



EUROPEAN CENTRAL BANK

MONTHLY BULLETIN  
MAY

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EUROPEAN CENTRAL BANK



## MONTHLY BULLETIN MAY 2004

In 2004 all ECB publications will feature a motif taken from the €100 banknote.

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*The cut-off date for the statistics included in this issue was 5 May 2004.*

ISSN 1561-0136 (print)

ISSN 1725-2822 (online)



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## 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 6 May 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.

On the basis of its regular economic and monetary analyses, the Governing Council concluded that it continued to expect price stability to be maintained over the medium term. Accordingly, the Governing Council did not change its assessment of the monetary policy stance and left the key ECB interest rates at their prevailing low levels. The low interest rates across the entire maturity spectrum also support the economic recovery in the euro area. The Governing Council will continue to monitor carefully all developments that could affect its assessment of risks to price stability over the medium term.

Starting with the economic analysis, the conjunctural indicators available still provide mixed evidence regarding the current situation and the very short-term outlook. All in all, they suggest that the recovery of real economic activity in the euro area has continued into 2004, albeit at a modest pace. At the same time, most recent information has been more encouraging, with the latest euro area business survey data offering more positive signals with regard to the beginning of the second quarter.

While the latest positive signals need to be confirmed by future developments, they underpin the expectation that the gradual recovery in the euro area will continue and will strengthen over time. The conditions for such a recovery are in place.

First, the global economic upturn continues to be robust and broadly based, both geographically and across sectors, and world trade has also strengthened. In this context of a favourable external environment, euro area exports are expected to grow significantly this year and next.

Second, favourable financing conditions, improvements in corporate efficiency and earnings and the strength of global demand should help investment. Growth in real disposable income should support private consumption, especially since households do not appear to face financial constraints that might impede stronger spending. Over time, consumer spending should also be supported by an improvement in labour market conditions.

These considerations underpin the expectation of a continuation of the economic recovery in the euro area. This expectation is mirrored by available forecasts and projections, and is also in line with financial market developments. Obviously, any forward-looking assessment is subject to risks and uncertainties. On the external side, the adverse terms-of-trade effects of recent rises in oil and other commodity prices pose risks at shorter horizons, while the persistence of global imbalances implies some uncertainties over the medium term. On the domestic side, uncertainties surrounding fiscal policy and structural reforms in some euro area countries seem to have contributed to preventing a more vigorous improvement in consumer confidence. A continued commitment to, and greater clarity about, the content and timing of these crucial reforms, supported by a better understanding of their necessity and benefits for all citizens, would help to resolve this uncertainty and thereby mitigate the associated risks for the euro area economy.

Turning to price developments, according to Eurostat's flash estimate, annual HICP inflation was 2.0% in April, after standing at 1.7% in March. While no detailed information is available as yet, the recent rise in annual inflation rates is likely to mainly reflect a strong base effect in the energy component, resulting from the marked decline of oil prices a year ago. Moreover, recent oil price increases have exerted additional upward pressure. As these factors will also play a role in the next few months, annual HICP inflation rates will exhibit some volatility and inflation rates of 2% or somewhat above are possible over the short term.

Looking beyond shorter-term developments, over longer horizons inflation rates are expected to remain in line with price stability. In particular, given the labour market situation, wage developments should remain moderate.

This outlook for price developments is in line with available forecasts and projections. However, at the current juncture, the increase in commodity prices in general, and oil prices in particular, may pose an upside risk to price stability. It will also continue to be important to pay close attention to inflation expectations.

Moving on to the monetary analysis, annual M3 growth has moderated only slowly since the summer of 2003. While there is evidence of continued portfolio shifts out of M3 into longer-term assets, the pace of this adjustment remains modest. Both monetary and credit growth continue to be supported by the historically low level of interest rates in the euro area and may also reflect the improvement in the economic environment over the last few quarters.

Given the continued strength of monetary growth, liquidity conditions remain ample in the euro area. The impact of this high level of liquidity on inflation over the medium term will depend on future developments in the economy and financial markets. Should excess liquidity persist, it could lead to inflationary pressures over the medium term.

To sum up, the economic analysis indicates that the main scenario for the outlook for price developments over the medium term is in line with price stability. Cross-checking with the monetary analysis does not alter this view at the current juncture.

Regarding fiscal policies, the Governing Council sees increased reasons for concern. On the basis of the latest Commission forecasts, the average euro area budgetary position is not expected to improve much this year or next. A growing number of countries are likely to report significant imbalances, while fiscal

consolidation efforts might fall short of commitments. It is essential that all countries concerned undertake credible measures to address these concerns. Such measures should be part of a comprehensive reform strategy. This would underpin the ongoing economic upswing by boosting confidence in sound public finances and by improving the prospects for future economic growth. The Governing Council welcomes the decision by the Commission to request more consolidation efforts from a number of countries.

Turning to structural reforms, the Governing Council reaffirmed its view that such reforms are essential if the euro area's growth potential is to expand substantially. In particular, both the employment rate and labour productivity growth in the euro area need to increase significantly. This requires a strengthened technological and scientific base and its application in the euro area as a whole, fostered by major efforts to enhance the human capital of the euro area economy. In this context, the Governing Council is particularly concerned that youth unemployment remains high in several countries. In order to increase the employment rate and labour productivity growth, it is necessary to strengthen the implementation of structural reforms, at both the European and the national level. The Lisbon agenda provides an excellent diagnosis of the problem and there is a good understanding of the measures needed to deal with it. The Governing Council strongly supports the ongoing reforms, but notes that they should be speeded up across the euro area. It is important to understand that everyone will be better off – with higher growth and more jobs – if and when the reforms of the Lisbon agenda are delivered.

This issue of the Monthly Bulletin contains three articles. The first presents a number of key macroeconomic features of the expanded EU and some potential longer-term implications of enlargement for economic growth and welfare. The second article discusses issues relating to the “natural real interest rate” as an indicator for assessing the stance of monetary

policy and presents some estimations of the natural real interest rates in the euro area. The third article describes the risks arising in reverse transactions (the most important monetary policy instrument used by the Eurosystem to provide liquidity to banks) and explains how the Eurosystem's collateral and risk control frameworks cater for these risks.





# ECONOMIC AND MONETARY DEVELOPMENTS

## I THE EXTERNAL ENVIRONMENT OF THE EURO AREA

*The robust growth of the world economy and of world trade continues to shape the external environment of the euro area. Inflationary pressures in major regions have so far remained rather limited despite the significant economic expansion. However, the rise in oil and non-oil commodity prices may now have started to feed into higher producer and consumer prices.*

### DEVELOPMENTS IN THE WORLD ECONOMY

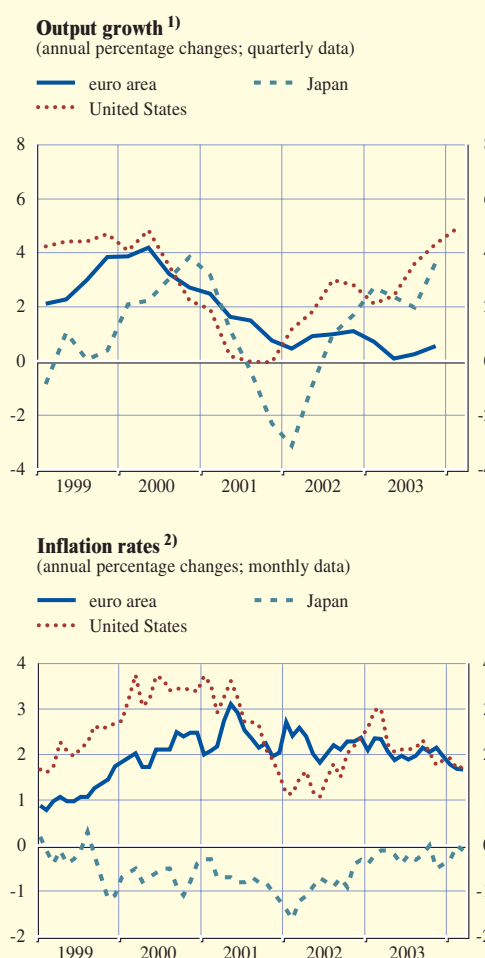
The global outlook has improved significantly over the past few months. In particular, non-Japan Asia and the United States, which have recorded exceptionally high growth rates since the second half of 2003, are expected to remain the main contributors to global growth (see Chart 1). Further growth impulses come from global trade, which has been expanding significantly in recent months.

In the United States, in the first quarter of 2004, economic growth became more balanced and remained solid. According to the advance estimates, real GDP in the first quarter grew by 4.2% (annualised quarter on quarter), reflecting a broadly based expansion in both private and public spending. However, the sustainability of household spending depends to a large extent on the recovery in employment and wages. While labour income is still growing at a lower rate than disposable income, some improvement may be currently under way in the labour market, and hiring appears to have picked up.

Against this background, consumer confidence about labour market and business conditions rose in April, according to the Conference Board Consumer survey, while the University of Michigan's Consumer Sentiment Index declined slightly in comparison with March, reflecting some uncertainty still surrounding consumer income.

In March, annual CPI inflation remained unchanged at 1.7%, lower than it had been at the beginning of 2004, although the annual rate of inflation excluding food and energy rose to 1.6% – an increase of 0.4 percentage point on February. Energy prices continued to grow at a sustained pace, rising on a seasonally adjusted monthly basis by 1.9% relative to February. As regards monetary policy, on 4 May the Federal Open Market Committee unanimously decided to leave its target for the federal funds rate unchanged at 1%.

Chart 1 Main developments in major industrialised economies



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.

2) Based on HICP.

In Japan, signs of robust economic growth have continued in 2004 following the strong real GDP figures for the fourth quarter of 2003. Exports and investments continue to drive the recovery, although at a somewhat slower pace than in the fourth quarter. On the domestic corporate side, while monthly growth rates of industrial production, shipments and machinery orders have been rather volatile, the Bank of Japan's Tankan survey confirmed improving business sentiment among both manufacturing and non-manufacturing companies in the first quarter. Private consumption spending has continued to strengthen in 2004, supported by rather strong increases in surveyed workers' real disposable income in early 2004 in addition to earlier decreases in saving rates. As for price developments, deflationary pressures have gradually abated. The CPI overall and adjusted for fresh food fell by 0.1% year on year in March. The Bank of Japan decided on 28 April to keep its monetary policy unchanged.

In the United Kingdom, economic growth continues to be strong. According to the latest national account data, real GDP rose by 0.9% in the fourth quarter of 2003. The main driver of growth remains household spending. Private consumption rose by a quarterly rate of 0.9% in the last quarter of 2003, reflecting stronger income growth, robust labour market conditions, buoyant household borrowing and a strong housing market. Significant growth was also recorded in investment and in government consumption. Net exports contributed negatively to overall GDP in 2003. Preliminary estimates of GDP growth for the first quarter of 2004 – together with short-term indicators – suggest that growth remained strong this year. Annual HICP inflation was 1.1% in March 2004, down from 1.3% in February.

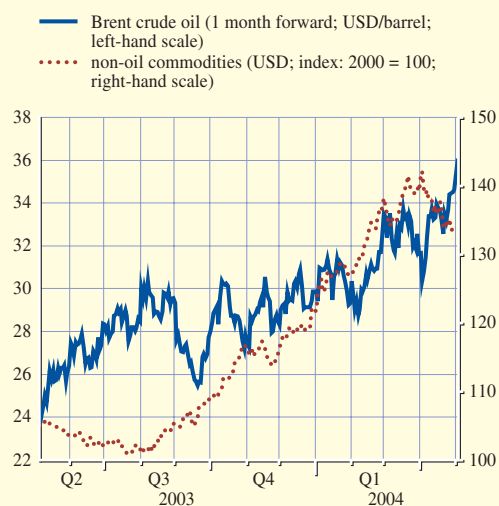
In other non-euro area EU Member States the growth outlook is broadly positive. Growth has picked up in Denmark and Sweden, although less than in the United Kingdom, and most of the ten central and eastern European and Mediterranean countries that joined the EU on 1 May 2004 are currently experiencing solid growth.

In non-Japan Asia, the latest data releases continue to point to a robust economic performance. In China real GDP growth reached 9.7% (year on year) in the first quarter of 2004, driven mainly by fixed asset investment. In March CPI inflation rose slightly to 3% (year on year), while PPI inflation surged to 3.9% (year on year). South Korea's industrial production grew sharply in the first two months of 2004, still benefiting from strong Chinese demand and demand for semiconductors for use by the global IT industry. Recent information for Latin America also confirms an ongoing improvement in real activity indicators there.

### COMMODITY MARKETS

In early May oil prices (in US dollar terms) reached their highest level in more than thirteen years. On 5 May the price of Brent crude reached USD 35.7 (€29.4). Prices were supported by strong demand for oil, a tightness in the US gasoline market, and heightened concerns over the security of oil supplies from

Chart 2 Main developments in commodity markets



Sources: Datastream and HWWA.

the Middle East. Other commodity prices retraced from the peak reached in the beginning of April amid uncertainty over future demand for raw materials. In US dollar terms, non-energy commodity prices were 32.2% higher in April than a year earlier (see Chart 2).

#### **OUTLOOK FOR THE EXTERNAL ENVIRONMENT**

In 2004 global economic activity is expected to remain robust and world real GDP growth is likely to reach its highest annual rate since 2000. The risks to the world economy appear to be broadly balanced. On the upside, world trade could expand even more strongly than currently anticipated. On the downside, high oil and other commodity prices could have a negative impact on world economic growth and price stability while, over the medium term, risks related to global current account imbalances persist. Moreover, geopolitical uncertainty continues to be present.



## 2 MONETARY AND FINANCIAL DEVELOPMENTS

### 2.1 MONEY AND MFI CREDIT

The monetary data for March 2004 confirmed that a trend towards more moderate M3 growth is under way. The developments in some of the main components and counterparts of M3 indicate that euro area investors continued to gradually shift the structure of their portfolio towards longer-term and riskier assets. At the same time, the low level of interest rates still fuelled the demand for liquid monetary assets, particularly those included in M1. Despite the gradual moderation in M3 growth, there remains significantly more liquidity in the euro area than needed to finance non-inflationary economic growth. In an environment of favourable financing conditions, the rate of growth of MFI loans to the private sector remained robust, with a strong expansion in loans to households, especially for house purchase. By contrast, the growth rate of MFI loans to non-financial corporations remained more subdued.

#### THE BROAD MONETARY AGGREGATE M3

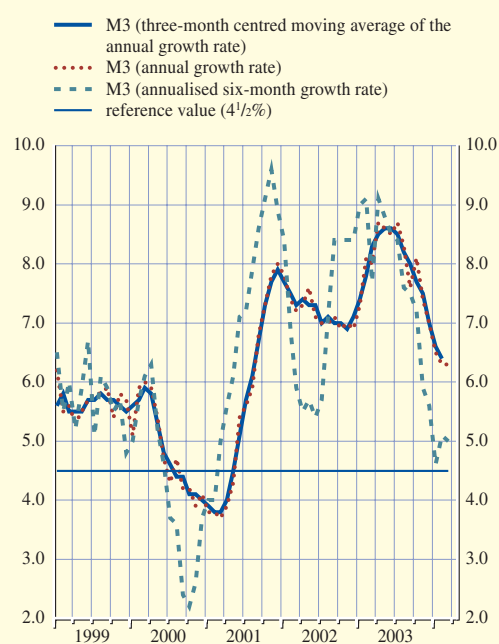
The monetary data for March 2004 confirmed that a trend towards more moderate monetary growth is under way. On a monthly basis, the broad monetary aggregate M3 expanded at a very slow pace in March. This reflected, to some extent, the reversal of large temporary repurchase agreement transactions conducted in the previous two months. The annual rate of growth of M3 remained stable at 6.3%, while its three-month average over the period January 2004 to March 2004 declined further, to 6.4%, from 6.6% in the period December 2003 to February 2004 (see Chart 3).

The developments in the main components and counterparts of M3 confirmed earlier evidence that euro area investors are unwinding past portfolio shifts into the monetary assets included in M3 in a rather cautious way. This points to a continued high degree of risk aversion on the part of individual investors, following the protracted period of stock market declines in previous years. Another reason why monetary growth has not declined more rapidly is the stimulating effect of low short-term interest rates and, hence, of low opportunity costs on the demand for liquid monetary instruments, particularly for those included in the narrow monetary aggregate M1. In addition, households do not seem to have so far reduced substantially their precautionary holdings of liquid financial assets, which they accumulated at the time of the weakening in economic activity.

Overall, there remains significantly more liquidity in the euro area than needed to finance non-inflationary economic growth. Whether or not the accumulated liquidity will translate into inflationary pressures over the medium to long term depends largely on the extent to and speed

Chart 3 M3 growth and the reference value

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



Source: ECB.

at which euro area investors continue to adjust their portfolios and on the strength of the economic recovery. It therefore remains crucial to monitor carefully the future development of excess liquidity, in conjunction with the incoming information on economic activity in the euro area.

### MAIN COMPONENTS OF M3

In March the narrow monetary aggregate M1 expanded at a faster pace on an annual basis (11.4%, compared with 11.1% in February), entirely as a result of faster growth in overnight deposits (see Table 1). By contrast, the annual rate of expansion in currency in circulation moderated somewhat, while remaining very high (22.7%). The ongoing strong expansion in the instruments included in M1 largely reflects the low opportunity costs of holding such instruments and the accumulation of euro banknote holdings both inside and outside the euro area.

The annual growth rate of short-term deposits other than overnight deposits declined in March to 2.2%, from 3.0% in the previous month. This decline mirrored the lower annual rates of change of both short-term time deposits (i.e. deposits with an agreed maturity of up to and including two years) and short-term savings deposits (i.e. deposits redeemable at a period of notice of up to and including three months). While the growth of savings deposits remained high, euro area economic agents continued to reduce their holdings of short-term time deposits, owing to the relatively low remuneration of these deposits relative to more liquid categories of deposits.

The marketable instruments included in M3 grew by 3.2% on an annual basis in March, compared with 2.4% in the previous month. This increase reflected, in particular, the rise in the annual rate of change of debt securities with an agreed maturity of up to two years. By contrast, the annual rate of change of repurchase agreements recorded a decline as a result of the reversal of large temporary portfolio management transactions undertaken by corporations in the previous two months. Meanwhile, the annual rate of growth of money market fund shares/units remained broadly unchanged. In recent months, the dynamics of money market fund shares/units – which are

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 Q1	2003 Q2	2003 Q3	2003 Q4	2004 Q1	2004 Feb.	2004 Mar.
<b>M1</b>	<b>44.6</b>	<b>10.1</b>	<b>11.3</b>	<b>11.4</b>	<b>11.1</b>	<b>11.1</b>	<b>11.1</b>	<b>11.4</b>
Currency in circulation	6.5	39.1	35.7	29.6	26.2	24.1	23.5	22.7
Overnight deposits	38.1	6.5	8.1	8.9	9.0	9.2	9.2	9.6
M2 - M1 (= other short-term deposits)	41.0	4.4	5.5	5.8	4.7	3.3	3.0	2.2
Deposits with agreed maturity of up to and including two years	16.1	0.4	0.0	-1.5	-3.2	-4.4	-5.1	-6.4
Deposits redeemable at notice of up to and including three months	24.9	7.6	10.0	11.6	11.0	9.3	9.2	8.6
<b>M2</b>	<b>85.6</b>	<b>7.1</b>	<b>8.3</b>	<b>8.5</b>	<b>7.9</b>	<b>7.2</b>	<b>7.0</b>	<b>6.8</b>
M3 - M2 (= marketable instruments)	14.4	10.5	9.8	7.4	5.8	2.4	2.4	3.2
<b>M3</b>	<b>100.0</b>	<b>7.6</b>	<b>8.5</b>	<b>8.3</b>	<b>7.6</b>	<b>6.5</b>	<b>6.3</b>	<b>6.3</b>
<b>Credit to euro area residents</b>	<b>169.2</b>	<b>4.2</b>	<b>4.8</b>	<b>5.3</b>	<b>5.9</b>	<b>5.9</b>	<b>5.9</b>	<b>6.1</b>
Credit to general government	36.5	2.1	3.5	4.9	6.6	6.1	5.8	6.6
Loans to general government	13.5	-1.1	-0.4	1.0	1.5	1.2	0.5	2.3
Credit to the private sector	132.7	4.8	5.1	5.5	5.7	5.9	5.9	6.0
Loans to the private sector	115.4	5.0	4.6	4.9	5.3	5.5	5.5	5.5
<b>Longer-term financial liabilities (excluding capital and reserves)</b>	<b>51.8</b>	<b>5.0</b>	<b>5.2</b>	<b>5.5</b>	<b>6.4</b>	<b>7.2</b>	<b>7.3</b>	<b>7.8</b>

Source: ECB.

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

instruments often used to “park” funds in a safe and liquid form – have moderated, as euro area investors have gradually reversed past portfolio shifts into these instruments.

### MAIN COUNTERPARTS OF M3

The annual growth rate of MFI loans to the private sector stood at 5.5% in March, unchanged from the previous month. While MFI loans to households continued to expand at a fast pace, the growth of MFI loans to non-financial corporations remained more subdued (see Table 2).

In March the dynamics of MFI loans to households continued to be supported by strong growth in loans for house purchase. This probably reflected both the continuing low level of interest rates on loans for housing purchase in the euro area and the strong house price rises in some euro area countries. The annual rate of growth of consumer credit remained broadly unchanged in March, following the recovery observed in recent months. The pick-up over recent months could be tentatively seen as a positive indication for consumption in the first quarter of 2004. Finally, the annual rate of growth of other lending to households increased.

Annual growth in MFI loans to non-financial corporations remained more subdued in March. This may reflect, to some extent, the larger availability of internal funds at a time of economic recovery and increased recourse to alternative sources of external finance. In this respect, the continuing high annual rate of growth of MFI loans to other non-monetary financial intermediaries (excluding insurance corporations and pension funds) could be related to non-financial corporations increasingly financing themselves indirectly via these intermediaries.

The annual rate of expansion of the broader aggregate MFI credit to the private sector (also including, besides MFI loans, MFI holdings of securities issued by the private sector) stood at 6.0% in March, compared with 5.9% in the previous month. Over the same period the annual rate of growth of MFI credit to general government increased markedly, to 6.6%, from 5.8% in February. The relatively high rate of growth in MFI credit to general government reflects the deteriorating budgetary positions in some euro area countries.

**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 Q1	2003 Q2	2003 Q3	2003 Q4	2004 Jan.	2004 Feb.	2004 Mar.
<b>Non-financial corporations</b>	<b>42.5</b>	<b>3.7</b>	<b>3.6</b>	<b>3.6</b>	<b>3.4</b>	<b>3.3</b>	<b>3.2</b>	<b>3.3</b>
Up to one year	31.3	-1.0	0.5	-1.0	-0.8	-3.0	-3.2	-2.1
Over one and up to five years	17.2	5.8	2.4	4.4	3.1	5.2	4.5	3.4
Over five years	51.5	6.4	6.2	6.4	6.4	7.0	7.1	6.8
<b>Households <sup>2)</sup></b>	<b>49.7</b>	<b>5.8</b>	<b>5.4</b>	<b>5.7</b>	<b>6.4</b>	<b>6.4</b>	<b>6.4</b>	<b>6.7</b>
Consumer credit <sup>3)</sup>	13.6	3.1	3.4	2.8	3.1	3.8	4.9	4.8
Lending for house purchase <sup>3)</sup>	67.3	7.6	7.2	7.4	8.0	8.2	8.1	8.2
Other lending	19.1	2.1	1.1	2.1	3.6	2.4	1.5	2.6
<b>Insurance corporations and pension funds</b>	<b>0.6</b>	<b>8.3</b>	<b>4.9</b>	<b>10.4</b>	<b>12.9</b>	<b>12.6</b>	<b>6.8</b>	<b>9.5</b>
<b>Other non-monetary financial intermediaries</b>	<b>7.1</b>	<b>1.6</b>	<b>3.3</b>	<b>5.7</b>	<b>11.5</b>	<b>12.3</b>	<b>14.8</b>	<b>10.9</b>

Source: ECB.

Note: For further details, see footnotes 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.

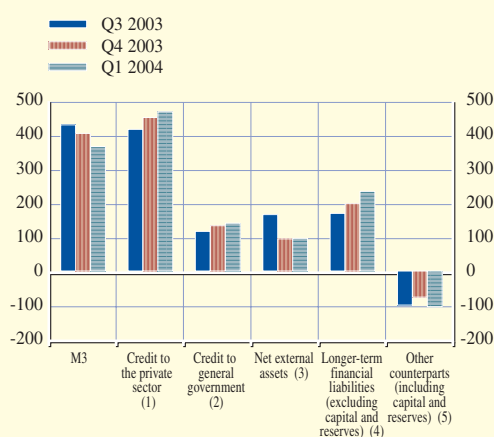
3) The definitions of consumer credit and lending for house purchase are not fully consistent across the euro area.

Among the other counterparts of M3, a further increase in the annual rate of growth of MFI longer-term financial liabilities (excluding capital and reserves) was recorded in March. MFI longer-term financial liabilities have grown at rather strong rates since the summer of 2003, against a background characterised by a relatively steep yield curve and low bond market volatility. Finally, the annual flow of the net external assets of the euro area MFI sector declined in March.

Summing up the information from the counterparts of M3, the more moderate annual M3 growth observed over recent quarters has been accompanied by a faster expansion in MFI longer-term financial liabilities (excluding capital and reserves) and by somewhat lower annual increases in MFI net external assets (see Chart 4). These factors confirm the assessment that euro area investors are changing the structure of their portfolio in favour of longer-term and riskier financial assets outside M3. At the same time, the robust annual growth of MFI credit to euro area residents continued to fuel M3 growth.

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

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



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

## Box I

### THE RESULTS OF THE APRIL 2004 BANK LENDING SURVEY FOR THE EURO AREA

This box describes the main results of the April 2004 bank lending survey for the euro area conducted by the Eurosystem. The survey, which is based on a sample of 85 banks, provides information on supply and demand conditions in the euro area credit markets. The survey questions are phrased in terms of changes over the past three months (in this case, the first quarter of 2004) or expectations of changes over the next three months (i.e. the second quarter of 2004). The answers to these questions are analysed by focusing on the difference (“net percentage”) between the share of banks reporting, for instance, that credit standards have been tightened and the share of banks reporting that these standards have been eased.

Overall, the results of the April 2004 survey show a stabilisation in the net percentages of banks indicating a tightening of credit standards over the past three months.

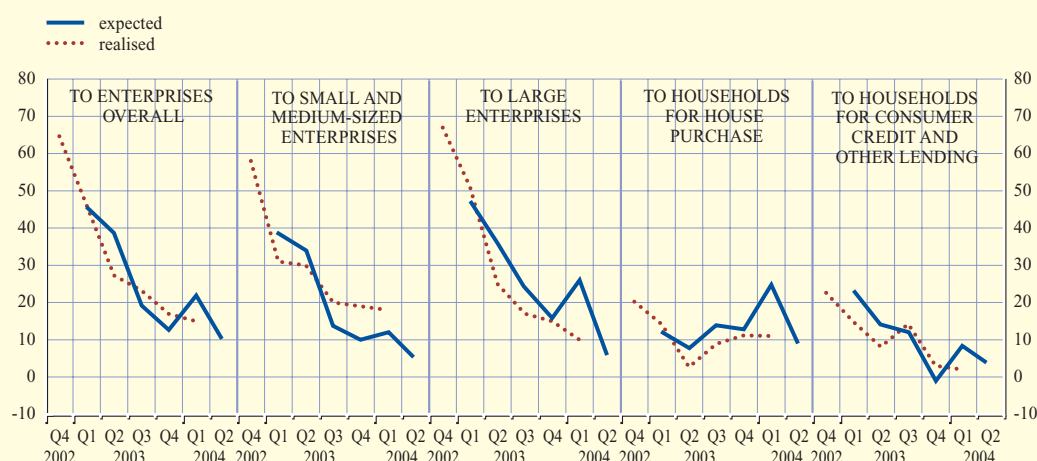
#### Loans or credit lines to enterprises

In net terms, 15% of the banks reported in April 2004 a tightening of credit standards for loans or credit lines to enterprises for the first quarter of 2004. This net percentage was lower than in the fourth quarter of 2003 (17%) and lower than what banks had expected in January 2004 for



## Chart Changes in credit standards applied to the approval of loans or credit lines

(net percentage)



Notes: The net percentage refers to the difference between the sum of the percentages for “tightened considerably” and “tightened somewhat” and the sum of the percentages for “eased somewhat” and “eased considerably”. “Realised” values refer to the period in which the survey was conducted. “Expected” values are the net percentages calculated from the responses given by the banks in the previous survey. For instance, “expected” values for the second quarter of 2004 were reported by banks in the April 2004 survey. The euro area results are the aggregation of the national outcomes weighted by the share of the total amounts outstanding of national lending in the total amount outstanding of euro area lending to euro area residents.

the first quarter of 2004 (22%) (see the chart above and Table A). In April the net percentage of reporting banks indicating a tightening remained slightly higher for loans to small and medium-sized enterprises than for loans to large enterprises. Banks reported that the factor contributing most to the continuing overall net tightening of credit standards in the first quarter of 2004 was the lack of further improvement in the macroeconomic outlook. The industry or firm-specific outlook, on the other hand, was regarded as contributing less to this net tightening.

**Table A Changes in credit standards applied to enterprises and in demand for loans or credit lines to enterprises**

(net percentages)

	Overall				Loans to small and medium-sized enterprises				Loans to large enterprises			
	Credit standards		Loan demand		Credit standards		Loan demand		Credit standards		Loan demand	
	Past three months	Next three months	Past three months	Next three months	Past three months	Next three months	Past three months	Next three months	Past three months	Next three months	Past three months	Next three months
April 2003	46	39	-31	-8	31	35	-19	3	51	36	-26	-9
July 2003	27	19	-25	-4	30	14	-17	-5	25	24	-15	-11
October 2003	23	13	-17	17	20	11	-9	23	17	16	-20	12
January 2004	17	22	3	33	20	12	12	39	15	26	-5	26
April 2004	15	10	-19	25	18	5	-9	34	10	6	-12	13

Notes: For credit standards the net percentage refers to the difference between the sum of the percentages for “tightened considerably” and “tightened somewhat” and the sum of the percentages for “eased somewhat” and “eased considerably”. For loan demand it refers to the difference between the sum of the percentages for “increased considerably” and “increased somewhat” and the sum of the percentages for “decreased somewhat” and “decreased considerably”.

The euro area results are the aggregation of the national outcomes weighted by the share of the total amounts outstanding of national lending in the total amount outstanding of euro area lending to euro area residents.

As regards demand for loans or credit lines to enterprises, a net 19% of the banks reported in April a decrease over the past three months, which was significantly lower than the net 33% of banks that expected in January an increase for the first quarter of 2004. The fall in the net percentage for corporate loan demand between the fourth quarter of 2003 and the first quarter of 2004 was more pronounced for small and medium-sized enterprises than for large enterprises. The main reason given for the fall in corporate loan demand was the decline in financing needs related to debt restructuring (i.e. refinancing needs were smaller). The net percentage of banks reporting that financing needs related to fixed investment contributed to lower demand remained unchanged.

With regard to expectations for the second quarter of 2004, a lower net percentage of reporting banks relative to the outcome for the first quarter expected in April 2004 a further tightening of their credit standards applied to the approval of loans or credit lines to enterprises. At the same time, banks expected in April stronger overall corporate loan demand in the second quarter of 2004 than had been realised in the first quarter.

### Loans to households for house purchase

On a net basis, 11% of banks reported a tightening of credit standards applied to the approval of housing loans in the first quarter of 2004. This net percentage was unchanged from the fourth quarter of 2003 and lower than had been expected for the first quarter of 2004 in the January 2004 survey (see the chart and Table B). The continued overall net tightening of credit standards applied to loans to households for house purchase reflected perceptions of risks related to housing market prospects and to general economic activity.

Looking at demand, the April 2004 survey showed that, in net terms, a lower percentage of banks reported an increase in the demand for loans for house purchase than in January 2004 (3% versus 23%). The fall in housing loan demand seems to be partly related to changes in housing subsidies in Germany. The fall was less pronounced than had been expected in January.

**Table B Changes in credit standards applied to households and in demand for loans to households**

(net percentages)

	Loans for house purchase				Consumer credit and other lending			
	Credit standards		Loan demand		Credit standards		Loan demand	
	Past three months	Next three months	Past three months	Next three months	Past three months	Next three months	Past three months	Next three months
April 2003	14	8	19	-10	15	14	-2	3
July 2003	3	14	29	-3	8	12	5	0
October 2003	9	13	31	16	14	-1	-7	19
January 2004	11	25	23	-21	2	8	-14	18
April 2004	11	9	3	1	2	3	10	13

Notes: For credit standards the net percentage refers to the difference between the sum of the percentages for “tightened considerably” and “tightened somewhat” and the sum of the percentages for “eased somewhat” and “eased considerably”. For loan demand it refers to the difference between the sum of the percentages for “increased considerably” and “increased somewhat” and the sum of the percentages for “decreased somewhat” and “decreased considerably”.

The euro area results are the aggregation of the national outcomes weighted by the share of the total amounts outstanding of national lending in the total amount outstanding of euro area lending to euro area residents.

Turning to expectations for the second quarter of 2004, the net tightening of credit standards was expected to remain broadly unchanged for loans for house purchase (at 9%) compared with the tightening in net terms for the first quarter reported in April. The reporting banks also expected in April 2004 broadly unchanged demand for housing loans over the next three months compared with the realised net percentage in April.

### **Loans to households for consumer credit and other lending**

In net terms, 2% of the responding banks reported a tightening of credit standards for loans to households for consumer credit and other lending in April 2004, unchanged from January and lower than had been expected for the first quarter in January 2004 (see the chart and Table B). Banks reported in April on a net basis that expectations about general economic activity contributed to a decrease in the tightening of credit standards, while a slight deterioration in their perception of the creditworthiness of consumers had the opposite effect.

On the demand side, the net percentage of banks reporting an increase in the demand for consumer credit and other lending to households rose sharply in April, to 10%, up from -14% in January. This increase seems to be related to an improved assessment regarding spending on durable goods and consumer confidence.

As regards expectations for the second quarter of 2004, the tightening of credit standards was expected to remain broadly unchanged for consumer credit (at 3% in net terms) compared with the realised net percentage for the first quarter of 2004 reported in April. In April 2004 the reporting banks also expected in net terms broadly unchanged increases in the demand for consumer credit over the next three months compared with the realised demand for the first quarter indicated in the April survey.

## **2.2 SECURITIES ISSUANCE**

*The annual rate of growth of debt securities issued by euro area residents declined slightly in February 2004. This was partly due to a moderation in bond issuance by non-financial corporations. In the same month, the annual growth rate of quoted shares issued by euro area residents increased slightly, but remained subdued.*

### **DEBT SECURITIES**

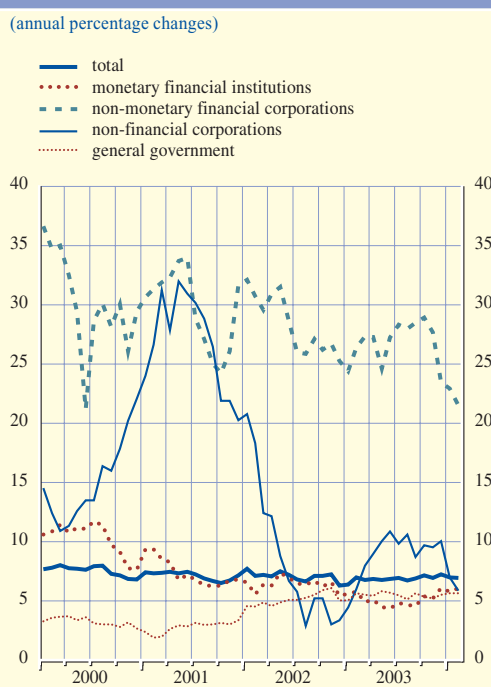
The annual rate of growth of debt securities issued by euro area residents decreased slightly to 6.9% in February 2004, from 7.0% in January (see Chart 5). Underlying the overall decrease in February was a considerable decline in short-term debt securities issuance, offset slightly by a moderate increase in long-term debt securities issuance. In general, issuers appear to have continued to lengthen the average maturity of their debt, even in the presence of a significant differential between long and short-term interest rates, taking advantage of the fact that the long-term financing conditions have remained very favourable from a historical perspective.

Turning to the sectoral breakdown of debt securities issuance, the annual growth rate of debt securities issued by MFIs increased slightly to 6.1% in February (see Table 3). In the non-MFI corporate sector, which includes both non-monetary financial corporations and non-financial

corporations, the annual growth rate of debt securities decreased by 1.2 percentage points between January and February 2004, to 13.8%. This was partly due to a further decline in the annual growth rate of debt securities issued by non-financial corporations (to 5.9% in February, as compared with an average rate of around 9% in 2003).

There are many possible reasons for the recent reduction in bond issuance by non-financial corporations. First, funding required by firms for the current year may in part have been secured in 2003, taking advantage of the low interest rates prevailing in 2003. Second, there are indications from the earnings reports of large quoted companies that corporate earnings have increased over recent quarters, which in turn could have limited the need for these firms to borrow from outside sources. In addition, non-financial corporations have continued to issue corporate bonds indirectly through financial subsidiaries and special purpose vehicles. In this respect, in February 2004 the average annual growth rate of debt securities issued by non-monetary financial corporations, despite declining, remained high at 21.5%. As a result of the persistently strong rate of growth over the past few years, the amount of bonds outstanding for this sector has, since the beginning of 2003, been larger than that for the non-financial corporations sector.

Chart 5 Sectoral breakdown of debt securities issuance by euro area residents



Source: ECB.  
Note: Growth rates are based on financial transactions and therefore do not include reclassifications, revaluations, exchange rate variations and other changes that do not arise from transactions.

Table 3 Securities issuance by euro area residents

Issuing sector	Amount outstanding, (€ billions) 2003 Q4	Annual growth rates (annual percentage changes <sup>1)</sup> )					
		2003 Q1	2003 Q2	2003 Q3	2003 Q4	2004 Jan.	2004 Feb.
<b>Debt securities issuance:</b>	<b>8,711</b>	<b>6.7</b>	<b>6.8</b>	<b>6.9</b>	<b>7.1</b>	<b>7.0</b>	<b>6.9</b>
MFIs	3,300	5.4	4.6	4.7	5.6	5.8	6.1
Non-monetary financial corporations	685	26.0	26.4	28.3	26.7	23.0	21.5
Non-financial corporations	589	6.2	10.0	9.7	9.8	7.0	5.9
General government	4,136	5.4	5.7	5.4	5.4	5.7	5.6
<i>of which:</i>							
Central government	3,918	4.4	4.7	4.7	4.6	4.9	4.9
Other general government	218	31.4	28.8	22.1	22.2	21.7	20.9
<b>Quoted share issuance:</b>	<b>3,647</b>	<b>0.7</b>	<b>1.1</b>	<b>1.1</b>	<b>1.1</b>	<b>1.2</b>	<b>1.3</b>
MFIs	569	0.6	0.7	1.0	1.4	1.7	2.0
Non-monetary financial corporations	348	0.1	1.9	2.1	2.6	3.0	3.2
Non-financial corporations	2,729	0.7	1.1	1.0	0.9	0.9	0.9

Source: ECB.

1) Quarterly average of monthly annual growth rates for quoted shares and debt securities.

As regards the government sector, the annual growth rate of debt securities issued by the central government sector remained unchanged at 4.9% in February. The other general government sector, which is mainly composed of local governments, continued to issue at a very high pace.

### QUOTED SHARES

The annual growth rate of quoted shares issued by euro area residents stood at 1.3% in February. It has remained broadly stable at this relatively low level since July 2003 (see Chart 6 and Table 3). Turning to the sectoral breakdown, the annual growth rate of quoted shares issued by non-financial corporations, which account for roughly three-quarters of total amounts outstanding, remained broadly unchanged (at 0.9%). At the same time, the annual growth rate of quoted shares issued by MFIs and non-monetary financial corporations (including insurance companies) continued to increase and stood at 2.0% and 3.2% respectively. This increase may reflect more favourable issuance conditions following the strong recovery witnessed in stock prices in these financial sectors over the past few quarters.

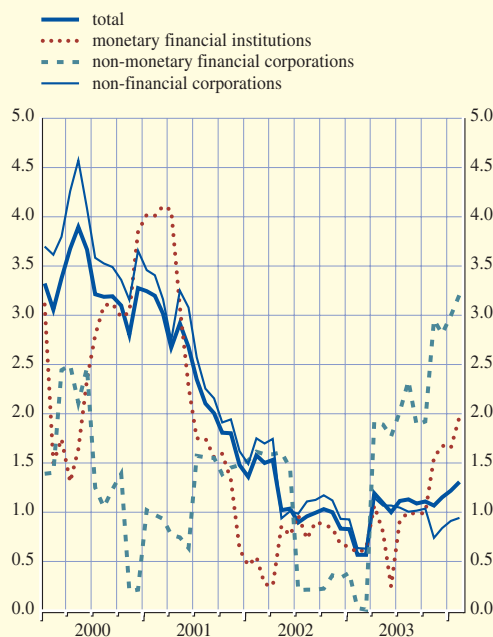
## 2.3 MONEY MARKET INTEREST RATES

*The downward trend in longer-term money market interest rates seen since the end of last year was reversed in April. As a consequence, the slope of the money market yield curve again turned positive.*

Longer-term money market rates increased in April, after having declined for four consecutive months (see Chart 7). For example, the twelve-month EURIBOR increased by 23 basis points

**Chart 6 Sectoral breakdown of quoted share issuance by euro area residents**

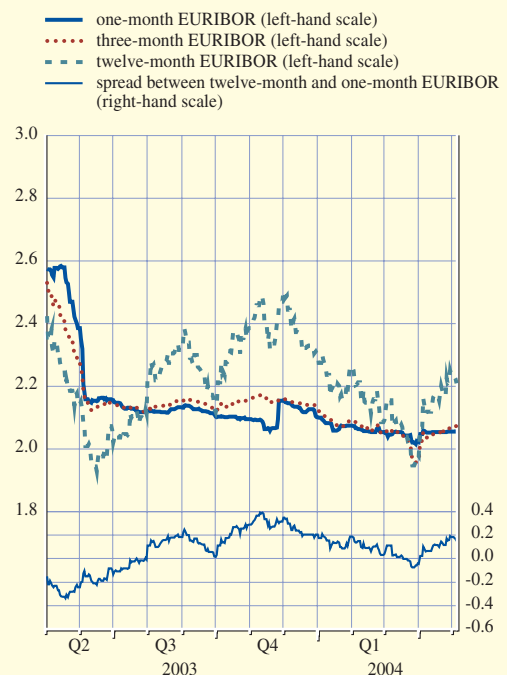
(annual percentage changes)



Source: ECB.  
Note: Growth rates are based on financial transactions and therefore do not include revaluations and other changes that do not arise from transactions.

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

(percentages per annum; percentage points; daily data)



Source: Reuters.

between the end of March and 5 May. However, interest rates at the very short end of the money market yield curve remained broadly unchanged, in line with key ECB interest rates. Consequently, the slope of the money market yield curve, which was slightly negative in March, turned positive again in April. The spread between the twelve-month and the one-month EURIBOR stood at 15 basis points on 5 May.

In April, market participants revised upwards their expectations for short-term interest rates for the coming months. This is suggested by the changes in the slope of the money market yield curve and the increase in implied three-month EURIBOR futures rates for 2004. The implied futures rate for December 2004 rose by 30 basis points between end-March and 5 May, while the implied futures rate for June and September 2004 increased by a somewhat smaller amount.

The liquidity provision in the Eurosystem's main refinancing operations was conducted smoothly in April. The EONIA overnight interest rate was very stable at a level slightly above the 2.0% minimum bid rate in the Eurosystem's main refinancing operations, apart from on the last two days of the reserve maintenance period ending on 6 April (see Chart 8). The EONIA reached 2.75% on 6 April, with the end of the maintenance period marked by rather tight liquidity conditions on account of unexpected changes in autonomous factors. The allotment rates in the Eurosystem's main refinancing operations were very close to the 2.0% minimum bid rate throughout April. In the Eurosystem's longer-term refinancing operation settled on 1 April, the allotment rates were slightly lower than the then-prevailing three-month EURIBOR interest rate.

## 2.4 BOND MARKETS

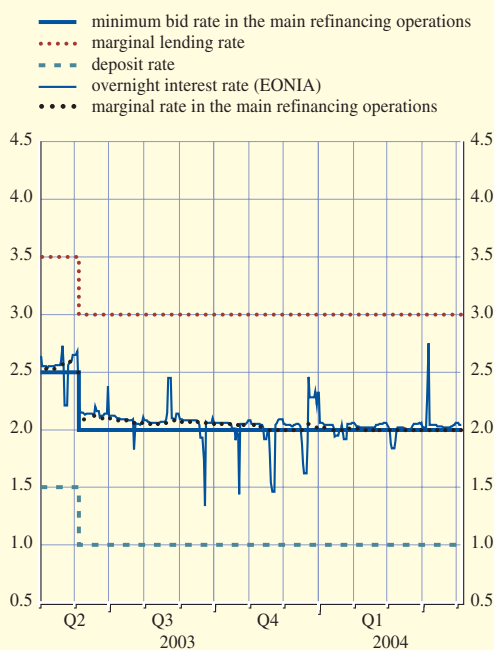
*Long-term government bond yields in the euro area and the United States increased in April 2004. The increase was more pronounced in the United States following macroeconomic data releases that were in general better than expected. Implied bond market volatility, an indicator of market participants' uncertainty regarding future bond yield developments, has also increased somewhat in the United States over recent weeks.*

### UNITED STATES

In the United States, ten-year government bond yields increased sharply, by around 70 basis points, between the end of March and 5 May. Most of the increase occurred in early April, following more favourable than expected US labour market developments (see also Box 2, entitled "The impact of recent employment data releases in the United States on global bond markets"). In

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

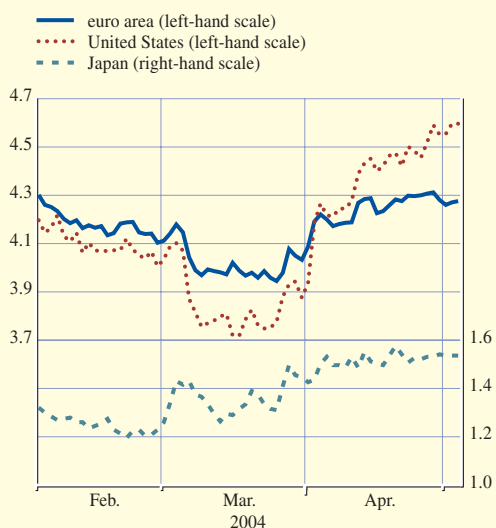
(percentages per annum; daily data)



Sources: ECB and Reuters.

**Chart 9 Long-term government bond yields**

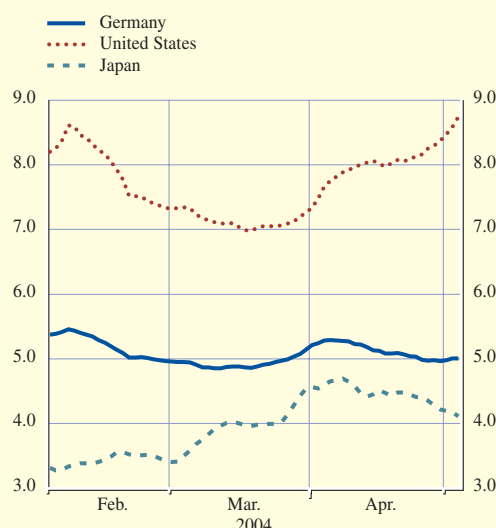
(percentages per annum; daily data)



Source: Reuters.  
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)



Source: Bloomberg.  
Note: The implied volatility series represents the 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.

addition, the fact that inflation increased according to some indicators and retail sales data were better than had been expected by market participants also contributed to upward pressure on US long-term bond yields. All of these data releases contributed to an upward shift in market expectations regarding the future path of short-term interest rates in the United States.

Most of the increase in nominal bond yields was related to higher real yields offered on long-term index-linked bonds, although the real yields remained low from a historical perspective. At the same time, investors' long-term average inflation expectations in the United States edged up, as suggested by a slight increase in the ten-year break-even inflation rate. Market participants' perception of uncertainty in the US bond market increased somewhat in April. Implied bond market volatility stood on 5 May at a level somewhat above its average since January 1999 (see Chart 10).

### JAPAN

In Japan, long-term government bond yields increased by 10 basis points between end-March and 5 May to stand at 1.55%. The increase seemed to reflect what was in general a more optimistic market assessment of future economic activity in Japan, following data releases indicating improved business confidence. Market participants' uncertainty about future bond yield developments, as measured by implied bond market volatility, remained broadly unchanged overall and ended the period at a level around its average since January 1999.

### EURO AREA

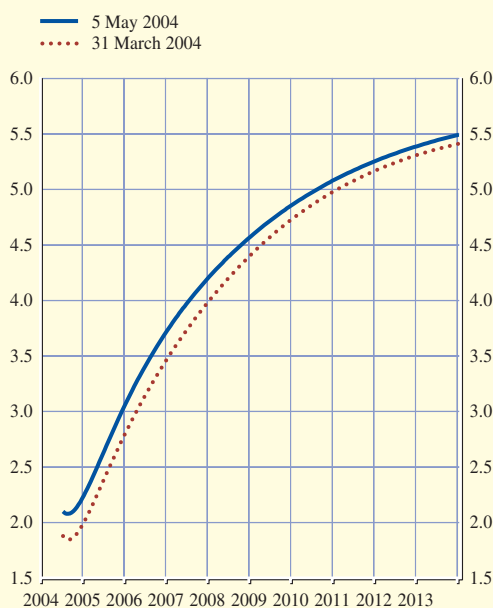
In the euro area, government bond yields moved broadly in tandem with US government bond yields in March, although the upturn was more muted. Overall, ten-year government bond yields in

the euro area increased by 25 basis points between end-March and 5 May and ended the period at 4.3%. In the euro area, the increase in long-term government bond yields in April seemed to a large extent to be a reflection of developments in the United States, i.e. changes in market participants' views on the economic outlook in the United States also influenced, to some extent, the outlook for the euro area economy. Chart 11 shows that the upturn in bond yields in the euro area was associated with an upward shift in implied forward interest rates, which was more pronounced in the short and medium term.

The yields on ten-year index-linked government bonds (indexed on the euro area HICP excluding tobacco) increased by around 25 basis points between the end of March and 5 May to stand at 1.85%. The break-even inflation rate – calculated as the difference between the yields on ten-year nominal and index-linked government bonds – remained stable, standing at around 2.1% on 5 May. The degree of uncertainty prevailing in the euro area bond markets – as measured by implied bond market volatility – also remained broadly unchanged throughout that period and on 5 May stood at a level slightly below the 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.

## Box 2

### THE IMPACT OF RECENT EMPLOYMENT DATA RELEASES IN THE UNITED STATES ON GLOBAL BOND MARKETS

Over recent months, economic data releases for the United States – most notably monthly releases on the employment situation – appear to have become one of the key factors behind movements in US and also to some extent euro area bond yields. This box assesses the influence of releases of one specific indicator – US non-farm payroll data (referring to the number of employed people outside the agricultural sector) – on long-term bond yields in both economic areas and discusses the reasons why market participants may have paid so much attention to its recent releases.

The marked bond market responses to the recent releases on the US employment situation can be related to the fact that the US economic recovery since the 2001 recession has been accompanied by a historically low rate of growth in non-farm payrolls in comparison with previous post-war economic recoveries, raising concerns about a “jobless recovery”. This has been seen to be clearly contributing to the higher than normal degree of labour market slack at this stage of the

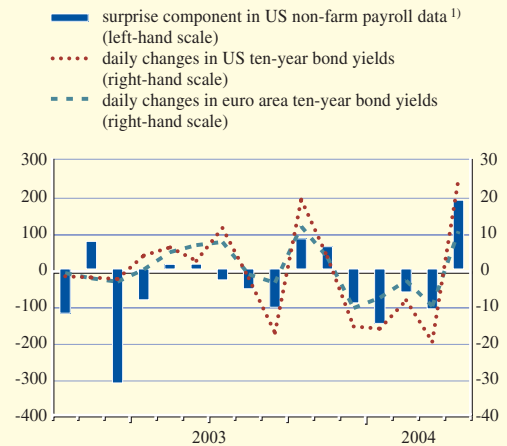


economic cycle, whilst having a dampening effect on US inflationary pressures. Against the backdrop of improvements in US domestic demand over the last few months, much attention has been paid by market participants to the possible influence of non-farm payroll data on future movements in short-term interest rates in the United States. As long-term bonds reflect market participants' expectations about future short-term interest rates, long-term bond yields have also reacted to the non-farm payroll data releases.

The non-farm payroll data releases in recent months have displayed employment growth figures deviating considerably from market expectations.<sup>1</sup> The chart shows the surprise component, measured by the difference between outcomes and expectations, in non-farm payroll data releases, together with the daily changes in both US and euro area ten-year government bond yields.

**Chart Surprise component in US non-farm payroll data releases and changes in ten-year US and euro area government bond yields on the release day**

(left-hand scale in thousands, right-hand scale in basis points)



Source: Reuters, Bloomberg.

1) The surprise component is defined as the difference between the outcomes for the monthly change in non-farm payroll data and the figures expected by market participants surveyed by Bloomberg.

Two notable features emerge from the chart:

- For the United States, the surprises in the US non-farm payroll data have in the past tended to be positively correlated with changes in ten-year bond yields. In addition, their impact on bond markets appears to have grown in recent months. Specifically, the non-farm payroll data released in March and April 2004 have had a particularly strong impact on US long-term bond yields, with movements of around 20 basis points on each release day. The relatively strong bond market reactions accompanying these individual data releases can be explained by the relatively large surprise component in the releases which, in the context of the sluggish employment recovery in the United States described above, may have altered expectations regarding the robustness of the US economic recovery. This, in turn, seems to have caused some major revisions in the markets' expectations as regards the future path of US short-term interest rates, thereby contributing to the pronounced movements in bond yields.
- The surprises in non-farm payroll data releases also seem to have had some impact on bond yields in the euro area. It seems that potential changes in market participants' views about the US economic outlook may have also influenced to some extent market perceptions of the outlook for the euro area economy. However, in general, the impact of these data releases on euro area bond yields has been more muted than that on US bond yields.

<sup>1</sup> In practice, financial asset prices should reflect all relevant available information which market participants use in forming their expectations about the fundamental factors driving the price of the corresponding asset. Therefore, data releases can be expected to trigger changes in asset prices notably when they deviate from what was expected by market participants.

## 2.5 INTEREST RATES ON LOANS AND DEPOSITS

*In February 2004 most MFI interest rates on new business remained broadly unchanged.*

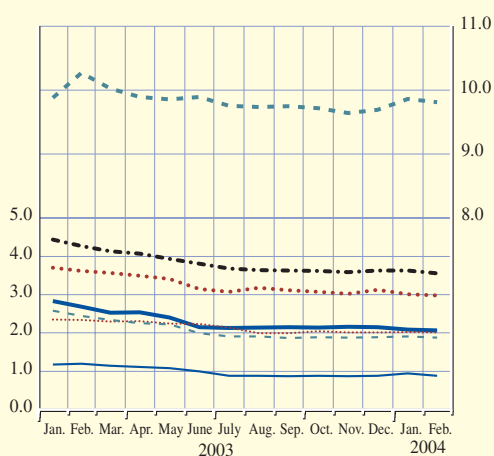
Most short-term MFI interest rates on new business remained broadly unchanged in February 2004 (see Chart 12). Over a longer horizon, bank interest rates declined slightly in line with developments in the money market between June 2003 and February 2004. For example, the rates on short-term savings deposits from households (i.e. redeemable at notice of up to three months) and on loans to non-financial corporations over €1 million with a floating rate and up to one year initial rate fixation both declined by around 20 basis points. In the same period, the rates on short-term time deposits from households (i.e. with an agreed maturity of up to one year), on bank overdrafts to households and on overnight deposits from non-financial corporations all decreased by 10 basis points. The rate on loans to households for house purchases with a floating rate and up to one year initial rate fixation declined by 25 basis points between June 2003 and February 2004. By way of comparison, the three-month money market rate fell by around 10 basis points during this period.

Long-term MFI rates on new business also remained broadly unchanged in February 2004 (see Chart 13). Over longer horizons, bank interest rates have been significantly less volatile than

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

(percentages per annum; rates on new business)

- three-month money market rate (left-hand scale)
- short-term loans to non-financial corporations<sup>1)</sup> (left-hand scale)
- - - overdrafts to households (right-hand scale)
- - - overnight deposits from non-financial corporations (left-hand scale)
- short-term savings deposits from households<sup>2)</sup> (left-hand scale)
- - - short-term time deposits from households<sup>3)</sup> (left-hand scale)
- - - short-term loans to households for house purchase<sup>4)</sup> (left-hand scale)



Source: ECB.

1) Loans to non-financial corporations over €1 million with a floating rate and up to one year initial rate fixation.

2) Deposits from households redeemable at notice of up to three months.

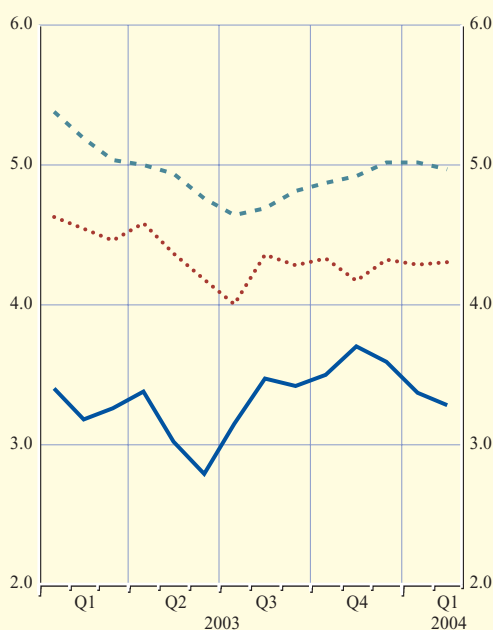
3) Deposits from households with an agreed maturity of up to one year.

4) Loans to households with a floating rate and up to one year initial rate fixation.

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

(percentages per annum; rates on new business)

- five-year government bond yields
- long-term loans to non-financial corporations<sup>1)</sup>
- - - long-term loans for house purchase<sup>2)</sup>



Source: ECB.

1) Loans to non-financial corporations over €1 million with over five years' initial rate fixation.

2) Loans to households with over five and up to ten years' initial rate fixation.

comparable market rates, in line with the normally sluggish adjustment of MFI interest rates. For example, between June 2003 and November 2003, when market rates were increasing, five-year government bond yields increased by 90 basis points. They subsequently declined by 40 basis points between November 2003 and February 2004. By comparison, the rate on loans to households for house purchase with over five and up to ten years' initial rate fixation and the rate on loans to non-financial corporations over €1 million with over five years' initial rate fixation moved only slightly both between June and November 2003 and between November 2003 and February 2004.

## 2.6 EQUITY MARKETS

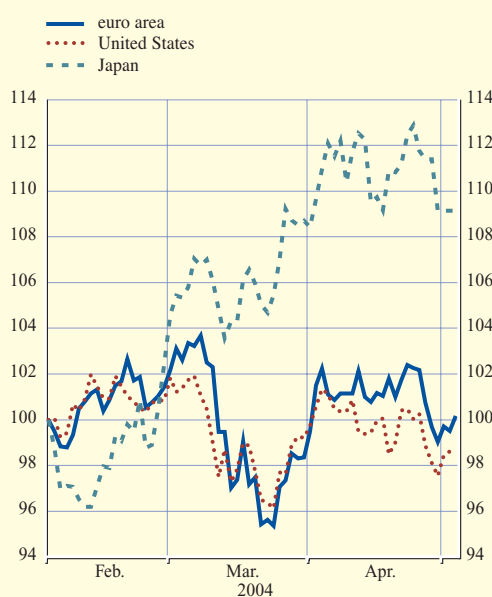
*In April 2004 stock prices in the euro area increased somewhat overall, while those in the United States remained broadly unchanged. Factors supporting stock prices in the euro area and the United States were, inter alia, a decline in stock market uncertainty, as measured by implied volatility, and further signs of an improvement in corporate earnings, while the rise in long-term bond yields had a negative impact on equity prices.*

### UNITED STATES

In the United States, stock prices, as measured by the Standard & Poor's 500 index, remained broadly unchanged between the end of March and 5 May 2004 (see Chart 14). On the one hand, the

**Chart 14 Stock price indices**

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

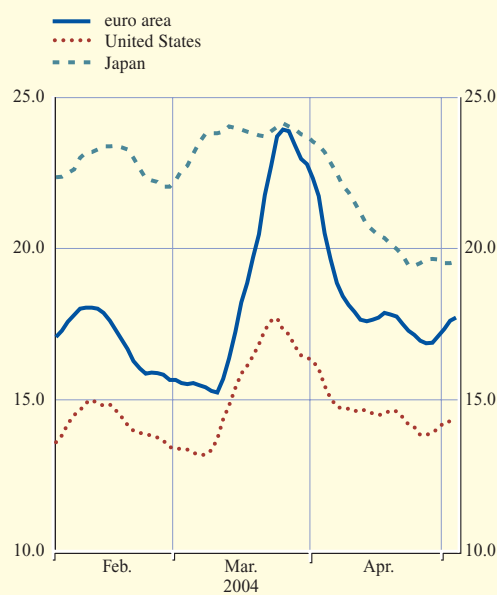


Source: Reuters.

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.

further decline in market uncertainty after the increase which followed the terrorist attacks in Madrid in March may have had a positive effect on stock prices. Indeed, between end-March and 5 May, the ten-day moving average of implied volatility – a measure of the degree of uncertainty prevailing in stock markets – derived from options on the Standard & Poor's 500 index, decreased by 2 percentage points to stand at a level last seen in October 2003 (see Chart 15). Furthermore, equity prices were supported by a marked improvement in market participants' expectations for corporate earnings for the first quarter of 2004. On the other hand, equity prices were dampened by the pronounced interest rate increases witnessed in April across the whole maturity spectrum in the United States.

### JAPAN

In Japan, stock prices rose slightly in April 2004. This overall increase in stock prices appeared to result from market participants' continued optimism about the economic outlook in Japan. The rise was accompanied by a significant decrease in uncertainty – as measured by the ten-day moving average of implied volatility extracted from options on the Nikkei 225 index – between end-March and 5 May. It appears that positive turnover figures reported by US companies, especially those in the technology sector, had a spillover effect on Japanese stock prices, with investors expecting that demand would increase in particular for Japanese companies specialising in computer-related products.

### EURO AREA

In the euro area, stock prices, as measured by the Dow Jones EURO STOXX index, increased by about 2% between the end of March and 5 May. A factor supporting euro area stock markets was the decline in uncertainty. Indeed, the ten-day moving average of implied stock market volatility extracted from options on the Dow Jones EURO STOXX 50 index fell significantly and was 5 percentage points lower on 5 May than at end-March. New data signalling favourable developments for corporate earnings also contributed to the price increase. In this respect, the annual growth in actual earnings per share for corporations included in the Dow Jones EURO STOXX index increased to around 31% in April 2004. The fact that the euro area stock markets slightly outperformed those in the United States may be due to the continuation of the reversal of the declines recorded in the aftermath of the terrorist attacks in Madrid on 11 March, which were more pronounced in the euro area than elsewhere. In addition, the upward movements in bond yields, which may also have exerted some downward pressure on stock prices, were less marked in the euro area than in the United States.

As regards recent sectoral developments within the euro area, most of the economic sectors in the Dow Jones EURO STOXX index recorded an increase in share prices in April. This broadly-based increase may reflect a general improvement in the business prospects of euro area firms.

## 3 PRICES AND COSTS

As anticipated, euro area HICP inflation rate rose to 2.0% in April according to Eurostat's flash estimate, following an increase from 1.6% in February to 1.7% in March. Looking at earlier stages of the pricing chain, producer price pressures remained moderate in March but have increased in recent months. Both oil and non-oil commodity prices have risen strongly through April and are likely to continue to put upward pressures on producer prices in the near future. Over the next few months, inflation rates of 2% or somewhat above are possible, while over longer horizons they should remain in line with price stability. In particular, labour productivity should pick up over the course of 2004, while nominal wage growth should remain moderate and the past appreciation of the euro should continue to dampen upward pressure on prices.

### 3.1 CONSUMER PRICES

#### FLASH ESTIMATE FOR APRIL 2004

According to Eurostat's flash estimate, euro area inflation rose to 2% in April 2004 (see Table 4). Although no detailed breakdown is available as yet, a strong base effect in the energy component, resulting from the marked decline in oil prices after the outbreak of the Iraq war last year, should account for this increase. Moreover, the further rise in oil prices in April may well have exerted upward pressure on energy prices. Given the preliminary nature of the information, however, the estimate is surrounded by the usual uncertainty.

#### HICP INFLATION IN MARCH 2004

Euro area inflation rose to 1.7% in March 2004, up from 1.6% in February (see Chart 16). In part, this reflected energy price developments. Inflation in February 2004 benefited from the fact that oil prices in euro terms were lower than in the same month in 2003. Since early February 2004, oil prices have continued to increase in euro terms and now stand above where they were a year ago. This upward movement in oil prices had an impact on energy prices in March. While the annual rate of change in energy prices remained negative in March, at -2.0%, the decline was smaller than in the previous month (-2.2%). In contrast, the annual rate of change in unprocessed food prices continued to decline in March, but to a lesser extent than in the previous four months. This may suggest that the unwinding of the effects of last summer's heatwave on food prices is gradually coming to an end.

Table 4 Price developments

(annual percentage changes, unless otherwise indicated)

	2002	2003	2003 Nov.	2003 Dec.	2004 Jan.	2004 Feb.	2004 Mar.	2004 Apr.
<b>HICP and its components</b>								
Overall index <sup>1)</sup>	2.3	2.1	2.2	2.0	1.9	1.6	1.7	2.0
Energy	-0.6	3.0	2.2	1.8	-0.4	-2.2	-2.0	.
Unprocessed food	3.1	2.1	3.8	3.2	2.9	1.9	1.7	.
Processed food	3.1	3.3	4.0	3.8	3.3	3.2	4.1	.
Non-energy industrial goods	1.5	0.8	0.7	0.7	0.6	0.8	0.8	.
Services	3.1	2.5	2.4	2.3	2.5	2.6	2.5	.
<b>Other price indicators</b>								
Industrial producer prices	-0.1	1.6	1.4	1.0	0.3	0.0	0.4	.
Oil prices (EUR per barrel)	26.5	25.1	24.6	24.0	24.2	24.1	26.7	27.6
Non-energy commodity prices	-0.9	-4.5	0.2	-0.2	5.1	7.2	17.2	19.7

Sources: Eurostat, Thomson Financial Datastream and HWWA.

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

In parallel with overall inflation, the annual rate of change in the HICP excluding unprocessed food and energy also rose by 0.1 percentage point, to 2.1% in March. This was mainly the result of increases in tobacco taxes in a number of euro area countries, resulting in a sharp increase in processed food prices. Specifically, the annual rate of change in tobacco prices increased to 13.9% in March, contributing 2.7 percentage points to the annual rate of change in processed food prices – 4.1% in March – and 0.3 percentage point to overall inflation.

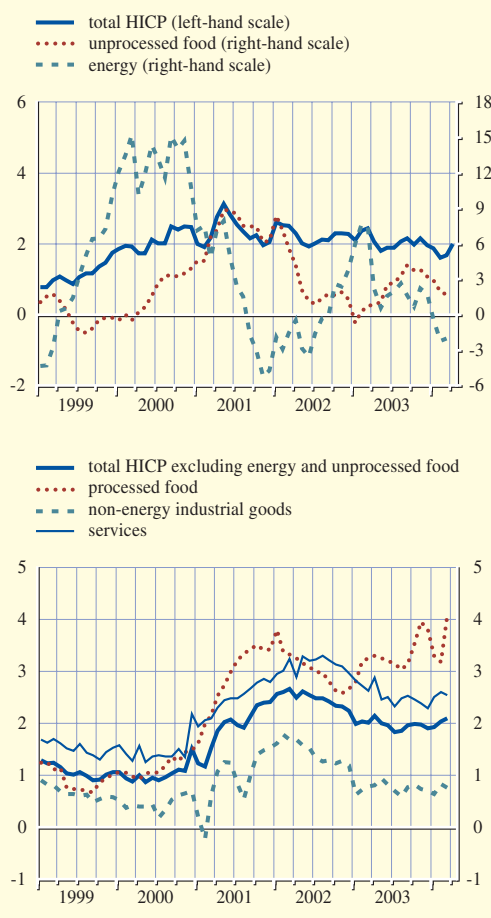
The annual rate of change in non-energy industrial goods prices remained unchanged in March 2004 at 0.8%, while the annual rate of change in services prices decreased by 0.1 percentage point to 2.5%. Although the annual rate of change in services prices has remained broadly unchanged at around 2.5% since the second quarter of 2003, this masks important differences in those services prices that are administered and those that are not administered (see the box entitled “The impact of developments in indirect taxes and administered prices on inflation” in the January 2004 issue of the Monthly Bulletin). Specifically, the annual rate of change of administered prices such as, for example, medical and dental services, has continued to increase. By contrast, the annual rate of change in services prices that are not administered has declined since the second quarter of 2003.

### 3.2 INDUSTRIAL PRODUCER PRICES

Looking at earlier stages of the pricing chain, producer price pressures, while remaining moderate in March, have increased in recent months (see Chart 17). In March, the annual rate of change in the producer price index excluding construction (PPI) rose to 0.4% from zero in February. Several factors contributed to the increase in March, including tobacco tax increases, and the continued increases in euro-denominated non-energy commodity prices. The rise in tobacco taxes drove up the annual rate of change in producer prices of consumer goods. At the same time, commodity prices continued to increase in March, exerting upward pressures on producer prices of intermediate goods. The annual rate of change of producer prices of intermediate goods rose to 1.4% compared with 0.8% in February. However, the moderate annual rate of change conceals larger increases in recent months. Comparing the first quarter of 2004 with the previous quarter gives a better picture of these latest upward movements, and shows that producer prices of intermediate goods grew by 1.2% in the first quarter of 2004.

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

(annual percentage changes; monthly data)



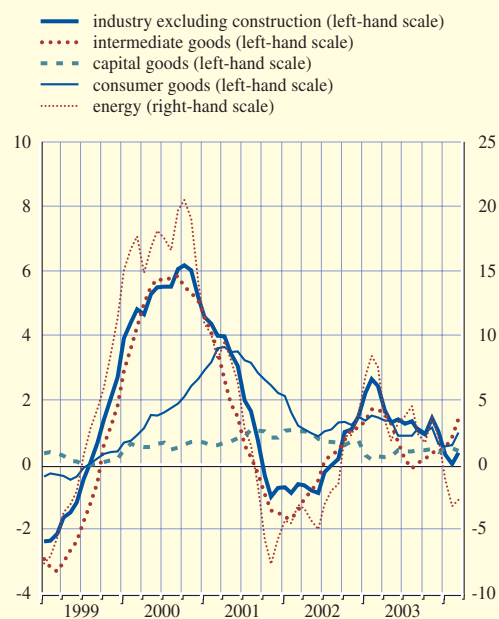
Source: Eurostat.

Energy prices continued to contribute to low growth in the PPI in March but base effects will result in increases in the coming months. When excluding energy, the PPI climbed to 1.1% in March from 0.8% in February. The annual rate of change in energy producer prices stood at -2.7% in March compared with -3.2% in February, reflecting the fact that oil prices dropped significantly between February and March last year. Moreover, oil prices in euro terms have been increasing since early February 2004. The recent rises combined with the drop in oil prices last year should contribute to an increase in the annual rate of change in energy producer prices in the coming months.

The Eurozone Input Price Index (EPI) for April supports the assessment that producer price inflation will increase further in the coming months. Although data on EPI only exist from September 1997, the annual rate of change in producer prices of intermediate goods seems to track the EPI well. In April, the EPI rose to 69.4, marking the sixth month above 50, indicating an increase in prices.

**Chart 17 Breakdown of industrial producer prices**

(annual percentage changes; monthly data)



Source: Eurostat.

### 3.3 LABOUR COST INDICATORS

All indicators of labour costs suggest that wage growth has slowed since early 2002 (see Table 5). Compared with 2002, the annual rate of change in 2003 declined for all labour cost indicators, with the actual extent of the slowdown varying across indicators. The most harmonised measure of labour costs is compensation per employee. The annual growth in compensation per employee for the whole economy was 2.1% in the fourth quarter of 2003, down from 2.5% in the third quarter. This development mainly reflects a one-off decline in Germany, associated with the cutting of Christmas bonuses. For 2003 as a whole, compensation per employee grew on average by 2.4%,

**Table 5 Labour cost indicators**

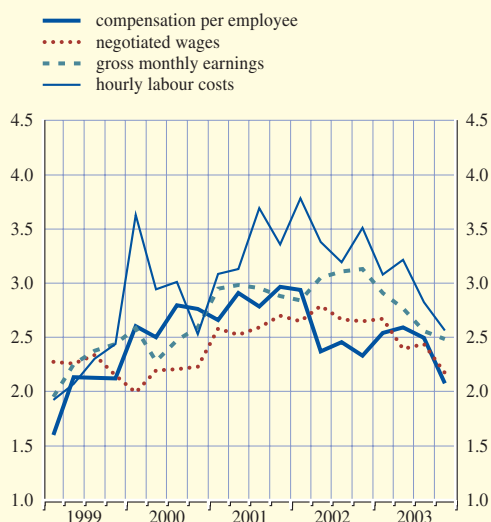
(annual percentage changes, unless otherwise indicated)

	2002	2003	2002 Q4	2003 Q1	2003 Q2	2003 Q3	2003 Q4
Negotiated wages	2.7	2.4	2.7	2.7	2.4	2.4	2.2
Total hourly labour costs	3.5	2.9	3.5	3.1	3.2	2.8	2.6
Gross monthly earnings	3.0	2.7	3.1	2.9	2.8	2.6	2.5
Compensation per employee	2.5	2.4	2.3	2.5	2.6	2.5	2.1
<i>Memo items:</i>							
Labour productivity	0.3	0.2	0.8	0.5	-0.1	0.1	0.3
Unit labour costs	2.2	2.2	1.5	2.0	2.7	2.4	1.7

Sources: Eurostat, national data and ECB calculations.

Chart 18 Selected labour cost indicators

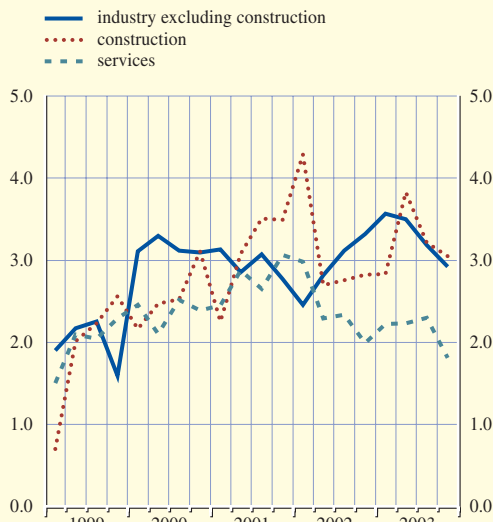
(annual percentage changes)



Sources: Eurostat, national data and ECB calculations.

Chart 19 Sectoral compensation per employee

(annual percentage changes; quarterly data)



Sources: Eurostat and ECB calculations.

compared with 2.5% in 2002. The development growth rate in other labour cost indicators showed a larger decline in 2003. For example, the average annual rate of change in hourly labour costs declined to 2.9% in 2003 from 3.5% in 2002 (see Chart 18). Taking a sectoral perspective, average wage growth in 2003 as a whole declined in the services sector, and in market-related services in particular, when compared with 2002. At the same time, growth in compensation per employee in the industrial sector increased in comparison with 2002 (see Chart 19).

Reflecting the decline in wage growth and a small increase in labour productivity, annual unit labour cost growth also eased in the fourth quarter, while for the year as a whole it remained unchanged from 2002 at 2.2%. As the economic recovery proceeds, labour productivity should increase and dampen unit labour cost growth.

### 3.4 OUTLOOK FOR INFLATION

The increase in the annual rate of change in overall inflation in April was largely anticipated and probably resulted mainly from base effects stemming from energy prices. Base effects and recent increases in energy prices will continue to exert upward pressure on inflation over the coming months. Looking further ahead, inflation is expected to remain at levels in line with price stability. This expectation is based on the assumption of a gradual pick-up in economic activity, accompanied by only moderate wage increases. Moreover, the past appreciation of the euro exchange rate should continue to moderate import price pressures. Factors which deserve close monitoring are, in particular, developments in commodity prices – both oil and non-oil – and the evolution of inflation expectations.



Box 3

**PRIVATE SECTOR EXPECTATIONS FOR INFLATION AND ECONOMIC ACTIVITY IN THE EURO AREA: RESULTS OF THE 2004 Q2 SURVEY OF PROFESSIONAL FORECASTERS (SPF) AND OTHER AVAILABLE INDICATORS**

This box reports the results of the 23rd Survey of Professional Forecasters (SPF) conducted by the ECB between 16 and 26 April 2004. The SPF gathers expectations for euro area inflation, economic activity and unemployment from experts affiliated to financial or non-financial institutions based in the European Union. It is important to bear in mind that, given the diversity of the panel of participants, aggregate SPF results can reflect a relatively heterogeneous set of subjective views and assumptions. Whenever possible, SPF results are compared with other available indicators of private sector expectations for the same horizons.<sup>1</sup>

**Inflation expectations for 2004 and 2005**

Survey participants' expectations for HICP inflation in 2004 are unchanged at 1.8% compared with the previous SPF (2004 Q1) conducted in January 2004. However, compared with the previous round, there has been a clear increase in the number of respondents citing commodity prices developments as an upward factor. Possible indirect tax and administered price increases, due to the worsening of fiscal balances in some countries, are also factors cited as exerting an upward influence on prices. Whilst past exchange rates movements are still mentioned as a downward factor, they are given less importance than in the previous round. Developments in

**Results from the 2004 Q2 SPF, the 2004 Q1 SPF and Consensus Economics (April 2004)**

(annual percentage changes, unless otherwise indicated)

	Survey horizon				
	2004	Mar. 2005	2005	Mar. 2006	Longer term <sup>2)</sup>
<b>HICP inflation</b>					
2004 Q2 SPF	1.8	1.7	1.8	1.8	1.9
Previous SPF (2004 Q1)	1.8	-	1.7	-	1.9
Consensus (April 2004)	1.7	-	1.6	-	1.9
<b>Real GDP growth</b>					
2004 Q2 SPF	1.6	2.0	2.1	2.2	2.3
Previous SPF (2004 Q1)	1.8	-	2.2	-	2.3
Consensus (April 2004)	1.6	-	2.0	-	2.1
<b>Unemployment rate<sup>1)</sup></b>					
2004 Q2 SPF	8.8	8.6	8.5	8.3	7.5
Previous SPF (2004 Q1)	8.8	-	8.5	-	7.4

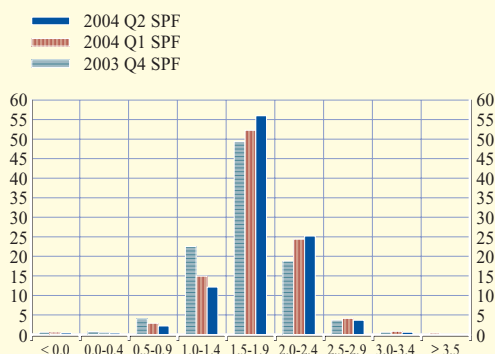
1) As a percentage of the labour force.

2) Longer-term inflation expectations refer to 2008. The Consensus Economics forecast refers to the period 2010-14 (data published in the April 2004 Consensus Economics Survey).

1 These horizons are the calendar years 2004, 2005 and "five years ahead, i.e. 2008". Expectations for two additional "rolling horizons" requested in the SPF are also reported. These rolling horizons are set one and two years ahead of the period for which the latest data for each particular variable are available at the time the survey is conducted. In the 2004 Q2 SPF, these rolling horizons were March 2005 and 2006 for the HICP inflation rate, the fourth quarter of 2004 and 2005 for the rate of growth in real GDP and February 2005 and 2006 for the euro area unemployment rate. These rolling horizons may be useful to identify dynamic patterns that are difficult to detect from averages over calendar years.

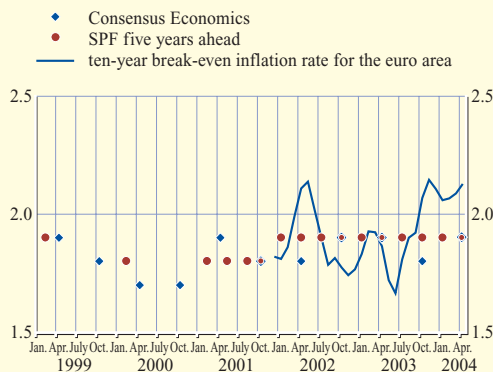
**Chart A Probability distribution for average inflation in 2004 in the last three SPF rounds**

(percentages)



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

(average annual percentage changes)



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

labour costs and weak domestic pressures stemming from the output gap are the main factors highlighted as exerting a downward influence on inflation over the next two years. Inflation expectations for 2005 are slightly up, to 1.8%, which appears to be due mainly to expected commodity price developments. Overall, SPF expectations are slightly higher than the figures reported in the April 2004 issues of Consensus Economics (see the table below) and the Euro Zone Barometer (1.7% for both 2004 and for 2005).

SPF participants are also asked to assign a probability distribution to their forecasts. This probability distribution is expressed in percentages falling within specific intervals. The probability distribution resulting from the aggregation of responses thus helps to assess how, on average, survey participants gauge the risk of the actual outcome being above or below the most likely range. Chart A reports the aggregate probability distributions for average annual rates of HICP inflation in 2004 in the last three survey rounds. Even though the bulk of the distribution for expected HICP inflation in 2004 continues to be centred in the 1.5-1.9% range, there has been a further movement to the right in the latest SPF round. This movement reflects the increase in inflationary pressures, which, as highlighted above, have been driven by government measures and by commodity (oil and non-oil) price developments.

### Indicators of longer-term inflation expectations

Longer-term inflation expectations (i.e. five years ahead) reported by SPF participants remained at 1.9%, unchanged for the tenth consecutive SPF (see Chart B). This is consistent with other survey measures of longer-term inflation expectations. In April 2004 the Euro Zone Barometer forecast an average inflation rate of 1.9% in 2008, and Consensus Economics published an average inflation rate of 1.9% for the period 2010-14. In financial markets, the ten-year break-even inflation rates

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

derived from French government bonds linked to the euro area HICP (excluding tobacco) remains broadly unchanged in recent months.<sup>2</sup> It should be noted, however, that these break-even inflation rates are not pure measures of market participants' long-term inflation expectations. They are also affected by a variety of risk premia (including inflation uncertainty and liquidity premia).

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

Expected GDP growth in 2004 has been revised downwards to 1.6%, which is 0.2 percentage point lower compared with the previous SPF. While expected GDP growth in 2005 is at a higher rate, 2.1%, this has also been revised downwards by 0.1 percentage point since the last round. Based on respondents' qualitative comments, the main factors hindering growth prospects are: on the external side, recent commodity price and past exchange rate developments, and on the domestic side, a lack of confidence, subdued internal demand and a number of uncertainties relating to structural reforms. The main factors mentioned by respondents as supporting the growth outlook are, on the external side, the pick-up in global activity, and on the domestic side, an upswing in investment supported by improved profit developments and favourable financing conditions. The SPF forecasts for 2004 and 2005 are broadly similar to those published in the April issues of Consensus Economics and the Euro Zone Barometer; both forecast GDP growth of 1.6% for 2004, whilst the former forecasts 2.0% and the latter 2.1% for 2005. Considering longer-term growth rates, expectations five years ahead (i.e. 2008) stand at 2.3%, which is unchanged from the previous SPF.

Notwithstanding the small downward revisions to GDP growth, SPF respondents' expectations for unemployment in 2004 and 2005 remain unchanged compared with the previous round at 8.8% and 8.5% respectively. The gradual nature of the expected pick-up in economic activity is the main factor cited as being behind the relatively slow decline in unemployment in 2004 and 2005. However, once the economic upswing gathers steam, respondents expect the cycle to be a stronger driving factor behind the decline in unemployment.

The expected rate of unemployment in 2008 stands at 7.5%, which represents a slight upward revision compared with the previous round. Whilst some respondents cite labour market reforms as being behind the expected decline in unemployment over the longer-term horizon, a number of respondents are sceptical about the magnitude of future reforms.

Regarding inflation expectations, the most recent information seems to support the view that inflation will ease over the next two years. For instance, the latest Survey of Professional Forecasters (SPF) conducted in April puts overall inflation at 1.8% in both 2004 and 2005 (see Box 3).

## 4 OUTPUT, DEMAND AND THE LABOUR MARKET

The second release of national accounts data for the euro area showed real GDP growth at 0.3% in the fourth quarter of 2003, as in the first release. The overall picture of the composition of demand in the fourth quarter remains unchanged, in particular with respect to the strong contributions by investment and inventory changes to growth. Recent survey data are consistent with an increase in industrial production in March/April, following four months of sluggish developments. Short-term indicators continue to suggest moderate growth in the services sector since the beginning of the year. Household spending indicators were mixed in the first quarter. Against this background, there has been no significant change in labour market conditions. Looking ahead, domestic and external conditions remain conducive to economic activity continuing to gradually recover in 2004 and strengthening over time.

### 4.1 OUTPUT AND DEMAND

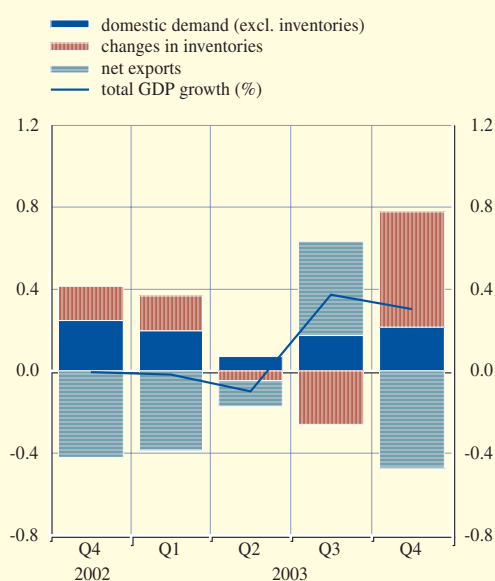
#### REAL GDP AND EXPENDITURE COMPONENTS

According to the second estimate of national accounts data released by Eurostat in April, real GDP growth in the fourth quarter of 2003 was left unchanged at 0.3%, compared with 0.4% in the third quarter (see Chart 20).

A number of revisions were made to some expenditure components. Domestic demand, in particular, was somewhat weaker than expected on the basis of the first national accounts release. Private consumption growth, which had previously shown a slight increase, was revised down to zero. The contribution of inventory changes was also revised downwards slightly, but remained strong. The contribution of investment was not revised. Investment rose by 0.6% quarter on quarter and made a strong contribution to real GDP growth. Detailed information on the latest

Chart 20 Contributions to real GDP growth

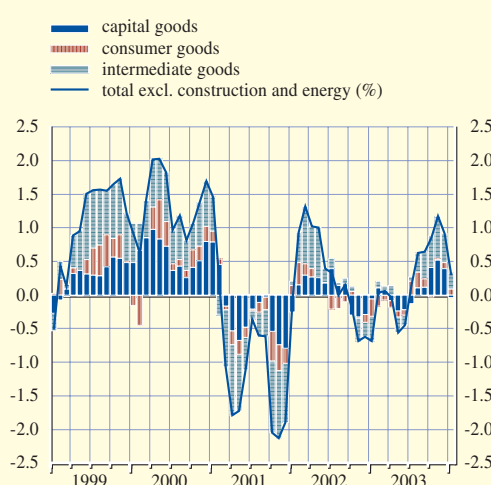
(quarterly percentage point contributions; seasonally adjusted)



Sources: Eurostat and ECB calculations.

Chart 21 Contributions to growth in industrial production

(percentage point contributions; seasonally adjusted)



Sources: Eurostat and ECB calculations.

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

developments in investment by type of product is shown in Box 4. The contribution of net exports was revised upwards slightly, from -0.7% to -0.5% quarter on quarter, as a result of a strong downward revision to imports.

## SECTORAL OUTPUT AND INDUSTRIAL PRODUCTION

Industrial activity made a strong positive contribution to euro area real GDP growth in the fourth quarter of 2003. The production of intermediate goods and capital goods was particularly strong, in line with investment developments. For the third quarter in a row, the construction sector provided a positive contribution to growth in total value added. Activity in services also continued to grow, albeit at a moderate pace. This was attributable to developments in financial, business and other services. By contrast, trade, transport and communication services activity declined.

Available data up to February 2004 suggest that industrial activity at the beginning of this year was, however, subdued (see Chart 21). Industrial production (excluding construction) decreased in January and was sluggish in February. In particular, the production of capital goods declined in February for the third consecutive month. Data on actual new orders showed some increase in February, but not enough to offset the strong decrease in January. Beyond the monthly volatility in the series, new orders data appear to indicate a stabilisation of the demand for industrial products since November 2003.

### Box 4

#### LATEST DEVELOPMENTS IN INVESTMENT BY TYPE OF PRODUCT

Investment has been one of the demand components of GDP which exhibited a clear decline over 2001 and 2002. In the course of 2003, however, while negative growth rates continued, there was a broadly based improvement evident across investment categories. This translated into an increase in total investment in the fourth quarter of last year (see Chart A). This is apparent in both construction and non-construction investment (referred to here as “equipment investment”). As concerns equipment investment, the improvement in the global economic environment, together with supportive financial conditions, explain the pattern observed over last year and should contribute to further growth over this year. This box summarises the most recent developments in investment by type of product, up to the fourth quarter of 2003.<sup>1</sup>

#### **Investment in metal products and machinery has led the improvement in equipment investment**

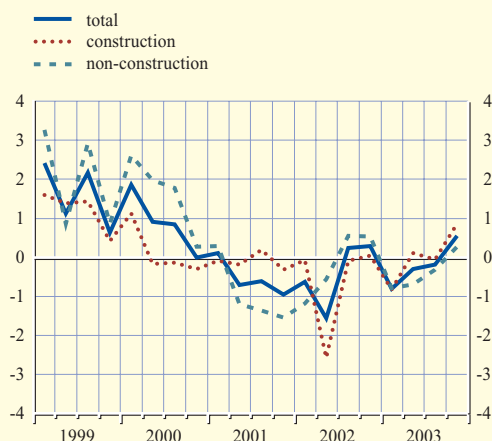
In the fourth quarter of 2003, data on euro area equipment investment confirmed the signs of improvement observed in this category in the second and third quarters. Euro area equipment investment increased by 0.3% quarter on quarter in the fourth quarter of 2003, following a decline of 0.3% in the third quarter (see Chart B).

Among the components of equipment investment, investment in metal products and machinery (which is the largest component, accounting for around 30% of total investment) led the resumption of investment. It rose by 0.7% quarter on quarter in the fourth quarter, after remaining stable in the previous quarter and after declining by 0.8% in the first half of 2003. On the other hand, for transport equipment (accounting for around 10% of total investment), which tends to be a very volatile component, the rates of decline slowed down in the course of 2003,

<sup>1</sup> Developments up to the first quarter of 2003 were reported in the September 2003 issue of the ECB Monthly Bulletin (in Box 6).

**Chart A Total, construction and non-construction investment**

(quarter-on-quarter changes; quarterly data)

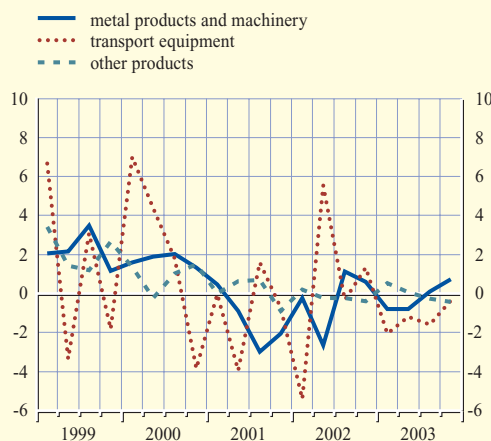


Source: Eurostat.

Note: Investment in other products includes agriculture.

**Chart B Breakdown of non-construction investment**

(quarter-on-quarter changes; quarterly data)



standing at -0.4% in the last quarter. Finally, investment in other products (also 10% of total investment), which includes software, exhibited a downward trend throughout the whole year, registering a fall of 0.4% in the fourth quarter.

### Resumption of construction investment

Euro area construction investment (accounting for around 50% of total investment) increased by 0.9% quarter on quarter in the fourth quarter of 2003. This follows a continuous decline over the past three years, which has however been less pronounced since the second half of 2002. This gradual improvement was initially supported by a slight increase in the housing sub-component in the second and third quarters of 2003. In the fourth quarter, this increase extended to the non-housing component as well.

### SURVEY DATA FOR MANUFACTURING AND SERVICES SECTORS

While industrial production remained stable at the turn of the year, April survey data suggest it may have improved in March/April. The EC industrial confidence indicator rose in April to reach its highest level since April 2001. The Purchasing Managers' Index (PMI) for the manufacturing sector increased further in April. Among the sample of manufacturing firms surveyed for the European Commission, the percentage of respondents who reported an increase in production in the preceding three-month period increased significantly, overtaking the percentage of those who saw a decrease. According to the EC survey, the production of capital goods also started to increase. Production expectations, which improved in April, remained high in all the main industrial groupings. Overall, the various surveys consistently point to an increase in industrial production at the beginning of the second quarter of 2004 (see Chart 22).

The European Commission's confidence indicator for the services sector showed a slight decline in April. While turnover in the preceding three-month period was assessed as having increased

significantly, there was a substantial decline in the index of turnover expectations (although such expectations remained at the average level for the second half of last year). The assessment of the overall business climate remained unchanged. The PMI for business activity in services was broadly unchanged in April but – similar to the EC survey – the index of business expectations decreased.

Overall, the recent survey data suggest that economic activity may have improved at the beginning of the second quarter of 2004. The European Commission's surveys for April show that firms' assessment of activity in recent months indicates an improvement in industry, construction and the retail sector. Firms' assessment of activity in the services sector was more mixed in April.

### INDICATORS OF HOUSEHOLD SPENDING

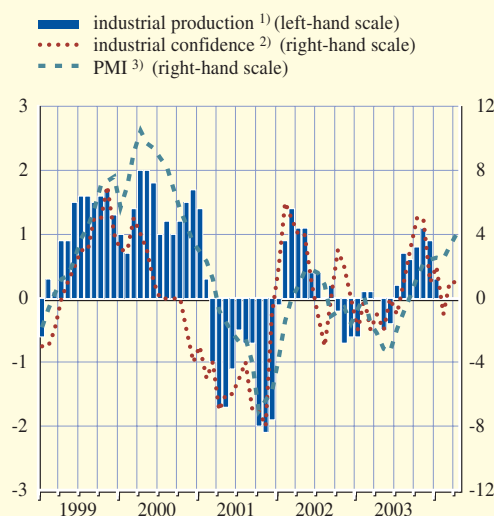
Household spending indicators remained mixed in the first quarter of 2004, but there are some signs of more positive developments in private consumption.

Overall, quarter-on-quarter growth in retail sales is estimated to have been positive in the first quarter of 2004. This reflects the strong increase in retail sales recorded for January. Eurostat's early estimate of retail sales for February has been revised downwards. Retail sales are now estimated to have decreased markedly in February and provisionally estimated to have declined slightly in March too. New passenger car registrations decreased in the first quarter.

The European Commission's consumer confidence indicator remained stable in April, for the second consecutive month (see Chart 23). Developments in this indicator are in line with moderate,

**Chart 22 Industrial production, industrial confidence and the PMI**

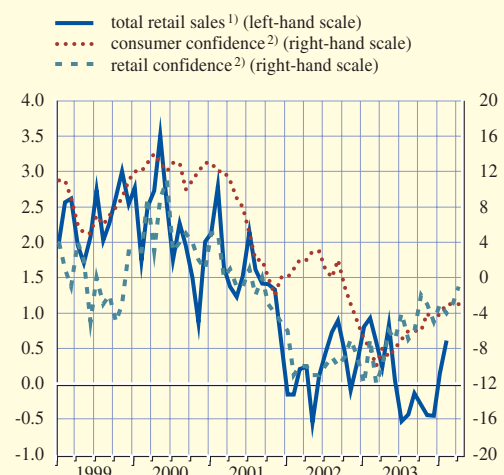
(monthly data; seasonally adjusted)



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.

**Chart 23 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.

but continued, improvement in consumer confidence from the low levels seen at the beginning of last year. In particular, they suggest that the terrorist attacks in Madrid have not reduced consumer confidence. However, confidence still remains low by historical standards.

## 4.2 LABOUR MARKET

### UNEMPLOYMENT

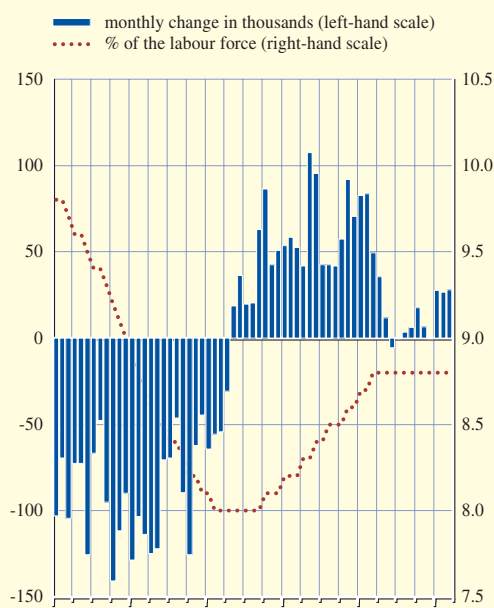
In March the euro area unemployment rate remained unchanged at 8.8% (see Chart 24). Seasonally adjusted figures show an increase of approximately 28,000 unemployed persons in March 2004, month on month, broadly in line with the figures recorded in January and February. Although the rate of unemployment has remained unchanged for 12 months, there are now 157,000 more unemployed than one year ago. Compared with the second half of 2003 the increases in the number of unemployed in the first quarter of 2004, albeit still moderate, reflect a slight deterioration in euro area labour market conditions.

### EMPLOYMENT

Employment growth in the economy as a whole was slightly positive in the fourth quarter of 2003 (see Table 6). Employment expectations improved slightly for industry and services in April, but remained at a low level, according to the EC Surveys. Available data suggest that the euro area vacancy rate decreased at the end of last year, indicating that firms were not ready to increase hiring in the initial stages of the recovery in economic activity. In industry, the percentage of firms

Chart 24 Unemployment

(monthly data; seasonally adjusted)



Source: Eurostat.

Table 6 Employment growth

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

	Annual rates		Quarterly rates				
	2002	2003	2002 Q4	2003 Q1	2003 Q2	2003 Q3	2003 Q4
Whole economy	0.5	0.2	0.0	0.0	0.1	0.0	0.1
<i>of which:</i>							
Agriculture and fishing	-1.9	-1.5	-0.6	-0.8	-0.1	0.2	0.2
Industry	-1.2	-1.5	-0.5	-0.3	-0.2	-0.5	-0.5
Excluding construction	-1.4	-1.9	-0.6	-0.4	-0.5	-0.5	-0.5
Construction	-0.6	-0.3	-0.1	0.1	0.4	-0.7	-0.3
Services	1.4	0.9	0.2	0.2	0.3	0.2	0.3
Trade and transport	0.3	0.5	0.0	0.2	0.4	0.4	0.2
Finance and business	2.4	1.2	0.4	0.2	0.2	0.3	0.6
Public administration	1.8	1.1	0.4	0.3	0.2	0.0	0.2

Sources: Eurostat and ECB calculations.



reporting a shortage of labour as a limit to production remained at historically low levels in the first quarter of 2004.

### **4.3 OUTLOOK FOR ECONOMIC ACTIVITY**

Regarding the current situation and the outlook over the very short term, the available conjunctural indicators still provide mixed evidence. All in all, they suggest that the recovery in real economic activity in the euro area has continued into 2004, albeit at a modest pace. Most recent information has been more encouraging, with the latest euro area survey data offering more positive signals with regard to the beginning of the second quarter.

While the latest positive signals need to be confirmed by future developments, they underpin the expectation that the gradual recovery in the euro area will continue and strengthen over time. The conditions for such a recovery are in place. Global economic growth continues to be robust, which should support the expansion of euro area exports. Growth in domestic demand should continue to benefit from favourable financing conditions, improvements in corporate efficiency and earnings and growth in real disposable income. At the same time, due account needs to be taken of some risks and uncertainties pertaining to high oil and other commodity prices, the persistence of global imbalances and uncertainties surrounding fiscal policy and structural reforms in the euro area, which seem to have had a dampening effect on consumer confidence.

## 5 EXCHANGE RATE AND BALANCE OF PAYMENTS DEVELOPMENTS

### 5.1 EXCHANGE RATES

The euro appreciated slightly in nominal effective terms between the end of March and early May 2004. This mostly reflected an appreciation of the euro vis-à-vis the Japanese yen and the pound sterling, which was only partly counterbalanced by a depreciation against the US dollar.

#### US DOLLAR/EURO

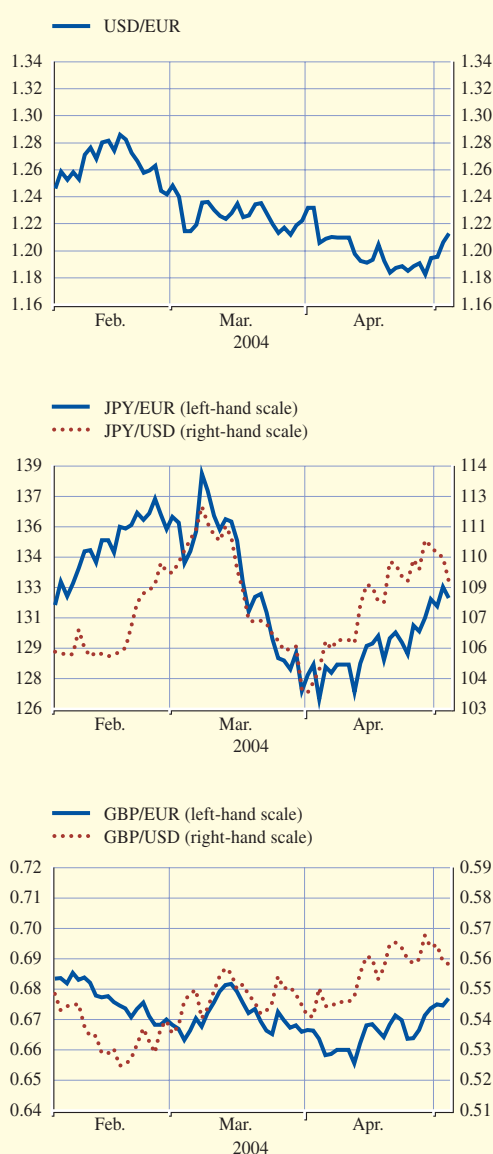
The euro declined against the US dollar in April amid evidence of a strengthening economic recovery in the United States (see Chart 25). The strength of the US currency during this period was relatively broad-based and stemmed mostly from a stream of data releases pointing to improving US labour market conditions and consumer confidence as well as robust retail sales. As this evidence further underscored the favourable US economic outlook, it appears to have increased market expectations of higher yields on US assets, thereby possibly providing additional support to the US dollar. In early May, however, the euro rebounded returning close to levels seen at the end of March. The G7 communiqué released on 24 April and the decision of the Federal Open Market Committee on 4 May to keep its target for the federal funds rate unchanged seem to have had no noticeable impact on foreign exchange markets. On 5 May the euro stood at USD 1.21, around 1.0% lower than its end-March level and 7.2% higher than its 2003 average.

#### JAPANESE YEN/EURO

Following a sharp depreciation in the second half of March, the euro appreciated against the Japanese yen in the reference period (see Chart 25). At the same time the Japanese currency also lost ground against all other major currencies. This relatively broad-based weakening of the yen took place despite the firming of the Japanese economic recovery. Market reports suggest that these developments in the yen might have been linked, at least partly, to net purchases of foreign securities by Japanese investors at the start of the new fiscal year in Japan. On 5 May the euro was quoted at JPY 131.9, 3.9% higher than its end-March level and close to its 2003 average.

Chart 25 Patterns in exchange rates

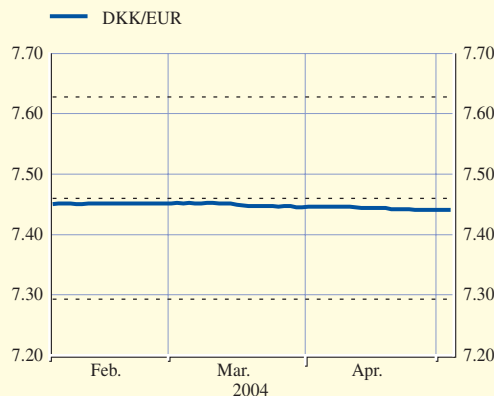
(daily data)



Source: ECB.

**Chart 26 Patterns in exchange rates within ERM II**

(daily data)



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

### POUND STERLING/EURO

In early April the euro depreciated against the pound sterling, as markets seem to have interpreted data releases showing strong demand and quiescent price pressures in the United Kingdom as a sign that yields on UK assets could rise (see Chart 25). Later in April and in early May, however, the euro more than recovered its earlier losses. On 5 May it traded against the pound sterling at GBP 0.68, 1.7% higher than its level at the end of March and 2.2% lower than its 2003 average.

### OTHER EUROPEAN CURRENCIES

In ERM II, the Danish krone continued to fluctuate in a very narrow range close to its central parity (see Chart 26). Turning to other European currencies, the euro depreciated slightly against the Swiss franc and more considerably against the Swedish krona and the Norwegian krone.

### EFFECTIVE EXCHANGE RATE OF THE EURO

On 5 May the euro stood in nominal effective terms – as measured against the currencies of 12 of the euro area's important trading partners – slightly above its end-March level and 2.3% above its average level in 2003 (see Chart 27). The slight appreciation of the euro in effective terms was mainly a reflection of its appreciation vis-à-vis the Japanese yen and the pound sterling that was only partly compensated by its weakening against the US dollar. Box 5 describes real effective exchange rate (EER) developments between the first quarter of 2002 and the first quarter of 2004, from both a euro area and a country perspective.

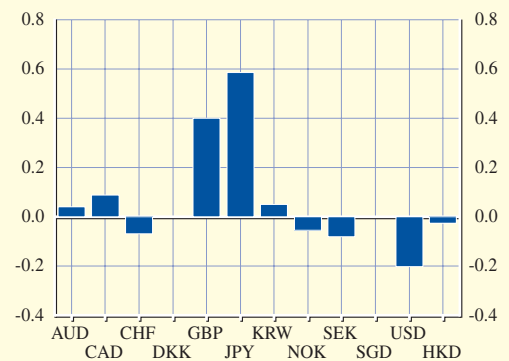
**Chart 27 The euro effective exchange rate and its decomposition<sup>1)</sup>**

(daily data)



### Contributions to EER changes<sup>2)</sup>

From 31 Mar. 2004 to 5 May 2004  
(in percentage points)



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

## Box 5

**REAL EFFECTIVE EXCHANGE RATE DEVELOPMENTS FROM A EURO AREA AND FROM A COUNTRY PERSPECTIVE**

This box examines the differences in the magnitude of the rise in the euro real effective exchange rate (EER) compared with the national competitiveness indicators (NCIs) of individual euro area countries since 2002, and the diverse developments in the NCIs themselves across euro area countries. NCIs use the same methodological framework as real EERs and have been designed to facilitate the comparison of developments in the international price competitiveness of each euro area national economy.<sup>1</sup>

The analysis suggests that the more subdued rise in the NCIs compared with the increase in the euro real EER since 2002 is due to the inclusion of intra-euro area trade in the NCIs. The diversity in the changes in NCIs across euro area countries stems mainly from three factors: first, the share of extra-euro area trade varies across countries; second, inflation differentials within the euro area affect the evolution of the NCIs; and third, patterns of extra-euro area trade are different for each country.

Over the past two years, the euro has experienced a strong appreciation against the currencies of major trading partners. Against the US dollar (and some Asian currencies linked to it) this appreciation has been rather pronounced, while it has been less substantial against the Japanese yen, the pound sterling and other European currencies. Overall, these developments translated into an increase in the nominal euro EER of almost 20% between the first quarter of 2002 and the first quarter of 2004. In real terms – based on developments in relative consumer prices – the euro real EER rose by more than 21% over the same period, reflecting deflationary pressures faced by some Asian trading partners and subdued inflation in several other industrialised countries. This appreciation can be partly construed as a recovery from historically very low levels. Nonetheless, it resulted in a loss in international price competitiveness of euro area companies. From a country perspective, NCIs rose less markedly than the euro real EER. In most countries the increase amounted to less than 10% between the first quarter of 2002 and the first quarter of 2004 (see table). Moreover, changes in the NCIs over this period were rather diverse within the euro area, ranging from 4.6% for Austria to 16.2% for Ireland.

The stronger rise in the euro real EER compared with the NCIs of individual euro area countries can be mainly attributed to the fact that the NCIs take intra-euro area trade into account. Therefore, a decomposition of each NCI into an intra and an extra-euro area sub-index facilitates the comparison between the euro real EER and the NCIs. The intra-euro area NCIs include as competitors only euro area countries, while the extra-euro area NCIs include as competitors only 12 major trading partners of the euro area. As exchange rate fluctuations were eliminated among euro area countries with the introduction of the euro, the intra-euro area sub-indices change only very gradually in line with inflation differentials between euro area countries. Accordingly, the table suggests that changes in the intra-euro area component of the NCIs were rather subdued, while the magnitude of the change in the extra-euro area component of the NCIs was, on the whole, more similar to the rise in the euro real EER. For each country, the overall NCI is a weighted average of the two sub-indices. As a large share of external trade

<sup>1</sup> For more detailed information on the computation of the effective exchange rate of the euro and national competitiveness indicators, see Buldorini, L., Makrydakis, S., Thimann, C. (2002), "The effective exchange rates of the euro", ECB Occasional Paper No. 2.

**Table Changes in competitiveness as measured by NCIs and the euro real EER between 2002 Q1 and 2004 Q1<sup>1), 2)</sup>**

(percentages)

	Euro real EER <sup>3)</sup>	NCIs for					
		Belgium	Germany	Greece	Spain	France	Ireland
Total	-	5.9	7.3	8.3	8.5	8.8	16.2
Intra-euro area component	-	-1.0	-2.2	2.7	2.1	0.6	3.5
Extra-euro area component	21.3	19.5	19.0	23.0	24.5	22.9	24.7
<b>Memo item</b>							
<i>Share of intra-euro area trade in the index<sup>4)</sup></i>							
		64.4	53.2	69.6	68.9	60.9	38.8

	Euro real EER <sup>3)</sup>	NCIs for					
		Italy	Luxembourg	Netherlands	Austria	Portugal	Finland
Total	-	9.7	7.1	8.6	4.6	6.7	7.3
Intra-euro area component	-	1.5	2.5	0.8	0.0	2.0	-1.2
Extra-euro area component	21.3	23.7	25.4	21.3	18.5	20.6	15.2
<b>Memo item</b>							
<i>Share of intra-euro area trade in the index<sup>4)</sup></i>							
		61.0	78.0	60.1	74.4	73.8	46.6

Source: ECB calculations.

1) A negative (positive) number signifies an increase (decrease) in price competitiveness.

2) The table should be read in columns, e.g. German price competitiveness increased by 2.2% vis-à-vis the rest of the euro area and decreased by 19.0% vis-à-vis the rest of the world. In terms of total external trade, Germany's price competitiveness decreased by 7.3%.

3) The real EER (CPI-deflated) of the euro is used.

4) Shares are measured in overall trade terms, i.e. including third-market effects. See Table IV.1 in Buldorini et al. (2002), using manufacturing trade data (average 1995-1997).

of individual euro area countries is with other euro area countries, the changes in the intra-euro area sub-indices have a strong effect on the developments in overall NCIs.

In more detail, the average loss in national competitiveness as measured by the overall NCI indices was 8.2% (compared with 21.3% for the euro area). While most countries experienced a change in competitiveness broadly around this average, some diversity in national competitiveness developments remains. In this context, the respective shares of intra and extra-euro area trade as well as inflation differentials between euro area countries are two important elements that could account for this diversity.

Specifically, countries having a high share of intra-euro area trade and/or a negative inflation differential faced a relatively smaller rise in their NCIs (for instance Austria and Belgium). By contrast, countries with a high share of extra-euro area trade and/or a positive inflation differential with respect to the rest of the euro area experienced a relatively stronger rise in their NCIs (for example Ireland and Italy). With regard to the intra-euro area component of the NCIs, inflation differentials are the only source of diversity, which may partly reflect an adjustment process of cross-country differences in real variables (such as productivity growth).<sup>2</sup> Accordingly, countries with relatively high inflation rates experienced a more pronounced rise in their NCIs, while countries with subdued inflation witnessed more moderate increases in

2 For a comprehensive discussion of inflation differentials in the euro area, see "Inflation differentials in the euro area: potential causes and policy implications", ECB September 2003.

their NCIs. Finally, the trade structure of euro area countries impacted on the diversity of NCI developments, as reflected in the extra-euro area component of these indices. The euro's strong appreciation against the US dollar and some Asian currencies over the past two years has translated into a stronger rise in the extra-euro area NCIs of those countries that are particularly exposed to trade with the United States and the Asian economies. For example, this factor partly explains the relatively higher rise of the Irish NCI, as Ireland's trade links with the United States are much stronger than those of the euro area as a whole. By contrast, the more subdued increase in the NCIs of Portugal and Austria, for instance, is partly explained by the smaller exposure of those countries to trade with the United States compared with the euro area.

In summary, comparing the overall NCIs with the euro area real EER suggests that the single currency has contributed to mitigating the effect of sharp exchange rate movements on the competitive position of individual euro area countries.

## 5.2 BALANCE OF PAYMENTS

*In February 2004 the seasonally adjusted current account surplus of the euro area rose relative to the previous month. This development mainly reflected a contraction in the income deficit, which was only partly offset by declines in the surpluses in goods and services. Although exports of goods continued to grow in February –in line with robust foreign demand –imports grew faster, thereby accounting for the reduction in the goods surplus. In the financial account, combined direct and portfolio investment experienced net inflows as a result of net inflows in direct investment and debt instruments.*

### CURRENT ACCOUNT AND TRADE

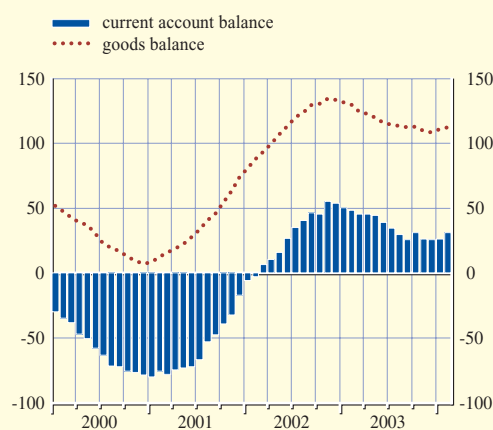
The seasonally adjusted current account of the euro area recorded a surplus of €5.4 billion in February 2004 (a surplus of €5.8 billion in non-seasonally adjusted terms). This reflected surpluses in both goods and services, which were partly offset by deficits in income and current transfers (see Table 7.1 in the “Euro area statistics” section).

Compared with the revised data for January 2004, the seasonally adjusted current account surplus increased by €1.7 billion in February 2004, mainly as a result of a €3.1 billion reduction in the income deficit. This development was partly counterbalanced by decreases in the surpluses of goods and services, while the current transfers deficit remained broadly unchanged. The contraction of the goods surplus was accounted for by imports rising more than exports over this period. In greater detail, the value of goods exports grew by 0.7% (month on month) in February following a 2.7% (month on month) rise in January. This development tends to confirm that the recovery in euro area goods exports, which started in the second half of last year, continued in the first months of 2004. Following a sharp pick-up in the last quarter of 2003, growth in goods imports remained strong in early 2004 (1.5% in February).

Taking a longer-term perspective, the 12-month cumulated current account surplus of the euro area up to February 2004 amounted to €31.1 billion, about 0.4% of GDP, compared with €48.3 billion a year earlier (see Chart 28). This mainly resulted from a decline in the goods surplus – reflecting lower export values (down by 2.3%) as the recovery observed since the third quarter of 2003 did not fully offset the earlier decline. The rise in the current transfers deficit was counterbalanced by the decrease in the income deficit, while the services surplus remained broadly unchanged.

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

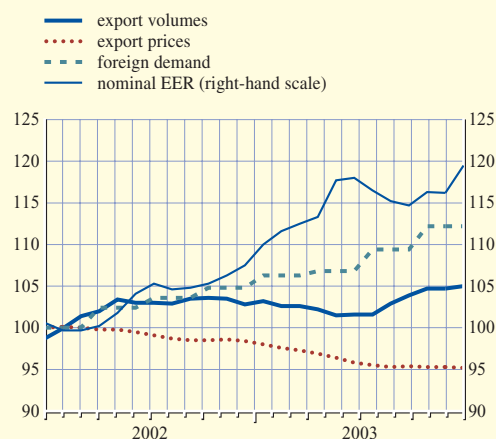
(EUR billions; monthly data; seasonally adjusted; 12-month cumulated figures)



Source: ECB.

**Chart 29 Extra-euro area exports and determinants**

(indices: 2002 Q1=100; three-month moving averages)



Sources: ECB and Eurostat.

Note: Foreign demand data are of quarterly frequency and 2003 Q4 figures are estimates only. Data on export volumes and prices are seasonally adjusted.

According to the decomposition of trade flows into volumes and prices – based on Eurostat’s External Trade Statistics up to December 2003 – the increase in export values in the second half of 2003 seems to be mostly attributable to rising export volumes. This is consistent with the strengthening of foreign demand observed over this period. At the same time, export prices in euro declined only marginally, in contrast with the stronger fall recorded since the euro started to appreciate in the second quarter of 2002 (see Chart 29). Turning to imports, the pick-up in the value of imported goods in the last quarter of 2003 was mostly due to expanding import volumes, while import prices remained almost flat. The rise in import volumes is in line with the ongoing gradual recovery in domestic demand, especially in the import intensive categories of expenditure. Meanwhile, the overall stability of import prices concealed opposite movements in the prices of key sub-components, as the fall in manufacturing import prices was counterbalanced by the rise in commodity prices.

### FINANCIAL ACCOUNT

Euro area combined direct and portfolio investment recorded net inflows of €12.2 billion in February 2004. This reflected net inflows in both direct investment (€7.8 billion) and debt instruments (€4.4 billion), as net flows in equity portfolio investment were balanced.

The main factor influencing developments in direct investment was in the category of “other capital (mostly inter-company loans)”, as non-resident enterprises increased inter-company loans to their affiliates in the euro area. As for the net inflows in portfolio investment, these resulted from net purchases of euro area bonds and notes by non-residents that exceeded net purchases of foreign debt instruments by euro area residents.

Other investment recorded net outflows (€11.5 billion), mainly due to a net increase in the external long-term assets held by euro area monetary financial institutions excluding the Eurosystem.

From a longer-term perspective, in the 12-month period up to February 2004, the combined direct and portfolio investment flows were broadly balanced compared with cumulated net inflows of €159.1 billion a year earlier. This resulted mostly from a sharp fall in net inflows in portfolio investment (see Chart 30). Much of this change reflected a rise in net euro area purchases of securities abroad, both in equity (by €74.8 billion) and in debt instruments (by €56.8 billion). Investment by non-residents in euro area securities remained at broadly similar levels over this period, involving, nonetheless, a shift in debt securities from money market to longer-term instruments (bonds and notes).

Factors accounting for these dynamics in portfolio investment may be the decline in geopolitical uncertainty and the improvement of the global economic outlook since the second half of 2003. The implied prospects for higher corporate profitability – amid a low interest rate environment – in other parts of the world seem to have encouraged euro area investors to become less risk averse and invest in particular in foreign equities. At the same time, yield considerations might have partly accounted for the increased interest by foreign investors in purchasing euro area bonds and notes.

#### DATA REVISIONS

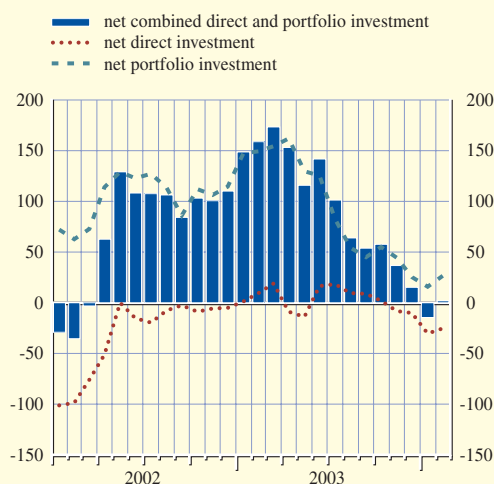
In addition to the monthly data for February 2004, revised balance of payments statistics for 2001, 2002 and 2003, as well as additional breakdowns for the fourth quarter of 2003, have recently been released (for detailed information see Table 7.1 in the “Euro area statistics” section).

As a result of these revisions the euro area current account deficit in 2001 has increased (from €14.5 billion to €16.7 billion), while the surpluses in both 2002 and 2003 have decreased (from €67.0 billion to €54.5 billion and from €28.5 billion to €26.1 billion respectively). The main revision related to the 2002 income from direct investment.

In the financial account, the main changes related to decreases in net foreign direct investment outflows in 2002 (from €41.5 billion to €4.7 billion) and 2003 (from €19.5 billion to €9.9 billion). This was mainly due to revised estimates of equity and reinvested earnings transactions by the non-MFI sector. On balance, these revisions have substantially reduced the errors and omissions for 2002 and 2003.

**Chart 30 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.





## ARTICLES

# THE EU ECONOMY FOLLOWING THE ACCESSION OF THE NEW MEMBER STATES



*On 1 May 2004, the European Union (EU) welcomed ten new countries in what represented its most significant enlargement since its creation. However, compared with previous enlargements, the economic weight of the new Member States is relatively small. As a result, the statistical macroeconomic features of the EU economy as a whole have not changed significantly. In fact, among the most notable changes are a 20% increase in total population and a 5% rise in total GDP. In the longer term, this enlargement is likely to contribute positively to economic growth and welfare in the EU as a whole. By increasing the scope for the ‘four freedoms’ (the free movement of goods, services, capital and labour), the extension of the Single Market should enhance competition and create economies of scale. However, the extent to which these effects will materialise and the speed at which they do so depend on many factors, not least on the economic policies in both the old and the new Member States.*

*This article presents a number of key macroeconomic features of the expanded EU. In addition, some potential longer-term implications of enlargement for economic growth and welfare are discussed, focusing on a number of aspects relating to the ‘four freedoms’ of the Single Market.*

### I INTRODUCTION

On 1 May 2004, following several years of extensive preparations, ten countries of central and eastern Europe and the Mediterranean – Cyprus, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovakia, Slovenia – joined the EU. The accession of these new countries opens up new opportunities for trade and investment for both the existing and the new Member States. This article reviews a number of economic implications of EU enlargement.

Section 2 presents a number of key macroeconomic features of the EU both before and since the accession of the new Member States. Comparisons are also made with the United States and Japan. Section 3 then discusses the implications of enlargement for economic growth and welfare in the EU. Given that a full evaluation of the economic implications of enlargement is beyond the scope of this article, the focus is on a number of aspects relating to the “four freedoms” of the Single Market. Other implications of enlargement, such as the impact on EU Structural and Cohesion Funds and the Common Agricultural Policy, are not discussed.

### 2 KEY MACROECONOMIC FEATURES OF THE EU INCLUDING THE NEW MEMBER STATES

The enlargement of the EU to include ten countries of central and eastern Europe and the Mediterranean does not fundamentally change the key characteristics of the EU economy, as the economic weight of the new Member States is relatively small. However, economic diversity within the EU has increased, as the institutional and structural features of the new Member States are in many respects still different from those of the old Member States. In the short term, the accession of the new Member States will have an upward impact, in statistical terms, on real GDP growth in the EU, as output growth in the new Member States is higher than in the EU-15. The table contains a number of key macroeconomic features of the enlarged EU (comparing it with the former EU of 15 Member States, the United States and Japan), using the most recent data available from various sources. Where necessary, comparisons between the existing and the enlarged EU, the United States and Japan are based on a conversion of national data into a common currency using the average nominal exchange rates prevailing in the corresponding period, unless otherwise indicated.

**Table Key characteristics of the EU economy following the accession of the new Member States**

	Reporting period	Unit	EU-15	EU-25	United States	Japan
Population <sup>1)</sup>	2004	mln	380.8	454.9	291.4	127.7
GDP (share of world GDP) <sup>2)</sup>	2002	%	26.8	28.1	32.5	12.3
GDP	2002	€ bln	9,172	9,615	10,980	4,235
GDP per capita	2002	PPP thousands	8,921	9,741	9,422	3,067
	2002	€ thousands	24.0	21.1	37.7	33.2
	2002	PPP thousands	23.3	21.4	32.7	24.1
Labour productivity per person employed	2002	PPP index EU-15 = 100	100	92.8	118.9	87.9
Exports of goods	2002	% of GDP	10.9	9.5	6.5	9.9
Imports of goods	2002	% of GDP	10.8	9.8	11.1	7.6
Sectors of production <sup>3)</sup>						
Agriculture, fishing, forestry	2002	% of GDP	2.0	2.1	1.3	1.3
Industry (including construction)	2002	% of GDP	27.0	27.2	21.6	29.1
Services	2002	% of GDP	71.0	70.7	77.1	69.6
Public expenditure on education	2000	% of GDP	4.9	4.9	4.8	3.6
R&D expenditure	2001	% of GDP	2.0	1.9	2.7	3.1
Unemployment rate	2003	%	8.0	9.0	6.0	5.3
Labour force participation rate <sup>4)</sup>	2002	%	69.6	68.9	76.6	75.7
Employment rate <sup>5)</sup>	2002	%	64.3	62.9	71.2	65.2
General government <sup>6)</sup>						
Surplus (+) or deficit (-)	2002	% of GDP	-2.0	-2.1	-3.4	-6.1
Expenditure	2002	% of GDP	48.0	48.0	32.4	38.7
Revenue	2002	% of GDP	46.0	45.9	29.0	32.6
Gross debt	2002	% of GDP	62.5	61.5	45.7	134.6
Bank deposits <sup>7)</sup>	2002	% of GDP	81.5	80.1	44.0	118.8
Stock of loans to the private sector <sup>8)</sup>	2002	% of GDP	97.1	94.2	51.2	101.0
Stock market capitalisation	2002	% of GDP	57.8	55.9	94.7	46.8

Sources: Eurostat, European Commission, IMF, BIS, ECB, World Federation of Exchanges, Bank of Japan and US Federal Reserve.

1) 1 January 2004; Japan: 1 April 2004.

2) GDP shares are based on country GDPs in current US dollars.

3) Based on gross value added at current prices.

4) Defined as the ratio of the labour force to the working age population (those aged between 15 and 64).

5) Defined as the ratio of the number of employed persons to the working age population (those aged between 15 and 64; for Japan, those aged between 15 and 70).

6) Revenue, expenditure and deficit based on ESA95. Gross debt is calculated as defined in the excessive deficit procedure. Japan: data for 2001.

7) EU-15 and EU-25: total deposits with MFIs; United States: demand, time and savings deposits with banking institutions; Japan: demand and time deposits with deposit money banks.

8) EU-15 and EU-25: MFI loans to residents other than general government; United States: loans by commercial banks, savings institutions and credit unions; Japan: loans to the private sector.

## POPULATION AND ECONOMIC ACTIVITY

The latest enlargement has increased the population of the EU by approximately 20% to a total of 455 million people. In terms of population this is the biggest enlargement since the EU's creation in 1957 (at that time it was referred to as the European Economic Community). Measured in terms of population, the EU-25 is the largest economic entity among the industrial countries. By way of comparison, the populations of the United States and Japan are less than two-thirds and one-third respectively of the population of the EU-25.

Economic activity in the countries forming the EU-25, as measured by GDP, was just above €9,600 billion in 2002, to which, on the basis of current exchange rates, the new Member States contributed 4.8%. From a historical perspective, the economic size of this enlargement is relatively limited. For example, the accession of Spain and Portugal to the European Community in 1986 (which at the time consisted of ten countries) raised the EU's total GDP by slightly more than 8%, and the enlargement to Austria, Finland and Sweden in 1995 increased total GDP by a little more than 7%. On the basis of GDP data and exchange

rates for 2002, the accession of the new Member States would lead to a rise in the EU's share of world GDP from 26.8% to 28.1%. It should be noted, however, that these international comparisons are heavily influenced by developments in exchange rates, although a way to circumvent this is to make a comparison on the basis of purchasing power parities (PPPs). Purchasing power parity is a currency conversion rate that converts economic indicators expressed in a national currency into an artificial common currency that equalises the purchasing power of different national currencies. In PPP terms and on the basis of 2002 data, the most recent enlargement increases the EU's GDP by 9.2%, so the size of the EU-25 economy is larger than that of the United States.

As the new Member States have a relatively large population in relation to their level of economic activity, their accession implies a decline in the average level of GDP per capita in the EU. In PPP terms, however, the level of GDP per capita in the new Member States is higher than on the basis of current exchange rates, as the price level in the new Member States is lower than in the EU-15. Therefore, in PPP terms, the decline in the EU's GDP per capita associated with the accession of the new Member States is less pronounced. Compared with the United States and Japan, GDP per capita in the EU-25 is relatively low, though the difference, especially with Japan, is much more limited in PPP terms (on the basis of figures for 2002).

### EXTERNAL POSITION

The key characteristics of the EU, as described in this section, are generally a weighted average of the individual Member States. One notable exception to this is that since enlargement, EU-15 trade with and among the new Member States has now become intra-EU trade. As a result, it is no longer recorded as international trade. By contrast, trade between the new Member States and the rest of the world excluding the EU-15 countries now counts as extra-EU-25 trade. The accession of the new

Member States decreases slightly the trade openness of the EU, as EU-15 trade with the new Member States is larger in magnitude than new Member States' trade with countries outside the EU-15. According to data for 2002, the expanded EU's exports of goods represented 9.5% of the EU's GDP, compared with 6.5% and 9.9% for the United States and Japan, respectively.

### PRODUCTION STRUCTURE

The structure of production in the new Member States is characterised by a slightly larger share of agriculture and industry and a somewhat smaller share of services in GDP than the average of the EU-15 countries. Consequently, the accession of the new Member States has only resulted in slight changes in the shares of these broad sectors in the EU's GDP. Sectoral differences compared with the EU-15 tend to be more pronounced in terms of the distribution of employment across these sectors. The new Member States each display notable differences with regard to sector shares and employment distribution. This diversity is even more pronounced within the broad sectors of industry and services. In comparison with the United States and Japan, the agricultural sector in the EU is relatively large, whereas the size of the EU's industrial sector is larger than that of the United States but smaller than that of Japan. The EU's services sector is larger than that of Japan but smaller than that of the United States.

### LABOUR MARKET

As the average unemployment rate in the new Member States is higher than that in the EU-15 countries, the accession of the new Member States has led to a somewhat higher average unemployment rate in the EU-25. Despite a fall during the late 1990s, unemployment in the EU-15 and the EU-25 remains significantly higher than in the United States and Japan. In the new central and eastern European Member States, unemployment rates have risen and regional unemployment differences have grown during the past decade, owing to structural adjustments associated with the transition to a market economy. However, prospects for

employment could improve in the years ahead, as labour shedding associated with the business restructuring process may come to an end. In the longer run, the new Member States' potential for catching-up in terms of GDP per capita may also contribute to favourable employment trends and lower unemployment.

The accession of the new Member States lowers the employment rate in the EU by 1.4 percentage points to 62.9%. A breakdown of the employment rates in the new Member States suggests that the participation rate of males in particular is considerably below the level of the EU-15 countries, whereas the gap for females is less considerable. The employment rate of older workers (i.e. those aged between 55 and 64) is also substantially lower in the new Member States than in the EU-15. Even more efforts in both the existing and the new Member States are therefore needed to achieve the Lisbon employment target of 70% by 2010. In comparison with the United States and Japan, the EU labour force participation rate is low. The combination of a lower participation rate and the higher unemployment rate in the EU is reflected in an employment rate which is below that of the United States and Japan.

#### **FISCAL POSITION AND THE SIZE OF THE GOVERNMENT SECTOR**

The accession of the new Member States does not substantially change the weighted average government deficit ratio in the EU, despite the fact that public deficits in the new Member States are generally high. The public expenditure and revenue shares in GDP are somewhat smaller in the new EU countries, thus reducing the share of the general government sector in the EU-25 slightly compared with the EU-15. As the public debt ratio in the new Member States is generally significantly below the level in the existing EU countries, the average EU debt-to-GDP ratio has become somewhat lower since enlargement.

In 2002 the general government deficit in the EU-25 was, at 2.1%, lower than in the United States and Japan. Also in 2002, the general

government sector in the EU-25, where the expenditure ratio stood at 48% and the revenue ratio at almost 46%, made up a larger share of the economy than in the United States and Japan. In the United States, the general government sector accounted for just over 32% of GDP in terms of expenditure and 29% of GDP in terms of revenue. In Japan, the large public deficit can be accounted for by a government expenditure ratio of almost 39% of GDP and a government revenue ratio of slightly below 33%. The accumulation of public deficits in the past is reflected in comparable public debt ratios in the EU and the United States, which are significantly lower than in Japan.

#### **FINANCIAL STRUCTURE**

The accession of the new Member States does not imply significant changes to the financial structure of the EU as a whole. Although the level of financial intermediation is relatively low in most new Member States and is more strongly focused on banks than in the EU-15, enlargement does not materially affect the EU aggregate given the relatively small size of the financial sectors in most new Member States. Financial markets in the new Member States are generally less developed than in the EU-15. In comparison with the United States, the EU's financial sector continues to be more oriented towards the banking sector, whereas the role of stock markets in financial intermediation is less important. The opposite is true for the EU's financial sector vis-à-vis Japan.

### **3 THE IMPACT OF EU ENLARGEMENT ON GROWTH AND WELFARE**

The previous section focused on the statistical impact of the accession of the new Member States on a number of aggregate macroeconomic figures for the EU. In addition to this statistical impact, the enlargement of the EU also affects incentives for and impediments to the flow of goods, services, capital and labour between the EU-15 and the new Member States. Although the degree of economic integration between the EU-15 and the new Member States that was

achieved prior to enlargement is substantial and many effects are already visible, enlargement is likely to have further integration effects. However, the extent to which these effects will materialise and the speed at which they do so depend on many factors, such as future economic developments and policies in Member States. This section reviews some channels through which enlargement could affect economic growth and welfare in the longer term, focusing on the “four freedoms” of the Single Market.

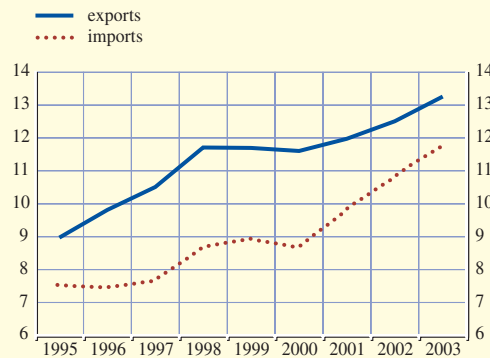
Existing studies have generally suggested that enlargement-related integration effects are likely to produce economic benefits for both the EU-15 and the new Member States, provided that suitable national economic policies are pursued. Estimates of the potential benefits of enlargement in terms of cumulative increases of GDP are generally positive – though rather small – for the existing EU as a whole, but are substantially higher for the new Member States given their relatively small size.<sup>1</sup> In addition, progress with nominal convergence in the new Member States (including a reduction of inflation) can help to speed up the catching-up process in real terms, as the experience of some EU countries during the 1990s has demonstrated. The benefits of enlargement will not be distributed evenly across countries, regions and sectors. For example, some economic sectors may benefit more than others because of an increased demand for their products from the new Member States, whereas others may face increased competition from suppliers in the new Member States.

### TRADE AND COMPETITION

The traditional theory of international trade predicts that economic integration has two broad effects on trade patterns. Trade creation arises when economic integration leads to the movement of trade from a high-cost to a low-cost producer, thereby raising the volume of cross-border exchanges. Trade diversion occurs by favouring trade among countries in a free trade area at the expense of lower cost producers outside this free-trade area.

**Chart 1 EU-15 trade with the new Member States**

(as a share of total extra-EU15 trade)



Source: Eurostat.

It is clear that the implementation of the so-called Europe Agreements has led to a significant increase in trade. These bilateral agreements between the EU-15 and the current new Member States were concluded in the early and mid-1990s and established a free trade area for many industrial products by removing tariffs and quantitative restrictions. As a result of these agreements and the profound structural changes taking place in the new Member States, EU trade with this group of countries grew relatively strongly during the 1990s and, hence, the new Member States as a group became a main trading partner of the EU-15 countries (see Chart 1). Although the Europe Agreements implied the abolition of formal barriers (i.e. tariffs and quantitative restrictions) to trade in industrial products, restrictions on agricultural and so-called sensitive products (including chemicals, textiles and clothing, footwear, iron and steel and furniture) continued to exist until enlargement. EU accession has finally and irreversibly liberalised trade between the new and the existing Member States for these products as well.

<sup>1</sup> These are only very rough estimates and only give an idea of the magnitude of the potential effects. For a recent overview of the new Member States' economies, see “The acceding countries' economies on the threshold of the European Union”, in the ECB's *Monthly Bulletin*, February 2004.

In addition to the integration effects described above, the expansion of the Single Market has enhanced the degree of competition and the scope for economies of scale. The degree of competition is likely to rise as the accession of the new Member States has increased the number of suppliers within the Single Market. Economies of scale may occur as the expansion of the Single Market has increased the size of the market available to suppliers. A rise in competition and economies of scale should lower prices and increase productivity, thereby contributing to an increase in the potential growth rate. Furthermore, the expansion of the Single Market should increase the range and varieties of products available to producers and consumers.

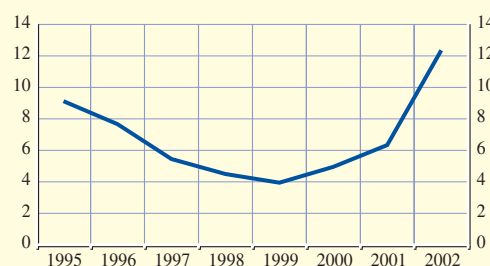
The scope for an enhancement of competition and economies of scale is reinforced by the reduction of so-called technical barriers to trade that existed prior to enlargement. Technical barriers can arise owing to differences in the way that products are regulated across countries vis-à-vis requirements such as health, safety, environmental and consumer protection standards. The Single Market aims to abolish these technical barriers between Member States, inter alia by setting harmonisation standards or by enforcing the principle of mutual recognition of each Member State's rules and regulations. Although some technical barriers were removed during the adoption of the *acquis communautaire* in the run-up to EU membership, the further removal of technical barriers is likely to have had an additional positive effect on trade flows since enlargement. The size of this effect depends on the actual implementation of the Single Market, including the full transposition of EU Directives into the national legislation of both the old and the new Member States.

#### FLOWS OF CAPITAL AND LABOUR

According to economic theory, the establishment of the free movement of capital between the old and the new Member States should lead to a flow of capital from the relatively capital-abundant EU-15 countries

**Chart 2 FDI flows from the EU-15 to the new Member States**

(as a share of total extra EU-15 FDI flows)



Source: Eurostat.

towards the new Member States, where the capital stock is smaller and marginal returns on capital are higher. Conversely, labour is likely to flow from the new Member States to the EU-15 countries, where the marginal return on labour (i.e. incomes) is higher. On the basis of this theoretical framework, the free movement of capital and labour should contribute to an increase in growth in the EU as a whole, because factors of production move to those locations where they are most productive. However, this framework is highly simplified. Migration flows, for example, are also influenced by a range of other factors, such as the employment rate in the home and the foreign country, geographical distance and differences between countries in terms of culture and language.

The new Member States largely liberalised capital movements early in the transition process, anticipating the obligations of EU accession. Foreign direct investment (FDI) constitutes by far the largest share of total cumulative net private capital inflows to the new Member States, also reflecting the role of FDI as a source of financing in the privatisation process. The share of FDI flows from the EU-15 countries to the new Member States has increased in recent years, linked to the prospect of joining the EU (see Chart 2). More specifically, some firms from the old Member States have tended to move labour-intensive parts of their production chains to the new

Member States. The prospects for FDI flows depend on a range of factors, such as factor prices, transport costs as well as labour and product market regulation in the economies concerned. On the one hand, the diminution of risks associated with entry into the EU is expected to support FDI inflows to the new Member States. On the other hand, the end of the privatisation process in most new Member States may reduce the role of FDI.

In contrast to goods, services and capital, limitations on the movement of labour between the new and old Member States remain in place. Member States are allowed to use transitional periods to postpone the free movement of workers and most existing EU countries have maintained restrictions since enlargement. However, several EU-15 Member States grant nationals from the new Member States the right to temporary immigration. Inflows of labour from the new Member States have thus been concentrated in sectors characterised by a high degree of seasonal work, such as agriculture and tourism.

Many studies suggest that future migration flows to the existing EU countries are likely to be small in relation to the size of the workforce in the EU. However, the range of estimates is rather wide, reflecting considerable uncertainty. Studies on the implications of enlargement for migration are based on very different methodologies, such as opinion polls, extrapolations from earlier south-north migrations, and analyses of past migration episodes in econometric models. Most studies predict a long-term migration potential of broadly 1%-4% of the current population in the new Member States. It is important to bear in mind that these projections are often based on ad hoc assumptions regarding the determinants of migration flows, such as future unemployment and income differentials between the new and the old Member States. In addition, it should be noted that these numbers are averages and the distribution of migration inflows into the existing Member States is likely to be uneven across countries and regions.

#### 4 CONCLUDING REMARKS

On 1 May 2004, the EU underwent its most significant enlargement since its creation, increasing from 15 to 25 Member States and from 381 to 455 million people. As the economic weight of the new Member States is relatively small, the statistical aggregate macroeconomic features of the EU economy have not changed fundamentally. In fact, the most notable changes in the EU are the 20% increase in total population and the 5% rise in GDP. In addition, as the new Member States have a large population relative to the level of economic activity, their accession implies a decline in the average level of GDP per capita in the EU.

In the longer term, enlargement is likely to contribute positively to economic growth and welfare in the EU as a whole, although the benefits of enlargement are not likely to be distributed evenly across countries, regions and sectors. The extension of the Single Market, by increasing the scope for the free movement of goods, services, capital and labour, should enhance competition and economies of scale. This should lower prices and increase productivity, thereby contributing to an increase in the sustainable rate of growth in the EU. The extent to which these effects will materialise and the speed at which they do so depend, inter alia, on economic policies in the old and the new Member States. In particular, macroeconomic policies should be aimed at stability and structural reforms should be implemented to enhance the flexibility of markets, including a forceful and prompt completion of the enlarged Single Market. Therefore, enlargement has made it all the more important to fully exploit the potential of the Single Market by dismantling any remaining barriers to the free movement of goods, services, capital and labour and any remaining impediments to competition.







## THE NATURAL REAL INTEREST RATE IN THE EURO AREA

*In economic literature, the “natural” or “neutral” real interest rate is often defined as the real short-term interest rate which is consistent with output at its potential level and a stable rate of inflation. In the short run, however, interest rates will deviate from the neutral rate as the economy is typically hit by economic shocks that could represent a risk to price stability. A central bank pursuing a stability-oriented policy would then set its interest rate instrument so as to move real short-term interest rates to that level below or above their natural level that is necessary to counter the effects of these shocks to price developments.*

*From a conceptual point of view, the natural real interest rate is an important benchmark for monetary policy and potentially, in theory, an important indicator of the monetary policy stance. In practice, however, the natural real interest rate is unobservable and can only be estimated on the basis of specific assumptions and with a large degree of uncertainty. This makes it difficult to rely on this indicator in the day-to-day conduct of monetary policy.*

*From an empirical point of view, this article discusses a number of issues related to developments in the natural real interest rate in the euro area, as estimated on the basis of specific assumptions. The main conclusion is that the natural real interest rate in the euro area is generally found to have declined over the past decade. This reflects factors such as the slowdown of productivity and population growth in the euro area, the reduction of inflation risk premia, the disappearance of intra-euro area exchange rate risk premia since the introduction of the euro and the process of fiscal consolidation in the euro area countries before the start of Stage Three of Economic and Monetary Union (EMU).*

### I INTRODUCTION

The real interest rate is the return, expressed in real terms, that a lender obtains on his investment, i.e. the return deflated by the change in the price index expected from the period in which he lends the funds to the period in which the funds are repaid. If the real interest rate is relatively low compared with its equilibrium level, borrowing is relatively cheap in real terms and, ceteris paribus, consumption and investment are more easily financed. If the real interest rate is relatively high, by contrast, borrowers face relatively high costs in real terms when financing their consumption and investment plans.

In the long term, real interest rates are determined mainly by real factors, inter alia by the rate of productivity growth and by households' preferences as to whether to spend on consumption sooner rather than later. In the short term, however, real interest rates can be influenced by monetary policy. By changing the nominal short-term interest rate, the central

bank is able to control the real interest rate, as prices are sticky in the short run.

In this context, economists have developed the notion of a “natural” or “neutral” real interest rate. This is often defined as the real short-term interest rate which is consistent in the long run – i.e. when prices are expected to adjust flexibly to whatever shocks may hit the economy from time to time – with output at its potential (or sustainable) level and a stable rate of inflation. Therefore, the “natural” or “neutral” real interest rate is a concept that is potentially important for monetary policy-makers. However, like the level of potential output, the natural real interest rate is not directly observable. It can only be estimated on the basis of specific assumptions, and the resulting estimates depend crucially on these assumptions.

This article discusses a number of issues related to the natural real interest rate in the euro area. Section 2 reviews the main determinants of the natural real interest rate from a conceptual point

of view. Section 3 explores the evolution of those determinants in the euro area over the past decades and presents the results of some empirical exercises that aim at estimating how the natural real interest rate may recently have evolved in the euro area. Section 4 explains the monetary policy implications embedded in the concept of the natural real interest rate. Finally, Section 5 sets out the conclusions.

## 2 THE DETERMINANTS OF THE NATURAL REAL INTEREST RATE

Economic literature identifies several determinants of the natural real interest rate. The most relevant of these are explicitly discussed in this article: the time preference of consumers; productivity and population growth; fiscal policy and risk premia; and the institutional structure of financial markets. Broadly speaking, the first factor relates to preferences, the second to technology and demography, and the others mainly to the institutional and macroeconomic policy setting.

The most intuitive and straightforward determinants of the natural real interest rate are those anchored in households' decisions on their pattern of consumption and saving over time.

For example, a decrease in the value households attach to future consumption relative to current consumption – typically referred to as a decline in the households' "discount factor" – will, other things being equal, encourage households to bring forward consumption and reduce saving. In this situation the equilibrium real interest rate must rise in order to ensure, in the aggregate, that savings remain equal to investment. Therefore, a greater tendency of households to discount the future raises the equilibrium real interest rate or, more generally, changes in household time preferences will produce fluctuations in the natural real interest rate.

While the link between the discount factor and the equilibrium real interest rate is intuitive, it should be noted that the discount factor of households is a very theoretical concept. In practice, intertemporal preferences of households are not observable, so that it is difficult to assess their influence on discount factors and real interest rates.

For firms, *faster productivity growth* implies higher returns on physical investment. This stimulates investment demand. To generate sufficient savings to meet this investment demand, the natural real interest rate must rise. In addition, productivity growth may also affect consumers' borrowing and lending demand, to the extent that productivity growth has repercussions on the expected rate of growth of households' income. A situation in which households anticipate higher real incomes in future may induce them to consume more relative to their income at present than in the future. This, again, exerts an upward pressure on the natural real interest rate in equilibrium.

*A higher rate of increase in the working-age population* normally leads to an expansion of the workforce. Because the additional workers have to be equipped with capital, greater investment by firms may be required. To the extent that the higher investment needed to equip an expanding working-age population is not matched by increased savings, the natural real interest rate may have to increase to maintain the equilibrium.

In addition to these fundamental determinants, there are also a number of other factors, such as fiscal policy, risk premia and the institutional setting of financial markets, which may also have a significant influence on the natural real interest rate.

Starting with *fiscal policy*, governments are typically very large net borrowers or lenders, and their actions can have a significant impact on the real interest rate as the equalising force between borrowing and lending demand. A large and sustained budget deficit that has to be

financed by debt issuance will need to create a corresponding demand for saving on the side of the private sector. If private agents decide to save more in order to offset a likely increase in taxes in the future, this would have no impact on the natural real interest rate, as saving would then increase one-to-one with the government's borrowing requirements, with no implications for the real rate that clears the market for funds. However, if agents do not fully adjust their saving in response to a rise in the budget deficit, an increase in the natural real interest rate is necessary in order to maintain the equilibrium. A prominent example of this non-neutrality of budget decisions can be found in the field of social security. Typically, increases in social security transfers have been found to reduce private savings, as households are encouraged to cut back on saving in anticipation of their old age. As a consequence, a higher real interest rate is required to finance the larger social security deficits.

In addition to the above-mentioned factors, risk premia may also matter. For example, *exchange rate risk premia* as well as *inflation risk premia* affect the level of the natural real interest rate. These premia are often interrelated since the credibility of a currency is typically closely related to the monetary policy regime and the level of inflation, e.g. exchange rate risk premia may be more significant in countries where the inflation rate is high and volatile and where the credibility of monetary policy is low.

Uncertainties related to inflation and the credibility of a currency, which are reflected in exchange rate and inflation risk premia, can raise the cost of borrowing. This introduces some distortions to an efficient functioning of capital markets. Maintaining price stability and the credibility of a currency therefore make a crucial contribution to the ability of financial markets to allocate resources efficiently across time, thereby enhancing the growth potential of the economy.

Finally, in all modern economies saving and investment are channelled through the financial

markets. Hence, the *institutional structure of financial markets* may represent another relevant factor in the determination of the natural real interest rate. The efficiency of financial markets makes an important contribution to an optimal allocation of savings across time and across investment projects. For example, improvements in the structure of financial markets can enlarge the range of assets available to savers in terms of returns, risk and liquidity. This may have the overall effect of encouraging households to save more, thereby leading to a lower level of the equilibrium real interest rate.

These considerations suggest that a high or low level of the natural real interest rate cannot necessarily be interpreted as a positive or a negative factor for the economy. Depending on the factors causing a high level of the natural real rate, for instance, it might be the symptom of a healthy and fast-growing economy or it may be a symptom of an economy which is subject to many inefficiencies and distortions. It is therefore always crucial to understand the factors driving the level of the natural real interest rate in order to assess their welfare implications for the economy.

### 3 THE NATURAL REAL INTEREST RATE IN THE EURO AREA

As pointed out above, the natural real interest rate is the equilibrium value around which the real short-term interest rate would fluctuate in a stable price environment in the medium to long term. In order to get some information regarding the developments of the natural real interest rate in the euro area over the past decades, it may be useful to start this section with an analysis of the evolution of the actual real interest rates. Then, the second part of the section presents some estimates of the natural real interest rate in the euro area and elaborates on the factors that may have been behind its development.

## DEVELOPMENTS IN REAL INTEREST RATES IN THE EURO AREA

Real interest rates are difficult to measure because they are not directly observable. Policy-makers can only observe the nominal interest rates (which are paid on financial instruments with various maturities and risk characteristics) and inflation rates (for which, again, various measures exist). From these data, they have to infer the real interest rate used by households and firms in their saving and investment decisions.

At this point, the distinction between an ex-post and an ex-ante definition of the real interest rates should be made. While the former represents the return in real terms an investor effectively made to his investment, the latter denotes the real return which is expected to be obtained from the investment. The ex-ante definition of the real interest rate should be more relevant in understanding savings and investment decisions.

Three measurement issues arise when estimating ex-ante real interest rates. First, which nominal interest rate should be chosen? Second, which price index should be used to deflate nominal returns? And, third, how should inflation expectations be constructed?

With regard to the choice of the nominal interest rate, it is desirable to use the interest rate of a short-term financial instrument issued by an institution whose default risk is quite stable, in order to minimise the effects of variations in default/credit risk premia. Concerning the selection of a price index, it should be noted that different deflators have been proposed in empirical literature and that the real interest rate estimated is quite sensitive to the index used. A seemingly natural choice is a broad-based consumer price index, which would capture the increase in the cost of living faced by economic agents. However, it is sometimes argued that producer price indices would be preferable in this context, as these measures are more relevant for investment decisions, since they capture the price of firms' output.

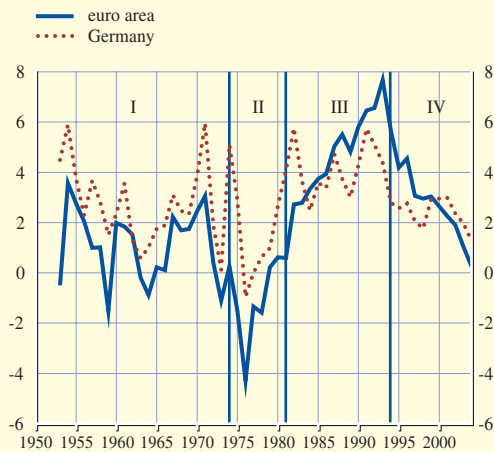
With respect to the construction of inflation expectations, the simplest approach is to assume that expectations simply reflect past inflation developments, so that the best forecast of future inflation is its most recent level. However, this hypothesis is problematical and can at best be justified when estimating the real interest rate paid on financial instruments of very short maturity, while the difference between current and expected future inflation may not be negligible for horizons longer than a few months (see the box entitled "Key issues for the analysis of real interest rates in the euro area" on page 16 of the March 1999 issue of the Monthly Bulletin).

Against the background of these caveats, Chart 1 shows the evolution of one possible measure of the real short-term interest rate in the euro area since 1952. In addition, a time series for Germany is also shown, as this country had the best track record among European countries in achieving low inflation rates over the period covered, and may thus be more comparable with developments in euro area interest rates since the start of Stage Three of EMU than past euro area averages. The measure shown in both cases is the difference between the annual average of nominal three-month interbank interest rates and the contemporaneous annual average of the year-on-year increase in consumer prices. This represents perhaps the simplest and least controversial measure of the real short-term interest rate available for the euro area over such an extended horizon, although it is obviously subject to the caveats noted above.

In Chart 1, four different periods can be identified. The first period lasts from the early 1950s until 1973, when the post-war international monetary arrangements based on fixed – albeit adjustable – exchange rates were finally abandoned. During this period, the real short-term interest rate in the euro area moved in the range of -2% to 4%. In order to interpret these figures correctly, it should be noted that the institutional environment prevailing for most of that period differs in important respects

**Chart 1 Measures of real short-term interest rates in the euro area and Germany**

(percentages per annum; annual data)

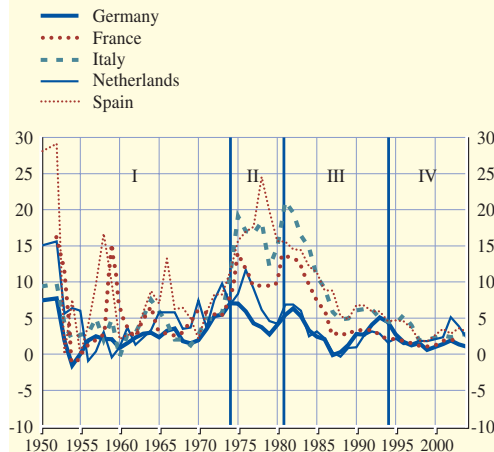


Sources: NCBs, BIS, Eurostat and ECB calculations.

Note: Three-month interbank interest rates or closest available substitutes deflated by annual consumer price inflation up to 1990, and by annual HICP inflation thereafter.

**Chart 2 Inflation developments in the five largest euro area countries**

(percentages per annum; annual data)



Sources: NCBs, BIS, Eurostat and ECB calculations.

Note: Before 1991 consumer price inflation is used and HICP inflation thereafter. For Germany, consumer price inflation is used before 1996 and HICP inflation thereafter.

from that now prevailing in the euro area. In particular, capital controls, which were applied in Europe during and in the aftermath of the Second World War, were an important constraint on households' decisions to allocate their savings to the most productive uses on an international basis. In addition, the 1950s were characterised by relatively large swings in inflation in several countries, which affected the measures of the short-term rates (Chart 2). While monetary policy in Germany and, to some extent, also in other European countries favoured an environment of high economic growth and relatively stable inflation after the stabilisation in the early 1950s, inflation in some other countries was more volatile and less predictable, particularly in the 1960s. This situation, coupled with restrictions on the international mobility of capital, may thus explain the occurrence of negative real interest rates even in face of high rates of expansion in production and income.

The beginning of the second period is marked by the abandonment of the fixed exchange rate regime and the upsurge in oil prices in 1973. The 1970s started with overheated economies in

which consumer price inflation and wages were rising, against the backdrop of decelerating potential growth and reduced labour market flexibility. In this context, oil price rises and the removal of the external constraint of fixed exchange rates created conditions for laxity in monetary and fiscal policies in most countries. Over this period, inflation rates rose rapidly, while nominal interest rates increased at a relatively slower pace and, as a consequence, measures of real interest rate fell substantially below zero, reaching a trough of -5% in 1975. Importantly, the relatively high inflation rates over the subsequent decade seem to indicate that the actual real rate was somewhat below the natural real interest rate, i.e. monetary policy was "too loose" on average during this period to be compatible with stable inflation (see the box entitled "Current euro area interest rates from a historical perspective" on pp. 25-28 of the September 2003 issue of the Monthly Bulletin).

The third period, from 1981 to 1993, is characterised by a substantial increase in the real interest rate, which culminated in the historical highs reached in the early 1990s. The rise in public deficits in many G7 countries and

the rise in inflation risk premia after the economic developments during the 1970s may have been factors pushing up real interest rates. In addition, after the high inflation rates which characterised the previous decade, most European monetary authorities pursued a monetary policy oriented towards disinflation that contributed to the decline in consumer price inflation throughout the 1980s and beyond. Therefore, the real rate was on average presumably above the natural real interest rate in this period, i.e. monetary policy was relatively tight. Overall, the need to curb inflation expectations and re-establish price stability after the experience of the 1970s was costly in terms of growth and employment. The high economic costs of fighting inflation once it had hovered around high levels for a long period of time strengthened the resolve of monetary authorities to commit to more stability-oriented policies later on.

Finally, since the mid-1990s, the real interest rate has fallen steadily, mainly due to two factors: first, the stabilisation of inflation rates in the euro area at low levels, and the decline in nominal interest rates made possible by the establishment of conditions of monetary stability; and, second, the process of fiscal consolidation in most euro area economies before the start of Stage Three of EMU. Against this background, the next sub-sections aim to draw some conclusions on the most likely evolution of the natural real interest rate in the euro area over the past decades.

## DEVELOPMENTS IN THE NATURAL REAL INTEREST RATE IN THE EURO AREA

The natural real interest rate is also an unobservable variable. In addition, as explained in Section 2, it is driven by a variety of fundamental factors that are not easily measured. Therefore, the natural real interest rate is even more difficult to estimate than actual real interest rates.

Most estimates of natural real interest rates are based on techniques which smoothen developments in the actual real rates. One simple approach to smoothing developments in real rates is simply to take averages of the real interest rate data over relatively long periods, where the incidental short-term fluctuations of the real rate cancel one another out. However, taking simple historical averages of actual real interest rates may not be a reliable method to compute the natural real interest rate, as a number of factors, including the stance of monetary policy, may contaminate the information content of these averages. In particular, as long as there are certain periods in which inflation was not stable, the average of actual real rates may cause misleading results.

Keeping all these caveats in mind, the table reports the historical averages of the actual real short-term interest rates in the euro area in each decade since the 1970s.

The statistical measures reported in the table point to a rate in the most recent period that is

**Table Short-term real interest rates and inflation in the euro area**

(percentages per annum; based on monthly data)

Period	Short-term real interest rate			Average inflation
	Average	Absolute minima	Absolute maxima	
1973-1980	-0.7	-5.2	2.1	10.3
1981-1993	5.2	1.5	9.1	5.5
1994-March 2004	2.4	0.0	5.1	2.0
1999-March 2004	1.4	0.0	2.9	2.0

Sources: NCBs, BIS, Eurostat and ECB calculations.

Note: See Charts 1 and 2 for details on the calculation of short-term real interest rates and inflation.

**Chart 3 Measures of trend productivity growth in the euro area**

(percentages per annum; quarterly data)

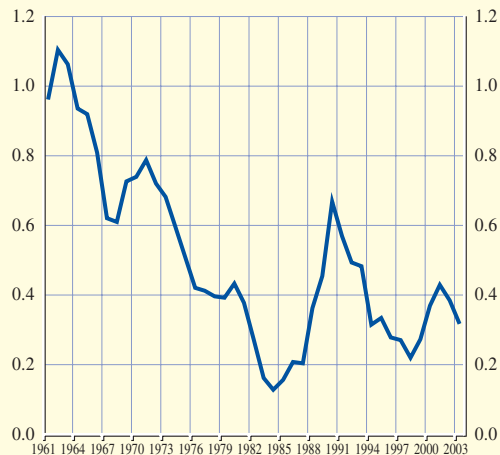


Source: ECB Area-Wide Model. Labour productivity is real GDP per employed person; total factor productivity is the Solow residual of the aggregate production function.

Note: See also G. Fagan, J. Henry and R. Mestre (2001), "An Area-Wide Model (AWM) for the euro area", ECB Working Paper No. 42.

**Chart 4 Total population growth in the euro area**

(annual percentage changes; annual data)



Source: Eurostat.

Note: The data refer to the countries which are currently part of the euro area (excluding East Germany and Luxembourg from 1961 to 1991).

noticeably lower than the one that seems to have been prevailing over the 1980s and 1990s. This suggests that the natural real interest rate in the euro area may have declined over time. Such evidence tends to be confirmed by results generated on alternative estimation methods based on a more refined statistical filtering of time series data and on more structural approaches using macroeconomic models (see the box below).

Various factors may help explain the apparent decline in the natural real interest rate in the euro area over the past decade.

First, *productivity growth* in the euro area declined over the most recent decade. Indeed, Chart 3 suggests that productivity growth in the euro area (no matter whether measured as output per employed person or as total factor productivity) seems to have followed a declining trend since the early 1970s.

Second, *population growth* in the euro area has declined over the past decade and may also have

contributed, albeit only slowly and gradually, to reducing the level of the natural real interest rate. In this regard, Chart 4 displays the decline in the growth rate of the total population in the euro area, from around 1% in the 1960s to approximately 0.3% in 2003.

These two factors, productivity growth and population growth, can be thought to have a downward effect on the risk-free real short-term interest rate. However, most estimates of the natural real interest rate are based on techniques which smoothen developments in the actual real short-term rates, which are not entirely risk-free. Therefore, the existence of risk premia in short-term rates may distort, in practice, the estimation of the natural real interest rate. The following paragraphs elaborate on three different types of risk premia which may have also been a factor in the decline in the estimated natural rate over the past decades: *exchange rate risk premia*, *default risk premia* and *inflation risk premia*.



The introduction of the euro in January 1999 resulted in the disappearance of intra-euro area exchange rate premia. Indeed, the euro has contributed to reducing the uncertainty that investors face when making transactions and business decisions across euro area countries. This has caused the cost of borrowing in real terms, i.e. the real interest rate, to fall in the euro area. It must be noted that the lower the exchange rate uncertainty, the larger the amount of resources that may be diverted from (unproductive) hedging activities to productive activities. This is one of the mechanisms by which the single currency may have contributed to an environment more favourable to risk-taking and business activity, thereby possibly fostering economic and employment growth in the medium term.

A factor that may also have led to a decline in risk premia in the euro area is the process of *fiscal consolidation* that took place in the euro area economies from the early 1990s to the commencement of Stage Three of EMU in 1999. This process was motivated, inter alia, by countries' efforts to meet the requirements imposed by the Maastricht Treaty. In this respect, the great efforts undertaken by euro area countries in the 1990s to reduce their fiscal deficits and their debt-to-GDP ratios were rewarded with higher investor confidence and lower risk premia in medium to long-term government bond yields, which also had an impact on real short-term interest rates.<sup>1</sup> However, investors' confidence could be dented and risk premia embedded in medium to long-term government bond yields might rise again if the recent trend towards increased fiscal deficits in euro area countries were not to be reversed.

Finally, the central banks of euro area countries and, subsequently, the ECB have been successful in their attempts to stabilise inflation at low levels over the past decade. As noted in the previous section, a more stable inflation rate is easier to predict by consumers, investors and social partners, leading to lower inflation risk premia. As a consequence, the central bank can

keep its interest rates lower than would otherwise be possible in order to achieve its objective of price stability as it already has a higher credibility; in other words, lower inflation risk premia also allow the natural real interest rate to fall.

All in all, the natural real interest rate is likely to have declined over the last decade, due to the combination of the aforementioned factors. As shown in the box, most – although not all – techniques suggest point estimates lying in the range of 2% to 3% in recent years. However, these estimates are subject to a large degree of uncertainty, not only regarding estimation uncertainty (i.e. the degree of confidence on the point estimates), but also the uncertainties on how to construct the real interest rate time series, which sample period should be chosen, which is the appropriate methodology to use and the details of the specific economic and statistical models employed. The estimates therefore typically differ from one study to another, and they need to be interpreted with a great deal of caution.

<sup>1</sup> For a description of the effects of fiscal policy on savings and interest rates, see the article entitled "Fiscal policies and economic growth" in the August 2001 issue of the Monthly Bulletin.

## Box

**ESTIMATES OF THE NATURAL REAL INTEREST RATE IN THE EURO AREA**

This box presents some technical details on various methods used in literature to estimate the natural real interest rate in the euro area.

**1. Averages of actual real interest rates**

This method is based on the law of large numbers and proposes that the average of actual real rates over a long enough period of time should average out the short-term deviations between the natural real interest rate and the actual real rates. An illustration of this particularly intuitive approach to the estimation of the natural real interest rate is provided in the main text.

**2. Average of actual real interest rates corrected for the effects of specific economic shocks**

The estimation technique based on simple averages of actual real interest rates can be refined in order to take into account the specific shocks that may have implied asymmetries over longer periods of time in growth and inflation performance. In economic literature, the computation is often conducted by deriving the natural real rate from estimations of the *Taylor rule*. This rule, originally proposed by Taylor (1993),<sup>1</sup> takes the form,

$$r_t = r^* + \beta(\pi_t - \pi^*) + \gamma x_t$$

where  $r_t$  corresponds to the real short-term interest rate,  $r^*$  represents the natural real interest rate,  $\pi^*$  symbolises the inflation objective of the central bank,  $\pi_t$  denotes the percentage change in the price level from time  $t-1$  to  $t$ , and  $x_t$  stands for the output gap at time  $t$ . The rule states that the central bank typically allows deviations of the actual real interest rate around the natural real interest rate if inflation is not consistent with the central bank's objective, or if the output gap is non-zero. In order to estimate the natural real interest rate  $r^*$ , the average of the real interest rates observed is then corrected for those fluctuations in actual real interest rates which are due to inflation being different from its target or the output gap being positive or negative.

By proceeding in this way, an ECB Working Paper (2003)<sup>2</sup> provides estimates of the equilibrium real rate of interest. Using euro area data from 1985 to 2002 to estimate a large number of different Taylor-type specifications, the vast majority of the natural real interest rates estimated lies between 2.1% and 3.2%. However, in the sample period starting from 1993, lower levels of the equilibrium rate, between 1.8% and 2.9%, were estimated.

**3. Real yields on inflation-linked bonds**

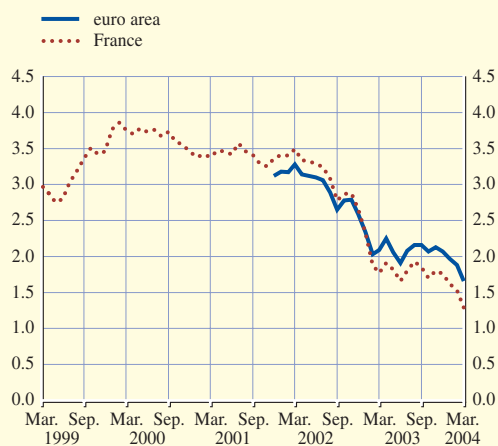
This method consists of calculating the level of the real yield on an inflation-linked bond. Such an approach builds on the view that the expectations computed by market participants are the best measure available of the rate that would prevail in the distant future. On average at a

1 J. B. Taylor (1993), "Discretion versus policy rules in practice", Carnegie-Rochester Series on Public Policy 39, pp. 195-214. On the caveats to using Taylor rules in the analysis of monetary policy decisions, see the article entitled "Issues related to monetary policy rules" in the October 2001 issue of the ECB Monthly Bulletin.

2 D. Gerdesmeier and B. Roffia (2003), "Empirical estimates of reaction functions for the euro area", ECB Working Paper No 206.

### Real bond yields in the euro area and France derived from French inflation-linked bonds

(percentages per annum; monthly averages)



Sources: French Treasury, Reuters and the ECB.

Note: French index-linked bond linked to the French CPI is maturing in 2009. The French index-linked bond linked to the euro area HICP is maturing in 2012.

available. Bonds indexed to the euro area HICP have only existed since November 2001. In addition, bonds indexed to the French CPI have existed for somewhat longer. The chart shows the available time series. While both time series show a fall in index-linked bond yields in 2003, the time period available appears to be too short to assess the information content of this measure for the natural real interest rate in the euro area.

#### 4. Time series models

To take the possibility of persistent time variations in the natural real interest rate into account, a small but growing body of literature, especially that using US data, has built simple time-series models explicitly allowing a time-varying natural real interest rate. Generally speaking, this literature is based on so-called “unobservable-component” techniques, which help to disentangle the trend movements in the natural real interest rate from transitory higher-frequency fluctuations in the real short-term interest rates.<sup>3</sup>

Such techniques make it possible to calculate the equilibrium real rate in the euro area,<sup>4</sup> using a multivariate econometric model on monthly data for industrial production, the real interest rate and inflation from 1991 to 2002 with the Kalman filter. The natural real interest rate, corresponding to the non-stationary component of the real rate series, is found to have declined to levels around or slightly above 2% in the most recent years.

sufficiently long horizon, e.g. ten years, it is reasonable to assume that a real long-term bond yield should be a valid measure of the natural real interest rate, at least as perceived by market participants. While this approach exhibits notable advantages over ex-post historical averages, namely its forward-looking character, its simplicity and its availability on a daily basis, it also has significant shortcomings. First, inflation-linked bond yields may be distorted by significant premia, e.g. due to liquidity or tax factors, which may also vary over time. Second, inflation-linked bond yields cannot measure the natural real interest rate per se, but only the market perception thereof, which might – at times of exceptional optimism or pessimism – be distorted.

A further limitation for the euro area is that no long series for inflation-linked bonds are

3 One important contribution in this regard is T. Laubach and J. C. Williams (2001), “Measuring the natural rate of interest”, FEDS Working Paper No 2001-56, who propose a simple macroeconomic model to estimate in a simultaneous manner the trend growth rate of output and the natural rate of interest in the United States by using a Kalman filter over a sample period from 1960 to 2000.

4 J. C. Cuaresma, E. Gnan and D. Ritzberger-Gruenwald (2003), “Searching for the natural rate of interest: a euro-area perspective”, Oesterreichische Nationalbank Working Paper No 84.

As pointed out earlier, an advantage of the statistical filtering approach is that it provides for time variation in the natural real interest rate. In addition, the estimates generally turn out to show relatively little dependence on the precise specification of the model used. However, this methodology does not give a structural interpretation to the movements in the equilibrium real rate, i.e. the approach is silent on the possible structural reasons for the time variations.

## 5. Structural models

The problem just described of a lack of a structural foundation can be addressed by using fully specified structural models of the economy. One class of structural frameworks that has received increasing attention features general equilibrium models constructed on the basis of explicit “optimising” behaviour on the part of households and firms and nominal frictions, whereby prices are sticky and thus do not adjust instantaneously to economic shocks. This approach is able to deal with the problems of calculating a time-varying natural real interest rate and, at the same time, providing a structural explanation for the estimated changes in the natural real interest rate. In particular, these types of models can be used to generate a time path for the natural real interest rate over a certain period by constructing a “flexible-price scenario”, characterised by the absence of nominal rigidities in the economy. The path of the natural real interest rate is then identified with the path of the actual real interest rate that the model generates in response to the estimated shocks under that counterfactual scenario. An example of this approach provided an estimate of a time-varying measure of the equilibrium real interest rate for the euro area.<sup>5</sup>

Two aspects are worth emphasising in this respect. The first is that the very notion of the “natural real rate of interest” underlying these exercises differs in some notable respects from that adopted in this article. Rather than measuring the level around which real short-term interest rates should be expected to fluctuate over a medium to long-term horizon – being driven by slow-moving determinants – the natural real interest rate implicit in this estimation approach is intended to provide a benchmark for the setting of the short-term interest rate at very short horizons. As a consequence, this measure is typically found to be quite volatile, as it indicates the way in which the real short-term interest rate should be allowed to react in response to economic shocks in a frictionless economy.

The second aspect that is worth emphasising is that the possibility of identifying the structural shocks that drive the natural real interest rate over time generally comes at the price of generating explanations and estimates that are highly model-specific, i.e. different model assumptions will naturally lead to different outcomes, because the channels through which a shock affects the real rate may differ substantially across models. Moreover, it should be emphasised that these models typically attribute a great deal of importance to preference and productivity shocks, while the factors listed in Section 2 (related to risk, fiscal policy and institutional considerations) are typically, though not always, left out of the analysis.

<sup>5</sup> F. Smets and R. Wouters (2002), “An estimated stochastic dynamic general equilibrium model of the euro area”, ECB Working Paper No 171.

## 4 MONETARY POLICY AND THE NATURAL REAL INTEREST RATE

As mentioned in Section 2, the natural real interest rate is the level of the real interest rate at which inflation is stable and output is equal to

its potential level. Over the medium to long term, it can be assumed, if inflation is close to the central bank’s objective, that a central bank will on average set the real interest rate close to the natural rate, and output will be close to its potential level. In the short run, however, the

economy may be hit by shocks which could, if not offset by the monetary authority, represent a risk to price stability over the medium term. A central bank following a stability-oriented policy will therefore move the interest rate that it controls in a way that offsets (or at least smoothens) the effect of these shocks on price developments. As a consequence, actual real interest rates will often differ considerably from measures of natural interest rates.

According to many views expressed in academic literature, these deviations between actual and natural interest rates can be regarded as a measure of the monetary policy stance. In fact, an upward deviation of the real interest rate from its natural level that is driven by the monetary authority tends to have a short-term contractionary impact on economic activity and creates downward pressure on inflation. Conversely, a downward deviation tends to stimulate economic activity and therefore brings upward pressure to bear on inflation. This is one channel of transmission of the monetary policy impulses to the economy. Clearly, the appropriate extent and duration of the deviations of the real short-term rate from the natural rate will depend on the magnitude and nature of the threat to medium-term price stability, and thus on the type of the shock hitting the economy.

Therefore, the level of the natural real interest rate is, in theory, an important benchmark for monetary policy. If it was possible to estimate the level of the natural real interest rate with precision in real time, it would allow central banks to gain a better understanding of the impact of monetary policy on economic activity and prices. Therefore, the natural real interest rate is, in principle, a useful concept.

However, as was illustrated above, central banks have a very imperfect knowledge of this variable. While it is already difficult to assess the level of the natural rate *ex post*, the difficulties are exacerbated even further in real time. Therefore, central banks are always confronted with estimates which are subject to a

high degree of uncertainty. Only in specific situations is it possible to assess that a certain level of the real interest rate is above or below any plausible estimate of the natural rate. In most cases, the sign – let alone the size – of the deviation of the real rate from the natural rate is very difficult to ascertain. Indeed, recent research has shown more generally that policy recommendations based on real-time estimates can differ significantly from those based on *ex post* (revised) data.<sup>2</sup> This suggests caution in relying the policy decisions on indicators which can only be vaguely estimated in real time.

Taking these difficulties into account, the natural real interest rate is, in practice, often a concept which does not add much value to monetary policy-making from an operational perspective. These structural difficulties may explain why the concept of the natural rate is rarely used in official central bank communications of current policy decisions. While it is always useful to assess the level of the real short-term rate in a historical perspective, other indicators, such as money and credit developments and measures of excess liquidity, may provide at least equally useful information on the stance of monetary policy. In addition, the central bank also has to take account of other pieces of relevant information in order to assess the appropriateness of the monetary policy stance. All this implies that it is difficult in practice to have a simple measure of the monetary policy stance. In the end, the central bank should always assess the appropriateness of the monetary policy stance against the prospects of achieving its objective in the medium term. Such assessment should always be based on the full set of available indicators and information in the economic and monetary analysis.

<sup>2</sup> See, for instance, A. Orphanides (2003): "Monetary policy rules based on real-time data", *American Economic Review*, 91(4), pp. 964-985.

## 5 CONCLUSION

This article has illustrated the potential usefulness of the concept of a natural real interest rate. However, it has also pointed to the enormous difficulties of operationalising this concept in practice, given the significant estimation problems. This notwithstanding, the evidence reviewed in this article shows that the natural real interest rate may have declined in the euro area in the course of the 1990s. There are several factors that might explain this decline. First, the slowdown of productivity and population growth in the euro area may have contributed, albeit only slowly and gradually, to reducing the level of the natural real interest rate. Second, the disappearance of intra-euro area exchange rate risk premia should also have contributed to a decline in the natural real interest rate in the euro area over the past decade. Third, the process of fiscal consolidation in the euro area countries before the start of Stage Three of EMU ought to have been a factor in reducing the natural real interest rate. Finally, a fall in the inflation risk premia in the euro area should have been another factor in reducing the natural real interest rate.

In this context, most estimates point to a range between 2% and 3% for the natural real interest rate in the euro area at present. At the same time, it has to be borne in mind that these point estimates are subject to a considerable degree of uncertainty and should therefore be interpreted with a great deal of caution. Moreover, the data, techniques and definition of the natural real interest rate all remain a subject of intense debate, much of which has yet to be resolved.

In practice, the significant uncertainties around the estimations of the natural real interest rate suggest that those estimations cannot easily be used (and doing so might imply a high risk) in the process of monetary policy decision-making. In this regard, it is necessary to take a broader view, as reflected in the ECB's monetary policy strategy, and to consider all the information provided by all the different indicators so as to be as well equipped as possible to assess the outlook for price stability over the medium term.





## RISK MITIGATION METHODS IN EUROSISTEM CREDIT OPERATIONS

*Article 18.1 of the Statute of the ESCB allows the ECB and the NCBs to transact in financial markets by buying and selling assets outright or under repurchase agreements and requires all Eurosystem credit operations (i.e. refinancing operations and intraday credit operations) to be based on adequate collateral. Consequently, all Eurosystem liquidity-providing operations are based on underlying assets provided by the counterparties either by transferring ownership of the assets (in the case of outright transactions or repurchase agreements) or by granting a pledge over them (in the case of collateralised loans). The requirement of collateral and the application of a complementary risk control framework are designed to protect the Eurosystem against financial risk. This article describes the risks arising in reverse transactions (repurchase agreements and collateralised loans) and explains how the collateral and risk control frameworks cater for these risks.*

### I INTRODUCTION: A DESCRIPTION OF EUROSISTEM CREDIT OPERATIONS

The Eurosystem has a number of instruments available for the implementation of monetary policy. These instruments include reverse transactions, outright transactions, the issuance of debt certificates, foreign exchange swaps and the collection of fixed-term deposits. Of these, liquidity-providing reverse transactions have so far been the most important. In such transactions, the Eurosystem buys specific types of asset under repurchase agreements or conducts credit operations collateralised by such assets.<sup>1</sup>

On average in 2003 the Eurosystem provided €243 billion of liquidity to the market through reverse monetary policy operations. Of this, €198 billion was supplied through main refinancing operations with a maturity of generally two weeks, €45 billion through longer-term refinancing operations with a maturity of three months, and €0.3 billion through counterparties having (overnight) recourse to the marginal lending facility. It also provided intraday liquidity against collateral within TARGET.

By their very nature, reverse transactions are temporary operations, which provide funds for a limited and pre-specified period only. In these operations the Eurosystem incurs a counterparty risk, since the counterparty may be unable to meet its credit obligations. This type of credit risk is mitigated by the requirement of

adequate collateral to guarantee the credit provided. The requirement is of a fundamental nature and is laid down by Article 18.1 of the Statute of the ESCB, which specifies that "... the ECB and the national central banks ... conduct credit operations with credit institutions and other market participants, with lending being based on adequate collateral".

The Eurosystem's collateral framework is aimed at translating the statutory requirement of adequate collateralisation into concrete tools and procedures that guarantee sufficient mitigation of the financial risks in a reverse transaction. To achieve this goal, the collateral accepted in such a transaction must be of a quality and quantity such that, in the event of a counterparty default and a subsequent realisation of the collateral in the market, it is highly probable that the Eurosystem would be able to recover the full amount of its claim.

Therefore, in order to successfully mitigate the counterparty risk in a reverse transaction, the collateral framework must adequately limit three kinds of risk, all of which arise only if the counterparty defaults: (1) the credit risk associated with the collateral accepted; (2) the market risk of an adverse movement in the price of an asset accepted as collateral due to exogenous factors occurring between the last collateral valuation and collateral realisation;

<sup>1</sup> For further details see "The implementation of monetary policy in the euro area: General documentation on Eurosystem monetary policy instruments and procedures", ECB, February 2004, also known as the "General Documentation".



(3) the liquidity risk of an adverse movement in the price of an asset caused by an attempt on the part of the Eurosystem to liquidate a potentially large position in that asset.

Section 2 describes the risks involved in a liquidity-providing reverse transaction between a Eurosystem NCB and a counterparty, highlighting the different types of risk that need to be taken into account by a sound risk management framework. The collateral and risk control frameworks, which use several methods to contain the identified risks, are described in more detail in Sections 3 to 5. Section 6 concludes.

## 2 THE RISKS INVOLVED IN REVERSE TRANSACTIONS

By the nature of lending, any lender bears credit risk, namely the risk that the borrower will fail to comply with its commitments to return the borrowed cash and/or provide the required compensation (i.e. interest) at the maturity of the transaction. Several tools are available to the lender to mitigate this risk.

First, counterparty risk can be reduced by conducting operations only with counterparties of a high credit quality, so that the probability of a default is small. In order to establish equal treatment of institutions across the euro area, however, the Eurosystem has opted to give a broad range of institutions access to its monetary policy operations, while ensuring that they fulfil certain operational and prudential requirements.

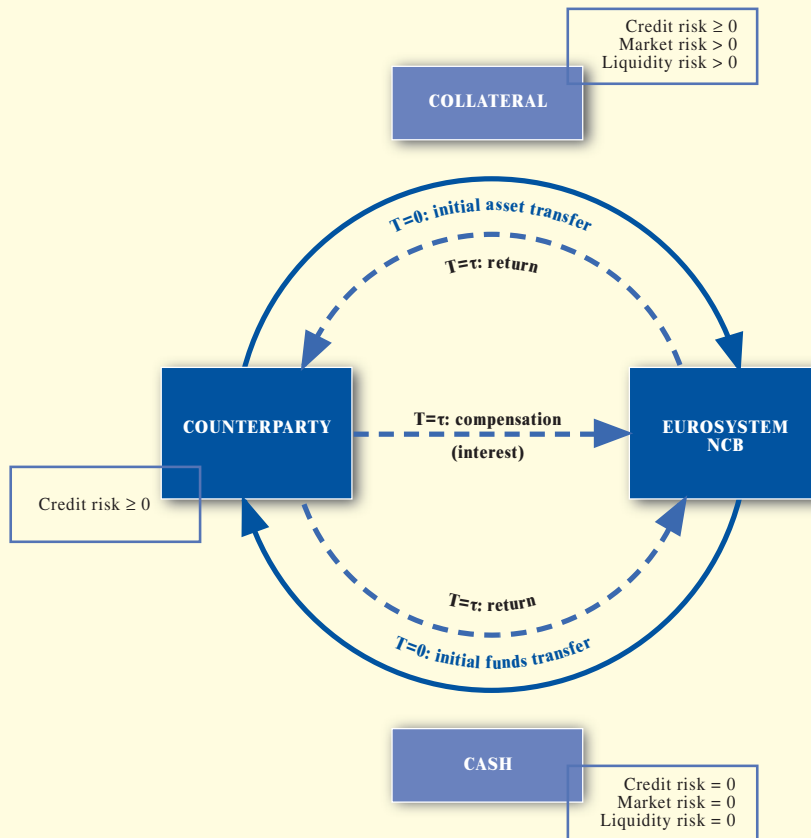
Second, and reflecting the same idea, counterparty risk can also be reduced by implementing a system of limits linking the exposure to each counterparty to its credit quality, so that the potential loss is kept at low levels. For Eurosystem open market operations, however, such a system would be incompatible with an efficient and transparent tender procedure for allotting liquidity.

Finally, counterparty risk can be mitigated by requiring the borrower to provide adequate collateral. This approach mitigates financial risks without limiting the number of counterparties or interfering with the allotment procedure and is therefore the approach chosen by the Eurosystem. When combined with the appropriate risk management tools, collateralisation can reduce the overall risk to negligible levels.

The lender in a collateralised reverse transaction may still incur a financial loss. However, this would require more than one adverse event to occur at the same time. This could happen as follows: the borrower would first default on its obligation to the lender, resulting in the lender taking possession of the collateral. Assuming that at the time of the default the value of the collateral covered the value of the liquidity provided through the reverse transaction, financial risk could arise from the following two possible sources:

- *Credit risk associated with the collateral.* The issuer of the security or the debtor of the claim accepted as collateral could also default, resulting in a “double default”. The probability of such a combination of defaults can be considered negligible if eligible assets satisfy high credit quality standards and if the lender does not accept assets issued by the borrower or entities having close financial links to the borrower. The Eurosystem’s framework for the assessment of the credit quality of collateral ensures these requirements are met, as explained in Section 3.
- *Market and liquidity risk.* This would arise if the value of the collateral fell in the period between the counterparty’s default and the realisation of the collateral. In the time between the last valuation of the collateral and the realisation of the collateral in the market, the collateral price could decrease to the extent that only a fraction of the claim could be recovered by the borrower. *Market risk* may be defined in this context as the risk

Chart 1 Risks involved in Eurosystem credit operations



Note: T is a time indicator that is equal to 0 at the starting date and equal to  $\tau$  at the maturity date of the credit operation.

of financial loss due to a fall of the market value of collateral caused by exogenous factors. *Liquidity risk* may be defined as the risk of financial loss arising from difficulties in liquidating a position quickly without this having a negative impact on the price of the asset. Market and liquidity risk can also be reduced considerably by following best practices in the valuation of assets and the risk control measures applied. The Eurosystem's risk control framework is the subject of Sections 4 and 5.

Chart 1 provides a visual summary of a reverse transaction and the risks involved.

Therefore, collateral per se cannot eliminate or even sufficiently mitigate financial risks.

To guarantee that the quality and quantity of collateral provide adequate protection to the lender, three separate, but highly interdependent, risk mitigation tools are required: the assessment of collateral credit quality, the correct valuation of collateral and the application of risk control measures to collateral. A description of each of these three elements is provided in the following sections.

### 3 THE ASSESSMENT OF COLLATERAL CREDIT QUALITY

All assets used as collateral in Eurosystem credit operations have to fulfil certain common criteria. An important criterion of eligibility is that the assets meet high credit standards.

Government bonds have traditionally been preferred by central banks because of their low credit risk and high liquidity, allowing relatively simple risk control measures concentrated mainly on market risk. However, since the Eurosystem's collateral policy has also to take account of Article 102 (ex Article 104a) of the Treaty establishing the European Community, which prohibits privileged access for the public sector to financial institutions, discrimination between public and private assets is precluded. Chart 2 provides statistical information on the relative importance in terms of total outstanding volumes of the main issuer groups in the pool of eligible tier one assets<sup>2</sup> as at the end of 2003. Although it reveals a predominance of government paper, credit institution and corporate paper accounts for a substantial share (43%) of the total outstanding volume.

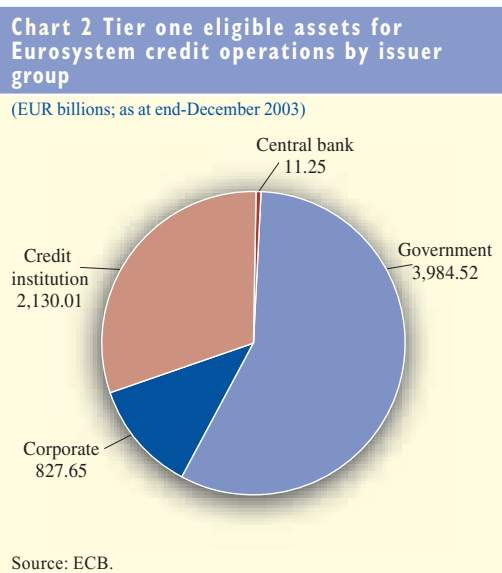
The assessment of the credit quality of private sector paper is more important than the assessment of government paper not only because of the increased default risk but also because private securities may be subject to higher price volatility and lower liquidity, which could result in losses if the assets have to be liquidated. When assessing the credit risk of debt instruments, the ECB takes into account,

inter alia, available agency ratings and the NCBs' own credit assessment systems, as well as certain institutional criteria which ensure particularly high protection of holders, including guarantees. The Eurosystem does not accept as underlying assets debt instruments issued or guaranteed by the counterparty, or by any other entity with which the counterparty has close links. The credit quality of eligible assets is constantly monitored to check that it is equivalent to at least the minimum level of financial soundness specified by the Eurosystem.

Work has recently been carried out to improve the comparability of the different sources of credit assessment and the analysis of new sources of credit assessment.<sup>3</sup> These efforts take into consideration, inter alia, the Basel Committee's proposals for the new Basel Capital Accord. In particular, the Eurosystem has taken note of the Committee's proposed approaches to credit risk as they relate to the recognition process and eligibility criteria for external credit assessment institutions and to the internal rating-based approach.

#### 4 VALUATION OF COLLATERAL

Collateral must be regularly valued to ensure that the Eurosystem is in a position to judge whether additional assets are required, or whether it should return excess collateral to the counterparty. The Eurosystem NCBs calculate the required value of underlying assets on a daily basis, taking into account the valuation



<sup>2</sup> Owing to the differences in financial structure across the countries of the euro area and for purposes internal to the Eurosystem, a distinction is made between two categories of assets eligible for Eurosystem credit operations. These two categories are referred to as "tier one" and "tier two". Tier one consists of marketable debt instruments which fulfil uniform euro area-wide eligibility criteria specified by the ECB. Tier two consists of additional assets (marketable and non-marketable) which are of particular importance to national financial markets and banking systems.

<sup>3</sup> For further details on future improvements to the collateral framework see the public consultation launched on 11 June 2003 and entitled "Measures to improve the collateral framework of the Eurosystem" and the related "Summary of comments received" published on 15 January 2004.

principles set by the Eurosystem. In relatively efficient and liquid securities markets, the market price tends to be the best indicator of the value of an asset. Where such markets are absent, theoretical valuation models can be used to mark-to-model<sup>4</sup> the collateral position.

For marketable tier one and tier two assets, the most representative price on a single reference market is selected as the price source. This reference price is used to value the collateral in a mark-to-market approach. If more than one price is quoted on the reference market, the lowest price is used. For non-marketable tier two assets or for those marketable assets which are not normally traded (so that marking to market is not possible) the Eurosystem is in the process of implementing a mark-to-model approach, based on present-value discounting of future cash flows. The discounting is based on an appropriate zero coupon curve, and differences in credit risk between issuers are explicitly taken into account through credit spreads. Work is currently being carried out to enhance the valuation methods in order to satisfy the need for daily valuation of all collateral, with special attention being paid to the enhancement of theoretical valuation methods to include more complex assets.

The use of a theoretical model should provide a fair (i.e. neither too conservative nor too high) value for the assets delivered as collateral. While the risk control framework is designed to protect the Eurosystem against market and liquidity risk in its collateralised transactions, it also aims to allow counterparties to use the eligible assets efficiently.

## 5 RISK CONTROL MEASURES

Risk control measures are applied to collateral throughout the lifetime of a credit operation in order to safeguard the Eurosystem against financial losses. They are designed to minimise the likelihood that, should an asset accepted as collateral have to be realised, the proceeds from the sale of the asset in the market will not be

sufficient to recover the liquidity originally provided by the Eurosystem. Risk control measures thus cater for market and liquidity risk. The Eurosystem's risk control measures as defined by the General Documentation<sup>5</sup> are listed in Box 1.

The two risk control measures currently applied in the implementation of the collateral framework are valuation haircuts and variation margins.

### VALUATION HAIRCUTS

The distinction between the two risks addressed by valuation haircuts, namely market and liquidity risk, is not always simple. Market risk is generally considered to measure the sensitivity of prices to exogenous factors (such as the general level of interest rates) which would not normally be affected by the Eurosystem attempting to unwind a large collateral position. By contrast, liquidity risk refers to the potential price effect caused by an attempt on the part of the Eurosystem to quickly unwind a large position in an asset. For the purpose of defining adequate valuation haircuts, market risk is measured by asset price volatility while liquidity risk is expressed in terms of the time required for an orderly realisation of the asset.

Until March 2004, only valuation haircuts for tier two assets took liquidity risk into account; those for tier one assets addressed only market risk. However, the regular reassessment of the risk control framework has led to a revision of the haircut schedules for both tier one and tier two assets and to the discontinuation of initial margins as of March 2004. The discontinuation of initial margins was made possible not only by the enhanced treatment of liquidity risk in the valuation haircut schedules, but also by the broader availability of asset prices fulfilling the valuation principles defined by the Eurosystem. The haircut schedule for tier one assets has been

<sup>4</sup> Marking to model is defined as any valuation which has to be benchmarked, extrapolated or otherwise calculated from a market input.

<sup>5</sup> See footnote 1.

**RISK CONTROL MEASURES**

The Eurosystem currently applies the following risk control measures in its liquidity-providing reverse transactions:

**Valuation haircuts**

The Eurosystem applies valuation haircuts, meaning that the value of the underlying asset is calculated as the market value of the asset less a certain percentage (haircut). In a framework with daily valuation of underlying assets, haircuts need to cover normal daily price fluctuations (i.e. fluctuations which, in statistical terms, fall with a specified confidence level within certain bounds) due to both market and liquidity factors.

**Variation margins (marking to market)**

The Eurosystem requires the haircut-adjusted market value of the underlying assets used in its liquidity-providing reverse transactions to be maintained over time. This implies that if the value, measured on a regular basis, of the underlying assets falls below a certain level, a margin call will be triggered, i.e. the NCB will require the counterparty to supply additional assets or cash. Similarly, if the value of the underlying assets exceeds a certain level, the counterparty may retrieve the excess assets or cash.

The following risk control measures are available to the Eurosystem but currently not applied:

**Initial margins**

The Eurosystem may apply initial margins, meaning that counterparties would need to provide, on the settlement date of a reverse transaction, underlying assets with a value at least equal to the liquidity provided by the Eurosystem plus the value of the initial margin. Initial margins might be used to provide an up-front incentive against counterparty default due to abrupt changes in market conditions. Until the Eurosystem suspended initial margins in March 2004, their levels were defined so as to depend on the maturity of the reverse transaction (1% for intraday and overnight transactions, 2% for any longer maturity).

**Limits in relation to issuers/debtors or guarantors**

The Eurosystem may apply limits to the exposure vis-à-vis issuers/debtors or guarantors.

**Additional guarantees**

The Eurosystem may require additional guarantees from financially sound entities in order to accept certain assets.

**Exclusion**

The Eurosystem may exclude certain assets from use in its monetary policy operations.

revised so as to cater specifically for the differences in the liquidity characteristics of the various types of eligible assets. Using both the institutional characteristics of the assets and quantitative measures of liquidity, four new liquidity categories have been defined:

- *Category I*: central government debt instruments, debt instruments issued by central banks
- *Category II*: local and regional government debt instruments, jumbo Pfandbrief-style debt instruments, agency debt instruments, supranational debt instruments
- *Category III*: traditional Pfandbrief-style debt instruments, credit institution debt instruments, debt instruments issued by corporate and other issuers
- *Category IV*: asset-backed securities.

The new haircut schedule is based on views regarding market risk (volatility) and the total time required for an orderly liquidation of a large asset position. Volatility estimates are based on historical and simulated scenarios for government bond yield changes and include a baseline stress scenario (based on the market volatility experienced in the aftermath of the 11 September 2001 attacks in the United States and a simulated worst-case scenario with high volatility). The higher the volatility levels – which are common to all liquidity categories – the larger the haircuts. Total liquidation time is based on three components: a valuation period, a grace period and a realisation time. The valuation period, which is one day (reflecting daily valuation), and the grace period, which is assumed to be three to four days, are again common to all liquidity categories. By contrast, the realisation time required for an orderly sale of the assets is assumed to be an increasing function of the liquidity category ranking. Since the Eurosystem has never needed to realise an asset due to the default of a counterparty, the estimated realisation time is based on information gathered in the financial markets.

Box 2 presents some further, more technical information on two methods used to derive haircuts.

#### VARIATION MARGINS

The second risk control measure applied is variation margins. The Eurosystem requires that the market value of the underlying assets used in its reverse transactions cover the provided liquidity over the life of the transaction. Thus if this value, measured on a daily basis, falls below a certain level, NCBs will require counterparties to supply additional assets or cash i.e. they will issue a margin call. Similarly, if the value of the underlying assets exceeds a certain level, the counterparty may retrieve the excess assets or cash. The frequency of margin calls depends not only on the volatility of asset prices but also on the collateral system in place at the NCB in question. Depending on both the legal framework and national operational systems, NCBs either allow underlying assets to be pooled or require the assets used in each individual transaction to be earmarked. Some NCBs use both methods. In a collateral pooling system, counterparties have a pool account in which to deposit assets collateralising their transactions with the central bank. In practice, counterparties generally provide NCBs that use a pooling system with more collateral than required, so margin calls are very rare.

The combination of daily asset valuation and the possibility of margin calls guarantees that the collateral value at all times covers the liquidity provided through a reverse transaction. Valuation haircuts, therefore, are designed to cover market moves during the time required for the realisation of the asset, and not during the life of the transaction. This feature considerably simplifies the risk control framework as it means that haircuts do not need to differentiate between different types of reverse transaction and their different maturities (which range, in the case of the Eurosystem, from intraday to three months).

## METHODS APPLIED TO DERIVE HAIRCUTS

This box provides a technical description of two methods applied to derive haircuts. The first is used for marketable securities and the second for non-marketable assets.

### 1. The adverse market move risk approach (marketable assets)

The general methodology builds on the concept of Value at Risk (VaR)<sup>1</sup> with a given confidence level during the liquidation period. The level of the haircut that gives the appropriate level of protection against adverse market moves can be formulated in terms of the probability of a large movement in the value of the collateral securities. The value of asset  $V_i$  on day  $t$  is defined as  $V_{i,t}$ . The gain or loss in collateral value between dates  $t$  and  $t+\tau$  ( $\tau$  being the total liquidation time) is  $V_{i,t+\tau} - V_{i,t}$ .

The total collateral received following the haircut  $h_i$  at date  $t$  ( $h_i V_{i,t}$ ) should be such that

$$P(V_{i,t+\tau} - V_{i,t} < -h_i V_{i,t}) = \xi.$$

The symbol  $\xi$  represents a small probability value (e.g. 1%), which is the probability that the loss in the value of the collateral will not exceed the additional provision of collateral received through the haircut. Dividing by  $V_{i,t}$  results in

$$P(n_{i,t+\tau} < -h_i) = \xi$$

where  $n_{i,t+\tau}$  denotes the percentage change in value of the collateral (i.e.  $\{(V_{i,t+\tau} - V_{i,t})/V_{i,t}\}$ ).

The expressions above are the VaR of a portfolio consisting of just the asset  $i$  computed at a confidence level equal to  $\xi$ . This VaR should equal the value  $h_i$ .

### 2. The opportunity cost risk approach (non-marketable assets)

Haircuts applied to non-marketable assets should reflect the risk associated with the opportunity cost of having to hold an asset until maturity, corresponding to the difference between the yield to maturity on the collateral and the yield that would have been realised on the roll-over of monetary policy operations until the maturity date of the collateral. This is the risk of missing the opportunity to invest at a potentially higher rate in the future as a result of being locked into an instrument with a fixed yield to maturity.

<sup>1</sup> The Value at Risk (VaR) of a position in an asset or a portfolio of assets for a time horizon T and at a certain confidence level p (usually between 90% and 99%) is the value q for which probability  $P(\Delta V < -q) = 1-p$ , where  $\Delta V$  is the change in the value of the position within the time horizon T.

## 6 CONCLUSION

Risk mitigation in the framework of the Eurosystem's liquidity-providing reverse operations is based on three elements:

- The Eurosystem uses *assets of a high credit quality* to collateralise its operations. For this purpose, it uses market sources and applies best practices to assess the credit quality of the heterogeneous set of eligible assets.
- Collateral needs to be *valued accurately and on a daily basis* to ensure that the Eurosystem is appropriately covered against credit risk.
- To address market and liquidity risk, *risk control measures* are applied to the properly valued collateral. While protecting the Eurosystem from financial risks in its operations, these measures aim to avoid penalising counterparties and to allow them to use eligible assets efficiently.





# EURO AREA STATISTICS





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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.

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#### WHAT'S NEW

Following EU enlargement on 1 May 2004, Table 7.3.2 (Trade in goods, Geographical breakdown) and Table 9.1.1 (Developments outside the euro area, Economic and financial developments in other EU Member States) have been amended accordingly.

#### 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	7.6	6.6	7.2	-	5.3	21.4	3.32	4.92
2003	11.0	8.0	8.0	-	4.9	20.3	2.33	4.16
2003 Q2	11.3	8.3	8.5	-	4.6	20.3	2.37	3.96
Q3	11.4	8.5	8.3	-	4.9	22.1	2.14	4.16
Q4	11.1	7.9	7.6	-	5.3	21.6	2.15	4.36
2004 Q1	11.1	7.2	6.5	-	5.5	.	2.06	4.15
2003 Nov.	10.5	7.6	7.4	7.5	5.6	21.7	2.16	4.44
Dec.	10.5	7.6	7.0	7.0	5.5	19.2	2.15	4.36
2004 Jan.	11.3	7.4	6.5	6.6	5.5	16.9	2.09	4.26
Feb.	11.1	7.0	6.3	6.4	5.5	15.8	2.07	4.18
Mar.	11.4	6.8	6.3	.	5.5	.	2.03	4.02
Apr.	.	.	.	.	.	.	2.05	4.24

## 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	3.5	0.9	-0.5	81.4	0.5	8.4
2003	2.1	1.6	2.9	0.4	0.3	80.9	0.2	8.8
2003 Q2	1.9	1.5	3.2	0.1	-0.9	80.8	0.2	8.8
Q3	2.0	1.2	2.8	0.3	-0.2	81.0	0.2	8.8
Q4	2.0	1.1	2.6	0.6	1.5	80.9	0.2	8.8
2004 Q1	1.7	0.2	.	.	.	80.5	.	8.8
2003 Nov.	2.2	1.4	-	-	0.9	-	-	8.8
Dec.	2.0	1.0	-	-	2.1	-	-	8.8
2004 Jan.	1.9	0.3	-	-	0.6	80.6	-	8.8
Feb.	1.6	0.0	-	-	0.6	-	-	8.8
Mar.	1.7	0.4	-	-	.	-	-	8.8
Apr.	2.0	.	-	-	.	80.4	-	.

## 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: narrow group (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	89.7	92.3	0.9456
2003	39.3	107.7	-9.9	25.3	306.5	99.9	103.6	1.1312
2003 Q2	-5.0	24.2	2.7	62.0	326.1	101.0	104.7	1.1372
Q3	14.3	36.8	-19.1	-59.1	332.9	100.2	103.9	1.1248
Q4	25.8	29.9	-6.4	18.2	306.5	101.8	105.9	1.1890
2004 Q1	.	.	.	.	308.4	103.9	108.2	1.2497
2003 Nov.	5.0	8.5	4.6	4.6	321.9	100.9	104.9	1.1702
Dec.	11.5	8.3	-0.9	-24.9	306.5	103.7	108.1	1.2286
2004 Jan.	-4.1	4.2	-11.9	-14.9	309.7	104.7	108.9	1.2613
Feb.	7.8	9.5	7.8	4.4	298.5	104.4	108.6	1.2646
Mar.	.	.	.	.	308.4	102.8	107.1	1.2262
Apr.	.	.	.	.	.	100.9	105.2	1.1985

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.



# MONETARY POLICY STATISTICS

## 1.1 Consolidated financial statement of the Eurosystem (EUR millions)

### 1. Assets

	2004 9 Apr.	2004 16 Apr.	2004 23 Apr.	2004 30 Apr.
<b>Gold and gold receivables</b>	136,529	136,529	136,529	136,529
<b>Claims on non-euro area residents in foreign currency</b>	171,428	171,190	171,723	173,580
<b>Claims on euro area residents in foreign currency</b>	16,791	16,995	17,511	17,691
<b>Claims on non-euro area residents in euro</b>	8,321	7,991	7,361	7,407
<b>Lending to euro area credit institutions in euro</b>	293,528	280,507	286,034	295,059
Main refinancing operations	218,499	205,500	211,000	220,002
Longer-term refinancing operations	75,000	75,000	75,000	75,001
Fine-tuning reverse operations	0	0	0	0
Structural reverse operations	0	0	0	0
Marginal lending facility	19	3	33	44
Credits related to margin calls	10	4	1	12
<b>Other claims on euro area credit institutions in euro</b>	1,010	999	925	1,000
<b>Securities of euro area residents in euro</b>	69,862	70,036	71,189	71,043
<b>General government debt in euro</b>	42,589	42,589	42,546	42,547
<b>Other assets</b>	108,055	108,420	108,900	108,682
<b>Total assets</b>	<b>848,113</b>	<b>835,256</b>	<b>842,718</b>	<b>853,538</b>

### 2. Liabilities

	2004 9 Apr.	2004 16 Apr.	2004 23 Apr.	2004 30 Apr.
<b>Banknotes in circulation</b>	441,418	435,813	432,009	435,421
<b>Liabilities to euro area credit institutions in euro</b>	135,074	135,225	131,071	133,564
Current accounts (covering the minimum reserve system)	135,008	135,165	131,026	133,513
Deposit facility	65	49	44	48
Fixed-term deposits	0	0	0	0
Fine-tuning reverse operations	0	0	0	0
Deposits related to margin calls	1	11	1	3
<b>Other liabilities to euro area credit institutions in euro</b>	302	301	302	301
<b>Debt certificates issued</b>	1,054	1,054	1,054	1,054
<b>Liabilities to other euro area residents in euro</b>	51,605	44,294	59,028	62,077
<b>Liabilities to non-euro area residents in euro</b>	8,551	8,475	8,384	8,563
<b>Liabilities to euro area residents in foreign currency</b>	297	298	300	301
<b>Liabilities to non-euro area residents in foreign currency</b>	8,973	8,385	8,797	10,289
<b>Counterpart of special drawing rights allocated by the IMF</b>	5,924	5,924	5,924	5,924
<b>Other liabilities</b>	55,035	55,607	55,968	56,162
<b>Revaluation accounts</b>	80,604	80,604	80,604	80,604
<b>Capital and reserves</b>	59,276	59,276	59,277	59,278
<b>Total liabilities</b>	<b>848,113</b>	<b>835,256</b>	<b>842,718</b>	<b>853,538</b>

Source: ECB.

## 1.2 Key ECB interest rates

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

With effect from <sup>1)</sup>	Deposit facility		Main refinancing operations			Marginal lending facility	
	Level	Change	Fixed rate tenders	Variable rate tenders	Change	Level	Change
			Fixed rate	Minimum bid rate			
	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
Main refinancing operations							
2004 6 Jan.	118,344	229	80,000	2.00	2.02	2.04	15
14	166,033	314	144,000	2.00	2.00	2.02	14
21	101,083	291	85,000	2.00	2.00	2.01	14
28	165,044	315	139,000	2.00	2.01	2.02	14
4 Feb.	112,763	276	76,000	2.00	2.01	2.02	14
11	147,492	313	137,000	2.00	2.00	2.01	12
18	104,015	285	83,000	2.00	2.00	2.01	14
23	135,659	268	135,659	2.00	2.00	2.00	16
3 Mar.	100,586	253	85,000	2.00	2.00	2.01	14
10	147,204	267	127,500	2.00	2.00	2.01	7
17	224,149	330	216,500	2.00	2.00	2.01	7
24	224,531	333	224,531	2.00	2.00	2.00	7
31	257,167	335	218,000	2.00	2.00	2.01	7
7 Apr.	255,399	317	218,500	2.00	2.00	2.01	7
14	265,103	341	205,500	2.00	2.00	2.01	7
21	267,511	371	211,000	2.00	2.00	2.01	7
28	270,499	366	220,000	2.00	2.00	2.01	7
5 May	267,916	349	211,000	2.00	2.00	2.01	7
Longer-term refinancing operations							
2003 30 Apr.	35,096	164	15,000	-	2.50	2.51	92
29 May	30,218	120	15,000	-	2.25	2.27	91
26 June	28,694	124	15,000	-	2.11	2.12	91
31 July	25,416	134	15,000	-	2.08	2.10	91
28 Aug.	35,940	143	15,000	-	2.12	2.13	91
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

#### 2. Other tender operations

Date of settlement	Type of operation	Bids (amount)	Number of participants	Allotment (amount)	Fixed rate tenders	Variable rate tenders			Running for (...) days
					Fixed rate	Minimum bid rate	Marginal rate <sup>4)</sup>	Weighted average rate	
	1	2	3	4	5	6	7	8	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	1
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

Source: ECB.

- The amounts shown may differ slightly from those in Table 1.1 due to operations allotted but not settled.
- 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.
- 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.
- In liquidity-providing (absorbing) operations, the marginal rate refers to the lowest (highest) rate at which bids were accepted.
- 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
2001	10,910.1	6,226.1	389.7	1,315.2	605.1	2,374.0
2002	11,116.8	6,139.9	409.2	1,381.9	725.5	2,460.3
2003 Q1	11,229.9	6,117.2	427.4	1,404.1	782.7	2,498.5
Q2	11,381.7	6,217.9	415.4	1,421.4	781.0	2,545.9
Q3	11,396.7	6,173.3	405.1	1,433.2	791.7	2,593.3
2003 Oct.	11,497.0	6,194.8	420.2	1,445.3	814.0	2,622.7
Nov.	11,559.6	6,241.2	423.0	1,451.5	813.2	2,630.7
Dec.	11,538.7	6,283.8	412.9	1,459.1	759.5	2,623.5
2004 Jan.	11,691.2	6,328.2	428.0	1,461.4	825.3	2,648.3
Feb.	11,775.2	6,315.9	431.3	1,470.0	882.0	2,676.0

### 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
2001	126.4	127.4	1.0	0.0	3.30
2002	128.8	129.5	0.8	0.0	3.06
2003 Q1	128.9	129.6	0.7	0.0	2.67
Q2	131.2	131.9	0.6	0.0	2.34
Q3	131.3	132.0	0.6	0.0	2.07
Q4	131.8	132.6	0.8	0.0	2.00
2004 23 Jan.	132.8	133.6	0.9	0.0	2.02
9 Mar.	133.4	134.1	0.7	0.0	2.00
6 Apr.	134.6	135.3	0.7	0.0	2.00
11 May	134.4	.	.	.	.

### 3. Liquidity

Maintenance period ending on:	Liquidity-providing factors					Liquidity-absorbing factors					Credit institutions current accounts	Base money			
	Eurosystem's net assets in gold and foreign currency	Monetary policy operations of the Eurosystem				Deposit facility	Other liquidity-absorbing operations	Banknotes in circulation	Central government deposits with the Eurosystem	Other factors (net)					
1		Main refinancing operations	Longer-term refinancing operations	Marginal lending facility	Other liquidity-providing operations						2	3	4	5	6
2001	383.7	122.5	60.0	0.5	12.4	0.8	0.0	298.0	43.5	109.3	127.4	426.2			
2002	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 Q1	352.5	179.5	45.0	0.2	0.0	0.1	0.0	347.8	59.1	40.6	129.6	477.5			
Q2	331.3	194.7	45.0	0.4	0.0	0.3	0.2	373.2	52.6	13.2	131.9	505.3			
Q3	315.0	214.0	45.0	0.1	0.0	0.6	0.0	391.7	54.4	-4.4	132.0	524.2			
Q4	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 23 Jan.	309.2	232.6	45.0	0.3	0.0	0.1	0.0	427.6	37.0	-11.2	133.6	561.4			
9 Mar.	303.3	219.4	56.7	0.4	0.0	0.2	0.0	418.0	48.6	-21.1	134.1	552.3			
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			

Source: ECB.

1) End of period.

## 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														
2001	998.6	412.7	25.7	0.6	386.4	107.0	101.8	1.3	3.8	-	13.8	399.0	11.9	54.3
2002	1,042.8	416.2	24.2	0.6	391.3	94.5	86.0	0.8	7.6	-	13.2	374.1	11.9	132.9
2003 Q1	1,015.4	411.8	24.1	0.6	387.0	105.4	95.1	0.8	9.5	-	12.5	349.3	11.9	124.5
Q2	1,074.6	469.3	23.7	0.6	445.0	114.2	103.1	1.1	10.0	-	12.4	334.4	12.0	132.3
Q3	1,089.1	462.5	23.7	0.6	438.1	121.7	110.5	1.1	10.1	-	12.4	341.8	12.3	138.4
Q4	1,085.7	471.3	22.6	0.6	448.0	133.5	121.5	1.2	10.8	-	12.8	318.0	12.4	137.7
2004 Jan.	1,090.0	469.7	22.6	0.7	446.4	136.3	123.9	1.3	11.2	-	12.9	321.7	13.0	136.3
Feb.	1,091.3	474.4	22.6	0.6	451.1	140.4	127.1	1.3	11.9	-	13.1	309.1	13.9	140.4
Mar. <sup>(p)</sup>	1,102.4	467.3	22.6	0.7	444.0	143.3	129.2	1.5	12.7	-	13.1	320.8	14.0	143.9
MFIs excluding the Eurosysteem														
2001	18,226.3	11,134.7	822.0	6,518.7	3,794.0	2,535.9	1,077.4	335.6	1,122.9	38.5	810.8	2,408.8	168.1	1,129.5
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 Q1	19,184.0	11,733.1	804.8	6,854.1	4,074.2	2,830.6	1,210.0	385.9	1,234.7	66.8	818.3	2,544.3	160.8	1,030.1
Q2	19,528.1	11,879.3	794.2	6,941.9	4,143.2	2,886.6	1,239.4	405.1	1,242.1	69.0	853.4	2,624.2	157.9	1,057.7
Q3	19,565.7	11,948.0	797.6	6,994.6	4,155.7	2,926.5	1,258.5	411.5	1,256.4	69.3	879.4	2,547.2	158.6	1,036.8
Q4	19,795.4	12,106.5	819.4	7,093.5	4,193.6	2,947.5	1,246.0	425.7	1,275.9	67.3	895.0	2,567.0	162.1	1,050.1
2004 Jan.	20,038.4	12,130.0	816.8	7,108.9	4,204.3	2,992.3	1,271.4	425.0	1,295.9	76.2	909.6	2,694.6	159.3	1,076.4
Feb.	20,160.7	12,152.9	808.3	7,140.9	4,203.7	3,040.6	1,293.6	430.7	1,316.4	77.3	908.3	2,723.4	159.6	1,098.6
Mar. <sup>(p)</sup>	20,422.4	12,228.7	823.1	7,171.5	4,234.1	3,080.6	1,303.9	431.8	1,344.9	77.8	928.4	2,827.8	160.0	1,119.1

### 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											
2001	998.6	285.9	391.9	35.1	14.4	342.4	-	4.6	209.8	35.6	70.8
2002	1,042.8	392.9	328.4	29.5	15.6	283.3	-	3.6	165.9	32.9	119.1
2003 Q1	1,015.4	365.4	345.8	50.7	16.2	279.0	-	2.7	149.5	28.7	123.3
Q2	1,074.6	391.4	379.4	52.6	18.9	307.9	-	2.6	143.1	29.8	128.3
Q3	1,089.1	406.4	362.1	55.0	17.4	289.8	-	2.6	151.2	32.4	134.4
Q4	1,085.7	450.5	324.0	21.3	16.9	285.8	-	1.6	139.9	27.5	142.2
2004 Jan.	1,090.0	430.0	345.9	42.7	15.5	287.6	-	1.6	140.8	29.4	142.2
Feb.	1,091.3	433.4	349.4	48.9	16.5	283.9	-	1.6	142.3	24.3	140.2
Mar. <sup>(p)</sup>	1,102.4	439.9	336.6	43.1	15.8	277.7	-	1.6	155.5	23.6	145.0
MFIs excluding the Eurosysteem											
2001	18,226.3	0.0	9,696.6	103.9	5,763.1	3,829.6	436.5	2,882.9	1,041.9	2,687.4	1,480.9
2002	18,857.9	0.0	10,197.8	106.9	5,954.3	4,136.6	532.8	2,992.6	1,108.7	2,594.2	1,431.7
2003 Q1	19,184.0	0.0	10,317.2	125.5	5,995.4	4,196.3	617.6	3,045.5	1,115.8	2,665.5	1,422.4
Q2	19,528.1	0.0	10,540.9	147.6	6,096.4	4,296.9	640.1	3,080.4	1,126.3	2,642.3	1,498.1
Q3	19,565.7	0.0	10,566.1	128.9	6,128.3	4,308.9	646.2	3,125.6	1,142.5	2,607.2	1,478.2
Q4	19,795.4	0.0	10,769.0	132.3	6,274.1	4,362.7	649.1	3,158.8	1,151.1	2,609.6	1,457.8
2004 Jan.	20,038.4	0.0	10,764.5	131.3	6,267.7	4,365.5	667.8	3,206.0	1,153.7	2,720.2	1,526.3
Feb.	20,160.7	0.0	10,807.0	144.1	6,288.1	4,374.7	676.4	3,236.1	1,154.0	2,742.3	1,545.0
Mar. <sup>(p)</sup>	20,422.4	0.0	10,859.6	140.7	6,307.6	4,411.3	678.6	3,302.5	1,160.7	2,835.4	1,585.6

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 1	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 8	External assets <sup>1)</sup> 9	Fixed assets 10	Remaining assets 11
		Total 2	General government 3	Other euro area residents 4	Total 5	General government 6	Other euro area residents 7				
Outstanding amounts											
2001	13,576.7	7,367.0	847.7	6,519.3	1,516.1	1,179.2	336.9	568.1	2,807.8	180.0	1,137.6
2002	13,931.2	7,618.5	837.2	6,781.2	1,588.0	1,221.0	367.0	572.7	2,839.6	179.5	1,132.9
2003 Q1	14,124.7	7,683.6	828.9	6,854.8	1,691.8	1,305.1	386.7	566.6	2,893.6	172.7	1,116.4
Q2	14,381.3	7,760.4	817.9	6,942.6	1,748.7	1,342.5	406.2	594.1	2,958.5	169.9	1,149.6
Q3	14,406.6	7,816.6	821.3	6,995.3	1,781.7	1,369.0	412.6	614.8	2,889.0	170.8	1,133.7
Q4	14,548.8	7,936.2	842.0	7,094.1	1,794.3	1,367.4	426.9	623.7	2,885.0	174.5	1,135.1
2004 Jan.	14,763.8	7,949.0	839.4	7,109.6	1,821.6	1,395.3	426.3	632.9	3,016.3	172.3	1,171.8
Feb.	14,863.5	7,972.5	830.9	7,141.6	1,852.7	1,420.7	432.0	633.3	3,032.5	173.5	1,199.0
Mar. <sup>(p)</sup>	15,078.7	8,017.9	845.7	7,172.2	1,866.4	1,433.1	433.3	649.2	3,148.5	174.0	1,222.6
Transactions											
2001	906.4	365.6	-7.6	373.2	71.4	8.5	62.9	29.8	331.1	8.1	100.8
2002	601.2	299.2	-9.4	308.6	75.8	45.7	30.2	5.5	241.8	-1.3	-19.9
2003 Q1	220.9	87.1	-0.7	87.8	63.0	46.4	16.6	0.2	91.6	-3.6	-17.5
Q2	321.2	96.2	-8.6	104.8	52.0	37.9	14.1	21.2	122.9	-2.5	31.5
Q3	1.7	60.4	3.5	56.9	39.6	32.7	6.9	-4.8	-72.1	0.8	-22.3
Q4	250.6	141.8	19.8	122.0	16.3	-0.4	16.7	7.2	82.8	1.9	0.6
2004 Jan.	182.2	22.9	-2.7	25.6	15.5	17.5	-1.9	7.4	111.4	-2.4	27.2
Feb.	103.1	28.3	-8.5	36.7	27.8	23.0	4.8	1.5	23.0	1.2	21.4
Mar. <sup>(p)</sup>	170.5	44.3	16.0	28.3	12.5	11.7	0.8	16.4	76.2	0.5	20.7

## 2. Liabilities

	Total 1	Currency in circulation 2	Deposits of central government 3	Deposits of other general government/other euro area residents 4	Money market fund shares/units <sup>2)</sup> 5	Debt securities issued <sup>3)</sup> 6	Capital and reserves 7	External liabilities <sup>1)</sup> 8	Remaining liabilities 9	Excess of inter-MFI liabilities 10
Outstanding amounts										
2001	13,576.7	239.7	139.0	5,777.6	398.0	1,760.8	995.2	2,723.0	1,551.8	-8.5
2002	13,931.2	341.2	136.4	5,969.9	470.5	1,818.1	1,006.4	2,627.0	1,550.9	10.8
2003 Q1	14,124.7	327.2	176.2	6,011.6	550.8	1,804.0	1,001.0	2,694.2	1,545.7	14.1
Q2	14,381.3	351.0	200.3	6,115.3	571.0	1,830.8	997.7	2,672.2	1,626.4	16.5
Q3	14,406.6	364.8	183.9	6,145.7	576.9	1,861.7	1,016.6	2,639.6	1,612.6	4.8
Q4	14,548.8	397.9	153.6	6,290.9	581.8	1,873.6	1,006.9	2,637.1	1,600.1	6.8
2004 Jan.	14,763.8	389.1	174.1	6,283.2	591.6	1,900.5	1,004.8	2,749.6	1,668.5	2.5
Feb.	14,863.5	393.5	193.1	6,304.6	599.1	1,909.4	1,008.2	2,766.6	1,685.2	3.8
Mar. <sup>(p)</sup>	15,078.7	399.5	183.9	6,323.4	600.7	1,946.6	1,023.9	2,859.1	1,730.6	11.0
Transactions										
2001	906.4	-116.4	-26.9	385.4	91.0	107.7	81.0	338.4	97.0	-50.7
2002	601.2	101.4	-5.8	222.0	70.0	104.5	39.1	75.9	-92.6	86.7
2003 Q1	220.9	7.7	32.8	50.8	35.8	25.0	2.6	59.6	-18.2	24.9
Q2	321.2	23.8	24.1	110.8	19.8	34.1	0.5	26.5	61.8	19.8
Q3	1.7	14.4	-13.7	-1.1	3.5	37.3	23.9	-20.9	-34.1	-7.7
Q4	250.6	33.1	-30.3	155.1	-1.3	34.0	4.7	67.1	-33.4	21.6
2004 Jan.	182.2	-8.8	20.5	-9.2	9.2	22.7	0.1	86.1	70.0	-8.4
Feb.	103.1	4.3	19.0	22.1	7.5	9.8	2.3	16.8	18.0	3.4
Mar. <sup>(p)</sup>	170.5	6.0	-9.2	15.3	3.6	28.3	7.1	72.4	45.2	1.8

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

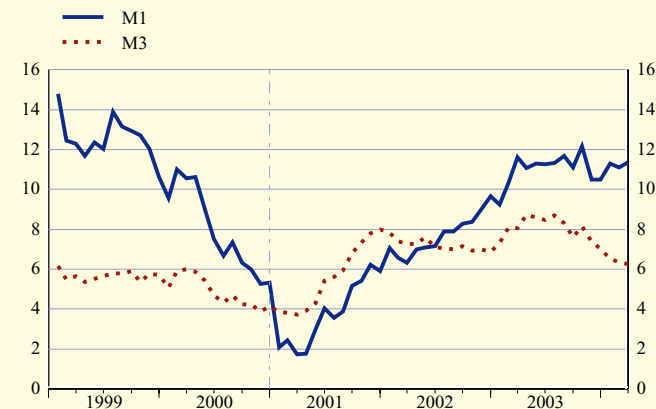
(EUR billions and annual growth rates; seasonally adjusted; outstanding amounts and growth rates at end of period, transactions during period)

### 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
	Outstanding amounts										
2001	2,222.3	2,395.9	4,618.2	789.8	5,408.0	-	3,897.3	2,041.0	7,425.5	6,514.7	54.7
2002	2,439.3	2,474.3	4,913.6	854.5	5,768.1	-	3,994.1	2,073.7	7,723.9	6,780.6	184.6
2003 Q1	2,508.7	2,495.0	5,003.7	857.8	5,861.4	-	4,005.0	2,120.9	7,788.3	6,847.2	223.4
Q2	2,552.2	2,536.7	5,088.9	887.2	5,976.1	-	4,028.6	2,143.2	7,911.6	6,911.8	278.9
Q3	2,621.6	2,547.7	5,169.3	888.8	6,058.2	-	4,106.0	2,200.9	8,046.8	7,005.5	237.5
Q4	2,673.9	2,554.2	5,228.0	909.4	6,137.4	-	4,141.9	2,228.0	8,149.1	7,095.3	221.1
2004 Jan.	2,714.6	2,546.3	5,260.9	898.7	6,159.5	-	4,156.0	2,241.5	8,174.5	7,114.8	265.9
Feb.	2,736.6	2,548.3	5,285.0	911.7	6,196.7	-	4,180.7	2,249.2	8,216.4	7,152.1	273.4
Mar. <sup>(p)</sup>	2,770.0	2,546.0	5,316.0	890.9	6,206.8	-	4,237.2	2,264.6	8,237.8	7,164.7	313.2
Transactions											
2001	121.4	158.3	279.7	118.6	398.4	-	178.1	2.4	467.0	377.4	-6.7
2002	214.6	88.4	303.0	68.4	371.4	-	187.7	38.0	346.3	312.6	167.9
2003 Q1	67.8	48.2	116.0	-7.9	108.1	-	29.5	16.6	81.9	80.9	84.0
Q2	59.1	45.2	104.3	26.5	130.8	-	38.0	25.2	128.7	81.6	65.0
Q3	72.4	10.6	82.9	1.3	84.2	-	87.1	63.9	114.0	97.9	-55.6
Q4	56.3	10.9	67.3	13.4	80.7	-	74.6	27.5	126.2	113.0	0.9
2004 Jan.	40.3	-9.5	30.8	-8.5	22.3	-	10.0	2.8	32.7	29.7	51.3
Feb.	23.2	1.5	24.7	13.9	38.6	-	23.7	5.5	46.6	42.1	14.5
Mar. <sup>(p)</sup>	31.9	-4.0	27.9	-19.0	8.9	-	38.7	15.7	19.1	10.1	20.0
Growth rates											
2001 Dec.	5.9	7.1	6.5	17.6	8.0	7.9	4.8	0.1	6.7	6.1	-6.7
2002 Dec.	9.7	3.7	6.6	8.7	6.9	7.1	4.9	1.8	4.7	4.8	167.9
2003 Mar.	11.6	4.8	8.1	8.0	8.0	8.3	4.4	1.7	4.8	4.7	229.9
June	11.2	5.8	8.4	8.6	8.5	8.6	5.0	3.7	5.1	4.6	247.0
Sep.	11.1	5.3	8.2	4.4	7.6	8.0	5.3	5.6	5.5	4.9	165.7
Dec.	10.5	4.7	7.6	3.9	7.0	7.0	5.8	6.4	5.8	5.5	94.3
2004 Jan.	11.3	3.6	7.4	1.3	6.5	6.6	5.9	6.0	5.8	5.5	109.5
Feb.	11.1	3.0	7.0	2.4	6.3	6.4	6.1	5.8	5.9	5.5	105.6
Mar. <sup>(p)</sup>	11.4	2.2	6.8	3.2	6.3	.	6.8	6.6	6.0	5.5	96.1

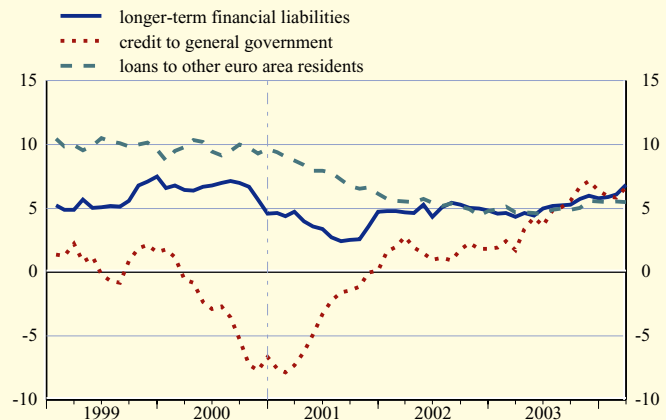
### C1 Monetary aggregates

(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**

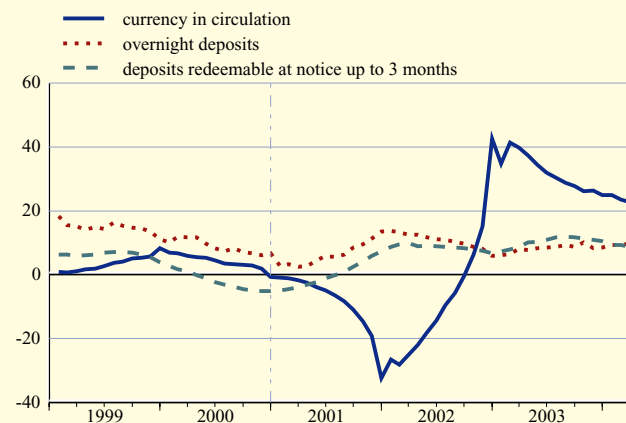
(EUR billions and annual growth rates; seasonally adjusted; outstanding amounts and growth rates at end of period, transactions during period)

**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
<b>Outstanding amounts</b>											
2001	233.4	1,988.9	1,089.9	1,306.0	231.5	412.4	145.9	1,621.4	113.7	1,166.8	995.3
2002	333.0	2,106.2	1,079.5	1,394.9	239.9	486.9	127.7	1,696.9	103.7	1,187.2	1,006.4
2003 Q1	331.9	2,176.8	1,071.5	1,423.4	209.4	549.1	99.4	1,702.6	100.2	1,203.1	999.2
Q2	347.1	2,205.0	1,074.1	1,462.7	220.9	569.3	97.0	1,728.5	96.2	1,210.8	993.1
Q3	366.9	2,254.7	1,051.4	1,496.4	215.6	582.0	91.3	1,770.3	90.9	1,230.8	1,014.0
Q4	388.5	2,285.4	1,042.5	1,511.6	219.7	601.9	87.7	1,793.1	90.5	1,251.9	1,006.4
2004 Jan.	396.6	2,318.1	1,029.2	1,517.1	212.1	595.5	91.0	1,812.1	90.3	1,256.1	997.4
Feb.	400.0	2,336.6	1,012.8	1,535.5	225.0	595.2	91.5	1,816.8	90.2	1,264.8	1,008.9
Mar. <sup>(p)</sup>	406.5	2,363.5	1,000.0	1,545.9	202.4	599.2	89.2	1,855.7	90.3	1,269.4	1,021.9
<b>Transactions</b>											
2001	-112.5	233.9	69.3	88.9	26.8	93.9	-2.1	110.1	-10.6	-2.4	81.1
2002	99.6	115.0	0.0	88.4	9.6	72.1	-13.2	117.6	-10.0	41.2	38.9
2003 Q1	20.9	46.8	-5.9	54.1	-21.7	17.4	-3.6	20.2	-3.5	11.9	0.9
Q2	15.2	43.9	5.8	39.4	11.6	19.7	-4.8	35.6	-4.0	8.6	-2.3
Q3	20.4	52.0	-23.1	33.7	-4.0	10.4	-5.1	47.6	-5.3	19.0	25.8
Q4	21.6	34.7	-4.6	15.5	3.2	13.7	-3.4	44.7	-0.4	23.3	6.9
2004 Jan.	8.1	32.2	-14.8	5.3	-6.6	-7.0	5.1	13.0	-0.1	3.9	-6.8
Feb.	3.4	19.8	-17.0	18.5	12.8	-0.4	1.4	4.7	-0.2	8.7	10.4
Mar. <sup>(p)</sup>	6.5	25.4	-14.3	10.3	-22.6	5.9	-2.4	30.0	0.1	4.2	4.3
<b>Growth rates</b>											
2001 Dec.	-32.4	13.5	6.8	7.3	12.5	28.9	-1.5	7.2	-8.5	-0.2	8.9
2002 Dec.	42.7	5.8	0.0	6.8	4.2	17.4	-9.5	7.3	-8.8	3.6	3.9
2003 Mar.	39.7	8.1	0.0	8.6	0.9	16.5	-11.4	6.6	-8.2	3.9	2.5
June	31.9	8.4	-0.5	10.9	-0.9	19.3	-14.3	7.1	-10.7	3.9	4.5
Sep.	27.8	8.7	-2.5	11.6	-6.7	14.2	-16.2	7.8	-15.2	4.7	4.0
Dec.	24.9	8.4	-2.6	10.4	-4.8	11.6	-16.8	8.8	-12.7	5.3	3.1
2004 Jan.	25.0	9.3	-3.7	9.3	-7.8	8.9	-16.6	9.5	-11.9	5.7	1.9
Feb.	23.5	9.2	-5.1	9.2	-1.7	7.8	-15.1	9.4	-11.1	5.8	2.6
Mar. <sup>(p)</sup>	22.7	9.6	-6.4	8.6	-2.7	7.7	-8.5	10.4	-9.9	5.6	3.9

**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>

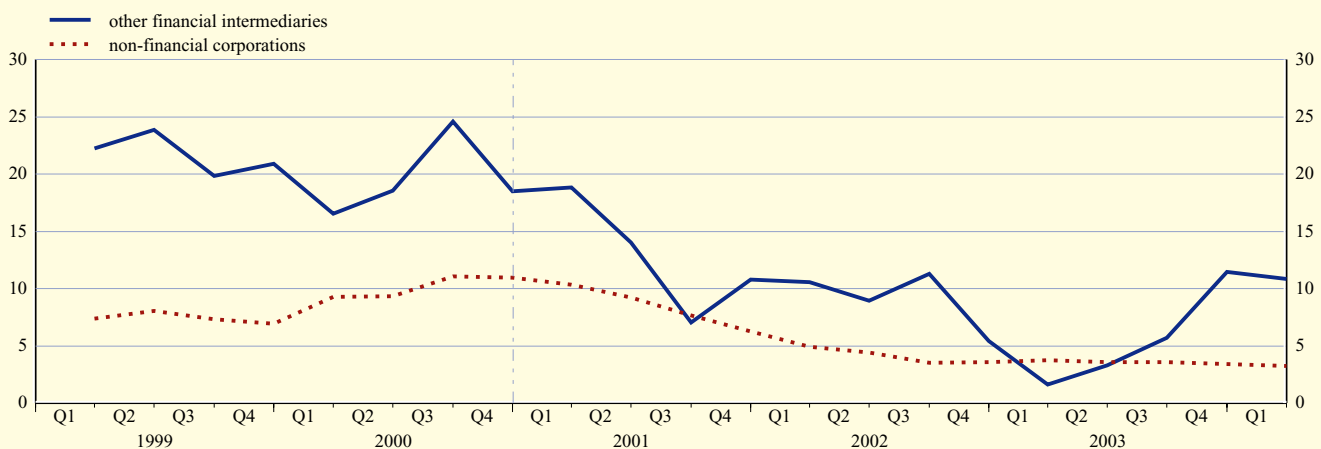
(EUR billions and annual growth rates; outstanding amounts and growth rates at end of period, transactions during period)

### 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								
2001	34.9	24.8	434.4	276.0	2,903.3	1,019.0	489.8	1,394.5
2002	33.0	19.7	455.2	289.3	2,965.6	980.1	514.8	1,470.6
2003 Q1	42.4	30.0	472.2	302.7	2,980.9	989.9	512.4	1,478.6
Q2	44.8	31.3	479.3	305.5	3,006.8	999.1	508.4	1,499.3
Q3	44.3	28.3	480.1	296.9	3,006.4	971.1	518.8	1,516.5
Q4	35.6	22.1	506.6	317.2	3,030.5	959.1	524.6	1,546.7
2004 Jan.	47.5	34.2	497.5	306.1	3,038.1	959.8	528.4	1,549.9
Feb.	47.0	33.2	514.0	318.7	3,040.2	954.8	529.1	1,556.2
Mar. <sup>(p)</sup>	46.3	32.1	509.1	307.1	3,050.4	956.3	523.5	1,570.6
Transactions								
2001	3.6	3.0	42.7	25.6	170.8	19.9	57.0	94.0
2002	-4.0	-7.3	23.6	16.2	104.0	-24.5	32.0	96.6
2003 Q1	11.2	10.3	9.6	5.3	28.4	12.5	1.5	14.4
Q2	2.6	1.4	9.6	4.5	36.1	13.0	-2.7	25.8
Q3	-0.5	-3.0	2.0	-8.0	1.4	-27.1	10.2	18.3
Q4	-8.8	-6.3	32.0	23.6	35.5	-6.2	6.4	35.3
2004 Jan.	11.9	12.1	-2.6	-4.2	9.4	1.9	3.8	3.7
Feb.	-0.5	-1.0	16.1	13.9	4.9	-4.2	1.0	8.0
Mar. <sup>(p)</sup>	-0.7	-1.1	-6.3	-12.2	9.1	1.4	-1.2	9.0
Growth rates								
2001 Dec.	11.4	13.6	10.8	10.1	6.3	2.1	13.1	7.2
2002 Dec.	-10.2	-26.4	5.4	5.9	3.6	-2.4	6.5	6.9
2003 Mar.	8.3	-1.6	1.6	-2.7	3.7	-1.0	5.8	6.4
June	4.9	-3.9	3.3	-0.7	3.6	0.5	2.4	6.2
Sept.	10.4	-5.6	5.7	1.9	3.6	-1.0	4.4	6.4
2003 Dec.	12.9	12.7	11.5	8.5	3.4	-0.8	3.1	6.4
2004 Jan.	12.6	15.6	12.3	10.6	3.3	-3.0	5.2	7.0
Feb.	6.8	5.5	14.8	13.5	3.2	-3.2	4.5	7.1
Mar. <sup>(p)</sup>	9.5	7.0	10.8	5.8	3.3	-2.1	3.4	6.8

### 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>

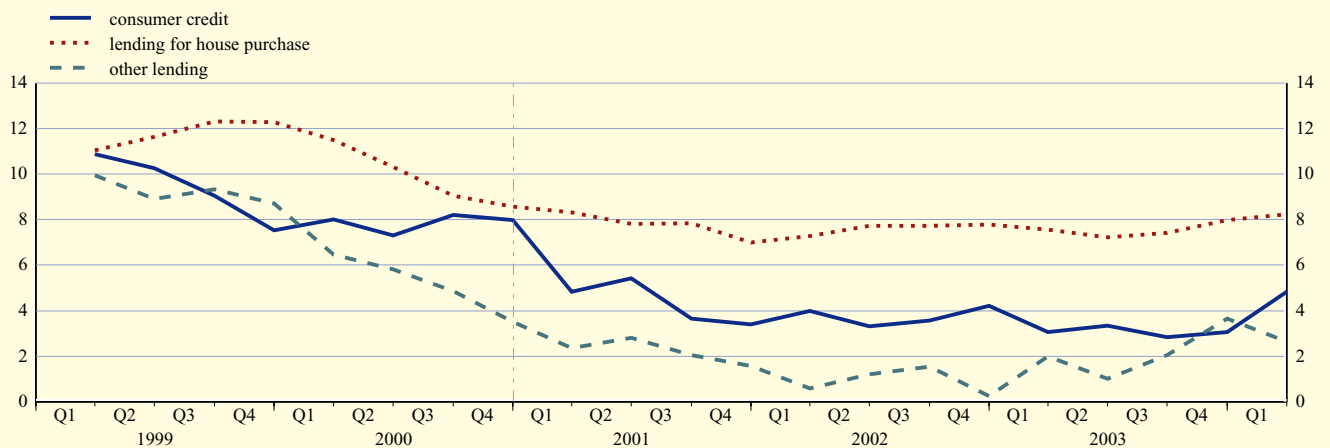
(EUR billions and annual growth rates; outstanding amounts and growth rates at end of period, transactions during period)

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

	Outstanding amounts													
	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	
Outstanding amounts														
2001	3,146.1	497.1	102.5	170.4	224.2	2,020.6	22.7	61.0	1,937.0	628.3	152.8	105.3	370.3	
2002	3,327.2	518.1	105.1	178.3	234.7	2,191.4	23.1	65.1	2,103.2	617.5	153.9	99.7	363.9	
2003 Q1	3,358.6	492.9	112.2	176.6	204.1	2,227.6	16.3	68.2	2,143.0	638.1	144.2	94.7	399.2	
Q2	3,410.9	501.1	115.7	179.3	206.1	2,265.6	16.6	68.5	2,180.5	644.3	144.8	92.5	406.9	
Q3	3,463.8	477.1	110.4	178.3	188.4	2,313.2	16.9	70.1	2,226.2	673.5	144.0	97.0	432.5	
Q4	3,520.8	484.4	112.0	181.0	191.5	2,360.4	16.1	67.3	2,277.0	676.0	144.9	95.9	435.2	
2004 Jan.	3,525.7	481.0	110.3	179.1	191.6	2,372.6	15.8	66.3	2,290.5	672.1	142.4	95.1	434.6	
Feb.	3,539.8	481.4	109.3	180.1	191.9	2,385.1	15.6	66.3	2,303.2	673.3	140.6	95.2	437.4	
Mar. <sup>(p)</sup>	3,565.7	484.8	110.2	181.8	192.8	2,400.3	15.9	70.6	2,313.8	680.5	141.6	94.5	444.5	
Transactions														
2001	158.1	16.4	-0.8	4.4	12.8	131.8	0.4	-1.8	133.2	9.9	-2.0	3.0	8.8	
2002	179.8	21.1	6.4	5.4	9.4	157.1	0.4	2.5	154.1	1.5	-3.0	2.2	2.2	
2003 Q1	38.3	-6.1	6.8	-3.1	-9.7	36.9	-6.6	3.2	40.3	7.8	-7.4	-2.4	17.5	
Q2	56.5	8.4	1.6	4.6	2.3	41.4	0.3	-0.2	41.3	6.7	3.2	-2.8	6.4	
Q3	54.0	3.0	-1.1	2.1	2.0	48.5	0.5	1.6	46.4	2.6	-4.4	1.3	5.7	
Q4	63.3	9.2	2.2	2.9	4.1	48.2	-0.7	-2.7	51.6	6.0	1.9	-1.0	5.1	
2004 Jan.	6.9	-3.0	-1.4	-1.8	0.2	12.6	-0.3	-1.0	13.8	-2.7	-2.1	-0.7	0.1	
Feb.	16.3	0.9	-0.9	1.2	0.6	13.2	-0.1	0.0	13.3	2.2	-1.4	0.2	3.5	
Mar. <sup>(p)</sup>	26.0	4.4	0.9	1.9	1.6	19.3	0.3	5.2	13.7	2.3	1.1	-0.1	1.4	
Growth rates														
2001 Dec.	5.3	3.4	-1.0	2.6	6.1	7.0	1.8	-2.8	7.4	1.6	-1.3	2.9	2.4	
2002 Dec.	5.7	4.2	6.2	3.1	4.2	7.8	1.9	4.2	8.0	0.2	-1.9	2.2	0.6	
2003 Mar.	5.8	3.1	17.3	0.6	-1.2	7.6	-28.6	9.9	7.9	2.0	-5.6	0.0	5.8	
June	5.4	3.4	15.8	2.8	-1.6	7.2	-29.3	9.5	7.6	1.0	-7.2	-5.6	6.3	
Sep.	5.7	2.8	12.6	4.0	-2.3	7.4	-30.0	12.0	7.7	2.1	-6.2	-2.9	6.7	
2003 Dec.	6.4	3.1	9.1	3.6	-0.2	8.0	-28.5	2.8	8.6	3.6	-4.5	-5.0	9.2	
2004 Jan.	6.4	3.8	1.5	6.4	3.0	8.2	-1.6	-0.7	8.5	2.4	-2.3	-4.1	5.6	
Feb.	6.4	4.9	-0.1	7.5	5.6	8.1	-3.3	-1.5	8.5	1.5	-2.2	-5.8	4.6	
Mar. <sup>(p)</sup>	6.7	4.8	1.3	6.2	5.6	8.2	0.2	4.2	8.4	2.6	-1.3	-3.3	5.4	

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>

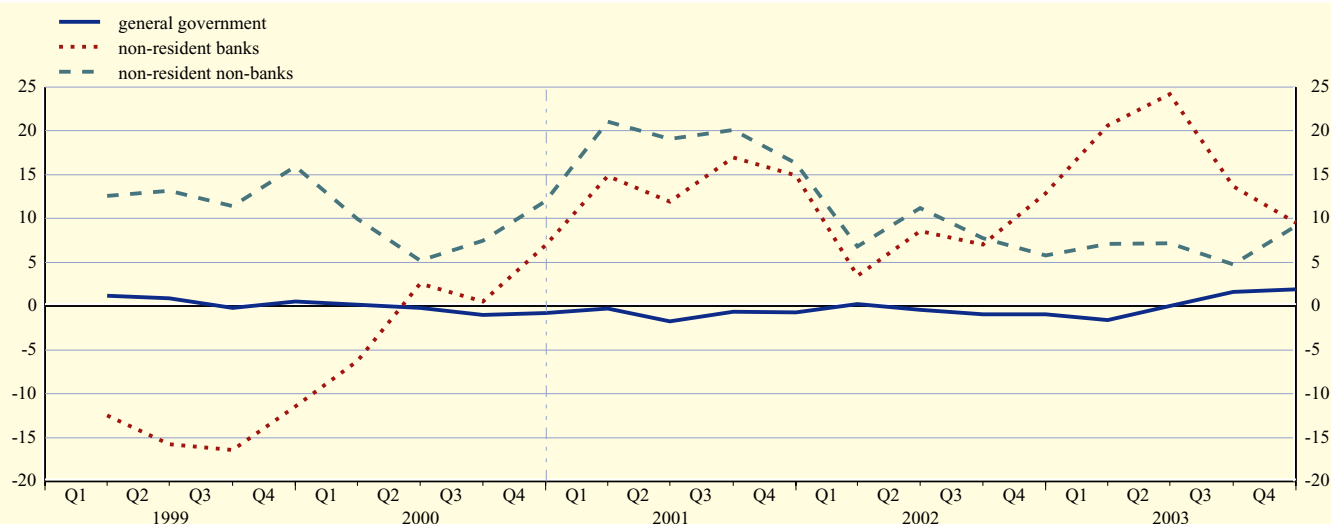
(EUR billions and annual growth rates; outstanding amounts and growth rates at end of period, transactions during period)

### 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										
2001	822.0	145.6	298.3	362.9	15.2	1,704.3	1,095.6	608.7	69.9	538.8
2002	813.0	132.7	277.7	382.8	19.7	1,730.1	1,146.2	583.9	64.6	519.3
2003 Q1	804.8	134.7	267.2	379.0	23.9	1,767.0	1,173.0	594.0	59.0	535.0
Q2	794.2	126.9	263.5	375.4	28.3	1,833.2	1,242.2	590.9	59.2	531.7
Q3	797.6	128.4	262.5	376.0	30.6	1,741.1	1,157.4	583.7	59.8	523.9
Q4 <sup>(p)</sup>	819.4	128.5	265.3	392.5	32.6	1,762.8	1,181.3	579.9	58.9	521.0
Transactions										
2001	-6.2	-18.7	1.1	9.9	1.7	225.2	140.1	84.6	4.3	80.3
2002	-7.9	-11.3	-21.1	19.9	4.6	169.1	134.8	34.5	-1.2	35.7
2003 Q1	-0.6	0.7	-10.2	4.8	4.1	66.2	43.8	22.9	-5.5	28.5
Q2	-8.2	-7.3	-3.8	-1.6	4.5	105.3	93.1	12.8	0.3	12.5
Q3	3.5	1.5	-1.0	0.5	2.2	-86.9	-82.9	-3.9	0.6	-4.4
Q4 <sup>(p)</sup>	20.9	0.7	2.8	16.5	2.0	74.9	54.2	20.1	-0.6	20.8
Growth rates										
2001 Dec.	-0.8	-11.4	0.4	2.8	12.4	15.4	14.9	16.3	6.3	17.8
2002 Dec.	-1.0	-7.8	-7.1	5.5	30.0	10.3	12.9	5.7	-1.9	6.7
2003 Mar.	-1.6	-13.2	-9.2	7.1	56.3	15.6	20.6	7.1	-13.9	9.9
June	0.0	-8.5	-6.3	5.3	54.3	18.0	24.1	7.2	-8.3	9.1
Sep.	1.6	-3.3	-4.3	5.1	50.1	10.4	13.6	4.8	-10.5	6.7
Dec. <sup>(p)</sup>	1.9	-3.3	-4.4	5.4	65.0	9.3	9.5	9.1	-8.2	11.3

### 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>

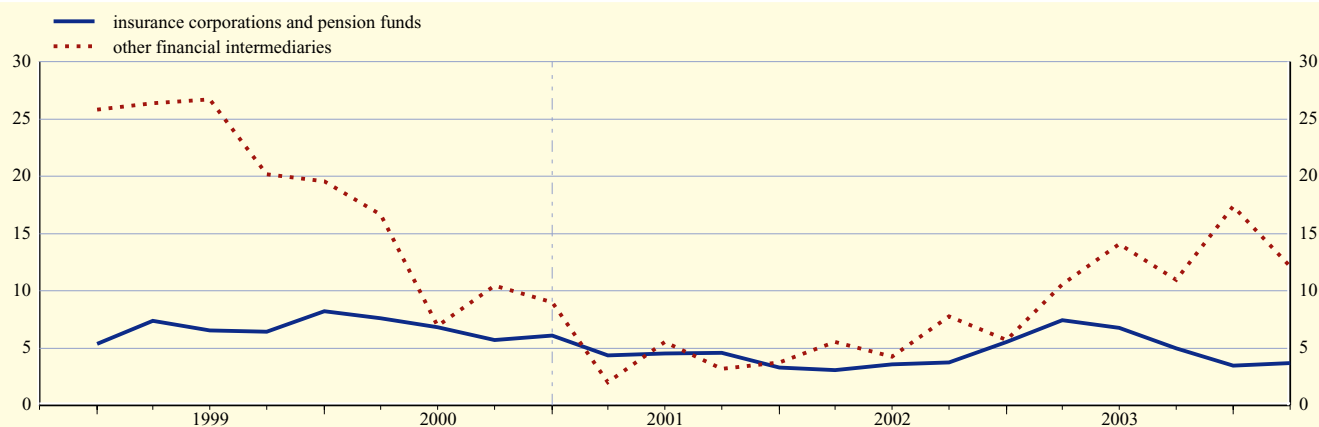
(EUR billions and annual growth rates; outstanding amounts and growth rates at end of period, transactions during period)

### 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
<b>Outstanding amounts</b>														
2001	495.4	48.0	-	-	-	-	16.4	464.5	156.5	-	-	-	-	85.3
2002	523.1	55.8	-	-	-	-	17.9	493.6	152.7	-	-	-	-	97.1
2003 Q1	535.8	61.7	39.2	415.0	0.9	0.6	18.3	526.4	168.2	133.5	119.6	5.3	0.1	99.6
Q2	537.8	63.8	38.1	412.4	1.0	0.3	22.3	546.6	180.3	132.6	129.8	5.8	0.1	98.0
Q3	532.7	57.3	33.0	422.3	1.1	0.3	18.7	540.3	177.2	125.2	129.3	5.0	0.1	103.6
Q4	541.9	58.8	41.7	420.5	1.3	0.3	19.1	562.9	180.2	129.6	142.4	6.1	0.1	104.4
2004 Jan.	554.1	65.4	43.2	422.2	1.3	0.3	21.7	567.1	178.3	130.7	140.4	6.9	0.1	110.8
Feb.	556.3	62.8	42.4	424.3	1.3	0.3	25.1	579.8	184.5	123.1	143.5	8.5	0.1	120.1
Mar. <sup>(p)</sup>	556.4	64.5	42.2	426.1	1.3	0.3	22.0	585.6	196.7	119.8	146.7	7.8	0.1	114.6
<b>Transactions</b>														
2001	15.8	7.6	-	-	-	-	-1.1	16.2	3.6	-	-	-	-	10.3
2002	27.6	7.8	-	-	-	-	1.4	26.7	-4.7	-	-	-	-	12.8
2003 Q1	12.6	4.2	-6.8	14.8	-0.1	-0.1	0.5	42.2	12.8	2.0	14.0	2.3	0.0	11.0
Q2	2.3	2.2	-1.0	-2.9	0.0	0.0	3.9	22.6	13.2	-0.2	10.8	0.5	0.0	-1.6
Q3	-6.5	-6.6	-5.1	8.9	0.1	0.0	-3.8	-7.2	-3.1	-8.2	-0.8	-0.8	0.0	5.7
Q4	9.6	1.7	9.0	-1.7	0.2	0.0	0.5	26.9	4.5	5.3	15.0	1.2	0.0	0.9
2004 Jan.	12.1	6.5	1.4	1.6	0.0	0.0	2.6	5.1	-1.5	0.8	-2.3	0.8	0.0	7.4
Feb.	2.1	-2.6	-0.8	2.2	0.0	0.0	3.4	11.9	6.3	-8.5	3.2	1.6	0.0	9.3
Mar. <sup>(p)</sup>	0.0	1.6	-0.3	1.8	0.0	0.0	-3.1	4.4	11.7	-3.6	2.5	-0.8	0.0	-5.4
<b>Growth rates</b>														
2001 Dec.	3.3	18.7	-	-	-	-	-5.1	3.7	2.3	-	-	-	-	14.0
2002 Dec.	5.6	16.3	-	-	-	-	8.5	5.7	-3.0	-	-	-	-	14.9
2003 Mar.	7.5	37.0	-	-	-	-	3.3	10.5	5.2	-	-	-	-	17.7
June	6.8	28.7	-	-	-	-	17.4	14.1	9.2	-	-	-	-	16.3
Sep.	5.0	11.5	-	-	-	-	28.2	11.0	11.6	-	-	-	-	8.8
2003 Dec.	3.4	2.8	-8.4	4.8	40.8	-12.6	6.0	17.4	17.7	-0.9	37.1	70.8	-	17.1
2004 Jan.	4.3	15.2	5.5	2.8	50.0	-9.7	-0.3	13.6	11.5	4.0	23.9	58.0	-	15.1
Feb.	4.8	15.4	6.1	2.7	57.9	-7.7	15.2	14.9	18.6	-6.9	26.8	78.6	-	20.9
Mar. <sup>(p)</sup>	3.7	4.9	8.0	2.4	40.3	1.8	18.6	12.1	18.6	-10.9	23.9	47.7	-	16.3

### 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>

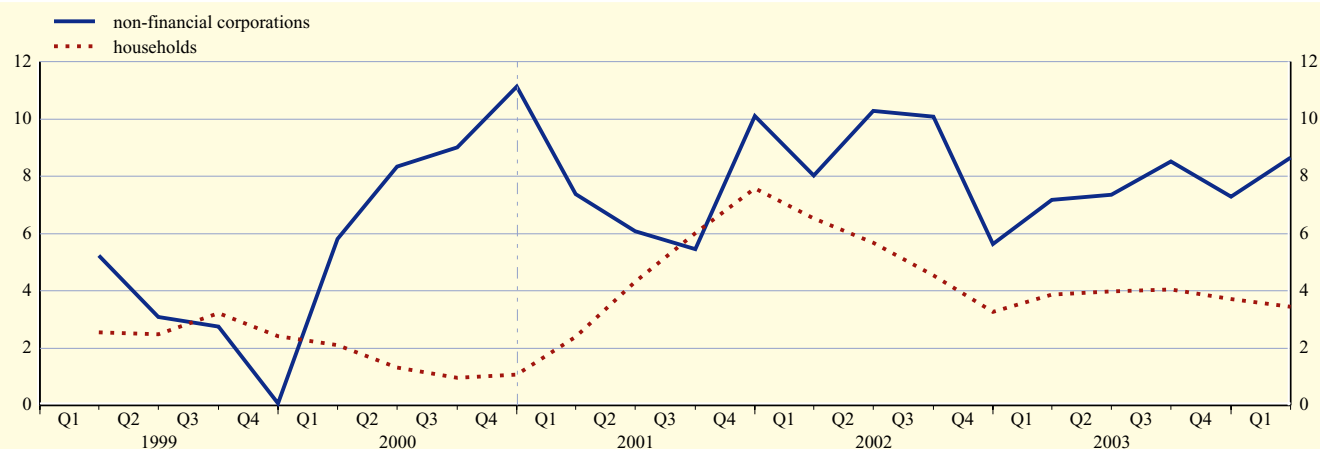
(EUR billions and annual growth rates; outstanding amounts and growth rates at end of period, transactions during period)

### 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
<b>Outstanding amounts</b>														
2001	974.2	575.3	-	-	-	-	36.2	3,679.3	1,097.2	-	-	-	-	76.6
2002	989.6	595.5	-	-	-	-	34.7	3,806.1	1,173.0	-	-	-	-	74.7
2003 Q1	959.8	565.6	271.0	61.7	28.0	1.1	32.3	3,834.9	1,195.9	580.2	586.4	1,303.2	98.6	70.6
Q2	1,000.7	599.2	279.1	61.0	30.2	1.4	29.8	3,868.0	1,236.6	562.8	585.0	1,328.7	93.0	61.9
Q3	1,017.9	608.3	282.1	65.7	30.9	1.5	29.4	3,902.3	1,270.8	555.1	586.2	1,345.3	88.6	56.3
Q4	1,051.9	639.3	282.2	66.3	32.6	1.5	30.0	3,978.5	1,311.8	545.0	600.8	1,378.1	89.9	52.9
2004 Jan.	1,013.1	613.9	270.8	67.9	33.5	1.5	25.4	3,995.2	1,315.7	539.8	604.7	1,392.1	88.8	54.1
Feb.	1,019.1	605.5	277.4	69.2	39.3	1.7	26.0	3,996.2	1,318.0	532.5	607.0	1,396.2	88.4	54.2
Mar. <sup>(p)</sup>	1,035.8	624.9	275.5	68.5	39.9	1.7	25.3	3,997.7	1,320.7	526.6	609.2	1,401.2	88.2	51.9
<b>Transactions</b>														
2001	89.9	69.6	-	-	-	-	7.4	258.5	139.7	-	-	-	-	7.0
2002	53.9	28.9	-	-	-	-	-1.3	120.4	65.4	-	-	-	-	-1.9
2003 Q1	-28.2	-35.7	43.9	-39.6	5.4	0.3	-2.4	26.7	9.9	-42.2	25.7	42.3	-5.0	-4.1
Q2	43.6	34.7	9.2	-0.1	2.2	0.0	-2.4	34.7	41.0	-16.2	-1.4	25.5	-5.5	-8.7
Q3	19.4	9.3	3.6	4.7	0.7	0.1	1.1	2.1	2.8	-8.0	0.8	16.6	-4.4	-5.6
Q4	36.9	33.0	1.8	0.9	1.7	0.0	-0.5	78.4	41.5	-8.7	14.7	33.0	1.3	-3.4
2004 Jan.	-40.2	-26.0	-12.0	1.5	0.8	0.0	-4.6	15.9	3.7	-5.7	3.9	13.9	-1.1	1.2
Feb.	7.2	-7.4	6.8	1.3	5.8	0.1	0.6	1.2	2.3	-7.2	2.3	4.1	-0.4	0.1
Mar. <sup>(p)</sup>	15.9	18.8	-2.5	-0.3	0.6	0.0	-0.7	0.5	2.5	-6.5	2.2	4.9	-0.3	-2.3
<b>Growth rates</b>														
2001 Dec.	10.1	13.6	-	-	-	-	25.8	7.6	14.5	-	-	-	-	12.9
2002 Dec.	5.6	5.1	-	-	-	-	-3.5	3.3	6.0	-	-	-	-	-2.5
2003 Mar.	7.2	7.8	-	-	-	-	-3.5	3.9	7.3	-	-	-	-	-12.4
June	7.4	7.7	-	-	-	-	-18.0	4.0	7.2	-	-	-	-	-19.6
Sep.	8.5	8.3	-	-	-	-	-15.0	4.1	8.2	-	-	-	-	-28.2
2003 Dec.	7.3	6.8	25.7	-33.7	40.8	44.2	-12.4	3.7	7.9	-12.1	7.1	9.3	-13.2	-29.2
2004 Jan.	7.4	10.0	2.7	12.7	32.2	38.3	-27.1	4.1	9.6	-9.0	3.7	8.7	-12.4	-28.5
Feb.	8.3	9.5	4.0	14.7	46.9	18.0	-19.3	3.7	8.7	-8.8	3.3	8.1	-11.6	-28.4
Mar. <sup>(p)</sup>	8.6	11.0	2.5	13.0	42.7	20.6	-20.4	3.4	7.7	-9.0	3.8	7.5	-10.5	-26.5

### 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
<b>Outstanding amounts</b>										
2001	253.6	103.9	29.9	68.9	50.9	2,400.1	1,696.9	703.2	94.1	609.1
2002	248.4	106.9	31.6	69.2	40.7	2,271.0	1,585.3	685.7	97.4	588.3
2003 Q1	264.0	125.5	32.0	65.5	41.0	2,292.0	1,588.0	704.0	97.8	606.2
Q2	290.9	147.6	34.2	64.5	44.5	2,274.5	1,580.6	693.9	94.5	599.3
Q3	264.1	128.9	32.3	64.2	38.7	2,256.2	1,562.4	693.7	93.4	600.3
Q4 <sup>(p)</sup>	271.2	132.3	30.2	67.9	40.8	2,246.3	1,582.2	667.0	95.9	571.0
<b>Transactions</b>										
2001	-12.5	-14.1	-0.8	-0.2	2.6	234.7	130.6	103.9	10.2	93.6
2002	-8.3	-0.2	1.8	0.4	-10.3	30.2	-4.9	35.2	3.6	31.6
2003 Q1	8.7	11.6	0.4	-3.7	0.3	61.6	30.2	31.4	0.5	30.8
Q2	26.9	22.1	2.2	-0.9	3.5	30.2	27.2	3.0	-3.3	6.3
Q3	-23.4	-16.0	-1.9	-0.4	-5.0	-6.6	-7.9	1.3	-1.2	2.5
Q4 <sup>(p)</sup>	7.1	3.4	-2.0	3.7	2.1	54.4	69.0	-11.7	2.6	-14.2
<b>Growth rates</b>										
2001 Dec.	-4.8	-12.0	-2.6	-0.3	5.3	11.1	8.7	17.6	12.2	18.5
2002 Dec.	-3.3	-0.2	5.9	0.5	-20.2	1.3	-0.2	5.0	3.9	5.1
2003 Mar.	3.1	13.0	3.7	2.1	-16.9	2.8	1.4	6.0	0.0	6.9
June	12.0	29.9	0.4	-1.6	-3.0	4.6	4.5	4.9	-0.5	5.8
Sep.	6.7	18.9	-5.7	0.8	-5.3	3.8	3.8	3.7	-7.7	5.6
Dec. <sup>(p)</sup>	7.7	19.3	-4.4	-1.9	2.4	6.3	7.7	3.4	-1.4	4.2

**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.

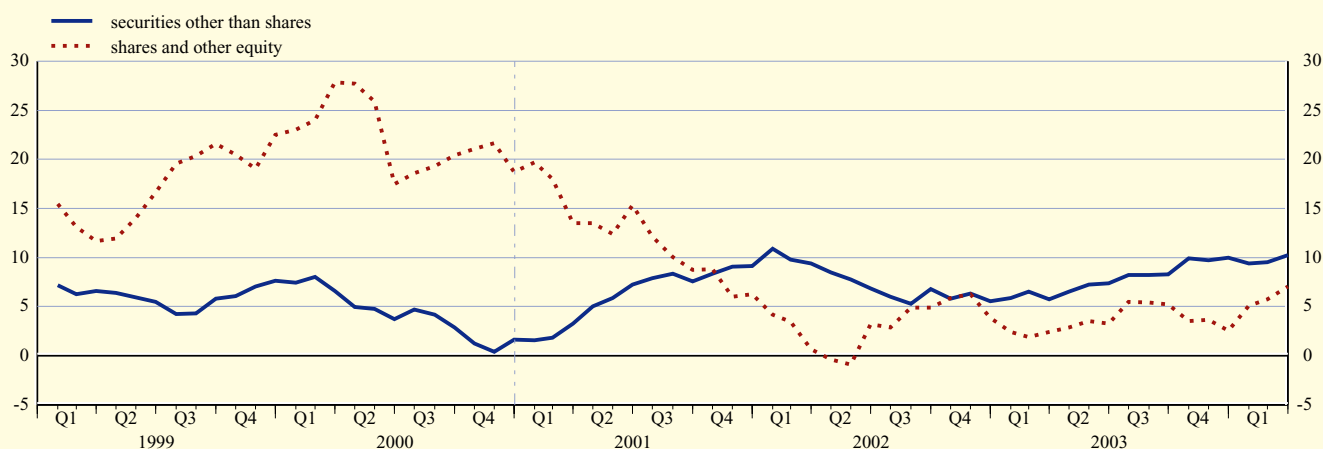
## 2.6 MFI holdings of securities, breakdown <sup>1)</sup>

(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
Outstanding amounts												
2001	3,076.9	1,068.7	54.2	1,059.8	17.6	319.8	15.8	541.0	972.4	251.9	559.0	161.6
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 Q1	3,426.4	1,173.7	61.0	1,192.3	17.7	366.9	19.0	595.8	998.7	259.2	559.1	180.3
Q2	3,501.5	1,183.1	59.1	1,223.2	16.1	386.8	18.3	614.8	1,028.2	267.3	586.1	174.8
Q3	3,551.7	1,199.1	57.3	1,241.9	16.7	392.4	19.2	625.2	1,059.0	272.6	606.8	179.6
Q4	3,576.8	1,218.5	57.4	1,230.4	15.6	407.1	18.6	629.3	1,068.6	279.6	615.4	173.7
2004 Jan.	3,661.7	1,235.0	60.9	1,255.3	16.1	407.3	17.7	669.4	1,089.7	285.4	624.3	180.1
Feb.	3,714.8	1,258.6	57.8	1,277.6	16.0	412.7	18.0	674.2	1,093.1	283.6	624.6	184.9
Mar. <sup>(p)</sup>	3,765.7	1,284.0	60.9	1,286.2	17.7	413.6	18.2	685.0	1,117.6	287.9	640.5	189.2
Transactions												
2001	258.2	82.4	-4.2	13.1	-4.9	63.0	-0.1	108.9	57.1	10.5	29.6	17.0
2002	171.3	48.0	-0.6	40.9	-0.8	27.3	3.2	53.1	37.2	13.7	4.8	18.7
2003 Q1	131.1	42.3	3.4	36.1	1.5	16.4	0.2	31.2	0.8	-3.0	0.7	3.1
Q2	87.7	16.5	-0.4	30.9	-0.7	14.0	0.2	27.2	20.5	6.0	21.0	-6.4
Q3	55.4	15.1	-1.9	24.1	0.4	5.9	0.9	10.9	0.9	1.9	-4.9	3.9
Q4	51.8	19.5	2.3	-12.0	-0.3	15.8	0.7	25.8	3.1	3.2	7.2	-7.3
2004 Jan.	61.6	14.0	2.3	15.1	0.1	-0.7	-1.3	32.2	17.9	4.0	7.5	6.4
Feb.	50.4	23.1	-3.2	20.4	0.1	4.2	0.5	5.3	6.0	-0.1	1.6	4.5
Mar. <sup>(p)</sup>	41.2	25.3	2.1	8.7	1.1	1.1	-0.3	3.3	24.3	4.7	16.4	3.2
Growth rates												
2001 Dec.	9.2	8.2	-7.3	1.2	-23.4	25.0	-0.4	25.4	6.3	4.2	5.7	12.0
2002 Dec.	5.6	4.5	-2.0	3.9	-4.3	8.5	21.9	10.0	3.8	5.4	0.9	11.6
2003 Mar.	5.7	4.3	-3.8	3.2	7.5	9.9	25.4	12.0	2.4	1.0	2.3	5.2
June	7.4	4.3	-10.0	4.9	7.2	15.3	15.8	16.3	3.3	0.0	5.8	0.4
Sep.	8.3	6.0	-9.1	6.6	8.4	15.3	18.6	13.9	5.2	3.4	6.2	4.9
Dec.	10.0	8.3	7.3	6.9	5.9	14.8	10.2	17.1	2.5	3.0	4.2	-3.7
2004 Jan.	9.4	7.4	4.1	6.5	1.8	12.9	9.3	18.0	5.1	7.4	5.4	0.7
Feb.	9.5	8.4	-0.6	7.0	-4.0	12.0	10.3	16.6	5.7	7.6	6.0	2.2
Mar. <sup>(p)</sup>	10.2	9.7	2.3	7.3	5.0	10.9	3.0	18.0	7.1	7.5	8.4	2.3

## 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
2001	0.0	-	-	-	-0.6	-	-	-	-6.7	-	-	-
2002	-0.9	-	-	-	-1.3	-	-	-	-5.3	-	-	-
2003 Q1	-1.2	-0.6	-0.1	-0.4	-1.1	-0.1	0.0	-1.0	-2.7	-1.2	-0.1	-1.5
Q2	-0.2	0.0	-0.1	-0.1	-0.2	0.0	0.0	-0.2	-1.2	-0.3	0.0	-0.9
Q3	-0.4	-0.1	-0.1	-0.2	-0.6	-0.1	0.0	-0.5	-1.2	-0.3	-0.1	-0.8
Q4	-0.9	-0.4	-0.2	-0.3	-1.3	-0.1	0.0	-1.1	-2.5	-1.0	-0.1	-1.4
2004 Jan.	-0.6	-0.3	-0.1	-0.2	-0.6	0.0	0.0	-0.5	-1.3	-0.5	-0.1	-0.8
Feb.	-0.4	-0.1	-0.1	-0.2	-0.5	0.0	0.0	-0.4	-0.9	-0.2	0.0	-0.6
Mar. <sup>(p)</sup>	-0.2	-0.1	0.0	-0.1	-0.2	0.0	0.0	-0.2	-0.6	-0.2	0.0	-0.4

**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
2001	-9.1	-0.7	-5.4	-2.9	-1.0	-	-
2002	-9.7	-2.1	-2.7	-4.9	-7.2	-	-
2003 Q1	-7.5	-4.1	-0.6	-2.8	-0.1	0.0	-0.1
Q2	-2.3	-1.1	-0.1	-1.1	-0.3	-0.3	-0.1
Q3	-2.1	-0.5	-0.2	-1.4	-0.2	-0.1	-0.1
Q4	-5.8	-3.0	-0.4	-2.4	-0.4	0.0	-0.4
2004 Jan.	-3.6	-1.8	-0.4	-1.5	-0.5	-0.2	-0.2
Feb.	-1.6	-0.5	-0.1	-0.9	-0.2	-0.1	-0.1
Mar. <sup>(p)</sup>	-1.2	-0.7	-0.1	-0.5	-0.2	0.0	-0.2

**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
2001	14.1	-0.6	0.2	9.9	0.1	5.9	0.1	-1.5	7.3	1.1	7.6	-1.3
2002	35.2	9.8	0.6	11.1	-0.1	5.1	0.2	8.4	-6.8	-4.7	0.7	-2.7
2003 Q1	6.4	-1.8	-0.1	10.3	0.0	-1.4	0.2	-0.9	-8.3	-1.1	-7.2	0.0
Q2	-0.3	-1.3	-0.1	0.1	-0.1	0.3	-0.2	0.8	8.8	2.1	6.0	0.7
Q3	-2.1	0.1	0.0	-2.1	0.0	-0.1	-0.1	0.1	5.0	4.5	0.2	0.3
Q4	-6.2	0.5	-0.2	-4.2	0.1	-0.3	-0.1	-1.9	4.4	1.5	1.5	1.4
2004 Jan.	9.7	1.5	0.2	7.8	0.1	0.0	0.0	0.2	3.2	1.5	1.7	-0.1
Feb.	3.7	0.6	0.0	1.7	0.0	1.1	0.0	0.2	-2.6	-1.7	-1.2	0.3
Mar. <sup>(p)</sup>	2.8	0.2	0.1	1.5	0.1	0.1	0.0	0.8	0.2	-0.4	-0.5	1.1

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						Total					
			USD	JPY	CHF	GBP			USD	JPY	CHF	GBP		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	
By euro area residents														
2001	3,829.6	87.7	12.3	8.0	0.9	1.8	1.0	5,867.1	96.6	3.4	2.2	0.4	0.2	0.3
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 Q1	4,196.3	90.5	9.5	6.1	0.7	1.5	0.8	6,120.9	97.1	2.9	1.8	0.3	0.2	0.3
Q2	4,296.9	91.0	9.0	5.8	0.6	1.4	0.8	6,244.0	97.0	3.0	1.8	0.3	0.2	0.4
Q3	4,308.9	91.0	9.0	5.6	0.5	1.5	0.9	6,257.2	97.1	2.9	1.7	0.4	0.1	0.3
Q4 <sup>(p)</sup>	4,362.7	91.2	8.8	5.5	0.5	1.5	0.9	6,406.4	97.3	2.7	1.7	0.3	0.1	0.3
By non-euro area residents														
2001	1,696.9	36.5	63.5	46.5	2.9	4.4	7.0	703.2	43.7	56.3	40.9	2.4	2.6	8.0
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 Q1	1,588.0	46.1	53.9	36.8	2.1	4.4	7.9	704.0	51.7	48.3	32.0	2.5	1.9	8.9
Q2	1,580.6	45.9	54.1	37.4	1.7	4.2	8.0	693.9	52.1	47.9	32.3	2.2	1.9	8.8
Q3	1,562.4	46.4	53.6	35.9	1.7	4.1	8.9	693.7	52.9	47.1	30.3	2.4	2.3	9.2
Q4 <sup>(p)</sup>	1,582.2	47.0	53.0	35.4	1.7	3.6	9.5	667.0	50.9	49.1	32.2	2.1	2.2	9.6

### 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
2001	3,030.2	85.1	14.9	8.2	2.2	1.4	2.2
2002	3,138.7	85.4	14.6	7.7	1.8	1.6	2.3
2003 Q1	3,197.1	85.2	14.8	8.1	1.6	1.6	2.3
Q2	3,226.5	85.6	14.4	8.1	1.4	1.6	2.1
Q3	3,261.6	85.3	14.7	8.2	1.5	1.7	2.1
Q4 <sup>(p)</sup>	3,303.2	85.4	14.6	7.9	1.5	1.7	2.2

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.

2.8 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														
2001	3,794.0	-	-	-	-	-	7,340.7	95.4	4.6	2.5	0.7	1.1	0.4	
2002	4,017.8	-	-	-	-	-	7,593.6	96.2	3.8	1.8	0.5	1.1	0.3	
2003 Q1	4,074.2	-	-	-	-	-	7,658.9	96.2	3.8	1.8	0.5	1.1	0.3	
Q2	4,143.2	-	-	-	-	-	7,736.1	96.3	3.7	1.7	0.4	1.1	0.3	
Q3	4,155.7	-	-	-	-	-	7,792.3	96.4	3.6	1.7	0.4	1.2	0.3	
Q4 <sup>(p)</sup>	4,193.6	-	-	-	-	-	7,912.9	96.5	3.5	1.6	0.3	1.2	0.3	
To non-euro area residents														
2001	1,095.6	41.3	58.7	37.9	4.0	3.4	8.4	608.7	33.1	66.9	51.9	1.9	4.2	6.1
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 Q1	1,173.0	50.6	49.4	30.6	4.3	2.7	8.6	594.0	38.2	61.8	46.7	1.9	4.6	5.6
Q2	1,242.2	50.8	49.2	30.8	4.8	2.4	7.9	590.9	39.3	60.7	46.2	1.5	4.2	5.7
Q3	1,157.4	49.7	50.3	30.4	5.6	2.4	8.7	583.7	38.3	61.7	45.9	2.1	4.4	6.3
Q4 <sup>(p)</sup>	1,181.3	50.3	49.7	28.9	5.2	2.3	9.3	579.9	38.3	61.7	44.2	2.4	4.6	6.9

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														
2001	1,122.9	95.2	4.8	2.7	0.6	0.1	0.7	1,413.0	97.6	2.4	1.3	0.8	0.1	0.2
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 Q1	1,234.7	95.1	4.9	1.7	0.6	0.2	1.0	1,595.9	97.7	2.3	1.3	0.6	0.1	0.2
Q2	1,242.1	95.2	4.8	1.7	0.6	0.3	1.0	1,644.5	97.9	2.1	1.1	0.6	0.1	0.2
Q3	1,256.4	95.4	4.6	1.5	0.5	0.3	1.1	1,670.1	97.9	2.1	1.1	0.6	0.1	0.2
Q4 <sup>(p)</sup>	1,275.9	95.5	4.5	1.4	0.5	0.3	1.3	1,671.6	98.0	2.0	1.1	0.6	0.1	0.2
Issued by non-euro area residents														
2001	233.0	34.4	65.6	49.6	1.8	1.2	10.2	308.0	41.3	58.7	44.1	5.9	0.8	4.7
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 Q1	256.7	39.8	60.2	36.3	3.7	3.4	12.0	339.1	43.2	56.8	36.5	9.1	0.7	5.9
Q2	259.1	42.2	57.8	34.4	3.4	2.5	13.6	355.4	44.2	55.8	35.4	8.5	0.7	6.0
Q3	261.3	43.0	57.0	32.4	3.5	2.8	14.6	362.9	45.0	55.0	34.7	9.4	0.7	5.7
Q4 <sup>(p)</sup>	271.2	44.7	55.3	30.4	3.8	2.0	15.2	357.5	46.1	53.9	33.2	9.1	0.7	6.1

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 Q3	2,846.2	236.7	1,337.4	74.3	1,263.0	844.8	203.4	121.0	102.9
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 <sup>(p)</sup>	3,174.3	234.9	1,389.0	67.4	1,321.6	1,033.9	243.6	133.9	139.0

### 2. Liabilities

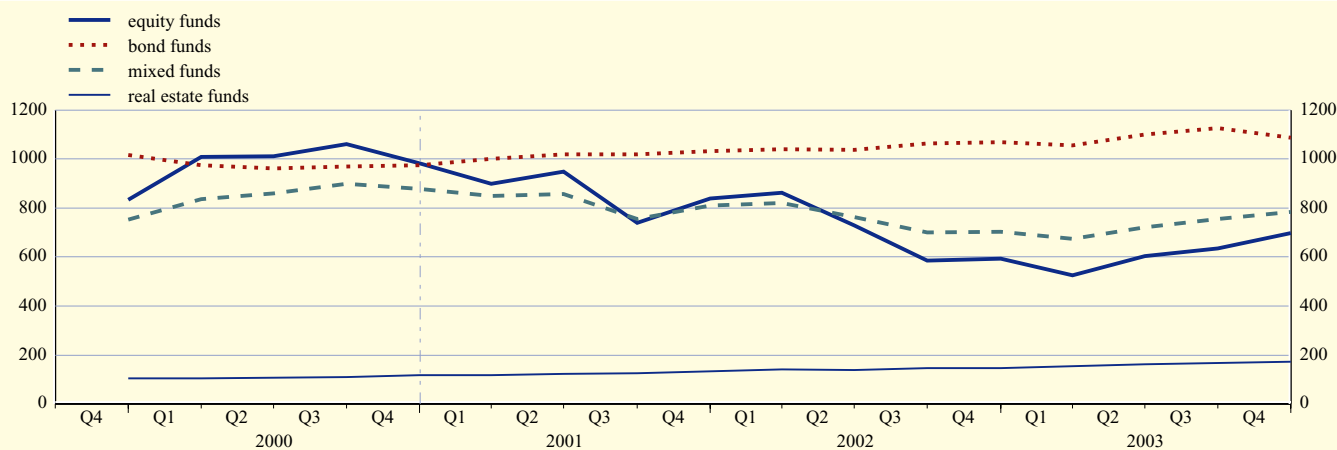
	Total 1	Deposits and loans taken 2	Investment fund shares 3	Other liabilities 4
2002 Q3	2,846.2	38.9	2,731.9	75.3
Q4	2,860.6	39.3	2,744.3	76.9
2003 Q1	2,746.9	40.2	2,628.3	78.4
Q2	2,959.5	41.8	2,825.8	91.9
Q3	3,085.6	43.2	2,917.7	124.8
Q4 <sup>(p)</sup>	3,174.3	44.2	3,010.9	119.1

### 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 Q3	2,846.2	585.2	1,063.3	699.9	145.6	352.2	2,092.0	754.2
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 <sup>(p)</sup>	3,174.3	697.8	1,086.2	783.3	171.9	435.1	2,318.1	856.2

## 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				
<b>Equity funds</b>									
2002 Q3	585.2	29.0	26.5	3.7	22.8	496.5	19.1	-	14.1
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
2003 Q2	603.3	27.9	31.6	2.9	28.7	506.5	18.5	-	18.8
2003 Q3	635.4	29.5	27.8	2.4	25.4	536.4	19.5	-	22.1
2003 Q4 <sup>(p)</sup>	697.8	29.3	31.3	2.9	28.4	593.9	20.8	-	22.5
<b>Bond funds</b>									
2002 Q3	1,063.3	78.3	902.1	37.2	865.0	32.7	11.6	-	38.5
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
2003 Q2	1,099.5	82.4	927.8	33.0	894.8	31.1	20.9	-	37.3
2003 Q3	1,127.0	93.6	934.7	30.7	904.1	29.1	21.7	-	47.9
2003 Q4 <sup>(p)</sup>	1,086.2	82.5	905.6	31.6	874.0	31.0	21.6	-	45.5
<b>Mixed funds</b>									
2002 Q3	699.9	53.0	291.7	21.3	270.4	234.3	88.1	5.2	27.7
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
2003 Q2	720.8	49.4	311.9	20.9	291.0	237.0	91.9	0.3	30.3
2003 Q3	754.2	50.5	324.0	22.2	301.8	248.4	95.4	0.3	35.6
2003 Q4 <sup>(p)</sup>	783.3	49.5	323.9	22.1	301.9	272.4	100.4	0.3	36.7
<b>Real estate funds</b>									
2002 Q3	145.6	13.3	10.7	0.6	10.1	0.8	5.1	109.5	6.2
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
2003 Q2	161.4	16.5	9.0	0.6	8.5	0.7	9.1	119.8	6.3
2003 Q3	167.7	16.1	9.0	0.6	8.4	0.8	9.5	125.3	6.9
2003 Q4 <sup>(p)</sup>	171.9	13.2	9.3	0.6	8.7	0.8	8.5	132.9	7.4

**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 Q3	2,092.0	187.9	917.6	654.4	156.0	107.9	68.2
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
2003 Q2	2,140.4	181.6	912.3	691.7	168.3	104.2	82.2
2003 Q3	2,249.0	199.0	927.6	736.5	176.6	108.9	100.4
2003 Q4 <sup>(p)</sup>	2,318.1	191.6	913.3	816.1	183.4	115.6	98.0
<b>Special investors' funds</b>							
2002 Q3	754.2	48.8	419.8	190.3	47.5	13.1	34.7
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
2003 Q2	819.1	51.0	470.4	189.2	56.1	16.5	36.0
2003 Q3	836.6	49.3	477.7	195.8	58.0	17.4	38.4
2003 Q4 <sup>(p)</sup>	856.2	43.2	475.7	217.8	60.1	18.3	41.0

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)

	Total		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
<b>Outstanding amounts</b>											
2002 Q2	14,798.9	5,438.1	261.2	4,827.6	1,759.9	1,593.8	1,356.2	117.6	155.0	194.3	278.1
Q3	14,344.4	5,448.4	278.4	4,827.5	1,757.3	1,585.8	1,365.7	118.8	146.3	196.1	289.0
Q4	14,636.2	5,607.9	309.2	4,951.7	1,846.7	1,581.4	1,411.7	111.9	136.4	210.7	293.2
2003 Q1	14,606.4	5,635.1	295.2	4,948.2	1,836.2	1,571.9	1,434.1	106.1	176.2	215.4	323.9
Q2	15,071.3	5,753.8	319.1	5,029.7	1,918.5	1,560.2	1,456.4	94.7	200.3	204.7	329.8
Q3	15,208.8	5,762.8	332.9	5,071.6	1,956.8	1,556.0	1,469.5	89.3	183.9	174.4	344.6
<b>Transactions</b>											
2002 Q2	170.2	97.3	24.5	73.2	73.7	0.9	0.2	-1.7	-2.5	2.1	-10.0
Q3	156.9	7.2	17.2	0.6	-3.1	-7.3	9.4	1.7	-12.5	1.8	9.1
Q4	184.4	169.3	30.8	133.9	82.6	11.8	46.4	-6.9	-9.9	14.5	10.1
2003 Q1	175.5	41.9	7.7	-3.3	-29.5	-11.1	43.0	-5.7	32.8	4.8	32.3
Q2	222.2	136.3	23.8	85.9	83.8	-8.7	22.2	-11.4	24.1	2.5	11.4
Q3	143.1	16.7	14.4	12.6	7.0	-3.6	13.0	-3.9	-13.7	3.4	16.5
<b>Growth rates</b>											
2002 Q2	4.5	4.7	-18.1	6.4	12.3	0.6	6.7	1.8	-6.0	13.8	3.3
Q3	4.8	4.6	-6.4	5.3	10.3	0.0	6.4	-2.6	-3.2	14.0	5.3
Q4	4.4	4.9	33.8	3.5	5.7	0.1	5.3	-3.9	-4.2	11.3	4.0
2003 Q1	4.5	5.9	33.9	4.3	7.3	-0.4	7.3	-10.6	5.1	12.1	13.7
Q2	5.0	6.5	30.4	4.5	7.6	-1.0	8.9	-19.0	22.3	12.1	22.6
Q3	5.1	6.7	27.5	4.7	8.2	-0.7	9.1	-23.5	22.8	12.8	24.3
<b>Securities other than shares</b>											
			<b>Shares<sup>2)</sup></b>				<b>Insurance technical reserves</b>				
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	
<b>Outstanding amounts</b>											
2002 Q2	1,928.4	224.7	1,703.7	4,010.4	2,249.5	1,760.9	297.2	3,422.0	3,086.7	335.3	
Q3	2,021.5	251.2	1,770.3	3,426.5	1,701.1	1,725.4	313.4	3,448.0	3,109.9	338.1	
Q4	2,021.5	244.9	1,776.6	3,487.7	1,779.0	1,708.7	308.2	3,519.1	3,174.7	344.4	
2003 Q1	2,035.8	243.5	1,792.2	3,359.2	1,621.1	1,738.0	392.0	3,576.4	3,226.4	350.0	
Q2	2,001.0	220.4	1,780.6	3,667.9	1,835.7	1,832.2	398.1	3,648.6	3,295.4	353.1	
Q3	2,020.6	220.5	1,800.1	3,718.4	1,856.7	1,861.7	403.2	3,707.0	3,351.3	355.7	
<b>Transactions</b>											
2002 Q2	-12.2	-42.4	30.1	35.1	21.3	13.7	-1.8	50.0	46.0	4.0	
Q3	46.6	27.5	19.1	55.4	31.3	24.1	13.6	47.7	43.7	4.0	
Q4	-20.1	-15.6	-4.5	-23.1	-22.8	-0.3	-8.5	58.2	56.6	1.6	
2003 Q1	-1.7	-4.6	2.9	72.4	10.8	61.6	29.6	62.9	56.0	6.8	
Q2	-38.4	-23.1	-15.2	70.6	35.6	34.9	3.5	53.6	48.8	4.9	
Q3	23.4	1.6	21.8	52.5	32.7	19.8	2.7	50.5	47.1	3.4	
<b>Growth rates</b>											
2002 Q2	4.7	-12.0	7.3	2.7	0.7	5.6	17.8	6.7	6.7	6.4	
Q3	5.6	1.3	6.2	3.1	1.1	5.8	16.2	6.7	6.7	6.0	
Q4	4.2	2.4	4.4	2.4	1.0	4.3	11.3	6.5	6.6	5.7	
2003 Q1	0.7	-13.1	2.9	3.2	1.6	5.3	11.2	6.4	6.6	5.0	
Q2	-0.7	-7.0	0.1	4.4	2.4	6.8	12.9	6.5	6.6	5.1	
Q3	-1.8	-16.6	0.3	5.0	3.3	6.7	8.7	6.5	6.7	4.9	

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)

	<b>Loans taken from euro area MFIs and other financial corporations by</b>												<b>Memo: loans taken from banks outside the euro area by non-banks</b>			
	<b>Total</b>			<b>General government</b>			<b>Non-financial corporations</b>			<b>Households<sup>1)</sup></b>						
	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				
<b>Outstanding amounts</b>																
2002 Q2	15,919.7	7,904.2	7,017.6	874.7	53.4	821.3	3,546.5	1,206.7	2,339.8	3,483.0	287.7	3,195.2	247.3			
Q3	15,361.6	7,949.2	7,053.0	867.0	54.7	812.3	3,553.7	1,188.7	2,365.0	3,528.4	283.8	3,244.6	241.7			
Q4	15,591.7	8,060.4	7,130.6	880.4	60.6	819.8	3,587.2	1,171.9	2,415.3	3,592.9	286.3	3,306.6	242.6			
2003 Q1	15,541.3	8,111.5	7,169.1	872.3	68.3	803.9	3,612.2	1,187.0	2,425.2	3,627.0	276.6	3,350.4	255.9			
Q2	16,089.4	8,211.6	7,236.3	859.7	69.6	790.1	3,659.8	1,211.5	2,448.3	3,692.2	281.0	3,411.2	253.3			
Q3	16,176.6	8,299.4	7,292.0	865.4	70.6	794.8	3,668.9	1,186.7	2,482.2	3,765.1	275.4	3,489.7	274.6			
<b>Transactions</b>																
2002 Q2	187.2	113.0	82.7	-25.3	0.1	-25.4	64.7	-3.4	68.1	73.6	9.4	64.2	-18.0			
Q3	111.3	43.1	34.6	-8.0	1.3	-9.2	2.4	-17.7	20.1	48.7	-3.9	52.7	-7.1			
Q4	143.6	120.6	94.0	14.0	5.9	8.1	48.6	-10.8	59.3	58.1	3.3	54.8	7.5			
2003 Q1	246.7	80.6	66.0	-0.3	8.0	-8.2	38.6	14.6	24.0	42.3	-7.5	49.8	5.6			
Q2	236.8	114.8	84.0	-10.3	3.3	-13.6	56.4	30.1	26.3	68.7	5.0	63.6	2.6			
Q3	142.9	84.6	58.7	5.7	1.0	4.7	4.8	-21.8	26.6	74.1	-4.8	79.0	22.4			
<b>Growth rates</b>																
2002 Q2	4.2	5.0	4.4	-0.6	26.7	-2.0	5.3	-3.6	10.7	6.2	0.6	6.8	-9.1			
Q3	4.1	4.4	4.0	-0.8	20.9	-2.0	3.7	-3.8	8.0	6.5	0.7	7.0	-4.5			
Q4	3.9	4.4	4.0	-2.0	21.2	-3.4	3.9	-3.1	7.8	6.5	1.5	7.0	-2.9			
2003 Q1	4.2	4.6	4.0	-2.2	28.5	-4.1	4.4	-1.4	7.5	6.5	0.4	7.1	-4.3			
Q2	4.6	4.5	4.0	-0.5	34.5	-2.8	4.1	1.3	5.5	6.3	-1.1	6.9	3.5			
Q3	5.0	5.0	4.3	1.0	33.1	-1.1	4.2	1.0	5.8	6.9	-1.4	7.6	15.7			
<b>Securities other than shares issued by</b>																
	<b>Total</b>									<b>Quoted shares issued by non-financial corporations</b>	<b>Deposit liabilities of central government</b>	<b>Pension fund reserves of non- financial corporations</b>				
	<b>General government</b>			<b>Non-financial corporations</b>												
	Total	Short-term	Long-term	Total	Short-term	Long-term	14	15	16	17	18	19	20	21	22	23
<b>Outstanding amounts</b>																
2002 Q2	4,530.1	4,008.3	481.6	3,526.7	521.8	130.3	391.5	3,034.8	191.3	259.3						
Q3	4,667.1	4,130.1	479.8	3,650.2	537.1	137.7	399.4	2,289.2	193.0	263.1						
Q4	4,678.3	4,134.3	480.0	3,654.3	544.0	144.7	399.3	2,379.9	207.5	265.7						
2003 Q1	4,836.9	4,265.7	529.7	3,736.0	571.3	167.1	404.2	2,111.5	212.4	269.1						
Q2	4,956.1	4,365.4	563.4	3,802.0	590.6	165.5	425.1	2,447.6	201.6	272.5						
Q3	4,958.1	4,369.0	557.5	3,811.5	589.1	164.5	424.7	2,471.4	171.3	276.5						
<b>Transactions</b>																
2002 Q2	61.0	62.0	33.9	28.1	-1.0	-14.5	13.6	7.8	2.1	3.3						
Q3	56.9	46.5	-0.9	47.4	10.4	7.5	2.9	5.8	1.7	3.8						
Q4	3.6	-0.3	-8.3	8.1	3.8	6.9	-3.1	2.4	14.5	2.5						
2003 Q1	158.1	129.1	50.8	78.3	29.0	22.3	6.7	-0.2	4.9	3.4						
Q2	100.7	83.8	33.9	49.9	16.9	-1.5	18.4	15.5	2.4	3.4						
Q3	46.4	46.7	-5.2	52.0	-0.3	-1.0	0.7	4.5	3.4	3.9						
<b>Growth rates</b>																
2002 Q2	5.2	4.6	9.6	4.0	9.7	3.8	11.8	0.9	14.1	4.7						
Q3	5.2	5.0	7.3	4.7	7.2	-1.6	10.7	1.2	14.1	4.9						
Q4	5.1	5.2	10.6	4.5	4.3	3.8	4.5	0.7	11.4	5.2						
2003 Q1	6.3	6.1	16.9	4.7	8.0	15.3	5.3	0.4	12.2	5.1						
Q2	7.0	6.5	15.6	5.2	11.5	27.0	6.3	0.8	12.3	5.1						
Q3	6.6	6.3	14.8	5.2	9.2	19.4	5.7	1.0	13.1	5.1						

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 Q2	3,458.0	503.9	48.4	432.9	3.7	19.0	331.7	65.2	266.5	1,248.2	40.5	1,207.7
Q3	3,385.5	506.3	50.1	437.9	3.9	14.4	334.3	69.2	265.1	1,309.8	51.5	1,258.3
Q4	3,480.8	523.1	55.9	445.9	3.5	17.9	336.9	70.5	266.4	1,356.5	54.1	1,302.4
2003 Q1	3,496.5	535.8	61.7	454.2	1.6	18.3	341.4	71.7	269.7	1,410.4	63.7	1,346.7
Q2	3,638.5	537.8	63.8	450.5	1.3	22.3	345.4	73.5	271.9	1,438.3	58.9	1,379.4
Q3	3,700.8	532.7	57.3	455.3	1.4	18.7	345.3	73.0	272.3	1,472.0	61.7	1,410.3
	Transactions											
2002 Q2	25.7	5.3	4.5	-0.1	-0.3	1.2	5.5	4.3	1.3	-6.2	-12.3	6.2
Q3	56.8	2.5	1.7	5.1	0.3	-4.6	1.1	2.5	-1.4	40.8	9.7	31.1
Q4	65.8	16.8	5.8	8.0	-0.4	3.5	3.1	1.5	1.6	35.0	2.2	32.7
2003 Q1	92.5	12.6	4.2	7.8	0.1	0.5	7.6	3.8	3.9	58.0	10.5	47.5
Q2	47.4	2.3	2.2	-3.9	0.0	3.9	7.1	4.3	2.8	16.4	-5.0	21.4
Q3	42.4	-6.5	-6.6	3.8	0.1	-3.8	3.1	2.1	1.0	33.0	2.8	30.1
	Growth rates											
2002 Q2	7.4	3.6	17.0	2.0	-5.0	12.2	4.6	19.0	1.8	7.6	-28.6	9.4
Q3	8.2	3.8	27.6	2.6	4.5	-19.6	4.8	21.8	1.4	10.1	-2.6	10.6
Q4	7.3	5.6	16.3	4.3	1.9	8.5	4.1	16.7	1.3	10.6	17.4	10.4
2003 Q1	6.7	7.5	37.0	4.8	-10.5	3.3	5.4	20.2	2.0	10.2	19.2	9.8
Q2	7.6	6.8	28.8	3.9	-1.9	17.4	5.7	18.5	2.6	12.0	43.1	11.0
Q3	7.3	5.0	11.3	3.6	-5.4	28.2	6.3	16.8	3.5	10.9	20.5	10.5

	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	14
	Outstanding amounts														
2002 Q2	1,266.6	673.7	593.0	51.3	107.6	3,550.2	56.0	42.5	10.7	226.5	3,257.0	2,758.8	498.2		
Q3	1,124.9	564.5	560.3	50.4	110.3	3,477.6	56.5	42.1	10.8	127.2	3,283.2	2,778.4	504.8		
Q4	1,152.7	584.8	567.9	57.3	111.6	3,514.1	43.5	33.0	10.9	113.3	3,346.4	2,839.5	506.9		
2003 Q1	1,094.7	535.5	559.2	60.9	114.2	3,577.8	55.5	42.4	11.1	103.3	3,408.0	2,892.4	515.5		
Q2	1,200.9	605.9	594.9	65.3	116.1	3,685.4	58.1	44.8	11.2	136.5	3,479.5	2,958.4	521.1		
Q3	1,233.2	628.3	604.9	61.5	117.6	3,745.2	59.8	44.3	11.6	135.8	3,538.0	3,012.7	525.3		
	Transactions														
2002 Q2	18.8	7.0	11.8	2.6	2.3	51.4	3.2	3.7	0.4	0.1	47.8	41.9	6.0		
Q3	9.7	7.0	2.7	-1.4	2.6	43.7	-2.0	-2.5	0.0	0.0	45.7	39.3	6.4		
Q4	9.5	-3.6	13.1	7.1	1.4	44.4	-11.4	-9.1	0.0	0.4	55.4	53.4	2.1		
2003 Q1	11.6	-0.1	11.7	2.0	2.6	79.1	13.8	11.2	-0.1	-0.1	65.5	55.5	9.9		
Q2	19.6	5.3	14.3	4.6	2.0	61.1	2.8	2.6	0.1	4.5	53.7	46.4	7.3		
Q3	11.4	6.2	5.2	-4.3	1.5	54.1	1.7	-0.5	0.5	1.3	50.7	45.6	5.0		
	Growth rates														
2002 Q2	8.2	7.1	9.6	7.8	22.4	7.0	10.0	18.2	13.3	2.3	7.4	7.0	9.8		
Q3	8.0	6.1	10.2	6.3	21.6	6.8	3.0	6.8	13.0	0.3	7.3	6.9	9.5		
Q4	5.5	3.9	7.4	20.7	11.3	6.0	-13.6	-11.5	6.1	0.3	6.7	6.8	6.2		
2003 Q1	3.6	1.3	6.4	21.0	8.5	6.1	6.7	8.5	3.1	0.2	6.6	6.9	5.0		
Q2	4.0	1.3	7.0	23.9	8.1	6.4	5.5	5.2	0.9	2.1	6.8	7.1	5.2		
Q3	4.6	1.4	7.9	18.5	6.8	6.9	12.0	10.1	4.8	4.8	6.9	7.2	4.8		

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	339.9	1,122.4	-783.9	1.1	0.4	1,730.6	-3.0	395.3	397.7	383.7	313.2	193.6	50.2
1997	352.3	1,139.3	-797.1	10.1	0.0	1,913.3	-0.2	394.4	332.2	449.8	485.7	222.0	29.3
1998	413.2	1,203.5	-823.6	33.2	0.2	2,397.5	11.0	422.7	357.5	522.9	844.7	215.9	22.9
1999	449.7	1,292.4	-863.7	20.8	0.2	3,062.8	1.3	557.7	427.3	881.5	905.1	261.1	28.8
2000	488.0	1,391.2	-913.1	26.6	-16.7	2,802.0	1.3	349.6	267.7	809.1	1,126.4	252.9	-5.0
2001	464.7	1,443.7	-973.6	-7.4	1.9	2,583.1	-0.5	575.8	430.5	730.3	630.8	243.1	-26.9
2002	404.7	1,430.5	-1,014.4	-12.8	1.4	2,157.6	0.9	581.3	325.3	519.1	485.1	228.6	17.2

	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	1,659.8	472.4	383.4	334.9	272.9	196.3
1997	455.7	1,241.8	-797.1	11.0	1,809.9	511.6	317.7	378.5	372.2	229.9
1998	486.5	1,299.1	-823.6	11.1	2,324.2	648.4	323.0	481.9	649.3	221.5
1999	498.0	1,352.0	-863.7	9.7	3,014.5	929.1	502.9	760.5	557.5	264.5
2000	514.9	1,419.4	-913.1	8.6	2,775.1	532.3	416.1	851.4	722.3	253.0
2001	485.4	1,449.4	-973.6	9.6	2,562.5	661.4	492.4	608.0	550.1	250.7
2002	496.3	1,499.1	-1,014.4	11.6	2,066.0	528.9	452.8	466.7	376.4	241.1

#### 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	258.5	54.1	-13.9	55.1	87.5	119.5	514.5	270.5	7.0	143.5	112.4
1997	150.4	592.0	-453.3	239.7	25.3	-13.0	46.3	97.0	105.2	521.5	285.0	12.1	153.7	109.7
1998	193.8	635.2	-470.6	424.7	45.7	-9.9	96.3	203.1	147.8	569.2	470.7	22.8	252.8	184.4
1999	212.0	684.5	-490.9	604.7	26.9	88.9	169.1	299.1	107.7	548.7	709.0	47.2	423.3	222.0
2000	309.7	750.3	-522.9	829.4	71.8	89.0	193.0	457.7	84.4	560.4	1,054.7	61.6	559.6	425.5
2001	219.2	774.3	-554.8	626.6	101.2	39.7	142.1	246.5	88.2	583.5	757.6	102.5	324.0	319.6
2002	173.0	758.1	-579.2	368.7	19.2	14.8	46.7	264.7	115.3	634.1	426.4	22.3	204.9	185.4

#### 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	168.2	384.6	-216.8	438.4	146.2	25.1	93.0	189.0	445.2	646.9	161.3	160.1	3,789.9	17.1
1997	166.5	377.5	-211.7	426.3	70.4	-19.0	193.7	215.8	424.2	617.3	168.5	167.1	3,818.0	16.2
1998	178.3	389.7	-216.4	442.0	96.3	-118.8	288.0	210.7	408.1	594.6	212.1	210.8	3,925.4	15.1
1999	189.4	418.5	-231.5	472.0	119.2	-24.0	189.7	247.6	392.9	582.0	268.5	266.9	4,088.5	14.2
2000	195.8	440.9	-241.7	422.4	65.6	41.7	114.1	247.0	396.1	598.3	222.1	220.4	4,278.8	14.0
2001	185.4	454.0	-264.1	408.9	175.3	86.8	59.4	223.6	425.3	653.0	169.0	167.2	4,574.4	14.3
2002	180.2	462.3	-275.4	494.6	219.7	63.0	-4.2	215.7	465.2	705.1	209.6	207.5	4,737.9	14.9

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

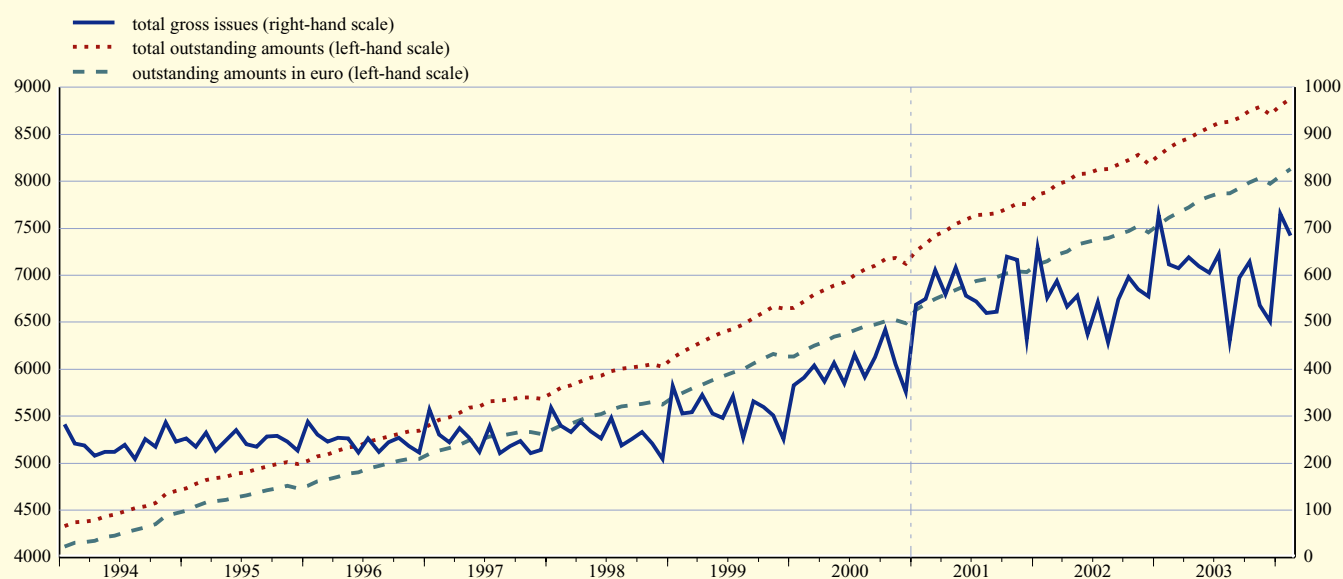
## 4.1 Securities issues other than shares by original maturity, residency of the issuer and currency

(EUR billions unless otherwise indicated, transactions during the month and end-of-period outstanding 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
Total												
2003 Feb.	8,673.7	627.5	544.5	82.9	8,354.7	622.5	541.7	80.7	91.1	93.3	94.6	68.1
Mar.	8,777.1	641.8	538.6	103.3	8,416.1	614.7	547.5	67.2	91.1	94.3	94.9	60.5
Apr.	8,819.1	635.9	593.7	42.2	8,458.1	637.5	582.2	55.2	91.3	94.4	94.2	53.2
May	8,914.0	624.7	529.1	95.6	8,517.4	619.0	536.3	82.7	91.6	93.4	93.6	76.0
June	8,994.2	636.3	556.4	79.9	8,570.3	606.0	565.3	40.7	91.4	93.7	93.9	36.9
July	9,027.0	648.6	616.2	32.3	8,618.2	644.9	601.6	43.3	91.3	93.1	94.3	32.9
Aug.	9,032.5	470.2	465.4	4.8	8,631.6	461.5	463.8	-2.3	91.2	93.9	92.6	3.8
Sep.	9,123.5	615.6	523.7	91.9	8,676.9	594.8	530.0	64.8	91.4	93.4	94.2	56.1
Oct.	9,180.7	634.8	578.5	56.3	8,750.1	628.2	560.8	67.4	91.3	93.8	94.8	57.7
Nov.	9,246.4	554.8	491.8	63.1	8,787.1	535.6	490.3	45.3	91.4	93.1	92.4	45.6
Dec.	9,209.9	520.0	552.9	-33.0	8,711.3	502.1	556.6	-54.5	91.6	93.7	94.6	-55.8
2004 Jan.	.	.	.	.	8,803.1	730.5	644.0	86.5	91.5	94.3	94.7	78.4
Feb.	.	.	.	.	8,880.5	684.4	603.5	80.9	91.5	94.5	94.3	77.9
Long-term												
2003 Feb.	7,842.2	172.5	120.9	51.6	7,485.9	164.8	112.2	52.6	91.2	88.6	92.0	42.7
Mar.	7,912.6	175.3	105.2	70.1	7,537.8	162.4	106.2	56.2	91.3	90.2	90.1	50.9
Apr.	7,953.3	165.3	125.1	40.3	7,563.2	159.7	125.1	34.6	91.4	91.3	92.5	30.1
May	8,041.4	186.9	98.7	88.2	7,617.1	174.9	99.7	75.1	91.7	92.2	90.4	71.0
June	8,111.5	185.1	115.7	69.5	7,690.0	170.6	110.0	60.6	91.5	91.0	91.6	54.4
July	8,163.8	197.9	146.3	51.6	7,738.7	185.1	140.6	44.5	91.3	88.2	95.0	29.6
Aug.	8,176.1	86.4	75.7	10.7	7,765.4	79.0	69.9	9.1	91.1	88.0	90.2	6.5
Sep.	8,253.3	179.9	101.9	77.9	7,817.7	173.4	101.9	71.4	91.4	91.7	90.1	67.0
Oct.	8,307.9	178.5	125.2	53.3	7,869.8	167.0	119.7	47.3	91.3	92.0	94.4	40.7
Nov.	8,357.8	142.5	94.0	48.5	7,905.0	135.8	90.5	45.3	91.4	89.4	88.0	41.8
Dec.	8,351.0	118.9	120.7	-1.8	7,880.0	111.8	114.9	-3.1	91.6	90.4	93.0	-5.9
2004 Jan.	.	.	.	.	7,930.8	180.8	138.4	42.5	91.5	91.7	90.9	40.0
Feb.	.	.	.	.	8,014.9	182.8	97.6	85.2	91.6	92.0	88.3	82.0

## 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)

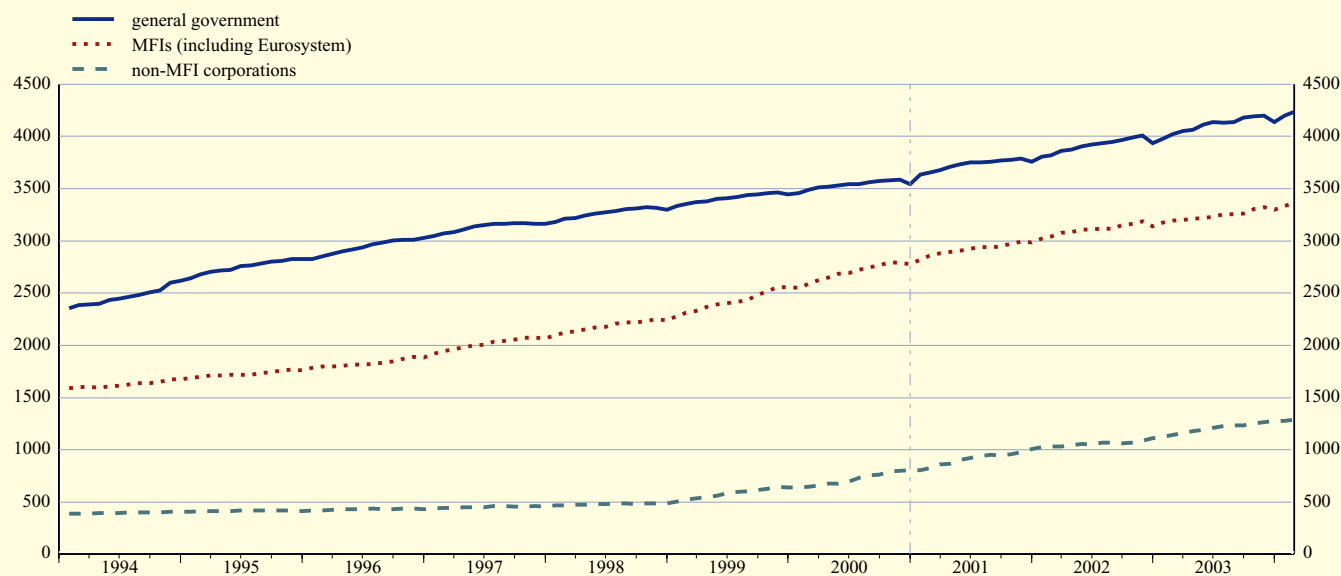
### 1. Outstanding amounts

(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 Feb.	8,354.7	3,192.9	579.2	564.2	3,829.6	188.9	91.1	85.5	83.8	87.0	97.2	95.9
Mar.	8,416.1	3,202.6	587.9	572.9	3,860.9	191.7	91.1	85.4	84.3	87.6	97.2	96.0
Apr.	8,458.1	3,213.3	600.9	577.5	3,870.8	195.7	91.3	85.6	84.9	87.8	97.3	95.7
May	8,517.4	3,215.9	602.8	585.1	3,914.9	198.6	91.6	85.9	85.6	88.2	97.4	95.7
June	8,570.3	3,227.8	620.3	586.9	3,932.1	203.0	91.4	85.6	85.7	88.2	97.3	95.7
July	8,618.2	3,255.9	639.1	589.5	3,929.3	204.5	91.3	85.5	85.5	88.0	97.3	95.5
Aug.	8,631.6	3,256.6	643.4	592.5	3,934.8	204.3	91.2	85.5	85.3	87.8	97.2	95.4
Sep.	8,676.9	3,262.3	651.6	584.9	3,969.1	209.0	91.4	85.4	86.3	88.1	97.4	95.5
Oct.	8,750.1	3,303.4	663.0	590.3	3,980.9	212.6	91.3	85.2	86.6	87.9	97.4	95.5
Nov.	8,787.1	3,325.3	670.8	590.4	3,983.5	217.1	91.4	85.4	87.0	88.1	97.5	95.6
Dec.	8,711.3	3,300.2	685.3	589.3	3,918.4	218.1	91.6	85.4	87.8	88.2	97.7	95.4
2004 Jan.	8,803.1	3,332.6	685.9	588.4	3,974.6	221.6	91.5	85.3	87.7	87.9	97.6	95.5
Feb.	8,880.5	3,360.9	694.5	591.2	4,006.1	227.8	91.5	85.5	88.0	87.8	97.6	95.6
	Long-term											
2003 Feb.	7,485.9	2,795.3	570.4	462.7	3,472.3	185.2	91.2	86.3	83.6	85.4	97.0	96.0
Mar.	7,537.8	2,809.1	578.9	469.4	3,492.4	188.1	91.3	86.2	84.0	86.0	97.0	96.1
Apr.	7,563.2	2,817.7	592.2	473.2	3,488.2	192.0	91.4	86.2	84.7	86.2	97.2	95.8
May	7,617.1	2,824.3	594.3	478.5	3,525.4	194.6	91.7	86.6	85.4	86.6	97.3	95.9
June	7,690.0	2,848.1	611.6	486.1	3,545.1	199.0	91.5	86.2	85.5	86.8	97.2	95.9
July	7,738.7	2,878.6	630.4	488.5	3,541.1	200.0	91.3	86.0	85.3	86.6	97.2	95.7
Aug.	7,765.4	2,894.5	634.7	491.4	3,544.4	200.4	91.1	85.7	85.1	86.4	97.1	95.5
Sep.	7,817.7	2,905.6	643.6	487.4	3,575.7	205.5	91.4	85.8	86.2	86.8	97.2	95.7
Oct.	7,869.8	2,937.7	654.9	490.6	3,577.4	209.2	91.3	85.6	86.5	86.6	97.3	95.6
Nov.	7,905.0	2,951.8	662.5	493.6	3,583.4	213.7	91.4	85.7	86.9	86.9	97.4	95.8
Dec.	7,880.0	2,940.2	676.3	497.4	3,551.5	214.6	91.6	85.8	87.7	87.2	97.5	95.5
2004 Jan.	7,930.8	2,957.7	677.3	492.4	3,585.9	217.6	91.5	85.7	87.6	86.6	97.5	95.6
Feb.	8,014.9	2,993.9	686.4	494.9	3,616.4	223.3	91.6	85.8	87.9	86.6	97.5	95.7

### 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)

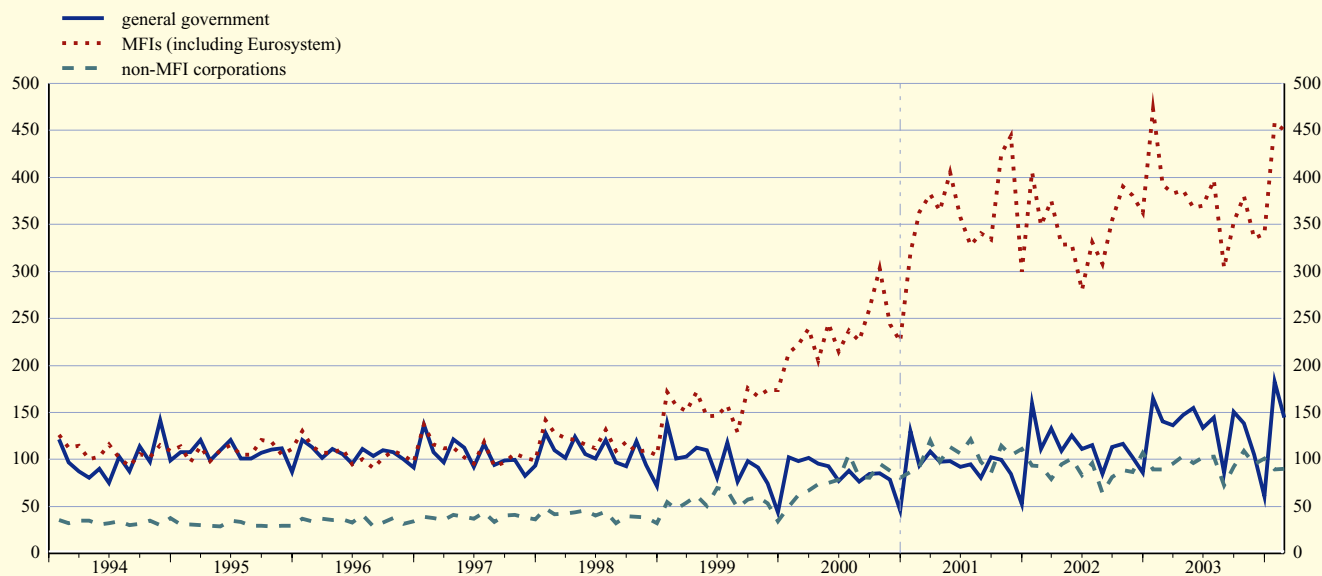
## 2. Gross issues

(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 Feb.	622.5	392.3	20.9	68.7	131.8	8.8	93.3	92.6	81.5	95.5	95.9	95.4
Mar.	614.7	382.7	20.8	74.9	129.9	6.4	94.3	92.8	87.6	98.0	97.6	99.1
Apr.	637.5	386.5	22.7	81.0	140.9	6.5	94.4	92.9	94.9	96.4	97.5	86.3
May	619.0	367.6	14.8	81.5	149.2	5.9	93.4	92.2	84.3	94.6	96.8	90.5
June	606.0	370.0	23.5	79.1	125.2	8.2	93.7	91.8	96.1	97.0	96.8	94.9
July	644.9	397.3	26.6	76.6	138.6	5.8	93.1	92.1	83.2	94.5	96.9	91.2
Aug.	461.5	303.6	8.7	63.6	82.3	3.4	93.9	92.3	91.8	96.6	97.7	93.1
Sep.	594.8	351.9	22.1	70.2	140.7	9.9	93.4	90.3	98.7	96.5	98.5	96.5
Oct.	628.2	380.2	21.4	87.9	130.7	8.0	93.8	91.6	95.8	96.3	98.1	94.0
Nov.	535.6	335.3	20.5	74.5	97.4	7.8	93.1	92.0	85.7	95.8	96.2	98.2
Dec.	502.1	339.7	28.3	73.0	55.5	5.6	93.7	92.6	97.1	94.6	99.3	79.8
2004 Jan.	730.5	458.5	8.5	80.7	173.6	9.2	94.3	92.9	90.8	95.8	97.1	97.5
Feb.	684.4	450.0	17.3	72.5	136.1	8.5	94.5	93.2	95.6	96.1	97.5	97.8
	Long-term											
2003 Feb.	164.8	65.7	17.5	9.3	65.7	6.6	88.6	84.3	77.9	93.1	94.2	96.5
Mar.	162.4	65.4	18.2	10.6	64.4	3.8	90.2	82.1	85.8	98.3	97.9	99.0
Apr.	159.7	61.3	19.9	8.4	65.7	4.5	91.3	82.6	94.2	85.3	100.0	81.9
May	174.9	61.6	11.8	12.4	85.6	3.5	92.2	87.8	80.3	84.0	98.2	91.8
June	170.6	68.7	20.1	12.8	63.0	5.9	91.0	81.8	95.4	99.0	97.5	95.2
July	185.1	74.4	24.1	9.9	73.5	3.2	88.2	82.6	81.5	80.1	97.0	87.5
Aug.	79.0	44.8	6.2	3.4	23.0	1.6	88.0	82.3	88.5	98.7	97.2	91.3
Sep.	173.4	64.9	19.0	3.6	78.8	7.1	91.7	79.6	98.6	97.8	99.0	98.8
Oct.	167.0	74.4	17.6	10.6	58.9	5.5	92.0	84.9	96.1	89.5	100.0	94.5
Nov.	135.8	62.6	16.8	9.7	40.9	5.8	89.4	87.0	84.1	90.2	93.5	99.6
Dec.	111.8	62.7	25.0	9.5	11.4	3.2	90.4	88.5	97.6	81.3	98.6	68.1
2004 Jan.	180.8	75.1	5.0	7.4	86.9	6.3	91.7	84.8	88.7	80.6	98.2	99.4
Feb.	182.8	85.9	15.1	5.6	70.2	6.0	92.0	86.0	96.0	87.4	98.2	99.0

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

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



Source: ECB.

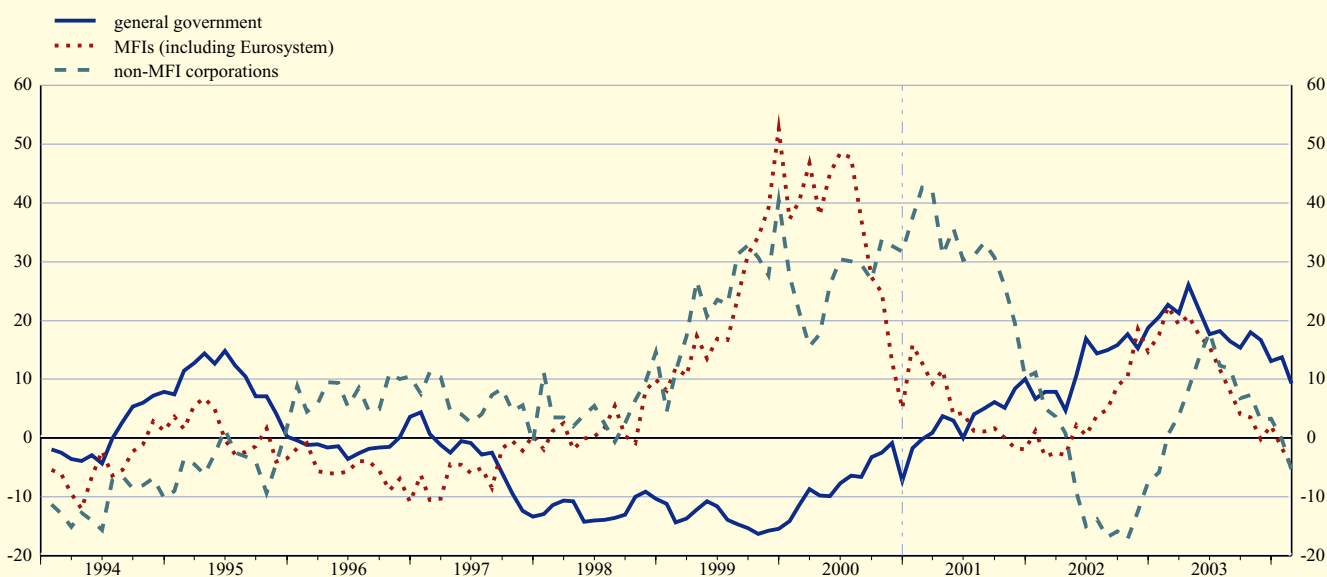
### 4.3 Annual growth rates of securities other than shares issued by euro area residents <sup>1)</sup>

(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 Feb.	7.0	108.7	5.8	15.6	26.4	6.0	5.7	4.6	33.7	19.2	125.2	22.4	0.6	29.9
Mar.	6.8	109.6	4.9	17.1	27.3	8.0	5.5	4.5	31.8	17.9	126.8	19.4	3.8	28.4
Apr.	6.9	110.3	5.1	17.7	27.3	9.0	5.5	4.4	30.6	21.2	129.8	20.9	8.3	20.1
May	6.8	111.4	4.5	17.1	24.6	10.0	5.8	4.9	27.6	18.8	130.9	17.4	13.7	31.0
June	6.8	111.9	4.3	18.8	27.3	10.9	5.7	4.7	28.3	16.8	128.0	15.5	18.0	29.0
July	6.9	112.5	4.8	18.8	28.3	9.9	5.5	4.7	21.9	14.6	127.8	11.7	12.3	22.9
Aug.	6.8	112.4	4.7	19.0	28.0	10.6	5.1	4.4	21.0	12.2	126.2	8.0	11.8	18.6
Sep.	6.9	113.3	4.6	18.3	28.5	8.7	5.7	4.9	23.3	9.4	125.2	4.0	6.8	17.0
Oct.	7.2	114.1	5.4	19.1	28.9	9.7	5.4	4.6	21.4	10.3	128.1	3.6	7.3	14.0
Nov.	6.9	114.7	5.2	18.5	27.7	9.6	5.2	4.4	23.0	7.3	128.1	-0.2	3.0	9.9
Dec.	7.3	114.0	6.1	16.9	23.5	10.0	5.5	4.7	22.2	6.8	120.7	2.1	3.3	20.8
2004 Jan.	7.0	115.2	5.8	15.0	23.0	7.0	5.7	4.9	21.7	4.9	127.1	-1.7	-0.1	16.8
Feb.	6.9	116.2	6.1	13.8	21.5	5.9	5.6	4.9	20.9	1.0	126.4	-4.9	-5.4	-7.9
	In euro													
2003 Feb.	6.5	108.2	4.4	17.6	31.5	6.2	5.4	4.4	33.1	20.0	127.0	25.8	-0.5	28.3
Mar.	6.3	109.0	3.5	19.4	32.3	8.8	5.3	4.3	31.0	18.4	128.6	21.5	2.7	26.6
Apr.	6.5	109.8	3.8	20.3	32.8	9.8	5.3	4.4	29.3	23.1	132.4	26.1	7.3	18.4
May	6.5	110.9	3.4	19.8	30.2	11.0	5.6	4.7	26.3	20.3	133.2	20.9	13.7	29.1
June	6.5	111.4	3.0	22.2	33.7	12.3	5.5	4.6	27.0	18.1	130.3	18.4	17.5	29.2
July	6.7	111.9	3.7	22.0	34.5	11.1	5.2	4.5	20.4	16.7	130.9	15.8	12.1	23.0
Aug.	6.5	111.9	3.6	22.3	34.4	11.8	4.9	4.2	19.5	14.7	130.4	13.4	11.0	18.6
Sep.	6.6	112.7	3.2	21.7	35.2	9.7	5.5	4.8	21.7	11.4	128.6	8.4	6.0	16.9
Oct.	6.9	113.5	4.1	22.7	36.2	10.6	5.3	4.6	20.8	12.5	131.4	7.6	6.9	14.3
Nov.	6.8	114.2	4.1	21.7	34.0	10.4	5.1	4.4	22.3	9.3	132.0	3.0	2.3	9.6
Dec.	7.0	113.4	4.9	19.2	27.5	10.8	5.5	4.7	21.2	8.8	123.9	5.5	2.9	19.2
2004 Jan.	6.8	114.5	4.8	16.9	26.9	7.1	5.7	5.0	21.0	5.9	130.1	-0.7	-0.9	16.5
Feb.	6.9	115.6	5.3	15.8	25.9	5.9	5.8	5.1	20.3	1.9	129.5	-3.9	-5.8	-8.4

### C16 Short-term debt securities by sector of the issuer in all currencies combined

(annual percentage changes based on nominal end-of-period outstanding amounts)



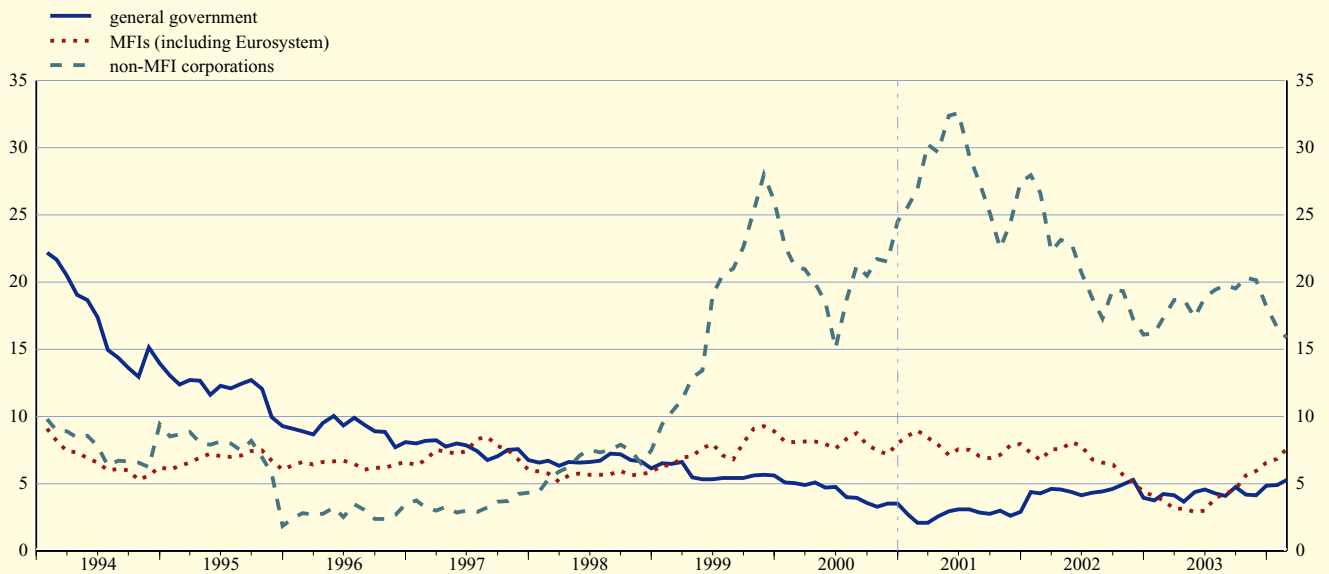
Source: ECB.

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>  
(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													
-1.3	22.7	23.0	0.6	5.7	107.0	3.8	17.3	26.3	7.7	4.2	3.0	34.6	2003 Feb.
2.1	21.2	21.4	5.7	5.6	107.8	3.2	18.7	27.3	9.3	4.1	3.0	32.4	Mar.
7.4	26.0	26.1	18.1	5.4	108.3	3.2	18.7	27.4	9.3	3.7	2.5	30.9	Apr.
12.5	21.7	21.7	22.5	5.5	109.4	2.9	17.4	24.5	9.5	4.4	3.4	27.7	May
17.1	17.7	17.7	18.7	5.8	110.3	3.0	18.9	27.2	9.7	4.6	3.5	28.5	June
11.5	18.2	18.2	18.9	6.1	110.9	4.0	19.5	28.4	9.6	4.3	3.5	22.0	July
11.2	16.5	16.6	2.5	6.2	111.1	4.2	19.8	28.1	10.5	4.1	3.2	21.4	Aug.
6.0	15.4	15.4	14.5	6.6	112.1	4.6	19.5	28.7	9.3	4.7	3.8	23.4	Sep.
6.8	18.0	18.2	-2.9	6.8	112.8	5.6	20.3	29.1	10.3	4.2	3.3	21.9	Oct.
2.5	16.7	16.9	-3.7	6.9	113.4	5.9	20.1	27.9	11.1	4.1	3.2	23.5	Nov.
1.8	13.1	13.3	-5.6	7.3	113.4	6.6	18.2	23.5	11.7	4.8	3.9	22.8	Dec.
-1.4	13.8	13.6	31.0	7.2	114.0	6.8	16.6	23.0	8.8	4.9	4.0	21.5	2004 Jan.
-5.2	9.3	9.2	20.9	7.6	115.2	7.6	15.8	22.0	8.3	5.3	4.5	20.9	Feb.
In euro													
-2.5	22.3	22.7	-9.0	5.1	106.4	2.1	20.2	31.6	8.6	4.0	2.7	34.2	2003 Feb.
0.9	21.0	21.3	-2.7	5.1	107.2	1.5	21.7	32.4	10.9	3.9	2.8	31.8	Mar.
6.4	25.8	26.0	8.9	4.9	107.6	1.4	22.0	33.1	10.6	3.5	2.4	29.7	Apr.
12.6	21.8	21.9	17.6	5.1	108.7	1.5	20.6	30.2	10.6	4.1	3.1	26.5	May
16.5	17.9	18.0	14.4	5.4	109.6	1.4	22.8	33.8	11.4	4.3	3.3	27.3	June
11.2	18.7	18.7	14.4	5.6	110.0	2.3	23.2	34.7	11.1	4.0	3.2	20.5	July
10.4	16.8	17.0	1.1	5.6	110.1	2.5	23.7	34.7	12.1	3.8	3.0	19.9	Aug.
5.1	15.4	15.4	14.5	6.1	111.2	2.6	23.6	35.5	10.8	4.6	3.7	21.9	Sep.
6.3	18.1	18.3	-5.1	6.3	111.8	3.7	24.6	36.5	11.5	4.0	3.2	21.2	Oct.
1.7	16.9	17.1	-7.0	6.5	112.5	4.3	24.0	34.4	12.4	4.0	3.1	22.9	Nov.
1.5	13.3	13.5	-4.7	6.8	112.4	4.8	21.0	27.6	12.8	4.7	3.9	21.7	Dec.
-2.2	13.9	13.7	40.2	6.9	113.0	5.5	19.0	27.0	9.3	4.9	4.1	20.7	2004 Jan.
-5.5	9.3	9.2	23.3	7.4	114.3	6.4	18.4	26.5	8.6	5.4	4.6	20.2	Feb.

C17 Long-term debt securities by sector of the issuer in all currencies combined  
(annual percentage changes based on nominal end-of-period outstanding amounts)



Source: ECB.

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

(EUR billions unless otherwise indicated; market values)

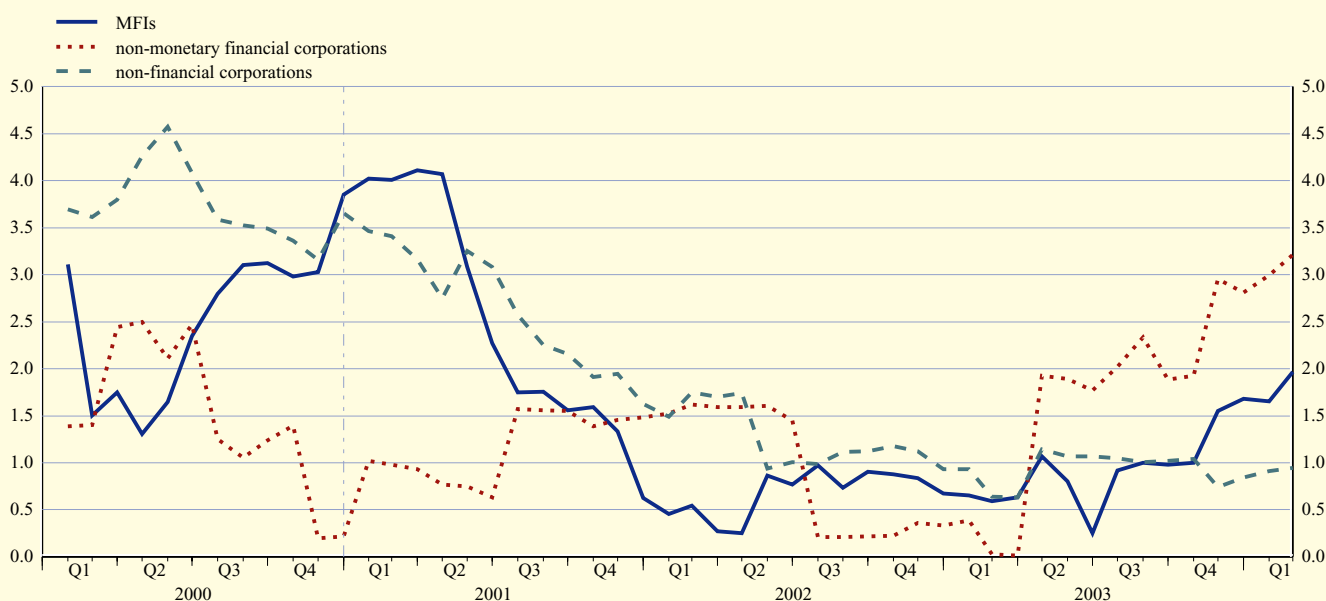
##### 1. Outstanding amounts and annual growth rates

(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 Feb.	4,545.5	100.2	1.6	622.5	0.5	509.8	1.6	3,413.2	1.7
Mar.	4,754.7	100.3	1.5	665.3	0.3	536.6	1.6	3,552.8	1.7
Apr.	4,571.1	100.3	1.5	678.1	0.2	517.4	1.6	3,375.5	1.7
May	4,433.2	100.4	1.0	666.3	0.9	484.8	1.6	3,282.1	0.9
June	4,119.4	100.5	1.0	614.9	0.8	463.4	1.5	3,041.2	1.0
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	100.7	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	0.4	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	0.7	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	1.0
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	101.8	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	101.9	1.1	549.5	1.6	337.9	3.0	2,659.5	0.7
Dec.	3,647.3	102.0	1.2	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.	3,851.7	102.1	1.3	587.9	2.0	371.5	3.2	2,892.3	0.9

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

(annual percentage changes)



Source: ECB.

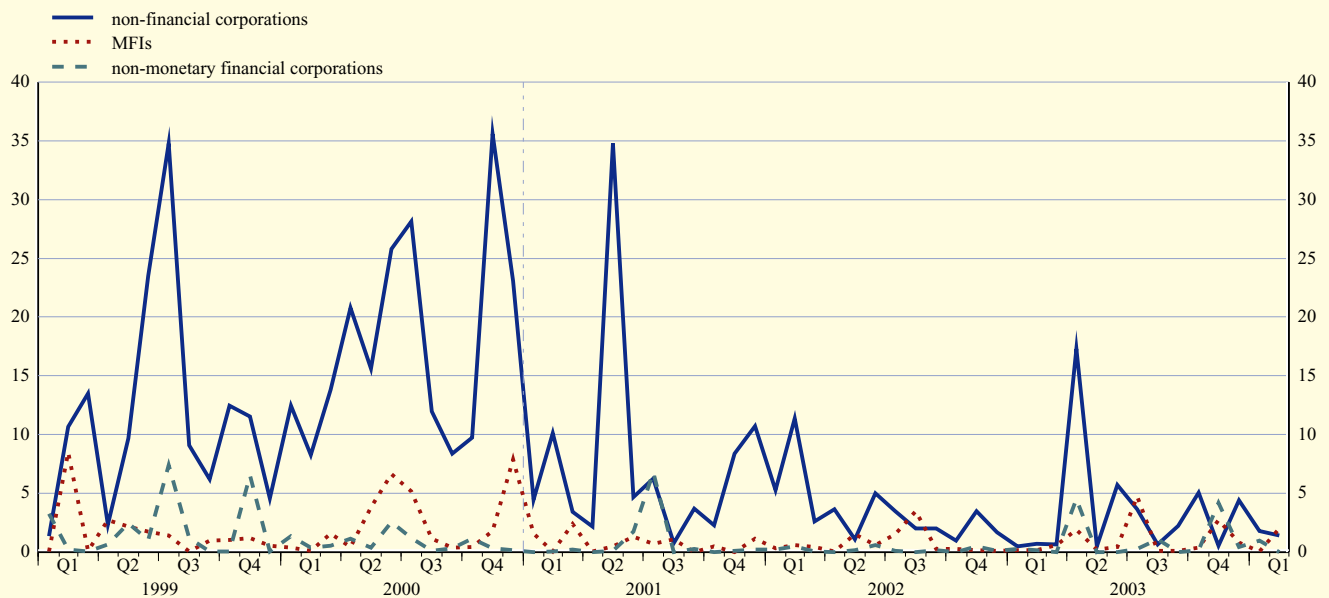
1) For the calculation of the index and the growth rates, see the technical notes.

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 Feb.	12.4	1.1	11.3	0.6	0.0	0.6	0.5	0.0	0.5	11.3	1.1	10.2
Mar.	3.1	2.3	0.8	0.4	0.0	0.4	0.0	0.0	0.0	2.6	2.2	0.4
Apr.	3.7	0.5	3.2	0.0	0.1	-0.1	0.0	0.0	0.0	3.7	0.3	3.3
May	2.7	0.3	2.4	1.5	0.0	1.5	0.2	0.0	0.2	1.1	0.3	0.8
June	6.2	0.5	5.6	0.6	0.0	0.6	0.6	0.0	0.6	5.0	0.5	4.5
July	5.1	1.3	3.8	1.5	0.1	1.4	0.1	0.9	-0.8	3.5	0.3	3.2
Aug.	5.5	5.1	0.3	3.5	3.9	-0.4	0.0	0.0	0.0	2.0	1.3	0.7
Sep.	2.4	0.5	1.9	0.3	0.1	0.1	0.2	0.0	0.2	2.0	0.4	1.7
Oct.	1.2	0.2	1.0	0.3	0.0	0.2	0.0	0.0	0.0	0.9	0.1	0.8
Nov.	4.1	0.8	3.3	0.2	0.4	-0.2	0.5	0.0	0.5	3.5	0.4	3.1
Dec.	1.9	0.6	1.3	0.1	0.0	0.1	0.1	0.1	0.0	1.7	0.5	1.2
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	-0.4	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	0.4	0.0	0.0	0.0	0.6	0.5	0.1
Apr.	23.7	4.7	19.0	1.9	0.2	1.7	4.5	0.0	4.5	17.3	4.5	12.8
May	0.7	2.1	-1.5	0.2	0.4	-0.2	0.0	0.0	0.0	0.5	1.7	-1.2
June	6.1	5.0	1.1	0.4	2.7	-2.2	0.0	0.0	0.0	5.7	2.4	3.3
July	8.6	1.8	6.8	4.7	0.2	4.5	0.2	0.0	0.2	3.6	1.6	2.0
Aug.	1.8	1.1	0.7	0.1	0.1	0.1	1.1	0.1	1.0	0.6	1.0	-0.3
Sep.	2.3	1.7	0.6	0.1	0.1	0.0	0.0	1.3	-1.3	2.2	0.3	1.9
Oct.	5.5	3.7	1.8	0.4	0.0	0.3	0.1	0.0	0.1	5.0	3.7	1.3
Nov.	7.5	5.3	2.1	2.7	0.1	2.7	4.2	0.3	3.9	0.6	5.0	-4.4
Dec.	5.6	1.4	4.2	0.8	0.1	0.8	0.4	0.8	-0.4	4.4	0.5	3.9
2004 Jan.	2.8	0.9	1.9	0.0	0.0	0.0	0.9	0.0	0.9	1.8	0.9	0.9
Feb.	3.4	0.6	2.9	2.0	0.0	2.0	0.0	0.2	-0.2	1.4	0.3	1.1

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 Mar.	0.87	2.34	2.52	2.74	2.29	3.19	1.14	2.50	2.48	3.41	2.57
Apr.	0.84	2.25	2.54	2.80	2.31	3.14	1.11	2.43	2.37	3.29	2.48
May	0.84	2.23	2.38	2.65	2.24	3.10	1.08	2.43	2.31	2.94	2.46
June	0.76	2.00	2.21	2.61	2.23	3.01	1.00	2.10	2.18	3.05	2.14
July	0.68	1.91	2.10	2.32	2.14	2.93	0.88	2.02	2.14	2.73	2.03
Aug.	0.68	1.91	2.12	2.51	1.99	2.88	0.88	2.03	2.27	3.56	1.97
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	0.89	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	2.33	2.70	1.97
Dec.	0.69	1.89	2.40	2.41	2.01	2.68	0.88	2.00	2.42	3.35	1.99
2004 Jan.	0.69	1.91	2.37	2.74	2.02	2.65	0.95	1.99	2.07	3.12	1.95
Feb.	0.70	1.87	2.16	2.45	2.02	2.63	0.88	1.98	2.25	3.58	1.98

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

	Bank overdraft <sup>1)</sup>	Consumer credit				Annual percentage rate of charge <sup>3)</sup>	Lending for house purchase				Annual percentage rate of charge <sup>3)</sup>	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 Mar.	10.02	7.28	7.00	8.28	8.06	4.13	4.41	5.04	5.05	4.70	4.73	5.31	5.37		
Apr.	9.89	7.46	6.99	8.32	8.16	4.07	4.32	5.00	5.03	4.67	4.71	5.30	5.33		
May	9.86	7.64	6.98	8.34	8.16	3.93	4.29	4.94	4.91	4.56	4.44	5.35	5.32		
June	9.89	7.11	6.94	8.28	8.02	3.80	4.16	4.76	4.78	4.42	4.12	4.97	4.91		
July	9.76	7.25	7.04	8.20	7.92	3.68	3.92	4.64	4.68	4.33	4.11	4.95	4.98		
Aug.	9.74	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.	9.75	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.	9.72	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	5.24	5.17		
Dec.	9.69	7.66	6.43	7.63	7.71	3.62	4.17	5.02	4.95	4.46	3.84	5.00	5.08		
2004 Jan.	9.87	7.62	7.04	8.49	8.32	3.62	4.28	5.02	4.92	4.49	4.06	5.12	5.16		
Feb.	9.81	7.50	6.92	8.44	8.17	3.55	4.21	4.97	4.84	4.35	4.10	5.07	5.05		

### 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 Mar.		6.05	4.55	5.03	5.11	3.56	3.86	4.46
Apr.		5.85	4.57	4.89	5.04	3.50	3.69	4.58
May		5.82	4.47	4.86	4.96	3.40	3.57	4.36
June		5.68	4.20	4.60	4.89	3.14	3.39	4.18
July		5.56	4.16	4.58	4.73	3.08	3.14	4.00
Aug.		5.47	4.17	4.65	4.77	3.18	3.41	4.36
Sep.		5.46	4.08	4.79	4.76	3.11	3.32	4.28
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	4.17
Dec.		5.57	4.04	4.84	4.81	3.12	3.41	4.32
2004 Jan.		5.66	4.06	4.86	4.81	3.01	3.37	4.29
Feb.		5.62	4.02	4.95	4.78	2.97	3.19	4.30

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)

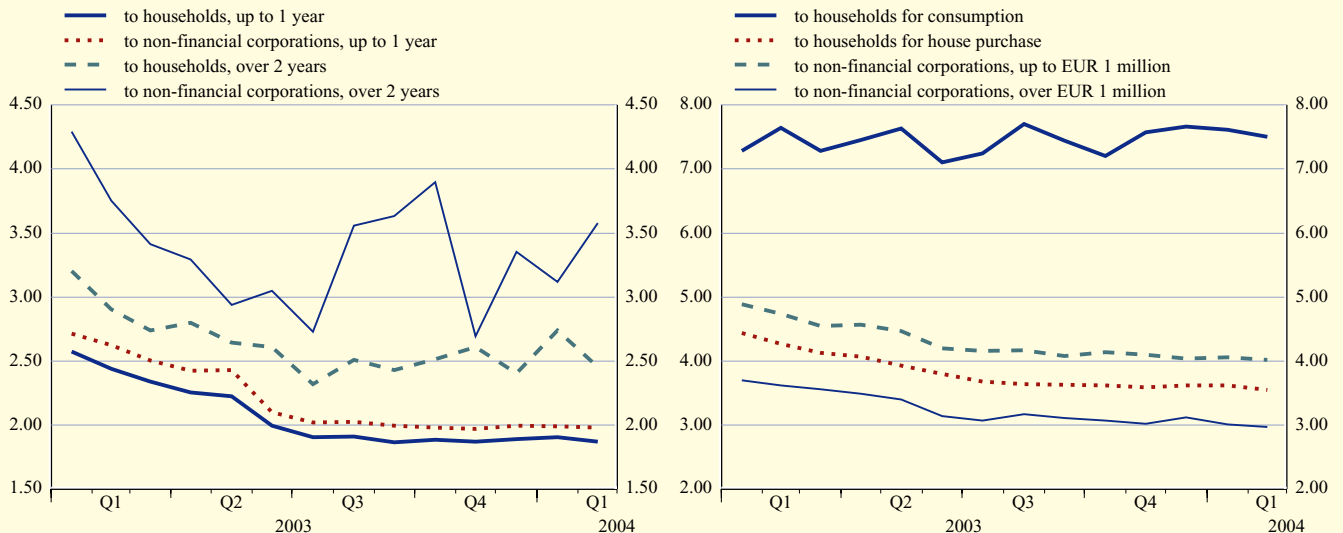
	Deposits from households					Deposits from non-financial corporations			Repos
	Overnight <sup>1)</sup>	With agreed maturity		Redeemable at notice <sup>1,2)</sup>		Overnight <sup>1)</sup>	With agreed maturity		
		Up to 2 years	Over 2 years	Up to 3 months	Over 3 months		Up to 2 years	Over 2 years	
	1	2	3	4	5	6	7	8	9
2003 Mar.	0.87	2.45	3.54	2.29	3.19	1.14	2.61	4.66	2.52
Apr.	0.84	2.39	3.55	2.31	3.14	1.11	2.53	4.61	2.44
May	0.84	2.34	3.47	2.24	3.10	1.08	2.50	4.50	2.42
June	0.76	2.18	3.48	2.23	3.01	1.00	2.26	4.45	2.19
July	0.68	2.08	3.43	2.14	2.93	0.88	2.24	4.40	2.08
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	0.89	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	2.01	2.68	0.88	2.15	4.25	1.98
2004 Jan.	0.69	1.94	3.36	2.02	2.65	0.95	2.09	4.26	1.95
Feb.	0.70	1.93	3.42	2.02	2.63	0.88	2.09	4.20	1.97

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 Mar.	5.45	5.36	5.55	8.61	7.42	6.17	5.00	4.68	5.11
Apr.	5.39	5.26	5.49	8.50	7.45	6.11	4.89	4.61	5.03
May	5.33	5.22	5.44	8.48	7.34	6.09	4.83	4.56	4.94
June	5.30	5.13	5.39	8.38	7.37	6.03	4.72	4.47	4.90
July	5.21	5.07	5.31	8.31	7.28	5.96	4.60	4.33	4.81
Aug.	5.11	4.99	5.25	8.26	7.23	6.07	4.53	4.22	4.75
Sep.	5.05	4.95	5.24	8.28	7.26	6.00	4.55	4.20	4.75
Oct.	4.97	4.92	5.20	8.11	7.12	5.85	4.55	4.12	4.71
Nov.	4.97	4.90	5.17	7.97	7.09	5.82	4.51	4.18	4.67
Dec.	4.96	4.88	5.14	8.05	7.05	6.00	4.53	4.23	4.67
2004 Jan.	4.90	4.89	5.11	8.15	7.02	5.92	4.55	4.08	4.56
Feb.	4.87	4.90	5.11	8.13	7.16	5.95	4.60	4.07	4.58

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)

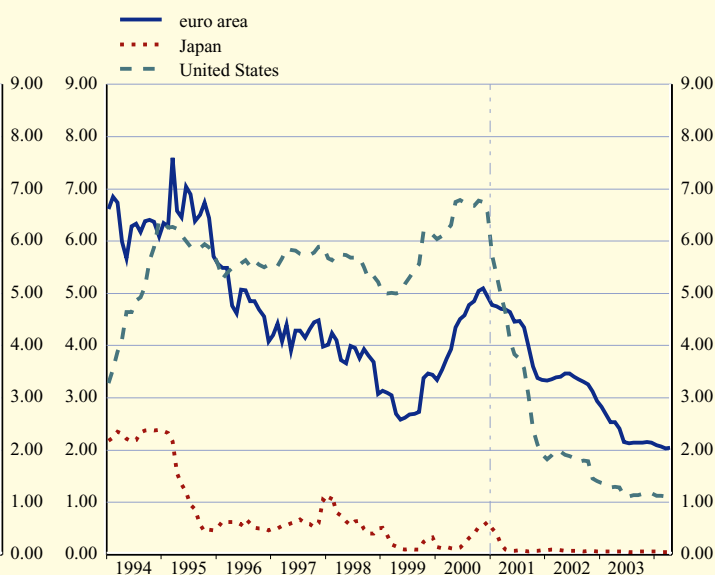
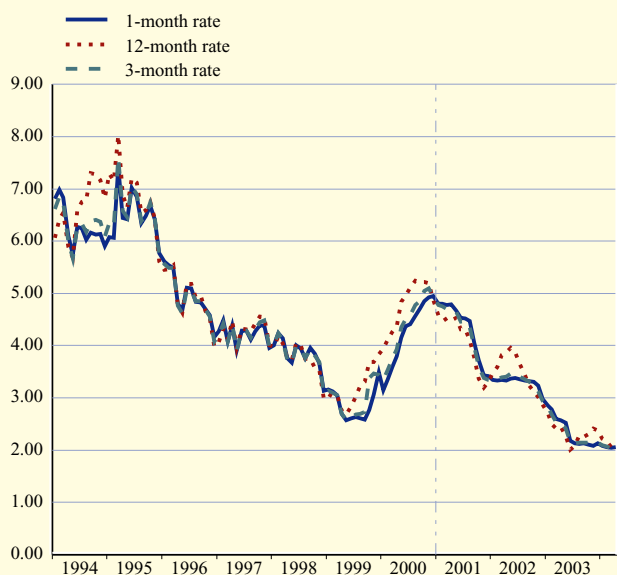
	Euro area <sup>1)</sup>					United States	Japan
	Overnight deposits (EONIA)	1-month deposits (EURIBOR)	3-month deposits (EURIBOR)	6-month deposits (EURIBOR)	12-month deposits (EURIBOR)	3-month deposits (LIBOR)	3-month deposits (LIBOR)
	1	2	3	4	5	6	7
2001	4.39	4.33	4.26	4.16	4.09	3.78	0.15
2002	3.29	3.30	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 Q1	2.77	2.75	2.69	2.60	2.55	1.33	0.06
Q2	2.44	2.43	2.37	2.29	2.25	1.24	0.06
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	2.14	1.12	0.05
2003 Apr.	2.56	2.58	2.54	2.47	2.45	1.30	0.06
May	2.56	2.52	2.41	2.32	2.26	1.28	0.06
June	2.21	2.18	2.15	2.08	2.01	1.12	0.06
July	2.08	2.13	2.13	2.09	2.08	1.11	0.05
Aug.	2.10	2.12	2.14	2.17	2.28	1.14	0.05
Sep.	2.02	2.13	2.15	2.18	2.26	1.14	0.05
Oct.	2.01	2.10	2.14	2.17	2.30	1.16	0.06
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

### 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.

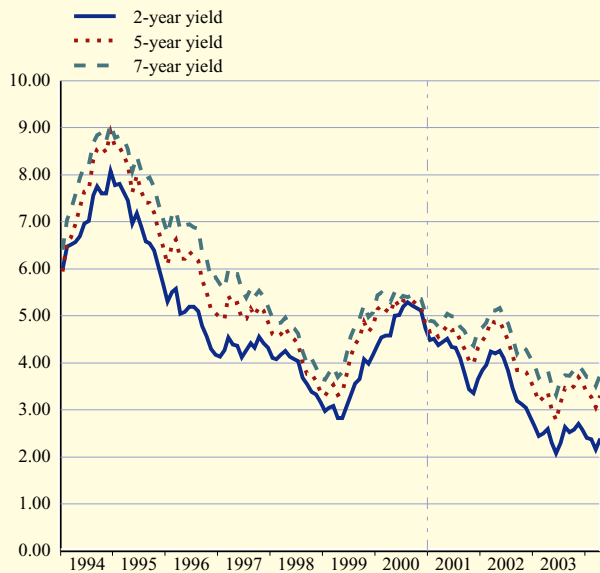
4.7 Government bond yields

(percentages per annum; period averages)

	Euro area <sup>1)</sup>					United States	Japan
	2 years	3 years	5 years	7 years	10 years	10 years	10 years
	1	2	3	4	5	6	7
2001	4.11	4.23	4.49	4.78	5.03	5.01	1.34
2002	3.67	3.94	4.35	4.70	4.92	4.59	1.27
2003	2.49	2.74	3.32	3.74	4.16	4.00	1.00
2003 Q1	2.53	2.71	3.29	3.80	4.16	3.91	0.80
Q2	2.33	2.54	3.07	3.57	3.96	3.61	0.60
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
2003 Apr.	2.59	2.81	3.38	3.85	4.23	3.94	0.66
May	2.31	2.53	3.02	3.54	3.92	3.56	0.57
June	2.08	2.29	2.79	3.32	3.72	3.32	0.56
July	2.30	2.56	3.15	3.65	4.06	3.93	0.99
Aug.	2.63	2.91	3.47	3.74	4.20	4.44	1.15
Sep.	2.53	2.87	3.42	3.72	4.23	4.29	1.45
Oct.	2.59	2.88	3.50	3.85	4.31	4.27	1.40
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

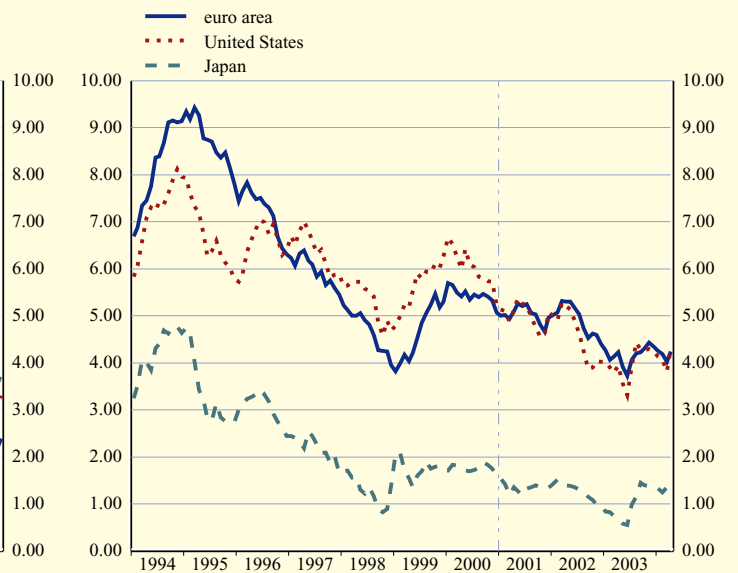
C24 Euro area government bond yields

(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.

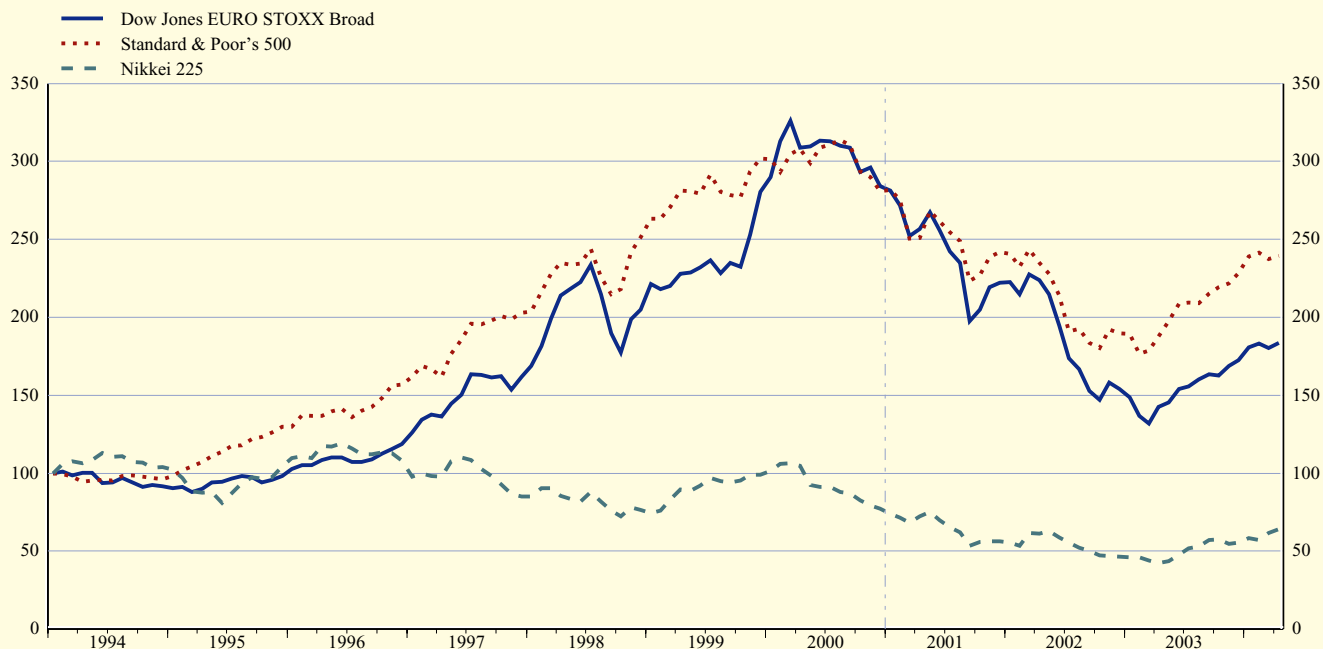
## 4.8 Stock market indices

(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	4,049.4	296.0	228.2	303.3	341.4	321.6	310.0	530.5	309.6	541.2	540.1	1,193.8	12,114.8
2002	259.9	3,023.4	267.5	175.0	266.5	308.9	243.3	252.4	345.1	255.5	349.2	411.8	995.4	10,119.3
2003	213.3	2,404.5	212.5	137.5	209.7	259.5	199.3	213.5	275.1	210.7	337.5	304.4	964.8	9,312.9
2003 Q1	193.0	2,211.6	191.7	122.6	201.7	249.5	174.4	188.6	235.0	197.9	310.7	287.8	859.7	8,424.7
Q2	204.4	2,341.5	198.3	126.8	204.2	255.2	189.9	199.3	260.5	208.7	330.1	303.9	937.8	8,304.5
Q3	221.8	2,512.4	225.2	144.6	212.9	265.9	210.0	225.0	286.0	216.1	347.6	304.4	1,000.3	10,066.4
Q4	233.0	2,613.9	233.7	155.2	219.1	266.5	221.9	240.2	317.8	219.5	360.4	320.0	1,056.7	10,413.8
2004 Q1	251.6	2,846.5	245.0	163.8	226.8	279.7	240.5	257.1	353.1	248.6	405.4	366.4	1,133.1	10,977.6
2003 Apr.	197.9	2,278.2	193.4	122.5	203.9	250.0	181.0	192.0	251.6	201.0	324.8	288.7	889.6	7,895.7
May	202.0	2,303.0	196.4	124.9	202.3	249.6	187.4	198.5	258.2	208.3	324.9	304.2	935.8	8,122.1
June	213.5	2,443.3	205.0	133.0	206.5	266.1	201.2	207.4	271.5	216.7	340.7	318.9	988.0	8,895.7
July	216.1	2,459.8	218.8	138.1	205.5	260.1	206.1	216.0	274.2	214.6	340.9	306.8	992.6	9,669.8
Aug.	222.3	2,524.1	227.2	144.6	211.9	268.6	211.6	227.0	281.7	217.0	352.4	293.2	989.5	9,884.6
Sep.	226.8	2,553.3	229.5	151.2	221.4	269.0	212.1	232.0	302.1	216.6	349.6	313.2	1,018.9	10,644.8
Oct.	225.5	2,523.3	222.0	150.1	218.9	263.0	212.9	231.5	308.0	210.8	348.4	309.7	1,038.7	10,720.1
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.	239.4	2,700.3	241.5	158.8	216.3	274.6	229.9	247.8	319.8	230.7	374.1	331.1	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.	250.2	2,825.6	240.0	161.6	228.9	286.2	235.8	253.8	351.0	254.2	398.8	379.0	1,124.0	11,437.8
Apr.	254.9	2,860.2	247.6	167.2	231.0	300.0	241.0	262.5	321.0	264.5	401.8	389.3	1,133.4	11,962.8

### 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 Q1	112.5	2.3	2.0	2.7	0.8	1.2	0.9	0.1	4.4	0.5
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	2.4	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	1.2	2.6	0.5	0.9	-0.5	0.2	1.2	0.7
2003 Nov.	113.9	2.2	2.0	2.4	0.1	0.5	0.1	0.0	-0.2	0.2
Dec.	114.2	2.0	1.8	2.3	0.1	0.2	-0.4	0.1	-0.2	0.2
2004 Jan.	114.0	1.9	1.3	2.5	0.2	0.2	0.0	0.0	0.9	0.3
Feb.	114.2	1.6	1.0	2.6	0.1	0.1	-0.4	0.1	-0.1	0.3
Mar.	115.0	1.7	1.1	2.5	0.3	1.2	0.0	0.0	1.3	0.2
Apr. <sup>3)</sup>	.	2.0	.	.	.	.	.	.	.	.

	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 Q1	1.9	3.1	0.1	2.0	0.7	7.0	2.4	2.1	3.2	-0.8	3.0	3.7
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
2003 Nov.	3.9	4.0	3.8	1.1	0.7	2.2	2.2	1.9	2.8	-0.5	2.5	3.2
Dec.	3.6	3.8	3.2	0.9	0.7	1.8	2.3	1.9	2.7	-0.7	2.3	3.2
2004 Jan.	3.1	3.3	2.9	0.4	0.6	-0.4	2.3	1.9	2.3	-0.8	2.4	4.8
Feb.	2.7	3.2	1.9	0.2	0.8	-2.2	2.4	1.9	2.4	-1.0	2.5	4.9
Mar.	3.1	4.1	1.7	0.2	0.8	-2.0	2.3	1.9	2.8	-1.3	2.4	4.8

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 excluding energy			
			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	2.6	5.0	0.6	1.6	1.4	1.6	17.2	2.5	4.8	51.9	20.4	31.0
2001	102.1	2.1	1.7	1.2	0.8	3.0	1.9	3.2	2.7	2.2	1.2	-8.3	-8.1	27.8
2002	102.0	-0.1	0.4	-0.3	0.8	1.3	1.5	1.2	-2.0	2.7	0.3	-4.1	-0.9	26.5
2003	103.6	1.6	0.8	0.8	0.3	1.1	0.5	1.2	4.1	2.2	1.0	-4.0	-4.5	25.1
2003 Q1	103.9	2.4	1.1	1.6	0.2	1.4	0.8	1.5	7.6	2.2	2.2	9.1	-3.2	28.4
Q2	103.4	1.5	0.9	1.2	0.3	1.2	0.5	1.3	2.8	2.6	0.7	-13.7	-7.9	22.7
Q3	103.4	1.2	0.6	0.0	0.4	1.0	0.4	1.0	3.5	2.1	0.5	-6.5	-5.8	25.1
Q4	103.6	1.1	0.7	0.3	0.4	0.9	0.3	1.0	2.5	2.3	0.5	-4.2	-1.2	24.5
2004 Q1	104.2	0.2	0.8	0.9	0.5	0.7	0.2	0.8	-2.4	.	0.1	-2.5	9.8	25.0
2003 Nov.	103.7	1.4	0.8	0.4	0.5	1.1	0.3	1.3	3.6	-	0.9	1.1	0.2	24.6
Dec.	103.6	1.0	0.6	0.4	0.4	0.6	0.3	0.7	2.1	-	0.4	-5.0	-0.2	24.0
2004 Jan.	103.9	0.3	0.6	0.5	0.5	0.6	0.1	0.6	-1.2	-	0.2	-5.5	5.1	24.2
Feb.	104.0	0.0	0.8	0.8	0.5	0.6	0.1	0.7	-3.2	-	-0.1	-8.4	7.2	24.1
Mar.	104.6	0.4	1.1	1.4	0.4	1.0	0.3	1.1	-2.7	-	0.3	6.8	17.2	26.7
Apr.	.	.	.	.	.	.	.	.	.	-	.	23.1	19.7	27.6

### 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	
2000	100.0	3.0	3.3	2.2	3.3	3.3	2.8	2.2
2001	103.3	3.3	3.5	2.9	3.1	3.6	3.6	2.6
2002	106.9	3.5	3.3	3.8	3.2	3.5	3.6	2.7
2003	110.0	2.9	2.8	3.3	3.2	3.3	2.7	2.4
2002 Q4	108.2	3.5	3.4	3.9	3.5	3.1	3.4	2.7
2003 Q1	108.9	3.1	2.9	3.7	3.2	3.0	2.6	2.7
Q2	109.7	3.2	3.1	3.7	3.8	3.9	3.2	2.4
Q3	110.4	2.8	2.7	3.0	3.1	3.1	2.7	2.4
Q4	111.0	2.6	2.5	2.8	2.8	3.0	2.4	2.2

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

- 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	1.3	-0.2	1.9	-0.4	4.6	1.7	
2001	102.6	2.6	2.4	2.8	4.1	1.0	2.6	2.8	
2002	104.8	2.2	-0.3	1.2	3.4	2.0	3.2	2.2	
2003	107.1	2.2	4.2	1.4	3.2	2.0	2.4	2.3	
2002 Q4	105.5	1.5	3.0	-0.1	3.3	1.1	3.2	1.5	
2003 Q1	106.5	2.0	1.1	0.7	4.0	1.7	2.9	2.2	
Q2	107.2	2.7	6.3	2.6	3.8	2.5	3.0	2.3	
Q3	107.5	2.4	5.4	1.9	2.8	1.4	1.5	3.2	
Q4	107.4	1.7	4.1	0.4	2.4	2.4	2.1	1.6	
Compensation per employee									
2000	100.0	2.7	2.6	3.2	2.6	1.6	3.0	2.6	
2001	102.8	2.8	1.9	3.0	3.1	2.9	1.6	3.2	
2002	105.4	2.5	2.4	2.9	3.1	2.7	2.0	2.4	
2003	108.0	2.4	2.2	3.3	3.2	1.9	2.0	2.4	
2002 Q4	106.3	2.3	2.6	3.3	2.8	2.5	2.1	1.5	
2003 Q1	107.2	2.5	1.0	3.6	2.8	2.4	2.2	2.1	
Q2	107.7	2.6	3.7	3.5	3.8	2.5	2.4	1.9	
Q3	108.4	2.5	1.8	3.2	3.2	1.4	1.5	3.3	
Q4	108.5	2.1	2.4	2.9	3.0	1.5	1.8	2.1	
Labour productivity <sup>2)</sup>									
2000	100.0	1.3	1.2	3.4	0.7	2.1	-1.6	0.9	
2001	100.2	0.2	-0.5	0.1	-1.0	1.8	-0.9	0.4	
2002	100.6	0.3	2.6	1.7	-0.3	0.6	-1.2	0.1	
2003	100.8	0.2	-1.9	1.9	0.0	-0.1	-0.4	0.0	
2002 Q4	100.8	0.8	-0.4	3.4	-0.5	1.4	-1.0	0.0	
2003 Q1	100.7	0.5	-0.1	2.8	-1.1	0.7	-0.7	-0.1	
Q2	100.5	-0.1	-2.4	0.9	0.0	0.0	-0.5	-0.3	
Q3	100.8	0.1	-3.4	1.2	0.4	0.0	-0.1	0.1	
Q4	101.1	0.3	-1.6	2.5	0.6	-0.9	-0.3	0.5	

### 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	2.7	2.7	4.9	8.5
2001	102.4	2.4	2.3	2.4	2.4	2.0	1.4	0.8
2002	105.0	2.5	2.1	2.8	2.2	1.9	-0.3	-1.4
2003	107.2	2.1	1.9	1.9	2.1	1.6	-0.5	-1.2
2002 Q4	105.8	2.3	2.3	2.7	2.2	2.1	0.2	0.0
2003 Q1	106.3	2.0	2.0	2.4	2.1	1.7	0.0	0.1
Q2	106.9	2.2	1.8	1.8	2.1	1.6	-0.7	-1.9
Q3	107.6	2.2	1.9	1.8	2.8	1.6	-0.8	-1.6
Q4	108.0	2.1	1.8	1.7	1.6	1.4	-0.6	-1.6

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>2)</sup>		
		Total	Private consumption	Government consumption	Gross fixed capital formation	Changes in inventories <sup>1)</sup>	Total	Exports <sup>2)</sup>	Imports <sup>2)</sup>
1	2	3	4	5	6	7	8	9	
<i>Current prices (EUR billions, seasonally adjusted)</i>									
2000	6,576.1	6,519.5	3,765.3	1,306.9	1,420.2	27.0	56.6	2,448.7	2,392.1
2001	6,842.6	6,729.1	3,921.5	1,371.3	1,443.7	-7.4	113.5	2,564.6	2,451.2
2002	7,073.3	6,891.6	4,032.7	1,441.1	1,430.5	-12.8	181.7	2,595.4	2,413.7
2003	7,251.9	7,097.0	4,151.8	1,501.0	1,438.4	5.8	154.9	2,582.4	2,427.6
2002 Q4	1,785.9	1,743.8	1,021.1	365.4	359.8	-2.4	42.0	654.8	612.8
2003 Q1	1,794.8	1,762.0	1,032.3	368.8	358.4	2.5	32.8	645.2	612.5
Q2	1,803.0	1,765.9	1,034.1	373.1	358.7	0.1	37.0	635.9	598.9
Q3	1,820.6	1,774.4	1,040.1	379.6	359.0	-4.3	46.2	648.7	602.5
Q4	1,833.5	1,794.7	1,045.4	379.5	362.3	7.5	38.9	652.6	613.7
<i>percentage of GDP</i>									
2003	100.0	97.9	57.3	20.7	19.8	0.1	2.1	-	-
<i>Constant prices (ECU billions at 1995 prices, seasonally adjusted)</i>									
<i>quarter-on-quarter percentage changes</i>									
2002 Q4	0.0	0.4	0.3	0.1	0.3	-	-	-0.3	0.9
2003 Q1	0.0	0.4	0.5	0.5	-0.8	-	-	-1.3	-0.4
Q2	-0.1	0.0	0.0	0.6	-0.3	-	-	-0.8	-0.5
Q3	0.4	-0.1	0.1	0.7	-0.2	-	-	2.2	1.1
Q4	0.3	0.8	0.0	0.4	0.6	-	-	0.2	1.6
<i>annual percentage changes</i>									
2000	3.5	2.9	2.7	2.1	4.9	-	-	12.3	11.0
2001	1.6	1.0	1.7	2.5	-0.3	-	-	3.4	1.7
2002	0.9	0.3	0.1	2.9	-2.8	-	-	1.5	-0.1
2003	0.4	1.1	1.0	2.0	-1.0	-	-	0.1	1.8
2002 Q4	1.1	1.1	0.5	2.2	-1.7	-	-	3.4	3.4
2003 Q1	0.7	1.4	1.4	2.0	-1.8	-	-	1.5	3.7
Q2	0.1	1.0	1.1	1.8	-0.6	-	-	-1.3	1.0
Q3	0.3	0.7	0.9	1.9	-1.0	-	-	-0.3	1.0
Q4	0.6	1.1	0.6	2.2	-0.7	-	-	0.3	1.8
<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	1.0	0.5	-0.1	-0.5	0.7	-	-
2002	0.9	0.3	0.0	0.6	-0.6	0.2	0.6	-	-
2003	0.4	1.0	0.6	0.4	-0.2	0.3	-0.6	-	-
2002 Q4	1.1	1.0	0.3	0.4	-0.4	0.6	0.1	-	-
2003 Q1	0.7	1.4	0.8	0.4	-0.4	0.6	-0.7	-	-
Q2	0.1	1.0	0.6	0.4	-0.1	0.1	-0.9	-	-
Q3	0.3	0.7	0.5	0.4	-0.2	0.0	-0.5	-	-
Q4	0.6	1.1	0.4	0.5	-0.2	0.4	-0.5	-	-

Source: Eurostat.

1) Including acquisitions less disposals of valuables.

2) 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

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	1,369.1	337.0	1,281.2	1,655.0	1,299.6	212.6	701.1
2001	6,351.7	151.2	1,409.0	351.3	1,350.7	1,729.9	1,359.6	222.1	712.9
2002	6,561.1	149.4	1,425.7	362.7	1,385.9	1,810.2	1,427.2	226.3	738.4
2003	6,722.5	152.5	1,436.0	375.0	1,411.8	1,866.6	1,480.6	231.9	761.2
2002 Q4	1,655.1	37.4	357.5	91.7	349.5	457.2	361.8	57.3	188.0
2003 Q1	1,662.9	37.5	360.0	92.0	348.3	459.8	365.3	57.2	189.1
Q2	1,671.2	37.5	355.4	93.2	352.5	464.6	368.1	58.1	189.9
Q3	1,690.3	38.4	359.4	94.1	355.3	469.0	374.1	58.4	188.7
Q4	1,698.1	39.1	361.2	95.7	355.8	473.1	373.2	58.1	193.5
<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>									
2002 Q4	0.0	-1.1	-0.8	0.3	0.2	0.2	0.3	0.9	0.7
2003 Q1	0.0	-1.2	0.4	-0.6	-0.3	0.0	0.2	-0.4	-0.5
Q2	-0.1	-2.2	-0.9	0.3	0.3	0.2	0.2	0.8	0.2
Q3	0.5	-0.2	0.5	0.1	0.7	0.5	0.3	1.3	-0.3
Q4	0.2	1.5	0.5	0.2	-0.5	0.2	0.4	-0.7	0.9
<i>annual percentage changes</i>									
2000	3.8	-0.3	4.0	2.5	5.2	4.3	2.5	7.1	1.8
2001	1.9	-1.2	0.5	-0.6	3.3	2.8	1.7	4.6	0.2
2002	0.9	0.6	0.2	-1.1	1.0	1.2	2.0	0.0	-0.2
2003	0.5	-3.4	0.0	-0.4	0.5	0.8	1.1	1.9	0.5
2002 Q4	1.1	-2.4	1.6	-1.4	1.3	0.9	1.9	0.5	0.5
2003 Q1	0.7	-2.5	1.0	-1.8	0.7	0.9	1.4	1.5	0.7
Q2	0.1	-4.4	-1.0	0.0	0.4	0.5	1.0	2.4	1.2
Q3	0.4	-4.6	-0.7	0.0	0.9	1.0	1.0	2.6	0.1
Q4	0.6	-2.1	0.6	0.0	0.2	1.0	1.2	1.1	0.3
<i>contributions to annual percentage changes of value added in percentage points</i>									
2000	3.8	0.0	0.9	0.1	1.1	1.1	0.5	-	-
2001	1.9	0.0	0.1	0.0	0.7	0.7	0.4	-	-
2002	0.9	0.0	0.1	-0.1	0.2	0.3	0.4	-	-
2003	0.5	-0.1	0.0	0.0	0.1	0.2	0.2	-	-
2002 Q4	1.1	-0.1	0.4	-0.1	0.3	0.2	0.4	-	-
2003 Q1	0.7	-0.1	0.2	-0.1	0.2	0.2	0.3	-	-
Q2	0.1	-0.1	-0.2	0.0	0.1	0.1	0.2	-	-
Q3	0.4	-0.1	-0.2	0.0	0.2	0.3	0.2	-	-
Q4	0.6	-0.1	0.1	0.0	0.0	0.3	0.2	-	-

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	5.4	6.2	8.1	1.7	6.1	0.9	1.9	2.4	5.6
2001	0.4	100.5	0.4	0.2	-0.5	1.6	0.3	-2.1	0.8	1.4	0.7	0.3
2002	-0.5	99.9	-0.5	-0.8	0.0	-1.5	-0.5	-5.7	0.5	1.0	0.6	-0.7
2003	0.2	100.3	0.3	0.0	0.5	0.0	-0.8	-5.0	-0.1	3.0	0.0	0.1
2002 Q4	0.8	99.8	1.3	1.4	2.8	1.2	0.5	-4.3	1.4	-0.4	-1.0	1.5
2003 Q1	0.6	100.2	0.8	0.3	1.1	0.8	-1.3	-6.1	-0.4	4.6	-1.9	0.5
Q2	-0.6	99.7	-0.9	-1.4	-0.6	-1.8	-1.8	-6.9	-0.9	2.1	0.8	-1.3
Q3	-0.3	100.2	-0.2	-0.6	-0.4	-1.2	-0.2	-4.7	0.6	2.3	0.4	-0.5
Q4	1.1	101.1	1.5	1.5	1.8	2.2	0.0	-2.2	0.4	2.6	0.5	1.6
2003 Sep.	-1.0	99.8	-1.1	-1.3	-2.0	-1.6	-1.0	-5.4	-0.2	1.3	-0.6	-1.2
Oct.	0.7	101.1	1.4	1.2	1.6	1.6	-0.3	-2.4	0.1	3.6	-1.2	1.3
Nov.	0.4	101.0	0.9	1.2	1.1	2.2	-0.5	-3.7	0.0	2.5	-2.2	1.2
Dec.	2.2	101.2	2.1	2.1	3.0	3.0	1.0	-0.3	1.2	1.8	5.5	2.4
2004 Jan.	.	100.8	0.6	0.7	1.0	0.0	0.2	0.2	0.3	1.4	.	0.5
Feb.	.	100.9	0.6	1.2	2.0	-0.7	0.6	-0.2	0.8	-0.4	.	1.0
<i>month-on-month percentage changes (s.a.)</i>												
2003 Sep.	-0.1	-	-0.4	-0.2	-1.1	0.3	-0.2	1.2	-0.5	-2.6	0.5	-0.3
Oct.	0.9	-	1.4	1.4	1.6	1.9	0.4	1.1	0.3	3.1	-0.4	1.4
Nov.	0.0	-	-0.1	0.3	0.3	0.5	0.1	-0.5	0.2	-3.4	0.0	0.2
Dec.	0.5	-	0.1	-0.2	0.4	-0.1	0.1	0.1	0.2	0.7	5.1	0.0
2004 Jan.	.	-	-0.4	-0.5	-0.6	-1.4	-0.2	0.7	-0.3	1.3	.	-0.7
Feb.	.	-	0.1	0.3	0.4	-0.4	0.1	-0.6	0.3	1.8	.	0.2

### 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	9	10
	1	2	3	4	5	6	7	8	9	10
2000	99.9	4.0	100.0	2.1	1.8	2.0	0.9	4.1	977	-1.8
2001	104.0	4.1	101.7	1.7	1.8	1.6	0.8	-0.1	968	-0.8
2002	106.0	1.9	101.7	0.0	0.9	-0.5	-2.0	-1.9	925	-4.4
2003	107.6	1.5	102.0	0.2	1.2	-0.7	-3.1	-0.3	912	-1.4
2003 Q1	107.6	2.6	102.2	0.8	2.3	0.2	-1.9	0.0	898	-2.6
Q2	107.5	1.7	102.1	0.8	1.6	-0.3	-1.8	0.1	899	-1.8
Q3	107.6	1.0	101.9	-0.4	1.1	-1.8	-4.9	-0.9	927	1.4
Q4	107.8	0.9	101.7	-0.4	-0.1	-0.7	-3.6	-0.1	925	-2.4
2004 Q1	108.6	0.9	102.7	0.5	0.6	-0.2	.	.	910	0.9
2003 Oct.	108.4	1.2	102.9	0.6	0.9	-0.1	-1.6	0.4	926	-0.2
Nov.	107.6	0.9	100.9	-1.7	-1.7	-1.6	-5.4	-1.1	931	0.0
Dec.	107.5	0.7	101.2	0.0	0.6	-0.3	-3.9	0.4	916	-7.4
2004 Jan.	109.1	1.5	103.5	0.6	1.4	-0.3	-1.5	1.2	904	1.1
Feb.	108.2	0.1	102.3	-0.1	-0.6	-0.8	-1.1	1.0	916	2.5
Mar.	108.6	1.1	102.1	1.0	0.9	0.4	.	.	909	-0.6

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> (index 2000 = 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	100.0	5	2	4	16	84.5	1	4	1	1	2
2001	97.0	-9	-15	14	1	82.9	-5	2	-10	14	2
2002	95.6	-11	-25	11	3	81.4	-11	-1	-12	26	-3
2003	95.1	-10	-25	10	3	80.9	-18	-5	-21	38	-9
2003 Q1	94.8	-11	-24	10	0	81.1	-19	-5	-23	39	-9
Q2	94.7	-12	-27	9	0	80.8	-19	-4	-22	41	-9
Q3	95.0	-11	-26	11	4	81.0	-17	-4	-20	38	-8
Q4	95.7	-7	-21	9	8	80.9	-16	-5	-17	34	-9
2004 Q1	96.0	-7	-21	10	11	80.5	-14	-4	-13	30	-9
2003 Nov.	96.0	-6	-21	8	10	-	-15	-4	-16	33	-8
Dec.	95.6	-8	-21	10	7	-	-16	-5	-16	32	-10
2004 Jan.	96.0	-6	-20	9	10	80.6	-15	-5	-14	31	-9
Feb.	95.9	-7	-21	10	11	-	-14	-4	-12	30	-9
Mar.	96.1	-7	-21	10	11	-	-14	-4	-13	30	-9
Apr.	96.6	-5	-16	9	11	80.4	-14	-3	-14	31	-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	9	30	36	23	33
2001	-11	-16	-4	-7	-7	17	2	15	16	8	20
2002	-19	-26	-11	-16	-23	18	-9	1	-4	-6	13
2003	-21	-28	-14	-14	-19	17	-5	2	-6	1	11
2003 Q1	-20	-27	-13	-17	-24	17	-10	-6	-16	-11	11
Q2	-21	-27	-14	-15	-20	18	-6	-2	-12	0	6
Q3	-22	-29	-15	-13	-18	17	-3	5	-1	4	13
Q4	-20	-28	-12	-10	-15	15	-2	10	5	11	15
2004 Q1	-20	-29	-10	-10	-16	15	0	11	6	6	20
2003 Nov.	-20	-27	-13	-10	-13	16	-1	11	6	11	16
Dec.	-19	-28	-9	-12	-16	16	-5	11	7	12	15
2004 Jan.	-19	-28	-10	-10	-16	16	2	10	5	8	18
Feb.	-21	-32	-9	-11	-16	14	-2	11	7	6	21
Mar.	-19	-27	-10	-10	-17	14	1	11	5	5	22
Apr.	-17	-24	-10	-8	-10	15	1	10	5	11	15

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, consumer, construction and retail trade confidence indicators; the industrial confidence indicator has a weight of 40% and the three other indicators have a weight of 20% each.
- 3) 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	4.7	18.8	7.1	25.2	14.5	29.8
	1	2	3	4	5	6	7	8	9	10
2000	131.427	2.2	2.5	0.7	-1.4	0.6	1.9	3.0	6.0	1.6
2001	133.241	1.4	1.6	0.2	-0.6	0.3	0.5	1.5	3.8	1.4
2002	133.958	0.5	0.7	-0.2	-1.9	-1.4	-0.6	0.3	2.4	1.8
2003	134.178	0.2	0.1	0.3	-1.5	-1.9	-0.3	0.5	1.2	1.1
2002 Q4	133.911	0.2	0.3	0.0	-1.9	-1.8	-0.8	-0.3	1.9	1.9
2003 Q1	133.960	0.1	0.1	0.1	-2.3	-1.8	-0.7	-0.2	1.6	1.5
Q2	134.123	0.2	0.2	0.5	-1.9	-1.9	0.2	0.4	1.1	1.3
Q3	134.132	0.2	0.1	0.3	-1.3	-2.0	-0.2	0.9	1.0	0.8
Q4	134.229	0.2	0.2	0.1	-0.4	-1.9	-0.5	1.0	1.1	0.6
	<i>quarter-on-quarter changes (s.a.)</i>									
2002 Q4	0.024	0.0	0.0	0.1	-0.6	-0.6	-0.1	0.0	0.4	0.4
2003 Q1	0.049	0.0	0.0	0.2	-0.8	-0.4	0.1	0.2	0.2	0.3
Q2	0.163	0.1	0.1	0.2	-0.1	-0.5	0.4	0.4	0.2	0.2
Q3	0.009	0.0	0.0	0.0	0.2	-0.5	-0.7	0.4	0.3	0.0
Q4	0.097	0.1	0.1	0.1	0.2	-0.5	-0.3	0.2	0.6	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		78.4		21.6		49.9		50.1	
	1	2	3	4	5	6	7	8	9	10
2000	11.605	8.5	8.897	7.4	2.707	16.7	5.481	7.0	6.124	10.5
2001	11.072	8.0	8.541	7.0	2.531	15.7	5.317	6.8	5.755	9.7
2002	11.689	8.4	9.095	7.4	2.594	16.2	5.764	7.3	5.925	9.9
2003	12.288	8.8	9.628	7.7	2.660	16.8	6.134	7.7	6.154	10.1
2002 Q4	11.970	8.6	9.344	7.6	2.626	16.5	5.943	7.5	6.027	10.0
2003 Q1	12.202	8.7	9.530	7.7	2.673	16.8	6.079	7.7	6.123	10.1
Q2	12.305	8.8	9.634	7.8	2.671	16.8	6.138	7.7	6.167	10.2
Q3	12.309	8.8	9.659	7.8	2.650	16.8	6.149	7.7	6.160	10.1
Q4	12.336	8.8	9.701	7.8	2.635	16.8	6.172	7.8	6.163	10.1
2003 Oct.	12.332	8.8	9.696	7.8	2.635	16.8	6.172	7.8	6.160	10.1
Nov.	12.338	8.8	9.706	7.8	2.633	16.8	6.174	7.8	6.164	10.1
Dec.	12.338	8.8	9.700	7.8	2.638	16.8	6.171	7.8	6.167	10.1
2004 Jan.	12.365	8.8	9.710	7.8	2.655	16.9	6.188	7.8	6.177	10.1
Feb.	12.392	8.8	9.726	7.8	2.666	16.9	6.201	7.8	6.191	10.1
Mar.	12.420	8.8	9.749	7.8	2.671	17.0	6.219	7.8	6.201	10.2

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 <sup>2)</sup> – revenue

	Total		Current revenue									Capital revenue		Memo: fiscal burden <sup>3)</sup>
	1	2	Direct taxes			Indirect taxes	Received by EU institutions		Social contributions			Sales	Capital taxes	
			Households	Corporations	6		7	Employers	Employees					
	3	4	5	6	7	8	9	10	11	12	13	14		
1995	47.2	46.7	11.6	9.2	2.0	13.3	0.9	17.4	8.4	5.6	2.4	0.5	0.3	42.6
1996	48.0	47.5	12.0	9.3	2.3	13.4	0.8	17.6	8.7	5.6	2.5	0.5	0.3	43.3
1997	48.2	47.6	12.2	9.3	2.6	13.5	0.7	17.6	8.8	5.6	2.4	0.6	0.4	43.7
1998	47.6	47.2	12.5	9.8	2.3	14.1	0.7	16.5	8.5	5.0	2.4	0.4	0.3	43.4
1999	48.1	47.7	12.8	9.9	2.5	14.4	0.6	16.4	8.5	5.0	2.4	0.4	0.3	43.9
2000	47.8	47.4	13.0	10.0	2.7	14.2	0.6	16.2	8.4	4.9	2.3	0.4	0.3	43.7
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	9.4	2.2	13.8	0.4	16.2	8.5	4.8	2.3	0.8	0.5	42.4

### 2. Euro area <sup>2)</sup> – expenditure

	Total		Current expenditure							Capital expenditure			Memo: primary expenditure <sup>3)</sup>		
	1	2	Total	Compensation of employees	Intermediate consumption	Interest	Current transfers	Social payments		Subsidies	Paid by EU institutions	Investment		Capital transfers	Paid by EU institutions
								7	8						
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
1995	52.3	47.8	11.2	4.8	5.7	26.2	22.9	2.2	0.6	4.5	2.7	1.8	0.1	46.6	
1996	52.3	48.3	11.2	4.8	5.7	26.7	23.4	2.2	0.6	4.0	2.6	1.4	0.0	46.6	
1997	50.9	47.2	11.0	4.7	5.1	26.3	23.3	2.1	0.6	3.7	2.4	1.3	0.1	45.8	
1998	49.9	46.0	10.7	4.6	4.7	26.0	22.8	2.0	0.5	3.9	2.4	1.5	0.1	45.2	
1999	49.4	45.4	10.7	4.7	4.2	25.9	22.7	2.0	0.5	4.0	2.5	1.5	0.1	45.2	
2000	48.7	44.8	10.5	4.7	4.0	25.6	22.3	1.9	0.5	3.9	2.5	1.4	0.1	44.7	
2001	48.8	44.7	10.5	4.7	4.0	25.4	22.3	2.0	0.5	4.1	2.5	1.6	0.0	44.8	
2002	48.8	44.9	10.6	4.8	3.7	25.7	22.8	1.9	0.5	3.9	2.4	1.5	0.0	45.1	
2003	49.4	45.3	10.7	4.9	3.5	26.2	23.2	1.9	0.5	4.0	2.6	1.5	0.1	45.9	

### 3. Euro area <sup>2)</sup> – deficit/surplus, primary deficit/surplus and government consumption

	Deficit (-)/surplus (+)					Primary deficit (-)/surplus (+)	Government consumption <sup>5)</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	-5.1	-4.2	-0.5	-0.1	-0.3	0.6	20.5	11.2	4.8	5.1	1.9	2.4	8.6	11.9
1996	-4.3	-3.6	-0.4	-0.1	-0.2	1.4	20.6	11.2	4.8	5.2	1.9	2.5	8.6	12.0
1997	-2.6	-2.3	-0.4	0.1	0.0	2.5	20.3	11.0	4.7	5.1	1.9	2.4	8.4	11.9
1998	-2.3	-2.2	-0.2	0.1	0.0	2.4	20.0	10.7	4.6	5.1	1.8	2.4	8.2	11.8
1999	-1.3	-1.6	-0.1	0.1	0.4	2.9	20.0	10.7	4.7	5.1	1.8	2.4	8.2	11.8
2000	-0.9	-1.3	-0.1	0.1	0.4	3.1	19.9	10.5	4.7	5.2	1.8	2.3	8.1	11.8
2001	-1.7	-1.5	-0.4	0.0	0.3	2.3	20.0	10.5	4.7	5.2	1.8	2.2	8.2	11.9
2002	-2.3	-1.9	-0.5	-0.1	0.2	1.4	20.4	10.6	4.8	5.3	1.8	2.3	8.3	12.1
2003	-2.7	-2.2	-0.5	-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>6)</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	-2.0	-0.9	-1.4	4.4	-0.6	6.3	2.2	-1.5	-2.8	7.1
2001	0.5	-2.8	-1.4	-0.4	-1.5	1.1	-2.6	6.3	0.0	0.2	-4.4	5.2
2002	0.1	-3.5	-1.4	0.0	-3.2	-0.2	-2.3	2.7	-1.9	-0.2	-2.7	4.3
2003	0.2	-3.9	-3.2	0.3	-4.1	0.2	-2.4	-0.1	-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 based on the ESA 95, but the figures exclude proceeds from the sale of UMTS licences in 2000 (the euro area deficit/surplus including those proceeds is equal to 0.2). Transactions between countries and EU institutions are included and consolidated. Transactions among governments are not consolidated.
- Data prior to 2001 refer to the Euro 11.
- 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 <sup>2)</sup> – government debt by financial instrument and sector of the holder

	Total	Financial instrument				Holder				Other creditors <sup>4)</sup>
		Coins and deposits	Loans	Short-term securities	Long-term securities	Domestic creditors <sup>3)</sup>				
						Total	MFIs	Other financial corporations	Other sectors	
1	2	3	4	5	6	7	8	9	10	
1994	70.0	2.9	16.1	10.3	40.7	55.9	29.9	9.8	16.3	14.1
1995	74.3	2.8	17.9	9.9	43.8	58.3	32.6	8.9	16.8	16.1
1996	75.5	2.9	17.4	9.9	45.4	58.6	32.5	10.4	15.7	17.0
1997	74.9	2.8	16.4	8.9	46.9	56.3	30.9	12.0	13.4	18.6
1998	73.2	2.8	15.1	7.9	47.4	52.8	28.4	13.0	11.3	20.5
1999	72.1	2.9	14.2	6.9	48.2	48.1	26.8	9.9	11.4	24.1
2000	69.7	2.7	13.1	6.2	47.7	43.9	23.0	9.4	11.6	25.8
2001	69.4	2.7	12.5	6.3	47.9	42.1	22.1	8.4	11.6	27.3
2002	69.2	2.7	11.8	6.7	48.0	39.0	20.5	7.0	11.4	30.2
2003	70.5	2.1	11.7	7.4	49.2	38.1	19.6	6.5	12.0	32.4

### 2. Euro area <sup>2)</sup> – government debt by issuer, maturity and currency denomination

	Total	Issued by <sup>5)</sup>				Original maturity			Residual maturity			Currency		
		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 currency <sup>6)</sup>	Non-domestic currency	Other currencies
1994	70.0	58.0	5.4	6.1	0.5	12.0	58.0	7.4	17.4	26.8	25.9	68.2	3.0	1.9
1995	74.3	61.8	5.7	6.0	0.8	11.5	62.8	6.8	18.5	26.5	29.3	72.4	2.9	2.4
1996	75.5	63.0	6.1	5.9	0.5	11.1	64.4	6.3	20.1	25.5	29.9	73.6	2.7	2.5
1997	74.9	62.4	6.3	5.6	0.6	9.7	65.2	6.0	19.6	25.4	29.9	72.9	2.8	2.7
1998	73.2	61.2	6.3	5.4	0.4	8.7	64.5	5.5	17.4	26.1	29.7	71.6	3.2	2.6
1999	72.1	60.3	6.2	5.3	0.3	7.6	64.6	5.0	15.6	26.9	29.6	71.4	-	1.7
2000	69.7	58.2	6.1	5.1	0.3	6.9	62.8	4.4	15.5	27.6	26.6	69.0	-	1.7
2001	69.4	58.0	6.2	4.9	0.3	7.3	62.1	3.1	16.0	26.3	27.1	68.8	-	1.6
2002	69.2	57.7	6.4	4.9	0.3	7.6	61.6	3.1	16.8	25.2	27.3	68.8	-	1.4
2003	70.5	57.8	6.7	5.6	0.4	7.9	62.6	2.9	16.0	25.9	28.4	70.5	-	1.0

### 3. Euro area countries – government debt

	BE	DE	GR	ES	FR	IE	IT	LU	NL	AT	PT	FI
	1	2	3	4	5	6	7	8	9	10	11	12
2000	109.1	60.2	106.2	61.2	57.2	38.4	111.2	5.5	55.9	67.0	53.3	44.6
2001	108.1	59.4	106.9	57.5	56.8	36.1	110.6	5.5	52.9	67.1	55.6	43.9
2002	105.8	60.8	104.7	54.6	58.6	32.3	108.0	5.7	52.6	66.6	58.1	42.6
2003	100.5	64.2	103.0	50.8	63.0	32.0	106.2	4.9	54.8	65.0	59.4	45.3

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

- 1) Data are partially estimated. General government gross consolidated debt at nominal value at the end of the year. Holdings by other governments are not consolidated.
- 2) Data prior to 2001 refer to the Euro 11.
- 3) Holders resident in the country whose government has issued the debt.
- 4) Includes residents of euro area countries other than the country whose government has issued the debt.
- 5) Excludes debt held by general government in the country whose government has issued it.
- 6) 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<sup>2)</sup> – change in government debt by source, financial instrument and sector of the holder

	Total	Source of change				Financial instrument				Holder			Other creditors <sup>5)</sup>
		Borrowing requirement <sup>3)</sup>	Valuation effects <sup>4)</sup>	Other changes in volume <sup>5)</sup>	Aggregation effect <sup>6)</sup>	Coins and deposits	Loans	Short-term securities	Long-term securities	Domestic creditors <sup>7)</sup>	MFIs	Other financial corporations	
	1	2	3	4	5	6	7	8	9	10	11	12	13
1995	7.8	5.1	0.4	2.4	-0.2	0.1	2.6	0.0	5.1	5.1	4.2	-0.4	2.6
1996	3.8	4.2	-0.2	0.1	-0.3	0.1	0.1	0.4	3.2	2.3	1.0	1.8	1.5
1997	2.3	2.2	0.5	-0.4	0.0	0.0	-0.4	-0.6	3.2	0.0	-0.4	2.1	2.3
1998	1.7	1.9	-0.2	0.0	0.0	0.1	-0.5	-0.6	2.7	-1.0	-1.0	1.5	2.7
1999	1.7	1.4	0.3	0.0	0.0	0.2	-0.4	-0.7	2.6	-2.6	-0.6	-2.6	4.4
2000	1.0	0.9	0.1	0.0	0.0	0.0	-0.4	-0.4	1.8	-2.0	-2.6	-0.1	2.9
2001	1.8	1.7	0.1	0.0	0.0	0.1	-0.2	0.4	1.4	-0.4	-0.4	-0.5	2.1
2002	2.1	2.4	-0.4	0.1	0.0	0.1	-0.3	0.7	1.6	-1.7	-0.8	-1.0	3.8
2003	3.0	2.7	0.3	0.0	0.0	-0.5	0.2	0.8	2.4	0.1	-0.4	-0.4	2.9

2. Euro area<sup>2)</sup> – deficit-debt adjustment

Change in debt	Deficit (-)/surplus (+) <sup>9)</sup>	Deficit-debt adjustment <sup>10)</sup>												
		Total	Transactions in main financial assets held by general government							Valuation effects	Exchange rate effects	Other changes in volume	Other <sup>12)</sup>	
			Total	Currency and deposits	Securities <sup>11)</sup>	Loans	Shares and other equity	Privatisations	Equity injections					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	
1995	7.8	-5.1	2.7	0.3	0.1	-0.1	0.4	-0.2	-0.4	0.2	0.4	-0.1	2.4	-0.5
1996	3.8	-4.3	-0.5	-0.2	0.0	0.0	-0.1	-0.1	-0.3	0.2	-0.2	-0.2	0.1	-0.2
1997	2.3	-2.6	-0.4	-0.4	0.2	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	-0.6	-0.8	0.2	-0.2	0.0	0.0	0.1
1999	1.7	-1.3	0.4	-0.2	0.5	0.1	0.0	-0.8	-0.8	0.1	0.3	0.2	0.0	0.3
2000	1.0	0.2	1.1	0.6	0.8	0.1	0.2	-0.6	-0.4	0.1	0.1	0.0	0.0	0.5
2001	1.8	-1.6	0.1	-0.4	-0.6	0.0	0.2	0.0	-0.3	0.2	0.1	0.0	0.0	0.4
2002	2.1	-2.3	-0.2	-0.3	0.0	0.1	0.1	-0.5	-0.3	0.2	-0.4	0.0	0.1	0.4
2003	3.0	-2.7	0.2	-0.4	-0.2	0.1	0.0	-0.3	-0.4	0.1	0.3	-0.1	0.0	0.4

Source: ECB.

- 1) Data are partially estimated. Annual change in gross nominal consolidated debt expressed as a percentage of GDP, i.e.  $[\text{debt}(t) - \text{debt}(t-1)] \div \text{GDP}(t)$ .
- 2) Data prior to 2001 refer to the Euro 11.
- 3) The borrowing requirement is by definition equal to transactions in government debt.
- 4) 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).
- 5) Includes, in particular, the impact of the reclassification of units and certain types of debt assumption.
- 6) The difference between the changes in the aggregated debt, resulting from the aggregation of countries' debt, and the aggregation of countries' change in debt, due to variations in the exchange rates used for aggregation before 1999.
- 7) Holders resident in the country whose government has issued the debt.
- 8) Includes residents of euro area countries other than the country whose government has issued the debt.
- 9) Including proceeds from sales of UMTS licences.
- 10) The difference between the annual change in gross nominal consolidated debt and the deficit as a percentage of GDP.
- 11) Excluding financial derivatives.
- 12) Mainly composed of transactions in other assets and liabilities (trade credit, other receivables/payables and financial derivatives).



## EXTERNAL TRANSACTIONS AND POSITIONS

### 7.1 Balance of payments

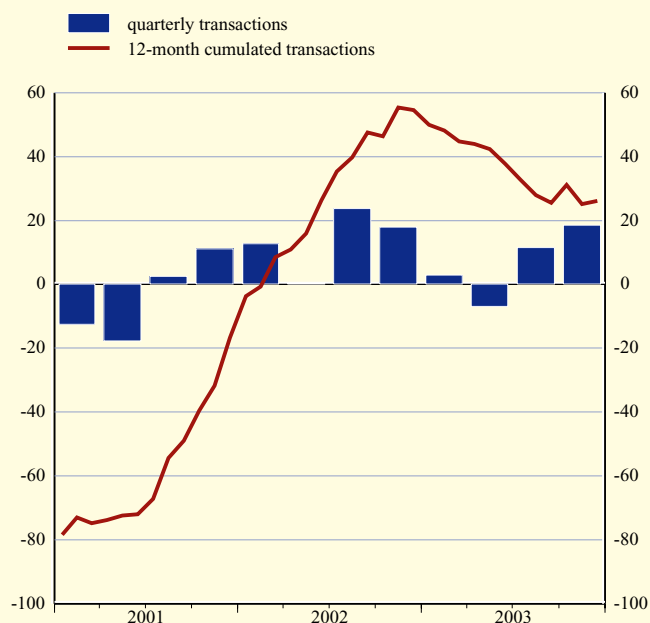
(EUR billions; net transactions)

#### 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	26.1	107.7	17.3	-43.2	-55.8	13.3	39.3	-43.4	-9.9	25.3	-13.7	-75.0	29.8	4.1
2002 Q4	18.0	34.4	3.8	-6.2	-14.0	2.5	20.5	-42.9	12.6	37.6	-3.1	-88.7	-1.3	22.5
2003 Q1	2.9	16.8	1.9	-12.0	-3.8	1.4	4.3	-14.3	13.0	4.2	-3.1	-40.3	11.9	10.0
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	18.5	29.9	6.0	-4.7	-12.6	7.2	25.8	3.5	-6.4	18.2	-4.7	-17.2	13.6	-29.2
2003 Feb.	2.6	8.5	0.3	-2.7	-3.5	-0.9	1.7	-21.2	2.3	-6.5	-0.6	-21.8	5.3	19.5
Mar.	4.3	6.8	1.5	-1.1	-2.9	0.2	4.5	10.9	2.0	16.0	-0.8	-11.4	5.0	-15.4
Apr.	-7.4	6.6	1.4	-8.7	-6.7	0.1	-7.3	17.5	-11.6	27.6	-2.8	3.0	1.2	-10.1
May	-1.6	7.4	1.8	-5.0	-5.8	0.3	-1.4	-23.0	0.6	9.4	1.7	-35.1	0.4	24.4
June	2.1	10.1	2.5	-3.3	-7.2	1.6	3.7	-26.4	13.6	25.0	-0.2	-65.6	0.8	22.8
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.	8.1	13.1	2.3	-3.8	-3.5	1.1	9.3	7.8	-10.0	38.5	1.7	-23.1	0.7	-17.1
Nov.	3.9	8.5	1.3	0.6	-6.4	1.1	5.0	6.2	4.6	4.6	0.5	-9.0	5.5	-11.2
Dec.	6.5	8.3	2.4	-1.5	-2.8	5.0	11.5	-10.5	-0.9	-24.9	-6.9	14.9	7.3	-1.0
2004 Jan.	-4.4	4.2	-0.6	-9.4	1.3	0.4	-4.1	-25.6	-11.9	-14.9	0.6	3.8	-3.2	29.6
Feb.	5.8	9.5	0.1	0.8	-4.6	2.1	7.8	9.4	7.8	4.4	-0.3	-11.5	9.0	-17.2
	<i>12-month cumulated transactions</i>													
2004 Feb.	28.7	111.4	16.5	-40.9	-58.2	14.5	43.3	-34.4	-24.9	26.7	-11.2	-53.7	28.7	-8.8

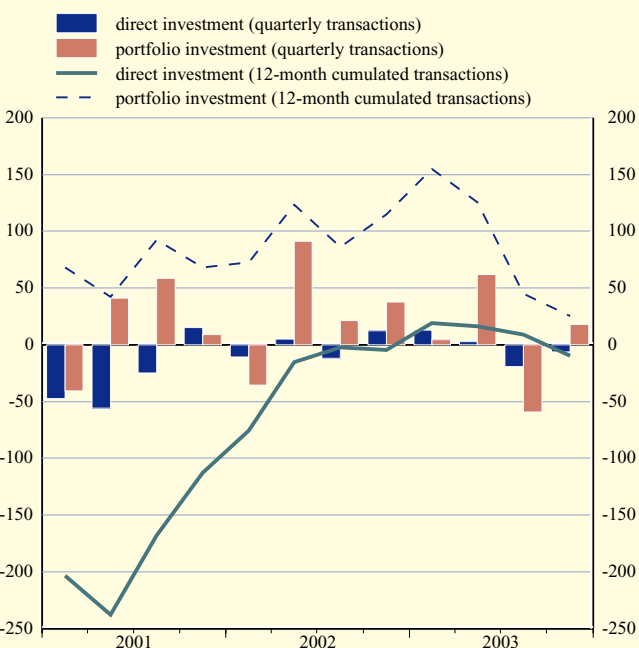
#### C27 B.o.p. current account balance

(EUR billions)



#### C28 B.o.p. net direct and portfolio investment

(EUR billions)



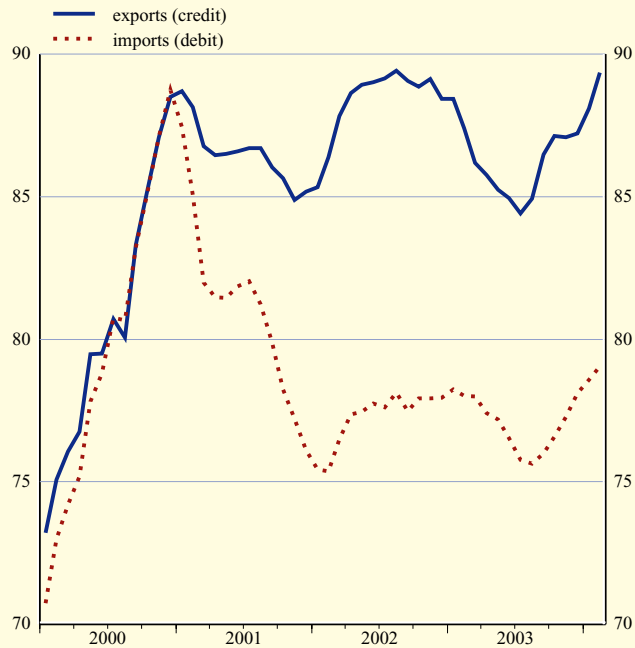
Source: ECB.

**7.1 Balance of payments**  
(EUR billions; transactions)

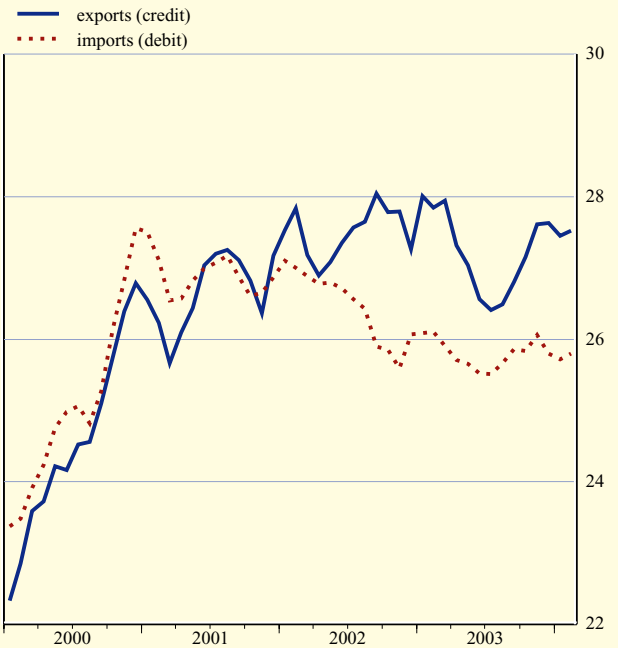
**2. Current account**  
(seasonally adjusted)

	Total			Goods		Services		Income		Current transfers	
	Credit 1	Debit 2	Net 3	Credit 4	Debit 5	Credit 6	Debit 7	Credit 8	Debit 9	Credit 10	Debit 11
2002 Q4	430.3	416.2	14.1	265.3	233.9	81.8	78.2	60.0	69.6	23.3	34.5
2003 Q1	417.2	413.1	4.1	258.5	234.0	83.8	77.7	54.0	67.9	20.9	33.4
Q2	409.6	408.7	0.9	254.8	229.6	79.7	76.6	56.4	68.0	18.7	34.5
Q3	414.7	408.1	6.6	259.4	228.0	80.4	77.6	56.2	65.7	18.7	36.9
Q4	419.2	404.8	14.4	261.7	234.3	82.9	77.4	53.8	61.5	20.8	31.5
2003 Feb.	138.6	137.8	0.8	86.9	77.3	27.2	25.7	17.8	23.5	6.7	11.4
Mar.	135.9	135.8	0.1	83.4	77.3	27.7	25.8	17.6	21.7	7.2	11.0
Apr.	139.9	139.1	0.8	86.9	77.6	27.1	25.7	20.1	24.4	5.8	11.4
May	136.2	134.9	1.3	85.4	76.6	26.3	25.5	18.4	21.5	6.1	11.4
June	133.5	134.6	-1.1	82.5	75.4	26.2	25.4	17.9	22.1	6.9	11.7
July	137.0	135.7	1.3	85.3	75.3	26.7	25.6	18.6	22.5	6.4	12.3
Aug.	139.4	136.6	2.8	86.9	76.2	26.6	26.0	19.6	22.2	6.3	12.3
Sep.	138.3	135.8	2.5	87.1	76.5	27.2	26.0	18.0	21.0	6.0	12.3
Oct.	138.6	131.4	7.2	87.3	77.0	27.7	25.6	17.3	20.8	6.3	8.0
Nov.	139.5	136.3	3.2	86.8	78.3	27.9	26.6	18.3	19.2	6.5	12.2
Dec.	141.1	137.0	4.0	87.6	79.0	27.3	25.2	18.2	21.5	8.0	11.4
2004 Jan.	142.2	138.5	3.7	89.9	78.5	27.2	25.3	18.1	22.4	7.0	12.3
Feb.	143.9	138.5	5.4	90.5	79.6	28.2	26.9	18.9	20.2	6.3	11.8

**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	1,662.4	1,636.3	26.1	1,034.6	926.9	326.7	309.4	220.7	263.9	80.3	136.1	23.2	10.0
2002 Q4	440.4	422.5	18.0	274.2	239.7	83.8	80.1	61.8	68.1	20.6	34.6	5.2	2.7
2003 Q1	412.3	409.3	2.9	253.3	236.4	75.7	73.7	51.4	63.5	31.9	35.7	5.4	4.0
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	429.9	411.4	18.5	269.8	239.9	85.1	79.1	56.1	60.8	19.0	31.6	9.2	2.0
2003 Feb.	130.6	127.9	2.6	83.3	74.8	23.4	23.1	16.4	19.1	7.5	11.0	1.5	2.4
Mar.	138.3	134.0	4.3	87.4	80.6	26.6	25.1	17.2	18.3	7.1	10.0	1.2	1.0
Apr.	136.5	143.9	-7.4	85.6	79.0	26.2	24.8	20.2	29.0	4.6	11.2	0.5	0.4
May	133.7	135.3	-1.6	84.0	76.6	25.9	24.1	19.0	24.0	4.8	10.6	1.4	1.1
June	137.4	135.3	2.1	84.9	74.8	27.3	24.9	20.1	23.3	5.1	12.3	2.6	1.0
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.	147.1	138.9	8.1	96.6	83.5	29.0	26.7	16.9	20.7	4.4	7.9	1.6	0.5
Nov.	134.3	130.4	3.9	86.3	77.8	26.4	25.1	16.0	15.4	5.7	12.0	1.7	0.6
Dec.	148.5	142.0	6.5	86.8	78.5	29.7	27.3	23.1	24.6	8.9	11.6	5.9	0.9
2004 Jan.	139.9	144.4	-4.4	81.8	77.6	23.7	24.2	16.8	26.3	17.6	16.2	0.8	0.5
Feb.	132.7	127.0	5.8	85.0	75.5	24.0	23.9	17.0	16.2	6.8	11.4	2.6	0.5

### 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	220.7	263.9	14.7	5.6	206.0	258.3	51.1	54.0	41.5	45.3	9.6	8.7
2002 Q4	61.8	68.1	3.9	1.6	58.0	66.5	16.3	17.4	13.8	14.6	2.5	2.8
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	56.1	60.8	3.8	1.4	52.3	59.4	15.3	13.1	12.5	10.3	2.8	2.8

	Investment income							
	Portfolio investment				Other investment			
	Total		Equity		Debt		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	85.4	125.8	20.9	49.7	64.5	76.1	69.5	78.6
2002 Q4	21.2	26.3	4.5	9.2	16.7	17.1	20.5	22.7
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	21.4	26.0	4.7	9.7	16.7	16.3	15.6	20.2

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	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	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	-115.5	-92.2	3.4	-95.6	-23.3	-0.1	-23.2	105.7	105.1	2.7	102.3	0.6	0.0	0.6
2002 Q4	-32.9	-29.5	-5.1	-24.5	-3.3	0.0	-3.3	45.4	46.0	0.7	45.3	-0.5	0.0	-0.5
2003 Q1	-29.4	-18.0	-2.1	-15.9	-11.4	-0.1	-11.2	42.3	29.4	0.9	28.5	13.0	-0.1	13.1
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	-24.2	-17.4	1.6	-19.0	-6.8	0.2	-7.0	17.8	29.7	0.4	29.3	-11.9	0.5	-12.4
2003 Feb.	-7.1	-5.6	-0.5	-5.1	-1.5	0.0	-1.5	9.4	6.4	0.9	5.6	2.9	-0.1	3.0
Mar.	-7.1	-4.1	-0.8	-3.4	-2.9	-0.1	-2.8	9.1	9.0	-0.2	9.2	0.1	0.0	0.1
Apr.	-17.1	-8.3	-1.4	-6.9	-8.8	0.0	-8.8	5.5	7.9	0.2	7.7	-2.4	0.0	-2.4
May	-15.1	-15.7	-0.8	-14.9	0.6	0.0	0.6	15.8	15.4	0.2	15.2	0.3	-0.1	0.4
June	2.4	1.6	7.2	-5.6	0.8	0.0	0.9	11.2	6.9	1.5	5.4	4.3	0.1	4.3
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.	-10.6	-6.6	1.8	-8.4	-4.0	0.0	-4.1	0.5	5.9	0.1	5.8	-5.4	0.3	-5.7
Nov.	1.8	3.9	-1.3	5.2	-2.2	0.1	-2.2	2.8	5.0	0.4	4.6	-2.1	0.1	-2.2
Dec.	-15.4	-14.7	1.1	-15.8	-0.6	0.1	-0.7	14.4	18.8	-0.1	18.9	-4.4	0.1	-4.5
2004 Jan.	-8.4	-3.8	-0.8	-3.0	-4.6	0.0	-4.6	-3.5	6.3	0.1	6.2	-9.8	0.0	-9.9
Feb.	-5.6	-3.7	-1.1	-2.6	-1.9	0.0	-1.8	13.4	2.6	0.2	2.5	10.8	0.0	10.8

### 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	-280.5	305.8	-65.6	105.5	-214.9	-172.0	-42.8	200.3	195.3	5.0
2002 Q4	-33.7	71.3	-8.1	12.5	-25.6	-20.2	-5.4	58.8	40.8	18.0
2003 Q1	-48.9	53.1	11.2	2.2	-60.0	-50.9	-9.1	50.8	40.4	10.4
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	-61.0	79.2	-24.2	47.7	-36.8	-24.7	-12.1	31.6	38.1	-6.6
2003 Feb.	-22.1	15.6	1.2	2.1	-23.3	-20.8	-2.5	13.5	2.7	10.8
Mar.	-9.0	25.0	7.6	-12.2	-16.6	-15.0	-1.6	37.2	35.8	1.4
Apr.	-23.2	50.8	-10.7	13.9	-12.5	-15.6	3.1	36.9	21.8	15.1
May	-36.7	46.1	-7.9	-6.2	-28.9	-19.6	-9.3	52.3	49.8	2.5
June	-47.4	72.4	-14.7	22.8	-32.7	-24.1	-8.6	49.6	53.0	-3.5
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.	-30.8	69.3	-13.5	22.4	-17.3	-11.3	-6.0	46.9	29.1	17.8
Nov.	-20.6	25.1	-3.3	11.8	-17.2	-15.1	-2.1	13.3	14.0	-0.6
Dec.	-9.7	-15.2	-7.4	13.4	-2.3	1.8	-4.1	-28.7	-5.0	-23.7
2004 Jan.	-49.1	34.2	-14.5	0.4	-34.6	-17.2	-17.4	33.8	21.4	12.3
Feb.	-13.6	18.0	-5.5	5.6	-8.1	-2.2	-5.9	12.4	12.4	0.0

Source: ECB.

## 7.1 Balance of payments

(EUR billions; transactions)

### 7. Portfolio investment assets by instrument and sector of holder

	Equity					Debt instruments									
						Bonds and notes					Money market instruments				
	Eurosysteem	MFIs excluding Eurosysteem	Non-MFIs			Eurosysteem	MFIs excluding Eurosysteem	Non-MFIs			Eurosysteem	MFIs excluding Eurosysteem	Non-MFIs		
			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	
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	-52.6	-2.6	-50.0	-2.2	-45.5	-124.3	-0.2	-124.1	0.2	-42.4	-0.6	0.6	-1.2
2002 Q4	-0.2	-2.5	-5.4	-1.2	-4.3	0.0	-2.2	-17.9	-0.5	-17.5	0.4	-4.6	-1.2	0.1	-1.3
2003 Q1	-0.1	-3.7	14.9	-0.6	15.6	-0.3	-4.4	-46.2	0.2	-46.5	-0.8	-26.9	18.6	-1.6	20.2
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	-20.6	-0.4	-20.2	-0.3	-7.0	-17.3	-0.1	-17.2	-0.2	-13.0	1.0	1.3	-0.3
2003 Feb.	-0.1	-1.5	2.8	-	-	0.4	-9.7	-11.6	-	-	-0.8	-1.0	-0.6	-	-
Mar.	0.0	-3.8	11.5	-	-	-0.3	-2.2	-12.5	-	-	0.4	5.9	-7.9	-	-
Apr.	-0.1	0.6	-11.2	-	-	-0.1	-8.1	-7.4	-	-	0.5	3.2	-0.7	-	-
May	0.0	0.2	-8.1	-	-	-0.2	-2.7	-16.7	-	-	0.9	-6.4	-3.8	-	-
June	0.0	-0.1	-14.5	-	-	0.1	-14.9	-9.3	-	-	-0.4	1.6	-9.8	-	-
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	-8.8	-	-	-0.4	-1.5	-9.4	-	-	-0.1	-4.0	-2.0	-	-
Nov.	0.0	1.4	-4.7	-	-	0.0	-8.5	-6.6	-	-	-0.1	-2.6	0.6	-	-
Dec.	0.0	-0.3	-7.1	-	-	0.1	3.0	-1.3	-	-	0.0	-6.4	2.4	-	-
2004 Jan.	0.0	-1.4	-13.1	-	-	0.0	-11.4	-5.8	-	-	0.1	-16.7	-0.8	-	-
Feb.	0.0	-3.1	-2.5	-	-	0.0	0.4	-2.6	-	-	-0.2	-6.3	0.7	-	-

### 8. Other investment by sector

	Total		Eurosysteem		General government		MFIs (excluding Eurosysteem)						Other sectors	
							Total		Long-term		Short-term			
	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
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	-240.7	165.7	-0.8	11.9	-1.3	-3.6	-152.9	133.7	-57.7	69.4	-95.2	64.2	-85.6	23.8
2002 Q4	-108.8	20.1	-0.4	6.2	0.4	-0.9	-89.3	0.2	-19.1	15.7	-70.2	-15.5	-19.5	14.5
2003 Q1	-123.1	82.9	-0.6	2.0	-1.8	-8.3	-65.7	60.1	-14.9	10.5	-50.8	49.7	-55.1	29.0
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	-77.4	60.2	-0.7	-0.8	2.7	-4.6	-71.6	53.7	-18.7	30.7	-52.9	23.0	-7.8	11.8
2003 Feb.	-84.4	62.6	-0.5	-0.3	-3.8	-2.2	-54.8	54.0	-6.0	4.6	-48.7	49.5	-25.3	11.1
Mar.	-28.3	16.9	-0.5	1.8	4.4	0.0	-13.8	4.6	-5.3	4.4	-8.5	0.2	-18.4	10.5
Apr.	-56.6	59.6	0.0	0.8	0.8	2.8	-32.7	52.1	-3.6	2.0	-29.1	50.1	-24.6	4.0
May	-46.1	11.0	0.7	1.9	-3.7	1.3	-35.1	3.7	-1.7	2.4	-33.4	1.3	-7.9	4.1
June	-29.5	-36.0	-0.5	2.1	0.9	-0.2	-35.3	-28.9	-6.2	7.4	-29.1	-36.3	5.4	-9.1
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.	-53.1	29.9	-0.2	0.7	1.1	-2.0	-40.5	25.4	-8.2	7.7	-32.3	17.7	-13.4	5.9
Nov.	-36.4	27.4	0.4	-2.7	1.0	1.5	-34.8	27.4	-5.6	7.5	-29.1	20.0	-3.0	1.2
Dec.	12.1	2.8	-0.9	1.2	0.6	-4.0	3.7	0.9	-4.9	15.6	8.6	-14.7	8.7	4.8
2004 Jan.	-64.6	68.5	-0.2	1.4	-1.4	-4.6	-61.8	75.4	-3.3	-2.2	-58.5	77.6	-1.2	-3.8
Feb.	-25.8	14.3	-0.1	-5.0	1.9	-0.8	-25.4	18.0	-8.0	-0.2	-17.4	18.3	-2.1	2.0

Source: ECB.

7.1 Balance of payments  
(EUR billions; transactions)

9. Other investment by instrument

	Eurosystem						General government								
	Loans/currency and deposits			Other assets/liabilities			Trade credits			Loans/currency and deposits			Other assets/liabilities		
	Assets	Liabilities	Balance	Assets	Liabilities	Balance	Assets	Liabilities	Balance	Assets	Liabilities	Balance	Assets	Liabilities	Balance
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
2001	0.6	4.5	5.0	0.0	0.0	0.0	-0.1	0.0	-0.1	4.4	-0.5	3.9	-1.3	0.1	-1.3
2002	-1.2	19.3	18.2	0.0	0.0	0.0	1.5	0.0	1.4	-0.4	-8.0	-8.4	-1.0	-0.2	-1.2
2003	-0.8	11.9	11.1	0.0	0.0	0.0	-0.1	0.0	0.0	-0.3	-3.9	-4.3	-0.9	0.3	-0.6
2002 Q4	-0.4	6.3	5.8	0.0	0.0	0.0	0.0	0.0	0.0	0.4	-0.8	-0.4	0.1	-0.1	-0.1
2003 Q1	-0.6	2.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	-1.2	-8.2	-9.5	-0.5	-0.1	-0.6
Q2	0.2	4.9	5.0	0.0	0.0	0.0	0.0	0.0	0.0	-1.7	3.6	1.9	-0.3	0.3	0.0
Q3	0.3	5.8	6.1	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	4.8	4.7	-0.2	0.5	0.4
Q4	-0.7	-0.8	-1.5	0.0	0.0	0.0	0.0	0.0	0.0	2.7	-4.1	-1.4	0.1	-0.4	-0.4

	MFIs (excluding Eurosystem)						Other sectors								
	Loans/currency and deposits			Other assets/liabilities			Trade credits			Loans/currency and deposits			Other assets/liabilities		
	Assets	Liabilities	Balance	Assets	Liabilities	Balance	Assets	Liabilities	Balance	Assets	Liabilities	Balance	Assets	Liabilities	Balance
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
2001	-215.1	222.2	7.1	-14.0	10.2	-3.9	-3.5	1.3	-2.2	-30.2	18.7	-11.5	-8.9	5.2	-3.8
2002	-162.2	30.6	-131.6	-3.8	-2.8	-6.6	-3.5	-3.0	-6.4	-58.4	25.9	-32.4	-1.5	5.9	4.4
2003	-150.8	136.4	-14.4	-2.1	-2.7	-4.8	-5.5	8.2	2.7	-64.2	14.4	-49.9	-15.9	1.2	-14.7
2002 Q4	-94.3	9.9	-84.5	5.0	-9.6	-4.6	0.2	-3.0	-2.8	-19.2	15.9	-3.4	-0.4	1.6	1.2
2003 Q1	-63.8	59.7	-4.1	-1.9	0.5	-1.5	-1.3	5.1	3.8	-47.9	22.7	-25.2	-5.8	1.2	-4.7
Q2	-103.9	28.5	-75.3	0.7	-1.6	-1.0	-1.1	-0.2	-1.4	-18.5	-7.2	-25.7	-7.5	6.4	-1.2
Q3	87.9	-5.7	82.1	-0.2	-1.3	-1.6	-1.3	0.9	-0.3	4.7	-11.5	-6.8	0.9	-5.4	-4.5
Q4	-71.0	53.9	-17.1	-0.6	-0.2	-0.8	-1.7	2.3	0.6	-2.6	10.4	7.8	-3.5	-0.9	-4.4

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	21.1	8.8	0.1	0.0
2002 Q4	-1.3	0.4	-0.1	0.3	-1.9	2.3	-1.2	0.0	-2.3	-0.9	0.0	0.0
2003 Q1	11.9	0.5	0.0	-0.2	11.5	0.8	-0.6	0.0	9.6	1.7	0.0	0.0
Q2	2.3	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	11.5	2.6	0.0	0.0

Source: ECB.

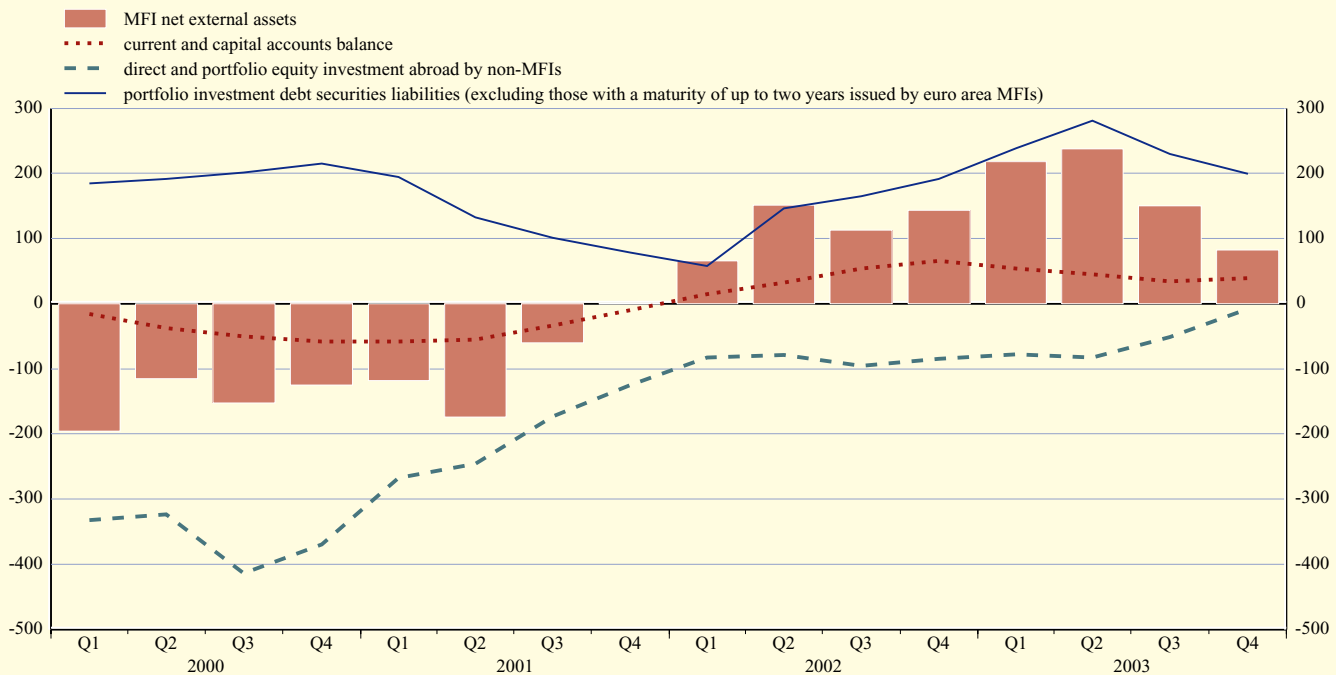
## 7.2 Monetary presentation of the balance of payments

(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	Liabilities		Assets	Liabilities				
					Non-MFIs	Equity <sup>1)</sup>						
1	2	3	4	5	6	7	8	9	10	11	12	
2001	-10.1	-296.8	203.2	-175.6	172.3	78.4	-39.7	24.7	-0.9	44.3	-0.1	-7.3
2002	65.4	-136.4	146.2	-121.5	52.0	191.1	-63.3	20.6	-10.8	0.4	143.7	166.0
2003	39.3	-118.8	105.7	-177.5	110.4	199.3	-87.0	20.2	-13.7	4.1	82.0	93.0
2002 Q4	20.5	-27.8	45.5	-24.5	2.5	49.0	-19.1	13.6	-3.1	22.5	79.0	85.4
2003 Q1	4.3	-27.2	42.4	-12.7	5.3	46.0	-56.8	20.7	-3.1	10.0	28.9	32.0
Q2	-5.0	-34.9	32.5	-81.5	34.2	140.4	-29.2	2.8	-1.4	37.0	94.9	96.4
Q3	14.3	-30.8	13.5	-46.3	27.2	-5.9	4.1	-10.7	-4.6	-13.6	-52.9	-51.2
Q4	25.8	-25.9	17.3	-36.9	43.8	18.9	-5.1	7.3	-4.7	-29.2	11.1	15.7

## 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	29.4	1,001.1	480.3	217.3	261.5	874.7	1,023.8	589.6	182.9	220.9	744.9	122.5
2001	6.1	-0.9	1,063.6	492.7	236.6	287.8	932.2	1,012.3	576.0	178.4	226.5	738.5	107.9
2002	2.1	-2.7	1,085.6	513.1	228.3	309.9	949.0	985.4	559.8	163.7	234.5	717.4	105.2
2003	-2.7	-0.3	1,057.0	496.8	220.1	297.6	915.8	984.3	548.5	160.6	238.1	708.5	107.9
2002 Q3	3.8	-1.4	272.0	127.8	57.5	78.4	238.0	245.8	139.4	41.8	58.3	180.5	26.4
Q4	2.3	2.5	269.7	127.5	56.8	76.7	235.4	247.0	139.8	40.8	59.3	178.3	27.6
2003 Q1	-1.1	3.4	266.1	125.7	54.7	75.5	230.2	250.4	142.9	40.8	58.6	177.7	29.9
Q2	-5.9	-3.0	259.6	122.9	53.2	72.8	225.2	244.2	134.5	39.6	59.6	176.5	25.5
Q3	-2.6	-1.9	264.6	124.7	56.0	74.4	230.1	241.5	134.4	38.8	59.0	174.9	26.3
Q4	-1.2	0.6	266.7	123.6	56.2	74.9	230.2	248.3	136.7	41.5	60.9	179.3	26.1
2003 Sep.	1.5	1.9	88.9	41.8	19.3	25.1	77.8	80.5	45.4	12.7	19.7	58.6	8.9
Oct.	-1.6	-1.2	89.0	40.4	18.5	25.4	76.8	82.0	44.8	14.0	20.4	60.3	8.3
Nov.	-5.5	-2.0	88.4	41.3	18.5	24.9	76.6	83.5	45.7	14.2	20.3	59.8	8.7
Dec.	4.2	5.6	89.3	41.8	19.1	24.6	76.8	82.8	46.2	13.3	20.3	59.2	9.2
2004 Jan.	-2.8	-6.7	89.7	41.7	18.9	24.3	76.8	81.8	44.9	12.7	20.2	58.9	8.5
Feb.	1.6	1.3	89.7	41.1	19.8	24.4	78.3	83.3	45.2	14.3	19.7	61.4	8.2
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	99.9	100.0
2001	5.1	-1.0	105.2	101.9	108.7	108.1	105.6	98.7	99.0	96.1	99.8	97.6	98.8
2002	3.0	-0.2	108.3	107.8	105.4	116.1	108.5	98.6	99.3	90.4	104.5	96.5	100.8
2003	0.5	3.1	109.0	107.6	105.8	114.9	108.4	101.7	99.9	94.4	109.5	99.3	103.1
2002 Q3	6.0	2.3	109.2	107.9	106.9	118.3	109.4	98.9	99.2	93.5	104.8	98.0	102.0
Q4	3.5	2.0	108.4	107.8	105.7	116.1	108.5	99.0	98.7	92.1	106.4	97.2	101.1
2003 Q1	1.7	3.7	108.2	107.3	103.6	115.6	107.5	100.7	99.9	94.5	107.0	98.3	98.0
Q2	-2.3	2.3	107.2	106.3	102.6	112.6	106.5	102.2	99.8	93.5	109.8	99.1	104.2
Q3	0.5	1.5	109.6	108.6	108.3	115.2	109.4	100.6	99.3	91.4	108.4	98.4	107.3
Q4	2.1	4.7	110.8	108.0	108.8	116.3	110.1	103.5	100.5	98.1	112.7	101.5	103.0
2003 Sep.	4.7	4.6	110.4	109.4	112.5	116.5	111.0	99.7	100.1	89.1	107.5	98.2	109.4
Oct.	2.1	3.0	111.0	105.9	106.8	118.4	110.3	102.7	99.6	98.6	111.9	101.9	100.3
Nov.	-2.4	1.6	110.1	108.6	108.3	115.9	109.8	104.2	100.3	100.9	112.7	101.4	102.4
Dec.	7.1	10.0	111.3	109.7	111.4	114.5	110.2	103.8	101.8	94.7	113.6	101.3	106.2
2004 Jan.	0.4	-1.5	112.6	110.1	110.5	114.4	110.8	103.3	99.7	92.0	113.9	101.2	98.1
Feb.	.	.	.	.	.	.	.	.	.	.	.	.	.
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	89.1
2002	-0.9	-2.5	100.1	99.1	99.7	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	93.1	93.0	98.5	95.7	85.6
2002 Q3	-2.0	-3.6	99.5	98.6	98.9	101.4	99.5	97.1	95.4	97.9	100.7	98.9	84.7
Q4	-1.1	0.4	99.4	98.6	98.8	101.2	99.2	97.5	96.1	97.0	100.9	98.5	89.1
2003 Q1	-2.8	-0.4	98.2	97.5	97.2	99.9	97.9	97.2	97.1	94.3	99.1	97.1	99.6
Q2	-3.7	-5.2	96.8	96.3	95.4	99.0	96.7	93.4	91.4	92.5	98.3	95.6	80.0
Q3	-3.1	-3.4	96.4	95.6	95.2	98.8	96.2	93.8	91.9	92.8	98.6	95.4	80.1
Q4	-3.2	-3.9	96.2	95.2	95.0	98.5	95.6	93.7	92.2	92.5	97.8	94.8	82.7
2003 Sep.	-3.0	-2.6	96.6	95.6	94.9	98.9	96.2	94.6	92.4	93.6	99.5	96.2	79.4
Oct.	-3.6	-4.1	96.0	95.4	95.6	98.5	95.6	93.6	91.5	92.8	98.9	95.3	80.7
Nov.	-3.2	-3.5	96.3	95.2	94.6	98.6	95.7	94.0	92.8	92.6	97.7	95.0	82.8
Dec.	-2.7	-4.0	96.1	95.2	94.8	98.4	95.6	93.5	92.4	92.0	96.9	94.2	84.7
2004 Jan.	-3.1	-5.2	95.5	94.6	94.5	97.5	95.1	92.8	91.7	90.4	96.4	93.7	84.6
Feb.	.	.	.	.	.	.	.	.	.	.	.	.	.

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	1,001.1	189.2	39.2	23.6	97.2	63.9	173.3	34.3	153.7	56.8	47.1	126.2
2001	1,063.6	202.1	37.0	24.3	105.9	66.4	180.1	34.5	165.5	60.4	49.9	135.5
2002	1,085.6	205.9	37.1	25.3	112.1	64.0	184.2	33.1	170.4	59.5	43.4	148.5
2003	1,057.0	192.8	38.3	24.8	117.0	63.2	167.0	31.1	170.3	59.4	37.8	.
2002 Q3	272.0	51.4	9.2	6.3	28.2	16.3	46.1	8.4	43.3	15.0	10.5	37.7
Q4	269.7	49.9	9.4	6.5	28.3	15.6	45.6	8.3	42.6	14.4	10.4	37.7
2003 Q1	266.1	48.8	9.6	6.4	28.4	16.5	43.2	7.8	42.2	14.5	10.3	37.9
Q2	259.6	46.9	9.5	6.1	29.2	15.6	41.2	7.5	41.6	14.7	9.5	37.8
Q3	264.6	48.1	9.6	6.3	30.2	15.3	41.7	7.8	43.6	15.3	9.1	39.4
Q4	266.7	49.1	9.7	6.1	29.2	15.8	40.9	8.1	42.9	14.9	8.9	.
2003 Sep.	88.9	16.1	3.2	2.1	9.9	5.0	14.4	2.6	15.1	5.2	3.3	13.4
Oct.	89.0	16.1	3.2	2.0	9.8	5.2	13.8	2.7	14.4	5.2	2.9	13.2
Nov.	88.4	16.0	3.3	2.0	9.5	5.4	13.4	2.6	14.4	4.8	3.1	12.3
Dec.	89.3	16.9	3.2	2.0	9.9	5.2	13.7	2.7	14.1	4.9	2.9	.
2004 Jan.	89.7	16.1	3.3	2.1	10.0	5.2	13.3	2.8	15.1	5.1	3.3	.
Feb.	89.7	.	.	.	.	.	.	.	.	.	.	.
<i>% share of total exports</i>												
2003	100.0	18.2	3.6	2.3	11.1	6.0	15.8	2.9	16.1	5.6	3.6	.
<b>Imports (c.i.f.)</b>												
2000	1,023.8	159.4	38.9	22.2	78.8	50.8	143.6	67.5	217.4	73.7	40.3	133.4
2001	1,012.3	154.3	34.4	21.3	88.9	53.0	138.0	58.6	208.3	74.0	40.9	140.3
2002	985.4	149.7	35.6	22.9	93.5	52.1	125.7	52.7	204.7	67.8	39.4	140.2
2003	984.3	136.6	36.4	22.8	102.0	50.6	110.7	52.1	214.9	68.5	39.5	.
2002 Q3	245.8	37.1	9.0	5.8	23.5	13.2	31.0	13.4	51.6	16.4	9.8	34.6
Q4	247.0	35.8	9.1	5.9	23.9	12.8	30.6	13.4	52.7	16.8	9.7	35.9
2003 Q1	250.4	35.1	9.1	5.9	24.8	13.2	27.9	13.5	53.2	18.4	9.8	38.3
Q2	244.2	33.9	9.1	5.7	25.1	12.6	28.1	13.2	53.7	16.9	9.7	36.4
Q3	241.5	33.6	9.0	5.6	25.1	12.5	27.8	12.5	53.6	16.8	9.7	36.2
Q4	248.3	34.0	9.1	5.7	27.0	12.4	26.9	13.0	54.5	16.5	10.4	.
2003 Sep.	80.5	11.0	3.0	1.9	8.5	4.1	9.3	4.1	18.2	5.7	3.2	12.4
Oct.	82.0	11.3	3.0	1.9	8.8	4.2	9.2	4.3	18.2	5.5	3.3	12.2
Nov.	83.5	11.3	3.1	1.9	9.0	4.1	9.1	4.2	18.0	5.5	3.5	11.8
Dec.	82.8	11.4	3.0	1.9	9.2	4.1	8.6	4.5	18.3	5.4	3.5	.
2004 Jan.	81.8	11.1	2.9	1.7	9.1	4.3	8.7	4.4	18.0	5.4	3.3	.
Feb.	83.3	.	.	.	.	.	.	.	.	.	.	.
<i>% share of total imports</i>												
2003	100.0	13.9	3.7	2.3	10.4	5.1	11.2	5.3	21.8	7.0	4.0	.
<b>Balance</b>												
2000	-22.6	29.9	0.3	1.5	18.4	13.2	29.6	-33.1	-63.6	-16.8	6.8	-7.1
2001	51.2	47.8	2.6	3.0	17.0	13.4	42.1	-24.1	-42.8	-13.6	9.0	-4.9
2002	100.2	56.1	1.5	2.4	18.6	11.9	58.5	-19.7	-34.2	-8.3	4.0	8.4
2003	72.6	56.2	2.0	2.0	15.0	12.6	56.3	-21.0	-44.6	-9.1	-1.7	.
2002 Q3	26.2	14.3	0.2	0.5	4.7	3.1	15.0	-5.0	-8.2	-1.4	0.7	3.1
Q4	22.7	14.1	0.4	0.6	4.4	2.8	15.0	-5.1	-10.2	-2.4	0.7	1.8
2003 Q1	15.7	13.6	0.4	0.5	3.6	3.3	15.3	-5.7	-11.0	-3.9	0.5	-0.4
Q2	15.4	13.0	0.4	0.4	4.1	3.0	13.1	-5.6	-12.0	-2.2	-0.1	1.4
Q3	23.1	14.5	0.5	0.7	5.1	2.8	13.9	-4.8	-10.0	-1.5	-0.6	3.2
Q4	18.4	15.1	0.6	0.4	2.2	3.4	14.0	-4.9	-11.6	-1.5	-1.5	.
2003 Sep.	8.4	5.2	0.2	0.2	1.4	0.9	5.1	-1.5	-3.2	-0.6	0.0	1.0
Oct.	7.0	4.9	0.2	0.1	1.0	1.0	4.5	-1.5	-3.8	-0.3	-0.4	1.0
Nov.	4.9	4.8	0.2	0.1	0.5	1.3	4.3	-1.6	-3.6	-0.7	-0.5	0.5
Dec.	6.5	5.5	0.2	0.1	0.7	1.1	5.2	-1.8	-4.1	-0.5	-0.6	.
2004 Jan.	8.0	5.0	0.4	0.4	0.8	0.9	4.7	-1.7	-2.8	-0.3	-0.1	.
Feb.	6.4	.	.	.	.	.	.	.	.	.	.	.

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

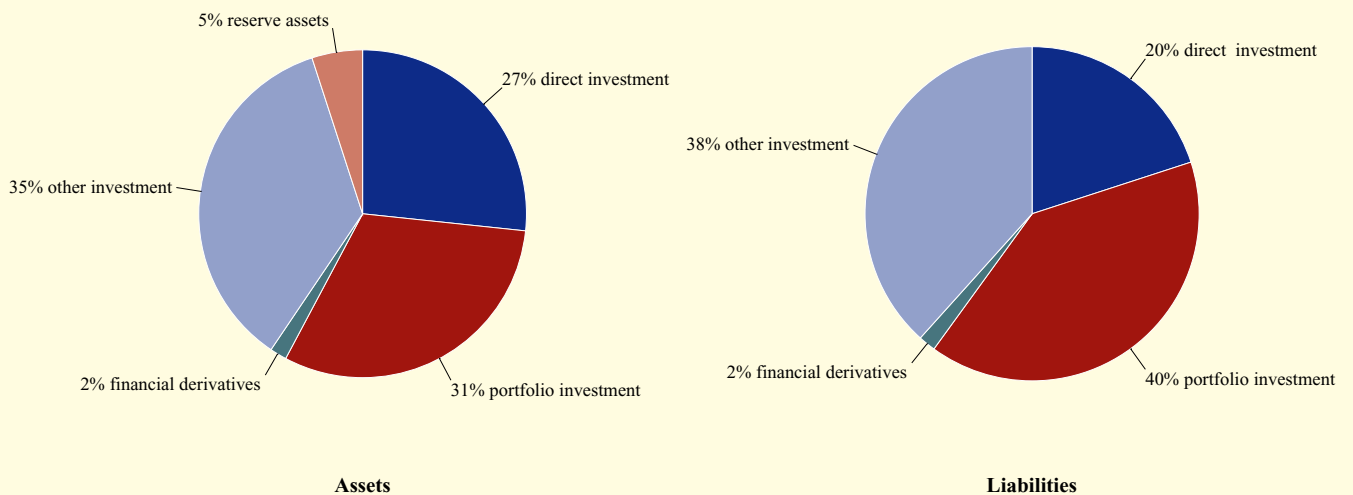
7.4 International investment position

(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	110.2	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	107.0	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	MFI's excluding Eurosystem	Non-MFI's	Total	MFI's excluding Eurosystem	Non-MFI's	Total	MFI's excluding Eurosystem	Non-MFI's	Total	MFI's excluding Eurosystem	Non-MFI's
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	MFI's excluding Eurosystem	Non-MFI's			Bonds and notes					Money market instruments				
			Total	General gov.	Other sectors	Euro-system	MFI's excluding Eurosystem	Non-MFI's			Euro-system	MFI's excluding Eurosystem	Non-MFI's		
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

	MFI's (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	
<b>Eurosystem</b>																
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 Mar.	339.1	122.3	397.765	4.7	24.4	187.7	7.9	36.4	142.8	-	-	-	0.6	0.0	18.9	-20.5
Apr.	332.4	119.9	396.324	4.5	25.0	183.1	7.6	33.6	141.0	-	-	-	0.9	0.0	18.4	-22.8
May	323.1	121.1	396.233	4.5	24.2	173.3	6.9	33.6	131.6	-	-	-	1.1	0.0	18.7	-23.1
June	326.1	120.0	396.229	4.6	25.5	176.1	8.3	34.8	132.2	-	-	-	0.8	0.0	18.2	-25.8
July	328.9	124.2	396.277	4.5	25.5	174.7	8.4	33.2	132.3	-	-	-	0.8	0.0	18.1	-27.2
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
<b>of which held by the European Central Bank</b>																
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 Mar.	40.5	7.6	24.656	0.2	0.0	32.8	0.9	9.3	22.6	-	-	-	0.0	0.0	3.0	-1.8
Apr.	40.7	7.5	24.656	0.2	0.0	33.1	0.9	6.8	25.4	-	-	-	0.0	0.0	2.5	-2.4
May	39.2	7.5	24.656	0.2	0.0	31.4	0.8	8.0	22.6	-	-	-	0.0	0.0	2.4	-2.2
June	39.3	7.5	24.656	0.2	0.0	31.6	0.9	7.1	23.6	-	-	-	0.0	0.0	2.8	-1.8
July	41.3	7.7	24.656	0.2	0.0	33.4	0.8	6.7	25.9	-	-	-	0.0	0.0	2.3	-2.9
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

Source: ECB.



## EXCHANGE RATES

### 8.1 Effective exchange rates

(period averages; index 1999 Q1=100)

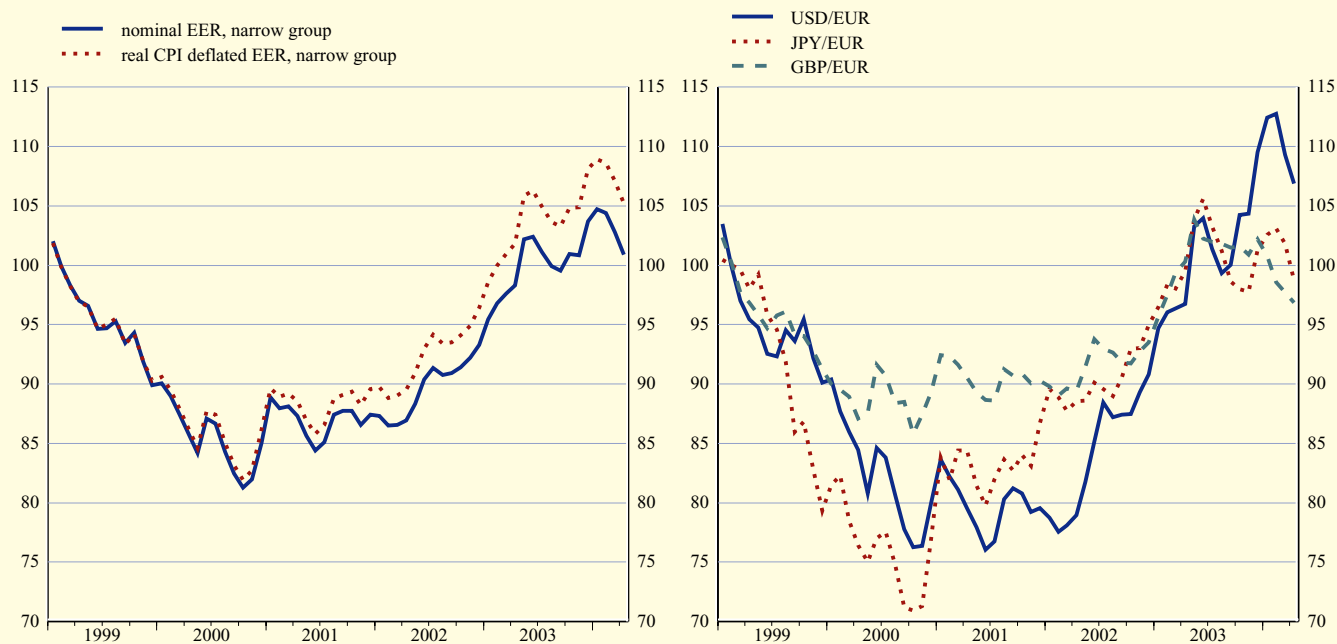
	Narrow group						Broad group		
	Nominal	Real CPI	Real PPI	Real GDP deflator	Real ULCM	Real ULCT	Nominal	Real CPI	
	1	2	3	4	5	6	7	8	
2001	87.0	88.4	89.6	88.2	88.4	87.2	90.8	87.7	
2002	89.7	92.3	93.1	92.0	92.0	91.5	95.4	91.6	
2003	99.9	103.6	103.3	103.4	103.5	103.3	106.8	102.0	
2003 Q1	96.6	99.8	100.3	99.4	99.0	99.5	103.9	99.1	
Q2	101.0	104.7	104.4	104.4	104.6	104.2	107.6	102.8	
Q3	100.2	103.9	103.4	103.9	103.9	103.8	106.7	101.9	
Q4	101.8	105.9	105.1	106.1	106.5	105.6	109.1	104.3	
2004 Q1	103.9	108.2	107.4	.	.	.	111.5	106.0	
2003 Apr.	98.3	101.8	101.7	-	-	-	105.0	100.3	
May	102.2	105.8	105.7	-	-	-	108.8	103.9	
June	102.4	106.3	105.9	-	-	-	109.1	104.3	
July	101.1	104.9	104.5	-	-	-	107.5	102.7	
Aug.	99.9	103.6	103.1	-	-	-	106.4	101.5	
Sep.	99.5	103.3	102.7	-	-	-	106.1	101.4	
Oct.	101.0	104.8	104.1	-	-	-	108.0	103.2	
Nov.	100.9	104.9	104.2	-	-	-	108.1	103.2	
Dec.	103.7	108.1	107.0	-	-	-	111.2	106.4	
2004 Jan.	104.7	108.9	108.0	-	-	-	112.3	106.7	
Feb.	104.4	108.6	107.8	-	-	-	112.1	106.4	
Mar.	102.8	107.1	106.5	-	-	-	110.1	104.8	
Apr.	100.9	105.2	104.9	-	-	-	108.2	102.9	
	<i>% change versus previous month</i>								
2004 Apr.	-1.8	-1.8	-1.5	-	-	-	-1.7	-1.8	
	<i>% change versus previous year</i>								
2004 Apr.	2.6	3.4	3.1	-	-	-	3.1	2.6	

### C33 Effective exchange rates

(monthly averages; index 1999 Q1=100)

### C34 Bilateral exchange rates

(monthly averages; index 1999 Q1=100)



Source: ECB.

## 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 kroner	Singapore dollar	Canadian dollar	Norwegian kroner	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 Q1	1.0731	0.66961	127.59	1.4662	9.1822	1,288.92	8.3695	7.4305	1.8724	1.6203	7.5706	1.8095	84.16	1.9537	8.9600
Q2	1.1372	0.70169	134.74	1.5180	9.1425	1,373.83	8.8692	7.4250	1.9872	1.5889	7.9570	1.7742	84.71	1.9955	8.8217
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
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
2003 Apr.	1.0848	0.68902	130.12	1.4964	9.1541	1,337.38	8.4605	7.4255	1.9282	1.5851	7.8317	1.7813	83.38	1.9700	8.3192
May	1.1582	0.71322	135.83	1.5155	9.1559	1,390.03	9.0321	7.4246	2.0074	1.6016	7.8715	1.7866	84.44	2.0083	8.9060
June	1.1663	0.70224	138.05	1.5411	9.1182	1,392.33	9.0955	7.4250	2.0233	1.5798	8.1619	1.7552	86.25	2.0069	9.2160
July	1.1372	0.70045	134.99	1.5476	9.1856	1,342.27	8.8689	7.4332	1.9956	1.5694	8.2893	1.7184	87.66	1.9386	8.5842
Aug.	1.1139	0.69919	132.38	1.5400	9.2378	1,312.67	8.6873	7.4322	1.9531	1.5570	8.2558	1.7114	88.79	1.9137	8.2375
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
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
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
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
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
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
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
	% change versus previous month														
2004 Apr.	-2.3	-0.9	-3.0	-0.8	-0.8	-3.3	-2.2	-0.1	-3.1	-1.5	-2.8	-1.4	0.4	0.9	-3.0
	% change versus previous year														
2004 Apr.	10.5	-3.4	-0.8	3.9	0.1	3.3	10.5	0.2	4.7	1.4	5.9	-9.4	5.0	-4.9	-5.2

	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 Q1	0.58001	31.624	15.6466	243.63	3.4527	0.6226	0.4214	4.1892	231.2825	41.786	1.9535	35,593	1,777,952
Q2	0.58653	31.470	15.6466	250.95	3.4528	0.6452	0.4274	4.3560	232.9990	41.226	1.9467	37,434	1,716,532
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
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
2003 Apr.	0.58657	31.618	15.6466	245.59	3.4530	0.6286	0.4240	4.2971	232.3136	41.038	1.9473	36,569	1,767,550
May	0.58694	31.387	15.6466	245.78	3.4528	0.6513	0.4295	4.3343	232.9908	41.125	1.9464	37,632	1,720,476
June	0.58607	31.412	15.6466	261.21	3.4527	0.6549	0.4285	4.4339	233.6600	41.507	1.9463	38,059	1,664,000
July	0.58730	31.880	15.6466	263.73	3.4528	0.6473	0.4274	4.4368	234.4369	41.804	1.9465	37,148	1,596,957
Aug.	0.58616	32.287	15.6466	259.56	3.4527	0.6397	0.4264	4.3699	234.9962	41.955	1.9463	37,166	1,564,214
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
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
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
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
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
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
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
	% change versus previous month												
2004 Apr.	0.1	-1.4	0.0	-1.2	0.0	-1.4	-0.4	-0.1	0.2	-0.6	0.0	1.6	1.1
	% change versus previous year												
2004 Apr.	0.0	2.8	0.0	2.0	0.0	3.4	0.3	10.8	2.6	-2.2	0.0	11.2	-7.4

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
HICP													
2002	1.4	2.4	3.6	2.8	2.0	0.4	5.2	3.1	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	2.6	0.7	5.7	8.5	2.3	1.4
2003 Q3	-0.2	1.6	1.3	2.7	3.5	-0.8	4.7	2.4	0.7	5.6	8.9	2.3	1.4
2003 Q4	0.8	1.3	1.2	3.2	3.5	-1.2	5.4	1.1	1.4	5.0	9.4	1.9	1.3
2004 Q1	2.0	0.7	0.6	1.0	4.3	-1.1	6.8	0.9	1.8	3.7	8.2	0.6	1.3
2003 Nov.	0.9	1.4	1.2	3.8	3.7	-0.9	5.6	-0.3	1.5	5.3	9.5	2.0	1.3
2003 Dec.	1.0	1.2	1.2	2.2	3.5	-1.3	5.6	0.7	1.6	4.7	9.3	1.8	1.3
2004 Jan.	2.0	1.0	0.6	1.6	4.0	-1.2	6.7	1.2	1.8	4.0	8.2	1.3	1.4
2004 Feb.	2.0	0.7	0.6	1.4	4.3	-1.2	7.0	0.9	1.8	3.6	8.4	0.2	1.3
2004 Mar.	2.1	0.4	0.7	0.1	4.7	-0.9	6.6	0.5	1.8	3.5	7.9	0.4	1.1
General government deficit (-)/surplus (+) as a % of GDP													
2001	-6.4	3.1	0.3	-2.4	-1.6	-2.1	-4.4	-6.4	-3.5	-2.7	-6.0	2.8	0.7
2002	-6.4	1.7	1.8	-4.6	-2.7	-1.4	-9.3	-5.7	-3.6	-1.9	-5.7	0.0	-1.6
2003	-12.9	1.5	2.6	-6.3	-1.8	-1.7	-5.9	-9.7	-4.1	-1.8	-3.6	0.7	-3.2
General government gross debt as a % of GDP													
2001	25.2	47.8	4.7	64.4	16.2	23.4	53.5	61.8	36.7	26.9	48.7	54.4	38.9
2002	28.9	47.2	5.7	67.1	15.5	22.8	57.1	61.7	41.2	27.8	43.3	52.6	38.5
2003	37.6	45.0	5.8	72.2	15.6	21.9	59.0	72.0	45.4	27.1	42.8	51.8	39.8
Long-term government bond yield as a % per annum, period average													
2003 Oct.	4.47	4.44	-	4.64	4.98	4.82	7.08	4.68	6.36	6.16	5.08	4.85	4.96
2003 Nov.	4.75	4.57	-	4.75	5.01	4.81	7.82	4.70	6.90	5.54	5.36	4.98	5.10
2003 Dec.	4.82	4.52	-	4.75	5.07	4.81	8.24	4.71	6.76	5.27	5.42	4.86	4.94
2004 Jan.	4.68	4.35	-	4.75	5.06	4.81	8.36	4.71	6.67	5.14	5.16	4.65	4.84
2004 Feb.	4.80	4.30	-	4.79	5.05	4.81	8.65	4.70	6.82	5.01	5.11	4.55	4.88
2004 Mar.	.	4.10	-	.	.	.	.	.	.	.	.	4.31	4.76
3-month interest rate as a % per annum, period average													
2003 Oct.	2.06	2.20	2.61	3.81	3.84	2.57	9.54	2.94	5.42	6.41	5.98	2.86	3.80
2003 Nov.	2.07	2.21	2.61	3.81	3.99	2.50	10.59	2.95	5.68	6.22	6.00	2.85	3.98
2003 Dec.	2.08	2.22	2.61	3.81	4.21	2.68	13.15	2.94	5.69	6.11	5.98	2.82	4.02
2004 Jan.	2.07	2.19	2.61	3.81	4.20	2.66	12.57	2.94	5.37	6.01	5.78	2.73	4.06
2004 Feb.	2.06	2.18	2.61	3.84	4.18	2.66	12.58	2.95	5.46	5.80	5.79	2.55	4.17
2004 Mar.	.	2.14	.	.	.	.	.	.	.	.	.	2.37	4.30
Real GDP													
2002	2.0	1.0	6.0	2.0	6.1	6.8	3.5	1.7	1.3	2.9	4.4	2.1	1.6
2003	2.9	0.4	.	2.0	7.4	9.0	2.9	.	.	2.3	4.2	1.6	2.2
2003 Q2	2.6	0.1	3.5	1.3	6.2	6.8	2.5	0.7	3.8	2.1	3.8	0.6	2.2
2003 Q3	3.4	0.1	4.6	2.0	7.3	8.8	2.9	1.9	3.9	2.3	4.2	1.7	2.2
2003 Q4	3.1	1.0	.	2.5	7.4	10.6	3.6	.	.	2.5	4.7	2.3	2.7
Current and capital accounts balance as a % of GDP													
2002	-5.7	2.1	-11.9	-5.4	-7.4	-4.8	-3.7	-1.2	-2.6	1.4	-7.6	4.7	-1.6
2003	-6.5	3.0	-13.2	-2.1	-8.9	-6.2	.	-5.1	-2.0	0.1	-0.5	6.5	-1.6
2003 Q2	-6.0	3.2	-11.0	-3.8	-10.0	-7.0	-8.5	-6.2	-2.0	-0.4	-1.2	5.8	-2.9
2003 Q3	-7.9	4.6	-9.9	11.0	-10.2	-4.5	-6.0	3.2	-1.1	1.9	0.8	6.6	-1.9
2003 Q4	-10.2	1.8	-16.2	-2.2	-9.7	-9.3	.	.	-1.3	-0.7	-0.6	7.1	-1.7
Unit labour costs													
2002	-	2.1	2.0	-	0.0	-12.6	9.0	-	-	6.5	4.1	0.8	2.8
2003	-	1.8	6.1	-	.	0.1	.	-	-	.	7.2	0.5	.
2003 Q2	-	2.0	7.4	-	-	.	-	-	-	-	-	-	2.9
2003 Q3	-	2.1	5.8	-	-	.	-	-	-	-	-	-	.
2003 Q4	-	2.0	.	-	-	.	-	-	-	-	-	-	.
Standardised unemployment rate as a % of labour force (s.a.)													
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
2003 Q3	7.9	5.8	10.1	4.6	10.3	12.5	5.7	8.5	19.2	6.6	16.8	5.6	4.9
2003 Q4	8.1	5.9	9.7	4.6	10.5	12.0	5.8	8.6	19.1	6.5	16.6	6.0	4.9
2004 Q1	8.3	5.9	9.4	4.7	10.6	11.6	5.9	8.9	19.1	6.5	16.6	6.3	.
2003 Nov.	8.1	5.9	9.7	4.6	10.5	12.1	5.8	8.7	19.1	6.5	16.5	6.0	4.9
2003 Dec.	8.1	6.0	9.6	4.7	10.5	11.9	5.9	8.6	19.1	6.4	16.6	6.0	4.8
2004 Jan.	8.2	5.9	9.5	4.7	10.6	11.7	5.9	8.8	19.1	6.4	16.6	6.0	4.7
2004 Feb.	8.3	5.9	9.4	4.7	10.6	11.6	5.9	9.0	19.1	6.5	16.6	6.4	.
2004 Mar.	8.4	5.9	9.3	4.7	10.7	11.5	6.0	9.0	19.0	6.5	16.5	6.4	.

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

9.2 In the United States and Japan

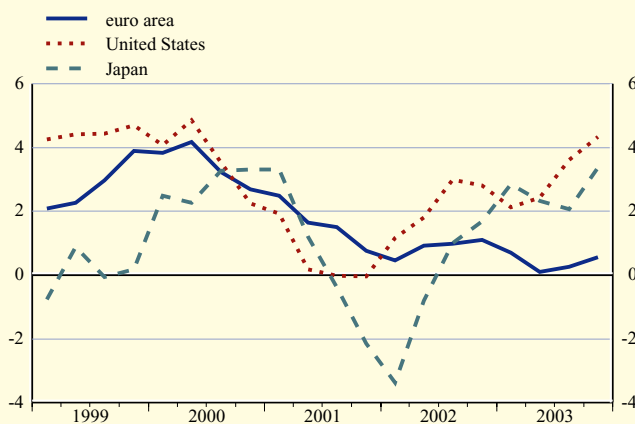
(annual percentage changes, unless otherwise indicated)

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	1.4	44.2
2001	2.8	0.1	0.5	-3.9	4.8	11.4	3.78	5.01	0.8956	-0.5	43.6
2002	1.6	-3.0	2.2	-0.5	5.8	8.0	1.80	4.60	0.9456	-3.4	45.7
2003	2.3	0.4	3.1	0.1	6.0	6.2	1.22	4.00	1.1312	.	.
2003 Q1	2.9	0.4	2.1	0.7	5.8	6.4	1.33	3.90	1.0731	-4.2	46.2
Q2	2.1	1.1	2.4	-1.3	6.1	6.9	1.24	3.61	1.1372	-4.7	47.1
Q3	2.2	0.5	3.6	-0.6	6.1	7.2	1.13	4.22	1.1248	-5.2	47.7
Q4	1.9	-0.6	4.3	1.7	5.9	4.5	1.17	4.27	1.1890	.	.
2004 Q1	1.8	.	4.9	3.1	5.6	4.1	1.12	4.00	1.2497	.	.
2003 Dec.	1.9	-	-	2.5	5.7	3.3	1.17	4.26	1.2286	-	-
2004 Jan.	1.9	-	-	2.1	5.6	3.8	1.13	4.13	1.2613	-	-
Feb.	1.7	-	-	3.4	5.6	4.1	1.12	4.06	1.2646	-	-
Mar.	1.7	-	-	3.8	5.7	4.5	1.11	3.81	1.2262	-	-
Apr.	.	-	-	.	.	.	1.15	4.32	1.1985	-	-
Japan											
2000	-0.7	-6.0	2.8	5.7	4.7	2.1	0.28	1.76	99.47	-7.4	126.1
2001	-0.7	5.1	0.4	-6.8	5.0	2.8	0.15	1.34	108.68	-6.1	134.6
2002	-0.9	-3.2	-0.4	-1.2	5.4	3.3	0.08	1.27	118.06	.	.
2003	-0.3	-4.2	2.7	3.2	5.3	1.7	0.06	0.99	130.97	.	.
2003 Q1	-0.2	-6.8	2.8	5.5	5.4	1.9	0.06	0.80	127.59	.	.
Q2	-0.2	-3.2	2.3	2.2	5.4	1.6	0.06	0.60	134.74	.	.
Q3	-0.2	-2.1	2.1	1.0	5.2	1.8	0.05	1.20	132.14	.	.
Q4	-0.3	-4.8	3.4	4.2	5.1	1.5	0.06	1.38	129.45	.	.
2004 Q1	-0.1	.	.	6.6	.	.	0.05	1.31	133.97	.	.
2003 Dec.	-0.4	-6.3	-	5.8	4.9	1.5	0.06	1.35	132.43	-	-
2004 Jan.	-0.3	-5.7	-	5.3	5.0	1.6	0.06	1.33	134.13	-	-
Feb.	0.0	.	-	6.6	5.0	1.7	0.05	1.25	134.78	-	-
Mar.	-0.1	.	-	7.7	4.7	.	0.05	1.35	133.13	-	-
Apr.	.	.	-	.	.	.	0.05	1.51	129.08	-	-

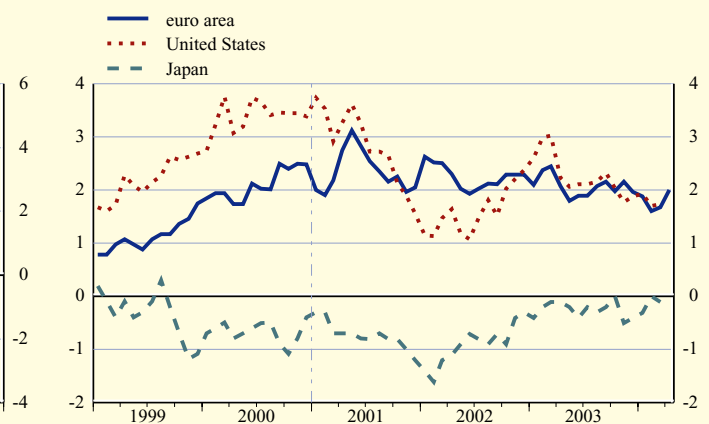
C35 Real gross domestic product

(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

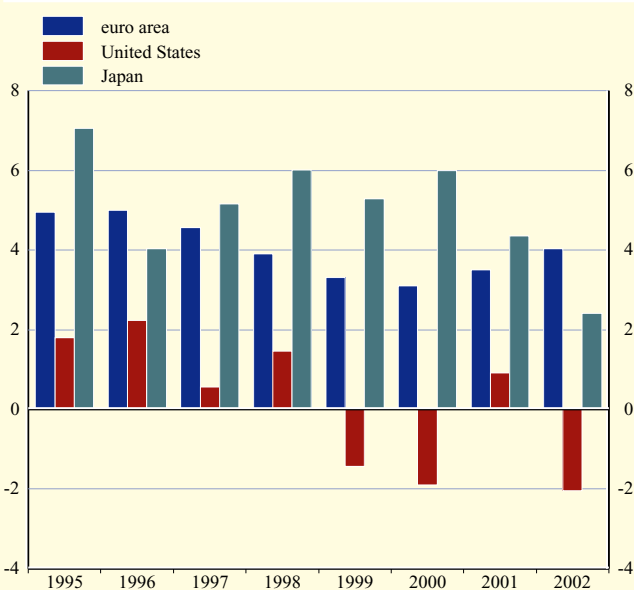
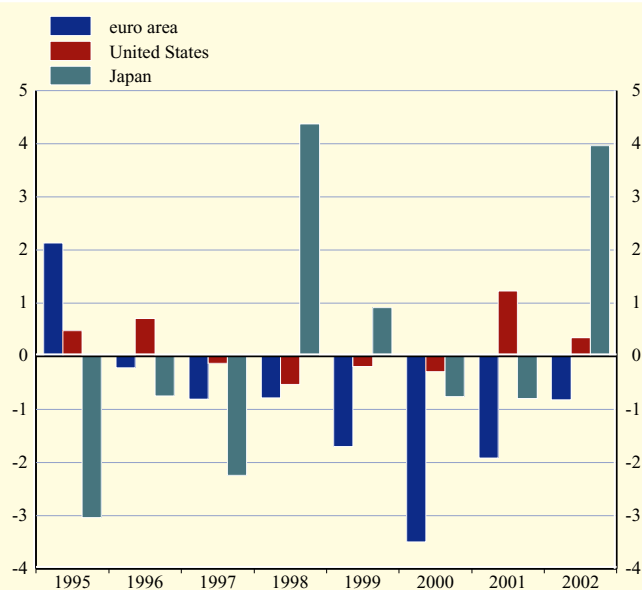
(as a percentage of GDP)

### 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	Gross capital formation	Net lending to the rest of the world	Gross capital formation	Gross fixed capital formation	Net acquisition of financial assets	Gross saving	Net incurrence of liabilities	Securities and shares	Capital expenditures <sup>2)</sup>	Net acquisition of financial assets	Gross saving <sup>3)</sup>	Net incurrence of liabilities
	1	2	3	4	5	6	7	8	9	10	11	12	13
United States													
2000	18.0	20.8	-4.0	9.4	8.9	12.3	7.5	12.6	2.5	12.7	4.0	11.1	5.9
2001	16.4	19.1	-3.8	7.9	8.3	1.9	7.6	0.6	1.7	13.2	7.0	11.1	6.0
2002	14.7	18.4	-4.4	7.5	7.4	2.3	8.2	1.9	0.0	13.0	5.0	11.3	7.0
2003	13.3	18.4	-4.8	7.3	7.2	5.5	8.6	4.4	0.8	13.2	6.3	11.0	8.4
2002 Q1	15.4	18.3	-4.0	7.3	7.6	1.6	8.1	1.3	0.2	12.9	6.0	11.4	7.1
Q2	15.1	18.4	-4.6	7.4	7.4	2.5	8.2	1.8	0.4	12.9	4.9	11.6	5.8
Q3	14.5	18.5	-4.5	7.6	7.3	2.2	8.1	2.0	-1.6	13.2	4.2	11.3	6.5
Q4	13.8	18.4	-4.7	7.5	7.2	2.8	8.3	2.5	0.9	12.9	4.9	10.8	8.6
2003 Q1	12.9	18.1	-4.9	7.2	7.2	5.7	7.9	5.4	0.7	12.8	5.5	10.6	8.4
Q2	13.2	18.2	-5.0	7.2	7.2	5.5	8.5	4.6	2.1	13.1	12.6	11.3	12.8
Q3	13.2	18.4	-4.7	7.2	7.3	5.2	8.9	3.8	0.2	13.5	5.1	11.5	7.3
Q4	13.8	18.9	-4.7	7.5	7.3	5.5	9.1	4.0	0.4	13.2	2.4	10.6	5.2
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	-2.9	15.7	-7.0	-0.9	4.8	0.7	8.5	-2.1
2003	.	24.0	.	.	.	2.6	.	-4.9	-0.5	.	-0.5	.	-0.6
2002 Q1	30.5	23.0	3.4	.	.	9.1	.	-4.9	-3.1	.	-6.6	.	2.5
Q2	24.1	23.4	2.8	.	.	-27.9	.	-23.7	0.8	.	5.8	.	-8.5
Q3	24.5	23.9	2.7	.	.	1.2	.	-9.7	-2.4	.	-6.8	.	-0.6
Q4	24.2	25.2	2.2	.	.	5.9	.	9.2	0.7	.	9.5	.	-1.5
2003 Q1	28.2	23.4	2.8	.	.	16.0	.	-4.6	0.3	.	-11.2	.	2.9
Q2	.	23.3	.	.	.	-25.1	.	-21.4	-0.9	.	4.1	.	-5.5
Q3	.	24.1	.	.	.	9.3	.	-2.9	-3.0	.	-5.4	.	1.6
Q4	.	24.9	.	.	.	10.3	.	8.6	1.4	.	9.4	.	-1.2

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.

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## TECHNICAL NOTES

### RELATING TO THE EURO AREA OVERVIEW (I. MONETARY DEVELOPMENTS AND INTEREST RATES)

The average growth rate for the quarter ending in month  $t$  is calculated as:

$$a) \left( \frac{0.5I_t + \sum_{i=1}^2 I_{t-i} + 0.5I_{t-3}}{0.5I_{t-12} + \sum_{i=1}^2 I_{t-i-12} + 0.5I_{t-15}} - 1 \right) \times 100$$

where  $I_t$  is the index of adjusted 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:

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

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

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

Following the entry into force on 1 January 2003 of ECB Regulation ECB/2001/13, a number of breakdowns of MFI balance-sheet data, previously reported at a quarterly frequency, are now available monthly – thus providing monthly data on, for example, loans to households. However, for the time being and until at least a full year of monthly data becomes available, growth rates will continue to be calculated on the basis of the quarterly data.

If  $F_t^Q$  and  $L_{t-3}$  are defined as above, the index  $I_t$  of adjusted 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:

$$j) \frac{\sum_{i=0}^3 T_{t-i}}{L_{t-4}} \times 100$$

<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.

**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 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:

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

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

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 I 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.

4 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 5 May 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 will be implemented on 10 March 2004. As a result of these changes, maintenance periods will 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 has been 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-

1 OJL 356, 30.12.1998, p. 7.

2 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) where 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 OJL 162, 5.6.1998, p. 1.

5 OJL 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 6.3 show the general government fiscal position in the euro area. The data are mainly consolidated and are based on the ESA 95 methodology. The euro area aggregates are compiled by the ECB from harmonised data provided by the NCBs, which are regularly updated. The deficit and debt data for the euro area countries may therefore differ from those used by the European Commission within the excessive deficit procedure.

Section 6.1 shows general government revenue and expenditure on the basis of definitions laid down in Commission Regulation (EC) No 1500/2000 of 10 July 2000<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.

## 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>7</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 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

<sup>6</sup> OJL 172, 12.7.2000, p. 3.

<sup>7</sup> OJL 131, 28.5.2003, p. 20.

methodological changes in the compilation of the source data.

Table 2 in Section 7.1 contains seasonally adjusted data for the current account. Where appropriate, the adjustment covers also working-day, leap year and/or Easter effects.

Table 7 in Section 7.1 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.

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 ECB calculations of nominal and real effective exchange rate indices for the euro, based on weighted averages of bilateral euro exchange rates. A positive change denotes an appreciation of the euro. Weights are based on 1995-97 manufactured goods trade with the trading partners and capture third-market effects. The narrow group is composed of the United States, the United Kingdom, Japan, Switzerland, Sweden, South Korea, Hong Kong, Denmark, Singapore, Canada, Norway and Australia. In addition, the broad group includes the following countries: Algeria, Argentina, Brazil, China, Croatia, Cyprus, the Czech Republic, Estonia, Hungary, India, Indonesia, Israel, Malaysia, Mexico, Morocco, New Zealand, the Philippines, Poland, Romania, Russia, Slovakia, Slovenia, South Africa, Taiwan, Thailand and Turkey. Real rates are calculated using consumer prices (CPI), producer prices (PPI), gross domestic product (GDP deflator), unit labour costs in manufacturing (ULCM) and unit labour costs in the total economy (ULCT). For more detailed information on the calculation of effective exchange rates, see the article entitled “Developments in the euro area’s international cost and price competitiveness” in the August 2003 issue of the Monthly Bulletin and the ECB’s Occasional Paper No. 2 (“The effective exchange rates of the euro”, Luca Buldorini, Stelios Makrydakis and Christian Thimann, February 2002), which can be downloaded from the ECB’s website.

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 in 1999 to 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 respectively.



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 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.

## DOCUMENTS PUBLISHED BY THE EUROPEAN CENTRAL BANK SINCE JANUARY 2003



This list is designed to inform readers about selected documents published by the European Central Bank since January 2003. For Working Papers, the list only refers to publications released between February and April 2004. The publications are available to interested parties free of charge from the Press and Information Division. Please submit orders in writing to the postal address given on the back of the title page.

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- “The EU economy following the accession of the new Member States”, May 2004.
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- “Risk mitigation methods in Eurosystem credit operations”, May 2004.

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- 353 “Towards the estimation of equilibrium exchange rates for CEE acceding countries: methodological issues and a panel cointegration perspective” by F. Maeso-Fernandez, C. Osbat and B. Schnatz, April 2004.

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- “EU banking sector stability”, February 2003.
- “List of Monetary Financial Institutions and institutions subject to minimum reserves”, February 2003.
- “Review of the foreign exchange market structure”, March 2003.
- “Structural factors in the EU housing markets”, March 2003.
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- “Memorandum of Understanding on the exchange of information among credit registers for the benefit of reporting institutions”, March 2003.

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#### **INFORMATION BROCHURES**

“Information guide for credit institutions using TARGET”, July 2003.



## 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.

