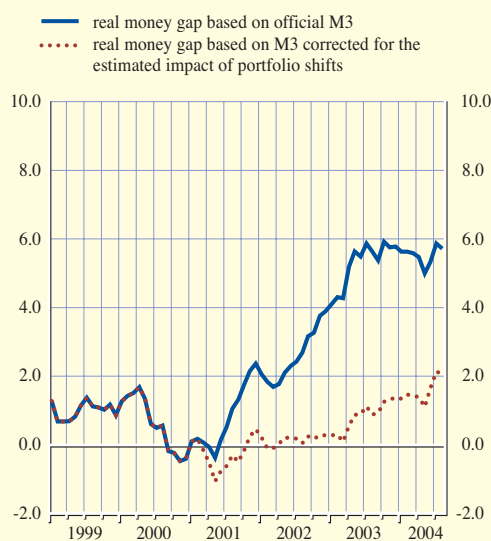


Source: ECB.

Note: The measure of the nominal money gap is defined as the difference between the actual level of M3 and the level of M3 that would have resulted from constant M3 growth at its reference value of 4½% since December 1998 (taken as the base period).

**Chart 9 Estimates of the real money gap**

(as percentage of the stock of real M3; adjusted for seasonal and calendar effects; December 1998 = 0)



Source: ECB.

Note: The measure of the real money gap is defined as the difference between the actual level of M3 deflated by the HICP and the deflated level of M3 that would have resulted from constant nominal M3 growth at its reference value of 4½% and HICP inflation in line with the ECB's definition of price stability, taking December 1998 as the base period.

The measure of M3 corrected for the estimated impact of past portfolio shifts can also be used to compute measures of the money gaps in the euro area. These are illustrated in Charts 8 and 9, together with measures constructed using the official M3 series, as already shown in Chart 2. As regards the official M3 data, both the real and the nominal money gap measures currently point to the existence of a significant stock of excess liquidity. Yet, in line with the moderation of M3 growth since summer 2003, both measures have stabilised during the past few quarters, as past portfolio shifts have started to unwind.

The picture that emerges when analysing the money gap measures corrected for the estimated impact of portfolio shifts is quite different. First, the level of the money gaps is considerably lower. In the case of the real money gap, the measure of excess liquidity is relatively low even in absolute terms. Second, the evolution of the gap measures corrected for

the estimated impact of portfolio shifts varies significantly from those based on official M3 data. In particular, the adjusted real money gap measure remained close to zero until spring 2003, since when it has increased. This pattern differs from that observed in the measure derived from the official series, which rose rapidly from mid-2001 but has stabilised since the summer of 2003.

## 5 IMPLICATIONS OF MONETARY ANALYSIS FOR THE OUTLOOK FOR PRICE STABILITY

Having identified and quantified the impact of various exceptional influences on recent M3 growth, it remains to assess quantitatively the risks to future price stability stemming from monetary developments. One important issue that immediately arises in this context is the question of how the impact of portfolio shifts on monetary developments should be treated. In particular, it is necessary to address whether the



estimated extraordinary portfolio shifts should be excluded from the monetary series used to assess risks to price stability.

This question has already been addressed in a box published in a previous issue of the *Monthly Bulletin*.<sup>14</sup> On that occasion, three possibilities were outlined. First, past portfolio shifts could unwind, as money holders normalise their portfolio allocation behaviour, shifting their liquid assets into longer-term assets such as equity. Second, the higher money holdings arising from the portfolio shifts may be associated with a permanent increase in the demand for liquid assets, consistent with the view that investors' aversion to risk and desire for safe and liquid assets has been permanently raised by the experience of large capital losses on equity between 2001 and 2003.

On either of these two interpretations, it would be natural to assume that the monetary implications of past portfolio shifts are benign with regard to the outlook for price stability, since they do not lead to the creation of transaction balances that could be used for spending and thus add to demand and inflationary pressure.<sup>15</sup> In this context, it would be appropriate to focus attention on the M3 series corrected for the estimated impact of portfolio shifts when analysing the implications of monetary developments for price stability.

However, the possibility also exists that the money holdings built up as a consequence of past portfolio shifts are transformed into transaction balances. In this third possibility, the accumulated liquidity would lead to higher spending and inflationary pressures from the demand side. Clearly, on this basis, analysis should focus on the official M3 series, which includes the impact of portfolio shifts.

Of course, it is impossible in practice to be certain which of these three possibilities best describes the behaviour of money holders. In practice, a combination of all the scenarios is also possible. One approach to addressing the risks and uncertainties inherent in such a situation is to

analyse quantitatively various scenarios, thereby giving an impression of the range of possible outcomes. This approach is illustrated in the rest of this section.

On the basis of a number of simple empirical tools, the remainder of this section illustrates how the preceding analysis can be transformed into a quantitative assessment of the inflationary risks stemming from monetary developments. First, the leading indicator properties of monetary growth for inflation over longer horizons are exploited. Second, a more elaborate set of scenarios that assume different uses of accumulated excess liquidity in the euro area is developed.

#### **FORECASTING INFLATION USING THE BIVARIATE RELATIONSHIP WITH M3 GROWTH**

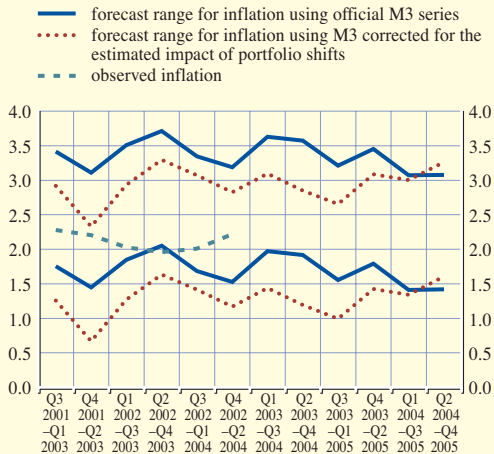
An ECB staff study provides an assessment of the leading indicator properties of monetary growth for inflation in the euro area.<sup>16</sup> It shows that the inclusion of monetary indicators improves the out-of-sample forecasting performance of a pure autoregressive model of price developments (in which inflation is forecast using only lagged values of itself). Furthermore, the study demonstrates that the performance of money-based indicators relative to other economic indicators improves as the horizon of the forecast lengthens. This simple bivariate leading indicator model can be used to forecast average inflation several quarters ahead. In Chart 10, a relatively short forecast horizon of six quarters has been chosen in order to allow a comparison with the observed data. In Chart 11, the forecast horizon has been extended to twelve quarters, closer to the medium to longer-term horizon where money is most useful in explaining inflation. In order to have a sense of the possible impact on monetary

14 See "What could happen with the accumulated excess liquidity in the euro area?", *Monthly Bulletin*, October 2003, pp. 8-10.

15 The reallocation of existing liquidity to financial assets may, in principle, have an impact on asset prices. While this may, in turn, affect aggregate spending via wealth effects or improved financing conditions, its effect is likely to be limited.

16 See S. Nicoletti-Altissimi (2001), "Does money lead inflation in the euro area?", ECB working paper No 63. The methodology employed in this paper is based on J. Stock and M. Watson (1999), "Forecasting inflation", *Journal of Monetary Economics* 44 (2), pp. 293-335.

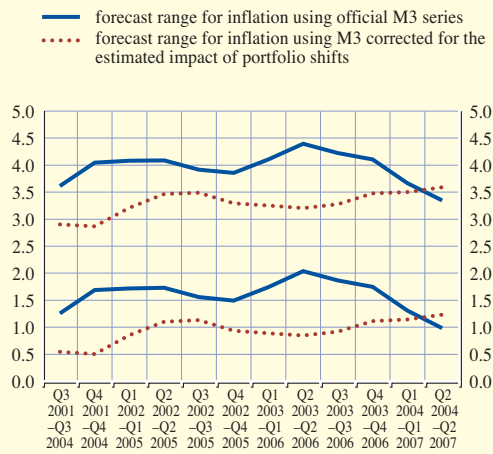
**Chart 10** Real-time forecast of annualised HICP inflation six quarters ahead based on a bivariate model using M3 and M3 corrected for the impact of portfolio shifts (annualised percentage changes)



Source: ECB.

Note: The forecasts were constructed as soon as data for the first quarter mentioned in the forecast interval were available. The ranges shown in this chart are derived from the 95% confidence interval surrounding the point inflation forecasts.

**Chart 11** Real-time forecast of annualised HICP inflation 12 quarters ahead based on a bivariate model using M3 and M3 corrected for the impact of portfolio shifts (annualised percentage changes)



Source: ECB.

Note: The forecasts were constructed as soon as data for the first period mentioned in the forecast interval were available. The ranges shown in this chart are derived from the 95% confidence interval surrounding the point inflation forecasts.

developments and the implied risks to price stability of past portfolio shifts, it is useful to present an analysis based on both the official M3 series and the series corrected for the estimated impact of portfolio shifts.

Charts 10 and 11 show the historical performance of the bivariate forecasting model in real time. This real time assessment uses only information available at the time the forecast was made. The charts therefore give an accurate impression of the signals derived from the model in the circumstances then prevailing.

The charts illustrate two important points. First, they suggest that both the official M3 series and the M3 series corrected for the estimated impact of portfolio shifts have indicated some upside risks to price stability stemming from monetary developments over recent years. These risks are illustrated by the inflation forecast ranges typically lying, in large part, above the 2% upper bound of the ECB's definition of price stability. However, it has to be kept in mind that these forecasts are surrounded by a high degree

of uncertainty, as reflected by the width of the ranges themselves.

Second, the aforementioned charts also show that, over the period from 2001 to 2003, forecasts based on the M3 series corrected for the estimated impact of portfolio shifts have implied lower inflationary risks than forecasts based on the official M3 data. In particular, this is apparent in late 2001 and early 2003, the two periods when portfolio shifts were most important. This is one illustration of the importance of identifying and quantifying the drivers of monetary dynamics in coming to an assessment of their implications for the evolution of risks to price stability.

While the available sample is clearly much too short to come to any definitive judgement, Chart 10 also shows that the forecasts based on M3 growth – in particular when using the series corrected for the estimated impact of portfolio shifts – performed relatively well in real time.

## FORECASTING INFLATION USING EXCESS LIQUIDITY MEASURES

Inflation indicators based solely on the evolution of money growth neglect the potential impact of accumulated excess liquidity on future price developments. It is thus also important to assess the information content of measures of excess liquidity for future price developments. The analysis presented here investigates three scenarios for the future use of excess liquidity and its impact on price stability, two of which could be presented as opposite ends of a spectrum of possible outcomes. The analysis can thus be understood as another illustration of the upper and lower limits of risks to price stability stemming from the monetary side.

The first scenario is based on the assumption that the accumulated excess liquidity will be transformed into transaction balances and may thus imply risks to price stability in line with historical regularities. To implement this scenario empirically, the official M3 series is used. The scenario implies a rather rapid fall of M3 growth in the future, as the model for M3 assumes that the current stock of excess liquidity will unwind over time to bring it down to levels consistent with historical patterns.

The second scenario is a variant of the first. It assumes that the empirical relationship between monetary dynamics and inflation prevails, but that excess liquidity in the euro area accumulated during the recent period of strong M3 growth will unwind more slowly in the future than has been the case on average over the last two decades. Such an analysis is motivated by the observation that the stock of excess liquidity has shown more persistence in the past few years than would have been expected on the basis of earlier experience. This could be linked to a greater aversion to risk by money holders following the prolonged period of stock market declines between 2000 and

2003. This scenario, which implies a more persistent period of excess liquidity than the first scenario, can be seen as an illustration of the upper bound for the risks to price stability stemming from the monetary side.

In the third scenario, it is assumed that the recent rapid money growth associated with extraordinary portfolio shifts has been of an entirely exceptional nature and thus should not be analysed on the basis of historical relationships. In this scenario, the M3 series corrected for the impact of portfolio shifts is employed. This scenario also assumes some correction of the excess liquidity in the future. It can be seen as an illustration of the lower bound for risks to price stability stemming from the monetary side.

The possible implications of excess liquidity for the outlook for price stability under each of the scenarios discussed above are illustrated with a small econometric indicator model for the euro area. This model relies on a real money gap measure derived from a money demand equation.<sup>17</sup> A number of empirical studies suggest that this measure of excess liquidity has helped to predict price developments in the euro area.<sup>18</sup> The model underlying this analysis is a variant of the so-called P-star approach, which has been prominent in economic literature on the leading indicator properties of money for future price developments (see Box 3).<sup>19</sup> Of course, such indicator models are very simple and subject to a number of limitations. The

<sup>17</sup> Note that this real money gap measure differs from that presented in Chart 2 in that it is based on a long-run money demand equation rather than on the cumulated deviations of M3 growth from its reference value.

<sup>18</sup> See, for example, S. Gerlach and L. E. O. Svensson (2003), "Money and inflation in the euro area: A case for monetary indicators?", *Journal of Monetary Economics* 50, pp. 1649-1672, and C. Trecroci and J.-L. Vega (2002), "The information content of M3 for future inflation", *Weltwirtschaftliches Archiv* 138 (1), pp. 22-53.

<sup>19</sup> See J. J. Hallman, R. D. Porter and D. H. Small (1991), "Is the price level tied to the M2 monetary aggregate in the long run?", *American Economic Review* 81 (4), pp. 841-858.

## Box 3

## THE P-STAR MODEL

The simple P-star model underlying the projections presented in the main text can be expressed using the following equation:

$$\pi_{t+1} = \pi_{t+1}^{obj} + \alpha_{\pi}(L)(\pi_t - \pi_t^{obj}) + \alpha_m(\text{REAL MONEY GAP})_{t-j} + \alpha_z(L)Z_t + u_{t+1} \quad [1]$$

This equation implies that deviations of inflation  $\pi_t$  from the central bank's objective  $\pi_t^{obj}$  are closed gradually. The real money gap and other variables (denoted Z) add to inflationary pressure, with the magnitude of such pressures being determined by the parameters  $\alpha_m$  and  $\alpha_z$ . The real money gap used in this exercise is constructed in a different way from that shown in Charts 2, 8 and 9 in the main text. As shown below, it is calculated as a deviation from the equilibrium implied by a money demand model. In the simple model used in this article, Z represents oil prices. Including oil prices in the P-star equation acknowledges that monetary developments are not decisive in predicting the shorter-term dynamics of inflation. The inclusion of oil prices can be seen as an attempt to control for short-term inflation volatility, thereby emphasising the medium to longer-term relationship between money and price developments.

In order to produce inflation forecasts for longer horizons with such a P-star model, projections for money growth are needed, which in turn rely on assumptions about other macroeconomic variables. For illustrative purposes, the exercise presented in this article simply takes the published figures from the ECB staff macroeconomic projections of September 2004.<sup>1</sup> Based on these assumptions, the evolution of M3 growth can be derived using a money demand system.<sup>2</sup>

In addition to deriving projections for inflation using the real money gap, the P-star model also allows a decomposition of projected deviations from the inflation objective on the basis of the various components of the real money gap. In particular, the real money gap can be decomposed into the "monetary overhang" (the deviation of the observed real money stock from what would be consistent with observed levels of real activity), a term related to the cyclical state of real activity in the economy and a term related to interest rates.

To see this, it is useful to define the real money gap as the deviation of the observed stock of real money (*real M3*) from that which would be implied by a money demand model in which both the traditional determinants of money demand (income  $y_t$  and interest rates  $i_t$ ) are at their equilibrium levels. Of course, this is analogous to the definition based on the ECB's reference value for monetary growth, since the derivation of the reference value is implicitly based on assumed paths for equilibrium output and interest rates. A money demand equation approach implies:<sup>3</sup>

$$\text{REALMONEYGAP}_t = (\text{realM3})_t - (c + \beta \cdot y_t^* + \gamma \cdot i_t^*) \quad [2]$$

1 For details, see the box entitled "ECB staff macroeconomic projections for the euro area," Monthly Bulletin, September 2004, pp. 60-61.

2 The money demand system used in this exercise is that developed for euro area M3 by A. Calza, D. Gerdesmeier and J. Levy (2001), *op. cit.*

3 Real M3 and income enter in logarithms in equations 2 and 3.

where  $y_t^*$  is the estimated equilibrium level of national income,  $i_t^*$  is the estimated equilibrium level of interest rates and  $c$ ,  $\beta$  and  $\gamma$  are the parameters of the money demand function. Of course, the observed level of money can always be expressed using a money demand equation, once a “residual” ( $\varepsilon_t$ ) is included to capture that part of the money stock which is not explained by the traditional determinants in the long run. Rewriting the stock of real M3 in this way gives the following decomposition of the real money gap:

$$\begin{aligned} \text{REALMONEYGAP}_t &= (c + \beta \cdot y_t + \gamma \cdot i_t + \varepsilon_t) - (c + \beta \cdot y_t^* + \gamma \cdot i_t^*) & [3] \\ &= \varepsilon_t + \beta \cdot (y_t - y_t^*) + \gamma \cdot (i_t - i_t^*) \end{aligned}$$

where  $\varepsilon_t$  is the “monetary overhang”, defined as the difference between the actual level of real M3 and the “equilibrium” or “desired” level of real M3 given by the long-run relation from a money demand model;  $\beta (y_t - y_t^*)$  is the contribution stemming from the cyclical state of the economy; and  $\gamma (i_t - i_t^*)$  is the contribution from interest rates. These components of the real money gap can then be substituted into the inflation forecasting equation [1] so as to identify separately the contributions of each of these components, as well as the contribution stemming from oil prices which act as a control for short-term inflation volatility.

If the monetary overhang contains information useful for predicting the future development of inflation beyond that contained in indicators of the cyclical state of the economy or interest rates, a strong case exists for analysing monetary developments closely when analysing the inflation process. Using data for the last two decades, several papers in economic literature have demonstrated that the monetary overhang helps to predict inflation in the euro area.<sup>4</sup>

It is clear that forecast models such as that presented in this box are relatively simple. Moreover, projections derived from these models are surrounded by a high degree of uncertainty. Nonetheless, the results of simulation exercises based on these models offer some useful illustrative insights into the risks posed by excess liquidity for future price developments.

<sup>4</sup> See, for example, C. Trecroci and J.-L. Vega, *op cit.*

results of such models should therefore be treated as indicative, giving a general sense of the direction, magnitude and uncertainty surrounding the risks to price stability stemming from monetary developments and excess liquidity rather than a precise forecast of inflation prospects at short horizons.

Inflation projections up to the end of 2006 based on the P-star model are shown in Table 1. As noted before, three scenarios are distinguished. In the scenario based on official M3 data, the model projects annual HICP inflation in the range 1¼% to 2¾% at the end of 2006. This range is based on the 95%

confidence interval around the point estimate of annual inflation and illustrates the sizeable uncertainties surrounding the money-based forecast. By contrast, if the current stock of excess liquidity were to adjust more slowly than anticipated on the basis of past experience (in line with the second scenario outlined above), inflation projections would remain skewed above 2% over the full forecasting horizon.

In any case, for both scenarios based on the official M3 series, a large part of the forecast range for inflation is above 2%, pointing to some upside risks to price stability. These results contrast somewhat with the scenario

**Table 1 Forecast of HICP inflation based on P-star model using M3, M3 with slow adjustment and M3 corrected for the estimated impact of portfolio shifts**

(annual percentage changes; contributions in percentage points)

	Inflation in 2005 Q4 <sup>1)</sup>	Contribution of the monetary overhang to inflation <sup>2)</sup>	Inflation in 2006 Q4 <sup>1)</sup>	Contribution of the monetary overhang to inflation <sup>2)</sup>
Scenario 1: official M3 growth with relatively rapid correction of excess liquidity <sup>3)</sup>	1¾-3	2 ½	1¼ -2¾	2
Scenario 2: official M3 growth with slow adjustment of excess liquidity <sup>4)</sup>	1¾-3	2¾	1¾-3¼	2½
Scenario 3: M3 growth corrected for the estimated impact of portfolio shifts	1-2¼	2	1-2½	1¾

Note: The forecasts were derived on the basis of monetary data up to the second quarter of 2004.

1) The forecast ranges are based on the 95% confidence interval around the point estimate of annual inflation.

2) The contribution of the money overhang to inflation shows the inflation rate that would prevail on the basis of the P-star model if the impact of oil prices and the cyclical state of the economy were removed from the forecast, to give a “pure” money-based forecast. The forecast for oil prices was taken from the assumptions of the September ECB staff macroeconomic projection exercise. The indicator of the cyclical state of the economy (including forecasts) was derived as an average of estimates derived from using a standard Hodrick-Prescott filter, a production-function based approach as provided in T. Proietti, A. Musso and T. Westermann (2002), “Estimating potential output and the output gap for the euro area: a model-based production function approach,” EUI working paper No ECO 2002/9 and an estimate provided by the OECD. Forecasts for the first two indicators were derived using the results of the September ECB staff macroeconomic projection exercise. The indicator of the cyclical state of the economy from the OECD is only forecast until the end of 2005. It was extended to the end of 2006 by using the quarter-on-quarter changes from the indicator of T. Proietti, A. Musso and T. Westermann (2002).

3) In line with parameter estimates for the money demand equation over the period from 1980 to mid-2001.

4) The slower adjustment was simulated by assuming that the future adjustment of the overhang occurs in line with an estimate of the above-mentioned money demand model between 1980 and the second quarter of 2004.

based on the M3 series corrected for the estimated impact of portfolio shifts. In this case, annual HICP inflation is expected to remain consistent with the ECB’s definition of price stability in 2005 and 2006. The results of the final exercise are thus closer to the projections embodied in the main scenario published in the context of the September ECB staff macroeconomic projection exercise, whereas the other two scenarios, especially the second one, are suggestive of some upside risks to price stability stemming from the monetary side.

As discussed in Box 3, the real money gap underlying the P-star model can be broken down into various components so that their individual impact on the inflation projection can be identified. In particular, the importance of the monetary overhang – the deviation of the actual money stock from the level that would be expected on the basis of historical experience, given the prevailing level of the conventional determinants of money demand – can be

assessed. The contribution stemming from the monetary overhang can be characterised as the purely monetary impulse to price developments.

In the case of the two scenarios based on the official M3 series, the contribution to the inflation projection coming from the monetary overhang is always positive and, most of the time, points to HICP inflation above 2%. If the overall inflation forecast in this scenario is below 2%, it is the consequence of a negative contribution of the cyclical state of the economy. Table 1 shows that when using the series for M3 corrected for the estimated impact of portfolio shifts, the contribution to inflationary pressures stemming from the monetary overhang is slightly more modest and results in a more moderate inflation projection overall.

Table 2 shows the historical performance of the P-star forecasting model for the euro area in real time. The table illustrates a number of important issues. First, it demonstrates that the

**Table 2 Real-time forecast of HICP inflation nine quarters ahead based on P-star model using M3, M3 with slow adjustment and M3 corrected for the estimated impact of portfolio shifts**

(annual percentage changes; contributions in percentage points)

Last available observation	Forecast annual inflation	M3	M3 with slower adjustment	M3 corrected for the estimated impact of portfolio shifts
2001 Q3	2003 Q4	½-2¼	½-2¼	½-2
2002 Q1	2004 Q2	½-2¼	½-2	½-2
2002 Q3	2004 Q4	¾-2¼	¾-2¼	½-2
2003 Q1	2005 Q2	1-2½	1¼-2½	¾-2¼
2003 Q3	2005 Q4	1¼-2½	1¼-2¾	¾-2¼
2004 Q1	2006 Q2	1¼-2¾	1½-3	¾-2¼
2004 Q2	2006 Q3	1½-2¾	1¾-3	1-2¼

Note: The forecasts were derived as soon as data for the first period mentioned in the forecast interval were available. The ranges shown in this table are derived from the 95% confidence interval surrounding the point inflation forecasts.

risks to price stability are relatively modest when assessed on the basis of the P-star model (based on measures of excess liquidity). However, while the P-star framework forecasts relatively low levels of inflation in 2001, the inflation forecasts show an upward trend over time, as the impact of the accumulated excess liquidity starts to build up. Overall, the indications of inflationary risks stemming from the P-star model appear more moderate than those provided by the bivariate indicator models (which focus on monetary growth). The richer structure of the P-star model, which takes into account the cyclical state of the economy, in addition to monetary developments, may account for this different assessment.

These results emphasise again the importance of a careful assessment of risks to price stability stemming from monetary developments that takes into account the specific nature of the factors driving monetary developments at different periods of time.

To conclude, this section has presented the results of monetary analysis applying some simple illustrative tools which demonstrate how the monetary analysis can provide information relevant for monetary policy decisions aimed at maintaining price stability. Of course, the simplicity of the approaches shown implies that inflation projections based largely on monetary data can only constitute one part of the overall

monetary analysis. As is apparent from the nature of the methods, the assumptions underlying these tools and the caveats mentioned above, the tools presented here cannot be applied in a mechanical way to derive concrete policy conclusions. Consistent with the strategy announced at the outset of Stage Three of EMU in October 1998, rather than reacting to monetary developments in a mechanical fashion, the ECB has used this analysis to identify those developments in M3 which pose potential risks to price stability in the medium to longer term. This analysis has been used as a cross-check against the assessment stemming from the economic analysis. This cross-checking is an essential feature in the ECB's monetary policy strategy that ensures that the Governing Council responds in a manner which serves to fulfil the ECB's mandate. Nevertheless, the exercises presented in this section should be seen as convenient heuristic and expositional devices which permit the implications of the detailed monetary analysis to be presented and understood more clearly.

## 6 CONCLUSION

In recent years, extracting the signals from monetary developments regarding the risks to price stability over the medium term has proved a challenging task. A number of

shocks have influenced both monetary and price developments at short to medium-term horizons, thereby blurring the underlying relationship between monetary growth and inflation over the longer term.

In the challenging environment faced over the past few years, the ECB's monetary analysis has employed a variety of analytical tools and conceptual frameworks to recover the information in monetary developments relevant for monetary policy decisions. Some of these tools have been described in this article. It is apparent that a mechanical use of any single indicator or tool is unlikely to be a successful method of extracting the information in monetary developments relevant for monetary policy decisions. As has been demonstrated by the scenario-based exercises presented in this article, similar headline money growth figures can lead to quite different assessments of the risks to future price stability, depending on prevailing macroeconomic conditions and, in particular, on the underlying factors driving monetary growth.

Using the institutional analysis and econometric techniques discussed in the article, it has been possible to develop a good understanding of monetary developments in real time over recent years, in particular with regard to understanding some of the underlying causes of variations in M3 growth and their possible implications for future price developments.



## ANNEX

### TESTING THE STABILITY OF LONG-TERM MONEY DEMAND IN THE EURO AREA

A number of studies have shown that the demand for broad money in the euro area exhibits a stable relationship with prices, economic activity and interest rates.<sup>20</sup> However, the exceptional growth of M3 between mid-2001 and the summer of 2003, which is well beyond that which would have been anticipated on the basis of developments in the conventional determinants of money demand, has given rise to concerns about possible statistical breaks in this historical relationship.

When assessing the stability of money demand relationships, it should be recognised that the empirically relevant definition of money is not clear-cut. In an environment of financial innovation and changes in financial structure, those instruments which perform the traditional roles of money – unit of account, means of payment and store of value – are constantly changing. Moreover, the nature of these three roles is itself also evolving over time, as technology advances and new instruments are introduced. A comprehensive monetary analysis must encompass developments in the components and counterparts of the key monetary aggregate and continually consider whether, in a specific set of circumstances, the holdings of some components really represent money balances in the conventional sense or rather instruments with an alternative economic role, such as longer-term savings vehicles. This notwithstanding, in line with the main text of this article, the focus of the assessment in this annex is on the stability of the key broad monetary aggregate, M3.

In principle, two forms of money demand instability can be distinguished. First, there may be short-run instabilities that leave the long-run demand relationship between the money stock, prices, real incomes and interest rates unchanged. Such instabilities are to some extent inevitable, given the complexity of the short-run relationship between monetary dynamics and inflation, which is conditional

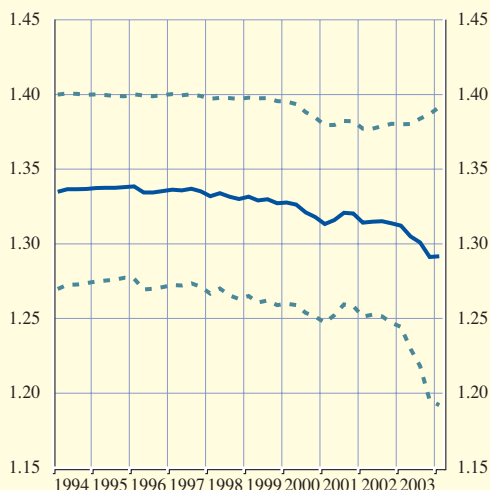
on developments in many other economic variables. Second, and more fundamentally, the long-run money demand relationship itself may break down. While this simply represents instability in a specific econometric formulation of money demand and does not necessarily put into question the underlying long-run relationship between monetary developments and prices, it nonetheless poses significant practical problems for monetary analysis since the statistical benchmarks against which monetary developments are typically judged would then become less meaningful.

This annex assesses the stability of euro area long-run money demand over the period from the first quarter of 1980 to the first quarter of 2004 using a money demand equation developed by ECB staff.<sup>21</sup> This equation is embedded in a vector error correction (VEC) system estimated by applying the Johansen cointegration procedure to a set of variables comprising M3 deflated by the GDP deflator ( $m-p$ ), real GDP ( $y$ ) and a measure of the opportunity cost of holding money defined as the spread between the short-term market interest rate ( $ST$ ) and the own rate of return of M3 ( $OWN$ ). The own rate is computed as the weighted average of the rates of return on the individual components of M3 (using the relative importance of each component in M3 as its weight).<sup>22</sup> The estimated long-run demand for

20 See for recent examples C. Brand and N. Cassola (2004), "A money demand system for euro area M3", *Applied Economics* 36 (8), pp. 817-838; A. Bruggeman, P. Donati and A. Warne (2003), "Is the demand for euro area M3 stable?", ECB working paper No 255; A. Calza, D. Gerdesmeier and J. Levy (2001), *op. cit.*; G. Coenen and J.-L. Vega (2001), "The demand for M3 in the euro area", *Journal of Applied Econometrics* 16 (6), pp. 727-748; and M. Funke (2001), "Money demand in Euroland", *Journal of International Money and Finance* 20 (5), pp. 701-713.

21 A. Calza, D. Gerdesmeier and J. Levy (2001), *op. cit.*

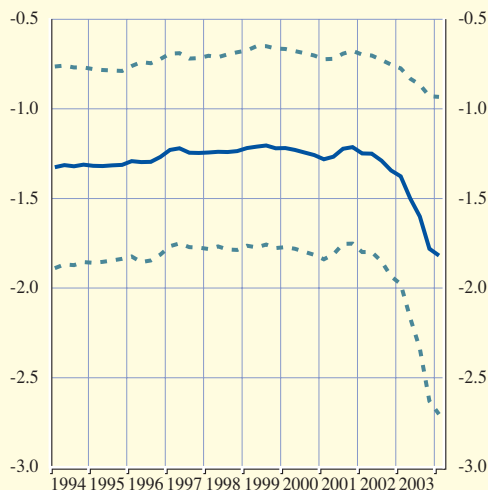
22 The variant of the model used for this box is estimated conditionally on a restriction of weak exogeneity of real GDP to the system. In addition, the first difference in the annualised quarterly inflation rate (based on the GDP deflator) and the one-quarter lagged change in the "yield spread" (defined as the difference between the ten-year government bond yield and the three-month money market interest rate) have been included as exogenous variables.

**Chart A Recursive estimates of the long-run coefficient of real GDP<sup>1)</sup>**

Source: ECB.

Note: Dashed lines denote the 95% confidence interval.

1) Based on the money demand model of A. Calza, D. Gerdesmeier and J. Levy (2001); see notes to Chart 4 for details.

**Chart B Recursive estimates of the long-run coefficient of opportunity costs<sup>1)</sup>**

Source: ECB.

Note: Dashed lines denote the 95% confidence interval.

1) Based on the money demand model of A. Calza, D. Gerdesmeier and J. Levy (2001); see notes to Chart 4 for details.

real money takes the following semi-log linear form (standard errors in parentheses):

$$(m - p)_t = 1.29 \cdot y_t - 1.82 \cdot (ST - OWN)_t$$

(0.05)                      (0.47)

A conventional method of investigating the stability of the long-run coefficients consists of graphing recursive estimates of these coefficients. This procedure simply involves estimating the equation over a truncated sample and then repeatedly re-estimating the equation over extended samples until the full-sample estimate is reached. The exercise gives some insight into whether the estimates change over time. In particular, large fluctuations of the estimated coefficients are typically interpreted as indicating instability.

It should be noted from the outset that this method is rather informal and suffers from some serious econometric problems. Therefore, the results of applying this method should be interpreted with a significant degree of caution. They can only be used to collect preliminary evidence on the stability of the parameters of the model.

Charts A and B plot the time paths described by the recursive estimates of the coefficients of the long-run money demand equation, together with the corresponding 95% confidence bands. Both the income elasticity and the interest rate spread semi-elasticity (the two key long-run parameters of the model) seem to have been affected by perturbations in the last few quarters of the sample period, when monetary growth has been exceptionally strong. While the effect of these perturbations is particularly visible from the fluctuation of the coefficient of the opportunity cost, it can also be detected from the widening of the confidence bands surrounding the estimated income elasticity towards the end of the sample period.

Overall, this graphical analysis would suggest that the stability of the model could not be taken for granted in recent periods. This observation prompts the need for more formal investigation using methods, such as parameter constancy tests, that are not subject to the technical drawbacks associated with the recursive estimates. Such more sophisticated tests include the mean and supremum variants of the so-

**Table A Nyblom parameter-constancy test <sup>1)</sup>**

Type of test	Statistic	P-value
Supremum	0.53	0.62
Mean	0.16	0.55

Note: The p-value is a measure of how much evidence there is against the null hypothesis (in these tests, joint stability of the parameters of the money demand equation). A large p-value indicates that there is little evidence against the null hypothesis. P-values are bootstrapped using 1,000 iterations.

1) Based on the money demand model of A. Calza, D. Gerdesmeier and J. Levy (2001); see notes to Chart 4 for details.

long-run M3 demand relationship for the euro area has broken down.

called Nyblom test of joint stability of the parameters of the cointegrating vector.<sup>23</sup> The results of such tests on euro area M3 demand are shown in Table A.

While these tests also suffer from various problems, such as small-sample size issues, the use of bootstrapping techniques as proposed by Bruggeman, Donati and Warne (2003) can mitigate at least some of them. As the relatively high level of the p-values show, the null hypothesis of the test (joint stability of the long-run parameters) cannot be rejected at conventional levels. This suggests that the long-run parameters of the model remain jointly stable, even when the sample period is extended up to the first quarter of 2004 and thus includes the recent period of strong monetary growth.

Overall, the two methods used to assess the stability of money demand yield somewhat conflicting signals. While the results of the recursive estimates suggest that the stability of the long-run coefficients of the model may have deteriorated towards the end of the sample period, the results of a formal parameter-constancy test fail to reveal major signs of parameter instability in the model. On balance, formal parameter-constancy tests should provide more reliable information than graphical analyses of recursive estimates and, therefore, their results should be given relatively higher weight. To sum up, this econometric exercise does not suggest that there are good reasons to believe that the estimated

<sup>23</sup> These tests have been extended to cointegrated VARs by B. Seo (1998), "Tests for structural changes in cointegrated systems", *Econometric Theory* 14, pp. 222-259, and H. Hansen and S. Johansen (1999), "Some tests for parameter constancy in cointegrated VAR-models", *Econometric Journal* 2, pp. 306-333.

# ECONOMIC INTEGRATION IN SELECTED REGIONS OUTSIDE THE EUROPEAN UNION

ARTICLES

Economic integration in selected regions outside the European Union

*Within the EU, regional economic integration is far advanced, and much discussed and analysed. The EU is thus often used as a point of reference for other regions of the world. At the same time, it represents only one of many experiences with regional economic integration. This article focuses on selected regions other than the EU – the Commonwealth of Independent States, the Middle East, Africa, East Asia and Latin America – and shows the different intensities and patterns with which integration in each of these regions has proceeded. It finds that in certain cases the main impetus for integration has been provided by market forces responding to economic factors, while in others political initiatives have been the driving force. Over the long run, however, a degree of interaction between the two can be observed.*

## I INTRODUCTION

Being itself the outcome of a lengthy process of regional economic integration, the ECB has become a natural partner to several regional groupings in the world, which call on the ECB to share its experience in the framework of joint seminars and other initiatives involving policy-makers and, sometimes, academics. In particular, in recent years the ECB has co-organised Eurosystem high-level seminars with central banks in the South and East Mediterranean region, the Executives' Meeting of East Asia-Pacific Central Banks (EMEAP)<sup>1</sup>, and most Latin American central banks. Seminars on regional economic integration have also taken place in the framework of the Asia-Europe Meeting (ASEM) and the Group of Twenty (G20), as well as contacts with other regional entities such as the Gulf Cooperation Council (GCC), the Association of Southeast Asian Nations (ASEAN) and the Centro de Estudios Monetarios Latinoamericanos (CEMLA). In this context, the ECB is not only interested in explaining the European case study, especially in the field of monetary cooperation, but, equally importantly, in understanding regional economic integration outside the EU. The latter topic is the focus of this article.

Regional economic integration can be defined as the degree of interpenetration of economic activity among countries belonging to the same geographic area, and is measured both by real aspects, such as trade and labour mobility, and by financial and monetary aspects, such as interest rate and inflation rate convergence. The actual level of economic integration reached by

a region at a given point in time can be interpreted as the outcome of both economic factors and official policies, with different combinations of the two depending on the case in question. The policies may pursue different final objectives of integration, such as those in the classification provided in Table 1, and may also vary markedly in form, ranging from intergovernmental agreements to wide-ranging unions involving a transfer of sovereignty to supranational institutions. All these different institutional settings can be grouped under the label “regional arrangements”.

While the EU is often referred to as the most advanced regional arrangement, several regions outside the EU have established or strengthened an institutional framework to support integration, especially since the 1990s. Indeed, over the past 15 years a proliferation of regional initiatives has accompanied the multilateral process of globalisation. This has notably been the case of emerging, transition and other developing countries, on which this article mainly focuses.

Regarding trade integration, developing countries are authorised to exchange virtually any trade preferences among themselves under the enabling clause of the General Agreement on Tariffs and Trade/World Trade Organization (GATT/WTO) rules, which can be interpreted as an exemption from the most-favoured-nation principle. This article focuses solely on this type of trade arrangement, sometimes referred to as a “South-South” arrangement, and thus

<sup>1</sup> See the appendix for a glossary of the regional terms and acronyms used in this article.

**Table 1 Policy objectives in regional economic integration: standard classification**

1. Preferential trade area (PTA)	A region where lower tariffs are imposed on goods produced in the member countries than on goods produced outside.
2. Free trade area (FTA)	A region where tariffs and quotas are abolished for imports from member countries, which, however, retain national tariffs and quotas against third countries.
3. Customs union (CU)	An FTA with common tariffs and quotas (if any) for trade with non-members.
4. Common market (CM)	A CU with no non-tariff barriers to trade (product and services market integration) or restrictions on factor movement (factor market integration).
5. Economic union (EUN)	A CM with a significant degree of coordination of national economic policies and/or harmonisation of relevant domestic laws.
6. Total economic integration (TEI)	An EUN with all relevant economic policies conducted at the supranational level within a framework of established supranational authorities and laws.

Source: Adapted from B. Balassa, "The Theory of Economic Integration" (1961).

does not deal with arrangements such as the North American Free Trade Area (NAFTA) and agreements between the EU and developing countries such as the African, Caribbean and Pacific (ACP) countries, which can be referred to as "North-South" arrangements.

In addition to trade policy, certain developing countries have also been making progress in financial and/or monetary and exchange rate cooperation as well as peer group economic surveillance at the regional level, in certain cases (e.g. East Asia) with the involvement of one or more developed countries (e.g. Japan), as reviewed below.

The regions considered in this article comprise selected EU neighbouring regions (the Commonwealth of Independent States (CIS), the Middle East and Africa), East Asia and Latin America. Their processes of regional integration are examined by looking at both the actual degree of economic integration (the economic dimension) and the underlying regional or sub-regional arrangements (the institutional dimension). The main variables chosen in describing the economic dimension are, where available, regional trade integration and openness, differences in real GDP per capita, business cycle synchronisation, nominal interest rate differences and intra-regional exchange rate volatility. The institutional dimension is assessed on a qualitative basis. An index is used to measure progress in regional

cooperation over time, with index values ranging from 0 (no integration at all) to 100 (total economic integration; see Table 1). Index values are presented for regional arrangements in East Asia and Latin America and, to allow for a better interpretation, are compared with the integration path followed by the EU since 1957, used here as a simple point of reference, i.e. not as a benchmark to be pursued. (Details of the methodology used to construct the index can be found in ECB Working Paper No 185 entitled "European integration: what lessons for other regions? The case of Latin America".)

The article addresses three main questions. First, is it possible to assess the various processes of regional economic integration on the basis of the same explanatory factors? Second, how important is the institutional dimension in a dynamic process of regional integration, and how is it linked to the economic dimension? And third, is regional integration consistent with integration into the global economy? Finally, tentative answers to such questions are suggested based on the analysis conducted below.

## 2 EU NEIGHBOURING REGIONS

There have been several, sometimes overlapping, attempts to foster regional economic integration in the EU neighbouring regions. With the exception of the Commonwealth of Independent

Table 2 Indicators of economic integration in selected EU neighbouring regions<sup>1), 2)</sup>

	Intra-regional trade as % of		Average variation (%) from group mean of members'						Nominal exchange rate volatility <sup>5)</sup>
	GDP	total trade	real GDP per capita <sup>3)</sup>		inflation rates <sup>4)</sup>		nominal interest rates <sup>4)</sup>		
			1993	2002	1993	2002	1993	2002	
Commonwealth of Independent States	14	26	70	49	968	11	9.7 <sup>6)</sup>	4.3	105
Middle East and Northern Africa	5	8	197	213	10.2	3.3	3.0	2.7	20
Gulf Cooperation Council	4	6	48	56	1.6	1.2	1.1	0.6	1.4
<i>Large arrangements in Sub-Saharan Africa</i>									
Economic Community of Central African States	1	2	143	211	287	19	6.0	9.1	76
Economic Community of West African States	6	9	54	51	15	4	14.6	6.2	26
Southern African Development Community	5	10	125	171	222	28	4.8	8.5	67
<i>Monetary unions in Sub-Saharan Africa</i>									
West African Economic & Monetary Union	6	10	40	37	10.5	0.3	0	0	6
Central African Economic & Monetary Community	1	2	119	160	4.1	2.5	0	0	0
Common Monetary Area	n.a.	n.a.	49	43	1.8	1.1	1.3	1.4	0

Sources: IMF, ECB calculations.

1) Depending on data availability, the number of countries in a regional arrangement may vary over time.

2) Members of each group are listed in the glossary in the appendix.

3) Population-weighted average of the differences between each member's real GDP per capita and the population-weighted regional average.

4) Average of the percentage point differences (absolute) between each country's interest rate or inflation rate and the respective regional mean.

5) Regional average of the standard deviations of four rolling month-on-month log differences in the exchange rate for every pair of currencies in the region.

6) 1996.

States, however, the overall degree of actual economic integration has remained low. From an institutional perspective, the most ambitious and advanced integration project is being pursued by the members of the Gulf Cooperation Council, which have already achieved a remarkable degree of monetary convergence.

### COMMONWEALTH OF INDEPENDENT STATES

The CIS, set up in 1991 by 12 successor countries of the former Soviet Union,<sup>2</sup> has a degree of economic integration which appears relatively high if compared with other EU neighbouring regions, but low if compared with regions such as the EU and East Asia. Intra-regional exports and imports of goods (hereafter "regional trade") account for about 26% of CIS total trade (see Table 2). Regional trade openness, i.e. the share of regional trade in regional GDP, amounts to 14%, whereas trade openness to the world as a

whole stands at about 50% of regional GDP. Russia's trade with other CIS countries is the main determinant of regional trade, which reflects both Russia's economic size relative to the other CIS countries and the legacy of trade links in the former Soviet Union.

Over the past decade, economic developments in the region have been affected by the transition from planned to market economies. In the early years of transition, many countries experienced hyperinflation, together with substantial inflation differentials and nominal exchange rate volatility. After the Russian financial crisis in 1998, however, inflation and interest rate differentials, as well as exchange rate volatility, declined substantially, with most exchange rate policies shifting to a tightly

2) Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, the Kyrgyz Republic, Moldova, Russia, Tajikistan, Turkmenistan, Ukraine and Uzbekistan.

managed float based on the US dollar as the anchor currency. Moreover, led by the strong recovery in Russia, the whole CIS has been enjoying high growth rates since the turn of the century.

The differences in GDP per capita among CIS members have increased significantly compared with Soviet times, although they are not as pronounced as in other regions of the world. Financial integration has been limited, even though the region has recently witnessed some cross-border banking activity. Finally, regional labour mobility seems to be quite high, as indirectly suggested by the rising deficits of private transfers in Kazakhstan and Russia which point to worker immigration from other CIS countries.

Given the common historical and economic legacy and similar challenges in the transition process, there have been several institutional efforts to foster economic integration in the region. The CIS aims to become a common economic space based on the principle of free movement of goods, services, labour and capital. This objective, however, is not being consistently pursued by all 12 CIS members at the same time. Four members – Russia, Ukraine, Belarus and Kazakhstan – agreed in 2003 to develop such a common economic space. Five members, namely Georgia, Ukraine, Uzbekistan, Azerbaijan and Moldova, founded GUUAM in 1997, a regional initiative aimed at deepening relations and cooperation among members. Five other members – Russia, Belarus, Kazakhstan, the Kyrgyz Republic and Tajikistan – established the Eurasian Economic Community (EAEC) in 2000. The latter two sub-regional arrangements, however, have relatively modest integration objectives, mainly focusing on trade and general policy cooperation. In addition, Belarus and Russia have started discussions on economic and monetary union. All in all, these regional policy initiatives have made limited progress, since countries have not yet implemented the steps that they have committed themselves to.

In this context, three other factors seem to affect economic integration in the region. The first one is divergence in resource endowments, with certain CIS countries being major exporters of natural resources including oil, and the other members largely relying on imports of energy from the first group. A second factor is the unequal progress made during the transition to a market economy. Laggard countries tend to be less integrated globally than countries with a stronger transition record. Finally, geographical considerations play an important role, since the CIS is the region with the largest number of land-locked countries in the world. Hence, the number of borders that goods have to cross to reach markets outside the region is comparatively high. Coupled with often restrictive trade policies at the country level, this tends to increase transport costs and hinder the exchange of goods and services both within and across regional borders.

Looking forward, despite the lack of progress in implementing the regional arrangements, economic integration is perceived as an important instrument both to deepen economic links within the region and to open it up to the rest of the world. The recent improvement in the macroeconomic environment of most CIS countries is providing new impetus to integration efforts as growing intra-CIS trade has underpinned the recovery in the region, highlighting the potential benefits of reducing intra-regional trade barriers. Subject to progress in institution-building and pursuing more open trade policies in general, the prospects for the further advancement of these countries in terms of regional and global integration seem to have improved.

## MIDDLE EAST AND NORTH AFRICA

The Middle East and North Africa (MENA) region exhibits a low degree of economic integration. Despite a common language in large parts of the region and trade openness of individual countries of 52% of GDP on average, regional trade accounts for only 8% of MENA's total trade. As a result, regional trade openness

stands at about 5% of regional GDP, and has hardly changed over the last decade (see Table 2).

Economic as well as institutional and political factors account for the low degree of integration. On the economic side, similar factor endowments imply that the bulk of exports are directed outside the region. Moreover, the dependence of government revenues on tariffs, on account of a weak fiscal basis, makes tariff reductions difficult. On the institutional side, the coherence and effectiveness of initiatives aimed at fostering cooperation in the region tend to be undermined by regional conflicts, which also hamper policies to develop a regional economic infrastructure.

Among the four regional arrangements in MENA, the scheme comprising the largest number of members (22) is the Arab League. Its key economic integration objective is the creation of a Pan-Arab Free Trade Area (PAFTA) by 2005, to which, however, not all members have subscribed. The Arab Maghreb Union (AMU), which comprises five North African countries, aims to liberalise the intra-regional movement of goods, services, capital and labour. The Agadir group is comprised of the four Arab countries that are most advanced in the process of association to the EU, and aims to liberalise regional trade by 2005. Finally, six countries located on the Arab peninsula form the Gulf Cooperation Council.

The GCC is the most advanced arrangement in the MENA region, with a customs union established in 2003. It is also the arrangement with the most ambitious objectives, as member states have embarked on a process of economic and monetary integration with the ultimate objective of monetary union by 2010. Nevertheless, economic integration in the GCC is limited, with regional trade as a percentage of total trade and GDP even somewhat lower than in MENA as a whole (see Table 2). This is mainly due to the dependency of GCC economies on the production of oil and related products, exports of which – directed almost entirely to countries outside the region –

account for above 70% of the GCC's total exports. In this respect, GCC countries are a textbook example of how similar factor endowments may prevent trade links from strengthening within a region. Regarding the non-oil trade of the GCC, a higher proportion (around one-third) is estimated to be intra-regional.

While financial integration also remains low, the high degree of monetary convergence among GCC member states, reflected in the strong US dollar orientation over the past two decades, is striking, especially given the environment of liberalised capital accounts. As a result of the dollar anchor, nominal exchange rate volatility among GCC currencies has been lower than in any other region of the world. Another consequence is that inflation differentials have been limited and interest rates have been co-moving within a narrow range.

The GCC aims to establish a common market by 2007 and, as mentioned above, a single currency by 2010. The planned move to monetary union is, therefore, embedded in a broader integration project. Despite these ambitious objectives, the institutional framework of the GCC has thus far been intergovernmental in nature, at both the political and the technical level, with supranational elements still in their infancy. Future developments in the field of economic and monetary integration may therefore hinge on the suitability of this institutional framework in the pursuit of the aforementioned objectives, as well as on the political readiness to implement these objectives effectively.

#### SUB-SAHARAN AFRICA

With the exception of the most southern part of Africa, where the regional exchange of goods and services increased quite substantially over the 1990s, economic integration has remained low in Sub-Saharan Africa. Similarly to MENA, a significant openness at the country level (between 50 and 60% of GDP) co-exists with a low degree of openness within the



various regional arrangements (see Table 2), even considering the fact that the statistics do not capture informal cross-border trade, which is estimated to be significant. Moreover, economic integration is low in spite of recent regional attempts to better coordinate economic policies. The three sub-regional monetary unions described below, however, are benefiting from subdued inflation as well as lower interest rate and inflation differentials than elsewhere in the region (Table 2).

Again, the dependency of most African economies on a few primary commodities mainly directed at markets in Europe, Asia and North America, as well as local and regional conflicts, greatly contribute to the poor degree of regional economic integration. However, this has not been offset by enhanced integration in world trade. The share of African exports in world exports has in fact fallen from around 5% before 1980 to close to 2% since the mid-1990s.

Notwithstanding the low degree of actual economic integration, many initiatives have been taken at the institutional level since the early 1960s, at both the continental and the sub-continental level. The Organisation for African Unity (OAU), established in 1963 and transformed into the African Union in 2002, decided in 1991 to create an African Economic Community and an African Monetary Union for the whole continent by 2028, building upon sub-continental cooperation agreements called Regional Economic Communities (RECs). Fourteen RECs have now been established, including some large economic integration schemes in Central, West and Southern Africa (ECCAS, ECOWAS and SADC) and three already existing monetary unions: the West African Economic and Monetary Union (WAEMU), the Central African Economic and Monetary Community (CAEMC) and the Common Monetary Area in Southern Africa (CMA).

Most of these regional arrangements, however, suffer from significant institutional weaknesses, which, combined with governance problems at

the country level, help to account for the low level of economic integration. In particular, compliance with the commitments made has remained low, for instance in the field of tariff reductions owing to the high dependency of countries' revenues on customs duties and the lack of regional schemes for the compensation of revenue losses. The institution-building challenge is further complicated by the fact that most countries (47 out of 53 African countries) are members of more than one regional arrangement (in some cases three or four), which leads to inconsistencies and conflicts. As a result, not even the existing monetary unions are based on a common market, and the most advanced form of market integration does not go beyond the customs union stage.

### 3 EAST ASIA

Compared with the other regions reviewed in this article, East Asia exhibits a much higher degree of regional economic integration which, however, is not matched to the same extent by regional institutional developments. Economic integration within the region has increased notably since the early 1980s, and the share of intra-regional trade in total trade is now similar to that of the EU. While the convergence of financial variables is not as striking, it is higher than in most other regions. By contrast, the progress made by the official sector in advancing integration arrangements for the region has been relatively modest, although some important steps have been taken in the past five years.

There are no formal regional blocs in East Asia that properly reflect the scope of regional economic integration. Rather, the economies that capture this phenomenon well are the ten largest in the region. This group of economies, labelled here as "ASEAN5+3+2", comprises Indonesia, Malaysia, the Philippines, Singapore and Thailand (that is, the five founding members of ASEAN, the key formal regional bloc), the "big three" (China, Japan and South Korea), Hong Kong S.A.R. and Taiwan. It is

significant that, of all East Asian economies, these ten are the most economically integrated into the world economy. It should be noted that this group includes a major advanced economy, Japan, a feature which is unique among the groups of countries discussed in this article, but which is essential to understanding certain dynamics of integration in the region.

Table 3 shows measures of regional economic integration among the ASEAN5+3+2 economies and, for comparison, among the ASEAN5 countries only. The measures of trade integration are the most striking. Significantly, intra-regional trade accounts for over 40% of the total trade of the ASEAN5+3+2 economies. Intra-regional trade openness of 16% is also high in view of the inclusion of Japan, whose openness to the world is a mere 18% of GDP. It is notably higher for the ASEAN5 alone, not least on account of their smaller economies. The high degree of trade integration reflects the exploitation of comparative advantages within the region in the production of goods for export to advanced third markets. This process characterises East Asia's development strategy

of exporting manufactures to high-income economies outside the region. Production in the region has been described as being akin to a single production line, with sites of high skill and productivity, such as Japan and South Korea, providing the most technologically sophisticated goods and components, and the more labour-intensive products and components being produced in locations such as China. As many of the exports are component-intensive (such as electronics, in which the region excels), much regional trade is intra-industry trade in intermediate goods (or "vertical" intra-industry trade). However, as incomes in East Asia rise, the region is increasingly becoming a target market for final goods in its own right.

While trade integration is very high, income disparities in East Asia are wide. The average percentage difference between each of the ten countries under consideration and the group average is unusually large, at almost 140%. However, rather than signifying an impediment to regional integration, these income disparities are entirely consistent with the integration of production processes, as countries contribute to

Table 3 Indicators of economic integration in East Asia

	Intra-regional trade as % of		Average variation (%) from group mean of members'		Business cycle synchronisation <sup>4)</sup>	Nominal exchange rate volatility <sup>5)</sup>
	GDP	total trade	real GDP per capita <sup>2)</sup>	nominal interest rates <sup>3)</sup>		
<b>ASEAN 5+3+2<sup>1)</sup></b>						
<b>1993-2002</b>	<b>16</b>	<b>43</b>	<b>138</b>	<b>3.3</b>	<b>0.30</b>	<b>21</b>
1998-2002	17	43	133	3.4	0.35	44
1993-1997	14	43	142	3.2	0.25	19
1986-1992	10	37	136	4.2	0.04	18
1980-1985	n.a.	n.a.	124	3.5	n.a.	24
<b>ASEAN 5<sup>1)</sup></b>						
<b>1993-2002</b>	<b>23</b>	<b>20</b>	<b>64</b>	<b>4.0</b>	<b>0.25</b>	<b>18</b>
1998-2002	27	20	68	4.4	0.34	54
1993-1997	20	19	60	3.6	0.15	15
1986-1992	14	16	43	4.9	-0.13	15
1980-1985	n.a.	n.a.	31	3.4	n.a.	24

Source: ECB calculations.

1) The acronyms are explained in the glossary in the appendix.

2) Population-weighted average of the differences between each member's real GDP per capita and the population-weighted regional average.

3) Average of the percentage point differences (absolute) of each country's interest rate from the respective regional mean.

4) Average cross-correlation of the Hodrick-Prescott residuals (i.e. actual minus trend) of countries' monthly industrial production series.

5) Regional average of the standard deviations of four rolling month-on-month log differences in the exchange rate for every pair of currencies in the region.

the production and assembly of final goods in accordance with their relative competencies and cost advantages. Income disparities therefore underpin the high proportion of total trade that is accounted for by regional trade in intermediate goods.

Business cycle correlation has risen steadily since the mid-1980s. This is in part evidence of the integration arising from the regional organisation of production, and was reinforced by the regional downturn induced by Asia's financial crisis in 1997-98. The growing importance of domestic demand within the region may also play a role.

Intra-regional exchange rate volatility and interest rate differences among the ASEAN5+3+2 economies over the period 1980-97 were modest given the range in development levels of the countries. They reflected in large part official attempts to stabilise East Asian currencies vis-à-vis the US dollar to support the strategy of exporting to external markets, predominantly the United States. The financial crisis of 1997-98 led to a large depreciation of some of the currencies in the region, thereby raising intra-regional exchange rate volatility. More recently, intra-regional exchange rate stability has been largely restored, owing to the use of the US dollar as an external anchor, even though countries are pursuing quite varied exchange rate regimes *de jure*.

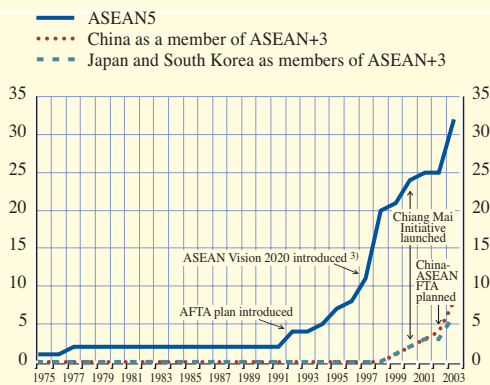
Turning to the institutional dimension of regional integration, it is remarkable that five of the ten largest Asian economies (including China, Japan and South Korea) – which, not coincidentally, are major traders in world markets – are not members of any regional trade arrangement. This makes them exceptional among their global peer group. The only fully-fledged intra-regional arrangement is the Association of Southeast Asian Nations (ASEAN), founded in 1967. Membership has doubled to ten since its inception, although the expansion increased the group's GDP by less than 10%. A key initiative, launched in 1992,

set the group on the path towards an ASEAN Free Trade Area (AFTA). Marked progress in tariff reduction has been made since then: by 2002 six ASEAN countries (ASEAN5 plus Brunei) had reduced internal tariffs on most goods to below 5%, with the other members expected to follow by 2008. However, the impact of AFTA on overall regional economic integration seems to have been limited thus far. First, the largest economies in the region are not members of AFTA. Second, it is difficult to gauge its actual effect on ASEAN regional trade since this trade has not been growing faster than ASEAN trade with the rest of the world.

Significantly, following the Asian financial crisis of 1997-98, the intra-regional dialogue has been strengthened under the auspices of the ASEAN+3 (i.e. all ASEAN members plus the aforementioned "big three"), an informal group that includes almost all the main economies in the region. This group places particular emphasis on promoting financial stability via three main avenues: (i) exchange of information, economic surveillance and peer review; (ii) macroeconomic policy cooperation; and (iii) development of regional financial arrangements. Regarding the latter, ASEAN+3 has strengthened the network of regional repurchase agreements under the Chiang Mai Initiative, with the aim of providing liquidity support to a country facing financial difficulty. This can be interpreted not only as a response to the Asian financial crisis, but also as a first step towards greater regional monetary integration. A discussion has re-emerged about the possibility of creating an East Asian Community (EAC), which is based on a proposal made in the early 1990s by the then Prime Minister of Malaysia. This time the prospects for the materialisation of such a community are arguably better since the ASEAN+3 countries present an obvious founding membership.

Whether the aims of such a community would include formal measures to foster deeper economic integration remains to be seen. Finally, both ASEAN+3 and EMEAP – which

**Chart 1 Index showing regional cooperation for ASEAN5 and selected members of ASEAN+3<sup>1), 2)</sup>**



Source: ECB calculations.

1) Index values range from 0 (no integration) to 100 (total economic integration). See the introduction for details.

2) The acronyms are explained in the glossary in the appendix.

3) This initiative aims to allow free factor movement.

includes the central banks of ASEAN5, the big three, Hong Kong S.A.R., Australia and New Zealand – are working on a number of initiatives – aimed at fostering bond market development and integration in the region. This is an important goal given that Asian domestic financial markets are in most cases not sufficiently developed to ensure an efficient allocation of the large domestic savings to local investment.

Chart 1 measures the progress made by ASEAN5 and ASEAN+3 countries in pursuing one or more of the integration objectives listed in Table 1, by converting the integration achievements into a scale of between 0 and 100 (see the introduction). It confirms that there have been significant improvements in recent years. In relative terms, however, these groups lag behind several other regional arrangements, as illustrated in Chart 2. In an effort to foster economic relations, ASEAN has started negotiations for free trade agreements with China (by 2010) and Japan (by 2012), though these are complicated by the lack of a single negotiating authority for the group and persisting differences in members' external tariffs.

Rather than seeking multilateral intra-regional cooperation, several countries in East Asia have begun exploring bilateral trade agreements with partners inside and outside the region. Japan, for instance, has already concluded an agreement with Singapore, while it is conducting negotiations with three other countries (Thailand, the Philippines and South Korea). Indeed, trade policies in the region tend to prioritise unilateral and global trade liberalisation. This is in line with the region's development strategy, which relies on access to the markets of advanced economies. This strategy has enabled many countries in the region to attain rapid GDP growth rates, economic development and, last but not least, regional economic integration in the absence of a developed official regional framework. In other words, economic integration in East Asia can be mainly interpreted as the indirect result of countries pursuing compatible development goals. This experience also illustrates that formal regional integration agreements per se may not be necessary to deepen regional economic integration, at least to a certain extent.

This does not mean, however, that the official sector has no role to play in the economic integration of East Asia. On the contrary, looking backward, countries in the region have benefited from substantial unilateral tariff reductions coupled with economic policies that have helped to develop the countries' industrial capacity and competitiveness. Looking forward, the most recent initiatives show that there is both scope and rationale for enhancing the degree of financial and monetary integration in the region, which is lagging behind integration in terms of trade, direct investment and other real variables. Moreover, new regional actors, such as India and other countries in the Pacific, may be involved in the cooperation process.

#### 4 LATIN AMERICA

In Latin America, the efforts towards economic integration supported by formal regional arrangements date back to the 1960s. These

initiatives – which included the Central American Common Market (CACM), the Andean Community (CAN), the Latin American Free Trade Area (LAFTA) and the Caribbean Community and Common Market (CARICOM) – were primarily established as an advancement of the import substitution industrialisation (ISI) framework, a dominant development strategy in this region during the early post-war period. While the debt crises in the 1980s and the associated policy constraints prompted the abandonment of the ISI framework, regional initiatives were still viewed as an instrument to complement a development strategy based on export promotion within a wide-ranging process of economic liberalisation and reform. Partly as a result, the 1990s saw the revival of integration agreements which had de facto been abandoned in the mid-1970s (such as the CACM or the CAN), the establishment of new regional

agreements such as the Common Market of the South (MERCOSUR), and Mexico's partnership with two advanced economies (the United States and Canada) in the form of the North American Free Trade Area (NAFTA).

In spite of this trend, economic integration remains very heterogeneous in Latin America, both across the region as a whole and within individual sub-regional groupings. The reasons for this heterogeneity are partly structural in nature. They include: (i) significant differences in openness to trade and/or export patterns; (ii) non-complementary production structures in South-South integration arrangements given generally limited intra-industry trade; (iii) underdeveloped infrastructure networks; and (iv) diverging vulnerability to exogenous shocks under a large dependence on external financing. Cyclical developments – including

**Table 4 Indicators of economic integration in Latin America**

	Intra-regional trade as % of		Average variation (%) from group mean of members <sup>7</sup>		Inflation rate correlation <sup>4)</sup>	Business cycle synchronisation <sup>5)</sup>	Nominal exchange rate volatility <sup>6)</sup>
	GDP	total trade	real GDP per capita <sup>2)</sup>	nominal interest rates <sup>3)</sup>			
<b>Latam11<sup>1)</sup></b>							
2001-2002	4.9	13	50	8	0.18	0.2	37
1994-2000	4.5	15	45	128	0.34	0.32	28
1987-1993	2.8	13	40	1,045	0.21	n.a.	68
<b>MERCOSUR<sup>1)</sup></b>							
2001-2002	4.0	16	59	6	0.7	0.2	57
1994-2000	3.5	21	44	283	0.73	0.41	18
1987-1993	1.8	13	39	2,298	0.53	n.a.	85
<b>CAN<sup>1)</sup></b>							
2001-2002	4.0	11	49	5	0.12	0.15	24
1994-2000	3.7	11	34	7	0.1	0.42	33
1987-1993	2.0	6	36	178	0.13	n.a.	74
<b>CAN3<sup>1)</sup></b>							
2001-2002	3.4	9	51	7	-0.13	0.49	35
1994-2000	3.1	9	30	5	-0.27	0.72	48
1987-1993	1.5	4	39	8	0.07	n.a.	44

Source: ECB calculations.

1) The acronyms are explained in the glossary in the appendix.

2) Population-weighted average of the differences between each member's real GDP per capita and the population-weighted regional average.

3) Average of the percentage point differences (absolute) of each country's interest rate from the respective regional mean.

4) Regional mean of bilateral correlations between group members of inflation rates.

5) Average cross-correlation of the Hodrick-Prescott residuals (i.e. actual minus trend) of countries' monthly industrial production series.

6) Regional average of the standard deviations of four rolling month-on-month log differences in the exchange rate for every pair of currencies in the region.

frequent crises as well as differences in political agendas – have also contributed to this trend.

In economic terms, the most significant South-South arrangements in Latin America are those in the Southern Cone (MERCOSUR and the CAN). Table 4 shows the evolution of a number of indicators of economic integration for these arrangements<sup>3</sup> in recent years, relative to a regional benchmark consisting of the 11 largest Latin American economies (Latam11). The upward trend in intra-regional trade openness is noticeable, albeit to a still low level of 4.9% of GDP for the 2001-02 period in Latam11 (from an average of 2.8% in the period 1987-93). MERCOSUR's intra-regional trade integration stands out by comparison with that of Latam11, with a higher average (around 20% compared with 14%), and faster growth since the 1987-93 period.

Business cycle correlations appeared to be relatively strong in both MERCOSUR and the CAN, sharply exceeding the Latam11 average, at least until the financial crisis affecting major economies in the region in 2002. While this period of instability was associated with an increasing convergence of real interest rates, it came at the sizeable cost of an increase in per capita income discrepancies across all groups (which were already on the rise during the 1994-2000 period, with MERCOSUR the worst affected). In several cases, the financial turmoil of 2002 also negatively affected some indicators that had shown a narrowing trend until that time (e.g. nominal exchange rate volatility and equity returns in MERCOSUR). This notwithstanding, MERCOSUR tends to outperform the CAN in most integration indicators, most noticeably in inflation correlations.

Looking at the economic integration trends within the individual sub-regions, a number of elements should be highlighted. First, the surge in intra-regional trade in both the CAN and MERCOSUR has mirrored progress in the institutional dimension, as discussed below. However, the impact of this policy-induced

trigger on overall trade expansion relative to economic size is still modest in comparison with other arrangements in the Western hemisphere. For instance, in 2002 total trade accounted for 20% and 15% of GDP for the CAN and MERCOSUR respectively, as opposed to 90% and 25% in the CACM and NAFTA. Second, while MERCOSUR has witnessed an improvement in some of its integration indicators, its progress was partly reversed following the economic and financial turmoil in 2002. Notwithstanding the post-crisis recovery of major MERCOSUR economies, there remains a downside risk that this will turn out to be a permanent rather than a temporary setback. Third, the CAN (particularly CAN3) has achieved considerable progress on a number of integration criteria, albeit from a very low base.

The heterogeneous nature of Latin American integration is also reflected in the varying degrees of institutionalisation underpinning the various regional agreements, even in those cases where similar objectives, such as the establishment of a common market, are pursued. Regarding the current degree of regional cooperation, Chart 2 measures a number of arrangements in Latin America against the index of regional cooperation. Scores in 2002 ranged from 43 and 41 (out of a maximum possible score of 100) in the cases of the CAN3 and the CACM3 respectively, to only 20 in the case of MERCOSUR. Using ASEAN5 as a point of reference, most Latin American regional arrangements rank higher, with the important exception of MERCOSUR. Turning to institutional trends across the region over time, a number of common features can be observed. First, the depth and scope of each sub-regional arrangement appear to be positively correlated with the degree of institutionalisation. This makes sense in that any regional arrangement requires a minimal operating institutional set-up, and this can be expected to expand as the objectives of

<sup>3</sup> A distinction is made between the CAN (five members) and a sub-group, CAN3 (three members), in order to account for the differentiated integration paths of Bolivia and Peru.

integration become more ambitious. Second, Latin America emerges as a region with a preference for deeper integration mechanisms, as illustrated by the fact that all the arrangements under consideration now aim to establish a common market at the very least.<sup>4</sup> In this context, peer-reviewed efforts at the ministerial level aiming at macroeconomic coordination have been initiated by all arrangements under consideration, with varying degrees of success.<sup>5</sup> Third, with the exception of CARICOM, progress in deepening integration has been achieved in a remarkably short period of time, dating back in most cases to the beginning of the 1990s.

Beyond these broad trends, however, significant differences emerge in both the extent and the sequencing of institutionalisation. First, as regards institutional design, the comparison between the CAN and MERCOSUR is illustrative insofar as both are arrangements between major Latin American economies at similar stages of development, with similar stated objectives. The CAN is modelled on the EU and has progressively established a number of supranational structures over the years, including the Andean Parliament, a Court of Justice, a reserve fund and a regional development bank. Common microeconomic policies have also been developed in the agricultural sector. MERCOSUR, by contrast, operates within a minimal institutional structure, which is largely intergovernmental in nature. This did not prevent MERCOSUR from creating a customs union (albeit an imperfect one) within its first four years of existence, suggesting that institutional minimalism is not necessarily a handicap in the presence of strong political consensus among the signatory parties. At the same time, this institutional setting also enables member countries to temporarily withdraw from some of their commitments, as MERCOSUR's history shows.<sup>6</sup> In this context, the political will of member states becomes the key variable on which the process of regional integration depends.

Second, regarding the sequencing of institutionalisation, regional arrangements in Latin America seem to have followed a flexible rather than a structured approach in the attainment of the stated economic objectives. For example, both the CAN and CARICOM undertook a number of reforms related to the establishment of a common market (including the partial liberalisation of capital flows and labour movement) some time before the customs unions process had been completed. This flexibility might also implicitly reflect different priorities for any given integration goal. For example, CARICOM moved to set up the Caribbean Court of Justice only recently (2002), whereas both the CAN and the CACM established comparable supranational structures early on in their respective integration processes.

In conclusion, the regional arrangements in Latin America tend to be characterised by their heterogeneity in both institutional and economic terms. Latin America continues to exhibit a low level of trade integration both within the region as a whole and with the rest of the world, although trade within specific sub-regional groupings has been increasing over the past decade. However, the policy-led efforts towards regional integration during the 1990s resulted in some progress on a host of other indicators of economic and financial integration. In institutional terms, most regional arrangements tend to have a high level of institutionalisation by comparison with the other regions reviewed in this article, including supranational features.

4 Of these, the single monetary policy of the ECCU (Eastern Caribbean Currency Union) is clearly the most advanced.

5 Since 1994, the CACM has used a set of eight indicators (i.e. current account deficit, net international reserves, real exchange rate, GDP growth, real interest rates, public debt, public sector deficit, and inflation) to monitor convergence in the sub-region. Targets for the latter three have also been set by the CAN (in 2001) and MERCOSUR (in 2000). Actual progress with regard to MERCOSUR, however, has been hampered by the volatile macroeconomic environment prevailing since the targets were set.

6 A new permanent trade dispute settlement court, which recently began operations for MERCOSUR, may deter such actions in the future.

Looking forward, two downside risks to the outlook for Latin American regional integration can be identified. First, there remains the possibility that the financial and economic instability that peaked in 2002 will bring about a more permanent reversal in economic integration than is currently anticipated. Second, it is unclear whether the main integration arrangements in the region will continue to operate successfully in the absence of a significant increase in intra-regional trade (in the case of the CAN) or a deepening of institutional integration beyond the current level (in the case of MERCOSUR).

## 5 A TENTATIVE ASSESSMENT AND OPEN ISSUES

The analysis conducted in this article allows some tentative conclusions to be drawn regarding (i) the different character of economic integration in various regions of the world, (ii) the link between the economic and the institutional dimension in a dynamic process of regional integration, and (iii) the compatibility between regional and global integration.

### NO ONE-SIZE-FITS-ALL APPROACH TO REGIONAL INTEGRATION

First, no single interpretation is suitable to understand the relevance, intensity and patterns of economic integration across different regions of the world. Several examples supporting this view are found in this article. For instance, unlike the European experience, where the process of economic integration was progressively enshrined in, and reinforced by, institutional arrangements, the relatively high level of integration among East Asian economies can be better understood as the outcome of the regional organisation of production rather than of joint policy decisions aimed specifically at integration. Another insight provided by the East Asian case study is that the degree of income disparity within a region does indeed affect the pattern of integration, but does not necessarily provide a guide to its intensity. In the EU, high incomes per capita and relatively low income differences

between members (especially prior to the May 2004 enlargement) have fostered trade in final goods, driven not least by consumer desire for variety. In East Asia, by contrast, marked intra-regional differences in per capita income levels have supported regional intra-industry trade in intermediate goods destined for markets outside the region. Finally, structural factors may also strongly affect the relevance, intensity and patterns of integration, as the experiences of the EU neighbouring regions and Latin America exemplify. For instance, similar endowments in terms of the type and extent of natural resources may limit the potential for regional economic integration – especially in the cases of the Middle East and Africa – in the same way as the opposite feature tends to foster it in Europe and East Asia.

The examples above all suggest that each region of the world is developing its *own* approach to economic integration. Indeed, regional arrangements are likely to succeed only to the extent that they embody realistic objectives in line with local economic conditions and the level of political commitment. This, at least, has been the experience of the EU over the last 50 years.

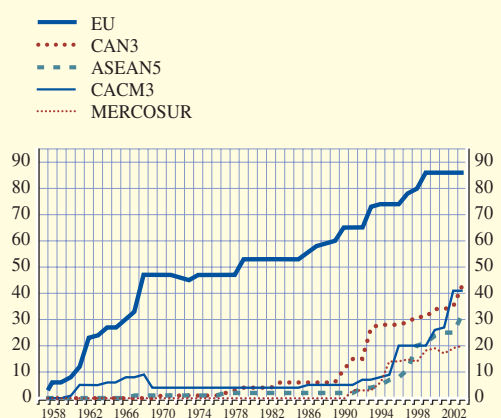
### THE IMPORTANCE OF INSTITUTIONS

It is striking that, despite significant differences in the level of regional cooperation achieved in different regions, a strong acceleration towards greater regional cooperation has taken place over the past 15 years, especially in East Asia and Latin America. This is confirmed by Chart 2, which compares the progress made by these two regions in pursuing one or more of the integration objectives listed in Table 1 with the progress made by the EU since the 1950s.<sup>7</sup>

<sup>7</sup> The six founding members of the European Economic Community (EU6; see glossary) set the upper bound against which other EU Member States have subsequently followed their own path of regional integration. Currently six other EU Member States (Greece, Spain, Ireland, Austria, Portugal and Finland) have achieved the same level of institutional integration through their participation in the single currency, while the other 13 EU Member States are not participating, at least for the time being, in Monetary Union.



**Chart 2 Index of regional cooperation for several arrangements in East Asia, Latin America and Europe<sup>1), 2)</sup>**



Source: ECB calculations.  
 1) Index values range from 0 (no integration) to 100 (total economic integration). See the introduction for details.  
 2) The acronyms are explained in the glossary in the appendix.

Owing to the relatively recent nature of this process of regional catching-up, it would be premature to draw firm conclusions about its likely influence on real, financial and/or monetary integration in each of the regions under discussion in the decades to come. On the one hand, a certain degree of economic integration could be seen as a precondition for further regional cooperation. On the other hand, a static analysis of a region's current degree of economic integration may not provide the best basis on which to evaluate the merits of strengthening regional cooperation. The European experience, which can be assessed over a longer time horizon, seems to confirm that there is dynamic interaction between the process of regional cooperation and actual economic integration. This does not mean that the latter is entirely endogenous to the policy decisions on regional cooperation: there is no "automatic pilot" ensuring that a strengthening in such cooperation will bring about, for instance, higher regional trade, more synchronised business cycles, financial market integration and nominal convergence. Rather it means that a virtuous circle may develop over time between the process of regional cooperation and the actual degree of economic integration, if certain preconditions are fulfilled.

One key precondition seems to be a lasting political commitment to enhance regional integration. Creating common institutions is not sufficient on its own to promote integration, as illustrated, for instance, by most arrangements in the EU neighbouring regions and, to some extent, the MERCOSUR experience. Institutions risk remaining ineffective if they are not backed by political commitment and a legal framework to ensure implementation of the agreed integration steps. In this respect it should be highlighted that outside the EU, with the important exception of three Latin American arrangements (CAN, CACM and CARICOM),<sup>8</sup> institution-building has not led to the development of supranational bodies and laws. While this may not be a problem as long as the final objective of integration is limited to the development of a free trade area or a customs union, the lack of an appropriate degree of institutional development may hamper the pursuit of more ambitious objectives, especially those requiring common policies. Furthermore, if countries are racked by regional conflicts or historically-rooted resentment, they are severely handicapped in their consideration of closer economic integration. Only when conflicts have ended and resentment has been put aside is there scope to consider regional initiatives, and, as the EU experience illustrates, such initiatives can in turn foster regional cohesion and peace over a long horizon.

## REGIONAL INTEGRATION AS PART OF GLOBALISATION

A final question is whether the process of regional integration should be interpreted as a stepping stone or a stumbling block to global economic integration. While the economic literature on the subject is far from conclusive, the experiences reviewed in this article illustrate that the answer to this question hinges on the concrete characteristics of an integration process. East Asia, for example, pursued global integration, and experienced increasing

<sup>8</sup> A supranational element may from now on also apply to MERCOSUR, following the establishment of a new permanent trade dispute settlement court.

regional integration almost as a “by-product”, as illustrated by the development of a regional production line for world markets. In this respect, globalisation and regionalisation have proceeded in harmony. The interaction of regional and global dynamics may benefit not only export-led growth, but also growth pursued through the bolstering of domestic demand and the attraction of foreign direct investment (FDI). Since most developing economies, especially those in Africa, have very small domestic markets, regional integration may become an important tool to expand markets and thus permit economies of scale. This may in turn facilitate integration into the global economy, by both improving competitiveness and possibly attracting FDI inflows. On the other hand, the experiences of Latin American countries in the early post-war period show that integration into the world economy is hindered by an approach such as import substitution industrialisation.

In the same vein, the institutional dimension of regional integration may usefully complement global integration under certain conditions. Enhanced regional surveillance, for instance, can facilitate IMF-led multilateral surveillance, as several experiences in East Asia and Latin America confirm. Internationally agreed standards and codes, which are formulated at a rather general level and implemented on a voluntary basis, can be supplemented by a regional set of rules and laws, which, as the EU’s *acquis communautaire* illustrates, can be more detailed and require greater commitment by signatories. Regional cooperation may also encourage the development and improvement of local market infrastructure, whereas the impetus from global integration may, per se, be less conducive to such an outcome. In the financial field, regional cooperation may foster the emergence of larger and more liquid markets, as well as of proper regulation and supervision, thus facilitating the process of capital account liberalisation.

While all these regional policies, which can be grouped under the heading “open regionalism”,

are not only consistent with, but can even reinforce, countries’ integration into the global economy, a number of potential threats to global economic integration should also be acknowledged and counteracted. Possible risks arise from the potential for creating forms of regionalism inconsistent with the principle of progressive trade liberalisation underpinning the WTO, the lack of an effective WTO system for monitoring and assessing regional trade arrangements, the participation of certain countries in many sub-regional arrangements at the same time – which complicates the assessment of their legal compatibility – and, more generally, any form of prioritisation of regional economic integration at the expense of global integration.

## APPENDIX: GLOSSARY OF THE REGIONAL TERMS AND ACRONYMS USED IN THIS ARTICLE

ACP countries	African, Caribbean and Pacific countries.
AFTA	ASEAN Free Trade Area.
Agadir group	The members of the Agadir group are Egypt, Jordan, Morocco and Tunisia.
AMU	Arab Maghreb Union, comprising Algeria, Libya, Mauritania, Morocco and Tunisia.
Arab League	The members of the Arab League are Algeria, Bahrain, Comoros, Djibouti, Egypt, Iraq, Jordan, Kuwait, Lebanon, Libya, Mauritania, Morocco, Oman, the Palestinian Territories, Qatar, Saudi Arabia, Somalia, Sudan, Syria, Tunisia, the United Arab Emirates and Yemen.
ASEAN	The current membership includes, along with the five founders (ASEAN5), Brunei, Cambodia, Lao PDR, Myanmar and Viet Nam.
ASEAN+3	ASEAN plus China, Japan and South Korea.
ASEAN5	The original members of the Association of Southeast Asian Nations, namely Indonesia, Malaysia, the Philippines, Singapore and Thailand.
ASEAN5+3+2	ASEAN5 plus China, Japan and South Korea, plus Hong Kong S.A.R. and Taiwan.
ASEM	Asia-Europe Meeting, comprising the finance ministers of ten Asian countries (China, Japan, South Korea, Brunei, Indonesia, Malaysia, the Philippines, Singapore, Thailand and Viet Nam), the finance ministers of the EU Member States and representatives of the European Commission. The ASEM observers are the IMF, the World Bank, the ECB and the Asian Development Bank (ADB).
CACM	Central American Common Market, comprising Costa Rica, El Salvador, Guatemala, Honduras and Nicaragua. The same countries are members of the Central American Monetary Council (CAMC).
CACM3	CACM without Costa Rica and Honduras.
CAEMC	Central African Economic and Monetary Community, comprising Cameroon, the Central African Republic, Chad, Equatorial Guinea, Gabon and the Republic of the Congo.
CAN	Comunidad Andina (Andean Community), comprising Bolivia, Colombia, Ecuador, Peru and Venezuela.
CAN3	CAN without Bolivia and Peru.

CARICOM	Caribbean Community and Common Market, comprising Antigua and Barbuda, the Bahamas, Barbados, Belize, Dominica, Grenada, Guyana, Haiti, Jamaica, Montserrat, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Suriname, and Trinidad and Tobago.
CEMLA	Centro de Estudios Monetarios Latinoamericanos.
CIS	Commonwealth of Independent States, comprising Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, the Kyrgyz Republic, Moldova, Russia, Tajikistan, Turkmenistan, Ukraine and Uzbekistan.
CMA	Common Monetary Area, comprising Lesotho, Namibia, South Africa and Swaziland.
EAC	East Asian Community. Although such a community is still under discussion, membership is likely to comprise, in the first instance, the ASEAN+3 countries.
EAEC	Eurasian Economic Community, comprising Belarus, Kazakhstan, the Kyrgyz Republic, Russia and Tajikistan.
ECCAS	Economic Community of Central African States, comprising Angola, Burundi, Cameroon, the Central African Republic, Chad, the Democratic Republic of the Congo, Equatorial Guinea, Gabon, the Republic of the Congo, São Tomé and Príncipe, and Rwanda.
ECCU	Eastern Caribbean Currency Union, comprising Anguilla, Antigua and Barbuda, Dominica, Grenada, Montserrat, St. Kitts and Nevis, St. Lucia, and St. Vincent and the Grenadines.
ECOWAS	Economic Community of West African States, comprising Benin, Burkina Faso, Cape Verde, Côte d'Ivoire, Gambia, Ghana, Guinea, Guinea-Bissau, Mali, Niger, Nigeria, Senegal, Sierra Leone and Togo.
EMEAP	Executives' Meeting of East Asia-Pacific Central Banks, comprising Australia, China, Hong Kong S.A.R., Indonesia, Japan, Malaysia, New Zealand, the Philippines, Singapore, South Korea and Thailand.
EU	European Union, comprising the following 25 Member States: Belgium, the Czech Republic, Denmark, Germany, Estonia, Greece, Spain, France, Ireland, Italy, Cyprus, Latvia, Lithuania, Luxembourg, Hungary, Malta, the Netherlands, Austria, Poland, Portugal, Slovenia, Slovakia, Finland, Sweden and the United Kingdom.
EU6	The six members of the EU (Belgium, Germany, France, Italy, Luxembourg and the Netherlands) that in 1957 founded the European Economic Community, the forerunner of the EU.
GCC	Gulf Cooperation Council, comprising Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and the United Arab Emirates.

GUAM	The members are Georgia, Ukraine, Uzbekistan, Azerbaijan and Moldova.
G20	Group of Twenty economies, comprising Argentina, Australia, Brazil, Canada, China, France, Germany, India, Indonesia, Italy, Japan, Mexico, South Korea, Russia, Saudi Arabia, South Africa, Turkey, the United Kingdom, the United States and the European Union. The Managing Director of the IMF, the President of the World Bank and the President of the ECB also participate, along with the chairpersons of the International Monetary and Financial Committee of the IMF Board of Governors and the IMF/World Bank Development Committee, as ex officio members.
LAFTA	Latin American Free Trade Area, which was founded by Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, Mexico, Paraguay, Peru, Uruguay and Venezuela.
Latam11	This label is used in this article to refer to the 11 major countries in Latin America, namely, Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, Mexico, Paraguay, Peru, Uruguay and Venezuela.
MENA	Countries covered here as Middle Eastern and North African: Algeria, Bahrain, Egypt, Iran, Iraq, Israel, Jordan, Kuwait, Lebanon, Libya, Morocco, Oman, the Palestinian Territories, Qatar, Saudi Arabia, Syria, Tunisia, the United Arab Emirates and Yemen.
MERCOSUR	Mercado Común del Sur (Common Market of the South), comprising Argentina, Brazil, Paraguay and Uruguay.
NAFTA	North American Free Trade Area, comprising Canada, Mexico and the United States.
OAU	Organization for African Unity, which in 2002 was transformed into the African Union (AU) comprising 53 African states.
PAFTA	Pan-Arab Free Trade Area. This is a trade arrangement of the Arab League.
SADC	Southern African Development Community, comprising Angola, Botswana, the Democratic Republic of the Congo, Lesotho, Malawi, Mauritius, Mozambique, Namibia, Seychelles, South Africa, Swaziland, Tanzania, Zambia and Zimbabwe.
WAEMU	West African Economic and Monetary Union, comprising Benin, Burkina Faso, Côte d'Ivoire, Guinea-Bissau, Mali, Niger, Senegal and Togo.

# EURO AREA STATISTICS





# CONTENTS<sup>1</sup>

## EURO AREA OVERVIEW

Summary of economic indicators for the euro area **S5**

## I MONETARY POLICY STATISTICS

1.1 Consolidated financial statement of the Eurosystem **S6**

1.2 Key ECB interest rates **S7**

1.3 Eurosystem monetary policy operations allotted through tenders **S8**

1.4 Minimum reserve and liquidity statistics **S9**

## 2 MONEY, BANKING AND INVESTMENT FUNDS

2.1 Aggregated balance sheet of euro area MFIs **S10**

2.2 Consolidated balance sheet of euro area MFIs **S11**

2.3 Monetary statistics **S12**

2.4 MFI loans, breakdown **S14**

2.5 Deposits held with MFIs, breakdown **S17**

2.6 MFI holdings of securities, breakdown **S20**

2.7 Revaluation of selected MFI balance sheet items **S21**

2.8 Currency breakdown of selected MFI balance sheet items **S22**

2.9 Aggregated balance sheet of euro area investment funds **S24**

2.10 Assets of euro area investment funds broken down by investment policy and type of investor **S25**

## 3 FINANCIAL AND NON-FINANCIAL ACCOUNTS

3.1 Main financial assets of non-financial sectors **S26**

3.2 Main liabilities of non-financial sectors **S27**

3.3 Main financial assets and liabilities of insurance corporations and pension funds **S28**

3.4 Annual saving, investment and financing **S29**

## 4 FINANCIAL MARKETS

4.1 Securities issues other than shares by original maturity, residency of the issuer and currency **S31**

4.2 Securities other than shares issued by euro area residents by original maturity and sector of the issuer **S32**

4.3 Annual growth rates of securities other than shares issued by euro area residents **S34**

4.4 Quoted shares issued by euro area residents **S36**

4.5 MFI interest rates on euro-denominated deposits and loans by euro area residents **S38**

4.6 Money market interest rates **S40**

4.7 Government bond yields **S41**

4.8 Stock market indices **S42**

## 5 PRICES, OUTPUT, DEMAND AND LABOUR MARKETS

5.1 HICP, other prices and costs **S43**

5.2 Output and demand **S46**

5.3 Labour markets **S50**

1) For further information, please contact us at: [statistics@ecb.int](mailto:statistics@ecb.int). See the ECB's website ([www.ecb.int](http://www.ecb.int)) for longer runs and more detailed data.



<b>6</b>	<b>GOVERNMENT FINANCE</b>	
6.1	Revenue, expenditure and deficit/surplus	<b>S51</b>
6.2	Debt	<b>S52</b>
6.3	Change in debt	<b>S53</b>
6.4	Quarterly revenue, expenditure and deficit/surplus	<b>S54</b>
<b>7</b>	<b>EXTERNAL TRANSACTIONS AND POSITIONS</b>	
7.1	Balance of payments	<b>S55</b>
7.2	Monetary presentation of the balance of payments	<b>S61</b>
7.3	Trade in goods	<b>S62</b>
7.4	International investment position	<b>S64</b>
7.5	International reserves	<b>S66</b>
<b>8</b>	<b>EXCHANGE RATES</b>	
8.1	Effective exchange rates	<b>S67</b>
8.2	Bilateral exchange rates	<b>S68</b>
<b>9</b>	<b>DEVELOPMENTS OUTSIDE THE EURO AREA</b>	
9.1	In other EU Member States	<b>S69</b>
9.2	In the United States and Japan	<b>S70</b>
	<b>LIST OF CHARTS</b>	<b>S72</b>
	<b>TECHNICAL NOTES</b>	<b>S73</b>
	<b>GENERAL NOTES</b>	<b>S77</b>

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#### Conventions used in the tables

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



# EURO AREA OVERVIEW

## Summary of economic indicators for the euro area

(annual percentage changes, unless otherwise indicated)

### 1. Monetary developments and interest rates

	M1 <sup>1)</sup>	M2 <sup>1)</sup>	M3 <sup>1),2)</sup>	M3 <sup>1),2)</sup> 3-month moving average (centred)	MFI loans to euro area residents excluding MFIs and general government <sup>1)</sup>	Securities other than shares issued in euro by non- financial and non- monetary financial corporations <sup>1)</sup>	3-month interest rate (EURIBOR, % per annum, period averages)	10-year government bond yield (% per annum, period averages)
	1	2	3	4	5	6	7	8
2002	7.7	6.6	7.3	-	5.4	21.2	3.32	4.92
2003	11.0	8.0	8.1	-	5.0	20.4	2.33	4.16
2003 Q4	11.0	7.9	7.6	-	5.3	21.7	2.15	4.36
2004 Q1	11.1	7.2	6.5	-	5.4	16.5	2.06	4.15
Q2	10.2	6.0	5.3	-	5.6	11.7	2.08	4.36
Q3	.	.	.	-	.	.	2.12	4.21
2004 Apr.	10.9	6.2	5.4	5.5	5.5	11.8	2.05	4.24
May	9.3	5.4	4.8	5.2	5.7	11.1	2.09	4.39
June	9.6	5.7	5.3	5.2	6.0	11.4	2.11	4.44
July	10.1	5.9	5.4	5.4	6.2	11.1	2.12	4.34
Aug.	9.3	5.7	5.5	.	6.0	.	2.11	4.17
Sep.	.	.	.	.	.	.	2.12	4.11

### 2. Prices, output, demand and labour markets

	HICP	Industrial producer prices	Hourly labour costs	Real GDP	Industrial production excluding construction	Capacity utilisation in manufacturing (percentages)	Employment	Unemployment (% of labour force)
	1	2	3	4	5	6	7	8
2002	2.3	-0.1	3.7	0.8	-0.5	81.5	0.5	8.4
2003	2.1	1.4	2.8	0.5	0.3	81.0	0.1	8.9
2003 Q4	2.0	1.0	2.1	0.7	1.4	81.1	0.2	8.9
2004 Q1	1.7	0.2	2.7	1.3	1.0	80.7	0.1	8.9
Q2	2.3	2.0	2.2	2.0	2.7	81.1	0.1	9.0
Q3	.	.	.	.	.	.	.	.
2004 Apr.	2.0	1.4	-	-	1.6	80.7	-	9.0
May	2.5	2.4	-	-	3.6	-	-	9.0
June	2.4	2.4	-	-	3.0	-	-	9.0
July	2.3	2.9	-	-	2.1	81.5	-	9.0
Aug.	2.3	3.1	-	-	.	-	-	9.0
Sep.	2.2	.	-	-	.	-	-	.

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

(EUR billions, unless otherwise indicated)

	Balance of payments (net transactions)				Reserve assets (end-of-period positions)	Effective exchange rate of the euro: EER-23 <sup>3)</sup> (index, 1999 Q1 = 100)		USD/EUR exchange rate
	Current and capital accounts	Goods	Direct investment	Portfolio investment		Nominal	Real (CPI)	
2002	65.4	133.6	-4.7	114.6	366.1	89.2	90.3	0.9456
2003	38.3	108.5	-13.1	17.6	306.5	99.9	101.7	1.1312
2003 Q4	24.7	30.7	-9.6	10.5	306.5	102.2	104.3	1.1890
2004 Q1	16.2	28.1	-28.9	5.2	308.4	104.7	106.7	1.2497
Q2	13.0	34.1	-12.3	4.2	301.4	102.1	104.1	1.2046
Q3	.	.	.	.	.	102.8	104.9	1.2220
2004 Apr.	1.0	10.7	-2.9	-3.0	303.9	101.6	103.7	1.1985
May	5.7	11.2	-1.6	-24.0	298.9	102.4	104.4	1.2007
June	6.3	12.2	-7.8	31.2	301.4	102.3	104.2	1.2138
July	4.3	13.7	-8.3	-30.5	301.3	102.8	104.7	1.2266
Aug.	.	.	.	.	301.7	102.7	104.8	1.2176
Sep.	.	.	.	.	.	103.0	105.2	1.2218

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

Note: For more information on the data, see the relevant tables later in this section.

- Annual percentage changes of monthly data refer to the end of the month, whereas those of quarterly and yearly data refer to the annual change in the period average of the series. See the technical notes for details.
- M3 and its components exclude holdings by non-euro area residents of money market fund shares/units and debt securities with a maturity of up to two years.
- For the definition of the trading partner groups and other information, please refer to the General notes.



# MONETARY POLICY STATISTICS

## 1.1 Consolidated financial statement of the Eurosystem

(EUR millions)

### 1. Assets

	2004 10 Sep.	2004 17 Sep.	2004 24 Sep.	2004 1 Oct.
<b>Gold and gold receivables</b>	127,382	127,382	127,381	130,657
<b>Claims on non-euro area residents in foreign currency</b>	167,544	167,709	168,799	165,337
<b>Claims on euro area residents in foreign currency</b>	17,603	17,521	17,293	17,145
<b>Claims on non-euro area residents in euro</b>	7,868	7,556	8,135	7,558
<b>Lending to euro area credit institutions in euro</b>	327,554	328,008	337,516	334,021
Main refinancing operations	252,501	253,000	262,501	258,999
Longer-term refinancing operations	74,999	74,999	74,999	75,001
Fine-tuning reverse operations	0	0	0	0
Structural reverse operations	0	0	0	0
Marginal lending facility	51	3	1	18
Credits related to margin calls	3	6	15	3
<b>Other claims on euro area credit institutions in euro</b>	1,510	1,573	1,586	1,817
<b>Securities of euro area residents in euro</b>	67,863	67,981	67,596	67,384
<b>General government debt in euro</b>	42,089	42,089	42,089	42,060
<b>Other assets</b>	115,197	115,429	115,416	116,315
<b>Total assets</b>	874,610	875,248	885,811	882,294

### 2. Liabilities

	2004 10 Sep.	2004 17 Sep.	2004 24 Sep.	2004 1 Oct.
<b>Banknotes in circulation</b>	465,282	463,944	462,638	466,798
<b>Liabilities to euro area credit institutions in euro</b>	137,398	138,455	137,202	142,472
Current accounts (covering the minimum reserve system)	137,378	138,434	137,187	142,449
Deposit facility	20	21	15	22
Fixed-term deposits	0	0	0	0
Fine-tuning reverse operations	0	0	0	0
Deposits related to margin calls	0	0	0	1
<b>Other liabilities to euro area credit institutions in euro</b>	125	125	125	125
<b>Debt certificates issued</b>	1,054	1,054	1,054	1,054
<b>Liabilities to other euro area residents in euro</b>	62,873	61,576	73,870	60,880
<b>Liabilities to non-euro area residents in euro</b>	9,087	9,122	9,254	9,237
<b>Liabilities to euro area residents in foreign currency</b>	322	384	446	268
<b>Liabilities to non-euro area residents in foreign currency</b>	7,443	7,430	8,426	8,191
<b>Counterpart of special drawing rights allocated by the IMF</b>	5,896	5,896	5,896	5,807
<b>Other liabilities</b>	55,152	57,283	56,920	56,905
<b>Revaluation accounts</b>	70,205	70,205	70,205	70,696
<b>Capital and reserves</b>	59,773	59,774	59,775	59,861
<b>Total liabilities</b>	874,610	875,248	885,811	882,294

Source: ECB.

## 1.2 Key ECB interest rates

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

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

Source: ECB.

- 1) From 1 January 1999 to 9 March 2004, the date refers to the deposit and marginal lending facilities. For main refinancing operations, 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. From 10 March 2004 onwards, the date refers to the deposit and marginal lending facilities and to the main refinancing operations (changes effective from the first main refinancing operation following the Governing Council discussion), unless otherwise indicated.
- 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 monetary 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.

### 1.3 Eurosystem monetary policy operations allotted through tenders <sup>1), 2)</sup>

(EUR millions; interest rates in percentages per annum)

#### 1. Main and longer-term refinancing operations <sup>3)</sup>

Date of settlement	Bids (amount)	Number of participants	Allotment (amount)	Variable rate tenders			Running for (...) days
				Minimum bid rate	Marginal rate <sup>4)</sup>	Weighted average rate	
	1	2	3	4	5	6	7
<b>Main refinancing operations</b>							
2004 9 June	278,440	344	233,500	2.00	2.00	2.01	7
16	305,245	376	232,000	2.00	2.00	2.01	7
23	331,013	406	260,000	2.00	2.00	2.01	7
30	315,078	385	256,000	2.00	2.01	2.02	7
7 July	315,956	383	253,000	2.00	2.00	2.01	7
14	328,840	390	242,500	2.00	2.01	2.01	7
21	322,945	416	259,500	2.00	2.01	2.01	7
28	321,937	403	258,000	2.00	2.01	2.02	7
4 Aug.	342,842	359	255,000	2.00	2.01	2.02	7
11	336,449	348	247,500	2.00	2.01	2.02	7
18	332,633	368	246,000	2.00	2.01	2.02	7
25	339,539	366	259,000	2.00	2.02	2.02	7
1 Sep.	343,768	333	254,000	2.00	2.02	2.02	7
8	326,708	339	252,500	2.00	2.02	2.02	7
15	332,636	357	253,000	2.00	2.02	2.02	7
22	331,112	380	262,500	2.00	2.02	2.02	7
29	327,330	353	259,000	2.00	2.02	2.03	6
5 Oct.	325,420	298	255,500	2.00	2.02	2.03	7
<b>Longer-term refinancing operations</b>							
2003 25 Sep.	28,436	106	15,000	-	2.10	2.12	84
30 Oct.	32,384	150	15,000	-	2.13	2.14	91
27 Nov.	25,402	128	15,000	-	2.12	2.13	91
18 Dec.	24,988	114	15,000	-	2.12	2.14	105
2004 29 Jan.	47,117	145	25,000	-	2.03	2.04	91
26 Feb.	34,597	139	25,000	-	2.01	2.03	91
1 Apr.	44,153	141	25,000	-	1.85	1.90	91
29	54,243	180	25,000	-	2.01	2.03	91
27 May	45,594	178	25,000	-	2.04	2.05	91
1 July	37,698	147	25,000	-	2.06	2.08	91
29	40,354	167	25,000	-	2.07	2.08	91
26 Aug.	37,957	152	25,000	-	2.06	2.08	91
30 Sep.	37,414	138	25,000	-	2.06	2.08	84

#### 2. Other tender operations

Date of settlement	Type of operation	Bids (amount)	Number of participants	Allotment (amount)	Variable rate tenders			Running for (...) days	
					Fixed rate tenders	Minimum bid rate	Marginal rate <sup>4)</sup>		Weighted average rate
	1	2	3	4	5	6	7	8	9
2000 5 Jan. <sup>5)</sup>	Collection of fixed-term deposits	14,420	43	14,420	-	-	3.00	3.00	7
21 June	Reverse transaction	18,845	38	7,000	-	-	4.26	4.28	7
2001 30 Apr.	Reverse transaction	105,377	329	73,000	-	4.75	4.77	4.79	7
12 Sep.	Reverse transaction	69,281	63	69,281	4.25	-	-	-	1
13	Reverse transaction	40,495	45	40,495	4.25	-	-	-	1
28 Nov.	Reverse transaction	73,096	166	53,000	-	3.25	3.28	3.29	7
2002 4 Jan.	Reverse transaction	57,644	61	25,000	-	3.25	3.30	3.32	3
10	Reverse transaction	59,377	63	40,000	-	3.25	3.28	3.30	1
18 Dec.	Reverse transaction	28,480	50	10,000	-	2.75	2.80	2.82	6
2003 23 May	Collection of fixed-term deposits	3,850	12	3,850	2.50	-	-	-	3
2004 11 May	Collection of fixed-term deposits	16,200	24	13,000	2.00	-	-	-	1

Source: ECB.

- 1) The amounts shown may differ slightly from those in Table 1.1 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 1.3.2.
- 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%.

### 1.4 Minimum reserve and liquidity statistics

(EUR billions; period averages of daily positions, unless otherwise indicated; interest rates as percentages per annum)

#### 1. Reserve base of credit institutions subject to reserve requirements

Reserve base as at <sup>1)</sup> :	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	Deposits (over 2 years' agreed maturity and notice period)	Repos	Debt securities over 2 years' agreed maturity
	1	2	3	4	5	6
2002	11,116.8	6,139.9	409.2	1,381.9	725.5	2,460.3
2003	11,538.7	6,283.8	412.9	1,459.1	759.5	2,623.5
2004 Q1	11,926.7	6,404.7	442.5	1,483.2	867.7	2,728.6
2004 Apr.	12,088.2	6,474.0	451.3	1,492.1	911.8	2,759.0
May	12,141.3	6,506.8	442.3	1,499.1	898.2	2,794.9
June	12,148.5	6,524.1	439.1	1,515.1	859.0	2,811.2
July	12,182.0	6,517.4	442.6	1,527.7	857.0	2,837.3

#### 2. Reserve maintenance

Maintenance period ending on:	Required reserves	Credit institutions current accounts	Excess reserves	Deficiencies	Interest rate on minimum reserves
	1	2	3	4	5
2002	128.8	129.5	0.8	0.0	3.06
2003	131.8	132.6	0.8	0.0	2.00
2004 Q1	133.4	134.1	0.7	0.0	2.00
Q2	136.4	137.1	0.7	0.0	2.00
2004 6 July	138.0	138.8	0.8	0.0	2.00
10 Aug.	138.5	139.1	0.6	0.0	2.01
7 Sep.	138.7	139.3	0.6	0.0	2.02
11 Oct.	138.7	.	.	.	.

#### 3. Liquidity

Maintenance period ending on:	Liquidity-providing factors					Liquidity-absorbing factors					Credit institutions current accounts	Base money
	Monetary policy operations of the Eurosystem					Banknotes in circulation	Central government deposits with the Eurosystem	Other factors (net)				
	Eurosystem's net assets in gold and foreign currency	Main refinancing operations	Longer-term refinancing operations	Marginal lending facility	Other liquidity-providing operations				Deposit facility	Other liquidity-absorbing operations		
	1	2	3	4	5	6	7	8	9	10	11	12
2002	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	320.1	235.5	45.0	0.6	0.0	0.1	0.0	416.1	57.0	-4.5	132.6	548.7
2004 Q1	303.3	219.4	56.7	0.4	0.0	0.2	0.0	418.0	48.6	-21.1	134.1	552.3
2004 6 Apr.	301.4	217.9	67.1	0.4	0.0	0.4	0.0	425.3	51.5	-25.7	135.3	561.0
11 May	310.7	213.2	75.0	0.1	0.0	0.1	0.4	436.4	46.0	-18.9	135.0	571.5
8 June	311.3	224.7	75.0	0.1	0.0	0.5	0.0	442.5	52.2	-21.1	137.1	580.1
6 July	308.2	245.4	75.0	0.3	0.0	0.1	0.0	449.1	65.0	-24.1	138.8	588.1
10 Aug.	300.8	253.6	75.0	0.0	0.0	0.2	0.0	460.9	61.1	-31.8	139.1	600.1
7 Sep.	299.4	251.6	75.0	0.1	0.0	0.2	0.0	462.8	56.3	-32.4	139.3	602.3

Source: ECB.

1) End of period.



## MONEY, BANKING AND INVESTMENT FUNDS

### 2.1 Aggregated balance sheet of euro area MFIs

(EUR billions; outstanding amounts at end of period)

#### 1. Assets

	Total	Loans to euro area residents			Holdings of securities other than shares issued by euro area residents				Money market fund shares/units <sup>1)</sup>	Holdings of shares/other equity issued by euro area residents	External assets	Fixed assets	Remaining assets	
		Total	General government	Other euro area residents	MFIs	Total	General government	Other euro area residents						MFIs
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Eurosysteem														
2002	1,042.8	416.2	24.2	0.6	391.3	94.6	86.0	1.0	7.6	-	13.2	374.0	11.9	132.9
2003	1,086.8	471.3	22.6	0.6	448.0	133.6	121.5	1.3	10.8	-	12.8	317.9	12.4	138.8
2004 Q1	1,102.7	467.6	22.6	0.7	444.3	143.4	128.9	1.5	13.0	-	13.1	320.7	14.0	143.9
2004 Apr.	1,130.8	493.6	22.6	0.6	470.3	146.0	131.4	1.8	12.7	-	13.3	314.6	13.9	149.4
May	1,128.1	493.4	22.6	0.6	470.1	147.0	132.9	1.8	12.3	-	13.0	310.0	14.0	150.8
June	1,200.0	560.9	22.2	0.6	538.0	147.8	133.5	1.9	12.3	-	13.3	311.3	14.1	152.7
July	1,192.2	548.7	22.2	0.6	525.8	148.5	134.0	1.8	12.7	-	13.2	312.6	14.2	154.9
Aug. <sup>(p)</sup>	1,175.0	527.1	22.2	0.6	504.3	151.1	135.6	1.8	13.7	-	13.2	313.3	14.3	156.1
MFIs excluding the Eurosysteem														
2002	18,857.9	11,611.4	813.0	6,780.6	4,017.8	2,671.5	1,135.0	366.2	1,170.4	62.4	827.6	2,465.5	167.6	1,051.8
2003	19,799.8	12,114.4	819.0	7,101.8	4,193.5	2,947.6	1,246.0	425.7	1,275.9	67.3	895.1	2,566.8	161.8	1,046.9
2004 Q1	20,395.0	12,217.8	823.3	7,170.1	4,224.4	3,081.2	1,305.6	431.6	1,344.0	78.0	926.4	2,832.0	160.0	1,099.5
2004 Apr.	20,688.3	12,385.3	817.6	7,228.4	4,339.3	3,104.4	1,313.8	435.8	1,354.8	79.8	954.0	2,914.7	160.7	1,089.4
May	20,660.7	12,347.2	811.7	7,268.2	4,267.3	3,146.2	1,340.5	440.1	1,365.6	77.4	955.6	2,886.6	159.1	1,088.5
June	20,767.7	12,446.8	818.4	7,319.5	4,308.8	3,162.4	1,355.4	443.9	1,363.1	76.9	944.4	2,871.1	159.3	1,106.8
July	20,857.6	12,543.8	825.7	7,354.0	4,364.1	3,172.1	1,347.3	446.3	1,378.4	78.5	935.6	2,871.4	160.1	1,096.2
Aug. <sup>(p)</sup>	20,874.1	12,514.4	820.3	7,345.4	4,348.7	3,177.8	1,348.6	446.0	1,383.2	77.3	925.3	2,909.8	160.0	1,109.4

#### 2. Liabilities

	Total	Currency in circulation	Deposits of euro area residents			Money market fund shares/units <sup>2)</sup>	Debt securities issued <sup>3)</sup>	Capital and reserves	External liabilities	Remaining liabilities	
			Total	Central government	Other general government/other euro area residents						MFIs
	1	2	3	4	5	6	7	8	9	10	11
Eurosysteem											
2002	1,042.8	392.9	328.4	29.5	15.6	283.3	-	3.6	165.9	32.9	119.1
2003	1,086.8	450.5	324.0	21.3	16.9	285.8	-	1.6	143.8	27.5	139.4
2004 Q1	1,102.7	439.9	336.6	43.1	15.8	277.7	-	1.6	155.5	23.6	145.3
2004 Apr.	1,130.8	450.2	358.3	43.6	16.7	297.9	-	1.6	149.4	25.1	146.2
May	1,128.1	459.3	350.2	46.0	18.3	285.8	-	1.6	146.5	22.2	148.3
June	1,200.0	465.1	413.2	67.1	18.4	327.6	-	1.6	145.5	23.5	151.1
July	1,192.2	478.5	388.2	58.5	16.5	313.2	-	1.6	146.8	24.2	152.8
Aug. <sup>(p)</sup>	1,175.0	475.7	367.4	58.2	15.9	293.2	-	1.6	151.5	23.3	155.5
MFIs excluding the Eurosysteem											
2002	18,857.9	0.0	10,197.8	106.9	5,954.3	4,136.6	532.8	2,992.5	1,108.7	2,594.2	1,431.7
2003	19,799.8	0.0	10,773.3	132.3	6,277.6	4,363.5	649.3	3,160.3	1,151.0	2,607.6	1,458.4
2004 Q1	20,395.0	0.0	10,863.5	140.7	6,310.3	4,412.5	680.0	3,303.4	1,160.4	2,833.8	1,553.8
2004 Apr.	20,688.3	0.0	11,015.3	136.0	6,351.3	4,528.0	690.6	3,338.5	1,167.6	2,912.9	1,563.4
May	20,660.7	0.0	10,993.3	149.1	6,375.2	4,469.0	687.2	3,359.2	1,171.6	2,909.7	1,539.8
June	20,767.7	0.0	11,095.7	157.1	6,410.5	4,528.2	685.5	3,370.2	1,181.6	2,873.0	1,561.6
July	20,857.6	0.0	11,163.8	143.2	6,422.7	4,598.0	691.5	3,401.9	1,185.5	2,875.8	1,539.1
Aug. <sup>(p)</sup>	20,874.1	0.0	11,119.4	134.9	6,401.9	4,582.6	701.8	3,417.4	1,186.2	2,881.5	1,567.7

Source: ECB.

- 1) Amounts issued by euro area residents. Amounts issued by non-euro area residents are included in external assets.
- 2) Amounts held by euro area residents.
- 3) Amounts issued with maturity up to two years held by non-euro area residents are included in external liabilities.

## 2.2 Consolidated balance sheet of euro area MFIs

(EUR billions; outstanding amounts at end of period; transactions during period)

## 1. Assets

	Total	Loans to euro area residents			Holdings of securities other than shares issued by euro area residents			Holdings of shares/other equity issued by other euro area residents	External assets <sup>1)</sup>	Fixed assets	Remaining assets
		Total	General government	Other euro area residents	Total	General government	Other euro area residents				
	1	2	3	4	5	6	7	8	9	10	11
Outstanding amounts											
2002	13,931.2	7,618.5	837.2	6,781.2	1,588.1	1,221.0	367.1	572.7	2,839.5	179.5	1,132.9
2003	14,554.4	7,944.2	841.7	7,102.5	1,794.5	1,367.4	427.0	623.8	2,884.8	174.1	1,133.0
2004 Q1	15,063.6	8,016.8	846.0	7,170.9	1,867.6	1,434.5	433.1	649.4	3,152.7	174.0	1,203.1
2004 Apr.	15,226.1	8,069.3	840.2	7,229.0	1,882.8	1,445.3	437.6	672.1	3,229.3	174.6	1,198.0
May	15,251.5	8,103.2	834.3	7,268.9	1,915.3	1,473.5	441.9	666.6	3,196.6	173.1	1,196.6
June	15,326.2	8,160.8	840.7	7,320.2	1,934.7	1,488.9	445.8	657.4	3,182.4	173.4	1,217.4
July	15,348.0	8,202.6	848.0	7,354.6	1,929.4	1,481.3	448.1	648.9	3,184.0	174.4	1,208.8
Aug. <sup>(p)</sup>	15,384.0	8,188.6	842.6	7,346.0	1,932.1	1,484.2	447.8	642.8	3,223.1	174.3	1,223.1
Transactions											
2002	605.9	301.9	-9.3	311.2	72.6	43.6	29.1	7.7	245.1	-1.3	-19.9
2003	794.0	388.5	13.7	374.9	172.3	118.0	54.3	19.4	224.4	-3.8	-6.9
2004 Q1	429.4	82.5	5.3	77.2	56.4	53.4	3.0	24.6	213.4	-0.3	52.9
2004 Apr.	149.7	51.7	-6.9	58.6	16.7	11.7	5.0	21.6	69.1	0.6	-9.9
May	56.7	37.9	-5.9	43.8	35.0	30.7	4.3	-2.9	-10.4	0.3	-3.1
June	67.1	59.8	5.9	53.9	16.7	12.2	4.5	-10.4	-19.8	0.3	20.7
July	9.6	42.4	7.4	35.0	-8.9	-8.6	-0.3	-7.5	-8.1	0.9	-9.2
Aug. <sup>(p)</sup>	42.5	-8.8	-5.3	-3.5	-0.4	-0.2	-0.3	-5.8	44.5	0.0	13.0

## 2. Liabilities

	Total	Currency in circulation	Deposits of central government	Deposits of other general government/other euro area residents	Money market fund shares/units <sup>2)</sup>	Debt securities issued <sup>3)</sup>	Capital and reserves	External liabilities <sup>1)</sup>	Remaining liabilities	Excess of inter-MFI liabilities
Outstanding amounts										
2002	13,931.2	341.2	136.4	5,969.9	470.5	1,818.1	1,006.4	2,627.1	1,550.9	10.8
2003	14,554.4	397.9	153.6	6,294.4	582.0	1,875.1	1,010.7	2,635.1	1,597.8	7.8
2004 Q1	15,063.6	399.6	183.8	6,326.1	602.0	1,948.1	1,025.9	2,857.4	1,699.1	21.6
2004 Apr.	15,226.1	409.4	179.6	6,368.0	610.8	1,972.6	1,021.8	2,938.0	1,709.7	16.2
May	15,251.5	416.6	195.1	6,393.5	609.7	1,982.9	1,016.1	2,931.9	1,688.1	17.4
June	15,326.2	423.0	224.3	6,428.9	608.6	1,996.4	1,027.0	2,896.5	1,712.8	8.9
July	15,348.0	436.2	201.7	6,439.2	613.0	2,012.4	1,032.4	2,900.0	1,691.9	21.2
Aug. <sup>(p)</sup>	15,384.0	433.4	193.1	6,417.9	624.5	2,022.2	1,042.1	2,904.9	1,723.2	22.8
Transactions										
2002	605.9	101.4	-5.8	225.3	70.0	114.7	39.7	76.6	-107.4	91.3
2003	794.0	79.0	12.9	319.2	58.0	141.7	37.3	131.1	-50.0	64.7
2004 Q1	429.4	1.7	30.2	22.6	21.3	59.6	7.6	174.7	120.6	-8.8
2004 Apr.	149.7	9.8	-4.7	40.2	8.4	21.2	2.2	62.9	18.5	-8.6
May	56.7	7.3	15.5	29.2	-1.1	15.5	-0.7	8.8	-22.8	5.0
June	67.1	6.3	29.2	35.0	-5.2	12.7	8.1	-38.3	21.9	-2.7
July	9.6	13.2	-22.6	9.1	3.8	11.8	4.4	-7.2	-12.4	9.5
Aug. <sup>(p)</sup>	42.5	-2.8	-8.5	-19.1	11.4	11.9	5.6	15.3	21.7	7.2

Source: ECB.

- 1) Since the end of November 2000, balances arising from the TARGET system are netted by novation on a daily basis. This implies that the bilateral positions of each NCB vis-à-vis the ECB and other NCBS have been replaced by a single net bilateral position vis-à-vis the ECB. For the TARGET gross end-of-month positions in 1999 and in 2000 (January to October), see the corresponding footnote in the February 2000 and December 2000 issues of the Monthly Bulletin.
- 2) Amounts held by euro area residents.
- 3) Amounts issued with maturity up to two years held by non-euro area residents are included in external liabilities.



## 2.3 Monetary statistics

(EUR billions and annual growth rates; seasonally adjusted; outstanding amounts and growth rates at end of period, transactions during period)

### 1. Monetary aggregates<sup>1)</sup> and counterparts

	M1		M2	M3-M2	M3	M3 3-month moving average (centred)	Longer-term financial liabilities	Credit to general government	Credit to other euro area residents		Net external assets <sup>2)</sup>
	1	2	3	4	5	6	7	8	Loans		11
									9	10	
Outstanding amounts											
2002	2,441.7	2,475.9	4,917.6	852.7	5,770.3	-	3,989.2	2,072.2	7,723.3	6,778.9	184.3
2003	2,676.1	2,559.6	5,235.7	908.5	6,144.2	-	4,143.5	2,225.7	8,156.0	7,100.9	222.5
2004 Q1	2,769.2	2,552.2	5,321.4	901.3	6,222.7	-	4,242.2	2,263.5	8,239.1	7,165.0	320.7
2004 Apr.	2,781.9	2,556.2	5,338.1	911.0	6,249.1	-	4,280.2	2,278.7	8,298.0	7,209.4	332.1
May	2,766.9	2,578.1	5,345.0	904.5	6,249.6	-	4,291.0	2,292.4	8,336.4	7,254.5	289.2
June	2,791.4	2,582.6	5,374.1	925.0	6,299.1	-	4,312.2	2,315.3	8,394.2	7,293.0	272.7
July	2,831.6	2,593.0	5,424.6	932.2	6,356.8	-	4,345.7	2,329.8	8,449.8	7,346.9	283.4
Aug. <sup>(p)</sup>	2,837.8	2,604.0	5,441.8	939.7	6,381.6	-	4,374.9	2,341.6	8,470.4	7,368.9	315.8
Transactions											
2002	218.5	90.8	309.3	70.0	379.3	-	197.0	35.4	350.0	314.4	170.2
2003	259.3	116.2	375.5	35.3	410.8	-	244.9	134.0	449.0	375.7	94.3
2004 Q1	92.0	-14.0	78.0	-4.5	73.5	-	74.8	25.1	87.8	72.9	91.2
2004 Apr.	11.9	3.8	15.7	9.4	25.1	-	40.3	15.0	58.7	44.8	21.6
May	-14.0	24.0	9.9	-6.4	3.5	-	21.5	16.1	44.9	49.0	-35.5
June	23.9	4.8	28.7	16.9	45.6	-	17.3	19.3	59.6	41.0	-19.3
July	40.0	9.5	49.5	7.1	56.6	-	27.5	13.6	54.6	54.6	11.8
Aug. <sup>(p)</sup>	6.8	11.6	18.4	7.6	26.0	-	28.2	8.8	26.0	27.1	27.6
Growth rates											
2002 Dec.	9.8	3.8	6.7	8.9	7.0	7.2	5.1	1.7	4.7	4.8	170.2
2003 Dec.	10.7	4.7	7.7	4.1	7.2	7.1	6.2	6.4	5.8	5.6	94.3
2004 Mar.	11.4	2.1	6.8	3.0	6.2	5.9	7.1	6.6	5.8	5.3	97.4
2004 Apr.	10.9	1.5	6.2	1.0	5.4	5.5	7.5	6.2	5.9	5.5	108.3
May	9.3	1.5	5.4	1.2	4.8	5.2	7.5	6.1	5.8	5.7	48.1
June	9.6	1.7	5.7	3.1	5.3	5.2	7.8	7.6	6.1	6.0	7.1
July	10.1	1.7	5.9	2.5	5.4	5.4	7.6	6.4	6.3	6.2	45.8
Aug. <sup>(p)</sup>	9.3	2.0	5.7	4.5	5.5	.	7.7	6.6	6.0	6.0	107.5

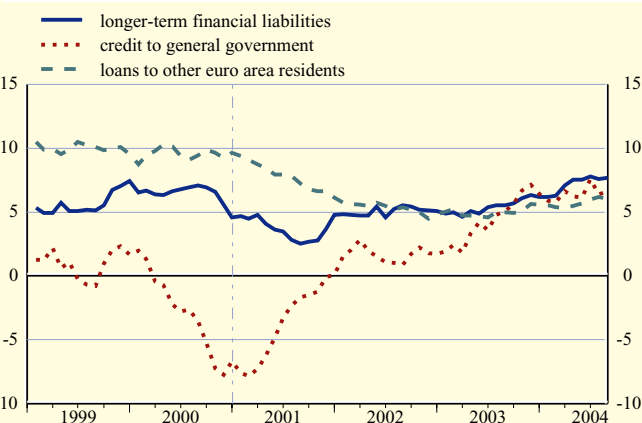
### C1 Monetary aggregates

(annual growth rates; seasonally adjusted)



### C2 Counterparts

(annual growth rates; seasonally adjusted)



Source: ECB.

- 1) Monetary liabilities of MFIs and central government (post office, treasury) vis-à-vis non-MFI euro area residents excluding central government (M1, M2, M3: see glossary).
- 2) Values in section 'growth rates' are sums of the transactions during the 12 months ending in the period indicated.

## 2.3 Monetary statistics

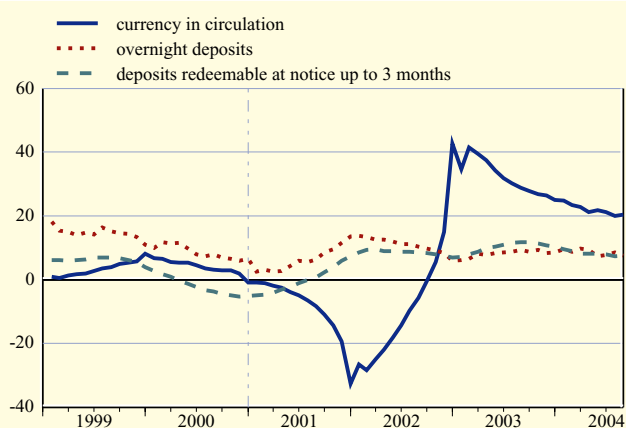
(EUR billions and annual growth rates; seasonally adjusted; outstanding amounts and growth rates at end of period, transactions during period)

### 2. Components of monetary aggregates and longer-term financial liabilities

	Currency in circulation	Overnight deposits	Deposits with agreed maturity up to 2 years	Deposits redeemable at notice up to 3 months	Repos	Money market fund shares/units	Debt securities up to 2 years	Debt securities over 2 years	Deposits redeemable at notice over 3 months	Deposits with agreed maturity over 2 years	Capital and reserves
	1	2	3	4	5	6	7	8	9	10	11
Outstanding amounts											
2002	332.3	2,109.4	1,077.0	1,399.0	240.6	484.5	127.6	1,694.0	103.8	1,186.6	1,004.8
2003	387.6	2,288.6	1,037.0	1,522.6	222.4	597.7	88.4	1,791.2	90.6	1,253.1	1,008.7
2004 Q1	406.2	2,363.0	1,003.9	1,548.3	215.1	596.5	89.8	1,857.2	90.1	1,268.3	1,026.6
2004 Apr.	409.6	2,372.3	995.9	1,560.3	215.2	601.1	94.7	1,879.6	90.0	1,284.1	1,026.5
May	416.4	2,350.6	1,005.9	1,572.1	214.0	601.3	89.3	1,890.8	89.4	1,287.7	1,023.0
June	420.5	2,370.9	995.9	1,586.7	220.1	610.9	94.0	1,901.1	89.1	1,298.5	1,023.5
July	425.2	2,406.4	998.5	1,594.5	230.8	611.1	90.3	1,917.8	89.4	1,307.4	1,031.2
Aug. <sup>(p)</sup>	433.2	2,404.6	996.2	1,607.8	229.4	618.9	91.3	1,932.9	89.3	1,311.6	1,041.2
Transactions											
2002	99.3	119.2	0.4	90.4	10.7	70.6	-11.3	126.0	-10.0	41.6	39.4
2003	77.8	181.5	-27.3	143.5	-9.0	59.5	-15.2	157.9	-13.2	63.2	37.0
2004 Q1	18.6	73.4	-39.5	25.5	-7.9	0.1	3.3	50.7	-0.5	14.3	10.3
2004 Apr.	3.4	8.5	-8.3	12.0	-0.2	4.2	5.4	18.7	-0.1	15.6	6.2
May	6.8	-20.8	12.1	11.9	-1.2	0.1	-5.4	16.3	-0.6	4.3	1.5
June	4.1	19.8	-9.7	14.5	6.1	5.5	5.2	9.0	-0.3	10.8	-2.1
July	4.7	35.3	1.7	7.8	10.7	-0.5	-3.1	11.8	0.3	8.8	6.7
Aug. <sup>(p)</sup>	8.0	-1.2	-1.7	13.3	-1.3	7.8	1.2	17.2	-0.1	5.3	5.9
Growth rates											
2002 Dec.	42.6	6.0	0.0	6.9	4.6	17.1	-8.2	7.9	-8.8	3.6	4.0
2003 Dec.	24.9	8.6	-2.6	10.4	-3.9	11.4	-15.4	9.5	-12.7	5.3	3.7
2004 Mar.	22.7	9.7	-6.1	8.2	-1.8	7.0	-8.8	10.8	-9.9	5.5	4.4
2004 Apr.	21.2	9.3	-7.3	8.1	-2.7	6.7	-18.5	10.9	-8.6	6.6	4.4
May	21.8	7.4	-7.2	8.1	-4.2	5.4	-10.5	10.7	-8.3	6.5	4.9
June	21.1	7.7	-6.8	8.0	1.3	4.6	-2.0	10.7	-7.1	7.0	5.0
July	20.0	8.5	-6.3	7.4	1.4	3.3	-0.5	10.3	-4.9	7.2	4.5
Aug. <sup>(p)</sup>	20.3	7.5	-5.7	7.5	3.9	4.9	2.9	10.8	-3.3	7.0	4.2

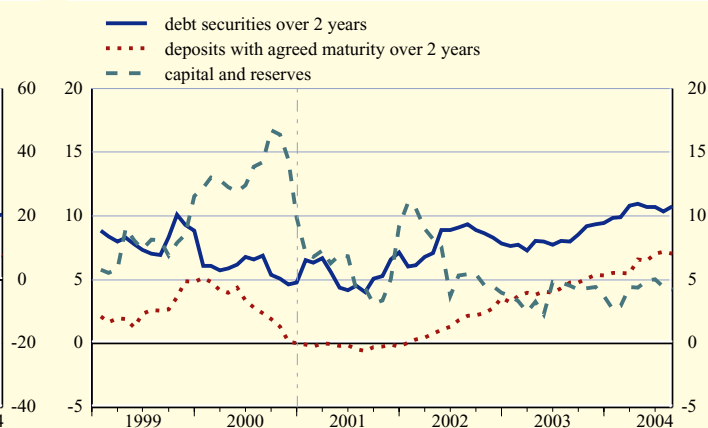
### C3 Components of monetary aggregates

(annual growth rates; seasonally adjusted)



### C4 Components of longer-term financial liabilities

(annual growth rates; seasonally adjusted)



Source: ECB.

## 2.4 MFI loans, breakdown <sup>1)</sup>

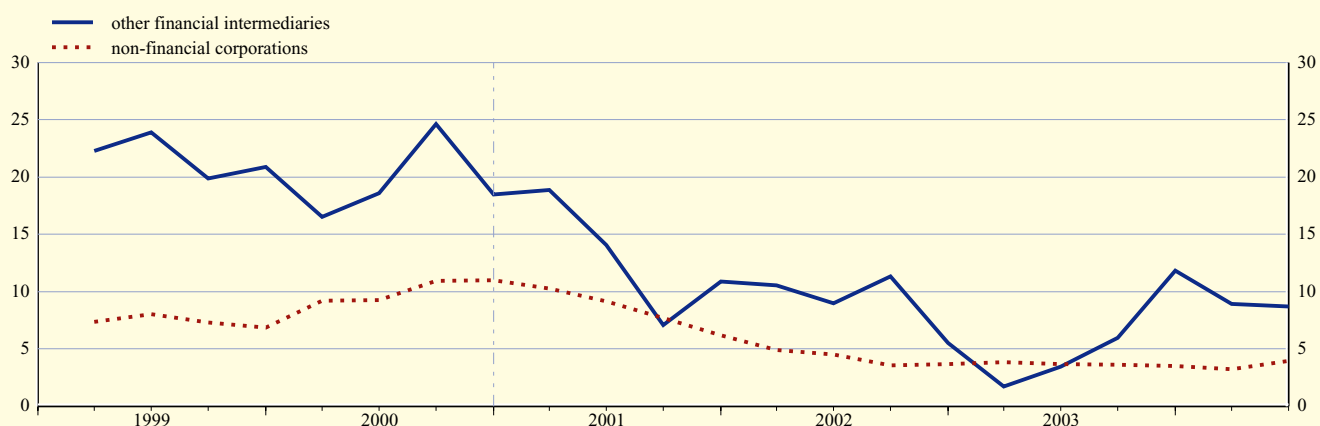
(EUR billions and annual growth rates; outstanding amounts and growth rates at end of period, transactions during period)

### 1. Loans to financial intermediaries and non-financial corporations

	Insurance corporations and pension funds		Other financial intermediaries <sup>2)</sup>		Non-financial corporations			
	Total	Up to 1 year	Total	Up to 1 year	Total	Up to 1 year	Over 1 year and up to 5 years	Over 5 years
	1	2	3	4	5	6	7	8
Outstanding amounts								
2002	32.9	19.6	455.5	289.3	2,965.1	980.2	514.8	1,470.1
2003	35.4	22.1	511.6	321.8	3,034.2	958.0	527.7	1,548.6
2004 Q1	46.3	32.2	503.8	303.8	3,055.3	955.2	526.2	1,574.0
2004 Apr.	51.4	37.7	510.8	313.3	3,076.6	958.3	531.6	1,586.7
May	56.5	42.6	515.3	317.1	3,086.0	952.5	537.1	1,596.3
June	53.7	40.1	510.4	306.3	3,093.2	966.2	535.3	1,591.7
July	56.6	42.1	506.5	303.3	3,099.3	961.2	538.7	1,599.4
Aug. <sup>(p)</sup>	53.8	39.3	490.9	287.5	3,092.8	944.3	543.2	1,605.3
Transactions								
2002	-4.1	-7.3	24.0	16.2	106.1	-23.6	32.4	97.3
2003	4.2	2.2	54.6	26.5	103.9	-7.6	15.9	95.6
2004 Q1	10.7	10.0	-3.1	-11.7	21.3	-4.3	4.3	21.4
2004 Apr.	4.7	5.1	8.6	11.5	21.5	3.6	5.8	12.1
May	5.1	4.9	5.5	4.5	11.6	-4.3	5.3	10.5
June	-2.8	-2.5	-5.0	-10.8	26.1	17.7	0.2	8.2
July	2.9	2.0	-4.6	-3.3	7.1	-4.7	3.7	8.1
Aug. <sup>(p)</sup>	-2.7	-2.8	-12.3	-12.6	-5.5	-16.5	4.4	6.5
Growth rates								
2002 Dec.	-10.3	-26.4	5.5	5.9	3.7	-2.3	6.6	7.0
2003 Dec.	11.9	11.7	11.8	8.9	3.5	-0.8	3.1	6.6
2004 Mar.	8.7	6.4	8.9	3.0	3.2	-2.5	3.7	6.9
2004 Apr.	9.5	10.2	8.3	4.4	3.5	-2.4	4.4	7.1
May	21.2	26.0	7.9	4.6	3.7	-2.3	5.9	6.9
June	18.8	26.3	8.7	3.3	4.0	-2.1	6.5	7.1
July	15.2	26.7	9.0	5.6	4.3	-1.2	6.0	7.3
Aug. <sup>(p)</sup>	21.6	37.7	7.1	3.3	4.0	-1.8	5.7	7.2

### C5 Loans to financial intermediaries and non-financial corporations

(annual growth rates)



Source: ECB.

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

2) This category includes investment funds.

**2.4 MFI loans, breakdown <sup>1)</sup>**

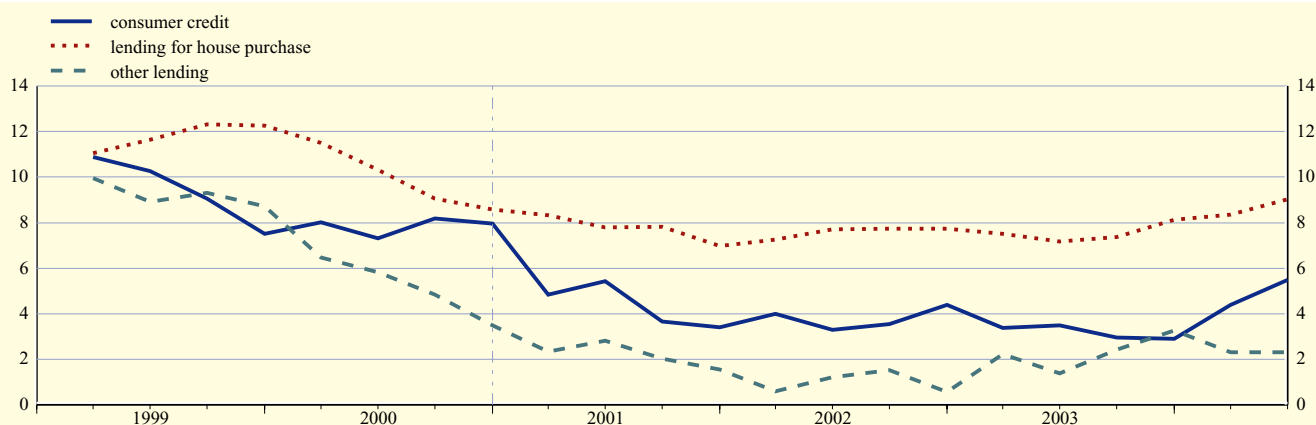
(EUR billions and annual growth rates; outstanding amounts and growth rates at end of period, transactions during period)

**2. Loans to households <sup>2)</sup>**

	Total	Consumer credit				Lending for house purchase				Other lending			
		Total	Up to 1 year	Over 1 year and up to 5 years	Over 5 years	Total	Up to 1 year	Over 1 year and up to 5 years	Over 5 years	Total	Up to 1 year	Over 1 year and up to 5 years	Over 5 years
	1	2	3	4	5	6	7	8	9	10	11	12	13
<b>Outstanding amounts</b>													
2002	3,327.0	518.9	105.9	178.3	234.7	2,188.5	22.3	65.1	2,101.1	619.6	153.9	99.7	366.0
2003	3,520.6	484.4	112.0	181.0	191.5	2,360.4	14.3	63.3	2,282.7	675.7	144.8	95.7	435.2
2004 Q1	3,564.7	484.5	109.9	182.3	192.3	2,400.2	14.2	61.6	2,324.4	680.0	141.8	95.2	443.1
2004 Apr.	3,589.5	489.3	110.7	184.0	194.6	2,419.1	14.1	62.0	2,343.0	681.1	141.1	96.1	443.9
May	3,610.5	489.7	110.2	183.9	195.6	2,439.3	14.2	62.4	2,362.8	681.5	139.8	96.1	445.5
June	3,662.3	501.3	114.3	184.9	202.1	2,463.8	14.9	63.5	2,385.4	697.2	147.6	97.9	451.6
July	3,691.5	503.6	113.2	186.6	203.8	2,492.1	14.5	64.0	2,413.7	695.8	143.9	98.2	453.7
Aug. <sup>(p)</sup>	3,707.8	505.0	114.0	186.2	204.8	2,509.2	14.4	64.3	2,430.5	693.7	142.3	98.0	453.4
<b>Transactions</b>													
2002	181.8	21.9	7.1	5.4	9.4	156.3	-0.3	2.5	154.1	3.6	-3.0	2.2	4.4
2003	212.1	13.7	8.7	6.4	-1.4	177.6	-5.9	1.7	181.8	20.8	-6.4	-5.0	32.3
2004 Q1	48.1	2.0	-1.7	1.8	1.9	44.8	0.0	-0.8	45.6	1.3	-2.3	0.5	3.2
2004 Apr.	23.8	3.9	0.8	1.5	1.6	18.9	0.0	0.4	18.5	1.0	-0.7	0.8	0.9
May	21.6	0.8	-0.5	0.1	1.2	20.3	0.1	0.3	19.9	0.5	-1.2	0.0	1.7
June	35.4	7.9	4.2	1.0	2.7	20.8	0.7	1.2	18.9	6.8	5.0	0.0	1.8
July	29.6	2.4	-1.2	1.8	1.8	28.4	-0.4	0.5	28.3	-1.1	-3.6	-0.1	2.5
Aug. <sup>(p)</sup>	17.1	1.6	0.8	-0.5	1.3	17.2	-0.1	0.3	16.9	-1.7	-1.6	-0.1	0.0
<b>Growth rates</b>													
2002 Dec.	5.8	4.4	6.9	3.1	4.2	7.7	-1.4	4.2	8.0	0.6	-1.9	2.1	1.2
2003 Dec.	6.4	2.9	8.3	3.6	-0.2	8.1	-26.3	2.6	8.7	3.3	-4.3	-5.1	8.5
2004 Mar.	6.6	4.4	0.1	6.3	5.2	8.4	4.7	-3.3	8.8	2.3	-1.1	-1.8	4.4
2004 Apr.	6.8	4.9	0.4	6.4	6.2	8.7	6.1	-3.4	9.1	2.1	-1.0	-1.4	3.9
May	6.9	4.8	0.8	5.4	6.5	8.8	5.6	-3.4	9.2	1.9	-0.8	-1.2	3.5
June	7.2	5.5	3.0	5.3	7.2	9.0	7.8	0.0	9.3	2.3	-1.3	1.6	3.8
July	7.3	5.4	3.4	5.4	6.5	9.2	6.3	-0.4	9.5	2.4	-0.9	1.3	3.7
Aug. <sup>(p)</sup>	7.5	6.5	6.0	5.7	7.5	9.3	4.3	-0.5	9.6	2.0	-0.5	1.5	3.0

**C6 Loans to households**

(annual growth rates)



Source: ECB.

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

2) Including non-profit institutions serving households.

## 2.4 MFI loans, breakdown <sup>1)</sup>

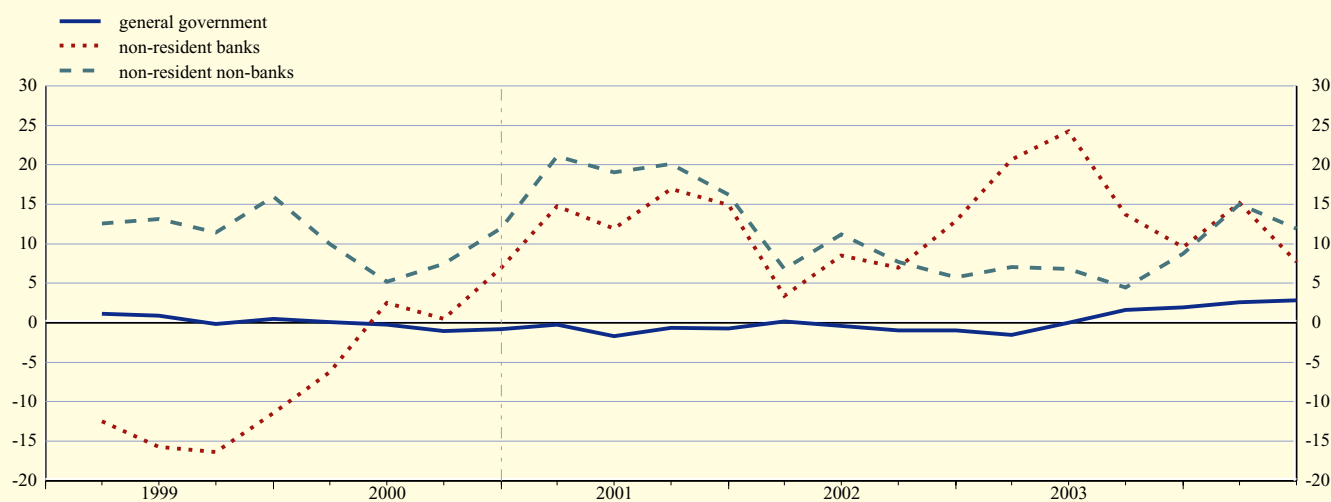
(EUR billions and annual growth rates; outstanding amounts and growth rates at end of period, transactions during period)

### 3. Loans to government and non-euro area residents

	General government					Non-euro area residents				
	Total	Central government	Other general government			Total	Banks <sup>2)</sup>	Non-banks		
			State government	Local government	Social security funds			Total	General government	Other
	1	2	3	4	5	6	7	8	9	10
Outstanding amounts										
2002	813.0	132.7	277.7	382.8	19.7	1,730.1	1,146.2	583.9	64.6	519.3
2003	819.0	130.0	265.1	388.9	35.0	1,762.7	1,182.2	580.6	59.3	521.2
2004 Q1	823.3	134.6	261.3	388.5	38.9	1,955.5	1,308.6	646.9	61.1	585.8
Q2 <sup>(p)</sup>	818.4	129.3	253.4	395.0	40.7	1,966.1	1,323.4	642.7	61.0	581.7
Transactions										
2002	-7.8	-11.2	-21.1	19.9	4.6	169.1	135.2	34.5	-1.2	35.7
2003	15.3	-4.3	-12.3	16.6	15.3	159.8	109.5	50.0	-4.9	54.8
2004 Q1	5.3	5.7	-3.9	-0.3	3.9	165.2	108.0	57.0	1.7	55.3
Q2 <sup>(p)</sup>	-6.5	-6.3	-8.5	6.4	1.8	6.4	11.9	-5.6	-0.3	-5.3
Growth rates										
2002 Dec.	-1.0	-7.7	-7.1	5.5	30.0	10.3	12.9	5.7	-1.9	6.7
2003 Dec.	1.9	-3.2	-4.4	4.4	77.5	9.3	9.6	8.7	-7.5	10.8
2004 Mar.	2.6	0.9	-2.2	2.9	63.1	15.2	15.2	15.0	4.1	16.3
June <sup>(p)</sup>	2.9	1.6	-4.0	5.0	43.7	9.1	7.7	11.9	3.2	12.9

### C7 Loans to government and non-euro area residents

(annual growth rates)



Source: ECB.

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

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

## 2.5 Deposits held with MFIs, breakdown <sup>1)</sup>

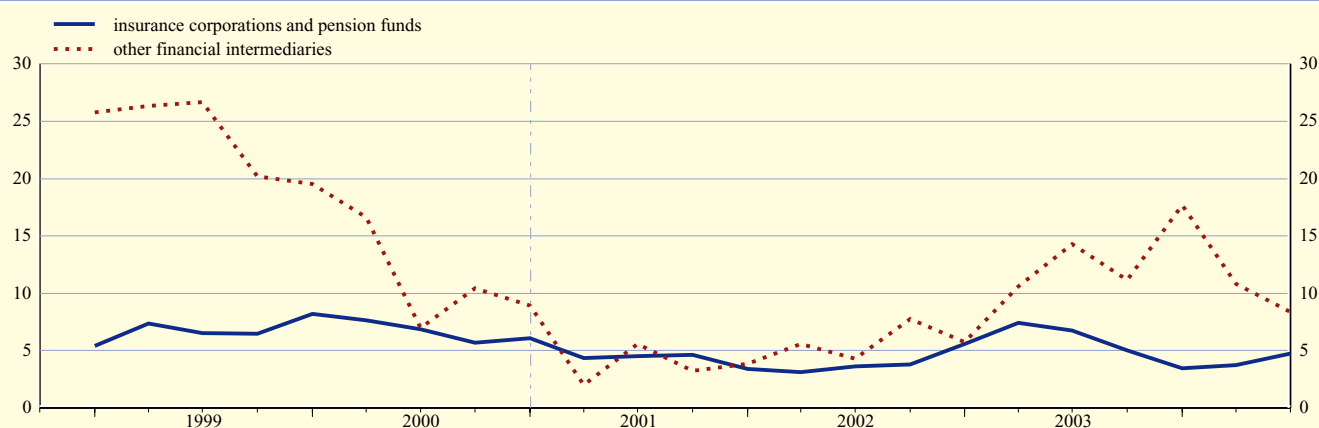
(EUR billions and annual growth rates; outstanding amounts and growth rates at end of period, transactions during period)

### 1. Deposits by financial intermediaries

	Insurance corporations and pension funds							Other financial intermediaries <sup>2)</sup>						
	Total	Overnight	With agreed maturity		Redeemable at notice		Repos	Total	Overnight	With agreed maturity		Redeemable at notice		Repos
			Up to 2 years	Over 2 years	Up to 3 months	Over 3 months				Up to 2 years	Over 2 years	Up to 3 months	Over 3 months	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Outstanding amounts														
2002	523.1	55.8	-	-	-	-	17.8	493.6	152.7	-	-	-	-	97.1
2003	541.9	58.9	41.7	420.5	1.3	0.3	19.1	568.9	183.1	130.6	144.6	6.1	0.1	104.4
2004 Q1	556.6	64.7	42.2	426.1	1.3	0.3	22.0	587.8	197.0	119.7	147.1	7.8	0.1	116.1
2004 Apr.	562.3	62.3	41.7	431.3	1.4	0.4	25.2	601.3	195.2	129.0	150.0	8.3	0.1	118.6
May	563.1	57.2	45.7	435.7	1.5	0.4	22.7	596.0	192.1	127.4	149.1	7.9	0.1	119.3
June	565.5	59.9	42.2	439.9	1.3	1.0	21.2	597.2	194.1	122.3	155.0	8.3	0.1	117.3
July	567.1	55.8	46.2	440.9	1.3	1.0	21.9	594.8	186.6	123.2	158.0	8.4	0.1	118.5
Aug. <sup>(p)</sup>	566.4	53.6	46.9	441.2	1.3	1.0	22.3	590.4	176.5	127.6	162.0	8.2	0.1	116.0
Transactions														
2002	27.6	7.8	-	-	-	-	1.4	26.7	-4.7	-	-	-	-	12.8
2003	17.9	1.7	-3.8	18.8	0.3	-0.1	1.1	86.1	27.9	-0.4	39.3	3.2	0.0	16.0
2004 Q1	14.4	5.7	0.3	5.6	0.0	0.0	2.8	13.4	13.9	-14.7	1.4	1.6	0.0	11.3
2004 Apr.	5.5	-2.4	-0.5	5.2	0.1	0.0	3.1	12.5	-2.1	9.2	2.7	0.5	0.0	2.2
May	0.7	-5.2	4.0	4.4	0.0	0.0	-2.5	-3.0	-2.8	-0.2	-0.4	-0.4	0.0	0.8
June	1.7	2.7	-3.5	4.2	-0.1	0.0	-1.5	2.5	3.4	-5.1	5.9	0.4	0.0	-2.0
July	1.6	-4.1	4.0	1.0	0.0	0.0	0.7	-2.7	-7.6	0.8	2.9	0.0	0.0	1.2
Aug. <sup>(p)</sup>	-0.5	-2.2	0.8	0.5	0.0	0.0	0.4	-3.9	-10.0	4.5	4.1	-0.1	0.0	-2.5
Growth rates														
2002 Dec.	5.6	16.3	-	-	-	-	8.5	5.7	-3.0	-	-	-	-	14.9
2003 Dec.	3.4	2.9	-8.1	4.7	40.9	-12.5	6.0	17.7	18.1	-0.4	37.2	71.4	-	17.1
2004 Mar.	3.7	5.1	8.1	2.4	40.8	1.8	18.6	10.8	17.2	-13.1	22.6	47.9	-	16.4
2004 Apr.	4.4	8.4	-3.8	3.9	49.2	6.2	17.0	10.0	15.5	-13.3	25.0	64.7	-	13.7
May	4.0	-0.8	0.1	5.2	10.0	6.6	1.8	5.2	7.2	-14.9	15.9	39.0	-	15.2
June	4.7	-6.4	10.9	6.4	40.3	3.8	-6.3	8.4	7.7	-10.1	18.6	44.6	-	19.1
July	5.5	0.4	17.0	5.1	32.8	3.1	3.7	8.8	9.1	-9.3	22.5	51.7	-	12.6
Aug. <sup>(p)</sup>	5.8	4.4	17.7	4.3	18.9	7.1	16.5	9.1	6.4	-5.6	25.1	67.5	-	9.8

### C8 Deposits by financial intermediaries

(annual growth rates)



Source: ECB.

- 1) MFI sector excluding the Eurosystem; sectoral classification is based on ESA 95.
- 2) This category includes investment funds.

## 2.5 Deposits held with MFIs, breakdown <sup>1)</sup>

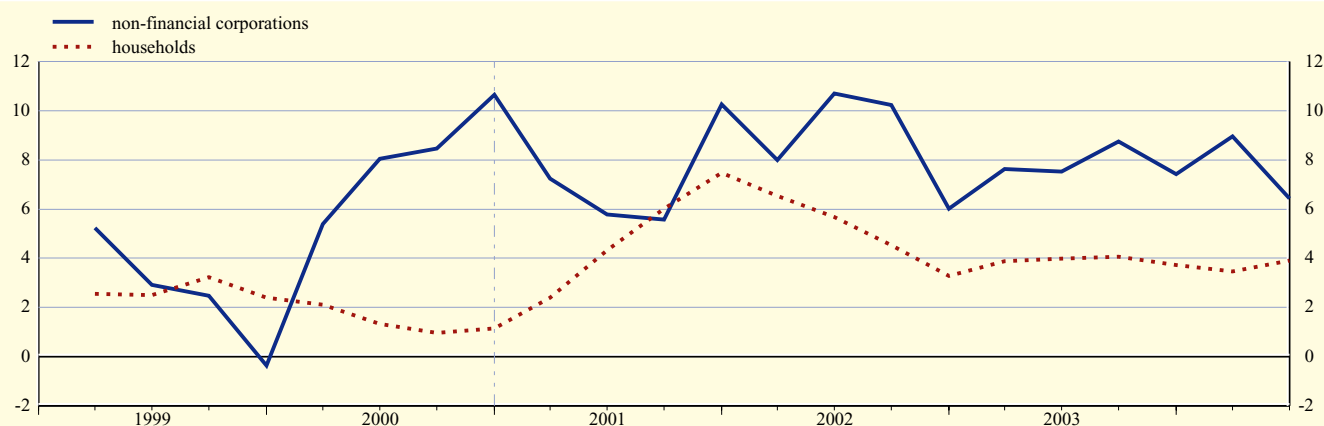
(EUR billions and annual growth rates; outstanding amounts and growth rates at end of period, transactions during period)

### 2. Deposits by non-financial corporations and households

	Non-financial corporations							Households <sup>2)</sup>						
	Total	Overnight	With agreed maturity		Redeemable at notice		Repos	Total	Overnight	With agreed maturity		Redeemable at notice		Repos
			Up to 2 years	Over 2 years	Up to 3 months	Over 3 months				Up to 2 years	Over 2 years	Up to 3 months	Over 3 months	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Outstanding amounts														
2002	990.0	595.6	-	-	-	-	34.7	3,806.3	1,173.0	-	-	-	-	74.7
2003	1,049.3	633.3	280.2	66.2	38.1	1.5	30.0	3,978.5	1,311.8	544.0	600.8	1,379.2	89.9	52.9
2004 Q1	1,035.9	624.2	275.9	68.5	39.9	1.7	25.8	3,997.9	1,320.7	527.4	608.6	1,401.2	88.2	51.9
2004 Apr.	1,037.9	627.9	271.7	69.7	40.5	1.7	26.4	4,014.9	1,335.8	523.1	610.1	1,406.5	87.1	52.3
May	1,051.4	633.0	279.4	70.4	40.9	1.7	26.0	4,027.4	1,349.5	518.9	610.9	1,411.4	86.2	50.5
June	1,054.4	651.7	266.1	69.1	41.0	1.0	25.5	4,055.7	1,367.7	517.2	612.2	1,422.3	85.8	50.4
July	1,053.8	642.1	271.0	71.6	41.6	1.0	26.5	4,069.4	1,372.4	517.3	613.1	1,428.2	85.9	52.6
Aug. <sup>(p)</sup>	1,052.5	639.4	270.0	71.0	42.2	1.0	28.8	4,055.1	1,351.3	516.6	615.3	1,431.3	85.8	54.7
Transactions														
2002	57.5	30.1	-	-	-	-	-1.2	120.6	65.3	-	-	-	-	-1.9
2003	73.0	41.5	54.9	-29.8	10.2	0.4	-4.2	142.6	95.4	-70.8	36.0	117.4	-13.7	-21.8
2004 Q1	-14.9	-9.6	-5.6	2.6	1.9	0.2	-4.2	17.7	8.5	-17.7	7.7	21.9	-1.7	-1.0
2004 Apr.	1.6	3.4	-4.1	1.1	0.6	0.0	0.7	16.8	15.0	-4.4	1.5	5.3	-1.1	0.4
May	14.5	5.7	7.9	0.8	0.4	0.0	-0.4	12.8	13.6	-3.9	0.8	4.9	-0.9	-1.8
June	6.2	19.8	-12.2	-0.8	0.0	0.0	-0.5	24.1	15.4	-2.5	0.8	10.9	-0.4	-0.1
July	-1.1	-9.9	4.7	2.5	0.6	0.0	1.0	13.5	4.9	-0.4	0.9	5.9	0.1	2.1
Aug. <sup>(p)</sup>	-0.8	-2.5	-0.7	-0.5	0.6	0.0	2.3	-14.3	-21.0	-0.5	2.1	3.0	-0.1	2.2
Growth rates														
2002 Dec.	6.0	5.3	-	-	-	-	-3.5	3.3	6.0	-	-	-	-	-2.5
2003 Dec.	7.4	6.8	23.7	-30.7	41.5	49.6	-12.4	3.7	7.9	-11.4	6.4	9.3	-13.2	-29.2
2004 Mar.	9.0	11.9	3.4	13.3	23.1	20.6	-19.1	3.5	7.7	-8.7	3.7	7.4	-10.5	-26.5
2004 Apr.	8.0	10.9	1.1	15.9	22.2	20.3	-15.9	3.5	7.7	-8.9	4.1	7.2	-9.3	-25.5
May	7.1	10.4	-0.3	19.1	20.4	22.2	-23.4	3.6	8.0	-9.2	4.3	7.1	-8.8	-26.5
June	6.4	10.3	-3.1	15.2	17.1	20.6	-13.4	3.9	7.6	-8.0	4.5	7.0	-7.7	-18.6
July	6.9	10.6	-3.0	17.0	17.8	21.5	-6.0	4.0	7.8	-7.8	4.7	6.6	-5.5	-15.9
Aug. <sup>(p)</sup>	6.1	10.9	-5.5	11.4	17.9	22.0	-1.1	3.6	6.2	-7.4	4.9	6.3	-4.0	-10.2

### C9 Deposits by non-financial corporations and households

(annual growth rates)



Source: ECB.

- 1) MFI sector excluding the Eurosystem; sectoral classification is based on ESA 95.  
 2) Including non-profit institutions serving households.

## 2.5 Deposits held with MFIs, breakdown <sup>1)</sup>

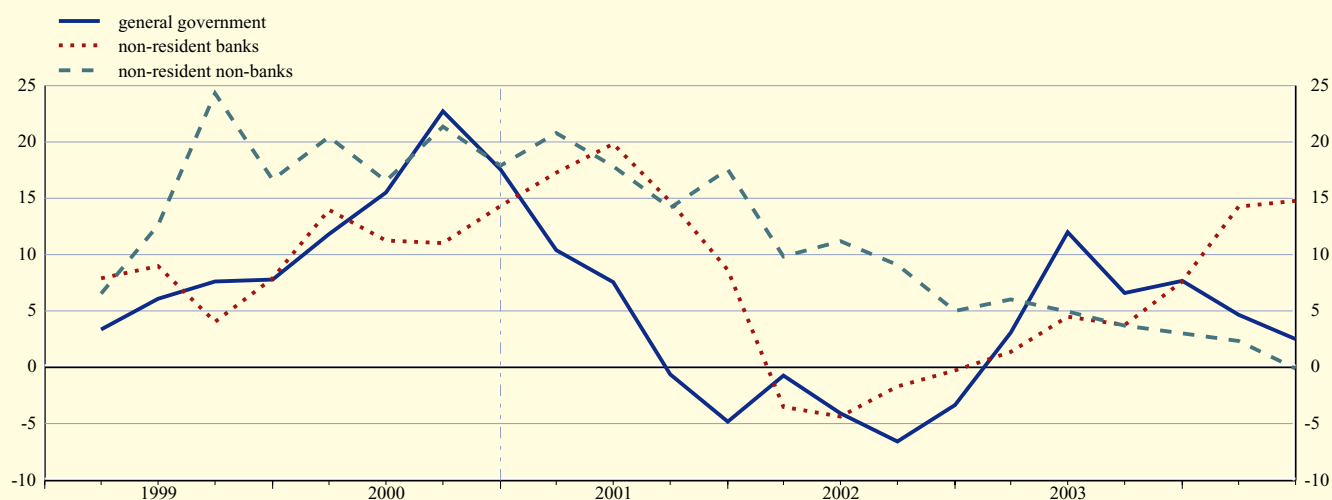
(EUR billions and annual growth rates; outstanding amounts and growth rates at end of period, transactions during period)

### 3. Deposits by government and non-euro area residents

	General government					Non-euro area residents				
	Total	Central government	Other general government			Total	Banks <sup>2)</sup>	Non-banks		
			State government	Local government	Social security funds			Total	General government	Other
	1	2	3	4	5	6	7	8	9	10
Outstanding amounts										
2002	248.4	106.9	31.6	69.2	40.7	2,271.0	1,585.3	685.7	97.4	588.3
2003	271.2	132.3	31.1	66.9	40.9	2,245.1	1,580.9	664.3	96.1	568.2
2004 Q1	272.7	140.7	30.0	62.4	39.6	2,444.2	1,742.7	701.5	100.8	600.7
Q2 <sup>(p)</sup>	294.9	157.1	31.6	64.4	41.8	2,473.3	1,785.1	688.2	102.5	585.7
Transactions										
2002	-8.3	-0.2	1.8	0.4	-10.3	30.2	-4.9	35.2	3.6	31.6
2003	19.3	21.1	-0.5	-2.3	1.0	138.5	117.5	21.1	-1.3	22.4
2004 Q1	1.5	8.4	-1.1	-4.5	-1.3	155.4	129.6	25.7	4.8	21.0
Q2 <sup>(p)</sup>	21.7	16.0	1.6	2.0	2.2	23.8	37.5	-13.7	1.7	-15.4
Growth rates										
2002 Dec.	-3.3	-0.2	5.9	0.5	-20.2	1.3	-0.2	5.0	3.9	5.1
2003 Dec.	7.7	19.3	-1.5	-3.4	2.6	6.2	7.6	3.0	-1.3	3.7
2004 Mar.	4.7	14.4	-6.2	-4.7	-1.4	10.6	14.3	2.3	3.1	2.2
June <sup>(p)</sup>	2.5	8.3	-7.7	-0.2	-4.2	10.2	14.8	-0.1	8.4	-1.5

### C10 Deposits by government and non-euro area residents

(annual growth rates)



Source: ECB.

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

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



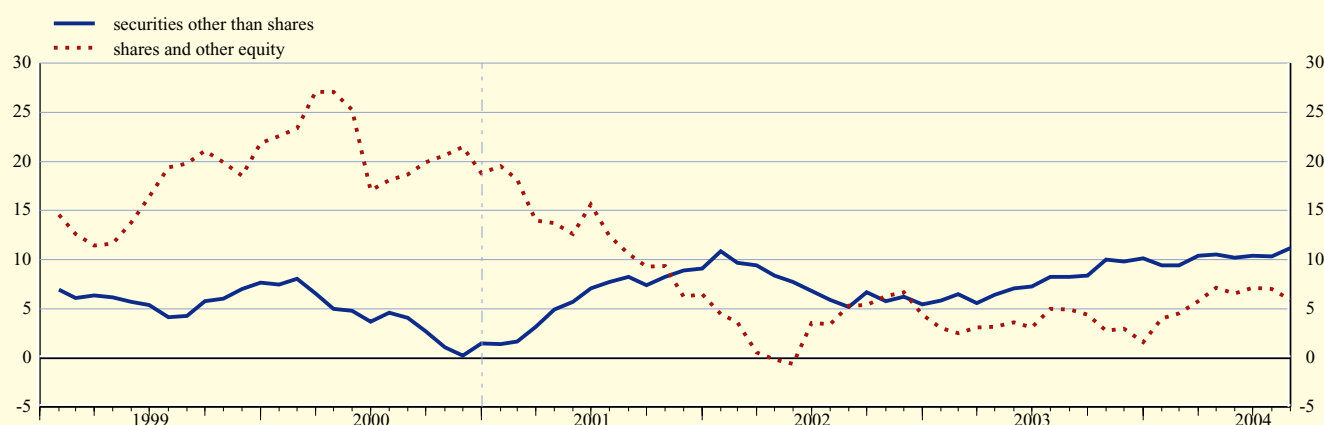
## 2.6 MFI holdings of securities, breakdown <sup>1)</sup>

(EUR billions and annual growth rates; outstanding amounts and growth rates at end of period, transactions during period)

	Securities other than shares								Shares and other equity			
	Total	MFIs		General government		Other euro area residents		Non-euro area residents	Total	MFIs	Non-MFIs	Non-euro area residents
		Euro	Non-euro	Euro	Non-euro	Euro	Non-euro					
	1	2	3	4	5	6	7	8	9	10	11	12
<b>Outstanding amounts</b>												
2002	3,228.2	1,122.2	48.2	1,119.5	15.5	349.5	16.7	556.6	1,004.9	263.3	564.3	177.3
2003	3,576.9	1,218.5	57.4	1,230.4	15.6	407.2	18.6	629.3	1,068.7	279.7	615.4	173.7
2004 Q1	3,767.1	1,283.1	60.9	1,287.9	17.8	413.5	18.0	685.9	1,115.8	285.7	640.7	189.5
2004 Apr.	3,811.8	1,292.7	62.0	1,296.5	17.3	417.2	18.6	707.4	1,145.4	290.8	663.2	191.4
May	3,849.7	1,304.2	61.5	1,323.4	17.2	422.4	17.6	703.5	1,148.9	297.6	658.0	193.3
June	3,860.3	1,299.5	63.6	1,337.8	17.6	425.7	18.2	697.9	1,150.0	295.8	648.6	205.6
July	3,901.6	1,315.1	63.3	1,329.9	17.4	429.1	17.3	729.5	1,149.7	295.6	640.0	214.2
Aug. <sup>(p)</sup>	3,919.5	1,319.6	63.6	1,331.7	16.9	429.1	16.9	741.7	1,142.5	291.2	634.1	217.2
<b>Transactions</b>												
2002	168.1	47.2	0.2	38.6	-0.6	25.9	3.5	53.4	42.7	14.0	7.0	21.8
2003	331.4	91.6	6.2	80.3	1.1	51.9	2.3	98.0	16.0	7.2	19.5	-10.7
2004 Q1	153.1	61.3	0.1	45.8	1.3	4.1	-1.3	41.8	44.8	6.1	24.6	14.0
2004 Apr.	41.8	9.7	0.9	8.7	-0.4	4.3	0.4	18.2	28.9	5.5	21.6	1.8
May	46.3	11.3	-0.4	28.6	0.1	5.0	-0.7	2.4	6.3	6.7	-2.8	2.4
June	8.1	-5.3	2.3	11.2	0.3	3.9	0.5	-4.8	-2.4	-3.2	-10.6	11.4
July	36.6	17.8	-0.9	-8.4	-0.2	0.8	-1.0	28.5	1.9	0.0	-7.6	9.5
Aug. <sup>(p)</sup>	19.3	4.5	1.2	-0.6	-0.5	0.0	-0.3	15.0	-6.2	-4.2	-5.8	3.7
<b>Growth rates</b>												
2002 Dec.	5.5	4.4	-0.6	3.7	-3.3	8.1	23.6	10.1	4.4	5.5	1.3	13.6
2003 Dec.	10.1	8.1	12.6	7.0	7.0	14.7	11.5	17.6	1.6	2.7	3.5	-5.8
2004 Mar.	10.4	9.6	6.1	7.3	6.1	10.7	5.2	19.1	5.8	6.2	7.5	-0.3
2004 Apr.	10.5	10.6	11.6	6.6	3.6	8.0	8.2	20.4	7.1	8.7	8.3	0.9
May	10.2	10.3	8.5	6.6	6.6	9.0	-7.4	19.0	6.6	9.4	5.9	4.6
June	10.4	9.5	8.1	8.9	10.3	10.1	2.9	15.9	7.2	7.4	5.2	13.4
July	10.4	9.5	5.8	7.1	6.1	11.2	-6.8	19.1	7.0	6.1	4.5	16.7
Aug. <sup>(p)</sup>	11.2	10.0	13.3	7.6	5.1	10.2	-6.1	21.7	5.9	4.3	3.3	16.6

## C11 MFI holdings of securities

(annual growth rates)



Source: ECB.

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

2.7 Revaluation of selected MFI balance sheet items <sup>1)</sup>  
(EUR billions)

1. Write-offs/write-downs of loans to households <sup>2)</sup>

	Consumer credit				Lending for house purchase				Other lending			
	Total	Up to 1 year	Over 1 year and up to 5 years	Over 5 years	Total	Up to 1 year	Over 1 year and up to 5 years	Over 5 years	Total	Up to 1 year	Over 1 year and up to 5 years	Over 5 years
	1	2	3	4	5	6	7	8	9	10	11	12
2002	-0.9	-	-	-	-1.3	-	-	-	-5.3	-	-	-
2003	-2.7	-1.1	-0.5	-1.0	-3.2	-0.3	-0.1	-2.8	-7.4	-2.8	-0.3	-4.3
2004 Q1	-1.2	-0.5	-0.2	-0.5	-1.3	-0.1	0.0	-1.1	-2.5	-1.0	-0.1	-1.4
2004 Apr.	-0.1	0.0	0.0	0.0	-0.1	0.0	0.0	-0.1	-0.2	-0.1	0.0	-0.1
May	-0.1	0.0	0.0	-0.1	-0.1	0.0	0.0	-0.1	-0.3	-0.1	0.0	-0.2
June	-0.2	-0.1	0.0	-0.1	-0.4	0.0	0.0	-0.3	-0.5	-0.1	0.0	-0.3
July	-0.1	0.0	0.0	-0.1	-0.1	0.0	0.0	-0.1	-0.2	0.0	0.0	-0.2
Aug. <sup>(p)</sup>	-0.1	0.0	0.0	-0.1	-0.2	0.0	0.0	-0.2	-0.2	-0.1	0.0	-0.2

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

	Non-financial corporations				Non-euro area residents		
	Total	Up to 1 year	Over 1 year and up to 5 years	Over 5 years	Total	Up to 1 year	Over 1 year
	1	2	3	4	5	6	7
2002	-9.7	-2.1	-2.7	-4.9	-7.2	-	-
2003	-17.6	-8.8	-1.3	-7.6	-1.0	-0.4	-0.6
2004 Q1	-5.7	-3.0	-0.6	-2.2	-0.9	-0.3	-0.5
2004 Apr.	-0.3	-0.2	0.0	-0.1	0.3	0.1	0.2
May	-0.7	-0.7	0.3	-0.3	0.2	0.0	0.2
June	-1.6	-0.9	-0.1	-0.6	0.2	0.1	0.2
July	-0.5	-0.3	-0.1	-0.1	-0.1	0.0	-0.1
Aug. <sup>(p)</sup>	-0.4	-0.1	0.0	-0.2	0.0	0.0	0.0

3. Revaluation of securities held by MFIs

	Securities other than shares							Shares and other equity				
	Total	MFIs		General government		Other euro area residents		Non-euro area residents	Total	MFIs	Non-MFIs	Non-euro area residents
		Euro	Non-euro	Euro	Non-euro	Euro	Non-euro					
	1	2	3	4	5	6	7	8	9	10	11	12
2002	39.6	9.9	0.6	13.2	-0.1	5.8	0.2	9.9	-12.3	-5.0	-1.5	-5.8
2003	-1.2	-0.7	-0.4	3.1	-0.1	-1.2	-0.1	-2.0	19.2	7.9	5.0	6.4
2004 Q1	16.6	2.5	0.3	11.1	0.1	1.5	0.0	1.0	2.3	-0.3	0.9	1.7
2004 Apr.	-5.1	-0.3	0.0	-4.1	0.0	-0.4	0.0	-0.3	0.6	-0.5	0.9	0.2
May	-3.7	0.1	-0.1	-1.8	0.0	0.2	0.0	-2.1	-2.3	0.3	-2.0	-0.5
June	0.2	-0.5	0.0	1.0	0.0	-0.6	0.0	0.3	1.6	-0.3	1.0	1.0
July	0.3	-0.6	0.0	0.5	0.0	0.3	0.0	0.1	-2.2	-0.3	-1.0	-1.0
Aug. <sup>(p)</sup>	2.5	0.0	0.0	2.4	0.0	0.1	0.0	0.0	-1.0	-0.1	-0.2	-0.7

Source: ECB.

- 1) MFI sector excluding the Eurosystem; sectoral classification is based on ESA 95.  
2) Including non-profit institutions serving households.

## 2.8 Currency breakdown of selected MFI balance sheet items <sup>1)</sup>

(percentages of total; outstanding amounts in EUR billions; end of period)

### 1. Deposits

	MFIs <sup>2)</sup>							Non-MFIs						
	All currencies outstanding amount	Euro <sup>3)</sup>	Non-euro currencies				All currencies outstanding amount	Euro <sup>3)</sup>	Non-euro currencies					
			Total	USD	JPY	CHF			GBP	Total	USD	JPY	CHF	GBP
1	2	3	4	5	6	7	8	9	10	11	12	13	14	
	By euro area residents													
2002	4,136.6	90.2	9.8	6.1	0.8	1.5	0.7	6,061.2	97.1	2.9	1.8	0.3	0.2	0.3
2003	4,363.5	91.2	8.8	5.4	0.5	1.5	0.9	6,409.8	97.3	2.7	1.7	0.3	0.1	0.3
2004 Q1	4,412.5	90.4	9.6	5.7	0.5	1.5	1.2	6,451.0	97.1	2.9	1.7	0.3	0.1	0.4
Q2 <sup>(p)</sup>	4,528.2	90.3	9.7	5.8	0.5	1.5	1.4	6,567.6	97.1	2.9	1.7	0.3	0.1	0.4
	By non-euro area residents													
2002	1,585.3	43.7	56.3	39.2	2.1	4.3	7.8	685.7	48.3	51.7	35.0	2.3	1.9	9.8
2003	1,580.9	46.9	53.1	35.6	1.8	3.6	9.4	664.3	51.0	49.0	32.1	2.1	2.2	9.6
2004 Q1	1,742.7	46.3	53.7	35.1	2.0	3.3	10.4	701.5	53.2	46.8	30.0	2.1	1.8	9.7
Q2 <sup>(p)</sup>	1,785.1	45.2	54.8	36.6	1.8	3.2	10.2	688.2	52.1	47.9	31.0	1.9	1.9	9.8

### 2. Debt securities issued by euro area MFIs

	All currencies outstanding amount	Euro <sup>3)</sup>	Non-euro currencies				
			Total	USD	JPY	CHF	GBP
	1	2	3	4	5	6	7
2002	3,138.7	85.4	14.6	7.7	1.8	1.6	2.3
2003	3,304.0	85.4	14.6	7.9	1.5	1.7	2.3
2004 Q1	3,458.0	84.6	15.4	7.7	1.7	2.0	2.6
Q2 <sup>(p)</sup>	3,534.6	84.0	16.0	8.2	1.7	2.0	2.7

Source: ECB.

- 1) MFI sector excluding the Eurosystem; sectoral classification is based on ESA 95.
- 2) For non-euro area residents, the term "MFIs" refers to institutions of a similar type to euro area MFIs.
- 3) Including items expressed in the national denominations of the euro.

**2.8 Currency breakdown of selected MFI balance sheet items <sup>1)</sup>**

(percentages of total; outstanding amounts in EUR billions; end of period)

**3. Loans**

	MFIs <sup>2)</sup>							Non-MFIs						
	All currencies outstanding amount	Euro <sup>3)</sup>	Non-euro currencies				All currencies outstanding amount	Euro <sup>3)</sup>	Non-euro currencies					
			Total						Total					
			USD	JPY	CHF	GBP			USD	JPY	CHF	GBP		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	
To euro area residents														
2002	4,017.8	-	-	-	-	-	-	7,593.6	96.2	3.8	1.8	0.5	1.1	0.3
2003	4,193.5	-	-	-	-	-	-	7,920.9	96.5	3.5	1.6	0.3	1.2	0.3
2004 Q1	4,224.4	-	-	-	-	-	-	7,993.5	96.4	3.6	1.6	0.3	1.2	0.4
2004 Q2 <sup>(p)</sup>	4,308.8	-	-	-	-	-	-	8,138.0	96.4	3.6	1.6	0.2	1.3	0.4
To non-euro area residents														
2002	1,146.2	48.3	51.7	32.4	4.5	2.6	9.1	583.9	36.2	63.8	47.6	2.3	4.7	5.6
2003	1,182.2	50.2	49.8	29.5	4.7	2.3	9.3	580.6	38.7	61.3	43.9	2.4	4.6	7.0
2004 Q1	1,308.6	49.1	50.9	30.6	4.7	2.5	9.4	646.9	40.0	60.0	41.9	2.5	4.4	8.0
2004 Q2 <sup>(p)</sup>	1,323.4	49.3	50.7	30.2	5.0	2.6	9.1	642.7	38.3	61.7	42.8	2.4	4.5	8.8

**4. Holdings of securities other than shares**

	Issued by MFIs <sup>2)</sup>							Issued by non-MFIs						
	All currencies outstanding amount	Euro <sup>3)</sup>	Non-euro currencies				All currencies outstanding amount	Euro <sup>3)</sup>	Non-euro currencies					
			Total						Total					
			USD	JPY	CHF	GBP			USD	JPY	CHF	GBP		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	
Issued by euro area residents														
2002	1,170.4	95.9	4.1	1.7	0.4	0.2	0.9	1,501.2	97.9	2.1	1.0	0.7	0.1	0.4
2003	1,275.9	95.5	4.5	2.1	0.3	0.5	1.4	1,671.7	98.0	2.0	1.1	0.5	0.1	0.2
2004 Q1	1,344.0	95.5	4.5	2.1	0.3	0.4	1.5	1,737.2	97.9	2.1	1.1	0.5	0.1	0.2
2004 Q2 <sup>(p)</sup>	1,363.1	95.3	4.7	2.2	0.4	0.4	1.4	1,799.3	98.0	2.0	1.1	0.5	0.1	0.2
Issued by non-euro area residents														
2002	239.6	36.9	63.1	45.5	1.7	0.6	13.2	317.1	41.5	58.5	42.0	5.8	0.9	5.6
2003	275.5	44.9	55.1	35.1	1.2	0.6	16.2	353.8	45.8	54.2	36.0	5.9	1.1	6.4
2004 Q1	307.1	44.4	55.6	34.2	1.2	0.6	17.3	378.8	44.3	55.7	35.9	6.2	0.8	7.2
2004 Q2 <sup>(p)</sup>	313.3	46.4	53.6	32.7	1.2	0.6	16.8	384.6	44.7	55.3	34.4	6.7	0.9	7.2

Source: ECB.

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

2) For non-euro area residents, the term "MFIs" refers to institutions of a similar type to euro area MFIs.

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

## 2.9 Aggregated balance sheet of euro area investment funds <sup>1)</sup>

(EUR billions; outstanding amounts at end of period)

### 1. Assets

	Total 1	Deposits 2	Holdings of securities other than shares			Holdings of shares/ other equity 6	Holdings of investment fund shares 7	Fixed assets 8	Other assets 9
			Total 3	Up to 1 year 4	Over 1 year 5				
2002 Q4	2,860.6	242.2	1,335.0	72.0	1,263.1	853.4	203.1	120.5	106.4
2003 Q1	2,746.9	217.2	1,331.8	70.6	1,261.2	767.3	205.8	116.7	108.1
Q2	2,959.5	232.6	1,382.7	67.1	1,315.6	880.9	224.5	120.7	118.1
Q3	3,085.6	248.3	1,405.3	65.3	1,340.0	932.3	234.6	126.3	138.8
Q4	3,175.0	235.2	1,389.4	67.4	1,322.0	1,033.7	243.9	133.7	139.1
2004 Q1 <sup>(p)</sup>	3,353.4	266.5	1,433.9	70.3	1,363.7	1,102.5	262.6	136.6	151.2

### 2. Liabilities

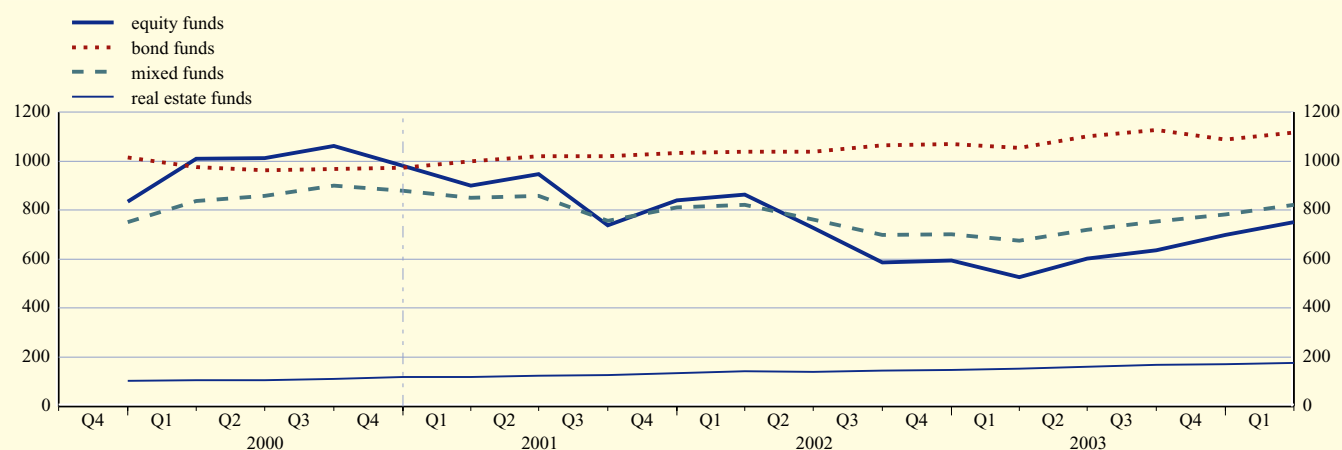
	Total 1	Deposits and loans taken 2	Investment fund shares 3	Other liabilities 4
2002 Q4	2,860.6	39.3	2,744.3	76.9
2003 Q1	2,746.9	40.2	2,628.3	78.4
Q2	2,959.5	41.8	2,825.8	91.9
Q3	3,085.6	43.2	2,917.7	124.8
Q4	3,175.0	44.2	3,011.7	119.1
2004 Q1 <sup>(p)</sup>	3,353.4	49.6	3,171.0	132.8

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

	Total 1	Funds by investment policy					Funds by type of investor	
		Equity funds 2	Bond funds 3	Mixed funds 4	Real estate funds 5	Other funds 6	General public funds 7	Special investors' funds 8
2002 Q4	2,860.6	594.1	1,068.2	701.6	147.5	349.2	2,087.7	772.9
2003 Q1	2,746.9	525.9	1,054.1	675.3	153.9	337.7	1,975.5	771.4
Q2	2,959.5	603.3	1,099.5	720.8	161.4	374.4	2,140.4	819.1
Q3	3,085.6	635.4	1,127.0	754.2	167.7	401.4	2,249.0	836.6
Q4	3,175.0	697.8	1,086.6	783.4	171.7	435.6	2,318.2	856.8
2004 Q1 <sup>(p)</sup>	3,353.4	750.1	1,116.6	821.2	176.0	489.6	2,470.3	883.1

### C12 Total assets of investment funds

(EUR billions)



Source: ECB.

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

## 2.10 Assets of euro area investment funds broken down by investment policy and type of investor

(EUR billions; outstanding amounts at end of period)

## 1. Funds by investment policy

	Total 1	Deposits 2	Holdings of securities other than shares			Holdings of shares/ other equity 6	Holdings of investment fund shares 7	Fixed assets 8	Other assets 9
			Total 3	Up to 1 year 4	Over 1 year 5				
Equity funds									
2002 Q4	594.1	26.6	28.0	3.1	24.9	506.1	18.4	-	14.9
2003 Q1	525.9	24.5	30.2	2.8	27.5	438.5	16.5	-	16.1
Q2	603.3	27.9	31.6	2.9	28.7	506.5	18.5	-	18.8
Q3	635.4	29.5	27.8	2.4	25.4	536.4	19.5	-	22.1
Q4	697.8	29.3	31.3	2.9	28.4	593.6	21.1	-	22.5
2004 Q1 <sup>(p)</sup>	750.1	32.7	32.2	3.0	29.2	635.3	23.4	-	26.5
Bond funds									
2002 Q4	1,068.2	83.9	902.8	36.6	866.2	31.9	12.3	-	37.2
2003 Q1	1,054.1	77.5	899.8	35.8	864.0	26.6	18.6	-	31.5
Q2	1,099.5	82.4	927.8	33.0	894.8	31.1	20.9	-	37.3
Q3	1,127.0	93.6	934.7	30.7	904.1	29.1	21.7	-	47.9
Q4	1,086.6	82.5	905.9	31.6	874.3	31.0	21.6	-	45.5
2004 Q1 <sup>(p)</sup>	1,116.6	97.3	918.4	35.3	883.1	32.9	21.4	-	46.6
Mixed funds									
2002 Q4	701.6	53.9	294.9	21.3	273.6	233.0	87.7	3.4	28.6
2003 Q1	675.3	50.4	300.8	21.8	278.9	209.9	83.7	0.7	29.9
Q2	720.8	49.4	311.9	20.9	291.0	237.0	91.9	0.3	30.3
Q3	754.2	50.5	324.0	22.2	301.8	248.4	95.4	0.3	35.6
Q4	783.4	49.5	324.0	22.1	301.9	272.5	100.5	0.3	36.7
2004 Q1 <sup>(p)</sup>	821.2	52.9	333.9	21.2	312.6	287.0	107.2	0.3	39.9
Real estate funds									
2002 Q4	147.5	10.9	9.5	0.5	8.9	0.7	7.0	112.6	6.8
2003 Q1	153.9	14.7	8.3	0.5	7.7	0.7	8.6	115.1	6.5
Q2	161.4	16.5	9.0	0.6	8.5	0.7	9.1	119.8	6.3
Q3	167.7	16.1	9.0	0.6	8.4	0.8	9.5	125.3	6.9
Q4	171.7	13.2	9.3	0.6	8.7	0.8	8.5	132.7	7.4
2004 Q1 <sup>(p)</sup>	176.0	14.7	9.1	0.6	8.5	0.8	7.7	135.8	8.0

## 2. Funds by type of investor

	Total 1	Deposits 2	Holdings of securities other than shares 3	Holdings of shares/ other equity 4	Holdings of investment fund shares 5	Fixed assets 6	Other assets 7
2002 Q4	2,087.7	191.0	904.8	663.5	153.2	105.8	69.6
2003 Q1	1,975.5	165.6	882.6	599.9	155.1	101.3	71.0
Q2	2,140.4	181.6	912.3	691.7	168.3	104.2	82.2
Q3	2,249.0	199.0	927.6	736.5	176.6	108.9	100.4
Q4	2,318.2	191.7	913.6	815.8	183.8	115.4	98.0
2004 Q1 <sup>(p)</sup>	2,470.3	219.3	948.9	877.9	198.8	117.5	107.9
Special investors' funds							
2002 Q4	772.9	51.2	430.3	190.0	49.9	14.7	36.8
2003 Q1	771.4	51.6	449.2	167.4	50.7	15.4	37.1
Q2	819.1	51.0	470.4	189.2	56.1	16.5	36.0
Q3	836.6	49.3	477.7	195.8	58.0	17.4	38.4
Q4	856.8	43.4	475.9	217.9	60.1	18.3	41.2
2004 Q1 <sup>(p)</sup>	883.1	47.2	485.0	224.6	63.8	19.1	43.3

Source: ECB.



## FINANCIAL AND NON-FINANCIAL ACCOUNTS

### 3.1 Main financial assets of non-financial sectors

(EUR billions and annual growth rates; outstanding amounts at end of period, transactions during the period)

	Currency and deposits											Memo: deposits of non-banks with banks outside the euro area
	Total	Currency	Deposits of non-financial sectors other than central government with euro area MFIs					Deposits of central government with euro area MFIs	Deposits with non-MFIs <sup>1)</sup>			
			Total	Overnight	With agreed maturity	Redeemable at notice	Repos					
	1	2	3	4	5	6	7	8	9	10	11	
Outstanding amounts												
2002 Q4	14,587.1	5,610.9	309.2	4,952.2	1,846.7	1,581.9	1,411.7	111.9	136.4	213.1	293.2	
2003 Q1	14,542.9	5,635.8	288.9	4,948.2	1,836.2	1,571.9	1,434.1	106.1	176.2	222.5	323.9	
Q2	15,003.5	5,749.7	310.1	5,029.7	1,918.4	1,560.2	1,456.4	94.7	200.3	209.6	329.8	
Q3	15,110.6	5,754.4	320.9	5,071.2	1,956.6	1,555.8	1,469.5	89.3	183.9	178.4	345.4	
Q4	15,400.8	5,871.9	350.7	5,182.4	2,027.5	1,557.8	1,511.9	85.2	153.6	185.2	348.4	
2004 Q1	15,597.9	5,907.7	350.8	5,180.3	2,021.0	1,543.6	1,534.5	81.2	183.8	192.8	394.9	
Transactions												
2002 Q4	171.7	171.1	30.8	135.7	83.0	13.2	46.4	-6.9	-9.9	14.5	10.1	
2003 Q1	154.7	40.2	1.3	-3.3	-29.3	-11.3	43.0	-5.7	32.8	9.4	32.2	
Q2	212.9	132.1	21.2	86.4	84.0	-8.4	22.2	-11.4	24.1	0.3	11.4	
Q3	131.9	12.6	11.4	12.4	6.9	-3.7	13.0	-3.9	-13.7	2.5	17.2	
Q4	154.6	125.9	29.8	119.6	79.3	9.1	36.4	-5.2	-30.3	6.8	10.9	
2004 Q1	148.6	32.5	0.0	-5.3	-7.4	-16.5	22.5	-3.9	30.2	7.6	40.6	
Growth rates												
2002 Q4	3.9	5.0	33.8	3.6	5.8	0.2	5.3	-3.9	-4.2	12.2	4.0	
2003 Q1	4.3	5.9	31.2	4.4	7.4	-0.2	7.3	-10.6	5.1	14.5	13.7	
Q2	4.6	6.4	27.0	4.5	7.6	-0.9	8.9	-19.0	22.3	13.7	22.6	
Q3	4.7	6.5	23.3	4.8	8.2	-0.6	9.1	-23.5	22.8	13.4	24.5	
Q4	4.5	5.5	20.6	4.3	7.6	-0.9	8.1	-23.4	9.5	8.9	24.5	
2004 Q1	4.5	5.4	21.6	4.3	8.9	-1.2	6.6	-23.0	5.9	7.7	24.8	
Securities other than shares												
			Shares <sup>2)</sup>					Insurance technical reserves				
	Total	Short-term	Long-term	Total	Quoted shares	Mutual fund shares	Money market fund shares	Total	Net equity of households in life insurance reserves and pension fund reserves	Prepayments of insurance premiums and reserves for outstanding claims		
	12	13	14	15	16	17	18	19	20	21		
Outstanding amounts												
2002 Q4	1,955.3	208.7	1,746.6	3,490.9	1,778.1	1,712.8	310.0	3,530.0	3,185.7	344.3		
2003 Q1	1,946.5	190.0	1,756.5	3,350.9	1,610.0	1,740.9	396.6	3,609.8	3,259.9	349.8		
Q2	1,915.4	172.6	1,742.7	3,652.9	1,815.6	1,837.3	402.7	3,685.5	3,332.4	353.1		
Q3	1,918.0	172.4	1,745.6	3,687.3	1,825.8	1,861.5	406.7	3,750.9	3,395.8	355.1		
Q4	1,921.5	178.0	1,743.4	3,828.3	1,952.7	1,875.6	404.5	3,779.1	3,422.3	356.8		
2004 Q1	1,944.6	185.0	1,759.6	3,912.7	1,985.4	1,927.3	414.1	3,832.9	3,468.9	364.0		
Transactions												
2002 Q4	-13.6	-10.3	-3.3	-23.9	-23.7	-0.2	-7.4	38.2	40.1	-1.9		
2003 Q1	-21.8	-21.8	-0.1	65.3	3.0	62.2	29.9	71.0	64.6	6.5		
Q2	-41.5	-17.1	-24.4	63.1	25.1	38.0	3.7	59.3	55.1	4.2		
Q3	11.0	0.1	10.9	50.3	33.0	17.3	2.6	57.9	54.9	3.0		
Q4	7.1	4.4	2.7	-24.6	-24.7	0.2	-10.3	46.2	43.6	2.6		
2004 Q1	19.9	3.4	16.5	27.0	1.5	25.5	10.4	69.1	61.3	7.9		
Growth rates												
2002 Q4	0.9	-14.0	3.0	2.0	0.1	4.7	12.1	6.4	6.6	4.5		
2003 Q1	-0.6	-16.1	1.3	2.8	0.8	5.6	11.9	6.3	6.6	3.7		
Q2	-2.4	-14.6	-1.1	3.8	1.3	7.1	13.5	6.4	6.7	3.7		
Q3	-3.4	-23.7	-1.0	4.6	2.2	6.9	9.2	6.5	6.9	3.4		
Q4	-2.3	-16.4	-0.6	4.4	2.0	6.9	8.3	6.6	6.8	4.7		
2004 Q1	-0.2	-4.8	0.3	3.5	2.2	4.6	1.6	6.4	6.6	5.0		

Source: ECB.

1) Covering deposits with euro area central government (S.1311 in ESA 95), other financial intermediaries (S.123 in ESA 95) and insurance corporations and pension funds (S.125 in ESA 95).

2) Excluding unquoted shares.

## 3.2 Main liabilities of non-financial sectors

(EUR billions and annual growth rates; outstanding amounts at end of period, transactions during the period)

	Loans taken from euro area MFIs and other financial corporations by												Memo: loans taken from banks outside the euro area by non-banks
	Total			General government			Non-financial corporations			Households <sup>1)</sup>			
	Total	Taken from euro area MFIs		Total	Short-term	Long-term	Total	Short-term	Long-term	Total	Short-term	Long-term	
1	2	3	4	5	6	7	8	9	10	11	12	13	
Outstanding amounts													
2002 Q4	15,613.9	8,080.9	7,130.0	886.3	60.9	825.5	3,581.0	1,175.4	2,405.6	3,613.6	296.8	3,316.7	241.6
2003 Q1	15,580.4	8,138.5	7,168.8	884.8	68.5	816.3	3,603.9	1,188.4	2,415.5	3,649.8	286.8	3,363.0	256.4
Q2	16,139.2	8,244.2	7,236.3	876.9	69.7	807.3	3,652.1	1,213.2	2,438.9	3,715.2	291.4	3,423.8	253.8
Q3	16,233.3	8,326.8	7,293.7	884.2	70.8	813.4	3,657.5	1,184.7	2,472.8	3,785.0	285.9	3,499.1	275.6
Q4	16,561.4	8,462.9	7,397.1	952.6	80.6	872.0	3,660.0	1,163.5	2,496.4	3,850.3	287.0	3,563.3	266.5
2004 Q1	16,899.7	8,513.2	7,466.6	956.4	84.7	871.7	3,654.9	1,161.2	2,493.7	3,901.9	281.8	3,620.1	304.1
Transactions													
2002 Q4	165.4	141.1	96.4	14.9	6.0	9.0	58.4	-5.0	63.4	67.8	2.8	65.0	6.4
2003 Q1	265.7	94.7	66.9	6.1	7.9	-1.8	45.4	18.6	26.8	43.2	-7.6	50.8	7.1
Q2	234.2	116.2	84.9	-5.4	3.2	-8.6	52.0	24.3	27.7	69.6	5.3	64.3	2.6
Q3	136.1	79.8	58.7	7.3	1.1	6.2	1.5	-25.9	27.5	71.0	-4.7	75.7	22.9
Q4	111.0	110.6	119.2	20.3	9.8	10.4	17.2	-16.5	33.7	73.1	4.5	68.5	-1.3
2004 Q1	192.6	45.7	74.8	4.9	4.1	0.8	-14.7	-6.9	-7.8	55.5	-4.0	59.5	32.6
Growth rates													
2002 Q4	3.9	4.4	4.0	-1.9	21.8	-3.3	3.9	-2.9	7.6	6.5	0.8	7.1	-3.3
2003 Q1	4.4	4.8	4.1	-1.4	28.4	-3.3	4.6	-0.8	7.5	6.7	-0.3	7.3	-4.1
Q2	4.8	4.9	4.0	0.8	34.3	-1.3	4.3	1.5	5.8	6.5	-1.5	7.2	3.6
Q3	5.2	5.4	4.4	2.6	33.1	0.6	4.4	1.0	6.2	7.1	-1.4	7.9	16.1
Q4	4.8	5.0	4.6	3.2	36.2	0.8	3.2	0.0	4.8	7.1	-0.8	7.8	12.9
2004 Q1	4.3	4.3	4.7	3.1	26.7	1.1	1.6	-2.1	3.4	7.4	0.4	8.0	22.1
Securities other than shares issued by													
	Total			General government			Non-financial corporations			Quoted shares issued by non-financial corporations	Deposit liabilities of central government	Pension fund reserves of non- financial corporations	
	Total			Total	Short-term	Long-term	Total	Short-term	Long-term				
	14	15	16	17	18	19	20	21	22	23			
Outstanding amounts													
2002 Q4	4,670.0	4,137.0	480.1	3,656.9	533.0	144.7	388.3	2,383.9	209.9	269.1			
2003 Q1	4,835.7	4,272.5	529.9	3,742.7	563.1	167.1	396.1	2,114.2	219.4	272.6			
Q2	4,962.0	4,377.7	563.6	3,814.1	584.3	165.6	418.7	2,451.3	205.7	276.1			
Q3	4,977.5	4,395.4	557.7	3,837.8	582.1	164.4	417.6	2,474.6	174.3	280.1			
Q4	4,904.9	4,316.2	538.9	3,777.2	588.8	163.5	425.2	2,729.2	181.7	282.7			
2004 Q1	5,071.2	4,477.8	576.1	3,901.7	593.5	179.9	413.5	2,839.5	189.0	286.7			
Transactions													
2002 Q4	4.2	-0.2	-8.3	8.0	4.4	6.9	-2.5	2.5	14.4	3.2			
2003 Q1	157.5	128.8	49.9	78.9	28.7	22.3	6.4	-0.2	9.5	4.2			
Q2	98.9	84.3	33.9	50.4	14.6	-1.4	16.0	15.5	-0.6	4.2			
Q3	45.8	43.7	-5.6	49.3	2.1	-1.1	3.2	4.0	2.4	4.2			
Q4	-11.5	-19.4	-18.4	-1.0	7.9	-0.9	8.8	0.4	7.4	4.1			
2004 Q1	134.0	134.6	35.8	98.9	-0.7	16.2	-16.9	1.6	7.3	4.0			
Growth rates													
2002 Q4	5.1	5.2	10.6	4.5	4.1	3.7	4.3	0.7	12.3	5.3			
2003 Q1	6.3	6.1	16.7	4.7	8.0	15.2	5.3	0.4	14.7	5.6			
Q2	7.0	6.5	15.5	5.2	11.3	27.0	5.9	0.8	13.4	5.9			
Q3	6.6	6.2	14.6	5.1	9.4	19.4	5.9	0.9	13.2	6.0			
Q4	6.2	5.7	12.5	4.9	10.0	13.0	8.9	0.8	8.9	6.2			
2004 Q1	5.5	5.7	8.6	5.3	4.2	7.6	2.8	1.0	7.5	6.1			

Source: ECB.

1) Including non-profit institutions serving households.



### 3.3 Main financial assets and liabilities of insurance corporations and pension funds

(EUR billions and annual growth rates; outstanding amounts at end of period, transactions during the period)

Main financial assets												
Total	Deposits with euro area MFIs					Loans			Securities other than shares			
	Total	Overnight	With agreed maturity	Redeemable at notice	Repos	Total	Short-term	Long-term	Total	Short-term	Long-term	
1	2	3	4	5	6	7	8	9	10	11	12	
Outstanding amounts												
2002 Q4	3,328.7	523.1	55.9	445.9	3.5	17.8	341.6	69.9	271.7	1,334.1	50.0	1,284.1
2003 Q1	3,343.2	535.8	61.7	454.2	1.6	18.3	332.9	63.6	269.3	1,382.6	55.9	1,326.7
Q2	3,472.8	537.8	63.8	450.5	1.3	22.3	337.1	64.8	272.3	1,411.8	53.7	1,358.0
Q3	3,522.5	532.9	57.5	455.3	1.4	18.7	338.8	65.2	273.6	1,433.3	56.6	1,376.7
Q4	3,629.6	541.9	58.9	462.3	1.6	19.1	327.3	65.8	261.5	1,461.2	58.3	1,403.0
2004 Q1	3,778.1	556.6	64.7	468.3	1.7	22.0	338.0	68.8	269.3	1,532.9	56.1	1,476.8
Transactions												
2002 Q4	68.7	16.8	5.8	8.0	-0.4	3.5	5.0	-4.6	9.6	36.5	2.4	34.1
2003 Q1	67.1	12.4	4.3	7.8	-0.2	0.5	-8.7	-6.4	-2.4	53.8	6.7	47.1
Q2	42.3	2.3	2.3	-3.9	0.0	3.9	4.2	1.2	3.0	18.7	-2.3	21.1
Q3	33.7	-6.3	-6.4	3.8	0.1	-3.8	1.7	0.4	1.3	22.6	2.9	19.7
Q4	59.3	9.5	1.6	7.2	0.2	0.5	-11.5	0.7	-12.2	37.6	1.7	35.9
2004 Q1	95.4	14.4	5.7	5.8	0.0	2.8	10.5	2.9	7.6	44.5	-2.4	47.0
Growth rates												
2002 Q4	6.3	5.6	16.3	4.3	1.9	8.5	-0.2	-3.2	0.7	9.4	8.3	9.5
2003 Q1	5.8	7.4	37.1	4.8	-17.5	3.3	-1.4	-11.6	1.4	10.0	17.5	9.7
Q2	6.8	6.7	28.9	3.9	-9.5	17.4	-0.6	-12.3	2.6	12.0	41.1	11.1
Q3	6.5	5.0	11.8	3.6	-12.4	28.2	0.6	-12.6	4.4	10.1	20.7	9.7
Q4	6.1	3.4	3.0	3.4	4.7	6.1	-4.2	-5.9	-3.8	10.0	18.0	9.6
2004 Q1	6.9	3.7	5.0	2.9	24.7	18.7	1.5	8.1	-0.1	8.9	-0.4	9.3

Main financial assets						Main liabilities							
Shares <sup>1)</sup>				Prepayments of insurance premiums and reserves for outstanding claims	Total	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	
													13
Outstanding amounts													
2002 Q4	1,020.6	455.5	565.0	56.4	109.4	3,521.2	47.3	32.9	10.7	111.4	3,351.8	2,847.0	504.8
2003 Q1	979.9	422.9	557.1	60.1	111.9	3,586.5	61.0	42.7	10.9	101.5	3,413.2	2,898.8	514.4
Q2	1,072.2	482.2	590.0	64.4	113.9	3,692.8	60.6	44.8	11.2	134.3	3,486.8	2,965.9	521.0
Q3	1,102.2	497.5	604.7	60.7	115.3	3,757.7	62.6	44.3	11.7	133.5	3,549.8	3,024.2	525.6
Q4	1,182.6	546.2	636.4	64.4	116.6	3,811.8	51.9	35.4	12.1	153.8	3,594.0	3,064.2	529.8
2004 Q1	1,230.8	563.5	667.3	68.6	119.7	3,878.0	61.7	46.3	12.3	153.7	3,650.5	3,110.1	540.4
Transactions													
2002 Q4	11.3	-3.9	15.2	6.7	-0.8	20.8	-12.9	-9.1	0.1	0.4	33.1	35.6	-2.4
2003 Q1	7.0	-3.6	10.6	2.0	2.6	83.3	15.2	11.3	0.0	-0.9	69.0	59.4	9.6
Q2	15.0	4.2	10.7	4.6	2.0	61.3	-0.3	2.3	0.2	4.5	57.0	50.4	6.6
Q3	14.3	5.2	9.1	-4.2	1.5	57.4	2.0	-0.5	0.5	0.0	54.8	50.1	4.7
Q4	22.3	7.1	15.2	4.3	1.4	34.7	-10.8	-8.9	0.5	3.9	41.1	36.9	4.2
2004 Q1	22.8	2.7	20.0	4.2	3.2	77.6	9.7	10.7	0.0	0.8	67.2	55.7	11.4
Growth rates													
2002 Q4	5.0	3.2	6.7	18.2	9.0	5.8	-13.1	-11.6	0.4	0.3	6.5	6.7	5.3
2003 Q1	3.0	0.0	5.8	19.5	6.3	5.9	7.5	8.5	0.2	-0.2	6.3	6.8	4.0
Q2	3.4	-0.1	6.5	23.0	6.0	6.0	0.8	4.6	0.9	1.8	6.4	6.8	4.0
Q3	4.8	0.4	8.2	18.2	4.8	6.4	6.7	9.5	7.7	3.2	6.5	7.0	3.6
Q4	5.7	2.8	8.1	11.8	6.9	6.7	13.0	12.9	11.1	6.7	6.6	6.9	5.0
2004 Q1	7.6	4.6	9.9	14.7	7.3	6.4	1.0	8.6	11.4	9.0	6.4	6.7	5.2

Source: ECB.

1) Excluding unquoted shares.

## 3.4 Annual saving, investment and financing

(EUR billions, unless otherwise indicated)

## 1. All sectors in the euro area

	Net acquisition of non-financial assets					Net acquisition of financial assets							
	Total	Gross fixed capital formation	Consumption of fixed capital (-)	Changes in inventories <sup>1)</sup>	Non-produced assets	Total	Monetary gold and SDRs	Currency and deposits	Securities other than shares <sup>2)</sup>	Loans	Shares and other equity	Insurance technical reserves	Other investment (net) <sup>3)</sup>
	1	2	3	4	5	6	7	8	9	10	11	12	13
1996	341.7	1,122.4	-783.9	2.9	0.4	1,733.8	-3.0	396.3	397.7	383.4	313.8	195.4	50.2
1997	354.1	1,139.3	-797.1	11.9	0.0	1,912.6	-0.2	392.4	332.2	449.9	485.0	223.9	29.3
1998	415.1	1,203.5	-823.6	35.0	0.2	2,423.0	11.0	419.7	357.1	537.6	844.8	215.3	37.6
1999	451.7	1,292.4	-863.7	22.8	0.2	3,103.5	1.3	554.9	427.0	895.0	936.7	261.2	27.5
2000	489.4	1,391.2	-913.1	28.0	-16.7	2,913.3	1.3	352.4	263.1	848.3	1,191.7	253.0	3.4
2001	463.3	1,443.7	-973.6	-8.8	1.9	2,596.6	-0.5	576.6	433.0	745.5	620.3	250.0	-28.3
2002	393.0	1,430.3	-1,020.5	-18.1	1.4	2,298.8	0.9	648.1	258.7	663.6	478.6	221.8	27.2

	Changes in net worth <sup>4)</sup>				Net incurrence of liabilities					
	Total	Gross saving	Consumption of fixed capital (-)	Net capital transfers receivable	Total	Currency and deposits	Securities other than shares <sup>2)</sup>	Loans	Shares and other equity	Insurance technical reserves
	14	15	16	17	18	19	20	21	22	23
1996	410.7	1,190.0	-783.9	4.6	1,664.8	473.5	383.4	334.7	277.0	196.2
1997	455.7	1,241.8	-797.1	11.0	1,811.0	509.6	317.7	378.5	375.0	230.1
1998	486.5	1,299.1	-823.6	11.1	2,351.6	648.5	323.2	499.2	659.7	221.0
1999	498.0	1,352.0	-863.7	9.7	3,057.2	930.5	503.7	767.9	591.6	263.5
2000	514.9	1,419.4	-913.1	8.6	2,887.8	541.5	417.3	884.5	791.0	253.4
2001	485.4	1,449.4	-973.6	9.6	2,574.4	673.6	490.1	622.7	537.6	250.4
2002	464.9	1,474.0	-1,020.5	11.5	2,227.0	562.3	443.3	607.0	397.8	216.5

## 2. Non-financial corporations

	Net acquisition of non-financial assets			Net acquisition of financial assets					Changes in net worth <sup>4)</sup>		Net incurrence of liabilities			
	Total	Gross fixed capital formation	Consumption of fixed capital (-)	Total	Currency and deposits	Securities other than shares <sup>2)</sup>	Loans	Shares and other equity	Total	Gross saving	Total	Securities other than shares <sup>2)</sup>	Loans	Shares and other equity
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1996	131.4	567.3	-438.0	262.5	54.1	-13.7	55.1	89.1	119.5	514.5	274.5	7.0	143.3	116.5
1997	150.4	592.0	-453.3	242.6	25.3	-11.8	46.3	97.7	105.2	521.5	287.9	12.1	153.8	112.4
1998	193.8	635.2	-470.6	450.0	42.7	-11.5	110.9	205.2	147.8	569.2	496.0	22.8	267.4	194.7
1999	212.0	684.5	-490.9	652.1	24.7	93.6	186.0	331.2	107.7	548.7	756.5	47.5	436.7	255.6
2000	309.7	750.3	-522.9	925.5	74.6	87.4	230.4	514.2	84.4	560.4	1,150.7	60.9	597.7	483.7
2001	219.2	774.3	-554.8	636.5	100.9	44.6	164.5	242.5	88.2	583.5	767.6	99.7	352.7	303.7
2002	172.9	758.3	-579.3	522.9	39.1	-57.8	189.8	258.6	115.1	634.3	580.7	21.2	343.1	201.2

3. Households<sup>5)</sup>

	Net acquisition of non-financial assets			Net acquisition of financial assets					Changes in net worth <sup>4)</sup>		Net incurrence of liabilities		Memo:	
	Total	Gross fixed capital formation	Consumption of fixed capital (-)	Total	Currency and deposits	Securities other than shares <sup>2)</sup>	Shares and other equity	Insurance technical reserves	Total	Gross saving	Total	Loans	Disposable income	Gross saving ratio <sup>6)</sup>
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1996	170.0	384.5	-216.8	436.7	146.2	24.8	90.9	190.8	445.4	647.1	161.3	160.0	3,788.2	17.1
1997	168.3	377.5	-211.6	424.3	70.4	-19.8	192.1	217.7	424.2	617.2	168.4	167.0	3,816.2	16.2
1998	180.2	389.7	-216.3	443.1	96.4	-119.2	286.6	210.5	408.1	594.6	215.2	213.9	3,923.5	15.2
1999	191.4	418.5	-231.5	468.5	118.7	-28.5	195.7	246.8	392.8	581.8	267.1	265.6	4,086.3	14.2
2000	197.9	441.0	-241.2	422.7	65.4	34.5	121.4	247.5	396.6	598.3	224.0	222.3	4,276.6	14.0
2001	183.8	452.8	-263.6	414.4	174.6	82.2	58.7	230.1	427.9	655.5	170.3	168.4	4,578.7	14.3
2002	165.6	458.6	-281.1	485.2	223.8	77.8	-1.4	212.2	439.2	684.6	211.6	209.4	4,721.6	14.5

Source: ECB.

- 1) Including net acquisition of valuables.
- 2) Excluding financial derivatives.
- 3) Financial derivatives, other accounts receivable/payable and statistical discrepancies.
- 4) Arising from saving and net capital transfers receivable, after allowance for consumption of fixed capital (-).
- 5) Including non-profit institutions serving households.
- 6) Gross saving as a percentage of disposable income.



## FINANCIAL MARKETS

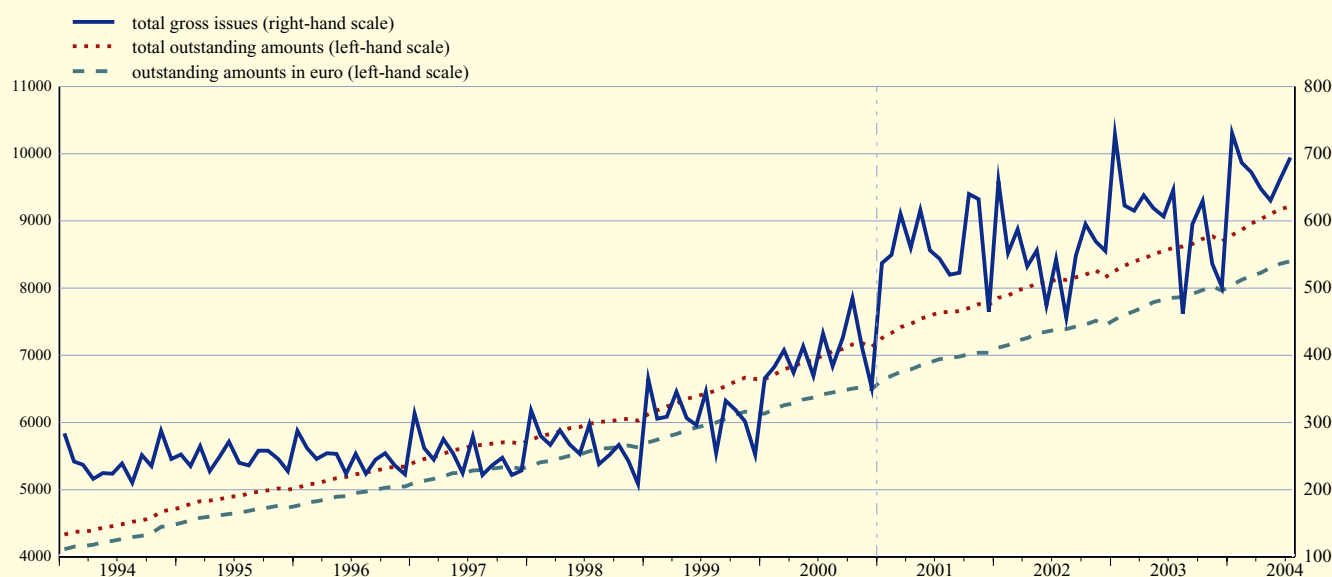
### 4.1 Securities issues other than shares by original maturity, residency of the issuer and currency

(EUR billions unless otherwise indicated, transactions during the month and end-of-period outstandings amounts; nominal values)

	Total in euro <sup>1)</sup>				By euro area residents							
	Outstanding amounts	Gross issues	Redemptions	Net issues	Total				Of which in euro			
					Outstanding amounts	Gross issues	Redemptions	Net issues	Outstanding amounts (%)	Gross issues (%)	Redemptions (%)	Net issues
	1	2	3	4	5	6	7	8	9	10	11	12
<b>Total</b>												
2003 July	9,019.7	649.4	615.7	33.7	8,601.3	645.7	601.2	44.5	91.4	93.1	94.3	34.1
Aug.	9,025.0	470.3	465.5	4.8	8,614.3	461.6	463.8	-2.2	91.3	93.9	92.6	3.8
Sep.	9,115.1	615.6	524.5	91.1	8,659.0	594.9	530.9	64.0	91.4	93.4	94.3	55.1
Oct.	9,172.7	635.5	578.8	56.7	8,733.0	629.7	561.6	68.1	91.3	93.7	94.7	58.1
Nov.	9,240.2	556.0	491.2	64.8	8,771.2	536.4	490.1	46.3	91.5	93.2	92.4	46.8
Dec.	9,204.0	519.4	551.8	-32.4	8,695.8	501.4	555.4	-54.0	91.6	93.7	94.6	-45.3
2004 Jan.	9,276.7	738.7	663.8	74.9	8,789.0	731.0	643.2	87.8	91.5	94.2	94.7	79.4
Feb.	9,353.6	699.3	622.6	76.7	8,866.1	686.4	605.5	80.8	91.6	94.6	94.2	78.6
Mar.	9,470.8	717.1	599.7	117.3	8,960.3	672.1	587.7	84.3	91.3	92.7	95.3	63.5
Apr.	9,496.0	647.8	624.3	23.5	9,027.4	647.8	586.9	60.9	91.2	93.2	95.0	46.2
May	9,595.1	648.3	549.6	98.8	9,109.3	630.2	543.5	86.6	91.2	93.9	94.9	75.9
June	9,699.8	708.0	602.3	105.8	9,172.7	661.5	598.2	63.4	91.2	94.3	94.7	57.0
July	.	.	.	.	9,215.4	693.9	651.7	42.2	91.1	94.0	94.6	36.0
<b>Long-term</b>												
2003 July	8,155.9	198.4	145.7	52.7	7,721.2	185.6	140.2	45.5	91.4	88.2	94.9	30.6
Aug.	8,168.1	86.4	75.8	10.7	7,747.6	79.0	69.9	9.1	91.2	88.0	90.4	6.4
Sep.	8,244.6	179.8	102.5	77.3	7,799.6	173.4	102.6	70.8	91.4	91.6	90.3	66.2
Oct.	8,299.5	179.2	125.5	53.7	7,852.3	168.3	120.4	47.8	91.4	91.7	94.0	41.1
Nov.	8,351.0	143.4	93.3	50.1	7,888.6	136.5	90.3	46.2	91.5	89.6	88.0	42.7
Dec.	8,344.7	118.2	119.4	-1.2	7,864.1	111.0	113.5	-2.5	91.6	90.3	93.0	-5.3
2004 Jan.	8,404.1	196.0	136.1	59.9	7,913.6	178.6	137.6	41.0	91.6	92.9	90.8	40.9
Feb.	8,490.4	194.3	109.0	85.3	7,997.2	183.5	98.7	84.9	91.7	92.2	88.0	82.5
Mar.	8,561.0	213.4	142.1	71.3	8,071.5	189.4	123.8	65.6	91.4	86.8	93.7	48.3
Apr.	8,601.7	162.7	123.8	38.9	8,121.7	154.7	110.2	44.6	91.3	88.4	94.6	32.5
May	8,703.1	174.2	72.1	102.1	8,205.5	156.3	67.8	88.5	91.3	89.2	90.8	77.9
June	8,785.7	201.6	121.1	80.6	8,274.4	178.7	113.5	65.2	91.3	92.9	92.3	61.2
July	.	.	.	.	8,311.0	173.1	137.5	35.6	91.2	91.5	93.7	29.6

### C13 Total outstanding amounts and gross issues of securities other than shares issued by euro area residents

(EUR billions)



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

1) Total euro-denominated securities other than shares issued by euro area residents and non-euro area residents.

## 4.2 Securities other than shares issued by euro area residents by original maturity and sector of the issuer

(EUR billions unless otherwise indicated; nominal values)

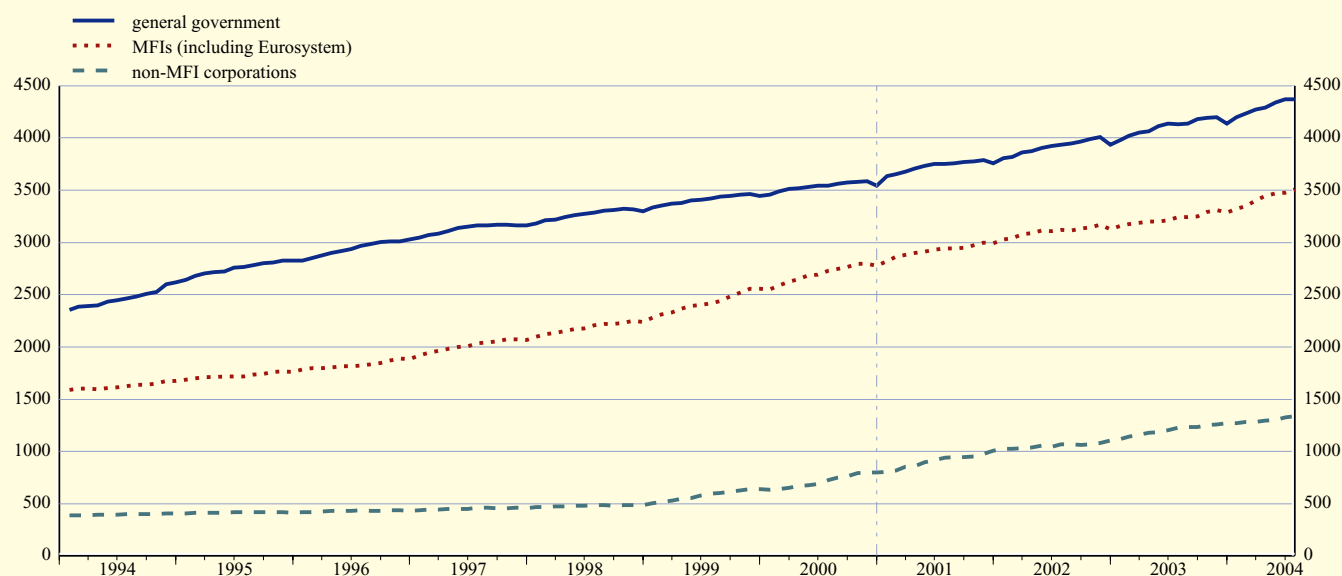
### 1. Outstanding amounts

(end of period)

	Total						Of which in euro (%)					
	Total	MFIs (including Eurosystem)	Non-MFI corporations		General government		Total	MFIs (including Eurosystem)	Non-MFI corporations		General government	
			Non-monetary financial corporations	Non-financial corporations	Central government	Other general government			Non-monetary financial corporations	Non-financial corporations	Central government	Other general government
1	2	3	4	5	6	7	8	9	10	11	12	
	Total											
2003 July	8,601.3	3,241.0	637.7	589.2	3,928.9	204.5	91.4	85.7	85.4	88.1	97.3	95.5
Aug.	8,614.3	3,241.3	641.9	592.5	3,934.4	204.3	91.3	85.6	85.2	87.9	97.2	95.4
Sep.	8,659.0	3,247.3	650.1	584.0	3,968.7	209.0	91.4	85.5	86.2	88.1	97.4	95.5
Oct.	8,733.0	3,288.9	661.4	589.5	3,980.5	212.6	91.3	85.3	86.6	87.9	97.4	95.5
Nov.	8,771.2	3,311.0	669.2	590.7	3,983.1	217.1	91.5	85.5	86.9	88.2	97.5	95.6
Dec.	8,695.8	3,286.9	683.6	589.2	3,917.9	218.1	91.6	85.5	87.8	88.3	97.7	95.4
2004 Jan.	8,789.0	3,319.7	684.8	588.6	3,974.2	221.8	91.5	85.4	87.7	87.9	97.6	95.5
Feb.	8,866.1	3,347.3	693.4	591.9	4,005.6	227.9	91.6	85.6	88.0	87.9	97.6	95.6
Mar.	8,960.3	3,403.7	695.6	589.4	4,040.8	230.8	91.3	85.2	87.8	87.7	97.4	95.5
Apr.	9,027.4	3,444.1	700.9	591.4	4,059.0	232.0	91.2	84.9	87.9	87.5	97.4	95.4
May	9,109.3	3,470.3	700.4	599.3	4,105.7	233.6	91.2	84.8	88.2	87.6	97.5	95.6
June	9,172.7	3,477.5	720.0	602.6	4,134.5	238.1	91.2	84.7	88.6	87.4	97.4	95.5
July	9,215.4	3,508.0	730.1	609.9	4,130.5	237.0	91.1	84.6	88.7	87.1	97.5	95.5
	Long-term											
2003 July	7,721.2	2,863.6	629.0	487.9	3,540.7	200.0	91.4	86.2	85.2	86.6	97.2	95.7
Aug.	7,747.6	2,879.2	633.2	490.9	3,543.9	200.4	91.2	85.9	85.0	86.4	97.1	95.5
Sep.	7,799.6	2,890.6	642.0	486.3	3,575.2	205.5	91.4	85.9	86.1	86.8	97.2	95.7
Oct.	7,852.3	2,923.1	653.3	489.6	3,577.0	209.2	91.4	85.7	86.4	86.6	97.3	95.6
Nov.	7,888.6	2,937.5	660.9	493.4	3,583.0	213.7	91.5	85.8	86.8	87.0	97.4	95.8
Dec.	7,864.1	2,926.8	674.7	497.0	3,551.0	214.6	91.6	86.0	87.7	87.2	97.5	95.5
2004 Jan.	7,913.6	2,941.9	676.2	492.3	3,585.5	217.7	91.6	85.9	87.5	86.7	97.5	95.6
Feb.	7,997.2	2,977.4	685.2	495.1	3,615.9	223.5	91.7	86.0	87.9	86.6	97.5	95.7
Mar.	8,071.5	3,029.6	687.8	489.1	3,638.2	226.8	91.4	85.7	87.7	86.2	97.3	95.7
Apr.	8,121.7	3,060.4	692.7	484.6	3,656.5	227.5	91.3	85.4	87.8	85.9	97.3	95.6
May	8,205.5	3,092.3	692.4	491.6	3,700.4	228.8	91.3	85.2	88.1	86.0	97.4	95.7
June	8,274.4	3,099.4	711.8	497.0	3,733.0	233.2	91.3	85.2	88.5	85.8	97.3	95.8
July	8,311.0	3,123.0	721.9	505.3	3,729.0	231.8	91.2	85.0	88.6	85.5	97.4	95.8

### C14 Outstanding amounts of securities other than shares by sector

(EUR billions, end-of-period outstanding amounts, nominal values)



Source: ECB.

## 4.2 Securities other than shares issued by euro area residents by original maturity and sector of the issuer

(EUR billions unless otherwise indicated; nominal values)

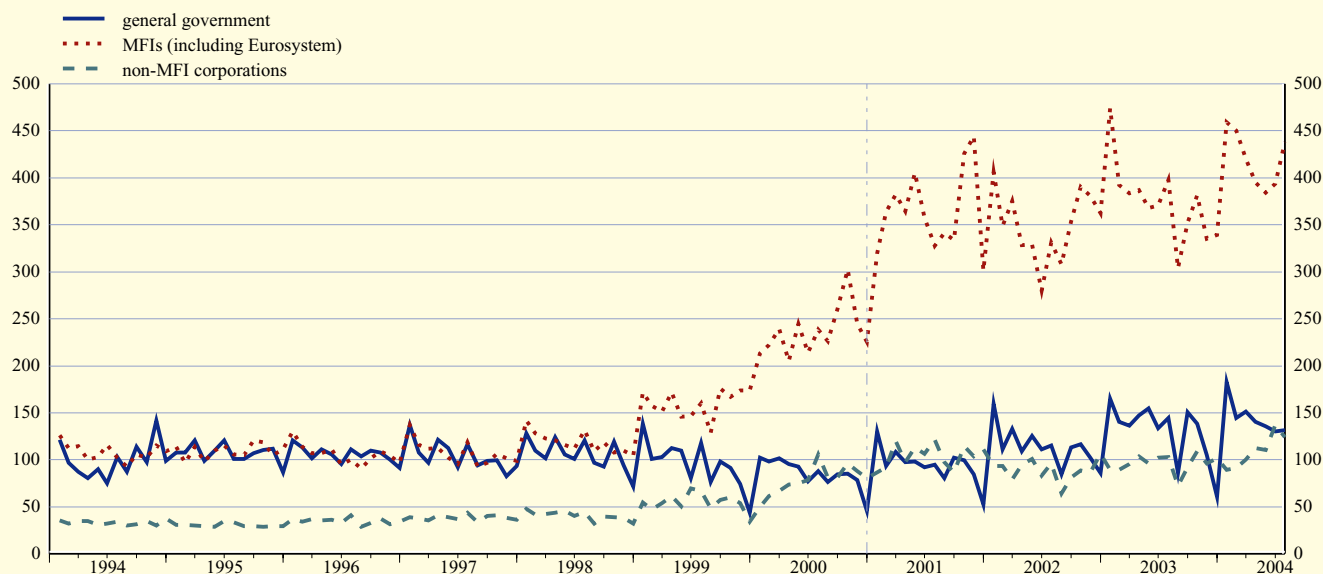
## 2. Gross issues

(transactions during the month)

	Total						Of which in euro (%)					
	Total	MFIs (including Eurosystem)	Non-MFI corporations		General government		Total	MFIs (including Eurosystem)	Non-MFI corporations		General government	
			Non-monetary financial corporations	Non-financial corporations	Central government	Other general government			Non-monetary financial corporations	Non-financial corporations	Central government	Other general government
1	2	3	4	5	6	7	8	9	10	11	12	
	Total											
2003 July	645.7	398.1	26.5	76.7	138.6	5.8	93.1	92.1	83.2	94.5	96.9	91.2
Aug.	461.6	303.6	8.7	63.6	82.3	3.4	93.9	92.3	91.8	96.6	97.7	93.1
Sep.	594.9	352.0	22.0	70.3	140.7	9.9	93.4	90.3	98.7	96.5	98.5	96.5
Oct.	629.7	381.6	21.4	87.9	130.7	8.0	93.7	91.5	95.8	96.3	98.1	94.0
Nov.	536.4	335.2	20.2	75.7	97.4	7.8	93.2	92.0	86.7	95.9	96.2	98.2
Dec.	501.4	339.0	28.2	73.2	55.5	5.6	93.7	92.6	97.1	94.6	99.3	79.8
2004 Jan.	731.0	458.9	8.5	80.8	173.6	9.2	94.2	92.9	90.8	95.8	97.1	97.4
Feb.	686.4	450.3	18.3	73.2	136.1	8.5	94.6	93.3	95.8	96.1	97.5	97.8
Mar.	672.1	420.4	10.9	89.5	143.2	8.0	92.7	90.9	89.5	97.1	95.5	94.1
Apr.	647.8	394.7	19.0	93.8	134.9	5.3	93.2	90.9	92.5	96.8	97.6	97.2
May	630.2	384.3	9.8	100.3	130.5	5.2	93.9	91.8	89.2	97.1	98.0	97.9
June	661.5	393.7	33.5	103.8	122.1	8.5	94.3	92.6	98.0	95.7	97.6	94.5
July	693.9	437.9	23.5	100.8	127.9	3.8	94.0	92.7	92.0	94.9	98.0	92.0
	Long-term											
2003 July	185.6	75.0	24.1	9.9	73.5	3.2	88.2	82.7	81.5	80.1	97.0	87.5
Aug.	79.0	44.8	6.1	3.4	23.0	1.6	88.0	82.4	88.4	98.7	97.2	91.3
Sep.	173.4	65.0	18.9	3.6	78.8	7.1	91.6	79.6	98.6	96.6	99.0	98.8
Oct.	168.3	75.7	17.5	10.7	58.9	5.5	91.7	84.4	96.1	89.4	100.0	94.5
Nov.	136.5	62.4	16.6	10.7	40.9	5.8	89.6	86.9	85.2	91.2	93.5	99.6
Dec.	111.0	61.9	24.9	9.6	11.4	3.2	90.3	88.3	97.6	81.5	98.6	68.1
2004 Jan.	178.6	72.9	5.0	7.4	86.9	6.3	92.9	87.5	88.7	80.7	98.2	99.4
Feb.	183.5	86.1	15.0	6.2	70.2	6.0	92.2	86.5	96.0	88.5	98.2	99.0
Mar.	189.4	98.8	8.1	5.0	72.0	5.6	86.8	79.6	88.2	92.3	95.4	95.7
Apr.	154.7	69.7	15.0	4.6	63.0	2.5	88.4	79.4	93.4	77.4	97.5	100.0
May	156.3	69.7	6.6	9.4	69.7	2.7	89.2	79.8	86.3	85.3	98.8	99.6
June	178.7	66.1	29.8	13.8	63.5	5.5	92.9	88.1	98.0	81.3	97.4	99.1
July	173.1	70.8	20.6	17.1	63.3	1.4	91.5	86.4	93.1	85.0	98.3	100.0

## C15 Gross issues of securities other than shares by sector

(EUR billions, transactions during the month, nominal values)



Source: ECB.

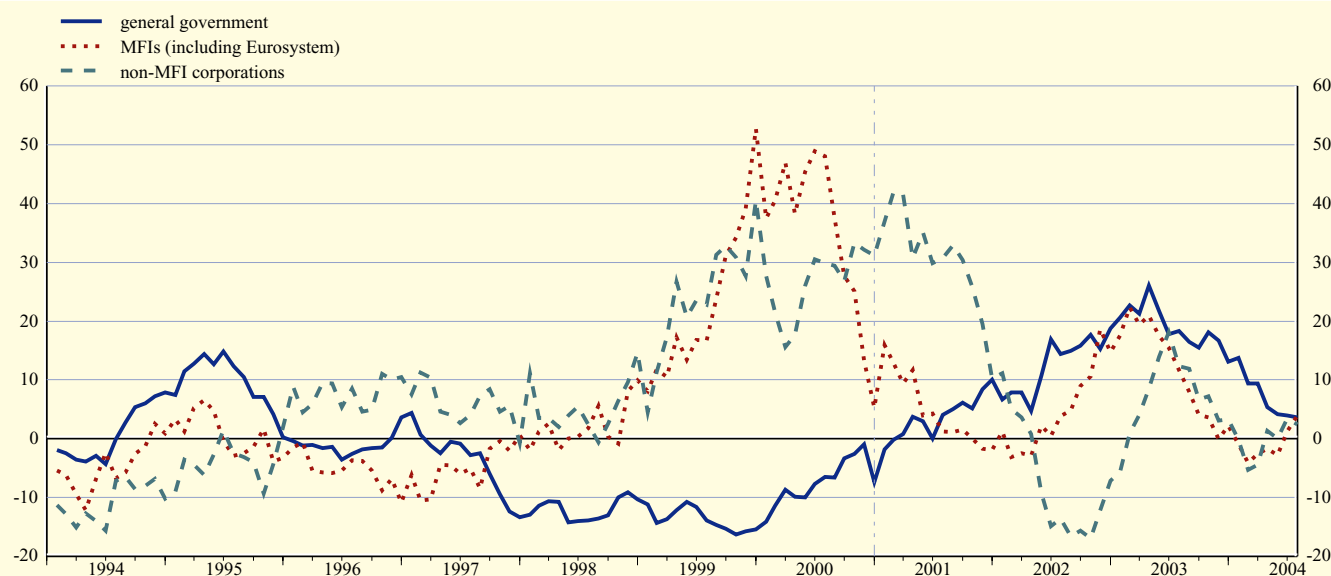
#### 4.3 Annual growth rates of securities other than shares issued by euro area residents <sup>1)</sup>

(percentage changes)

	Total													
	Total		MFIs (including Eurosystem)	Non-MFI corporations			General government			Total		MFIs (including Euro- system)	Non-MFI	
	Total	Index Dec. 01 = 100		Total	Non- monetary financial corporations	Non- financial corporations	Total	Central gov.	Other general gov.	Total	Index Dec. 01 = 100		Total	Non- monetary financial corporations
1	2	3	4	5	6	7	8	9	10	11	12	13	14	
In all currencies combined														
2003 July	7.0	112.5	4.9	19.0	28.4	10.1	5.5	4.7	21.9	14.6	127.9	11.7	12.3	22.9
Aug.	6.8	112.5	4.7	19.2	28.1	10.8	5.1	4.4	21.0	12.2	126.3	8.0	11.9	18.6
Sep.	6.9	113.3	4.6	18.4	28.6	8.8	5.7	4.9	23.3	9.4	125.3	4.1	6.7	17.0
Oct.	7.2	114.2	5.5	19.2	29.1	9.8	5.4	4.6	21.4	10.3	128.3	3.6	7.2	13.9
Nov.	7.0	114.8	5.3	18.7	27.8	9.7	5.2	4.4	23.0	7.3	128.3	-0.1	3.1	9.8
Dec.	7.3	114.1	6.2	17.0	23.6	10.2	5.5	4.7	22.2	6.9	120.8	2.2	3.3	20.8
2004 Jan.	7.1	115.2	5.9	15.2	23.2	7.1	5.7	4.9	21.8	5.2	127.6	-0.9	-0.2	16.8
Feb.	7.0	116.3	6.2	14.0	21.7	6.1	5.6	4.9	21.0	1.4	127.0	-4.1	-5.4	-8.1
Mar.	7.2	117.4	7.4	11.8	19.8	3.7	5.6	4.9	20.6	2.3	129.7	-2.6	-4.4	-15.1
Apr.	7.2	118.2	7.9	10.4	17.6	2.9	5.6	5.0	18.7	1.7	132.1	-1.8	1.3	-5.9
May	7.1	119.3	8.3	9.6	16.5	2.6	5.5	4.9	17.6	0.7	131.8	-2.8	0.0	-5.9
June	7.4	120.2	8.4	10.1	16.8	3.1	5.8	5.2	17.4	2.7	131.6	1.3	3.4	-7.2
July	7.3	120.7	8.4	9.7	14.9	4.1	5.7	5.2	16.0	3.6	132.6	4.0	2.4	-6.9
In euro														
2003 July	6.7	111.9	3.8	22.1	34.6	11.3	5.2	4.5	20.4	16.7	131.0	15.9	12.2	22.9
Aug.	6.5	111.9	3.7	22.5	34.5	12.0	4.9	4.2	19.5	14.8	130.5	13.5	11.2	18.6
Sep.	6.6	112.7	3.3	21.7	35.3	9.7	5.5	4.8	21.8	11.5	128.7	8.5	5.9	16.9
Oct.	7.0	113.6	4.2	22.7	36.3	10.6	5.3	4.6	20.8	12.5	131.5	7.7	6.8	14.3
Nov.	6.8	114.2	4.2	21.8	34.2	10.5	5.1	4.3	22.3	9.3	132.2	3.1	2.3	9.6
Dec.	7.0	113.4	5.0	19.3	27.7	10.9	5.5	4.7	21.2	8.9	124.0	5.6	2.9	19.1
2004 Jan.	6.9	114.6	4.9	17.1	27.1	7.2	5.7	5.0	21.1	6.0	130.3	-0.5	-0.9	16.5
Feb.	6.9	115.7	5.4	16.1	26.2	6.1	5.8	5.1	20.4	2.0	129.6	-3.7	-5.7	-8.6
Mar.	6.9	116.6	6.4	13.4	23.9	3.1	5.6	4.9	19.8	2.7	132.1	-2.2	-4.7	-16.2
Apr.	6.8	117.2	6.6	11.8	21.2	2.3	5.6	5.0	18.2	1.4	134.3	-2.9	1.2	-8.3
May	6.7	118.3	6.8	11.1	20.2	1.9	5.5	4.9	17.5	0.6	134.0	-3.5	-0.3	-6.7
June	6.9	119.1	6.9	11.4	20.6	1.9	5.8	5.3	17.1	2.3	133.3	-0.1	3.6	-7.3
July	6.9	119.7	6.9	11.1	19.0	2.9	5.9	5.3	15.9	2.6	134.4	1.7	2.0	-9.3

#### C16 Annual growth rates of short-term debt securities by sector of the issuer in all currencies combined

(percentage changes)



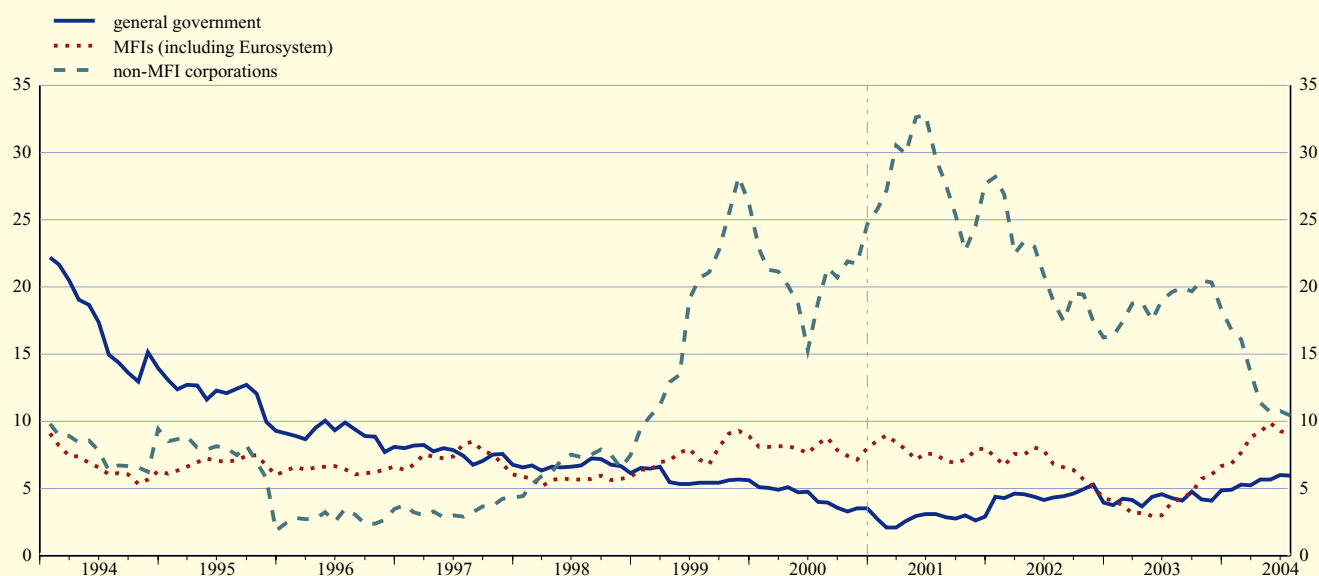
Source: ECB.

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

4.3 Annual growth rates of securities other than shares issued by euro area residents <sup>1)</sup> (cont'd)  
(percentage changes)

Short-term				Long-term									
corporations	General government			Total		MFIs (including Eurosystem)	Non-MFI corporations			General government			
	Non-financial corporations	Total	Central gov.	Other general gov.	Total		Index Dec. 01 = 100	Total	Non-monetary financial corporations	Non-financial corporations	Total	Central gov.	
15	16	17	18	19	20	21	22	23	24	25	26	27	
In all currencies combined													
11.5	18.3	18.3	18.9	6.2	111.0	4.0	19.6	28.5	9.8	4.3	3.4	22.0	2003 July
11.3	16.5	16.7	2.5	6.2	111.1	4.3	20.0	28.2	10.8	4.1	3.2	21.4	Aug.
5.9	15.5	15.5	14.5	6.7	112.1	4.7	19.7	28.8	9.4	4.7	3.8	23.4	Sep.
6.7	18.1	18.3	-2.9	6.9	112.8	5.7	20.5	29.3	10.5	4.2	3.3	21.9	Oct.
2.5	16.7	17.0	-3.7	7.0	113.4	6.0	20.3	28.1	11.3	4.1	3.2	23.5	Nov.
1.8	13.1	13.3	-5.6	7.4	113.4	6.7	18.4	23.6	11.9	4.8	3.9	22.8	Dec.
-1.4	13.8	13.6	31.3	7.3	114.0	6.9	16.8	23.2	9.0	4.9	4.0	21.6	2004 Jan.
-5.1	9.4	9.2	21.1	7.6	115.2	7.6	16.1	22.2	8.6	5.3	4.4	21.0	Feb.
-3.5	9.4	9.4	9.6	7.7	116.2	8.8	13.6	20.3	5.4	5.2	4.4	20.8	Mar.
2.0	5.4	5.2	22.5	7.8	116.8	9.3	11.4	18.0	3.1	5.7	5.0	18.6	Apr.
0.5	4.2	4.1	18.1	7.9	118.1	9.9	10.6	16.8	3.0	5.6	5.0	17.6	May
4.4	4.0	3.8	24.1	7.9	119.0	9.3	10.8	17.1	2.8	6.0	5.4	17.2	June
3.2	3.6	3.4	18.3	7.7	119.5	9.0	10.4	15.2	4.3	6.0	5.4	15.9	July
In euro													
11.3	18.7	18.7	14.4	5.6	110.1	2.4	23.3	34.8	11.3	4.0	3.2	20.5	2003 July
10.5	16.8	17.0	1.1	5.7	110.2	2.5	23.9	34.8	12.3	3.7	3.0	19.9	Aug.
5.0	15.4	15.4	14.5	6.1	111.2	2.7	23.6	35.6	10.8	4.5	3.7	21.9	Sep.
6.2	18.1	18.3	-5.1	6.4	111.8	3.8	24.6	36.7	11.6	4.0	3.2	21.2	Oct.
1.7	16.9	17.1	-7.0	6.5	112.5	4.3	24.2	34.6	12.6	4.0	3.1	22.9	Nov.
1.5	13.3	13.5	-4.7	6.9	112.4	4.9	21.1	27.8	13.0	4.7	3.9	21.7	Dec.
-2.3	13.9	13.7	40.2	7.0	113.1	5.6	19.2	27.3	9.5	4.9	4.1	20.8	2004 Jan.
-5.5	9.3	9.2	23.3	7.5	114.3	6.5	18.7	26.8	8.9	5.4	4.6	20.3	Feb.
-3.7	9.0	9.1	4.1	7.4	115.1	7.6	15.6	24.6	4.8	5.3	4.5	20.0	Mar.
2.0	5.2	5.0	18.4	7.4	115.6	7.9	13.0	21.7	2.3	5.6	5.0	18.2	Apr.
0.2	4.1	4.0	20.8	7.4	116.8	8.1	12.4	20.7	2.3	5.7	5.0	17.4	May
4.6	3.7	3.6	19.8	7.5	117.8	7.8	12.2	21.0	1.3	6.1	5.4	17.1	June
3.1	3.5	3.4	13.9	7.4	118.2	7.5	12.1	19.4	2.8	6.1	5.6	16.0	July

C17 Annual growth rates of long-term debt securities by sector of the issuer in all currencies combined  
(percentage changes)



Source: ECB.



#### 4.4 Quoted shares issued by euro area residents <sup>1)</sup>

(EUR billions unless otherwise indicated; market values)

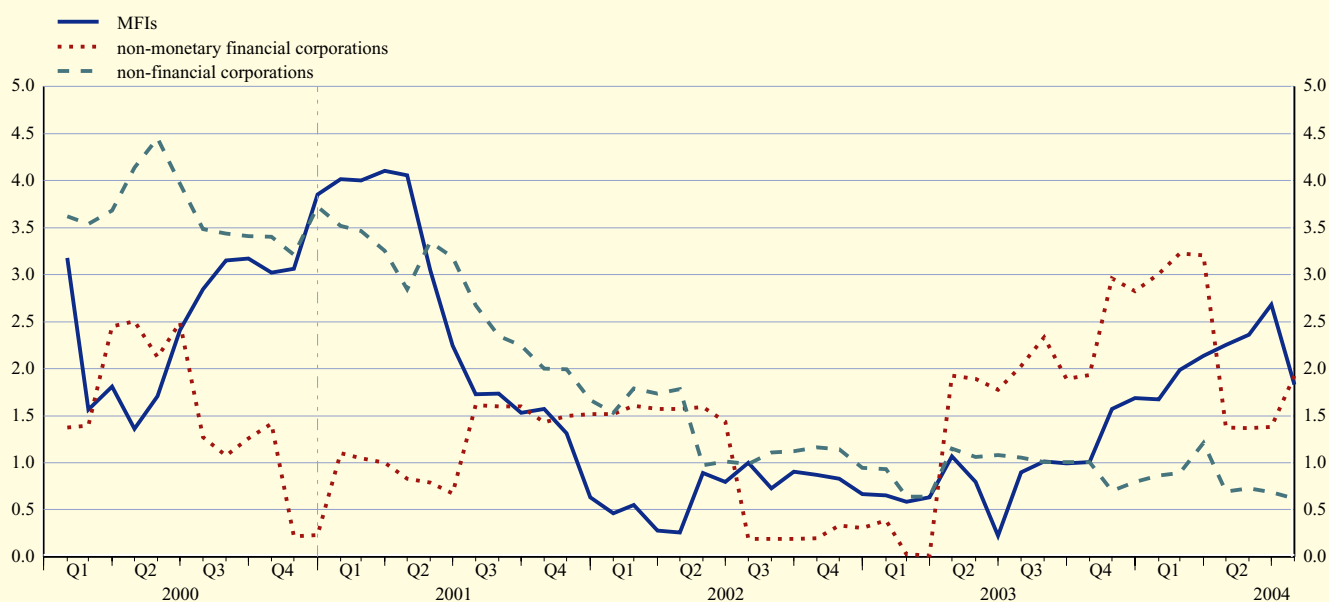
##### 1. Outstanding amounts and annual growth rates

(outstanding amounts as end-of-period)

	Total			MFIs		Non-monetary financial corporations		Non-financial corporations	
	Total	Index Dec. 01 = 100 (%)	Annual growth rates (%)	Total	Annual growth rates (%)	Total	Annual growth rates (%)	Total	Annual growth rates (%)
	1	2	3	4	5	6	7	8	9
2002 July	3,710.9	100.6	0.9	515.7	1.0	394.6	0.2	2,800.7	1.0
Aug.	3,521.3	100.6	1.0	521.7	0.7	371.1	0.2	2,628.6	1.1
Sep.	2,982.8	100.6	1.0	412.6	0.9	276.3	0.2	2,293.9	1.1
Oct.	3,252.7	100.7	1.0	446.9	0.9	321.2	0.2	2,484.5	1.2
Nov.	3,436.6	100.8	1.0	487.4	0.8	345.9	0.3	2,603.3	1.1
Dec.	3,118.2	100.8	0.8	450.7	0.7	283.6	0.3	2,383.9	0.9
2003 Jan.	2,978.3	100.8	0.8	425.8	0.6	261.1	0.4	2,291.4	0.9
Feb.	2,884.9	100.8	0.6	425.3	0.6	270.8	0.0	2,188.8	0.6
Mar.	2,763.4	100.8	0.6	413.0	0.6	236.2	0.0	2,114.2	0.6
Apr.	3,112.9	101.5	1.2	471.4	1.1	291.8	1.9	2,349.7	1.1
May	3,145.6	101.5	1.1	476.7	0.8	291.3	1.9	2,377.5	1.1
June	3,256.1	101.5	1.0	504.2	0.2	300.6	1.8	2,451.3	1.1
July	3,366.4	101.7	1.1	528.0	0.9	330.9	2.0	2,507.5	1.1
Aug.	3,413.3	101.7	1.1	506.5	1.0	325.5	2.3	2,581.3	1.0
Sep.	3,276.6	101.7	1.1	494.8	1.0	307.1	1.9	2,474.6	1.0
Oct.	3,483.9	101.8	1.1	535.2	1.0	333.2	1.9	2,615.5	1.0
Nov.	3,546.8	101.8	1.0	549.5	1.6	337.9	3.0	2,659.5	0.7
Dec.	3,647.3	102.0	1.1	569.5	1.7	348.6	2.8	2,729.2	0.8
2004 Jan.	3,788.5	102.0	1.2	584.1	1.7	372.3	3.0	2,832.0	0.9
Feb.	3,851.9	102.1	1.3	587.9	2.0	374.3	3.2	2,889.7	0.9
Mar.	3,766.4	102.4	1.5	571.9	2.1	355.0	3.2	2,839.5	1.2
Apr.	3,748.3	102.5	1.0	579.4	2.3	361.1	1.4	2,807.9	0.7
May	3,687.7	102.5	1.0	568.1	2.4	350.6	1.4	2,769.1	0.7
June	3,790.2	102.6	1.1	583.5	2.7	362.0	1.4	2,844.8	0.7
July	3,679.7	102.6	0.9	563.3	1.8	354.0	1.9	2,762.4	0.6

#### C18 Annual growth rates for quoted shares issued by euro area residents

(annual percentage changes)



Source: ECB.

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

#### 4.4 Quoted shares issued by euro area residents

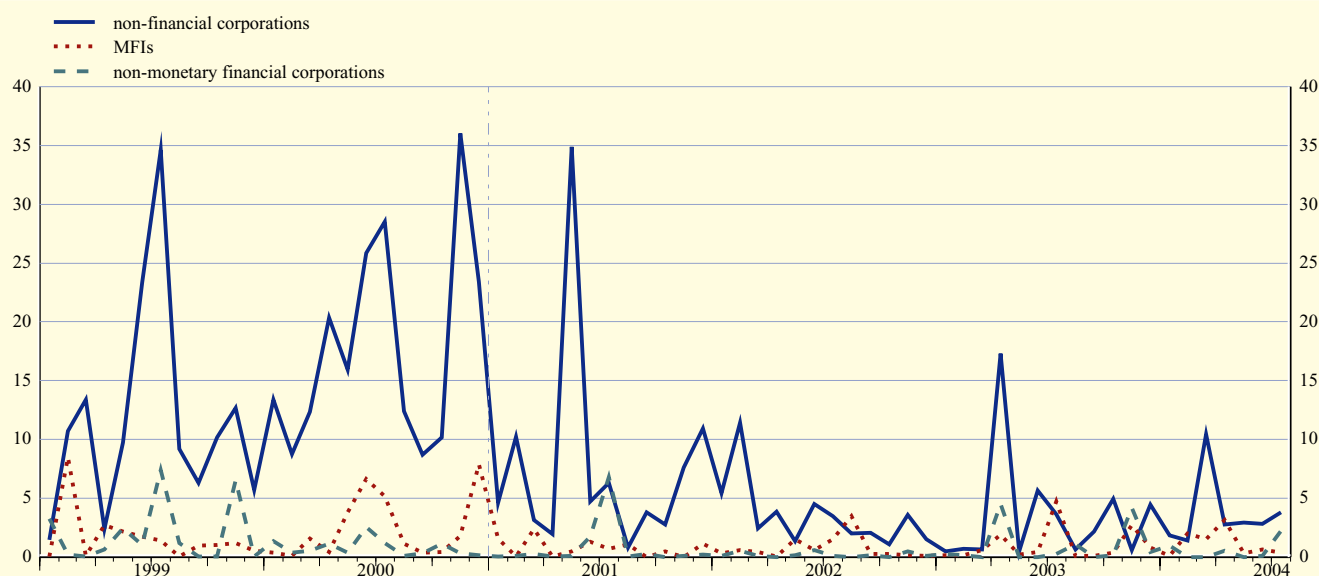
(EUR billions; market values)

##### 2. Transactions during the month

	Total			MFIs			Non-monetary financial corporations			Non-financial corporations		
	Gross issues	Redemptions	Net issues	Gross issues	Redemptions	Net issues	Gross issues	Redemptions	Net issues	Gross issues	Redemptions	Net issues
	1	2	3	4	5	6	7	8	9	10	11	12
2002 July	5.1	1.2	3.9	1.5	0.1	1.4	0.1	0.9	-0.8	3.5	0.2	3.3
Aug.	5.5	5.2	0.3	3.5	4.0	-0.5	0.0	0.0	0.0	2.0	1.2	0.8
Sep.	2.5	0.4	2.0	0.3	0.1	0.1	0.2	0.0	0.2	2.0	0.3	1.8
Oct.	1.3	0.1	1.2	0.3	0.0	0.2	0.0	0.0	0.0	1.1	0.1	1.0
Nov.	4.3	0.7	3.6	0.2	0.4	-0.2	0.5	0.0	0.5	3.6	0.3	3.3
Dec.	1.7	0.5	1.3	0.1	0.0	0.1	0.1	0.1	0.0	1.5	0.4	1.1
2003 Jan.	0.9	1.4	-0.5	0.1	0.0	0.1	0.3	0.0	0.3	0.5	1.4	-0.9
Feb.	1.0	1.3	-0.3	0.1	0.0	0.1	0.1	0.8	-0.7	0.7	0.5	0.2
Mar.	1.2	0.7	0.5	0.6	0.1	0.5	0.0	0.0	0.0	0.6	0.5	0.1
Apr.	23.7	4.8	18.9	1.9	0.1	1.7	4.5	0.0	4.5	17.3	4.6	12.7
May	0.7	2.2	-1.6	0.2	0.4	-0.2	0.0	0.0	0.0	0.5	1.8	-1.3
June	6.1	5.2	0.9	0.4	2.8	-2.3	0.0	0.0	0.0	5.7	2.4	3.2
July	8.6	1.9	6.7	4.7	0.2	4.5	0.2	0.0	0.2	3.6	1.7	1.9
Aug.	1.8	1.2	0.6	0.1	0.0	0.1	1.1	0.1	1.0	0.6	1.1	-0.4
Sep.	2.3	1.8	0.5	0.1	0.1	0.0	0.0	1.3	-1.3	2.2	0.4	1.8
Oct.	5.4	3.9	1.6	0.4	0.0	0.4	0.1	0.0	0.1	4.9	3.8	1.1
Nov.	7.5	5.5	2.1	2.7	0.0	2.7	4.2	0.3	3.9	0.6	5.1	-4.5
Dec.	5.7	1.5	4.2	0.8	0.1	0.8	0.4	0.8	-0.4	4.4	0.6	3.8
2004 Jan.	2.9	1.0	1.9	0.1	0.0	0.1	0.9	0.0	0.9	1.8	1.0	0.8
Feb.	3.5	0.7	2.8	2.0	0.0	2.0	0.0	0.2	-0.2	1.4	0.5	1.0
Mar.	12.0	1.3	10.7	1.5	0.0	1.5	0.0	0.1	-0.1	10.5	1.1	9.3
Apr.	6.4	0.6	5.8	3.1	0.1	3.1	0.5	0.1	0.4	2.8	0.5	2.3
May	3.3	3.6	-0.4	0.3	0.0	0.3	0.0	0.0	0.0	2.9	3.6	-0.6
June	3.6	1.9	1.7	0.7	1.6	-1.0	0.1	0.0	0.1	2.8	0.2	2.6
July	6.4	3.5	2.9	0.4	0.0	0.3	2.2	0.0	2.2	3.8	3.5	0.3

#### C19 Gross issues of quoted shares by sector of the issuer

(EUR billions; transactions during the month; market values)



Source: ECB.

## 4.5 MFI interest rates on euro-denominated deposits and loans by euro area residents

(percentages per annum; outstanding amounts as end-of-period, new business as period average unless otherwise indicated)

### 1. Interest rates on deposits (new business)

	Deposits from households						Deposits from non-financial corporations				Repos
	Overnight <sup>1)</sup>	With agreed maturity			Redeemable at notice <sup>1),2)</sup>		Overnight <sup>1)</sup>	With agreed maturity			
		Up to 1 year	Over 1 and up to 2 years	Over 2 years	Up to 3 months	Over 3 months		Up to 1 year	Over 1 and up to 2 years	Over 2 years	
	1	2	3	4	5	6	7	8	9	10	11
2003 Aug.	0.68	1.91	2.12	2.51	1.99	2.88	0.88	2.03	2.27	3.56	1.98
Sep.	0.69	1.87	2.12	2.43	2.00	2.85	0.87	2.00	2.29	3.63	2.00
Oct.	0.69	1.89	2.16	2.51	2.05	2.73	0.88	1.98	2.23	3.89	1.99
Nov.	0.70	1.87	2.24	2.61	2.01	2.70	0.87	1.97	2.36	2.70	1.97
Dec.	0.69	1.89	2.40	2.41	2.02	2.68	0.86	2.00	2.42	3.35	1.99
2004 Jan.	0.69	1.91	2.37	2.74	2.03	2.65	0.93	1.99	2.07	3.12	1.95
Feb.	0.69	1.88	2.16	2.45	2.02	2.63	0.86	1.98	2.21	3.59	1.98
Mar.	0.70	1.92	2.15	2.34	2.00	2.59	0.86	1.96	2.11	3.35	1.98
Apr.	0.70	1.92	2.14	2.44	2.02	2.57	0.85	1.97	2.00	3.50	1.95
May	0.70	1.85	2.16	2.41	2.00	2.55	0.86	1.96	2.06	3.75	1.95
June	0.70	1.88	2.23	2.40	2.00	2.55	0.87	1.99	2.27	3.79	1.98
July	0.70	1.91	2.21	2.53	1.99	2.55	0.85	2.00	2.56	3.71	1.99

### 2. Interest rates on loans to households (new business)

	Bank overdraft <sup>1)</sup>	Consumer credit				Lending for house purchase					Other lending by initial rate fixation		
		By initial rate fixation			Annual percentage rate of charge <sup>3)</sup>	By initial rate fixation				Annual percentage rate of charge <sup>3)</sup>	Floating rate and up to 1 year	Over 1 and up to 5 years	Over 5 years
		Floating rate and up to 1 year	Over 1 and up to 5 years	Over 5 years		Floating rate and up to 1 year	Over 1 and up to 5 years	Over 5 and up to 10 years	Over 10 years				
	1	2	3	4	5	6	7	8	9	10	11	12	13
2003 Aug.	9.73	7.70	6.84	8.27	8.04	3.64	3.96	4.69	4.69	4.41	4.13	5.00	4.98
Sep.	9.74	7.44	6.89	8.04	8.02	3.63	4.10	4.81	4.75	4.41	3.98	5.00	5.11
Oct.	9.71	7.20	6.74	8.07	7.91	3.62	4.02	4.87	4.78	4.40	4.05	5.09	5.21
Nov.	9.64	7.57	6.59	7.93	7.84	3.59	4.09	4.92	4.84	4.42	4.15	5.25	5.17
Dec.	9.69	7.66	6.43	7.63	7.71	3.63	4.17	5.02	4.95	4.45	3.85	5.00	5.08
2004 Jan.	9.87	7.62	7.04	8.49	8.32	3.63	4.28	5.02	4.92	4.48	4.06	5.12	5.16
Feb.	9.81	7.43	6.91	8.44	8.16	3.55	4.21	4.97	4.84	4.34	4.10	5.07	5.05
Mar.	9.71	7.34	6.80	8.28	8.01	3.47	4.12	4.86	4.78	4.28	3.94	5.06	4.97
Apr.	9.73	7.31	6.60	8.22	7.82	3.42	4.03	4.78	4.68	4.27	3.87	4.89	4.92
May	9.68	7.30	6.69	8.17	7.92	3.40	4.03	4.75	4.61	4.20	4.11	4.81	4.94
June	9.55	7.18	6.70	8.30	7.99	3.42	4.11	4.81	4.69	4.20	3.93	4.94	5.01
July	9.57	7.23	6.89	8.41	8.12	3.46	4.15	4.81	4.69	4.21	4.03	4.92	5.02

### 3. Interest rates on loans to non-financial corporations (new business)

	Bank overdraft <sup>1)</sup>	Other loans up to EUR 1 million by initial rate fixation			Other loans over EUR 1 million by initial rate fixation			
		Floating rate and up to 1 year	Over 1 and up to 5 years	Over 5 years	Floating rate and up to 1 year	Over 1 and up to 5 years	Over 5 years	
								1
2003 Aug.		5.47	4.17	4.65	4.77	3.18	3.35	4.36
Sep.		5.46	4.08	4.79	4.76	3.11	3.32	4.29
Oct.		5.46	4.14	4.76	4.83	3.08	3.26	4.33
Nov.		5.41	4.10	4.94	4.71	3.02	3.30	4.23
Dec.		5.58	4.04	4.84	4.81	3.12	3.41	4.32
2004 Jan.		5.67	4.06	4.86	4.81	3.01	3.37	4.29
Feb.		5.63	4.02	4.94	4.78	2.97	3.19	4.30
Mar.		5.56	3.94	4.79	4.77	2.91	3.25	4.41
Apr.		5.51	3.87	4.71	4.64	2.96	3.28	4.41
May		5.46	3.98	4.58	4.57	2.95	3.30	4.24
June		5.46	3.96	4.76	4.71	3.02	3.26	4.08
July		5.34	4.03	4.86	4.65	3.03	3.28	4.25

Source: ECB.

- 1) For this instrument category, new business and outstanding amounts coincide. End-of-period.
- 2) For this instrument category, households and non-financial corporations are merged and allocated to the household sector, since the outstanding amounts of non-financial corporations are negligible compared with those of the household sector in all participating Member States combined.
- 3) The annual percentage rate of charge covers the total cost of a loan. The total cost comprises an interest rate component and a component of other (related) charges, such as the cost of inquiries, administration, preparation of documents, guarantees, etc.

#### 4.5 MFI interest rates on euro-denominated deposits and loans by euro area residents

(percentages per annum; outstanding amounts as end-of-period, new business as period average unless otherwise indicated)

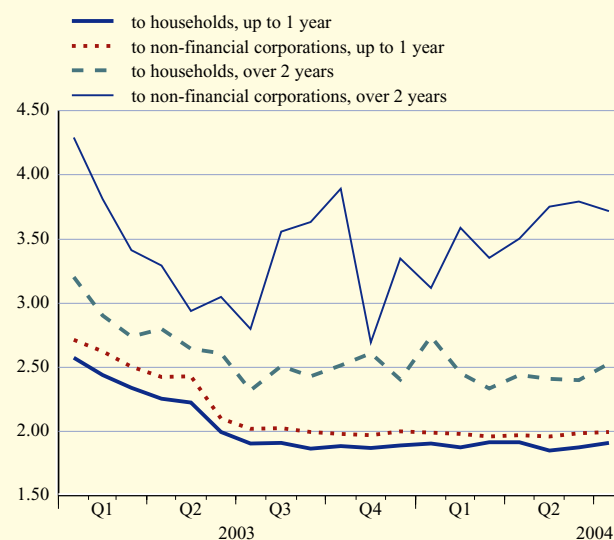
#### 4. Interest rates on deposits (outstanding amounts)

	Deposits from households					Deposits from non-financial corporations			Repos
	Overnight <sup>1)</sup>	With agreed maturity		Redeemable at notice <sup>1),2)</sup>		Overnight <sup>1)</sup>	With agreed maturity		
		Up to 2 years	Over 2 years	Up to 3 months	Over 3 months		Up to 2 years	Over 2 years	
	1	2	3	4	5	6	7	8	9
2003 Aug.	0.68	2.04	3.43	1.99	2.88	0.88	2.20	4.26	2.05
Sep.	0.69	2.01	3.44	2.00	2.85	0.87	2.23	4.32	2.04
Oct.	0.69	1.97	3.47	2.05	2.73	0.88	2.12	4.33	2.03
Nov.	0.70	1.98	3.44	2.01	2.70	0.87	2.13	4.43	1.98
Dec.	0.69	1.97	3.54	2.02	2.68	0.86	2.14	4.25	1.98
2004 Jan.	0.69	1.94	3.36	2.03	2.65	0.93	2.09	4.27	1.95
Feb.	0.69	1.93	3.42	2.02	2.63	0.86	2.09	4.22	1.97
Mar.	0.70	1.92	3.32	2.00	2.59	0.86	2.08	4.17	1.93
Apr.	0.70	1.90	3.35	2.02	2.57	0.85	2.09	4.16	1.92
May	0.70	1.89	3.28	2.00	2.55	0.86	2.07	4.15	1.93
June	0.70	1.89	3.27	2.00	2.55	0.87	2.09	4.11	1.94
July	0.70	1.89	3.25	1.99	2.55	0.85	2.10	4.04	1.96

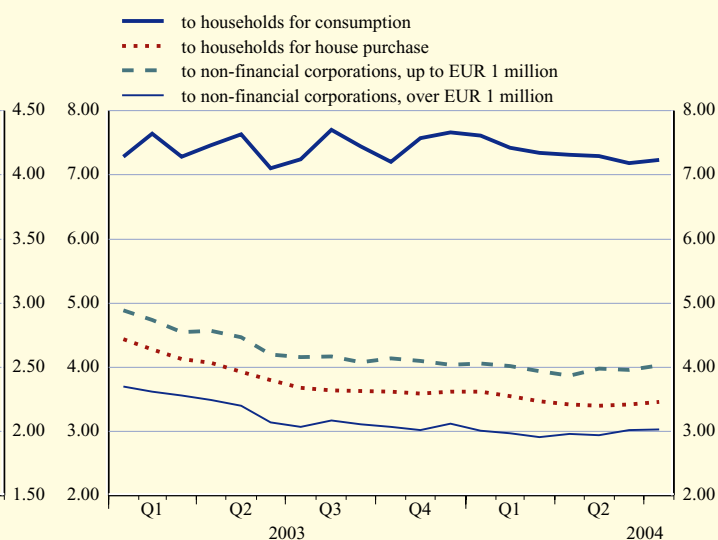
#### 5. Interest rates on loans (outstanding amounts)

	Loans to households						Loans to non-financial corporations		
	Lending for house purchase, with maturity			Consumer credit and other loans, with maturity			With maturity		
	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Up to 1 year	Over 1 and up to 5 years	Over 5 years
	1	2	3	4	5	6	7	8	9
2003 Aug.	5.07	4.99	5.25	8.28	7.23	6.07	4.54	4.21	4.74
Sep.	5.00	4.95	5.24	8.30	7.27	6.00	4.55	4.20	4.75
Oct.	5.00	4.92	5.20	8.13	7.13	5.84	4.56	4.12	4.71
Nov.	4.97	4.90	5.17	7.98	7.09	5.82	4.52	4.18	4.67
Dec.	5.09	4.88	5.14	8.04	7.05	6.00	4.56	4.23	4.67
2004 Jan.	5.05	4.89	5.11	8.15	7.02	5.92	4.58	4.07	4.56
Feb.	5.01	4.91	5.11	8.13	7.16	5.95	4.62	4.06	4.58
Mar.	4.98	4.82	5.03	8.05	7.17	5.89	4.56	3.96	4.61
Apr.	4.90	4.75	5.01	8.03	7.08	5.85	4.51	3.91	4.59
May	4.89	4.72	4.99	7.99	7.04	5.82	4.50	3.87	4.55
June	4.87	4.69	4.97	7.93	6.99	5.80	4.47	3.89	4.53
July	4.90	4.63	4.94	7.93	6.99	5.76	4.47	3.88	4.50

**C20 New deposits with agreed maturity**  
(percentages per annum excluding charges; period averages)



**C21 New loans at floating rate and up to 1 year initial rate fixation**  
(percentages per annum excluding charges; period averages)



Source: ECB.

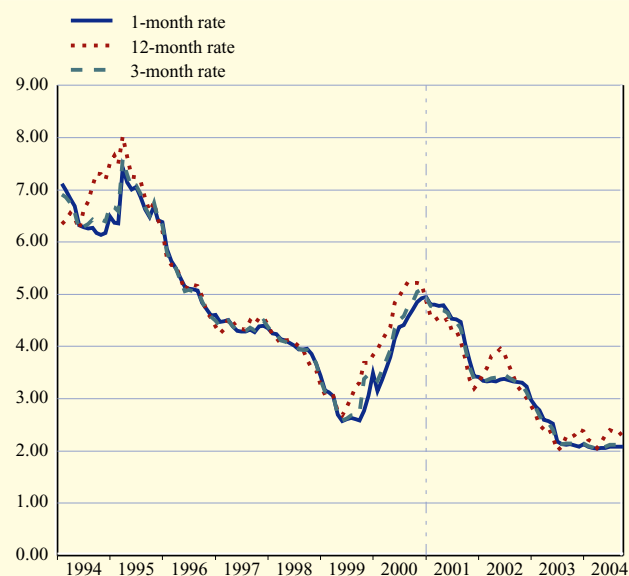
## 4.6 Money market interest rates

(percentages per annum; period averages)

	Euro area <sup>1)</sup>					United States	Japan
	Overnight deposits (EONIA)	1-month deposits (EURIBOR)	3-month deposits (EURIBOR)	6-month deposits (EURIBOR)	12-month deposits (EURIBOR)	3-month deposits (LIBOR)	3-month deposits (LIBOR)
	1	2	3	4	5	6	7
2001	4.39	4.33	4.26	4.15	4.08	3.78	0.15
2002	3.29	3.30	3.32	3.35	3.49	1.80	0.08
2003	2.32	2.35	2.33	2.31	2.34	1.22	0.06
2003 Q3	2.07	2.13	2.14	2.15	2.20	1.13	0.05
Q4	2.02	2.11	2.15	2.20	2.36	1.17	0.06
2004 Q1	2.02	2.06	2.06	2.07	2.15	1.12	0.05
Q2	2.04	2.06	2.08	2.13	2.29	1.30	0.05
Q3	2.05	2.08	2.12	2.19	2.35	1.75	0.05
2003 Sep.	2.02	2.13	2.15	2.18	2.26	1.14	0.05
Oct.	2.01	2.10	2.14	2.17	2.30	1.16	0.06
Nov.	1.97	2.09	2.16	2.22	2.41	1.17	0.06
Dec.	2.06	2.13	2.15	2.20	2.38	1.17	0.06
2004 Jan.	2.02	2.08	2.09	2.12	2.22	1.13	0.06
Feb.	2.03	2.06	2.07	2.09	2.16	1.12	0.05
Mar.	2.01	2.04	2.03	2.02	2.06	1.11	0.05
Apr.	2.08	2.05	2.05	2.06	2.16	1.15	0.05
May	2.02	2.06	2.09	2.14	2.30	1.25	0.05
June	2.03	2.08	2.11	2.19	2.40	1.50	0.05
July	2.07	2.08	2.12	2.19	2.36	1.63	0.05
Aug.	2.04	2.08	2.11	2.17	2.30	1.73	0.05
Sep.	2.05	2.08	2.12	2.20	2.38	1.90	0.05

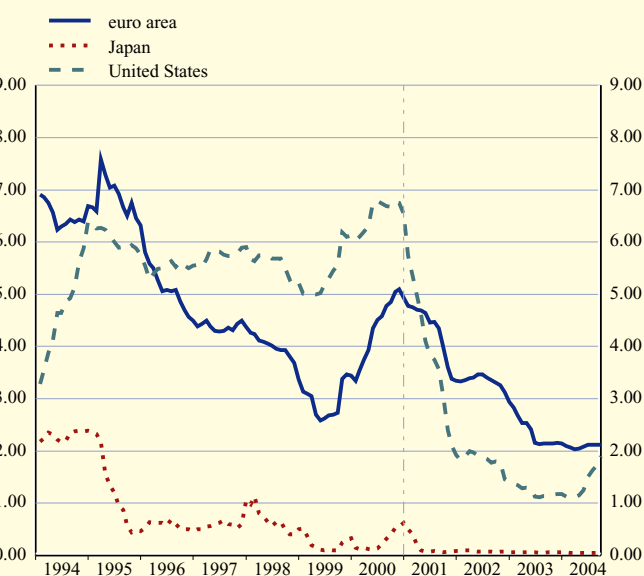
### C22 Euro area money market rates

(monthly; percentages per annum)



### C23 3-month money market rates

(monthly; percentages per annum)



Source: ECB.

1) Before January 1999 synthetic euro area rates were calculated on the basis of national rates weighted by GDP. For further information, see general notes.

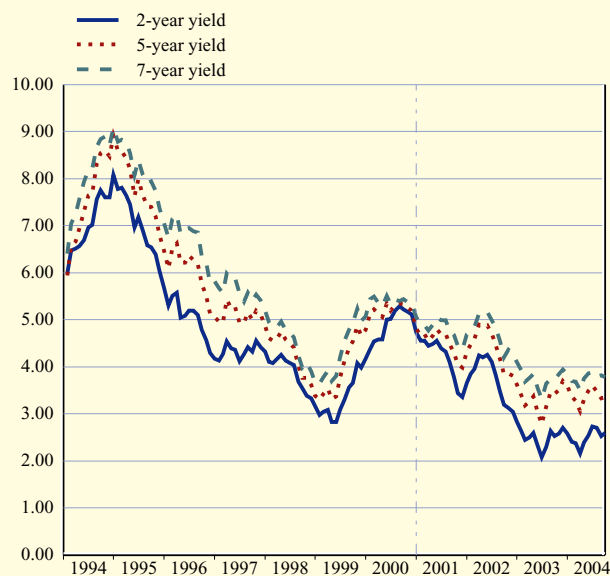
### 4.7 Government bond yields

(percentages per annum; period averages)

	Euro area <sup>1)</sup>					United States	Japan
	2 years 1	3 years 2	5 years 3	7 years 4	10 years 5	10 years 6	10 years 7
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
2003	2.49	2.74	3.32	3.74	4.16	4.00	0.99
2003 Q3	2.48	2.77	3.34	3.70	4.16	4.21	1.19
Q4	2.62	2.91	3.59	3.88	4.36	4.27	1.38
2004 Q1	2.31	2.63	3.23	3.63	4.15	4.00	1.31
Q2	2.56	2.92	3.47	3.84	4.36	4.58	1.59
Q3	2.61	2.89	3.39	3.80	4.21	4.29	1.64
2003 Sep.	2.53	2.87	3.42	3.72	4.23	4.29	1.45
Oct.	2.59	2.88	3.50	3.85	4.31	4.27	1.40
Nov.	2.70	2.99	3.70	3.94	4.44	4.29	1.38
Dec.	2.58	2.88	3.59	3.85	4.36	4.26	1.35
2004 Jan.	2.41	2.71	3.37	3.70	4.26	4.13	1.33
Feb.	2.38	2.71	3.28	3.69	4.18	4.06	1.25
Mar.	2.16	2.48	3.06	3.51	4.02	3.81	1.35
Apr.	2.39	2.75	3.31	3.75	4.24	4.32	1.51
May	2.55	2.94	3.50	3.87	4.39	4.70	1.49
June	2.74	3.06	3.60	3.89	4.44	4.73	1.77
July	2.70	2.97	3.49	3.80	4.34	4.48	1.79
Aug.	2.53	2.83	3.33	3.82	4.17	4.27	1.63
Sep.	2.60	2.87	3.35	3.79	4.11	4.13	1.50

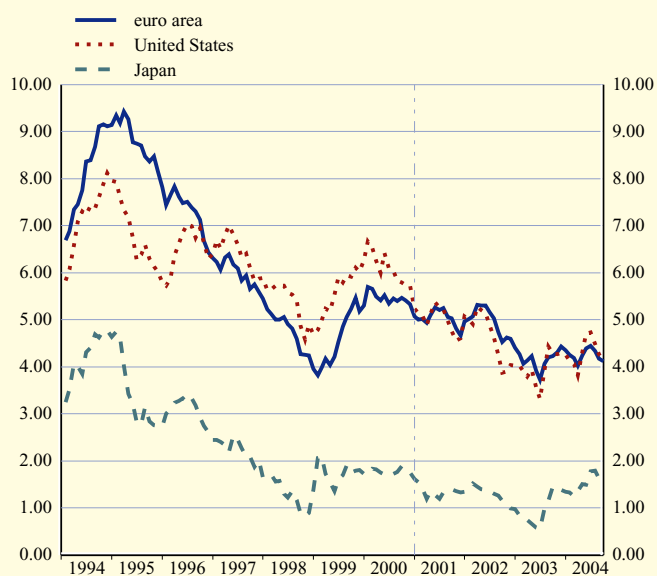
### C24 Euro area government bond yields

(monthly; percentages per annum)



### C25 10-year government bond yields

(monthly; percentages per annum)



Source: ECB.

1) 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.

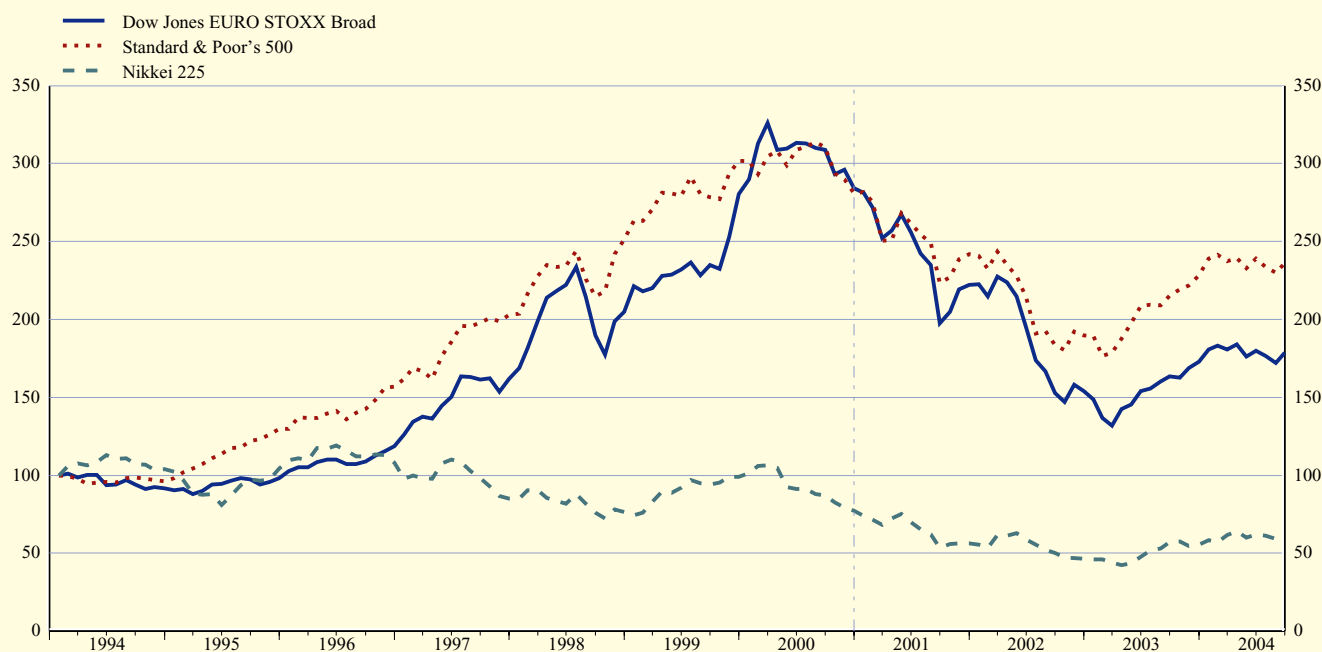
## 4.8 Stock market indices

(index levels in points; period averages)

	Dow Jones EURO STOXX indices												United States	Japan
	Benchmark		Main economic sector indices										Standard & Poor's 500	Nikkei 225
	Broad	50	Basic materials	Consumer cyclical	Consumer non-cyclical	Energy	Financial	Industrial	Technology	Utilities	Telecom.	Healthcare		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	
2001	336.3	4,049.7	296.0	228.2	303.3	341.4	321.6	310.0	530.6	309.6	541.2	540.2	1,193.8	12,114.8
2002	260.0	3,052.5	267.5	175.0	266.5	309.0	243.4	252.4	345.2	255.5	349.2	411.9	995.4	10,119.3
2003	213.3	2,422.7	212.5	137.5	209.7	259.5	199.3	213.5	275.2	210.7	337.5	304.5	964.8	9,312.9
2003 Q3	221.7	2,511.5	225.1	144.5	212.8	265.8	209.9	224.9	285.9	216.0	347.4	304.6	1,000.4	10,063.2
Q4	233.0	2,614.3	233.7	155.2	219.0	266.7	221.9	240.2	317.5	219.7	360.6	320.2	1,057.0	10,423.3
2004 Q1	251.6	2,846.5	245.0	163.8	226.8	279.9	240.5	257.1	353.0	248.7	405.3	366.6	1,132.6	10,995.7
Q2	249.8	2,794.7	244.7	164.7	229.3	300.9	234.6	256.1	299.4	262.1	388.3	394.9	1,123.6	11,550.0
Q3	244.0	2,708.7	246.8	158.9	218.6	305.0	228.7	253.1	259.9	266.8	379.8	402.6	1,104.5	11,152.3
2003 Sep.	226.8	2,553.3	229.5	151.2	221.4	269.0	212.1	232.0	302.1	216.6	349.6	313.2	1,018.9	10,644.8
Oct.	225.5	2,523.3	222.0	150.1	218.9	263.0	212.9	231.5	308.0	210.7	348.4	309.7	1,038.7	10,720.1
Nov.	233.9	2,618.1	237.5	156.8	222.1	262.0	223.0	241.5	325.4	217.0	358.7	319.3	1,050.1	10,205.4
Dec.	239.6	2,702.2	242.0	158.9	216.5	274.5	230.1	247.9	320.2	231.0	374.4	331.5	1,081.2	10,315.9
2004 Jan.	250.6	2,839.1	250.3	164.8	222.0	277.2	242.0	257.5	349.2	239.6	405.1	350.3	1,131.6	10,876.4
Feb.	253.9	2,874.8	244.7	165.1	229.5	275.6	243.7	260.1	359.0	252.1	412.3	370.0	1,143.8	10,618.6
Mar.	250.5	2,829.0	240.3	161.8	229.1	286.3	236.1	254.1	351.4	254.5	399.3	379.3	1,124.0	11,437.8
Apr.	255.0	2,860.9	247.6	167.2	230.8	300.2	241.0	262.6	321.3	264.7	402.0	389.3	1,133.4	11,962.8
May	244.4	2,728.0	240.2	161.4	225.8	297.7	228.7	250.9	284.8	256.6	378.0	395.3	1,103.7	11,141.0
June	249.8	2,792.2	246.1	165.2	231.2	304.7	233.9	254.5	291.4	264.9	384.3	400.0	1,132.9	11,527.7
July	245.2	2,730.4	245.5	161.7	224.4	302.8	227.8	251.4	272.3	267.5	382.1	397.7	1,106.9	11,390.8
Aug.	238.9	2,646.9	243.7	155.4	215.0	300.2	223.9	248.1	245.3	262.6	372.8	396.4	1,088.9	10,989.3
Sep.	248.0	2,748.6	251.1	159.6	216.5	311.8	234.6	259.9	261.9	270.1	384.4	413.7	1,117.7	11,076.8

### C26 Dow Jones EURO STOXX Broad, Standard & Poor's 500 and Nikkei 225

(January 1994 = 100; monthly averages)



Source: ECB.

# PRICES, OUTPUT, DEMAND AND LABOUR MARKETS

## 5.1 HICP, other prices and costs

(annual percentage changes, unless otherwise indicated)

### 1. Harmonised Index of Consumer Prices<sup>1)</sup>

	Total				Total (s.a., percentage change on previous period)					
	Index 1996 = 100	Total	Goods	Services	Total	Processed food	Unprocessed food	Non-energy industrial goods	Energy (n.s.a.)	Services
% of total <sup>2)</sup>	100.0	100.0	58.7	41.3	100.0	11.8	7.7	31.0	8.1	41.3
	1	2	3	4	5	6	7	8	9	10
2000	106.0	2.1	2.5	1.5	-	-	-	-	-	-
2001	108.5	2.3	2.3	2.5	-	-	-	-	-	-
2002	110.9	2.3	1.7	3.1	-	-	-	-	-	-
2003	113.2	2.1	1.8	2.5	-	-	-	-	-	-
2003 Q2	113.2	1.9	1.5	2.6	0.2	0.8	0.5	0.2	-2.9	0.6
Q3	113.4	2.0	1.7	2.5	0.5	0.6	1.5	0.1	0.5	0.6
Q4	114.0	2.0	1.8	2.4	0.5	1.1	0.6	0.2	-0.2	0.6
2004 Q1	114.4	1.7	1.1	2.6	0.5	0.9	-0.5	0.2	1.2	0.7
Q2	115.8	2.3	2.1	2.6	0.8	1.1	-0.1	0.4	3.3	0.6
2004 Apr.	115.5	2.0	1.8	2.5	0.3	0.1	-0.2	0.3	1.1	0.2
May	115.9	2.5	2.4	2.6	0.3	0.3	0.2	0.0	2.5	0.2
June	115.9	2.4	2.2	2.6	0.1	0.1	0.3	0.1	-0.7	0.3
July	115.7	2.3	2.1	2.7	0.1	0.2	-0.4	-0.2	0.6	0.2
Aug. <sup>3)</sup>	115.9	2.3	2.1	2.7	0.3	0.1	-0.3	0.3	1.5	0.3
Sep. <sup>3)</sup>	.	2.2	.	.	.	.	.	.	.	.

	Goods						Services					
	Food (incl. alcoholic beverages and tobacco)			Industrial goods			Housing		Transport	Communication	Recreation and personal	Miscellaneous
	Total	Processed food	Unprocessed food	Total	Non-energy industrial goods	Energy	Rents					
% of total <sup>2)</sup>	19.5	11.8	7.7	39.1	31.0	8.1	10.4	6.4	6.4	2.9	15.0	6.6
	11	12	13	14	15	16	17	18	19	20	21	22
2000	1.4	1.2	1.8	3.0	0.5	13.0	1.5	1.3	2.5	-7.1	2.4	2.5
2001	4.5	2.9	7.0	1.2	0.9	2.2	1.8	1.4	3.6	-4.1	3.6	2.7
2002	3.1	3.1	3.1	1.0	1.5	-0.6	2.4	2.0	3.2	-0.3	4.2	3.4
2003	2.8	3.3	2.1	1.2	0.8	3.0	2.3	2.0	2.9	-0.6	2.7	3.4
2003 Q2	2.5	3.3	1.5	1.0	0.9	1.5	2.4	2.1	3.0	-0.5	2.9	3.5
Q3	3.2	3.1	3.4	1.0	0.7	2.1	2.4	1.9	2.8	-0.4	2.6	3.2
Q4	3.7	3.8	3.6	0.9	0.8	1.6	2.3	1.9	2.8	-0.7	2.5	3.3
2004 Q1	3.0	3.5	2.2	0.2	0.7	-1.5	2.3	1.9	2.5	-1.0	2.4	4.9
Q2	2.9	3.9	1.5	1.7	0.9	4.8	2.3	1.8	3.0	-1.9	2.4	4.9
2004 Apr.	2.9	3.9	1.6	1.2	1.0	2.0	2.3	1.8	3.0	-1.7	2.2	4.8
May	3.1	3.9	1.7	2.1	0.9	6.7	2.3	1.8	2.9	-1.9	2.5	4.8
June	2.8	3.8	1.2	2.0	0.9	5.9	2.3	1.8	3.0	-2.0	2.5	5.0
July	2.6	3.8	0.7	1.8	0.7	5.9	2.5	1.9	2.9	-2.4	2.6	5.3
Aug.	2.1	3.6	-0.2	2.1	0.9	6.5	2.5	2.0	2.9	-2.5	2.6	5.2

Sources: Eurostat and ECB calculations.

1) Data prior to 2001 refer to the Euro 11.

2) Referring to the index period 2004. Due to rounding, component weights might not add up to the total.

3) 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.



## 5.1 HICP, other prices and costs

(annual percentage changes, unless otherwise indicated)

### 2. Industry and commodity prices

	Industrial producer prices										World market prices of raw materials <sup>1)</sup>	Oil prices <sup>2)</sup> (EUR per barrel)		
	Industry excluding construction									Construction <sup>3)</sup>			Manufacturing	
	Total (index 2000 = 100)	Total	Industry excluding construction and energy						Energy		Total			
			Total	Intermediate goods	Capital goods	Consumer goods								
						Total	Durable	Non-durable						
% of total <sup>4)</sup>	100.0	100.0	82.5	31.6	21.3	29.5	4.0	25.5	17.5		89.5	100.0	32.8	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
2000	100.0	5.3	2.5	5.0	0.6	1.6	1.4	1.6	16.4	2.5	4.8	51.9	20.4	31.0
2001	102.0	2.0	1.7	1.2	0.9	3.0	1.9	3.1	2.6	2.2	1.2	-8.3	-8.1	27.8
2002	101.9	-0.1	0.5	-0.3	0.9	1.0	1.3	1.0	-2.3	2.7	0.3	-4.1	-0.9	26.5
2003	103.4	1.4	0.8	0.8	0.3	1.1	0.6	1.2	3.8	2.0	0.9	-4.0	-4.5	25.1
2003 Q3	103.2	1.1	0.5	0.0	0.3	1.2	0.6	1.3	3.1	1.9	0.4	-6.5	-5.8	25.1
Q4	103.4	1.0	0.6	0.3	0.3	1.2	0.5	1.3	2.0	1.5	0.5	-4.2	-1.2	24.5
2004 Q1	103.9	0.2	0.8	1.0	0.3	1.1	0.4	1.3	-2.6	1.6	0.2	-2.5	9.8	25.0
Q2	105.3	2.0	1.6	2.8	0.6	1.5	0.6	1.6	3.7	.	2.5	28.8	20.9	29.3
Q3	.	.	.	.	.	.	.	.	.	.	.	26.9	11.9	33.3
2004 Apr.	104.9	1.4	1.5	2.3	0.5	1.4	0.6	1.6	1.2	-	1.7	23.1	19.7	27.6
May	105.5	2.4	1.6	2.8	0.6	1.4	0.6	1.6	5.4	-	2.8	35.9	21.1	30.9
June	105.5	2.4	1.9	3.3	0.7	1.6	0.6	1.8	4.4	-	2.9	27.8	21.9	29.3
July	106.0	2.9	2.2	4.2	0.8	1.6	0.8	1.7	5.2	-	3.2	24.9	18.0	30.7
Aug.	106.4	3.1	2.3	4.8	0.9	1.4	0.8	1.5	5.4	-	3.5	25.5	11.0	34.1
Sep.	.	.	.	.	.	.	.	.	.	-	.	30.5	6.9	35.0

### 3. Hourly labour costs<sup>5)</sup>

	Total (s.a. index 2000 = 100)	Total	By component		By selected economic activity			Memo item: indicator of negotiated wages
			Wages and salaries	Employers' social contributions	Mining, manufacturing and energy	Construction	Services	
	1	2	3	4	5	6	7	8
2000	100.0	3.1	3.5	2.0	3.0	3.6	3.7	2.2
2001	103.5	3.6	3.7	3.0	3.4	4.0	3.2	2.6
2002	107.4	3.7	3.6	4.1	3.7	4.0	3.5	2.7
2003	110.4	2.8	2.7	3.2	2.9	3.3	2.7	2.4
2003 Q2	110.2	3.3	3.1	3.8	3.4	3.8	3.2	2.4
Q3	110.8	2.8	2.7	3.2	3.0	3.1	2.8	2.4
Q4	111.3	2.1	2.1	2.4	2.1	2.6	2.2	2.2
2004 Q1	112.1	2.7	2.7	2.7	3.0	3.0	2.6	2.3
Q2	112.7	2.2	2.3	2.1	2.6	2.3	2.2	2.2

Sources: Eurostat, HWWA (columns 12 and 13), Thomson Financial Datastream (column 14), ECB calculations based on Eurostat data (column 6 in table 5.1.2 and column 7 in table 5.1.3) and ECB calculations (column 8 in table 5.1.3).

1) Refers to the prices expressed in euro.

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

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

4) In 2000.

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

## 5.1 HICP, other prices and costs

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

## 4. Unit labour costs, compensation per employee and labour productivity

	Total (index 2000 = 100)	Total	By economic activity					
			Agriculture, hunting, forestry and fishing	Mining, manufacturing, and energy	Construction	Trade, repairs, hotels and restaurants, transport and communication	Financial, real estate, renting and business services	
	1	2	3	4	5	6	7	8
Unit labour costs <sup>1)</sup>								
2000	100.0	1.4	0.8	-0.3	1.7	0.4	3.7	1.7
2001	102.6	2.6	2.4	2.7	3.9	0.9	3.2	2.8
2002	104.8	2.2	-0.5	0.9	2.7	1.9	3.7	2.3
2003	107.0	2.1	4.0	1.3	3.6	1.7	2.1	2.4
2003 Q2	107.2	2.5	5.8	2.6	3.6	2.1	2.6	2.3
Q3	107.4	2.4	6.0	1.9	3.9	1.3	1.4	3.2
Q4	107.3	1.6	3.4	0.4	3.5	2.0	2.0	1.6
2004 Q1	107.2	1.0	-4.2	0.8	2.6	0.4	1.3	1.6
Q2	.	.	.	.	.	.	.	.
Compensation per employee								
2000	100.0	2.7	2.1	3.4	2.5	1.8	2.3	2.8
2001	102.8	2.8	1.8	2.6	3.0	2.7	2.4	3.1
2002	105.4	2.5	2.7	2.5	2.8	2.6	2.0	2.7
2003	107.9	2.4	2.2	3.3	3.3	1.9	2.0	2.3
2003 Q2	107.7	2.5	3.8	3.5	3.9	2.4	2.5	1.8
Q3	108.4	2.5	1.9	3.3	3.6	1.5	1.6	3.2
Q4	108.6	2.1	1.8	3.2	3.2	1.5	1.7	2.0
2004 Q1	109.3	2.1	-2.1	4.1	2.9	0.8	1.1	2.2
Q2	.	.	.	.	.	.	.	.
Labour productivity <sup>2)</sup>								
2000	100.0	1.3	1.2	3.7	0.9	1.4	-1.3	1.1
2001	100.2	0.2	-0.5	-0.1	-0.9	1.8	-0.8	0.3
2002	100.5	0.3	3.2	1.6	0.1	0.7	-1.6	0.4
2003	100.8	0.3	-1.7	2.0	-0.3	0.1	-0.1	-0.1
2003 Q2	100.5	0.0	-1.8	0.9	0.3	0.2	-0.1	-0.5
Q3	100.9	0.2	-3.9	1.4	-0.3	0.1	0.2	-0.1
Q4	101.2	0.5	-1.5	2.8	-0.3	-0.5	-0.3	0.4
2004 Q1	101.9	1.1	2.2	3.3	0.4	0.4	-0.2	0.7
Q2	102.3	1.8	4.3	5.5	0.8	1.0	0.2	1.1

## 5. Gross Domestic Product deflators

	Total (index 2000 = 100)	Total	Domestic demand			Exports <sup>3)</sup>	Imports <sup>3)</sup>	
			Total	Private consumption	Government consumption			Gross fixed capital formation
	1	2	3	4	5	6	7	8
2000	100.0	1.4	2.6	2.2	2.6	2.7	5.0	8.4
2001	102.4	2.4	2.3	2.3	2.4	2.0	1.4	0.8
2002	105.1	2.5	2.1	2.3	2.1	1.8	-0.3	-1.6
2003	107.2	2.1	1.8	2.0	2.2	1.3	-0.6	-1.2
2003 Q2	106.9	2.1	1.8	1.9	2.3	1.3	-0.8	-1.8
Q3	107.6	2.1	1.8	2.0	2.7	1.3	-0.7	-1.6
Q4	108.0	2.0	1.6	1.9	1.6	1.1	-0.7	-1.7
2004 Q1	108.5	2.0	1.5	1.6	1.6	1.7	-0.9	-2.4
Q2	109.2	2.1	2.0	1.9	1.5	2.8	0.4	0.0

Sources: ECB calculations based on Eurostat data.

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

## 5.2 Output and demand

### 1. GDP and expenditure components

	GDP								
	Total	Domestic demand					External balance <sup>1)</sup>		
		Total	Private consumption	Government consumption	Gross fixed capital formation	Changes in inventories <sup>2)</sup>	Total	Exports <sup>1)</sup>	Imports <sup>1)</sup>
1	2	3	4	5	6	7	8	9	
<i>Current prices (EUR billions, seasonally adjusted)</i>									
2000	6,576.1	6,519.0	3,763.2	1,307.2	1,420.2	28.4	57.1	2,448.1	2,391.0
2001	6,842.9	6,729.4	3,923.2	1,371.4	1,443.7	-8.8	113.4	2,563.8	2,450.4
2002	7,075.9	6,892.8	4,037.0	1,443.6	1,430.3	-18.1	183.1	2,600.3	2,417.2
2003	7,255.9	7,104.5	4,159.7	1,500.7	1,440.7	3.4	151.4	2,588.5	2,437.2
2003 Q2	1,802.3	1,768.7	1,035.5	373.7	358.7	0.8	33.6	635.3	601.7
Q3	1,821.5	1,775.0	1,043.3	379.3	359.8	-7.3	46.5	651.4	604.9
Q4	1,835.3	1,795.3	1,048.2	378.5	364.0	4.6	39.9	655.4	615.5
2004 Q1	1,856.5	1,811.4	1,058.9	381.2	366.4	4.9	45.1	663.0	617.9
Q2	1,876.9	1,827.8	1,067.4	385.9	371.4	3.0	49.1	690.0	641.0
<i>percentage of GDP</i>									
2003	100.0	97.9	57.3	20.7	19.9	0.0	2.1	-	-
<i>Constant prices (ECU billions at 1995 prices, seasonally adjusted)</i>									
<i>quarter-on-quarter percentage changes</i>									
2003 Q2	-0.2	-0.1	0.0	0.5	-0.1	-	-	-0.8	-0.6
Q3	0.5	0.0	0.2	0.6	0.0	-	-	2.5	1.3
Q4	0.4	0.9	0.0	0.4	0.8	-	-	0.4	1.9
2004 Q1	0.6	0.2	0.6	0.1	-0.2	-	-	1.4	0.3
Q2	0.5	0.1	0.3	0.6	0.1	-	-	3.7	2.9
<i>annual percentage changes</i>									
2000	3.5	3.0	2.7	2.1	4.9	-	-	12.3	11.0
2001	1.6	1.0	1.9	2.5	-0.3	-	-	3.4	1.7
2002	0.8	0.3	0.6	3.1	-2.7	-	-	1.7	0.3
2003	0.5	1.2	1.0	1.7	-0.6	-	-	0.1	2.1
2003 Q2	0.1	1.1	1.1	1.7	-0.3	-	-	-1.4	1.1
Q3	0.3	0.9	0.9	1.8	-0.3	-	-	0.1	1.5
Q4	0.7	1.4	0.6	1.5	-0.1	-	-	0.3	2.2
2004 Q1	1.3	1.1	0.9	1.6	0.5	-	-	3.5	2.9
Q2	2.0	1.3	1.1	1.7	0.7	-	-	8.1	6.5
<i>contributions to annual percentage changes of GDP in percentage points</i>									
2000	3.5	2.9	1.5	0.4	1.1	-0.1	0.6	-	-
2001	1.6	0.9	1.1	0.5	-0.1	-0.5	0.6	-	-
2002	0.8	0.3	0.4	0.6	-0.6	-0.1	0.6	-	-
2003	0.5	1.2	0.6	0.4	-0.1	0.4	-0.7	-	-
2003 Q2	0.1	1.1	0.6	0.3	-0.1	0.2	-0.9	-	-
Q3	0.3	0.8	0.5	0.4	-0.1	0.1	-0.5	-	-
Q4	0.7	1.4	0.3	0.3	0.0	0.7	-0.7	-	-
2004 Q1	1.3	1.0	0.5	0.3	0.1	0.1	0.3	-	-
Q2	2.0	1.3	0.6	0.4	0.1	0.1	0.7	-	-

Source: Eurostat.

1) Exports and imports cover goods and services and include cross-border intra-euro area trade. They are not fully consistent with Table 7.3.1

2) Including acquisitions less disposals of valuables.

## 5.2 Output and demand

## 2. Value added by economic activity

	Gross value added (basic prices)							Intermediate consumption of FISIM <sup>1)</sup>	Taxes less subsidies on products
	Total	Agriculture, hunting, forestry and fishing activities	Mining, manufacturing and energy	Construction	Trade, repairs, hotels and restaurants, transport and communication	Financial, real estate, renting and business activities	Public administration, education, health and other services		
	1	2	3	4	5	6	7	8	9
<i>Current prices (EUR billions, seasonally adjusted)</i>									
2000	6,087.6	145.8	1,368.6	337.3	1,278.4	1,651.1	1,306.4	212.6	701.1
2001	6,351.3	151.3	1,407.2	351.7	1,348.0	1,726.1	1,366.9	222.1	713.7
2002	6,568.7	149.1	1,433.2	363.8	1,386.8	1,800.3	1,435.6	231.8	739.0
2003	6,737.8	152.4	1,440.0	374.8	1,415.2	1,873.9	1,481.5	240.6	758.6
2003 Q2	1,674.0	37.5	355.5	93.4	353.0	466.1	368.5	60.3	188.6
Q3	1,692.9	38.4	360.0	94.0	356.0	471.3	373.1	60.5	189.1
Q4	1,703.0	38.9	363.2	95.4	356.9	475.4	373.3	60.4	192.6
2004 Q1	1,723.7	38.7	367.3	96.9	360.7	481.7	378.4	61.0	193.7
Q2	1,745.8	38.7	372.7	98.8	365.0	488.1	382.5	61.4	192.5
<i>percentage of value added</i>									
2003	100.0	2.3	21.4	5.6	21.0	27.8	22.0	-	-
<i>Constant prices (ECU billions at 1995 prices, seasonally adjusted)</i>									
<i>quarter-on-quarter percentage changes</i>									
2003 Q2	-0.2	-2.0	-1.3	0.2	0.1	0.2	0.1	0.5	0.7
Q3	0.5	-0.9	0.9	-0.2	0.6	0.5	0.3	0.5	0.1
Q4	0.3	1.4	0.6	0.0	-0.1	0.2	0.5	-0.4	0.7
2004 Q1	0.7	2.7	1.0	0.2	0.8	0.5	0.2	-0.2	0.2
Q2	0.7	-0.3	1.1	0.5	0.6	0.8	0.5	0.1	-1.7
<i>annual percentage changes</i>									
2000	3.8	-0.4	4.3	2.7	4.5	4.5	2.7	7.1	1.9
2001	1.9	-1.1	0.3	-0.4	3.3	3.1	1.7	4.7	0.2
2002	0.9	1.0	0.2	-0.6	1.1	0.8	2.2	0.0	-0.4
2003	0.5	-3.6	0.0	-0.6	0.7	1.2	1.0	1.8	0.4
2003 Q2	0.2	-4.3	-1.1	0.1	0.6	0.9	0.8	2.6	0.9
Q3	0.4	-5.4	-0.6	-0.5	0.9	1.4	0.9	2.1	0.1
Q4	0.7	-2.4	0.7	-0.4	0.5	1.0	1.1	0.5	0.5
2004 Q1	1.2	1.2	1.2	0.2	1.5	1.3	1.1	0.4	1.7
Q2	2.2	3.0	3.6	0.4	2.0	2.0	1.5	0.0	-0.8
<i>contributions to annual percentage changes of value added in percentage points</i>									
2000	3.8	0.0	1.0	0.1	1.0	1.2	0.6	-	-
2001	1.9	0.0	0.1	0.0	0.7	0.8	0.3	-	-
2002	0.9	0.0	0.0	0.0	0.2	0.2	0.5	-	-
2003	0.5	-0.1	0.0	0.0	0.1	0.3	0.2	-	-
2003 Q2	0.2	-0.1	-0.3	0.0	0.1	0.2	0.2	-	-
Q3	0.4	-0.1	-0.1	0.0	0.2	0.4	0.2	-	-
Q4	0.7	-0.1	0.2	0.0	0.1	0.3	0.2	-	-
2004 Q1	1.2	0.0	0.3	0.0	0.3	0.4	0.2	-	-
Q2	2.2	0.1	0.8	0.0	0.4	0.5	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.

## 5.2 Output and demand

(annual percentage changes, unless otherwise indicated)

### 3. Industrial production

	Total		Industry excluding construction							Construction	Manufacturing	
	Total (s.a. index 2000 = 100)	Total	Industry excluding construction and energy						Energy			
			Total	Intermediate goods	Capital goods	Consumer goods						
						Total	Durable	Non-durable				
% of total <sup>1)</sup>	100.0	82.9	82.9	74.0	30.0	22.4	21.5	3.6	17.9	8.9	17.1	75.0
	1	2	3	4	5	6	7	8	9	10	11	12
2000	4.8	100.1	5.2	5.2	6.2	8.2	1.7	6.1	0.9	1.9	2.5	5.6
2001	0.4	100.5	0.4	0.1	-0.6	1.6	0.3	-2.0	0.8	1.3	0.7	0.3
2002	-0.4	100.0	-0.5	-0.7	0.2	-1.6	-0.4	-5.6	0.6	1.1	0.7	-0.7
2003	0.2	100.3	0.3	0.0	0.3	-0.1	-0.6	-4.3	0.1	2.9	-0.2	0.0
2003 Q2	-0.6	99.6	-0.8	-1.3	-0.8	-1.8	-1.5	-6.2	-0.6	2.0	0.8	-1.3
Q3	-0.4	100.1	-0.3	-0.6	-0.6	-1.3	0.1	-3.6	0.8	2.0	0.1	-0.5
Q4	1.0	101.2	1.4	1.3	1.7	1.8	-0.1	-1.6	0.1	2.7	0.4	1.4
2004 Q1	1.0	101.3	1.0	1.0	1.1	0.4	0.7	1.4	0.5	2.2	1.0	1.0
Q2	2.3	102.2	2.7	2.8	2.4	4.2	1.2	2.7	0.9	2.6	-1.1	3.0
2004 Feb.	1.1	101.4	0.9	1.3	2.2	-0.3	0.4	1.0	0.3	0.4	4.2	1.1
Mar.	1.2	101.7	1.7	1.1	0.2	1.7	1.6	1.9	1.6	4.9	-1.7	1.4
Apr.	0.9	101.9	1.6	1.5	1.8	2.1	0.6	2.4	0.2	2.0	-2.8	1.7
May	2.9	102.5	3.6	3.7	2.9	5.2	2.3	4.5	1.9	3.7	-2.1	4.0
June	3.1	102.3	3.0	3.1	2.5	5.2	0.8	1.4	0.7	2.0	1.5	3.5
July	.	102.6	2.1	2.2	2.9	3.8	-0.5	1.1	-0.8	0.9	.	2.4
<i>month-on-month percentage changes (s.a.)</i>												
2004 Feb.	0.4	-	0.4	0.5	0.5	0.2	0.2	-0.4	0.3	2.3	0.9	0.5
Mar.	0.0	-	0.2	0.0	-0.9	0.9	0.2	-0.1	0.3	0.2	-2.9	0.3
Apr.	0.1	-	0.3	0.4	1.2	0.8	-0.1	0.6	-0.2	-1.9	-0.7	0.4
May	0.6	-	0.6	0.6	-0.1	1.1	0.2	0.1	0.2	0.5	-0.2	0.7
June	0.3	-	-0.2	-0.3	0.1	-0.3	-0.5	-1.2	-0.4	0.4	3.0	-0.2
July	.	-	0.3	0.4	0.8	0.6	0.1	1.4	-0.1	-0.8	.	0.4

### 4. Retail sales and passenger car registrations

	Retail sales (s.a.)								New passenger car registrations	
	Current prices		Constant prices						Total (s.a. thousands <sup>2)</sup> )	Total
	Total (index 2000 = 100)	Total	Total (index 2000 = 100)	Total	Food, beverages, tobacco	Non-food				
						Textiles, clothing, footwear	Household equipment			
% of total <sup>1)</sup>	100.0	100.0	100.0	100.0	43.7	56.3	10.6	14.8		
	1	2	3	4	5	6	7	8	9	10
2000	99.9	4.1	100.0	2.2	1.8	2.1	1.0	4.2	977	-1.8
2001	104.0	4.1	101.6	1.6	1.7	1.6	0.7	-0.2	968	-0.8
2002	105.9	1.9	101.7	0.1	0.9	-0.5	-1.9	-1.9	925	-4.4
2003	107.7	1.6	102.0	0.3	1.3	-0.6	-3.1	-0.2	912	-1.4
2003 Q2	107.6	1.8	102.3	1.1	1.6	-0.1	-1.8	0.2	892	-1.8
Q3	107.5	0.9	101.9	-0.4	1.2	-1.8	-5.0	-0.9	932	1.4
Q4	107.9	1.0	101.7	-0.3	-0.1	-0.5	-3.5	0.0	924	-2.4
2004 Q1	108.4	0.6	102.5	0.5	-0.1	0.0	-1.8	2.0	912	0.9
Q2	108.7	1.0	102.2	-0.1	-0.3	-0.1	-0.5	2.0	923	3.0
2004 Mar.	108.1	0.4	101.5	0.5	0.2	-0.1	-3.6	1.5	911	-0.6
Apr.	108.9	1.1	103.2	0.3	0.1	0.1	0.2	2.0	926	4.6
May	108.0	0.6	100.4	-2.1	-1.7	-2.1	-3.6	0.3	920	4.1
June	109.2	1.4	102.9	1.5	0.8	1.7	1.9	3.7	923	0.6
July	108.9	1.0	102.9	0.8	0.6	0.9	0.3	2.5	904	-1.7
Aug.	109.2	1.9	101.5	-0.3	-1.6	0.9	.	.	871	-9.5

Sources: Eurostat, except columns 9 and 10 in table 5.2.4 (ECB calculations based on data from the ACEA, European Automobile Manufacturers' Association).

1) In 2000.

2) Annual and quarterly figures are averages of monthly figures in the period concerned.

## 5.2 Output and demand

(percentage balances,<sup>1)</sup> unless otherwise indicated; seasonally adjusted)

## 5. Business and Consumer Surveys

	Economic sentiment indicator <sup>2)</sup> (long-term average = 100)	Manufacturing industry					Consumer confidence indicator <sup>3)</sup>				
		Industrial confidence indicator				Capacity utilisation <sup>3),4)</sup> (percentages)	Total <sup>5)</sup>	Financial situation over next 12 months	Economic situation over next 12 months	Unemployment situation over next 12 months	Savings over next 12 months
		Total <sup>5)</sup>	Order books	Stocks of finished products	Production expectations						
	1	2	3	4	5	6	7	8	9	10	11
2000	114.1	4	2	4	16	84.5	1	4	1	1	2
2001	100.8	-9	-15	14	1	83.0	-5	2	-10	14	2
2002	94.4	-11	-25	11	3	81.5	-11	-1	-12	26	-3
2003	93.5	-10	-25	10	3	81.0	-18	-5	-21	38	-9
2003 Q3	94.2	-11	-27	11	4	81.1	-17	-4	-20	38	-8
2003 Q4	97.7	-7	-22	9	8	81.1	-16	-5	-17	33	-9
2004 Q1	98.8	-7	-21	10	11	80.7	-14	-4	-13	30	-9
2004 Q2	100.0	-5	-16	8	10	81.1	-15	-3	-15	32	-8
2004 Q3	100.5	-4	-12	8	9	.	-14	-4	-13	29	-8
2004 Apr.	100.1	-5	-16	9	11	80.7	-14	-3	-14	31	-7
2004 May	100.3	-5	-18	7	10	-	-16	-4	-16	33	-9
2004 June	99.7	-4	-15	8	10	-	-14	-3	-14	31	-8
2004 July	99.8	-4	-12	8	8	81.5	-14	-4	-14	30	-9
2004 Aug.	100.9	-4	-12	7	8	-	-14	-4	-14	30	-7
2004 Sep.	100.7	-3	-12	8	10	-	-13	-3	-12	28	-7
	Construction confidence indicator			Retail trade confidence indicator				Services confidence indicator			
	Total <sup>5)</sup>	Order books	Employment expectations	Total <sup>5)</sup>	Present business situation	Volume of stocks	Expected business situation	Total <sup>5)</sup>	Business climate	Demand in recent months	Demand in the months ahead
	12	13	14	15	16	17	18	19	20	21	22
2000	-5	-13	3	-2	-1	17	11	30	36	23	33
2001	-11	-16	-4	-7	-5	17	-1	15	16	8	20
2002	-19	-27	-11	-16	-20	18	-12	1	-4	-6	13
2003	-20	-27	-13	-11	-15	17	-2	2	-6	1	11
2003 Q3	-21	-28	-15	-10	-15	17	1	5	-1	4	13
2003 Q4	-20	-27	-11	-8	-12	15	3	10	6	11	15
2004 Q1	-19	-28	-9	-8	-12	15	1	11	6	6	20
2004 Q2	-16	-23	-9	-8	-10	15	2	11	5	11	17
2004 Q3	-16	-24	-7	-8	-10	14	0	11	5	11	18
2004 Apr.	-17	-24	-9	-6	-7	15	4	11	6	11	16
2004 May	-17	-22	-11	-7	-10	15	3	13	6	12	20
2004 June	-15	-24	-6	-10	-14	16	0	10	4	11	15
2004 July	-16	-25	-7	-9	-10	15	-1	11	6	12	16
2004 Aug.	-15	-24	-6	-7	-10	12	2	12	7	12	17
2004 Sep.	-16	-22	-9	-9	-11	16	0	11	3	9	20

Source: European Commission (Economic and Financial Affairs DG).

- 1) Difference between the percentages of respondents giving positive and negative replies.
- 2) The economic sentiment indicator is composed of the industrial, services, consumer, construction and retail trade confidence indicators; the industrial confidence indicator has a weight of 40%, the services confidence indicator has a weight of 30%, the consumer confidence indicator has a weight of 20% and the two other indicators have a weight of 5% each. Values of the economic sentiment indicator above (below) 100 indicate above (below) average economic sentiment.
- 3) Owing to changes in the questionnaire used for the French survey, euro area results from January 2004 onwards are not fully comparable with previous results.
- 4) Data are collected in January, April, July and October each year. The quarterly figures shown are averages 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.

## 5.3 Labour markets <sup>1)</sup>

(annual percentage changes, unless otherwise indicated)

### 1. Employment

	Whole economy		By employment status		By economic activity					
	Millions (s.a.)		Employees	Self-employed	Agriculture, hunting, forestry and fishing	Mining, manufacturing, and energy	Construction	Trade, repairs, hotels and restaurants, transport and communication	Financial, real estate, renting and business services	Public administration, education, health and other services
% of total <sup>2)</sup>	100.0	100.0	84.2	15.8	4.6	18.8	7.1	25.2	14.5	29.8
	1	2	3	4	5	6	7	8	9	10
2000	131.428	2.2	2.5	0.6	-1.5	0.6	1.9	3.1	5.9	1.6
2001	133.276	1.4	1.6	0.2	-0.4	0.3	0.6	1.5	3.9	1.4
2002	133.978	0.5	0.7	-0.2	-2.1	-1.4	-0.6	0.4	2.4	1.8
2003	134.153	0.1	0.1	0.2	-1.9	-2.0	-0.2	0.5	1.2	1.0
2003 Q2	134.079	0.2	0.2	0.1	-2.4	-2.0	0.2	0.4	1.0	1.3
Q3	134.114	0.2	0.1	0.4	-1.6	-2.0	-0.2	0.9	1.1	0.9
Q4	134.177	0.2	0.1	0.6	-0.8	-2.0	-0.3	1.1	1.2	0.6
2004 Q1	134.173	0.1	0.0	0.4	-1.0	-2.1	-0.1	1.0	1.2	0.4
Q2	134.327	0.1	0.0	0.9	-1.0	-1.8	-0.2	0.9	1.5	0.3
	<i>quarter-on-quarter changes (s.a.)</i>									
2003 Q2	0.142	0.1	0.1	0.2	-0.2	-0.5	0.4	0.3	0.1	0.3
Q3	0.035	0.0	-0.1	0.5	0.1	-0.5	-0.4	0.4	0.4	-0.1
Q4	0.063	0.0	0.0	0.3	0.1	-0.6	-0.2	0.2	0.6	0.1
2004 Q1	-0.004	0.0	0.0	-0.3	-0.9	-0.4	0.1	0.1	0.4	0.1
Q2	0.154	0.1	0.0	0.6	-0.5	-0.3	0.1	0.2	0.4	0.2

### 2. Unemployment

(seasonally adjusted)

	Total		By age <sup>3)</sup>				By gender <sup>4)</sup>			
	Millions	% of labour force	Adult		Youth		Male		Female	
			Millions	% of labour force	Millions	% of labour force	Millions	% of labour force	Millions	% of labour force
% of total <sup>2)</sup>	100.0		78.1		21.9		50.2		49.8	
	1	2	3	4	5	6	7	8	9	10
2000	11.608	8.4	8.881	7.3	2.727	16.7	5.499	7.0	6.109	10.4
2001	11.084	8.0	8.539	7.0	2.546	15.8	5.338	6.7	5.746	9.7
2002	11.806	8.4	9.181	7.4	2.626	16.4	5.841	7.3	5.966	9.9
2003	12.536	8.9	9.796	7.8	2.740	17.2	6.295	7.9	6.241	10.2
2003 Q2	12.567	8.9	9.814	7.8	2.753	17.2	6.312	7.9	6.255	10.2
Q3	12.576	8.9	9.839	7.8	2.737	17.2	6.318	7.9	6.258	10.2
Q4	12.594	8.9	9.867	7.8	2.727	17.3	6.330	7.9	6.264	10.2
2004 Q1	12.637	8.9	9.879	7.8	2.758	17.5	6.349	7.9	6.288	10.2
Q2	12.733	9.0	9.957	7.9	2.776	17.6	6.400	8.0	6.332	10.3
2004 Mar.	12.675	8.9	9.904	7.9	2.771	17.5	6.371	7.9	6.304	10.2
Apr.	12.719	9.0	9.937	7.9	2.782	17.6	6.393	8.0	6.326	10.3
May	12.727	9.0	9.955	7.9	2.772	17.5	6.398	8.0	6.329	10.3
June	12.752	9.0	9.979	7.9	2.773	17.6	6.411	8.0	6.342	10.3
July	12.765	9.0	9.999	7.9	2.766	17.5	6.419	8.0	6.346	10.3
Aug.	12.791	9.0	10.020	7.9	2.771	17.5	6.433	8.0	6.358	10.3

Sources: ECB calculations based on Eurostat data (in table 5.3.1) and Eurostat (table 5.3.2).

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 2003.

3) Adult: 25 years of age and over; youth: below 25 years of age; 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.

# GOVERNMENT FINANCE

## 6.1 Revenue, expenditure and deficit/surplus <sup>1)</sup> (as a percentage of GDP)

### 1. Euro area – revenue

	Total		Current revenue								Capital revenue		Memo: fiscal burden <sup>2)</sup>	
	1	2	Direct taxes		Indirect taxes	Received by EU institutions	Social contributions		Sales	Capital taxes	13			
			Households	Corporations			Employers	Employees						
			3	4	5	6	7	8	9	10	11	12	14	
1995	47.0	46.5	11.5	9.1	2.0	13.3	0.9	17.2	8.4	5.6	2.4	0.5	0.3	42.4
1996	47.9	47.4	11.9	9.2	2.3	13.4	0.8	17.5	8.7	5.6	2.4	0.5	0.3	43.1
1997	48.1	47.5	12.1	9.2	2.6	13.6	0.7	17.5	8.7	5.5	2.4	0.6	0.4	43.5
1998	47.5	47.1	12.4	9.7	2.3	14.2	0.7	16.4	8.5	4.9	2.4	0.4	0.3	43.3
1999	48.0	47.6	12.8	9.8	2.6	14.4	0.6	16.4	8.4	5.0	2.3	0.4	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	2.3	0.4	0.3	43.6
2001	47.1	46.7	12.6	9.8	2.5	13.9	0.6	16.0	8.4	4.8	2.2	0.4	0.3	42.8
2002	46.5	46.1	12.2	9.6	2.3	13.8	0.4	16.0	8.4	4.7	2.3	0.4	0.3	42.3
2003	46.6	45.8	11.8	9.3	2.2	13.9	0.4	16.2	8.5	4.8	2.3	0.8	0.5	42.4

### 2. Euro area – expenditure

	Total		Current expenditure							Capital expenditure			Memo: primary expenditure <sup>3)</sup>	
	1	2	Compensation of employees	Intermediate consumption	Interest	Current transfers	Social payments	Subsidies	Paid by EU institutions	Investment	Capital transfers	Paid by EU institutions		
														3
1995	52.2	47.7	11.2	4.8	5.8	26.0	22.7	2.3	0.6	4.5	2.7	1.8	0.1	46.4
1996	52.2	48.2	11.2	4.8	5.8	26.5	23.2	2.2	0.6	4.0	2.6	1.4	0.0	46.4
1997	50.8	47.1	11.1	4.7	5.2	26.1	23.1	2.1	0.6	3.7	2.4	1.3	0.1	45.6
1998	49.8	45.9	10.7	4.6	4.8	25.7	22.6	2.1	0.5	3.9	2.5	1.5	0.1	45.0
1999	49.3	45.3	10.7	4.7	4.3	25.6	22.5	2.0	0.5	4.0	2.5	1.5	0.1	45.0
2000	48.7	44.8	10.6	4.7	4.1	25.4	22.2	2.0	0.5	4.0	2.5	1.4	0.1	44.6
2001	48.8	44.7	10.5	4.8	4.0	25.4	22.3	1.9	0.5	4.1	2.6	1.5	0.0	44.9
2002	48.9	45.0	10.7	4.9	3.7	25.8	22.8	1.9	0.5	3.9	2.5	1.5	0.0	45.2
2003	49.3	45.3	10.7	4.9	3.5	26.2	23.2	1.9	0.5	4.0	2.6	1.4	0.1	45.8

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

	Deficit (-)/surplus (+)					Primary deficit (-)/surplus (+)	Government consumption <sup>4)</sup>							
	Total	Central gov.	State gov.	Local gov.	Social security funds		Total	Compensation of employees	Intermediate consumption	Transfers in kind via market producers	Consumption of fixed capital	Sales (minus)	Collective consumption	Individual consumption
1995	-5.2	-4.4	-0.5	-0.1	-0.2	0.6	20.4	11.2	4.8	5.0	1.9	2.4	8.6	11.8
1996	-4.3	-3.8	-0.4	0.0	-0.1	1.5	20.5	11.2	4.8	5.1	1.9	2.4	8.6	11.9
1997	-2.7	-2.4	-0.4	0.1	0.1	2.5	20.2	11.1	4.7	5.0	1.8	2.4	8.4	11.8
1998	-2.3	-2.2	-0.2	0.1	0.1	2.5	19.9	10.7	4.6	5.0	1.8	2.4	8.2	11.7
1999	-1.3	-1.6	-0.1	0.1	0.4	3.0	19.9	10.7	4.7	5.0	1.8	2.3	8.2	11.6
2000	-1.0	-1.4	-0.1	0.1	0.5	3.1	19.9	10.6	4.7	5.1	1.8	2.3	8.2	11.7
2001	-1.7	-1.6	-0.4	0.0	0.3	2.3	20.1	10.5	4.8	5.2	1.8	2.2	8.2	11.8
2002	-2.4	-2.0	-0.5	-0.2	0.2	1.3	20.4	10.7	4.9	5.3	1.8	2.3	8.3	12.1
2003	-2.7	-2.2	-0.4	-0.1	0.0	0.8	20.7	10.7	4.9	5.4	1.8	2.3	8.4	12.3

### 4. Euro area countries – deficit (-)/surplus (+) <sup>5)</sup>

	BE	DE	GR	ES	FR	IE	IT	LU	NL	AT	PT	FI
	1	2	3	4	5	6	7	8	9	10	11	12
2000	0.2	1.3	-4.1	-0.9	-1.4	4.4	-0.6	6.0	2.2	-1.5	-2.8	7.1
2001	0.6	-2.8	-3.7	-0.4	-1.5	0.9	-2.6	6.4	-0.1	0.3	-4.4	5.2
2002	0.1	-3.7	-3.7	-0.1	-3.2	-0.2	-2.3	2.8	-1.9	-0.2	-2.7	4.3
2003	0.4	-3.8	-4.6	0.4	-4.1	0.1	-2.4	0.8	-3.2	-1.1	-2.8	2.3

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

- Revenue, expenditure and deficit/surplus are based on the ESA 95, but the figures exclude proceeds from the sale of UMTS licences in 2000 (the euro area deficit/surplus including those proceeds is equal to 0.1% of GDP). Transactions involving the EU budget are included and consolidated. Transactions among Member States' governments are not consolidated.
- The fiscal burden comprises taxes and social contributions.
- Comprises total expenditure minus interest expenditure.
- Corresponds to final consumption expenditure (P.3) of general government in the ESA 95.
- Including proceeds from the sale of UMTS licences.



## 6.2 Debt <sup>1)</sup>

(as a percentage of GDP)

### 1. Euro area – by financial instrument and sector of the holder

	Total	Financial instruments				Holders				Other creditors <sup>3)</sup>
		Coins and deposits	Loans	Short-term securities	Long-term securities	Domestic creditors <sup>2)</sup>				
						Total	MFIs	Other financial corporations	Other sectors	
1	2	3	4	5	6	7	8	9	10	
1994	70.7	2.9	16.2	10.7	41.0	56.3	30.2	9.6	16.5	14.4
1995	74.9	2.8	17.9	10.1	44.1	58.7	32.8	8.7	17.1	16.3
1996	76.2	2.8	17.4	10.2	45.8	59.0	32.7	10.2	16.2	17.1
1997	75.5	2.7	16.3	9.0	47.4	56.8	31.0	11.8	13.9	18.8
1998	73.8	2.7	15.1	7.9	48.1	53.1	28.8	12.7	11.6	20.7
1999	72.9	2.9	14.3	6.8	49.0	48.5	27.1	9.7	11.7	24.4
2000	70.5	2.7	13.2	6.1	48.5	44.3	23.5	9.2	11.7	26.2
2001	69.6	2.7	12.5	6.3	48.1	42.2	22.2	8.3	11.7	27.3
2002	69.4	2.7	11.8	6.7	48.1	39.0	20.5	6.9	11.6	30.4
2003	70.7	2.1	11.8	7.4	49.3	38.8	20.7	7.3	10.8	31.9

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

	Total	Issued by <sup>4)</sup>				Original maturity			Residual maturity			Currencies	
		Central gov.	State gov.	Local gov.	Social security funds	Up to 1 year	Over 1 year	Variable interest rate	Up to 1 year	Over 1 year and up to 5 years	Over 5 years	Euro or participating currencies <sup>5)</sup>	Other currencies
1994	70.7	58.9	5.3	5.9	0.6	12.3	58.4	7.2	17.9	27.1	25.8	68.4	2.3
1995	74.9	62.6	5.6	5.9	0.8	12.9	62.0	5.6	18.9	26.8	29.2	72.8	2.1
1996	76.2	63.9	6.0	5.7	0.5	12.2	64.0	5.3	20.5	25.9	29.8	74.0	2.1
1997	75.5	63.2	6.2	5.5	0.6	11.1	64.4	4.6	19.8	25.9	29.8	73.3	2.2
1998	73.8	62.0	6.2	5.3	0.4	9.4	64.4	4.8	17.1	26.9	29.8	72.0	1.9
1999	72.9	61.2	6.1	5.2	0.3	9.2	63.7	3.2	15.5	27.7	29.7	70.8	2.0
2000	70.5	59.2	6.0	5.0	0.3	8.3	62.2	2.8	15.3	28.3	26.9	68.7	1.9
2001	69.6	58.2	6.2	4.9	0.3	8.8	60.7	1.5	16.0	26.5	27.1	68.0	1.5
2002	69.4	57.9	6.4	4.8	0.3	9.1	60.3	1.6	16.8	25.3	27.3	68.0	1.4
2003	70.7	58.3	6.7	5.2	0.6	9.2	61.5	1.5	15.9	26.2	28.7	69.7	1.0

### 3. Euro area countries

	BE	DE	GR	ES	FR	IE	IT	LU	NL	AT	PT	FI
	1	2	3	4	5	6	7	8	9	10	11	12
2000	109.1	60.2	114.0	61.1	56.8	38.3	111.2	5.5	55.9	67.0	53.3	44.6
2001	108.1	59.4	114.7	57.5	56.5	35.9	110.6	5.5	52.9	67.1	55.8	43.8
2002	105.8	60.9	112.5	54.4	58.8	32.7	107.9	5.7	52.6	66.6	58.4	42.6
2003	100.7	64.2	109.9	50.7	63.7	32.1	106.2	5.4	54.1	65.1	60.3	45.6

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

- 1) Gross general government debt at nominal value and consolidated between sub-sectors of government. Holdings by non-resident governments are not consolidated. Data are partially estimated.
- 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, this comprises debt in ECU, in domestic currency and in the currencies of other Member States which have adopted the euro.

### 6.3 Change in debt <sup>1)</sup>

(as a percentage of GDP)

#### 1. Euro area – by source, financial instrument and sector of the holder

	Total	Source of change				Financial instruments				Holders			Other creditors <sup>7)</sup>
		Borrowing requirement <sup>2)</sup>	Valuation effects <sup>3)</sup>	Other changes in volume <sup>4)</sup>	Aggregation effect <sup>5)</sup>	Coins and deposits	Loans	Short-term securities	Long-term securities	Domestic creditors <sup>6)</sup>	MFIs	Other financial corporations	
	1	2	3	4	5	6	7	8	9	10	11	12	13
1995	7.7	5.2	0.4	2.4	-0.3	0.1	2.5	0.0	5.1	5.1	4.1	-0.4	2.6
1996	3.9	4.4	-0.2	0.1	-0.4	0.1	0.1	0.4	3.3	2.4	1.0	1.8	1.4
1997	2.3	2.3	0.5	-0.4	-0.1	0.0	-0.3	-0.8	3.4	0.0	-0.4	2.0	2.3
1998	1.7	1.9	-0.2	0.0	-0.1	0.1	-0.5	-0.7	2.8	-1.1	-0.9	1.4	2.8
1999	1.9	1.5	0.3	0.0	-0.1	0.2	-0.3	-0.8	2.7	-2.6	-0.5	-2.6	4.5
2000	1.1	1.0	0.2	0.0	0.0	0.0	-0.4	-0.4	1.9	-1.9	-2.4	-0.1	3.0
2001	1.8	1.7	0.1	0.0	0.0	0.1	-0.2	0.4	1.4	-0.3	-0.4	-0.5	2.1
2002	2.1	2.4	-0.4	0.1	0.0	0.1	-0.3	0.7	1.7	-1.8	-1.0	-1.1	3.9
2003	3.1	2.9	0.3	0.0	0.0	-0.5	0.3	0.8	2.4	0.8	0.7	0.5	2.3

#### 2. Euro area – deficit-debt adjustment

	Change in debt	Deficit (-) / surplus (+) <sup>8)</sup>	Deficit-debt adjustment <sup>9)</sup>											Other <sup>11)</sup>
			Total	Transactions in main financial assets held by general government							Valuation effects	Exchange rate effects	Other changes in volume	
				Total	Currency and deposits	Securities <sup>10)</sup>	Loans	Shares and other equity	Privatisations	Equity injections				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1995	7.7	-5.2	2.5	0.3	0.2	-0.1	0.4	-0.1	-0.4	0.2	0.4	-0.1	2.4	-0.6
1996	3.9	-4.3	-0.5	-0.1	0.0	0.0	-0.1	-0.1	-0.2	0.2	-0.2	-0.2	0.1	-0.2
1997	2.3	-2.7	-0.4	-0.4	0.1	0.0	0.0	-0.5	-0.7	0.2	0.5	0.2	-0.4	-0.1
1998	1.7	-2.3	-0.6	-0.5	0.1	0.0	-0.1	-0.5	-0.8	0.2	-0.2	0.0	0.0	0.0
1999	1.9	-1.3	0.6	-0.2	0.5	0.1	0.0	-0.7	-0.8	0.1	0.3	0.3	0.0	0.4
2000	1.1	0.1	1.2	0.6	0.7	0.1	0.2	-0.5	-0.4	0.2	0.2	0.1	0.0	0.4
2001	1.8	-1.7	0.1	-0.5	-0.6	0.0	0.2	0.0	-0.3	0.2	0.1	0.0	0.0	0.4
2002	2.1	-2.4	-0.3	-0.4	0.0	0.1	0.1	-0.5	-0.4	0.2	-0.4	0.0	0.1	0.4
2003	3.1	-2.7	0.3	-0.3	-0.1	0.0	0.0	-0.2	-0.4	0.1	0.3	-0.2	0.0	0.4

Source: ECB.

1) Data are partially estimated. Annual change in gross nominal consolidated debt is expressed as a percentage of GDP, i.e.  $[\text{debt}(t) - \text{debt}(t-1)] \div \text{GDP}(t)$ .

2) The borrowing requirement is by definition equal to transactions in 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) Includes, 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 is 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) Mainly composed of transactions in other assets and liabilities (trade credits, other receivables/payables and financial derivatives).

## 6.4 Quarterly revenue, expenditure and deficit/surplus <sup>1)</sup>

(as a percentage of GDP)

### 1. Euro area – quarterly revenue

	Total		Current revenue					Capital revenue		Memo: fiscal burden <sup>2)</sup>
	1	2	Direct taxes	Indirect taxes	Social contributions	Sales	Property income	8	Capital taxes	
1999 Q1	44.2	43.7	10.8	13.3	16.0	2.0	0.7	0.5	0.3	40.4
Q2	48.3	47.8	13.7	13.6	16.2	2.2	1.3	0.5	0.3	43.8
Q3	45.2	44.8	11.9	13.1	16.1	2.1	0.7	0.5	0.3	41.4
Q4	52.0	51.4	14.5	14.9	17.1	3.1	0.8	0.7	0.3	46.8
2000 Q1	44.1	43.5	11.2	13.2	15.7	1.9	0.7	0.5	0.3	40.4
Q2	48.3	47.8	14.1	13.6	16.0	2.1	1.1	0.6	0.3	44.0
Q3	44.9	44.5	12.2	12.8	16.0	2.0	0.8	0.4	0.3	41.2
Q4	51.3	50.8	14.3	14.5	17.0	3.1	0.9	0.5	0.3	46.1
2001 Q1	43.0	42.6	10.7	12.9	15.5	1.8	0.8	0.4	0.2	39.4
Q2	47.7	47.3	13.8	13.2	15.9	2.0	1.5	0.4	0.2	43.1
Q3	44.4	44.0	11.9	12.6	15.8	1.9	0.8	0.4	0.3	40.6
Q4	50.7	50.1	13.9	14.3	16.8	3.2	0.9	0.5	0.3	45.4
2002 Q1	42.7	42.3	10.4	13.0	15.7	1.7	0.7	0.4	0.2	39.3
Q2	46.5	45.9	12.9	12.9	15.8	2.1	1.4	0.6	0.4	42.0
Q3	44.5	44.0	11.5	13.0	15.8	2.0	0.7	0.4	0.3	40.6
Q4	50.7	50.0	13.8	14.6	16.7	3.2	0.8	0.6	0.3	45.4
2003 Q1	42.7	42.3	10.0	13.1	15.9	1.7	0.7	0.5	0.2	39.3
Q2	47.2	45.5	12.4	12.9	16.1	2.1	1.2	1.7	1.4	42.8
Q3	43.9	43.4	11.1	13.0	15.9	1.9	0.6	0.5	0.3	40.2
Q4	51.1	50.0	13.5	14.8	16.8	3.2	0.7	1.1	0.3	45.4
2004 Q1	42.3	41.8	9.8	13.1	15.7	1.7	0.6	0.5	0.3	38.9
Q2	45.8	45.2	12.5	13.1	15.7	2.1	0.9	0.6	0.4	41.8

### 2. Euro area – quarterly expenditure and deficit/surplus

	Total		Current expenditure					Capital expenditure			Deficit (-)/ surplus (+)	Primary deficit (-)/ surplus (+)	
	1	2	Compensation of employees	Intermediate consumption	Interest	Current transfers	Social		Investment	Capital transfers			
							benefits	Subsidies					
1999 Q1	47.8	44.5	10.5	4.3	4.7	25.0	21.8	1.3	3.3	1.9	1.3	-3.6	1.0
Q2	47.9	44.3	10.6	4.5	4.3	24.8	21.6	1.5	3.6	2.4	1.2	0.4	4.8
Q3	47.8	44.1	10.3	4.5	4.2	25.1	21.6	1.6	3.7	2.5	1.1	-2.5	1.6
Q4	51.7	46.9	11.2	5.3	3.9	26.5	22.9	1.7	4.8	3.1	1.7	0.3	4.2
2000 Q1	46.6	43.3	10.3	4.4	4.3	24.3	21.3	1.2	3.3	2.0	1.4	-2.6	1.7
Q2	47.1	43.7	10.5	4.6	4.0	24.6	21.4	1.4	3.4	2.4	1.1	1.2	5.2
Q3	43.7	43.4	10.2	4.5	4.1	24.6	21.4	1.5	0.3	2.5	1.1	1.2	5.3
Q4	50.8	47.0	11.2	5.3	3.9	26.5	22.7	1.6	3.9	3.2	1.5	0.4	4.3
2001 Q1	45.9	42.6	10.2	4.1	4.1	24.2	21.2	1.2	3.3	2.0	1.4	-2.9	1.2
Q2	47.1	43.7	10.5	4.7	4.0	24.5	21.4	1.4	3.4	2.4	1.1	0.6	4.6
Q3	47.1	43.3	10.2	4.6	4.0	24.6	21.5	1.5	3.7	2.5	1.2	-2.7	1.3
Q4	52.5	47.4	11.3	5.6	3.8	26.7	23.0	1.6	5.1	3.2	1.8	-1.8	2.0
2002 Q1	46.5	43.1	10.5	4.2	3.9	24.6	21.6	1.2	3.4	2.0	1.4	-3.8	0.1
Q2	47.6	44.1	10.5	4.9	3.7	24.9	21.8	1.3	3.5	2.4	1.1	-1.1	2.6
Q3	47.7	44.0	10.2	4.7	3.7	25.4	22.0	1.4	3.7	2.5	1.1	-3.2	0.5
Q4	52.2	47.7	11.4	5.7	3.5	27.2	23.5	1.5	4.5	2.8	1.6	-1.5	2.0
2003 Q1	47.2	43.7	10.5	4.3	3.7	25.2	22.0	1.1	3.5	2.0	1.5	-4.4	-0.8
Q2	48.2	44.7	10.7	4.8	3.5	25.7	22.3	1.4	3.5	2.4	1.1	-1.0	2.5
Q3	48.0	44.4	10.4	4.8	3.5	25.7	22.3	1.4	3.6	2.6	1.0	-4.1	-0.7
Q4	52.6	47.8	11.3	5.8	3.3	27.5	23.9	1.5	4.8	3.3	1.5	-1.5	1.8
2004 Q1	46.7	43.3	10.4	4.2	3.4	25.3	22.0	1.0	3.3	2.1	1.3	-4.4	-1.0
Q2	47.4	44.1	10.6	4.6	3.3	25.5	22.3	1.3	3.4	2.4	0.9	-1.6	1.7

Source: ECB calculations based on Eurostat and national data.

1) Revenue, expenditure and deficit/surplus are based on the ESA 95. Transactions involving the EU budget are not included. Including these transactions would increase both revenue and expenditure by, on average, about 0.2% of GDP. Otherwise, and except for different data transmission deadlines, the quarterly data are consistent with the annual data. The data are not seasonally adjusted.

2) The fiscal burden comprises taxes and social contributions.

# EXTERNAL TRANSACTIONS AND POSITIONS

## 7.1 Balance of payments

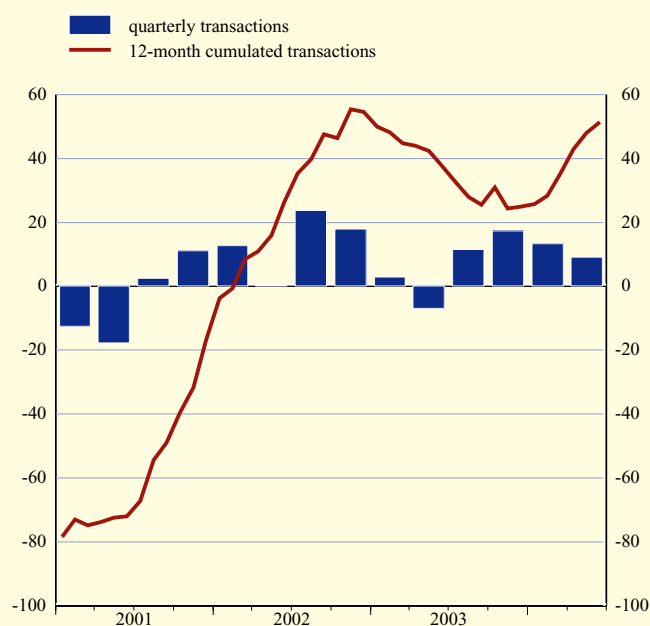
(EUR billions; net transactions)

### 1. Summary balance of payments

	Current account					Capital account	Net lending/borrowing to/from rest of the world (columns 1+6)	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	14
2001	-16.7	73.6	-0.4	-38.6	-51.4	6.6	-10.1	-34.2	-112.4	67.9	-0.9	-6.6	17.8	44.3
2002	54.5	133.6	13.1	-44.1	-48.1	11.0	65.4	-65.8	-4.7	114.6	-10.8	-162.7	-2.3	0.4
2003	24.9	108.5	15.6	-43.4	-55.9	13.4	38.3	-50.5	-13.1	17.6	-13.1	-71.7	29.8	12.2
2003 Q2	-6.9	24.2	5.7	-17.0	-19.7	1.9	-5.0	-32.0	2.7	62.0	-1.4	-97.6	2.3	37.0
Q3	11.5	36.8	3.7	-9.4	-19.6	2.8	14.3	-0.6	-19.1	-59.1	-4.6	80.1	2.0	-13.6
Q4	17.3	30.7	4.3	-5.0	-12.7	7.4	24.7	-3.6	-9.6	10.5	-4.1	-13.9	13.6	-21.2
2004 Q1	13.3	28.1	-2.6	-5.2	-7.0	2.9	16.2	-14.0	-28.9	5.2	6.2	-6.0	9.4	-2.2
Q2	9.2	34.1	7.1	-15.1	-17.0	3.8	13.0	-14.8	-12.3	4.2	-1.5	-2.1	-3.1	1.9
2003 July	2.8	15.5	2.6	-8.8	-6.4	0.8	3.6	0.3	-4.0	-33.7	-2.4	38.6	1.8	-4.0
Aug.	3.0	10.5	-0.1	-1.4	-6.0	1.7	4.8	5.9	-5.6	-36.2	-2.6	50.0	0.3	-10.7
Sep.	5.6	10.9	1.2	0.7	-7.2	0.2	5.9	-6.9	-9.5	10.8	0.4	-8.5	-0.1	1.0
Oct.	8.0	13.4	2.0	-3.9	-3.5	1.2	9.2	-0.1	-9.2	34.1	1.6	-27.3	0.7	-9.1
Nov.	3.3	8.7	0.6	0.4	-6.4	1.1	4.4	13.2	3.9	3.4	0.6	-0.2	5.5	-17.6
Dec.	6.1	8.6	1.8	-1.5	-2.8	5.1	11.1	-16.7	-4.3	-27.0	-6.3	13.6	7.3	5.5
2004 Jan.	-3.1	5.2	-2.0	-8.1	1.7	0.3	-2.8	-19.7	-10.6	-6.4	2.9	-2.7	-3.0	22.5
Feb.	5.2	9.4	-0.4	0.9	-4.7	2.1	7.3	16.7	7.8	16.5	0.9	-17.2	8.6	-24.0
Mar.	11.1	13.4	-0.2	1.9	-4.0	0.5	11.7	-11.0	-26.1	-4.9	2.4	13.8	3.7	-0.7
Apr.	0.3	10.7	0.5	-6.7	-4.2	0.7	1.0	-8.5	-2.9	-3.0	0.0	0.2	-2.7	7.5
May	3.4	11.2	3.7	-5.8	-5.7	2.3	5.7	-7.1	-1.6	-24.0	-1.6	19.3	0.7	1.4
June	5.4	12.2	2.9	-2.6	-7.1	0.8	6.3	0.8	-7.8	31.2	0.1	-21.6	-1.1	-7.1
July	3.1	13.7	1.3	-5.6	-6.3	1.2	4.3	-11.8	-8.3	-30.5	-0.9	27.2	0.6	7.5
<i>12-month cumulated transactions</i>														
2004 July	51.6	128.0	11.2	-31.5	-56.2	17.2	68.8	-45.1	-74.2	-35.9	-2.5	46.8	20.7	-23.7

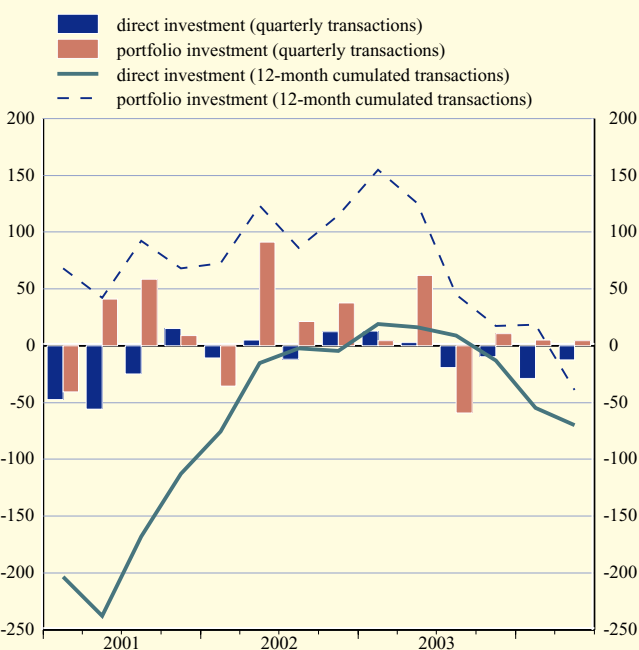
### C27 B.o.p. current account balance

(EUR billions)



### C28 B.o.p. net direct and portfolio investment

(EUR billions)



Source: ECB.

## 7.1 Balance of payments

(EUR billions; transactions)

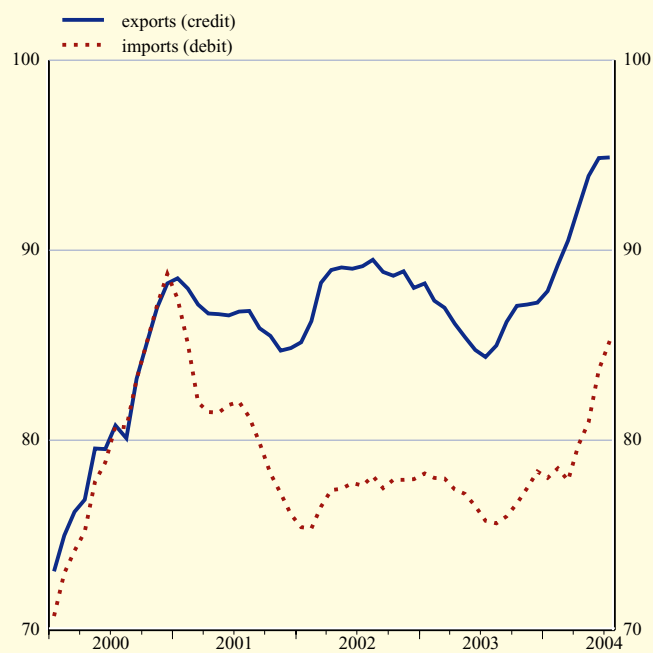
### 2. Current account

(seasonally adjusted)

	Total			Goods		Services		Income		Current transfers	
	Credit	Debit	Net	Credit	Debit	Credit	Debit	Credit	Debit	Credit	Debit
	1	2	3	4	5	6	7	8	9	10	11
2003 Q2	408.7	408.1	0.5	254.2	229.6	79.4	76.6	55.8	67.3	19.2	34.6
Q3	413.9	408.4	5.5	258.7	228.0	80.2	77.6	56.2	66.1	18.8	36.8
Q4	419.9	407.9	12.0	261.8	235.1	82.4	78.3	54.6	62.7	21.1	31.8
2004 Q1	432.2	415.7	16.5	271.5	233.6	83.3	81.7	57.3	64.1	20.2	36.3
Q2	446.7	431.4	15.3	284.6	251.1	84.5	80.4	57.5	67.4	20.1	32.5
2003 July	136.7	135.8	1.0	85.0	75.3	26.6	25.6	18.7	22.6	6.4	12.3
Aug.	139.0	136.7	2.3	86.8	76.2	26.4	26.0	19.5	22.3	6.3	12.3
Sep.	138.2	136.0	2.2	86.9	76.5	27.1	26.0	18.1	21.3	6.1	12.2
Oct.	139.2	132.7	6.5	87.5	77.4	27.7	25.9	17.6	21.3	6.4	8.1
Nov.	139.8	137.4	2.4	87.0	78.5	27.6	26.9	18.5	19.9	6.7	12.2
Dec.	140.9	137.8	3.1	87.3	79.2	27.1	25.5	18.5	21.5	8.1	11.6
2004 Jan.	141.6	136.8	4.8	89.3	76.3	27.0	26.6	18.3	21.7	7.0	12.1
Feb.	145.4	140.6	4.8	91.2	80.1	28.8	28.1	19.3	20.6	6.1	11.9
Mar.	145.2	138.3	6.9	91.1	77.2	27.4	27.0	19.7	21.8	7.1	12.3
Apr.	147.9	139.0	8.8	94.5	81.9	27.0	26.4	20.0	21.8	6.4	9.0
May	149.9	143.9	6.0	96.2	83.7	29.4	27.0	17.8	21.5	6.6	11.8
June	148.9	148.5	0.4	93.9	85.5	28.2	27.1	19.7	24.2	7.1	11.7
July	147.9	146.0	1.8	94.5	86.5	26.8	26.8	20.8	21.1	5.8	11.7

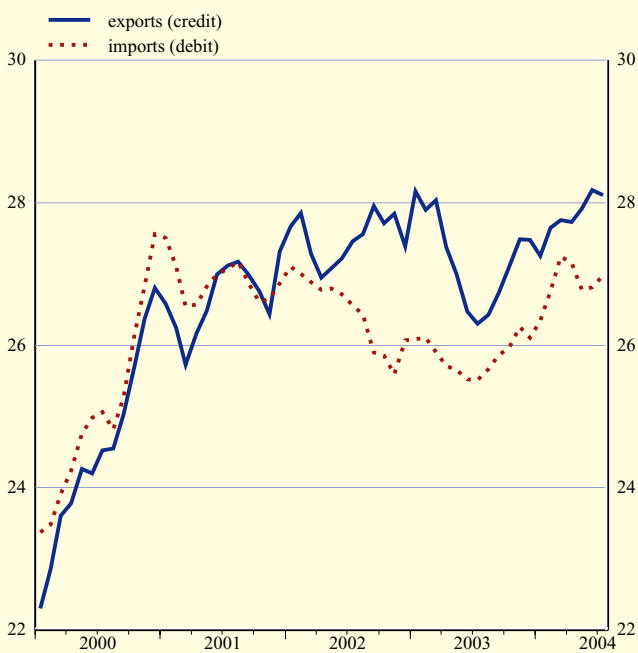
### C29 B.o.p. goods

(EUR billions, seasonally adjusted; three-month moving average)



### C30 B.o.p. services

(EUR billions, seasonally adjusted; three-month moving average)



Source: ECB.

## 7.1 Balance of payments

(EUR billions; transactions)

## 3. Current and capital accounts

	Current account										Capital account		
	Total			Goods		Services		Income		Current transfers		Credit	Debit
	Credit	Debit	Net	Credit	Debit	Credit	Debit	Credit	Debit	Credit	Debit		
1	2	3	4	5	6	7	8	9	10	11	12	13	
2001	1,710.2	1,726.9	-16.7	1,033.9	960.2	321.7	322.0	275.9	314.4	78.8	130.2	17.4	10.8
2002	1,714.5	1,660.1	54.5	1,063.2	929.7	329.8	316.7	236.1	280.3	85.3	133.4	19.0	8.1
2003	1,664.1	1,639.3	24.9	1,036.2	927.7	326.0	310.3	221.2	264.6	80.8	136.6	23.2	9.8
2003 Q2	407.6	414.5	-6.9	254.5	230.3	79.4	73.7	59.3	76.3	14.5	34.2	4.5	2.6
Q3	412.6	401.1	11.5	257.1	220.2	86.5	82.8	53.9	63.4	15.1	34.7	4.1	1.4
Q4	431.7	414.3	17.3	271.4	240.7	84.4	80.1	56.6	61.5	19.4	32.1	9.2	1.9
2004 Q1	426.5	413.2	13.3	265.1	237.1	75.0	77.6	54.6	59.9	31.7	38.7	5.1	2.2
Q2	447.2	438.0	9.2	286.2	252.1	84.5	77.4	61.5	76.5	14.9	31.9	5.0	1.2
2003 July	147.3	144.5	2.8	91.5	76.1	31.0	28.5	19.2	28.0	5.5	11.9	1.3	0.5
Aug.	125.4	122.3	3.0	76.4	65.9	27.5	27.6	16.6	18.0	4.8	10.8	2.1	0.4
Sep.	139.9	134.3	5.6	89.1	78.2	28.0	26.8	18.1	17.4	4.7	11.9	0.7	0.5
Oct.	148.1	140.1	8.0	97.3	83.9	29.1	27.1	17.1	21.0	4.5	8.0	1.6	0.4
Nov.	134.5	131.2	3.3	86.8	78.1	25.9	25.3	16.1	15.7	5.7	12.1	1.7	0.6
Dec.	149.1	143.1	6.1	87.3	78.7	29.4	27.6	23.3	24.8	9.1	11.9	5.9	0.9
2004 Jan.	138.5	141.6	-3.1	80.7	75.5	23.5	25.5	16.8	24.9	17.5	15.8	0.8	0.5
Feb.	133.8	128.6	5.2	85.4	75.9	24.5	25.0	17.2	16.2	6.7	11.4	2.6	0.5
Mar.	154.2	143.0	11.1	99.0	85.6	27.0	27.2	20.7	18.8	7.5	11.4	1.8	1.2
Apr.	145.9	145.5	0.3	94.1	83.5	26.0	25.4	21.1	27.8	4.7	8.9	1.1	0.4
May	143.8	140.4	3.4	92.4	81.2	28.7	25.1	17.6	23.4	5.0	10.7	2.7	0.3
June	157.5	152.1	5.4	99.7	87.5	29.8	26.9	22.8	25.4	5.2	12.3	1.3	0.5
July	154.7	151.6	3.1	98.3	84.6	30.6	29.3	20.8	26.4	5.0	11.3	1.7	0.6

## 4. Income account

	Total		Compensation of employees		Investment income							
	Credit	Debit	Credit	Debit	Total		Direct investment					
					Credit	Debit	Total		Equity		Debt	
							Credit	Debit	Credit	Debit	Credit	Debit
1	2	3	4	5	6	7	8	9	10	11	12	
2001	275.9	314.4	14.7	5.9	261.2	308.5	59.2	60.3	48.8	50.2	10.3	10.1
2002	236.1	280.3	14.7	6.0	221.5	274.3	52.5	57.9	44.4	50.7	8.1	7.2
2003	221.2	264.6	14.7	5.7	206.5	259.0	51.7	54.8	42.1	46.0	9.6	8.8
2003 Q1	51.4	63.5	3.6	1.2	47.8	62.2	8.9	10.9	7.2	8.9	1.8	2.1
Q2	59.3	76.3	3.6	1.4	55.6	74.9	14.3	16.5	11.4	14.2	2.9	2.4
Q3	53.9	63.4	3.7	1.5	50.2	61.9	12.6	13.4	10.5	11.9	2.1	1.5
Q4	56.6	61.5	3.8	1.5	52.8	60.0	15.8	13.9	13.0	11.1	2.8	2.9
2004 Q1	54.6	59.9	3.6	1.2	51.1	58.7	13.4	10.9	10.4	8.8	3.0	2.1

	Investment income									
	Portfolio investment						Other investment			
	Total		Equity		Debt		Credit	Debit	Credit	Debit
	Credit	Debit	Credit	Debit	Credit	Debit				
13	14	15	16	17	18	19	20			
2001	85.0	116.9	18.0	44.8	67.0	72.1	117.0	131.3		
2002	85.7	123.3	19.7	52.4	66.0	70.9	83.2	93.1		
2003	85.2	126.0	20.8	49.7	64.4	76.3	69.6	78.2		
2003 Q1	19.0	31.4	3.6	8.4	15.4	23.0	19.9	19.9		
Q2	23.4	37.7	7.8	21.3	15.6	16.3	17.9	20.7		
Q3	21.6	30.7	4.8	10.3	16.8	20.4	16.1	17.8		
Q4	21.2	26.3	4.7	9.7	16.6	16.6	15.7	19.8		
2004 Q1	21.5	30.1	4.7	9.5	16.8	20.6	16.1	17.6		

Source: ECB.

## 7.1 Balance of payments

(EUR billions; transactions)

### 5. Direct investment

	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	MFI excluding Eurosystem	Non- MFIs	Total	MFI excluding Eurosystem	Non- MFIs		Total	MFI excluding Eurosystem	Non- MFIs	Total	MFI excluding Eurosystem	Non- MFIs
1	2	3	4	5	6	7	8	9	10	11	12	13	14	
2001	-316.5	-237.9	-19.6	-218.3	-78.6	-0.1	-78.4	204.1	146.5	5.5	141.0	57.6	0.9	56.7
2002	-151.3	-136.4	-14.9	-121.4	-15.0	0.0	-14.9	146.6	111.9	3.1	108.8	34.7	0.5	34.3
2003	-118.6	-93.4	3.8	-97.2	-25.2	-0.1	-25.1	105.5	105.2	2.8	102.4	0.3	0.0	0.3
2003 Q2	-29.8	-22.4	5.1	-27.5	-7.4	0.0	-7.4	32.5	30.2	1.9	28.3	2.3	0.0	2.3
Q3	-32.2	-34.4	-1.2	-33.2	2.2	-0.1	2.4	13.1	15.9	-0.4	16.2	-2.8	-0.4	-2.4
Q4	-27.2	-18.6	2.0	-20.6	-8.7	0.2	-8.8	17.6	29.8	0.4	29.4	-12.2	0.5	-12.7
2004 Q1	-25.9	-19.6	-6.6	-13.0	-6.3	-0.1	-6.1	-3.0	7.1	-0.6	7.7	-10.1	-0.3	-9.7
Q2	-20.8	-22.9	-3.1	-19.9	2.2	0.0	2.2	8.4	8.8	0.7	8.1	-0.4	0.0	-0.4
2003 July	-9.4	-8.5	-0.9	-7.7	-0.9	-0.1	-0.8	5.4	4.3	-0.8	5.2	1.0	-0.6	1.6
Aug.	-4.9	-10.3	-0.5	-9.7	5.3	-0.1	5.4	-0.6	-0.9	0.2	-1.2	0.3	0.1	0.2
Sep.	-17.9	-15.6	0.2	-15.8	-2.3	0.0	-2.2	8.3	12.4	0.2	12.2	-4.1	0.1	-4.2
Oct.	-11.1	-5.8	2.0	-7.8	-5.3	0.0	-5.3	1.9	6.0	0.1	5.9	-4.1	0.3	-4.4
Nov.	0.6	4.1	-1.2	5.3	-3.5	0.1	-3.6	3.3	5.0	0.4	4.6	-1.8	0.1	-1.8
Dec.	-16.8	-16.9	1.2	-18.1	0.1	0.1	0.1	12.5	18.8	-0.1	18.8	-6.3	0.1	-6.4
2004 Jan.	-10.7	-5.3	-0.9	-4.5	-5.4	0.0	-5.4	0.1	6.7	0.2	6.5	-6.6	-0.1	-6.5
Feb.	-5.5	-3.0	-1.2	-1.9	-2.4	0.0	-2.4	13.3	2.9	0.3	2.6	10.4	-0.1	10.5
Mar.	-9.7	-11.3	-4.6	-6.6	1.6	-0.1	1.7	-16.4	-2.6	-1.2	-1.4	-13.8	-0.1	-13.7
Apr.	-7.9	-3.1	-0.4	-2.7	-4.8	0.1	-4.8	4.9	1.6	0.2	1.4	3.3	0.0	3.2
May	-1.0	-7.4	0.2	-7.6	6.4	0.0	6.5	-0.6	3.6	0.4	3.2	-4.2	0.0	-4.2
June	-11.9	-12.5	-2.9	-9.5	0.6	0.0	0.6	4.1	3.6	0.1	3.5	0.5	-0.1	0.6
July	-11.3	-9.6	0.2	-9.8	-1.7	0.0	-1.7	3.1	5.1	0.2	4.9	-2.0	-0.1	-2.0

### 6. Portfolio investment by instrument

	Total		Equity		Debt instruments					
	Assets	Liabilities	Assets	Liabilities	Assets			Liabilities		
					Total	Bonds and notes	Money market instruments	Total	Bonds and notes	Money market instruments
1	2	3	4	5	6	7	8	9	10	
2001	-281.9	349.8	-101.6	232.6	-180.3	-155.9	-24.4	117.3	113.1	4.1
2002	-175.8	290.4	-40.4	88.9	-135.4	-89.6	-45.8	201.5	133.7	67.9
2003	-283.8	301.4	-67.7	103.6	-216.1	-172.8	-43.3	197.8	191.8	6.0
2003 Q2	-107.3	169.3	-33.2	30.5	-74.1	-59.3	-14.8	138.8	124.6	14.2
Q3	-63.3	4.2	-19.4	25.1	-43.9	-37.2	-6.8	-20.9	-7.8	-13.1
Q4	-64.3	74.8	-26.3	45.7	-38.0	-25.4	-12.6	29.1	34.6	-5.6
2004 Q1	-89.9	95.1	-31.3	19.9	-58.6	-46.4	-12.2	75.2	53.4	21.7
Q2	-61.2	65.4	-22.0	2.0	-39.2	-30.7	-8.5	63.4	64.4	-1.0
2003 July	-27.1	-6.7	-8.6	10.9	-18.5	-22.0	3.5	-17.5	-13.3	-4.3
Aug.	-14.5	-21.7	-5.3	3.4	-9.2	-6.3	-2.9	-25.1	-8.8	-16.3
Sep.	-21.8	32.6	-5.6	10.8	-16.2	-8.8	-7.4	21.8	14.3	7.5
Oct.	-33.6	67.7	-15.0	22.2	-18.7	-11.7	-6.9	45.6	27.0	18.6
Nov.	-20.4	23.8	-3.6	11.3	-16.7	-15.0	-1.7	12.4	12.8	-0.4
Dec.	-10.3	-16.7	-7.7	12.2	-2.6	1.3	-3.9	-28.9	-5.1	-23.8
2004 Jan.	-46.1	39.8	-10.4	1.1	-35.8	-18.8	-17.0	38.6	28.1	10.5
Feb.	-18.3	34.8	-10.1	18.1	-8.2	-3.2	-5.0	16.7	16.3	0.4
Mar.	-25.4	20.5	-10.8	0.7	-14.6	-24.4	9.7	19.8	9.0	10.9
Apr.	-29.8	26.8	-2.5	-12.9	-27.3	-8.7	-18.6	39.7	27.2	12.5
May	-18.7	-5.2	-4.5	-0.2	-14.2	-16.7	2.4	-5.0	12.6	-17.6
June	-12.6	43.8	-15.0	15.1	2.3	-5.3	7.6	28.7	24.7	4.1
July	-33.0	2.5	-2.9	9.1	-30.1	-12.3	-17.8	-6.6	-3.2	-3.4

Source: ECB.

7.1 Balance of payments  
(EUR billions; transactions)

7. Portfolio investment assets by instrument and sector of holder

	Equity					Debt instruments											
	Eurosystem		MFIs excluding Eurosystem		Non-MFIs			Bonds and notes					Money market instruments				
								Eurosystem		MFIs excluding Eurosystem		Non-MFIs			Eurosystem		MFIs excluding Eurosystem
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15		
2001	-0.4	4.0	-105.2	-2.1	-103.2	0.2	-67.1	-89.0	-1.2	-87.8	-2.4	-40.7	18.6	-0.1	18.7		
2002	-0.4	-7.6	-32.4	-4.4	-28.0	-0.6	-15.0	-74.1	-0.9	-73.2	2.0	-32.8	-15.0	-1.1	-14.0		
2003	-0.3	-12.7	-54.7	-2.6	-52.1	-2.2	-45.4	-125.1	-0.2	-124.9	0.2	-42.6	-0.9	0.6	-1.5		
2003 Q2	-0.2	0.7	-33.8	-0.8	-33.0	-0.2	-25.6	-33.5	0.0	-33.5	1.0	-1.6	-14.3	1.0	-15.3		
Q3	-0.1	-6.2	-13.1	-0.8	-12.3	-1.4	-8.5	-27.3	-0.3	-27.0	0.1	-1.0	-5.9	-0.1	-5.8		
Q4	0.0	-3.6	-22.7	-0.4	-22.3	-0.4	-6.9	-18.1	-0.1	-18.0	-0.2	-13.1	0.7	1.3	-0.6		
2004 Q1	0.0	-6.0	-25.3	-0.9	-24.4	-0.5	-25.8	-20.1	-0.6	-19.5	-0.2	-7.3	-4.7	-1.1	-3.6		
Q2	0.0	-14.9	-7.1	.	.	0.4	-8.1	-23.0	.	.	0.0	-11.2	2.7	.	.		
2003 July	0.0	-2.0	-6.5	-	-	-0.1	-1.7	-20.2	-	-	0.2	-3.3	6.6	-	-		
Aug.	0.0	-1.0	-4.2	-	-	-0.6	-2.3	-3.5	-	-	0.1	4.0	-7.0	-	-		
Sep.	0.0	-3.2	-2.4	-	-	-0.7	-4.5	-3.6	-	-	-0.1	-1.7	-5.6	-	-		
Oct.	0.0	-4.7	-10.3	-	-	-0.4	-1.7	-9.7	-	-	-0.1	-4.1	-2.8	-	-		
Nov.	0.0	1.4	-5.1	-	-	0.0	-8.1	-6.8	-	-	-0.1	-2.7	1.1	-	-		
Dec.	0.0	-0.3	-7.4	-	-	0.0	2.9	-1.7	-	-	0.0	-6.4	2.5	-	-		
2004 Jan.	0.0	-3.4	-7.0	-	-	0.0	-13.0	-5.8	-	-	0.1	-15.0	-2.1	-	-		
Feb.	0.1	-3.1	-7.0	-	-	0.0	-1.2	-2.0	-	-	-0.2	-3.6	-1.2	-	-		
Mar.	0.0	0.5	-11.3	-	-	-0.4	-11.6	-12.3	-	-	0.0	11.2	-1.4	-	-		
Apr.	0.0	-1.1	-1.4	-	-	0.2	-3.0	-5.9	-	-	0.0	-15.6	-3.0	-	-		
May	0.0	-4.2	-0.3	-	-	0.2	-4.8	-12.0	-	-	-0.2	0.5	2.2	-	-		
June	0.0	-9.6	-5.3	-	-	0.1	-0.3	-5.0	-	-	0.2	3.9	3.5	-	-		
July	0.0	-9.0	6.2	-	-	-0.3	-11.1	-0.9	-	-	0.3	-17.7	-0.4	-	-		

8. Other investment by sector

	Total		Eurosystem		General government		MFIs (excluding Eurosystem)						Other sectors			
	Assets	Liabilities	Assets	Liabilities	Assets	Liabilities	Total		Long-term		Short-term		Assets	Liabilities		
							Assets	Liabilities	Assets	Liabilities	Assets	Liabilities				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
2001	-268.2	261.6	0.6	4.4	3.0	-	-0.4	-229.1	232.4	-46.9	22.7	-182.3	209.7	-42.6	-	25.2
2002	-230.4	67.8	-1.2	19.3	0.1	-	-8.2	-166.0	27.8	-32.2	51.7	-133.8	-23.9	-63.4	-	28.8
2003	-236.5	164.9	-0.8	12.0	-1.3	-	-3.6	-152.8	133.8	-55.6	56.9	-97.2	76.9	-81.6	-	22.6
2003 Q2	-132.2	34.6	0.2	4.9	-2.0	-	3.9	-103.2	26.9	-11.5	11.8	-91.7	15.1	-27.2	-	-1.1
Q3	92.0	-11.9	0.3	5.8	-0.3	-	5.3	87.6	-7.1	-12.5	16.4	100.2	-23.4	4.4	-	-16.0
Q4	-73.2	59.3	-0.7	-0.6	2.7	-	-4.6	-71.5	53.8	-16.6	18.2	-54.8	35.6	-3.7	-	10.7
2004 Q1	-180.8	174.8	-0.6	-1.2	-0.3	-0.2	-6.4	-158.9	158.9	-20.3	3.0	-138.6	155.9	-20.9	-18.5	23.4
Q2	-22.9	20.9	0.4	1.9	-4.2	-3.9	1.8	-8.7	24.3	-8.2	2.9	-0.6	21.4	-10.4	7.0	-7.2
2003 July	41.3	-2.7	0.1	2.6	-2.5	-	2.1	42.4	2.6	-4.6	8.3	47.0	-5.7	1.3	-	-9.9
Aug.	79.8	-29.8	0.3	1.5	0.5	-	0.5	73.4	-30.2	-2.0	2.7	75.4	-33.0	5.6	-	-1.6
Sep.	-29.1	20.6	-0.1	1.8	1.7	-	2.7	-28.1	20.6	-5.9	5.4	-22.2	15.2	-2.5	-	-4.4
Oct.	-51.4	24.1	-0.2	0.9	1.1	-	-2.0	-40.7	25.7	-5.8	-2.0	-34.9	27.8	-11.6	-	-0.5
Nov.	-35.7	35.5	0.4	-2.8	1.1	-	1.5	-34.7	27.9	-6.0	10.0	-28.7	17.9	-2.4	-	8.9
Dec.	13.9	-0.3	-0.9	1.3	0.5	-	-4.0	3.9	0.2	-4.8	10.2	8.8	-10.0	10.3	-	2.3
2004 Jan.	-71.2	68.5	-0.4	2.6	-1.5	-1.5	-4.5	-63.0	76.9	-4.8	5.3	-58.2	71.6	-6.2	-4.8	-6.4
Feb.	-29.3	12.1	-0.3	-4.3	1.8	1.6	-0.3	-25.1	17.0	-8.7	0.0	-16.4	17.0	-5.7	-5.3	-0.3
Mar.	-80.3	94.2	0.0	0.5	-0.5	-0.3	-1.5	-70.8	65.1	-6.8	-2.3	-64.0	67.4	-9.0	-8.5	30.2
Apr.	-55.5	55.6	0.6	0.6	-1.0	-0.8	-0.2	-53.1	55.3	-8.3	-2.1	-44.9	57.4	-1.8	5.4	-0.1
May	13.3	6.0	-0.1	0.0	0.2	0.3	0.5	16.4	10.8	1.9	2.8	14.5	7.9	-3.1	3.9	-5.2
June	19.2	-40.8	0.0	1.4	-3.4	-3.3	1.6	28.0	-41.7	-1.8	2.2	29.9	-43.9	-5.5	-2.4	-1.9
July	56.8	-29.6	-0.3	1.8	-0.4	-0.6	-0.4	47.3	-12.2	6.9	-6.5	40.4	-5.7	10.2	4.7	-18.7

Source: ECB.



## 7.1 Balance of payments

(EUR billions; transactions)

### 9. Other investment by instrument

	Eurosystem				General government							
	Assets		Liabilities		Assets				Liabilities			
	Loans/currency and deposits	Other assets	Loans/currency and deposits	Other liabilities	Trade credits	Loans/currency and deposits			Other assets	Trade credits	Loans	Other liabilities
						Total	Loans	Currency and deposits				
1	2	3	4	5	6	7	8	9	10	11	12	
2001	0.6	0.0	4.5	0.0	-0.1	4.4	-	-	-1.3	0.0	-0.5	0.1
2002	-1.2	0.0	19.3	0.0	1.5	-0.4	-	-	-1.0	0.0	-8.0	-0.2
2003	-0.8	0.0	12.1	0.0	-0.1	-0.4	-	-	-0.9	0.0	-3.9	0.3
2003 Q1	-0.6	0.0	2.0	0.0	0.0	-1.2	-	-	-0.5	0.0	-8.2	-0.1
Q2	0.2	0.0	4.9	0.0	0.0	-1.7	-	-	-0.3	0.0	3.6	0.3
Q3	0.3	0.0	5.8	0.0	0.0	-0.1	-	-	-0.2	0.0	4.8	0.5
Q4	-0.7	0.0	-0.6	0.0	0.0	2.7	-	-	0.1	0.0	-4.1	-0.4
2004 Q1	-0.6	0.0	-1.3	0.0	0.0	0.5	0.7	-0.2	-0.8	0.0	-6.1	-0.3

	MFIs (excluding Eurosystem)				Other sectors							
	Assets		Liabilities		Assets				Liabilities			
	Loans/currency and deposits	Other assets	Loans/currency and deposits	Other liabilities	Trade credits	Loans/currency and deposits			Other assets	Trade credits	Loans	Other liabilities
						Total	Loans	Currency and deposits				
13	14	15	16	17	18	19	20	21	22	23	24	
2001	-215.1	-14.0	222.2	10.2	-3.5	-30.2	-	-	-8.9	1.3	18.7	5.2
2002	-162.2	-3.8	30.6	-2.8	-3.5	-58.4	-	-	-1.5	-3.0	25.9	5.9
2003	-150.7	-2.1	136.5	-2.7	-4.8	-63.8	-	-	-13.0	7.9	13.7	1.0
2003 Q1	-63.8	-1.9	59.7	0.5	-1.3	-47.9	-	-	-5.8	5.1	22.7	1.2
Q2	-103.9	0.7	28.5	-1.6	-1.1	-18.5	-	-	-7.5	-0.2	-7.2	6.4
Q3	87.9	-0.2	-5.7	-1.3	-1.3	4.7	-	-	0.9	0.9	-11.5	-5.4
Q4	-70.9	-0.6	54.0	-0.2	-1.1	-2.1	-	-	-0.5	2.1	9.7	-1.1
2004 Q1	-156.4	-2.6	157.4	1.6	-2.8	-16.3	2.2	-18.5	-1.7	4.9	18.2	0.4

### 10. Reserve assets

	Total	Monetary gold	Special drawing rights	Reserve position in the IMF	Foreign exchange						Other claims	
					Total	Currency and deposits		Securities				Financial derivatives
						With monetary authorities and the BIS	With banks	Equity	Bonds and notes	Money market instruments		
1	2	3	4	5	6	7	8	9	10	11	12	
2001	17.8	0.6	-1.0	-4.2	22.5	10.0	-5.3	-1.1	20.4	-1.6	0.0	0.0
2002	-2.3	0.7	0.2	-2.0	-1.2	-2.3	-15.3	0.0	8.1	8.5	-0.2	0.0
2003	29.8	1.7	0.0	-1.6	29.7	-1.8	1.6	0.0	22.6	7.3	0.1	0.0
2003 Q1	11.9	0.5	0.0	-0.2	11.5	0.8	-0.6	0.0	9.6	1.7	0.0	0.0
Q2	2.3	0.5	0.0	-2.6	4.4	-0.5	0.0	-0.1	4.8	0.2	0.0	0.0
Q3	2.0	0.1	0.0	-0.7	2.6	-1.1	4.1	0.0	-4.7	4.3	0.0	0.0
Q4	13.6	0.6	0.0	1.8	11.1	-1.0	-1.9	0.0	13.0	1.1	0.0	0.0
2004 Q1	9.4	-0.1	-0.1	0.7	8.8	0.8	1.8	0.5	8.1	-2.4	0.0	0.0

Source: ECB.

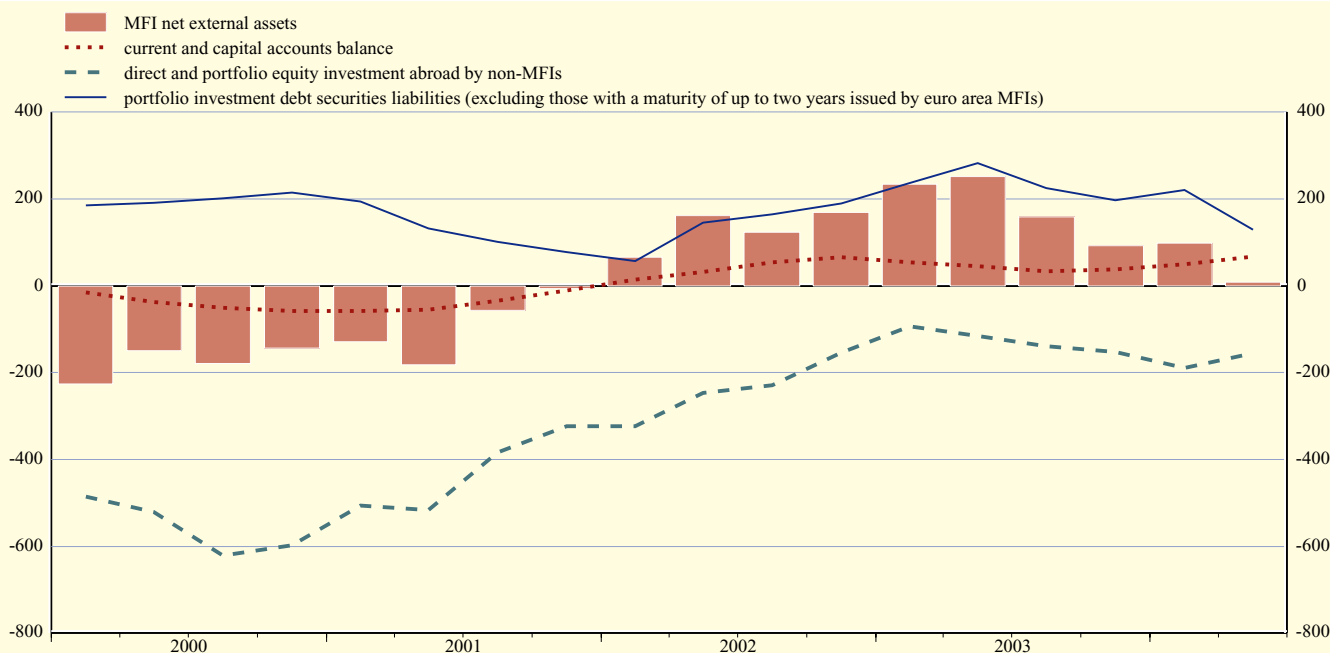
## 7.2 Monetary presentation of the balance of payments

(EUR billions; transactions)

	B.o.p. items balancing transactions in the external counterpart of M3										Memo: Transactions in the external counterpart of M3	
	Current and capital accounts balance	Direct investment		Portfolio investment			Other investment		Financial derivatives	Errors and omissions		Total of columns 1 to 10
		By resident units abroad (non-MFIs)	By non- resident units in the euro area	Assets Non-MFIs	Liabilities		Assets Non-MFIs	Liabilities Non-MFIs				
					Equity <sup>1)</sup>	Debt instruments <sup>2)</sup>						
1	2	3	4	5	6	7	8	9	10	11	12	
2001	-10.1	-296.8	203.2	-175.6	172.3	78.5	-39.7	24.7	-0.9	44.3	-0.1	-6.9
2002	65.4	-136.4	146.2	-121.5	52.0	190.3	-63.3	20.6	-10.8	0.4	143.0	168.5
2003	38.3	-122.3	105.5	-180.7	108.7	196.7	-83.0	19.0	-13.1	12.2	81.3	93.3
2003 Q2	-5.0	-34.9	32.5	-81.5	29.6	144.9	-29.2	2.8	-1.4	37.0	94.8	95.9
Q3	14.3	-30.8	13.5	-46.3	27.5	-12.9	4.1	-10.7	-4.6	-13.6	-59.6	-56.5
Q4	24.7	-29.4	17.1	-40.1	42.1	20.4	-1.0	6.1	-4.1	-21.2	14.6	20.3
2004 Q1	16.2	-19.1	-2.7	-50.1	3.6	68.0	-21.2	17.1	6.2	-2.2	15.9	38.7
Q2	13.0	-17.7	8.5	-27.4	2.1	53.5	-14.6	-5.4	-1.5	1.9	12.3	5.4
2003 July	3.6	-8.5	5.9	-20.1	9.7	-14.6	-1.2	-7.8	-2.4	-4.0	-39.3	-38.5
Aug.	4.8	-4.3	-0.8	-14.7	-1.1	-11.7	6.1	-1.1	-2.6	-10.7	-36.0	-31.9
Sep.	5.9	-18.1	8.3	-11.5	19.0	13.5	-0.8	-1.7	0.4	1.0	15.8	14.0
Oct.	9.2	-13.1	1.6	-22.7	17.4	40.3	-10.5	-2.5	1.6	-9.1	12.1	11.5
Nov.	4.4	1.7	3.2	-10.8	11.3	10.4	-1.4	10.4	0.6	-17.6	12.2	18.3
Dec.	11.1	-18.0	12.3	-6.6	13.5	-30.2	10.8	-1.8	-6.3	5.5	-9.6	-9.5
2004 Jan.	-2.8	-9.8	0.2	-14.9	-6.9	35.9	-7.8	-10.9	2.9	22.5	8.3	22.0
Feb.	7.3	-4.3	13.4	-10.2	18.1	12.4	-3.9	-0.6	0.9	-24.0	9.1	8.6
Mar.	11.7	-5.0	-16.3	-25.0	-7.5	19.7	-9.5	28.6	2.4	-0.7	-1.6	8.1
Apr.	1.0	-7.6	4.9	-10.4	-15.7	32.6	-2.9	-0.3	0.0	7.5	9.2	6.2
May	5.7	-1.2	-0.6	-10.1	3.1	-6.8	-2.9	-4.7	-1.6	1.4	-17.6	-19.2
June	6.3	-9.0	4.2	-6.9	14.7	27.7	-8.9	-0.4	0.1	-7.1	20.8	18.4
July	4.3	-11.5	3.1	4.9	4.7	-6.0	9.8	-19.1	-0.9	7.5	-3.3	-0.8
	<i>12-month cumulated transactions</i>											
2004 July	68.8	-100.1	33.5	-139.0	70.3	137.7	-21.7	-4.1	-2.5	-23.7	19.3	45.6

## C31 Main b.o.p. transactions underlying the developments in MFI net external assets

(EUR billions; 12-month cumulated transactions)



Source: ECB.

1) Excluding money market fund shares/units.

2) Excluding debt securities with a maturity of up to two years issued by euro area MFIs.

## 7.3 Trade in goods

(seasonally adjusted, unless otherwise indicated)

### 1. Values, volumes and unit values by product group

	Total (n.s.a.)		Exports (f.o.b.)					Imports (c.i.f.)					
	Exports	Imports	Total			Memo: Manufactures	Total			Memo:			
			Intermediate	Capital	Consumption		Intermediate	Capital	Consumption	Manufactures	Oil		
	1	2	3	4	5	6	7	8	9	10	11	12	13
Values (EUR billions; annual percentage changes for columns 1 and 2)													
2000	21.7	29.5	1,002.1	492.4	216.4	262.8	875.3	1,023.8	591.0	182.8	220.9	743.6	122.7
2001	6.1	-0.7	1,062.3	505.8	234.8	289.1	931.9	1,014.3	579.0	178.8	228.3	740.5	107.7
2002	2.0	-3.0	1,083.6	512.5	227.8	309.3	948.7	984.4	559.2	163.3	234.1	717.0	105.2
2003	-2.5	0.0	1,055.5	497.5	220.9	298.4	918.0	983.2	549.9	161.8	239.3	709.0	108.1
2003 Q1	-1.0	3.8	265.3	125.7	54.9	75.5	230.6	249.6	142.7	41.3	58.7	178.1	29.6
Q2	-5.9	-2.9	257.2	122.3	52.6	72.6	224.7	242.8	134.7	39.8	59.8	177.1	25.1
Q3	-2.5	-1.7	264.3	124.9	56.0	74.7	231.2	242.3	134.8	39.0	59.8	174.8	26.8
Q4	-0.7	0.9	268.6	124.7	57.4	75.7	231.4	248.5	137.7	41.7	61.0	179.1	26.7
2004 Q1	4.7	-0.3	276.7	130.1	58.2	75.3	241.2	249.5	136.6	40.9	61.8	181.3	26.1
Q2	11.7	8.6	285.9	134.1	58.9	78.6	246.0	261.1	143.8	43.2	61.4	184.7	29.3
2004 Feb.	3.1	0.8	92.9	43.4	19.9	25.1	80.8	83.8	46.1	14.2	20.6	60.8	8.0
Mar.	13.2	5.0	93.6	44.3	19.5	25.8	81.2	84.0	46.0	13.5	20.8	60.3	9.6
Apr.	10.3	5.4	95.7	45.1	20.0	26.1	83.6	86.6	47.7	14.9	20.7	62.0	8.9
May	8.8	5.5	94.6	44.1	19.4	25.9	80.7	85.9	47.2	14.2	20.2	61.1	9.6
June	15.9	15.2	95.6	44.9	19.5	26.6	81.8	88.6	48.9	14.2	20.5	61.6	10.7
July	6.9	8.5	95.4	45.1	20.0	26.2	83.1	89.7	49.6	13.8	21.1	63.6	10.6
Volume indices (2000 = 100; annual percentage changes for columns 1 and 2)													
2000	12.4	6.0	100.0	100.0	100.0	100.0	100.0	99.9	99.9	100.0	100.0	100.0	99.9
2001	5.2	-0.8	105.0	102.1	108.3	108.0	105.5	98.9	99.2	96.3	100.6	98.0	99.3
2002	2.9	-0.5	108.0	105.1	105.7	115.3	108.3	98.5	98.9	90.2	104.4	96.7	100.6
2003	0.7	3.4	108.7	105.1	106.7	114.7	108.6	101.6	99.9	95.1	110.0	99.6	103.2
2003 Q1	1.9	4.1	107.9	104.6	104.3	114.9	107.5	100.3	99.3	95.6	106.9	98.5	96.4
Q2	-2.2	2.4	106.1	103.4	102.1	111.8	106.3	101.6	99.8	94.0	110.0	99.7	103.5
Q3	0.6	1.8	109.4	106.1	108.8	115.2	109.9	100.9	99.3	92.1	110.2	98.7	108.3
Q4	2.7	5.0	111.6	106.2	111.7	116.8	110.6	103.6	101.2	98.7	113.1	101.6	104.6
2004 Q1	7.8	4.6	115.8	111.5	114.6	116.9	115.8	105.2	100.6	99.2	115.8	103.7	100.7
Q2	11.6	5.4	117.9	113.4	115.3	119.8	116.8	106.1	100.5	102.9	114.1	103.8	101.2
2004 Feb.	6.8	6.4	117.2	112.0	117.3	116.9	116.8	106.5	102.1	103.5	116.0	104.7	93.3
Mar.	15.9	8.7	117.3	113.4	115.9	120.1	116.7	105.7	100.4	98.1	116.7	103.1	109.2
Apr.	11.3	6.0	118.9	115.0	117.4	119.9	119.4	107.5	102.2	107.0	116.7	105.3	97.6
May	8.8	1.2	117.1	111.9	114.1	118.1	115.0	105.0	98.8	101.5	112.8	103.0	101.5
June	14.6	9.2	117.6	113.1	114.3	121.4	116.1	105.9	100.4	100.1	112.9	103.2	104.6
July	.	.	.	.	.	.	.	.	.	.	.	.	.
Unit value indices (2000 = 100; annual percentage changes for columns 1 and 2)													
2000	8.3	22.0	99.9	99.9	99.9	100.0	99.9	100.0	99.9	99.9	100.0	100.0	99.9
2001	1.0	0.2	100.9	100.7	100.2	101.8	100.9	100.2	98.7	101.5	102.7	101.6	88.6
2002	-0.9	-2.5	100.1	99.1	99.6	102.1	100.0	97.7	95.7	99.0	101.6	99.8	85.2
2003	-3.2	-3.2	96.9	96.2	95.7	99.0	96.6	94.5	93.2	93.0	98.5	95.7	85.7
2003 Q1	-2.8	-0.3	98.2	97.6	97.4	100.0	98.0	97.2	97.2	94.5	99.4	97.3	100.1
Q2	-3.7	-5.2	96.8	96.1	95.3	98.8	96.6	93.3	91.4	92.6	98.5	95.5	78.9
Q3	-3.1	-3.4	96.4	95.6	95.2	98.7	96.1	93.8	91.9	92.6	98.3	95.2	80.5
Q4	-3.3	-3.9	96.1	95.4	95.0	98.6	95.6	93.7	92.1	92.5	97.8	94.9	83.3
2004 Q1	-2.9	-4.7	95.4	94.8	93.9	98.1	95.2	92.7	91.9	90.2	96.6	94.0	84.6
Q2	0.1	3.0	96.8	96.1	94.5	99.9	96.2	96.2	96.9	92.0	97.5	95.7	94.0
2004 Feb.	-3.4	-5.2	94.9	94.4	94.1	97.8	94.8	92.3	91.6	89.9	96.4	93.7	83.9
Mar.	-2.3	-3.4	95.6	95.2	93.1	98.1	95.4	93.1	92.9	90.3	96.8	94.4	86.1
Apr.	-0.9	-0.6	96.4	95.6	94.5	99.3	96.0	94.5	94.7	91.6	96.5	95.0	89.2
May	0.0	4.2	96.8	96.1	94.5	100.0	96.2	96.0	96.9	91.6	97.5	95.7	92.6
June	1.1	5.5	97.3	96.7	94.5	100.2	96.6	98.1	98.9	92.8	98.5	96.3	100.3
July	.	.	.	.	.	.	.	.	.	.	.	.	.

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

## 7.3 Trade in goods

(EUR billions, unless otherwise indicated; seasonally adjusted)

## 2. Geographical breakdown

	Total	Other EU Member States				Switzerland	United States	Japan	Asia excl. Japan	Africa	Latin America	Other countries
		United Kingdom	Sweden	Denmark	Others							
	1	2	3	4	5	6	7	8	9	10	11	12
<b>Exports (f.o.b.)</b>												
2000	1,002.1	189.1	39.4	23.5	97.2	63.9	172.5	34.4	153.6	56.4	47.0	125.1
2001	1,062.3	202.3	37.0	24.4	105.9	66.3	180.2	34.5	165.4	60.4	49.8	136.0
2002	1,083.6	205.7	37.1	25.3	112.1	64.0	184.1	33.0	170.2	59.5	43.4	149.2
2003	1,055.5	193.1	38.6	24.8	117.4	63.2	166.2	31.2	170.4	59.4	37.8	153.4
2003 Q1	265.3	49.1	9.6	6.3	28.4	16.5	43.1	7.8	42.7	14.7	10.4	36.8
Q2	257.2	47.0	9.5	6.1	29.2	15.6	40.3	7.6	41.4	14.5	9.5	36.6
Q3	264.3	48.0	9.7	6.3	30.2	15.3	41.4	7.8	43.3	15.3	9.1	38.1
Q4	268.6	49.1	9.8	6.1	29.6	15.8	41.4	8.1	43.0	14.9	8.9	41.9
2004 Q1	276.7	49.1	10.0	6.1	31.2	15.5	42.5	8.4	46.4	15.1	9.5	42.8
Q2	285.9	50.1	10.3	6.2	31.3	16.2	44.0	8.1	47.1	16.1	9.8	46.7
2004 Feb.	92.9	16.9	3.3	2.0	10.4	5.1	14.3	2.8	15.6	4.9	3.1	14.5
Mar.	93.6	16.1	3.4	2.0	10.5	5.2	14.5	2.8	15.3	5.0	3.1	15.6
Apr.	95.7	16.8	3.4	2.1	11.1	5.5	14.8	2.7	15.8	5.5	3.2	14.7
May	94.6	16.5	3.5	2.0	10.5	5.3	14.5	2.6	15.5	4.9	3.4	16.0
June	95.6	16.8	3.4	2.1	9.7	5.4	14.7	2.8	15.8	5.7	3.2	16.0
July	95.4	.	.	.	.	.	.	.	.	.	.	.
<i>% share of total exports</i>												
2003	100.0	18.3	3.7	2.4	11.1	6.0	15.7	3.0	16.1	5.6	3.6	14.5
<b>Imports (c.i.f.)</b>												
2000	1,023.8	159.5	39.1	22.3	78.8	50.4	142.0	67.3	217.1	73.8	40.3	133.2
2001	1,014.3	154.5	35.6	22.0	88.9	52.9	138.7	58.5	208.2	74.0	40.9	140.1
2002	984.4	149.6	35.6	22.9	93.5	52.1	125.6	52.7	204.7	67.8	39.4	140.4
2003	983.2	137.8	36.7	23.0	101.9	50.4	110.3	51.9	215.5	68.5	39.5	147.6
2003 Q1	249.6	35.8	9.2	5.9	24.6	13.1	28.4	13.3	53.4	18.4	9.7	37.7
Q2	242.8	34.3	9.1	5.8	25.3	12.5	28.1	13.2	52.9	16.9	9.7	35.1
Q3	242.3	33.7	9.1	5.6	25.1	12.4	27.2	12.6	53.0	16.7	9.7	37.3
Q4	248.5	34.0	9.3	5.7	26.9	12.4	26.6	12.8	55.2	16.5	10.5	37.5
2004 Q1	249.5	33.4	9.3	5.9	27.0	12.7	26.1	13.3	55.2	16.4	10.6	39.6
Q2	261.1	34.1	9.6	5.7	26.1	13.2	29.7	12.6	62.5	16.9	10.6	40.0
2004 Feb.	83.8	11.3	3.2	2.0	9.1	4.3	8.8	4.4	18.6	5.2	3.5	13.5
Mar.	84.0	10.9	3.1	2.1	9.0	4.2	8.6	4.5	18.9	5.7	3.6	13.3
Apr.	86.6	11.2	3.1	1.9	9.7	4.4	10.2	4.3	20.3	5.2	3.7	12.7
May	85.9	11.3	3.2	1.9	8.5	4.4	9.8	4.2	20.6	5.6	3.4	13.1
June	88.6	11.6	3.3	1.9	7.9	4.4	9.7	4.2	21.6	6.2	3.5	14.3
July	89.7	.	.	.	.	.	.	.	.	.	.	.
<i>% share of total imports</i>												
2003	100.0	14.0	3.7	2.3	10.4	5.1	11.2	5.3	21.9	7.0	4.0	15.0
<b>Balance</b>												
2000	-21.7	29.6	0.3	1.2	18.4	13.5	30.4	-32.9	-63.5	-17.3	6.7	-8.1
2001	48.0	47.8	1.4	2.3	17.0	13.4	41.5	-24.0	-42.8	-13.5	8.9	-4.1
2002	99.2	56.0	1.5	2.4	18.6	11.9	58.5	-19.6	-34.5	-8.3	4.0	8.7
2003	72.3	55.4	1.9	1.8	15.5	12.8	55.9	-20.7	-45.1	-9.1	-1.7	5.8
2003 Q1	15.7	13.3	0.4	0.4	3.8	3.4	14.7	-5.6	-10.7	-3.7	0.6	-1.0
Q2	14.5	12.7	0.4	0.4	3.9	3.0	12.2	-5.6	-11.5	-2.4	-0.2	1.5
Q3	22.0	14.3	0.5	0.7	5.1	2.9	14.2	-4.8	-9.8	-1.4	-0.6	0.8
Q4	20.1	15.0	0.5	0.4	2.7	3.4	14.8	-4.7	-13.3	-1.6	-1.6	4.4
2004 Q1	27.1	15.6	0.7	0.2	4.2	2.8	16.3	-4.9	-8.7	-1.3	-1.0	3.2
Q2	24.8	16.0	0.6	0.5	5.2	3.0	14.2	-4.6	-15.4	-0.8	-0.8	6.7
2004 Feb.	9.1	5.6	0.1	0.0	1.3	0.8	5.6	-1.6	-3.0	-0.4	-0.4	1.0
Mar.	9.7	5.2	0.2	-0.1	1.6	0.9	5.9	-1.7	-3.6	-0.7	-0.5	2.4
Apr.	9.1	5.6	0.3	0.2	1.4	1.2	4.6	-1.6	-4.5	0.4	-0.4	2.1
May	8.7	5.1	0.2	0.1	2.0	0.9	4.7	-1.6	-5.1	-0.7	0.0	2.9
June	7.0	5.3	0.1	0.2	1.8	0.9	4.9	-1.4	-5.8	-0.5	-0.4	1.8
July	5.7	.	.	.	.	.	.	.	.	.	.	.

Sources: Eurostat and ECB calculations based on Eurostat data (balance and columns 5 and 12).

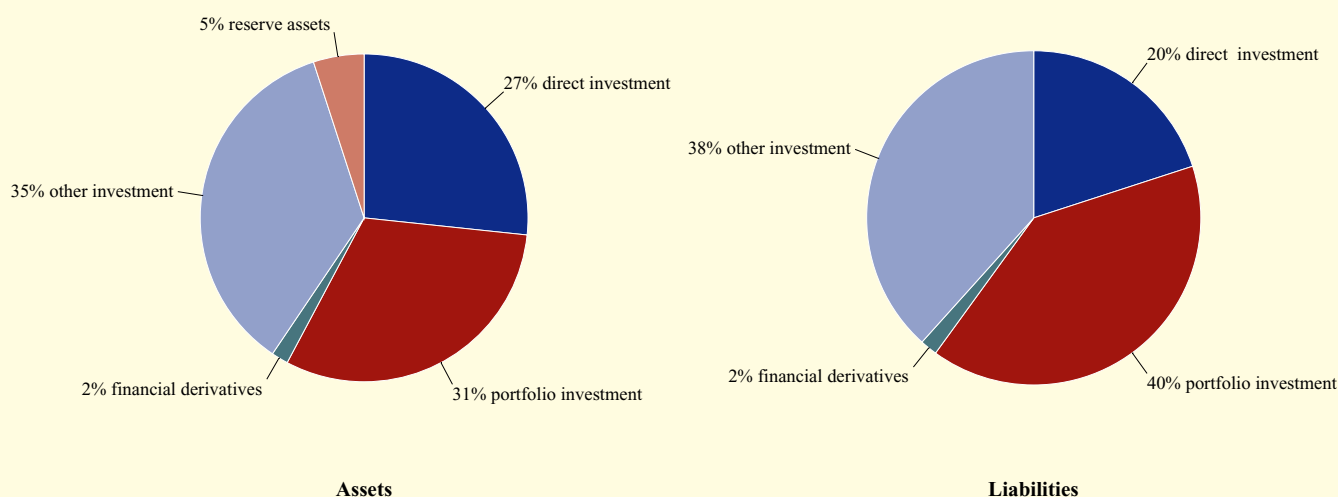
## 7.4 International investment position

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

### 1. Summary international investment position

	Total 1	Total as a % of GDP 2	Direct investment 3	Portfolio investment 4	Financial derivatives 5	Other investment 6	Reserve assets 7
Net international investment position							
1999	-318.5	-5.1	369.6	-892.8	16.0	-193.5	382.2
2000	-386.8	-5.9	452.7	-786.4	2.0	-446.3	391.2
2001	-189.6	-2.8	496.4	-691.4	1.5	-388.8	392.7
2002	-289.6	-4.1	425.1	-756.3	-8.1	-316.4	366.1
Outstanding assets							
1999	5,796.6	92.5	1,174.5	2,058.0	111.1	2,070.8	382.2
2000	6,751.2	102.7	1,626.7	2,351.1	105.8	2,276.4	391.2
2001	7,537.2	110.1	1,897.0	2,521.3	108.4	2,617.9	392.7
2002	7,277.9	102.9	1,937.5	2,270.4	122.6	2,581.3	366.1
Outstanding liabilities							
1999	6,115.1	97.6	804.9	2,950.8	95.1	2,264.3	-
2000	7,138.0	108.5	1,174.0	3,137.5	103.7	2,722.7	-
2001	7,726.8	112.9	1,400.6	3,212.7	106.9	3,006.7	-
2002	7,567.5	106.9	1,512.5	3,026.7	130.7	2,897.6	-

### C32 International investment position by item at end-2002



Source: ECB.

## 7.4 International investment position

(EUR billions; end-of-period outstanding amounts)

## 2. Direct investment

	By resident units abroad						By non-resident units in the euro area					
	Equity capital and reinvested earnings			Other capital (mostly inter-company loans)			Equity capital and reinvested earnings			Other capital (mostly inter-company loans)		
	Total	MFIs excluding Eurosystem	Non-MFIs	Total	MFIs excluding Eurosystem	Non-MFIs	Total	MFIs excluding Eurosystem	Non-MFIs	Total	MFIs excluding Eurosystem	Non-MFIs
1	2	3	4	5	6	7	8	9	10	11	12	
1999	938.7	85.7	853.0	235.8	1.8	234.0	606.3	24.3	582.0	198.6	1.7	196.9
2000	1,273.4	115.2	1,158.2	353.3	1.7	351.6	869.2	32.1	837.1	304.8	1.8	303.0
2001	1,513.2	129.3	1,383.9	383.8	1.4	382.4	1,043.3	42.3	1,001.1	357.3	2.5	354.8
2002	1,554.4	137.5	1,416.9	383.1	1.4	381.7	1,107.7	43.1	1,064.6	404.8	2.7	402.1

## 3. Portfolio investment by instrument

	Equity		Debt instruments					
	Assets	Liabilities	Assets			Liabilities		
			Total	Bonds and notes	Money market instruments	Total	Bonds and notes	Money market instruments
1	2	3	4	5	6	7	8	
1999	1,013.7	1,698.9	1,044.4	937.1	107.2	1,251.9	1,146.5	105.4
2000	1,183.7	1,606.7	1,167.4	1,045.3	122.2	1,530.8	1,365.5	165.4
2001	1,122.4	1,582.0	1,399.0	1,222.0	176.9	1,630.7	1,460.8	169.9
2002	862.2	1,328.3	1,408.3	1,168.7	239.6	1,698.5	1,518.5	179.9

## 4. Portfolio investment assets by instrument and sector of holder

	Equity					Debt instruments									
	Euro-system	MFIs excluding Eurosystem	Non-MFIs			Euro-system	MFIs excluding Eurosystem	Bonds and notes			Money market instruments				
			Total	General gov.	Other sectors			Total	General gov.	Other sectors	Total	General gov.	Other sectors		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
1999	0.4	25.9	987.3	4.1	983.2	4.5	257.2	675.4	6.2	669.2	2.6	68.5	36.1	0.2	35.9
2000	0.9	42.7	1,140.1	5.7	1,134.4	3.4	328.5	713.4	5.7	707.7	0.5	85.6	36.1	0.1	35.9
2001	1.3	38.1	1,082.9	6.7	1,076.3	2.2	418.7	801.1	8.3	792.8	2.8	131.9	42.2	0.2	42.0
2002	1.4	38.0	822.8	8.4	814.4	5.0	379.0	784.8	8.8	776.0	1.2	190.1	48.2	1.1	47.1

## 5. Other investment

	Eurosystem						General government							
	Total		Loans/currency and deposits		Other assets/liabilities		Total		Trade credits		Loans/currency and deposits		Other assets/liabilities	
	Assets	Liabilities	Assets	Liabilities	Assets	Liabilities	Assets	Liabilities	Assets	Liabilities	Assets	Liabilities	Assets	Liabilities
1	2	3	4	5	6	7	8	9	10	11	12	13	14	
1999	3.1	37.0	3.0	36.6	0.1	0.3	125.5	57.3	2.5	0.1	72.4	45.4	50.6	11.8
2000	3.0	41.8	2.9	41.4	0.1	0.3	133.9	59.5	2.8	0.2	77.5	47.2	53.5	12.1
2001	3.1	40.7	3.0	40.5	0.1	0.2	127.3	61.6	3.1	0.2	68.4	49.1	55.8	12.4
2002	3.4	58.1	3.4	57.9	0.1	0.2	120.6	61.0	1.3	0.1	64.9	45.8	54.3	15.1

	MFIs (excluding Eurosystem)						Other sectors							
	Total		Loans/currency and deposits		Other assets/liabilities		Total		Trade credits		Loans/currency and deposits		Other assets/liabilities	
	Assets	Liabilities	Assets	Liabilities	Assets	Liabilities	Assets	Liabilities	Assets	Liabilities	Assets	Liabilities	Assets	Liabilities
15	16	17	18	19	20	21	22	23	24	25	26	27	28	
1999	1,317.7	1,823.5	1,291.8	1,798.1	25.9	25.5	624.5	346.5	158.9	91.8	396.3	224.6	69.3	30.1
2000	1,458.5	2,169.0	1,421.4	2,127.1	37.1	42.0	681.1	452.4	173.9	110.9	422.9	311.8	84.2	29.6
2001	1,715.8	2,413.1	1,668.3	2,364.1	47.5	49.0	771.7	491.3	176.6	109.5	507.4	346.8	87.6	35.1
2002	1,717.0	2,274.6	1,660.1	2,227.2	56.9	47.4	740.3	503.9	176.5	105.2	485.4	354.6	78.4	44.0

Source: ECB.

## 7.5 International reserves

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

	Reserve assets													Memo		
	Total	Monetary gold		Special drawing rights	Reserve position in the IMF	Foreign exchange							Other claims	Assets	Liabilities	
		In EUR billions	In fine troy ounces (millions)			Total	Currency and deposits		Securities			Financial derivatives		Claims on euro area residents in foreign currency	Predetermined short-term net drains in foreign currency	
							With monetary authorities and the BIS	With banks	Total	Equity	Bonds and notes					Money market instruments
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Eurosysteem																
2000 Dec.	391.2	119.2	404.157	4.3	21.2	246.5	16.8	20.5	208.5	0.0	155.3	53.2	0.7	0.0	16.3	-21.7
2001 Dec.	392.7	126.1	401.876	5.5	25.3	235.8	8.0	25.9	201.5	1.2	144.4	55.9	0.4	0.0	24.7	-28.5
2002 Dec.	366.1	130.4	399.022	4.8	25.0	205.8	10.3	35.3	159.8	1.0	117.1	41.7	0.4	0.0	22.4	-26.3
2003 Aug.	346.8	136.0	395.632	4.7	26.6	179.5	10.3	31.5	137.3	-	-	-	0.4	0.0	18.1	-27.6
Sep.	332.9	131.7	395.444	4.6	26.1	170.5	9.5	30.3	130.4	-	-	-	0.3	0.0	17.1	-25.5
Oct.	332.4	131.4	395.284	4.6	26.2	170.2	9.4	31.5	128.6	-	-	-	0.8	0.0	17.8	-24.9
Nov.	321.9	131.0	394.294	4.6	25.4	160.9	11.2	26.9	121.8	-	-	-	1.0	0.0	15.8	-17.5
Dec.	306.5	130.0	393.543	4.4	23.3	148.9	10.0	30.4	107.8	-	-	-	0.7	0.0	20.3	-16.3
2004 Jan.	309.7	127.0	393.542	4.5	23.5	154.7	10.2	32.5	111.7	-	-	-	0.3	0.0	19.3	-17.1
Feb.	298.5	125.4	393.540	4.5	23.3	145.2	10.1	32.6	102.4	-	-	-	0.1	0.0	20.8	-10.9
Mar.	308.4	136.4	393.539	4.6	23.2	144.2	9.7	29.3	105.5	-	-	-	-0.2	0.0	20.4	-10.5
Apr.	303.9	128.0	393.536	4.7	23.7	147.5	10.5	26.5	110.8	-	-	-	-0.2	0.0	20.4	-12.7
May	298.9	126.5	392.415	4.7	23.3	144.4	10.6	25.8	108.0	-	-	-	0.1	0.0	18.8	-9.3
June	301.4	127.8	392.324	4.6	22.4	146.7	11.4	27.6	107.1	-	-	-	0.6	0.0	18.3	-10.2
July	301.3	127.5	392.221	4.6	22.1	147.1	9.8	27.1	110.2	-	-	-	0.1	0.0	19.6	-9.5
Aug.	301.7	131.9	392.222	4.6	21.7	143.4	8.3	30.2	104.7	-	-	-	0.2	0.0	20.5	-8.7
of which held by the European Central Bank																
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	-5.9
2002 Dec.	45.5	8.1	24.656	0.2	0.0	37.3	1.2	9.9	26.1	0.0	19.5	6.7	0.0	0.0	3.0	-5.2
2003 Aug.	42.7	8.5	24.656	0.2	0.0	34.0	0.9	5.7	27.4	-	-	-	0.0	0.0	2.7	-2.6
Sep.	40.7	8.2	24.656	0.2	0.0	32.3	0.9	4.5	26.9	-	-	-	0.0	0.0	2.4	-2.3
Oct.	40.4	8.2	24.656	0.2	0.0	32.0	1.0	4.7	26.3	-	-	-	0.0	0.0	2.7	-2.3
Nov.	39.6	8.2	24.656	0.2	0.0	31.2	1.0	5.2	25.0	-	-	-	0.0	0.0	2.6	-2.4
Dec.	36.9	8.1	24.656	0.2	0.0	28.6	1.4	5.0	22.2	-	-	-	0.0	0.0	2.8	-1.5
2004 Jan.	38.3	8.0	24.656	0.2	0.0	30.1	1.3	6.9	21.9	-	-	-	0.0	0.0	2.5	-2.0
Feb.	36.1	7.9	24.656	0.2	0.0	28.0	1.1	7.7	19.2	-	-	-	0.0	0.0	2.8	-0.4
Mar.	37.9	8.5	24.656	0.2	0.0	29.1	1.0	5.4	22.8	-	-	-	0.0	0.0	2.5	-0.4
Apr.	37.7	8.0	24.656	0.2	0.0	29.5	1.0	4.7	23.8	-	-	-	0.0	0.0	2.6	-0.5
May	37.4	7.9	24.656	0.2	0.0	29.2	1.4	5.5	22.3	-	-	-	0.0	0.0	2.4	-0.6
June	37.4	8.0	24.656	0.2	0.0	29.2	1.5	3.7	24.0	-	-	-	0.0	0.0	2.4	-0.5
July	38.0	8.0	24.656	0.2	0.0	29.8	1.4	4.6	23.9	-	-	-	0.0	0.0	2.5	-1.0
Aug.	37.5	8.3	24.656	0.2	0.0	29.0	1.2	5.9	21.9	-	-	-	0.0	0.0	3.2	-0.9

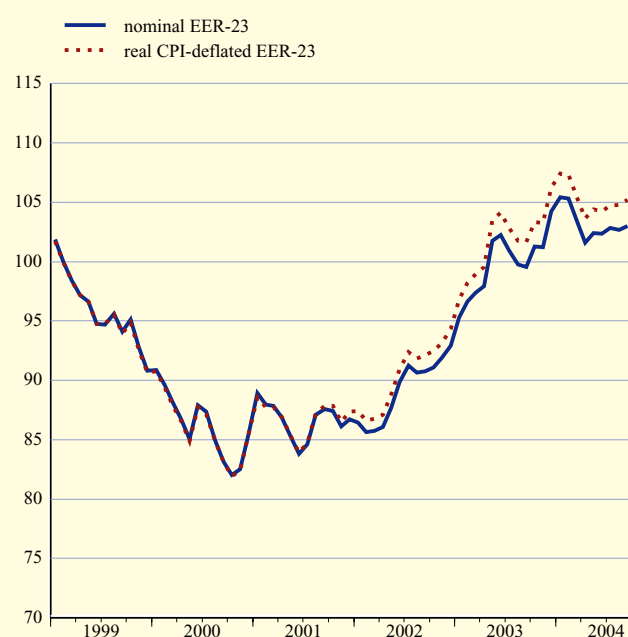
Source: ECB.

## EXCHANGE RATES

### 8.1 Effective exchange rates <sup>1)</sup> (period averages; index 1999 Q1=100)

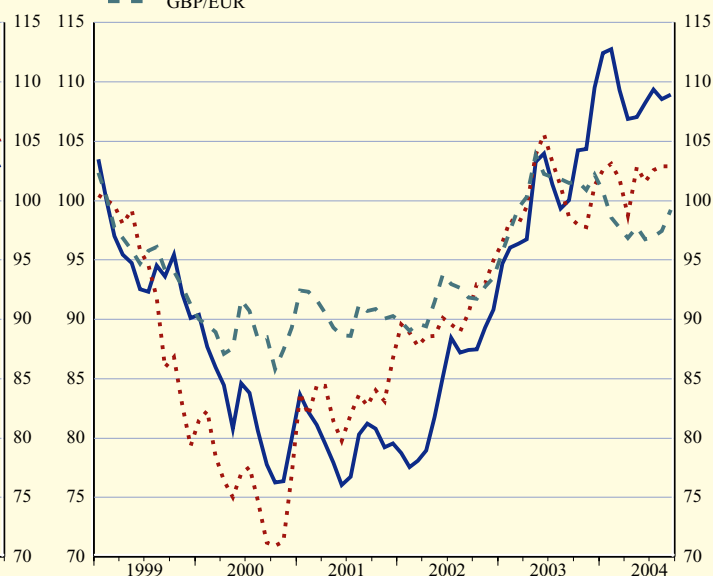
	EER-23						EER-42	
	Nominal	Real CPI	Real PPI	Real GDP deflator	Real ULCM	Real ULCT	Nominal	Real CPI
	1	2	3	4	5	6	7	8
2001	86.7	86.8	88.4	86.7	86.3	85.1	90.4	87.0
2002	89.2	90.3	91.9	90.2	88.5	88.2	94.8	90.9
2003	99.9	101.7	102.2	101.6	100.0	99.4	106.6	101.6
2003 Q3	100.1	102.1	102.2	101.9	100.7	100.2	106.4	101.5
Q4	102.2	104.3	104.1	104.2	102.6	101.4	109.1	103.9
2004 Q1	104.7	106.7	106.4	106.8	105.5	103.9	111.6	106.1
Q2	102.1	104.1	103.6	104.4	103.8	101.1	109.2	103.7
Q3	102.8	104.9	104.6	.	.	.	110.1	104.4
2003 Sep.	99.6	101.7	101.5	.	.	.	105.9	101.1
Oct.	101.3	103.3	103.1	.	.	.	108.0	102.9
Nov.	101.2	103.3	103.2	.	.	.	108.0	102.9
Dec.	104.2	106.2	105.9	.	.	.	111.2	105.9
2004 Jan.	105.4	107.4	107.0	.	.	.	112.5	106.9
Feb.	105.3	107.3	106.9	.	.	.	112.3	106.8
Mar.	103.4	105.4	105.2	.	.	.	110.2	104.7
Apr.	101.6	103.7	103.2	.	.	.	108.3	103.0
May	102.4	104.4	103.9	.	.	.	109.5	104.1
June	102.3	104.2	103.7	.	.	.	109.6	104.0
July	102.8	104.7	104.4	.	.	.	110.1	104.3
Aug.	102.7	104.8	104.5	.	.	.	109.9	104.4
Sep.	103.0	105.2	104.9	.	.	.	110.3	104.7
	<i>% change versus previous month</i>							
2004 Sep.	0.3	0.4	0.4	.	.	.	0.3	0.3
	<i>% change versus previous year</i>							
2004 Sep.	3.4	3.5	3.3	.	.	.	4.1	3.5

### C33 Effective exchange rates (monthly averages; index 1999 Q1=100)



### C34 Bilateral exchange rates (monthly averages; index 1999 Q1=100)

— USD/EUR  
 ..... JPY/EUR  
 - - - - - GBP/EUR



Source: ECB.

1) For the definition of the trading partner groups and other information, please refer to the General notes.



## 8.2 Bilateral exchange rates

(period averages; units of national currency per euro)

	US dollar	Pound sterling	Japanese yen	Swiss franc	Swedish krona	South Korean won	Hong Kong dollar	Danish krone	Singapore dollar	Canadian dollar	Norwegian krone	Australian dollar	Icelandic krona	New Zealand dollar	South African rand
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
2001	0.8956	0.62187	108.68	1.5105	9.2551	1,154.83	6.9855	7.4521	1.6039	1.3864	8.0484	1.7319	87.42	2.1300	7.6873
2002	0.9456	0.62883	118.06	1.4670	9.1611	1,175.50	7.3750	7.4305	1.6912	1.4838	7.5086	1.7376	86.18	2.0366	9.9072
2003	1.1312	0.69199	130.97	1.5212	9.1242	1,346.90	8.8079	7.4307	1.9703	1.5817	8.0033	1.7379	86.65	1.9438	8.5317
2003 Q3	1.1248	0.69888	132.14	1.5451	9.1631	1,321.05	8.7674	7.4309	1.9699	1.5533	8.2472	1.7089	88.40	1.9254	8.3505
2003 Q4	1.1890	0.69753	129.45	1.5537	9.0093	1,404.56	9.2219	7.4361	2.0507	1.5659	8.2227	1.6622	89.16	1.9032	8.0159
2004 Q1	1.2497	0.67987	133.97	1.5686	9.1843	1,464.18	9.7201	7.4495	2.1179	1.6482	8.6310	1.6337	87.22	1.8532	8.4768
2004 Q2	1.2046	0.66704	132.20	1.5374	9.1450	1,400.41	9.3925	7.4393	2.0518	1.6374	8.2634	1.6907	87.70	1.9180	7.9465
2004 Q3	1.2220	0.67216	134.38	1.5363	9.1581	1,411.03	9.5310	7.4367	2.0867	1.5998	8.3890	1.7226	87.48	1.8701	7.7869
2003 Sep.	1.1222	0.69693	128.94	1.5474	9.0682	1,306.88	8.7377	7.4273	1.9591	1.5330	8.1952	1.6967	88.81	1.9227	8.2141
2003 Oct.	1.1692	0.69763	128.12	1.5485	9.0105	1,364.70	9.0530	7.4301	2.0282	1.5489	8.2274	1.6867	89.17	1.9446	8.1540
2003 Nov.	1.1702	0.69278	127.84	1.5590	8.9939	1,388.09	9.0836	7.4370	2.0233	1.5361	8.1969	1.6337	88.60	1.8608	7.8806
2003 Dec.	1.2286	0.70196	132.43	1.5544	9.0228	1,463.90	9.5386	7.4419	2.1016	1.6131	8.2421	1.6626	89.68	1.8982	7.9934
2004 Jan.	1.2613	0.69215	134.13	1.5657	9.1368	1,492.23	9.7951	7.4481	2.1415	1.6346	8.5925	1.6374	87.69	1.8751	8.7788
2004 Feb.	1.2646	0.67690	134.78	1.5734	9.1763	1,474.74	9.8314	7.4511	2.1323	1.6817	8.7752	1.6260	86.72	1.8262	8.5555
2004 Mar.	1.2262	0.67124	133.13	1.5670	9.2346	1,429.40	9.5547	7.4493	2.0838	1.6314	8.5407	1.6370	87.23	1.8566	8.1326
2004 Apr.	1.1985	0.66533	129.08	1.5547	9.1653	1,381.58	9.3451	7.4436	2.0193	1.6068	8.2976	1.6142	87.59	1.8727	7.8890
2004 May	1.2007	0.67157	134.48	1.5400	9.1277	1,412.29	9.3618	7.4405	2.0541	1.6541	8.2074	1.7033	87.97	1.9484	8.1432
2004 June	1.2138	0.66428	132.86	1.5192	9.1430	1,406.18	9.4648	7.4342	2.0791	1.6492	8.2856	1.7483	87.55	1.9301	7.8110
2004 July	1.2266	0.66576	134.08	1.5270	9.1962	1,420.66	9.5672	7.4355	2.0995	1.6220	8.4751	1.7135	87.71	1.8961	7.5137
2004 Aug.	1.2176	0.66942	134.54	1.5387	9.1861	1,409.37	9.4968	7.4365	2.0886	1.6007	8.3315	1.7147	87.08	1.8604	7.8527
2004 Sep.	1.2218	0.68130	134.51	1.5431	9.0920	1,403.06	9.5290	7.4381	2.0719	1.5767	8.3604	1.7396	87.65	1.8538	7.9943
	% change versus previous month														
2004 Sep.	0.3	1.8	0.0	0.3	-1.0	-0.4	0.3	0.0	-0.8	-1.5	0.3	1.5	0.7	-0.4	1.8
	% change versus previous year														
2004 Sep.	8.9	-2.2	4.3	-0.3	0.3	7.4	9.1	0.1	5.8	2.9	2.0	2.5	-1.3	-3.6	-2.7

	Cyprus pound	Czech koruna	Estonian kroon	Hungarian forint	Lithuanian litas	Latvian lats	Maltese lira	Polish zloty	Slovenian tolar	Slovak koruna	Bulgarian lev	Romanian leu	Turkish lira
	16	17	18	19	20	21	22	23	24	25	26	27	28
2001	0.57589	34.068	15.6466	256.59	3.5823	0.5601	0.4030	3.6721	217.9797	43.300	1.9482	26,004	1,102,425
2002	0.57530	30.804	15.6466	242.96	3.4594	0.5810	0.4089	3.8574	225.9772	42.694	1.9492	31,270	1,439,680
2003	0.58409	31.846	15.6466	253.62	3.4527	0.6407	0.4261	4.3996	233.8493	41.489	1.9490	37,551	1,694,851
2003 Q3	0.58574	32.168	15.6466	259.65	3.4528	0.6419	0.4268	4.4244	234.8763	41.747	1.9466	37,410	1,569,762
2003 Q4	0.58404	32.096	15.6466	259.82	3.4526	0.6528	0.4287	4.6232	236.1407	41.184	1.9494	39,735	1,721,043
2004 Q1	0.58615	32.860	15.6466	260.00	3.4530	0.6664	0.4283	4.7763	237.6479	40.556	1.9517	40,550	1,665,395
2004 Q2	0.58480	32.022	15.6466	252.16	3.4528	0.6542	0.4255	4.6877	238.8648	40.076	1.9493	40,664	1,759,532
2004 Q3	0.57902	31.593	15.6466	248.80	3.4528	0.6597	0.4266	4.4236	239.9533	40.020	1.9559	40,994	1,807,510
2003 Sep.	0.58370	32.355	15.6466	255.46	3.4530	0.6383	0.4265	4.4635	235.2211	41.489	1.9469	37,918	1,546,627
2003 Oct.	0.58418	31.989	15.6466	255.77	3.4525	0.6483	0.4281	4.5952	235.6663	41.304	1.9473	38,803	1,679,067
2003 Nov.	0.58328	31.974	15.6466	259.31	3.4528	0.6471	0.4275	4.6174	236.1345	41.102	1.9476	39,927	1,726,781
2003 Dec.	0.58459	32.329	15.6466	264.74	3.4525	0.6631	0.4304	4.6595	236.6662	41.132	1.9533	40,573	1,761,551
2004 Jan.	0.58647	32.724	15.6466	264.32	3.4531	0.6707	0.4301	4.7128	237.3167	40.731	1.9557	41,107	1,698,262
2004 Feb.	0.58601	32.857	15.6466	263.15	3.4532	0.6698	0.4284	4.8569	237.5123	40.551	1.9535	40,563	1,682,658
2004 Mar.	0.58598	32.985	15.6466	253.33	3.4528	0.6596	0.4266	4.7642	238.0683	40.400	1.9465	40,029	1,620,374
2004 Apr.	0.58630	32.519	15.6466	250.41	3.4529	0.6502	0.4251	4.7597	238.4520	40.151	1.9465	40,683	1,637,423
2004 May	0.58589	31.976	15.6466	252.91	3.4528	0.6557	0.4259	4.7209	238.7400	40.164	1.9464	40,554	1,818,487
2004 June	0.58239	31.614	15.6466	253.02	3.4528	0.6565	0.4254	4.5906	239.3591	39.923	1.9547	40,753	1,814,266
2004 July	0.58171	31.545	15.6466	249.89	3.4528	0.6596	0.4259	4.4651	239.9023	39.899	1.9558	40,962	1,784,116
2004 Aug.	0.57838	31.634	15.6466	248.85	3.4528	0.6586	0.4261	4.4310	239.9900	40.111	1.9559	40,946	1,799,918
2004 Sep.	0.57696	31.601	15.6466	247.66	3.4528	0.6610	0.4277	4.3748	239.9677	40.049	1.9559	41,075	1,838,497
	% change versus previous month												
2004 Sep.	-0.2	-0.1	0.0	-0.5	0.0	0.4	0.4	-1.3	0.0	-0.2	0.0	0.3	2.1
	% change versus previous year												
2004 Sep.	-1.2	-2.3	0.0	-3.1	0.0	3.6	0.3	-2.0	2.0	-3.5	0.5	8.3	18.9

Source: ECB.

## DEVELOPMENTS OUTSIDE THE EURO AREA

### 9.1 In other EU Member States

(annual percentage changes, unless otherwise indicated)

#### 1. Economic and financial developments

	Czech Republic	Denmark	Estonia	Cyprus	Latvia	Lithuania	Hungary	Malta	Poland	Slovenia	Slovakia	Sweden	United Kingdom
	1	2	3	4	5	6	7	8	9	10	11	12	13
<b>HICP</b>													
2002	1.4	2.4	3.6	2.8	2.0	0.4	5.2	2.6	1.9	7.5	3.5	2.0	1.3
2003	-0.1	2.0	1.4	4.0	2.9	-1.1	4.7	1.9	0.7	5.7	8.5	2.3	1.4
2004 Q1	2.0	0.7	0.6	1.0	4.3	-1.1	6.8	2.5	1.8	3.7	8.2	0.6	1.3
Q2	2.5	0.8	3.2	1.2	5.8	0.5	7.4	3.3	3.4	3.8	8.0	1.2	1.4
Q3	.	.	.	.	.	.	.	.	.	3.6	.	.	.
2004 May	2.6	1.1	3.7	1.2	6.1	1.0	7.8	3.1	3.5	3.9	8.2	1.5	1.5
June	2.7	0.9	4.4	2.4	6.1	1.0	7.5	4.3	4.3	3.9	8.1	1.2	1.6
July	3.1	1.1	4.0	2.9	6.7	1.8	7.2	3.1	4.7	3.7	8.3	1.2	1.4
Aug.	3.2	0.9	3.9	2.8	7.8	2.2	7.2	2.5	4.9	3.7	7.0	1.2	1.3
Sep.	.	.	.	.	.	.	.	.	.	3.4	.	.	.
<b>General government deficit (-)/surplus (+) as a % of GDP</b>													
2001	-5.9	2.0	0.3	-2.4	-2.1	-2.0	-4.4	-6.4	-3.8	-2.8	-6.0	2.8	0.7
2002	-6.8	0.7	1.4	-4.6	-2.7	-1.5	-9.2	-5.9	-3.6	-2.4	-5.7	0.0	-1.7
2003	-12.6	0.3	3.1	-6.4	-1.5	-1.9	-6.2	-9.7	-3.9	-2.0	-3.7	0.3	-3.3
<b>General government gross debt as a % of GDP</b>													
2001	25.3	49.2	4.4	64.3	14.9	22.9	53.5	62.2	36.7	28.1	48.7	54.4	38.8
2002	28.8	48.8	5.3	67.4	14.1	22.4	57.2	62.7	41.1	29.5	43.3	52.6	38.3
2003	37.8	45.9	5.3	70.9	14.4	21.6	59.1	71.1	45.4	29.5	42.6	52.0	39.8
<b>Long-term government bond yield as a % per annum, period average</b>													
2004 Mar.	4.50	4.10	-	5.17	4.98	4.64	8.04	4.70	6.65	4.99	5.09	4.31	4.76
Apr.	4.60	4.30	-	5.17	4.89	4.55	7.89	4.65	7.02	4.83	5.06	4.55	4.99
May	4.88	4.46	-	5.17	4.95	4.46	8.25	4.65	7.32	4.77	5.13	4.68	5.15
June	5.02	4.53	-	5.49	4.93	4.47	8.55	4.65	7.27	4.69	5.09	4.72	5.24
July	5.11	4.62	-	6.58	4.89	4.58	8.47	4.65	7.44	4.65	5.03	4.57	5.14
Aug.	5.02	4.45	-	6.58	4.88	4.57	8.44	4.70	7.36	4.66	5.02	4.42	5.03
<b>3-month interest rate as a % per annum, period average</b>													
2004 Mar.	2.05	2.14	2.62	3.83	4.33	2.67	12.25	2.93	5.49	5.62	5.71	2.37	4.30
Apr.	2.06	2.17	2.62	3.94	4.49	2.69	-	2.90	5.69	4.99	5.35	2.13	4.39
May	2.16	2.20	2.61	5.16	4.47	2.70	-	2.90	5.99	4.76	4.91	2.14	4.53
June	2.33	2.21	2.42	5.30	3.94	2.68	11.10	2.90	5.91	4.46	4.33	2.15	4.79
July	2.47	2.22	2.41	5.23	4.05	2.69	-	2.94	6.34	4.03	3.96	2.15	4.86
Aug.	2.57	2.21	2.41	5.16	4.12	2.71	-	2.96	6.60	4.01	3.96	2.17	4.96
<b>Real GDP</b>													
2002	1.7	1.0	7.2	2.0	6.4	6.8	3.5	1.8	1.3	3.4	4.4	2.1	1.8
2003	3.1	0.5	5.1	2.0	7.5	9.7	2.9	0.2	.	2.3	4.2	1.6	2.2
2003 Q4	3.3	1.4	6.1	3.1	7.5	12.2	3.6	2.1	.	2.5	4.7	2.4	2.9
2004 Q1	3.1	1.5	7.0	3.6	8.8	7.1	4.2	2.3	.	3.8	5.5	2.8	3.4
Q2	.	2.5	.	4.1	7.7	7.5	4.0	-1.5	.	4.6	5.4	3.5	3.6
<b>Current and capital accounts balance as a % of GDP</b>													
2002	-5.7	2.1	-9.9	-4.7	-6.5	-4.8	-6.9	-0.9	-2.6	0.7	-7.6	5.3	-1.7
2003	-6.2	2.7	-12.7	-3.4	-7.6	-6.5	-9.0	-5.4	-2.2	-1.0	-0.5	6.4	-1.7
2003 Q4	-10.0	1.5	-15.9	-4.9	-8.6	-9.5	-9.0	-9.1	-1.5	-2.3	-0.6	6.4	-1.7
2004 Q1	-2.4	3.1	-11.5	-12.6	-8.5	-8.9	-9.8	-7.0	-1.4	0.6	1.2	7.6	-1.0
Q2	-5.8	3.6	-20.4	-11.1	-16.7	-10.6	-10.3	0.1	-2.9	-2.6	-6.4	7.9	-2.8
<b>Unit labour costs</b>													
2002	-	1.8	4.1	-	-0.4	-1.2	9.0	-	-	6.0	4.4	0.8	3.4
2003	-	2.2	4.6	-	4.9	1.5	6.8	-	-	4.8	6.6	0.5	.
2003 Q4	-	1.0	2.7	-	-	-	-	-	-	-	-	-	.
2004 Q1	-	2.1	4.7	-	-	-	-	-	-	-	-	-	.
Q2	-	1.0	4.8	-	-	-	-	-	-	-	-	-	.
<b>Standardised unemployment rate as a % of labour force (s.a.)</b>													
2002	7.3	4.6	9.5	3.9	12.5	13.6	5.6	7.5	19.8	6.1	18.7	4.9	5.1
2003	7.8	5.6	10.1	4.5	10.5	12.7	5.8	8.2	19.2	6.5	17.1	5.6	5.0
2004 Q1	8.5	5.9	9.4	4.7	10.6	11.7	5.9	8.9	19.1	6.4	16.5	6.2	4.7
Q2	8.5	5.9	9.1	4.3	10.6	11.3	5.9	8.9	18.9	6.4	16.2	6.4	4.7
Q3	.	.	.	.	.	.	6.0	.	.	.	.	.	.
2004 May	8.4	5.9	9.1	4.2	10.6	11.3	5.9	8.9	18.9	6.3	16.3	6.6	4.7
June	8.5	5.9	9.0	4.4	10.6	11.2	5.9	8.8	18.8	6.3	16.1	6.4	4.7
July	8.5	5.8	8.8	4.5	10.6	11.2	5.9	8.7	18.8	6.2	15.9	6.3	.
Aug.	8.5	.	8.7	4.5	10.6	11.0	6.0	.	18.7	6.2	15.7	6.2	.
Sep.	.	.	.	.	.	.	6.0	.	.	.	.	.	.

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

## 9.2 In the United States and Japan

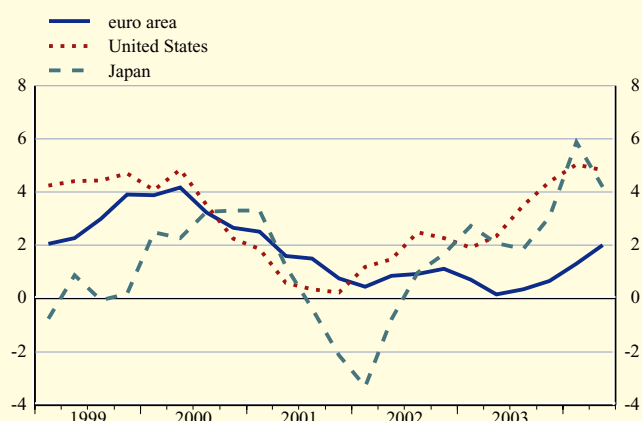
(annual percentage changes, unless otherwise indicated)

### 1. Economic and financial developments

	Consumer price index	Unit labour costs (manufacturing)	Real GDP	Industrial production index (manufacturing)	Unemployment rate as a % of labour force (s.a.)	Broad money <sup>1)</sup>	3-month interbank deposit rate <sup>2)</sup> as a % per annum	10-year government bond yield <sup>2)</sup> as a % per annum	Exchange rate <sup>3)</sup> as national currency per euro	Fiscal deficit (-)/surplus (+) as a % of GDP	Gross public debt <sup>4)</sup> as a % of GDP
	1	2	3	4	5	6	7	8	9	10	11
United States											
2000	3.4	4.3	3.7	4.8	4.0	9.4	6.53	6.03	0.9236	1.6	44.2
2001	2.8	0.2	0.8	-3.9	4.8	11.4	3.78	5.01	0.8956	-0.4	43.4
2002	1.6	-0.3	1.9	-0.5	5.8	8.0	1.80	4.60	0.9456	-3.8	45.6
2003	2.3	3.2	3.0	0.1	6.0	6.3	1.22	4.00	1.1312	-4.6	47.9
2003 Q3	2.2	3.1	3.5	-0.6	6.1	7.2	1.13	4.21	1.1248	-5.1	47.4
Q4	1.9	3.5	4.4	1.7	5.9	4.6	1.17	4.27	1.1890	-4.3	47.9
2004 Q1	1.8	-0.6	5.0	3.2	5.6	4.5	1.12	4.00	1.2497	-4.5	48.7
Q2	2.9	-2.5	4.8	5.9	5.6	5.8	1.30	4.58	1.2046	.	.
Q3	.	.	.	.	.	.	1.75	4.29	1.2220	.	.
2004 May	3.1	.	.	6.2	5.6	6.0	1.25	4.70	1.2007	.	.
June	3.3	.	.	5.9	5.6	5.7	1.50	4.73	1.2138	.	.
July	3.0	.	.	6.1	5.5	4.6	1.63	4.48	1.2266	.	.
Aug.	2.7	.	.	6.5	5.4	4.4	1.73	4.27	1.2176	.	.
Sep.	.	.	.	.	.	.	1.90	4.13	1.2218	.	.
Japan											
2000	-0.7	-6.7	2.8	5.7	4.7	2.1	0.28	1.76	99.47	-7.5	126.9
2001	-0.7	4.4	0.4	-6.8	5.0	2.8	0.15	1.34	108.68	-6.1	134.7
2002	-0.9	-3.2	-0.3	-1.2	5.4	3.3	0.08	1.27	118.06	-7.9	141.3
2003	-0.3	-3.8	2.4	3.2	5.3	1.7	0.06	0.99	130.97	.	.
2003 Q3	-0.2	-1.5	1.9	1.0	5.2	1.8	0.05	1.19	132.14	.	.
Q4	-0.3	-4.3	3.1	4.2	5.1	1.5	0.06	1.38	129.45	.	.
2004 Q1	-0.1	-6.5	5.9	6.8	4.9	1.7	0.05	1.31	133.97	.	.
Q2	-0.3	-6.7	4.2	7.4	4.6	1.9	0.05	1.59	132.20	.	.
Q3	.	.	.	.	.	.	0.05	1.64	134.38	.	.
2004 May	-0.5	-4.5	.	4.6	4.6	2.0	0.05	1.49	134.48	.	.
June	0.0	-8.0	.	8.9	4.6	1.7	0.05	1.77	132.86	.	.
July	-0.1	.	.	5.7	4.9	1.8	0.05	1.79	134.08	.	.
Aug.	-0.2	.	.	9.9	.	1.8	0.05	1.63	134.54	.	.
Sep.	.	.	.	.	.	.	0.05	1.50	134.51	.	.

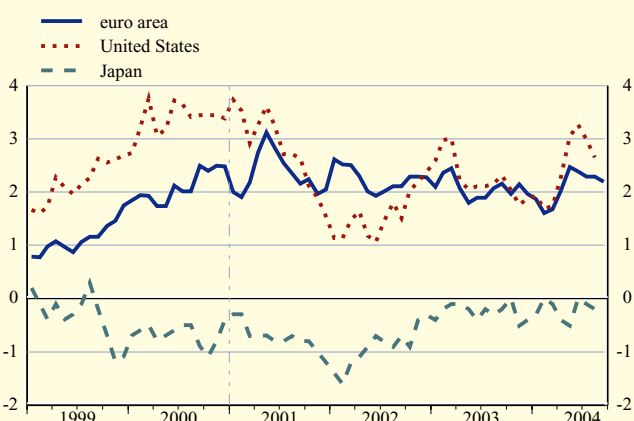
### C35 Real gross domestic product

(annual percentage changes; quarterly)



### C36 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 (columns 7 and 8); ECB calculations (column 11).

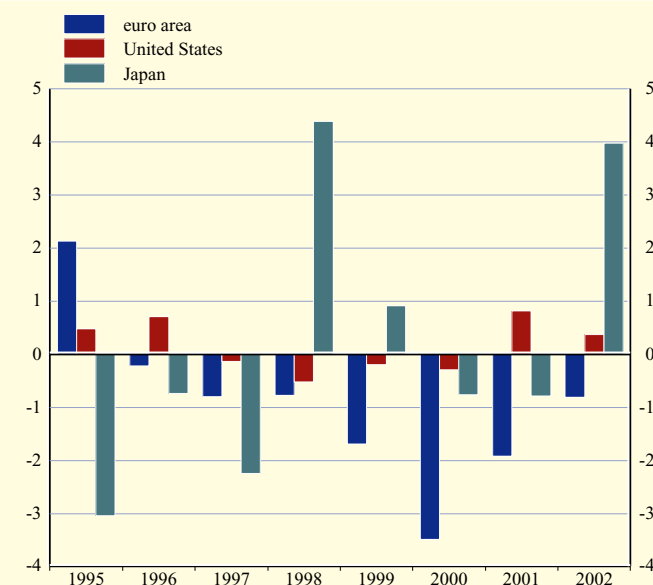
- 1) Average-of-period values; M3 for US, M2+CDs for Japan.
- 2) For more information, see Sections 4.6 and 4.7.
- 3) For more information, see Section 8.2.
- 4) Gross consolidated general government debt (end of period).

9.2 In the United States and Japan  
(as a percentage of GDP)

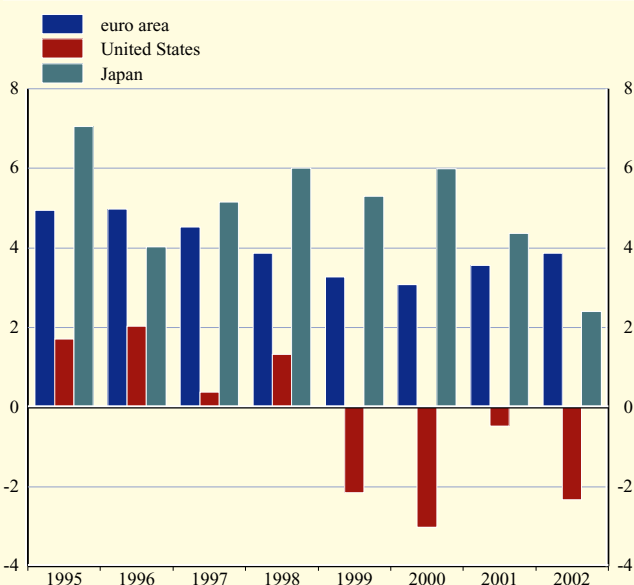
2. Saving, investment and financing

	National saving and investment			Investment and financing of non-financial corporations						Investment and financing of households <sup>1)</sup>			
	Gross saving 1	Gross capital formation 2	Net lending to the rest of the world 3	Gross capital formation 4	Gross fixed capital formation 5	Net acquisition of financial assets 6	Gross saving 7	Net incurrence of liabilities 8	Securities and shares 9	Capital expenditures <sup>2)</sup> 10	Net acquisition of financial assets 11	Gross saving <sup>3)</sup> 12	Net incurrence of liabilities 13
United States													
2000	18.0	20.8	-4.0	9.5	9.0	12.3	7.5	12.6	2.4	12.6	2.8	11.1	5.8
2001	16.4	19.1	-3.7	8.0	8.4	1.8	7.6	0.9	1.8	12.7	5.3	10.7	5.8
2002	14.2	18.4	-4.4	7.3	7.2	1.4	8.0	1.1	-0.1	12.8	4.3	11.1	6.6
2003	13.5	18.4	-4.7	7.0	7.1	4.6	8.5	2.7	0.9	13.1	7.6	10.7	8.2
2002 Q3	13.8	18.3	-4.4	7.3	7.2	0.8	7.9	0.6	-1.8	12.9	3.1	10.8	5.5
2002 Q4	13.3	18.3	-4.7	7.1	7.0	5.4	8.3	4.3	0.7	12.9	3.3	10.5	8.0
2003 Q1	12.8	18.2	-5.0	6.9	6.9	3.6	7.8	2.4	1.0	12.8	7.2	10.2	9.3
2003 Q2	13.2	18.1	-4.8	6.8	7.0	5.8	8.5	4.0	2.0	13.1	11.2	10.5	12.5
2003 Q3	13.7	18.6	-4.6	7.0	7.1	4.2	8.7	2.1	0.3	13.3	8.6	11.2	6.9
2003 Q4	14.4	18.8	-4.3	7.2	7.2	4.7	9.1	2.5	0.3	13.3	3.7	10.7	4.1
2004 Q1	13.7	19.1	-4.9	7.4	7.1	5.5	8.9	3.9	1.3	13.2	7.2	10.3	9.8
2004 Q2	13.7	19.7	-5.5	7.7	7.3	4.1	8.7	2.5	-0.1	13.3	7.3	10.2	8.4
Japan													
2000	27.8	26.3	2.3	15.4	15.5	0.9	14.5	-1.0	0.2	5.2	3.9	10.5	-0.1
2001	26.4	25.8	2.0	15.3	15.3	-2.8	14.3	-6.3	0.2	4.9	2.8	8.6	0.2
2002	25.7	23.9	2.8	13.7	14.0	-1.7	15.7	-7.4	-0.9	4.8	-0.2	8.5	-2.1
2003	.	24.1	.	.	.	3.2	.	-5.1	-0.2	.	-1.2	.	-0.8
2002 Q3	24.5	23.9	2.7	.	.	1.1	.	-10.0	-2.4	.	-8.1	.	-0.4
2002 Q4	24.2	25.2	2.2	.	.	5.5	.	9.8	0.7	.	10.2	.	-1.7
2003 Q1	28.2	23.4	2.8	.	.	17.5	.	-1.8	1.7	.	-13.1	.	2.9
2003 Q2	.	23.3	.	.	.	-25.8	.	-20.5	-0.9	.	4.1	.	-5.7
2003 Q3	.	24.1	.	.	.	9.8	.	-5.5	-3.0	.	-5.5	.	1.1
2003 Q4	.	24.9	.	.	.	11.5	.	6.5	1.2	.	8.7	.	-1.2
2004 Q1	.	23.8	.	.	.	11.3	.	0.6	-0.4	.	-7.6	.	2.6
2004 Q2	.	23.1	.	.	.	-10.1	.	-12.3	-0.6	.	4.7	.	-5.9

C37 Net lending of non-financial corporations  
(as a percentage of GDP)



C38 Net lending of households<sup>1)</sup>  
(as a percentage of GDP)



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

1) Including non-profit institutions serving households.

2) Gross capital formation in Japan. Capital expenditures in the United States include purchases of consumer durable goods.

3) Gross saving in the United States is increased by expenditures on consumer durable goods.

## LIST OF CHARTS

C1	Monetary aggregates	S12
C2	Counterparts	S12
C3	Components of monetary aggregates	S13
C4	Components of longer-term financial liabilities	S13
C5	Loans to financial intermediaries and non-financial corporations	S14
C6	Loans to households	S15
C7	Loans to government and non-euro area residents	S16
C8	Deposits by financial intermediaries	S17
C9	Deposits by non-financial corporations and households	S18
C10	Deposits by government and non-euro area residents	S19
C11	MFI holdings of securities	S20
C12	Total assets of investment funds	S24
C13	Total outstanding amounts and gross issues of securities other than shares issued by euro area residents	S31
C14	Outstanding amounts of securities other than shares by sector	S32
C15	Gross issues of securities other than shares by sector	S33
C16	Annual growth rates of short-term debt securities by sector of the issuer in all currencies combined	S34
C17	Annual growth rates of long-term debt securities by sector of the issuer in all currencies combined	S35
C18	Annual growth rates for quoted shares issued by euro area residents	S36
C19	Gross issues of quoted shares by sector of the issuer	S37
C20	New deposits with agreed maturity	S39
C21	New loans at floating rate and up to 1 year initial rate fixation	S39
C22	Euro area money market rates	S40
C23	3-month money market rates	S40
C24	Euro area government bond yields	S41
C25	10-year government bond yields	S41
C26	Dow Jones EURO STOXX Broad, Standard & Poor's 500 and Nikkei 225	S42
C27	B.o.p. current account balance	S55
C28	B.o.p. net direct and portfolio investment	S55
C29	B.o.p. goods	S56
C30	B.o.p. services	S56
C31	Main b.o.p. transactions underlying the developments in MFI net external assets	S61
C32	International investment position by item at end-2002	S64
C33	Effective exchange rates	S67
C34	Bilateral exchange rates	S67
C35	Real gross domestic product	S70
C36	Consumer price indices	S70
C37	Net lending of non-financial corporations	S71
C38	Net lending of households	S71



## TECHNICAL NOTES

### RELATING TO THE EURO AREA OVERVIEW

#### CALCULATION OF GROWTH RATES FOR MONETARY DEVELOPMENTS

The average growth rate for the quarter ending in month  $t$  is calculated as:

$$a) \left( \frac{0.5I_t + \sum_{i=1}^2 I_{t-i} + 0.5I_{t-3}}{0.5I_{t-12} + \sum_{i=1}^2 I_{t-i-12} + 0.5I_{t-15}} - 1 \right) \times 100$$

where  $I_t$  is the index of adjusted outstanding amounts as at month  $t$  (see also below). Likewise, for the year ending in month  $t$ , the average growth rate is calculated as:

$$b) \left( \frac{0.5I_t + \sum_{i=1}^{11} I_{t-i} + 0.5I_{t-12}}{0.5I_{t-12} + \sum_{i=1}^{11} I_{t-i-12} + 0.5I_{t-24}} - 1 \right) \times 100$$

### RELATING TO SECTIONS 2.1 TO 2.6

#### CALCULATION OF TRANSACTIONS

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

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

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

Similarly, the quarterly transactions  $F_t^Q$  for the quarter ending in month  $t$  are defined as:

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

where  $L_{t-3}$  is the amount outstanding at the end of month  $t-3$  (the end of the previous quarter)

and, for example,  $C_t^Q$  is the reclassification adjustment in the quarter ending in month  $t$ .

For those quarterly series for which monthly observations are now available (see below), the quarterly transactions can be derived as the sum of the three monthly transactions in the quarter.

#### CALCULATION OF GROWTH RATES FOR MONTHLY SERIES

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

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

The base of the index (of the non-seasonally adjusted series) is currently set as December 2001 = 100. Time series of the index of adjusted outstanding amounts are available on the ECB's website ([www.ecb.int](http://www.ecb.int)) under the "Monetary statistics" sub-section of the "Statistics" section.

The annual growth rate  $a_t$  for month  $t$  – i.e. the change in the 12 months ending in month  $t$  – may be calculated using either of the following two formulae:

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

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

Unless otherwise indicated, the annual growth rates refer to the end of the indicated period. For example, the annual percentage change for the year 2002 is calculated in g) by dividing the index of December 2002 by the index of December 2001.

Growth rates for intra-annual periods may be derived by adapting formula g). For example, the month-on-month growth rate  $a_t^M$  may be calculated as:

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

Finally, the three-month moving average for the annual growth rate of M3 is obtained as  $(a_t + a_{t-1} + a_{t-2})/3$ , where  $a_t$  is defined as in f) or g) above.

#### CALCULATION OF GROWTH RATES FOR QUARTERLY SERIES

If  $F_t^Q$  and  $L_{t-3}$  are defined as above, the index  $I_t$  of adjusted outstanding amounts for the quarter ending in month  $t$  is defined as:

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

The annual growth rate in the four quarters ending in month  $t$ , i.e.  $a_t$ , may be calculated using formula g).

#### SEASONAL ADJUSTMENT OF THE EURO AREA MONETARY STATISTICS<sup>1</sup>

The approach used relies on a multiplicative decomposition through X-12-ARIMA.<sup>2</sup> The seasonal adjustment may include a day-of-the-week adjustment, and for some series is carried out indirectly by means of a linear combination of components. In particular, this is the case for M3, derived by aggregating the seasonally adjusted series for M1, M2 less M1, and M3 less M2.

The seasonal adjustment procedures are first applied to the index of adjusted outstanding amounts.<sup>3</sup> The resulting estimates of the seasonal factors are then applied to the levels and to the adjustments arising from reclassifications and revaluations, in turn yielding seasonally adjusted transactions.

Seasonal (and trading day) factors are revised at annual intervals or as required.

#### RELATING TO SECTIONS 3.1 TO 3.3

#### 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.

If  $T_t$  represents the transactions in quarter  $t$  and  $L_t$  represents the outstanding amount at the end of quarter  $t$ , then the growth rate for the quarter  $t$  is calculated as:

$$j) \frac{\sum_{i=0}^3 T_{t-i}}{L_{t-4}} \times 100$$

#### RELATING TO SECTION 4.3 AND 4.4

#### CALCULATION OF GROWTH RATES FOR DEBT SECURITIES AND QUOTED SHARES

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

<sup>1</sup> For details, see "Seasonal adjustment of monetary aggregates and HICP for the euro area", ECB (August 2000) and the "Statistics" section of the ECB's website ([www.ecb.int](http://www.ecb.int)), under the "Monetary statistics" sub-section.

<sup>2</sup> For details, see Findley, D., Monsell, B., Bell, W., Otto, M., and Chen, B. C. (1998), "New Capabilities and Methods of the X-12-ARIMA Seasonal Adjustment Program", *Journal of Business and Economic Statistics*, 16, 2, pp.127-152, or "X-12-ARIMA Reference Manual", Time Series Staff, Bureau of the Census, Washington, D.C.

For internal purposes, the model-based approach of TRAMO-SEATS is also used. For details on TRAMO-SEATS, see Gomez, V. and Maravall, A. (1996), "Programs TRAMO and SEATS: Instructions for the User", Banco de España, Working Paper No. 9628, Madrid.

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

from transactions or from the index of adjusted outstanding amounts. If  $N_t^M$  represents the transactions (net issues) in month  $t$  and  $L_t$  the level outstanding at the end of the month  $t$ , the index  $I_t$  of adjusted outstanding amounts in month  $t$  is defined as:

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

As a base, the index is set equal to 100 on December 2001. The growth rate  $a_t$  for month  $t$  corresponding to the change in the 12 months ending in month  $t$ , may be calculated using either of the following two formulae:

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

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

The method used to calculate the growth rates for securities other than shares is the same as that used for the monetary aggregates, the only difference being that an “N” is used rather than an “F”. The reason for this is to distinguish between the different ways of obtaining “net issues” for securities issues statistics, where the ECB collects information on gross issues and redemptions separately, and “transactions” used for the monetary aggregates.

The calculation formula used for Section 4.3 is also used for Section 4.4 and is likewise based on that used for the monetary aggregates. Section 4.4 is based on market values and the basis for the calculation are financial transactions, which exclude reclassifications, revaluations or any other changes that do not arise from transactions. Exchange rate variations are not included as all quoted shares covered are denominated in euro.

## RELATING TO TABLE 1 IN SECTION 5.1

### SEASONAL ADJUSTMENT OF THE HICP<sup>4</sup>

The approach used relies on multiplicative decomposition through X-12-ARIMA (see footnote 2 on page S74). The seasonal adjustment of the overall HICP for the euro area is carried out indirectly by aggregating the seasonally adjusted euro area series for processed food, unprocessed food, industrial goods excluding energy, and services. Energy is added without adjustment since there is no statistical evidence of seasonality. Seasonal factors are revised at annual intervals or as required.

## RELATING TO TABLE 2 IN SECTION 7.1

### SEASONAL ADJUSTMENT OF THE BALANCE OF PAYMENTS CURRENT ACCOUNT

The approach relies on multiplicative decomposition through X-12-ARIMA (see footnote 2 on page S74). The raw data for goods and services are pre-adjusted to take “working day” and “Easter” effects into account. Data on income credits are subject to a “working day” pre-adjustment. The seasonal adjustment for these items is carried out using these pre-adjusted series. Income debits and current transfers are not pre-adjusted. The seasonal adjustment of the total current account is carried out by aggregating the seasonally adjusted euro area series for goods, services, income and current transfers. Seasonal factors are revised at semi-annual intervals or as required.

<sup>4</sup> For details, see “Seasonal adjustment of monetary aggregates and HICP for the euro area”, ECB (August 2000) and the “Statistics” section of the ECB’s website ([www.ecb.int](http://www.ecb.int)), under the “Monetary statistics” sub-section.







## GENERAL NOTES

The “Euro area statistics” section of the Monthly Bulletin focuses on statistics for the euro area as a whole. More detailed and longer runs of data, with further explanatory notes, are available in the “Statistics” section of the ECB’s website ([www.ecb.int](http://www.ecb.int)). Services available under the “Statistics on-line” subsection include a browser interface with search facilities, subscription to different datasets and a facility for downloading data directly as compressed Comma Separated Value (CSV) files. For further information, please contact us at: [statistics@ecb.int](mailto:statistics@ecb.int).

In general, the cut-off date for the statistics included in the Monthly Bulletin is the day preceding the first meeting in the month of the Governing Council. For this issue, the cut-off date was 6 October 2004.

All data relate to the Euro 12, unless otherwise indicated. For the monetary data, the Harmonised Index of Consumer Prices (HICP), investment fund and financial market statistics, the statistical series relating to the euro area cover the EU Member States that had adopted the euro at the time to which the statistics relate. Where applicable, this is shown in the tables by means of a footnote; in the charts, the break is indicated by a dotted line. In these cases, where underlying data are available, 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.

Given that the composition of the ECU does not coincide with the former currencies of the countries which have adopted the single currency, pre-1999 amounts converted from the participating currencies into ECU at current ECU exchange rates are affected by movements in the currencies of EU Member States which have not adopted the euro. To avoid this effect on the monetary statistics, the pre-1999 data in Sections 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 otherwise indicated,

price and cost statistics before 1999 are based on data expressed in national currency terms.

Methods of aggregation and/or consolidation (including cross-country consolidation) have been used where appropriate.

Recent data are often provisional and may be revised. Discrepancies between totals and their components may arise from rounding.

The group “Other EU Member States” comprises the Czech Republic, Denmark, Estonia, Cyprus, Latvia, Lithuania, Hungary, Malta, Poland, Slovenia, Slovakia, Sweden and United Kingdom.

In most cases, the terminology used within the tables follows international standards, such as those contained in the European System of Accounts 1995 (ESA 95) and the IMF Balance of Payments Manual. Transactions refer to voluntary exchanges (measured directly or derived), while flows also encompass changes in outstanding amounts owing to price and exchange rate changes, write-offs, and other changes.

In the tables, the term “up to (x) years” means “up to *and including* (x) years”.

### OVERVIEW

Developments in key indicators for the euro area are summarised in an overview table.

### MONETARY POLICY STATISTICS

Section 1.4 shows statistics on minimum reserve and liquidity factors. Annual and quarterly observations refer to averages of the last reserve maintenance period of the year/quarter. Until December 2003, the maintenance periods started on the 24th calendar day of a month and ran to the 23rd of the following month. On 23 January 2003 the ECB announced changes to the operational

framework, which were implemented on 10 March 2004. As a result of these changes, maintenance periods 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 scheduled. A transitional maintenance period was defined to cover the period from 24 January to 9 March 2004.

Table 1 in Section 1.4 shows the components of the reserve base of credit institutions subject to reserve requirements. The 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. When 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. The percentage for calculating the reserve base was 10% until November 1999 and 30% thereafter.

Table 2 in Section 1.4 contains average data for completed maintenance periods. The amount of the 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 from the end of each calendar month. Subsequently, each credit institution deducts from this figure a lump-sum allowance of €100,000. The resulting required reserves are then aggregated at the euro area level (column 1). The current account holdings (column 2) are the aggregate average daily current account holdings of credit institutions, including those that serve the fulfilment of reserve requirements. The excess reserves (column 3) are the average current account holdings over the maintenance period in excess of the required reserves. The deficiencies (column 4) are defined as the average shortfalls of current account holdings from required reserves over the maintenance period, computed

on the basis of those credit institutions that have not fulfilled their reserve requirement. The interest rate on minimum reserves (column 5) is equal to 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 Section 1.3).

Table 3 in Section 1.4 shows the banking system's liquidity position, which is defined as the current account holdings in euro of credit institutions in the euro area with the Eurosystem. All amounts are derived from the consolidated financial statement of the Eurosystem. The other liquidity-absorbing operations (column 7) exclude the issuance of debt certificates initiated by national central banks in Stage Two of EMU. The net other factors (column 10) represent the netted remaining items in the consolidated financial statement of the Eurosystem. The credit institutions' current accounts (column 11) are equal to the difference between the sum of liquidity-providing factors (columns 1 to 5) and the sum of liquidity-absorbing factors (columns 6 to 10). The base money (column 12) is calculated as the sum of the deposit facility (column 6), the banknotes in circulation (column 8) and the credit institutions' current account holdings (column 11).

## **MONEY, BANKING AND INVESTMENT FUNDS**

Section 2.1 shows the aggregated balance sheet of the monetary financial institution (MFI) sector, i.e. the sum of the harmonised balance sheets of all MFIs resident in the euro area. MFIs are central banks, credit institutions as defined under Community law, money market funds and other institutions whose business it is to receive deposits and/or close substitutes for deposits from entities other than MFIs and, for their own account (at least in economic terms), to grant credits and/or make investments in securities. A complete list of MFIs is published on the ECB's website.

Section 2.2 shows the consolidated balance sheet of the MFI sector, which is obtained by netting the aggregated balance sheet positions between MFIs in the euro area. Due to limited heterogeneity in recording practices, the sum of the inter-MFI positions is not necessarily zero; the balance is shown in column 10 of the liabilities side of Section 2.2. Section 2.3 sets out the euro area monetary aggregates and counterparts. These are derived from the consolidated MFI balance sheet; they also take account of some monetary assets/liabilities of central government. Statistics on monetary aggregates and counterparts are adjusted for seasonal and trading-day effects. The external liabilities item of Sections 2.1 and 2.2 shows the holdings by non-euro area residents of i) shares/units issued by money market funds located in the euro area and ii) debt securities issued with a maturity of up to two years by MFIs located in the euro area. In Section 2.3, however, these holdings are excluded from the monetary aggregates and contribute to the item “net external assets”.

Section 2.4 provides an analysis by sector, type and original maturity of loans granted by MFIs other than the Eurosystem (the banking system) resident in the euro area. Section 2.5 shows a sectoral and instrument analysis of deposits held with the euro area banking system. Section 2.6 shows the securities held by the euro area banking system, by type of issuer.

Sections 2.2 to 2.6 include transactions, which are derived as differences in outstanding amounts adjusted for reclassifications, revaluations, exchange rate variations and any other changes which do not arise from transactions. Section 2.7 shows selected revaluations which are used in the derivation of transactions. Sections 2.2 to 2.6 also provide growth rates in terms of annual percentage changes based on the transactions. Section 2.8 shows a quarterly currency breakdown of selected MFI balance sheet items.

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 the Regulation ECB/2001/13 on the MFI Balance Sheet Statistics” (ECB, November 2002) explains practices recommended to be followed by the NCBs. Since 1 January 1999 the statistical information has been collected and compiled on the basis of Regulation ECB/1998/16 of 1 December 1998 concerning the consolidated balance sheet of the Monetary Financial Institutions sector<sup>1</sup>, as last amended by Regulation ECB/2003/10<sup>2</sup>.

In line with this Regulation, 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.

Section 2.9 shows end-of-quarter outstanding amounts for the balance sheet of the euro area investment funds (other than money market funds). The balance sheet is aggregated and therefore 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). Section 2.10 shows the aggregated balance sheet for each investment fund sector as identified by investment policy and type of investor.

## FINANCIAL AND NON-FINANCIAL ACCOUNTS

Sections 3.1 and 3.2 show quarterly data on financial accounts for non-financial sectors in the euro area, comprising general government (S.13 in the ESA 95), non-financial corporations (S.11 in the ESA 95), and households (S.14 in the ESA 95) including non-

<sup>1</sup> OJL 356, 30.12.1998, p. 7.

<sup>2</sup> OJL 250, 2.10.2003, p. 19.

profit institutions serving households (S.15 in the ESA 95). The data cover non-seasonally adjusted amounts outstanding and financial transactions classified according to the ESA 95 and show the main financial investment and financing activities of the non-financial sectors. On the financing side (liabilities), the data are presented by ESA 95 sector and original maturity (“short-term” refers to an original maturity of up to one year; “long-term” refers to an original maturity of over one year). 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.

Section 3.3 shows quarterly data on financial accounts for insurance corporations and pension funds (S.125 in the ESA 95) in the euro area. As in Sections 3.1 and 3.2, the data cover non-seasonally adjusted amounts outstanding and financial transactions, and show the main financial investment and financing activities of this sector.

The quarterly data in these three sections are based on quarterly national financial accounts data and MFI balance sheet and securities issues statistics. Sections 3.1 and 3.2 also refer to data taken from the 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.

Section 3.4 shows annual data on saving, investment (financial and non-financial) and financing for the euro area as a whole, and separately for non-financial corporations and households. These annual data provide, in particular, fuller sectoral information on the acquisition of financial assets and are consistent with the quarterly data in the two previous sections.

## FINANCIAL MARKETS

The series on financial market statistics for the euro area cover the EU Member States that had adopted the euro at the time to which the statistics relate.

Statistics on securities other than shares and quoted shares (Sections 4.1 to 4.4) are produced by the ECB using data from the ESCB and the BIS. Section 4.5 presents MFI interest rates on euro-denominated deposits and loans by euro area residents. Statistics on money market interest rates, long-term government bond yields and stock market indices (Sections 4.6 to 4.8) are produced by the ECB using data from wire services.

Statistics on securities issues cover securities other than shares (debt securities), which are presented in Sections 4.1, 4.2 and 4.3, and quoted shares, which are presented in Section 4.4. 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 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. Euro-denominated securities indicated in Sections 4.1, 4.2 and 4.3 also include items expressed in national denominations of the euro.

Section 4.1 shows securities issued, redemptions, net issues and outstanding amounts for all maturities, with an additional breakdown of long-term maturities. Net issues differ from the change in outstanding amounts owing to valuation changes, reclassifications and other adjustments.

Columns 1 to 4 show the outstanding amounts, gross issues, redemptions and net issues for all euro-denominated issues. Columns 5 to 8 show

the outstanding amounts, gross issues, redemptions and net issues for all securities other than shares (debt securities) issued by euro residents. Columns 9 to 11 show the percentage share of the outstanding amounts, gross issues and redemptions of securities that have been issued in euro by euro area residents. Column 12 shows euro-denominated net issues by euro area residents.

Section 4.2 contains a sectoral breakdown of outstanding amounts and gross issues for euro area resident issuers which is in line with the ESA 95<sup>3</sup>. The ECB is included in the Eurosystem.

The total outstanding amounts in column 1 of Section 4.2 are identical to the data on outstanding amounts of Section 4.1, column 5. The outstanding amounts of securities issued by MFIs in Section 4.2, column 2, are broadly comparable with debt securities issued as shown on the liabilities side of the aggregated MFI balance sheet in Section 2.1, column 8.

Section 4.3 shows annual growth rates for debt securities issued by euro area residents (broken down by maturity 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.

Section 4.4, columns 1, 4, 6 and 8, show 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 Section 3.2 (main liabilities, column 21).

Section 4.4, columns 3, 5, 7 and 9, show annual growth rates for quoted shares issued by euro area residents (broken down by the sector of the issuer), which are based on financial

transactions that occur when an issuer sells or redeems shares for cash excluding investments in the issuers' own shares. Transactions include the quotation of an issuer on a stock exchange for the first time and the creation or deletion of new instruments. The calculation of annual growth rates excludes reclassifications, revaluations and any other changes which do not arise from transactions.

Section 4.5 presents statistics on all the interest rates that MFIs resident in the euro area apply to euro-denominated deposits and loans vis-à-vis households and non-financial corporations resident in the euro area. Euro area MFI interest rates are calculated as a weighted average (by corresponding business volume) of the euro area countries' interest rates for each category.

MFI interest rate statistics are broken down by type of business coverage, sector, instrument category and maturity, period of notice or initial period of interest rate fixation. The new MFI interest rate statistics replace the ten transitional statistical series on euro area retail interest rates that have been published in the ECB's Monthly Bulletin since January 1999.

Section 4.6 presents money market interest rates for the euro area, the United States and Japan. For the euro area, a broad spectrum of money market interest rates is covered spanning from interest rates on overnight deposits to those on twelve-month deposits. Before January 1999 synthetic euro area interest rates were calculated on the basis of national rates weighted by GDP. With the exception of the overnight rate to December 1998, monthly, quarterly and yearly values are period averages.

<sup>3</sup> The code numbers in the ESA 95 for the sectors shown in tables in the Monthly Bulletin are: MFIs (including the Eurosystem), which comprises the ECB, the NCBs of the euro area 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).

Overnight deposits are represented by interbank deposit bid rates up to December 1998. From January 1999 column 1 of Section 4.6 shows the euro overnight index average (EONIA). These are end-of-period rates up to December 1998 and period averages thereafter. From January 1999 interest rates on one-, three-, six- and twelve-month deposits are euro interbank offered rates (EURIBOR); until December 1998, London interbank offered rates (LIBOR) were available. For the United States and Japan, interest rates on three-month deposits are represented by LIBOR.

Section 4.7 presents government bond yields for the euro area, the United States and Japan. Until December 1998, two-, three-, five- and seven-year euro area yields were end-of-period values and ten-year yields period averages. Thereafter, all yields are period averages. Until December 1998, euro area yields were 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. For the United States and Japan, ten-year yields are period averages.

Section 4.8 shows stock market indices for the euro area, the United States and Japan.

## PRICES, OUTPUT, DEMAND AND LABOUR MARKETS

Most of the data described in this section are produced by the European Commission (mainly Eurostat) and national statistical authorities. Euro area results are obtained by aggregating data for individual countries. As far as possible, the data are harmonised and comparable. Statistics on GDP and expenditure components, value added by economic activity, industrial production, retail sales and passenger car registrations are adjusted for the variations in the number of working days.

The Harmonised Index of Consumer Prices (HICP) for the euro area (Section 5.1) is

available from 1995 onwards. It is based on national HICPs, which follow the same methodology in all euro area countries. The breakdown by goods and services components is derived from the Classification of individual consumption by purpose (Coicop/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.

Industrial producer prices (Table 2 in Section 5.1), industrial production and retail sales (Section 5.2) are covered by Council Regulation (EC) No 1165/98 of 19 May 1998 concerning short-term statistics<sup>4</sup>. The breakdown by end-use of products for industrial producer prices and industrial production is the harmonised sub-division of industry excluding construction (NACE sections C to E) into Main Industrial Groupings (MIGs) as defined by Commission Regulation (EC) No 586/2001 of 26 March 2001<sup>5</sup>. Industrial producer prices reflect the ex-factory gate prices of producers. They include indirect taxes except VAT and other deductible taxes. Industrial production reflects the value added of the industries concerned.

World market prices of raw materials (Table 2 in Section 5.1) measures price changes of euro-denominated euro area imports compared with the base period.

The Labour Cost Indices (Table 3 in Section 5.1) measure the average labour cost per hour worked. They do not, however, cover agriculture, fishing, public administration, education, health and services not elsewhere classified. The ECB calculates the indicator of negotiated wages (memo item in Table 3 of Section 5.1) on the basis of non-harmonised national definition data.

Unit labour cost components (Table 4 in Section 5.1), GDP and its components (Tables 1 and 2

4 OJ L 162, 5.6.1998, p. 1.

5 OJ L 86, 27.3.2001, p. 11.

in Section 5.2), GDP deflators (Table 5 in Section 5.1) and employment statistics (Table 1 in Section 5.3) are results of the ESA 95 quarterly national accounts.

Retail sales (Table 4 in Section 5.2) measures the turnover, including all duties and taxes with the exception of VAT, of all retail trade excluding sales of motor vehicles and motorcycles, and except repairs. New passenger car registrations covers registrations of both private and commercial passenger cars.

Qualitative business and consumer survey data (Table 5 in Section 5.2) draw on the European Commission Business and Consumer Surveys.

Unemployment rates (Table 2 in Section 5.3) conform to International Labour Organisation (ILO) guidelines. They refer to persons actively seeking work as a share of the labour force, using harmonised criteria and definitions. The labour force estimates underlying the unemployment rate are different from the sum of the employment and unemployment levels published in Section 5.3.

## GOVERNMENT FINANCE

Sections 6.1 to 6.4 show the general government fiscal position in the euro area. The data are mainly consolidated and are based on the ESA 95 methodology. The annual euro area aggregates in Sections 6.1 to 6.3 are compiled by the ECB from harmonised data provided by the NCBs, which are regularly updated. The deficit and debt data for the euro area countries may therefore differ from those used by the European Commission within the excessive deficit procedure. The quarterly euro area aggregates in Section 6.4 are compiled by the ECB on the basis of Eurostat and national data.

Section 6.1 presents annual figures on general government revenue and expenditure on the basis of definitions laid down in Commission Regulation (EC) No 1500/2000 of 10 July 2000<sup>6</sup> amending the ESA 95. Section 6.2 shows

details of general government gross consolidated debt at nominal value in line with the Treaty provisions on the excessive deficit procedure. Sections 6.1 and 6.2 include summary data for the individual euro area countries owing to their importance in the framework of the Stability and Growth Pact. Section 6.3 presents changes in general government debt. The difference between the change in the government debt and the government deficit – the deficit-debt adjustment – is mainly explained by government transactions in financial assets and by foreign exchange valuation effects. Section 6.4 presents quarterly figures on general government revenue and expenditure on the basis of definitions laid down in the Regulation (EC) No 1221/2002 of the European Parliament and of the Council of 10 June 2002<sup>7</sup> on quarterly non-financial accounts for general government.

## EXTERNAL TRANSACTIONS AND POSITIONS

The concepts and definitions used in balance of payments (b.o.p.) and international investment position (i.i.p.) statistics (Sections 7.1, 7.2, 7.4 and 7.5) are generally in line with the IMF Balance of Payments Manual (fifth edition, October 1993), the ECB Guideline of 2 May 2003 on the statistical reporting requirements of the ECB (ECB/2003/7)<sup>8</sup>, and Eurostat documents. Additional references about the methodologies and sources used in the euro area b.o.p. and i.i.p. statistics can be found in the ECB publication entitled “European Union balance of payments/international investment position statistical methods” (November 2003), which can be downloaded from the ECB’s website.

The presentation of net transactions in the financial account follows the sign convention of the IMF Balance of Payments Manual: an increase of assets appears with a minus sign, while an increase of liabilities appears with a

6 OJ L 172, 12.7.2000, p. 3.

7 OJ L 179, 9.7.2002, p. 1.

8 OJ L 131, 28.5.2003, p. 20.



plus sign. In the current account and capital account, both credit and debit transactions are presented with a plus sign.

The euro area b.o.p. is compiled by the ECB. The recent monthly figures should be regarded as provisional. Data are revised when figures for the following month and/or the detailed quarterly b.o.p. are published. Earlier data are revised periodically or as a result of methodological changes in the compilation of the source data.

In Section 7.1, Table 2 contains seasonally adjusted data for the current account. Where appropriate, the adjustment covers also working-day, leap year and/or Easter effects. Table 7 provides a sectoral breakdown of euro area purchasers of securities issued by non-euro area residents. It is not yet possible to show a sectoral breakdown of euro area issuers of securities acquired by non-residents. In Tables 8 and 9 the breakdown between “loans” and “currency and deposits” is based on the sector of the non-resident counterpart, i.e. assets vis-à-vis non-resident banks are classified as deposits, whereas assets vis-à-vis other non-resident sectors are classified as loans. This breakdown follows the distinction made in other statistics, such as the MFI consolidated balance sheet, and conforms with the IMF Balance of Payments Manual.

Section 7.2 contains a monetary presentation of the b.o.p.: the b.o.p. transactions mirroring the transactions in the external counterpart of M3. The data follow the sign conventions of the b.o.p., except for the transactions in the external counterpart of M3 taken from money and banking statistics (column 12), where a positive sign denotes an increase of assets or a decrease of liabilities. In the liabilities of portfolio investment, the b.o.p. transactions include sales and purchases of equity and debt securities issued by MFIs, apart from shares of money market funds and debt securities issued by MFIs with a maturity of up to two years. A specific methodological note on the monetary presentation of the euro area b.o.p. is available

in the “Statistics” section of the ECB’s website. See also Box 1 in the June 2003 issue of the Monthly Bulletin.

Section 7.3 shows data on euro area external trade in goods. The main source 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 breakdown by product group in columns 4 to 6 and 9 to 11 of Table 7.3.1 is in line with the classification by Broad Economic Categories. Manufactured goods (columns 7 and 12) and oil (column 13) are in line with the SITC Rev. 3 definition. 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 for imports, are not fully comparable with the goods item in the balance of payments statistics (Sections 7.1 and 7.2). The difference for imports accounted for around 5% in the recent years (ECB estimate), a significant part of which relates to the inclusion of insurance and freight services in the external trade data (c.i.f. basis).

The data on the euro area i.i.p. in Section 7.4 are based on positions vis-à-vis non-euro area residents, considering the euro area as a single economy (see also Box 9 in the December 2002 issue of the Monthly Bulletin). The i.i.p. is valued at current market prices, with the exception of direct investment, where book values are used to a large extent.

The outstanding amounts of the Eurosystem’s international reserves and related assets and liabilities are shown in Section 7.5, together with the part held by the ECB. These figures are not fully comparable with those of the Eurosystem’s weekly financial statement owing to differences in coverage and valuation. The data in Section 7.5 are in line with the

recommendations for the IMF/BIS template on international reserves and foreign currency liquidity. Changes in the gold holdings of the Eurosystem (column 3) are due to transactions in gold within the terms of the Central Bank Gold Agreement of 26 September 1999, updated on 8 March 2004. More information on the statistical treatment of the Eurosystem's international reserves can be found in a publication entitled "Statistical treatment of the Eurosystem's international reserves" (October 2000), which can be downloaded from the ECB's website. The website also contains more comprehensive data in accordance with the template on international reserves and foreign currency liquidity.

## EXCHANGE RATES

Section 8.1 shows nominal and real effective exchange rate (EER) indices for the euro calculated by the ECB on the basis of weighted averages of bilateral exchange rates of the euro against the currencies of the euro area's trading partners. A positive change denotes an appreciation of the euro. Weights are based on trade in manufactured goods with the trading partners in the periods 1995-1997 and 1999-2001, and are calculated to account for third-market effects. The EER indices result from the linking at the beginning of 1999 of the indices based on 1995-1997 weights to those based on 1999-2001 weights. The EER-23 group of trading partners is composed of the 13 non-euro area EU Member States, Australia, Canada, China, Hong Kong, Japan, Norway, Singapore, South Korea, Switzerland and the United States. The EER-42 group includes, in addition to the EER-23, the following countries: Algeria, Argentina, Brazil, Bulgaria, Croatia, India, Indonesia, Israel, Malaysia, Mexico, Morocco, New Zealand, the Philippines, Romania, Russia, South Africa, Taiwan, Thailand and Turkey. Real EERs are calculated using consumer price indices, producer price indices, gross domestic product deflators, unit labour costs in manufacturing and unit labour costs in the total economy.

For more detailed information on the calculation of the EERs, see Box 10 entitled "Update of the overall trade weights for the effective exchange rates of the euro and computation of a new set of euro indicators" in the September 2004 issue of the Monthly Bulletin and the ECB's Occasional Paper No 2 ("The effective exchange rates of the euro" by Luca Buldorini, Stelios Makrydakis and Christian Thimann, February 2002), which can be downloaded from the ECB's website.

The bilateral rates shown in Section 8.2 are monthly averages of those published daily as reference rates for these currencies.

## DEVELOPMENTS OUTSIDE THE EURO AREA

Statistics on other EU Member States (Section 9.1) follow the same principles as those for data relating to the euro area. Data for the United States and Japan contained in Section 9.2 are obtained from national sources.





# CHRONOLOGY OF MONETARY POLICY MEASURES OF THE EUROSYSTEM<sup>1</sup>

## 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

<sup>1</sup> The chronology of monetary policy measures of the Eurosystem taken between 1999 and 2001 can be found on pages 176 to 180 of the ECB's Annual Report 1999, on pages 205 to 208 of the ECB's Annual Report 2000 and on pages 219 to 220 of the ECB's Annual Report 2001.

improve the operational framework for monetary policy:

First, 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.

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

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

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

### **6 FEBRUARY 2003**

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

### **6 MARCH 2003**

The Governing Council of the ECB decides to lower the minimum bid rate on the main refinancing operations by 0.25 percentage

point to 2.50%, starting from the operation to be settled on 12 March 2003. It also decides to lower the interest rates on both the marginal lending facility and the deposit facility by 0.25 percentage point, to 3.50% and 1.50% respectively, both with effect from 7 March 2003.

### **3 APRIL 2003**

The Governing Council of the ECB decides that the minimum bid rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 2.50%, 3.50% and 1.50% respectively.

### **8 MAY 2003**

The Governing Council of the ECB decides that the minimum bid rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 2.50%, 3.50% and 1.50% respectively.

It also announces the results of its evaluation of the ECB's monetary policy strategy. This strategy, which was announced on 13 October 1998, consists of three main elements: a quantitative definition of price stability, a prominent role for money in the assessment of risks to price stability, and a broadly based assessment of the outlook for price developments.

The Governing Council confirms the definition of price stability formulated in October 1998, namely that "price stability is defined as a year-on-year increase in the Harmonised Index of Consumer Prices (HICP) for the euro area of below 2%. Price stability is to be maintained over the medium term". At the same time, the Governing Council agrees that in the pursuit of price stability it will aim to maintain

inflation rates close to 2% over the medium term.

The Governing Council confirms that its monetary policy decisions will continue to be based on a comprehensive analysis of the risks to price stability. At the same time, the Governing Council decides to clarify in its communication the respective roles played by economic and monetary analysis in the process of coming to the Council's overall assessment of risks to price stability.

To underscore the longer-term nature of the reference value for monetary growth as a benchmark for the assessment of monetary developments, the Governing Council also decides that it will no longer conduct a review of the reference value on an annual basis. However, it will continue to assess the underlying conditions and assumptions.

### **5 JUNE 2003**

The Governing Council of the ECB decides to lower the minimum bid rate on the main refinancing operations by 0.50 percentage point to 2.0%, starting from the operation to be settled on 9 June 2003. It also decides to lower the interest rates on both the marginal lending facility and the deposit facility by 0.50 percentage point, to 3.0% and 1.0% respectively, both with effect from 6 June 2003.

### **10 JULY, 31 JULY, 4 SEPTEMBER, 2 OCTOBER, 6 NOVEMBER, 4 DECEMBER 2003 AND 8 JANUARY 2004**

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.

### **12 JANUARY 2004**

The Governing Council of the ECB decides to increase the allotment amount for each of the longer-term refinancing operations to be conducted in the year 2004 from €15 billion to €25 billion. This increased amount takes into consideration the higher liquidity needs of the euro area banking system anticipated for the year 2004. The Eurosystem will, however, continue to provide the bulk of liquidity through its main refinancing operations. The Governing Council may decide to adjust the allotment amount again at the beginning of 2005.

### **5 FEBRUARY, 4 MARCH 2004**

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.

### **10 MARCH 2004**

In accordance with the Governing Council's decision of 23 January 2003, the maturity of the Eurosystem's main refinancing operations is reduced from two weeks to one week and the maintenance period for the Eurosystem's required reserve system is redefined to start on the settlement day of the main refinancing operation following the Governing Council meeting at which the monthly assessment of the monetary policy stance is pre-scheduled, rather than on the 24th day of the month.



**1 APRIL, 6 MAY, 3 JUNE, 1 JULY,  
5 AUGUST, 2 SEPTEMBER, 7 OCTOBER 2004**

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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## GLOSSARY

**Autonomous liquidity factors:** liquidity factors which normally do not stem from the use of monetary policy instruments. They include, for example, banknotes in circulation, government deposits with the central bank, and net foreign assets of the central bank.

**Central parity:** the exchange rate of ERM II member currencies vis-à-vis the euro around which the ERM II fluctuation margins are defined.

**Compensation per employee:** compensation is defined as the total remuneration, in cash or in kind, payable by employers to employees. Compensation includes gross wages and salaries, as well as bonuses, overtime payments and employers' social security contributions. Compensation per employee is defined as total compensation divided by the total number of employees.

**Consolidated balance sheet of the MFI sector:** obtained by netting out inter-MFI positions (mainly loans granted by one MFI to another) on the aggregated MFI balance sheet.

**Debt (financial accounts):** includes loans, debt securities issued, and pension fund reserves of non-financial corporations, valued at market value at the end of the period. In the quarterly financial accounts, debt does not include loans granted by non-financial sectors (for example inter-company loans) or by banks outside the euro area, whereas these components are included in the annual financial accounts.

**Debt ratio (general government):** general government debt is defined as total gross debt at nominal value outstanding at the end of the year and consolidated between and within the sectors of general government. The government debt-to-GDP ratio is defined as the ratio of general government debt to gross domestic product at current market prices and is the subject of one of the fiscal convergence criteria laid down in Article 104 (2) of the Treaty establishing the European Community.

**Debt securities:** represent a promise on the part of the issuer (i.e. the borrower) to make one or more payment(s) to the holder (the lender) at a specified future date or dates. They usually carry a specific rate of interest (the coupon) and/or are sold at a discount to the amount that will be repaid at maturity. Debt securities issued with an original maturity of more than one year are classified as long-term.

**Deficit ratio (general government):** the general government deficit is defined as net borrowing and corresponds to the difference between total government revenue and total government expenditure. The deficit ratio is defined as the ratio of the general government deficit to gross domestic product at current market prices and is the subject of one of the fiscal convergence criteria laid down in Article 104 (2) of the Treaty establishing the European Community. It is also referred to as the budget deficit ratio or the fiscal deficit ratio.

**Deposit facility:** a standing facility of the Eurosystem which counterparties may use to make overnight deposits, remunerated at a pre-specified interest rate, at a national central bank.

**Direct investment:** cross-border investment that reflects the objective of obtaining a lasting interest in an enterprise resident in another economy (in practice assumed for ownership equivalent to at least 10% of the voting rights). The direct investment account records net acquisitions of assets abroad by euro area residents (as "direct investment

abroad”) and net acquisitions of euro area assets by non-residents (as “direct investment in the euro area”). Direct investment includes equity capital, reinvested earnings and other capital associated with inter-company operations.

**EC surveys:** qualitative business and consumer surveys conducted for the European Commission. Questions are addressed to managers in manufacturing, construction, retail and services as well as to consumers. The confidence indicators are composite indicators calculated as the arithmetic average of the percentage balances of several components (see Table 5.2.5 in the “Euro area statistics” section for details).

**EONIA (euro overnight index average):** a measure of the interest rate prevailing in the euro interbank overnight market based on transactions.

**Equity securities:** represent ownership of a stake in a corporation. Comprise shares traded on stock exchanges (quoted shares), unquoted shares and other forms of equity. Equities usually produce income in the form of dividends.

**ERM II (exchange rate mechanism II):** the exchange rate arrangement which provides the framework for exchange rate policy cooperation between the euro area countries and the EU Member States not participating in Stage Three of EMU.

**EURIBOR (euro interbank offered rate):** the rate at which a prime bank is willing to lend funds in euro to another prime bank, computed daily for interbank deposits with different maturities of up to 12 months.

**Euro effective exchange rates (EERs, nominal/real):** nominal euro EERs are weighted averages of bilateral euro exchange rates against the currencies of euro area’s trading partners. The ECB publishes nominal EER indices for the euro against the currencies of a narrow and a broad group of trading partners. The weights used reflect the share of each partner country in euro area trade. Real EERs are nominal EERs deflated by a weighted average of foreign, relative to domestic, prices or costs. They are, thus, measures of price and cost competitiveness.

**Eurozone Manufacturing Input Prices Index (EPI):** a weighted average of the manufacturing input price data derived from surveys of manufacturing business conditions conducted in a number of euro area countries.

**Eurozone purchasing managers’ surveys:** surveys of manufacturing and service sector business conditions conducted for a number of countries in the euro area and used to compile indices. The Eurozone Manufacturing Purchasing Managers’ Index (PMI) is a weighted indicator calculated from indices of output, new orders, employment, suppliers’ delivery times and stocks of purchases. The service sector survey asks questions on business activity, expectations of future business activity, amount of business outstanding, incoming new business, employment, input prices and prices charged. The Eurozone Composite Index is calculated combining the results from the manufacturing and service sector surveys.

**External trade in goods:** intra- and extra-euro area exports and imports of goods, measured in terms of value and as volume and unit value indices. Intra-euro area trade records the arrival and dispatch of goods flowing between the euro area countries, while extra-euro area trade records

the external trade of the euro area. External trade statistics are not directly comparable with exports and imports recorded in the National Accounts, as the latter include both intra- and extra-euro area transactions and also combine goods and services.

**Fixed rate tender:** a tender procedure where the interest rate is specified in advance by the central bank and participating counterparties bid the amount of money they wish to transact at the fixed interest rate.

**General government:** comprises central, state and local government and social security funds. Publicly-owned units carrying out commercial operations, such as public enterprises, are in principle excluded from general government.

**Gross domestic product (GDP):** the final result of production activity. It corresponds to the economy's output of goods and services less intermediate consumption, plus net taxes on products and imports. GDP can be broken down by output, expenditure or income components. The main expenditure aggregates which make up GDP are household final consumption, government final consumption, gross fixed capital formation, changes in inventories, and exports and imports of goods and services (including intra-euro area trade).

**Gross monthly earnings:** a measure of gross monthly wages and salaries of employees, including employees' social security contributions.

**Harmonised Index of Consumer Prices (HICP):** a measure of consumer prices which is compiled by Eurostat and harmonised for all EU countries.

**Hourly labour cost index:** a measure of labour costs, including gross wages and salaries (including bonuses of all kinds), employers' social security contributions and other labour costs (such as vocational training costs, recruitment costs and employment-related taxes) and net of subsidies, per hour actually worked. Hourly costs are obtained by dividing the total of these costs for all employees by all hours worked by them (including overtime).

**Implied volatility:** a measure of expected volatility (standard deviation in terms of annualised percentage changes) in the prices of, for example, bonds and stocks (or of corresponding futures contracts), which can be extracted from option prices.

**Index of negotiated wages:** a measure of the direct outcome of collective bargaining in terms of basic pay (i.e. excluding bonuses) at the euro area level. It refers to the implied average change in monthly wages and salaries.

**Industrial producer prices:** a measure of the factory-gate prices (transportation costs are not included) of all products sold by industry excluding construction on the domestic markets of the euro area countries, excluding imports.

**Industrial production:** a measure of the gross value added created by industry at constant prices.

**Inflation-indexed government bonds:** debt securities whose coupon payments and principal are linked to a specific consumer price index.



**International investment position (i.i.p.):** the value and composition of an economy's outstanding net financial claims on (or financial liabilities to) the rest of the world. Also referred to as the net external asset position.

**Job vacancies:** a measure of newly created jobs, unoccupied jobs or jobs about to become vacant in the near future, for which the employer has taken recent active steps to find a suitable candidate.

**Key ECB interest rates:** the interest rates, set by the Governing Council, which reflect the monetary policy stance of the ECB. They are the minimum bid rate on the main refinancing operations, the interest rate on the marginal lending facility and the interest rate on the deposit facility.

**Labour force:** the sum of persons in employment and the number of unemployed.

**Labour productivity:** a measure of the output that can be produced with a given input of labour. Labour productivity can be measured in several ways. It is commonly measured as GDP at constant prices divided by either total employment or total hours worked.

**Longer-term refinancing operation:** a monthly open market operation, conducted by the Eurosystem, with a usual maturity of three months. The operations are conducted as variable rate tenders with pre-announced allotment volumes.

**M1:** narrow monetary aggregate. Comprises currency in circulation plus overnight deposits held with MFIs and central government (e.g. at the post office or treasury).

**M2:** intermediate monetary aggregate. Comprises M1 and deposits redeemable at a period of notice of up to and including three months (i.e. short-term savings deposits) and deposits with an agreed maturity of up to and including two years (i.e. short-term time deposits) held with MFIs and central government.

**M3:** broad monetary aggregate. Comprises M2 and marketable instruments, i.e. repurchase agreements, money market fund shares and units, and debt securities with a maturity of up to and including two years issued by MFIs.

**Marginal lending facility:** a standing facility of the Eurosystem which counterparties may use to receive credit from a national central bank at a pre-specified interest rate against eligible assets.

**Main refinancing operation:** a weekly open market operation conducted by the Eurosystem. In 2003 the Governing Council decided that as of March 2004 the maturity of these operations would be reduced from two weeks to one. The operations are conducted as variable rate tenders with a pre-announced minimum bid rate.

**MFIs (monetary financial institutions):** financial institutions forming the money-issuing sector of the euro area. They include the ECB, the national central banks of the euro area countries, and credit institutions and money market funds located in the euro area.

**MFI credit to euro area residents:** comprises MFI loans to euro area residents and MFI holdings of securities issued by euro area residents. Securities comprise shares, other equity and debt securities.

**MFI longer-term financial liabilities:** comprise deposits with an agreed maturity of over two years, deposits redeemable at a period of notice of over three months, debt securities issued with an original maturity of more than two years and the capital and reserves of the euro area MFI sector.

**MFI net external assets:** comprise external assets of euro area MFIs (such as gold, non-euro banknotes, securities issued by non-euro area residents and loans granted to non-euro area residents) minus external liabilities of the euro area MFI sector (such as non-euro area residents' holdings of deposits, repurchase agreements, money market fund shares and units, and debt securities with a maturity of up to and including two years issued by MFIs).

**Portfolio investment:** a record of net acquisitions by euro area residents of securities issued by non-residents of the euro area ("assets") and net acquisitions by non-residents of the euro area of securities issued by euro area residents ("liabilities"). Includes equity securities, debt securities in the form of bonds and notes, and money market instruments. Transactions are recorded at the effective price paid or received, less commissions and expenses. To be regarded as a portfolio asset, ownership in an enterprise must be equivalent to less than 10% of the voting rights.

**Price stability:** the maintenance of price stability is the primary objective of the Eurosystem. The Governing Council defines price stability as a year-on-year increase in the Harmonised Index of Consumer Prices (HICP) for the euro area of below 2%. The Governing Council has also made it clear that, in the pursuit of price stability, it aims to maintain inflation rates below, but close to, 2% over the medium term.

**Reference value for M3 growth:** the annual growth rate of M3 over the medium term consistent with the maintenance of price stability. At present, the reference value for annual M3 growth is 4½%.

**Reserve requirement:** the minimum amount of reserves a credit institution is required to hold with the Eurosystem. Compliance is determined on the basis of the average of the daily balances over a maintenance period of around one month.

**Unit labour costs:** a measure of total labour costs per unit of output calculated for the euro area as the ratio of total compensation of employees to gross domestic product at constant prices.

**Variable rate tender:** a tender procedure where the counterparties bid both the amount of money they wish to transact with the central bank and the interest rate at which they wish to enter into the transaction.

**Wage drift:** a measure of the gap between the rate of increase of wages and salaries actually paid and that of basic negotiated wages (e.g. due to additional elements such as bonuses and promotion premia and clauses covering unexpected inflation).

**Yield curve:** describes the relationship between interest rates at different maturities at a given point in time. The slope of the yield curve can be measured as the difference between interest rates at two selected maturities.

