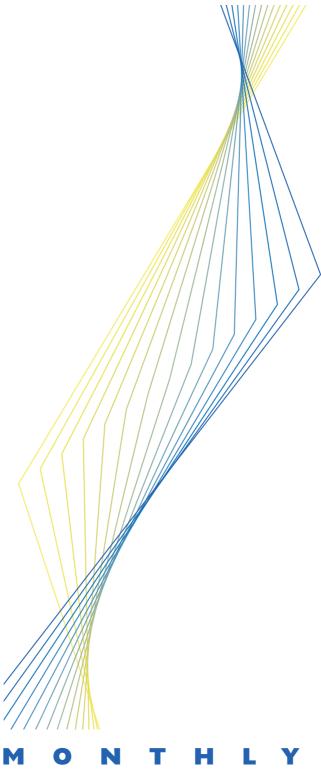


EUROPEAN CENTRAL BANK

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

September 2003





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

September 2003

### © European Central Bank, 2003

Address Kaiserstrasse 29

D-60311 Frankfurt am Main

Postal address Postfach 16 03 19

D-60066 Frankfurt am Main

 Telephone
 +49 69 1344 0

 Internet
 http://www.ecb.int

 Fax
 +49 69 1344 6000

 Telex
 411 144 ecb d

This Bulletin was produced under the responsibility of the Executive Board of the ECB. Translations are prepared and published by the national central banks.

All rights reserved. Reproduction for educational and non-commercial purposes is permitted provided that the source is acknowledged.

The cut-off date for the statistics included in this issue was 3 September 2003.

ISSN 1561-0136 (print)

ISSN 1725-2822 (online)

### **Contents**

Ed	ito	rial	5
Ec	one	omic and monetary developments in the euro area	7
	Mo	onetary and financial developments	7
	Pr	ice developments	35
	Οι	utput, demand and labour market developments	42
	Fis	scal developments	51
		ne global macroeconomic environment, exchange rates and e balance of payments	53
Во	хe	s:	
	I	Enhancements to euro area monetary statistics	9
	2	Monetary policy operations and liquidity conditions in the reserve maintenance period ending on 23 August 2003	23
	3	Current euro area interest rates from a historical perspective	25
	4	Deriving euro area inflation expectations from inflation-linked swap	s 31
	5	Sources of short-term volatility in HICP inflation	39
	6	Latest developments in investment by type of product	43
	7	Progress and gaps in euro area short-term statistics	45
Eu	ro	area statistics	*
Ch	ro	nology of monetary policy measures of the Eurosystem	<b>97</b> *
		TARGET (Trans-European Automated Real-time Gross settlement ess Transfer) system	101*
Do	ocu	ments published by the European Central Bank	105*

#### **Abbreviations**

#### **Countries**

BE Belgium DK Denmark DE Germany GR Greece ES Spain FR France ΙE Ireland ΙT Italy

LU Luxembourg
NL Netherlands
AT Austria
PT Portugal
FI Finland
SE Sweden

UK United Kingdom

IP Japan

US United States

#### **Others**

BIS Bank for International Settlements

BPM5 IMF Balance of Payments Manual (5th edition)

CDs certificates of deposit

c.i.f. cost, insurance and freight at the importer's border

CPI Consumer Price Index

ECB European Central Bank

ECU European Currency Unit

EER effective exchange rate

EMI European Monetary Institute

EMU Economic and Monetary Union

ESA 95 European System of Accounts 1995

ESCB European System of Central Banks
EU European Union

EUR euro

f.o.b. free on board at the exporter's border

GDP gross domestic product

HICP Harmonised Index of Consumer Prices
ILO International Labour Organization
IMF International Monetary Fund
MFIs monetary financial institutions

NACE Rev. I Statistical classification of economic activities in the European Community

NCBs national central banks
PPI Producer Price Index
repos repurchase agreements

SITC Rev. 3 Standard International Trade Classification (revision 3)

ULCM unit labour costs in manufacturing 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 4 September 2003, the Governing Council of the ECB decided to leave the minimum bid rate on the main refinancing operations of the Eurosystem unchanged at 2.0%. The interest rates on the marginal lending facility and the deposit facility were also left unchanged at 3.0% and 1.0% respectively.

The decision to leave interest rates unchanged reflects the Governing Council's assessment that the outlook for price stability in the medium term continues to be favourable. The current monetary policy stance therefore remains appropriate. The historically low interest rates lend support to economic activity. The Governing Council will carefully monitor all factors that might affect this assessment.

As regards the economic analysis underlying this assessment, recent data confirm that economic activity in the euro area was very weak in the second quarter of 2003, with a slight decline in real GDP (quarter-on-quarter) according to Eurostat's first estimate. However, survey data and recent financial market developments reflect an improvement in confidence and support the expectation of an increase in economic activity. The main scenario thus remains that of a gradual recovery in real GDP growth starting in the second half of 2003 and strengthening further in the course of 2004. This is in line with currently available forecasts and projections.

The expected upturn should be underpinned by both external and domestic factors. Recent data signal that a recovery is already under way in several parts of the world economy. The associated strengthening in foreign demand should lead to an increase in euro area exports, counteracting the effects of the loss of price competitiveness due to the past appreciation of the euro, and also have a positive impact on business investment. Ongoing adjustment efforts to enhance euro area corporate profitability should improve the conditions for an economic upswing. The low level of interest rates facilitates this adjustment and strengthens incentives to

invest. Furthermore, real disposable income in the euro area should be positively affected by terms-of-trade effects stemming from the past appreciation of the euro.

Downside risks to this main scenario for economic growth have declined over the past couple of months but have not disappeared. Macroeconomic imbalances in some regions of the world economy persist. Although this may not affect the short-term economic dynamics, it constitutes a risk over the longer term. The development of the oil price level has also to be seen as a risk to economic activity.

As regards price developments, Eurostat's flash estimate for annual HICP inflation in August was 2.1%. While recent oil price developments imply some short-term upward pressure on inflation rates, the picture of annual HICP inflation hovering around or slightly above 2% during the remainder of this year remains broadly unchanged. In 2004 annual inflation rates should fall below 2%, stabilising at levels consistent with price stability. This expectation is based on the assumption of moderate wage developments in the context of a gradual economic recovery. Moreover, the significant past strengthening of the external value of the euro should continue to have lagged effects which will limit upward pressure on prices, despite some recent declines in the level of the euro exchange rate. Over longer time horizons, inflation expectations in the euro area seem to be well anchored at levels below but close to 2%.

As regards the monetary analysis, monetary growth remained strong in recent months and there is significantly more liquidity available in the euro area than is needed to finance non-inflationary growth. In part, this is due to past portfolio shifts and possibly to an increase in monetary holdings related to precautionary motives. Moreover, the continued strong monetary growth is likely to be related to the low level of interest rates, which implies low opportunity costs of holding liquid assets. The current level of

interest rates is also counterbalancing the negative impact of subdued economic growth on credit demand. In fact, the growth of loans to the private sector has remained relatively robust since the beginning of the year.

At the current juncture, the ample liquidity is not expected to translate into inflationary pressure. However, monetary growth needs to be closely monitored as the considerable amounts of excess liquidity could become a source of concern if they were to persist when economic activity strengthens significantly.

Summing up and cross-checking the information from the two pillars, the economic analysis confirms the expectation that price pressures will remain subdued in the context of a gradual economic recovery and moderate import price and wage developments. The strong monetary expansion should, in view of the economic situation, not be seen as adversely affecting this outlook for the time being. Overall, therefore, the medium-term outlook for price stability remains favourable.

Recent fiscal developments in the euro area are of great concern. There is growing evidence that most countries will miss their budgetary targets for 2003 by a significant margin. The deterioration of budget balances mainly reflects the lower than anticipated economic growth, but it is worrying that not

all countries with severe imbalances have, as yet, introduced sufficient consolidation measures. In order to maintain the credibility of the institutional and economic underpinnings of EMU, it is fundamental to abide by the rules of the Stability and Growth Pact in all respects. In the budget plans currently being prepared for 2004, a correction of excessive deficits within the agreed time frame is essential in the countries concerned. In other countries with fiscal imbalances, a structural consolidation effort of at least 0.5% of GDP per year is required. Fiscal plans need to be part of a comprehensive and credible medium-term strategy with emphasis on expenditure restraint and growth-oriented restructuring of expenditure. Sound fiscal policies will help to boost investor and consumer confidence and enhance the prospects for stronger economic growth in the euro area.

Fiscal consolidation strategies should go hand in hand with progress in implementing structural reforms. In this respect, efforts to bring public pension systems onto a sustainable path and to further develop private pension schemes deserve support. At the same time, more reforms are needed to reduce structural rigidities in the labour and product markets. Such reforms are essential for addressing what is perceived to be the main economic problem of the euro area, namely the high level of structural unemployment.

### **Economic and monetary developments** in the euro area

### Monetary and financial developments

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

At its meeting on 4 September 2003, the Governing Council of the ECB decided to leave the minimum bid rate in the main refinancing operations, conducted as variable rate tenders, unchanged at 2.0%. The interest rates on both the marginal lending facility and the deposit facility were also kept unchanged, at 3.0% and 1.0% respectively (see Chart 1).

### Annual M3 growth remained high in July

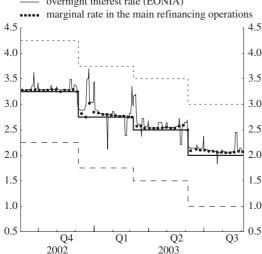
The trend of strong monetary growth, which has been observed since mid-2001, continued in the recent past. In July 2003 the annual growth rate of the broad monetary aggregate M3 rose to 8.5%, from 8.4% in the previous month. The three-month average of the annual growth rates of M3 stood at 8.5% in the period from May to July 2003, unchanged from the period from April to June 2003 (see Chart 2).

### Chart I

### ECB interest rates and money market

(percentages per annum; daily data)

- ---- marginal lending rate
- deposit rate
- minimum bid rate in the main refinancing operations
- overnight interest rate (EONIA)



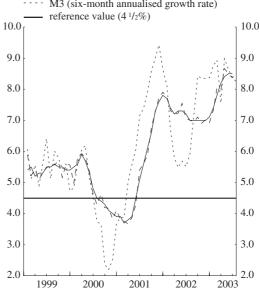
Sources: ECB and Reuters.

#### Chart 2

### M3 growth and the reference value

(adjusted for seasonal and calendar effects)

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



Source: ECB.

Monetary developments up to July indicate that reversals of past portfolio shifts remained limited, despite the decline in geopolitical tensions and tendency а towards normalisation in stock market conditions over previous months. It appears that private non-MFI investors are still reluctant to re-invest in equity, given the substantial losses they stock market experienced on investments in recent years.

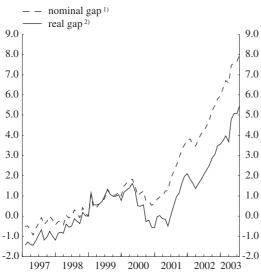
The persistently strong monetary growth is likely to be related mainly to the low level of interest rates across the maturity spectrum. This resulted in low opportunity costs of holding in particular the most liquid monetary assets included in the narrow monetary aggregate MI. The high bond market volatility over recent months may also have supported the preference of private non-MFI investors for short-term liquid and secure assets. Finally, the strong liquidity preference of economic agents may also be partly due to the uncertainty about the outlook for

employment, which may have fuelled precautionary savings.

The extended period of strong monetary growth has resulted in the accumulation of substantially more liquidity in the euro area than is needed to finance sustainable noninflationary growth, as indicated by the continued steep rise in measures of the nominal and real money gaps Chart 3). The nominal money gap measure refers to the difference between the actual level of M3 and the level of M3 which would have resulted from M3 growth at its reference value (4½% p.a.) since December 1998. The real money gap measure shows the difference between the actual level of M3 deflated by the HICP and the level of M3 in real terms which would have resulted from nominal M3 growth at the reference value and HICP inflation in line with the definition of price stability - again using December 1998 as the base period. Although the choice of the base period is rather arbitrary, it is clear that very

# **Chart 3**Estimates of the nominal and real money gaps

 $(as\ a\ percentage\ of\ the\ stock\ of\ M3)$ 



Source: ECB.

- Deviation of the actual stock of M3 from the level consistent with monetary growth at the reference value, taking December 1998 as the base period.
- Nominal money gap minus the deviation of consumer prices from a level compatible with the definition of price stability, taking December 1998 as the base period.

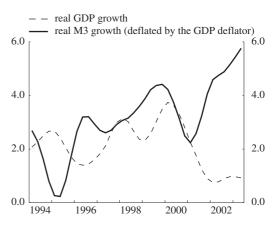
large amounts of excess liquidity have accumulated over the past two years.

A substantial part of this excess liquidity is due to past portfolio shifts, most of which occurred in the context of high stock market volatility and the continuous decline in stock prices between mid-2001 and early 2003. The upward effect on the money gap measures can be estimated to be between 3 and 5 percentage points in the second quarter of 2003 (see also the box entitled "Estimating the size of portfolio shifts from equity to

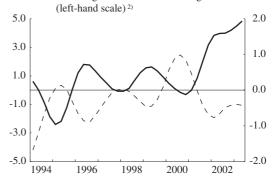
### Chart 4

### Real M3, real GDP and opportunity costs of M3

(four-quarter moving averages of annual changes; seasonally adjusted)



change in opportunity cost of M3
 (right-hand scale) <sup>1)</sup>
 real M3 growth minus real GDP growth



Source: ECB.

Note: The annual growth rates of GDP and the GDP deflator in the second quarter of 2003 are assumed to be equal to those in the first quarter.

- The opportunity cost of M3 is defined as the difference between the three-month money market rate and the own rate of return on M3.
- Calculated as the difference between M3 growth deflated by the GDP deflator and real GDP growth.

money" on page 11 of the May 2003 issue of the Monthly Bulletin). Obviously, as indicated by the broad range, such estimates are surrounded by a large degree of uncertainty and need therefore to be interpreted very cautiously.

The significant influence of exceptional factors on monetary developments over recent years is also confirmed by the fact that in the second quarter of 2003 the annual growth rate of M3 continued to be above what would have been in line with the developments in

its traditional determinants, i.e. real GDP and the opportunity costs of M3. As shown in Chart 4 there is a substantial gap between real M3 growth and real GDP growth. This gap can only partly be explained by the low level of the opportunity costs of M3.

With the release of the July 2003 data, the ECB has considerably extended the set of seasonally adjusted data for the main components and counterparts of M3 (see Box I).

#### Box I

### **Enhancements to euro area monetary statistics**

This issue of the Monthly Bulletin contains, for the first time, a more comprehensive and improved set of euro area monetary statistics, derived from the balance sheet of the monetary financial institutions (MFIs) (see Tables 2.3 - 2.8 of the "Euro area statistics" section).

Following the entry into effect on 1 January 2003 of ECB Regulation ECB/2001/13 concerning the consolidated balance sheet of the MFI sector, a number of breakdowns of the data on deposits and loans which used to be reported quarterly are reported monthly, starting from January 2003. Monthly data are now available for the sectoral breakdown of deposits (by maturity, currency and type) taken by MFIs from insurance corporations and pension funds, other financial intermediaries (e.g. investment funds), non-financial corporations and households. On the asset side of the MFI balance sheet, monthly data are now available for the loans granted by MFIs to these four sub-sectors. A further breakdown of the loans to households by purpose (into "loans for consumer credit", "loans for housing purchase" and "other loans") is now also compiled monthly.

This additional statistical information allows for the derivation of monthly sectoral M1 and M2 aggregates (based on an estimate of sectoral currency holdings). Once the data have been available for a sufficient period of time and annual growth rates can be computed at a monthly frequency, a sectoral analysis may help to provide a better understanding of the driving forces behind monetary growth. In addition, sectoral monetary aggregates may have some information content for economic variables such as investment or consumption.

In the table in this box, the upper panel shows the percentage breakdown of each sector by instrument, while the lower panel reports the percentage breakdown of each instrument by sector as at end-July 2003. It appears that the money holdings of both financial and non-financial corporations are concentrated in overnight and short-term time deposits, while the money holdings of households are more widespread. For instance, short-term savings deposits (i.e. deposits redeemable at notice of up to three months) account for a considerable share of their holdings. At the same time, households hold more than half of all categories of deposit except repurchase agreements.

Another enhancement to the statistics is that MFIs now report monthly on the price revaluations of their deposits and holdings of securities and on write-offs and write-downs (i.e. changes in the value of loans caused by the removal of doubtful loans from the balance sheet). In the past this information was only available quarterly and was estimated by the national central banks of the euro area.

### Breakdown of MFI deposits by instrument and sector

(percentage values as at July 2003)

	Insurance corporations and pension funds	Other financial institutions	Non-financial corporations	Households	Total 1)
		Brea	kdown by instru	ment	
Overnight deposits	46	41	63	37	-
Deposits with agreed maturity					
of up to one year	33	30	30	15	-
Deposits with agreed maturity					
of over one year and up to two years	1	1	1	2	-
Deposits redeemable at notice					
of up to three months	2	2	4	44	-
Repurchase agreements	18	25	3	2	-
Total 1)	100	100	100	100	-
		Bı	reakdown by sect	or	
Overnight deposits	3	8	29	60	100
Deposits with agreed maturity					
of up to one year	4	13	30	53	100
Deposits with agreed maturity					
of over one year and up to two years	2	7	7	85	100
Deposits redeemable at notice					
of up to three months	0	1	2	97	100
Repurchase agreements	10	48	13	29	100
Total 1)	2	9	20	69	100

Source: ECB.

1) Figures may not add up due to rounding.

Furthermore, all the main M3 components and counterparts are now adjusted for seasonal and calendar effects. These new series start in September 1997.

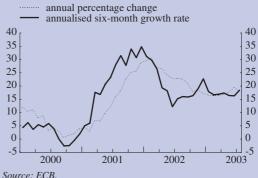
An example of the relevance of the seasonal adjustment of the additional monetary series is provided in the chart below. This chart shows the annual growth rates and the annualised six-month growth rates, calculated

from seasonally adjusted flows, of the series for money market fund shares/units. The monitoring of shorter-term dynamics may help on occasion to detect at an early stage possible changes in the longer-term developments. For instance, money market fund shares/units are particularly suitable for keeping cash at times of high uncertainty, so that monitoring the seasonally adjusted series may assist in determining changes in the sentiment of the relevant economic agents.

Methodological notes and longer runs of data, including historical time series from 1970 for the main euro area monetary aggregates, can be found on the ECB's website (www.ecb.int) in the "Monetary statistics" part of the "Statistics" section. For more

### **Growth in money market fund** shares/units

(annual percentage changes, annualised six-month growth rates; seasonally adjusted)



background information on ECB Regulation ECB/2001/13, see the article entitled "Enhancements to MFI balance sheet and interest rate statistics" in the April 2002 issue of the Monthly Bulletin.

### All main components of M3 contributed to its strong dynamics

In July 2003 the annual growth rate of the narrow monetary aggregate MI remained broadly stable at 11.5% (see Table I). The annual growth rate of currency in circulation, although declining (to 30.3% in July, from a high of 39.1% in the first quarter of 2003), remained very strong. The high growth continued to reflect the ongoing recovery in currency in circulation since the euro cash changeover on I January 2002, driven by a rebuilding of currency holdings by both domestic and non-euro area residents.

The annual growth rate of overnight deposits has increased further over recent months. In July 2003 this rate stood at 8.8%, compared with a low of 6.6% in the first quarter of 2003. While the demand for overnight deposits was dampened by the rebuilding of currency holdings, this was more than offset by the positive effects of both the low opportunity costs of holding overnight deposits and portfolio shifts into liquid and secure assets at times of high uncertainty. In addition, due to the increasing use of electronic banking, where MFIs offer highly attractive interest rates for specific types of overnight deposit, demand for the latter seems to have been fuelled.

The annual growth rate of other short-term deposits remained robust at 5.7%, compared with a low of 4.3% in the first quarter of 2003. The stronger growth of this component of M3 is solely due to the developments in savings deposits, the annual growth rate of which increased to 10.9%, from 7.3% in the first quarter of 2003. While this may have partly reflected a shift from time deposits – in line with the narrowing of the spread between the retail bank interest rates on both types of deposit (see Chart 5) – it may also be related to increased precautionary savings of euro area households.

The pronounced preference of euro area private non-MFI investors for safe and liquid instruments is also reflected in the strong dynamics of marketable instruments included in M3 and in particular of money market fund shares and units, which - like overnight deposits - are well suited for parking money in times of high uncertainty. In July the annual growth rate of money market fund shares and units stood at 18.2%, compared with 16.6% in the first quarter of 2003. At the same time, the annual rates of change in the other components of marketable instruments - repurchase agreements and short-term debt securities issued by MFIs remained very low.

Table I
Components of M3
(annual percentage changes; quarterly averages; adjusted for seasonal and calendar effects)

2002	2002	2002	2003	2003	2003
Q2	Q3	Q4	Q1	Q2	July
6.6	7.6	8.8	10.3	11.4	11.5
-20.0	-7.7	12.9	39.1	35.7	30.3
11.8	10.3	8.1	6.6	8.1	8.8
6.3	5.5	4.9	4.3	5.4	5.7
2.7	1.4	1.5	0.5	0.0	-1.1
9.4	8.8	7.7	7.3	9.6	10.9
6.5	6.5	6.7	7.1	8.2	8.4
12.4	10.4	8.5	10.5	9.8	8.9
2.1	3.2	2.2	8.4	2.5	0.2
25.2	22.5	18.5	16.6	17.5	18.2
-3.1	-9.5	-8.8	-5.6	-5.4	-13.9
7.3	7.0	7.0	7.6	8.4	8.5
	Q2  6.6 -20.0 11.8 6.3 2.7 9.4 6.5 12.4 2.1 25.2 -3.1	Q2         Q3           6.6         7.6           -20.0         -7.7           11.8         10.3           6.3         5.5           2.7         1.4           9.4         8.8           6.5         6.5           12.4         10.4           2.1         3.2           25.2         22.5           -3.1         -9.5	Q2         Q3         Q4           6.6         7.6         8.8           -20.0         -7.7         12.9           11.8         10.3         8.1           6.3         5.5         4.9           2.7         1.4         1.5           9.4         8.8         7.7           6.5         6.5         6.7           12.4         10.4         8.5           2.1         3.2         2.2           25.2         22.5         18.5           -3.1         -9.5         -8.8	Q2         Q3         Q4         Q1           6.6         7.6         8.8         10.3           -20.0         -7.7         12.9         39.1           11.8         10.3         8.1         6.6           6.3         5.5         4.9         4.3           2.7         1.4         1.5         0.5           9.4         8.8         7.7         7.3           6.5         6.5         6.7         7.1           12.4         10.4         8.5         10.5           2.1         3.2         2.2         8.4           25.2         22.5         18.5         16.6           -3.1         -9.5         -8.8         -5.6	Q2         Q3         Q4         Q1         Q2           6.6         7.6         8.8         10.3         11.4           -20.0         -7.7         12.9         39.1         35.7           11.8         10.3         8.1         6.6         8.1           6.3         5.5         4.9         4.3         5.4           2.7         1.4         1.5         0.5         0.0           9.4         8.8         7.7         7.3         9.6           6.5         6.5         6.7         7.1         8.2           12.4         10.4         8.5         10.5         9.8           2.1         3.2         2.2         8.4         2.5           25.2         22.5         18.5         16.6         17.5           -3.1         -9.5         -8.8         -5.6         -5.4

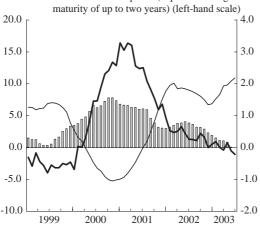
Source: ECB.

#### Chart 5

### Short-term savings and time deposits and their retail interest rate spread

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

- spread between remuneration rates of time deposits and savings deposits (right-hand scale)
- short-term savings deposits (deposits redeemable at notice of up to three months) (left-hand scale)
  - short-term time deposits (deposits with agreed maturity of up to two years) (left-hand scale)



Source: ECB.

### Growth in loans to the private sector stabilised

As regards the counterparts of M3 in the consolidated balance sheet of the euro area MFI sector, the annual growth rate of total credit granted to euro area residents continued to increase, reaching 5.3% in July 2003, from a low of 4.1% in the last quarter of 2002 (see Table 2). This was due to a rise in the annual growth rates of both credit extended to general government and credit granted to the private sector.

The annual growth rate of credit to general government increased to 4.6% in July 2003, compared with a low of 1.1% in the third quarter of 2002. As for the instrument breakdown, the annual rate of change in MFI loans to general government became positive in July. The annual growth of general government debt securities held by MFIs also continued its rising trend. The continued rise in the growth of credit to general government is likely to reflect increased financing needs against the background of weak economic growth in the euro area.

The annual growth rate of MFI loans to the private sector was 4.9% in July, remaining in the range between 41/2% and 5% in which it has been hovering since the end of last year. The positive effects stemming from the low level of retail bank lending rates in the euro appear to have continued counterbalance the negative impact of weak economic growth. Recent data confirm that the downward trend in the growth of loans

Table 2 Counterparts of M3 (annual percentage changes; quarterly averages; adjusted for seasonal and calendar effects)

	2002	2002	2002	2003	2003	2003
	Q2	Q3	Q4	Q1	Q2	July
Longer-term financial liabilities						
(excluding capital and reserves)	4.0	5.1	5.2	5.0	5.2	5.5
Deposits with an agreed maturity of over 2 years	0.9	1.9	2.7	3.4	3.8	4.2
Deposits redeemable at notice of over 3 months	-13.1	-11.2	-9.1	-7.9	-9.1	-12.5
Debt securities issued with a maturity of over 2 years	7.8	8.8	8.1	7.1	7.1	7.5
Credit to euro area residents	4.5	4.2	4.1	4.2	4.7	5.3
Credit to general government	1.8	1.1	2.0	2.0	3.4	4.6
Securities other than shares	3.7	2.5	4.1	4.3	6.0	7.2
Loans	-0.9	-0.9	-1.2	-1.2	-0.5	0.8
Credit to other euro area residents	5.3	5.0	4.7	4.8	5.1	5.5
Securities other than shares	14.8	7.6	6.9	8.6	14.3	15.2
Shares and other equities	-2.9	0.9	2.6	1.0	4.8	6.7
Loans	5.5	5.3	4.8	4.9	4.6	4.9

Source: ECB.

to the private sector came to an end in late 2002. At the same time, it is still too early to assess whether a turnaround in the growth of these loans has materialised. While the annual growth of loans to the private sector currently stands below its long-term average, in real terms it seems to be rather robust compared with previous periods of sustained low economic growth.

Data on the sectoral breakdown of MFI loans to the private sector up to the second guarter of 2003 indicate that the annual growth rates of both loans to non-financial corporations and loans to households remained within relatively narrow ranges over the previous four quarters. In the second quarter of 2003, the annual growth rate of loans to non-financial corporations stood at 3.6%, compared with 3.8% and 3.5% in the first quarter of 2003 and the last quarter of 2002 respectively. At the same time, the annual growth rate of loans to households was 5.5% in the second quarter of 2003, compared with 5.9% in the previous two quarters. Sectoral loan trends are analysed in more detail in the section on the overall debt financing by the non-financial sector (see below).

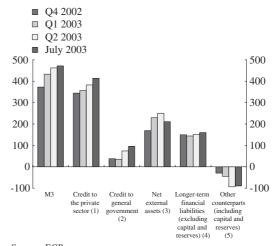
Among the other counterparts of M3, the annual growth rate of MFIs' longer-term financial liabilities (excluding capital and reserves) continued to increase, rising to 5.5% in July from 5.0% in the first quarter of 2003. This reflected a persistent rise in the annual growth rates of deposits with an agreed maturity of over two years (to 4.2% in July, from 3.4% in the first quarter) and of debt securities with a maturity of over two years issued by MFIs (to 7.5% in July, from 7.1% in the first quarter).

In July 2003, the net external asset position of the euro area MFI sector decreased by €37 billion. Over the 12 months to July, however, the net external assets of the euro area MFI sector increased by €211 billion (see Chart 6). Euro area balance of payments data up to the second quarter of 2003 suggest that the continued large positive annual flow

#### Chart 6

#### 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

of the net external assets of the euro area MFI sector was mainly related to large purchases by non-euro area residents of euro area debt securities. (While most of these debt securities were probably issued by the government sector, some of these purchases may also be recorded under "purchases of long-term debt securities" issued by MFIs, i.e. not under "external liabilities" of MFIs. At present, euro area statistics do not make it possible to identify to what extent long-term debt securities issued by MFIs are bought by residents or non-residents of the euro area.)

### Liquidity in the euro area remained very ample

Following the strong M3 growth, substantially more liquidity has been accumulated over the past two years than would be needed to finance non-inflationary growth in the medium term. This excess liquidity may not be of immediate concern in the present context of subdued economic growth. However, even if a large part of it is related to past portfolio shifts, the build-up of a medium-term inflation potential cannot be ruled out if this excess liquidity were to persist at a time of a significant strengthening of economic activity

in the euro area. Against this background, monetary developments will need to continue to be monitored closely, all the more so given that the low level of interest rates also contributed to the strong monetary growth.

were 43% and 25% respectively. At the same time, the annual growth of the value of the balance sheet total of euro area bond funds was positive and amounted to 1.4% over this period, partly due to rising bond prices.

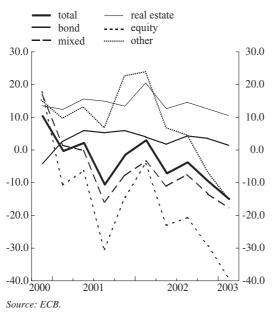
### Investment fund assets shrank again in the first quarter of 2003

The annual rate of change in the value of total assets of euro area investment funds stood at -15.6% at the end of the first quarter of 2003, compared with -10.3% at the end of the previous quarter (see Chart 7). Underlying this further decline in total investment fund assets were diverging trends in investment fund assets according to the investment policy, which were in turn largely driven by financial asset price developments. The annual rate of decline in investment fund holdings of equity funds was 39.0% at the end of the first quarter of 2003, whilst the annual declines in the Dow Jones EURO STOXX index and Standard and Poor's 500 index

#### Chart 7

Annual growth in the value of total assets of investment funds in the euro area, broken down by investment policy

 $(annual\ percentage\ changes;\ end-of\-period\ stock\ data)$ 



## Lower growth in financial investment of insurance corporations and pension funds in the first quarter of 2003

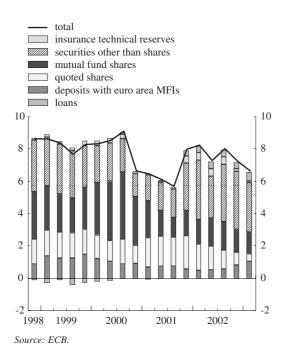
The annual growth in the financial investment of insurance corporations and pension funds (ICPFs) in the euro area decreased from 7.2% in fourth quarter of 2002 to 6.5% in the first quarter of 2003 (see Chart 8). This decline partly reflected lower annual growth in the acquisition of long-term debt securities, which stood at 8.2% in the first quarter of 2003, down from 10.0% in the previous quarter. In addition, the annual growth rate of acquisitions of quoted shares fell from 3.8% in the fourth quarter of 2002 to 2.2% in the first quarter of 2003. The decrease in the acquisitions of shares was probably a result of the decline in stock prices over previous periods and, in addition, was a contributing factor to this latter decline, given the large size of the ICPFs as major euro area institutional investors. By contrast, in the first quarter of 2003 the annual growth rates of investment in money market fund shares and short-term securities other than shares were high, at 17.7% (down from 20.4% in the previous quarter) and 19.0% (up from 17.6% in the previous quarter) respectively. Thus ICPFs continued their move towards more liquid, less risky financial investments in the first quarter of 2003.

On the liability side of the insurance corporations and pension fund sector, the annual growth rate of insurance technical reserves – which account for around 95% of the liabilities of ICPFs and mainly reflect households' and corporations' investment in insurance and pension products – stabilised at 6.6% in the first quarter of 2003. This is similar to the growth rate in the fourth quarter of 2002 and down from 7.8% one year earlier.

### Chart 8

## Financial investment of insurance corporations and pension funds in the euro area

(annual growth rates; contributions in percentage points)



### Strong growth in corporate debt securities issuance in the second quarter

In the second quarter of 2003 the average annual growth in the amount outstanding of debt securities issued by euro area residents increased to 7.1%, from 6.9% in the first quarter (see Chart 9). Underlying this increase was a rise in the average annual growth in the amount outstanding of short-term debt securities to 19.0% in the second quarter, from 17.5% in the first, while the average annual growth in the amount outstanding of long-term debt securities remained unchanged at 5.8% over the same period. Growth in debt securities issuance by non-financial corporations was particularly strong.

The breakdown by currency shows that average annual growth in the amount outstanding of euro-denominated debt securities issued by euro area residents increased by 0.3 percentage point to 6.7% in

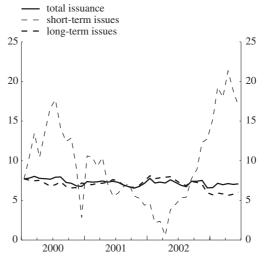
the second quarter. By contrast, average annual growth in non-euro-denominated debt securities issued by euro area residents decreased by 1.3 percentage points to 11.3%.

Turning to the sectoral breakdown of eurodenominated debt securities issuance, the average annual growth in the amount outstanding of debt securities issued by MFIs decreased to 4.0% in the second quarter, from 4.6% in the first (see Chart 10). On the basis of the consolidated balance sheet of the MFI sector, this growth rate stood at 2.0% in the second quarter suggesting that a substantial proportion of the issuance by MFIs was acquired by other MFIs. The relatively low growth rates - whether on a consolidated basis or not - might indicate lower financing needs of MFIs, in particular given the high growth in bank deposits. A further feature of the underlying dynamics is strong issuance of short-term debt securities, confirming the trend that started in the third quarter of 2002.

#### Chart 9

### Maturity breakdown of euro-denominated debt securities issued by euro area residents

(annual percentage changes)



Source: ECB.

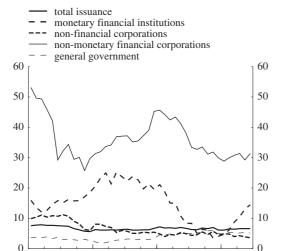
Note: Annual growth rates are based on financial transactions and are corrected for reclassifications, revaluations, exchange rate variations and other changes that do not arise from transactions.

#### Chart 10

### Sectoral breakdown of euro-denominated debt securities issued by euro area residents

(annual percentage changes)

2000



Source: ECB.

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

2002

2001

As regards non-financial corporations, the average annual growth in the amount outstanding of debt securities increased by 6.1 percentage points from the previous quarter to 12.7% in the second quarter of 2003. This seems to confirm the reversal of the downward trend that started at the end of 2001. Underlying this strong growth were increases in the rates of growth of issuance of both short and long-term debt securities. The average annual growth in outstanding short-term debt securities issued by nonfinancial corporations rose significantly to 11.7% in the second quarter, having recorded -3.3% in the previous quarter. For long-term debt securities, this growth rate rose to 13.0%, from 9.3% in the first quarter. Issuers may have been attracted by the lower funding costs in the corporate bond market arising from the continued fall in corporate bond yields over previous months. At the same time, in an environment where interest rates had reached very low levels, many investors were in search of assets with a higher yield than government bonds.

Concerning non-monetary financial corporations, the average annual growth in debt securities issuance rose to 30.7% in the second quarter, from 29.9% in the first. The continued strong issuance in this sector has tended to be concentrated in a few countries where MFIs and non-financial corporations have found it convenient, mainly for tax or regulatory reasons, to use dedicated financing agencies such as special purpose vehicles (SPVs) to raise capital via the bond market.

With regard to the general government sector, the average annual growth in the amount outstanding of debt securities issued by central government stood at 4.4% in the second quarter of 2003, compared with 4.2% in the previous quarter. The central government sector increased its borrowing through the issuance of short-term debt securities, for which the annual rate of growth stood at 22.0% in the second quarter, compared with 21.7% in the first. At the same time, the average annual growth in the amount outstanding of debt securities issued by other general government sub-sectors (primarily state and local governments) decreased to 27.3% in the second quarter, from 30.4% in the first. The issuance by these sub-sectors is limited to a few countries and the high growth rates reflect developments in these countries rather than a proliferation of issuing countries.

## Overall debt financing growth of the non-financial sector broadly stable in the second quarter of 2003

Overall, for the non-financial sector as a whole, the annual growth of debt financing is estimated to have been broadly stable in the second quarter of 2003, at around 5½% (see Table 3). The annual growth of households' debt financing moderated, although remaining at robust levels. By contrast, the annual growth of debt financing by non-financial corporations is estimated to have remained stable in the second quarter and the annual growth of debt financing by general government is estimated to have risen further (see Chart 11).

**Table 3 Financing of euro area non-financial sectors** 

	Outstanding amount as a				Α	nnual g	rowth ra	tes			
	percentage of (sector) financing 1)	2001 Q1	2001 Q2	2001 Q3	2001 Q4	2002 Q1	2002 Q2	2002 Q3	2002 Q4	2003 Q1	2003 Q2 <sup>2)</sup>
Non-financial sectors	100	6.5	6.6	5.9	5.2	4.6	4.2	4.0	3.8	4.1	
of which: long-term financing 3)	84.4	5.6	5.9	5.5	5.0	4.9	4.6	4.6	4.0	4.0	
Debt financing <sup>4)</sup>	86.3	7.3	7.2	6.7	6.1	5.4	5.2	4.8	4.8	5.3	5 1/2
of which: short-term debt financing	15.6	13.2	11.1	8.5	6.6	2.5	1.5	0.6	2.2	5.0	5 3/4
of which: long-term debt financing	70.8	6.1	6.3	6.3	6.0	6.1	6.1	5.8	5.4	5.4	5 1/2
Households 4), 5)	23.3	7.0	6.9	6.4	6.3	5.8	6.2	6.5	6.7	6.7	6 1/4
of which: short-term debt financing	7.7	5.5	4.0	2.4	1.0	-0.6	1.1	1.2	2.9	1.3	-1 1/2
of which: long-term debt financing	92.3	7.1	7.2	6.8	6.8	6.4	6.7	7.0	7.0	7.1	7
Non-financial corporations	42.3	9.3	9.1	7.9	6.2	4.4	3.4	2.7	2.3	2.6	
of which: long-term financing	79.4	7.4	7.8	7.3	6.1	5.2	4.9	4.2	3.3	3.2	
Debt financing 4)	67.7	15.6	14.2	12.5	10.0	6.7	5.8	4.2	4.0	5.0	5
of which: short-term debt financing	20.6	21.4	16.8	10.9	6.9	0.6	-3.1	-3.8	-2.7	0.2	2 3/4
of which: long-term debt financing	47.1	12.9	12.9	13.4	11.5	9.9	10.3	8.1	7.2	7.2	6
of which: loans	55.2	15.1	13.1	11.3	8.5	5.5	5.3	3.7	3.9	4.5	3 3/4
of which: securities other than shares	8.6	26.6	28.4	26.6	24.4	16.3	9.7	7.1	4.1	8.1	12 3/4
of which: pension fund reserves	3.9	5.0	5.1	5.2	4.8	4.8	4.9	5.1	5.4	5.4	5 1/4
Quoted shares	32.3	4.5	5.0	3.8	2.7	1.8	0.8	0.6	0.2	-0.2	
General government <sup>4)</sup>	34.3	1.3	1.9	2.2	2.8	4.1	4.0	4.3	4.1	4.7	5 1/2
of which: short-term debt financing	14.7	1.5	3.4	6.3	8.6	8.0	11.6	9.7	12.0	16.2	14 1/4
of which: long-term debt financing	85.3	1.3	1.7	1.6	1.9	3.6	2.8	3.4	2.9	2.9	4
of which: loans	16.5	-1.3	-2.4	-1.3	-0.2	0.6	-0.5	-0.7	-2.1	-2.2	- 1/2
of which: securities other than shares	79.9	1.9	2.8	2.9	3.3	4.6	4.6	5.0	5.2	6.0	6 3/4
of which: central government deposit liabilitie	es 3.6	4.4	4.9	5.7	8.6	12.9	13.2	13.6	12.7	10.9	10 1/4

Source: ECB.

Note: For details, see footnote to Table 6.1 in the "Euro area statistics" section of the Monthly Bulletin.

- 1) As at the end of the first quarter of 2003. Short-term and long-term (debt) financing and sector financing as a percentage of financing. Sector short-term and long-term (debt) financing and financing instruments as a percentage of sector financing. Figures may not add up exactly due to rounding.
- 2) Figures for the most recent quarter shown in the table have been estimated on the basis of transactions reported in money and banking statistics and in securities issues statistics.
- 3) Long-term financing with an original maturity of over one year includes long-term loans, long-term debt securities issued, quoted shares issued and pension fund reserves of non-financial corporations.
- 4) Debt financing includes loans, debt securities issued, pension fund reserves of non-financial corporations and deposit liabilities of central government. Short-term debt financing with an original maturity of up to one year includes short-term loans, short-term debt securities issued and deposit liabilities of central government. Long-term debt financing equals long-term financing excluding quoted shares issued.
- 5) Including non-profit institutions serving households.

The moderation of the annual growth of debt financing by households, from 6.7% in the first quarter of 2003 to around 61/4% in the second quarter, was mainly due to shortterm debt financing developments. The annual rate of change of short-term debt financing (mainly consumer credit and other loans) continued to be very subdued in the second quarter, partly reflecting weak consumer confidence. In addition, it reflects to some extent weak growth of loans granted to small firms which are included in the category "other lending to households" (see Table 4). At the same time, the annual growth of housing loans, which are mainly long-term, remained robust at 7.0% in the second quarter. The low level of mortgage interest

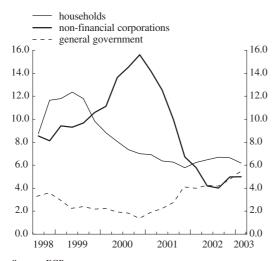
rates and the continuing relatively rapid increase in house prices in some euro area countries offset the dampening impact of rather subdued growth in real disposable income and uncertain economic prospects. Despite the moderation in their debt financing growth, the debt-to-GDP ratio of households is estimated to have risen slightly in the second quarter of 2003, to 51½%, partly due to weak economic growth (see Chart 12).

The annual growth of debt financing by non-financial corporations is estimated to have remained stable at 5% in the second quarter of 2003, after having recovered somewhat in the first quarter. While the annual growth of loans to non-financial corporations

### Chart I I

### **Debt financing by the non-financial sectors**

(annual percentage changes)



Source: ECB. Note: For details, see Table 3.

moderated slightly in the second quarter, standing at broadly the same level as at the end of 2002, the annual growth of debt securities issued by non-financial corporations rose further. There are indications that non-financial corporations have in part restructured their debt, switching from loans to debt securities in order to take advantage

of the low cost of financing via debt securities. The short-term debt financing growth of nonfinancial corporations continued to recover, owing to both short-term loans and, in particular, short-term debt securities issued. By contrast, annual growth of long-term debt financing is estimated to have decreased somewhat in the second quarter, to 6% (in part related to a base effect), due to a fall in the annual growth of long-term loans, while the annual growth of long-term debt securities increased. These developments suggest that non-financial corporations took up additional funds to finance their current business, owing to relatively weak turnover and possibly delayed payments of receivables, but needed (in annual terms) fewer funds for longer-term investment projects.

As a result of debt financing developments and weak economic growth, the debt-to-GDP ratio of non-financial corporations is estimated to have risen slightly in the second quarter of 2003, to 63%.

In the context of weak economic activity and rising fiscal deficits, the annual growth of debt financing by general government is estimated to have increased further, to  $5\frac{1}{2}$ % in the second quarter. The annual growth of short-

**Table 4**MFI loans to households and non-financial corporations

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

	Outstanding amount			Annual gro	owth rates		
	as a %	2002	2002	2002	2002	2003	2003
	of total 1)	Q1	Q2	Q3	Q4	Q1	Q2
Non-financial corporations	47.0	5.0	4.4	3.5	3.5	3.8	3.6
Up to 1 year	33.0	-1.6	-3.1	-2.6	-2.6	-1.0	-0.1
Over 1 year	67.0	8.8	8.8	6.9	6.8	6.4	5.5
Over 1 and up to 5 years	16.9	12.3	12.2	8.9	6.3	5.8	2.7
Over 5 years	50.1	7.7	7.6	6.2	7.0	6.6	6.5
Households 2)	53.0	5.4	5.7	5.8	5.9	5.9	5.5
Consumer credit <sup>3)</sup>	14.8	4.0	3.4	3.6	3.8	3.3	3.5
Lending for house purchase 3)	66.1	7.2	7.7	7.7	7.6	7.2	7.0
Other lending	19.1	0.6	1.4	1.7	1.8	3.6	2.1

Source: ECB money and banking statistics.

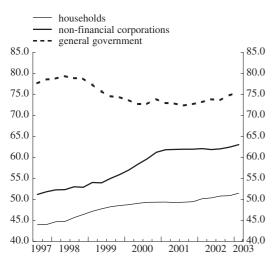
Note: For further details, see footnotes to Table 2.5 in the "Euro area statistics" section of the Monthly Bulletin and the relevant technical notes.

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

### Chart I2

### Ratio of debt to GDP of the non-financial sectors

(in percentages)



Source: ECB.

Notes: For details, see Table 3. Compared with the annual financial accounts, the ratio of debt to GDP is somewhat lower on the basis of the quarterly financial accounts, mainly due to the fact that loans granted by non-financial sectors and by banks outside the euro area are not included. The debt-to-GDP ratio of general government differs somewhat from the Maastricht definition owing to differences in valuation, coverage and treatment of accrued interest.

term debt financing is estimated to have moderated somewhat, while the annual growth of long-term debt financing is estimated to have picked up.

Data on equity issuance by non-financial corporations are only available up to the first quarter of 2003. By contrast with debt financing developments, the quarterly issuance of quoted shares by non-financial corporations remained negative for the third quarter in a row in the first quarter, owing in part to the high cost of equity financing. The annual rate of change in quoted shares issued by non-financial corporations was -0.2%. According to private databases, secondary public offerings in equity markets recovered somewhat in the second quarter, while initial public offerings remained very subdued.

### High liquidity holdings by the nonfinancial sector in the first quarter of 2003

For the financial investment by the non-financial sector, data are only available up to the first quarter of 2003. There was a further fall in the annual growth of financial investment by the non-financial sector in this quarter, to 4.3% from 4.5% in the fourth quarter of 2002. This reflected the subdued growth of households' disposable income and overall weak acquisition activity by corporations in early 2003 (see Table 5).

The fall in the annual growth of financial investment was due to a slowdown in both short-term and long-term investment. While the annual growth of currency and deposits continued to increase, the holdings of shortterm debt securities by the non-financial sector dropped. The increased holdings of deposits by non-financial investors could be related to the relatively attractive remuneration of certain overnight deposits compared with alternative short-term investment opportunities. By contrast, euro area financial institutions and to some extent probably also non-residents increased their holdings of short-term debt securities.

The slight fall in the annual growth of longterm financial investment by the non-financial sector, to 3.6%, was due to lower holdings of long-term debt securities. By contrast, the annual growth of investment in non-monetary mutual fund shares increased to 4.5% in the first quarter. Probably as a result of ongoing losses on holdings of quoted shares (see Chart 13) and the high uncertainty related to the geopolitical situation at that time, the non-financial sector seems to have lacked the confidence to start re-investing to any larger extent in quoted shares. Accordingly, the annual rate of change of investment in quoted shares remained negative, at -0.3%. Finally, the annual growth of investment in

 Table 5

 Financial investment of the euro area non-financial sector

	Outstanding amount as a percentage	Annual growth rates										
	of financial	2001	2001	2001	2001	2002	2002	2002	2002	2003	2003	
	investment 13	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	
Financial investment	100	8.0	7.8	7.0	5.7	4.9	4.7	4.9	4.5	4.3		
of which: short-term financial investment 2)	44.2	6.9	7.2	7.5	7.6	4.9	5.1	5.5	5.8	5.3		
of which: long-term financial investment 3)	54.6	8.6	8.1	7.0	4.9	4.8	4.6	4.6	3.8	3.6		
Currency and deposits	38.8	5.7	6.5	6.5	6.6	4.8	4.9	4.9	5.4	5.9		
Securities other than shares	14.1	15.3	12.3	9.0	7.8	5.4	4.9	5.7	4.5	0.6		
of which: short-term	1.6	55.8	33.2	16.3	3.7	-7.7	-12.3	1.2	2.2	-13.5		
of which: long-term	12.5	10.0	9.5	8.0	8.4	7.8	7.6	6.3	4.8	2.8		
Mutual fund shares	11.7	5.8	5.3	6.2	5.6	5.4	5.7	6.0	5.1	5.7		
of which: mutual fund shares, excluding money												
market fund shares	9.1	6.1	4.8	4.9	3.7	3.2	4.0	4.2	3.9	4.5		
of which: money market fund shares	2.6	3.9	9.3	16.8	21.2	20.9	18.0	16.4	11.9	12.0		
Quoted shares	10.9	9.6	9.4	6.9	1.3	1.7	0.9	0.7	-0.3	-0.3		
Insurance technical reserves	24.5	7.8	7.6	7.3	7.2	6.9	6.7	6.7	6.5	6.5		
M3 4)		3.7	5.4	6.8	7.9	7.2	7.1	7.1	6.9	8.0	8.3	

Source: ECB.

Note: For details, see footnote to Table 6.1 in the "Euro area statistics" section of the Monthly Bulletin.

- 1) As at the end of the first quarter of 2003.
- 2) Short-term financial investment includes currency and deposits (excluding central government deposits), short-term debt securities and money market fund shares. Due to the exclusion of central government deposits, short-term and long-term financial investment do not add up to 100%. When interpreting these figures, it should be kept in mind that both short-term and long-term deposits are included in short-term investment.
- 3) Long-term financial investment includes long-term debt securities, mutual fund shares excluding money market fund shares, quoted shares and insurance and pension products.
- 4) End of quarter. The monetary aggregate M3 includes monetary instruments held by euro area non-MFIs (i.e. the non-financial sector and non-monetary financial institutions) with euro area MFIs.

200

180

160

140

120

100

80

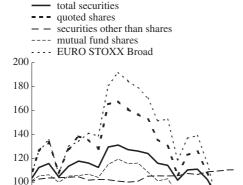
2003

insurance and pension products continued to follow its steady path of past quarters, standing at a robust level of 6.5%.

### Chart 13

## Gains and losses on holdings of securities by the non-financial sector of the euro area

 $(1997 \, Q4 = 100)$ 



Source: ECB.

1998

1999

2000

2001

2002

80

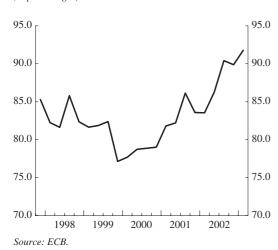
# Debt-to-financial asset ratio of the non-financial sector rose in the first quarter of 2003

After some stabilisation in late 2002, the ratio of debt to financial assets of the non-financial sector rose again in the first quarter of 2003 (see Chart 14). This was related to both higher indebtedness and a decline in the value of the holdings of financial assets. While the debt-to-financial asset ratio probably declined in the second quarter after the rise in stock prices, the ongoing high leverage of nonfinancial corporations in particular could dampen their appetite to take up new debt to finance investment. At the same time, the profitability of many companies should have been improving during recent quarters due to progress in cost-cutting and internal restructuring. This should allow companies to take advantage of the favourable debt financing conditions prevailing in the euro area and help to support an economic recovery.

### Chart 14

### Ratio of debt to financial assets of the non-financial sector

(in percentages)



### Retail bank interest rates reached historically low levels in July

Following the reduction of the key ECB interest rates in early lune, short-term retail bank interest rates declined further in July 2003, taking them to the lowest levels seen since 1990 (see Chart 15). They fell by around 7 basis points in July 2003 from the previous month. Between June 2002, when short-term retail bank interest rates last peaked, and July 2003, declines ranged from around 30 basis points for the rates on overnight deposits and deposits redeemable at a period of notice of up to three months to around 115 basis points for the rate on time deposits. This compares with a decrease in the three-month money market interest rate of around 135 basis points over the same period. The stickiness of the rates on overnight deposits and deposits redeemable at a period of notice of up to three months is in line with the historical pattern of responses of these rates to market interest rate developments.

While long-term bond yields, which have been falling since May 2002, increased in July 2003, all long-term retail bank interest rates declined further in July, typically by around 10 basis points compared with the previous

month (see Chart 16). The retail bank interest rates on deposits with an agreed maturity of over two years and on loans to households for house purchase dropped by around 150 basis points between May 2002 and July 2003, reaching the lowest reported levels since 1990. These declines compare with a fall in the five-year government bond yield of 155 basis points over the same period, suggesting, in line with previous experience, a complete adjustment of these rates to longterm market interest rate developments over a longer period of time. At the same time, the rate on loans to enterprises of over one year declined slightly less, partly owing to corporate credit risk concerns.

## Money market interest rates at longer maturities have increased over the past few months

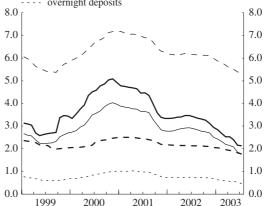
The downward trend in money market rates seen since mid-May 2002 came to a halt in mid-June 2003, and since then, money market rates at the very short end of the money

### Chart 15

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

(percentages per annum; monthly averages)

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



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

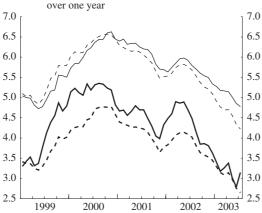
Note: From January 2001, data include Greece.

### Chart 16

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

(percentages per annum; monthly averages)

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



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

Note: From January 2001, data include Greece.

market yield curve have stabilised, while those at longer maturities have increased somewhat (see Chart 17). Consequently, the slope of the money market yield curve, as measured by the difference between the twelve-month and the one-month EURIBOR, which was negative in mid-June, became positive in August. This reflected an upward adjustment of market participants' expectations with regard to future short-term interest rates.

Following the reduction in key ECB interest rates in early June, the overnight interest rate, as measured by the EONIA, gradually declined to values close to the minimum bid rate in the Eurosystem's main refinancing operations of 2.0%. More recently, between end-July and 3 September the EONIA fluctuated for most of the time between 2.06% and 2.11%, with three exceptions. During this period, the two-week EONIA swap rate varied between 2.06% and 2.11%, standing at 2.09% on 3 September. The marginal and average rates of allotment in the Eurosystem's main refinancing operations were, on average, both 6 basis points above

the minimum bid rate in the period between end-July and 3 September (see Box 2).

Between end-July and 3 September, the one-month and three-month EURIBOR increased marginally by 2 and 4 basis points respectively, to stand at 2.14% and 2.16% on the latter date. Developments in the three-month EURIBOR have, as usual, been reflected in the interest rates of allotment in the longer-term refinancing operations of the Eurosystem. In the operation settled on 28 August, the marginal and average rates of allotment were 2.12% and 2.13% respectively, slightly higher than the rates in the longer-term refinancing operation settled on 31 July.

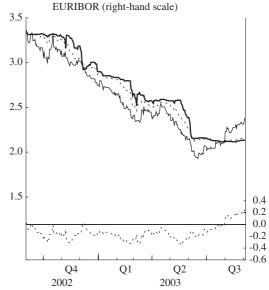
As noted earlier, the money market rates at the long end of the money market yield curve have increased somewhat over the past couple of months. More recently, between end-July and 3 September the six-month and twelve-month EURIBOR increased by 12 and 27 basis points respectively, to stand at 2.22%

### Chart 17

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

(percentages per annum; percentage points; daily data)

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



Source: Reuters.

### Box 2

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

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

### Open market operations

(EUR billions; interest rates in percentages per annum)

Operation	Date of settlement	Date of maturity	Bids (amount)	Allotment (amount)	Bid-cover ratio	Number of participants	Minimum bid rate	Marginal rate	Weighted average rate	Fixed rate
MRO	30/07/2003	13/08/2003	114.57	73.00	1.57	257	2.00	2.06	2.07	-
MRO	06/08/2003	20/08/2003	174.50	144.00	1.21	279	2.00	2.05	2.06	-
MRO	13/08/2003	27/08/2003	118.01	61.00	1.93	268	2.00	2.05	2.06	-
MRO	20/08/2003	03/09/2003	192.89	144.00	1.34	321	2.00	2.06	2.06	-
LTRO	31/07/2003	30/10/2003	25.42	15.00	1.70	134	1.99	2.08	2.10	-

Source: ECB.

Two of the MROs were relatively large ( $\leqslant$ 144 billion). Since bid amounts did not increase proportionally, bid-cover ratios in these operations were correspondingly lower. Bidding rates remained within a narrow range throughout the maintenance period, with weighted average rates at 2.06 or 2.07% and marginal rates at 2.05 or 2.06%.

The EONIA fell from 2.06% on 24 July to 2.04% on 28 July, the lowest level within this maintenance period. It peaked at 2.11% on 31 July due to the usual month-end effect, and decreased on the following day to 2.08%. From 2 August to 19 August, the EONIA remained stable at a level of 2.06% to 2.07%, reflecting the absence of rate change expectations and smooth liquidity conditions. Over the last three working days of the maintenance period, it increased to 2.09%, 2.15% and 2.45% respectively. The reserve maintenance period ended slightly on the tight side, with net recourse to the marginal lending facility of €0.4 billion.

The average difference between current account holdings of credit institutions with the Eurosystem and the minimum reserve requirements was  $\leq 0.69$  billion.

### Contributions to the banking system's liquidity

(EUR billions)

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

	Liquidity providing	Liquidity absorbing	Net contribution
(a) Monetary policy operations of the Eurosystem	258.6	0.1	+ 258.5
Main refinancing operations	213.4	-	+ 213.4
Longer-term refinancing operations	45.0	-	+ 45.0
Standing facilities	0.2	0.1	+0.1
Other operations	-	-	-
(b) Other factors affecting the banking system's liqui	idity <sup>1)</sup> 315.8	441.5	- 125.7
Banknotes in circulation		391.6	- 391.6
Government deposits with the Eurosystem	-	51.5	- 51.5
Net foreign assets (including gold)	315.8	-	+ 315.8
Other factors (net)	-	1.6	- 1.6
(c) Credit institutions' holdings on current accounts			
with the Eurosystem (a) + (b)			132.8
(d) Required reserves			132.1

Source: ECB.

Note: Totals may not add up due to rounding.

The published estimates of the average liquidity needs stemming from autonomous factors ranged between €116.1 billion and €128.9 billion. The largest deviation between the published estimate and the actual figure occurred for the period from 28 July to 5 August and amounted to €1.6 billion.

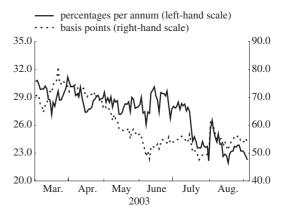
and 2.38% on the latter date. In the same period, the slope of the money market yield curve, as measured by the difference between the twelve-month and the one-month EURIBOR, turned positive and was 24 basis points on 3 September.

The expected path of the three-month EURIBOR, as implied in the fu'ures prices on contracts with delivery dates in the second half of 2003 and the first half of 2004, has risen significantly over the past few months, indicating that market participants have adjusted their expectations upwards with regard to future short-term interest rates (see Chart 18). While in mid-June the rates on futures contracts maturing in 2003 and 2004 were lower than the prevailing three-month EURIBOR, this was no longer the case in the beginning of September. In the most recent period between end-July and 3 September, the implied futures rates on

### Chart 19

## Implied volatilities derived from options on three-month EURIBOR futures maturing in March 2004

(percentages per annum; basis points; daily data)



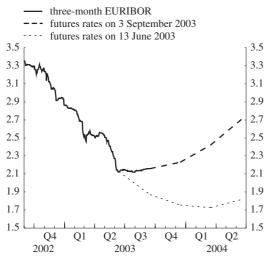
Sources: Bloomberg and ECB calculations.

Note: The basis point measure is obtained as the product of implied volatility in percentages and the corresponding interest rate (see also the box entitled "Measures of implied volatility derived from options on short-term interest rate futures" on pages 13-16 of the May 2002 issue of the Monthly Bulletin).

#### Chart 18

### Three-month interest rates and futures rates in the euro area

(percentages per annum; daily data)



Source: Reuters.

Note: Three-month futures contracts for delivery at the end of the current and next three quarters as quoted on Liffe.

contracts with delivery dates in September and December 2003 and March and June 2004 increased by between 5 and 28 basis points. On 3 September they stood at 2.16%, 2.23%, 2.42% and 2.71% respectively.

The volatility of the three-month EURIBOR implied in options on futures contracts maturing in March 2004, which reflects the uncertainty that market participants attach to the three-month EURIBOR for mid-March 2004, has decreased in recent months to levels which are relatively low by historical standards. When measured in basis points to take into account varying levels of interest rates, volatility stabilised after the reduction of key ECB interest rates in early June (see Chart 19).

Box 3 shows that short-term interest rates are at relatively low levels at present, in both nominal and real terms.

#### Box 3

#### Current euro area interest rates from a historical perspective

In 2003 euro area short and long-term interest rates have reached values which are very low from a historical perspective. Chart A shows a long-term series of euro area nominal short-term interest rates constructed by aggregating national short-term rates from 1950 until 1998 for the countries now forming the euro area, and using euro area rates since 1999. Chart B shows a series for nominal long-term interest rates from 1970 until 1998 for the countries now forming the euro area, and euro area rates since 1999 (the lack of data of sufficient quality prevents the construction of an average euro area series for long-term interest rates before 1970).

When looking at these data, several caveats should be kept in mind, as monetary policy regimes differed significantly over time and across countries, and money and especially bond markets developed only over time. In addition, as regards short-term interest rates, before the 1960s, other instruments than interest rates were used in some countries for the conduct of monetary policy, e.g. credit aggregates. Furthermore, the data needed to be aggregated using different instruments and are thus not fully homogeneous over time. In particular, with regard to long-term interest rates, the maturities of the aggregated instruments available differ across countries and over time.

In both cases, data for Germany are added for the period before Stage Three of Economic and Monetary Union. As this country had the best track record among European countries in achieving low inflation rates over this period, and for most of the period played a pivotal role among euro area countries, it is more easily comparable with the current euro area in terms of interest rates than the past euro area averages.

As Chart A shows, the current level of nominal short-term interest rates in the euro area is the lowest since the early 1950s, which is both true when comparing it with Germany and generally for all the euro area countries. Another striking feature is that the current level of short-term interest rates is particularly low in comparison with the 1970s and 1980s. A similar conclusion is reached by looking at Chart B, as the level of nominal long-term interest rates in the euro area, which was 4.23% at end-August 2003, has also reached a very low level by historical standards.

### Chart A: Nominal short-term interest rates in the euro area and Germany

(percentages per annum; annual data)



Sources: NCBs, BIS, Reuters and ECB calculations.

Notes: For the twelve euro area countries, national short-term interest rates were used until 1998. The data is aggregated using 1999 GDP weights at PPP exchange rates. From 1999 the three-month EURIBOR is used for the euro area. The national short-term rates consist of three-month money market rates, where available, and otherwise of central and commercial bank interest rates or yields on Treasury bills. For Luxembourg, short-term interest rates of Belgium are used.

## Chart B: Nominal long-term interest rates in the euro area and Germany

(percentages per annum; annual data)



Sources: NCBs, BIS, Global Financial data, Reuters and ECB calculations.

Notes: For the twelve euro area countries, national long-term interest rates were aggregated using 1999 GDP weights at PPP exchange rates. The national long-term rates consist of ten-year government bond yields, where available, and otherwise of yields on instruments with the closest maturity.

The low level of short-term interest rates in the euro area, which was 2.15% at end-August 2003, is associated with inflation expectations that are compatible with price stability. This was not always the case in the past,

### Chart C: Consumer price inflation in the euro area and Germany

(percentages per annum; annual data)



Sources: NCBs, BIS, Eurostat and ECB calculations.
Notes: Before 1991 consumer price inflation rates in the twelve euro area countries were aggregated using 1999 consumer spending weights at PPP exchange rates. From 1991 HICP inflation in the euro area is used. For Germany, consumer price inflation is used before 1996 and the HICP thereafter.

especially from the second half of the 1960s until the early 1980s, when inflation was at times high and, in some cases, persistent (see Chart C), although generally to a lesser extent in Germany than in most countries now forming the euro area.

Developments in real interest rates, which are normally defined as nominal interest rates adjusted for expected inflation over the corresponding time horizon, did not necessarily mirror those of nominal short-term interest rates in the past. The computation of real interest rates based on nominal interest rates is subject to several practical and conceptual difficulties, especially in the case of long-term interest rates (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 and the box entitled "Recent developments"

in real interest rates in the euro area" on page 18 of the April 2001 issue of the Monthly Bulletin). The simplest approach, and the one used throughout this box, is to use the closest available annual consumer price inflation rate as a proxy for expected inflation. While deviations may exist between expected and current inflation, this problem is often less severe when assessing developments over longer horizons.

A comparison of the current level of euro area real interest rates with past rates in either the euro area or Germany should be undertaken with even greater caution than with nominal interest rates, as the economic conditions and the financial and economic structures have changed across countries and also over time. Chart D shows the real short-term interest rate series in the euro area and in Germany since the late 1950s, while Chart E shows real long-term interest rate series in the euro area since the 1970s and in Germany since the 1950s. The picture is broadly similar when looking at both real short and long-term interest rates. The remainder of this box addresses these long-term developments and puts the current real interest rates into perspective.

The situation before the end of the Bretton Woods system in the early 1970s bears little resemblance to the current situation. Capital controls, which were applied in Europe during the Second World War, prevailed during most of the period. Although convertibility for current account transactions was generally resumed in 1958, controls on capital account transactions remained the rule rather than the exception. The effectiveness of these controls was also enhanced by restrictions on international banking and low levels of activity in international bond markets. In addition, the 1950s were characterised by relatively large swings in inflation in several countries, which affected the measures of real short-term rates. In Germany, and also to some extent in other European countries, after the stabilisation in the early 1950s, monetary policy favoured an environment of high growth and low and relatively stable inflation. Several factors contributed to this outcome, such as sound fiscal polices, the successful anchoring of inflation expectations at low values and positive productivity shocks. A significant degree of wage moderation and labour market flexibility also played a key role in the economic performance during this period.

This situation continued during the early part of the 1960s. Both in Germany and on average in the euro area, real interest rates remained low in a context of high real economic growth. Although inflation was higher than at present, it remained relatively subdued in many of the countries that now form the euro area. However, low real interest rates, which even reached negative levels on average for the euro area in a couple of years, were observed in periods of surging, and probably unanticipated, inflation in some countries.

### Chart D: Real short-term interest rates in the euro area and Germany

(percentages per annum; annual data)



Sources: NCBs, BIS, Reuters, Eurostat and ECB calculations. Note: Short-term interest rates are deflated by consumer price inflation (see Charts A and C for details).

### Chart E: Real long-term interest rates in the euro area and Germany

(percentages per annum; annual data)



Sources: NCBs, BIS, Global Financial data, Reuters, Eurostat and ECB calculations.

Note: Long-term nominal interest rates are deflated by consumer price inflation (see Charts B and C for details).

Later in the 1960s this situation changed. As social conflicts arose when economic growth started to decelerate and labour flexibility declined, shocks to the economy reduced growth and employment. At the same time, international capital flows became more important in the course of the decade, as international money and bond markets awakened and commercial banks started to be involved in international lending. Against this background, an acceleration of money growth in the United States during most of the 1960s created strains in the international arena in the context of the pegged exchange rates of the Bretton Woods system. The size of the dollar reserves already accumulated in many countries made the sterilisation of this monetary expansion increasingly difficult, which in turn also led to strong monetary growth in many European countries and gave rise to inflationary pressures towards the end of the decade. The Bretton Woods system ceased to exist in the early 1970s, as many countries in the system were not willing to address the external imbalances at the cost of higher inflation.

The 1970s started with overheated economies in which consumer price inflation and wages were rising. Oil price increases in the early 1970s were followed by inadequate monetary and fiscal policies in most countries. Fiscal policies attempted to counteract the negative income effects of the increases in oil prices, while the reaction of monetary policy was insufficient to keep the rise in inflation in check (see the box entitled "Lessons to be drawn from the oil price shocks of the 1970s and early 1980s" on page 21 of the November 2000 issue of the Monthly Bulletin). Although policy reactions and the economic outlook differed across countries, average real interest rates became negative in the euro area in the early 1970s and remained so for most of the decade, as inflation was not correctly anticipated. During this period, German real interest rates remained generally higher than in other euro area countries. It is clear that the oil price increases had an immediate impact on inflation. However, it is also clear that without accommodating macroeconomic policies and the consequent increase in inflation expectations, this would not have translated into an entrenched process of inflation, as beyond the very short term oil prices only feed through to inflation through second-round effects via domestic price and wage-setting, made possible by abundant liquidity.

The second oil price shock in the late 1970s was not followed by a similar reduction in real interest rates as with the first oil price shock. One reason for this was that on average, euro area wages did not increase as much as in the early 1970s in a context of very subdued growth. In fact, real wages actually declined between 1979 and 1981. However, fiscal deficits continued to increase and monetary policy in some countries did not initially react to the necessary extent. Still, on average, nominal interest rates rose to historically high levels, so high that real rates rose despite the increase in inflation between 1979 and 1981.

In the early 1980s, the monetary authorities in many euro area countries pursued a monetary policy oriented towards disinflation that contributed to the decline in consumer price inflation throughout the 1980s and beyond. Real interest rates rose steadily over that decade and into the early 1990s. This process was, however, less marked in Germany, where the extent of the disinflation required was significantly lower. Overall, the need to curb inflation expectations and re-establish price stability after the experience of the early 1970s was costly in terms of growth and employment, and real GDP growth remained rather subdued until the mid-1980s. The high economic costs of fighting inflation once it had stabilised at high levels strengthened the conviction of all economic actors to commit themselves to more stability-oriented policies later on.

### Long-term government bond yields stabilised in August

Following the rebound that began in mid-June, long-term government bond yields stabilised in August and early September in an environment where market participants became more optimistic about the global economic outlook. In the United States and the euro area, ten-year government bond yields stood at 4.6% and 4.4% on 3 September respectively, which implies a rise since the trough on 13 June of about 140 basis points in the United States and of 90 basis points in the euro area (see Chart 20). As a result of

## Chart 20 Long-term government bond yields in the euro area and the United States

(percentages per annum; daily data)



Source: Reuters.

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

the larger increase in US bond yields since mid-June, the differential between US and euro area ten-year government bond yields turned positive for the first time since early April 2002 and stood at 20 basis points on 3 September.

The marked increase in long-term government bond yields since mid-June in the United States seemed to mainly reflect upward revisions among market participants of both growth and inflation expectations. The more optimistic assessment among investors of the outlook for economic activity in the United States was reflected in a rise of around 80 basis points in the real yield on ten-year index-linked government bonds between mid-June and 3 September. Despite the very sharp upturn, the level of real yields of 2.1% on 3 September was still below survey-based consensus expectations about future long-term real GDP growth. Reflecting the larger increase of the US ten-year nominal yield relative to the ten-year index-linked yield, the break-even inflation rate - measured as the difference between these two yields - also rose by about 70 basis points between mid-June and 3 September to around 2.2%.

After the recent sharp movements in the level of bond yields, market participants became somewhat more uncertain about future bond yield movements in the US market. This was reflected in a 2.3 percentage point rise in the ten-day moving average of implied volatility on ten-year US Treasury futures contracts between mid-June and 3 September (see Chart 21). On the latter date, the ten-day moving average of implied bond volatility was

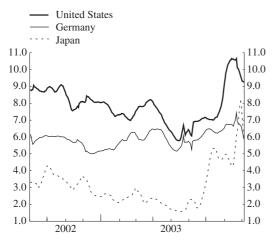
9.2%, which was around 1.4 percentage points above its average over the past two years.

In Japan, ten-year government bond yields reached historically low levels in May, but have since increased sharply. Between the end of July and 3 September, ten-year government bond yields in Japan increased by around 70 basis points, reaching 1.6% on the latter date. This was the highest level since early 2002. Portfolio shifts from the bond market to the stock market, where prices rose sharply over recent months, together with data releases suggesting a pick-up in economic activity, contributed to the strong rise. This recent surge in bond yields also had a substantial impact on the uncertainty among market participants. On 3 September, the tenday moving average of implied bond market volatility stood at almost 5.8%, which compares with an average of 2.6% for this measure of bond market uncertainty over the past two years (see Chart 21).

#### Chart 21

Implied volatility for futures contracts on the ten-year German Bund, the ten-year US Treasury note and the ten-year Japanese government bond

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



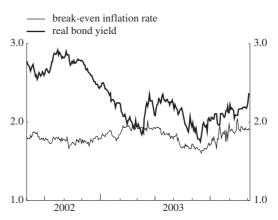
Source: Bloomberg.

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

### Chart 22

### Euro area real bond yield and break-even inflation rate

(percentages per annum; daily data)



Source: Reuters.

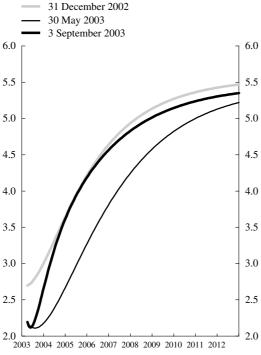
Note: Real bond yields are derived from the market prices of French government bonds which are indexed to the euro area HICP (excluding tobacco prices) and which mature in 2012. The method used to compute the break-even inflation rate was outlined on page 16 of the February 2002 issue of the Monthly Bulletin

Long-term government bond yields in the euro area also rebounded from mid-June onwards, following the downward trend earlier this year. The increases were, however, less pronounced than in the United States, probably owing to the fact that economic data releases for the euro area were perceived by market participants as being more mixed. Despite this, the rise in bond yields in the euro area reflected some upward revisions among market participants of future growth and inflation expectations. The more optimistic assessment of future economic activity was reflected developments in ten-year index-linked bond yields (indexed on the euro area HICP excluding tobacco), which rose by around 70 basis points between mid-June and 3 September. Further evidence supporting this more optimistic view was the steepening of the implied forward overnight interest rate curve at short and medium maturities in recent months (see Chart 23). Investors' more optimistic assessment of future economic activity also contributed to exerting some upward pressure on long-term inflation expectations in the euro area. The

### Chart 23

### Implied forward euro area overnight interest rates

(percentages per annum; daily data)



Source: ECR 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.

break-even inflation rate, measured as the difference between ten-year nominal and index-linked bond yields, increased overall by around 30 basis points between mid-June and 3 September. The movement in the break-even inflation rate was primarily the outcome of shifts in inflation expectations at shorter maturities (see Box 4 entitled "Deriving euro area inflation expectations from inflation-linked swaps").

The degree of uncertainty prevailing in the euro area bond market, as gauged by the implied volatility of options on futures contracts on German long-term government bonds, increased somewhat between

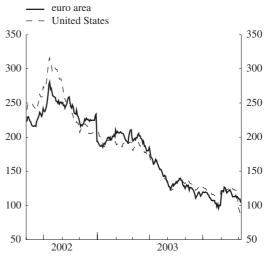
mid-June and 3 September (see Chart 21). On the latter date, the ten-day moving average of implied bond market volatility stood at 5.9%, which was around 0.3 percentage point higher than the average over the past two years.

Long-term corporate bond yields followed the developments in government bond yields over recent months. For example, the yields on bond issues by BBB-rated corporations in the euro area and the United States increased by 80 and 120 basis points respectively between mid-June and 3 September. The relative cost of financing, as measured by the differential between the yields on bonds issued by BBB-rated corporations and government bond yields in the euro area, stood at 100 basis points on 3 September. This was the lowest level seen since early 2002, indicating that financing conditions in the corporate bond market in the euro area have improved significantly over recent months (see Chart 24).

### Chart 24

### Corporate bond spreads in the euro area and the United States

(in basis points; daily data; BBB rating)



Sources: Bloomberg and ECB calculations.

Note: Corporate bond spreads are calculated as the difference between seven to ten-year corporate bond yields and seven to ten-year government bond yields.

#### Box 4

### Deriving euro area inflation expectations from inflation-linked swaps

The most commonly used financial indicators of euro area inflation expectations have thus far been break-even inflation rates derived from the difference between French nominal bond yields and French index-linked bond yields (linked to the euro area HICP excluding tobacco) of similar maturities. This box describes new financial measures of euro area inflation expectations extracted from inflation-linked swaps (I/L swaps) and examines what these new measures signal with regard to changes in euro area inflation expectations since early 2003. The main advantage of using I/L swaps to monitor developments in inflation expectations is that they provide a wider spectrum of maturities than similar bonds, in particular for the short and medium-term horizons and as such they are useful in the monitoring of inflation expectations.

In an I/L swap agreement, investor A commits to pay investor B a stream of fixed payments in return for a stream of inflation-linked payments. The payments can take place at the maturity of the swap (zero coupon I/L swap) or each year over the life of the swap (multi-payment I/L swap). From a zero coupon I/L swap it is possible to extract an indicator of average inflation expectations over the life of the swap.

The underlying inflation indexes used in the most actively traded of such products are the euro area HICP excluding tobacco and the French CPI excluding tobacco. These are also the two indexes used by *Agence France Trésor* for its inflation-linked bonds, which are used in the pricing of I/L swaps and in hedging positions on the I/L swap market.

The I/L swap market grew rapidly in 2002. In fact, corporations with revenues linked to inflation (including utilities and retailers) used this market to hedge against the risk of low inflation, while corporations with

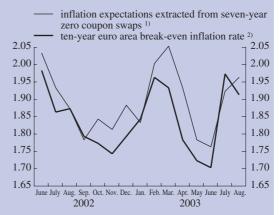
liabilities linked to inflation (e.g. pension funds and life insurance corporations) used it to hedge against the risk of high inflation.

As with break-even inflation rates, measures of inflation expectations extracted from I/L swaps are an imperfect indicator of inflation expectations. Notably, they are biased by an inflation risk premium as well as a liquidity premium.\(^1\) In addition, a counterparty risk is also included in the measure of inflation expectations extracted from I/L swaps. However, this risk is usually mitigated through collateral.

Bearing in mind the shortcomings of the different measures, the break-even inflation rate and the measure of inflation expectations extracted from I/L swaps give similar information on inflation expectations.<sup>2</sup> As shown in Chart A, the ten-year euro area break-even inflation rate and the comparable measure using I/L swaps are extremely close to each other, the latter being on average only 5 basis points higher than the former over the past year. However,

## Chart A: Comparison of euro area inflation expectations extracted from inflation-linked bonds and inflation-linked swaps

(percentages per annum; end-of-month data)



Sources: CDC IXIS Capital Markets, Reuters and ECB calculations.

- A horizon of seven years has been chosen since it corresponds to the duration of the bonds used to calculate the ten-year break-even inflation rates.
- The difference between the nominal yield of the French nominal bond maturing in 2012 and the real yield of the French index-linked bond linked to the euro area HICP maturing in 2012.
- 1 For more details, see the box entitled "Deriving long-term euro area inflation expectations from index-linked bonds issued by the French Treasury" in the February 2002 issue of the Monthly Bulletin.
- 2 On the comparison between break-even inflation rates and inflation expectations extracted from I/L swaps see also the July 2002 edition of the monthly review published by the French bank CDC IXIS entitled "Inflation linked".

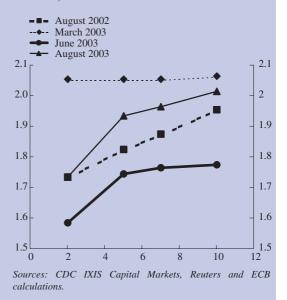
because of the presence of the above-mentioned biases, and as in the case of break-even inflation rates, when monitoring the I/L swap market, it is always safer to focus on changes in the inflation expectations measure extracted from I/L swaps than on levels.

As shown in Chart B, short-term inflation expectations extracted from I/L swaps fluctuated considerably. In 2003, the two-year average inflation expectations have fluctuated between 1.58% and 2.05%, and seem to have been partly affected by temporary shocks on prices, such as those on oil prices. In contrast, the ten-year inflation expectations have been more stable suggesting that long-term inflation expectations were well anchored at levels more or less compatible with price stability over the medium to long term.

From the peak in inflation expectations at end-March 2003 to the trough at end-June 2003, market participants seemed to have revised downward their expectations for average inflation over the next two years by 50 basis points. Despite these significant revisions, and bearing in mind the several caveats mentioned above, inflation expectations did not suggest that investors in June had priced in any significant deflationary risks at any horizon. At end-

### Chart B: Changes in inflation expectations extracted from inflation-linked swaps

(x-axis: horizon in years; y-axis: percentages per annum, end-ofmonth data)



August, the inflation expectations curve was close to the level of one year earlier, with the average ten-year inflation expectations standing at around 2%.

#### Stock markets on an upward trend

Stock prices continued the upward trend observed since mid-March. The rise in stock prices, which occurred in parallel with the rebound in bond yields, seemed to mainly reflect growing optimism among market participants regarding the global economic outlook. It took place amid generally better than expected corporate earnings reports and signs that a global economic recovery is under way. Recent stock market developments were also accompanied by a decrease in uncertainty, as measured by the implied volatility extracted from options on the major stock market indices, which by 3 September had fallen to its lowest level in 2003 in both the euro area and the United States. The rise in stock prices over recent months is especially noteworthy since the sharp rise in bond yields, and hence the rate at which future earnings from holding stocks are discounted, at the same time, put some downward pressure on stock markets.

Between the end of July and 3 September, stock prices in the euro area, as measured by the broad Dow Jones EURO STOXX index, increased by 6%. Over the same period, stock prices in the United States, as measured by the Standard & Poor's 500 index, increased by 4%, while the Japanese Nikkei 225 index increased by 11%. Taking a somewhat longer perspective, by 3 September stock prices in the euro area were up by around 10% since mid-June when the bond yields started to pick up. In the same period, US stock prices and Japanese stock prices rose by 4% and 20% respectively.

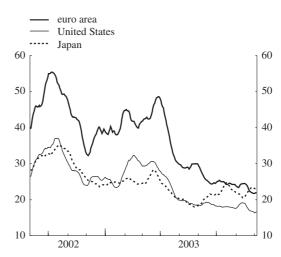
In the United States, following the strong rallies in spring 2003, the broad stock market

indices seemed to stabilise in July and August. This stabilisation took place against a background of abating stock market uncertainty and improved sentiment among market participants regarding the prospects for an economic recovery. In addition, stock markets were positively influenced by corporate earnings reports for the second quarter of 2003 that, overall, exceeded expectations. The better than expected increases in corporations' profits seemed to reflect successful cost-cutting measures, including labour shedding, since revenue grew at a lower rate than earnings. By 3 September uncertainty, as measured by the implied volatility derived from options on the Standard & Poor's 500 index, had fallen to its lowest level for more than a year. The tenday moving average of implied volatility stood at 17%, significantly below the highs of around 30% in mid-March and 7 percentage points lower than its average for the past two years. While the broad US stock market indices stabilised in July and August, the technologyladen Nasdaq Composite index continued its

### Chart 26

### Implied stock market volatility in the euro area, the United States and Japan

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

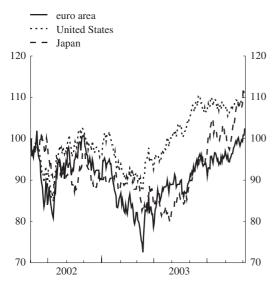


Source: Bloomberg.

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

## Chart 25 Stock price indices in the euro area, the United States and Japan

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



Source: Reuters.

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

sharp ascent. By 3 September, it had risen by 14% since mid-June and by 39% since the beginning of the year.

In Japan, stock prices performed strongly in recent months against a background of significantly improved economic data and corporate profits. In particular, the stronger than expected figures for second quarter GDP growth acted as a catalyst for the stock price increases in August by changing market participants' view of the overall corporate outlook. In addition to the sharp rises in stock prices in recent months, uncertainty in the Japanese stock market - as measured by the ten-day moving average of implied volatility extracted from options on the Nikkei 225 index - increased somewhat and by 3 September stood at around 23%, which was 5 percentage points below the average over the past two years.

In the euro area, stock prices continued rising in recent months. The positive stock market

developments seemed to mainly stem from a decrease in the equity risk premium and from rising expectations among market participants of a gradual economic recovery in the second half of the year. In addition, survey results pointing to improved euro area business sentiment, as well as a number macroeconomic data releases in the United States, supported euro area stock prices. Furthermore, the recent weakening of the euro could have been perceived as having improved the outlook for export-oriented companies in the euro area, thereby providing a further impetus to increases in stock prices. As in the United States, uncertainty in the euro area (as measured by the ten-day moving average of the implied stock market volatility extracted from options on the Dow Jones EURO STOXX 50 index) by early September was hovering near its lowest level in 2003. Thus, by 3 September implied volatility stood at 22%, which was much lower than the 50% level of February/March 2003 and some 12 percentage points below its two-year average.

Recent euro area stock market increases were relatively broad-based across most economic sectors (see Table 6). In fact, only the healthcare sector declined overall in the past two months against a background of weak quarterly results. On the positive side, more cyclical stocks such as those in the basic materials, the consumer cyclical and the industrial sectors fared relatively well in July and August, reflecting better than expected quarterly earnings reports and market perceptions of a more positive economic outlook. Furthermore, stock prices of energy corporations showed a strong rise in August following upward revisions to estimates for 2003 global oil consumption and as a result of higher oil prices. Finally, as in the United States, prices of technology-related stocks increased considerably over the past two months.

**Table 6**Price changes and historical volatility in the Dow Jones EURO STOXX economic sector indices

 $(price\ changes\ as\ percentages\ of\ end-of-period\ prices;\ historical\ volatility\ as\ percentages\ per\ annum)$ 

	Basic materials	Consumer cyclical	Consumer non- cyclical	Energy	Financial	Healthcare	Industrial	Techno- logy	Tele- communi- cations	Utility	EURO STOXX
Share of sector in market											
capitalisation	5.1	11.1	9.8	10.8	28.5	10.1	6.6	5.7	8.1	4.2	100.0
(end-of-period data)											
Price changes (end-of-period	d data)										
2002 Q2	-6.4	-17.1	-7.6	-8.5	-13.8	-14.4	-11.4	-36.3	-33.9	-7.8	-16.5
2002 Q3	-28.8	-29.3	-18.0	-21.0	-36.7	-22.7	-27.8	-35.6	-11.7	-23.8	-28.2
2002 Q4	4.0	2.9	-1.2	3.8	13.6	-0.9	0.8	21.4	21.8	-3.4	7.6
2003 Q1	-19.6	-15.8	-16.0	-12.9	-14.9	-16.4	-9.0	-9.4	-4.1	-7.8	-11.8
2003 Q2	18.0	21.1	7.6	10.3	25.4	15.3	15.6	19.0	17.7	16.8	18.2
July	9.6	3.7	0.8	-2.5	6.1	-3.2	7.6	4.2	-0.1	0.7	3.1
August	2.9	7.7	5.5	6.9	0.0	-2.0	3.3	8.5	2.2	0.9	2.6
End-June to 3 September 2003	3 12.8	11.7	6.3	4.2	6.1	-5.2	11.1	13.0	2.1	1.6	5.7
Volatilities (period averages	i)										
2002 Q2	16.4	24.9	14.5	23.6	22.2	27.5	14.5	44.3	36.3	17.2	20.9
2002 Q3	38.4	46.0	32.2	46.5	51.2	49.5	28.0	59.7	48.0	39.7	43.4
2002 Q4	34.2	40.7	20.8	31.1	44.3	30.6	28.8	61.1	35.7	29.8	34.9
2003 Q1	37.2	37.8	29.3	32.1	40.3	36.5	25.6	44.9	35.0	33.3	33.8
2003 Q2	25.3	28.5	19.9	22.2	25.8	24.3	17.6	34.3	21.3	20.4	32.2
July	29.3	22.2	13.6	20.5	23.0	19.9	17.4	41.2	16.7	16.1	30.3
August	20.0	15.1	11.8	19.4	14.1	15.4	10.3	25.8	12.6	13.1	30.0
End-June to 3 September 2003	3 24.7	18.9	12.6	19.5	19.6	18.6	14.6	34.3	14.7	14.4	23.2

Sources: STOXX and ECB calculations.

Notes: Historical volatilities are calculated as the annualised standard deviation of daily index level changes over the period. Sector indices are shown in the "Euro area statistics" section of this issue of the Monthly Bulletin.

### 2 Price developments

### HICP inflation is estimated to have increased in August 2003

According to Eurostat's flash estimate, euro area HICP inflation rose to 2.1% in August 2003, up from 1.9% in July (see Table 7). However, as is usually the case, a degree of uncertainty surrounds this estimate. While a detailed HICP breakdown is not yet available for August, the increase is likely to be related to higher energy price inflation, reflecting both the recent depreciation of the euro and higher oil prices denominated in US dollars. There have also been some indications that unprocessed food prices did not increase sharply in August despite the exceptionally hot, dry summer. However, there is still a risk that unprocessed food prices will rise substantially over the coming months.

In July 2003 euro area HICP inflation decreased to 1.9%, down from 2.0% in June. This mainly reflected the decline in the annual growth rate of the HICP excluding unprocessed food and energy, which also fell to 1.9% in July from 2.0% the previous month.

The annual rate of change in unprocessed food prices increased slightly to 2.8% in July from 2.6% in June (see Chart 27). This reflected an increase in the annual growth rates of fruit and meat prices, which was partly offset by the decline in the growth rate of vegetable prices. While the higher annual growth in fruit prices may have partly reflected recent hot, dry weather conditions, the latter did not result in a significant year-on-year rise in overall unprocessed food prices in July.

**Table 7 Price and cost developments in the euro area** 

(annual percentage changes, unless otherwise indicated)

	2000	2001	2002	2002 Q3	2002 Q4	2003 Q1	2003 Q2	2003 Mar.	2003 Apr.	2003 May	2003 June	2003 July	2003 Aug.
Harmonised Index of Consumer Prices (HICP) and its components													
Overall index 1)	2.1	2.3	2.3	2.1	2.3	2.3	2.0	2.4	2.1	1.9	2.0	1.9	2.1
of which:													
Goods	2.5	2.3	1.7	1.3	1.8	2.0	1.5	2.2	1.5	1.4	1.6	1.6	
Food	1.4	4.5	3.1	2.3	2.3	2.0	2.6	2.3	2.4	2.5	3.0	3.0	
Processed food	1.2	2.9	3.1	2.9	2.7	3.2	3.3	3.3	3.4	3.4	3.3	3.2	
Unprocessed food	1.8	7.0	3.1	1.4	1.7	0.2	1.6	0.8	1.0	1.2	2.6	2.8	
Industrial goods	3.0	1.2	1.0	0.8	1.6	2.0	1.0	2.2	1.1	0.9	1.0	0.9	
Non-energy industrial goods	0.5	0.9	1.5	1.3	1.2	0.7	0.9	0.8	0.8	0.9	0.8	0.7	
Energy	13.0	2.2	-0.6	-0.7	2.9	7.0	1.5	7.5	2.2	0.6	1.6	1.8	
Services	1.5	2.5	3.1	3.3	3.1	2.7	2.6	2.6	2.9	2.5	2.5	2.4	
Other price and cost indicators													
Industrial producer prices	5.3	2.2	0.0	0.0	1.3	2.4	1.5	2.4	1.7	1.3	1.4	1.3	
Unit labour costs	1.3	2.6	2.1	1.8	1.4	1.8		-	-	-	-	-	-
Labour productivity	1.3	0.1	0.4	0.7	1.1	0.9		-	-	-	-	-	-
Compensation per employee	2.6	2.8	2.6	2.5	2.5	2.7		-	-	-	-	-	-
Total hourly labour costs	2.8	3.3	3.7	3.5	3.7	2.7		-	-	-	-	-	-
Oil prices (EUR per barrel)	31.0	27.8	26.5	27.2	26.5	28.4	22.7	27.2	22.9	21.9	23.3	25.0	26.5
Commodity prices (EUR)	20.4	-8.1	-0.9	1.1	5.6	-3.2	-7.9	-6.4	-6.2	-8.0	-9.6	-7.5	-5.2

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

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

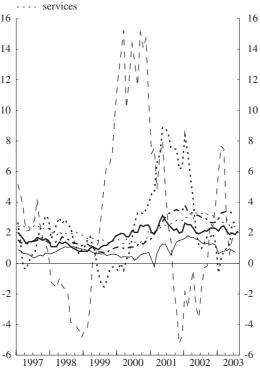
<sup>1)</sup> HICP inflation in August 2003 refers to Eurostat's flash estimate.

## Breakdown of HICP inflation in the euro area by component

(annual percentage changes; monthly data)

total HICP
processed food
unprocessed food
non-energy industrial goods

— energy



Source: Eurostat.

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

The annual rate of increase in energy prices rose slightly to 1.8% in July from 1.6% in June. This is mainly attributable to the increase in euro-denominated oil prices recorded since mid-May, caused by both a rise in US dollar-denominated oil prices and the recent depreciation of the euro.

The annual rate of change in the HICP excluding unprocessed food and energy declined by 0.1 percentage point to 1.9% in July. Although this decrease was reflected in all main sub-components of the HICP excluding unprocessed food and energy, it did not mirror underlying lower price pressure but was rather the result of downward movements in volatile items, in particular clothing and package holiday prices.

The year-on-year rate of change in processed food prices declined by 0.1 percentage point to 3.2% in July. The annual rate of change in non-energy industrial goods prices declined by 0.1 percentage point to 0.7%. This fall is mostly related to an unusual seasonal decline in clothing prices in the context of the 2003 summer sales.

Services price inflation also fell 0.1 percentage point to 2.4% in July, mainly owing to a strong drop in the annual rate of change in package holiday prices. As the monthly increase in package holiday prices in July 2003 has been clearly below the average rate normally recorded for this month, this fall might be linked to a possible shift in the timing of summer holidays. From a longerterm perspective, the annual growth rate of services prices has been declining since the third quarter of 2002. This is likely to be a reflection of the unwinding of past price increases. These increases resulted in particular from the effect of the euro cash changeover as well as past oil price rises, the latter having an impact especially on transportation costs. Somewhat lower wage growth in the context of continuing sluggishness in economic activity may also have contributed to reducing services price inflation.

## Annual rate of change in industrial producer prices decreased in July

The year-on-year rate of change in euro area industrial producer prices declined to 1.3% in July, down from 1.4% in June 2003 (see Chart 28), concealing offsetting movements among its components. Overall, the latest data point to a continuation of subdued price pressure at the producer level.

With regard to the breakdown of industrial producer prices, the annual rate of change in energy prices rose in July 2003 to 3.6%, compared with 3.1% in June. This reflects the 0.7% month-on-month increase in energy prices in July, a consequence of the rise in oil prices since mid-May. The year-on-year rate of increase in intermediate goods prices

### Breakdown of industrial producer prices for the euro area

(annual percentage changes; monthly data)

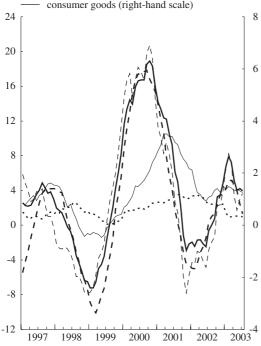
energy (left-hand scale)

industry excl. construction (right-hand scale)

intermediate goods (right-hand scale)

· · · capital goods (right-hand scale)

consumer goods (right-hand scale)



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

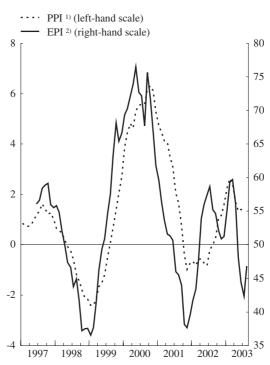
declined by 0.4 percentage point in July to 0.4%. This stems from both a base effect and a strong month-on-month decline in intermediate goods prices, possibly reflecting the delayed impact from the past decline in import prices. The annual rate of change capital goods prices declined by 0.1 percentage point in July to 0.3%. The annual rate of change in consumer goods prices remained unchanged at 1.3%, hovering around this rate for the fourth consecutive month, thereby suggesting subdued underlying pressure on consumer prices. As a result of these developments, the year-on-year rate of change in industrial producer prices excluding energy decreased further in July by 0.3 percentage point to 0.6%.

Looking at developments beyond July, although the Eurozone Price Index (EPI) for manufacturing from the Purchasing Managers' Survey increased from 42.3 in July to 46.9 in August 2003, following four consecutive monthly declines, it was still below the threshold of 50 (see Chart 29). This indicates a continuing, albeit more moderate, decline in manufacturing input prices. The slower fall in average input prices partly reflected higher overall import prices stemming from the recent depreciation of the euro and the rise in US dollar-denominated oil prices.

### Chart 29

### Overall producer prices and manufacturing input prices for the euro area

(monthly data)



Sources: Eurostat and Reuters.

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

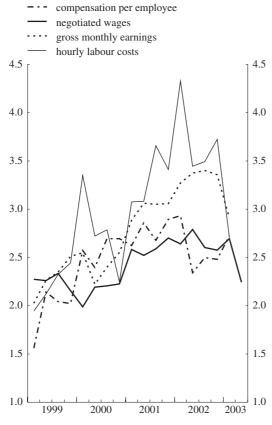
## Some indication of lower wage growth in the second quarter of 2003

Only information about negotiated wages is available for the second quarter of 2003, showing a sharp fall in the year-on-year growth rate to 2.2%, down from 2.7% in the first quarter of the year (see Chart 30). This substantial drop should be interpreted with great caution, as it is mainly attributable to temporary effects in Germany. First, the negotiated wage growth in the first quarter was pushed up by the agreed payment of a one-off lump sum. Second, the drop in negotiated wage growth in the second quarter was related to a strong base effect resulting

### Chart 30

## Selected labour cost indicators for the euro area

(annual percentage changes)



Sources: Eurostat, national data and ECB calculations.

from the substantial pay increases recorded in the same quarter last year. Taking into account these factors, negotiated wage growth in the euro area was moderate in the first half of 2003. This confirms the earlier assessment that labour cost growth levelled off during 2002 and has remained broadly stable since.

Compensation per employee increased by 2.7% year on year in the first quarter of 2003, which is 0.2 percentage point higher than in the third and fourth quarters of 2002. However, against the background of its usual volatility, this rise should not be seen as an indication of increasing wage pressure. This assessment is supported by other indicators. In particular, hourly labour costs in the nonagricultural business sector, while subject to statistical shortcomings, point to a decrease in labour cost growth in the first quarter of 2003.

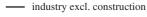
Sectoral data on compensation per employee are now available for the first quarter of 2003 (see Chart 31). The increase in the annual rate of change in total compensation per employee concealed different developments across sectors in the first quarter of 2003, with compensation growth declining in construction and increasing in industry and services. In services, from a longer-term perspective, growth in compensation per employee in the first quarter of this year (2.5%) was close to the average for 2002, remaining below the relatively high growth rates recorded in 2001.

Following a sharp fall in the course of 2002, unit labour cost growth increased by 0.4 percentage point to 1.8% in the first quarter of 2003, reflecting both the increase in growth in compensation per employee and the cyclical decline in labour productivity growth. However, the year-on-year increase in unit labour costs in the first quarter remains clearly lower than the average growth rate recorded in 2001 and 2002.

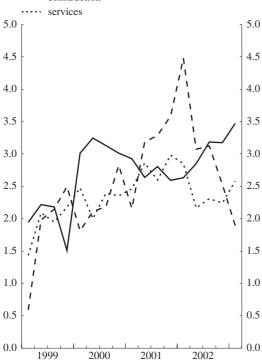
### Chart 3 I

## Sectoral compensation per employee in the euro area

(annual percentage changes; quarterly data)



-- · construction



Sources: Eurostat and ECB calculations.

## HICP inflation expected to hover around 2% for the rest of the year

As explained in Box 5, in the short term, some volatility in HICP inflation may stem from a number of items, including some goods or services belonging to the HICP excluding unprocessed food and energy. While recent oil price developments, in addition to adverse weather conditions and recently announced tax measures in some countries, imply some shortterm upward pressure on inflation rates, the broad picture of annual HICP inflation hovering around or slightly above 2% during the remainder of this year remains unchanged. In 2004 annual inflation rates should fall below 2%, stabilising at levels consistent with price stability. This expectation is based on the assumption of moderate wage developments in the context of a gradual economic recovery. Moreover, the significant strengthening of the external value of the euro over the past one and a half years should continue to have lagged effects, limiting upward pressure on prices, despite the recent decline in the level of the exchange rate. Over longer-term horizons, inflation expectations in the euro area seem to be well anchored at levels below but close to 2%.

### Box 5

### Sources of short-term volatility in HICP inflation

In the short term, HICP inflation is expected to follow a somewhat erratic path. This can largely be explained by intrinsic volatility in the prices of some items included in the basket of goods and services. This box aims to explain and illustrate the sources of the expected volatility in HICP inflation in the period ahead.

### General sources of volatility in inflation

Volatility is generally a fairly vague concept which is rather difficult to define. For the purposes of this box, volatility in inflation is defined as short-term changes in the annual rate of inflation over time which are not related to underlying trends. Importantly, given that the focus of the analysis is on annual inflation rates, it is worth remembering that the change in the annual growth rate in prices from one month to the next depends on both the most recent monthly change and the monthly change 12 months previously (the so-called base effect). While base effects, therefore, cannot be considered a separate source of volatility, volatility produces base effects.

Inflation volatility can result from various fundamental factors: (1) *irregular seasonality* – the prices of some items, such as fresh food or package holidays, display a strong and fairly regular seasonal pattern over the course of the year, which does not affect the annual rate of change. However, irregular seasonal movements, related to weather factors in the case of food prices or to the timing of holidays in the case of package tour prices, will not be smoothed out by annual rates of change; (2) *volatility in commodity markets*, which might be

related to changes in and uncertainty about supply and demand, can play a strong role in commodity prices, such as those of oil; (3) *short-term fluctuations in the euro exchange rate* can also cause volatility, as these changes tend to have an immediate impact on euro-denominated prices of imported commodities; (4) *shocks* not related to weather or markets but to other factors, such as the BSE crisis or the oil price spike before the Iraq war, may also be viewed as a source of volatility; (5) *government measures*, such as increases in indirect taxes or administered prices, as well as deregulation, may affect price developments; (6) *statistical factors* – some movements in the HICP are merely statistical "noise", for example rounding, and do not reflect economic factors. Moreover, methodological changes in the production of the HICP may also introduce some erratic movements, particularly when the historical data have not been fully revised.

A simple but insightful way to measure the volatility of HICP items is to compute the standard deviation of the monthly change in the annual inflation rate. This measure is preferable to the simple standard deviation of the annual rate of change, as it is not affected by strong trends or regular cyclical fluctuations in the inflation rate. The table below presents the standard deviations for the eight most volatile HICP items, calculated over the period February 1996-July 2003, covering as long a period as possible given the availability of disaggregated HICP data. It shows that the volatility in overall HICP inflation stems mainly from a small proportion of items, with a total weight of around 10%. Volatility in these items is at least eight times greater than that of the eight least volatile items and at least five times greater than in overall HICP inflation.

Volatile HICP items (standard deviation of change in the annual percentage change, February 1996-July 2003)

HICP item	Standard deviation (percentage points)	HICP weight (%)	Standard deviation × HICP weight (percentage points)
Liquid fuels	7.2	0.7	0.05
Package holidays	3.6	1.5	0.06
Vegetables	3.1	1.5	0.05
Petrol 1)	2.8	3.7	0.10
Passenger transport by sea and inland waterway	2.4	0.1	0.00
Passenger transport by air	1.8	0.5	0.01
Fruit	1.7	1.1	0.02
Oils and fats	1.6	0.5	0.01
Memo items:			
Garments	0.7	5.6	0.04
Overall HICP	0.3	100.0	
HICP excluding unprocessed food and energy	0.3	84.2	
Eight least volatile items	0.2	4.6	

Sources: Eurostat and ECB calculations.

While it is not surprising that four of these items belong either to the unprocessed food (vegetables and fruit) or energy (liquid fuels and petrol) categories, the other highly volatile items are contained in components of the HICP excluding unprocessed food and energy. In terms of items which are part of the services component, package holidays in particular has been one of the most volatile, partly owing to irregular seasonality but also to statistical changes. Prices of passenger transport by sea and air, which are likely to be influenced by movements in euro-denominated oil prices and also by irregular seasonality, are even more volatile than fruit prices. While garments (clothing), included under non-energy industrial goods, is not among the eight most volatile items (assessed over the whole period from February 1996 to July 2003), it has become more volatile in recent times, partly as a result of statistical factors and also, possibly, a change in the seasonal pattern.

<sup>1)</sup> The term "petrol" is used to refer to the COICOP (Classification of individual consumption by purpose) item "Fuels and lubricants for personal transport equipment".

Moreover, when considering the standard deviation weighted by the importance of the items in the HICP, garments is the fifth most important volatile item after petrol, package holidays, liquid fuels and vegetables.

### Items possibly inducing volatility in HICP inflation in the near future

Looking at the items expected to affect HICP inflation in the short term, first is energy prices, in particular those of liquid fuels and petrol, which are likely to be affected by recent developments in euro-denominated oil prices. The profile of the annual rate of change in the energy component will also be influenced by base effects stemming from the sharp energy price movements in the first half of 2003. For example, the sharp rise in the energy index between December 2002 and March 2003, reflecting the rise in oil prices in the run-up to the Iraq war, will drop out of the year-on-year rate of change, leading to a significant decline in the contribution of energy prices to overall HICP inflation in the first quarter of 2004. However, this decline will be fairly short-lived, as the base effects associated with developments in energy prices between March and June 2003 will lead to a renewed rise in the energy contribution in the second quarter of 2004.

Some volatility may also arise in the near term from developments in food prices, reflecting irregular seasonality due to this year's exceptional weather conditions. Although the impact of the latter on euro area food prices has so far been limited, there is still a risk that seasonal food prices will rise considerably over the coming months and/or that processed food prices will also be affected. Notwithstanding this, any weather-related food price shock should unwind rather quickly.

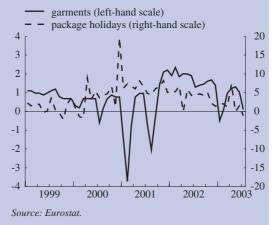
Movements in clothing prices may further contribute to fluctuations in HICP inflation through their impact on the non-energy industrial goods component. The annual rate of change in clothing prices declined strongly between December 2002 and January 2003 (see chart) as a result of a steeper than usual price decline in the

context of the winter 2003 sales. This decline was reversed during the spring when clothing prices returned to their "normal" levels. It appears that this pattern has been repeated during the summer 2003 sales, with a substantial decline in clothing prices in July but a possible reversal towards the autumn.

With regard to services items, movements in package tour prices have dominated the pattern of services price inflation for most of this year and may continue to cause some volatility. For example, a rather unusual seasonal pattern in package holiday prices owing to the timing of Easter this year led to a significant rise in services price inflation between March and April (see chart). In July package holiday prices did not increase as much as usual, possibly as

### Garments and package holiday prices

(annual percentage changes)



a result of a different timing of the summer holidays, leading to a decline in the annual rate of change in services prices. However, this decline might be, at least partly, reversed in the following months.

### 3 Output, demand and labour market developments

## Real GDP broadly unchanged in the second quarter of 2003

After weak economic activity in the first quarter of 2003, characterised by negative contributions from fixed capital formation and net exports but a positive contribution from private consumption and a surprisingly strong build-up of inventories, Eurostat's flash estimate for euro area real GDP in the second quarter points to zero quarter-on-quarter growth (see Table 8). However, on the basis of national data currently available, a downward revision of real GDP growth to -0.1%, quarter-on-quarter, in the second quarter cannot be excluded. Overall, the emerging picture is one of broadly stagnating activity in the first half of 2003.

No breakdown of real GDP is yet available for the second quarter of 2003, but developments in the expenditure components for some euro area countries up to the second quarter and other short-term statistical indicators suggest that the continued weakness of overall activity resulted mainly from a decline in consumption growth and a significantly contribution to growth from changes in inventories than in the first quarter of 2003. Fixed capital formation growth, after signs of a recovery in the second half of 2002, fell significantly in the first quarter of 2003 although largely as a result of country-specific temporary factors (see Box 6). Thus, investment growth is likely to have improved in the second quarter.

Table 8
Composition of real GDP growth in the euro area
(percentage changes, unless otherwise indicated; seasonally adjusted)

		Annual rates 1)							Quarterly rates 2)				
	2000	2001	2002	2002 Q2	2002 Q3	2002 Q4	2003 Q1	2003 Q2	2002 Q2	2002 Q3	2002 Q4	2003 Q1	2003 Q2
Real gross domestic product 3) of which:	3.5	1.5	0.8	0.8	1.0	1.2	0.9	0.4	0.4	0.3	0.1	0.1	0.0
Domestic demand	2.9	1.0	0.2	-0.2	0.5	0.8	1.4		0.1	0.3	0.4	0.5	
Private consumption	2.5	1.8	0.5	0.2	0.6	1.0	1.5		0.3	0.5	0.4	0.4	
Government consumption	2.1	2.2	2.7	3.0	2.9	2.5	1.9		0.8	0.5	0.3	0.3	
Gross fixed capital formation	4.9	-0.6	-2.7	-3.4	-2.6	-1.7	-2.3		-1.4	0.1	0.2	-1.2	
Changes in inventories 4)	0.0	-0.4	0.0	-0.2	0.1	0.1	0.6		0.1	-0.1	0.1	0.4	
Net exports 4)	0.6	0.5	0.6	1.0	0.5	0.4	-0.5		0.3	0.1	-0.4	-0.4	
Exports 5)	12.6	3.0	1.2	1.1	3.1	3.6	3.2		2.2	2.0	-0.4	-0.6	
of which: goods	12.6	3.1	1.5	0.7	3.5	4.2	3.0		1.8	2.7	-0.5	-1.0	
Imports 5)	11.3	1.7	-0.4	-1.7	1.9	2.7	4.8		1.6	1.9	0.5	0.6	
of which: goods	11.4	1.0	-0.4	-2.4	2.1	3.7	5.4		1.5	2.3	1.1	0.3	
Real gross value added:													
Agriculture and fishing	-0.6	-1.3	-0.7	0.0	-0.9	-1.3	0.7		-0.1	0.3	-0.5	1.0	
Industry	3.7	0.8	0.5	0.7	0.9	1.4	0.4		0.6	0.3	-0.4	-0.2	
Services	4.0	2.3	1.6	1.7	1.6	1.7	1.3		0.6	0.3	0.3	0.1	

Sources: Eurostat and ECB calculations.

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

- 1) Annual rates: percentage change compared with the same period a year earlier.
- 2) Quarterly rates: percentage change compared with the previous quarter.
- 3) The latest observation for euro area GDP growth refers to Eurostat's flash estimate.
- 4) As a contribution to real GDP growth; in percentage points.
- 5) Exports and imports cover goods and services and include internal cross-border trade in the euro area. Intra-euro area trade is not cancelled out in import and export figures used in national accounts. Consequently, these data are not fully comparable with balance of payments data.

### Box 6

### Latest developments in investment by type of product

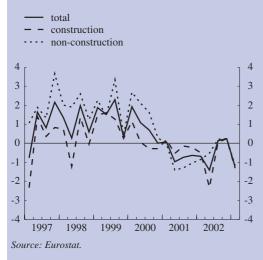
Data on the breakdown of investment by type of product were first presented in Box 6 of the September 2002 issue of the ECB's Monthly Bulletin, together with a description of long-term trends. This box summarises developments in the second half of 2002 and the first quarter of 2003, the latest available estimate. After a slight recovery at the end of last year, overall investment declined again in the first quarter of 2003 (see Chart A). This pattern has been relatively broad-based across investment categories, but is largely related to country-specific factors. Abstracting from these effects, investment was broadly unchanged in the first quarter of this year, after having declined over the two preceding years.

### Equipment investment affected by country-specific factors

For the past three quarters, data on euro area non-construction investment (referred to here as "equipment investment") have been significantly affected by strong fluctuations in Italian equipment investment. The fiscal incentives in place in Italy up to the end of 2002 meant that equipment investment was brought forward at the end of last year, which resulted in a sharp decline in the first quarter of 2003. The impact of this special factor more than offset the improvement in equipment investment in the rest of the euro area. As a result, euro area equipment investment declined by 1.2% quarter-on-quarter in the first quarter of 2003, after two quarters of growth around zero (see Chart B). Within equipment investment, investment in metal products and machinery (30% of total investment) fell by 1.1% quarter-on-quarter in the first quarter of this year. Transport equipment (10% of total investment), which tends to be a very volatile component, declined even more strongly, by 2.1% quarter-on-quarter, while "other investment" (10% of total investment), which notably comprises software, declined slightly. Looking ahead, business confidence data indicate that companies may remain cautious in their investment decisions in the short term. However, euro area equipment investment should recover gradually as the outlook for demand and corporate balance sheet positions improves.

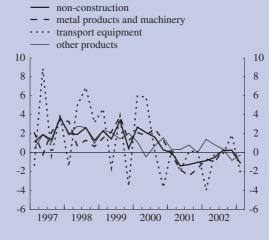
## Chart A: Total, construction and non-construction investment

(quarter-on-quarter changes; quarterly data)



## Chart B: Breakdown of non-construction investment

(quarter-on-quarter changes; quarterly data)



### Ongoing weakness in construction investment

Euro area construction investment declined for around two years before stabilising in the second half of 2002. In the first quarter of 2003, growth turned negative again, at -1.3% quarter-on-quarter. Similar falls were recorded for the two main sub-components, housing and non-housing construction. Continued restructuring,

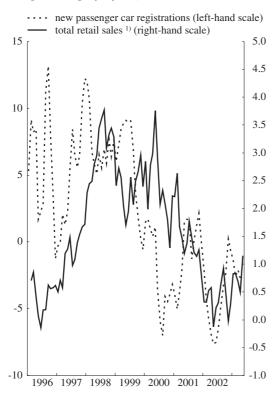
in particular the ongoing correction of the post-reunification overhang of buildings in Germany, contributed to the past decline in construction investment. Moreover, as regards the first quarter of 2003 specifically, an unusually cold winter in some countries of the euro area is likely to have had a negative impact on construction activity.

Short-term indicators of private consumption growth point to moderate developments in the second quarter of 2003 (see Chart 32). Retail sales volumes remained broadly unchanged in June 2003, after decreasing by

### Chart 32

## New passenger car registrations and retail sales in the euro area

(annual percentage changes; three-month centred moving averages; working day-adjusted)



Sources: Eurostat and European Automobile Manufacturers' Association, Brussels).

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

1) Calculated using seasonally adjusted data.

0.7% month-on-month in May 2003. These two figures only partially offset the strong increase recorded in April. Thus, quarter-on-quarter growth in retail sales volumes remained positive in the second quarter of 2003 (at 0.1%), although growth was significantly lower than in the first quarter of 2003 (at 0.7%). New car registrations increased strongly in June, by 5.2% month-on-month, following decreases in April and May. For the second quarter, this resulted in a significant moderation in the quarter-on-quarter rate of decline to 1.3%, compared with 5.7% in the previous quarter.

Developments in the first half of 2003 differed across sectors of the economy, as in the fourth quarter of 2002. Available data point to developments in the industrial sector as the main source of the continued weakness of economic activity: industrial sector value added declined by 0.2% quarter-on-quarter in the first quarter of this year, after falling even more substantially in the previous quarter (see Table 8). In the services sector, by contrast, value added increased slightly in the first quarter of 2003, although by less than in the fourth quarter of 2002. For the second quarter of 2003, sectoral national accounts data are not yet available, but short-term indicators suggest that industrial activity fell further, while services output growth is likely to have remained positive, albeit at subdued levels. Box 7 reviews recent developments and planned improvements in the production of short-term indicators in the framework of the EU Council Regulation on short-term statistics.

### Table 9

### Industrial production in the euro area

(annual percentage changes, unless otherwise indicated)

	2001	2002	2003 Apr.	2003 May	2003 June	2003 Apr.	2003 May	2003 June	2003 Jan.	2003 Feb.	2003 Mar.	2003 Apr.	2003 May
						month-on-month		three-month moving averages				iges	
Total industry excluding construction by main industrial groupings:	0.5	-0.6	0.5	-1.4	-1.5	0.3	-1.0	0.0	-0.4	0.0	0.0	-0.4	-0.7
Total indus. excl. construction and energy	0.3	-0.8	-0.5	-1.7	-2.1	-0.1	-1.0	-0.1	-0.7	-0.3	-0.3	-0.4	-0.9
Intermediate goods	-0.5	0.4	0.4	-1.4	-0.8	0.1	-1.4	0.4	-0.8	0.1	-0.2	-0.2	-0.8
Capital goods	1.5	-2.1	-0.9	-1.1	-4.4	0.7	-0.8	-1.2	-0.4	-0.6	-0.7	-1.0	-1.2
Consumer goods	0.6	-0.5	0.5	-2.9	-1.2	0.7	-1.8	0.7	-0.7	-0.5	-0.2	-0.4	-0.5
Durable consumer goods	-1.7	-5.5	-4.8	-6.9	-7.0	0.2	-2.3	0.4	-2.6	-1.6	-1.9	-2.1	-2.4
Non-durable consumer goods	1.0	0.4	1.5	-2.2	-0.1	0.8	-1.7	0.8	-0.4	-0.2	0.1	-0.1	-0.2
Energy	1.4	0.9	3.0	1.4	2.8	0.7	-0.1	2.2	2.4	2.7	2.9	-0.6	0.0
Manufacturing	0.4	-0.7	-0.4	-1.6	-2.0	0.0	-0.9	-0.1	-0.7	-0.3	-0.3	-0.4	-0.9

Sources: Eurostat and ECB calculations.

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

Euro area industrial production (excluding construction) was unchanged in month-onmonth terms in June 2003, following a decline of 1.0% in May (see Table 9). In the second quarter of 2003 as a whole, industrial production fell by 0.7% quarter-on-quarter compared with zero growth in the first quarter. The past appreciation of the euro and strikes in various euro area countries were among the main factors behind the decline.

All three main industrial groupings contributed to the decline in industrial production (excluding construction and energy) in the second quarter. However, the decline was mainly due to negative contributions from industries producing capital, intermediate and durable consumer goods.

### Box 7

### Progress and gaps in euro area short-term statistics

Council Regulation (EC) No. 1165/98 of 19 May 1998 concerning short-term statistics entered into force in June 1998 and provided for a five-year period in which the EU Member States were to implement its provisions. As a result, a number of short-term indicators for the euro area have recently become available, or should be available in the near future. They will improve the basis for analysis of the euro area business cycle. This box summarises the current availability of short-term general economic statistics for the euro area (for a general overview, see also the article entitled "Developments in general economic statistics for the euro area" in the April 2003 issue of the ECB's Monthly Bulletin) and concludes by indicating future developments in this field.

The Regulation requires the provision of a broad range of indicators at quarterly or monthly frequency, with a detailed breakdown by branch in industry, construction and retail trade. Moreover, it includes new quarterly indicators for the increasingly important market services sector, which covers, among other things, hotels and restaurants, transport, communication and IT services. The Regulation requires the provision of leading and concurrent activity indicators (e.g. new orders, production), as well as producer prices, labour volume and wage indicators. It lays down statistical methods and definitions which are comparable across countries.

Euro area aggregates for these indicators are compiled and published by the European Commission (Eurostat). Some of the indicators have been fully available for some time and are regularly reported in the ECB's Monthly Bulletin in the analysis of the euro area economy (i.e. industrial production, domestic producer prices and retail trade turnover). The recent progress in the implementation of the Regulation has increased the availability of various other indicators (i.e. industrial turnover, new orders, employment, wages and salaries, and hours worked) and improves the timely monitoring of the economic situation in the euro area.

### Availability and timeliness of short-term indicators for the euro area

Variables required by the Regulation	Euro area aggregate available	Timeliness required by the Regulation (days after the reference period) 2)	Actual availability of euro area aggregates (days after the reference period) 2)
Industry/construction			
Production	Yes	45/60	45 to 50 / 70 to 80
Turnover (total, domestic 1), non-domestic 1))	Yes	60	60 to 65
New orders 1) (total, domestic, non-domestic)	Yes	50/90	50 to 65 / 100 to 190
Persons employed	Yes	90/90	65 to 75 / 55 to 120
Hours worked	Yes	90/90	65 to 75 / 90 to 110
Gross wages and salaries	Yes	90/90	65 to 75 / 90 to 110
Output prices (total 1), domestic, non-domestic 1)	Yes	35	35
Construction costs 1)	Yes	90	60 to 120
Building permits 1)	Yes	90	70 to 160
Retail trade			
Turnover	Yes	60	60
Persons employed	Yes	90	190
Other services			
Turnover in wholesale trade 1)	Yes	90	190
Turnover in other market services	No	90	n.a.
Persons employed	No	90	n.a.

<sup>1)</sup> Incomplete country coverage affects the reliability of the euro area aggregate.

However, although the Regulation's implementation period has expired, several national and euro area indicators are still lacking or incomplete. Eurostat calculates euro area aggregates when a country coverage of at least 60% of the euro area is achieved. There are still no quarterly aggregates for turnover and employment in the market services sector, as are required by the Regulation. In industry and construction, some indicators are not yet wholly reliable because data for at least one large country (and a number of smaller countries) are missing. Furthermore, the timeliness of several euro area indicators still falls short of the requirements (e.g. statistics for construction). Eurostat is co-ordinating efforts in the different countries in order to improve timeliness and minimise further delays in the implementation of the Regulation.

Moreover, other initiatives have been taken in order to fill the gaps in this field. The Principal European Economic Indicators (PEEI) – a list of old and new major euro area indicators selected by Eurostat, the national statistical institutes (NSIs) and European authorities – stipulate targets for euro area statistics. These will require both the introduction of new indicators and the shortening of current publication schedules. In order to meet these targets, a longer-term revision of the Regulation is currently under preparation. The revision, which will incorporate new requirements and refine some of the current obligations, is expected to introduce short-term statistics on, for example, euro area import prices and output prices for business services, as well as to improve timeliness.

<sup>2)</sup> Where two numbers are given, the first refers to industry, the second to construction.

## Survey data suggest signs of improvement in the third quarter of 2003

Survey data available up to August provide some positive signs for developments in the third quarter of 2003. In particular, survey indicators for manufacturing support the assessment that industrial production is stabilising in the third quarter and is likely to return to positive growth rates during the remainder of the year. For example, the Purchasing Managers' Index (PMI) increased to 49.1 in August, from 48.0 in July. It thus remained below the level consistent with zero growth in manufacturing output (i.e. 50) for the sixth consecutive month, but came closer to it (see Chart 33). The increase in the PMI in August was broadly based across its five sub-component indices, as in July. Notably, new orders and changes in output reached the 50 level, signalling a stabilisation in both. Suppliers' delivery times increased further, also consistent with an improvement in activity. The measure of stocks of purchased products increased, but remained well below 50, pointing to a further decrease in purchases of raw materials by manufacturing firms, which are probably still engaged in a costcutting process. However, the marked increase in the index may also reflect stockbuilding in line with rising production requirements in a growing number of firms. Finally, the index for employment rose substantially in August, but also remained well below 50, indicating that manufacturing employment fell for the 27th consecutive month, but at a lower pace.

The industrial confidence indicator derived from the European Commission's Business Survey declined somewhat in July (see Table 10), although available national survey data suggest that some improvement can be expected in August. The July result was due to small deteriorations in production expectations and in the assessment of current order books, and a more pessimistic assessment of inventories. In terms of the main industrial groupings, the decline in confidence was limited to the intermediate

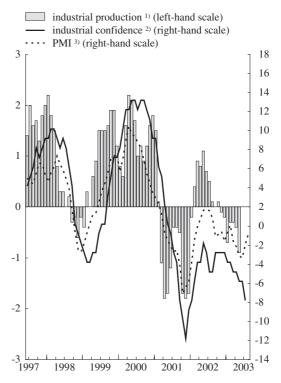
goods industry, whereas confidence improved in the consumer goods sector and remained unchanged in the capital goods sector.

Services sector survey data improved markedly further in August 2003, as in July, after some positive developments in the second quarter. Thus, while growth in services sector value added is likely to have remained weak in the second quarter of 2003, the latest survey data suggest significantly stronger growth in the third quarter. In particular, the business activity index of the Reuters Eurozone PMI Services survey rose strongly in August, as in July, marking the fourth consecutive increase since April this year. It is now at levels that point to an expansion in production of the services sector during the third quarter of 2003.

### Chart 33

## Industrial production, industrial confidence and the PMI for the euro area

(monthly data)



Sources: Eurostat, European Commission Business and Consumer Surveys, Reuters and ECB calculations.

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

### Table 10

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

(seasonally adjusted data)

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

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

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

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

Positive signs are also provided by the European Commission's Business Survey indicators of confidence in the retail trade and services sectors, which improved in July following somewhat erratic but generally favourable developments in the preceding months. Available national survey data suggest that the retail trade indicator may have decreased in August 2003, but that the services confidence indicator improved further strongly, as in July, marking a fifth consecutive month of increase. Consumer confidence appears to have broadly stabilised at a low level during the second quarter, reflecting some improvement in households' expectations with regard to both the general economic situation and unemployment. Consumer confidence improved slightly in July and available

national data point to a possible further slight improvement in August.

## Labour market developments remain subdued

The euro area standardised unemployment rate was unchanged at 8.9% in July compared with June 2003, but has been on an upward trend since April 2001 (see Chart 34). As regards developments by age group, the unemployment rate remained unchanged in July for both those below 25 and those aged 25 and over, at 16.9% and 7.8% respectively (see Table 11). The increase in the number of unemployed in July was about 30,000. This increase is not much

### Table I I

### Unemployment in the euro area

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

	2000	2001	2002	2002 Q3	2002 Q4							2003 June	
Total	8.5	8.0	8.4	8.5	8.6	8.7	8.8	8.7	8.8	8.8	8.8	8.9	8.9
Under 25 years 1)	16.6	15.7	16.2	16.3	16.4	16.8	16.9	16.8	16.9	16.9	16.9	16.9	16.9
25 years and over	7.4	7.0	7.4	7.4	7.6	7.7	7.8	7.7	7.7	7.8	7.8	7.8	7.8

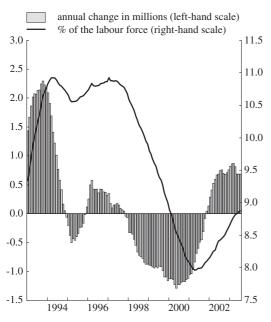
Source: Eurostat.

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

<sup>1)</sup> In 2002 this category represented 22.2% of total unemployment.

### Unemployment in the euro area

(monthly data; seasonally adjusted)



Source: Eurostat.

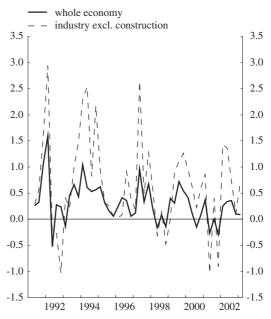
Note: Data refer to the Euro 12 (including periods prior to 2001).

different from that of the previous two months, while it is less than half the monthly increases recorded from October 2002 to April 2003. This lower increase in the number of unemployed in the period from May to July 2003 can be largely accounted for by country-

### Chart 35

### Labour productivity in the euro area

(quarterly percentage changes; seasonally adjusted)



Source: Eurostat.

specific developments, the implications of which for the remaining course of 2003 are uncertain. Thus, a further increase in the unemployment rate in the second half of 2003 cannot be excluded.

As reported in the last issue of the Monthly Bulletin, quarter-on-quarter employment

**Table 12 Employment growth in the euro area** 

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

-	2000	2001	2002	2002	2002	2002	2002	2003	2002	2002	2002	2002	2003
				Q1	Q2	Q3	Q4	Q1	Q1	Q2	Q3	Q4	Q1
										Qua	rterly ra	ates 1)	
Whole economy of which:	2.2	1.4	0.4	0.7	0.5	0.3	0.1	0.0	0.2	0.1	0.0	0.0	0.0
Agriculture and fishing	-1.6	-0.8	-2.2	-2.5	-2.1	-2.1	-2.0	-2.3	-0.5	-0.4	-0.7	-0.4	-0.8
Industry	0.9	0.4	-1.2	-1.0	-1.1	-1.3	-1.5	-1.6	-0.3	-0.3	-0.4	-0.5	-0.4
Excluding construction	0.5	0.3	-1.3	-1.0	-1.2	-1.3	-1.6	-1.7	-0.4	-0.3	-0.4	-0.6	-0.5
Construction	1.9	0.4	-1.1	-0.8	-0.9	-1.3	-1.3	-1.1	-0.2	-0.3	-0.5	-0.2	0.0
Services	3.0	1.9	1.2	1.6	1.3	1.1	0.9	0.7	0.4	0.2	0.1	0.2	0.2
Trade and transport	3.1	1.6	0.5	1.2	0.6	0.3	0.0	-0.2	0.3	-0.1	0.0	-0.2	0.1
Finance and business	5.8	3.9	2.3	2.7	2.6	2.1	2.0	1.6	0.5	0.7	0.2	0.6	0.1
Public administration	1.6	1.3	1.3	1.4	1.4	1.4	1.2	1.1	0.4	0.3	0.3	0.3	0.3

Sources: Eurostat and ECB calculations.

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

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

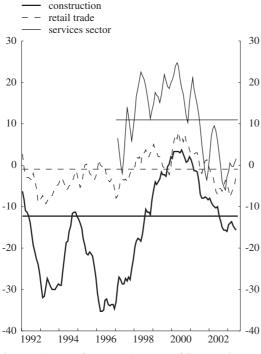
growth remained broadly unchanged at zero in the first quarter of 2003, as in the previous two quarters, despite subdued economic activity and an increase in unemployment (see Table 12). Developments continue to differ across sectors, with industrial sector (excluding construction) employment recording the strongest fall in the first quarter of 2003, while construction employment was broadly stable (revised significantly upwards from -0.3%). Employment growth in the services sector was positive, at 0.2%, in the first quarter of 2003, in line with developments in the fourth quarter of 2002.

As a result of stagnant economic activity and broadly constant employment levels, labour productivity growth has been very weak in the first quarter of 2003 (see Chart 35), and it is likely that this weakness persisted in the second quarter. Despite the need of firms to restore

### Chart 36

### **Employment expectations in the euro area**

(percentage balances; three-month centred moving averages; seasonally adjusted)

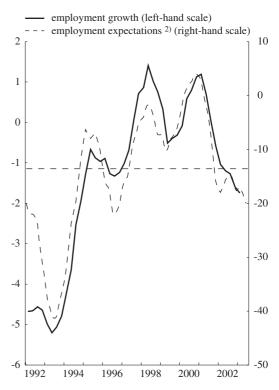


Sources: European Commission Business and Consumer Surveys. Note: The horizontal lines are averages of employment expectations since January 1985 for construction, since April 1985 for retail trade, and since January 1997 for the services sector.

### Chart 37

## Employment growth and employment expectations in industry in the euro area 1)

(annual percentage changes; three-month centred moving averages of percentage balances)



Sources: Eurostat and European Commission Business and Consumer Surveys.

Note: The horizontal line is the average of employment expectations since 1985.

- 1) Excluding construction.
- 2) Employment expectations refer to manufacturing only.

profits and some indications of ongoing costcutting (including labour costs), the prospects of a gradual recovery in output during the second half of 2003 and the slow adjustment of employment imply that labour productivity growth is likely to recover slowly and gain strength only in the course of 2004.

Employment expectations suggest that labour market conditions are not likely to improve over the remaining course of 2003 (see Charts 36 and 37). Employment expectations from the PMI in August 2003 signal a further – though less strong – decrease in employment in both manufacturing and services. The European Commission Business Surveys in July 2003 recorded a small increase in employment expectations in all sectors,

although remaining at relatively low levels. Available national survey data point to possible increased pessimism regarding labour market conditions in most sectors in August.

# A gradual strengthening of economic growth in the second half of 2003 is the most likely scenario

Economic activity stagnated in the first half of 2003, broadly in line with expectations. Given the typical lagging pattern of labour market dynamics over the cycle, labour market conditions are likely to remain subdued also in the remaining course of 2003. At the same time, there is reason to expect that economic activity will recover gradually in the second half of this year and strengthen further in 2004.

Some support for this view is provided by recent survey information, especially for the services sector. Various factors are expected to foster the economic recovery in the euro area: the increase in real disposable incomes owing to past improvements in the terms of trade; the low level of interest rates and, more generally, favourable financing conditions; and the expected improvement in external demand due to the global recovery. These factors should help to compensate for the negative effects of the past appreciation of the euro on export demand. Risks stemming from the past accumulation of macroeconomic imbalances outside the euro area and from the uncertain degree of adjustment still needed to enhance productivity and profitability in the euro area corporate sector remain, but - overall downside risks seem to have diminished.

### 4 Fiscal developments

## Economic environment continues to cloud public finance outlook

The latest harmonised fiscal data and official estimates of budgetary developments in the euro area are those published in the spring of 2003. More recent information provided by governments on budgetary developments this year and on policy measures is not harmonised between countries, as there are differences in coverage and definition of data across countries. Consequently, an assessment of the short-term outlook for public finances in the euro area countries can, at this stage, only be tentative.

Nonetheless, there is growing evidence that most countries will miss by a significant margin the budgetary targets set for 2003 in their most recent stability programmes. Moreover, the average euro area government budget deficit for 2003 is expected to increase significantly with respect to the previous year, instead of declining as planned. The average budget deficit is also likely to be slightly higher than projected in the spring by the European Commission, meaning that the deterioration with respect to the previous year will also be larger than expected earlier this year.

Unfavourable budget developments will also adversely affect the average government debt ratio. After five years of uninterrupted decline, the debt ratio stabilised in 2002 and is expected to increase in 2003.

The deterioration of budget balances in most euro area countries mainly (but not only) reflects lower than anticipated economic growth. In particular, budget revenues are lower than expected. Moreover, in some countries, expenditure has increased beyond the initial budget plan, mainly to finance higher spending for unemployment benefits and related social transfers.

Adverse budgetary developments are of particular concern in countries with sizeable fiscal imbalances, namely Germany, France, Italy and Portugal. All of these countries are expected to miss their 2003 targets and to report budget deficits close to or above 3% in the absence of further consolidation measures. The Italian Government has not revised further its spring deficit projection of 2.3% of GDP, despite lower growth projections. Higher than expected revenues from one-off measures are expected to

compensate for the additional cyclical shortfalls. Recent information indicates that France and Germany will breach the 3%-of-GDP deficit limit again in 2003, and revenue shortfalls could bring the deficit above this threshold in Portugal as well.

In these four countries, fiscal commitments must be met during the remainder of 2003 to maintain confidence in countries' reform efforts and the EU fiscal framework. A cautious budget implementation and, where needed, additional budget tightening would help contain deviations from targets and prevent unwarranted lapses in consolidation efforts.

## Budgetary plans for 2004 must reflect progress towards sound public finances

Euro area countries are currently preparing their budget plans for 2004. These should contribute to building confidence in economic prospects. This can best be achieved if budget plans have a sound medium-term orientation, in line with the Broad Economic Policy Guidelines (BEPGs) that were endorsed by the European Council in lune 2003. The BEPGs maintain that Member States' fiscal policies should contribute to output stabilisation by allowing the full and symmetric play of automatic stabilisers over the cycle, while avoiding excessive deficits and ensuring structural consolidation, in order to achieve positions of close to balance or in surplus in cyclically adjusted terms. Consolidation and reform programmes need to strengthen incentives to work and invest and to address ageing-related fiscal challenges. Furthermore, fiscal plans should reflect realistic assumptions about the macroeconomic environment and contain clearly specified measures if they are to be credible.

In the four countries with sizeable fiscal imbalances, it is crucial that adequate progress be made with consolidation so that excessive deficits are prevented or corrected in a timely fashion. A relaxation of these objectives, which were set in the countries' Council opinions earlier this year, would weaken

reform incentives and undermine the credibility of the Stability and Growth Pact.

Current information on fiscal plans for 2004 in these four countries is still very limited. The Italian Government's medium-term plan contains a revised deficit target of 1.8% of GDP, which would again be mainly attained via temporary measures. Furthermore, it has postponed to 2007 the achievement of a close-to-balance or in-surplus budget position. Fiscal plans in Germany are currently under discussion, with much emphasis on welcome structural reforms. In this context, however, it is important to realise that a trade-off does not exist between growthfriendly structural reforms and consolidation, if such reforms are designed appropriately rather the opposite is true. While the growthenhancing effect of tax cuts is well known, evidence that expenditure-based consolidation and reform is good for confidence and growth prospects is less appreciated.

In the other countries with fiscal imbalances, budget plans should be guided by the Eurogroup agreement of October 2002, which prescribes structural consolidation efforts of at least 0.5% of GDP per year until close-to-balance or in-surplus positions are reached. Moreover, fiscal measures should be of "high quality" and should enhance mediumterm economic and fiscal prospects. If fiscal targets reflect appropriate consolidation strategies (ex ante), automatic stabilisers can be allowed to operate fully (ex post), should the economic environment develop differently than expected.

In countries with sound budgetary positions, budget plans can accommodate changes in the macroeconomic environment while preventing the re-emergence of fiscal imbalances. However, fiscal activism is generally not warranted and additional efforts towards rapid debt reduction in high-debt countries are desirable to enhance the sustainability of public finances in those countries.

## 5 The global macroeconomic environment, exchange rates and the balance of payments

## World economic recovery gains momentum

Recent data releases indicate that the recovery of the world economy has broadened and strengthened somewhat following a rather extended period of moderate growth. This improvement has mainly been driven by positive economic developments in the United States as well as growth dynamics in Asia, lately also including Japan (see Chart 38).

While private consumption and expansionary economic policies have supported this gradual upturn in economic activity across the globe, business investment, in particular, has remained muted in most industrialised countries, implying that the recovery may not yet have become self-sustained. The imbalances accumulated over the past period of strong growth, notably overcapacity and corporate indebtedness, together with the aftermath of the bursting of the stock market bubble, continue to curb investment activity. In addition, and notwithstanding the somewhat improved outlook, the preoccupation with the growing twin deficits in the United States represents a downward risk for the global economy.

In the United States, preliminary data indicate that the economic recovery strengthened in the second quarter of 2003. Real GDP grew by 3.1% (on a quarter-on-quarter, annualised basis) with the main contributor to growth being private consumption, particularly in durable goods. This upturn in real GDP growth also reflected a significant boost in government national defence spending and, to a lesser extent, private business investment in all sub-categories excluding inventories (which put a strain on real GDP growth). Real net exports subtracted rather significantly (1.2 percentage points) from annualised real GDP growth amidst declining export and increasing import volumes.

Looking ahead, available evidence suggests that the US economy should gain strength in the second half of 2003. Personal income tax cuts are expected to support continued private consumption growth, while private business investment is expected to gain further momentum. However, risks with regard to the sustainability of the economic upturn still remain, particularly given the persistence of some imbalances.

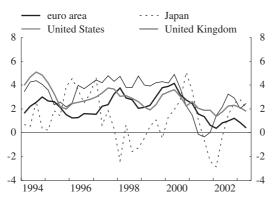
With regard to business spending, leading indicators point towards increasing momentum in US firms' investment plans and suggest that the ongoing recovery in business confidence has been associated with a significant increase in new orders, both in the manufacturing and the services sector. Furthermore, industrial production data for July were stronger than expected and provide a further signal that the slowdown in the manufacturing sector may be coming to an end. Finally, according to a recent survey conducted by the Federal Reserve Board, the restructuring efforts made by US corporate firms over the past two years have led to a reduction in credit spreads and improvements in the terms and conditions of banks' investment financing. This notwithstanding, overcapacity and corporate indebtedness may continue to hamper investment activity.

With regard to private consumption, recent data releases suggest household spending is likely to remain robust in the short term. Whilst the level of consumer confidence has shown little improvement in recent months, strong growth in disposable personal income resulted in personal consumption expenditures in July growing at a robust pace owing, in large part, to continued strength in durable goods purchases by consumers. As tax cuts were the dominant support for the large rise in disposable personal income in July, a durable improvement in labour market conditions would help further support consumption growth. Since the release of the July Employment Report, several other labour

## Main developments in major industrialised economies

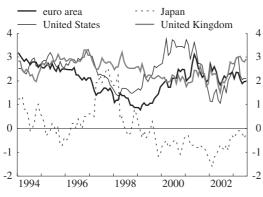
### Output growth 1)

(annual percentage changes; quarterly data)



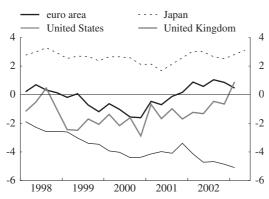
### Inflation rates 2)

(annual percentage changes; monthly data)



### **Current account balance** 3)

 $(as\ a\ percentage\ of\ GDP;\ monthly/quarterly\ data)$ 



 $Sources:\ National\ data,\ BIS,\ Eurostat\ and\ ECB\ calculations.$ 

- Eurostat data are used for the euro area and the United Kingdom; for the United States and Japan national data are used.
- Data for the euro area up to 1995 are estimates for the HICP based on national CPI data; after 1995 HICP data are used. The RPIX index is used for the United Kingdom.
- 3) ECB and Eurostat data are used for the euro area and the United Kingdom; for the United States and Japan national data are used. For all countries, figures refer to seasonally adjusted data for both GDP and the current account.

market data have shown some tentative signs of potential improvement.

Annual CPI inflation has stabilised in recent months and in July it stood at 2.1% on a year-on-year basis. The main driving force behind price developments is still the services sector, and in particular healthcare, transportation and education. Excluding food and energy, CPI inflation has also stabilised, and in July it was recorded at 1.5% year on year. In the medium term, inflationary pressures are expected to remain subdued, as rather moderate wage growth in combination with robust productivity growth should contribute to a slowdown in unit labour cost growth.

With regard to monetary policy, at its meeting on 12 August 2003 the Federal Open Market Committee (FOMC) decided to keep its target for the Federal funds rate at 1%, its level since June 2003. The FOMC reiterated its June assessment with regard to the risks of lower inflation dominating those relating to economic growth. It also indicated that the risks of an "unwelcome fall in inflation" would allow "policy accommodation" to "be maintained for a considerable period".

In Japan, the economic situation is expected to continue to improve. Having declined continuously since the second quarter of 2002, quarter-on-quarter real GDP growth rose again in the second quarter of 2003 to 0.6%, after 0.3% in the first quarter of 2003. External demand contributed 0.2 percentage point, with domestic demand contributing the remaining 0.4 percentage point. Net exports benefited from a 1.1% decline in imports, reflecting in part the effect of SARS on imports of tourism-related services. At the same time, export growth recovered slightly, to reach 1.0% (quarter-on-quarter), while remaining hampered, however, by the relative sluggishness of the global economy. The continued efforts by the Government to achieve medium-term fiscal consolidation by controlling public expenditure was reflected in a further decline in public investment and consumption, by 0.9% and 0.4%, respectively.

Looking ahead, the Japanese economy is expected to be supported to some extent by the gradually improving global environment. Survey data and recent developments in stocks and bond markets support expectations of an improvement in economic activity. Furthermore, the recent increase in the Cabinet Office's leading indicator and low inventory levels may herald a pick-up in industrial production, with rising machinery orders signalling a likely improvement in investment spending. At the same time, the economy is still burdened by substantial structural problems in the financial and corporate sectors.

Moving on to price developments, deflationary pressures still persist. Both the overall CPI and the CPI excluding fresh food declined by 0.2% year on year in July, following a decline of 0.4% in the previous month. At the same time, the annual rate of decline of the GDP deflator eased, from -3.5% in the first quarter of 2003 to -2.1% in the second quarter.

Against this background, the Bank of Japan has maintained its target for the outstanding balance of current accounts at around JPY 27-30 trillion since 20 May 2003, when it was raised to that level. In addition, on II June 2003 the Bank of Japan specified details of its policy of purchasing asset-backed securities. The purchase scheme, which will be in force until end-March 2006, has been limited for the time being to a maximum outstanding amount of JPY I trillion. The underlying assets shall be those deemed to contribute to the smooth financing of small and medium-sized enterprises and with a minimum rating of BB.

In the United Kingdom, quarter-on-quarter real GDP growth picked up, to reach 0.3% in the second quarter of 2003, a level which was 1.8% higher than a year earlier. Household spending growth increased to 1.3% quarter on quarter, following a slowdown in the first quarter. Gross fixed capital formation declined by 0.5% in the second quarter, reflecting a fall in business

investment. Investment spending is likely to have been hampered by uncertainty over demand and by spare capacity in the corporate sector. Net exports made a sizeable negative contribution to real GDP growth in the second quarter. Output growth in the United Kingdom is likely to strengthen gradually, supported by robust growth in public expenditure, a higher contribution of net foreign trade and a moderate upturn in business investment. At the same time, private consumption may slow down.

Inflation, as measured by the Retail Price Index excluding mortgage interest payments (RPIX), stood at an annual rate of 2.9% in July, unchanged from the second quarter. The depreciation of the pound sterling since early 2003 seems to have had an upward influence on the relative prices of goods, whereas services price increases have gradually slowed down since early this year, helped by moderate gains in earnings. Annual HICP inflation, at 1.3% in July, was considerably lower than RPIX inflation, reflecting the impact of the inclusion of the housing cost components in the RPIX.

On 10 July 2003 the Bank of England's Monetary Policy Committee (MPC) reduced its repo rate by 0.25 percentage point to 3.5%. The Bank of England explained its decision by referring to the prospects for global and domestic demand, which were weaker than had been previously expected. At the same time, RPIX inflation was expected to moderate in the course of the year, as temporary upward effects from oil prices and housing costs were expected to fade away.

In Denmark, quarter-on-quarter real GDP decreased by -0.5% in the second quarter of 2003 (-0.8% year on year), down from 0.4% (1.4% year on year) in the previous quarter. The downturn was mainly due to a decrease in inventories, government consumption and, most notably, fixed investment. Positive contributions came from net exports and private consumption. This development deviates from the pattern observed in the first quarter of 2003, where inventories, in

particular, were the main factor contributing to real GDP growth. The annual rate of HICP inflation decreased slightly from 2.2% in the second quarter of 2003 to 1.8% in July, mainly due to lower import prices and continuously low oil prices.

In Sweden, according to preliminary national accounts data, quarter-on-quarter real GDP rose by 0.3% in the second quarter of 2003, as compared with 0.5% in the first quarter. Output growth was largely driven by household consumption and the contribution from net exports. Annual HICP inflation rose to 2.4% in July 2003, as compared with an average of 2.1% in the second quarter of the year, mainly owing to rising energy and rent prices.

In Switzerland, recent data releases have confirmed a decline in economic activity in the first half of this year. Real GDP growth was negative for the third quarter in a row in the second quarter of 2003, owing to a further decline in investment. However, the recent improvement in some leading indicators and the ongoing global recovery are pointing to a likely upturn in economic growth. With regard to price developments, inflation increased slightly in August. The year-on-year rate of inflation was 0.5%, as compared with 0.3% in July.

The outlook for growth in the larger EU acceding countries remains positive. However, a more diversified picture emerges across countries in terms of prices and cyclical conditions. In the Czech Republic, GDP growth increased somewhat in the first quarter owing to robust growth in household consumption and a moderate pick-up in exports. In Hungary, output growth slowed down considerably in the first quarter of the year, although consumption remained sustained. On 4 June 2003, the National Bank of Hungary agreed with the government's request to devalue the parity of the forint by 2.26%, while maintaining the ±15% exchange rate band. In the wake of this decision, the central bank increased interest rates by 300 basis points, to 9.5%. In Poland, notwithstanding a moderation in private consumption, growth remained stable in the first quarter, as the economy benefited from a significant recovery in exports. Activity in the manufacturing sector was strong in the second quarter of 2003.

In Russia, the economic outlook has improved considerably, as confirmed by output growth of close to 8% in the first quarter of the year. Higher oil prices have contributed significantly to the momentum towards stronger growth, with Russian oil companies expanding export volumes. In the first half of the year, inflation declined slightly, to just below 14% in June.

In Turkey, the recent strength of economic activity, characterised by a strong rebound in consumption and investment growth, has continued, with annual output growth exceeding 8% in the first quarter. External trade, although contributing negatively to growth, is currently growing at a very rapid pace. Annual inflation is stable at levels just below 30%.

In non-Japan Asia, the growth momentum continues to be relatively robust, although the SARS epidemic did lead to a temporary economic slowdown in the second quarter of 2003. The economies most affected by the disease were Hong Kong, Singapore, Taiwan and China. The impact of the SARS epidemic was particularly noticeable in the domestic services sector — above all in retail sales, restaurants and hotels — which more recently has shown evidence of a recovery.

Following a moderation in output growth in the second quarter of 2003, China continues to register the fastest expansion in the region. Real GDP growth, supported by exports and investment activity, remained strong at 6.7% (year on year) in the second quarter, while at the same time being curbed by a SARS-induced slowdown in consumption growth. In July 2003 exports continued to expand rapidly, by 31% (year on year), while fixed asset investment rose strongly, by 27% (year on year). Retail sales expanded by 9.8% (year on year) in July, thus fully recovering from

the slowdown observed in the second quarter of the year. While deflationary pressures are not entirely absent, consumer prices have continued to rise over recent months, posting a 0.5% (year-on-year) increase in July.

Economic activity in South Korea has continued to moderate, largely reflecting a slowdown in domestic demand growth. Real GDP grew by 1.9% (year on year) in the second quarter of 2003, after 3.7% (year on year) in the first quarter. Both business and consumer confidence have continued to decline amid recent corporate accounting scandals, a moderation in lending to households and heightened geopolitical tensions in relation to North Korea. By contrast with developments in domestic demand, exports have remained the main factor supporting output growth. In Singapore and Taiwan year-on-year real GDP fell by 4.2% and 0.1% respectively in the second quarter of 2003. This negative economic performance was largely related to a decline in domestic demand, which was severely affected by the SARS epidemic, while exports held up reasonably well.

The economic prospects for non-Japan Asia are positive for the rest of the year and 2004, and the balance of risks appears to be broadly balanced.

The latest data releases in Latin America seem to indicate that the economic recovery, which began last year, is losing momentum. In Brazil the economy slowed down in the second quarter of 2003. Industrial production recently showed considerable volatility, falling by 3.3% (year on year) in June. In Mexico real GDP growth registered 0.2% (year on year) in the second quarter of 2003, down from 2.3% in the previous quarter. The main drag on the country's economic performance was the manufacturing sector, which contracted by 4.5% (year on year) in the second quarter, partly as a result of declining non-oil exports. The latter, which have recently been under competitive pressure from non-Japan Asia, did, however, show some signs of recovery in June. In Argentina, there are signs of a

slowdown in the pace of economic activity. The outlook for the Argentinean economy remains hampered by sizeable external borrowing requirements for the rest of the year, pending the conclusion of a new financial arrangement with multilateral institutions.

### The euro weakened in August

In August 2003 the euro weakened against major currencies. It declined most markedly against the Japanese yen, which experienced a broad-based strengthening, but also against the US dollar and, to a lesser extent, the pound sterling. These developments were mainly associated with market participants' improved outlook for economic activity in Japan and the United States, as opposed to expectations of a more gradual recovery in the euro area.

The strengthening of the US dollar against the euro in August took place against a background of market participants adopting a more optimistic outlook for the US economy (see Chart 39). This was supported by data releases in the United States indicating that the economic recovery had strengthened in the second quarter of 2003. Moreover, there was strong personal consumption expenditure, a resilient housing market and signs that investment spending is gaining momentum. By contrast, concerns over the financing of the US current account deficit and the strong rise in the US fiscal deficit seem to have played a secondary role. Towards the end of the month, technical factors may have provided added impetus to the euro's decline as the exchange rate broke through key support levels. On 3 September 2003 the euro stood close to a four-month low against the US dollar, at USD 1.08, that is 4.7% lower than its end-July level but 14% stronger than its 2002 average.

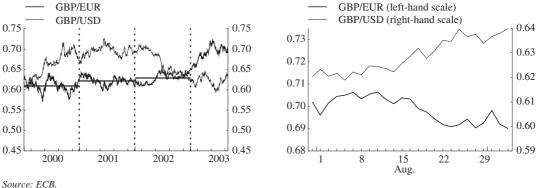
In August the Japanese yen appreciated strongly against the euro and moderately against the US dollar amid a stream of data releases suggesting a more positive outlook for the Japanese economy (see Chart 39).

Evidence of an acceleration in economic activity in Japan stemmed from rising consumer spending and improvement in key leading indicators. In this context, Japanese stock prices rose significantly in August, and long-term bond yields increased perceptibly, particularly in the second half of the month; this was connected, inter alia, to the repatriation of funds by Japanese investors

into the stock market and portfolio shifts from the bond to the stock market. On 3 September 2003 the euro was quoted at JPY 125.4, 7.6% weaker than at the end of July and 6.2% higher than the 2002 average.

The pound sterling appreciated somewhat against the euro but weakened against the US dollar in August (see Chart 39). Its

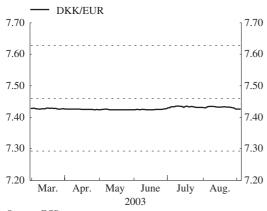
#### Chart 39 Patterns in exchange rates (daily data) From Jan. 2000 From 31 July 2003 to 3 Sep. 2003 USD/EUR USD/EUR 1.25 1.25 1.16 1.16 1.20 1.20 1.15 1.15 1.15 1.15 1.14 1.14 1.10 1.10 1.13 1.13 1.05 1.05 1.12 1.12 1.00 1.00 1.11 1.11 0.95 0.95 1.10 1.10 0.90 0.90 1.09 1.09 0.85 1.08 1.08 0.85 0.80 0.80 1.07 1.07 0.75 0.75 1.06 1.06 2000 2001 2002 2003 8 15 22 29 Aug. JPY/EUR JPY/EUR (left-hand scale) JPY/USD JPY/USD (right-hand scale) 122 141 141 136 121 136 136 135 131 120 134 126 126 133 132 119 121 121 118 116 116 131 117 111 111 130 106 129 128 116 106 101 115 96 91 96 127 114 91 126 86 113 86 125 2000 2001 2002 2003 8 15 22 29 Aug



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

### Patterns in exchange rates within ERM II

(daily data)



Source: ECB.

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

strengthening vis-à-vis the single currency was partly related to Bank of England statements that the British economy was recovering and to the release of somewhat better than expected employment figures. However, the strengthening of the pound sterling against the euro in August may also be partly related to the traditional co-movement of the UK currency with the US dollar. On 3 September 2003, the euro traded against the pound sterling at GBP 0.69, that is 1.7% lower than at the end of July and 9.7% higher than its 2002 average.

In ERM II, the Danish krone continued to fluctuate in a very narrow range close to its central parity (see Chart 40). With regard to other European currencies, in the period under review the euro appreciated slightly against the Norwegian krone and depreciated modestly against the Swiss franc, while it was broadly unchanged vis-à-vis the Swedish krona.

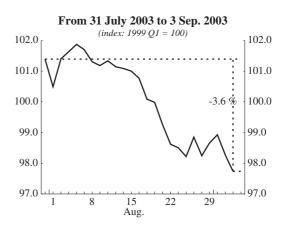
Taken together, these developments translated into a decline in the nominal effective exchange rate of the euro as measured against the currencies of 12 major trading partners of the euro area. On 3 September it stood 3.6% below its end-July level, but 8.6% above its average level in 2002. Much of this recent fall is accounted for by

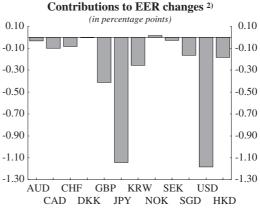
the rise of the Japanese yen and the US dollar against the single currency (see Chart 41). The real effective exchange rates of the euro, based on CPI, PPI and ULCM developments, continued to track developments in the nominal index (see Chart 42). The real indices tend to be somewhat higher than the index for the nominal effective exchange rate of the euro, which reflects both deflationary pressures experienced in Japan and Hong Kong SAR over the past four years and subdued inflation in several industrialised countries.

### Chart 41

## The effective euro exchange rate and its decomposition 1)

(daily data)



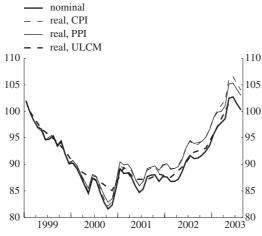


Source: ECB.

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

## Nominal and real effective euro exchange rates 1)

(monthly/quarterly data; index: 1999 Q1 = 100)



Source: ECB.

 An upward movement of the index represents an appreciation of the euro. The latest observations for monthly data are August 2003. In the case of the ULCMbased real EER, the latest observation is for Q2 2003 and is partly based on estimates.

## Seasonally adjusted current account in surplus in June 2003

In June 2003 the seasonally adjusted current account of the euro area registered a surplus of €2.5 billion (corresponding to a surplus of €3.2 billion in non-seasonally adjusted terms). This reflected surpluses in both goods and services that were partly offset by deficits in income and current transfers (see Table 13). Compared with May 2003, the seasonally adjusted current account surplus remained almost unchanged in June, as the increase in the income deficit was broadly offset by the increase in the services surplus and the decrease in the deficit of current transfers. The goods surplus remained broadly stable in June, while exports and imports declined.

Looking at quarterly figures, the value of exports and imports of both goods and services fell in the second quarter of 2003 compared with the previous quarter (see Table 8.2 in the "Euro area statistics" section of this issue of the Monthly Bulletin). With regard to goods, the fall in export values (by approximately 1%) was similar in magnitude

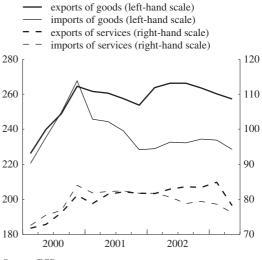
to the earlier quarter-on-quarter declines in export values recorded since the last quarter of 2002 (see Chart 43). This reflects falling export volumes and prices which, in turn, are associated with the weakness of global demand and the appreciation of the euro (see Box 4 in the previous issue of the Monthly Bulletin for further details). Meanwhile, the fall in import values in the second quarter of 2003 suggests that the decline in oil prices over this period, combined with the lagged impact of the appreciation of the euro, is beginning to feed through to lower import prices, while the demand for imports also seems to have fallen in line with the decline in euro area industrial production in the second quarter.

Turning to services, export values declined by almost 8% between the first and second quarters of 2003, contrasting with the moderate growth recorded in previous quarters. This fall in services exports may reflect, on the one hand, the lagged effect of the earlier losses in price competitiveness arising from the strengthening of the euro and, on the other, the effects of the war in Iraq and the SARS epidemic. The latter two factors seem to partly account for the decline

### Chart 43

## Euro area exports and imports of goods and of services

 $(EUR\ billions;\ quarterly\ data;\ seasonally\ adjusted)$ 



Source: ECB.

### Table 13

#### Current account of the euro area

(EUR billions, seasonally adjusted)

								n cumulated es ending
	2003	2003	2003	2003	2003	2003	2002	2003
	Jan.	Feb.	Mar.	Apr.	May	June	June	June
Current account balance	3.2	3.0	2.1	-1.0	2.8	2.5	26.0	46.8
Goods balance	10.6	10.3	5.5	9.8	9.5	9.4	112.3	118.0
Exports	89.0	87.9	83.2	87.3	86.4	83.5	1,041.1	1,047.0
Imports	78.5	77.6	77.7	77.5	76.9	74.1	928.9	929.0
Services balance	1.9	1.8	2.6	0.6	0.5	1.0	1.8	17.2
Exports	28.6	27.8	28.5	26.9	25.6	25.8	328.5	330.3
Imports	26.7	26.0	25.9	26.3	25.1	24.8	326.7	313.0
Income balance	-5.4	-4.8	-2.2	-6.6	-2.7	-4.5	-35.7	-42.9
Current transfers balance	-3.8	-4.3	-3.8	-4.8	-4.6	-3.3	-52.3	-45.6

Source: ECB.

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

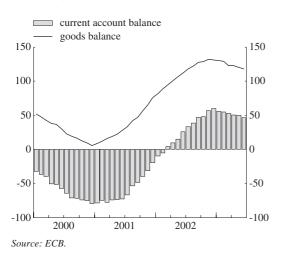
in travel and air transportation revenue experienced by some euro area countries in the second quarter. Meanwhile, these factors most probably also had a negative impact on the same categories of imports of services. In addition, weak euro area demand may have partly contributed to this fall in imports of services.

From a longer-term perspective, the fall in the value of exports of goods since the last quarter of 2002 largely accounts for the decline in the 12-month cumulated goods surplus over the same period which, in turn, largely explains the accompanying decline in the 12-month cumulated current account surplus (see Chart 44). To a lesser extent, the rising income deficit has also contributed to the latter development, partly as a result of a fall in income receipts. The appreciation of the euro could provide a partial explanation for this fall, as income received in foreign currency has a lower value when expressed in euro.

### Chart 44

## The euro area current account and goods balances

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



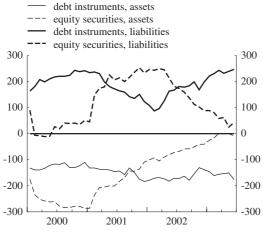
## Sizeable net inflows in direct and portfolio investment in June 2003

In June 2003, combined direct and portfolio investment recorded net inflows of €38.2 billion (see Table 14 as well as the more detailed information contained in Tables 8.4-8.8 in the "Euro area statistics" section of this issue of the ECB's Monthly Bulletin).

The net inflows in direct investment  $(\in 23.7 \text{ billion})$  largely reflected net inflows in other capital  $(\in 15.1 \text{ billion})$ . In particular, repayments of inter-company loans from foreign affiliates to their euro area parent companies  $(\in 10.2 \text{ billion})$  seem to have been an important contributory factor in the developments observed in June.

## **Equity securities and debt instruments** flows

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



Source: ECB.

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

As for portfolio investment, the net inflows ( $\in$  14.5 billion) mainly stemmed from the increased investment by non-residents in euro area bonds and notes ( $\in$ 47.4 billion) and, to

a lesser extent, in euro area equities ( $\in$ 19.7 billion). This was only partly offset by euro area residents' investment in foreign equities, bonds and notes.

Overall, developments in the euro area financial account in June continued to be characterised by the dominant role of flows in debt instruments, as was the case in earlier months. This is reflected in the 12-month cumulated figures, which point to an ongoing shift from equity portfolio investment to investment in debt instruments between the 12-month period ending in June 2002 and the corresponding period ending in June 2003. As Chart 45 shows, non-euro area residents have been investing substantially in euro area debt instruments, particularly in bonds and notes, since about the beginning of 2002. As in previous months, uncertainty about global economic prospects, coupled with yield considerations and expectations of possible capital gains, are likely to have contributed to the continued shift of investment flows in this asset category in recent months.

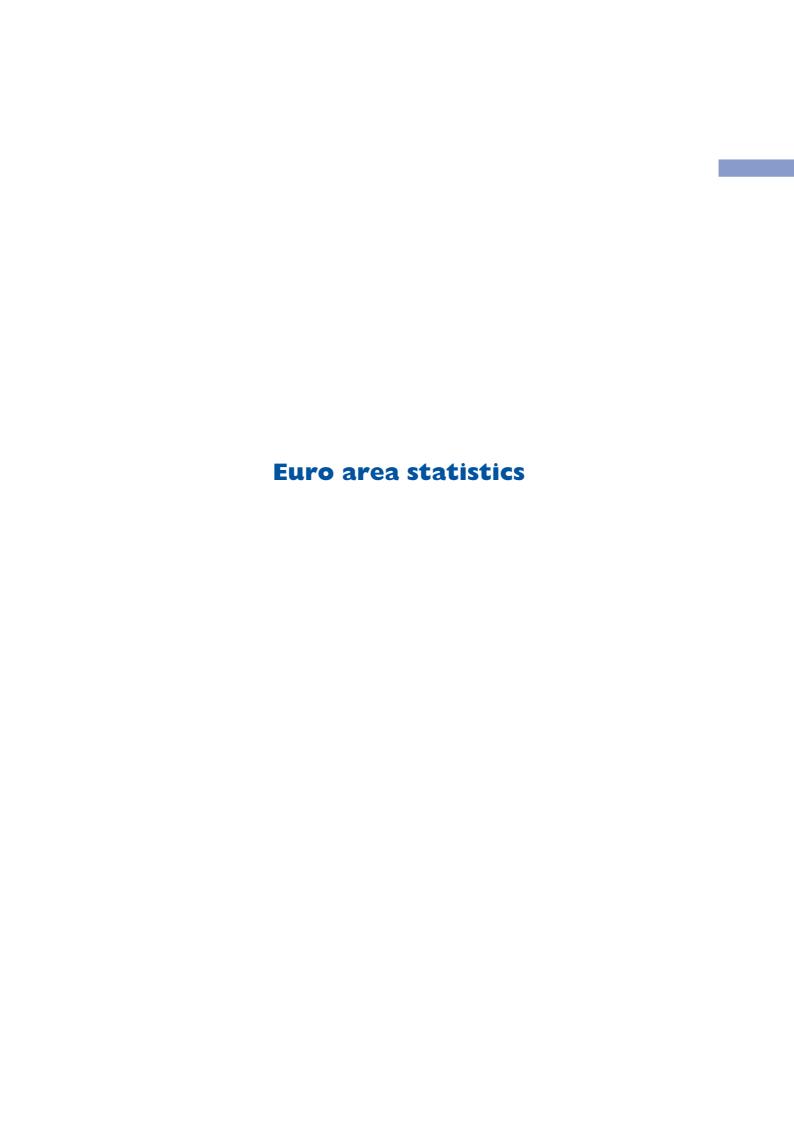
**Table 14**Balance of payments of the euro area

(EUR billions; not seasonally adjusted)

								cumulated es ending
	2003	2003	2003	2003	2003	2003	2002	2003
	Jan.	Feb.	Mar.	Apr.	May	June	June	June
Current account balance	-4.8	3.5	4.0	-8.6	0.4	3.2	25.4	43.3
Goods balance	2.1	9.1	6.2	7.4	8.3	11.2	112.1	117.4
Services balance	-0.6	0.1	1.5	0.8	2.0	2.8	1.8	16.6
Income balance	-9.4	-2.6	-0.6	-10.5	-4.3	-4.4	-36.8	-44.8
Current transfers balance	3.2	-3.1	-3.0	-6.3	-5.6	-6.4	-51.6	-45.9
Capital account balance	2.1	-0.9	0.8	0.1	0.4	2.3	9.1	9.6
Financial account balance	-12.7	-25.8	7.9	7.8	-29.8	-20.0	-110.9	-176.7
Direct investment	-3.1	3.2	-7.7	-20.2	-0.2	23.7	-33.2	-12.8
Abroad	-16.8	-6.8	-17.1	-22.8	-0.7	14.6	-187.8	-110.6
In the euro area	13.6	10.0	9.4	2.6	0.5	9.1	154.5	97.8
Portfolio investment	-2.8	-12.0	17.6	9.3	8.0	14.5	106.7	106.5
Equities	15.7	2.5	-3.4	7.1	-15.0	5.1	110.5	35.2
Assets	2.3	0.3	7.4	-3.0	-5.8	-14.6	-71.9	-8.2
Liabilities	13.4	2.2	-10.8	10.2	-9.2	19.7	182.4	43.3
Debt instruments	-18.6	-14.4	21.0	2.1	23.0	9.4	-3.8	71.3
Assets	-22.7	-23.9	-14.8	-9.1	-20.6	-30.4	-171.0	-175.3
Liabilities	4.1	9.5	35.8	11.2	43.6	39.7	167.1	246.6
Memo item:								
Combined net direct and								
portfolio investment	-6.0	-8.8	9.9	-10.9	7.7	38.2	73.5	93.7
Financial derivatives	-0.8	0.6	0.2	-4.6	0.6	-0.3	-17.2	-18.2
Other investment	-7.4	-22.9	-7.2	22.9	-39.6	-58.7	-176.5	-261.0
Reserve assets	1.5	5.3	5.0	0.5	1.4	0.8	9.4	8.8
Errors and omissions	15.3	23.2	-12.7	0.7	29.1	14.5	76.4	123.8

Source: ECB.

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





### Contents <sup>1</sup>

	Euro area overview table	5*
ı	I Monetary policy statistics	
	I.I Consolidated financial statement of the Eurosystem	6*
	1.2 Key ECB interest rates	8*
	1.3 Eurosystem monetary policy operations allotted through tenders	8*
	1.4 Minimum reserve statistics	10*
	1.5 Banking system's liquidity position	*
2	2 Monetary developments and investment funds in the euro area	
	2.1 Aggregated balance sheet of the euro area MFIs	12*
	2.2 Consolidated balance sheet of the euro area MFIs including the Eurosyste	em 14*
	2.3 Monetary aggregates and counterparts	16*
	2.4 MFI loans, breakdown	20*
	2.5 Deposits held with MFIs, breakdown	23*
	2.6 MFI holdings of securities, breakdown	26*
	2.7 Revaluation of selected MFI balance sheet items	27*
	2.8 Currency analysis of selected liabilities and assets of the euro area MFIs	28*
	2.9 Aggregated balance sheet of euro area investment funds	30*
	2.10 Aggregated balance sheet of euro area investment funds broken down	
	by investment policy	31*
	2.11 Aggregated balance sheet of euro area investment funds broken down	
	by type of investor	33*
3	3 Financial markets and interest rates in the euro area	
	3.1 Money market interest rates	34*
	3.2 Government bond yields	35*
	3.3 Stock market indices	36*
	3.4 Retail bank interest rates	37*
	3.5 Securities issues other than shares by original maturity, residency of the	ssuer
	and currency denomination	38*
	3.6 Euro-denominated securities other than shares by original maturity, resid	-
	and sector of the issuer	40*
	3.7 Annual growth rates of securities other than shares issued by euro area r	
	3.8 Quoted shares issued by euro area residents	48*
4	· · · · · · · · · · · · · · · · · · ·	
	4.1 Harmonised Index of Consumer Prices	50*
	4.2 Selected other price indicators	51*
5	5 Real economy indicators in the euro area	
	5.1 National accounts	52*
	5.2 Selected other real economy indicators	54*
	5.3 European Commission Business and Consumer Surveys	55*
	5.4 Labour market indicators	56*
6	6 Saving, investment and financing in the euro area	
	6.1 Financial investment and financing of non-financial sectors	58*
	6.2 Financial investment and financing of insurance corporations and pension	funds 62*
	6.3 Saving, investment and financing	64*
I	I See the ECB's website (www.ecb.int) for longer runs and more detailed data.	

7	Gen	eral government fiscal position in the euro area and in the euro area countries	
	7. I	Revenue, expenditure and deficit / surplus	65*
	7.2	Debt	66*
	7.3	Change in debt	67*
8	Bala	nce of payments and international investment position of the euro area (including reserves)	
	8.1	Summary balance of payments	68*
	8.2	Balance of payments: current and capital accounts	69*
	8.3	Balance of payments: income account	70*
	8.4	Balance of payments: direct investment account	71*
	8.5	Balance of payments: portfolio investment account	<b>72</b> *
	8.6	Balance of payments: other investment account and reserve assets	73*
	8.7	Monetary presentation of the euro area balance of payments	<b>75</b> *
	8.8	International investment position and reserve assets outstanding	<b>76</b> *
9	Exte	rnal trade in goods of the euro area	<b>78</b> *
10	Exch	nange rates	80*
П	Ecor	nomic and financial developments in the other EU Member States	82*
12	Ecor	nomic and financial developments outside the EU	
		Economic and financial developments	83*
	12.2	Saving, investment and financing	84*
Tec	nnical	notes	85*
Gen	eral n	otes	89*

### What's new?

Table 2.3 presents seasonally adjusted estimates of further time series for monetary aggregates and counterparts (seasonally adjusted data are now available for the whole consolidated balance sheet of the MFI sector). New monthly data showing the sectoral breakdown of deposits, loans and holdings of securities are presented in tables 2.4 to 2.6 (in the past, the breakdown was available only quarterly). Revaluations of selected MFI balance sheet items (e.g. write-offs/write-downs of loans) are presented in table 2.7. For more detailed information, see the Box entitled "Enhancements in euro area monetary statistics" in this issue of the Monthly Bulletin and the "Monetary statistics" item in the statistics section of the ECB's website (www.ecb.int/stats/monetary/monetary.htm). The website also provides methodological notes and longer runs of data.

### Conventions used in the tables

"-" data do not exist/data are not applicable

"." data are not yet available

"..." nil or negligible

"billion" 109

 $_{(p)}$  provisional

s.a. seasonally adjusted

### Euro area overview table

### Summary table of economic indicators for the euro area

(annual percentage changes, unless otherwise indicated)

### 1. Monetary developments and interest rates

	M1 <sup>1)</sup>	M2 <sup>1)</sup>	M3	3-month moving average (centred)	MFI loans to euro area residents excluding MFIs and general government 19	Securities issued by non- financial and non-monetary financial corporations 1)	3-month interest rate (EURIBOR, % per annum, period averages) 7	10-year government bond yield (% per annum, period averages)
2001	3.6	4.2	5.4	-	7.8	27.6	4.26	5.03
2002	7.3	6.5	7.2		5.3	22.2	3.32	4.92
2002 Q3	7.6	6.5	7.0	-	5.3	18.3	3.36	4.77
Q4	8.8	6.7	7.0		4.8	16.5	3.11	4.54
2003 Q1	10.3	7.1	7.6		4.9	16.6	2.69	4.16
Q2	11.4	8.2	8.4		4.6	20.5	2.37	3.96
2003 Mar. Apr. May June July	11.8 11.2 11.4 11.4 11.5	8.0 8.0 8.5 8.4 8.4	8.0 8.7 8.5 8.4 8.5	8.2 8.4 8.5 8.5	4.7 4.6 4.6 4.5 4.9	18.9 20.2 20.7 22.5	2.53 2.54 2.41 2.15 2.13	4.13 4.23 3.92 3.72 4.06
Aug.		·		·		•	2.14	4.20

### 2. Price and real economy developments

	HICP	Industrial producer prices	Hourly labour costs (whole economy)	Real GDP	Industrial production (excluding construction)	Capacity utilisation in manufacturing (percentages)	Employment (whole economy)	Unemployment (% of labour force)
	9	10	<u> </u>	12	13	14	15	16
2001 2002	2.3 2.3	2.2 0.0	3.3 3.7	1.5 0.8	0.5 -0.6	82.9 81.4	1.4 0.4	8.0 8.4
2002 Q3 Q4	2.1 2.3	0.0 1.3	3.5 3.7	1.0 1.2	0.1 1.2	81.5 81.5	0.3 0.1	8.5 8.6
2003 Q1 Q2	2.3 2.0	2.4 1.5	2.7	0.9 0.4	1.0 -0.8	81.1 80.7	0.0	8.7 8.8
2003 Mar. Apr.	2.4 2.1	2.4 1.7	-	-	0.0 0.5	80.8	-	8.8 8.8
May June	1.9 2.0	1.3 1.4	-	-	-1.4 -1.5	-	-	8.8 8.9
July Aug.	1.9 2.1	1.3	-			80.6	-	8.9

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

(EUR billions, unless otherwise indicated)

	Ва	alance of payme	nts (net flows)		Reserve assets (end-of-period	Effective exchar the euro: broad	USD/EUR exchange rate	
	Current and			Portfolio	positions)	(1999 Q1 = 1)	_	
	capital Goods	investment	investment		NY : 1			
	accounts 17	18	19	20	21	Nominal 22	Real (CPI)	24
	1/	18	19	20	21	22	23	24_
2001	-9.8	75.5	-102.8	64.7	392.7	91.0	87.7	0.896
2002	71.2	131.1	-33.6	108.4	366.1	95.6	91.7	0.946
2002 Q3	25.3	38.5	-12.0	35.7	380.9	97.9	93.8	0.984
Q4	25.1	34.6	3.6	36.2	366.1	99.4	94.9	0.999
2003 Q1	4.7	17.3	-7.7	2.8	339.1	104.1	99.2	1.073
Q2	-2.2	26.9	3.3	31.8	326.1	107.9	103.0	1.137
2003 Mar.	4.9	6.2	-7.7	17.6	339.1	105.1	100.2	1.081
Apr.	-8.5	7.4	-20.2	9.3	332.4	105.2	100.5	1.085
May	0.8	8.3	-0.2	8.0	323.1	109.1	104.1	1.158
June	5.5	11.2	23.7	14.5	326.1	109.3	104.5	1.166
July					328.9	107.8	102.9	1.137
Aug.						106.6	101.7	1.114

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

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

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

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

## I Monetary policy statistics

### Table 1.1

### Consolidated financial statement of the Eurosystem

(EUR millions)

### 1. Assets

	Gold and	Claims on non-	Claims on euro	Claims on non-	Lending to			
	gold	euro area	area residents in	euro area	euro area credit	Main	Longer-term	Fine-tuning
	receivables	residents in	foreign currency	residents	institutions	refinancing	refinancing	reverse
		foreign currency		in euro	in euro	operations	operations	operations
	1	2	3	4	5	6	7	8_
2003 4 Apr.	122,728	216,872	17,072	4,783	220,040	174,999	45,000	0
11	122,728	215,994	16,736	4,496	217,097	172,000	44,973	0
18	122,728		16,528	4,551	223,000	177,998	44,973	Õ
25	122,274		16,919	4,575	247,011	201,999	44,973	Ö
2 May	122,274	214,456	16,721	4,597	207,989	163,001	44,979	0
9	122,274		17,116	4,821	211,999	166,992	44,979	0
16	122,274		16,946	4,493	218,054	173,001	44,979	Õ
23	122,274		17,234	3,656	238,095	192,998	44,979	Ŏ
30	122,246		17,283	3,384	247,352	202,001	44,988	ő
6 June	122,245	213,549	16,428	3,487	223,508	178,372	44,988	0
13	122,245	214,814	15,494	3,322	246,854	201,372	44,988	Ŏ
20	122,244		16,793	3,446	237,979	191,001	44,988	Õ
27	122,244		17,133	3,411	257,883	212,000	45,000	0
21	122,277	212,710	17,133	The state of the s		212,000	45,000	U
4 July	119,980		15,586	3,963	251,103	205,999	45,000	0
11	119,980	208,438	14,968	3,641	245,051	200,000	45,000	0
18	119,980	205,363	15,799	4,420	244,057	198,999	45,000	0
25	119,947	204,022	15,209	4,388	277,751	232,002	45,000	0
1 Aug.	119,993	203,971	15,194	4,265	252,077	207,000	44,995	0
8	119,993	203,221	15,241	4,417	262,070	217,000	44,995	0
15	119,993	202,993	14,651	4,377	250,023	205,000	44,995	ŏ
22	119,785		14,849	4,847	251,678	204,998	44,995	ŏ
29	119,785	203,484	15,186	4,554	264,053	219,000	44,994	ő
	117,703	205,404	15,100	7,557	204,033	217,000	77,227	0

### 2. Liabilities

T T	Banknotes in	Liabilities to						Other liabilities	Debt certificates
	circulation		Current accounts	Deposit	Fixed-term	Fine-tuning	Deposits	to euro area	issued
		institutions	(covering	facility	deposits	reverse	related to	credit institutions	
		in euro	the minimum	·	•	operations	margin calls	in euro	
			reserve system)						
	1	2	3	4	5	6	7	8	9
2003 4 Apr.	357,775	131,573	131,477	90	0	0	6	76	2,029
11	360,186	128,359	128,321	29	0	0	9	76	2,029
18	367,559	132,655	132,436	216	0	0	3	15	2,029
25	363,873	147,509	147,427	80	0	0	2	15	2,029
2 May	367,432	122,600	122,512	87	0	0	1	15	2,029
9	368,111	129,360	129,284	75	0	0	1	15	2,029
16	366,888	128,610	128,532	77	0	0	1	15	2,029
23	365,344	126,340	121,748	741	3,850	0	1	15	2,029
30	371,002	134,948	134,842	105	0	0	1	15	2,029
6 June	376,039	112,718	112,667	50	0	0	1	15	2,029
13	376,498	139,059	139,000	59	0	0	0	15	2,029
20	375,979	134,360	134,098	262	0	0	0	15	2,029
27	377,232	130,970	130,891	61	0	0	18	31	2,029
4 July	383,664	133,314	133,183	109	0	0	22	31	2,029
11	386,242	130,912	130,866	24	0	0	22	31	2,029
18	386,913	133,797	133,735	43	0	0	19	31	2,029
25	386,347	142,560	142,502	34	0	0	24	31	2,029
1 Aug.	392,088	125,977	125,904	70	0	0	3	31	2,029
8	395,055	134,631	134,608	19	0	0	4	31	2,029
15	395,013	129,178	129,166	8	0	0	4	31	2,029
22	390,047	136,245	134,996	1,240	0	0	9	51	2,029
29	390,447	131,016	131,001	6	0	0	9	51	2,029

Source: ECB.

							Total	
			Other claims on	Securities of		Other assets		
Structu			euro area credit	euro area	government debt			
revei		to margin calls	institutions	residents	in euro			
operatio	ns		in euro	in euro				
	9 10	11	12	13	14	15	16	
	0 3	38	289	38,760	44,318	109,563	774,429	2003 4 Apr.
	0 109	15	164	39,658	44,322	109,351	770,550	11
	0 14	15	134	39,785	44,279	109,666	776,461	18
	0 30	9	116	40,185	44,273	109,529	800,643	25
	0 1	8	111	40,295	44,273	109,631	760,351	2 May
	0 0	28	195	40,543	44,274	109,789	765,135	9
	0 53	21	197	40,996	44,270	109,580	771,868	16
	0 90	28	158	42,348	44,266	109,647	793,894	23
	0 313	50	330	42,294	44,260	110,128	801,435	30
	0 99	49	225	43,067	44,261	110,286	777,056	6 June
	0 415	79	347	43,381	44,261	110,952	801,670	13
	0 1,922	68	287	43,811	44,261	110,891	791,707	20
	0 796	87	244	44,146	44,262	111,327	813,568	27
	0 16	88	253	44,099	43,781	116,929	802,107	4 July
	0 7	44	259	44,476	43,781	117,402	797,996	11
	0 10	48	327	44,530	43,782	117,016	795,274	18
	0 702	47	289	46,632	43,782	116,455	828,475	25
	0 25	57	212	46,937	43,782	116,511	802,942	1 Aug.
	0 14	61	235	47,092	43,788	116,526	812,583	8
	0 16	12	236	47,182	43,762	115,175	798,392	15
	0 1,671	14	318	47,908	43,763	114,823	800,214	22
	0 25	34	346	48,499	43,763	115,140	814,810	29
				-,	- ,	- , -	,	

								Total	
Liabilities to	Liabilities to	Liabilities to	Liabilities to	Counterpart of	Other	Revaluation	Capital and	1 Otal	
other euro	non-euro area	euro area	non-euro area	special drawing	liabilities	accounts	reserves		
area residents	residents	residents in	residents	rights allocated					
in euro	in euro	foreign	in foreign	by the IMF					
4.0		currency	currency						
10	11	12	13	14	15	16	17	18	
53,949	8,858	1,081	15,366	6,168	65,081	68,005	64,468	774,429	2003 4 Apr.
51,602	8,717	1,005	14,572	6,168	65,227	68,005	64,604	770,550	11
44,996	9,172	1,045	14,304	6,168	65,907	68,005	64,606	776,461	18
59,278	8,455	1,048	14,132	6,168	65,475	68,005	64,656	800,643	25
40,143	9,506	1,048	12,990	6,168	65,853	67,910	64,657	760,351	2 May
37,661	8,904	1,032	13,626	6,168	65,634	67,910	64,685	765,135	9
46,332	8,803	1,029	13,644	6,168	65,729	67,910	64,711	771,868	16
69,296	9,551	987	16,002	6,168	65,231	67,910	65,021	793,894	23
65,536	8,815	1,049	14,022	6,168	64,918	67,910	65,023	801,435	30
58,912	8,966	961	13,725	6,168	64,606	67,910	65,007	777,056	6 June
55,148	9,020	959	15,216	6,168	64,640	67,910	65,008	801,670	13
48,390	10,583	952	14,626	6,168	65,686	67,910	65,009	791,707	20
72,975	8,738	1,002	16,047	6,168	65,455	67,910	65,011	813,568	27
57,937	8,810	916	16,418	5,997	65,784	62,226	64,981	802,107	4 July
52,121	8,696	911	17,859	5,997	65,990	62,226	64,982	797,996	11
45,723	8,880	882	16,745	5,997	67,068	62,226	64,983	795,274	18
70,574	9,317	874	16,629	5,997	66,906	62,226	64,985	828,475	25
56,814	9,076	888	16,250	5,997	66,580	62,226	64,986	802,942	1 Aug.
55,558	9,032	846	15,781	5,997	66,410	62,226	64,987	812,583	8
48,668	9,409	835	14,812	5,997	65,205	62,226	64,989	798,392	15
48,778	9,319	836	14,927	5,997	64,768	62,226	64,991	800,214	22
66,934	9,419	835	16,539	5,997	64,325	62,226	64,992	814,810	29
00,551	-,	055	10,000	2,27	0.,020	0-,0	0.,-,2	01.,010	

# Table 1.2

#### **Key ECB interest rates**

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

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

# Table 1.3

# Eurosystem monetary policy operations allotted through tenders 1) 2)

(EUR millions; interest rates in percentages per annum)

#### 1. Main refinancing operations 3)

Date of settlement	Bids	Allotment	Fixed rate tenders	7	ariable rate tenders		
Date of settlement	(amount)	(amount)	Tixed fate tenders	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	ariable rate tenders		
	(41110 4111)	()	Fixed rate	Minimum bid rate	Marginal rate 4)	Weighted	Running for
					-	average rate	() days
	1	2	3	4	5	6	7_
2003 2 Apr.	112,031	71,000	-	2.50	2.53	2.54	14
9	133,547	101,000	-	2.50	2.53	2.53	14
16	126,889	77,000	-	2.50	2.53	2.54	14
23	156,979	125,000	-	2.50	2.54	2.55	14
30	106,071	38,000	-	2.50	2.55	2.55	14
7 May	120,843	76,000	-	2.50	2.53	2.54	14
7	67,356	53,000	-	2.50	2.53	2.54	7
14	145,595	97,000	-	2.50	2.53	2.54	14
21	157,067	96,000	-	2.50	2.57	2.58	14
28	184,856	106,000	-	2.50	2.59	2.61	12
4 June	72,372	72,372	-	2.50	2.50	2.50	14
9	145,751	129,000	-	2.00	2.09	2.11	16
18	111,215	62,000	-	2.00	2.12	2.12	14
25	166,404	150,000	-	2.00	2.10	2.12	14
2 July	111,698	56,000	-	2.00	2.10	2.11	14
9	130,689	101,000	-	2.00	2.08	2.10	14
9	67,965	43,000	-	2.00	2.09	2.10	7
16	147,621	98,000	-	2.00	2.08	2.09	14
23	141,573	134,000	-	2.00	2.06	2.08	14
30	114,569	73,000	-	2.00	2.06	2.07	14
6 Aug.	174,505	144,000	-	2.00	2.05	2.06	14
13	118,015	61,000	-	2.00	2.05	2.06	14
20	192,891	144,000	-	2.00	2.06	2.06	14
27	121,927	75,000	-	2.00	2.08	2.08	14
3 Sep.	185,556	140,000	-	2.00	2.07	2.08	14

<sup>1)</sup> The date refers to the deposit and marginal lending facilities. For main refinancing operations, unless otherwise indicated, changes in the rate are effective

from the first operation following the date indicated. The change on 18 September 2001 was effective on that same day.

On 22 December 1998 the ECB announced that, as an exceptional measure between 4 and 21 January 1999, a narrow corridor of 50 basis points would be applied between the interest rates for the marginal lending facility and the deposit facility, aimed at facilitating the transition to the new regime by market

participants.

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

#### 2. Longer-term refinancing operations

Date of settlement	Bids (amount)	Allotment (amount)	Fixed rate tenders	Variable rate to	enders	
	` ´	` ´	Fixed rate	Marginal rate 4)	Weighted	Running for
		2	3	4	average rate	() days 6
	1		3	•	5	
2001 27 Sep.	28,269	20,000	-	3.55	3.58	85
25 Oct.	42,308	20,000	-	3.50	3.52	98
29 Nov.	49,135	20,000	-	3.32	3.34	91
21 Dec.	38,178	20,000	-	3.29	3.31	97
2002 31 Jan.	44,547	20,000	_	3.31	3.33	84
28 Feb.	47,001	20,000	-	3.32	3.33	91
28 Mar.	39,976	20,000	-	3.40	3.42	91
25 Apr.	40,580	20,000	_	3.35	3.36	91
30 May	37,602	20,000	-	3.45	3.47	91
27 June	27,670	20,000	-	3.38	3.41	91
25 July	28,791	15,000	-	3.35	3.37	98
29 Aug.	33,527	15,000	-	3.33	3.34	91
26 Sep.	25,728	15,000	_	3.23	3.26	88
31 Oct.	27,820	15,000	_	3.22	3.24	91
28 Nov.	38,644	15,000	_	3.02	3.04	91
23 Dec.	42,305	15,000	-	2.93	2.95	94
2003 30 Jan.	31,716	15,000	_	2.78	2.80	90
27 Feb.	24,863	15,000	-	2.48	2.51	91
27 Mar.	33,367	15,000	-	2.49	2.51	91
30 Apr.	35,096	15,000	-	2.50	2.51	92
29 May	30,218	15,000	-	2.25	2.27	91
26 June	28,694	15,000	-	2.11	2.12	91
31 July	25,416	15,000	-	2.08	2.10	91
28 Aug.	35,940	15,000	-	2.12	2.13	91

#### 3. Other tender operations

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

Source: ECB.

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

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

3) On 8 June 2000 the ECB announced that, starting from the operation to be settled on 28 June 2000, the main refinancing operations of the Eurosystem

would be conducted as variable rate tenders. The minimum bid rate refers to the minimum interest rate at which counterparties may place their bids.

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

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

#### Table 1.4

#### Minimum reserve statistics

#### 1. Reserve base of credit institutions subject to reserve requirements 1) 2)

(EUR billions; end of period)

Reserve base	Total	Liabilities to which a 2% rese	rve coefficient is applied	Liabilities to which	ch a 0% reserve coeff	icient is applied
as at:		Deposits (overnight, up to 2 years' agreed maturity and notice period)	Debt securities up to 2 years' agreed maturity 3)	Deposits (over 2 years' agreed maturity and notice period)	Repos	Debt securities over 2 years' agreed maturity
	1	2	3	4	5	6_
2002 July	10,999.6	6,069.3	408.6	1,368.0	691.0	2,462.7
Aug.	10,952.0	6,010.3	401.5	1,359.7	703.2	2,477.2
Sep.	11,054.3	6,055.4	405.0	1,373.5	747.6	2,472.7
Oct.	11,113.6	6,052.0	414.2	1,379.1	790.5	2,477.8
Nov.	11,207.0	6,142.9	426.9	1,365.2	784.2	2,487.7
Dec.	11,116.8	6,139.9	409.2	1,381.9	725.5	2,460.3
2003 Jan.	11,100.8	6,048.5	426.0	1,385.7	773.9	2,466.7
Feb.	11,214.2	6,092.6	434.0	1,396.4	808.2	2,483.0
Mar.	11,229.9	6,117.2	427.4	1,404.1	782.7	2,498.5
Apr.	11,312.6	6,154.9	431.4	1,406.9	815.2	2,504.2
May	11,340.5	6,182.9	423.1	1,401.2	815.9	2,517.3
June	11,381.7	6,217.9	415.4	1,421.4	781.0	2,545.9
July (p)	11,381.5	6,165.6	417.6	1,429.3	800.1	2,568.9

Source: ECB.

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

# 2. Reserve maintenance 1)

(EUR billions; interest rates as annual percentages)

Maintenance period ending in:	Required reserves 2)	Actual reserves 3)	Excess reserves 4)	Deficiencies 5)	Interest rate on minimum reserves <sup>6)</sup>
	1	2	3	4	5
2002 Sep.	129.0	129.5	0.5	0.0	3.28
Oct.	127.7	128.2	0.5	0.0	3.28
Nov.	128.7	129.2	0.5	0.0	3.28
Dec.	128.8	129.4	0.7	0.0	3.06
2003 Jan.	130.9	131.4	0.6	0.0	2.87
Feb.	130.4	131.0	0.6	0.0	2.78
Mar.	128.9	129.5	0.6	0.0	2.67
Apr.	130.0	130.5	0.5	0.0	2.53
May	130.3	130.8	0.5	0.0	2.54
June	131.2	131.7	0.5	0.0	2.34
July	131.6	132.0	0.5	0.0	2.09
Aug.	132.1	132.7	0.6	0.0	2.06
Sep. (p)	131.1				

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

# Table 1.5

# Banking system's liquidity position 1)

(EUR billions; period averages of daily positions)

Maintenance period		Liquidit	Liquidity-providing factors Liquidity-absorbing factors								Credit institu-	Base money 5)
ending in:		N	Monetary policy	operations	of the Euros	system					tions'	
	Eurosystem's net assets in gold and foreign currency	Main refinancing operations	Longer-term refinancing operations	Marginal lending facility	Other liquidity- providing operations	Deposit facility	liquidity-	Banknotes in circulation	Central government deposits with the Eurosystem	Other factors (net) 3)	accounts 4)	
	1	2	3	4	5	6	7	8	9	10	11	12
2002 July	369.1	130.4	60.0	0.2	0.0	0.2	0.0		54.4	60.3	131.4	445.0
Aug.		139.2	55.2	0.1	0.0	0.1	0.0	322.8	50.9	50.8	129.9	452.8
Sep.	362.3	140.9	50.8	0.1	0.0	0.2	0.0	323.6	49.1	51.7	129.6	453.4
Oct.	370.0	146.1	45.3	0.1	0.0	0.1	0.0	329.2	45.6	58.2	128.3	457.6
Nov.	372.1	147.5	45.0	0.1	0.0	0.1	0.0	334.0	42.8	58.6	129.3	463.4
Dec.	371.5	168.1	45.0	1.1	2.0	0.2	0.0	350.7	51.7	55.5	129.5	480.5
2003 Jan.	360.9	176.3	45.0	0.5	0.0	0.3	0.0	353.9	43.7	53.3	131.6	485.8
Feb.	356.4	168.6	45.0	0.3	0.0	0.3	0.0	340.7	50.2	48.0	131.1	472.2
Mar.	352.5	179.5	45.0	0.2	0.0	0.1	0.0	347.8	59.1	40.6	129.6	477.5
Apr.	337.4	179.4	45.0	0.1	0.0	0.2	0.0	358.5	52.1	20.5	130.6	489.3
May	333.1	177.1	45.0	0.4	0.0	0.2	0.1	366.2	42.6	15.5	130.9	497.3
June	331.3	194.7	45.0	0.4	0.0	0.3	0.2	373.2	52.6	13.2	131.9	505.3
July	320.4	204.7	45.0	0.4	0.0	0.3	0.0	382.7	52.4	2.9	132.2	515.2
Aug.	<sup>(p)</sup> 315.8	213.4	45.0	0.2	0.0	0.1	0.0	391.6	51.5	-1.6	132.8	524.6

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

 Excludes the issuance of debt certificates initiated by national central banks in Stage Two.
 Remaining items in the consolidated financial statement of the Eurosystem.
 Equal to the difference between the sum of liquidity-providing factors (items 1 to 5) and the sum of liquidity-absorbing factors (items 6 to 10).
 Calculated as the sum of the deposit facility (item 6), banknotes in circulation (item 8) and credit institutions' current account holdings (item 11).

# 2 Monetary developments and investment funds in the euro area

# Table 2.1

#### Aggregated balance sheet of the euro area MFIs

(EUR billions; not seasonally adjusted)

#### 1. Assets: levels

							Eu	rosystem					
	Loans to euro area residents	MFIs 1)	General govern- ment	Other euro area residents	Holdings of securities other than	MFIs	General govern- ment	Other euro area residents	Holdings of shares/ other equity	External assets 1)	Fixed assets	Re- maining assets	Total
					shares issued by euro area residents				by euro area residents				
	1	2	3	4	5	6	7	8	9	10	11	12	13
2001 2002	412.7 416.2	386.4 391.3	25.7 24.2	0.6 0.6	107.0 94.5	3.8 7.6	101.8 86.0	1.3 0.8	13.8 13.2	399.0 374.8	11.9 11.9	54.3 132.3	998.6 1,042.8
2003 Q1	411.8	387.0	24.1	0.6	105.2	9.5	94.8	0.8	12.5	350.2	11.9	123.6	1,015.1
2003 Apr. May June July (p)	369.6 444.7 469.3 437.3	344.9 420.0 445.0 412.9	24.1 24.0 23.7 23.7	0.6 0.7 0.6 0.7	107.6 112.0 114.2 115.3	9.6 10.4 10.0 9.6	97.1 100.5 103.1 104.6	0.8 1.0 1.1 1.1	13.0 12.2 12.4 12.5	341.5 334.0 335.2 337.9	12.0 11.9 12.0 12.2	128.2 131.0 131.5 133.4	971.9 1,045.8 1,074.6 1,048.5

#### 2. Liabilities: levels

						Eurosystem				
	Currency in circulation	Deposits of euro area residents	MFIs 1)	Central government	Other general government/ other euro area residents	Debt securities issued	Capital and reserves	External liabilities 1)	Remaining liabilities	Total
	1	2	3	4	5	6	7	8	9	10
2001 2002	285.9 392.9	391.9 328.4	342.4 283.3	35.1 29.5	14.4 15.6	4.6 3.6	209.8 165.9	35.6 32.9	70.8 119.1	998.6 1,042.8
2003 Q1	365.4	345.8	279.0	50.7	16.2	2.7	149.2	28.7	123.3	1,015.1
2003 Apr. May June July (p)	378.7 384.1 391.4 403.6	292.1 361.9 379.4 334.4	233.2 297.6 307.9 266.1	42.0 45.9 52.6 52.3	16.9 18.4 18.9 16.0	2.7 2.7 2.6 2.6	144.6 141.0 143.1 145.2	27.7 28.1 29.8 31.7	126.1 127.9 128.3 131.1	971.9 1,045.8 1,074.6 1,048.5

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

# Table 2.1 (cont'd)

# Aggregated balance sheet of the euro area MFIs (EUR billions; not seasonally adjusted)

#### 3. Assets: levels

							MFIs exc	luding the E	urosystem					
	Loans to				Holdings				Money	Holdings	External	Fixed	Remaining	Total
	euro area	MFIs	General	Other	of	MFIs	General	Other	market	of shares/	assets	assets	assets	
	residents		govern- ment	euro area residents	securities other than		govern- ment	euro area residents	fund shares/	other equity				
			ment	residents	shares		ment	residents	units	issued				
					issued					by euro				
					by euro					area				
					residents					residents				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14_
2001	11,134.7	3,794.0	822.0	6,518.7	2,535.9	1,122.9	1,077.4	335.6	38.5	810.8	2,408.8	168.1	1,129.5	18,226.3
2002	11,613.3	4,019.8	812.6	6,780.9	2,671.2	1,170.0	1,135.0	366.2	62.4	827.6	2,465.5	167.6	1,051.8	18,859.3
2003 Q1	11,735.4	4,076.6	804.6	6,854.2	2,830.2	1,234.5	1,210.0	385.7	66.8	818.3	2,545.1	160.8	1,029.5	19,186.2
2003 Apr.	11,798.9	4,109.0	799.2	6,890.7	2,852.5	1,223.0	1,226.2	403.4	69.6	837.2	2,564.8	158.8	1,037.6	19,319.4
May	11,892.3	4,190.8	794.8	6,906.6	2,896.5	1,233.8	1,256.6	406.1	70.7	854.1	2,544.4	159.4	1,072.8	19,490.1
June	11,882.2	4,143.4	795.8	6,943.0	2,887.3	1,243.1	1,238.6	405.6	68.9	849.3	2,625.2	158.3	1,054.2	19,525.4
July (F	11,863.8	4,097.3	803.2	6,963.3	2,913.0	1,260.0	1,249.8	403.2	68.8	883.4	2,605.5	158.6	981.2	19,474.4

#### 4. Liabilities: levels

					MI	FIs excluding the	e Eurosystem				
	Currency in circu- lation	Deposits of euro area residents	MFIs	Central govern- ment	Other general govern- ment/ other euro area	Money market fund shares/ units 1)	Debt securities issued 1)	Capital and reserves	External liabilities	Remaining liabilities	Total
	1	2	3	4	residents 5	6	7	8	9	10	11
2001 2002	0.0 0.0	9,696.6 10,198.9	3,829.6 4,136.5	103.9 106.9	5,763.1 5,955.6	436.5 532.9	2,882.9 2,992.7	1,041.9 1,108.8	2,687.4 2,594.3	1,480.9 1,431.7	18,226.3 18,859.3
2003 Q1	0.0	10,319.0	4,198.7	125.5	5,994.7	617.6	3,045.9	1,115.8	2,665.4	1,422.6	19,186.2
2003 Apr. May June July (p)	0.0 0.0 0.0 0.0	10,350.2 10,517.3 10,545.9 10,500.5	4,200.8 4,310.1 4,303.4 4,258.3	117.8 124.2 147.3 121.2	6,031.6 6,082.9 6,095.1 6,121.0	632.6 641.9 640.1 649.4	3,064.4 3,062.5 3,082.8 3,116.1	1,116.9 1,120.5 1,128.8 1,137.7	2,687.9 2,625.3 2,640.4 2,652.5	1,467.5 1,522.6 1,487.4 1,418.2	19,319.4 19,490.1 19,525.4 19,474.4

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

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

(EUR billions; not seasonally adjusted)

#### 1. Assets: levels

											Total
	Loans to _			Holdings_			Holdings	External	Fixed	Remaining	
	euro area	General	Other	of securities	General	Other	of shares/	assets 1)	assets	assets	
	residents	govern-	euro area	other than	govern-	euro area	other				
		ment	residents	shares	ment	residents	equity				
				issued by euro			issued by other				
				area			euro area				
				residents			residents				
	1	2	3	4	5	6	7	8	9	10	11_
2001	7,367.0	847.7	6,519.3	1,516.1	1,179.2	336.9	568.1	2,807.8	180.0	1,137.6	13,576.7
2002	7,618.3	836.8	6,781.5	1,588.0	1,221.0	367.0	572.7	2,840.3	179.5	1,132.2	13,931.0
2003 Q1	7,683.6	828.7	6,854.9	1,691.4	1,304.8	386.6	565.3	2,895.3	172.7	1,114.9	14,123.3
2003 Apr.	7,714.6	823.3	6,891.3	1,727.5	1,323.3	404.2	584.2	2,906.3	170.8	1,123.5	14,226.9
May	7,726.1	818.9	6,907.3	1,764.1	1,357.1	407.1	596.2	2,878.4	171.3	1,163.4	14,299.6
June	7,763.1	819.5	6,943.6	1,748.4	1,341.7	406.7	590.3	2,960.4	170.4	1,145.3	14,377.9
July (p)	7,790.9	826.9	6,964.0	1,758.7	1,354.4	404.3	615.3	2,943.3	170.8	1,072.5	14,351.6

#### 2. Liabilities: levels

										Total
	Currency in circulation	Deposits of central govern- ment	Deposits of other general govern- ment/ other euro	Money market fund shares/ units 2)	Debt securities issued <sup>2)</sup>	Capital and reserves	External liabilities	Remaining liabilities	Excess of inter- MFI liabilities	
	1	2	area residents 3	4	5	6	7	8	9	10
2001 2002	239.7 341.2	139.0 136.4	5,777.6 5,971.1	398.0 470.6	1,760.8 1,818.6	995.2 1,006.5	2,723.0 2,627.2	1,551.8 1,550.8	-8.5 8.7	13,576.7 13,931.0
2003 Q1	327.2	176.2	6,010.9	550.8	1,804.7	999.5	2,694.1	1,545.8	14.1	14,123.3
2003 Apr. May June	336.3 343.8 351.0	159.7 170.1 200.0	6,048.5 6,101.4 6,114.1	563.0 571.1 571.2	1,834.5 1,821.0 1,832.2	995.6 991.4 1,000.5	2,715.6 2,653.4 2,670.2	1,593.6 1,650.5 1,615.8	-19.8 -3.1 22.9	14,226.9 14,299.6 14,377.9
July (p)	361.5	173.5	6,137.0	580.5	1,849.1	1,002.3	2,684.2	1,549.3	14.2	14,351.6

Source: ECB.

1) Since the end of November 2000, balances arising from the TARGET system are netted by novation on a daily basis. This implies that the bilateral positions of each NCB vis-à-vis the ECB and other NCBs have been replaced by a single net bilateral position vis-à-vis the ECB. For the TARGET gross end-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.

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

# Table 2.2 (cont'd)

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

(EUR billions; not seasonally adjusted)

#### 3. Assets: flows 1)

											Total
	Loans to _			Holdings _			Holdings	External	Fixed	Remaining	
	euro area	General	Other	of securities	General	Other	of shares/	assets 2)	assets	assets	
	residents	govern-	euro area	other than	govern-	euro area	other				
		ment	residents		ment	residents	equity				
				issued by euro			issued by other				
				area			euro area				
				residents			residents				
	1	2	3	4	5	6	7	8	9	10	11
2001	364.2	-7.6	371.8	71.5	8.5	62.9	29.8	330.5	8.1	100.6	904.6
2002	297.3	-9.8	307.1	75.9	45.7	30.2	5.4	246.0	-1.3	-20.6	604.8
2003 Q1	86.6	-0.5	87.0	62.5	46.0	16.5	-0.9	91.5	-3.6	-16.8	219.8
2003 Apr.	38.7	-5.3	44.0	33.5	21.0	12.5	15.4	39.7	-1.9	4.6	130.0
May	24.1	-4.0	28.2	33.9	30.7	3.2	11.1	41.8	0.5	39.2	150.6
June	33.2	0.5	32.7	-15.6	-14.6	-1.0	-7.7	41.0	-0.8	-15.3	34.8
July (p)	26.2	7.3	18.9	7.3	9.0	-1.7	-2.7	-33.6	0.4	-74.5	-76.9

#### 4. Liabilities: flows 1)

Currency in circulation	Deposits of central govern- ment	Deposits of other general govern- ment/ other euro area residents	Money market fund shares/ units 3)	Debt securities issued 3)	Capital and reserves	External liabilities	Remaining liabilities	Excess of inter- MFI liabilities	Total
1	2	3	4	5	6	7	8	9	10
-116.4 101.4	-26.9 -5.8	385.4 223.2	90.9 70.1	107.6 105.3	79.3 36.8	338.4 76.0	79.9 -33.0	-33.5 30.6	904.6 604.8
7.7	32.8	48.9	35.7	25.1	1.2	59.4	-4.3	13.4	219.8
9.1 7.4 7.3	-16.5 10.4 29.9	41.1 61.2 7.9	11.8 8.8 -0.7	29.9 2.4 2.7	0.0 -6.8 9.2	44.6 0.6 -20.4	43.2 52.2 -27.6	-33.3 14.4 26.4	130.0 150.6 34.8 -76.9
	in circulation  1  -116.4 101.4 7.7 9.1 7.4	in circulation of central government  1 2  -116.4 -26.9 101.4 -5.8 7.7 32.8 9.1 -16.5 7.4 10.4 7.3 29.9	in circulation central government government other euro area residents 3  -116.4 -26.9 385.4 101.4 -5.8 223.2 7.7 32.8 48.9 9.1 -16.5 41.1 7.4 10.4 61.2 7.3 29.9 7.9	circulation   contain   government   government   government   government   other euro area residents   1   2   3   385.4   90.9   101.4   -5.8   223.2   70.1   7.7   32.8   48.9   35.7   9.1   -16.5   41.1   11.8   7.4   10.4   61.2   8.8   7.3   29.9   7.9   -0.7	circulation   central govern-ment   govern-ment   govern-ment	Circulation   Control   Central government   Circulation   Circulation	Securities   Sec	Circulation	Circulation   Circulation

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

<sup>2)</sup> 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 Rulletin

issues of the Monthly Bulletin.

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

# Monetary aggregates 1) and counterparts (not seasonally adjusted)

(EUR billions and percentage growth rates)

#### 1. Levels

			M3			Longer-term financial	Credit to general	Credit to other		Net external
		M2		M3-M2	Total	liabilities	government	euro area residents	Loans	assets
	M1	M2-M1	Total							
	1	2	3	4	5	6	7	8	9	10_
2001 2002	2,207.9 2,425.5	2,459.8 2,539.1	4,667.7 4,964.6	762.4 825.1	5,430.2 5,789.7	3,893.8 3,991.5	2,026.9 2,057.8	7,424.4 7,721.2	6,519.3 6,781.5	84.7 213.1
2003 Q1	2,397.8	2,587.5	4,985.3	874.2	5,859.5	4,010.7	2,133.5	7,806.8	6,854.9	201.2
2003 Apr. May June July (p)	2,425.7 2,458.0 2,501.1 2,480.5	2,605.5 2,627.9 2,606.5 2,617.6	5,031.2 5,085.9 5,107.6 5,098.2	917.4 907.5 882.4 889.4	5,948.6 5,993.4 5,990.0 5,987.6	4,005.8 4,010.9 4,042.0 4,070.7	2,146.6 2,175.9 2,161.3 2,181.3	7,879.7 7,910.6 7,940.6 7,983.6	6,891.3 6,907.3 6,943.6 6,964.0	190.8 225.0 290.1 259.1

#### 2. Flows 2)

			M3			Longer-term financial	Credit to general	Credit to other		Net external
		M2		M3-M2	Total	liabilities	government	euro area residents	Loans	assets
	M1	M2-M1	Total					residents	Zouns	
	1	2	3	4	5	6	7	8	9	10_
2001 2002	106.8 215.1	162.2 89.3	269.1 304.3	114.0 66.7	383.0 371.1	176.5 186.5	0.9 35.9	464.6 342.7	371.8 307.1	-7.9 170.0
2003 Q1	-3.8	50.6	46.8	37.8	84.6	37.7	45.6	102.6	87.0	32.1
2003 Apr. May June July (p)	29.2 35.3 54.5 -18.8	19.8 26.5 -23.7 10.8	49.0 61.8 30.8 -8.1	38.5 -7.9 -25.3 7.4	87.5 53.9 5.5 -0.7	3.8 18.3 21.5 32.0	15.7 26.7 -14.1 16.3	71.8 42.4 24.0 14.6	44.0 28.2 32.7 18.9	-4.9 41.2 61.4 -39.9

# 3. Growth rates 3)

			M3			Longer-term financial	Credit to general	Credit to other		Net external
		M2		M3-M2	Total	liabilities	government	euro area residents	Loans	assets 4)
	M1	M2-M1	Total							
	1	2	3	4	5	6	7	8	9	10
2001 2002	5.1 9.8	7.1	6.1 6.5	17.7 8.8	7.6 6.8	4.7 4.8	0.0 1.8	6.7	6.0 4.7	-7.9 170.0
2002	9.8	3.6	0.3	0.0	0.8	4.0	1.8	4.6	4./	1/0.0
2003 Q1	11.6	4.6	7.8	8.1	7.9	4.3	1.8	4.7	4.7	229.2
2003 Apr. May June July (p)	10.9 11.8 11.3 11.6	5.4 5.9 5.5 5.7	8.0 8.7 8.3 8.5	12.4 8.6 8.3 8.9	8.6 8.7 8.3 8.5	4.5 4.3 5.0 5.2	3.4 4.4 3.7 4.7	5.1 5.2 5.1 5.5	4.7 4.6 4.5 4.9	227.3 229.5 249.9 208.5

<sup>1)</sup> Monetary aggregates comprise monetary liabilities of MFIs and central government (post office, treasury) vis-à-vis non-MFI euro area residents excluding central government. M1 is the sum of currency in circulation and overnight deposits; M2 is the sum of M1, deposits with an agreed maturity of up to two years and deposits redeemable at notice of up to three months; and M3 is the sum of M2, repurchase agreements, money market fund shares/units and debt

 <sup>2)</sup> Calculated from monthly differences in levels adjusted for reclassifications, other revaluations, exchange rate variations and any other changes that do not arise from transactions.
 3) For the calculation of the growth rates, see the technical notes.

<sup>4)</sup> Sum of 12 monthly flows ending in the period indicated.

# Table 2.3 (cont'd)

# Monetary aggregates 1) and counterparts (not seasonally adjusted)

(EUR billions and percentage growth rates)

#### 4. Levels

	Currency in				Repurchase		Debt	Debt	Deposits		Capital
	circulation	deposits	with agreed	redeemable	agreements	market	securities	securities	redeemable	with agreed	and
			maturity up			fund	up to	over	at notice	maturity	reserves
			to 2 years	to 3 months		shares/units	2 years	2 years	over 3 months	over 2 years	
	1	2	3	4	5	6	7	8	9	10	11
2001	239.7	1,968.2	1,088.8	1,371.0	218.5	398.0	145.9	1,613.6	115.8	1,169.1	995.2
2002	341.2	2,084.4	1,075.5	1,463.5	226.9	470.6	127.7	1,689.7	105.8	1,189.6	1,006.5
2003 Q1	327.2	2,070.6	1,073.2	1,514.3	224.0	550.8	99.4	1,704.4	100.9	1,205.9	999.5
2003 Apr.	336.3	2,089.4	1,081.9	1,523.7	230.5	563.0	124.0	1,709.7	98.3	1,202.2	995.6
May	343.8	2,114.2	1,096.9	1,531.0	231.4	571.1	105.0	1,714.2	96.9	1,208.4	991.4
June	351.0	2,150.1	1,060.5	1,546.0	215.0	571.2	96.3	1,734.2	95.4	1,212.0	1,000.5
July (p)	361.5	2,119.0	1,063.6	1,554.1	218.8	580.5	90.0	1,757.3	93.3	1,217.8	1,002.3

#### 5. Flows 2)

	Currency in	Overnight	Deposits	Deposits	Repurchase	Money	Debt	Debt	Deposits	Deposits	Capital
	circulation	deposits	with agreed	redeemable	agreements	market	securities	securities	redeemable	with agreed	and
			maturity up	at notice up		fund	up to	over	at notice	maturity	reserves
			to 2 years	to 3 months		shares/units	2 years	2 years	over 3 months		
	1	2	3	4	5	6	7	8	9	10	11
2001	-116.4	223.2	64.3	98.0	25.2	90.9	-2.1	110.2	-10.8	-2.2	79.3
2002	101.4	113.6	-2.8	92.0	9.6	70.1	-13.0	118.4	-10.0	41.4	36.8
2003 Q1	7.7	-11.5	-0.4	50.9	5.8	35.7	-3.7	29.1	-4.9	12.3	1.2
2003 Apr.	9.1	20.1	10.2	9.6	6.4	11.8	20.3	9.7	-2.7	-3.2	0.0
May	7.4	27.9	18.8	7.7	1.0	8.8	-17.7	19.1	-1.3	7.3	-6.8
June	7.3	47.3	-38.5	14.7	-16.4	-0.7	-8.2	10.9	-1.6	2.9	9.2
July (p)	11.1	-29.9	2.7	8.1	3.2	9.5	-5.4	20.0	-2.1	5.0	9.1

# 6. Growth rates 3)

	Currency in				Repurchase	Money	Debt	Debt	Deposits		Capital
	circulation	deposits	with agreed			market	securities	securities	redeemable	with agreed	and
			maturity up			fund	up to	over	at notice	maturity	reserves
			to 2 years	to 3 months		shares/units	2 years	2 years	over 3 months		
	1	2	3	4		6	7	8	9	10	11
2001	-32.7	12.8	6.3	7.7	13.0	29.1	-1.5	7.2	-8.5	-0.2	8.7
2002	42.3	5.8	-0.3	6.7	4.4	17.6	-9.3	7.4	-8.7	3.6	3.7
2003 Q1	37.6	8.2	-0.4	8.4	1.8	16.4	-11.1	6.7	-8.1	3.9	2.2
2003 Apr.	37.4	7.4	0.0	9.6	5.4	16.8	9.7	7.2	-8.9	3.6	2.7
May	34.2	8.7	0.7	10.0	2.8	17.5	-12.3	7.1	-9.2	3.9	1.6
June	31.4	8.5	-0.9	10.5	-2.0	19.4	-14.8	7.2	-10.5	3.9	4.4
July (p)	30.6	8.8	-1.1	10.9	-0.2	18.1	-13.9	7.5	-12.5	4.2	4.3

<sup>1)</sup> Monetary aggregates comprise monetary liabilities of MFIs and central government (post office, treasury) vis-à-vis non-MFI euro area residents excluding central government. M1 is the sum of currency in circulation and overnight deposits; M2 is the sum of M1, deposits with an agreed maturity of up to two years and deposits redeemable at notice of up to three months; and M3 is the sum of M2, repurchase agreements, money market fund shares/units and debt

 <sup>2)</sup> Calculated from monthly differences in levels adjusted for reclassifications, other revaluations, exchange rate variations and any other changes that do not arise from transactions.
 3) For the calculation of the growth rates, see the technical notes.

# Table 2.3 (cont'd)

# Monetary aggregates 1) and counterparts (seasonally adjusted)

(EUR billions and percentage growth rates)

#### 7. Levels

			M3			Longer-term financial	Credit to general	Credit to other		Net external
		M2		M3-M2	Total	liabilities	government	euro area residents	Loans	assets
	M1	M2-M1	Total							
	1	2	3	4	5	6	7	8	9	10
2001 2002	2,151.7 2,367.1	2,450.4 2,531.7	4,602.2 4,898.8	789.2 853.7	5,391.3 5,752.5	3,897.3 3,994.7	2,041.0 2,073.3	7,425.5 7,724.2	6,514.7 6,780.9	48.8 176.5
2003 Q1	2,408.5	2,576.0	4,984.5	856.5	5,841.1	4,003.1	2,120.4	7,787.1	6,847.4	228.5
2003 Apr. May June July <sup>(p)</sup>	2,426.5 2,445.1 2,449.9 2,473.1	2,593.3 2,609.7 2,619.7 2,628.3	5,019.8 5,054.9 5,069.7 5,101.5	899.2 885.9 887.2 898.1	5,918.9 5,940.8 5,956.9 5,999.6	4,006.8 4,013.4 4,033.0 4,067.6	2,137.1 2,158.1 2,144.1 2,183.2	7,846.2 7,874.0 7,909.4 7,980.2	6,871.8 6,893.8 6,912.9 6,954.3	237.9 266.8 290.9 262.5

#### 8. Flows 2)

			M3			Longer-term financial	Credit to general	Credit to other		Net external
		M2		M3-M2	Total	liabilities	government	euro area residents	Loona	assets
	M1	M2-M1	Total					residents	Loans	
	1	2	3	4	5	6	7	8	9	10_
2001 2002	109.7 213.0	165.4 91.2	275.0 304.2	118.3 68.6	393.4 372.8	176.3 186.1	2.5 37.7	465.7 344.7	376.1 311.1	-9.5 169.3
2003 Q1	65.5	46.5	112.1	-8.5	103.6	26.9	16.6	79.9	80.1	96.0
2003 Apr. May	19.2 21.7	19.0 20.6	38.2 42.3	38.1 -11.4	76.3 30.9	12.4 19.7	19.4 18.4	58.1 39.3	31.9 34.2	15.0 35.9
June July <sup>(p)</sup>	16.0 24.9	7.7 8.2	23.7 33.1	1.2 11.3	24.8 44.4	9.9 37.9	-13.5 35.3	29.5 42.2	15.5 39.9	20.3 -37.3

# 9. Growth rates 3)

			M3				Longer-term financial	Credit to general	Credit to other		Net external
		M2		M3-M2	Total	3-month moving	liabilities	government	euro area residents	Loans	assets 4)
	M1	M2-M1	Total			average (centred)					
	1	2	3	4	5	6	7	8	9	10	11_
2001 2002	5.4 9.9	7.2 3.7	6.4 6.6	17.5 8.7	7.9 6.9	-	4.7 4.8	0.1 1.8	6.7 4.7	6.1 4.8	-9.5 169.3
2003 Q1	11.8	4.7	8.0	8.0	8.0	-	4.3	1.7	4.8	4.7	229.7
2003 Apr. May June July (p)	11.2 11.4 11.4 11.5	5.2 5.9 5.6 5.7	8.0 8.5 8.4 8.4	12.4 8.7 8.5 8.9	8.7 8.5 8.4 8.5	8.4 8.5 8.5	4.5 4.3 5.0 5.2	3.4 4.3 3.6 4.6	5.1 5.2 5.1 5.5	4.6 4.6 4.5 4.9	227.6 228.8 250.6 211.0

<sup>1)</sup> Monetary aggregates comprise monetary liabilities of MFIs and central government (post office, treasury) vis-à-vis non-MFI euro area residents excluding central government. M1 is the sum of currency in circulation and overnight deposits; M2 is the sum of M1, deposits with an agreed maturity of up to two years and deposits redeemable at notice of up to three months; and M3 is the sum of M2, repurchase agreements, money market fund shares/units and debt

 <sup>2)</sup> Calculated from monthly differences in levels adjusted for reclassifications, other revaluations, exchange rate variations and any other changes that do not arise from transactions.
 3) For the calculation of the growth rates, see the technical notes.
 4) Sum of 12 monthly flows ending in the period indicated.

# Table 2.3 (cont'd)

# Monetary aggregates 1) and counterparts (seasonally adjusted)

(EUR billions and percentage growth rates)

#### 10. Levels

	Currency in	Overnight			Repurchase		Debt	Debt	Deposits		Capital
	circulation	deposits	with agreed	redeemable	agreements	market	securities	securities	redeemable	with agreed	and
			maturity up	at notice up		fund	up to	over	at notice	maturity	reserves
			to 2 years	to 3 months		shares/units	2 years	2 years	over 3 months		
	1	2	3	4	5	6	7	8	9	10	11
2001	233.4	1,918.3	1,090.1	1,360.3	231.4	411.9	145.9	1,621.4	113.7	1,166.8	995.3
2002	333.0	2,034.1	1,079.5	1,452.1	240.1	485.9	127.7	1,697.3	103.8	1,187.2	1,006.4
2003 Q1	331.9	2,076.6	1,072.0	1,504.0	209.9	547.3	99.4	1,703.2	100.4	1,201.8	997.7
2003 Apr.	338.0	2,088.5	1,076.5	1,516.8	221.4	553.8	124.0	1,708.5	98.9	1,201.4	998.0
May	342.0	2,103.1	1,081.3	1,528.4	219.0	561.8	105.0	1,711.6	97.9	1,206.2	997.7
June	347.1	2,102.8	1,074.4	1,545.3	218.8	572.2	96.3	1,730.6	96.4	1,210.0	996.0
July (p)	355.2	2,117.9	1,067.3	1,561.0	225.7	582.4	90.0	1,755.4	94.2	1,219.0	999.0

#### 11. Flows 2)

	Currency in	Overnight	Deposits	Deposits	Repurchase	Money	Debt	Debt	Deposits	Deposits	Capital
	circulation	deposits	with agreed	redeemable	agreements	market	securities	securities	redeemable	with agreed	and
			maturity up	at notice up		fund	up to	over	at notice	maturity	reserves
			to 2 years	to 3 months		shares/units	2 years	2 years	over 3 months		
	1	2	3	4	5	6	7	8	9	10	11_
2001	-112.5	222.1	69.4	96.0	26.8	93.7	-2.1	110.0	-10.6	-2.4	79.3
2002	99.6	113.4	-0.1	91.3	9.9	71.7	-13.0	118.1	-9.9	41.2	36.7
2003 Q1	20.9	44.6	-5.6	52.1	-21.6	16.8	-3.7	20.3	-3.5	10.7	-0.6
2003 Apr.	6.1	13.2	6.0	12.9	11.7	6.1	20.3	9.6	-1.5	0.0	4.2
May	4.0	17.7	8.6	12.0	-2.4	8.6	-17.7	17.6	-1.0	6.0	-3.0
June	5.0	10.9	-9.0	16.7	-0.2	9.6	-8.2	10.0	-1.6	3.1	-1.6
July (p)	8.7	16.2	-7.4	15.6	6.2	10.4	-5.4	21.7	-2.2	8.1	10.3

#### 12. Growth rates 3)

	Currency in	Overnight	Deposits	Deposits	Repurchase	Money	Debt	Debt	Deposits	Deposits	Capital
	circulation	deposits		redeemable	agreements	market	securities	securities	redeemable	with agreed	
			maturity up	at notice up		fund	up to	over	at notice	maturity	reserves
	1	2	to 2 years	to 3 months	5	shares/units	2 years	2 years	over 3 months	over 2 years	11
2001	-32.4	13.1	6.8	7.6	12.5	28.9	-1.5	7.2	-8.5	-0.2	8.7
2002	42.7	5.9	0.0	6.7	4.3	17.3	-9.3	7.3	-8.7	3.6	3.7
2003 Q1	39.7	8.1	0.0	8.3	1.1	16.4	-11.1	6.7	-8.0	3.8	2.2
2003 Apr.	37.4	7.7	-0.4	9.7	5.3	16.9	9.7	7.2	-8.9	3.6	2.7
May	34.3	8.3	0.8	9.8	2.5	17.7	-12.3	7.1	-9.2	3.9	1.7
June	31.9	8.5	-0.5	10.4	-1.4	19.5	-14.8	7.2	-10.5	3.8	4.4
July (p)	30.3	8.8	-1.1	10.9	0.2	18.2	-13.9	7.5	-12.5	4.2	4.3

<sup>1)</sup> Monetary aggregates comprise monetary liabilities of MFIs and central government (post office, treasury) vis-à-vis non-MFI euro area residents excluding central government. M1 is the sum of currency in circulation and overnight deposits; M2 is the sum of M1, deposits with an agreed maturity of up to two years and deposits redeemable at notice of up to three months; and M3 is the sum of M2, repurchase agreements, money market fund shares/units and debt securities up to two years.

securities up to two years.

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

<sup>3)</sup> For the calculation of the growth rates, see the technical notes.

# MFI loans, breakdown 1)

(EUR billions and percentage growth rates; not seasonally adjusted)

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

	Insurance corpor and pension fun		Other finar intermediar		No	n-financial corpora	ntions	
	Total	Up to 1 year	Total	Up to 1 year	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Total
	1	2	3	4	5	6	7	8_
2001 2002	34.9 33.0	24.8 19.7	434.4 453.9	276.0 288.0	1,019.0 980.8	489.8 514.3	1,394.5 1,477.2	2,903.3 2,972.3
2003 Q1	42.4	30.0	470.2	301.0	991.3	512.7	1,487.3	2,991.2
2003 Apr. May	46.3 46.2	33.5 33.3	480.7 484.4	308.1 309.7	992.2 983.7	513.4 509.8	1,494.5 1,502.0	3,000.1 2,995.4
June July <sup>(p)</sup>	44.6 48.7	31.2 32.8	477.8 471.9	304.1 293.3	994.9 982.5	510.7 516.4	1,509.4 1,514.4	3,015.0 3,013.3

#### 2. Loans to financial intermediaries and non-financial corporations: flows 3)

	Insurance corpora and pension fund			financial ediaries 2)		Non-financial corp	porations	
	Total	Up to 1 year	Total	Up to 1 year	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Total
	1	2	3	4	5	6	7	8
2001 2002	3.6 -4.4	3.0 -5.3	47.1 23.3	28.2 16.1	46.7 -25.9	62.9 31.0	101.0 97.5	210.7 102.6
2003 Q1	11.3	10.3	9.0	5.1	13.1	2.3	16.3	31.7
2003 Apr. May June July (p)	4.0 0.0 -1.6 4.0	3.6 -0.1 -2.2 1.6	11.7 6.6 -7.7 -6.6	7.9 3.5 -6.6 -11.4	2.3 -5.9 10.7 -12.1	1.4 -2.8 0.0 5.5	9.6 10.9 6.4 4.6	13.3 2.2 17.1 -2.0

#### 3. Loans to financial intermediaries and non-financial corporations: growth rates 4)

	Insurance co and pension			financial ediaries 2)		Non-financial corp	orations	
	Total	Up to 1 year	Total	Up to 1 year	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Total
	1	2	3	4	5	6	7	8
2001 2002	11.5 -11.1	13.8 -21.2	12.0 5.4	11.2 5.8	4.8 -2.6	14.6 6.3	7.8 7.0	7.8 3.5
2003 Q1 Q2 <sup>(p)</sup>	7.2 4.2	5.3 2.5	1.5 3.4	-2.8 -0.7	-1.0 -0.1	5.8 2.7	6.6 6.5	3.8 3.6

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

<sup>2)</sup> This category includes e.g. investment funds.

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

not arise from transactions.
4) For the calculation of the growth rates, see the technical notes.

# Table 2.4 (cont'd)

# MFI loans, breakdown 1)

(EUR billions and percentage growth rates; not seasonally adjusted)

#### 4. Loans to households: levels

					Househ	olds 2)							
		Cons	umer credit		Lendii	ng for house	purchase			Other lend	ling		Total
	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Total	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Total	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Total	
	1	2	3	4	5	6	7	8	9	10	11	12	13
2001 2002	102.5 102.2	170.4 179.1	224.2 236.4	497.1 517.7	22.7 25.8	61.0 66.5	1,937.0 2,085.8	2,020.6 2,178.0	152.8 157.1	105.3 98.9	370.3 370.0		3,146.1 3,321.8
2003 Q1	111.1	176.1	208.1	495.3	16.1	69.0	2,123.5	2,208.6	146.5	94.5	405.5	646.6	3,350.5
2003 Apr. May June July (p)	110.4 109.9 114.3 113.1	177.7 179.3 179.4 180.2	206.9 206.0 209.7 211.8	495.0 495.1 503.4 505.0	15.9 16.1 16.6 16.3	68.7 68.8 68.7 69.6	2,134.3 2,150.2 2,165.8 2,187.9	2,218.9 2,235.1 2,251.2 2,273.8	145.5 143.7 145.1 140.6	95.3 94.8 94.6 95.2	408.8 411.8 411.4 414.7	650.4 651.1	3,363.6 3,380.6 3,405.6 3,429.3

#### 5. Loans to households: flows 3)

					Househ	olds 2)							
		Cons	umer credit		Lendin	ng for house	purchase			Other lend	ling		Total
	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Total	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Total	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Total	
	1	2	3	4	5	6	7	8	9	10	11	12	13
2001 2002	4.2 3.1	4.1 4.9	12.5 11.1	20.7 19.1	0.4 3.1	-1.4 3.9	142.8 147.4	141.9 154.4	-1.9 1.5	3.0 1.4	8.8 8.4	9.9 11.3	172.4 185.2
2003 Q1	8.5	-4.5	-7.5	-3.5	-9.5	2.6	37.8	30.9	-8.3	-1.8	17.6	7.5	34.9
2003 Apr. May June July (p)	0.2 -0.6 1.7 -1.4	1.9 1.6 1.5 1.2	-0.2 -0.2 2.3 3.0	1.9 0.8 5.6 2.8	-0.2 0.3 0.4 -0.3	-0.3 0.2 -0.8 1.0	11.4 16.7 18.0 21.3	11.0 17.2 17.6 21.9	-1.6 -1.6 4.2 -4.0	0.7 -0.1 -1.1 0.2	2.9 3.0 -1.4 2.4	2.0 1.4 1.7 -1.4	14.9 19.4 24.9 23.3

# 6. Loans to households: growth rates 4)

					Househ	iolds 2)							
		Con	sumer credi	t	Lendi	ng for house	purchase			Other len	ding		Total
	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Total	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Total	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Total	
	1	2	3	4	5	6	7	8	9	10	11	12	13
2001 2002	4.3 3.0	2.4 2.8	5.9 5.0	4.4 3.8	1.7 13.7	-2.2 6.4	8.0 7.6	7.6 7.6	-1.2 1.0	2.9 1.4	2.4 2.3	1.6 1.8	5.8 5.9
2003 Q1 Q2 <sup>(p)</sup>	16.3 14.4	-0.4 2.1	0.6 -0.1	3.3 3.5	-29.7 -29.4	11.3 9.8	7.4 7.4	7.1 7.0	-3.3 -7.0	-0.2 -3.4	7.5 7.6	3.6 2.1	5.9 5.5

MFI sector excluding the Eurosystem; sectoral classification is based on ESA 95.
 Comprises households (S.14) and non-profit institutions serving households (S.15)
 Calculated from monthly differences in levels adjusted for reclassifications, other revaluations, exchange rate variations and any other changes that do not arise from transactions.
 For the calculation of the growth rates, see the technical notes.

# Table 2.4 (cont'd)

# MFI loans, breakdown 1)

(EUR billions and percentage growth rates; not seasonally adjusted)

#### 7. Loans to government and non-euro area residents: levels

		General go	vernment				Loans	to non-reside	ents	
	Central government	Other ger	neral governmen	t	Total	Banks 2)	Nor	n-banks		Total
	government	State government	Local government	Social security funds			General government	Other	Total	
	1	2	3	4	5	6	7	8	9	10_
2001 2002	146.0 132.3	298.3 277.7	362.9 382.8	14.8 19.7	822.0 812.6	1,095.6 1,146.2	69.9 64.6	538.8 519.3	608.7 583.9	1,704.3 1,730.1
2003 Q1 Q2 (p)	134.1 127.7	267.2 263.5	379.0 379.3	23.9 24.7	804.6 795.8	1,173.1 1,239.6	59.2 59.5	534.9 534.5	594.0 594.0	1,767.1 1,833.6

#### 8. Loans to government and non-euro area residents: flows 3)

		General go	overnment				Loans to non-residents					
	Central government		neral governmen	t	Total	Banks 2)	No	on-banks		Total		
	government	State government	Local government	Social security funds			General government	Other	Total			
	1	2	3	4	5	6	7	8	9	10		
2001 2002	-18.3 -12.2	1.1 -21.1	9.9 19.9	1.3 4.9	-6.2 -8.3	139.7 134.4	4.3 -1.2	80.2 35.6	84.5 34.4	224.2 168.8		
2003 Q1 Q2 <sup>(p)</sup>	0.4 -5.9	-10.2 -3.7	4.8 0.2	4.1 0.9	-0.3 -8.4	44.0 90.3	-5.4 0.4	28.3 15.6	22.9 16.0	66.9 106.3		

# 9. Loans to government and non-euro area residents: growth rates 4)

		General go	vernment				Loans	s to non-reside	ents	
	Central government	Other ger	neral governmen	t	Total	Banks 2)	Not	n-banks		Total
	8	State government	Local government	Social security funds			General government	Other	Total	
	1	2	3	4	5	6	7	8	9	10_
2001 2002	-11.2 -8.4	0.4 -7.1	2.8 5.5	9.7 33.2	-0.8 -1.0	14.8 12.8	6.2 -1.9	17.8 6.7	16.2 5.7	15.4 10.3
2003 Q1 Q2 <sup>(p)</sup>	-14.0 -8.3	-9.2 -6.3	7.1 5.8	60.2 37.4	-1.6 -0.1	20.6 23.9	-13.7 -7.9	9.9 9.7	7.1 7.7	15.6 18.1

Source: ECB.

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

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

3) Calculated from quarterly differences in levels adjusted for reclassifications, other revaluations, exchange rate variations and any other changes that do not arise from transactions.
4) For the calculation of the growth rates, see the technical notes.

# Deposits held with MFIs, breakdown 1)

(EUR billions and percentage growth rates; not seasonally adjusted)

#### 1. Deposits by financial intermediaries: levels

	Ins	surance corpo	rations and pens	sion funds			Other fir	nancial intermed	liaries 2)	
	Overnight	nt With agreed at notice maturity Redeemable Repos 7				Overnight	With agreed maturity	Redeemable at notice	Repos	Total
	1	2	3	4	5	6	7	8	9	10
2001	48.0	427.5	3.4	16.4	495.4	156.5	217.3	5.2	85.3	464.5
2002	55.9	445.6	3.5	17.9	522.8	152.6	226.0	6.6	97.1	482.3
2003 Q1	59.6	454.0	3.7	18.2	535.5	165.3	251.1	8.2	99.6	524.3
2003 Apr.	55.8	457.2	3.3	21.1	537.4	164.5	259.2	8.8	103.9	536.3
May	56.0	458.4	3.2	22.4	539.9	173.9	269.2	9.4	102.7	555.1
June	62.2	450.3	3.0	22.3	537.7	176.6	259.3	9.6	98.0	543.5
July (p)	53.7	458.1	3.1	20.8	535.7	167.3	256.1	9.6	103.7	536.7

# 2. Deposits by financial intermediaries: flows 3)

	In	surance corpo	rations and pens	ion funds			Other fit	nancial intermed	diaries 2)	
	Overnight	With agreed maturity	Redeemable at notice	Repos	Total	Overnight	With agreed maturity		Repos	Total
	1	2	3	4	5	6	7	8	9	10
2001 2002	7.7 7.9	9.1 18.0	0.3 0.1	1.1 1.4	18.1 27.3	4.0 -4.7	1.8 18.3	0.6 -0.2	11.5 12.8	18.0 26.2
2003 Q1	3.9	7.8	0.2	0.4	12.2	13.4	25.3	1.7	11.0	51.4
2003 Apr. May June July (p)	-3.8 0.3 6.1 -8.5	2.9 1.6 -8.3 7.5	-0.3 0.1 -0.2 0.2	2.9 1.3 -0.1 -1.5	1.8 3.3 -2.5 -2.3	-0.4 10.5 2.0 -9.4	8.7 11.5 -10.7 -3.2	0.6 0.6 0.2 0.0	4.2 -1.2 -4.6 5.0	13.2 21.5 -13.1 -7.7

# 3. Deposits by financial intermediaries: growth rates 4)

	In	surance corpo	rations and per	nsion funds			Other fir	nancial interme	ediaries 2)	
	Overnight	With agreed maturity	Redeemable at notice	Repos	Total	Overnight	With agreed maturity	Redeemable at notice	Repos	Total
	1	2	3	4	5	6	7	8	9	10
2001 2002	19.0 16.4	2.2 4.2	8.6 1.9	7.2 8.5	3.8 5.5	2.6 -3.0	0.6 8.5	13.6 -9.0	15.6 14.9	4.2 5.6
2003 Q1 Q2 (p)	36.3 29.1	4.7 3.9	-8.0 -10.7	2.7 17.4	7.3 6.7	5.5 9.1	15.6 19.2	-0.2 78.3	17.8 16.4	12.6 16.0

MFI sector excluding the Eurosystem; sectoral classification is based on ESA 95.
 This category includes e.g. investment funds.

<sup>3)</sup> Calculated from monthly differences in levels adjusted for reclassifications, other revaluations, exchange rate variations and any other changes that do

not arise from transactions.
4) For the calculation of the growth rates, see the technical notes.

# Table 2.5 (cont'd)

# Deposits held with MFIs, breakdown 1)

(EUR billions and percentage growth rates; not seasonally adjusted)

#### 4. Deposits by non-financial corporations and households: levels

		Non	-financial corpor	ations		Households 2)						
	Overnight	With agreed maturity	Redeemable at notice	Repos	Total	Overnight	With agreed maturity	Redeemable at notice	Repos	Total		
	1	2	3	4	5	6	7	8	9	10		
2001 2002	575.3 595.4	335.2 340.3	27.5 30.5	36.2 34.7	974.2 1,000.9	1,042.4 1,116.7	1,194.6 1,180.8	1,365.7 1,435.9	76.6 74.7	3,679.3 3,808.0		
2003 Q1	560.1	333.1	34.4	32.4	960.0	1,125.6	1,167.6	1,472.6	70.6	3,836.4		
2003 Apr. May June July (p)	567.8 574.2 593.4 582.9	334.3 343.0 340.4 345.0	34.8 35.6 36.7 36.8	32.0 34.2 29.9 28.6	968.9 987.0 1,000.3 993.4	1,138.5 1,147.1 1,164.6 1,200.9	1,162.6 1,158.5 1,149.3 1,150.2	1,479.0 1,482.1 1,493.9 1,500.5	70.1 68.6 61.6 62.2	3,850.2 3,856.3 3,869.4 3,913.9		

# 5. Deposits by non-financial corporations and households: flows $^{3)}$

		Non	-financial corpo	rations				Hous	eholds 2)	
	Overnight	With agreed maturity	Redeemable at notice	Repos	Total	Overnight	With agreed maturity	Redeemable at notice	Repos	Total
	1	2	3	4	5	6	7	8	9	10_
2001 2002	76.6 28.8	17.8 22.8	2.7 4.1	10.0 -1.3	107.1 54.4	136.3 63.8	67.8 -9.3	124.4 69.8	19.5 -1.9	348.0 122.3
2003 Q1	-34.3	-6.2	4.0	-2.3	-38.8	9.4	-15.8	36.9	-4.1	26.4
2003 Apr. May June July (p)	8.2 7.7 18.4 -11.3	2.3 10.4 -3.6 4.6	0.4 0.5 1.1 0.1	-0.4 2.3 -4.4 -1.2	10.5 21.0 11.5 -7.8	13.1 9.0 17.3 4.7	-4.5 -2.7 -10.0 -0.1	6.4 3.3 11.7 6.7	-0.4 -1.6 -6.9 0.6	14.6 8.0 12.1 11.9

# 6. Deposits by non-financial corporations and households: growth rates 4)

		Non	-financial corpo	rations				Hous	eholds 2)	
	Overnight	With agreed maturity	Redeemable at notice	Repos	Total	Overnight	With agreed maturity	Redeemable at notice	Repos	Total
	1	2	3	4	5	6	7	8	9	10_
2001 2002	15.3 5.1	5.7 6.9	11.0 14.8	37.9 -3.5	12.3 5.7	15.0 6.1	6.0 -0.8	10.0 5.1	34.2 -2.5	10.4 3.3
$\underset{Q2}{2003} \underset{(p)}{Q1}$	8.0 7.9	2.2 3.6	29.5 36.0	-3.2 -17.9	6.1 6.2	7.5 7.4	-1.3 -2.3	6.6 8.1	-12.5 -19.9	3.9 4.0

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

The sector excluding the Eurosystem, sectoral classification is based on ESA 93.
 Comprises households (S.14) and non-profit institutions serving households (S.15).
 Calculated from monthly differences in levels adjusted for reclassifications, other revaluations, exchange rate variations and any other changes that do not arise from transactions.
 For the calculation of the growth rates, see the technical notes.

# Table 2.5 (cont'd)

# Deposits held with MFIs, breakdown 1)

(EUR billions and percentage growth rates; not seasonally adjusted)

#### 7. Deposits by government and non-euro area residents: levels

		General go	overnment				Non-	residents			
-	Central govern-	Other gen	eral governmer	nt	Total	Banks 2)	N	on-banks		Total	
	ment						General govern- ment	Other	Total		
	1	2	3	4	5	6	7	8	9	10_	
2001 2002	103.9 106.9	29.9 31.6	68.9 69.2	50.9 40.7	253.6 248.4	1,696.9 1,585.3	94.1 97.4	609.1 588.7	703.2 686.0	2,400.1 2,271.3	
2003 Q1 Q2 <sup>(p)</sup>	125.5 147.3	125.5 32.0 65.5 41.				1,587.9 1,579.3	97.8 94.7	606.3 599.0	704.2 693.7	2,292.0 2,273.1	

#### 8. Deposits by government and non-euro area residents: flows 3)

		General	government				No	n-residents		
	Central govern-	Other ge	neral governm	ent	Total	Banks 2)		Non-banks		Total
	ment State Local Soci govern- govern- secur ment ment fun						General govern- ment	Other	Total	
	1	2	3	4	5	6	7	8	9	10
2001 2002	-14.1 -0.2	-0.8 1.8	-0.2 0.3	2.6 -10.3	-12.5 -8.4	130.6 -4.9	10.2 3.6	93.6 31.9	103.9 35.5	234.5 30.6
2003 Q1 Q2 (p)	11.6 21.8	0.4 2.2	-3.7 -0.3	0.4 3.7	8.6 27.4	30.1 26.2	0.5 -3.2	30.7 5.8	31.1 2.7	61.3 28.9

# 9. Deposits by government and non-euro area residents: growth rates 4)

		General g	overnment				No	n-residents		
	Central govern-	Other gen	neral governme	ent	Total	Banks 2)		Non-banks		Total
	ment	State govern- ment	Local govern- ment	Social security funds			General govern- ment	Other	Total	
	1	2	3	4	5	6	7	8	9	10
2001 2002	-12.0 -0.2	-2.6 5.9	-0.3 0.5	5.3 -20.2	-4.8 -3.3	8.7 -0.2	12.2 3.9	18.5 5.2	17.6 5.1	11.1 1.3
2003 Q1 Q2 <sup>(p)</sup>	13.0 29.6	0 3.7 2.1 -16.9			3.1 12.2	1.4 4.4	-0.1 -0.5	7.0 5.7	6.0 4.9	2.8 4.6

Source: ECB.

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

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

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

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

# MFI holdings of securities, breakdown 1)

(EUR billions and percentage growth rates; not seasonally adjusted)

#### 1. Levels

			S	ecurities oth	er than sha	ares			Shares and other equity			
	MF	Is	Gener			er euro residents	Total	Non- residents	MFIs	Non-MFIs	Total	Non- residents
	Euro	Euro Non-euro Euro 1			Euro	Non-euro						
	1	2	3	4	5	6	7	8	9	10	11	12
2001 2002	1,068.7 1,121.8	54.2 48.2	1,059.8 1,119.4		319.8 349.5	15.8 16.7	2,535.9 2,671.2	541.0 556.6	251.9 263.3	559.0 564.3	810.8 827.6	161.6 177.3
2003 Q1	1,173.1	61.4	1,192.3	17.7	366.7	19.0	2,830.2	595.8	260.4	557.9	818.3	181.0
2003 Apr. May June July <sup>(p)</sup>	1,165.9 1,178.4 1,183.6 1,199.9	1,165.9 57.1 1,209.0 17.2 1,178.4 55.5 1,240.7 15.9 1,183.6 59.5 1,222.5 16.1				17.9 19.1 18.4 19.4	2,852.5 2,896.5 2,887.3 2,913.0	599.8 592.1 615.5 625.1	260.9 265.6 267.0 276.2	576.3 588.5 582.3 607.2	837.2 854.1 849.3 883.4	182.0 178.7 174.7 178.9

# 2. Flows 2)

			Sec	urities othe	er than share	es				Shares a	nd other equi	ty
	MF	s	General governm		Other area res		Total	Non- residents	MFIs	Non-MFIs	Total	Non- residents
	Euro	Non-euro	Euro Non-euro Euro Non-e		lon-euro							
	1	2	3	4	5	6	7	8	9	10	11	12_
2001 2002	82.4 47.7	-4.1 -0.9	13.1 41.0	-4.9 -0.8	63.0 27.3	-0.1 3.2	149.5 117.6	108.9 57.1	10.3 13.6	29.6 4.7	40.0 18.3	17.0 18.7
2003 Q1	42.0	4.0	36.2	1.5	16.3	0.2	100.2	31.4	-1.8	-0.5	-2.3	2.9
2003 Apr. May June July <sup>(p)</sup>	-1.3 13.6 5.4 15.6	-3.5 0.4 2.7 0.4	18.6 28.0 -16.4 6.1	-0.1 -0.4 -0.2 0.4	13.2 1.1 0.3 -2.6	-0.6 2.2 -1.3 1.0	26.3 44.8 -9.6 20.9	7.6 8.1 11.9 7.1	-0.6 4.6 0.9 4.1	15.4 11.1 -7.9 -2.8	14.8 15.7 -6.9 1.3	0.3 -3.4 -4.5 3.0

# 3. Growth rates 3)

			Sec	urities oth	er than shai	res			Shares and other equity			
	MF	Is	General governm			r euro esidents	Total	Non- residents	MFIs	Non-MFIs	Total	Non- residents
	Euro	Non-euro	ro Euro Non-euro Euro Non-euro									
	1	2	3	4	5	6	7	8	9	10	11	12
2001 2002	8.2 4.5	-7.1 -2.5	1.2 3.9	-23.4 -4.3	25.0 8.5	-0.4 21.9	6.3 4.6	25.4 10.8	4.2 5.4	5.7 0.9	5.2 2.3	12.0 11.6
2003 Q1	4.2	-3.4	3.2	7.5	9.9	25.4	4.5	11.9	1.4	2.1	1.9	5.0
2003 Apr. May June July (p)	3.2 3.9 4.3 5.9	3.2 -10.0 4.7 5.9 3.9 -10.1 6.1 7.7 4.3 -9.4 4.9 7.2				9.7 22.1 16.2 23.7	5.1 6.0 5.7 6.6	13.8 13.4 16.4 15.9	-1.6 0.0 0.0 3.6	3.7 5.5 5.1 6.9	2.0 3.7 3.4 5.8	6.8 2.3 -0.5 1.2

Source: ECB.

1) MFI sector excluding the Eurosystem.

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

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

# Revaluation of selected MFI balance sheet items 1)

(EUR billions; not seasonally adjusted)

#### 1. Write-offs/write-downs of loans to households

					Но	ouseholds 2)						
		Const	umer credit		L	ending for ho	use purchase			Other lend	ing	
	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Total	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Total	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Total
	1	2	3	4	5	6	7	8	9	10	11	12
2001	_	_	-	0.0	_	_	-	0.0	_	-	-	0.0
2002	-	-	-	0.0	-	-	-	0.0	-	-	-	-1.0
2003 Q1	-0.6	-0.1	-0.4	-1.1	-0.1	0.0	-1.0	-1.1	-1.1	-0.1	-1.3	-2.6
2003 Apr.	0.0	-0.1	0.0	-0.1	0.0	0.0	-0.1	-0.1	-0.1	0.0	-0.3	-0.4
May	0.0	0.0	-0.1	-0.1	0.0	0.0	-0.1	-0.1	-0.1	0.0	-0.3	-0.4
June	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	-0.3	-0.4
July (p)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	-0.3	-0.3

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

		Non-financia	al corporations		N	Ion-residents	
	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Total 4	Up to 1 year	Over 1 year	Total 7
2001 2002	-0.8 -1.8	-5.4 -2.7	-4.4 -4.7	-10.6 -9.2	-	-	-0.4 -6.7
2003 Q1	-4.0	-0.6	-2.5	-7.1	0.0	-0.1	0.0
2003 Apr. May June July (P)	-0.3 -0.4 -0.3 0.0	0.0 0.0 0.0 0.0	-0.5 -0.3 -0.2 -0.2	-0.8 -0.7 -0.5 -0.2	0.0 0.0 -0.3 0.0	0.0 0.0 0.0 0.0	0.0 0.0 -0.3 0.0

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

			Se	ecurities oth	er than sha	res				Shares and	other equi	ty
	MF	FIs	Gener			er euro esidents	Total	Non- residents	MFIs	Non-MFIs	Total	Non- residents
	Euro	Non-euro	Euro	Non-euro	Euro	Non-euro						
	1	2	3	4	5	6	7	8	9	10	11	12_
2001 2002	-0.6 9.8	0.2 0.6	9.8 11.0	0.1 -0.1	5.9 5.1	0.1 0.2	15.6 26.8	-1.5 4.4	1.1 -4.7	7.6 0.8	8.7 -3.9	-1.3 -2.7
2003 Q1	-1.8	-0.1	10.2	0.0	-1.4	0.2	7.1	-1.0	-1.1	-7.2	-8.4	0.9
2003 Apr. May June July (p)	-0.4 -0.4 -0.4 -0.3	0.0 -0.1 0.0 0.0	-1.7 3.7 -1.8 -0.9	-0.1 -0.1 0.0 0.0	-0.1 0.4 0.0 -0.1	-0.2 0.0 0.0 -0.1	-2.4 3.5 -2.1 -1.3	0.4 -0.1 0.7 0.4	0.9 0.1 0.5 5.1	3.1 1.1 1.7 -0.2	4.0 1.2 2.1 4.9	0.5 0.1 0.5 0.7

Source: ECB.

1) MFI sector excluding the Eurosystem.

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

# Currency analysis of selected liabilities and assets of the euro area MFIs 1)

(EUR billions; not seasonally adjusted)

#### 1. Deposits placed by euro area residents: levels

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

#### 2. Deposits placed by non-euro area residents: levels

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

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

	Debt securities						
	All currencies	Euro 2)	Non-euro currencies				
				USD	JPY	CHF	GBP
	1	2	3	4	5	6	7
2001 2002	3,030.2 3,138.8	2,579.5 2,680.9	450.4 457.5	247.6 241.0	65.2 55.8	42.8 50.8	67.5 72.7
2003 Q1 Q2 <sup>(p)</sup>	3,197.5 3,228.4	2,725.1 2,763.9	471.9 463.9	259.9 260.0	50.9 46.5	50.3 51.5	72.8 70.1

Source: ECB.

1) MFI sector excluding the Eurosystem.

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

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

# Table 2.8 (cont'd)

# Currency analysis of selected liabilities and assets of the euro area MFIs 1)

(EUR billions; not seasonally adjusted)

#### 4. Loans to euro area residents: levels

	MFIs							Non-M	1FIs					
	All curren-	Euro 2)	Non-euro curren-					All curren-	Euro 2)	Non-euro curren-				
	cies		cies	USD	JPY	CHF	GBP	cies		cies	USD	JPY	CHF	GBP
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
2001	3,794.0	-	_	_	_	-	-	7,340.7	6,999.5	341.2	181.6	47.8	77.5	26.6
2002	4,019.8	-	-	-	-	-	-	7,593.5	7,303.1	290.4	133.7	40.3	83.3	24.4
2003 Q1	4,076.6	-	_	-	_	-	-	7,658.9	7,367.8	291.1	135.1	36.6	85.8	24.9
Q2 (p)	4,143.4	-	-	-	-	-	-	7,738.8	7,455.9	282.9	134.1	28.4	87.9	24.3

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

	Banks 3)							Non-ban	ks					
	All curren-	Euro 2)	Non-euro curren-					All curren-	Euro 2)	Non-euro curren-				
	cies		cies	USD	JPY	CHF	GBP	cies		cies	USD	JPY	CHF	GBP
	1	2	3	4	5	6	7	8	9	10	11	12	13	14_
2001 2002	1,095.6 1,146.2	451.9 553.9	643.7 592.3	415.7 371.7	44.1 51.3	37.1 30.4	91.7 103.8	608.7 583.9	201.3 211.4	407.3 372.5	315.7 278.1	11.5 13.6	25.6 27.4	36.9 32.9
2003 Q1 Q2 <sup>(p)</sup>	1,173.1 1,239.6	593.4 630.5	579.7 609.1	359.2 381.2	50.3 59.0	31.6 31.8	101.4 97.0	594.0 594.0	226.8 233.9	367.2 360.1	277.1 274.1	11.4 9.1	27.1 25.0	33.5 34.1

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

	Issued b	y MFIs						Issued by n	on-MFIs					
	All	Euro 2)	Non-euro					All	Euro 2)	Non-euro				
	curren- cies		curren- cies	USD	JPY	CHF	GBP	curren- cies		curren- cies	USD	JPY	CHF	GBP
	1	2	3	4	5	6	7	8	9	10	11	12	13	14_
2001 2002	1,122.9	1,068.7	54.2	37.2	9.0	1.8	15.2	1,413.0	1,379.6	33.4	17.8	10.6	1.1	2.3
2002 2003 Q1	1,170.0 1,234.5	1,121.8 1.173.1	48.2 61.4	24.8 20.8	6.7 7.9	1.9 2.8	22.9 11.9	1,501.2 1.595.7	1,468.9 1,559.0	32.2 36.7	14.3 20.4	9.8 10.2	1.5	5.3 3.9
Q2 <sup>(p)</sup>	1,234.3	1,183.6	59.5	21.0	6.9	3.2	12.8	1,644.2	1,609.7	34.5	18.5	9.8	1.1	4.0

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

	Issued by	banks 3)						Issued by nor	n-banks					
	All curren-	Euro 2)	Non-euro curren-					All curren-	Euro 2)	Non-euro curren-				
	cies		cies	USD	JPY	CHF	GBP	cies		cies	USD	JPY	CHF	GBP
	1	2	3	4	5	6	7	8	9	10	11	12	13	14_
2001 2002	233.0 239.6	80.1 88.4	152.9 151.1	115.6 109.1	4.2 4.1	2.7 1.4	23.8 31.7	308.0 317.1	127.4 131.6	180.7 185.4	136.0 133.1	18.2 18.4	2.6 2.9	14.5 17.6
2003 Q1 Q2 (p)	256.6 259.9	102.1 110.1	154.5 149.8	93.0 88.8	9.4 9.0	8.6 6.3	30.7 35.4	339.2 355.3	146.7 156.9	192.5 198.4	123.7 126.9	30.8 33.3	2.5 2.7	19.9 21.4

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

# Aggregated balance sheet of euro area investment funds 1)

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

#### 1. Assets

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

# 2. Liabilities

		_		Total
	Deposits	Investment	Other	
	and loans taken	fund shares	liabilities	
	1	2	3	4
2001 Q3	41.5	2,858.8	77.6	2,977.9
Q4	41.1	3,075.6	74.1	3,190.8
2002 Q1	42.6	3,137.7	78.8	3,259.2
Q2	39.1	2,919.8	75.5	3,034.4
Q3	38.9	2,732.3	75.3	2,846.5
Q2 Q3 Q4	40.2	2,746.6	76.9	2,863.7
2003 Q1 (p)	41.0	2,629.8	78.5	2,749.3

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

		Funds by inves	stment policy			Funds by		Total
	Equity funds	Bond funds	Mixed funds	Real estate funds	Other funds	General public funds	Special investors' funds	0
	1	2	3	4	5	6	7	8
2001 Q3 Q4	738.2 839.6	1,019.1 1,031.7	756.0 810.3	127.0 134.0	337.7 375.2	2,241.8 2,408.1	736.1 782.7	2,977.9 3,190.8
2002 Q1 Q2 Q3 Q4	862.4 728.7 585.2 593.9	1,039.3 1,037.0 1,063.2 1,068.2	820.3 762.6 699.9 701.6	142.3 139.2 145.6 150.8	394.8 366.9 352.6 349.2	2,464.2 2,262.4 2,092.3 2,090.9	794.9 772.0 754.2 772.9	3,259.2 3,034.4 2,846.5 2,863.7
2003 Q1 (p)	525.7	1,054.2	675.3	157.3	336.8	1,978.9	770.4	2,749.3

Source: ECB.

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

# Aggregated balance sheet of euro area investment funds broken down by investment policy

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

#### 1. Assets of equity funds

								Total
	Deposits	Holdings of			Holdings	Holdings of	Other	
		securities	Up to	Over	of shares/ other	investment	assets	
		other than	l year	l year l year		fund shares		
		shares			equity		_	
	1	2	3	4]	5	6	7	8
2001 Q3	41.2	30.6	4.2	26.4	636.1	16.7	13.6	738.2
Q4	39.5	29.0	3.0	26.1	735.2	19.4	16.5	839.6
2002 Q1	39.3	28.7	2.9	25.8	759.1	20.6	14.7	862.4
Q2	34.0	27.4	4.0	23.4	630.0	22.2	15.0	728.7
O3	29.0	26.5	3.7	22.8	496.5	19.1	14.1	585.2
Q3 Q4	26.6	28.2	3.4	24.9	506.0	18.4	14.7	593.9
2003 O1 (p)	24.5	30.4	3.0	27.4	438.4	16.4	16.0	525.7

# 2. Liabilities of equity funds

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

#### 3. Assets of bond funds

	Deposits	Holdings of			Haldings	Haldings of	Other	Total
	Deposits	Holdings of securities other than shares	Up to 1 year	Over 1 year	Holdings of shares/ other equity	Holdings of investment fund shares	assets	
	1	2	3	4	5	6	7	8
2001 Q3	74.9	865.5	32.2	833.3	34.3	12.7	31.6	1,019.1
Q4	73.2	875.5	33.2	842.3	38.5	11.2	33.4	1,031.7
2002 Q1	77.9	874.0	37.3	836.7	42.9	11.5	33.0	1,039.3
Q2	75.9	882.2	38.5	843.8	33.2	10.8	34.9	1,037.0
Q3	78.3	902.1	37.2	865.0	32.6	11.6	38.5	1,063.2
Q2 Q3 Q4	83.9	902.8	36.5	866.3	31.9	12.3	37.2	1,068.2
2003 Q1 (p)	77.5	899.7	35.8	863.9	26.6	18.6	31.7	1,054.2

#### 4. Liabilities of bond funds

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

# Table 2.10 (cont'd)

# Aggregated balance sheet of euro area investment funds broken down by investment policy

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

#### 5. Assets of mixed funds

									Total
	Deposits	Holdings of			Holdings	Holdings of	Fixed	Other	
		securities	Up to	Over	of shares/	investment	assets	assets	
		other than	1 year	1 year	other	fund shares			
		shares			equity				
	1	2	3	4	5	6	7	8	9
2001 Q3	55.2	290.4	16.4	274.0	297.5	85.7	2.5	24.8	756.0
Q4	56.9	286.5	17.0	269.5	347.5	92.7	2.4	24.3	810.3
2002 Q1	52.6	283.8	18.1	265.7	357.0	100.3	2.3	24.4	820.3
Q2	54.2	286.9	20.6	266.3	298.8	94.6	2.1	26.0	762.6
Õ3	53.0	291.7	21.3	270.4	234.3	88.1	5.2	27.7	699.9
Q2 Q3 Q4	53.9	295.6	21.2	274.4	233.0	87.7	3.4	28.0	701.6
2003 Q1 <sup>(p)</sup>	50.4	301.2	21.8	279.5	210.0	83.7	0.7	29.4	675.3

#### 6. Liabilities of mixed funds

				Total
	Deposits	Investment		
	and loans	fund	liabilities	
	taken	shares		
	1	2	3	4_
2001 Q3	3.3	734.4	18.3	756.0
Q4	2.9	790.9	16.5	810.3
2002 Q1	2.9	799.4	18.0	820.3
Q2	3.1	741.3	18.2	762.6
Q3	3.5	676.9	19.5	699.9
Q4	3.0	677.2	21.5	701.6
2003 Q1 (p)	2.9	650.0	22.5	675.3

#### 7. Assets of real estate funds

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

#### 8. Liabilities of real estate funds

				Total
	Deposits	Investment	Other	
	and loans	fund	liabilities	
	taken	shares		
	1	2	3	4
2001 Q3	24.8	97.9	4.4	127.0
Q4	25.9	103.3	4.8	134.0
2002 Q1	26.7	110.7	4.9	142.3
Q2	22.3	112.1	4.8	139.2
Q3	22.9	117.7	5.0	145.6
Q4	24.6	120.9	5.4	150.8
2003 Q1 <sup>(p)</sup>	24.0	127.9	5.4	157.3

# Aggregated balance sheet of euro area investment funds broken down by type of investor

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

# 1. Assets of general public funds

							Total
	Deposits	Holdings of	Holdings of	Holdings of	Fixed	Other	
		securities	shares/	investment	assets	assets	
		other than	other	fund shares			
	1	shares equity 2		4	5	6	7
2001 Q3	196.4	912.1	820.2	151.6	96.4	65.1	2,241.8
Q4	201.0	928.7	949.2	167.0	99.1	63.2	2,408.1
2002 Q1	213.3	921.8	984.8	176.8	100.6	66.9	2,464.2
Q2	199.2	915.7	818.4	166.7	96.1	66.3	2,262.4
Q3	187.9	917.6	654.4	156.0	107.9	68.5	2,092.3
Q4	190.8	905.1	663.2	153.1	109.0	69.6	2,090.9
2003 O1 (p)	165.5	882.5	599.8	155.0	104.6	71.5	1,978.9

# 2. Liabilities of general public funds

				Total
	Deposits	Investment	Other	
	and loans	fund	liabilities	
	taken	shares	_	
	1	2	3	4
2001 Q3	37.4	2,137.4	67.0	2,241.8
Q4	36.4	2,312.9	58.8	2,408.1
2002 Q1	38.1	2,360.2	65.9	2,464.2
Q2	34.0	2,166.0	62.4	2,262.4
O3	33.0	1,997.8	61.5	2,092.3
Q3 Q4	33.7	1,995.4	61.7	2,090.9
2003 Q1 (p)	34.6	1,881.4	63.0	1,978.9

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

		** 441 al	** 441 0	** ***	=: 4		Total
	Deposits	Holdings of securities	Holdings of shares/	Holdings of investment	Fixed assets	Other assets	
		other than	other	fund shares	ussets	assets	
		shares 2	equity 3	4	5	6	7
2001 Q3	46.0	381.8	233.7	40.7	8.6	25.3	736.1
Q4	43.6	381.2	270.0	42.6	9.8	35.6	782.7
2002 Q1	40.3	386.9	278.4	47.8	10.3	31.2	794.9
	43.6	396.9	237.7	48.5	11.9	33.5	772.0
Q3	48.8	419.8	190.3	47.5	13.1	34.7	754.2
Q2 Q3 Q4	51.2	430.3	190.0	49.9	14.7	36.8	772.9
2003 Q1 (p)	51.4	449.1	167.1	50.3	15.4	37.0	770.4

# 4. Liabilities of special investors' funds

				Total
	Deposits	Investment	Other	
	and loans	fund	liabilities	
	taken	shares		
	1	21	3	4_
2001 Q3	4.2	721.4	10.5	736.1
Q4	4.6	762.8	15.3	782.7
2002 Q1	4.5	777.5	12.9	794.9
Q2	5.1	753.8	13.1	772.0
Q3	5.9	734.5	13.8	754.2
Q4	6.5	751.2	15.2	772.9
2003 Q1 <sup>(p)</sup>	6.5	748.4	15.5	770.4

# Financial markets and interest rates in the euro area

Table 3.1

#### Money market interest rates 1)

(percentages per annum)

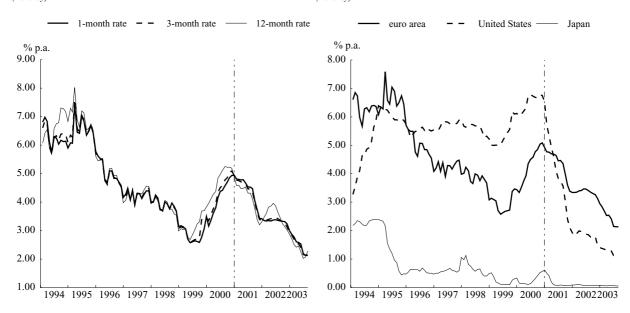
		Ει	ıro area 4)			United States 6)	Japan 6)
	Overnight deposits 2)3)	1-month deposits 5)	3-month deposits 5)	6-month deposits 5) 4	12-month deposits 5)	3-month deposits 6	3-month deposits
1998	3.09	3.84	3.83	3.78	3.77	5.57	0.66
1999 2000	2.74 4.12	2.86 4.24	2.96 4.40	3.06 4.55	3.19 4.78	5.42 6.53	0.22 0.28
	2		Euro area en		,0		
2001 2002	4.39 3.29	4.33 3.30	4.26 3.32	4.16 3.35	4.09 3.49	3.78 1.80	0.15 0.08
2002 Aug. Sep. Oct. Nov. Dec.	3.29 3.32 3.30 3.30 3.09	3.33 3.32 3.31 3.23 2.98	3.35 3.31 3.26 3.12 2.94	3.38 3.27 3.17 3.04 2.89	3.44 3.24 3.13 3.02 2.87	1.78 1.80 1.78 1.46 1.41	0.07 0.07 0.07 0.07 0.06
2003 Jan. Feb. Mar. Apr. May June July Aug.	2.79 2.76 2.75 2.56 2.56 2.21 2.08 2.10	2.86 2.77 2.60 2.58 2.52 2.18 2.13 2.12	2.83 2.69 2.53 2.53 2.40 2.15 2.13	2.76 2.58 2.45 2.47 2.32 2.08 2.09 2.17	2.71 2.50 2.41 2.45 2.26 2.01 2.08 2.28	1.37 1.34 1.29 1.30 1.28 1.12 1.11	0.06 0.06 0.06 0.06 0.06 0.06 0.05
2003 1 Aug. 8 15 22 29	2.08 2.06 2.07 2.45 2.14	2.12 2.12 2.12 2.13 2.13	2.13 2.14 2.14 2.15 2.15	2.16 2.15 2.17 2.18 2.20	2.23 2.22 2.28 2.31 2.32	1.14 1.13 1.13 1.14 1.14	0.05 0.05 0.05 0.06 0.06

#### Euro area money market rates

(monthly)

#### 3-month money market rates

(monthly)



Sources: Reuters and ECB.

- With the exception of the overnight rate to December 1998, monthly and yearly values are period averages.
- Interbank deposit bid rates to December 1998. From January 1999 column 1 shows the euro overnight index average (EONIA).

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

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

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

Table 3.2

# Government bond yields 1)

(percentages per annum)

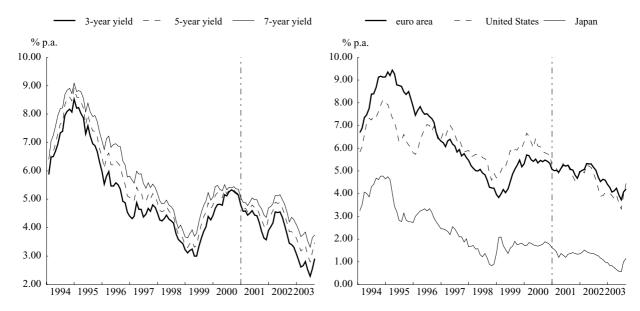
			Euro area 2)			United States	Japan
	2 years	3 years 2	5 years	7 years 4	10 years 5	10 years 6	10 years 7
1998	3.16	3.22	3.38	3.67	4.71	5.33	1.30
1999	3.38	3.63	4.01	4.38	4.66	5.64	1.75
2000	4.90	5.03	5.19	5.37	5.44	6.03	1.76
			Euro area enlar	gement —			
2001	4.11	4.23	4.49	4.79	5.03	5.01	1.34
2002	3.68	3.94	4.35	4.70	4.92	4.60	1.27
2002 Aug.	3.47	3.76	4.15	4.54	4.73	4.24	1.26
Sep.	3.19	3.46	3.85	4.20	4.52	3.88	1.16
Oct.	3.13	3.41	3.86	4.36	4.62	3.91	1.09
Nov.	3.04	3.31	3.81	4.28	4.59	4.04	0.99
Dec.	2.84	3.08	3.63	4.10	4.41	4.03	0.97
2003 Jan.	2.64	2.85	3.40	3.93	4.27	4.02	0.84
Feb.	2.45	2.61	3.18	3.68	4.06	3.90	0.83
Mar.	2.50	2.66	3.26	3.76	4.13	3.79	0.74
Apr.	2.59	2.81	3.38	3.85	4.23	3.94	0.66
May	2.31	2.53	3.02	3.54	3.92	3.56	0.57
June	2.08	2.29	2.79	3.32	3.72	3.32	0.56
July	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
2003 1 Aug.	2.70	2.99	3.53	3.79	4.25	4.43	0.96
8	2.49	2.75	3.29	3.58	4.05	4.21	0.87
15	2.61	2.88	3.47	3.75	4.21	4.50	1.10
22	2.68	2.95	3.52	3.78	4.23	4.45	1.35
29	2.64	2.93	3.50	3.77	4.23	4.44	1.46

# Euro area government bond yields

(monthly)

# 10-year government bond yields

(monthly)



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

  1) To December 1998, 2, 3, 5 and 7-year euro area yields are end-of-period values and 10-year yields are period averages. Thereafter, all yields are
- period averages.

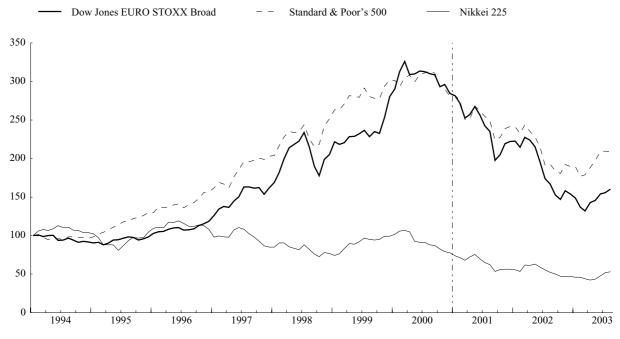
  To December 1998, euro area yields are calculated on the basis of harmonised national government bond yields weighted by GDP. Thereafter, the weights are the nominal outstanding amounts of government bonds in each maturity band.

# **Stock market indices**

(index levels, in points) 1)

	Dow Jones EURO STOXX indices							United States	Japan					
	Benc	hmark			I	Main ecor	nomic sect	or indices					States	
	Broad	50	Basic of materials	Consumer cyclical 4	Consumer non- cyclical 5	Energy 6	Financial	Industrial 8	Techno- logy	Utilities	Tele- communi- cations	Health- care	Standard & Poor's 500 13	Nikkei 225 14
1998 1999 2000	325.8	3,076.3 3,787.3 5,075.5	257.9 279.2 299.1	245.0 262.9 292.9	295.5 327.7 324.3	249.3 286.0 342.3	281.3 295.7 350.7 ea enlarg	218.4 285.1 378.0	333.6 470.4 963.1	282.4 306.2 341.7	488.1 717.7 1,072.5	348.9 392.6	1,085.3 1,327.8	15,338.4 16,829.9 17,162.7
2001 2002		4,049.4 3,023.4	296.0 267.5	228.2 175.0	303.3 266.5	341.4 308.9	321.6 243.3	310.0 252.4	530.5 345.1	309.6 255.5	541.2 349.2	540.1 411.8		12,114.8 10,119.3
2002 Aug. Sep. Oct. Nov. Dec.	211.8 204.0 219.5	2,697.4 2,450.2 2,384.7 2,559.0 2,475.1	243.6 227.2 214.4 224.2 225.3	152.9 140.6 135.3 145.4 139.4	250.1 241.2 236.5 234.8 226.5	290.9 274.0 272.1 272.4 268.8	217.4 193.1 177.8 197.0 194.2	227.9 215.3 193.6 208.8 205.2	258.8 229.0 235.8 289.6 270.4	236.7 221.2 209.6 215.2 207.3	310.0 283.1 286.8 324.5 322.5	376.6 337.0 345.4 347.1 324.4	912.6 870.1 854.6 910.1 899.1	9,751.2 9,354.8 8,781.1 8,699.6 8,674.8
2003 Jan. Feb. Mar. Apr. May June July Aug.	189.8 183.0 197.9 202.0 213.5 216.1	2,377.4 2,170.9 2,086.5 2,278.2 2,303.0 2,443.3 2,459.8 2,524.1	213.0 185.8 176.1 193.4 196.4 205.0 218.8 227.2	130.9 121.5 115.4 122.5 124.9 133.0 138.1 144.6	220.2 196.5 188.4 203.9 202.3 206.5 205.5 211.9	262.4 245.1 241.1 250.0 249.6 266.1 260.1 268.6	186.5 172.2 164.5 181.0 187.4 201.2 206.1 211.6	198.5 186.0 181.2 192.0 198.5 207.4 216.0 227.0	250.2 226.5 228.2 251.6 258.2 271.5 274.2 281.7	210.0 198.1 185.6 201.0 208.3 216.7 214.6 217.0	330.0 309.4 292.8 324.8 324.9 340.7 340.9 352.4	313.8 274.3 275.2 288.7 304.2 318.9 306.8 293.2	896.0 836.6 846.6 889.6 935.8 988.0 992.6 989.5	8,567.4 8,535.8 8,171.0 7,895.7 8,122.1 8,895.7 9,669.8 9,884.6
2003 1 Aug. 8 15 22 29	216.8 223.5 228.6	2,479.7 2,460.1 2,548.9 2,593.6 2,556.7	227.5 219.4 226.6 235.4 231.6	140.4 138.4 144.4 151.7 152.6	205.7 208.5 212.0 218.3 220.2	253.8 264.4 273.6 277.0 272.2	212.6 207.6 213.9 214.5 209.1	224.9 222.5 227.5 232.6 231.5	274.7 264.4 274.4 300.0 306.5	214.0 214.1 218.3 220.6 218.9	347.2 346.6 357.9 358.1 348.4	291.9 292.4 296.9 295.0 296.3	980.2 977.6 990.7 993.1 1,008.0	9,611.7 9,327.5 9,863.5 10,281.2 10,343.6

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



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

#### Retail bank interest rates

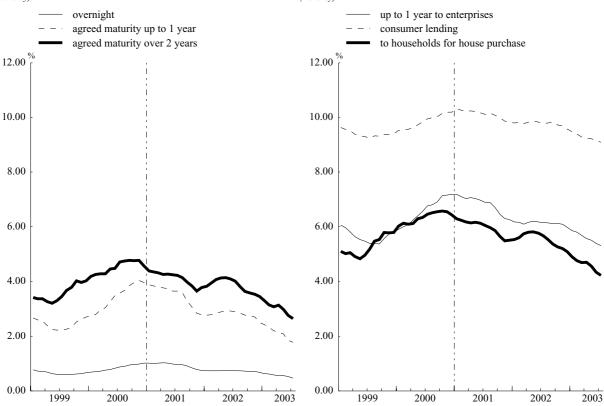
(percentages per annum; period averages)

			Deposit inte	rest rates			Lending interest rates			
	Overnight	With a	agreed maturity	7	Redeemable	at notice	To enterpr	rises	To households	
	1	Up to 1 year 2	Up to 2 years 3	Over 2 years 4	Up to 3 months 5	Over 3 months 6	Up to 1 year 7	Over 1 year 8	Consumer lending 9	For house purchase 10
2000	0.85	3.45	3.45	4.52	2.25	3.79	6.60	6.23	9.87	6.34
				Euro ai	rea enlargem	ent —				
2001	0.94	3.49	3.49	4.12	2.40	3.59	6.83	6.15	10.12	5.97
2002	0.73	2.80	2.80	3.85	2.13	2.85	6.13	5.71	9.78	5.54
2002 July	0.74	2.89	2.90	4.02	2.13	3.02	6.16	5.79	9.78	5.68
Aug.	0.73	2.84	2.85	3.81	2.12	2.94	6.15	5.71	9.79	5.53
Sep.	0.73	2.77	2.77	3.64	2.13	2.73	6.12	5.61	9.85	5.38
Oct.	0.72	2.74	2.74	3.58	2.11	2.63	6.13	5.54	9.72	5.26
Nov.	0.71	2.70	2.69	3.53	2.11	2.55	6.10	5.50	9.70	5.21
Dec.	0.68	2.51	2.51	3.45	2.05	2.41	5.98	5.34	9.58	5.10
2003 Jan.	0.63	2.43	2.42	3.30	2.04	2.34	5.87	5.27	9.48	4.91
Feb.	0.62	2.32	2.32	3.15	2.02	2.12	5.81	5.18	9.39	4.77
Mar.	0.59	2.20	2.19	3.08	1.97	2.05	5.69	5.17	9.29	4.69
Apr.	0.56	2.15	2.14	3.14	1.93	2.05	5.57	5.14	9.24	4.70
May	0.56	2.08	2.08	2.98	1.91	1.92	5.51	5.01	9.22	4.56
June	0.52	1.85	1.84	2.76	1.83	1.65	5.39	4.86	9.15	4.34
July	0.46	1.78	1.77	2.65	1.77	1.48	5.31	4.78	9.09	4.22

#### **Deposit interest rates**

(monthly)

#### Lending interest rates (monthly)



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

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

 $(EUR\ billions;\ transactions\ during\ the\ month\ and\ end-of\mbox{-}period\ stocks;\ nominal\ values)$ 

#### 1. Short-term

					By euro ar	ea residents					
						In euro	) 1)		In other		
	Issues	Redemptions	Net issues	Amounts outstanding	Issues	Redemptions	Net issues	Amounts outstanding	Issues	Redemptions	
	1	2	3	4	5	6	7	8	9	10	
2002 June	337.6	342.2	-4.6	766.2	317.0	319.1	-2.1	676.8	20.7	23.1	
July	406.0	392.2	13.8	772.6	382.4	371.4	11.0	685.0	23.6	20.9	
Aug.	384.5	378.1	6.4	775.6	366.2	356.8	9.3	693.1	18.3	21.3	
Sep.	414.9	400.6	14.3	792.7	392.1	381.0	11.0	706.7	22.8	19.6	
Oct.	468.3	456.4	11.9	806.1	441.8	433.3	8.5	715.3	26.5	23.1	
Nov.	435.5	413.0	22.5	830.5	413.5	388.9	24.6	740.1	22.0	24.2	
Dec.	406.1	451.6	-45.5	783.5	386.8	429.9	-43.1	696.0	19.3	21.7	
2003 Jan.	545.1	487.4	57.7	840.8	518.6	462.7	55.9	751.0	26.5	24.7	
Feb.	456.3	428.4	27.9	866.0	433.5	408.3	25.2	775.6	22.8	20.1	
Mar.	452.0	440.7	11.3	875.7	433.0	423.1	9.9	785.3	19.0	17.6	
Apr.	476.7	456.1	20.6	892.4	454.8	431.8	23.1	807.8	21.9	24.3	
May	443.0	435.3	7.7	897.9	415.8	410.7	5.1	812.2	27.2	24.6	
June	434.2	454.4	-20.3	877.6	411.9	429.0	-17.1	794.8	22.3	25.5	

# 2. Long-term

					By euro ar	ea residents					
						In euro	O 1)		In other		
	Issues	Redemptions	Net issues	Amounts outstanding	Issues	Redemptions	Net issues	Amounts outstanding	Issues	Redemptions	
	1	2	3	4	5	6	7	8	9	10	
2002 June	133.5	95.4	38.1	7,294.3	123.4	87.5	35.8	6,665.0	10.1	7.8	
July	133.3	114.2	19.1	7,324.8	116.2	104.7	11.6	6,680.1	17.1	9.6	
Aug.	69.7	64.7	5.0	7,327.2	59.8	55.1	4.7	6,684.3	9.9	9.6	
Sep.	141.5	87.2	54.2	7,380.9	122.1	75.3	46.8	6,730.3	19.3	11.9	
Oct.	124.0	92.5	31.5	7,411.8	105.9	81.7	24.2	6,754.8	18.1	10.8	
Nov.	133.1	96.3	36.7	7,445.8	119.4	90.2	29.1	6,783.8	13.7	6.1	
Dec.	140.9	173.6	-32.7	7,393.8	129.3	160.4	-31.2	6,751.6	11.7	13.2	
2003 Jan.	179.1	134.4	44.7	7,426.4	155.9	125.3	30.6	6,782.9	23.2	9.2	
Feb.	163.9	112.2	51.7	7,480.4	145.4	103.6	41.8	6,825.4	18.5	8.6	
Mar.	161.2	101.9	59.3	7,535.6	145.8	92.2	53.6	6,879.5	15.4	9.6	
Apr.	160.7	124.6	36.1	7,562.6	146.0	115.3	30.7	6,910.4	14.7	9.3	
May	174.6	100.0	74.5	7,616.0	160.9	90.5	70.4	6,980.8	13.6	9.5	
June	167.7	108.0	59.7	7,688.0	152.1	99.4	52.7	7,034.2	15.7	8.7	

#### 3. Total

					By euro ar	ea residents					
						In euro	, <sup>1)</sup>		In other		
	Issues	Redemptions	Net issues	Amounts outstanding	Issues	Redemptions	Net issues	Amounts outstanding	Issues	Redemptions	
	1	2	3	4	5	6	7	8	9	10	
2002 June	471.1	437.6	33.6	8,060.6	440.3	406.6	33.7	7,341.8	30.8	31.0	
July	539.3	506.5	32.8	8,097.5	498.6	476.0	22.6	7,365.1	40.7	30.4	
Aug.	454.2	442.8	11.4	8,102.9	426.0	411.9	14.1	7,377.4	28.2	30.9	
Sep.	556.4	487.8	68.5	8,173.6	514.2	456.4	57.8	7,437.0	42.2	31.5	
Oct.	592.3	548.9	43.4	8,217.8	547.7	515.0	32.7	7,470.1	44.6	33.9	
Nov.	568.6	509.4	59.2	8,276.3	532.8	479.1	53.7	7,524.0	35.7	30.3	
Dec.	547.0	625.2	-78.2	8,177.3	516.0	590.3	-74.3	7,447.6	31.0	34.9	
2003 Jan.	724.2	621.9	102.3	8,267.2	674.5	588.0	86.5	7,533.9	49.8	33.9	
Feb.	620.2	540.6	79.6	8,346.4	578.9	511.9	67.0	7,601.0	41.3	28.7	
Mar.	613.2	542.5	70.7	8,411.3	578.8	515.3	63.5	7,664.8	34.4	27.2	
Apr.	637.5	580.7	56.8	8,455.0	600.8	547.1	53.8	7,718.2	36.6	33.6	
May	617.6	535.3	82.3	8,513.9	576.7	501.2	75.6	7,793.0	40.8	34.1	
June	601.9	562.5	39.4	8,565.6	564.0	528.3	35.6	7,829.0	37.9	34.1	

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

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

		By non-residents of the euro area in euro 1)				Total in euro 1)				
currencies										
Net issues	Amounts outstanding	Issues	Redemptions	Net issues	Amounts outstanding	Issues	Redemptions	Net issues	Amounts outstanding	
11	12	13	14	15	16	17	18	19	20	
-2.4 2.7 -3.0 3.3 3.4 -2.2 -2.4	89.5 87.6 82.6 86.0 90.7 90.4 87.5	20.9 14.7 12.1 31.7 17.1 14.6 23.8	8.0 24.8 11.5 7.7 31.3 16.9 10.6	12.9 -10.1 0.6 24.0 -14.2 -2.3 13.2	54.4 44.4 44.9 68.9 54.7 52.4 65.6	337.9 397.1 378.3 423.8 458.8 428.0 410.6	396.2 368.4 388.7 464.5 405.7	10.7 0.9 9.9 35.1 -5.7 22.3 -29.9	731.2 729.4 738.0 775.6 770.1 792.5 761.6	2002 June July Aug. Sep. Oct. Nov. Dec.
1.8 2.7 1.4 -2.4 2.6 -3.2	89.8 90.4 90.4 84.6 85.7 82.7	16.3 20.1 33.3 14.6 20.9 38.4	34.5 14.1 9.7 35.8 18.4 10.6	-18.2 6.0 23.6 -21.1 2.4 27.9	47.4 53.4 76.9 55.8 58.2 86.1	534.9 453.6 466.2 469.5 436.7 450.3	422.5 432.8	37.7 31.1 33.5 1.9 7.6 10.8	798.4 829.0 862.3 863.6 870.4 881.0	2003 Jan. Feb. Mar. Apr. May June

		By no	n-residents of t	he euro area in	euro 1)		Total i	n euro 1)		
currencies										
Net issues	Amounts outstanding	Issues	Redemptions	Net issues	Amounts outstanding	Issues	Redemptions	Net issues	Amounts outstanding	
11	12	13	14	15	16	17	18	19	20	
2.3 7.5 0.2 7.4 7.3	629.3 644.7 642.9 650.6 657.0	29.3 11.6 7.0 24.3 13.2		18.3 3.4 -1.2 12.9 0.1	960.4 963.9 962.7 975.6 975.8	152.7 127.9 66.8 146.5 119.1	98.6 112.9 63.2 86.7 94.8	54.1 15.0 3.6 59.7 24.3	7,625.4 7,643.9 7,647.0 7,706.0 7,730.5	2002 June July Aug. Sep. Oct.
7.6 -1.5	662.0 642.3	13.6 18.3	12.1 10.9	1.6 7.4	977.4 984.8	133.0 147.6	102.3 171.3	30.7 -23.7	7,761.2 7,736.3	Nov. Dec.
14.1 9.9 5.7 5.4 4.1 7.0	643.5 654.9 656.1 652.2 635.1 653.9	23.8 26.5 28.7 19.4 25.7 30.0	7.2 17.7 9.6 9.4 8.3 14.9	16.6 8.9 19.2 10.0 17.4 15.1	1,001.4 1,010.3 1,029.3 1,039.5 1,056.9 1,071.9	179.6 171.9 174.6 165.4 186.6 182.1	132.5 121.3 101.8 124.7 98.8 114.3	47.2 50.7 72.8 40.7 87.8 67.7	7,784.3 7,835.7 7,908.8 7,949.9 8,037.7 8,106.1	2003 Jan. Feb. Mar. Apr. May June

		By no	n-residents of th	ne euro area in	euro 1)	Total in euro 1)				
currencies										
Net issues	Amounts outstanding	Issues	Redemptions	Net issues	Amounts outstanding	Issues	Redemptions	Net issues	Amounts outstanding	
11	12	13	14	15	16	17	18	19	20	
-0.1	718.8	50.2	19.1	31.2	1,014.8	490.6	425.7	64.9	8,356.6	2002 June
10.2	732.4	26.4	33.0	-6.7	1,008.2	525.0	509.0	15.9	8,373.3	July
-2.7	725.5	19.1	19.7	-0.6	1,007.6	445.0	431.6	13.5	8,385.0	Aug.
10.7	736.6	56.0	19.1	37.0	1,044.6	570.3	475.4	94.8	8,481.6	Sep.
10.7	747.7	30.3	44.3	-14.1	1,030.5	577.9	559.3	18.6	8,500.6	Oct.
5.5	752.3	28.2	29.0	-0.8	1,029.7	561.0	508.1	53.0	8,553.7	Nov.
-3.9	729.7	42.1	21.5	20.6	1,050.4	558.1	611.8	-53.6	8,497.9	Dec.
15.8	733.3	40.1	41.7	-1.6	1,048.8	714.5	629.7	84.9	8,582.7	2003 Jan.
12.6	745.3	46.6	31.8	14.8	1,063.6	625.5	543.7	81.8	8,664.6	Feb.
7.2	746.4	62.0	19.2	42.7	1,106.3	640.8	534.6	106.2	8,771.1	Mar.
3.0	736.8	34.0	45.1	-11.1	1,095.3	634.9	592.2	42.6	8,813.5	Apr.
6.7	720.8	46.5	26.7	19.8	1,115.1	623.3	527.9	95.4	8,908.2	May
3.8	736.6	68.4	25.5	42.9	1,158.0	632.4	553.8	78.6	8,987.0	June

Euro-denominated securities other than shares by original maturity, residency and sector of the issuer 1)

(EUR billions; end of period; nominal values)

#### Amounts outstanding

#### 1. Short-term

			By euro are	a residents		By non-residents				
	Total	MFIs (including Eurosystem)	Non-monetary financial corporations	corporations	Central government	Other general government	Total 7	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations
2002 June	676.8	265.4	3.8	82.0	322.5	3.0	54.4	21.3	28.0	4.4
July	685.0	269.7	4.1	86.2	321.7	3.4	44.4	18.3	22.8	2.8
Aug.	693.1	269.9	4.3	86.7	328.8	3.3	44.9	18.1	23.9	2.6
Sep.	706.7	276.6	4.1	87.7	335.7	2.6	68.9	26.8	37.3	4.0
Oct.	715.3	284.0	4.2	88.5	335.6	3.0	54.7	20.9	28.1	3.5
Nov.	740.1	304.7	4.7	89.9	337.8	3.1	52.4	18.2	28.1	3.7
Dec.	696.0	281.4	4.3	85.3	321.8	3.2	65.6	20.5	37.9	4.6
2003 Jan.	751.0	313.3	4.5	92.6	337.9	2.6	47.4	18.1	26.4	2.4
Feb.	775.6	318.6	5.9	95.9	352.0	3.2	53.4	21.4	28.9	2.5
Mar.	785.3	314.6	6.3	98.4	362.8	3.2	76.9	27.6	44.6	3.3
Apr.	807.8	323.0	5.9	99.1	376.6	3.3	55.8	21.9	30.8	2.1
May	812.2	317.9	5.9	101.7	383.2	3.5	58.2	22.9	32.1	2.4
June	794.8	309.2	6.1	95.4	380.7	3.5	86.1	32.1	49.5	3.4

# 2. Long-term

			By euro are	a residents			By non-residents					
-	Total	MFIs (including Eurosystem)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	Total	(including central	Non-monetary financial corporations	corporations		
	1	2	3	4	5	6	7	banks) 8	9	10		
2002 June	6,665.0	2,402.0	406.0	372.5	3,334.1	150.3	960.4	246.0	380.9	111.0		
July	6,680.1	2,400.5	414.4	374.8	3,331.1	159.2	963.9	246.0	385.2	110.7		
Aug.	6,684.3	2,399.5	415.0	372.8	3,337.0	160.1	962.7	245.4	384.8	110.8		
Sep.	6,730.3	2,421.0	423.3	375.5	3,348.7	161.8	975.6	246.2	394.1	109.3		
Oct.	6,754.8	2,417.1	429.7	374.6	3,367.8	165.5	975.8	247.0	395.7	109.0		
Nov.	6,783.8	2,414.9	443.0	377.8	3,381.2	167.0	977.4	249.3	398.1	108.4		
Dec.	6,751.6	2,400.6	474.6	379.4	3,328.2	168.7	984.8	251.9	402.7	109.5		
2003 Jan.	6,782.9	2,396.2	476.3	385.8	3,351.9	172.7	1,001.4	258.0	411.9	111.0		
Feb.	6,825.4	2,407.3	485.0	390.0	3,365.0	178.1	1,010.3	264.6	413.9	112.3		
Mar.	6,879.5	2,417.1	497.0	398.5	3,385.7	181.1	1,029.3	274.6	417.6	112.2		
Apr.	6,910.4	2,424.7	512.8	406.7	3,381.9	184.3	1,039.5	279.5	424.9	112.3		
May	6,980.8	2,440.6	518.0	418.8	3,416.5	186.9	1,056.9	286.5	431.9	110.7		
June	7,034.2	2,451.5	532.3	426.6	3,432.8	191.0	1,071.9	290.0	437.4	113.0		

#### 3. Total

			By euro are	a residents			By non-residents				
	Total	(including Eurosystem)	Non-monetary financial corporations	corporations	Central government	government		Banks (including central banks)	financial corporations	corporations	
	1	2	3	4	5	6	7	8	9	10	
2002 June	7,341.8	2,667.3	409.9	454.5	3,656.7	153.4	1,014.8	267.3	408.8	115.4	
July	7,365.1	2,670.2	418.6		3,652.8	162.6	1,008.2	264.3	407.9	113.5	
Aug.	7,377.4	2,669.4	419.4	459.4	3,665.8	163.4	1,007.6	263.5	408.7	113.4	
Sep.	7,437.0	2,697.6	427.3	463.3	3,684.4	164.4	1,044.6	273.0	431.4	113.3	
Oct.	7,470.1	2,701.1	433.9	463.2	3,703.4	168.5	1,030.5	267.9	423.8	112.5	
Nov.	7,524.0	2,719.5	447.7	467.7	3,718.9	170.1	1,029.7	267.5	426.2	112.1	
Dec.	7,447.6	2,682.0	478.9	464.7	3,650.1	171.9	1,050.4	272.5	440.6	114.1	
2003 Jan.	7,533.9	2,709.5	480.8	478.5	3,689.8	175.3	1,048.8	276.1	438.3	113.4	
Feb.	7,601.0	2,725.9	490.9	485.9	3,717.0	181.4	1,063.6	286.0	442.8	114.8	
Mar.	7,664.8	2,731.7	503.3	497.0	3,748.5	184.3	1,106.3	302.3	462.2	115.5	
Apr.	7,718.2	2,747.7	518.6	505.8	3,758.5	187.5	1.095.3	301.5	455.7	114.4	
May	7,793.0	2,758.5	523.9	520.5	3,799.7	190.4	1,115.1	309.4	464.1	113.1	
June	7,829.0	2,760.7	538.4	522.0	3,813.5	194.5	1,158.0	322.0	486.9	116.4	

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

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

of the euro ar	rea				7	Γotal				
Central government		International organisations	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations		Other general government	International organisations	
11	12	13	14	15	16	17	18	19	20	
0.2	0.1	0.5	731.2	286.7	31.8	86.4	322.7	3.1	0.5	2002 June
0.2	0.0	0.2	729.4	288.0	26.9	89.0	321.8	3.4	0.2	July
0.1	0.0	0.1	738.0	288.0	28.2	89.3	329.0	3.4	0.1	Aug.
0.2	0.0	0.6	775.6	303.3	41.4	91.8	335.9	2.7	0.6	Sep.
0.1	0.2	1.8	770.1	304.9	32.4	92.1	335.7	3.2	1.8	Oct.
0.1	0.2	2.0	792.5	322.9	32.9	93.6	337.8	3.3	2.0	Nov.
0.0	0.2	2.4	761.6	302.0	42.2	89.8	321.9	3.4	2.4	Dec.
0.0	0.1	0.4	798.4	331.4	30.9	95.1	338.0	2.7	0.4	2003 Jan.
0.0	0.1	0.4	829.0	340.0	34.9	98.4	352.0	3.4	0.4	Feb.
0.0	0.2	1.2	862.3	342.2	50.9	101.7	362.8	3.4	1.2	Mar.
0.0	0.2	0.8	863.6	344.9	36.7	101.2	376.6	3.4	0.8	Apr.
0.0	0.2	0.7	870.4	340.8	38.0	104.0	383.2	3.7	0.7	May
0.0	0.2	1.0	881.0	341.3	55.5	98.8	380.7	3.7	1.0	June

of the euro ar	rea				7	otal				
Central	Other general		Total		Non-monetary			Other general		
government	government	organisations		(including		corporations	government	government	organisations	
				central banks)	corporations					
11	12	13	14	15	16	17	18	19	20	
93.2	14.6	114.7	7,625.4	2,648.0	786.9	483.5	3,427.3	165.0	114.7	2002 June
93.1	14.6	114.3	7,643.9	2,646.6	799.6	485.5	3,424.2	173.8	114.3	July
93.4	14.6	113.6	7,647.0	2,644.9	799.9	483.6	3,430.4	174.7	113.6	Aug.
94.1	14.7	117.3	7,706.0	2,667.3	817.4	484.8	3,442.8	176.5	117.3	Sep.
93.6	14.6	115.9	7,730.5	2,664.2	825.4	483.6	3,461.4	180.1	115.9	Oct.
93.1	14.6	113.8	7,761.2	2,664.2	841.0	486.2	3,474.3	181.6	113.8	Nov.
92.7	14.3	113.6	7,736.3	2,652.5	877.4	488.9	3,420.9	183.0	113.6	Dec.
92.2	14.0	114.4	7,784.3	2,654.3	888.2	496.8	3,444.0	186.7	114.4	2003 Jan.
92.7	14.9	111.8	7,835.7	2,671.9	898.9	502.3	3,457.8	193.0	111.8	Feb.
92.7	15.4	116.9	7,908.8	2,691.7	914.6	510.7	3,478.4	196.5	116.9	Mar.
90.7	15.3	116.8	7,949.9	2,704.2	937.6	519.1	3,472.7	199.6	116.8	Apr.
95.3	16.1	116.3	8,037.7	2,727.1	950.0	529.6	3,511.9	203.0	116.3	May
94.5	16.2	120.8	8,106.1	2,741.5	969.7	539.6	3,527.4	207.2	120.8	June

of the euro ar	rea				1	otal				
Central government	Other general government	International organisations	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations		Other general government	International organisations	
11	12	13	14	15	16	17	18	19	20	
93.4	14.7	115.2	8,356.6	2,934.7	818.7	569.9	3,750.0	168.1	115.2	2002 June
93.3	14.7	114.5	8,373.3	2,934.5	826.5	574.5	3,746.1	177.3	114.5	July
93.5	14.7	113.7	8,385.0	2,932.9	828.1	572.9	3,759.4	178.1	113.7	Aug.
94.3	14.7	117.9	8,481.6	2,970.6	858.8	576.6	3,778.7	179.1	117.9	Sep.
93.7	14.8	117.7	8,500.6	2,969.1	857.7	575.7	3,797.2	183.2	117.7	Oct.
93.2	14.8	115.9	8,553.7	2,987.1	873.9	579.8	3,812.1	184.9	115.9	Nov.
92.7	14.5	116.0	8,497.9	2,954.5	919.6	578.8	3,742.8	186.3	116.0	Dec.
92.2 92.8	14.1 15.0	114.8 112.2	8,582.7 8,664.6	2,985.6 3,011.9	919.0 933.8	591.8 600.7	3,782.0 3,809.8	189.4 196.4	114.8 112.2	2003 Jan. Feb.
92.7	15.5	118.1	8,771.1	3,034.0	965.5	612.5	3,841.2	199.8	118.1	Mar.
90.7	15.5	117.5	8,813.5	3,049.1	974.3	620.2	3,849.2	203.0	117.5	Apr.
95.4	16.3	117.0	8,908.2	3,067.9	988.0	633.6	3,895.1	206.6	117.0	May
94.5	16.4	121.8	8,987.0	3,082.7	1,025.3	638.4	3,908.0	210.9	121.8	June

# Table 3.6 (cont'd)

Euro-denominated securities other than shares by original maturity, residency and sector of the issuer 1)

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

#### **Gross issues**

# 1. Short-term

			By euro are	a residents			By non-residents				
	Total	MFIs (including Eurosystem)	Non-monetary financial corporations	corporations	Central government	Other general government	Total	Banks (including central banks) 8	Non-monetary financial corporations	corporations	
	1		) 3	4	3	6	/	8	9	10_	
2002 June	317.0	208.1	2.5	51.7	52.5	2.2	20.9	6.3	12.6	1.8	
July	382.4	260.2	1.8	65.6	52.6	2.2	14.7	5.9	8.2	0.6	
Aug.	366.2	257.8	1.8	50.9	53.9	1.8	12.1	4.5	6.8	0.6	
Sep.	392.1	278.4	1.9	56.8	53.0	2.0	31.7	11.1	18.0	2.0	
Oct.	441.8	319.4	2.2	64.7	53.1	2.3	17.1	5.0	9.0	1.3	
Nov.	413.5	302.9	2.4	58.2	47.7	2.3	14.6	4.7	8.4	1.2	
Dec.	386.8	291.3	2.2	46.4	44.3	2.6	23.8	6.3	15.6	1.3	
2003 Jan.	518.6	375.7	2.1	66.0	72.9	1.9	16.3	6.3	9.4	0.3	
Feb.	433.5	308.0	2.2	56.7	64.4	2.1	20.1	7.2	11.6	1.0	
Mar.	433.0	301.5	2.3	62.9	63.7	2.6	33.3	10.2	20.7	1.4	
Apr.	454.8	308.5	1.8	70.9	71.7	1.9	14.6	5.1	9.1	0.2	
May	415.8	284.7	2.0	66.6	60.4	2.1	20.9	7.5	12.2	1.1	
June	411.9	283.8	2.7	63.6	59.7	2.1	38.4	12.7	23.4	1.6	

# 2. Long-term

			By euro are	a residents			By non-residents				
•	Total	MFIs (including Eurosystem)	Non-monetary financial corporations		Central government			Banks (including central banks)	Non-monetary financial corporations	corporations	
	1	2	] 3	4	5	6	7	- 8	9	10	
2002 June	123.4	48.2	13.6	7.4	51.3	2.9	29.3	9.9	17.7	0.7	
July	116.2	37.9	14.6	6.1	48.2	9.4	11.6	2.9	6.9	0.4	
Aug.	59.8	28.1	3.1	2.1	25.2	1.3	7.0	3.1	2.7	0.3	
Sep.	122.1	52.3	12.3	4.5	50.4	2.6	24.3	5.2	12.6	0.2	
Oct.	105.9	39.0	9.5	0.9	52.1	4.4	13.2	4.6	6.7	0.3	
Nov.	119.4	48.1	16.2	3.5	48.0	3.6	13.6	5.6	6.6	0.8	
Dec.	129.3	45.6	37.7	7.9	34.4	3.7	18.3	6.1	8.8	2.2	
2003 Jan.	155.9	58.3	6.1	8.9	76.3	6.3	23.8	7.9	12.4	1.7	
Feb.	145.4	55.7	12.9	8.6	61.9	6.3	26.5	10.9	6.7	3.5	
Mar.	145.8	53.8	14.8	10.4	63.1	3.7	28.7	13.2	8.2	0.6	
Apr.	146.0	50.3	19.3	11.0	61.7	3.7	19.4	8.6	8.9	1.0	
May	160.9	54.0	9.4	16.2	78.0	3.3	25.7	9.8	9.2	0.3	
June	152.1	54.2	18.2	12.7	61.4	5.5	30.0	9.3	10.4	2.9	

#### 3. Total

			By euro are	a residents			By non-residents				
	Total	MFIs (including Eurosystem)	Non-monetary financial corporations		Central government		Total	Banks (including central banks)		corporations	
	1	2	3	4	5	6	7	8	9	10	
2002 June	440.3	256.2	16.1	59.1	103.8	5.2	50.2	16.3	30.3	2.5	
July	498.6	298.1	16.4	71.7	100.8	11.6	26.4	8.8	15.1	1.0	
Aug.	426.0	285.9	4.9	53.1	79.0	3.2	19.1	7.7	9.5	0.9	
Sep.	514.2	330.7	14.2	61.3	103.5	4.6	56.0	16.3	30.7	2.1	
Oct.	547.7	358.5	11.7	65.6	105.2	6.7	30.3	9.6	15.8	1.6	
Nov.	532.8	351.0	18.7	61.6	95.7	5.8	28.2	10.3	15.0	2.0	
Dec.	516.0	336.8	39.9	54.3	78.7	6.4	42.1	12.4	24.4	3.5	
2003 Jan.	674.5	434.0	8.2	74.9	149.2	8.2	40.1	14.2	21.8	2.1	
Feb.	578.9	363.7	15.1	65.3	126.3	8.4	46.6	18.1	18.4	4.5	
Mar.	578.8	355.3	17.2	73.4	126.7	6.3	62.0	23.5	28.9	2.0	
Apr.	600.8	358.8	21.1	82.0	133.4	5.6	34.0	13.7	18.0	1.2	
May	576.7	338.8	11.4	82.7	138.4	5.4	46.5	17.3	21.4	1.4	
June	564.0	338.0	20.9	76.3	121.2	7.6	68.4	22.0	33.8	4.5	

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

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

of the euro ar	rea				7	Total				
Central government	Other general government	International organisations	Total	Banks (including central banks)		Non-financial corporations		Other general government		
11	12	13	14	15	16	17	18	19	20	
0.0	0.0	0.1	337.9	214.4	15.1	53.5	52.5	2.2	0.1	2002 June
0.0	0.0	0.0	397.1	266.1	10.0	66.2	52.6	2.2	0.0	July
0.0	0.0	0.1	378.3	262.3	8.6	51.5	53.9	1.8	0.1	Aug.
0.1	0.0	0.5	423.8	289.5	19.9	58.7	53.1	2.0	0.5	Sep.
0.0	0.1	1.6	458.8	324.5	11.2	66.0	53.1	2.5	1.6	Oct.
0.0	0.0	0.2	428.0	307.6	10.8	59.4	47.7	2.3	0.2	Nov.
0.0	0.0	0.5	410.6	297.5	17.8	47.7	44.3	2.7	0.5	Dec.
0.0	0.1	0.1	534.9	382.0	11.5	66.4	72.9	2.0	0.1	2003 Jan.
0.0	0.0	0.2	453.6	315.3	13.9	57.6	64.4	2.1	0.2	Feb.
0.0	0.0	0.9	466.2	311.7	23.0	64.3	63.7	2.6	0.9	Mar.
0.0	0.1	0.2	469.5	313.6	10.9	71.1	71.7	2.0	0.2	Apr.
0.0	0.0	0.1	436.7	292.2	14.2	67.7	60.4	2.1	0.1	May
0.0	0.1	0.7	450.3	296.4	26.1	65.2	59.8	2.2	0.7	June

of the euro a	rea									
Central government		International organisations		Banks (including central banks)	corporations	Non-financial corporations	Central government	Other general government	International organisations	
11	12	13	14	15	16	17	18	19	20	
0.1	0.1	0.7	152.7	58.1	31.4	8.1	51.4	3.0	0.7	2002 June
0.9	0.1	0.3	127.9	40.8	21.5	6.5	49.1	9.5	0.3	July
0.3	0.1	0.5	66.8	31.2	5.8	2.4	25.5	1.4	0.5	Aug.
0.7	0.2	5.5	146.5	57.5	24.9	4.7	51.1	2.7	5.5	Sep.
0.2	0.0	1.3	119.1	43.7	16.2	1.2	52.2	4.4	1.3	Oct.
0.0	0.0	0.5	133.0	53.7	22.9	4.3	48.0	3.6	0.5	Nov.
0.4	0.0	0.8	147.6	51.6	46.5	10.0	34.8	3.7	0.8	Dec.
0.5	0.0	1.3	179.6	66.2	18.5	10.6	76.8	6.3	1.3	2003 Jan.
3.3	1.0	1.1	171.9	66.6	19.6	12.1	65.2	7.4	1.1	Feb.
0.4	0.6	5.7	174.6	67.0	23.1	11.0	63.5	4.3	5.7	Mar.
0.1	0.0	0.8	165.4	59.0	28.2	12.0	61.8	3.7	0.8	Apr.
5.1	0.8	0.5	186.6	63.8	18.6	16.5	83.2	4.0	0.5	May
1.5	0.1	5.7	182.1	63.5	28.6	15.6	62.9	5.6	5.7	June

of the euro a	rea		Total							
Central government	Other general government		Total	Banks (including central banks)	Non-monetary financial corporations			Other general government		
11	12	13	14	15	16	17	18	19	20	
0.2	0.1	0.9	490.6	272.5	46.4	61.6	103.9	5.3	0.9	2002 June
1.0	0.1	0.4	525.0	306.9	31.5	72.8	101.8	11.7	0.4	July
0.3	0.1	0.6	445.0	293.5	14.4	54.0	79.4	3.3	0.6	Aug.
0.8	0.2	6.0	570.3	347.0	44.8	63.4	104.2	4.8	6.0	Sep.
0.2	0.1	2.9	577.9	368.1	27.4	67.2	105.3	6.9	2.9	Oct.
0.0	0.0	0.7	561.0	361.4	33.7	63.7	95.7	5.9	0.7	Nov.
0.4	0.0	1.3	558.1	349.2	64.3	57.8	79.1	6.4	1.3	Dec.
0.5	0.1	1.4	714.5	448.2	30.0	77.0	149.7	8.3	1.4	2003 Jan.
3.3	1.0	1.3	625.5	381.8	33.5	69.8	129.7	9.5	1.3	Feb.
0.4	0.6	6.6	640.8	378.7	46.1	75.3	127.2	6.9	6.6	Mar.
0.1	0.1	0.9	634.9	372.6	39.1	83.1	133.5	5.7	0.9	Apr.
5.2	0.8	0.6	623.3	356.0	32.8	84.1	143.6	6.2	0.6	May
1.5	0.2	6.4	632.4	360.0	54.7	80.8	122.7	7.8	6.4	June

### Table 3.6 (cont'd)

Euro-denominated securities other than shares by original maturity, residency and sector of the issuer 1)

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

#### Net issues

#### 1. Short-term

			By euro are	a residents				F	By non-residents	
	Total	MFIs (including Eurosystem)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	Total 7	Banks (including central banks)		corporations
2002 June	-2.1	-2.5	0.1	-8.1	8.3	0.0	12.9	3.0	8.8	1.0
July	11.0	7.1	0.3	4.1	-0.9	0.3	-10.1	-3.0	-5.2	-1.6
Aug.	9.3	1.5	0.2	0.5	7.2	0.0	0.6	-0.2	1.1	-0.2
Sep.	11.0	4.1	-0.3	1.1	6.9	-0.7	24.0	8.6	13.5	1.4
Oct.	8.5	7.5	0.2	0.8	-0.3	0.3	-14.2	-5.8	-9.1	-0.5
Nov.	24.6	20.5	0.5	1.4	2.2	0.1	-2.3	-2.7	0.0	0.2
Dec.	-43.1	-22.2	-0.4	-4.7	-15.9	0.1	13.2	2.3	9.8	0.9
2003 Jan.	55.9	32.8	0.3	7.4	16.1	-0.6	-18.2	-2.5	-11.6	-2.1
Feb.	25.2	5.8	1.4	3.3	14.0	0.6	6.0	3.4	2.6	0.0
Mar.	9.9	-3.8	0.3	2.5	10.9	0.0	23.6	6.2	15.7	0.8
Apr.	23.1	9.1	-0.4	0.6	13.7	0.1	-21.1	-5.7	-13.8	-1.2
May	5.1	-4.4	0.0	2.6	6.6	0.3	2.4	0.9	1.3	0.3
June	-17.1	-8.4	0.2	-6.3	-2.5	0.0	27.9	9.2	17.3	1.1

#### 2. Long-term

			By euro are	a residents				Е	By non-residents	
	Total	MFIs (including Eurosystem)	Non-monetary financial corporations	corporations	Central government		Total	Banks (including central	Non-monetary financial corporations	Non-financial corporations
	1	2	3	4	5	6	7	banks) 8	9	10
2002 June	35.8	13.8	4.4	3.5	11.7	2.5	18.3	7.4	13.5	-0.6
July	11.6	-5.0	8.4	2.3	-3.0	8.9	3.4	0.0	4.3	-0.3
Aug.	4.7	-0.8	0.6	-1.9	5.9	0.9	-1.2	-0.6	-0.3	0.1
Sep.	46.8	22.4	8.2	2.8	11.7	1.7	12.9	0.8	9.3	-1.5
Oct.	24.2	-4.4	6.4	-0.8	19.3	3.7	0.1	0.8	1.5	-0.3
Nov.	29.1	0.4	13.2	0.7	13.3	1.5	1.6	2.3	2.4	-0.6
Dec.	-31.2	-14.4	31.8	2.6	-52.9	1.7	7.4	2.6	4.7	1.1
2003 Jan.	30.6	-5.1	1.6	6.4	23.6	4.0	16.6	6.1	9.2	1.4
Feb.	41.8	10.4	8.7	4.1	13.2	5.4	8.9	6.5	2.0	1.4
Mar.	53.6	9.4	12.1	8.6	20.5	2.9	19.2	10.1	3.7	-0.1
Apr.	30.7	7.3	15.7	8.2	-3.8	3.2	10.0	4.8	7.2	0.1
May	70.4	15.9	5.3	12.1	34.6	2.6	17.4	7.0	7.1	-1.6
June	52.7	10.2	14.3	7.8	16.3	4.1	15.1	3.4	5.6	2.3

#### 3. Total

			By euro are	a residents			F	By non-residents		
	Total	MFIs (including Eurosystem)	Non-monetary financial corporations	corporations	Central government	Other general government	Total	Banks (including central banks)	Non-monetary financial corporations	corporations
	1	2	3	4	5	6	7	8	9	10
2002 June	33.7	11.3	4.5	-4.6	20.0	2.5	31.2	10.4	22.4	0.4
July	22.6	2.2	8.7	6.4	-3.9	9.2	-6.7	-3.0	-1.0	-1.9
Aug.	14.1	0.8	0.8	-1.4	13.0	0.8	-0.6	-0.8	0.8	-0.1
Sep.	57.8	26.4	8.0	3.8	18.6	1.0	37.0	9.4	22.7	-0.1
Oct.	32.7	3.1	6.5	0.0	19.1	4.0	-14.1	-5.0	-7.6	-0.8
Nov.	53.7	20.8	13.7	2.0	15.5	1.6	-0.8	-0.4	2.4	-0.4
Dec.	-74.3	-36.6	31.4	-2.0	-68.9	1.8	20.6	4.9	14.4	2.0
2003 Jan.	86.5	27.7	1.9	13.8	39.7	3.4	-1.6	3.6	-2.4	-0.7
Feb.	67.0	16.2	10.1	7.4	27.2	6.0	14.8	9.9	4.6	1.4
Mar.	63.5	5.6	12.4	11.1	31.4	2.9	42.7	16.3	19.4	0.7
Apr.	53.8	16.4	15.3	8.8	9.9	3.3	-11.1	-0.9	-6.6	-1.1
May	75.6	11.5	5.3	14.7	41.2	2.8	19.8	8.0	8.4	-1.3
June	35.6	1.8	14.4	1.5	13.8	4.1	42.9	12.6	22.9	3.3

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

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

of the euro ar	rea			Total								
Central government	Other general government		Total	Banks (including central banks)	financial corporations	Non-financial corporations	Central government	Other general government	International organisations			
11	12	13	14	15	16	17	18	19	20			
0.0	0.0	0.1	10.7	0.5	8.9	-7.1	8.3	0.0	0.1	2002 June		
0.0	0.0	-0.2	0.9	4.2	-4.9	2.5	-0.9	0.3	-0.2	July		
0.0	0.0	-0.1	9.9	1.3	1.3	0.3	7.1	0.0	-0.1	Aug.		
0.1	0.0	0.5	35.1	12.7	13.2	2.5	6.9	-0.7	0.5	Sep.		
-0.1	0.1	1.2	-5.7	1.7	-9.0	0.3	-0.3	0.5	1.2	Oct.		
0.0	0.0	0.2	22.3	17.8	0.5	1.5	2.1	0.1	0.2	Nov.		
-0.1	0.0	0.3	-29.9	-20.0	9.4	-3.8	-16.0	0.1	0.3	Dec.		
0.0	-0.1	-2.0	37.7	30.3	-11.3	5.2	16.1	-0.7	-2.0	2003 Jan.		
0.0	0.0	0.0	31.1	9.1	4.0	3.3	14.0	0.7	0.0	Feb.		
0.0	0.0	0.8	33.5	2.4	16.0	3.3	10.8	0.0	0.8	Mar.		
0.0	0.0	-0.4	1.9	3.4	-14.2	-0.6	13.7	0.1	-0.4	Apr.		
0.0	0.0	-0.1	7.6	-3.4	1.3	2.9	6.7	0.3	-0.1	May		
0.0	0.1	0.3	10.8	0.8	17.5	-5.2	-2.5	0.0	0.3	June		

of the euro ar	rea			Total							
Central government	Other general government		Total	Banks (including central banks)	financial corporations	Non-financial corporations	Central government	Other general government	International organisations		
11	12	13	14	15	16	17	18	19	20		
-1.9	0.0	-0.3	54.1	21.2	17.9	3.0	9.8	2.5	-0.3	2002 June	
-0.1	0.0	-0.5	15.0	-5.0	12.7	2.0	-3.1	8.9	-0.5	July	
0.3	0.0	-0.7	3.6	-1.4	0.3	-1.7	6.2	0.9	-0.7	Aug.	
0.7	0.0	3.7	59.7	23.2	17.5	1.3	12.4	1.7	3.7	Sep.	
-0.5	-0.1	-1.4	24.3	-3.7	7.9	-1.1	18.8	3.6	-1.4	Oct.	
-0.5	0.0	-2.0	30.7	2.6	15.6	0.1	12.9	1.5	-2.0	Nov.	
-0.4	-0.3	-0.3	-23.7	-11.7	36.5	3.7	-53.4	1.4	-0.3	Dec.	
-0.5	-0.3	0.7	47.2	1.0	10.8	7.8	23.1	3.7	0.7	2003 Jan.	
0.6	0.9	-2.6	50.7	16.9	10.7	5.5	13.7	6.3	-2.6	Feb.	
-0.1	0.5	5.1	72.8	19.5	15.8	8.5	20.5	3.4	5.1	Mar.	
-1.9	-0.1	-0.1	40.7	12.1	22.9	8.3	-5.7	3.1	-0.1	Apr.	
4.6	0.8	-0.5	87.8	22.9	12.3	10.5	39.2	3.3	-0.5	May	
-0.8	0.1	4.5	67.7	13.7	19.8	10.0	15.5	4.2	4.5	June	

of the euro ar	rea			Total								
Central government	Other general government	International organisations	Total	Banks (including central banks)	financial corporations	Non-financial corporations	Central government	Other general government	International organisations			
11	12	13	14	15	16	17	18	19	20			
-1.8	0.0	-0.3	64.9	21.7	26.9	-4.2	18.2	2.6	-0.3	2002 June		
-0.1	0.0	-0.7	15.9	-0.8	7.7	4.5	-4.0	9.2	-0.7	July		
0.3	0.0	-0.8	13.5	0.0	1.6	-1.4	13.3	0.8	-0.8	Aug.		
0.8	0.0	4.2	94.8	35.9	30.7	3.7	19.3	1.0	4.2	Sep.		
-0.6	0.1	-0.2	18.6	-2.0	-1.1	-0.8	18.5	4.1	-0.2	Oct.		
-0.5	0.0	-1.8	53.0	20.4	16.1	1.6	15.0	1.6	-1.8	Nov.		
-0.5	-0.3	0.1	-53.6	-31.7	45.9	0.0	-69.4	1.5	0.1	Dec.		
-0.5	-0.4	-1.2	84.9	31.3	-0.5	13.1	39.2	3.1	-1.2	2003 Jan.		
0.6	0.9	-2.6	81.8	26.1	14.7	8.8	27.8	7.0	-2.6	Feb.		
-0.1	0.5	5.9	106.2	22.0	31.8	11.9	31.3	3.4	5.9	Mar.		
-1.9	-0.1	-0.6	42.6	15.5	8.7	7.7	8.0	3.2	-0.6	Apr.		
4.6	0.8	-0.6	95.4	19.5	13.7	13.3	45.9	3.6	-0.6	May		
-0.8	0.1	4.8	78.6	14.5	37.3	4.8	13.0	4.2	4.8	June		

#### Table 3.7

#### Annual growth rates of securities other than shares issued by euro area residents 1)

(percentage changes)

#### 1. Short-term

			In	all currencies combin	ned		
	Total	MFIs (including		Non-monetary financial	Non-financial corporations	Central government	Other general government
	1	Index Dec.01= 100 2	Eurosystem)	corporations 4	5	6	7_
2002 June	4.5	109.4	0.4	-25.1	-15.2	16.7	50.8
July	5.3	111.3	3.8	-16.4	-14.0	14.6	-3.1
Aug.	5.4	112.3	4.8	0.6	-18.0	15.2	-1.3
Sep.	7.8	114.3	8.9	0.8	-17.0	16.3	-19.4
Oct.	8.9	116.0	10.5	14.9	-18.5	17.9	-0.9
Nov.	12.3	119.3	18.6	23.3	-14.6	15.6	-5.3
Dec.	12.7	112.7	14.7	30.4	-10.4	19.3	-14.3
2003 Jan.	15.2	121.0	17.6	28.9	-7.2	21.1	-15.2
Feb.	19.3	125.1	22.4	60.3	-1.6	23.0	0.6
Mar.	18.0	126.7	19.4	53.1	2.1	21.4	5.7
Apr.	21.3	129.7	20.9	36.8	7.5	26.1	18.1
May	18.9	130.8	17.4	65.5	12.5	21.7	22.5
June	16.9	127.9	15.5	61.5	16.9	17.7	18.7

#### 2. Long-term

			In a	Il currencies combine	d		
	Total		MFIs (including	Non-monetary financial	Non-financial corporations	Central government	Other general government
	1	Index Dec.01= 100 2	Eurosystem)	corporations 4	5	6	7_
2002 June	7.6	104.3	7.8	30.4	13.1	3.1	31.4
July	7.1	104.6	6.8	27.8	11.8	3.1	36.3
Aug.	6.9	104.7	6.5	27.3	9.0	3.3	34.0
Sep.	7.4	105.4	7.1	28.1	11.8	3.6	30.9
Oct.	7.3	105.9	6.3	27.3	12.5	3.9	29.7
Nov.	7.0	106.4	5.8	27.5	8.0	4.3	29.0
Dec.	6.0	106.0	5.0	25.6	6.9	2.9	29.4
2003 Jan.	5.7	106.6	4.7	24.5	7.3	2.7	29.9
Feb.	5.9	107.3	4.4	25.6	7.7	3.0	34.6
Mar.	5.8	108.2	3.8	26.7	9.4	3.0	32.4
Apr.	5.6	108.7	3.8	26.7	10.1	2.4	30.9
May	5.8	109.8	3.6	24.2	11.8	3.1	27.8
June	6.0	110.6	3.7	25.8	12.3	3.2	28.6

#### 3. Total

			In a	Il currencies combine	d		
	Total	Index Dec.01= 100	MFIs (including Eurosystem)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government
	1	2	3	4	5	6	7
2002 June	7.3	104.8	6.9	29.6	7.3	4.2	31.7
July	6.9	105.2	6.4	27.3	6.4	4.1	35.1
Aug.	6.7	105.4	6.3	27.0	3.2	4.3	32.9
Sep.	7.4	106.2	7.3	27.8	5.6	4.6	29.4
Oct.	7.4	106.8	6.8	27.2	5.5	5.0	28.9
Nov.	7.5	107.6	7.2	27.5	3.2	5.2	28.1
Dec.	6.6	106.6	6.0	25.7	3.5	4.1	28.0
2003 Jan.	6.6	107.9	6.2	24.6	4.4	4.1	28.7
Feb.	7.2	108.9	6.4	25.9	5.9	4.6	33.7
Mar.	7.0	109.9	5.5	26.9	8.0	4.5	31.7
Apr.	7.1	110.6	5.7	26.8	9.6	4.3	30.6
May	7.0	111.7	5.1	24.5	11.9	4.7	27.7
June	7.1	112.2	5.0	26.0	13.0	4.5	28.4

<sup>1)</sup> For the calculation of the index and the growth rates, see the technical notes.
2) Including items expressed in the national denomination of the euro.

				In euro 2)			
	Other general government	Central government	Non-financial corporations	Non-monetary financial corporations	MFIs (including Eurosystem)	Index Dec.01= 100	Total
	14	13	12	11	10	9	8
2002 June July Aug. Sep. Oct. Nov. Dec.	51.6 -7.0 -7.0 -28.9 -11.8 -14.0	16.5 14.5 15.0 16.7 18.1 15.9 20.3	-16.6 -15.6 -19.4 -18.1 -20.3 -15.9 -11.4	-27.1 -18.5 -1.8 -1.8 12.1 20.6 27.3	-0.8 3.6 6.1 9.0 8.1 20.4 16.6	110.1 111.9 113.5 115.3 116.6 120.7 113.6	4.2 5.1 5.7 7.7 7.6 12.3 13.6
2003 Jan. Feb. Mar. Apr. May June	-27.0 -9.0 -2.7 8.9 17.6 14.4	21.1 22.7 21.3 26.0 21.9 18.0	-8.1 -2.7 0.9 6.5 12.6 16.1	26.0 57.4 50.3 34.1 62.2 62.7	20.5 25.7 21.5 26.1 20.9 18.8	122.8 126.9 128.5 132.3 133.1 130.3	16.1 20.1 18.5 23.3 20.5 18.3
				In euro 2)			
	Other general government	Central government	Non-financial corporations	Non-monetary financial corporations	MFIs (including Eurosystem)	Index Dec.01= 100	Total
	14	13	12	11	10	9	8
2002 June July Aug, Sep. Oct. Nov. Dec. 2003 Jan.	32.3 37.6 34.9 31.8 29.4 28.8 29.0	3.2 3.1 3.3 3.4 3.9 4.3 2.8	16.0 15.9 13.0 14.4 15.0 9.5 8.4 8.5	39.3 34.3 33.2 34.0 31.4 32.0 30.0 28.9	5.7 4.5 4.4 5.1 4.3 4.2 3.5	104.1 104.3 104.3 105.1 105.4 105.9 105.4	7.0 6.5 6.3 6.7 6.5 6.5 5.4
Feb. Mar. Apr. May June	33.8 31.5 29.5 26.4 27.0	2.7 2.8 2.3 2.8 3.0	8.6 10.9 11.5 13.2 14.2	29.6 30.6 31.3 29.0 31.1	2.7 2.1 2.0 2.1 1.9	106.5 107.4 107.9 109.0 109.8	5.2 5.2 5.0 5.3 5.5
				In euro 2)			
	Other general government	Central government	Non-financial corporations	Non-monetary financial corporations	MFIs (including Eurosystem)	Index Dec.01= 100	Total
2002 1	14	13	12	11	10	9	8
2002 June July Aug. Sep. Oct. Nov. Dec.	32.7 36.2 33.7 30.0 28.4 27.6 27.4	4.2 4.1 4.2 4.5 5.0 5.3 4.1	8.4 8.4 5.0 6.4 6.1 3.5 4.1	38.1 33.4 32.7 33.5 31.2 31.9 29.9	5.0 4.4 4.6 5.5 4.7 5.8 4.7	104.6 104.9 105.1 105.9 106.4 107.2 106.1	6.7 6.3 6.2 6.8 6.6 7.1 6.1
2003 Jan. Feb. Mar. Apr. May June	27.7 32.7 30.7 29.0 26.2 26.8	4.0 4.3 4.3 4.3 4.5 4.3	4.8 6.2 8.8 10.5 13.1 14.5	28.9 29.9 30.8 31.4 29.3 31.4	4.9 4.9 4.0 4.3 4.0 3.6	107.4 108.3 109.2 110.0 111.1 111.6	6.1 6.6 6.4 6.7 6.7

#### Table 3.8

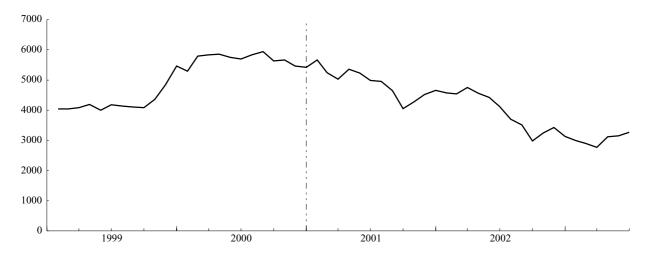
#### Quoted shares issued by euro area residents

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

#### Amounts outstanding

	Total	MFIs	Non-monetary financial corporations	Non-financial corporations
	1	2	3	4
000 June	5,698.3	680.6	645.7	4,372.0
July	5,829.8	700.3	696.3	4,433.3
Aug.	5,943.4	742.1	700.4	4,500.9
Sep.	5,633.3	730.3	687.7	4,215.4
Oct.	5,662.3	718.9	664.4	4,279.0
Nov.	5,461.1	674.4	673.5	4,113.1
Dec.	5,425.7	687.0	675.0	4,063.7
	,	o area enlargement —		
001 Jan.	5,662.5	762.2	706.3	4,194.0
Feb.	5,243.9	710.1	661.6	3,872.2
Mar.	5,024.4	686.3	620.4	3,717.7
Apr.	5,360.0	715.3	643.4	4,001.2
May	5,229.2	697.9	627.0	3,904.4
June	4,988.2	676.5	635.1	3,676.6
July	4,954.3	647.0	572.4	3,735.0
Aug.	4,642.9	643.2	576.6	3,423.1
Sep.	4,052.8	535.7	485.4	3,031.7
Oct.	4,272.8	551.5	497.8	3,223.5
Nov.	4,518.4	587.5	512.1	3,418.8
Dec.	4,656.1	617.3	511.1	3,527.7
002 Jan.	4.569.7	623.8	518.8	3,427.1
Feb.	4,540.1	622.4	509.8	3,407.9
Mar.	4,747.9	665.3	536.6	3,546.0
Apr.	4,564.4	678.0	517.5	3,368.8
May	4,426.7	666.3	484.9	3,368.8 3,275.6
June	4,112.6	614.8	463.4	3,034.4
July	3,705.2	515.6	395.4	2,794.1
Aug.	3,514.6	521.7	371.0	2,621.9
Sep.	2,977.1	412.6	276.0	2,288.5
Oct.	3,246.4	446.9	321.2	2,478.3
Nov.	3,429.9	487.3	346.0	2,596.6
Dec.	3,129.4	450.7	283.6	2,395.1
003 Jan.	2,989.4	425.8	261.1	2,302.5
Feb.	2,896.0	425.2	270.8	2,199.9
Mar.	2,771.3	413.0	236.2	2,122.2
Apr.	3,122.9	471.4	291.8	2,359.8
May	3,156.1	476.6	291.4	2,388.0
June	3,271.0	506.5	300.7	2,463.9

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



### 4 HICP and other prices in the euro area

#### Table 4.1

#### **Harmonised Index of Consumer Prices**

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

#### 1. Total index and goods and services

	Tot	tal	Go	ods	Ser	vices	Tota	1 (s.a.)	Goods (s.a.)	Services (s.a.)
	Index 1996 = 100		Index 1996 = 100		Index 1996 = 100		Index 1996 = 100	% change on previous period	Index 1996 = 100	Index 1996 = 100
Weight in the total (%) 1)	100.0	100.0	59.1	59.1	40.9	40.9	100.0	100.0	59.1	40.9
	1	2	3	4	5	6	7	8	9	10
1999 2000	103.8 106.0	1.1 2.1	102.7 105.3	0.9 2.5	106.0 107.5	1.5 1.5	-	-	-	-
				— Euro	area enlarg	ement –				
2001 2002	108.5 110.9	2.3 2.3	107.7 109.5	2.3 1.7	110.2 113.6	2.5 3.1	-	-	-	-
2002 Q3 Q4	111.1 111.7	2.1 2.3	109.2 110.1	1.3 1.8	114.5 114.5	3.3 3.1	111.2 111.8	0.4 0.5	109.6 110.0	
2003 Q1 Q2	112.5 113.2	2.3 2.0	110.8 111.6	2.0 1.5	115.3 116.1	2.7 2.6	112.6 112.9	0.8 0.2	111.1 111.0	115.4 116.1
2002 Sep. Oct. Nov. Dec.	111.3 111.6 111.5 112.0	2.1 2.3 2.3 2.3	109.7 110.1 110.0 110.2	1.4 1.8 1.8 1.9	114.2 114.2 114.2 115.2	3.2 3.1 3.1 3.0	111.5 111.7 111.7 111.9	0.3 0.2 0.0 0.2	109.9 110.1 109.9 110.1	114.3 114.6 114.8 115.1
2003 Jan. Feb. Mar. Apr. May June July	111.9 112.4 113.1 113.2 113.2 113.3 113.1	2.1 2.4 2.4 2.1 1.9 2.0 1.9	110.2 110.7 111.7 111.7 111.6 111.5 110.7	1.6 2.1 2.2 1.5 1.4 1.6	115.0 115.4 115.6 116.0 116.0 116.4 117.2	2.8 2.7 2.6 2.9 2.5 2.5 2.4	112.3 112.6 113.0 112.8 112.8 113.0 113.1	0.4 0.3 0.3 -0.1 0.0 0.2 0.1	110.7 111.1 111.5 111.1 110.9 111.1 111.2	115.2 115.4 115.6 115.9 116.1 116.4 116.5
Aug. 2)		2.1						·		ė

#### 2. Breakdown of goods and services

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

Sources: Eurostat and ECB calculations.

<sup>1)</sup> Referring to the index period 2003.

<sup>2)</sup> 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.

<sup>3)</sup> Including alcoholic beverages and tobacco.

#### Table 4.2

#### **Selected other price indicators**

#### 1. Industry and commodity prices

(annual percentage changes, unless otherwise indicated)

					Indu	strial pro	ducer price	es					arket prices	Oil prices 2) (EUR per
			Industr	ry excludin	g construc	tion 3)				Construc- tion 4)	Manu- facturing		Total	barrel)
	Tot	al	]	Industry ex	cluding co	nstructio	on and ener	rgy	Energy	tion	iacturing		excluding energy	
	Index 2000 = 100		Total	Inter- mediate	Capital goods	(	Consumer	goods						
		2		goods		Total	consumer goods	Non-durable consumer goods		10		12	12	1.4
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1997 1998	96.0 95.4	1.1 -0.7	0.4 0.1	0.2 -0.4	0.3 0.6	0.7 0.7	0.6 0.7	1.2 0.5	3.0 -4.6	1.4 0.3	0.8 -0.5	0.3 -21.9	10.7 -14.7	17.0 12.0
1999	95.4	-0.7	-0.6	-1.5	0.0	0.7	0.7	-0.2	0.2	1.3	0.1	14.6	-6.4	17.1
2000	100.0	5.3	2.5	5.1	0.6	1.4	1.4	1.6	17.3	2.5	4.8	51.9	20.4	31.0
						- E	uro area	enlargement	_					
2001	102.2	2.2	1.7	1.2	1.0	3.0	1.8	3.1	2.7	2.3	1.2	-8.3	-8.1	27.8
2002	102.1	0.0	0.5	-0.3	0.9	1.3	1.6	1.3	-1.9	2.7	0.3	-4.1	-0.9	26.5
2002 Q2	102.1	-0.7	0.2	-0.8	1.0	1.1	1.7	1.0	-4.1	2.5	-0.3	-9.6	-4.9	27.8
Q3 Q4	102.3 102.6	0.0 1.3	0.6 1.0	0.3 1.0	0.8 0.8	1.2 1.4	1.5 1.3	1.1 1.4	-2.1 2.8	2.6 3.1	0.4 1.5	-4.6 12.6	1.1 5.6	27.2 26.5
2003 Q1	104.1 103.6	2.4 1.5	1.2 1.0	1.6 1.2	0.4 0.4	1.4 1.3	0.9 0.8	1.5 1.4	7.4 2.7	2.0	2.2 0.8	9.1 -13.7	-3.2 -7.9	28.4 22.7
Q2										•				
2002 Au Ser		0.0	0.6 0.7	0.3 0.4	0.8 0.8	1.1 1.3	1.6 1.6	1.1 1.3	-1.9 -1.4	-	0.5 0.6	-4.6 2.1	1.5 7.9	27.0 28.9
Oct		1.1	0.7	0.4	0.3	1.4	1.0	1.3	2.3	-	1.3	13.2	10.2	27.9
No	v. 102.4	1.2	1.0	1.2	0.8	1.3	1.2	1.3	2.4	-	1.3	9.1	3.9	24.2
Dec	c. 102.7	1.6	1.1	1.2	0.8	1.5	1.3	1.5	3.9	-	1.8	15.6	2.9	27.1
2003 Jan		2.3	1.1	1.4	0.5	1.4	1.1	1.4	6.6	-	2.0	15.4	-1.1	28.3
Feb		2.6	1.2	1.7	0.3	1.5	1.0	1.6	8.2	-	2.4	15.8	-2.1	29.8
Ma Ap		2.4 1.7	1.2 1.1	1.7 1.6	0.3 0.4	1.4 1.3	0.8 0.7	1.5 1.4	7.3 3.3	-	2.1 1.1	-2.2 -15.2	-6.4 -6.2	27.2 22.9
Ma		1.3	1.0	1.3	0.3	1.3	0.7	1.4	1.7	_	0.6	-16.6	-8.0	21.9
Jun	ie 103.4	1.4	0.9	0.8	0.4	1.3	0.9	1.4	3.1	-	0.7	-8.9	-9.6	23.3
Jul		1.3	0.6	0.4	0.3	1.3	1.1	1.3	3.6	-	0.7	-4.4	-7.5	25.0
Au	g		•			•		•		-		-2.9	-5.2	26.5

#### 2. Deflators of gross domestic product 5)

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

	Total		Domestic demand	Private	Government	Gross fixed	Exports 6)	Imports 6)
	Index 1995 = 100			consumption	consumption	capital formation		
	15	16	17	18	19	20	21	22_
1996	102.0	2.0	2.1	2.4	2.2	0.9	0.8	0.7
1997	103.6	1.5	1.7	2.0	1.3	1.0	1.8	2.6
1998	105.3	1.7	1.3	1.4	1.2	0.9	-0.1	-1.5
1999	106.4	1.1	1.2	1.1	1.9	0.8	-0.5	-0.3
2000	107.9	1.4	2.6	2.2	2.6	2.5	4.7	8.2
-			Euro	area enlargeme	ent —			
2001	111.0	2.5	2.3	2.4	2.4	2.1	1.4	0.7
2002	113.6	2.4	2.2	2.4	1.8	1.9	-0.6	-1.5
2001 Q3	111.1	2.3	2.2	2.4	2.2	2.1	0.5	0.1
Q4	112.2	2.9	1.8	2.1	2.3	1.7	-0.7	-3.7
2002 Q1	112.9	2.7	2.4	2.6	2.0	1.9	-0.8	-1.7
Q2	113.3	2.3	2.0	2.3	1.7	2.1	-1.1	-1.9
Q3	114.0	2.6	2.0	2.4	1.8	1.8	-0.3	-2.0
Q4	114.5	2.1	2.2	2.4	1.7	1.9	-0.2	-0.2
2003 Q1	115.2	2.0	1.9	2.2	1.9	1.9	0.1	-0.3

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

To December 1998, in ECU; from January 1999, in euro.
Brent Blend (for one-month forward delivery). To December 1998, in ECU; from January 1999, in euro.
Breakdown in accordance with the harmonised definition of Main Industrial Groupings.

Residential buildings, based on non-harmonised data.

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

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

### Real economy indicators in the euro area

#### Table 5.1

National accounts 1)

#### GDP and expenditure components

#### 1. Current prices

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

					GDP				
	Total		Do	mestic demand				External balanc	e 3)
		Total	Private consumption	Government consumption	Gross fixed capital formation	Changes in inventories 2)	Total	Exports 3)	Imports 3)
	1	2	3	4	5	6	7	8	9
1998 1999 2000	5,883.6 6,150.4 6,453.0	5,743.7 6,048.5 6,385.1	3,330.9 3,507.0 3,675.7	1,176.3 1,230.0 1,289.1	1,203.4 1,291.7 1,388.8	33.0 19.7 31.5	139.9 101.9 67.9	1,949.1 2,052.4 2,416.6	1,809.2 1,950.6 2,348.7
		-	-	Euro area	enlargement	-		-	-
2001 2002	6,839.7 7,063.5	6,727.1 6,888.6	3,921.2 4,037.6	1,369.6 1,432.0	1,437.5 1,426.2	-1.3 -7.2	112.6 174.9	2,556.2 2,572.0	2,443.6 2,397.1
2002 Q1 Q2 Q3 Q4	1,745.6 1,758.5 1,775.0 1,784.5	1,705.6 1,715.9 1,726.4 1,740.7	996.6 1,004.5 1,014.2 1,022.4	352.4 356.9 359.9 362.7	357.5 354.4 355.9 358.3	-0.9 0.1 -3.7 -2.8	39.9 42.6 48.6 43.8	627.5 640.2 652.9 651.4	587.5 597.6 604.3 607.6
2003 Q1 Q2	1,796.5	1,762.4	1,034.5	366.1	356.0	5.9	34.1	648.0	613.9

#### 2. Constant prices

(ECU billions at 1995 prices, seasonally adjusted)

					GDP				_
	Total		Do	mestic demand				External balance	e 3)
		Total	Private consumption	Government consumption	Gross fixed capital formation	Changes in inventories 2)	Total	Exports 3)	Imports 3)
	10	11	12	13	14	15	16	17	18_
1998 1999 2000	5,667.3 5,826.4 6,029.4	5,544.7 5,738.1 5,905.8	3,186.2 3,299.1 3,382.7	1,142.2 1,164.6 1,189.4	1,190.8 1,260.6 1,322.0 enlargement	25.6 13.7 11.6	122.5 88.4 123.6	1,939.1 2,040.3 2,295.3	1,816.6 1,951.9 2,171.7
2001	6,227.5	6,078.9	3,521.6	1.231.2	1,339.1	-13.1	148.6	2,392.8	2,244.2
2002	6,280.2	6,092.8	3,540.5	1,264.7	1,303.3	-15.9	187.5	2,422.3	2,234.8
2002 Q1 Q2 Q3 Q4	2 1,568.8 3 1,573.9	1,517.9 1,520.1 1,524.0 1,530.7	880.4 883.0 887.0 890.2	313.3 315.8 317.3 318.2	328.9 324.3 324.7 325.5	-4.7 -3.0 -5.0 -3.1	44.7 48.7 49.8 44.2	590.6 603.5 615.4 612.9	545.8 554.8 565.6 568.7
2003 Q1	1,575.9	1,538.6	893.8	319.3	321.5	3.9	37.3	609.3	572.0
Q2			•				•		
(annual p	percentage changes)								
1998	2.9	3.6	3.0	1.4	5.1	-	_	7.4	10.0
1999	2.8	3.5	3.5	2.0	5.9	-	-	5.2	7.4
2000	3.5	2.9	2.5	2.1	4.9	-	-	12.5	11.3
					enlargement				
2001 2002	1.5 0.8	1.0 0.2	1.8	2.2	-0.6 -2.7	-	-	3.0 1.2	1.7
			0.5	2.7		-	-		-0.4
2002 Q1		-0.2	0.4	2.5	-3.0	-	-	-2.7	-4.5
Q2	2 0.8 3 1.0	-0.2 0.5	0.2 0.6	3.0 2.9	-3.4 -2.6	-	-	1.1 3.1	-1.7 1.9
Q3 Q4		0.3	1.0	2.5	-2.0 -1.7	-	-	3.6	2.7
2003 Q1	0.9	1.4	1.5	1.9	-2.3	-	-	3.2	4.8
Q2	0.4	•		•	•	-	-		•

Source: Eurostat.

<sup>1)</sup> See the first section of the general notes for a brief explanation of features of current price data expressed in ECU up to end-1998.

<sup>2)</sup> Including acquisitions less disposals of valuables.
3) Exports and imports cover goods and services and include cross-border trade within the euro area. They are not fully consistent with Tables 8 and 9.

#### Value added by economic activity

#### 3. Current prices

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

			(	Gross value add	ed			Intermediate consumption of	Taxes less subsidies on
	Total	Agriculture, hunting, forestry and fishing activities	mining	Construction	Trade, repairs, hotels and restaurants, transport and communication	Financial, real estate, renting and business activities	administration, education,	FISIM 1)	products
	1	2	3	4	5	6	7	8	9
1998 1999 2000	5,470.9 5,689.3 5,976.5	138.7 136.1 136.6	1,276.6 1,293.0 1,348.7	295.4 310.9 327.5	1,139.7 1,191.1 1,260.6	1,445.9 1,532.6 1,627.2	1,174.5 1,225.7 1,276.1	202.2 201.6 212.2	614.8 662.7 688.7
	·			Euro area	enlargement				
2001 2002	6,352.0 6,559.2	151.0 149.9	1,411.7 1,429.7	349.0 360.4	1,359.3 1,394.2	1,721.3 1,798.2	1,359.8 1,426.7	228.7 237.8	716.3 742.2
2001 Q4	1,604.7	38.3	350.5	88.7	343.3	438.0	345.9	58.0	180.5
2002 Q1 Q2 Q3 Q4	1,621.1 1,634.3 1,647.5 1,656.4	37.8 37.3 37.7 37.1	353.8 357.2 359.9 358.8	90.1 89.3 90.0 91.0	345.3 347.6 349.8 351.5	443.5 447.9 451.4 455.4	350.6 354.9 358.6 362.6	58.5 59.2 59.6 60.6	183.0 183.4 187.1 188.7
2003 O1	1.666.5	37.3	362.5	90.6	352.0	458.3	365.7	60.8	190.8

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

			(	Gross value add	ed			Intermediate consumption of	Taxes less subsidies on
	Total 10	hunting, forestry and fishing activities	Manufacturing, energy and mining	Construction	hotels and restaurants, transport and communication	Financial, real estate, renting and business activities	Public administration, education, health and other services	FISIM <sup>1</sup>	products
1000		112.4			14		1 126.0		18
1998 1999	5,319.4 5,462.3	142.4 146.2	1,256.4 1,268.1	291.9 299.2	1,114.4 1.164.2	1,388.3 1,441.3	1,126.0 1,143.4	222.4 231.2	570.3 595.4
2000	5,666.7	145.7	1,318.7	306.0	1,220.5	1,508.0	1,167.7	247.6	610.3
-				Euro area	enlargement	-			
2001	5,865.3	151.9	1,348.4	310.8	1,282.5	1,569.4	1,202.2	264.7	626.9
2002	5,938.5	150.9	1,359.2	308.3	1,299.2	1,589.2	1,231.7	271.0	612.8
2001 Q4	1,467.5	38.1	333.4	77.9	321.1	394.3	302.6	66.9	155.7
2002 Q1	1,475.8	37.7	337.0	77.8	323.1	395.3	305.0	66.9	153.7
Q2	1,484.0 1,488.5	37.7 37.8	340.4 341.7	76.9 76.8	324.6 325.4	397.1 397.9	307.3 308.8	67.2 68.1	152.0 153.5
Q2 Q3 Q4	1,490.2	37.6	340.2	76.8	326.1	398.9	310.6	68.9	153.7
2003 Q1	1,491.2	38.0	340.9	75.4	326.5	399.4	311.0	69.3	154.1
(annual perce	entage changes)								
1998	2.9	1.5	3.2	0.5	4.0	3.7	1.5	3.6	2.6
1999	2.7	2.7	0.9	2.5	4.5	3.8	1.5	4.0	4.4
2000	3.7	-0.3	4.0	2.3	4.8	4.6	2.1	7.1	2.5
2001	1.7	-1.3	1.1	Euro area -0.6	enlargement	2.6	1.4	5.4	0.7
2001	1.7	-1.3 -0.7	0.8	-0.8	2.6 1.3	1.3	1.4 2.5	2.4	-2.2
2001 Q4	0.9	-0.6	-1.2	0.0	1.4	2.0	1.6	4.2	-0.2
2002 Q1	0.8	-0.6	-1.2	0.1	1.1	1.5	2.1	2.4	-2.3
Q2	1.3	0.0	1.1	-0.9	1.3	1.4	2.5	1.8	-3.7
Q3	1.3 1.5	-0.9 -1.3	1.3	-1.1 -1.4	1.3 1.5	1.1 1.2	2.6	2.4 3.0	-1.8 -1.3
Q4			2.0				2.6		
2003 Q1	1.0	0.7	1.2	-3.0	1.1	1.0	2.0	3.7	0.2

Source: Eurostat.

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

#### Table 5.2

#### Selected other real economy indicators 1)

#### 1. Industrial production

(annual percentage changes, unless otherwise indicated)

	Total			Indust	try excluding	g construct	ion 2)				Construction	Manufacturing
		Total			Industry ex	cluding co	nstruction	n and energy		Energy		
		Index (s.a.) 2000 = 100		Total	Inter- mediate	Capital goods	C	Consumer goo	ods			
	1	2	3	4	goods	6	Total	Durable consumer goods	Non-durable consumer goods 9	10	11	12
1999 2000	2.1 4.9	95.0 100.1	1.9 5.3	1.9 5.4	1.9 5.9	2.3 8.3	1.6 2.0	1.4 6.5	1.6 1.1	0.7 1.9	4.1 2.4	1.9 5.7
					Euro	area enla	rgement					
2001 2002	0.3 -0.6	100.6 100.0	0.5 -0.6	0.3 -0.8	-0.5 0.4	1.5 -2.1	0.6 -0.5	-1.7 -5.5	1.0 0.4	1.4 0.9	0.3 0.5	0.4 -0.7
2002 Q2 Q3 Q4	-0.9 0.0 0.7	100.1 100.3 100.2	-0.7 0.1 1.2	-0.7 -0.3 1.4	-0.1 1.4 2.8	-1.9 -1.1 1.1	-0.7 -0.8 0.5	-6.3 -4.3 -4.2	0.4 -0.2 1.4	2.1 1.5 -1.0	0.4 0.7 -1.1	-0.7 0.0 1.5
2003 Q1 Q2	0.6	100.2 99.4	1.0 -0.8	0.7 -1.4	1.3 -0.6	1.3 -2.2	-0.8 -1.2	-4.9 -6.2	0.0 -0.3	4.3 2.4	-2.9	0.8 -1.3
2002 Aug. Sep. Oct. Nov. Dec.	-0.7 0.2 0.6 2.1 -0.5	100.1 100.3 100.4 100.8 99.4	-0.8 0.2 1.2 2.6 -0.5	-1.1 -0.1 0.8 3.2 0.0	-0.2 2.5 1.5 4.9 1.9	-0.5 -2.2 0.3 3.3 -0.3	-1.5 -0.4 0.4 1.9 -0.8	-8.8 -3.3 -3.9 -2.0 -7.0	-0.4 0.2 1.3 2.6 0.4	0.9 0.9 4.8 -1.8 -4.8	-0.2 1.1 -1.6 0.1 -2.0	-0.7 0.0 0.9 3.4 0.2
2003 Jan. Feb. Mar. Apr.	0.8 1.2 -0.2 -0.5	100.2 100.6 99.7 100.1	1.1 2.1 0.0 0.5	0.7 0.9 0.5 -0.5	2.6 1.0 0.5 0.4	1.2 3.0 -0.2 -0.9	-0.8 -0.4 -1.1 0.5	-4.4 -4.3 -5.8 -4.8	-0.2 0.3 -0.2 1.5	1.1 9.1 3.1 3.0	-1.7 -4.3 -2.9 -4.0	0.8 1.1 0.4 -0.4
May June	-2.0	99.1 99.1	-1.4 -1.5	-1.7 -2.1	-1.4 -0.8	-1.1 -4.4	-2.9 -1.2	-6.9 -7.0	-2.2 -0.1	1.4 2.8	-3.8	-1.6 -2.0

#### 2. Retail sales and car registrations

(annual percentage changes, unless otherwise indicated)

				Retail sal	es (s.a.)				New passer	nger car tions
	Current pric	es			Constar	nt prices				
	Total		Tota	al	Food, beverages,	Non-food			Thousands 3) (s.a.)	
	Index 2000 = 100	14	Index 2000 = 100	16	tobacco	18	Textiles, clothing, footwear	Household equipment 20	21	22
1000			•			•				
1999 2000	96.0 99.9	3.0 4.1	97.8 100.0	2.4 2.3	2.7 2.1	2.2 2.1	1.4 1.6	2.3 4.4	973 952	5.4 -2.1
				Eur	ro area enlarg	gement —				
2001 2002	104.1 106.0	4.2 1.9	101.6 101.8	1.6 0.2	1.8 0.9	1.5 -0.2	0.9 -0.9	-0.3 -1.8	968 926	-0.8 -4.3
2002 Q2 Q3 Q4	105.8 106.5 106.6	1.8 1.8 1.5	101.5 102.3 101.8	-0.1 0.6 0.0	0.6 1.1 1.1	0.0 0.4 -0.5	-1.3 -1.4 -0.5	-2.0 -0.6 -2.5	914 920 950	-7.6 -4.8 0.2
2003 Q1 Q2	108.1 108.2	2.8 2.2	102.6 102.6	0.8 1.2	2.3 1.7	0.6 0.4	-1.7 -1.0	0.3 0.5	896 885	-2.6 -2.8
2002 Aug Sep. Oct. Nov Dec.	106.6 107.3 106.3	2.1 1.6 3.2 0.9 0.3	102.7 102.1 102.6 101.8 101.1	0.7 0.4 1.7 -0.6 -1.2	1.7 0.7 2.0 1.4 -0.1	0.3 0.3 1.5 -1.4 -1.8	0.2 -4.3 5.1 -4.5 -1.8	-1.9 -0.3 -1.5 -3.1 -2.9	927 932 930 942 979	-4.1 -2.5 -3.3 -1.2 6.1
2003 Jan. Feb. Mar Apr. May June	. 108.0 108.1 108.0	3.4 2.8 2.3 2.3 2.2 2.3	103.5 102.7 101.5 103.1 102.4 102.4	2.6 1.1 -1.1 2.1 0.5 0.8	4.0 2.7 0.2 2.2 1.3 1.5	1.7 0.4 -0.3 0.7 0.2 0.3	2.6 -3.9 -3.6 -0.6 -1.7 -0.6	0.2 -0.4 1.0 1.0 0.0 0.6	884 897 908 876 867 912	-5.3 -3.5 0.6 -3.9 -5.3 0.8

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

1) Adjusted for variations in the number of working days.

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

<sup>3)</sup> Annual and quarterly figures are averages of monthly totals.

#### Table 5.3

#### European Commission Business and Consumer Surveys 1)

#### 1. Economic sentiment indicator, manufacturing industry and consumer surveys

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

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

#### 2. Construction industry, retail trade and services surveys

(percentage balances 2), seasonally adjusted)

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

Source: European Commission Business and Consumer Surveys.

<sup>1)</sup> Data refer to the Euro 12.

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

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

derived from quarterly averages.

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

#### Table 5.4

#### Labour market indicators 1)

#### 1. Employment

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

	Whole ec	onomy	By employ	ment status				By economic ac	ctivity	
	Millions		Employees	Self- employed	Agriculture, hunting, forestry and fishing	Manufacturing, energy and mining		Trade, repairs, hotels and restaurants, transport and communication	Financial, real estate, renting and business services	Public administration, education, health and other services
Weight in the total 2)	100.0	100.0	84.2	15.8	4.7	19.3	7.0	25.1	14.3	29.6
	1	2	3	4	5	6	7	8	9	10
1998 1999 2000	122.361 124.605 127.396	1.8 1.8 2.2	2.0 2.3 2.5	0.9 -0.6 0.8	-1.3 -2.5 -1.5	1.0 -0.2 0.6	0.1 1.9 1.8	2.1 2.2 3.2	5.3 5.7 5.9	1.6 1.9 1.6
					— Euro	area enlargem	ent —			
2001 2002	133.132 133.685	1.4 0.4	1.6 0.6	0.2 -0.5	-0.8 -2.2	0.3 -1.3	0.4 -1.1	1.6 0.5	3.9 2.3	1.3 1.3
2002 Q1 Q2 Q3 Q4	133.660 133.739 133.692 133.649	0.7 0.5 0.3 0.1	0.9 0.7 0.5 0.2	-0.4 -0.7 -0.7 -0.3	-2.5 -2.1 -2.1 -2.0	-1.0 -1.2 -1.3 -1.6	-0.8 -0.9 -1.3 -1.3	1.2 0.6 0.3 0.0	2.7 2.6 2.1 2.0	1.4 1.4 1.4 1.2
2003 Q1	133.616	0.0	-0.1	0.1	-2.3	-1.7	-1.1	-0.2	1.6	1.1

#### 2. Unemployment

(seasonally adjusted)

	Tot	tal		Ву	age 3)			E	By gender 4)	
			Ac	lult	Yo	uth	Ma	le	]	Female
	Millions 11	% of labour force 12	Millions 13	% of labour force 14	Millions 15	% of labour force 16	Millions 17	% of labour force 18	Millions 19	% of labour force 20
1998 1999 2000	13.270 12.247 11.104	10.2 9.3 8.4	10.146 9.431 8.555	8.9 8.2 7.3	3.124 2.815 2.549	20.0 18.0 16.2	6.445 5.901 5.286	8.6 7.8 7.0	6.825 6.345 5.818	12.5 11.4 10.3
2001 2002	11.062 11.689	8.0 8.4	8.535 9.094	7.0 7.4	o area enlarg 2.527 2.595	15.7 16.2	5.313 5.762	6.7 7.3	5.749 5.927	9.7 9.9
2002 Q2 Q3 Q4	11.616 11.777 11.960	8.3 8.5 8.6	9.017 9.174 9.337	7.3 7.4 7.6	2.600 2.603 2.623	16.2 16.3 16.4	5.715 5.824 5.938	7.2 7.4 7.5	5.902 5.953 6.021	9.8 9.9 10.0
2003 Q1 Q2	12.218 12.386	8.7 8.8	9.534 9.690	7.7 7.8	2.684 2.696	16.8 16.9	6.082 6.164	7.7 7.8	6.136 6.222	10.1 10.3
2002 July Aug. Sep. Oct. Nov. Dec.	11.744 11.776 11.810 11.872 11.968 12.040	8.4 8.5 8.5 8.5 8.6 8.6	9.135 9.172 9.214 9.272 9.341 9.397	7.4 7.4 7.5 7.5 7.6 7.6	2.609 2.605 2.596 2.600 2.627 2.642	16.3 16.2 16.3 16.5 16.5	5.802 5.825 5.845 5.884 5.941 5.990	7.3 7.4 7.4 7.4 7.5 7.6	5.942 5.951 5.965 5.988 6.026 6.050	9.9 9.9 9.9 9.9 10.0 10.0
2003 Jan. Feb. Mar. Apr. May June July	12.133 12.226 12.297 12.359 12.383 12.417 12.448	8.7 8.7 8.8 8.8 8.8 8.9	9.461 9.538 9.604 9.663 9.686 9.722 9.747	7.6 7.7 7.7 7.8 7.8 7.8 7.8	2.672 2.688 2.693 2.696 2.697 2.695 2.701	16.7 16.8 16.9 16.9 16.9 16.9	6.040 6.088 6.117 6.147 6.164 6.181 6.195	7.6 7.7 7.7 7.7 7.8 7.8 7.8	6.093 6.137 6.180 6.212 6.219 6.237 6.253	10.1 10.1 10.2 10.2 10.2 10.3 10.3

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

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

1) In 2002.

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

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

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

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

Tota	ıl				By economic	activity	
Index 2000=100	2	Agriculture, hunting, forestry and fishing	Manufacturing, energy and mining 4	Construction 5	restaurants, transport and communication	Financial, real estate renting and business services	Public administration, education, health and other services
				oour costs 1)		, ,	
100.0	1.3	1.6	-0.3	1.9	0.0	4.2	1.8
102.6	2.6	3.4				2.6	3.1
104.8	2.1	1.5	0.8	3.0	1.6	3.0	1.5
104.4 104.5 104.9	3.2 2.0 1.8	6.0 -0.8 -1.6	2.8 0.5 0.5	3.5 3.1 2.9	2.8 1.5 1.2	3.5 2.4 2.8	2.5 1.5 1.3
105.4	1.4	2.4	-0.5	2.6	1.0	3.1	0.6
106.3	1.8	-0.4	0.5	3.9	1.6	2.9	1.5
			Compensati	on per employ	ee		
100.0	2.5	2.9	3.0	2.3	1.7	3.0	2.3
102.8 105.4	2.8 2.6	2.8 3.0	2.7 3.0	3.1 3.3	2.9 2.4	1.4 1.9	3.2 2.6
104.5 105.0 105.7 106.3	2.9 2.3 2.5 2.5	8.1 1.4 -0.4 3.1	2.6 2.8 3.2 3.2	4.5 3.1 3.1 2.5	2.7 2.1 2.3 2.6	2.3 1.2 1.7 2.2	3.2 2.6 2.6 2.0
107.4	2.7	2.6	3.5	1.9	3.0	2.4	2.4
			Labour p	roductivity 2)			
100.0	1.2	1.2	3.4	0.4	1.6	-1.2	0.5
100.1 100.6	0.1 0.4	-0.5 1.5	0.8 2.1	-1.0 0.3	1.0 0.8	-1.2 -1.1	0.1 1.1
100.1 100.4 100.8 100.9	-0.3 0.3 0.7 1.1	1.9 2.2 1.2 0.7 3.0	-0.1 2.3 2.6 3.7 3.0	0.9 -0.1 0.2 -0.1	-0.1 0.6 1.1 1.6	-1.2 -1.2 -1.0 -0.9 -0.5	0.7 1.1 1.2 1.4 0.9
	Index 2000=100 1 100.0 102.6 104.8 104.4 104.5 104.9 105.4 106.3 105.4 104.5 105.0 105.7 106.3 107.4 100.0	2000=100	Index   2000=100	Index   2000=100	Index   2000=100	Index   2000=100	Index   2000=100

#### 4. Hourly labour cost indicators

(annual percentage changes, unless otherwise indicated)

	Total 3)		By com	ponent	By selected economic activity			
	Index (s.a.) 2000=100		Wages and salaries	Employers' social contributions	Manufacturing, energy and mining	Construction	Services	
	9	10	11	12	13	14	15	
2000	100.0	2.8	3.0	2.0	3.4	3.3	1.7	
			<ul> <li>Euro area</li> </ul>	enlargement				
2001 2002	103.3 107.1	3.3 3.7	3.4 3.7	2.9 4.0	3.1 3.2	3.6 3.5	4.1 3.9	
2002 Q1 Q2 Q3 Q4	106.4 106.4 107.4 108.4	4.3 3.4 3.5 3.7	4.3 3.3 3.4 3.7	4.4 3.8 3.8 4.0	3.7 2.8 3.0 3.5	4.6 3.1 3.5 3.0	5.4 3.8 3.2 3.3	
2003 Q1	109.3	2.7	2.6	3.1	2.8	2.1	2.1	

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

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

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

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

# 6 Saving, investment and financing in the euro area

#### Table 6.1

#### Financial investment and financing of non-financial sectors 1)

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

#### Amounts outstanding

#### 1. Main financial assets 2)

					Currency an	d deposits				Memo: deposits of
	Total	Currency	Deposits o		l sectors other ith euro area N	than central go IFIs	vernment	Deposits of central government	Deposits with non-MFIs 4)	non-banks with banks outside the
			Total	Overnight	With agreed maturity	Redeemable at notice	Repurchase agreements			euro area 3)
	1	2	3	4	5	6	7	8	9	10
1999 Q2 Q3 Q4	4,704.4 4,716.7 4,859.1	324.8 328.3 350.8	4,114.2 4,112.8 4,215.1	1,321.8 1,324.6 1,370.9	1,418.3 1,416.5 1,457.7	1,315.7 1,313.1 1,323.5	58.4 58.7 63.0	125.0 133.3 142.0	140.4 142.3 151.2	242.7 238.6 229.7
2000 Q1 Q2 Q3 Q4	4,838.4 4,895.0 4,915.8 5,032.2	335.5 342.0 339.8 348.4	4,222.3 4,256.9 4,266.5 4,361.6	1,379.6 1,409.7 1,396.9 1,464.4	1,462.5 1,485.7 1,524.0 1,542.4	1,303.3 1,282.6 1,263.7 1,269.1	76.8 78.9 81.9 85.6	130.2 146.0 159.2 164.5	150.5 150.1 150.2 157.8	260.5 247.1 253.9 230.1
	- 120 1	2262	4 404 4		area enlarge		110 6	450.0		2.50.6
2001 Q1 Q2 Q3 Q4	5,138.1 5,236.2 5,225.6 5,366.7	336.3 333.0 309.6 239.7	4,494.1 4,579.4 4,609.0 4,816.3	1,446.1 1,526.3 1,547.9 1,690.3	1,620.9 1,616.7 1,605.2 1,613.0	1,314.6 1,321.1 1,333.7 1,396.3	112.6 115.3 122.2 116.7	150.3 165.5 147.8 139.0	157.3 158.3 159.1 171.7	259.6 268.8 265.6 298.1
2002 Q1 Q2 Q3 Q4	5,363.7 5,447.0 5,461.2 5,635.7	254.3 285.7 306.7 341.2	4,774.3 4,827.6 4,827.4 4,964.9	1,637.4 1,703.6 1,699.6 1,790.2	1,604.8 1,593.8 1,585.8 1,593.3	1,413.0 1,412.5 1,423.3 1,469.6	119.1 117.6 118.8 111.9	157.5 155.0 146.3 136.4	177.6 178.7 180.8 193.3	301.7 278.1 289.0 291.6
2003 Q1 Q2	5,650.2	327.2 351.0	4,950.0 5,031.7	1,760.0 1,840.5	1,573.3 1,562.6	1,510.4 1,533.9	106.2 94.7	176.2 200.0	196.8	

	Securi	ties other than	shares		Sha	ares 5)		Insurar	nce technical res	serves
	Total	Short-term	Long-term	Total	Quoted shares	Mutual fund shares	Money market fund shares	Total	Net equity of households in life insurance reserves and pension fund reserves	of insurance premiums and reserves
	11	12	13	14	15	16	17	18	19	20
1999 Q2 Q3 Q4	1,499.9 1,504.9 1,563.8	156.9 143.3 169.6	1,343.0 1,361.6 1,394.1	4,140.0 4,059.2 4,796.8	2,422.5 2,334.3 2,976.6	1,717.5 1,724.9 1,820.3	211.4 210.0 204.2	2,758.4 2,800.9 2,952.3	2,471.6 2,510.1 2,652.3	286.8 290.7 300.0
2000 Q1 Q2 Q3 Q4	1,554.0 1,583.0 1,667.2 1,752.9	178.4 183.7 202.6 220.5	1,375.6 1,399.2 1,464.6 1,532.4	4,872.1 4,781.3 4,825.4 4,844.6	2,952.9 2,888.4 2,918.3 2,985.8	1,919.2 1,892.9 1,907.1 1,858.7	214.9 204.6 204.1 200.1	3,065.6 3,113.2 3,168.8 3,200.7	2,764.8 2,808.6 2,860.3 2,892.0	300.8 304.6 308.5 308.7
				— Euro	area enlar	gement -				
2001 Q1 Q2 Q3 Q4	1,861.7 1,858.7 1,890.7 1,926.2	285.4 245.1 240.4 228.1	1,576.3 1,613.6 1,650.3 1,698.1	4,527.1 4,492.3 4,000.8 4,349.1	2,706.6 2,644.6 2,272.7 2,527.4	1,820.6 1,847.7 1,728.1 1,821.8	224.0 232.3 253.1 260.0	3,253.0 3,312.1 3,289.0 3,378.7	2,939.1 2,995.4 2,968.0 3,053.6	313.9 316.7 321.0 325.0
2002 Q1 Q2 Q3 Q4	1,979.2 2,004.1 2,060.8 2,059.6	266.5 229.9 255.8 248.4	1,712.7 1,774.2 1,805.0 1,811.2	4,436.5 4,048.6 3,443.6 3,435.3	2,582.5 2,293.0 1,726.0 1,738.0	1,854.0 1,755.6 1,717.6 1,697.3	290.5 292.8 309.2 304.3	3,402.4 3,422.8 3,448.6 3,518.6	3,070.7 3,087.4 3,110.4 3,174.6	331.7 335.4 338.2 344.0
2003 Q1 Q2	2,055.7	238.2	1,817.6	3,295.4	1,586.2	1,709.1	379.2	3,575.8	3,227.0	348.8

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

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

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

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

<sup>5)</sup> Excluding unquoted shares.

#### 2. Main liabilities 1)

			]	Loans taken 1	from euro are	a MFIs and	other finance	cial corporati	ons by			Memo: loans
	Total	Taken from	Gene	eral governme	ent	Non-fir	nancial corpo	orations	Н	ouseholds 3)		taken from banks
		euro area MFIs	Total	Short-term L	ong-term 4)	Total	Short-term	Long-term	Total	Short-term	Long-term	outside the euro area by non-banks <sup>2)</sup>
	1	2	3	4	5	6	7	8	9	10	11	12
1999 Q2 Q3 Q4	6,415.1 6,482.9 6,660.4	5,817.5 5,886.6 6,039.5	897.3 882.4 902.4	38.6 37.5 41.7	858.7 844.9 860.7	2,684.7 2,699.7 2,791.4	963.3 942.8 978.6	1,721.4 1,756.9 1,812.9	2,833.1 2,900.8 2,966.6	254.2 253.9 262.6	2,578.8 2,646.9 2,704.1	183.3 191.4 201.4
2000 Q1 Q2 Q3 Q4	6,805.6 6,952.8 7,097.8 7,261.5	6,156.4 6,262.2 6,379.6 6,500.5	893.1 887.9 868.4 884.2	40.7 41.6 39.5 41.7	852.3 846.3 828.8 842.5	2,890.2 2,989.6 3,097.5 3,196.3	1,036.8 1,088.8 1,150.6 1,166.1	1,853.4 1,900.7 1,947.0 2,030.3	3,022.3 3,075.3 3,131.9 3,181.1	264.0 272.7 274.2 279.3	2,758.3 2,802.6 2,857.7 2,901.8	221.1 219.7 252.3 245.2
2001 Q1 Q2 Q3 Q4	7,455.1 7,561.3 7,632.6 7,751.1	6,671.7 6,762.2 6,805.2 6,897.7	897.6 882.7 876.1 903.1	42.3 42.2 45.3 50.0	855.3 840.5 830.9 853.2	area enla 3,322.9 3,394.6 3,434.5 3,474.3	1,243.9 1,265.6 1,243.2 1,226.0	2,079.1 2,129.0 2,191.3 2,248.4	3,234.5 3,284.0 3,321.9 3,373.6	278.9 284.8 280.3 281.6	2,955.6 2,999.1 3,041.6 3,092.0	257.3 279.2 249.7 268.9
2002 Q1 Q2 Q3 Q4	7,812.9 7,907.2 7,952.5 8,064.5	6,960.5 7,017.6 7,053.0 7,131.5	904.5 877.7 870.1 883.2	53.4 53.4 54.7 60.6	851.1 824.3 815.4 822.6	3,501.6 3,547.0 3,554.3 3,594.2	1,222.0 1,206.7 1,188.7 1,172.7	2,279.6 2,340.4 2,365.6 2,421.6	3,406.8 3,482.4 3,528.0 3,587.1	277.2 287.9 284.1 289.3	3,129.6 3,194.5 3,244.0 3,297.8	278.5 245.5 238.0 240.2
2003 Q1 Q2	8,116.8	7,170.6 7,240.1	874.7	68.3	806.3	3,622.6	1,188.1	2,434.5	3,619.5	277.7	3,341.8	

			Securiti	es other than	shares issued by	y		Quoted shares	Deposit liabilities of	Pension fund
	Total	Ge	neral governm	ent	Non-	financial corpo	rations	issued by non-financial	central government	reserves of non-
		Total	Short-term	Long-term	Total	Short-term	Long-term		8	financial corporations
	13	14	15	16	17	18	19	20	21	22
1999 Q2 Q3 Q4	3,951.7 3,930.1 3,896.5	3,612.1 3,577.4 3,533.3	458.2 448.1 419.7	3,153.8 3,129.2 3,113.6	339.7 352.7 363.2	66.2 73.9 77.4	273.5 278.8 285.8	3,007.2	139.6 141.7 148.9	221.9 224.2 226.5
2000 Q1 Q2 Q3 Q4	3,950.7 3,984.8 4,018.7 4,068.1	3,586.0 3,607.7 3,622.1 3,650.2	425.1 425.6 422.0 400.5	3,160.9 3,182.1 3,200.1 3,249.6	364.7 377.1 396.6 417.9	77.0 87.8 94.6 100.8	287.7 289.3 302.0 317.1	4,526.1 4,372.0 4,215.4 4,063.7	148.2 147.9 147.9 155.3	228.4 230.2 232.1 233.9
	-	-		— Euro	o area enlarg	ement –		-		
2001 Q1 Q2 Q3 Q4	4,245.6 4,296.1 4,380.4 4,394.2	3,790.9 3,815.9 3,880.8 3,875.1	429.7 441.2 450.1 434.3	3,361.2 3,374.7 3,430.7 3,440.8	454.8 480.2 499.7 519.0	111.4 122.5 137.1 136.9	343.4 357.7 362.6 382.1	3,676.6	154.7 155.2 156.3 168.6	236.1 238.3 240.5 241.4
2002 Q1 Q2 Q3 Q4	4,452.3 4,543.2 4,653.0 4,660.2	3,929.0 4,025.5 4,122.3 4,125.9	446.6 481.6 479.9 480.0	3,482.4 3,543.9 3,642.4 3,646.0	523.3 517.7 530.8 534.3	141.7 126.9 133.8 140.2	381.6 390.8 396.9 394.1	3,034.4	174.6 175.7 177.6 190.1	243.8 246.2 248.6 251.1
2003 Q1 Q2	4,814.0	4,248.8	521.4	3,727.4	565.2	161.8	403.4	2,122.2 2,463.9	193.7	254.6

Most of the financial asset and liability categories defined in the ESA 95 are covered. Financial derivatives, loans granted by general government and non-financial corporations, unquoted shares and other equity, and other receivables and payables are not included.
 BIS international banking statistics. The BIS definition of banks is close to that of MFIs.
 Including non-profit institutions serving households.
 Including all loans taken by central government from MFIs in the euro area.

#### Table 6.1 (cont'd)

#### Financial investment and financing of non-financial sectors 1)

(EUR billions; not seasonally adjusted)

#### **Transactions**

#### 1. Main financial assets 2)

		Currency and deposits  Total Currency Deposits of non-financial sectors other than central government Deposits of Deposits with											
	Total	Currency	Deposits o	f non-financia w	l sectors other rith euro area M	than central go IFIs	vernment	Deposits of central government	Deposits with non-MFIs 4)	deposits of non-banks with banks outside the			
			Total	Overnight	With agreed maturity	Redeemable at notice	Repurchase agreements	with euro area MFIs		euro area 3)			
	1	2	3	4	5	6	7	8	9	10			
1999 Q2 Q3 Q4	22.9 13.9 133.6	6.2 3.5 22.3	34.2 0.2 95.1	81.3 3.5 44.2	-48.9 -1.1 36.4	9.4 -2.6 10.3	-7.6 0.3 4.2	-8.4 8.3 8.7	-9.1 1.9 7.6	-4.3 -2.8 -14.2			
2000 Q1 Q2 Q3 Q4	-27.6 52.1 7.0 129.7	-15.3 6.7 -2.2 8.6	0.4 30.0 -4.2 108.3	6.1 31.9 -17.3 71.4	0.9 17.8 28.8 27.3	-20.4 -21.8 -18.5 5.7	13.7 2.1 2.9 3.8	-11.9 15.8 13.3 5.3	-0.7 -0.4 0.1 7.6	26.1 -12.8 -1.7 -16.7			
2001.01	04.0	10.0	120.6		area enlarge		26.0	15.6	0.5	12.6			
2001 Q1 Q2 Q3 Q4	84.8 94.8 7.9 143.7	-19.8 -3.3 -23.4 -69.9	120.6 82.0 48.1 209.9	-23.8 77.3 25.2 142.3	72.6 -4.3 3.0 10.6	44.9 6.3 13.0 62.5	26.9 2.7 7.0 -5.4	-15.6 15.1 -17.7 -8.8	-0.5 1.0 0.8 12.5	13.6 4.8 3.4 12.2			
2002 Q1 Q2 Q3 Q4	-0.7 103.2 11.2 173.5	14.6 31.4 21.0 34.5	-40.2 73.2 0.6 136.4	-53.4 72.2 -4.4 83.8	-4.1 0.9 -7.3 12.9	14.9 1.7 10.6 46.6	2.3 -1.7 1.7 -6.9	19.0 -2.5 -12.5 -9.9	6.0 1.1 2.1 12.5	2.7 -10.0 9.2 8.5			
2003 Q1 Q2	29.3	7.7 23.8	-14.8 86.1	-28.7 82.0	-21.5 -7.8	41.0 23.3	-5.6 -11.5	32.8 23.8	3.6				

	Securi	ties other than	shares		Sha	ares 5)		Insurar	nce technical res	serves
	Total	Short-term	Long-term	Total	Quoted shares	Mutual fund shares	Money market fund shares	Total	Net equity of households in life insurance reserves and pension fund reserves	Prepayments of insurance premiums and reserves for outstanding claims
	11	12	13	14	15	16	17	18	19	20
1999 Q2 Q3 Q4	-36.0 -3.2 61.2	-8.4 -14.6 25.2	-27.6 11.4 36.0	150.6 86.3 -16.7	65.9 46.5 14.3	84.7 39.8 -31.0	15.5 -2.1 -12.7	55.0 57.6 75.4	49.3 52.1 70.4	5.7 5.5 4.9
2000 Q1 Q2 Q3 Q4	10.1 40.9 75.0 17.4	21.8 4.3 22.3 6.5	-11.6 36.6 52.7 10.9	-16.3 68.1 104.8 177.7	-64.4 49.2 97.3 139.6	48.1 18.9 7.4 38.1	13.5 -7.4 -1.3 -5.1	79.9 55.4 55.5 59.2	74.3 52.8 52.7 61.3	5.6 2.7 2.7 -2.2
					area enlar	_				
2001 Q1 Q2 Q3 Q4	104.3 -2.1 31.2 3.5	66.4 -34.2 -5.8 -18.2	37.8 32.2 36.9 21.7	45.9 42.1 55.1 -0.2	-1.6 35.6 29.0 -23.3	47.5 6.5 26.1 23.2	22.0 3.4 14.0 3.1	68.2 53.2 51.0 56.6	60.9 49.7 45.9 54.4	7.3 3.6 5.1 2.2
2002 Q1 Q2 Q3 Q4	68.3 -11.1 46.7 -17.9	36.3 -42.5 27.4 -16.0	32.0 31.4 19.3 -1.9	47.7 26.5 44.4 -34.7	4.9 12.8 20.5 -46.7	42.8 13.7 23.9 12.1	26.3 -1.5 13.7 -7.6	65.3 50.2 47.8 57.6	55.6 46.2 43.8 56.5	9.7 4.0 4.0 1.1
2003 Q1 Q2	-5.2	-4.7	-0.5	61.6	5.5	56.1	30.3	65.6	59.7	6.0

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

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

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

<sup>4)</sup> Covering deposits with euro area central government (S.1311), other financial intermediaries (S.123) and insurance corporations and pension funds (S.125). Excluding unquoted shares.

#### 2. Main liabilities 1)

			L	oans taken f	rom euro area	MFIs and o	ther financi	al corporatio	ns by			Memo: loans
	Total	Taken from	Gen	eral governi	nent	Non-fii	nancial corp	orations	Н	Iouseholds 3)		taken from banks
		euro area MFIs	Total	Short-term	Long-term 4)	Total	Short-term	Long-term	Total	Short-term	Long-term	outside the euro area by non-banks <sup>2)</sup>
	1	2	3	4	5	6	7	8	9	10	11	12
1999 Q2 Q3 Q4	162.3 70.4 175.8	133.2 71.5 146.3	-4.1 -14.7 19.7	2.7 -1.1 4.2	-6.8 -13.6 15.5	89.4 17.4 87.7	41.0 -16.7 33.6	34.1	77.0 67.7 68.4	3.8 -0.3 8.4	73.2 68.1 60.0	23.9 8.4 -7.0
2000 Q1 Q2 Q3 Q4	141.9 162.9 132.8 188.3	108.8 118.4 91.6 140.1	-7.9 -5.5 -15.9 16.1	-0.9 0.9 -2.1 2.2	-7.0 -6.4 -13.8 13.9	91.9 112.6 96.9 119.5	55.0 61.8 53.6 20.5	50.8	58.0 55.8 51.8 52.7	1.5 9.7 0.0 5.3	56.5 46.1 51.8 47.4	15.1 -0.8 23.2 1.9
					— Euro	area enla	rgement					
2001 Q1 Q2 Q3 Q4	151.3 109.8 88.0 119.1	137.3 88.0 57.9 92.5	-6.3 -15.3 -6.1 26.1	0.0 -0.1 3.1 4.7	-6.3 -15.2 -9.1 21.4	106.2 68.2 55.4 40.6	66.8 20.1 -16.4 -19.6		51.3 56.9 38.7 52.4	-0.4 6.0 -4.2 1.4	51.7 51.0 42.9 51.0	9.2 16.8 -21.4 4.2
2002 Q1 Q2 Q3 Q4	60.1 113.5 43.2 125.8	61.9 83.0 34.2 99.1	1.0 -25.2 -7.9 13.5	3.4 0.1 1.3 5.9	-2.4 -25.3 -9.1 7.6	20.2 63.9 2.4 49.0	-7.1 -3.8 -17.7 -11.1	27.3 67.7 20.1 60.1	39.0 74.8 48.7 63.3	-4.9 10.9 -3.9 6.2	43.9 63.9 52.6 57.2	8.4 -18.7 -9.0 8.9
2003 Q1 Q2	80.6	65.7 82.9	-0.7	8.0	-8.7	41.6	14.9	26.7	39.8	-9.6	49.3	

			Securiti	es other than		Quoted shares	Deposit liabilities of	Pension fund		
	Total	Ge	neral governm	ent	Non-	financial corpo	orations	issued by non-financial	central	reserves of non-
		Total	Short-term	Long-term	Total	Short-term	Long-term		8	financial corporations
	13	14	15	16	17	18	19	20	21	22
1999 Q2	39.6	29.0	-7.7	36.7	10.6	2.5	8.1	34.7	-9.2	2.8
Q3	55.8	38.6	-10.0	48.6	17.2	7.6	9.6	34.7	2.1	2.8
Q4	-12.1	-19.8	-27.9	8.1	7.7	3.6	4.1	42.1	7.2	2.8
2000 Q1	60.9	61.0	10.9	50.0	-0.1	-0.5	0.4	20.9	-0.7	2.8
Q2	39.3	23.5	-1.3	24.8	15.8	10.9	4.9		-0.3	2.8
Q3	48.6	25.8	-2.3	28.1	22.8	7.0	15.8		0.0	2.8
Q4	0.8	-20.3	-27.4	7.2	21.0	7.4	13.6		7.4	2.8
				— Euro	o area enlarg	ement –				
2001 Q1	74.9	37.6	32.5	5.1	37.3	10.9	26.4	51.4	-0.6	3.1
Q2	85.4	59.3	10.8	48.6	26.1	11.7	14.4	43.8	0.5	3.1
Q3	50.6	29.6	8.8	20.8	21.0	14.6	6.4	9.2	1.1	3.1
Q4	9.7	-7.9	-21.9	14.0	17.6	-0.8	18.3	5.9	12.3	1.8
2002 Q1	102.7	93.3	21.7	71.7	9.4	5.2	4.1	9.4	6.0	3.3
Q2	60.7	61.9	33.9	28.1	-1.2	-15.2	13.9		1.1	3.3
Q3	56.1	46.2	-0.9	47.1	9.9	7.0	2.8	-0.4	1.9	3.8
Q4	2.9	-0.6	-8.4	7.8	3.5	6.5	-3.0	-6.2	12.4	2.5
2003 Q1 Q2	159.1	128.9	50.1	78.8	30.2	22.1	8.1	-4.5	3.6	3.4

Source: ECB.

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

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

3) Including non-profit institutions serving households.

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

#### Table 6.2

#### Financial investment and financing of insurance corporations and pension funds

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

#### Amounts outstanding

					Main	financial asse	ets 1)				
		Deposit	s with euro are	ea MFIs			Loans		Securit	ies other thar	shares
	Total	Overnight	With agreed maturity	Redeemable at notice	Repurchase agreements	Total	Short-term	Long-term	Total	Short-term	Long-term
	1	2	3	4	5	6	7	8	9	10	11
1999 Q2 Q3 Q4	430.9 436.6 447.5	36.4 32.0 32.2	380.5 389.8 400.3	3.3 3.3 3.3	10.7 11.5 11.7	321.7 313.6 313.6	42.5 41.3 41.1	279.2 272.3 272.5	1,024.1 1,031.2 1,035.1	37.1 34.0 38.5	987.0 997.2 996.6
2000 Q1 Q2 Q3 Q4	458.9 460.8 464.6 477.6	35.4 34.6 34.1 40.6	407.1 411.1 413.8 418.5	3.2 3.5 3.7 3.2	13.1 11.6 12.9 15.3	317.4 316.1 317.2 311.3	45.0 46.3 46.9 50.1	272.4 269.8 270.3 261.1	1,064.4 1,091.1 1,091.4 1,085.2	40.4 45.1 45.6 40.4	1,024.0 1,046.0 1,045.9 1,044.8
					Euro area en	largement					
2001 Q1 Q2 Q3 Q4	483.8 486.3 487.8 495.4	38.2 41.4 39.3 48.0	423.3 424.2 426.9 427.5	3.5 3.8 3.8 3.4	18.8 16.9 17.9 16.4	313.1 316.1 316.5 320.2	51.9 52.2 53.1 56.7	261.2 263.9 263.4 263.5	1,126.8 1,150.5 1,165.2 1,187.2	40.3 55.0 50.1 44.3	1,086.5 1,095.5 1,115.1 1,142.9
2002 Q1 Q2 Q3 Q4	498.6 503.9 506.3 522.8	43.9 48.4 50.1 55.9	433.0 432.9 437.9 445.6	4.0 3.7 3.9 3.5	17.7 19.0 14.4 17.9	325.2 331.7 334.3 337.0	59.5 65.2 69.2 70.7	265.7 266.5 265.1 266.3	1,252.5 1,242.7 1,301.0 1,345.4	52.9 40.8 50.8 54.1	1,199.5 1,201.9 1,250.2 1,291.3
2003 Q1 Q2	535.5 537.7	59.7 62.2	454.0 450.3	3.7 3.0	18.2 22.3	343.9	71.6	272.3	1,379.1	64.5	1,314.6

		Mair	n financial	assets 1)				N	Iain liabili	ties 1)		
		Shar	es 2)		Prepayments of insurance	Loans ta	ken from a MFIs	Securities other than	Quoted shares	Inst	urance technical	reserves
	Total	Quoted shares	Mutual fund shares	Money market fund shares	premiums and reserves for out- standing claims	and other corpo	Taken from euro area	shares		Total	of households in life insurance reserves and pension	Prepayments of insurance premiums and reserves for out- standing
	12	13	14	15	16	17	MFIs 18	19	20	21	fund reserves	claims 23
1999 Q2 Q3 Q4	1,002.0 1,012.4 1,232.8	580.8 586.3 719.7	421.2 426.1 513.1	36.6 33.7 33.4	71.3 72.5 75.5	54.4 56.4 44.1	40.4 41.9 29.6	3.8 4.5 4.5	279.7 272.1 332.4	2,590.5 2,633.7 2,780.4	2,186.3 2,221.9 2,359.7	404.2 411.7 420.7
2000 Q1 Q2 Q3 Q4	1,348.7 1,363.1 1,412.0 1,331.6	777.9 771.6 797.3 726.9	570.8 591.5 614.6 604.7	37.1 40.6 37.4 36.9	78.0 78.9 80.0 78.4	52.3 54.2 49.0 47.3	37.1 38.8 33.1 31.5	5.1 5.1 7.9 9.1	363.4 332.2 359.0 326.3	2,897.3 2,941.9 2,994.4 3,019.8	2,467.4 2,507.9 2,556.2 2,582.2	429.9 434.0 438.2 437.6
					— Euro	area enla	rgement					
2001 Q1 Q2 Q3 Q4	1,305.9 1,343.2 1,212.9 1,310.7	709.7 736.3 648.0 704.0	596.1 606.8 564.9 606.7	44.8 46.5 45.9 46.0	80.8 81.7 83.6 92.2	51.3 51.2 52.1 48.5	36.4 36.2 37.4 34.9	9.2 9.7 9.7 10.3	311.9 315.6 221.5 234.7	3,072.6 3,130.5 3,108.4 3,207.3	2,624.6 2,677.8 2,648.0 2,730.9	448.0 452.7 460.4 476.4
2002 Q1 Q2 Q3 Q4	1,389.2 1,270.6 1,130.3 1,160.5	765.8 672.6 562.8 584.4	623.4 598.0 567.5 576.1	47.5 50.1 48.7 55.3	96.5 97.5 98.7 98.7	52.5 55.9 56.4 43.4	38.9 42.5 42.1 33.0	10.3 10.6 10.8 10.8	257.0 226.5 127.2 113.3	3,235.9 3,254.6 3,280.1 3,342.2	2,743.5 2,756.6 2,775.8 2,836.0	492.5 498.0 504.3 506.2
2003 Q1 Q2	1,120.4	543.5	577.0	55.9	100.1	56.4	42.4 44.6	10.9	103.3 136.5	3,401.3	2,888.0	513.2

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

#### **Transactions**

					Mair	financial asse	ets 1)				
		Deposit	ts with euro ar	ea MFIs			Loans		Securit	ties other than	shares
	Total	Overnight	With agreed maturity	Redeemable at notice	Repurchase agreements	Total	Short-term	Long-term	Total	Short-term	Long-term
	1	2	3	4	5	6	7	8	9	10	11
1999 Q2	4.8	4.3	0.4	0.3	-0.2	-1.7	-0.1	-1.6	18.1	-2.2	20.4
Q3	5.8	-4.4	9.3	0.0	0.8	-8.4	-1.2	-7.2	18.1	-2.8	20.9
Q4	10.5	0.2	10.1	0.0	0.2	-0.1	-0.3	0.2	4.3	3.8	0.5
2000 Q1	11.4	3.2	6.8	0.0	1.4	4.0	4.0	0.1	22.1	2.2	19.9
Q2	1.9	0.3	2.8	0.3	-1.5	-0.9	1.3	-2.2	23.2	4.7	18.6
Q3	1.2	-0.7	0.4	0.2	1.3	1.2	0.5	0.6	9.3	0.4	8.9
Q4	13.0	6.5	4.6	-0.5	2.4	-5.5	3.3	-8.8	-9.9	-6.0	-3.9
					Euro area ei	nlargement					
2001 Q1	6.2	-2.5	4.8	0.3	3.5	2.0	1.7	0.3	29.9	-0.2	30.1
Q2	2.8	3.4	1.0	0.3	-1.9	3.0	0.5	2.5	28.7	14.6	14.1
Q3	1.5	-2.1	2.7	-0.1	1.0	0.5	0.8	-0.3	10.6	-4.9	15.5
Q4	7.6	8.8	0.6	-0.3	-1.4	5.3	3.6	1.7	27.1	-5.9	33.0
2002 Q1	3.0	-4.2	5.3	0.5	1.3	3.2	1.2	2.0	55.3	8.5	46.8
Q2	5.3	4.5	-0.1	-0.3	1.2	5.5	4.3	1.3	-6.2	-12.4	6.2
Q3	2.5	1.7	5.1	0.3	-4.6	1.1	2.5	-1.4	39.1	9.8	29.3
Q4	16.5	5.8	7.7	-0.4	3.5	3.0	1.5	1.5	33.5	1.9	31.6
2003 Q1	12.2	3.9	7.8	0.2	0.4	10.0	3.5	6.6	42.4	10.8	31.7
Q2	2.5	2.7	-3.8	-0.4	4.0						

		Mair	n financial	assets 1)				N	Iain liabilit	ies 1)		
		Shar	es 2)		Prepayments of insurance	Loans ta	ken from	Securities other than	Quoted shares	Inst	urance technica	l reserves
	Total	Quoted shares	Mutual fund shares		premiums and reserves for out- standing claims	and other corpo		shares	shares _	Total	Net equity of households in life insurance reserves and pension fund reserves	Prepayments of insurance premiums and reserves for out- standing claims
	12	13	14	15	16	17	18	19	20	21	22	23
1999 Q2 Q3 Q4	23.4 15.0 50.8	12.8 11.9 11.2	10.6 3.1 39.6	3.0 -2.8 -0.3	1.2 1.3 3.0	4.3 1.7 -12.6	4.3 1.5 -12.4	1.8 0.4 0.6	0.3 0.2 -0.4	53.5 56.4 75.5	45.9 48.8 66.4	7.6 7.7 9.1
2000 Q1 Q2 Q3 Q4	41.9 33.6 36.3 17.0	4.6 8.8 18.8 2.6	37.3 24.8 17.5 14.4	4.4 3.4 -3.2 -0.5	2.4 0.9 1.1 -1.6	8.2 1.9 -5.2 -1.7	7.5 1.7 -5.7 -1.6	0.5 0.0 2.7 1.0	0.7 1.9 0.2 0.1	78.8 53.5 53.8 57.3	69.5 49.4 49.5 57.8	9.3 4.1 4.3 -0.5
					— Euro	area enla	rgement					
2001 Q1 Q2 Q3 Q4	46.4 14.7 23.8 34.6	28.9 11.2 19.7 7.9	17.6 3.5 4.1 26.8	8.2 1.3 -0.7 0.0	2.4 0.9 1.9 8.6	4.4 0.3 1.6 -3.3	4.9 -0.2 1.5 -2.5	0.1 0.6 0.2 0.6	-0.9 -1.0 4.0 0.6	66.9 51.7 51.2 67.5	56.0 46.6 43.0 51.1	10.9 5.1 8.2 16.4
2002 Q1 Q2 Q3 Q4	31.6 18.0 11.4 14.5	16.2 5.6 7.9 -3.0	15.3 12.4 3.5 17.5	1.5 2.6 -1.4 6.7	4.3 1.0 1.3 0.0	3.7 2.9 -2.0 -11.5	3.9 3.3 -2.5 -9.2	0.2 0.4 0.1 0.3	0.2 0.2 0.0 0.5	66.7 47.6 45.4 54.7	50.7 42.1 39.2 52.9	16.0 5.5 6.2 1.8
2003 Q1 Q2	20.3	6.5	13.8	0.5	1.4	14.8	11.3 2.4	0.0	0.2	65.9	58.8	7.0

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

#### Table 6.3

#### Saving, investment and financing 1)

(EUR billions, unless otherwise indicated)

#### 1. All sectors in the euro area 2)

		Net acquisi	tion of non-finan	cial assets				Net	acquisition of fi	inancial ass	ets		
	Total	Gross fixed capital formation	Consumption of fixed capital (-)	Changes in inven- tories 3)	Non- produced assets	Total	Monetary gold and SDRs	Currency and deposits	Securities other than shares 4)	Loans	Shares and other equity	Insurance technical reserves	Other investment (net) 5)
	1	2	3	4	5	6	7	8	9	10	11	12	13
1996	340.4	1,122.4	-783.9	1.6	0.4	1,735.6	-3.0	395.3	397.7	383.8	315.0	195.4	51.4
1997	353.0	1,139.2	-797.1	10.8	0.1	1,916.6	-0.2	394.4	332.3	449.9	485.6	223.7	30.9
1998	412.3	1,203.4	-823.6	32.3	0.2	2,393.9	11.0	430.7	357.2	523.3	831.2	215.9	24.5
1999	447.9	1,291.7	-863.7	19.8	0.1	3,070.4	1.3	557.7	427.1	880.6	906.8	261.1	35.7
2000	490.3	1,388.8	-913.1	31.2	-16.6	2,797.7	1.3	349.6	266.5	808.9	1,121.3	252.9	-2.8
-					<u>—</u> Еи	ro area en	largement	-					
2001	464.6	1,437.5	-973.6	-1.2	1.9	2,556.8	-0.5	558.7	431.7	714.6	612.3	236.8	3.2
2002	370.4	1.426.2	-1.050.9	-6.2	1.3	2.255.9	0.9	613.5	331.1	522.8	487.6	222.0	78.0

		Changes in	net worth 6)				Net incurrence	of liabilities		
	Total	Gross saving	Consumption of fixed capital (-)	Net capital transfers receivable	Total	Currency and deposits	Securities other than shares 4)	Loans	Shares and other equity	Insurance technical reserves
	14	15	16	17	18	19	20	21	22	23
1996	410.7	1,190.0	-783.9	4.6	1,665.4	472.4	383.4	335.0	278.2	196.3
1997	456.1	1,241.8	-797.1	11.4	1,813.4	511.6	317.7	378.6	375.6	229.9
1998	486.5	1,299.1	-823.6	11.1	2,319.7	648.4	322.5	481.8	645.5	221.5
1999	498.3	1,352.0	-863.7	10.0	3,020.0	929.1	503.8	762.5	559.7	264.9
2000	514.7	1,419.4	-913.1	8.4	2,773.3	532.4	413.8	850.6	723.8	252.7
				Euro	area enlarge	ment -				
2001	483.4	1,449.4	-973.6	7.5	2,538.1	660.2	493.0	594.5	541.0	249.3
2002	524.3	1,562.1	-1,050.9	13.1	2,101.9	559.4	452.6	468.2	387.7	233.9

#### 2. Non-financial corporations

		Net acquisitio on-financial a			Net acqu	isition of financ	ial assets			ges in orth <sup>6)</sup>	N	et incurrence o	f liabilities	
	Total			Total					Total		Total			
		Gross fixed capital formation	Consumption of fixed capital (-)		Currency and deposits	Securities other than shares 4)	Loans	Shares and other equity		Gross saving		Securities other than shares 4)	Loans	Shares and other equity
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1996	136.0	589.1	-454.7	267.2	54.1	-13.5	55.1	87.5	125.8	537.6	277.4	7.0	143.8	119.0
1997	157.4	614.9	-469.2	244.3	25.3	-13.6	46.3	95.9	112.5	544.9	289.2	12.1	154.5	113.0
1998	201.6	659.4	-487.0	421.8	54.1	-10.2	96.4	185.8	156.3	594.2	467.1	22.7	253.1	180.6
1999	220.6	710.3	-508.0	604.5	27.0	87.0	169.4	296.0	115.0	572.9	710.1	48.6	420.7	224.3
2000	318.2	776.9	-541.7	827.3	71.3	93.5	192.4	435.0	91.3	586.7	1,054.2	59.5	559.7	427.0
						Euro area	enlargeme	ent						
2001 2002	221.4 182.9	800.1 784.0	-576.2 -597.0	602.1 372.4	88.5 22.5	74.5 17.5	135.8 47.3	229.5 254.7	88.8 124.1	606.6 658.4	734.7 431.2	102.0 21.5	311.3 208.8	309.9 187.0

#### 3. Households 7)

		Net acquisition on-financial a			Net acqu	isition of finar	cial assets		Change: wor	s in net rth <sup>6)</sup>	Net incu of liab		Memo	):
	Total			Total					Total _		Total		Disposable	Gross
		Gross fixed	Consumption		Currency	Securities	Shares	Insurance		Gross		Loans	income	saving
		capital	of fixed capital (-)		deposits	other than shares 4)	and other	technical		saving				ratio 8)
		formation	capitai (-)		deposits	snares	equity	reserves						
	1	2	3	4	5	6	7	8	9	10	11	12	13	14_
1996	164.2	361.8	-199.0	433.9	146.2	24.8	94.4	190.9	436.8	620.5	161.3	160.1	3,763.5	16.5
1997	160.1	353.7	-194.7	423.3	70.4	-18.3	195.0	217.4	414.9	590.3	168.5	167.1	3,791.0	15.6
1998	169.4	364.3	-199.0	439.9	96.3	-118.5	292.7	210.7	397.8	566.6	211.5	210.2	3,897.5	14.5
1999	179.0	390.9	-213.4	477.6	119.2	-22.8	193.4	247.6	383.2	553.9	273.4	271.9	4,060.9	13.6
2000	190.0	410.4	-221.4	418.1	65.6	37.4	117.8	247.0	385.9	568.0	222.2	220.5	4,243.6	13.4
						Euro area	enlargemen	t –						
2001	184.3	420.5	-240.8	405.9	172.3	52.4	60.3	223.5	416.5	623.5	173.7	171.8	4,544.8	13.7
2002	142.8	433.2	-290.9	553.6	229.2	64.4	-4.5	215.5	481.4	738.2	215.0	212.8	4,775.8	15.5

- 1) Non-consolidated data.
- All sectors comprise general government (S.13), non-financial corporations (S.11), financial corporations (S.12) and households (S.14) including non-profit All sections comprise general government (5.15), non-jutaneous corporations (5.11), financial co-porations (5.11), financial

- Including non-profit institutions serving households.
- Gross saving as a percentage of disposable income.

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

#### Table 7.1

#### Revenue, expenditure and deficit / surplus 1)

(as a percentage of GDP)

#### 1. Euro area - revenue

	Total	Current										Capital		Memo:
		revenue	Direct_			Indirect _		Social _			Sales	revenue	Capital	fiscal
			taxes	House-	Corpo-	taxes	Received		Employers Er	nployees			taxes	burden 2)
				holds	rations		by EU	butions						
							institutions							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1993	48.0	47.5	12.1	9.8	2.0	13.2	0.8	17.5	8.7	5.6	2.5	0.5	0.3	43.1
1994	47.6	47.1	11.6	9.3	1.9	13.4	0.8	17.5	8.5	5.7	2.5	0.4	0.2	42.8
1995	47.2	46.6	11.6	9.2	2.0	13.3	0.9	17.3	8.4	5.6	2.5	0.5	0.3	42.6
1996	48.0	47.5	12.0	9.4	2.3	13.4	0.8	17.6	8.7	5.6	2.5	0.5	0.3	43.3
1997	48.3	47.6	12.2	9.3	2.5	13.5	0.7	17.6	8.8	5.6	2.5	0.7	0.4	43.7
1998	47.7	47.2	12.4	9.6	2.5	14.1	0.7	16.5	8.5	5.0	2.5	0.5	0.3	43.3
1999	48.2	47.7	12.8	9.8	2.6	14.3	0.6	16.4	8.5	5.0	2.5	0.5	0.3	43.8
2000	47.8	47.3	13.0	10.0	2.7	14.2	0.6	16.2	8.4	4.9	2.4	0.5	0.3	43.6
						Euro area e	nlargement							
2001	47.1	46.6	12.6	9.8	2.5	13.9	0.6	16.0	8.4	4.8	2.3	0.5	0.3	42.7
2002	46.6	46.0	12.1	9.5	2.4	13.9	0.5	16.0	8.4	4.7	2.3	0.6	0.3	42.3

#### 2. Euro area - expenditure

	Total				Current	expenditur	e			Capital				Memo:
						•				expenditure	Invest-	Capital		primary
		Total	F	Inter-	Interest	Current				_	ment	transfers	Paid	expend-
			sation of	mediate		transfers	Social	Subsidies	D. I.I. EII				by EU	iture 4)
			employees	consumption			payments 3)		Paid by EU institutions				institu- tions	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1993	53.7	49.2	11.6	5.1	5.9	26.6	22.0	2.5	0.6	4.6	3.1	1.6	0.1	47.9
1993	52.7	48.3	11.0		5.5	26.6	23.0 23.0	2.3	0.6	4.6	2.9	1.5	0.1	47.9
				4.9										
1995	52.2	47.7	11.2	4.8	5.7	26.1	22.9	2.2	0.6	4.5	2.7	1.8	0.1	46.5
1996	52.3	48.3	11.2	4.8	5.7	26.6	23.3	2.2	0.6	4.0	2.6	1.4	0.0	46.6
1997	50.9	47.2	11.0	4.7	5.1	26.3	23.2	2.1	0.6	3.7	2.4	1.3	0.1	45.8
1998	50.0	46.0	10.7	4.6	4.7	26.0	22.7	2.0	0.5	3.9	2.4	1.5	0.1	45.3
1999	49.4	45.4	10.7	4.7	4.2	25.8	22.6	2.0	0.5	4.0	2.5	1.5	0.1	45.2
2000	48.7	44.7	10.5	4.7	4.0	25.5	22.3	1.9	0.5	4.0	2.5	1.4	0.0	44.7
						Euro a	rea enlargem	ent						
2001	48.7	44.6	10.5	4.7	4.0	25.4	22.3	1.9	0.5	4.2	2.5	1.6	0.0	44.8
2002	48.8	44.8	10.6	4.8	3.7	25.7	22.8	1.8	0.5	4.0	2.4	1.6	0.0	45.1

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

		Defic	it (-) / surpl	lus (+)		Primary deficit (-) /				Governmen	t consumption	1 <sup>5)</sup>		
	Total	Central	State	Local	Social	surplus (+)	Total						Government	Government
		govern-	govern-	govern-	security	• ` ` `		Compen-	Inter-	Transfers	Consump-	Sales	collective	individual
		ment	ment	ment	funds			sation of	mediate	in kind	tion	(minus)	consump-	consump-
								employees	consump-	via market	of fixed		tion	tion
	,	2	3		5		7		tion	producers	capital	12	1.2	1.4
	1	2	3	4]	5]	6	/	8	9	10	11	12	13	14
1993	-5.7	-5.0	-0.4	-0.2	-0.1	0.2	21.2	11.6	5.1	5.0	2.0	-2.5	9.0	12.2
1994	-5.1	-4.4	-0.5	-0.2	0.0	0.4	20.8	11.3	4.9	5.1	1.9	-2.5	8.7	12.1
1995	-5.1	-4.2	-0.5	-0.1	-0.3	0.6	20.5	11.2	4.8	5.1	1.9	-2.5	8.6	11.9
1996	-4.3	-3.6	-0.4	0.0	-0.2	1.4	20.6	11.2	4.8	5.2	1.9	-2.5	8.6	12.0
1997	-2.6	-2.3	-0.4	0.1	0.0	2.5	20.4	11.0	4.7	5.1	1.9	-2.5	8.4	11.9
1998	-2.3	-2.2	-0.3	0.1	0.0	2.4	20.0	10.7	4.6	5.1	1.8	-2.5	8.2	11.8
1999	-1.3	-1.6	-0.1	0.1	0.4	2.9	20.0	10.7	4.7	5.1	1.8	-2.5	8.2	11.8
2000	-0.9	-1.3	-0.1	0.1	0.4	3.1	20.0	10.5	4.7	5.2	1.8	-2.4	8.1	11.9
						Eu	ro area en	largement						
2001	-1.6	-1.6	-0.4	0.0	0.3	2.3	20.0	10.5	4.7	5.2	1.8	-2.3	8.1	11.9
2002	-2.3	-1.9	-0.5	-0.1	0.2	1.4	20.3	10.6	4.8	5.3	1.8	-2.3	8.2	12.1

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

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

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

Revenue, expenditure and deficit / surplus based on the ESA 95, but the figures exclude proceeds from the sale of UMTS (Universal Mobile Telecommunications Systems) licences in 2000 (the euro area deficit / surplus including those proceeds is equal to 0.2). Transactions between countries and EU institutions are included and consolidated. Transactions among governments are not consolidated.

The fiscal burden comprises taxes and social contributions.

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

Comprises total expenditure minus interest expenditure.

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

Including proceeds from the sale of UMTS licences.

#### Table 7.2

#### Debt 1)

(as a percentage of GDP)

#### 1. Euro area – government debt by financial instrument and sector of the holder

	Total		Financial ins	strument				Holder		
		Coins and	Loans	Short-term securities	Long-term securities	D	omestic credi	tors 2)		Other creditors 3)
		deposits				Total	MFIs	Other financial corporations	Other sectors	
	1	2	3	4	5	6	7	. 8	9	10
1993	67.3	2.7	17.0	10.0	37.6	52.5	27.6	8.8	16.2	14.8
1994	70.0	2.9	16.1	10.3	40.6	55.8	29.8	10.0	16.0	14.2
1995	74.2	2.9	17.7	9.9	43.8	58.3	30.5	11.0	16.8	15.9
1996	75.4	2.9	17.2	9.9	45.5	58.9	30.3	13.2	15.4	16.5
1997	74.9	2.8	16.3	8.9	46.8	56.9	29.0	14.5	13.4	17.9
1998	73.2	2.8	15.1	7.9	47.3	53.4	27.0	16.3	10.2	19.8
1999	72.1	2.9	14.2	6.9	48.1	49.8	25.2	14.9	9.7	22.3
2000	69.6	2.7	13.0	6.2	47.6	45.9	22.8	13.3	9.8	23.6
				Euro ar	ea enlargement					
2001	69.2	2.6	12.5	6.3	47.8	44.6	22.5	12.5	9.6	24.6
2002	69.0	2.5	11.8	6.7	48.0	43.3	21.7	12.1	9.5	25.7

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

	Total		Issue	d by 4)		0	riginal matu	rity	Re	sidual maturit	у		Currency	
		Central	State	Local	Social	Up to	Over_		Up to	Over 1 and	Over	Euro or		Other
		govern-	govern-	govern-	security	1 year	1 year	Variable	1 year	up to 5	5 years		Non-domestic	currencies
		ment	ment	ment	funds			interest rate		years		currency 5)	currency	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1993	67.3	55.2	5.2	6.3	0.6	11.9	55.4	6.6	18.4	24.4	24.4	65.6	2.9	1.7
1994	70.0	57.9	5.4	6.1	0.5	11.2	58.8	7.4	16.5	26.8	26.7	68.1	3.0	1.9
1995	74.2	61.7	5.7	6.0	0.8	10.6	63.6	6.8	17.6	26.4	30.2	72.3	2.9	1.9
1996	75.4	62.9	6.1	5.9	0.5	10.2	65.2	6.3	19.2	25.4	30.8	73.5	2.7	1.9
1997	74.9	62.3	6.3	5.6	0.6	8.8	66.0	6.0	18.6	25.4	30.8	72.8	2.8	2.0
1998	73.2	61.1	6.3	5.4	0.4	7.7	65.4	5.5	16.4	26.1	30.7	71.4	3.2	1.7
1999	72.1	60.2	6.2	5.3	0.3	6.5	65.6	5.0	14.4	26.9	30.7	70.2	-	1.9
2000	69.6	58.1	6.1	5.1	0.3	5.7	63.8	4.4	14.3	27.6	27.7	67.7	-	1.9
						— E	uro area e	nlargement	-					
2001	69.2	57.8	6.2	4.9	0.3	6.0	63.2	3.2	14.6	26.3	28.3	67.4	-	1.8
2002	69.0	57.5	6.4	4.8	0.3	6.2	62.8	3.2	15.7	24.8	28.5	67.4	-	1.6

#### 3. Euro area countries - government debt

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

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

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.
 Holders resident in the country whose government has issued the debt.
 Includes residents of euro area countries other than the country whose government has issued the debt.
 Excludes debt held by general government in the country whose government has issued it.

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

#### Table 7.3

#### Change in debt 1)

(as a percentage of GDP)

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

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

#### 2. Euro area - deficit-debt adjustment

	Change in	Deficit (-) / surplus (+) 8)						Deficit-deb	t adjustment	9)				
	dest	surpius (+)	Total		Transaction	ns in main financ	cial assets	held by genera	ıl governmen	t	Valuation effects	Exchange	Other changes in	Other 11)
				Total	Currency	Securities 10)	Loans	Shares and				rate	volume	
					and			other	Privatisa-	Equity		effects		
					deposits			equity	tions	injections				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1993	8.0	-5.7	2.3	1.5	1.3	0.2	0.3	-0.2	-0.3	0.1	0.3	0.3	0.1	0.3
1994	6.0	-5.1	0.9	0.0	-0.2	0.1	0.3	-0.1	-0.4	0.2	0.2	0.0	0.7	0.1
1995	7.8	-5.1	2.7	0.6	0.1	-0.1	0.5	0.1	-0.4	0.2	0.2	0.0	2.2	-0.3
1996	3.8	-4.3	-0.5	-0.2	-0.1	0.0	-0.1	-0.1	-0.3	0.2	-0.2	-0.1	0.1	-0.2
1997	2.3	-2.6	-0.3	-0.5	0.2	-0.1	0.0	-0.5	-0.8	0.3	0.2	0.2	-0.2	0.2
1998	1.7	-2.3	-0.6	-0.5	0.1	0.0	-0.1	-0.6	-0.8	0.3	-0.2	0.0	0.0	0.1
1999	1.7	-1.3	0.4	-0.1	0.5	0.1	0.0	-0.7	-0.9	0.2	0.3	0.2	0.1	0.1
2000	0.9	0.2	1.1	0.9	0.7	0.1	0.2	-0.2	-0.4	0.2	0.1	0.0	-0.1	0.1
						- Euro a	rea enlar	gement						
2001	1.7	-1.6	0.1	-0.4	-0.6	0.1	0.2	-0.1	-0.3	0.2	0.0	0.0	0.0	0.5
2002	2.0	-2.3	-0.2	0.2	0.3	0.0	0.1	-0.2	-0.4	0.1	-0.1	-0.1	-0.4	0.0

- Data are partially estimated. Annual change in gross nominal consolidated debt expressed as a percentage of GDP [debt(t) debt(t-1)] ÷ GDP(t).
   The borrowing requirement is by definition equal to transactions in government debt.
   Includes, in addition to the impact of foreign exchange movements, effects arising from measurement at nominal value (e.g. premia or discounts on securities)
- Comprises, in particular, the impact of the reclassification of units and certain types of debt assumption.

  The difference between the changes in the aggregated debt, resulting from the aggregation of countries' debt, and the aggregation of countries' change in debt, due to variations in the exchange rates used for aggregation before 1999.

  Holders resident in the country whose government has issued the debt.
- Includes residents of euro area countries other than the country whose government has issued the debt.
- Including proceeds from sales of UMTS licences.
- The difference between the annual change in gross nominal consolidated debt and the deficit as a percentage of GDP.
- Excluding financial derivatives.
   Comprises mainly transactions in other assets and liabilities (trade credit, other receivables/payables and financial derivatives).

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

#### Summary balance of payments 1) 2)

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

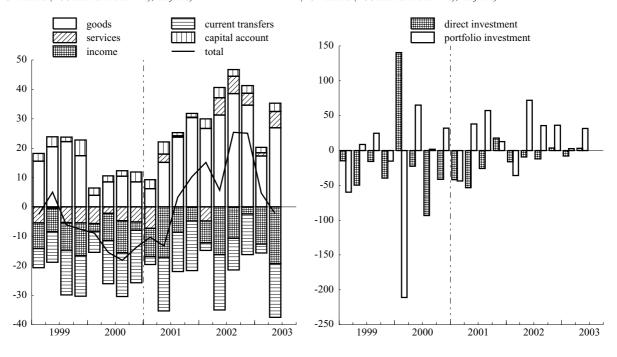
		Cı	irrent accou	int		Capital account			Financi	al account			Errors and
	Total	Goods	Services	Income	Current transfers	account	Total	Direct investment	Portfolio investment	Financial derivatives	Other investment	Reserve assets	omissions
	1	2	3	4	5	6	7	8	9	10	11	12	13
1997 1998 1999 2000	56.7 26.7 -23.8 -66.0	116.4 109.0 75.7 31.6	-2.3 -6.3 -16.5 -17.5	-15.2 -28.8 -37.0 -25.5	-42.2 -47.2 -46.1 -54.6	13.0 12.4 12.8 9.8	-67.0 13.5 66.9 rea enlar	-44.4 -81.3 -119.5 -16.5	-24.1 -109.9 -41.4 -111.6	-8.2 3.3 -3.4	124.2 161.0 180.8	8.2 10.1 17.6	27.9 -2.5 -10.7
2001 2002	-19.4 59.6	75.5 131.1	-3.7 11.1	-39.9 -36.6	-51.2 -46.0	9.5 11.6	-24.9 -132.1	-102.8 -33.6	64.7 108.4	-3.5 -14.0	-1.1 -190.7	17.8 -2.2	34.7 60.9
2002 Q2 Q3 Q4	2.2 23.0 22.4	31.3 38.5 34.6	5.9 5.9 4.0	-16.2 -10.7 -2.4	-18.8 -10.7 -13.8	3.5 2.3 2.6	-19.8 -50.3 -53.9	-9.2 -12.0 3.6	72.2 35.7 36.2	-2.8 -9.6 -4.0	-86.7 -59.7 -88.4	6.7 -4.6 -1.3	14.1 24.9 28.8
2003 Q1 Q2	2.8 -5.0	17.3 26.9	1.1 5.6	-12.6 -19.2	-3.0 -18.3	1.9 2.8	-30.5 -42.0	-7.7 3.3	2.8 31.8	-0.1 -4.4	-37.5 -75.4	11.9 2.8	25.8 44.2
2002 Apr. May June July Aug. Sep. Oct. Nov. Dec.	-5.8 0.7 7.4 4.8 9.9 8.3 4.7 10.6 7.1	7.3 10.3 13.7 15.3 12.2 11.1 12.4 12.6 9.6	0.6 2.1 3.2 1.7 0.4 3.9 0.9 1.7	-7.7 -6.4 -2.1 -9.0 0.3 -2.0 -2.4 0.2 -0.2	-6.0 -5.3 -7.5 -3.1 -3.0 -4.6 -6.2 -3.9 -3.7	1.3 1.0 1.1 0.5 0.6 1.2 1.4 0.3 0.9	14.8 5.6 -40.2 -17.4 -11.5 -21.3 -17.4 -20.2 -16.2	8.1 1.5 -18.8 -6.7 1.7 -7.0 -6.2 7.2 2.5	16.0 34.2 22.0 10.7 8.3 16.7 25.9 15.6 -5.3	1.4 -2.0 -2.2 -8.2 -2.1 0.7 -0.1 -1.4 -2.5	-19.1 -30.0 -37.7 -10.7 -21.1 -27.9 -39.3 -39.2 -9.9	8.4 1.9 -3.5 -2.6 1.8 -3.8 2.1 -2.4 -1.0	-10.3 -7.3 31.8 12.1 1.0 11.8 11.3 9.3 8.2
2003 Jan. Feb. Mar. Apr. May June	-4.8 3.5 4.0 -8.6 0.4 3.2	2.1 9.1 6.2 7.4 8.3 11.2	-0.6 0.1 1.5 0.8 2.0 2.8	-9.4 -2.6 -0.6 -10.5 -4.3 -4.4	3.2 -3.1 -3.0 -6.3 -5.6 -6.4	2.1 -0.9 0.8 0.1 0.4 2.3	-12.7 -25.8 7.9 7.8 -29.8 -20.0	-3.1 3.2 -7.7 -20.2 -0.2 23.7	-2.8 -12.0 17.6 9.3 8.0 14.5	-0.8 0.6 0.2 -4.6 0.6 -0.3	-7.4 -22.9 -7.2 22.9 -39.6 -58.7	1.5 5.3 5.0 0.5 1.4 0.8	15.3 23.2 -12.7 0.7 29.1 14.5

#### Current and capital accounts

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

#### Direct and portfolio investment

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



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

### Table 8.2

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

#### 1. Main items

					Curi	ent account	:					Capital ac	count
		Total		Good	s	Servi	ices	Inco	me	Current tra	ansfers		
	Credit	Debit	Net	Credit	Debit	Credit	Debit	Credit	Debit	Credit	Debit	Credit	Debit
	1	2	3	4	5	6	7	8	9	10	11	12	13
1997	1,218.5	1,161.8	56.7	754.6	638.3	214.3	216.5	189.5	204.7	60.0	102.3	18.9	5.9
1998	1,277.3	1,250.6	26.7	784.4	675.4	231.6	237.9	198.5	227.3	62.9	110.1	17.7	5.3
1999	1,337.0	1,360.8	-23.8	818.3	742.5	246.7	263.2	207.3	244.2	64.8	110.9	19.1	6.3
2000	1,613.1	1,679.1	-66.0	989.8	958.3	287.5	304.9	269.1	294.6	66.7	121.3	18.3	8.5
2001	1,716.3	1,735.7	-19.4	1,033.0	957.6	area enla 325.0	328.7	283.1	322.9	75.3	126.5	17.0	7.5
2002	1,713.4	1,653.8	59.6	1,059.3	928.2	332.0	320.9	238.0	274.6	84.2	130.2	18.9	7.3
2002 Q2	429.3	427.1	2.2	267.3	236.0	84.5	78.6	62.5	78.6	15.1	33.9	5.0	1.5
Q3	426.8	403.8	23.0	263.2	224.7	89.8	83.9	55.4	66.0	18.4	29.2	4.1	1.7
Q4	440.8	418.4	22.4	273.9	239.3	85.2	81.1	61.9	64.2	19.9	33.7	5.2	2.5
2003 Q1	411.8	409.0	2.8	252.6	235.3	75.3	74.3	51.3	63.8	32.6	35.6	5.2	3.3
Q2	413.6	418.6	-5.0	257.1	230.2	79.7	74.2	61.8	81.0	15.0	33.3	4.6	1.8
2002 Apr.	141.4	147.2	-5.8	88.4	81.1	27.5	26.8	20.2	27.9	5.3	11.3	1.9	0.6
May	143.0	142.3	0.7	88.9	78.6	28.2	26.1	20.5	26.9	5.3	10.6	1.5	0.4
June	144.9	137.6	7.4	89.9	76.3	28.8	25.6	21.7	23.8	4.5	12.0	1.6	0.5
July	151.1	146.3	4.8	93.5	78.2	31.3	29.6	20.1	29.1	6.3	9.4	1.1	0.6
Aug.	134.9	125.1	9.9	81.7	69.5	28.9	28.6	18.3	18.0	6.0	9.0	1.3	0.7
Sep.	140.8	132.4	8.3	88.1	77.0	29.6	25.7	17.0	19.0	6.1	10.7	1.6	0.4
Oct.	151.3	146.6	4.7	97.7	85.2	29.1	28.2	19.5	21.9	5.1	11.3	2.0	0.6
Nov.	145.6	134.9	10.6	92.2	79.7	26.8	25.1	19.6	19.4	6.9	10.8	1.1	0.8
Dec.	144.0	136.9	7.1	84.0	74.4	29.2	27.8	22.8	23.0	7.9	11.6	2.1	1.2
2003 Jan.	143.7	148.5	-4.8	82.4	80.3	25.5	26.2	18.0	27.4	17.8	14.6	2.6	0.5
Feb.	131.0	127.5	3.5	83.3	74.2	23.4	23.3	16.5	19.0	7.8	10.9	1.5	2.4
Mar.	137.1	133.1	4.0	86.9	80.7	26.4	24.8	16.8	17.4	7.0	10.1	1.2	0.3
Apr.	138.8	147.4	-8.6	86.3	78.9	26.4	25.7	21.3	31.8	4.7	11.0	0.5	0.4
May	135.7	135.3	0.4	84.5	76.2	26.0	24.1	20.1	24.4	5.1	10.7	1.4	1.0
June	139.1	135.8	3.2	86.2	75.0	27.3	24.5	20.4	24.8	5.2	11.6	2.7	0.4

#### 2. Main current account items (seasonally adjusted)

				Curre	ent account					
	Total		Goods		Service	es	Incom	ie	Current tran	sfers
Credit 1	Debit 2	Net 3	Credit 4	Debit 5	Credit 6	Debit 7	Credit 8	Debit 9	Credit 10	Debit 11
430.8	442.6	-11.8	260.6	244.3	81.5	82.3	69.6	82.4	19.1	33.6
428.2	430.4	-2.2	257.4	239.1	82.1	82.5	70.1	78.0	18.5	30.8
422.4	419.7	2.6	253.7	228.3	81.8	81.7	68.3	76.9	18.5	32.8
426.4	411.0	15.3	263.7	228.8	81.6	81.8	61.6	68.9	19.5	31.5
427.4	417.2	10.2	266.3	232.7	82.9	80.7	58.2	70.1	20.0	33.7
430.9	412.1	18.7	266.2	232.3	83.7	78.8	58.5	68.6	22.5	32.4
429.1	413.6	15.4	263.5	234.4	83.4	79.4	59.9	66.5	22.2	33.4
420.6	412.2	8.3	260.1	233.8	84.9	78.6	54.6	67.0	20.9	32.9
413.6	409.3	4.3	257.2	228.5	78.3	76.2	57.8	71.7	20.3	33.0
142.0	140.9	1.1	88.0	77.9	27.9	27.6	19.2	24.1	6.9	11.3
141.8	138.4	3.4	88.5	76.7	27.2	26.6	19.5	24.0	6.6	11.2
143.6	137.9	5.7	89.7	78.1	27.8	26.5	19.5	22.0	6.6	11.2
141.4	138.4	3.0	87.2	77.0	27.0	26.6	19.8	24.3	7.4	10.5
145.4	137.9	7.5	89.8	77.7	27.6	26.9	20.3	22.7	7.7	10.7
144.0	135.8	8.2	89.2	77.6	29.1	25.3	18.4	21.7	7.4	11.2
143.1	139.5	3.5	88.3	78.5	27.8	26.6	19.8	23.0	7.2	11.4
146.6	138.2	8.4	89.4	78.1	28.3	26.2	21.2	22.7	7.7	11.2
139.4	135.9	3.5	85.7	77.9	27.4	26.5	19.0	20.7	7.3	10.8
143.6	140.4	3.2	89.0	78.5	28.6	26.7	18.8	24.3	7.2	11.0
140.6	137.6	3.0	87.9	77.6		26.0	18.1	22.9	6.7	11.1
136.3	134.3	2.1		77.7		25.9	17.6	19.8	7.0	10.8
140.5	141.5	-1.0	87.3	77.5		26.3	20.1	26.7	6.3	11.0
137.7	134.9	2.8					19.1	21.8		11.1
135.4	132.9	2.5	83.5	74.1	25.8	24.8	18.6	23.2	7.5	10.8
	Credit 1 430.8 428.2 422.4 426.4 427.4 430.9 429.1 420.6 413.6 141.4 145.4 144.0 143.1 146.6 139.4 143.6 140.6 136.3 140.5 137.7	1 2 430.8 442.6 428.2 430.4 422.4 419.7 426.4 411.0 427.4 417.2 430.9 412.1 429.1 413.6 420.6 412.2 413.6 409.3 142.0 140.9 141.8 138.4 143.6 137.9 141.4 138.4 145.4 137.9 144.0 135.8 143.1 139.5 146.6 138.2 139.4 135.9 143.6 140.4 140.6 137.6 136.3 134.3 140.5 141.5 137.7 134.9	Credit         Debit         Net           430.8         442.6         -11.8           428.2         430.4         -2.2           422.4         419.7         2.6           426.4         411.0         15.3           427.4         417.2         10.2           430.9         412.1         18.7           429.1         413.6         15.4           420.6         412.2         8.3           413.6         409.3         4.3           142.0         140.9         1.1           141.8         138.4         3.4           143.6         137.9         5.7           141.4         138.4         3.0           145.4         137.9         7.5           144.0         135.8         8.2           143.1         139.5         3.5           146.6         138.2         8.4           139.4         135.9         3.5           143.6         140.4         3.2           140.6         137.6         3.0           140.5         141.5         -1.0           137.7         134.9         2.8	Credit         Debit         Net         Credit           430.8         442.6         -11.8         260.6           428.2         430.4         -2.2         257.4           422.4         419.7         2.6         253.7           426.4         411.0         15.3         263.7           427.4         417.2         10.2         266.3           430.9         412.1         18.7         266.2           429.1         413.6         15.4         263.5           420.6         412.2         8.3         260.1           413.6         409.3         4.3         257.2           142.0         140.9         1.1         88.0           141.8         138.4         3.4         88.5           143.6         137.9         5.7         89.7           141.4         138.4         3.0         87.2           145.4         137.9         7.5         89.8           144.0         135.8         8.2         89.2           143.1         139.5         3.5         88.3           146.6         138.2         8.4         89.4           139.4         135.9         3.5	Credit         Debit         Net         Credit         Debit           430.8         442.6         -11.8         260.6         244.3           428.2         430.4         -2.2         257.4         239.1           422.4         419.7         2.6         253.7         228.8           427.4         417.2         10.2         266.3         232.7           430.9         412.1         18.7         266.2         232.3           429.1         413.6         15.4         263.5         234.4           420.6         412.2         8.3         260.1         233.8           413.6         409.3         4.3         257.2         228.5           142.0         140.9         1.1         88.0         77.9           141.8         138.4         3.4         88.5         76.7           143.6         137.9         5.7         89.7         78.1           141.4         138.4         3.0         87.2         77.0           145.4         137.9         7.5         89.8         77.7           144.0         135.8         8.2         89.2         77.6           143.1         139.5         3	Credit         Debit         Net         Credit         Debit         Credit         Credit	Credit         Debit         Net         Credit         Debit         Credit         Debit         Credit         Debit         Credit         Debit         T           430.8         442.6         -11.8         260.6         244.3         81.5         82.3           428.2         430.4         -2.2         257.4         239.1         82.1         82.5           422.4         419.7         2.6         253.7         228.8         81.6         81.8           427.4         417.2         10.2         266.3         232.7         82.9         80.7           430.9         412.1         18.7         266.2         232.3         83.7         78.8           429.1         413.6         15.4         263.5         234.4         83.4         79.4           420.6         412.2         8.3         260.1         233.8         84.9         78.6           413.6         409.3         4.3         257.2         228.5         78.3         76.2           141.8         138.4         3.4         88.5         76.7         27.9         27.6           143.6         137.9         5.7         89.7         78.1         27.8         26.5 <td>Credit         Debit         Net         Credit         Debit         Credit         Debit         Credit         Debit         Credit         Debit         Credit         Net         Credit         Debit         Credit         Debit         Credit         Debit         Credit         Debit         Credit         Net         Credit         Net         Credit         Debit         Credit         Debit         Credit         Net         Net</td> <td>Credit         Debit         Net         Credit         Debit         Credit         Debit         Credit         Debit         Pebit           430.8         442.6         -11.8         260.6         244.3         81.5         82.3         69.6         82.4           428.2         430.4         -2.2         257.4         239.1         82.1         82.5         70.1         78.0           422.4         419.7         2.6         253.7         228.8         81.8         81.7         68.3         76.9           426.4         411.0         15.3         263.7         228.8         81.6         81.8         61.6         68.9           427.4         417.2         10.2         266.3         232.7         82.9         80.7         58.2         70.1           430.9         412.1         18.7         266.2         232.3         83.7         78.8         58.5         68.6           429.1         413.6         15.4         263.5         234.4         83.4         79.4         59.9         66.5           420.6         412.2         8.3         260.1         233.8         84.9         78.6         54.6         67.0           413.6</td> <td><math display="block"> \begin{array}{ c c c c c c c c c c c c c c c c c c c</math></td>	Credit         Debit         Net         Credit         Debit         Credit         Debit         Credit         Debit         Credit         Debit         Credit         Net         Credit         Debit         Credit         Debit         Credit         Debit         Credit         Debit         Credit         Net         Credit         Net         Credit         Debit         Credit         Debit         Credit         Net         Net	Credit         Debit         Net         Credit         Debit         Credit         Debit         Credit         Debit         Pebit           430.8         442.6         -11.8         260.6         244.3         81.5         82.3         69.6         82.4           428.2         430.4         -2.2         257.4         239.1         82.1         82.5         70.1         78.0           422.4         419.7         2.6         253.7         228.8         81.8         81.7         68.3         76.9           426.4         411.0         15.3         263.7         228.8         81.6         81.8         61.6         68.9           427.4         417.2         10.2         266.3         232.7         82.9         80.7         58.2         70.1           430.9         412.1         18.7         266.2         232.3         83.7         78.8         58.5         68.6           429.1         413.6         15.4         263.5         234.4         83.4         79.4         59.9         66.5           420.6         412.2         8.3         260.1         233.8         84.9         78.6         54.6         67.0           413.6	$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$

Table 8.3

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

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

	I	ncome on direct ir	rvestment		Inc	ome on portfolio	investment	
	Equity		Debt		Equity		Debt	
	Credit 13	Debit 14	Credit 15	Debit 16	Credit	Debit 18	Credit 19	Debit 20
1999 2000	36.2 50.5	46.7 56.8	6.5 10.9	4.6 7.7	9.5 14.3	34.0 30.6	54.7 62.4	68.3 76.8
		30.0		a enlargement		30.0	02.4	70.0
2001 2002	59.3 48.4	60.1 48.0	10.2 7.7	8.9 5.7	17.3 20.6	43.8 53.0	65.2 63.2	74.4 70.3
2002 Q1 Q2	9.3 15.4	11.6 15.1	2.1 1.8	1.3 1.2	4.8 6.5	8.8 23.8	15.7 15.5	17.6 14.8
Q3 Q4	9.5 14.2	10.5 10.9	1.4 2.3	1.3 1.8	4.4 4.9	10.4 10.0	16.1 15.8	20.6 17.3
2003 Q1	7.6	10.5	1.3	1.9	3.5	8.3	14.5	21.8

Table 8.4

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

			Ву	resident	units abroad	l				By non	-resident	units in the	e euro area	
	Total		uity capital			er capital ter-compan	y loans)	Total		uity capital		(mostly in	Other cap	
	-	Total	MFIs 2)	Non- MFIs	Total	MFIs 2)	Non- MFIs		Total	MFIs 2)	Non- MFIs	Total	MFIs 2)	Non- MFIs
	1	2	3	4	5	6	7	8	9	10	11	12	13	14_
1997 1998	-93.2 -172.7							48.7 91.4						
1999 2000	-320.9 -443.3	-239.5 -351.7	-25.0 -35.5	-214.6 -316.2	-81.3 -91.5	-0.6 0.3	-80.7 -91.8	201.3 426.7	145.7 301.0	3.5 12.4	142.2 288.6	55.6 125.8	0.2 0.1	55.4 125.7
						Euro are								
2001 2002	-259.2 -163.5	-167.0 -135.8	-13.9 -19.3	-153.1 -116.6	-92.1 -27.6	-0.6 -0.5	-91.6 -27.1	156.4 129.8	99.9 93.2	5.3 4.3	94.6 88.9	56.5 36.6	0.7 0.7	55.8 35.9
2002 Q2	-47.0	-28.8	-6.0	-22.7	-18.2	-0.3	-17.9	37.7	22.1	2.8	19.3	15.6	0.1	15.6
Q3	-32.5 -28.5	-36.2 -29.3	-5.2 -5.6	-31.0 -23.7	3.7 0.7	-0.1 -0.1	3.8 0.8	20.5 32.1	12.2 32.6	-0.4 0.7	12.6 31.9	8.4 -0.5	$0.6 \\ 0.0$	7.8 -0.5
Q4														
2003 Q1	-40.7 -8.9	-19.7 -6.1	-2.0 5.1	-17.7 -11.2	-21.0 -2.8	-0.1 -0.5	-20.9 -2.3	33.0 12.1	21.2 4.7	0.7 1.7	20.5 3.0	11.9 7.4	-0.1 -0.1	12.0 7.5
Q2														
2002 Apr.	-7.7 -18.0	-2.3 -10.5	-4.1 -1.0	1.8 -9.5	-5.4 -7.4	$0.0 \\ 0.0$	-5.4 -7.4	15.8 19.4	9.4 6.5	2.0 0.7	7.4 5.8	6.4 13.0	$0.0 \\ 0.0$	6.4 12.9
May June	-18.0	-10.3 -15.9	-1.0 -0.9	-15.0	-7.4 -5.4	-0.3	-7.4 -5.1	2.5	6.2	0.7	6.2	-3.7	0.0	-3.8
July	-13.1	-14.5	-3.4	-11.1	1.4	0.0	1.4	6.4	2.8	0.1	1.9	3.6	0.0	3.6
Aug.	-1.1	-6.6	-0.3	-6.3	5.5	-0.1	5.5	2.8	2.4	-0.8	3.2	0.4	0.7	-0.3
Sep.	-18.3	-15.2	-1.5	-13.7	-3.1	0.0	-3.1	11.3	7.0	-0.6	7.5	4.3	-0.1	4.4
Oct.	-12.6	-6.9	-0.9	-6.0	-5.7	0.0	-5.7	6.4	6.0	0.3	5.8	0.4	0.0	0.4
Nov. Dec.	-14.6 -1.3	-6.8 -15.6	-1.2 -3.5	-5.5 -12.1	-7.8 14.3	$0.0 \\ 0.0$	-7.8 14.3	21.8 3.9	15.1 11.4	0.0 0.4	15.1 11.0	6.7 -7.6	$0.0 \\ 0.0$	6.6 -7.6
2003 Jan.	-16.8	-8.5	-0.7	-7.8	-8.3	0.0	-8.3	13.6	10.8	0.2	10.6	2.8	0.0	2.8
Feb. Mar.	-6.8 -17.1	-5.4 -5.8	-0.5 -0.7	-4.8 -5.1	-1.5 -11.3	0.0 -0.1	-1.5 -11.2	10.0 9.4	6.2 4.1	0.8 -0.3	5.4 4.4	3.8 5.3	-0.1 0.0	3.9 5.3
Apr.	-22.8	-3.8 -7.0	-1.3	-5.6	-11.3	-0.1	-11.2	2.6	1.4	0.1	1.3	1.2	0.0	1.2
May	-0.7	-3.5	-0.8	-2.7	2.8	-0.1	2.9	0.5	-0.8	0.2	-1.0	1.3	-0.1	1.4
June	14.6	4.4	7.2	-2.8	10.2	-0.1	10.3	9.1	4.1	1.4	2.7	4.9	0.0	4.9

Source: ECB.

1) Inflows (+); outflows (-).
2) Excluding the Eurosystem.

### Table 8.5

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

#### 1. By instrument

	Tot	tal	Equi	ty			Debt instr	uments		
						Assets			Liabilities	
	Assets 1	Liabilities 2	Assets 3	Liabilities 4	Total 5	Bonds and notes	Money market instruments 7	Total 8	Bonds and notes	Money market instruments 10
1998	-363.3	253.3	-116.2	104.0	-247.1	-238.9	-8.2	149.4	121.3	28.1
1999	-311.3	269.8	-156.5	93.0	-154.8	-154.9	0.1	176.8	117.0	59.9
2000	-409.0	297.4	-285.9	49.9	-123.1	-114.3	-8.8	247.5	239.2	8.3
				— Euro a	ırea enlargei					
2001	-291.0	355.8	-108.3	233.2	-182.7	-160.1	-22.6	122.5	115.1	7.4
2002	-177.8	286.2	-40.8	88.2	-137.1	-80.6	-56.4	198.0	133.5	64.5
2002 Q2	-54.2	126.5	-13.9	36.0	-40.3	-25.3	-15.0	90.5	61.4	29.1
Q3	-19.8	55.5	12.7	6.0	-32.5	-17.3	-15.2	49.5	26.3	23.2
Q4	-28.8	65.0	-7.5	11.8	-21.3	-16.1	-5.2	53.3	38.6	14.6
2003 Q1	-51.4	54.2	10.0	4.9	-61.4	-51.0	-10.4	49.3	49.7	-0.3
Q2	-83.5	115.2	-23.4	20.7	-60.1	-54.3	-5.8	94.5	91.4	3.1
2002 Apr. May June July Aug. Sep. Oct. Nov. Dec.	-13.2 -29.5 -11.6 -15.8 -4.4 0.4 -1.6 -7.0 -20.1	29.3 63.7 33.5 26.5 12.7 16.4 27.6 22.6 14.8	-1.9 -5.8 -6.2 -6.4 5.1 14.0 -0.6 0.3 -7.1	6.5 27.8 1.7 4.5 -0.3 1.9 -1.1 14.7	-11.3 -23.6 -5.4 -9.4 -9.5 -13.6 -1.0 -7.3 -13.0	-10.1 -14.7 -0.6 -1.3 -10.1 -6.0 -4.1 -3.7 -8.3	-1.2 -9.0 -4.8 -8.1 0.5 -7.7 3.1 -3.7 -4.7	22.8 35.9 31.8 22.0 13.0 14.5 28.7 7.9 16.6	15.1 22.8 23.5 13.4 2.1 10.8 17.2 6.0 15.4	7.7 13.1 8.3 8.6 10.9 3.7 11.5 2.0
2003 Jan.	-20.4	17.5	2.3	13.4	-22.7	-15.6	-7.1	4.1	5.5	-1.4
Feb.	-23.6	11.7	0.3	2.2	-23.9	-20.3	-3.6	9.5	3.4	6.1
Mar.	-7.4	25.0	7.4	-10.8	-14.8	-15.0	0.3	35.8	40.8	-5.1
Apr.	-12.1	21.4	-3.0	10.2	-9.1	-16.1	7.1	11.2	0.5	10.7
May	-26.4	34.4	-5.8	-9.2	-20.6	-15.3	-5.3	43.6	43.5	0.1
June	-44.9	59.4	-14.6	19.7	-30.4	-22.8	-7.6	39.7	47.4	-7.7

#### 2. Assets by instrument and sector of holder

			Equity							Deb	t instrume	nts			
							Bonds	and notes				Money m	arket inst	ruments	
	Euro- system	MFIs 2)	1	Non-MFIs		Euro- system	MFIs 2)		Non-MFIs	3	Euro- system	MFIs 2)	]	Non-MFIs	
	system		Total	General govern- ment	Other sectors			Total	General govern- ment	Other sectors			Total	General govern- ment	Other sectors
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1999 2000	0.1 -0.1	-1.5 -4.3	-155.1 -281.6	-2.1 -2.6	-153.0 -278.9	0.1 -1.9	-15.4 -46.3	-139.6 -66.1	-1.7 -1.5	-137.9 -64.6	0.9 2.2	-8.1 -15.5	7.3 4.6	-0.1 -1.0	7.5 5.5
						— E	uro area	enlargen	ent						
2001 2002	-0.4 -0.4	3.8 -9.7	-111.8 -30.7	-2.1 -5.2	-109.8 -25.5	1.9 3.2	-71.1 -11.3	-90.9 -72.5	-1.2 -1.0	-89.6 -71.5	-2.3 2.1	-34.5 -34.9	14.3 -23.7	-0.2 -0.9	14.5 -22.7
2002 Q2 Q3 Q4	-0.1 -0.1 -0.2	-3.7 2.8 -3.9	-10.1 10.0 -3.4	-2.0 -0.6 -1.2	-8.1 10.6 -2.2	2.4 -1.1 1.6	-2.3 -2.9 -1.4	-25.4 -13.3 -16.3	0.2 -0.3 -0.4	-25.6 -13.0 -15.8	0.0 0.9 0.4	-1.9 -13.3 -6.6	-13.1 -2.7 1.0	-0.1 0.2 0.1	-13.0 -3.0 0.8
2003 Q1 Q2	-0.1 -0.1	-3.8 0.4	13.9 -23.7	-0.6	14.5	-1.6 -0.8	-22.9 -19.1	-26.5 -34.4	0.3	-26.8	-1.4 1.1	-7.1 -6.9	-1.9 0.0	-1.6	-0.3
2003 Jan. Feb Mai Apr May June	0.1 . 0.0 0.1 y 0.0	1.5 -1.5 -3.9 0.6 0.4 -0.6	0.7 1.9 11.3 -3.5 -6.2 -13.9			-0.7 -0.2 -0.7 -0.8 -0.2	-12.0 -9.6 -1.3 -7.6 -1.3 -10.1	-3.0 -10.5 -13.0 -7.8 -13.8 -12.8			-0.3 -0.9 -0.2 0.5 0.9 -0.4	-12.7 -0.7 6.3 2.3 -7.2 -2.0	6.0 -2.0 -5.9 4.3 0.9 -5.2		

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

#### Table 8.6

#### Balance of payments: other investment account and reserve assets

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

#### 1. Other investment by sector 1)

	Tot	al	Eurosy	stem	Gene			MFIs (	excluding tl	ne Eurosys	tem)		Other se	ectors
							Tot	al	Long-	term	Short-1	term		
	Assets 1	Liabil- ities 2	Assets 3	Liabil- ities 4	Assets 5	Liabil- ities 6	Assets 7	Liabil- ities 8	Assets 9	Liabil- ities 10	Assets 11	Liabil- ities 12	Assets 13	Liabil- ities 14
1998 1999 2000	-81.5 -31.8 -179.0	205.6 192.7 359.8	-0.7 -1.9 -1.1	3.5 6.6 0.9	-1.0 3.3 -2.2	-6.1 -13.0 0.7	-22.6 16.3 -130.4	192.4 161.2 288.8	-37.6 -47.2 -50.0	40.4 53.8 52.5	15.0 63.5 -80.4	152.0 107.4 236.3	-57.1 -49.4 -45.4	15.9 37.9 69.5
2001 2002	-250.2 -220.8	249.0 30.1	0.6 -1.2	4.4 0.1	2.9 0.0	Euro a -0.5 -8.3	rea enlarg -227.6 -164.3	233.5 23.1	-45.3 -29.6	22.4 51.5	-182.3 -134.7	211.1 -28.4	-26.1 -55.4	11.6 15.2
2002 Q2 Q3 Q4	-77.6 -62.1 -101.0	-9.1 2.3 12.6	-0.6 0.3 -0.4	-3.5 -0.1 2.5	0.9 -0.5 0.3	3.8 -2.8 -1.0	-62.7 -34.9 -85.3	-11.8 9.6 -0.4	-4.4 -4.7 -17.9	19.8 4.6 15.7	-58.3 -30.2 -67.4	-31.6 5.0 -16.2	-15.2 -26.9 -15.5	2.4 -4.3 11.6
2003 Q1 Q2	-105.9 -120.4	68.4 45.0	-0.6 0.2	-4.4 2.3	-1.6 -2.1	-8.5 3.3	-60.1 -105.0	59.2 34.6	-13.4 -12.1	8.6 14.7	-46.7 -92.8	50.7 19.8	-43.6 -13.5	22.1 4.8
2002 Apr. May June July Aug. Sep. Oct. Nov. Dec.	28.8 -2.3 8.5 -68.3 -70.2 -77.1	23.1 34.2 -66.4 -8.4 -29.7 40.4 31.0 37.9 -56.3	-0.4 -0.1 -0.1 0.4 0.1 -0.2 -0.1 0.9 -1.3	-4.3 -0.5 1.3 2.7 -5.0 2.1 -0.3 1.2 1.6	1.7 0.0 -0.7 -0.2 -0.6 0.3 -0.4 -1.6 2.3	5.6 0.0 -1.8 -1.2 -2.2 0.6 1.3 -0.3 -2.0	-30.1 -56.0 23.4 14.0 12.8 -61.7 -53.9 -65.6 34.1	22.2 36.4 -70.4 -9.8 -17.9 37.3 22.3 34.7 -57.4	-4.2 -3.9 3.7 2.8 0.4 -7.9 -5.2 -7.8 -5.0	7.1 8.2 4.4 1.6 2.0 0.9 8.0 -6.3 14.0	-25.9 -52.1 19.7 11.2 12.4 -53.8 -48.7 -57.8 39.1	15.1 28.2 -74.8 -11.4 -19.9 36.3 14.2 41.0 -71.4	-13.3 -8.0 6.2 -16.5 -3.8 -6.6 -15.9 -10.8 11.2	-0.4 -1.7 4.5 -0.1 -4.6 0.4 7.8 2.3 1.5
2003 Jan. Feb. Mar. Apr. May June	-40.3 -48.2	0.7 61.4 6.3 63.2 8.7 -26.8	0.5 -0.5 -0.5 0.0 0.7 -0.5	-2.4 -2.0 0.0 -0.3 0.9 1.6	-2.4 -3.8 4.6 1.1 -3.1 -0.1	-6.2 -2.2 -0.1 2.7 1.1 -0.4	4.6 -55.9 -8.7 -32.6 -36.3 -36.0	2.9 54.1 2.2 55.8 4.8 -26.1	-3.6 -6.3 -3.5 -3.4 -2.0 -6.7	2.7 4.5 1.4 2.9 2.7 9.1	8.2 -49.6 -5.3 -29.2 -34.3 -29.4	0.3 49.6 0.8 53.0 2.1 -35.2	-10.8 -24.0 -8.8 -8.8 -9.5 4.8	6.5 11.4 4.2 4.9 1.9 -2.0

#### 2. Other investment by sector and instrument 1)

#### 2.1. Eurosystem

	Loans/c	urrency and deposits		Othe	r assets/liabilities	
	Assets 1	Liabilities 2	Balance 3	Assets 4	Liabilities 5	Balance 6
1999 2000	-1.1	6.7 0.9	5.6 -0.2	-0.8	-0.1	-0.9
	-1.1		enlargement –	0.0	0.0	0.0
2001 2002	0.6 -1.2	4.4 0.0	5.0 -1.1	0.0 0.0	0.0 0.0	0.0 0.0
2002 Q1 Q2 Q3 Q4	-0.4 -0.6 0.3 -0.4	1.2 -3.5 -0.2 2.6	0.7 -4.1 0.1 2.1	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0
2003 Q1	-0.6	-4.4	-4.9	0.0	0.0	0.0

Source: ECB.
1) Inflows (+); outflows (-).

#### Table 8.6 (cont'd)

#### Balance of payments: other investment account and reserve assets

(EUR billions; net flows)

#### 2.2. General government

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

#### 2.3. MFIs (excluding the Eurosystem)

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

#### 2.4. Other sectors

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

#### 3. Reserve assets 1)

	Total	Monetary gold	Special drawing	Reserve position in			Foreig	n exchange	;			Other
			rights	the IMF	Total	Currency and o	deposits		Securities		Financial derivatives	
						With monetary authorities and the BIS	With banks	Equity	notes	Money market instruments		
	1	2	3	4	5	6	7	8	9	10	11	12
1999	10.1	0.3	1.0	2.0	6.1	12.5	-12.1	0.2	3.5	2.0	-0.1	0.8
2000	17.6	1.0	0.3	2.9	13.3	4.3	4.6	0.0	-5.6	10.1	-0.1	0.0
					Eur	o area enlargem	ent –					
2001	17.8	0.6	-1.0	-4.2	22.5	10.0	-5.3	-1.1	20.4	-1.6	0.0	0.0
2002	-2.2	0.7	0.2	-2.0	-1.2	-2.3	-15.3	0.0	8.2	8.4	-0.2	0.0
2002 Q1	-3.1	-0.2	0.0	-0.4	-2.4	-1.7	-12.4	0.0	4.2	7.4	0.0	0.0
Q2	6.7	0.5	0.5	-2.1	7.8	-0.6	1.2	0.0	4.3	3.1	-0.2	0.0
Q3	-4.6	-0.1	-0.2	0.2	-4.6	-2.4	-3.0	0.0	1.9	-1.2	0.0	0.0
Q4	-1.3	0.4	-0.1	0.3	-1.9	2.3	-1.2	0.0	-2.3	-0.9	0.0	0.0
2003 Q1	11.9	0.5	0.0	-0.2	11.5	0.8	-0.6	0.0	9.6	1.7	0.0	0.0

<sup>1)</sup> Increase (-); decrease (+)

Table 8.7

#### Monetary presentation of the euro area balance of payments 1)

(EUR billions)

	Current and capital	Direct	nvestment	Portf	folio invest	ment	Other in	vestment	Financial derivatives	Errors and	Total 5)	Memo item: transactions
	accounts	By resident	By non- resident	Assets	Liab	oilities	Assets	Liabilities		omissions		in the external
		units abroad (non-MFIs)	units in the euro area 2)	Non-MFIs	Equity 3)	Debt instruments 4)	Non-MFIs	Non-MFIs				counterpart of M3 <sup>6)</sup>
-	1	2	3	4	5	6	7	8	9	10	11	12
2000	-56.2	-408.0	426.7	-343.1	37.2	209.8	-47.6	70.2	-3.4	-10.7	-125.1	142.2
2000 Q1	-8.9	-68.4	217.6	-129.2	-103.3	38.2		10.6	1.3	-35.8	-118.0	118.0
Q2 Q3	-15.4 -18.1	-88.8 -121.4	71.6 40.3	-66.7 -75.1	66.9 28.9	70.7 55.7	-5.5 -12.3	4.1 38.3	4.4 0.1	3.7 23.2	45.1 -40.4	-35.2 51.6
Q4	-13.8	-129.4	97.1	-72.1	44.7	45.1	10.5	17.1	-9.3	-1.9	-11.8	7.8
					Euro ar	ea enlargeme	ent –					
2001	-9.8	-244.7	155.7	-188.4	172.9	83.7	-23.2	11.1	-3.5	34.7	-11.4	7.9
2002	71.2	-143.7	129.1	-126.9	51.4	187.6	-55.4	6.9	-14.0	60.9	167.3	-170.0
2001 Q1	-10.3	-72.9	35.4	-46.0	1.7	22.4	2.8	-12.1	1.4	-32.5	-110.1	105.8
Q2	-13.2	-91.2	43.2	-70.1	89.6	5.1	0.8	9.5	12.0	-2.0	-16.3	18.0
Q3	3.4	-56.1	31.3	-22.9	42.0	27.8	-3.5	11.9	-10.3	47.4	71.0	-74.3
Q4	10.3	-24.6	45.8	-49.4	39.6	28.3	-23.2	1.8	-6.6	21.8	43.9	-41.6
2002 Q1	15.2	-53.0	39.5	-53.6	15.2	3.9	1.6	-2.7	2.5	-6.9	-38.4	27.1
Q2	5.7	-40.7	37.7	-48.6	38.5	83.6		6.2	-2.8	14.1	79.3	-77.0
Q3 Q4	25.3 25.1	-27.2 -22.8	19.9 32.1	-6.0 -18.7	-4.6 2.4	56.7 43.5	-27.4 -15.2	-7.1 10.5	-9.6 -4.0	24.9 28.8	44.8 81.6	-33.8 -86.3
-										25.8		
2003 Q1 Q2	4.7 -2.2	-38.6 -13.5	33.1 12.2	-14.5 -58.0	7.8 24.3	44.5 96.7	-45.2 -15.6	13.6 8.2	-0.1 -4.4	25.8 44.2	31.1 91.9	-32.1 -97.7

- Source: E.C.D.

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

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

  3) Excluding money market fund shares/units.

  4) Excluding debt securities with a maturity of up to two years and issued by euro area MFIs.

- Sum of columns 1 to 10; errors and omissions (column 10) are those shown in Table 8.1 (column 13) of the Monthly Bulletin; remaining differences (in absolute values) with column 12 are explained in a methodological note available on the statistics section of the ECB's website (www.ecb.int).
   Source: Monthly Bulletin, Table 2.3.2, column 10.

#### **Table 8.8**

#### International investment position 1) and reserve assets outstanding

(EUR billions (ECU billions in 1997); end-of-period positions)

#### 1. Summary international investment position

-	Total _		Direct	Portfolio	Financial	Other	Reserve
		as % of GDP	investment	investment	derivatives	investment	assets
	1	2	3	4	5	6	7
-			Net international in	vestment position 2)	3)		
1997	16.3	0.3	181.5	-750.5	-5.9	223.8	367.3
1998	-170.1	-2.8	152.0	-748.5	2.3	86.5	337.6
1999	-297.3	-4.7	369.6	-881.2	16.0	-183.9	382.2
2000	-414.7	-6.3	428.4	-804.9	8.5	-437.2	390.4
2001	-152.2	-2.2	530.7	-682.7	-5.9	-387.0	392.7
			Outstan	ding assets			
1999	5,796.7	92.5	1,174.5	2,058.1	111.1	2,070.8	382.2
2000	6,740.0	102.5	1,609.7	2,344.1	117.9	2,277.9	390.4
2001	7,459.4	109.1	1,859.9	2,499.8	123.7	2,583.4	392.7
			Outstandi	ng liabilities			
1999	6,094.0	97.2	804.9	2,939.3	95.1	2,254.7	_
2000	7,154.7	108.8	1,181.2	3,149.1	109.3	2,715.1	-
2001	7,611.6	111.3	1,329.2	3,182.5	129.5	2,970.5	-

#### 2. Direct investment

		]	By resident	units abroad				By no	n-resident	units in the e	euro area	
		uity capital nvested earr	nings		her capital nter-company	loans)		uity capital nvested earn	ings		Other capital ter-company	
	Total	MFIs 4)	Non- MFIs 3	Total MFIs 4) Non-MFIs 4 5 6					Non- MFIs 9	Total MFIs 4) 10 11		Non- MFIs 12
1999 2000 2001	938.7 1,256.0 1,478.4	85.7 115.9 132.0	853.0 1,140.1 1,346.4	235.8 353.7 381.5	1.8 2.3 2.6	234.0 351.3 378.9	606.3 880.6 985.6	24.3 31.8 42.4	582.0 848.8 943.2	198.6 300.7 343.6	1.7 1.8 2.6	196.9 298.9 341.0

#### 3.1. Portfolio investment by instrument

	Equ	iity			Debt inst	ruments		
				Assets			Liabilities	
	Assets	Liabilities	Total	Bonds and notes	Money market instruments	Total	Bonds and notes	Money market instruments
1999	1,013.6	1,698.1	1,044.4	937.2	107.2	1,241.2	1,138.5	102.7
2000 2001	1,183.6 1,111.5	1,627.6 1,577.6	1,160.5 1,388.3	1,038.4 1,208.1	122.1 180.1	1,521.5 1,604.9	1,399.9 1,505.5	121.6 99.4

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

			Equity							Debt in	nstruments	S			
							Во	nds and r	iotes			Money	market	instruments	3
	Euro- system	MFIs 4)	1	Non-MFIs		Euro- system	MFIs 4)		Non-MFIs		Euro- system	MFIs 4)		Non-MFIs	
	)		Total	General govern-	Other sectors	system.		Total	General govern-	Other sectors	System		Total	General govern-	Other
	9	10	11	ment 12	13	14	15	16	ment 17	18	19	20	21	ment 22	23_
1999	0.4	25.9	987.3	4.1	983.2	4.5	257.2	675.4	6.2	669.3	2.6	68.5	36.1	0.2	35.9
2000 2001	0.9 42.7 1,140.0 5.6 1,134.4 1.2 43.7 1,066.7 6.6 1,060.0					3.4 2.1	328.5 422.1	706.5 784.0	5.7 8.0	700.9 776.0	0.5 2.8	85.6 125.2	36.0 52.1	0.1 0.2	35.8 51.9

- Data refer to the Euro 12, i.e. they include Greece.
   Assets minus liabilities.
- For the comparability of recent and some earlier data, see the general notes.
   Excluding the Eurosystem.

#### 4. Other investment by sector and instrument

			Euros	ystem						Gener	al governme	ent		
	То	otal	Loans/cu and de		Other a		To	tal	Trade	credits	Loans/cu and dep		Other assets liabilities	
	Assets 1	Liabil- ities 2	Assets 3	Liabil- ities 4	Assets 5	Liabil- ities 6	Assets 7	Liabil- ities 8	Assets 9	Liabil- ities 10	Assets 11	Liabil- ities 12	Assets	Liabil- ities 14
1999 2000 2001	3.1 3.0 3.0	27.4 32.2 36.4	3.0 2.9 2.9	27.1 31.9 36.2	0.1 0.1 0.1	0.3 0.3 0.2	125.5 133.8 132.5	57.3 60.0 63.8	2.5 2.8 3.1	0.1 0.2 0.2	72.4 77.5 73.6	45.4 47.7 51.4	50.6 53.5 55.9	11.8 12.1 12.3

		MFI	s (excludin	g the Euro	system)		Other sectors								
	Total		Total Loans/currency and deposits		Other assets/ liabilities		Total		Trade credits		Loans/currency and deposits		Other assets/ liabilities		
	Assets 15	Liabil- ities 16	Assets	Liabil- ities 18	Assets	Liabil- ities 20	Assets 21	Liabil- ities 22	Assets 23	Liabil- ities 24	Assets 25	Liabil- ities 26	Assets 27	Liabil- ities 28	
1999 2000 2001	1,317.7 1,458.5	1,823.5 2,168.4	1,291.8 1,421.4 1,668.6	1,798.1 2,126.4	25.9 37.1 50.9	25.5 42.0 53.2	624.5 682.6 728.4	346.5 454.5 462.9	161.0 179.5 177.6	90.7 110.2 109.7	394.2 418.9 478.4	225.7 314.8 321.9	69.3 84.2 72.4	30.1 29.5 31.4	

### $\textbf{5. Reserves and related assets of the Eurosystem and of the European Central Bank} \ ^{1)} \\ \textit{(EUR billions; end-of-period positions, unless otherwise indicated)} \\$

						F	Reserve asset	s							Memo: related assets
	Total	Monetary gold		Special drawing	Special Reserve Foreign exchange rawing position									Other	Claims on euro
		8	In fine troy ounces	rights		Total	Currency deposit				Financial deriva- tives		area residents denomin-		
			(millions) <sup>2)</sup>				With monetary authorities and the BIS	With banks		Equities	and notes	market instru- ments			ated in foreign currency
	1	2	3	4	5	6	Eurosysten	8 l	9	10	11	12	13	14	15
1998 Dec. 4)	329.4	99.6	404.131	5.2	23.4	201.2	12.6	19.6	169.0	0.0	116.6	52.4	0.0	0.0	7.6
1999 Dec.	372.1	116.4	402.758	4.5	24.3	226.9	13.5	23.0	190.7	0.0	133.9	56.8	-0.2	0.0	14.6
2000 Dec.	377.2	117.1	399.537	4.3	20.8	235.0	9.7	20.1	204.4	0.0	154.0	50.4	0.7	0.0	15.8
							area enlarg		_						
2001 1 Jan.	390.4	118.4	404.157	4.3	21.2	246.5	16.8	20.5	208.5	0.0	158.1	50.4	0.7	0.0	16.3
2001 Dec.	392.7	126.1	401.876	5.5	25.3	235.8	8.0	25.9	201.5	1.2	147.0	53.3	0.4	0.0	24.7
2002 Dec.	366.1	130.4	399.022	4.8	25.0	205.8	10.3	35.3	159.8	-	-	-	0.4	0.0	22.4
2003 Apr.	332.4	119.9	396.324	4.5	25.0	183.1	7.6	33.6	141.0	-	-	-	0.9	0.0	18.4
May	323.1	121.1	396.233	4.5	24.2	173.3	6.9	33.6	131.6	-	-	-	1.1	0.0	18.7
June	326.1	120.0	396.229	4.6	25.5	176.1	8.3	34.8	132.2	-	-	-	0.8	0.0	18.2
July	328.9	124.2	396.277	4.5	25.5	174.7	9.4	32.3	132.3	-	-	-	0.8	0.0	18.1
						Euro	pean Centra	l Bank 5	)						
1999 Dec.	49.3	7.0	24.030	0.0	0.0	42.3	0.3	7.8	34.3	0.0	27.8	6.5	0.0	0.0	2.6
2000 Dec.	45.3	7.0	24.030	0.0	0.0	38.2	0.6	6.8	30.6	0.0	20.4	10.2	0.3	0.0	3.8
						Euro	area enlarg	gement	_						
2001 Dec.	49.3	7.8	24.656	0.1	0.0	41.4	0.8	7.0	33.6	0.0	23.5	10.1	0.0	0.0	3.6
2002 Dec.	45.5	8.1	24.656	0.2	0.0	37.3	1.2	9.9	26.1	-	-	-	0.0	0.0	3.0
2003 Apr.	40.7	7.5	24.656	0.2	0.0	33.1	0.9	6.8	25.4	-	-	-	0.0	0.0	2.5
May	39.2	7.5	24.656	0.2	0.0	31.4	0.8	8.0	22.6	-	-	-	0.0	0.0	2.4
June	39.3	7.5	24.656	0.2	0.0	31.6	0.9	7.1	23.6	-	-	-	0.0	0.0	2.8
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

- Nore comprehensive data in accordance with the template on international reserves and foreign currency liquidity can be found on the ECB's website.

  Changes in the gold holdings of the Eurosystem are due to transactions in gold within the terms of the Central Bank Gold Agreement of 26 September 1999.

  The figures are not fully comparable with those in Table 1.1 owing to differences in coverage and valuation.

  Position as at 1 January 1999.

  Part of the Eurosystem's reserves.

### External trade in goods of the euro area

#### Table 9

#### 1. Values, volumes and unit values by commodity 1) 2)

(not seasonally adjusted, unless otherwise indicated)

		Exports	of goods (	f.o.b.)		Imports of goods (c.i.f.)							(s.a.)
	Total				Memo:	Total					10:	(2000=	100)
		Inter- mediate	Capital	Consump- tion	Manufac- tures		Inter- mediate	Capital	Consump- tion	Manufac- tures	Oil	Exports	Imports
	1	2	3	4	5	6 ions; 2000=	7	8 mns 12 and	9	10	11	12	13
1999	832.8	386.5	183.2	224.2	725.0		423.2		192.1	590.6	61.5	82.5	78.1
2000	1,013.7	482.6	221.7	265.4	883.2	781.2 1,008.4	579.8	143.6 179.4	218.1	730.2	118.9	100.0	100.0
2001	1.060.0	401.6	225.0	207.0		ro area enl		170.2	226.1	720.1	107.5	106.2	00.0
2001 2002	1,060.8 1,077.9	491.6 495.1	235.8 227.5	287.0 303.8	930.8 939.0	1,011.1 979.6	575.1 552.0	178.2 162.0	226.1 230.1	738.1 709.6	107.5 104.9	106.2 108.0	98.9 95.8
2002 Q2	273.3	128.2	57.6	74.9	238.5	250.4	143.0	40.8	57.5	181.6	26.5	108.5	96.7
Q3 Q4	267.1 278.2	121.8 125.2	55.5 60.8	76.6 79.0	232.7 241.4	235.8 252.0	132.5 139.7	38.4 43.1	57.1 59.2	171.2 180.2	26.8 28.1	108.4 107.4	95.5 96.0
2003 Q1	255.4	117.8	51.9	72.7	221.6	248.7	141.5	40.1	57.3	177.0	29.4	105.5	97.4
Q2	257.2	120.3	52.3	69.9	223.6	243.9	135.5	39.5	57.4	176.3	25.2	102.9	95.3
2003 Jan.	82.4	38.5	16.2	23.5	71.2	83.8	47.4	13.8	19.5	59.4	10.1	106.8	98.2
Feb. Mar.	84.6 88.4	38.9 40.4	17.0 18.6	24.4 24.8	73.6 76.8	79.1 85.8	45.3 48.8	12.1 14.2	18.4 19.4	56.0 61.6	9.4 10.0	106.4 103.2	96.7 97.3
Apr.	86.2	40.0	17.4	23.8	74.4	82.8	46.1	13.5	19.6	59.5	9.4	104.9	96.0
May June	85.1 85.9	40.6 39.7	16.7 18.2	22.8 23.2	73.8 75.4	80.6 80.5	44.9 44.5	13.2 12.8	18.7 19.1	58.3 58.5	7.7 8.1	101.9 102.0	94.5 95.4
June	65.9	39.1				age changes					6.1	102.0	73.4
1999	2.2	2.8	-0.8	3.3	1.4	6.1	3.5	12.9	7.7	7.1	6.0	89.3	95.2
2000	12.4	12.5	12.7	12.7	13.6	5.9	6.8	11.7	4.5	8.9	4.7	100.0	100.0
2001	5.1	1.0	0.6	7.0	— Eus 5.8	ro area enl	_	2.0	0.1	1.7	1.6	105.2	00.0
2001 2002	5.1 1.8	1.8 1.0	8.6 -3.5	7.9 4.3	1.2	-1.2 -1.5	-1.0 -2.5	-3.9 -8.2	-0.1 1.6	-1.7 -2.7	-1.6 -1.5	105.3 107.8	98.8 98.0
2002 Q2	2.9	3.1	-2.4	4.8	2.5	-1.1	-1.4	-9.5	2.7	-2.6	-2.4	107.8	98.6
Q3	5.4	4.7	-0.4	7.1	4.6	1.4	0.1	-0.7	2.5	1.4	-2.7	109.0	97.9
Q4	3.1	3.2	-2.5	5.7	2.3	1.1	-1.0	-1.7	4.2	0.5	1.2	107.7	97.9
2003 Q1 Q2	0.9	-0.6	-1.3	2.0	0.4	3.4	0.1	6.3	4.9	4.2	0.2	107.2	100.1
2003 Jan.	4.0	3.4	0.9	5.7	3.1	2.4	-1.8	15.2	5.2	4.3	-6.9	108.5	100.1
Feb.	2.1	0.9	1.6	2.8	1.8	1.0	-0.4	1.4	3.6	1.9	-5.4	108.0	99.5
Mar.	-2.5 -1.9	-3.8 -2.1	-2.7 -5.7	-1.0	-2.5 -2.7	4.9 -0.9	2.5 -3.1	8.1 -1.1	6.6 2.9	5.5	3.0	105.1	100.6 101.3
Apr. May	-3.4	-2.1 -4.5	-6.6	-3.2 -3.8	-3.9	3.5	0.6	5.6	4.3	-0.8 2.2	7.5 3.1	107.5 104.9	101.3
June	•			•					•	•		•	•
						ntage change							
1999 2000	2.3 8.3	1.7 11.0	2.7 7.4	1.4 5.1	2.4 7.2	3.5 21.9	3.9 28.3	3.4 11.8	1.4 8.7	2.0 13.5	39.4 84.8	92.4 100.0	82.1 100.0
2000	8.3	11.0	7.4	3.1		21.9 ro area enl		11.8	0.7	13.3	04.0	100.0	100.0
2001	1.0	0.7	0.3	1.9	1.0	0.2	-1.3	1.6	2.8	1.7	-11.0	101.0	100.2
2002	-0.7	-1.4	-0.5	0.5	-0.7	-2.4	-2.8	-2.1	-1.0	-1.6	-3.8	100.3	97.8
2002 Q2 Q3	-0.7 -1.9	-1.4 -2.7	-0.3 -1.8	0.4 -0.6	-0.6 -1.9	-3.2 -3.4	-4.2 -3.6	-1.8 -3.4	-1.1 -2.8	-1.6 -2.8	-8.4 -4.6	100.7 99.5	98.1 97.7
Q4	-1.1	-1.1	-1.5	-0.6	-1.2	0.6	2.5	-2.7	-1.4	-1.5	19.3	99.8	98.2
2003 Q1	-2.5	-1.9	-3.1	-3.1	-2.8	0.2	3.4	-6.4	-3.4	-3.6	29.4	98.5	97.4
Q2													
2003 Jan. Feb.	-2.6 -2.3	-2.2 -1.4	-2.8 -2.3	-2.6 -3.4	-2.7 -2.5	1.4 0.4	4.5 4.1	-5.9 -5.7	-1.7 -4.3	-2.7 -3.8	32.6 33.8	98.5 98.6	98.2 97.3
Mar.	-2.3	-2.0	-2.3 -4.1	-3.4	-3.3	-1.2	1.7	-3.7 -7.5	-4.3 -4.1	-3.8 -4.3	22.5	98.2	96.8
Apr.	-3.2	-3.0	-3.4	-2.9	-3.3	-3.5	-3.1	-7.1	-2.8	-4.0	-3.2	97.6	94.9
May June	-4.0	-3.0	-6.1	-3.7	-4.0	-6.3	-6.7	-8.2	-4.8	-5.5 ·	-17.0	97.2	92.1
June	•	•	•		•	•	•		•	•	•		•

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

Owing to differences in definitions, coverage and time of recording, trade data (as compiled by Eurostat) are not fully comparable with the goods item in the balance of payments statistics compiled by the ECB (Table 8.2).
 The commodity breakdown in columns 2 to 4 and 7 to 9 is in accordance with the Classification by Broad Economic Categories. Manufactured goods

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

2. Geographical breakdown 1) (EUR billions; not seasonally adjusted, unless otherwise indicated)

	Total	Total (s.a.)	United Kingdom 3	Sweden 4	Denmark 5	Acceding countries 6	Switzer- land 7	United States 8	Japan 9	Asia excl. Japan 10	Africa	Latin America	Other countries
					- 1	Exports	(f.o.b.)						
1999 2000	832.8 1,013.7	-	161.4 189.7	33.1 38.8	21.1 23.2	77.3 94.6	56.1 63.4 alargement	135.1 171.4	26.8 34.2	119.2 151.6	48.4 56.1	39.1 46.7	113.6 141.6
2001 2002	1,060.8 1,077.9	-	201.9 204.5	36.9 36.9	24.3 24.7	105.9 112.1	66.3 63.8	180.0 181.8	34.5 32.6	165.3 170.2	60.3 59.8	49.8 43.1	135.6 148.3
2002 Q2 Q3 Q4	273.3 267.1 278.2	271.6 271.4 268.8	51.6 50.5 50.2	9.3 8.4 10.0	6.3 6.0 6.5	28.7 27.8 29.2	16.2 15.7 16.1	46.0 44.4 46.7	7.8 8.3 8.6	42.7 43.0 45.1	15.6 14.9 15.2	11.3 10.6 11.0	37.7 37.7 39.6
2003 Q1 Q2	255.4 257.2	264.0 257.6	48.9	9.7	6.3	27.6	16.4	41.4	7.8	39.4	13.6	9.5	34.7
2003 Jan. Feb. Mar. Apr. May June	82.4 84.6 88.4 86.2 85.1 85.9	89.1 88.8 86.1 87.5 85.0 85.1	15.4 15.9 17.6 15.7 15.7	3.1 3.2 3.5 3.3 3.1	1.9 2.0 2.4 2.0 2.0	9.0 9.2 9.4 9.6 9.8	5.3 5.5 5.6 5.1 5.2	14.2 13.7 13.5 13.8 13.9	2.5 2.7 2.6 2.7 2.3	12.3 13.4 13.7 13.6 13.5	4.6 4.4 4.7 5.0 4.8	3.1 3.0 3.3 3.0 3.0	11.0 11.7 12.0
% change ver 2003 June	rsus previous -5.5	year -											
						Imports							
1999 2000	781.2 1,008.4	-	131.0 156.6	33.2 38.0	18.6 21.8	60.3 76.8	43.2 49.8 alargement	113.2 140.7	53.9 65.5	151.8 211.6	49.0 72.2	30.4 39.7	95.4 134.0
2001 2002	1,011.1 979.6	-	154.0 147.4	34.3 35.3	21.3 22.4	88.8 93.5	52.9 51.9	138.1 124.9	58.6 52.6	207.9 204.5	74.0 68.2	40.9 39.3	140.3 139.5
2002 Q2 Q3 Q4	250.4 235.8 252.0	247.5 244.5 245.8	38.5 34.5 37.0	9.1 8.3 9.5	5.4 5.4 6.2	23.9 22.6 24.7	13.6 12.3 13.3	33.0 28.4 30.5	13.6 12.6 13.6	48.9 51.7 54.6	17.1 16.2 17.1	10.7 10.0 9.3	36.5 33.7 36.1
2003 Q1 Q2	248.7 243.9	249.4 244.0	35.1	9.1	5.8	24.6	13.4	28.2	13.4	53.7	18.8	8.9	37.7
2003 Jan. Feb. Mar. Apr. May June	83.8 79.1 85.8 82.8 80.6 80.5	83.8 82.5 83.0 81.9 80.6 81.4	11.1 11.3 12.7 11.0 11.3	2.8 3.0 3.3 3.2 3.0	2.0 2.0 1.9 1.8 1.7	8.0 7.9 8.8 8.5 8.2	4.3 4.4 4.7 4.1 4.3	9.8 8.8 9.7 9.8 9.6	4.7 4.1 4.6 4.8 4.3	18.7 17.0 18.0 17.7 17.0	6.4 6.0 6.4 6.1 5.3	3.1 2.7 3.1 3.6 3.5	13.1 12.0 12.7
% change ver 2003 June		-											
2003 Julie	-0.1	-	•	•	•	Bala	ance	•	•	•	•	•	•
1999 2000	51.6 5.3	-	30.4 33.1	-0.1 0.8	2.6 1.4	17.0 17.8	12.9 13.6	21.9 30.7	-27.1 -31.3	-32.6 -60.0	-0.6 -16.1	8.7 7.0	18.2 7.6
2001 2002	49.7 98.3	-	47.8 57.1	2.7 1.6	- Eu 3.0 2.3	ro area en 17.1 18.5	13.4 11.9	42.0 56.9	-24.1 -20.0	-42.5 -34.3	-13.7 -8.4	8.9 3.8	-4.7 8.8
2002 Q2 Q3 Q4	23.0 31.3 26.2	24.1 26.9 23.0	13.1 15.9 13.2	0.2 0.2 0.6	0.8 0.6 0.3	4.8 5.2 4.5	2.7 3.3 2.8	13.0 16.0 16.2	-5.8 -4.3 -5.0	-6.2 -8.7 -9.5	-1.5 -1.4 -1.9	0.7 0.6 1.6	1.2 4.0 3.5
2003 Q1 Q2	6.7 13.3	14.7 13.7	13.8	0.6	0.5	3.0	3.0	13.2	-5.5	-14.4	-5.2	0.6	-2.8
2003 Jan. Feb. Mar. Apr. May June	-1.4 5.5 2.6 3.4 4.5 5.4	5.3 6.3 3.1 5.6 4.4 3.7	4.3 4.6 4.9 4.7 4.4	0.3 0.2 0.2 0.1 0.1	-0.1 0.0 0.6 0.2 0.2	1.0 1.3 0.7 1.1 1.5	1.1 1.1 0.9 1.0 0.8	4.4 4.9 3.8 4.0 4.3	-2.1 -1.4 -2.0 -2.1 -2.0	-6.4 -3.6 -4.3 -4.1 -3.5	-1.8 -1.6 -1.7 -1.0 -0.5	0.1 0.3 0.2 -0.5 -0.5	-2.1 -0.2 -0.6

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

1) Owing to differences in definitions, coverage and time of recording, trade data (as compiled by Eurostat) are not fully comparable with the goods item in the balance of payments statistics compiled by the ECB (Tables 8.1 and 8.2).

### **10 Exchange rates**

#### Table 10

#### **Exchange rates**

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

	Effective exchange rate of the euro 1)									ECU nge rates 2)
				group			Broad grou	ıp	US dollar	Japanese yen
	Nominal	Real CPI	Real PPI 3	Real GDP deflator	Real ULCM	Real ULCT 6	Nominal 7	Real CPI	9	10
1997	99.1	99.4	99.1	98.3	100.6	101.6	90.4	96.5	1.1340	137.09
1998	101.5	101.3	101.5	100.9	99.5	101.5	96.6	99.1	1.1211	146.41
1999 2000	95.7 85.7	95.7 86.3	95.6 86.6	95.6 85.4	96.1 87.2	95.7 85.1	96.6 88.2	95.8 86.0	1.0658 0.9236	121.32 99.47
	0.5.0	00.5			enlargeme		24.0	0.7.7	0.00=6	100.50
2001 2002	87.3 90.0	88.6 92.5	88.9 92.6	88.1 92.3	88.0 90.6	86.5 90.2	91.0 95.6	87.7 91.7	0.8956 0.9456	108.68 118.06
2001 Q1	88.6	89.5	90.2	88.9	89.4	87.3	91.4	88.4	0.9232	109.06
Q2	86.0	87.3	87.4	86.5	87.2	85.1	89.5	86.4	0.8725	106.93
Q3	87.0	88.3 89.3	88.5 89.5	87.7 89.2	87.1 88.1	85.9	91.2 92.0	87.7 88.4	0.8903 0.8959	108.27 110.45
Q4	87.5					87.6				
2002 Q1 Q2	87.1 88.8	89.4 91.4	89.5 91.2	88.8 90.9	87.5 89.4	87.6 89.2	91.3 93.9	87.8 90.2	0.8766 0.9188	116.07 116.46
$\tilde{Q}_3^2$	91.3	93.9	94.2	93.8	92.3	91.5	97.9	93.8	0.9838	117.25
Q4	92.5	95.4	95.3	95.6	93.0	92.6	99.4	94.9	0.9994	122.42
2003 Q1 Q2	96.9 101.3	100.1 104.9	99.6 103.8	100.2	97.2	97.0	104.1 107.9	99.2 103.0	1.0731 1.1372	127.59 134.74
2001 Jan.	89.2	89.9	90.5	_	_	_	91.7	88.6	0.9383	109.57
Feb.	88.3	89.1	89.9	-	-	-	91.0	88.1	0.9217	107.08
Mar.	88.4	89.4	90.1	-	-	-	91.4	88.4	0.9095	110.33
Apr.	87.6	88.8	89.1 87.2	-	-	-	91.0 89.3	88.0 86.2	0.8920 0.8742	110.36 106.50
May June	85.9 84.7	87.2 86.0	86.0		-	-	88.1	85.0	0.8532	100.30
July	85.4	86.8	86.8	_	-	-	89.1	85.9	0.8607	107.21
Aug.	87.7	89.0	89.2	-	-	-	91.8	88.3	0.9005	109.34
Sep.	88.0	89.3	89.5	-	-	-	92.6	89.0	0.9111	108.20
Oct. Nov.	88.0 86.8	89.6 88.4	89.7 88.8	_	-	-	92.8 91.3	89.1 87.6	0.9059 0.8883	109.86 108.68
Dec.	87.7	89.8	89.9	-	-	-	91.9	88.5	0.8924	113.38
2002 Jan.	87.6	89.9	90.2	_	_	_	91.6	88.1	0.8833	117.12
Feb.	86.8	89.0	89.2	-	-	-	91.1	87.4	0.8700	116.23
Mar.	86.8	89.3	89.2	-	-	-	91.2	87.8	0.8758	114.75
Apr. May	87.2 88.6	89.7 91.1	89.6 90.9	-	-	-	91.7 93.7	88.1 89.9	0.8858 0.9170	115.81 115.86
June	90.6	93.2	93.1	-	-	-	96.4	92.5	0.9554	117.80
July	91.7	94.4	94.5	-	-	-	98.2	94.2	0.9922	117.11
Aug.	91.1	93.6	94.0	-	-	-	97.7	93.5	0.9778	116.31
Sep. Oct.	91.2 91.7	93.7 94.3	94.1 94.3	-	-	-	98.0 98.5	93.7 94.2	0.9808 0.9811	118.38 121.57
Nov.	92.5	95.1	95.1	-	-	-	99.3	94.6	1.0014	121.65
Dec.	93.6	96.7	96.6	-	-	-	100.4	96.0	1.0183	124.20
2003 Jan.	95.8	98.8	98.8	-	-	-	103.0	98.1	1.0622	126.12
Feb.	97.1	100.2	99.8	-	-	-	104.4	99.4	1.0773	128.60
Mar.	97.9 08.6	101.2	100.0	-	-	-	105.1 105.2	100.2 100.5	1.0807	128.16
Apr. May	98.6 102.5	102.1 106.1	101.0 105.2	-	-	-	105.2	100.5	1.0848 1.1582	130.12 135.83
June	102.7	106.5	105.3	-	-	-	109.3	104.5	1.1663	138.05
July	101.4	105.2	104.1	-	-	-	107.8	102.9	1.1372	134.99
Aug.	100.3	104.0	103.0	-	-	-	106.6	101.7	1.1139	132.38
% ch. vs. 4) prev. mont 2003 Aug.	th -1.2	-1.2	-1.1	-	-	-	-1.1	-1.2	-2.1	-1.9
% ch. vs. 4) prev. year 2003 Aug.	10.1	11.1	9.6	_	_	_	9.2	8.7	13.9	13.8

Source: ECB.

1) More details of the calculation are given in the general notes.

2) To December 1998, rates for the ECU (source BIS); from January 1999, rates for the euro.

			Bilater	al ECU or euro	exchange rat	es 2)				
Swiss franc	Pound sterling	Swedish krona	Danish krone	Norwegian krone	Canadian dollar	Australian dollar	Hong Kong dollar <sup>3)</sup>	South Korean won 3)	Singapore dollar 3)	
11	12	13	14	15	16	17	18	19	20	
1.6440 1.6220 1.6003 1.5579	0.69230 0.67643 0.65874 0.60948	8.6512 8.9159 8.8075 8.4452	7.4836 7.4993 7.4355 7.4538	8.0186 8.4659 8.3104 8.1129	1.5692 1.6651 1.5840 1.3706 aro area enla	1.5281 1.7867 1.6524 1.5889	8.7498 8.6946 8.2694 7.1972	1,069.75 1,568.89 1,267.26 1,043.50	1.6777 1.8764 1.8064 1.5923	1997 1998 1999 2000
1.5105	0.62187	9.2551	7.4521	8.0484	iro area enia 1.3864	1.7319	6.9855	1,154.83	1.6039	2001
1.4670	0.62883	9.1611	7.4305	7.5086	1.4838	1.7376	7.3750	1,175.50	1.6912	2002
1.5334 1.5283 1.5070 1.4735	0.63260 0.61437 0.61940 0.62090	9.0038 9.1261 9.4067 9.4810	7.4639 7.4593 7.4438 7.4415	8.2024 8.0109 8.0094 7.9693	1.4099 1.3450 1.3743 1.4157	1.7405 1.7013 1.7341 1.7508	7.2007 6.8051 6.9439 6.9873	1,174.68 1,138.94 1,150.05 1,155.22	1.6164 1.5829 1.5823 1.6344	2001 Q1 Q2 Q3 Q4
1.4733 1.4648 1.4636 1.4667	0.61471 0.62853 0.63533 0.63611	9.1589 9.1584 9.2301 9.0946	7.4318 7.4343 7.4281 7.4281	7.8117 7.5175 7.3991 7.3192	1.3978 1.4275 1.5361 1.5687	1.6923 1.6662 1.7965 1.7913	6.8368 7.1664 7.6731 7.7941	1,155.27 1,157.79 1,172.73 1,215.37	1.6072 1.6567 1.7295 1.7671	2002 Q1 Q2 Q3 Q4
1.4662 1.5180	0.66961 0.70169	9.1822 9.1425	7.4305 7.4250	7.5706 7.9570	1.6203 1.5889	1.8095 1.7742	8.3695 8.8692	1,288.92 1,373.83	1.8724 1.9872	2003 Q1 Q2
1.5291 1.5358 1.5355 1.5287 1.5334 1.5225 1.5135 1.5144 1.4913 1.4793 1.4663 1.4749 1.4775 1.4678 1.4678 1.4658 1.4572 1.4721	0.63480 0.63400 0.62915 0.62168 0.61328 0.60890 0.60857 0.62672 0.62291 0.62393 0.61838 0.62012 0.61659 0.61160 0.61574 0.62823 0.64405 0.63870	8.9055 8.9770 9.1264 9.1120 9.0576 9.2106 9.2637 9.3107 9.6744 9.5780 9.4166 9.4359 9.2275 9.1828 9.0594 9.1358 9.2208 9.1137 9.2689	7.4642 7.4630 7.4643 7.4663 7.4612 7.4539 7.4447 7.4450 7.4413 7.4367 7.4452 7.4431 7.4329 7.4299 7.4324 7.4341 7.4356 7.4330 7.4301	8.2355 8.2125 8.1600 8.1146 7.9927 7.9360 7.9714 8.0552 7.9985 7.9970 7.9224 7.9911 7.9208 7.7853 7.7183 7.6221 7.5207 7.4043 7.4043	1.4098 1.4027 1.4167 1.3903 1.3473 1.3016 1.3153 1.3857 1.4260 1.4224 1.4153 1.4075 1.4135 1.3880 1.3903 1.4008 1.4210 1.4627 1.5321	1.6891 1.7236 1.8072 1.7847 1.6813 1.6469 1.6890 1.7169 1.8036 1.7955 1.7172 1.7348 1.7094 1.6963 1.6695 1.6537 1.6662 1.6793	7.3182 7.1889 7.0939 6.9568 6.8182 6.6542 6.7130 7.0236 7.1063 7.0655 6.9284 6.9595 6.8886 6.7857 6.8308 6.9091 7.1521 7.4523 7.7389	1,194.92 1,153.81 1,173.40 1,183.45 1,133.74 1,104.12 1,120.28 1,153.99 1,178.27 1,178.62 1,137.48 1,146.99 1,160.78 1,147.18 1,157.30 1,163.18 1,150.08 1,160.62 1,169.16	1.6302 1.6067 1.6114 1.6165 1.5855 1.5497 1.5691 1.5855 1.5929 1.6397 1.6254 1.6389 1.6247 1.5935 1.6016 1.6191 1.6506 1.7029 1.7395	2001 Jan. Feb. Mar. Apr. May June July Aug. Sep. Oct. Nov. Dec. 2002 Jan. Feb. Mar. Apr. May June
1.4636 1.4649 1.4650 1.4673 1.4679	0.63633 0.63059 0.62994 0.63709 0.64218	9.2489 9.1679 9.1051 9.0818 9.0961	7.4270 7.4271 7.4297 7.4280 7.4264	7.4284 7.3619 7.3405 7.3190 7.2948	1.5333 1.5434 1.5481 1.5735 1.5872	1.8045 1.7927 1.7831 1.7847 1.8076	7.6265 7.6500 7.6521 7.8098 7.9409	1,167.08 1,182.57 1,211.92 1,208.19 1,226.88	1.7164 1.7320 1.7511 1.7666 1.7858	July Aug. Sep. Oct. Nov. Dec.
1.4621 1.4674 1.4695 1.4964 1.5155 1.5411 1.5476 1.5400	0.65711 0.66977 0.68255 0.68902 0.71322 0.70224 0.70045 0.69919	9.1733 9.1455 9.2265 9.1541 9.1559 9.1182 9.1856 9.2378	7.4324 7.4317 7.4274 7.4255 7.4246 7.4250 7.4332 7.4322	7.3328 7.5439 7.8450 7.8317 7.8715 8.1619 8.2893 8.2558	1.6364 1.6299 1.5943 1.5851 1.6016 1.5798 1.5694 1.5570	1.8218 1.8112 1.7950 1.7813 1.7866 1.7552 1.7184 1.7114	8.2841 8.4022 8.4279 8.4605 9.0321 9.0955 8.8689 8.6873	1,250.06 1,282.82 1,335.44 1,337.38 1,390.03 1,392.33 1,342.27 1,312.67	1.8433 1.8803 1.8954 1.9282 2.0074 2.0233 1.9956 1.9531	2003 Jan. Feb. Mar. Apr. May June July Aug.
-0.5	-0.2	0.6	0.0	-0.4	-0.8	-0.4	-2.0	-2.2	-2.1	6 ch. vs. 4 prev. month 2003 Aug.
5.2	9.9	-0.1	0.1	11.1	1.5	-5.2	13.9	12.5	13.8	% ch. vs. 4) prev. year 2003 Aug.

Indicative rates for these currencies are shown up to September 2000, as the ECB did not provide official reference rates for these currencies before that.
 The table shows the percentage change in the latest monthly observation vis-à-vis the previous month, and vis-à-vis the same month of the previous year.

<sup>4)</sup> The table shows the percentage change in the latest monthly observation vis-à-vis the previous month, and vis-à-vis the same month of the previous year. A positive change denotes an appreciation of the euro. Due to the change in the weighting scheme, effective exchange rate data as from January 2001 are not fully comparable with earlier observations.

### II Economic and financial developments in the other EU Member States

Table 11

#### **Economic and financial developments**

(annual percentage changes, unless otherwise indicated)

	НІСР	General govern- ment deficit (-)/ surplus (+) as a % of GDP	General govern- ment gross debt as a % of GDP	Long-term govern- ment bond yield 1) as a % per annum	Exchange rate <sup>2)</sup> as national currency per euro	Current and new capital account as a % of GDP	Unit labour costs 3)	Real GDP	Industrial production index 4)	Standard- ised unemploy- ment rate as a % of labour force (s.a.)	Broad money 5)	3-month interest rate 1) as a % per annum
-	1	2	3	4	5	6 Denmark	7	8	9	10	11	12_
1999 2000 2001	2.1 2.7 2.3	3.3 2.6 3.1	53.0 47.4	4.91 5.64 5.08	7.44 7.45	1.8 1.5	2.4 1.4	2.6 2.9 1.4	0.1 5.7 1.3	4.8 4.4 4.3	-0.2 1.1	3.44 5.00
2001	2.3	1.9	45.4 45.2	5.06	7.45 7.43	3.1 2.8	3.7 1.2	2.1	1.5	4.5	5.7 3.5	4.70 3.54
2002 Q1 Q2	2.5 2.1	-	-	5.21 5.36	7.43 7.43	2.6 3.3	3.2 0.0	1.7 3.4	-0.5 4.5	4.3 4.4	2.3 2.8	3.63 3.71
Q3 Q4	2.4 2.7	-	-	4.92 4.74	7.43 7.43	3.5 1.8	1.0 0.4	1.6 1.5	0.9 1.1	4.6 4.7	2.6 6.1	3.57 3.27
2003 Q1 Q2	2.8 2.2	-	-	4.30 4.12	7.43 7.43	2.6 4.2	-0.1 2.6	1.5 -0.8	1.6 -0.7	5.0 5.2	19.1 22.3	2.83 2.48
2003 Mar. Apr. May June	2.8 2.5 2.1 2.0	- - -	- - -	4.26 4.41 4.09 3.85	7.43 7.43 7.42 7.42	- - -	- - - -	- - -	2.1 -0.2 -1.4 -0.5	5.0 5.0 5.2 5.3	18.5 20.6 24.4 21.8	2.67 2.67 2.54 2.22
July Aug.	1.8	-	-	4.17 4.35	7.43 7.43	-	-	-		5.3	21.2	2.18 2.19
						Sweden						
1999 2000 2001 2002	0.6 1.3 2.7 2.0	1.5 3.4 4.5 1.2	62.7 52.8 54.4 52.4	4.98 5.37 5.11 5.31	8.81 8.45 9.26 9.16	2.6 3.8 3.8 4.3	-1.2 5.0 5.8 2.1	4.6 4.4 1.1 1.9	2.2 6.3 -0.3 -1.2	6.7 5.6 4.9 4.9	6.8 6.2 3.4 5.4	3.32 4.07 4.11 4.24
2002 Q1 Q2 Q3 Q4	2.9 1.9 1.5 1.6	- - -	- - -	5.42 5.64 5.16 5.00	9.16 9.16 9.23 9.09	5.5 5.3 4.1 2.5	4.7 0.8 1.4 1.7	0.8 3.1 2.4 1.3	-1.2 0.1 -1.1 -2.5	4.9 4.9 4.9 5.1	7.0 5.3 6.0 3.4	4.00 4.43 4.41 4.09
2003 Q1 Q2	2.9 2.1	-	-	4.59 4.43	9.18 9.14	5.4	-0.5	2.2 0.9	-1.9 0.6	5.3 5.4	5.6 5.5	3.72 3.28
2003 Mar. Apr. May June July Aug.	2.9 2.3 2.0 2.0 2.4	- - - -	- - - -	4.57 4.73 4.37 4.20 4.51 4.70	9.23 9.15 9.16 9.12 9.19 9.24	- - - -	- - - -	- - - - -	-4.5 1.8 -2.0 1.8	5.3 5.3 5.4 5.4 5.4	5.8 4.4 7.0 5.0 5.1	3.56 3.56 3.35 2.93 2.83 2.87
						nited Kingdon						
1999 2000 2001 2002	1.3 0.8 1.2 1.3	1.1 3.9 0.8 -1.4	45.1 42.1 39.0 38.6	5.01 5.33 5.01 4.91	0.659 0.609 0.622 0.629	-2.1 -1.8 -1.1 -0.8	2.8 2.4 4.0 2.3	2.4 3.1 2.1 1.9	0.8 1.6 -2.1 -3.5	5.9 5.4 5.0 5.1	5.5 6.6 8.1 6.0	5.54 6.19 5.04 4.06
2002 Q1 Q2 Q3 Q4	1.5 0.9 1.1 1.6	2.8 -3.9 -0.7 -3.2	37.7 38.1 37.7 38.2	5.13 5.28 4.71 4.52	0.615 0.629 0.635 0.636	-0.2 -2.1 0.0 -1.0	2.8 2.8 1.7 1.7	1.4 1.8 2.3 2.3	-5.9 -4.3 -2.4 -1.3	5.1 5.1 5.2 5.0	6.1 5.7 5.7 6.3	4.08 4.17 4.01 3.98
2003 Q1 Q2	1.5 1.3	-0.4 -5.4	37.6 38.4	4.34 4.35	$0.670 \\ 0.702$	1.8	1.7	2.1 1.8	-0.7 -0.2	5.0	6.8 8.0	3.80 3.64
2003 Mar. Apr. May June July Aug.	1.6 1.5 1.2 1.1 1.3	-4.3 -3.0 -7.7 -5.4 1.0	37.6 37.5 37.9 38.4 38.5	4.41 4.56 4.31 4.19 4.47 4.65	0.683 0.689 0.713 0.702 0.700 0.699	- - - -	- - - - -	- - - - -	-1.2 -0.8 -3.9 4.4	5.0 5.0 4.9	7.1 8.0 8.2 8.0 7.6	3.66 3.65 3.63 3.64 3.49 3.52

Sources: Eurostat (columns 1, 8, 9 and 10); European Commission (Economic and Financial Affairs DG and Eurostat) (columns 2 (annual) and 3 (annual)); Reuters (column 12); national data (columns 2 (quarterly and monthly), 3 (quarterly and monthly), 4, 5, 7 (except Sweden) and 11); ECB calculations (columns 6 and 7 (Sweden)).

Average-of-period values.

Average-oj-periou values.

For more information, see Table 10.

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

Total excluding construction; adjusted for working days.

Average of end-month values; M3; M4 for the United Kingdom.

### 12 Economic and financial developments outside the EU

**Table 12.1** 

#### **Economic and financial developments**

(annual percentage changes, unless otherwise indicated)

	Consumer price index	Unit labour costs 1)	Real GDP	Industrial production index 1)	Unemploy- ment rate as a % of labour force (s.a.)	Broad money 2)	3-month interbank deposit rate 3) as a %	bond yield <sup>3)</sup> as a %	Exchange rate <sup>4)</sup> as national currency per euro	Fiscal deficit (-)/ surplus (+) <sup>5)</sup> as a % of GDP	Gross public debt <sup>6)</sup> as a % of GDP
	1	2	3	4	5	6	per annum 7	per annum 8	9	10	11
					United	States					
1999	2.2	-1.1	4.1	5.0	4.2	8.7	5.42	5.64	1.066	0.7	49.6
2000	3.4	3.2	3.8	5.2	4.0	9.4	6.53	6.03	0.924	1.4	44.3
2001	2.8	0.7	0.3	-4.1	4.8	11.4	3.78	5.01	0.896	-0.5	44.0
2002	1.6	-1.3	2.4	-1.0	5.8	8.0	1.80	4.60	0.946	-3.4	46.2
2002 Q1	1.3	-0.8	1.4	-4.0	5.6	10.7	1.90	5.06	0.877	-3.0	44.3
Q2	1.3	-1.4	2.2	-1.5	5.8	7.9	1.92	5.08	0.919	-3.3	44.6
Q3	1.6	-1.9	3.3	0.5	5.8	7.2	1.81	4.25	0.984	-3.4	45.3
Q4	2.2	-0.8	2.9	1.1	5.9	6.4	1.55	3.99	0.999	-3.9	46.2
2003 Q1	2.9	0.6	2.0	0.4	5.8	6.3	1.33	3.90	1.073	-4.1	46.8
Q2	2.1	0.7	2.5	-1.3	6.2	6.9	1.24	3.61	1.137	-4.7	
2003 Mar.	3.0	_	-	0.0	5.8	6.4	1.29	3.79	1.081	_	_
Apr.	2.2	_	_	-1.1	6.0	6.6	1.30	3.94	1.085	_	_
May	2.1	_	-	-1.3	6.1	6.8	1.28	3.56	1.158	-	-
June	2.1	-	-	-1.3	6.4	7.2	1.12	3.32	1.166	-	-
July	2.1	-	-	-1.5	6.2	8.6	1.11	3.93	1.137	-	-
Aug.		-	-				1.14	4.44	1.114	-	-
					Jap	an					
1999	-0.3	-1.8	0.1	0.2	4.7	3.7	0.22	1.75	121.3	-7.2	118.2
2000	-0.7	-6.0	2.8	5.7	4.7	2.1	0.28	1.76	99.5	-7.4	126.1
2001	-0.7	5.1	0.4	-6.8	5.0	2.8	0.15	1.34	108.7	-6.1	134.6
2002	-0.9	-3.0	0.2	-1.4	5.4	3.3	0.08	1.27	118.1		•
2002 Q1	-1.4	5.4	-3.1	-9.9	5.3	3.6	0.10	1.46	116.1		
Q2	-0.9	-1.7	-0.3	-3.8	5.4	3.5	0.08	1.37	116.5		
Q3	-0.8	-6.7	1.7	3.2	5.4	3.3	0.07	1.24	117.2		
Q4	-0.5	-8.4	2.3	5.9	5.4	2.9	0.07	1.01	122.4		•
2003 Q1	-0.2	-6.9	2.9	5.6	5.4	1.9	0.06	0.80	127.6		
Q2	-0.2	•	2.1	2.6	5.4	1.6	0.06	0.60	134.7		
2003 Mar.	-0.1	-5.1	_	4.1	5.4	1.7	0.06	0.74	128.2	-	-
Apr.	-0.1	-4.8	_	3.3	5.4	1.3	0.06	0.66	130.1	-	_
May	-0.2	-2.3	-	1.7	5.4	1.6	0.06	0.57	135.8	-	-
June	-0.4		-	2.8	5.3	1.8	0.06	0.56	138.1	-	-
July	-0.2		-	0.0	5.3	1.8	0.05	0.99	135.0	-	-
Aug.			-				0.05	1.15	132.4	-	-

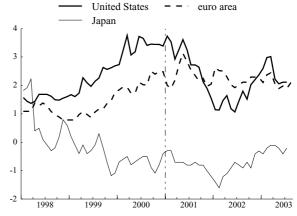
#### Real gross domestic product

(annual percentage changes; quarterly)

#### United States euro area Japan 7 6 4 3 2 0 -2 -3 -4 1998 1999 2000 2001 2002

#### Consumer price indices

(annual percentage changes; monthly)



Sources: National data (columns 1, 2 (United States), 3, 4, 5, 6, 9 and 10); OECD (column 2 (Japan)); Eurostat (euro area chart data); Reuters (column 7 and 8); ECB calculation (column 11).

- 1) Manufacturing.
- Average-of-period values; M3 for US, M2+CDs for Japan.
   For more information, see Tables 3.1 and 3.2.
- For more information, see Table 10.
- 7) To more information, see Tuber 10.
   5) Financial accounts sources for 1999.
   6) Gross consolidated debt for the general government (end of period).

#### **Table 12.2**

#### Saving, investment and financing

(as a percentage of GDP)

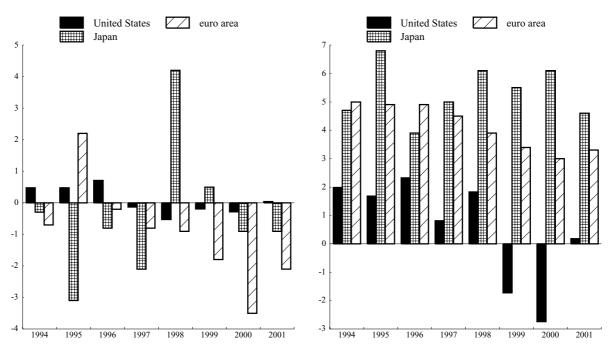
	National s	aving and i	nvestment	Inve	estment and	financing of	non-finan	cial corporat	tions	Investmen	nt and financ	ing of hou	seholds 1)
	Gross saving	Gross capital formation		Gross capital formation	Gross fixed capital formation	Net acquisi- tion of financial assets	Gross saving	Net incurrence of liabilities	Secur- ities and shares	Capital expend- iture	Net acquisi- tion of financial assets	Gross saving	Net incurr- ence of liabilities
	1	2	3	4	5	6	7	8	9	10	11	12	13
						United S	States						
1999 2000 2001 2002	18.4 18.4 16.5 15.1	20.9 21.1 19.1 18.6	-3.0 -4.0 -3.7 -4.7	9.5 9.7 7.9 7.7	8.9 9.1 8.5 7.6	10.5 12.3 1.9 1.6	8.2 7.5 7.7 7.7	10.6 12.6 1.8 1.8	2.9 2.7 2.1 0.3	12.4 12.5 13.0 12.8	4.5 3.0 5.9 6.6	11.2 11.5 11.6 12.5	6.2 5.7 5.8 7.0
2001 Q2 Q3 Q4	16.6 16.5 15.9	19.3 18.8 18.2	-3.8 -3.5 -3.6	8.1 7.7 7.1	8.6 8.3 8.0	1.4 0.1 2.1	7.4 7.8 8.5	1.7 0.3 0.8	2.8 0.9 2.4	12.9 12.9 13.4	6.0 8.9 2.5	11.2 12.8 10.9	6.7 9.1 3.6
2002 Q1 Q2 Q3 Q4	15.5 15.5 14.6 14.6	18.6 18.7 18.6 18.7	-4.1 -4.8 -4.7 -5.1	7.5 7.7 7.8 7.8	7.8 7.6 7.6 7.5	1.7 2.9 0.0 1.8	7.9 7.7 7.5 7.6	1.5 2.9 0.6 2.2	0.3 1.1 -1.4 1.1	12.8 12.7 12.9 12.7	6.5 5.6 4.7 9.4	12.3 12.7 12.5 12.5	6.8 5.9 6.6 8.5
2003 Q1	14.2	18.5	-5.2	7.5	7.4	2.6	7.3	3.1	0.8	12.7	8.3	12.4	8.4
						Japa	n						
1999 2000 2001 2002	27.8 27.7 26.4	25.9 26.2 25.6 23.7	2.2 2.3 2.0	14.4 15.8 15.7	14.8 15.4 15.2	2.4 2.4 -2.3 -3.0	13.7 14.3 14.1	-3.5 0.3 -5.7 -6.6	1.7 1.2 1.7 -0.3	5.2 5.2 4.9	5.1 4.1 3.0 1.5	11.5 10.7 8.6	0.2 0.0 -0.1 -2.1
2001 Q2 Q3 Q4	24.2 25.9 25.5	25.4 25.3 25.5	1.7 2.1 2.0			-26.7 6.3 2.3		-15.3 -8.9 3.2	4.0 -1.1 1.5		11.8 -5.2 8.8		-4.5 2.6 -1.5
2002 Q1 Q2 Q3 Q4	29.6	22.8 22.7 23.7 25.0	3.4			10.0 -25.0 -0.8 3.8		-6.7 -19.0 -7.5 6.1	-2.5 2.0 -2.6 1.5		-6.5 7.4 -4.3 8.5		2.5 -8.0 -0.1 -2.5
2003 Q1		22.9				23.3		13.9	0.2		-6.9		2.7

#### Net lending of non-financial corporations

(as a percentage of GDP)

#### Net lending of households 1)

(as a percentage of GDP)



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

1) Households including non-profit institutions serving households.

#### **Technical notes**

### Relating to the euro area overview table (I. Monetary developments and interest

### (I. Monetary developments and interest rates)

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

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

where  $I_t$  is the index of adjusted stocks as at month t (see also below). Likewise, for the year ending in month t, the average growth rate is calculated as:

b) 
$$\left(\frac{0.5 I_{t} + \sum_{i=1}^{11} I_{t-i} + 0.5 I_{t-12}}{0.5 I_{t-12} + \sum_{i=1}^{11} I_{t-i-12} + 0.5 I_{t-24}} - 1\right) \times 100$$

#### Relating to Tables 2.1 to 2.8

#### **Calculation of flows**

Monthly flows are calculated from monthly differences in levels adjusted for reclassifications, other revaluations, exchange rate variations and any other changes which do not arise from transactions.

If  $L_{\tau}$  represents the level outstanding at the end of month t,  $C_{\tau}^{M}$  the reclassification adjustment in month t,  $E_{\tau}^{M}$  the exchange rate adjustment and  $V_{\tau}^{M}$  the other revaluation adjustments, the flow  $F_{\tau}^{M}$  in month t is defined as:

c) 
$$F_{t}^{M} = (L_{t} - L_{t-1}) - C_{t}^{M} - E_{t}^{M} - V_{t}^{M}$$

Similarly, the quarterly flow  $F_t^Q$  for the quarter ending in month t is defined as:

d) 
$$F_t^Q = (L_t - L_{t-3}) - C_t^Q - E_t^Q - V_t^Q$$

where  $L_{t\cdot 3}$  is the level outstanding at the end of month t-3 (the end of the previous quarter) and, for example,  $C_t^Q$  is the reclassification adjustment in the quarter ending in month t.

For those quarterly series for which monthly observations are now available (see below), the

quarterly flow can equivalently be derived as sum of the three monthly flows in the quarter.

### Calculation of growth rates for monthly series

Growth rates may be calculated from flows or from the index of adjusted stocks. If  $F_t^M$  and  $L_t$  are defined as above, the index  $I_t$  of adjusted stocks in month t is defined as:

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

The base of the index (of the non-seasonally adjusted series) is currently set as December 2001 = 100. Time series of the index of adjusted stocks are available on the ECB's website (www.ecb.int) under the "Monetary statistics" item of the statistics section.

The annual percentage change  $a_t$  for month t-i.e. the change in the 12 months ending in month t-i.e. may be calculated using either of the following two formulae:

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

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

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

h) 
$$a_t^M = \left( \frac{F_t^M}{L_{t-1}} \right) \times 100$$

or

i) 
$$a_t^M = \begin{pmatrix} I_t / I_{t-1} - 1 \end{pmatrix} \times 100$$

Finally, the three-month moving average for the annual percentage change of M3 is obtained as  $(a_t + a_{t-1} + a_{t-2})/3$ , where  $a_t$  is defined as in f) or g) above.

### Calculation of growth rates for quarterly series

Following the entry into force on I 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  $L_{t\cdot 3}$  are defined as above, the index  $I_t$  of adjusted stocks for the quarter ending in month t is defined as:

j) 
$$I_t = I_{t-3} \times \left(1 + \frac{F_t^Q}{L_{t-3}}\right)$$

The annual percentage change in the four quarters ending in month t, i.e.  $a_t$ , may be calculated using formula g.

Similarly, the quarter-on-quarter percentage change  $a_t^Q$  for the quarter ending in month t may be calculated as:

k) 
$$a_t^Q = \begin{pmatrix} F_t^Q \\ L_{t-3} \end{pmatrix} \times 100$$
  
or .  
1)  $a_t^Q = \begin{pmatrix} I_t \\ L_{t-3} \end{pmatrix} \times 100$ 

### Seasonal adjustment of the euro area monetary statistics<sup>1</sup>

The approach used relies on a multiplicative decomposition through X-12-ARIMA.<sup>2</sup> The seasonal adjustment may include a day-of-the-week adjustment, and for some series is carried out indirectly by means of a linear combination of components. In particular, this is the case for M3, derived by aggregating the seasonally adjusted series for M1, M2 less M1, and M3 less M2.

The seasonal adjustment procedures are first applied to the index of adjusted stocks.<sup>3</sup> The resulting estimates of the seasonal factors are then applied to the levels

and to the adjustments arising from reclassifications and revaluations, in turn yielding seasonally adjusted flows. Seasonal (and trading day) factors are revised at annual intervals or as required.

#### Relating to Table 3.7

#### Calculation of growth rates

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

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

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

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

o) 
$$a_t = (I_t / I_{t-12} - 1) \times 100$$

The method used to calculate the growth rates for securities issues statistics is the same as that used for the monetary aggregates, the only difference being that an "N" is used rather than an "F". The reason for this is to distinguish between the different ways of obtaining "net issues" for securities issues statistics, where the ECB collects information on

I 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), under the "Monetary statistics" item.

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.

gross issues and redemptions separately, and "flows" used for the monetary aggregates.

#### Relating to Table 4.1

#### Seasonal adjustment of the HICP<sup>4</sup>

The approach used relies on multiplicative decomposition through X-I2-ARIMA (see footnote 2 on page 86\*). The seasonal adjustment of the overall HICP for the euro area is carried out indirectly by aggregating the seasonally adjusted euro area series for processed food, unprocessed food, industrial goods excluding energy, and services. Energy is added without adjustment since there is no statistical evidence of seasonality. Seasonal factors are revised at annual intervals or as required.

#### Relating to Table 8.2

### Seasonal adjustment of the balance of payments current account

The approach relies on multiplicative decomposition through X-12-ARIMA (see footnote 2 on page 86\*). Goods raw data are pre-adjusted to take into account "working day", "leap year" and "Easter" effects. Services data are subject to only a "working day" pre-adjustment. The seasonal adjustment for goods and services is carried out using these pre-adjusted series. Income and current transfers 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 annual intervals or as required.

4 See footnote I on page 86\*.

#### **General notes**

The basis for the statistics compiled by the European Central Bank (ECB) is presented in the document entitled "Statistical information collected and compiled by the ESCB", dated May 2000. This document is an update of the report entitled "Statistical requirements for Stage Three of Monetary Union (Implementation Package)" of July 1996. The document covers money and banking and related statistics, balance of payments statistics, international investment position statistics and financial accounts statistics. The ECB's requirements for statistics on prices and costs, national accounts, the labour market, government receipts and expenditure, short-term indicators of output and demand, and the European Commission Business and Consumer Surveys are set out in the document entitled "Requirements in the field of general economic statistics" of August 2000.1

The focus of these statistics is the euro area as a whole. New data will appear in the ECB's Monthly Bulletin as they become available. More detailed and longer runs of data, with further explanatory notes, are available in the statistics section of the ECB's website (www.ecb.int). Services available under "Statistics on-line" include a browser interface with search facilities, subscription to different datasets and a facility allowing data to be downloaded directly in compressed Comma Separated Value (CSV) files.

Given that the composition of the ECU does not coincide with the former currencies of the countries which have adopted the single currency, pre-1999 amounts converted from the participating currencies into ECU at current ECU exchange rates are affected by movements in the currencies of EU Member States which have not adopted the euro. To avoid this effect in the monetary statistics, the pre-1999 data in Tables 2.1 to 2.8 are expressed in units converted from national currencies at the irrevocable euro exchange rates established on 31 December 1998. Unless indicated otherwise, price and cost statistics before 1999 are based on data expressed in national currency terms.

Methods of aggregation and/or consolidation (including cross-country consolidation) have been used where appropriate.

As a general rule, the cut-off date for the statistics included in the Monthly Bulletin is the day preceding the first meeting in the month of the Governing Council. For this issue, the cut-off date was 3 September 2003.

Recent data are often provisional and may be revised. Discrepancies between totals and their components may arise from rounding.

Statistical series relating to the euro area cover EU Member States that had adopted the euro at the time to which the statistics relate. This means that euro area data up to end-2000 cover the Euro II and, from the beginning of 2001, data cover the Euro I2. Exceptions to this rule are indicated where appropriate.

In the tables, the break is shown by means of a line marked "Euro area enlargement". In the charts, the break is indicated by a dotted line. Where possible, absolute and percentage changes for 2001 calculated from a base in 2000 use a series which takes into account the impact of Greece's entry into the euro area.

Data for the euro area plus Greece up to end-2000 can be downloaded (CSV files) from the ECB's website (www.ecb.int).

The group "acceding countries" consists of the Czech Republic, Estonia, Cyprus, Latvia, Lithuania, Hungary, Malta, Poland, Slovenia and Slovakia.

#### **Overview**

Key developments in the euro area are summarised in an overview table.

I The ECB is responsible for money, banking and financial markets statistics at the European level; responsibility for balance of payments, international investment position and financial accounts statistics is shared with the European Commission (Eurostat); price, cost and other economic statistics are the responsibility of the European Commission (Eurostat).

#### **Monetary policy statistics**

Tables 1.1 to 1.5 show the consolidated financial statement of the Eurosystem, data on Eurosystem operations, statistics relating to minimum reserves, and the banking system's liquidity position. Tables 1.2 and 1.3 reflect the switch to variable rate tenders in June 2000.

### Monetary developments and investment funds

Table 2.1 shows the aggregated balance sheet of the monetary financial institution (MFI) sector, i.e. the sum of the harmonised balance sheets of all MFIs resident in the euro area. Table 2.2 shows the consolidated balance sheet of the MFI sector, which is obtained by netting the aggregated balance sheet positions between MFIs in the euro area. Due to limited heterogeneity in recording practices, the sum of the inter-MFI positions is not necessarily zero; the balance is shown in column 9 of the liabilities side of Table 2.2. Table 2.3 sets out the euro area monetary aggregates and counterparts. These are derived from the consolidated MFI balance sheet; they also take account of some monetary assets/ liabilities of central government. Statistics on monetary aggregates and counterparts are presented with reference to both unadjusted data (panels 1-6) and data adjusted for seasonal and trading-day effects (panels 7-12). Whereas in Tables 2.1 and 2.2, the holdings by non-euro area residents of i) shares/units issued by money market funds located in the euro area and ii) debt securities issued with a maturity of up to two years by MFIs located in the euro area are shown in the external liabilities item, in Table 2.3, these holdings are excluded from the monetary aggregates and contribute to the item net external assets. Table 2.4 provides an analysis by sector, type and original maturity of loans granted by MFIs other than the Eurosystem (the banking system) resident in the euro area. Table 2.5 shows a sectoral and instrument analysis of deposits held with the

euro area banking system. Table 2.6 shows the securities held by the euro area banking system, by type of issuer. Tables 2.2 to 2.6 include flows adjusted for reclassifications, revaluations, exchange rate variations and any other changes which do not arise from transactions. Table 2.7 shows selected revaluations for which the flows are adjusted. Tables 2.3 to 2.6 also provide growth rates in terms of annual percentage changes based on the adjusted flows. Table 2.8 shows a quarterly currency analysis of selected MFI balance sheet items.

A complete list of MFIs is published on the ECB's website. Details of the sector definitions are set out in the "Money and Banking Statistics Sector Manual: guidance for the statistical classification of customers" (ECB, November 1999). The "Guidance Notes to Regulation ECB/2001/13 on the MFI Balance Sheet Statistics" (ECB, November 2002) explains practices recommended to be followed by the NCBs. From I January 1999 the statistical information has been collected and compiled on the basis of the ECB Regulation concerning the consolidated balance sheet of the Monetary Financial Institutions sector (ECB/1998/16, as replaced from January 2003 by ECB/2001/13).

Following the entry into force of Regulation ECB/2001/13, the balance sheet item "money market paper" has been merged with the item "debt securities" on both the assets and liabilities side of the MFI balance sheet.

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

fund sector as identified by investment policy, and Table 2.11 shows the aggregated balance sheet broken down by type of investor.

#### Financial markets and interest rates

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

Statistics on securities issues cover securities other than shares (debt securities), which are presented in Tables 3.5, 3.6 and 3.7, as well as quoted shares, which are presented in Table 3.8. Debt securities are broken down into short-term and long-term securities. "Short-term" means securities with an original maturity of one year or less (in exceptional cases, and in accordance with the ESA 95, two years or less). Securities with a longer maturity, or with optional maturity dates, the latest of which is more than one year away, or with indefinite maturity dates, are classified as long-term. The statistics on debt securities are estimated to cover approximately 95% of total issues by euro area residents.

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

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

area. The term "international organisations" includes the European Investment Bank. The ECB is included in the Eurosystem.

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

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

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

2 The code numbers in the ESA 95 for the sectors shown in tables in the Monthly Bulletin are: MFIs (including the Eurosystem), which comprises the ECB, the NCBs of the euro area member countries (S.121) and other monetary financial institutions (S.122); non-monetary financial corporations, which comprises other financial intermediaries (S.123), financial auxiliaries (S.124) and insurance corporations and pension funds (S.125); non-financial corporations (S.11); central government (S.1311); and other general government, which comprises state government (S.1312), local government (S.1313) and social security funds (S.1314).

#### **HICP** and other prices

The data described in this section and the "Real economy indicators" section are, with a few exceptions, produced by the European Commission (mainly Eurostat) and national statistical authorities. Euro area results are obtained by aggregating data for individual countries. As far as possible, the data are harmonised and comparable. As a general rule, however, the availability of comparable data is better for the more recent periods than for earlier periods.

The Harmonised Index of Consumer Prices (HICP) for the euro area (Table 4.1) is available from 1995 onwards. The index is based on national HICPs, which follow the same methodology in all euro area countries. The breakdown by goods and services components is derived from the Classification of individual consumption by purpose (Coicop). The HICP covers monetary expenditure on final consumption by households on the economic territory of the euro area. The table includes seasonally adjusted HICP data which are compiled by the ECB.

#### Real economy indicators

With regard to statistics on national accounts (Tables 4.2 and 5.1), the implementation of the ESA 95 from 1999 has begun to pave the way for fully comparable data, including quarterly summary accounts, across the euro area. For data before 1999, the deflators of GDP in Table 4.2.2 are derived from national data in domestic currency. National accounts in the Monthly Bulletin are based on the ESA 95.

Table 5.2 shows selected other real economy indicators. The implementation of Council Regulation (EC) No. 1165/98 of 19 May 1998 concerning short-term statistics will enlarge the range of available euro area data. The breakdown by end-use of products applied in Tables 4.2.1 and 5.2.1 is the harmonised sub-division of industry excluding construction

(NACE sections C to E) into Main Industrial Groupings as defined by Commission Regulation (EC) No. 586/2001 of 26 March 2001.

Opinion survey data (Table 5.3) draw on the European Commission Business and Consumer Surveys.

Employment data (Table 5.4) are based on the ESA 95. Whenever coverage of the euro area is incomplete, some data are estimated by the ECB on the basis of the information available. Unemployment rates conform to International Labour Organization (ILO) guidelines. The labour force estimates underlying the unemployment rate are different from the sum of the employment and unemployment levels published in Table 5.4.

#### Saving, investment and financing

Table 6.1 shows quarterly data on financial accounts for non-financial sectors in the euro area, comprising general government (S.13), non-financial corporations (S.11), and households (S.14) including non-profit institutions serving households (S.15). The data cover amounts outstanding and transactions classified according to the ESA 95 and show the main financial investment and financing activities of the nonfinancial sectors. On the financing side (liabilities) the data are presented by ESA 95 sector and original maturity. Whenever possible the financing taken from MFIs is presented separately. The information on financial investment (assets) is currently less detailed than that on financing, especially since a breakdown by sector is not possible.

Table 6.2 shows quarterly data on financial accounts for insurance corporations and pensions funds (S.125) in the euro area. As in Table 6.1, the data cover amounts outstanding and financial transactions and show the main financial investment and financing activities of this sector.

The quarterly data in both tables are based on quarterly national financial accounts, MFI balance sheet and securities issues statistics. Table 6.1 also refers to data taken from BIS international banking statistics. Although all euro area countries contribute to the MFI balance sheet and securities issues statistics, Ireland and Luxembourg do not yet provide quarterly national financial accounts data.

Table 6.3 shows annual data on saving, investment (financial and non-financial) and financing for the euro area sectors as a whole, and for non-financial corporations and households separately. These annual data provide, in particular, fuller sectoral information on the acquisition of financial assets and are consistent with the quarterly data in the two previous tables.

#### General government fiscal position

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

Table 7.1 shows general government revenue and expenditure on the basis of definitions laid down in Commission Regulation (EC) No. 1500/2000 of 10 July 2000 amending the ESA 95. Table 7.2 shows details of general government gross consolidated debt at nominal value in accordance with the Treaty provisions on the excessive deficit procedure. Tables 7.1 and 7.2 include summary data for the individual euro area countries owing to their importance in the framework of the Stability and Growth Pact. Table 7.3 analyses changes in general government debt. The difference between the change in government debt and government deficit - the deficit-debt adjustment - is

mainly explained by government transactions in financial assets and by foreign exchange valuation effects.

### Balance of payments and international investment position (including reserves)

The concepts and definitions used in balance of payments statistics (Tables 8.1 to 8.6) and international investment position statistics (Tables 8.8.1 to 8.8.4) generally conform to the 5th edition of the IMF Balance of Payments Manual (October 1993), to the ECB Guideline of May 2003 (ECB/2003/7) on the statistical reporting requirements of the ECB, and to Eurostat's documentation.

The euro area balance of payments (b.o.p.) data are compiled by the ECB. Data up to December 1998 are expressed in ECU. The recent monthly figures should be regarded as provisional. Data are revised with the publication of the figures for the next month and of the detailed quarterly b.o.p. data. Earlier data are revised periodically or as a result of methodological changes in the compilation of the source data.

Some earlier data have been partially estimated and may not be fully comparable with more recent observations. Table 8.5.2 provides a sectoral breakdown of euro area purchasers of securities issued by non-euro area residents. For the time being, it is not possible to show a sectoral breakdown of euro area issuers of securities acquired by non-residents.

A specific methodological note on the monetary presentation of the euro area b.o.p. (Table 8.7) is available in the statistics section of the ECB's website (www.ecb.int). See also Box I on page 15 of the June 2003 issue of the ECB's Monthly Bulletin.

The euro area international investment position (i.i.p.) is compiled on the basis of euro area member countries' positions vis-à-vis non-euro area residents (i.e. considering the euro area as a single economy) from

end-1999 data onwards, with the result that euro area assets and liabilities are shown separately (see also Box 9 on page 71 of the December 2002 issue of the Monthly Bulletin). For end-1997 and end-1998 positions, the i.i.p. is compiled on a "net" basis, i.e. by aggregating national data. The "net" and the "extra-euro area" based compilation methodologies may not give fully comparable results. The i.i.p. is valued at current market prices, with the exception of direct investment stocks, where book values are used to a large extent.

The outstanding amounts of the Eurosystem's international reserves and related assets are shown in Table 8.8.5 with the corresponding reserves and related assets held by the ECB. The data in Table 8.8.5 are in line with the recommendations for the IMF/BIS template on international reserves and foreign currency liquidity. Earlier data are continually revised. Reserve assets data before end-1999 are not fully comparable with later observations. A publication on the statistical treatment of the Eurosystem's international reserves is available on the ECB's website ("Statistical treatment of the Eurosystem's international reserves", October 2000).

#### External trade in goods

Table 9 shows data on euro area external trade in goods. The main source for the data is Eurostat. The ECB derives volume indices from Eurostat value and unit value indices, and performs seasonal adjustment of unit value indices, while value data are seasonally and working-day adjusted by Eurostat.

The commodity breakdown is in accordance with the classification by Broad Economic Categories (based on the SITC Rev. 3 definition) for intermediate, capital and consumption goods, and with the SITC Rev. 3 for manufactured goods and oil. The geographical breakdown shows main trading partners, individually or in regional groups.

Owing to differences in definitions, classification, coverage and time of recording, external trade data, in particular imports, are not fully comparable with the goods item in the balance of payments statistics (Tables 8.1 and 8.2). Part of the difference arises from the inclusion of insurance and freight services in the recording of goods imported, which accounted for about 3.8% of the value of imports (c.i.f.) in 1998 (ECB estimates).

#### **Exchange rates**

Table 10 shows ECB calculations of nominal and real effective exchange rate indices for the euro based on weighted averages of bilateral euro exchange rates. Weights are based on 1995-97 manufactured goods trade with the trading partners and capture thirdmarket effects. Up to December 2000, the narrow group is composed of the countries whose currencies are shown in the table plus Greece. When Greece joined the euro area in January 2001, it ceased to be a partner country in the effective exchange rate of the euro and the weighting scheme has been adjusted accordingly. In addition, the broad group includes the following countries: Algeria, Argentina, Brazil, China, Croatia, Cyprus, the Czech Republic, Estonia, Hungary, India, Indonesia, Israel, Malaysia, Mexico, Morocco, New Zealand, the Philippines, Poland, Romania, Russia, Slovakia, Slovenia, South Africa, Taiwan, Thailand and Turkey. Real rates are calculated using consumer prices (CPI), producer prices (PPI), gross domestic product (GDP deflator), unit labour costs in manufacturing (ULCM) and unit labour costs in the total economy (ULCT). Where deflators are not yet available, estimates are used. Rates using the GDP deflator and the ULCT index as deflators refer to the Euro 12, i.e. they include Greece for the entire period.

The bilateral rates shown are those against the 12 currencies used in the ECB's calculation of the "narrow" effective exchange rate of the euro. The ECB publishes daily reference rates for these and some other currencies. For more detailed information on the calculation of effective exchange rates, see the article entitled "Developments in the euro area's international cost and price competitiveness" in the August 2003 issue of the Monthly Bulletin (page 67) and the ECB's Occasional Paper No. 2 ("The effective exchange rates of the euro", Luca Buldorini, Stelios Makrydakis and Christian Thimann, February 2002), which can be downloaded from the ECB's website.

### Economic and financial developments outside the euro area

Statistics on other EU Member States (Table II) follow the same principles as those for data relating to the euro area. Data for the United States and Japan contained in Tables/ Charts 12.1 and 12.2 are obtained from national sources.

# Chronology of monetary policy measures of the Eurosystem

#### 2 January 200 I

On I January 2001 the euro was introduced in Greece. Greece thus became the twelfth EU Member State to adopt the single currency and the first to do so since the start of Stage Three of Economic and Monetary Union (EMU) on I January 1999. As a result, the Bank of Greece is now a full member of the Eurosystem, with the same rights and obligations as the 11 national central banks of the EU Member States which previously adopted the euro. In accordance with Article 49 of the Statute of the European System of Central Banks and of the European Central Bank, the Bank of Greece pays up the remainder of its contribution to the capital of the ECB, as well as its share of the ECB's reserves, and also transfers to the ECB its contribution to the foreign reserve assets of the ECB.

Further to the announcement on 29 December 2000, the first main refinancing operation of 2001, in which the Greek counterparties of the Eurosystem participate for the first time, is successfully conducted. The allotment volume of €101 billion takes into account the additional liquidity needs of the euro area banking system resulting from the integration of the Greek Monetary Financial Institutions.

#### 4 January 2001

The Governing Council of the ECB decides that the minimum bid rate for the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 4.75%, 5.75% and 3.75% respectively.

In addition, it decides on an allotment amount of €20 billion per operation for the longer-term refinancing operations to be conducted in 2001. This amount takes into consideration the expected liquidity needs of the euro area banking system in 2001 and the desire of the Eurosystem to continue to provide the bulk of refinancing of the financial sector through its main refinancing operations. The

Governing Council may adjust the allotment amount in the course of the year in the event of unexpected developments in liquidity needs.

## 18 January, I February, 15 February, I March, 15 March, 29 March, 11 April, 26 April 2001

The Governing Council of the ECB decides that the minimum bid rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 4.75%, 5.75% and 3.75% respectively.

#### 10 May 2001

The Governing Council of the ECB decides to lower the minimum bid rate on the main refinancing operations by 0.25 percentage point to 4.50%, with effect from the operation to be settled on 15 May 2001. In addition, it decides to lower the interest rates on both the marginal lending facility and the deposit facility by 0.25 percentage point, to 5.50% and 3.50% respectively, both with effect from 11 May 2001.

### 23 May, 7 June, 21 June, 5 July, 19 July, 2 August 2001

The Governing Council of the ECB decides that the minimum bid rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 4.50%, 5.50% and 3.50% respectively.

#### 30 August 2001

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

1 The chronology of monetary policy measures of the Eurosystem taken in 1999 and 2000 can be found on pages 176 to 179 of the ECB Annual report 1999 and on pages 205 to 208 of the ECB Annual report 2000 respectively. refinancing operations by 0.25 percentage point to 4.25%, with effect from the operation to be settled on 5 September 2001. In addition, it decides to lower the interest rates on both the marginal lending facility and the deposit facility by 0.25 percentage point, to 5.25% and 3.25% respectively, both with effect from 31 August 2001.

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

#### 13 September 2001

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

#### 17 September 2001

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

### 27 September, II October, 25 October 2001

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

#### 8 November 2001

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

#### 6 December 2001

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

In addition, it decides that the reference value for the annual growth rate of the broad monetary aggregate M3 will remain at 4½%.

#### 3 January 2002

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

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

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

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

#### 10 July 2002

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

### I August, I2 September, I0 October, 7 November 2002

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

#### 5 December 2002

The Governing Council of the ECB decides to lower the minimum bid rate on the main refinancing operations by 0.50 percentage point to 2.75%, starting from the operation to be settled on 11 December 2002. It also decides to lower the interest rates on both the marginal lending facility and the deposit facility by 0.50 percentage point, to 3.75% and 1.75% respectively, both with effect from 6 December 2002.

In addition, it decides that the reference value for the annual growth rate of the broad monetary aggregate M3 will remain at 4½%.

#### 9 January 2003

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

#### 23 January 2003

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

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

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

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

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

#### 6 February 2003

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

#### 6 March 2003

The Governing Council of the ECB decides to lower the minimum bid rate on the main refinancing operations by 0.25 percentage point to 2.50%, starting from the operation to be settled on 12 March 2003. It also decides to lower the interest rates on both the marginal lending facility and the deposit facility by 0.25 percentage point, to 3.50% and 1.50% respectively, both with effect from 7 March 2003.

#### 3 April 2003

The Governing Council of the ECB decides that the minimum bid rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 2.50%, 3.50% and 1.50% respectively.

#### 8 May 2003

The Governing Council of the ECB decides that the minimum bid rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 2.50%, 3.50% and 1.50% respectively.

It also announces the results of its evaluation of the ECB's monetary policy strategy. This strategy, which was announced on 13 October 1998, consists of three main elements: a quantitative definition of price stability, a prominent role for money in the assessment of risks to price stability, and a broadly based assessment of the outlook for price developments.

The Governing Council confirms the definition of price stability formulated in October 1998, namely that "price stability is defined as a year-on-year increase in the Harmonised Index of Consumer Prices (HICP) for the euro area of below 2%. Price stability is to be maintained over the medium term". At the same time, the Governing Council agrees that in the pursuit of price stability it will aim to maintain inflation rates close to 2% over the medium term.

The Governing Council confirms that its monetary policy decisions will continue to be based on a comprehensive analysis of the risks to price stability. At the same time, the Governing Council decides to clarify in its communication the respective roles played by economic and monetary analysis in the process of coming to the Council's overall assessment of risks to price stability.

To underscore the longer-term nature of the reference value for monetary growth as a benchmark for the assessment of monetary developments, the Governing Council also decides that it will no longer conduct a review of the reference value on an annual basis. However, it will continue to assess the underlying conditions and assumptions.

#### 5 June 2003

The Governing Council of the ECB decides to lower the minimum bid rate on the main refinancing operations by 0.50 percentage point to 2.0%, starting from the operation to be settled on 9 June 2003. It also decides to lower the interest rates on both the marginal lending facility and the deposit facility by 0.50 percentage point, to 3.0% and 1.0% respectively, both with effect from 6 June 2003.

#### 10 July, 31 July, 4 September 2003

The Governing Council of the ECB decides that the minimum bid rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 2.0%, 3.0% and 1.0% respectively.

# The TARGET (Trans-European Automated Real-time Gross settlement Express Transfer) system

#### **Payment flows in TARGET**

(number of payments)

In the second quarter TARGET traffic increased in terms of volume and value. TARGET as a whole, i.e. on both domestic and cross-border level, processed a daily average of 267,841 payments with a value of €1,709 billion, showing an increase of 6% in volume and 1% in value compared with the previous quarter. The significant rise in volume was reflected on both a domestic and cross-border level. The recorded increase in value was due to a higher domestic turnover whereas the cross-border turnover was lower compared with the previous quarter. TARGET's overall market share continued to grow in value (from 86.6% in the previous quarter to 86.9%) and decreased in volume (57.5% compared with 57.8% in the first quarter of 2003).

#### **TARGET** domestic

TARGET domestic traffic rose in the second quarter. TARGET processed a daily average of 206,710 domestic payments with a value of €1,168 billion, representing an increase of 6% and 2% respectively compared with the previous quarter. Compared with the respective period of 2002, the volume grew by 5% and the value by 10%.

TARGET domestic accounted for 68.3% and 77.2% of the total value and volume of TARGET respectively. The average value of a domestic payment with €5.7 million was €0.2 million lower than in the previous quarter.

The highest domestic traffic was recorded on 30 June, the last day of the half-year, when a

**Table 1**Payment instructions processed by TARGET and other selected interbank funds transfer systems: volume of transactions

	2002	2002	2002	2003	2003
	Q2	Q3	Q4	Q1	Q2
TARGET					
All TARGET payments					
Total volume	15,834,392	16,361,900	16,581,446	15,932,658	16,606,135
Daily average	251,340	247,908	259,085	252,899	267,841
Cross-border TARGET payments					
Total volume	3,419,144	3,577,801	3,548,455	3,626,612	3,790,098
Daily average	54,272	54,209	55,445	57,565	61,131
Domestic TARGET payments					
Total volume	12,415,248	12,784,099	13,032,991	12,306,046	12,816,037
Daily average	197,067	193,698	203,640	195,334	206,710
Other systems					
Euro 1 (EBA)					
Total volume	8,549,759	8,866,903	9,193,222	9,175,565	9,752,646
Daily average	135,710	134,347	143,644	145,664	157,301
Paris Net Settlement (PNS)					
Total volume	1,901,820	1,860,283	1,907,487	1,848,463	1,860,345
Daily average	30,188	28,186	29,804	29,341	30,006
Servicio Español de Pagos Interbancarios (SPI)					
Total volume	455,080	449,333	462,054	475,698	461,878
Daily average	7,223	6,808	7,220	7,551	7,450
Pankkien On-line Pikasiirrot ja					

157,864

2,392

138,552

2,165

134.248

2,131

191.101

3,082

212,064

3,366

Sekit-järjestelmä (POPS)

Total volume Daily average total of 282,803 payments with a total value of  $\in$  1,535 billion were processed.

Regarding payment value bands 65% of all domestic TARGET payments were less than or equal to €50,000, while 12% were higher than €1 million. On a daily average about 130 TARGET domestic payments had a value above €1 billion.

#### **TARGET** cross-border

At cross-border level, TARGET continued its upward movement in volume terms and processed a daily average of 61,131 payments with a value of €541 billion. Compared with the first quarter, the volume was 6% higher and turnover decreased by 2%. The cross-border figures rose by 13% in volume terms and 11% in

value terms compared with the second quarter of 2002.

Interbank payments rose by 7% in terms of value and decreased by 2% in volume terms compared with the previous quarter. Customer payments remained unchanged in value and their number grew by 5%.

The ratio of interbank payments to the average number of daily TARGET cross-border payments accounted for 95.6% in value and 52.9% in volume. The average value of interbank payments fell from  $\[ \in \]$  17.4 million to  $\[ \in \]$  16.0 million compared with the first quarter. The average value of customer payments decreased from  $\[ \in \]$  867,000 to  $\[ \in \]$  833,000.

During the second quarter the highest value on a single day in TARGET cross-border was

Table 2
Payment instructions processed by TARGET and other selected interbank funds transfer systems: value of transactions
(EUR billions)

	2002	2002	2002	2003	2003
	Q2	Q3	Q4	Q1	Q2
TARGET					
All TARGET payments					
Total value	97,682	97,404	105,008	106,869	105,978
Daily average	1,551	1,476	1,641	1,696	1,709
Cross-border TARGET payments					
Total value	30,794	30,309	32,899	34,636	33,545
Daily average	489	459	514	550	541
Domestic TARGET payments					
Total value	66,888	67,095	72,110	72,233	72,433
Daily average	1,062	1,017	1,127	1,147	1,168
Other systems					
Euro 1 (EBA)					
Total value	12,045	12,279	11,711	11,431	11,074
Daily average	191	186	183	181	179
Paris Net Settlement (PNS)					
Total value	5,079	4,832	4,995	4,896	4,698
Daily average	81	73	78	78	76
Servicio Español de Pagos					
Interbancarios (SPI)					
Total value	80	78	72	79	78
Daily average	1	1	1	1	1
Pankkien On-line Pikasiirrot ja					
Sekit-järjestelmä (POPS)					
Total value	100	98	102	115	111
Daily average	1	1	2	2	2

recorded on 30 June when €798 billion were processed. The peak day in cross-border volume terms was 30 May, the last business day of the month, with 81,773 processed cross-border payments.

In terms of value bands, 56% of total cross-border payments had a value of less than or equal to  $\[ \in \]$ 50,000. I7% had a value above  $\[ \in \]$ 1 million. On a daily average about 40 TARGET cross-border payments had a value above  $\[ \in \]$ 1 billion.

#### **TARGET** release 2003

Preparations and testing for the next TARGET release, which will go live in November 2003, have continued according to the schedule. This release will consist of the suppression of the Interlinking sub-message type 100, in parallel with the suppression of the MT100 at SWIFT level. From November 2003, only the MT103 already available since November 2000 will be used for customer payments. No other TARGET change is foreseen.

#### **TARGET** at Sibos, Singapore

Since 1998 the Eurosystem has presented the TARGET system at the annual Sibos conference, which is organised by SWIFT. This year the Eurosystem will again attend Sibos in Singapore from 20 to 24 October 2003.

The presence of the Eurosystem at Sibos is considered an excellent opportunity for those who attend to learn more about the euro, the financial services available in the euro area, TARGET and the second generation TARGET2. The Eurosystem's stand will provide up-to-date information in all kinds of media. Members of staff of the national central banks and the ECB will be pleased to answer visitors' questions. Furthermore a special interest session on TARGET2 will be organised on Monday, 20 October from 2 to 3.30 p.m. Singapore local time

# **Documents published by the European Central Bank**

This list is designed to inform readers about selected documents published by the European Central Bank. 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.

For a complete list of documents published by the European Monetary Institute, please visit the ECB's website (http://www.ecb.int).

#### **Annual Report**

- "Annual Report 1998", April 1999.
- "Annual Report 1999", April 2000.
- "Annual Report 2000", May 2001.
- "Annual Report 2001", April 2002.
- "Annual Report 2002", April 2003.

#### **Convergence Report**

- "Convergence Report 2000", May 2000.
- "Convergence Report 2002", May 2002.

#### **Monthly Bulletin**

Articles published from January 1999 onwards:

- "The euro area at the start of Stage Three", January 1999.
- "The stability-oriented monetary policy strategy of the Eurosystem", January 1999.
- "Euro area monetary aggregates and their role in the Eurosystem's monetary policy strategy", February 1999.
- "The role of short-term economic indicators in the analysis of price developments in the euro area", April 1999.
- "Banking in the euro area: structural features and trends", April 1999.
- "The operational framework of the Eurosystem: description and first assessment", May 1999.
- "The implementation of the Stability and Growth Pact", May 1999.
- "Longer-term developments and cyclical variations in key economic indicators across euro area countries", July 1999.
- "The institutional framework of the European System of Central Banks", July 1999.
- "The international role of the euro", August 1999.
- "The balance sheets of the Monetary Financial Institutions of the euro area in early 1999", August 1999.
- "Inflation differentials in a monetary union", October 1999.
- "ESCB preparations for the year 2000", October 1999.
- "Stability-oriented policies and developments in long-term real interest rates in the 1990s", November 1999.
- "TARGET and payments in euro", November 1999.
- "Legal instruments of the European Central Bank", November 1999.
- "The euro area one year after the introduction of the euro: key characteristics and changes in the financial structure", January 2000.
- "Foreign exchange reserves and operations of the Eurosystem", January 2000.
- "The Eurosystem and the EU enlargement process", February 2000.
- "Consolidation in the securities settlement industry", February 2000.

- "The nominal and real effective exchange rates of the euro", April 2000.
- "EMU and banking supervision", April 2000.
- "The information content of interest rates and their derivatives for monetary policy", May 2000.
- "Developments in and structural features of the euro area labour markets", May 2000.
- "The switch to variable rate tenders in the main refinancing operations", July 2000.
- "Monetary policy transmission in the euro area", July 2000.
- "Population ageing and fiscal policy in the euro area", July 2000.
- "Price and cost indicators for the euro area: an overview", August 2000.
- "The external trade of the euro area economy: stylised facts and recent trends", August 2000.
- "Potential output growth and output gaps: concept, uses and estimates", October 2000.
- "The ECB's relations with institutions and bodies of the European Community", October 2000.
- "The two pillars of the ECB's monetary policy strategy", November 2000.
- "Issues arising from the emergence of electronic money", November 2000.
- "The euro area after the entry of Greece", January 2001.
- "Monetary policy-making under uncertainty", January 2001.
- "The ECB's relations with international organisations and fora", January 2001.
- "Characteristics of corporate finance in the euro area", February 2001.
- "Towards a uniform service level for retail payments in the euro area", February 2001.
- "The external communication of the European Central Bank", February 2001.
- "Assessment of general economic statistics for the euro area", April 2001.
- "The collateral framework of the Eurosystem", April 2001.
- "The introduction of euro banknotes and coins", April 2001.
- "Framework and tools of monetary analysis", May 2001.
- "The new capital adequacy regime the ECB perspective", May 2001.
- "Financing and financial investment of the non-financial sectors in the euro area", May 2001.
- "New technologies and productivity in the euro area", July 2001.
- "Measures of underlying inflation in the euro area", July 2001.
- "Fiscal policies and economic growth", August 2001.
- "Product market reforms in the euro area", August 2001.
- "Consolidation in central counterparty clearing in the euro area", August 2001.
- "Issues related to monetary policy rules", October 2001.
- "Bidding behaviour of counterparties in the Eurosystem's regular open market operations", October 2001.
- "The euro cash changeover in markets outside the euro area", October 2001.
- "The information content of composite indicators of the euro area business cycle", November 2001.
- "The economic policy framework in EMU", November 2001.
- "Economic fundamentals and the exchange rate of the euro", January 2002.
- "Euro banknote preparations: from cash changeover to post-launch activities", January 2002.
- "The stock market and monetary policy", February 2002.
- "Recent developments in international co-operation", February 2002.
- "The operation of automatic fiscal stabilisers in the euro area", April 2002.
- "The role of the Eurosystem in payment and clearing systems", April 2002.
- "Enhancements to MFI balance sheet and interest rate statistics", April 2002.
- "The liquidity management of the ECB", May 2002.
- "International supervisory co-operation", May 2002.
- "Implications of the euro cash changeover on the development of banknotes and coins in circulation", May 2002.

- "Characteristics of the euro area business cycle in the 1990s", July 2002.
- "The Eurosystem's dialogue with EU accession countries", July 2002.
- "Developments in the external direct and portfolio investment flows of the euro area", July 2002.
- "Price level convergence and competition in the euro area", August 2002.
- "Recent developments and risks in the euro area banking sector", August 2002.
- "Saving, financing and investment in the euro area", August 2002.
- "Recent findings on monetary policy transmission in the euro area", October 2002.
- "Main features of the repo market in the euro area", October 2002.
- "The accountability of the ECB", November 2002.
- "Transparency in the monetary policy of the ECB", November 2002.
- "The composition of employment growth in the euro area in recent years", November 2002.
- "The demand for currency in the euro area and the impact of the euro cash changeover", January 2003.
- "CLS purpose, concept and implications", January 2003.
- "The relationship between monetary policy and fiscal policies in the euro area", February 2003.
- "Exchange rate regimes for emerging market economies", February 2003.
- "The need for comprehensive reforms to cope with population ageing", April 2003.
- "Developments in general economic statistics for the euro area", April 2003.
- "A bank lending survey for the euro area", April 2003.
- "Recent trends in residential property prices in the euro area", May 2003.
- "Electronification of payments in Europe", May 2003.
- "The adjustment of voting modalities in the Governing Council", May 2003.
- "The outcome of the ECB's evaluation of its monetary policy strategy", June 2003.
- "Trends in euro area gross fixed capital formation", July 2003.
- "Early experience of the management of euro banknote printing and issuance", July 2003.
- "Changes to the Eurosystem's operational framework for monetary policy", August 2003.
- "Recent developments in the euro area banking sector", August 2003.
- "Developments in the euro area's international cost and price competitiveness", August 2003.

#### **Occasional Paper Series**

- I "The impact of the euro on money and bond markets" by J. Santillán, M. Bayle and C. Thygesen, July 2000.
- 2 "The effective exchange rates of the euro" by L. Buldorini, S. Makrydakis and C. Thimann, February 2002.
- 3 "Estimating the trend of M3 income velocity underlying the reference value for monetary growth" by C. Brand, D. Gerdesmeier and B. Roffia, May 2002.
- 4 "Labour force developments in the euro area since the 1980s" by V. Genre and R. Gómez-Salvador, July 2002.
- 5 "The evolution of clearing and central counterparty services for exchange-traded derivatives in the United States and Europe: a comparison" by D. Russo, T. L. Hart and A. Schönenberger, September 2002.
- 6 "Banking integration in the euro area" by I. Cabral, F. Dierick and J. Vesala, December 2002.
- 7 "Economic relations with regions neighbouring the euro area in the 'Euro Time Zone'" by F. Mazzaferro, A. Mehl, M. Sturm, C. Thimann and A. Winkler, December 2002.
- 8 "An introduction to the ECB's survey of professional forecasters" by J. A. Garcia, September 2003.

#### **Working Paper Series**

- I "A global hazard index for the world foreign exchange markets" by V. Brousseau and F. Scacciavillani, May 1999.
- 2 "What does the single monetary policy do? A SVAR benchmark for the European Central Bank" by C. Monticelli and O. Tristani, May 1999.
- 3 "Fiscal policy effectiveness and neutrality results in a non-Ricardian world" by C. Detken, May 1999.
- 4 "From the ERM to the euro: new evidence on economic and policy convergence among EU countries" by I. Angeloni and L. Dedola, May 1999.
- 5 "Core inflation: a review of some conceptual issues" by M. Wynne, May 1999.
- 6 "The demand for M3 in the euro area" by G. Coenen and J.-L. Vega, September 1999.
- 7 "A cross-country comparison of market structures in European banking" by O. De Bandt and E. P. Davis, September 1999.
- 8 "Inflation zone targeting" by A. Orphanides and V. Wieland, October 1999.
- 9 "Asymptotic confidence bands for the estimated autocovariance and autocorrelation functions of vector autoregressive models", by G. Coenen, January 2000.
- 10 "On the effectiveness of sterilized foreign exchange intervention", by R. Fatum, February 2000.
- 11 "Is the yield curve a useful information variable for the Eurosystem?" by J. M. Berk and P. van Bergeijk, February 2000.
- 12 "Indicator variables for optimal policy" by L. E. O. Svensson and M. Woodford, February 2000.
- 13 "Monetary policy with uncertain parameters" by U. Söderström, February 2000.
- 14 "Assessing nominal income rules for monetary policy with model and data uncertainty" by G. D. Rudebusch, February 2000.
- 15 "The quest for prosperity without inflation" by A. Orphanides, March 2000.
- 16 "Estimating the implied distribution of the future short-term interest rate using the Longstaff-Schwartz model" by P. Hördahl, March 2000.
- 17 "Alternative measures of the NAIRU in the euro area: estimates and assessment" by S. Fabiani and R. Mestre, March 2000.
- 18 "House prices and the macroeconomy in Europe: results from a structural VAR analysis" by M. lacoviello, April 2000.
- 19 "The euro and international capital markets" by C. Detken and P. Hartmann, April 2000.
- 20 "Convergence of fiscal policies in the euro area" by O. De Bandt and F. P. Mongelli, May 2000.
- 21 "Firm size and monetary policy transmission: evidence from German business survey data" by M. Ehrmann, May 2000.
- 22 "Regulating access to international large-value payment systems" by C. Holthausen and T. Rønde, June 2000.
- 23 "Escaping Nash inflation" by In-Koo Cho and T. J. Sargent, June 2000.
- 24 "What horizon for price stability" by F. Smets, July 2000.
- 25 "Caution and conservatism in the making of monetary policy" by P. Schellekens, July 2000.
- 26 "Which kind of transparency? On the need for clarity in monetary policy-making" by B. Winkler, August 2000.
- 27 "This is what the US leading indicators lead" by M. Camacho and G. Perez-Quiros, August 2000.
- 28 "Learning, uncertainty and central bank activism in an economy with strategic interactions" by M. Ellison and N. Valla, August 2000.
- 29 "The sources of unemployment fluctuations: an empirical application to the Italian case" by S. Fabiani, A. Locarno, G. Oneto and P. Sestito, September 2000.

- 30 "A small estimated euro area model with rational expectations and nominal rigidities" by G. Coenen and V. Wieland, September 2000.
- 31 "The disappearing tax base: is foreign direct investment eroding corporate income taxes?" by R. Gropp and K. Kostial, September 2000.
- 32 "Can indeterminacy explain the short-run non-neutrality of money?" by F. De Fiore, September 2000.
- 33 "The information content of M3 for future inflation in the euro area" by C. Trecroci and J. L. Vega, October 2000.
- 34 "Capital market development, corporate governance and the credibility of exchange rate pegs" by O. Castrén and T. Takalo, October 2000.
- 35 "Systemic Risk: A survey" by O. De Bandt and P. Hartmann, November 2000.
- 36 "Measuring core inflation in the euro area" by C. Morana, November 2000.
- 37 "Business fixed investment: evidence of a financial accelerator in Europe" by P. Vermeulen, November 2000.
- 38 "The optimal inflation tax when taxes are costly to collect" by F. De Fiore, November 2000.
- 39 "A money demand system for euro area M3" by C. Brand and N. Cassola, November 2000.
- 40 "Financial structure and the interest rate channel of ECB monetary policy" by B. Mojon, November 2000.
- 41 "Why adopt transparency? The publication of central bank forecasts" by P. M. Geraats, January 2001.
- 42 "An area-wide model (AWM) for the euro area" by G. Fagan, J. Henry and R. Mestre, January 2001.
- 43 "Sources of economic renewal: from the traditional firm to the knowledge firm", by D. Rodriguez Palenzuela, February 2001.
- 44 "The supply and demand for Eurosystem deposits The first 18 months", by U. Bindseil and F. Seitz, February 2001.
- 45 "Testing the rank of the Hankel Matrix: a statistical approach", by G. Camba-Méndez and G. Kapetanios, March 2001.
- 46 "A two-factor model of the German term structure of interest rates" by N. Cassola and J. B. Luís, March 2001.
- 47 "Deposit insurance and moral hazard: does the counterfactual matter?" by R. Gropp and J. Vesala, March 2001.
- 48 "Financial market integration in Europe: on the effects of EMU on stock markets" by M. Fratzscher, March 2001.
- 49 "Business cycle and monetary policy analysis in a structural sticky-price model of the euro area" by M. Casares, March 2001.
- 50 "Employment and productivity growth in service and manufacturing sectors in France, Germany and the United States" by T. von Wachter, March 2001.
- 51 "The functional form of the demand for euro area M1" by L. Stracca, March 2001.
- 52 "Are the effects of monetary policy in the euro area greater in recessions than in booms?" by G. Peersman and F. Smets, March 2001.
- 53 "An evaluation of some measures of core inflation for the euro area" by J.-L. Vega and M. A. Wynne, April 2001.
- 54 "Assessment criteria for output gap estimates" by G. Camba-Méndez and D. Rodriguez Palenzuela, April 2001.
- 55 "Modelling the demand for loans to the private sector in the euro area" by A. Calza, G. Gartner and J. Sousa, April 2001.
- 56 "Stabilization policy in a two country model and the role of financial frictions" by E. Faia, April 2001.
- 57 "Model-based indicators of labour market rigidity" by S. Fabiani and D. Rodriguez Palenzuela, April 2001.

- 58 "Business cycle asymmetries in stock returns: evidence from higher order moments and conditional densities" by G. Pérez-Quirós and A. Timmermann, April 2001.
- 59 "Uncertain potential output: implications for monetary policy" by M. Ehrmann and F. Smets, April 2001.
- 60 "A multi-country trend indicator for euro area inflation: computation and properties" by E. Angelini, J. Henry and R. Mestre, April 2001.
- 61 "Diffusion index-based inflation forecasts for the euro area" by E. Angelini, J. Henry and R. Mestre, April 2001.
- 62 "Spectral based methods to identify common trends and common cycles" by G. C. Mendez and G. Kapetanios, April 2001.
- 63 "Does money lead inflation in the euro area?" by S. Nicoletti Altimari, May 2001.
- 64 "Exchange rate volatility and euro area imports" by R. Anderton and F. Skudelny, May 2001.
- 65 "A system approach for measuring the euro area NAIRU" by S. Fabiani and R. Mestre, May 2001.
- 66 "Can short-term foreign exchange volatility be predicted by the Global Hazard Index?" by V. Brousseau and F. Scacciavillani, June 2001.
- 67 "The daily market for funds in Europe: has something changed with the EMU?" by G. Pérez-Quirós and H. Rodríguez Mendizábal, June 2001.
- 68 "The performance of forecast-based monetary policy rules under model uncertainty" by A. Levin, V. Wieland and J. C. Williams, July 2001.
- 69 "The ECB monetary policy strategy and the money market" by V. Gaspar, G. Pérez-Quirós and J. Sicilia, July 2001.
- 70 "Central bank forecasts of liquidity factors: quality, publication and the control of the overnight rate" by U. Bindseil, July 2001.
- 71 "Asset market linkages in crisis periods" by P. Hartmann, S. Straetmans and C. G. de Vries, July 2001.
- 72 "Bank concentration and retail interest rates" by S. Corvoisier and R. Gropp, July 2001.
- 73 "Interbank lending and monetary policy transmission evidence for Germany" by M. Ehrmann and A. Worms, July 2001.
- 74 "Interbank market integration under asymmetric information" by X. Freixas and C. Holthausen, August 2001.
- 75 "Value at risk models in finance" by S. Manganelli and R. F. Engle, August 2001.
- 76 "Rating agency actions and the pricing of debt and equity of European banks: what can we infer about private sector monitoring of bank soundness?" by R. Gropp and A. J. Richards, August 2001.
- 77 "Cyclically adjusted budget balances: an alternative approach" by C. Bouthevillain, P. Cour-Thimann, G. van den Dool, P. Hernández de Cos, G. Langenus, M. Mohr, S. Momigliano and M. Tujula, September 2001.
- 78 "Investment and monetary policy in the euro area" by B. Mojon, F. Smets and P. Vermeulen, September 2001.
- 79 "Does liquidity matter? Properties of a synthetic divisia monetary aggregate in the euro area" by L. Stracca, October 2001.
- 80 "The microstructure of the euro money market" by P. Hartmann, M. Manna and A. Manzanares, October 2001.
- 81 "What can changes in structural factors tell us about unemployment in Europe?" by J. Morgan and A. Mourougane, October 2001.
- 82 "Economic forecasting: some lessons from recent research" by D. Hendry and M. P. Clements, October 2001.
- 83 "Chi-squared tests of interval and density forecasts, and the Bank of England's fan charts" by K. F. Wallis. November 2001.
- 84 "Data uncertainty and the role of money as an information variable for monetary policy" by G. Coenen, A. Levin and V. Wieland, November 2001.

- 85 "Determinants of the euro real effective exchange rate: a BEER/PEER approach" by F. Maeso-Fernandez, C. Osbat and B. Schnatz, November 2001.
- 86 "Rational expectations and near rational alternatives: how best to form expectations" by M. Beeby, S. G. Hall and S. B. Henry, November 2001.
- 87 "Credit rationing, output gap and business cycles" by F. Boissay, November 2001.
- 88 "Why is it so difficult to beat the random walk forecast of exchange rates?" by L. Kilian and M. P. Taylor, November 2001.
- 89 "Monetary policy and fears of financial instability" by V. Brousseau and C. Detken, November 2001.
- 90 "Public pensions and growth" by S. Lambrecht, P. Michel and J.-P. Vidal, November 2001.
- 91 "The monetary transmission mechanism in the euro area: more evidence from VAR analysis" by G. Peersman and F. Smets, December 2001.
- 92 "A VAR description of the effects of the monetary policy in the individual countries of the euro area" by B. Mojon and G. Peersman, December 2001.
- "The monetary transmission mechanism at the euro area level: issues and results using structural macroeconomic models" by P. McAdam and J. Morgan, December 2001.
- 94 "Monetary policy transmission in the euro area: what do aggregate and national structural models tell us?" by P. van Els, A. Locarno, J. Morgan and J.-P. Villetelle, December 2001.
- 95 "Some stylised facts on the euro area business cycle" by A.-M. Agresti and B. Mojon, December 2001.
- 96 "The reaction of bank lending to monetary policy measures in Germany" by A. Worms, December 2001.
- 97 "Asymmetries in bank lending behaviour. Austria during the 1990s" by S. Kaufmann, December 2001.
- 98 "The credit channel in the Netherlands: evidence from bank balance sheets" by L. De Haan, December 2001.
- 99 "Is there a bank lending channel of monetary policy in Spain?" by I. Hernando and J. Martínez-Pagés, December 2001.
- 100 "Transmission of monetary policy shocks in Finland: evidence from bank level data on loans" by J. Topi and J. Vilmunen, December 2001.
- 101 "Monetary policy and bank lending in France: are there asymmetries?" by C. Loupias, F. Savignac and P. Sevestre, December 2001.
- 102 "The bank lending channel of monetary policy: identification and estimation using Portuguese micro bank data" by L. Farinha and C. Robalo Marques, December 2001.
- 103 "Bank-specific characteristics and monetary policy transmission: the case of Italy" by L. Gambacorta, December 2001.
- 104 "Is there a bank lending channel of monetary policy in Greece? Evidence from bank level data" by S. N. Brissimis, N. C. Kamberoglou and G. T. Simigiannis, December 2001.
- 105 "Financial systems and the role of banks in monetary policy transmission in the euro area" by M. Ehrmann, L. Gambacorta, J. Martínez-Pagés, P. Sevestre and A. Worms, December 2001.
- 106 "Investment, the cost of capital, and monetary policy in the nineties in France: a panel data investigation" by J.-B. Chatelain and A. Tiomo, December 2001.
- 107 "The interest rate and credit channel in Belgium: an investigation with micro-level firm data" by P. Butzen, C. Fuss and P. Vermeulen, December 2001.
- 108 "Credit channel and investment behaviour in Austria: a microeconometric approach" by M. Valderrama, December 2001.
- 109 "Monetary transmission in Germany: new perspectives on financial constraints and investment spending" by U. von Kalckreuth, December 2001.
- 110 "Does monetary policy have asymmetric effects? A look at the investment decisions of Italian firms" by E. Gaiotti and A. Generale, December 2001.

- III "Monetary transmission: empirical evidence from Luxembourg firm level data" by P. Lünnemann and T. Mathä, December 2001.
- 112 "Firm investment and monetary transmission in the euro area" by J.-B. Chatelain, A. Generale, I. Hernando, U. von Kalckreuth and P. Vermeulen, December 2001.
- 113 "Financial frictions and the monetary transmission mechanism: theory, evidence and policy implications", by C. Bean, J. Larsen and K. Nikolov, January 2002.
- 114 "Monetary transmission in the euro area: where do we stand?" by I. Angeloni, A. Kashyap, B. Mojon and D. Terlizzese, January 2002.
- 115 "Monetary policy rules, macroeconomic stability and inflation: a view from the trenches" by A. Orphanides, December 2001.
- 116 "Rent indices for housing in West Germany 1985 to 1998" by J. Hoffmann and C. Kurz, January 2002.
- 117 "Hedonic house prices without characteristics: the case of new multiunit housing" by O. Bover and P. Velilla, January 2002.
- 118 "Durable goods, price indexes and quality change: an application to automobile prices in Italy, 1988-98" by G. M. Tomat, January 2002.
- 119 "Monetary policy and the stock market in the euro area" by N. Cassola and C. Morana, January 2002.
- 120 "Learning stability in economics with heterogeneous agents" by S. Honkapohja and K. Mitra, January 2002.
- 121 "Natural rate doubts" by A. Beyer and R. E. A. Farmer, February 2002.
- 122 "New technologies and productivity growth in the euro area" by F. Vijselaar and R. Albers, February 2002.
- 123 "Analysing and combining multiple credit assessments of financial institutions" by E. Tabakis and A. Vinci, February 2002.
- 124 "Monetary policy, expectations and commitment" by G. W. Evans and S. Honkapohja, February 2002.
- 125 "Duration, volume and volatility impact of trades" by S. Manganelli, February 2002.
- 126 "Optimal contracts in a dynamic costly state verification model" by C. Monnet and E. Quintin, February 2002.
- 127 "Performance of monetary policy with internal central bank forecasting" by S. Honkapohja and K. Mitra, February 2002.
- 128 "Openness, imperfect exchange rate pass-through and monetary policy" by F. Smets and R. Wouters, March 2002.
- 129 "Non-standard central bank loss functions, skewed risks, and certainty equivalence" by A. al-Nowaihi and L. Stracca, March 2002.
- 130 "Harmonized indexes of consumer prices: their conceptual foundations" by E. Diewert, March 2002.
- 131 "Measurement bias in the HICP: what do we know, and what do we need to know?" by M. A. Wynne and D. Rodríguez-Palenzuela, March 2002.
- 132 "Inflation dynamics and dual inflation in accession countries: a 'new Keynesian' perspective" by O. Arratibel, D. Rodríguez-Palenzuela and C. Thimann, March 2002.
- 133 "Can confidence indicators be useful to predict short-term real GDP growth?" by A. Mourougane and M. Roma, March 2002.
- 134 "The cost of private transportation in the Netherlands, 1992-99" by B. Bode and J. Van Dalen, March 2002.
- 135 "The optimal mix of taxes on money, consumption and income" by F. De Fiore and P. Teles, April 2002.
- 136 "Retail bank interest rate pass-through: new evidence at the euro area level" by G. de Bondt, April 2002.
- 137 "Equilibrium bidding in the Eurosystem's open market operations" by U. Bindseil, April 2002.

- 138 "New' views on the optimum currency area theory: what is EMU telling us?" by F. P. Mongelli, April 2002.
- 139 "On currency crises and contagion" by M. Fratzscher, April 2002.
- 140 "Price setting and the steady-state effects of inflation" by M. Casares, May 2002.
- 141 "Asset prices and fiscal balances" by F. Eschenbach and L. Schuknecht, May 2002.
- 142 "Modelling the daily banknotes in circulation in the context of the liquidity management of the European Central Bank" by A. Cabrero, G. Camba-Mendez, A. Hirsch and F. Nieto, May 2002.
- 143 "A non-parametric method for valuing new goods" by L. Blow and I. Crawford, May 2002.
- 144 "A failure in the measurement of inflation: results from a hedonic and matched experiment using scanner data" by M. Silver and S. Heravi, May 2002.
- 145 "Towards a new early warning system of financial crises" by M. Bussiere and M. Fratzscher, May 2002.
- 146 "Competition and stability what's special about banking?" by E. Carletti and P. Hartmann, May 2002.
- 147 "Time-to-build approach in a sticky price, sticky wage optimising monetary model" by M. Casares, May 2002.
- 148 "The functional form of yield curves" by V. Brousseau, May 2002.
- 149 "The Spanish block of the ESCB multi-country model" by A. Willman and A. Estrada, May 2002.
- 150 "Equity and bond market signals as leading indicators of bank fragility" by R. Gropp, J. Vesala and G. Vulpes, June 2002.
- 151 "G7 inflation forecasts" by F. Canova, June 2002.
- 152 "Short-term monitoring of fiscal policy discipline" by G. Camba-Mendez and A. Lamo, June 2002.
- 153 "Euro area production function and potential output: a supply side system approach" by A. Willman, June 2002.
- 154 "The euro bloc, the dollar bloc and the yen bloc: how much monetary policy independence can exchange rate flexibility buy in an interdependent world?" by M. Fratzscher, June 2002.
- 155 "Youth unemployment in the OECD: demographic shifts, labour market institutions, and macroeconomic shocks" by J. F. Jimeno and D. Rodriguez-Palenzuela, June 2002.
- 156 "Identifying endogenous fiscal policy rules for macroeconomic models" by J. J. Perez and P. Hiebert, July 2002.
- 157 "Bidding and performance in repo auctions: evidence from ECB open market operations" by Kjell G. Nyborg, U. Bindseil and I. A. Strebulaev, July 2002.
- 158 "Quantifying embodied technological change" by P. Sakellars and D. J. Wilson, July 2002.
- 159 "Optimal public money" by C. Monnet, July 2002.
- 160 "Model uncertainty and the equilibrium value of the real effective euro exchange rate" by C. Detken, A. Dieppe, J. Henry, C. Marin and F. Smets, July 2002.
- 161 "The optimal allocation of risks under prospect theory" by L. Stracca, July 2002.
- 162 "Public debt asymmetries: the effect on taxes and spending in the European Union" by S. Krogstrup, August 2002.
- 163 "The rationality of consumers' inflation expectations: survey-based evidence for the euro area" by M. Forsells and G. Kenny, August 2002.
- 164 "Euro area corporate debt securities market: first empirical evidence" by G. de Bondt, August 2002.
- 165 "The industry effects of monetary policy in the euro area" by G. Peersman and F. Smets, August 2002.
- 166 "Monetary and fiscal policy interactions in a micro-founded model of a monetary union" by R. M. W. J. Beetsma and H. Jensen, August 2002.
- 167 "Identifying the effects of monetary policy shocks on exchange rates using high frequency data" by J. Faust, J. H. Rogers, E. Swanson and J. H. Wright, August 2002.

- 168 "Estimating the effects of fiscal policy in OECD countries" by R. Perotti, August 2002.
- 169 "Modelling model uncertainty" by A. Onatski and N. Williams, August 2002.
- 170 "What measure of inflation should a central bank target?" by G. Mankiw and R. Reis, August 2002.
- 171 "An estimated stochastic dynamic general equilibrium model of the euro area" by F. Smets and R. Wouters, August 2002.
- 172 "Constructing quality-adjusted price indices: a comparison of hedonic and discrete choice models" by N. Jonker, September 2002.
- 173 "Openness and equilibrium determinacy under interest rate rules" by F. de Fiore and Z. Liu, September 2002.
- 174 "International monetary policy co-ordination and financial market integration" by A. Sutherland, September 2002.
- 175 "Monetary policy and the financial accelerator in a monetary union" by S. Gilchrist, J. O. Hairault and H. Kempf, September 2002.
- 176 "Macroeconomics of international price discrimination" by G. Corsetti and L. Dedola, September 2002.
- 177 "A theory of the currency denomination of international trade" by P. Bacchetta and E. van Wincoop, September 2002.
- 178 "Inflation persistence and optimal monetary policy in the euro area" by P. Benigno and J. D. López-Salido, September 2002.
- 179 "Optimal monetary policy with durable and non-durable goods" by C. J. Erceg and A. T. Levin, September 2002.
- 180 "Regional inflation in a currency union: fiscal policy versus fundamentals" by M. Duarte and A. L. Wolman, September 2002.
- 181 "Inflation dynamics and international linkages: a model of the United States, the euro area and Japan" by G. Coenen and V. Wieland, September 2002.
- 182 "The information content of real-time output gap estimates: an application to the euro area" by G. Rünstler, September 2002.
- 183 "Monetary policy in a world with different financial systems" by E. Faia, October 2002.
- 184 "Efficient pricing of large-value interbank payment systems" by C. Holthausen and J.-C. Rochet, October 2002.
- 185 "European integration: what lessons for other regions? The case of Latin America" by E. Dorrucci, S. Firpo, M. Fratzscher and F. P. Mongelli, October 2002.
- 186 "Using money market rates to assess the alternatives of fixed versus variable rate tenders: the lesson from 1989-98 data for Germany" by M. Manna, October 2002.
- 187 "A fiscal theory of sovereign risk" by M. Uribe, October 2002.
- 188 "Should central banks really be flexible?" by H. P. Grüner, October 2002.
- 189 "Debt reduction and automatic stabilisation" by P. Hiebert, J. J. Pérez and M. Rostagno, October 2002.
- 190 "Monetary policy and the zero bound to interest rates: a review" by T. Yates, October 2002.
- 191 "The fiscal costs of financial instability revisited" by L. Schuknecht and F. Eschenbach, November 2002.
- 192 "Is the European Central Bank (and the United States Federal Reserve) predictable?" by G. Pérez-Quirós and J. Sicilia, November 2002.
- 193 "Sustainability of public finances and automatic stabilisation under a rule of budgetary discipline" by J. Marín, November 2002.
- 194 "Sensitivity analysis of volatility: a new tool for risk management" by S. Manganelli, V. Ceci and W. Vecchiato, November 2002.
- 195 "In-sample or out-of-sample tests of predictability: which one should we use?" by A. Inoue and L. Kilian, November 2002.
- 196 "Bootstrapping autoregressions with conditional heteroskedasticity of unknown form" by S. Gonçalves and L. Kilian, November 2002.

- 197 "A model of the Eurosystem's operational framework for monetary policy implementation" by C. Ewerhart, November 2002.
- 198 "Extracting risk-neutral probability densities by fitting implied volatility smiles: some methodological points and an application to the 3M EURIBOR futures option prices" by A. B. Andersen and T. Wagener, December 2002.
- 199 "Time variation in the tail behaviour of bund futures returns" by T. Werner and C. Upper, December 2002.
- 200 "Interdependence between the euro area and the United States: what role for EMU?" by M. Ehrmann and M. Fratzscher, December 2002.
- 201 "Euro area inflation persistence" by N. Batini, December 2002.
- 202 "Aggregate loans to the euro area private sector" by A. Calza, M. Manrique and J. Sousa, January 2003.
- 203 "Myopic loss aversion, disappointment aversion and the equity premium puzzle" by D. Fielding and L. Stracca, January 2003.
- 204 "Asymmetric dynamics in the correlations of global equity and bond returns" by L. Cappiello, R. F. Engle and K. Sheppard, January 2003.
- 205 "Real exchange rate in an inter-temporal n-country-model with incomplete markets" by B. Mercereau, January 2003.
- 206 "Empirical estimates of reaction functions for the euro area" by D. Gerdesmeier and B. Roffia, January 2003.
- 207 "A comprehensive model on the euro overnight rate" by F. R. Würtz, January 2003.
- 208 "Do demographic changes affect risk premiums? Evidence from international data" by A. Ang and A. Maddaloni, January 2003.
- 209 "A framework for collateral risk control determination" by D. Cossin, Z. Huang, D. Aunon-Nerin and F. González, January 2003.
- 210 "Anticipated Ramsey reforms and the uniform taxation principle: the role of international financial markets" by S. Schmitt-Grohé and M. Uribe, January 2003.
- 211 "Self-control and savings" by P. Michel and J. P. Vidal, January 2003.
- 212 "Modelling the implied probability of stock market movements" by E. Glatzer and M. Scheicher, January 2003.
- 213 "Aggregation and euro area Phillips curves" by S. Fabiani and J. Morgan, February 2003.
- 214 "On the selection of forecasting models" by A. Inoue and L. Kilian, February 2003.
- 215 "Budget institutions and fiscal performance in central and eastern European countries" by H. Gleich, February 2003.
- 216 "The admission of accession countries to an enlarged monetary union: a tentative assessment" by M. Ca' Zorzi and R. A. De Santis, February 2003.
- 217 "The role of product market regulations in the process of structural change" by J. Messina, March 2003.
- 218 "The zero-interest-rate bound and the role of the exchange rate for monetary policy in Japan" by G. Coenen and V. Wieland, March 2003.
- 219 "Extra-euro area manufacturing import prices and exchange rate pass-through" by B. Anderton, March 2003.
- 220 "The allocation of competencies in an international union: a positive analysis" by M. Ruta, April 2003.
- 221 "Estimating risk premia in money market rates" by A. Durré, S. Evjen and R. Pilegaard, April 2003.
- 222 "Inflation dynamics and subjective expectations in the United States" by K. Adam and M. Padula, April 2003.
- 223 "Optimal monetary policy with imperfect common knowledge" by K. Adam, April 2003.
- 224 "The rise of the yen vis-à-vis the ("synthetic") euro: is it supported by economic fundamentals?" by C. Osbat, R. Rüffer and B. Schnatz, April 2003.

- 225 "Productivity and the ("synthetic") euro-dollar exchange rate" by C. Osbat, F. Vijselaar and B. Schnatz, April 2003.
- 226 "The central banker as a risk manager: quantifying and forecasting inflation risks" by L. Kilian and S. Manganelli, April 2003.
- 227 "Monetary policy in a low pass-through environment" by T. Monacelli, April 2003.
- 228 "Monetary policy shocks a non-fundamental look at the data" by M. Klaeffing, May 2003.
- 229 "How does the ECB target inflation?" by P. Surico, May 2003.
- 230 "The euro area financial system: structure, integration and policy initiatives" by P. Hartmann, A. Maddaloni and S. Manganelli, May 2003.
- 231 "Price stability and monetary policy effectiveness when nominal interest rates are bounded at zero" by G. Coenen, A. Orphanides and V. Wieland, May 2003.
- 232 "Describing the Fed's conduct with Taylor rules: is interest rate smoothing important?" by E. Castelnuovo, May 2003.
- 233 "The natural real rate of interest in the euro area" by N. Giammarioli and N. Valla, May 2003.
- 234 "Unemployment, hysteresis and transition" by M. León-Ledesma and P. McAdam, May 2003.
- 235 "Volatility of interest rates in the euro area: evidence from high frequency data" by N. Cassola and C. Morana, June 2003.
- 236 "Swiss monetary targeting 1974-96: the role of internal policy analysis" by G. Rich, June 2003.
- 237 "Growth expectations, capital flows and international risk sharing" by O. Castrén, M. Miller and R. Stiegert, June 2003.
- 238 "The impact of monetary union on trade prices" by R. Anderton, R. E. Baldwin and D. Taglioni, June 2003.
- 239 "Temporary shocks and unavoidable transitions to a high-unemployment regime" by W. J. Denhaan, June 2003.
- 240 "Monetary policy transmission in the euro area: any changes after EMU?" by I. Angeloni and M. Ehrmann, July 2003.
- 241 Maintaining price stability under free floating: a fearless way out of the corner?" by C. Detken and V. Gaspar, July 2003.
- 242 "Public sector efficiency: an international comparison" by A. Afonso, L. Schuknecht and V. Tanzi, July 2003.
- 243 "Pass-through of external shocks to euro area inflation" by E. Hahn, July 2003.
- 244 "How does the ECB allot liquidity in its weekly main refinancing operations? A look at the empirical evidence" by S. Ejerskov, C. Martin Moss and L. Stracca, July 2003.
- 245 "Money and payments: a modern perspective" by C. Holthausen and C. Monnet, July 2003.
- 246 "Public finances and long-term growth in Europe evidence from a panel data analysis" by D. R. de Ávila Torrijos and R. Strauch, July 2003.
- 247 "Forecasting euro area inflation: does aggregating forecasts by HICP component improve forecast accuracy?" by K. Hubrich, August 2003.
- 248 "Exchange rates and fundamentals" by C. Engel and K. D. West, August 2003.
- 249 "Trade advantages and specialisation dynamics in acceding countries" by A. Zaghini, August 2003.
- 250 "Persistence, the transmission mechanism and robust monetary policy" by I. Angeloni, G. Coenen and F. Smets, August 2003.
- 251 "Consumption, habit persistence, imperfect information and the lifetime budget constraint" by A. Willman, August 2003.
- 252 "Interpolation and backdating with a large information set" by E. Angelini, J. Henry and M. Marcellino, August 2003.
- 253 "Bond market inflation expectations and longer-term trends in broad monetary growth and inflation in industrial countries, 1880-2001" by W. G. Dewald, September 2003.
- 254 "Forecasting real GDP: what role for narrow money?" by C. Brand, H.-E. Reimers and F. Seitz, September 2003.

- 255 "Is the demand for euro area M3 stable?" by A. Bruggeman, P. Donati and A. Warne, September 2003.
- 256 "Information acquisition and decision making in committees: a survey" by K. Gerling, H. P. Grüner, A. Kiel and E. Schulte, September 2003.
- 257 "Macroeconomic modelling of monetary policy" by M. Klaeffling and Lehman Brothers, September 2003.
- 258 "Interest rate reaction functions and the Taylor rule in the euro area" by P. Gerlach-Kristen, September 2003.
- 259 "Implicit tax co-ordination under repeated policy interactions" by M. Catenaro and J.-P. Vidal, September 2003.
- 260 "Aggregation-theoretic monetary aggregation over the euro area, when countries are heterogeneous" by W. A. Barnett, September 2003.
- 261 "Why has broad money demand been more stable in the euro area than in other economies? A literature review" by A. Calza and J. Sousa, September 2003.

#### Other publications

- "The TARGET service level", July 1998.
- "Report on electronic money", August 1998.
- "Assessment of EU securities settlement systems against the standards for their use in ESCB credit operations", September 1998.
- "Money and banking statistics compilation guide", September 1998.
- "The single monetary policy in Stage Three: General documentation on ESCB monetary policy instruments and procedures", September 1998.
- "Third progress report on the TARGET project", November 1998.
- "Correspondent central banking model (CCBM)", December 1998.
- "Payment systems in the European Union: Addendum incorporating 1997 figures", lanuary 1999.
- "Possible effects of EMU on the EU banking systems in the medium to long term", February 1999.
- "Euro area monetary aggregates: conceptual reconciliation exercise", July 1999.
- "The effects of technology on the EU banking systems", July 1999.
- "Payment systems in countries that have applied for membership of the European Union", August 1999.
- "Improving cross-border retail payment services: the Eurosystem's view", September 1999.
- "Compendium: Collection of legal instruments, June 1998 May 1999", October 1999.
- "European Union balance of payments/international investment position statistical methods", November 1999.
- "Money and banking statistics compilation guide, addendum I: money market paper", November 1999.
- "Money and banking statistics sector manual", second edition, November 1999.
- "Report on the legal protection of banknotes in the European Union Member States", November 1999.
- "Correspondent central banking model (CCBM)", November 1999.
- "Cross-border payments in TARGET: A users' survey", November 1999.
- "Money and banking statistics: Series keys for the exchange of balance sheet items time series", November 1999.
- "Money and banking statistics: Handbook for the compilation of flow statistics", December 1999.
- "Payment systems in the European Union: Addendum incorporating 1998 figures", February 2000.

- "Interlinking: Data dictionary", Version 2.02, March 2000.
- "Asset prices and banking stability", April 2000.
- "EU banks' income structure", April 2000.
- "Statistical information collected and compiled by the ESCB", May 2000.
- "Correspondent central banking model (CCBM)", July 2000.
- "Statistical requirements of the European Central Bank in the field of general economic statistics", August 2000.
- "Seasonal adjustment of monetary aggregates and HICP for the euro area", August 2000.
- "Improving cross-border retail payment services", September 2000.
- "Statistical treatment of the Eurosystem's international reserves", October 2000.
- "European Union balance of payments/international investment position statistical methods", November 2000.
- "Information guide for credit institutions using TARGET", November 2000.
- "The single monetary policy in Stage Three: General documentation on Eurosystem monetary policy instruments and procedures", November 2000.
- "EU banks' margins and credit standards", December 2000.
- "Mergers and acquisitions involving the EU banking industry: facts and implications", December 2000.
- "Annual report on the activities of the Anti-Fraud Committee of the European Central Bank", January 2001.
- "Cross-border use of collateral: A user's survey", February 2001.
- "Price effects of regulatory reform in selected network industries", March 2001.
- "The role of central banks in prudential supervision", March 2001.
- "Money and banking statistics in the accession countries: Methodological Manual", April 2001.
- "TARGET: Annual Report", May 2001.
- "A guide to Eurosystem staff macroeconomic projection exercises", June 2001.
- "Payment and securities settlement systems in the European Union", June 2001.
- "Why price stability?", June 2001.
- "The euro bond market", July 2001.
- "The euro money market", July 2001.
- "The euro equity markets", August 2001.
- "The monetary policy of the ECB", August 2001.
- "Monetary analysis: tools and applications", August 2001.
- "Review of the international role of the euro", September 2001.
- "The Eurosystem's policy line with regard to consolidation in central counterparty clearing", September 2001.
- "Provisional list of MFIs of the accession countries (as at the end of December 2000)", October 2001.
- "TARGET: the Trans-European Automated Real-time Gross settlement Express Transfer system update 2001", November 2001.
- "European Union balance of payments/international investment position statistical methods", November 2001.
- "Fair value accounting in the banking sector", November 2001.
- "Towards an integrated infrastructure for credit transfers in euro", November 2001.
- "Accession countries: balance of payments/international investment position statistical methods", February 2002.
- "List of Monetary Financial Institutions and institutions subject to minimum reserves", February 2002.
- "Labour market mismatches in euro area countries", March 2002.
- "Compendium: Collection of legal instruments, June 1998 December 2001", March 2002.
- "Evaluation of the 2002 cash changeover", April 2002.

- "TARGET Annual Report 2001, April 2002.
- "The single monetary policy in the euro area: General documentation on Eurosystem monetary policy instruments and procedures", April 2002.
- "Annual report on the activities of the Anti-Fraud Committee of the European Central Bank, covering the period from January 2001 to January 2002", May 2002.
- "Developments in banks' liquidity profile and management", May 2002.
- "The Eurosystem's terms of reference for the use of cash-recycling machines by credit institutions and other euro area institutions engaged in the sorting and distribution of banknotes to the public as a professional activity", May 2002.
- "Bond markets and long-term interest rates in European Union accession countries", June 2002.
- "TARGET minimum common performance features of RTGS systems within TARGET as at November 2001", June 2002.
- "TARGET Interlinking data dictionary as at November 2001", June 2002.
- "TARGET Interlinking specification as at November 2001", June 2002.
- "TARGET Interlinking user requirement as at November 2001", June 2002.
- "Task force on portfolio investment collection systems, Final Report", June 2002.
- "Measurement issues in European consumer price indices and the conceptual framework of the HICP", July 2002.
- "Payment and securities settlement systems in the European Union: Addendum incorporating 2000 figures", July 2002.
- "Financial sectors in EU accession countries", August 2002.
- "Payment and securities settlement systems in accession countries", August 2002.
- "TARGET Interlinking specification", November 2002.
- "TARGET Interlinking data dictionary", November 2002.
- "Guidance Notes to Regulation ECB/2001/13 on the MFI balance sheet statistics", November 2002
- "Structural analysis of the EU banking sector", November 2002.
- "European Union balance of payments/international investment position statistical methods", November 2002.
- "Review of the international role of the euro", December 2002.
- "Euro money market study 2001 (MOC)", December 2002.
- "EU banking sector stability", February 2003.
- "Review of the foreign exchange market structure", March 2003.
- "List of Monetary Financial Institutions and institutions subject to minimum reserves", February 2003.
- "Structural factors in the EU housing markets", March 2003.
- "List of Monetary Financial Institutions in the accession countries", March 2003.
- "Memorandum of Understanding on the exchange of information among credit registers for the benefit of reporting institutions", March 2003.
- "Memorandum of Understanding on Economic and Financial Statistics between the Directorate General Statistics of the European Central Bank and the Statistical Office of the European Communities (Eurostat).
- Annex I: Share of responsibilities in the field of balance of payments and international investment position statistics", March 2003.
- "TARGET Annual Report 2002", April 2003.
- "Supplementary guidance notes concerning statistics on the holders of money market fund shares/units", April 2003.
- "Money, banking and financial market statistics in the accession countries.

  Methodological Manual. Vol. 1: The current definition and structure of money and banking

statistics in the accession countries", May 2003.

- "Money, banking and financial market statistics in the accession countries.
- Methodological Manual. Vol. 2: Statistics on other financial intermediaries, financial markets and interest rates in the accession countries", May 2003.
- "Accession countries: balance of payments/international investment position statistical methods", May 2003.
- "Electronic money system security objectives according to the common criteria methodology", May 2003.
- "The transformation of the European financial system, Second ECB Central Banking Conference, October 2002, Frankfurt am Main", June 2003.
- "Letter from the ECB President to the President of the Convention regarding the draft Constitutional Treaty", June 2003.
- "Developments in national supervisory structures", June 2003.
- "Oversight standards for euro retail payment systems", June 2003.
- "Towards a Single Euro Payments Area progress report", June 2003.
- "Amendments to the risk control framework for tier one and tier two eligible assets", July 2003.
- "Information Guide for credit institutions using TARGET", July 2003.
- "ECB statistics: A brief overview", August 2003.
- "Portfolio investment income: Task force report", August 2003.
- "The New Basel Capital Accord", August 2003.
- "Payment and securities settlement systems in the European Union: Addendum incorporating 2001 figures", September 2003.

#### Information brochures

- "TARGET: facts, figures, future", September 1999.
- "EPM: the ECB payment mechanism", August 2000.
- "The euro: integrating financial services", August 2000 (out of print).
- "TARGET", August 2000 (out of print).
- "The European Central Bank", April 2001.
- "The euro banknotes and coins", May 2001.
- "TARGET update 2001", July 2001.
- "The euro and the integration of financial services", September 2001.
- "The euro, our money", June 2002.

