



EUROPEAN CENTRAL BANK

EUROSYSTEM

10 | 2007

MONTHLY BULLETIN

EUROPEAN CENTRAL BANK

01 | 2007

02 | 2007

03 | 2007

04 | 2007

05 | 2007

06 | 2007

07 | 2007

08 | 2007

09 | 2007

**10 | 2007**

11 | 2007

12 | 2007

MONTHLY BULLETIN  
OCTOBER





EUROPEAN CENTRAL BANK

EUROSYSTEM



## MONTHLY BULLETIN OCTOBER 2007

In 2007 all ECB publications feature a motif taken from the €20 banknote.

© European Central Bank, 2007

**Address**

Kaiserstrasse 29  
60311 Frankfurt am Main  
Germany

**Postal address**

Postfach 16 03 19  
60066 Frankfurt am Main  
Germany

**Telephone**

+49 69 1344 0

**Website**

<http://www.ecb.europa.eu>

**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 2 October 2007.*

ISSN 1561-0136 (print)  
ISSN 1725-2822 (online)





# CONTENTS

<b>EDITORIAL</b>	<b>5</b>	<b>EURO AREA STATISTICS</b>	<b>SI</b>
<b>ECONOMIC AND MONETARY DEVELOPMENTS</b>	<b>9</b>	<b>ANNEXES</b>	
The external environment of the euro area	9	Chronology of monetary policy measures of the Eurosystem	I
Monetary and financial developments	14	Documents published by the European Central Bank since 2006	V
Prices and costs	44	Glossary	XIII
Output, demand and the labour market	53		
Exchange rate and balance of payments developments	63		
Boxes:			
1 New euro area historical series on MFI loans to households and non-financial corporations	17		
2 The results of the October 2007 bank lending survey for the euro area	20		
3 The recent repricing of credit risk	34		
4 Volatility and cross-country dispersion of corporate earnings in the euro area	41		
5 Capacity utilisation in the euro area: measures and implications	47		
6 Sectoral patterns of total factor productivity growth in the euro area countries	57		
<b>ARTICLES</b>			
Long-term developments in MFI loans to households in the euro area: main patterns and determinants	69		
The collateral frameworks of the Federal Reserve System, the Bank of Japan and the Eurosystem	85		
Circulation and supply of euro banknotes and preparations for the second series of banknotes	101		

## ABBREVIATIONS

### COUNTRIES

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

### OTHERS

BIS	Bank for International Settlements
b.o.p.	balance of payments
BPM5	IMF Balance of Payments Manual (5th edition)
CD	certificate of deposit
c.i.f.	cost, insurance and freight at the importer's border
CPI	Consumer Price Index
ECB	European Central Bank
EER	effective exchange rate
EMI	European Monetary Institute
EMU	Economic and Monetary Union
ESA 95	European System of Accounts 1995
ESCB	European System of Central Banks
EU	European Union
EUR	euro
f.o.b.	free on board at the exporter's border
GDP	gross domestic product
HICP	Harmonised Index of Consumer Prices
HWWI	Hamburg Institute of International Economics
ILO	International Labour Organization
IMF	International Monetary Fund
MFI	monetary financial institution
NACE Rev. 1	Statistical classification of economic activities in the European Community
NCB	national central bank
OECD	Organisation for Economic Co-operation and Development
PPI	Producer Price Index
SITC Rev. 3	Standard International Trade Classification (revision 3)
ULCM	unit labour costs in manufacturing
ULCT	unit labour costs in the total economy

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



## EDITORIAL

At its meeting on 4 October 2007, the Governing Council of the ECB decided, on the basis of its regular economic and monetary analyses, to leave the key ECB interest rates unchanged. The information that has become available since the previous meeting of the Governing Council, on 6 September, has confirmed that the outlook for price stability over the medium term is subject to upside risks. Against this background, and with money and credit growth vigorous in the euro area, the ECB's monetary policy stands ready to counter upside risks to price stability, as required by its primary objective. The fundamentals of the euro area economy support a favourable medium-term outlook for economic activity. In particular, corporate earnings and profitability have been sustained, employment growth has been robust and unemployment has fallen. However, given the financial market volatility and the reappraisal of risk seen in recent weeks, this assessment is surrounded by heightened uncertainty. In view of the only limited range of new economic data that have become available since the meeting of the Governing Council on 6 September, particular caution needs to be exercised when assessing any potential impact of the financial market developments on the real economy. Hence, it remains necessary to gather additional information and examine new data before drawing further conclusions for monetary policy in the context of the ECB's medium-term-oriented monetary policy strategy focused on maintaining price stability. Accordingly, the Governing Council will monitor very closely all developments. On the basis of its assessment, and by acting in a firm and timely manner, the Governing Council will ensure that risks to price stability over the medium term do not materialise and that medium and long-term inflation expectations remain firmly anchored in line with price stability, thereby favouring an environment conducive to sustained economic growth, well-functioning markets and continued job creation. Providing such an anchor for medium and long-term inflation expectations is all the more important at times of financial market volatility and increased uncertainty. As regards

the financial markets, the Governing Council will continue to pay great attention to developments over the period to come.

Turning first to the economic analysis, on the basis of the available data, it appears that the sustained real economic growth experienced in the euro area in the first half of 2007 has continued through the summer. This is also reflected in available forecasts for real GDP growth for the third and fourth quarters of 2007. While financial market volatility appears to have contributed to a decline in euro area consumer and business confidence indicators in September, these indicators remain above their historical averages and continue to point to ongoing sustained growth during the second half of 2007.

Looking further ahead, available forecasts for 2008 confirm the Governing Council's main scenario of real GDP growing at around trend potential. This scenario is based on the expectation that global economic activity will remain robust, with the moderation of economic growth in the United States largely offset by the continued strength of emerging market economies. This will provide ongoing support to euro area exports and investment. Consumption growth in the euro area should also contribute to economic growth, in line with developments in real disposable income, as employment conditions remain supportive. That said, in view of the potential impact of increased financial market volatility and the re-pricing of risk on the real economy, the uncertainties surrounding this broadly favourable outlook for economic activity have increased.

On balance, risks to the outlook for growth are judged to lie on the downside. These downside risks relate mainly to the potential for a broader impact from the ongoing reappraisal of risk in financial markets on confidence and financing conditions, concerns about protectionist pressures and possible disorderly developments owing to global imbalances, as well as further oil and commodity price rises.

As regards price developments, according to Eurostat's flash estimate, the annual HICP inflation rate increased strongly to 2.1% in September 2007, from 1.7% in August. As the Governing Council has already indicated on previous occasions, unfavourable effects from energy prices will have a strong impact on annual HICP inflation rates over the period to come. Owing mainly to such effects, as a result of the marked decline in energy prices a year ago combined with the recent substantial increase in oil prices, the Governing Council expects the inflation rate to remain significantly above 2% in the remaining months of 2007 and in early 2008, before moderating again. Largely as a consequence of capacity constraints and relatively tight labour market conditions, inflation is expected to be around 2% on average in 2008.

Risks to the outlook for price developments remain on the upside. They continue to include the possibility of further increases in the prices of oil and agricultural products as well as additional increases in administered prices and indirect taxes beyond those announced thus far. Taking into account the existence of capacity constraints, the favourable momentum of real GDP growth observed over the past few quarters and the positive signs from labour markets, stronger than currently expected wage developments may occur, and an increase in the pricing power in market segments with low competition could materialise. Such developments would pose upward risks to price stability. It is therefore crucial that all parties concerned meet their responsibilities.

The monetary analysis confirms the prevailing upside risks to price stability at medium to longer-term horizons. A broad assessment of the monetary data supports the view that the underlying rate of money and credit growth remains strong. However, the August annual growth rate of close to 12% in the monetary aggregate M3 as well as the annual growth rate of loans to non-financial corporations, which reached a record level of more than 14% in August, may have been influenced by a number

of temporary or special factors, such as the flattening of the yield curve and the recent financial market volatility, and may therefore overstate the underlying rate of money and credit expansion.

A broad assessment of underlying trends in money and credit growth is particularly important during the current period of financial market volatility, as the latter may influence the short-term behaviour of private agents and thereby affect monetary developments. Thus, monetary and credit data can offer an important insight into how financial institutions, households and firms have responded to the financial market volatility. Indeed, previous episodes of heightened financial market uncertainty have been associated with large portfolio shifts into safe and liquid monetary assets. For the time being, however, there is still little evidence in the monetary data for such shifts since the rise in financial market volatility in early August, while it cannot be excluded that the flow of bank loans to the non-financial corporate sector in August partly reflects the re-intermediation of some financing onto bank balance sheets. Further data will be required to develop a more complete view of the impact of the financial market volatility on bank balance sheets, financing conditions and money and credit growth.

Overall, the continued vigour of underlying monetary and credit expansion points to upside risks to price stability over the medium to longer term. Monetary developments therefore continue to require very careful monitoring so as to detect underlying trends on the one hand and to better understand shorter-term dynamics on the other. This will provide a more complete picture of the response of the private sector to the increased volatility in financial markets.

To sum up, a cross-check of the information identified under the economic analysis with the outcome of the monetary analysis has confirmed the existence of upside risks to price stability over the medium term, against the background of good economic fundamentals in the euro

area. Accordingly, and with money and credit growth vigorous in the euro area, the ECB's monetary policy stands ready to counter upside risks to price stability, as required by its primary objective. At the same time, given the heightened level of uncertainty, additional information is needed before further conclusions for monetary policy can be drawn. Consequently, the Governing Council will monitor very closely all developments. On the basis of its assessment, and by acting in a firm and timely manner, the Governing Council will ensure that risks to price stability over the medium term do not materialise and that medium and long-term inflation expectations remain firmly anchored in line with price stability, which is all the more important in the current context. As regards the financial markets, the Governing Council will continue to pay great attention to developments over the period to come.

Turning to fiscal policy, the Governing Council is increasingly concerned about a weakening in structural fiscal consolidation efforts and the delaying of decisive action to address fiscal imbalances. Against this background, all euro area countries concerned are urged to meet the commitments made in the context of the Stability and Growth Pact to structurally improve their fiscal balances. The commitment made in the Eurogroup to reach medium-term budgetary objectives in 2008 or 2009, and by 2010 at the latest, must also be respected by all euro area countries. Those countries that have already achieved sound fiscal positions need to abstain from pro-cyclical fiscal policies. Sound fiscal policies will also make an important contribution to maintaining confidence at a time of heightened uncertainty in financial markets.

With regard to structural reforms, the Governing Council fully supports efforts to enhance competition, increase productivity and foster market flexibility. While the services sector is a particularly important area for reform, further efforts are also needed to improve the functioning of the agricultural markets. Against the background of a marked increase in

international food commodity prices, further liberalisation and reforms in the EU agricultural markets would help to enhance their efficiency and benefit European consumers through lower prices. The successful conclusion of the Doha round of world trade negotiations should also help to improve the functioning of global trade in general and of agricultural markets in Europe and worldwide in particular.

This issue of the Monthly Bulletin contains three articles. The first article discusses long-term developments in loans to households from euro area monetary financial institutions. The second article compares the collateral frameworks of the Federal Reserve System, the Bank of Japan and the Eurosystem, identifying similarities in underlying principles and differences in the practical design. The third article provides an overview of the circulation and supply of euro banknotes and preparations for the second series of banknotes.





# ECONOMIC AND MONETARY DEVELOPMENTS

## I THE EXTERNAL ENVIRONMENT OF THE EURO AREA

*Despite some moderation in growth momentum, global economic activity remains resilient, supported in particular by robust economic growth in emerging economies. Consumer price inflation eased in industrialised countries and cost inflationary pressures recently diminished. The recent rise in oil and commodity prices however signals a possible renewed increase in global inflationary pressures in the near term. Downside risks to the global economic outlook remain elevated. They relate mainly to the potential for a broader impact from the ongoing reappraisal of risk in financial markets, concerns about protectionist pressures and possible disorderly developments owing to global imbalances, as well as further oil and commodity price rises.*

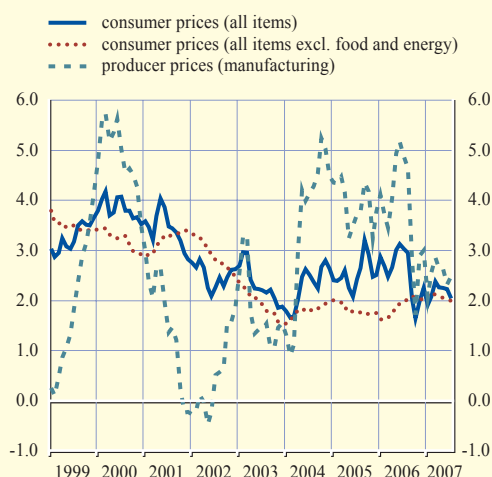
### I.1 DEVELOPMENTS IN THE WORLD ECONOMY

Despite some moderation in growth momentum, global economic activity remains resilient, supported in particular by robust economic growth in emerging economies. Although the latest data remain overall rather positive at the global level, they refer to the period preceding the financial market turmoil. It remains therefore to be seen whether the recent financial market developments will have significant implications for the real economy.

Global price developments eased in July and cost inflationary pressures recently diminished. The annual rate of increase in headline consumer price inflation and in inflation measures excluding food and energy were both at 2.0% in the OECD countries in July 2007 (see Chart 1). While survey evidence on input prices suggests a further easing in cost pressures, the recent rise in oil prices signals a possible renewed increase in global inflationary pressures in the near term.

**Chart 1 Price developments in OECD countries**

(annual percentage changes; monthly data)



Source: OECD.

### UNITED STATES

In the United States, where economic activity grew at a rate below trend over most of the previous year, real GDP growth rebounded in the second quarter of 2007 (see Chart 2). According to final estimates, real GDP grew by a quarterly annualised rate of 3.8%, after 0.6% in the first quarter. In the second quarter, the dampening effect from private consumption was more than offset by a rebound in net exports, investment and government consumption.

The latest information suggests that the correction in the US housing markets is still ongoing. On the construction side, both building permits and housing starts dropped further in August. In addition, the continued rise in the number of mortgages ending in foreclosure may exert further dampening pressure on housing sales and housing construction. However, the latest data suggest that the impact of housing markets on private consumption has thus far remained fairly modest.

Recently, a slowdown in the annual rate of increase in energy prices has led to a fall in inflation rates. Annual CPI inflation declined to 2.0% in August, from 2.4% in the previous month. Annual

consumer price inflation excluding food and energy declined by 0.1 percentage points to 2.1% in August.

On 18 September the US Federal Open Market Committee decided to cut its target for the federal funds rate by 50 basis points to 4.75%. The changes also included a 50 basis point reduction in the primary credit rate to 5.25%.

### JAPAN

In Japan, economic activity recovered, while inflation has remained subdued. Output has been supported by steady domestic demand and strong exports. In the second quarter of 2007, however, according to second preliminary data released by the Cabinet Office, real GDP growth decelerated from the rapid expansion recorded in previous quarters. Real GDP declined by 0.3% on a quarterly basis after growing by 0.7% in the previous quarter, reflecting mainly a significant contraction in private investment over the quarter.

With regard to price developments inflation has remained subdued (see Chart 2), owing to persistent downward pressures, especially on wages. In August 2007 consumer price inflation was -0.2% on an annual basis (after being nil in July); the annual change in the CPI excluding fresh food was -0.1%, unchanged for the fifth consecutive month.

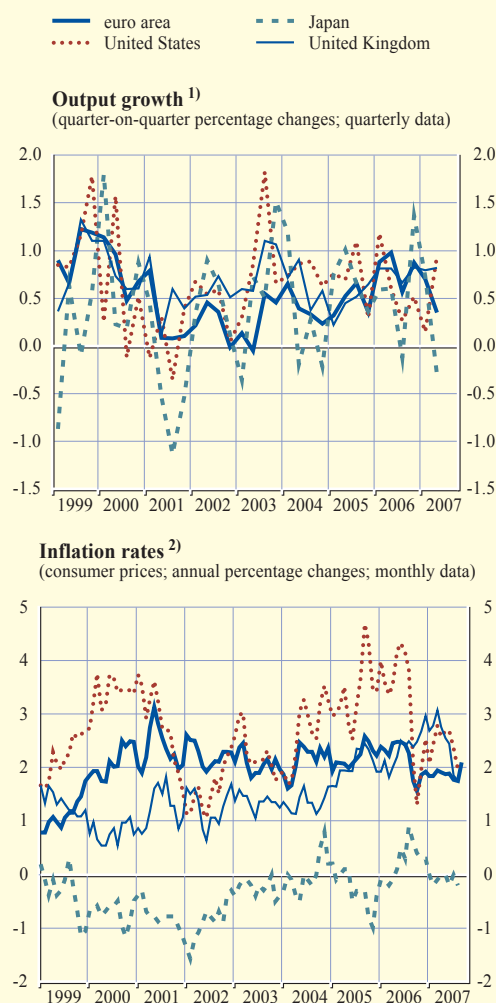
At its meeting on 19 September 2007 the Bank of Japan decided to leave its target for the uncollateralised overnight call rate unchanged at 0.50%.

### UNITED KINGDOM

In the United Kingdom, GDP growth was 0.8% in the second quarter (see Chart 2). Recent short-term indicators point to a slightly easing growth momentum in the third quarter, although these indicators do not yet reflect the financial turbulence of the past weeks. In the three months to August retail sales remained firm (1.3% up on the previous three months). HICP inflation declined further from 1.9% in July to 1.8% in August. As in previous months, utility bills have had a significant downward effect.

On 5 October 2007 the Bank of England's Monetary Policy Committee decided to leave its main policy rate unchanged at 5.75%. In the past weeks the Bank of England injected liquidity in the money markets and widened the target bands for reserves as well as the range of eligible collateral.

**Chart 2 Main developments in major industrialised economies**



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

## OTHER EUROPEAN COUNTRIES

In most other EU countries outside the euro area, output growth has remained robust in recent quarters, reflecting sustained growth in domestic demand, while inflation developments have been mixed.

In Sweden and Denmark, real economic developments have recently diverged. While quarterly real GDP growth decreased to -0.4% in the second quarter of 2007 in Denmark, it rose to 0.9% in Sweden. This development in Denmark was mainly attributable to a broad-based weakening of domestic demand, while both private and public consumption accelerated in Sweden. HICP inflation has been subdued in the two countries in recent months. In August annual HICP inflation in Denmark decreased to 0.9%, whereas in Sweden it decreased to 1.2%. On 7 September Sveriges Riksbank raised its main interest rate by 25 basis points to 3.75%.

As regards the four largest central and eastern European economies (the Czech Republic, Hungary, Poland and Romania), output growth remained robust in the second quarter of 2007 in the Czech Republic and Poland while it decelerated in Hungary and Romania. Real GDP growth has mainly been driven by domestic demand, while in Hungary it was driven mainly by net exports. Regarding price developments, the level of inflation continued to differ significantly across the four countries. In the Czech Republic and Poland, HICP inflation stood at 2.6% and 2.1% respectively in August, while in Romania it increased to 5.0%. In Hungary HICP inflation decreased to 7.1% but remained the highest among the four countries, reflecting a large increase in indirect taxes and administered prices which is part of the country's fiscal consolidation package. On 24 September the Magyar Nemzeti Bank reduced its key policy rate by 25 basis points to 7.5%, against the background of weakening economic activity.

## EMERGING ASIA

In emerging Asia, economic activity continued to expand at a robust pace, particularly in China. In China, short-term indicators available for July and August indicate that the economy continued to expand at rates similar to those of the second quarter of 2007, when real GDP grew by 11.9% year on year. The main contribution to growth continued to stem from domestic demand. The trade surplus continued to widen, bringing the cumulated surplus from January to August 2007 to USD 162 billion, up by 72% compared with the same period a year earlier. In August annual consumer price inflation rose to 6.5%, from 5.6% in July, largely because of higher food prices. On 6 September the People's Bank of China raised the reserve requirement ratio of banks by 50 basis points to 12.5% and on 14 September it raised the benchmark deposit and lending rates by 27 basis points to 3.87% and 7.29% respectively. Inflationary pressures continued to moderate in other large economies in the region, most notably India, where wholesale price inflation – the Reserve Bank of India's preferred measure of inflation – declined to below 4% on an annual basis in August.

## LATIN AMERICA

In Latin America, economic activity remained sustained, albeit with some heterogeneity in the growth and inflation performances of major economies. In Brazil, activity continued to be solid, with real GDP growing at an annual rate of 5.4% in the second quarter of 2007, up from 4.4% in the first quarter. In August consumer price inflation increased to 4.2% on an annual basis, compared with 3.7% in July. On 6 September the Banco Central do Brasil cut its key interest rate by 25 basis points to 11.25%. Activity in Argentina also remained robust, with real GDP expanding by 8.7% on an annual basis in the second quarter of 2007. Consumer price inflation stood at an annual rate of 8.7% in August. Activity continued to be weak in Mexico, with industrial production growth



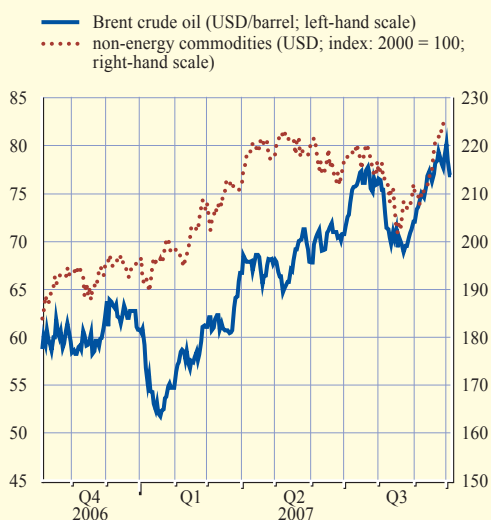
expanding by 2.4% on an annual basis in July, while annual consumer price inflation remained unchanged at 4.0% in August.

## 1.2 COMMODITY MARKETS

Oil prices increased significantly in most of September to reach new historical peaks towards the end of the period under review. Following a sharp fall during August, crude oil prices rebounded in mid-September and stood at USD 78.5 (EUR 55.5) per barrel on 2 October, approximately 30% higher than at the start of the year (about 22% higher in euro terms). Despite the decision of the Organization of the Petroleum Exporting Countries (OPEC) to increase the volume of crude supplied to the market by 0.5 million barrels a day effective 1 November, supply-side conditions remained tight owing to decreasing US crude oil inventories and threats to energy production related to the hurricane season. In addition, the price hikes were supported by demand side fundamentals, as concerns over the potential dampening effects of the financial turmoil on the global economy and global energy demand eased slightly. Looking ahead, continued limited spare capacity along the oil supply chain is expected to keep prices at relatively high levels and sensitive to small changes in the external environment.

After the relatively strong decrease in August, the prices of non-energy commodities rebounded in September. The recent increase was mainly driven by agricultural prices, in particular food prices as the price of cereals surged due to bad harvests, increasing demand for the use of arable land in the production of biofuel products and declining stocks. At the same time, demand-side fundamentals continued to be strong. The overall non-energy commodity price index (denominated in US dollars) was on average approximately 17% higher towards the end of September than a year earlier.

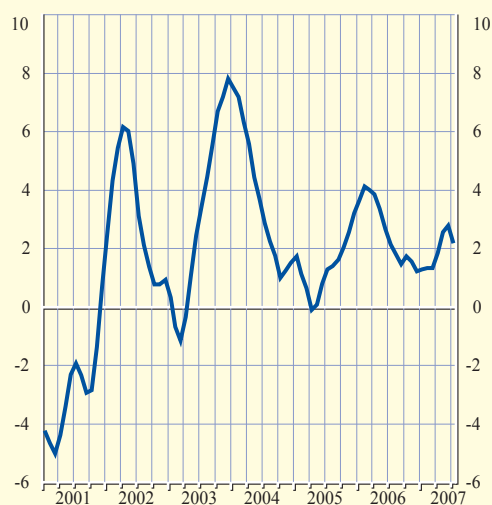
**Chart 3 Main developments in commodity markets**



Sources: Bloomberg and HWWI.

**Chart 4 OECD composite leading indicator**

(six-month rate of change)



Source: OECD.

Note: The latest observation refers to July 2007.

### I.3 OUTLOOK FOR THE EXTERNAL ENVIRONMENT

The outlook for the external environment and for euro area foreign demand continues to be favourable, despite some moderation in global economic expansion. Following some weakness in the second quarter of this year, early indicators suggest some strengthening in international trade at the beginning of the third quarter. In July the six-month rate of change of the composite leading indicator (CLI) for the OECD slightly decreased, while signalling relatively robust activity overall. In more detail, the data showed weakening performance in most of the advanced economies. The latest data for major OECD non-member economies pointed to moderating expansion in China and Brazil, as opposed to an improved outlook in India.

Downside risks to the global economic outlook remain elevated. They relate mainly to the potential for a broader impact from the ongoing reappraisal of risk in financial markets, concerns about protectionist pressures and possible disorderly developments owing to global imbalances, as well as further oil and commodity price rises.

## 2 MONETARY AND FINANCIAL DEVELOPMENTS

### 2.1 MONEY AND MFI CREDIT

In August both monetary and credit expansion remained strong, with annual M3 growth broadly unchanged at 11.6% and annual growth in MFI loans to the private sector slightly higher than in the previous month, at 11.2%. The withdrawal of monetary policy accommodation since December 2005 is continuing to influence monetary dynamics, as reflected in the moderation of the annual growth of loans to households. At the same time, in the context of a relatively flat yield curve in the euro area, interest rate increases stimulated the expansion of demand for monetary assets outside M1, in particular short-term time deposits. Recent financial market developments also seem to have influenced monetary dynamics in July and August, although such effects appear modest thus far. Further information is required before a more comprehensive assessment can be undertaken. Nonetheless, even after taking these short to medium-term effects into account, underlying monetary dynamics remain strong and point to upside risks to price stability over the medium to longer term.

#### THE BROAD MONETARY AGGREGATE M3

The evolution of the money and credit data in recent quarters has confirmed the effects on monetary developments of the withdrawal of monetary policy accommodation that has been underway since December 2005. Nonetheless, in the context of a relatively flat yield curve in the euro area, the annual growth rate of the broad monetary aggregate M3 remained strong at 11.6% in August, after 11.7% in the previous month. This continued high annual growth rate reflected a further significant month-on-month increase of 0.9% (after 1.1% and 0.8% in the two previous months). The robust shorter-term dynamics of M3 were also reflected in the annualised six-month rate, which remained higher than the annual growth rate (see Chart 5).

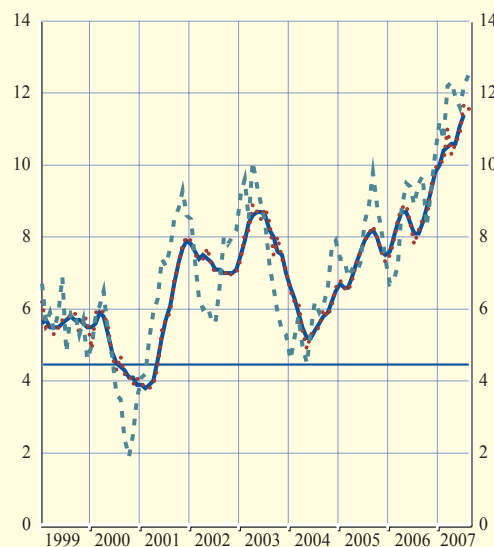
The impact of the withdrawal of monetary policy accommodation is apparent in several respects. On the components side, higher interest rates increased the opportunity cost of holding overnight deposits, thereby dampening the dynamics of M1. As a result, the annual growth rate of M1 declined to rates well below those of the other main components of M3. On the counterparts side, the impact of higher key ECB interest rates was visible, in particular, in the continuous moderation of growth in household borrowing. At the same time, increases in short-term interest rates led to a relatively flat yield curve that stimulated the expansion of demand for monetary assets outside M1, in particular short-term time deposits.

Broadly speaking, these patterns have also characterised monetary developments over the

Chart 5 M3 growth

(percentage changes; adjusted for seasonal and calendar effects)

- M3 (three-month centred moving average of the annual growth rate)
- ..... M3 (annual growth rate)
- - - M3 (annualised six-month growth rate)
- reference value (4<sup>1/2</sup>%)



Source: ECB.

past two months, in which uncertainty in financial markets increased significantly. On the basis of experience gained in previous episodes of financial market volatility, changes in portfolio investment behaviour and financing decisions may – as risk aversion increases – significantly influence the money and credit data. However, the impact of recent financial market developments on the monetary data appears to have been modest thus far. Nonetheless, close monitoring and careful interpretation are required, since any such impact may only become apparent in the coming months.

### MAIN COMPONENTS OF M3

The annual growth rate of M1 remained unchanged at 6.8% in August. This reflected a stable annual rate of growth in overnight deposits, while the annual growth rate of currency in circulation moderated somewhat (see Table 1). Developments in annual M1 growth in recent months suggest a pause in the moderation of demand for liquid holdings, possibly reflecting that the dampening effects associated with higher interest rates have increasingly been counterbalanced by a stronger transactions-related demand for M1, given the sustained expansion of economic activity.

The annual growth rate of short-term deposits other than overnight deposits rose further to 15.3% in August, from 15.0% in July. This reflected a continued strengthening in the growth of short-term time deposits (i.e. deposits with a maturity of up to two years), which more than compensated for the stronger annual rate of decline in short-term savings deposits (i.e. deposits redeemable at notice of up to three months). Short-term time deposits have accounted for more than half of annual M3 growth in recent months.

The current attractiveness of time deposits reflects several factors. First, their remuneration has increased broadly in line with the rise in short-term money market interest rates. The spread between the remuneration of time deposits, on the one hand, and that of overnight deposits and short-term savings deposits, on the other, has widened continuously, prompting the substitution

**Table 1 Summary table of monetary variables**

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

	Outstanding amount as a percentage of M3 <sup>1)</sup>	Annual growth rates					
		2006 Q3	2006 Q4	2007 Q1	2007 Q2	2007 July	2007 Aug.
<b>M1</b>	<b>45.9</b>	<b>7.6</b>	<b>6.8</b>	<b>7.0</b>	<b>6.2</b>	<b>6.8</b>	<b>6.8</b>
Currency in circulation	7.3	11.4	11.1	10.5	10.0	9.2	8.7
Overnight deposits	38.6	7.0	6.0	6.3	5.5	6.4	6.4
<b>M2 - M1 (= other short-term deposits)</b>	<b>39.2</b>	<b>9.5</b>	<b>11.1</b>	<b>11.9</b>	<b>13.1</b>	<b>15.0</b>	<b>15.3</b>
Deposits with an agreed maturity of up to two years	21.1	19.7	25.2	29.5	33.2	37.5	38.5
Deposits redeemable at notice of up to three months	18.1	2.4	1.1	-0.8	-2.1	-2.9	-3.5
<b>M2</b>	<b>85.1</b>	<b>8.4</b>	<b>8.7</b>	<b>9.1</b>	<b>9.2</b>	<b>10.4</b>	<b>10.6</b>
<b>M3 - M2 (= marketable instruments)</b>	<b>14.9</b>	<b>6.4</b>	<b>11.3</b>	<b>16.9</b>	<b>19.3</b>	<b>19.5</b>	<b>17.8</b>
<b>M3</b>	<b>100.0</b>	<b>8.1</b>	<b>9.0</b>	<b>10.2</b>	<b>10.6</b>	<b>11.7</b>	<b>11.6</b>
<b>Credit to euro area residents</b>		<b>9.2</b>	<b>8.8</b>	<b>8.0</b>	<b>8.1</b>	<b>8.7</b>	<b>8.8</b>
Credit to general government		-0.9	-3.1	-4.5	-4.3	-3.7	-4.2
Loans to general government		-0.6	-0.4	-1.3	-1.2	-0.6	-0.7
Credit to the private sector		11.9	11.9	11.1	11.0	11.6	11.8
Loans to the private sector		11.2	11.2	10.6	10.5	11.0	11.2
<b>Longer-term financial liabilities (excluding capital and reserves)</b>		<b>8.5</b>	<b>9.0</b>	<b>10.0</b>	<b>10.3</b>	<b>10.6</b>	<b>10.5</b>

Source: ECB.

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



of the latter with the former. Second, given the relatively flat yield curve in the euro area, time deposits also remain attractive in comparison with riskier longer-maturity assets outside M3, since they offer greater liquidity and lower risk at little cost in terms of return. Third, increases in time deposits may reflect “flight-to-safety” flows triggered by the recent increase in financial market volatility. Such behaviour would be in contrast with that previously experienced (notably between 2001 and 2003) when flows into monetary assets during episodes of heightened risk aversion largely went into money market fund shares/units. However, in the current situation, investors may have become increasingly apprehensive about investment in money market fund shares/units on account of the exposure of some of these funds to riskier assets, including various forms of asset-backed instruments. In August, money market fund shares/units recorded an outflow, causing the annual growth rate to decline to 12.8%, from 14.4% in the previous month.

The annual growth rate of short-term deposits and repurchase agreements with MFIs (M3 deposits, which represent the broadest aggregation of M3 components for which information is available by holding sector) decreased slightly in August. This decrease concealed divergent developments in different sectors. In particular, the annual growth rate of holdings of M3 deposits by non-monetary financial institutions (i.e. other non-monetary financial intermediaries and insurance corporations and pension funds) declined in August, more than offsetting the increase in the annual growth rate of holdings of M3 deposits by households, the largest money-holding sector. The latter development may possibly reflect a shift in households’ investment preferences towards safe and liquid monetary assets, as risk aversion has increased in the context of recent financial market developments.

#### **MAIN COUNTERPARTS OF M3**

On the counterparts side, total credit to euro area residents continued to grow strongly. The development of this broad aggregate concealed a slight increase in the annual growth rate of credit granted to the private sector, which more than offset the increased annual rate of decline in credit to general government. In August, MFIs continued to shed general government credit from their portfolios. Sales of government securities may also have been due to the recent increase in bond prices, which made it more attractive to sell them off.

Loans to the private sector continued to expand strongly, growing at 11.2% on an annual basis in August, after 11.0% in July. This increased rate of growth concealed different developments in the lending to the household and non-financial corporation sectors.

The annual growth rate of MFI loans to households was 7.0% in August, unchanged from the previous month. It is also noteworthy that the monthly flow of loans to households in August was broadly in line with what was observed in the same month one year ago, pointing to an only modest impact of recent financial market developments on household borrowing thus far. These developments largely reflect the dynamics of loans for house purchase, which grew at 8.1% in August on an annual basis, the same rate recorded in July (see Table 2). Growth in loans to households has moderated appreciably since the peak observed in spring 2006, in line with the moderation in house price growth and housing market activity in a number of euro area economies over the past few quarters, and the gradual upward trend in mortgage rates throughout the euro area. The annual growth rate of consumer credit declined slightly to 5.7% in August, from 5.8% in July. (For a discussion of the main determinants of developments in loans to households from a historical perspective, see the article entitled “Long-term developments in MFI loans to households in the euro area: main patterns and determinants” in this issue of the Monthly Bulletin.)

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

(quarterly figures are averages; not adjusted for seasonal and calendar effects)

	Outstanding amount as a percentage of the total <sup>1)</sup>	Annual growth rates					
		2006 Q3	2006 Q4	2007 Q1	2007 Q2	2007 July	2007 Aug.
<b>Non-financial corporations</b>	<b>42.5</b>	<b>12.0</b>	<b>13.0</b>	<b>13.0</b>	<b>12.7</b>	<b>13.6</b>	<b>14.2</b>
Up to one year	29.5	9.2	10.5	9.9	10.1	11.5	13.2
Over one and up to five years	19.1	19.0	20.5	19.9	19.2	19.4	20.2
Over five years	51.4	11.3	12.0	12.4	12.0	12.8	12.7
<b>Households<sup>2)</sup></b>	<b>48.0</b>	<b>9.3</b>	<b>8.6</b>	<b>8.1</b>	<b>7.5</b>	<b>7.0</b>	<b>7.0</b>
Consumer credit <sup>3)</sup>	12.8	8.5	8.0	7.1	6.5	5.8	5.7
Lending for house purchase <sup>3)</sup>	71.3	11.2	10.2	9.4	8.6	8.1	8.1
Other lending	15.9	2.3	2.7	3.2	3.7	3.2	3.3
<b>Insurance corporations and pension funds</b>	<b>1.1</b>	<b>36.8</b>	<b>29.1</b>	<b>27.6</b>	<b>23.7</b>	<b>24.0</b>	<b>27.9</b>
<b>Other non-monetary financial intermediaries</b>	<b>8.3</b>	<b>17.3</b>	<b>16.4</b>	<b>12.3</b>	<b>15.9</b>	<b>20.5</b>	<b>19.6</b>

Source: ECB.

Notes: MFI sector including the Eurosystem; sectoral classification based on the ESA 95. For further details, see the relevant technical notes.

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

2) As defined in the ESA 95.

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

The annual growth rate of loans to non-financial corporations increased further in August, reaching 14.2%, the highest level observed since 1980, the period for which historical data are available. (For a description of these series, see Box 1 entitled “New euro area historical series on MFI loans to households and non-financial corporations”.) The strengthening of non-financial corporations’ borrowing over the past two months largely reflected developments in longer-term loans, in contrast to what was observed in preceding months when loans at shorter initial maturities played the most prominent role.

**Box 1****NEW EURO AREA HISTORICAL SERIES ON MFI LOANS TO HOUSEHOLDS AND NON-FINANCIAL CORPORATIONS**

Historical time series play an important role in the analysis of economic and monetary developments as they allow current or projected developments to be assessed in the light of historical patterns and relationships. Long time series on MFI loans to households and non-financial corporations for the euro area have now become available for the period since 1980.<sup>1</sup> This box describes how these historical data were constructed, as well as their main stylised facts.<sup>2</sup>

**Construction of the historical time series on MFI loans to households and non-financial corporations**

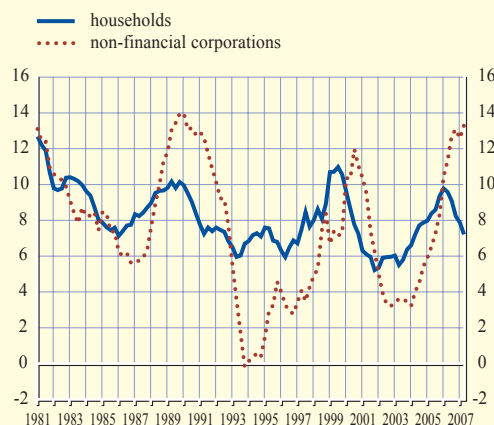
In accordance with Regulation ECB/2001/13, MFIs resident in the euro area have reported data on loans granted to households and non-financial corporations on a monthly basis since January 2003. On a quarterly basis, data had already been reported since the third quarter of 1997, based on an analogous statistical framework. The data collected include breakdowns by original

1 The series are available in the ECB’s Statistical Data Warehouse (<http://sdw.ecb.europa.eu/>).

2 The article entitled “Long-term developments in MFI loans to households in the euro area: main patterns and determinants” in this issue of the Monthly Bulletin details the historical regularities that can be derived from such long time series.

**Chart A MFI loans to households and non-financial corporations**

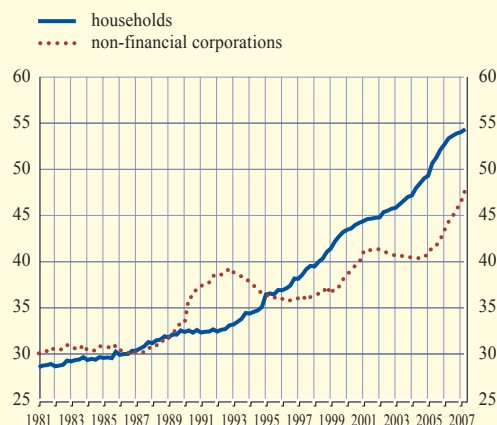
(annual percentage changes)



Source: ECB.

**Chart B MFI loan-to-GDP ratios for households and non-financial corporations**

(percentages)



Sources: ECB and Eurostat.

maturity for loans to non-financial corporations and by both original maturity and purpose for loans to households.

The ECB has now constructed quarterly euro area time series of loans to households and non-financial corporations going back to the first quarter of 1980. The historical series of loans to households are broken down further into consumer credit, loans for house purchase and other lending. The series for non-financial corporations are split between loans with an original maturity of up to one year and those with an original maturity of over one year. These historical euro area aggregates have been constructed on the basis of loan data that were collected by the NCBs of the Eurosystem before the harmonised framework of the ECB statistical regulations was established. There are some caveats to be aware of. In some cases, these national data were compiled on the basis of definitions of the borrower's sector and/or loan purpose which were not fully in line with those laid out in the subsequent ECB regulations. Consequently, when constructing the historical aggregates, the data available at the national level were reconciled as far as possible with the harmonised definitions, with recourse to estimations and assumptions wherever necessary.<sup>3</sup> Moreover, in a few cases, NCBs did not collect data for the whole historical period back to the first quarter of 1980. In those cases, the available data were grossed up to a euro area aggregate using simple univariate time-series models to replace the missing national contributions.<sup>4</sup>

### Stylised facts of longer-term developments in MFI loans to households and non-financial corporations

Chart A shows the annual growth rates of loans to households and non-financial corporations. The patterns of these growth rates are similar in the sense that there appear to have been three

<sup>3</sup> For instance, in some countries loans granted to non-profit institutions serving households (NPISH) for investment in dwellings were not collected until 1995 and could therefore not be included within "loans for house purchase", as required by the ECB statistical framework. In order to derive a consistent euro area growth rate for the series before 1995, it was assumed that residential investment loans to NPISH had grown in line with loans to households for house purchase in those countries for which data on the former had not been collected before 1995.

<sup>4</sup> The need to gross up should have little effect on the euro area figures obtained for the 1990s, as the missing national contributions represented only 4% of loans to the non-financial sectors in the euro area in 1997. Coverage for the 1980s was less complete, with actual NCB data representing between 80% and 85% of the total.

broad cyclical swings since 1980, with peaks in the late 1980s, in the late 1990s and in the mid-2000s. At present, however, it is not yet certain that the peak has been reached in the case of non-financial corporations. At the same time, the patterns differ somewhat in the sense that the amplitude of the cyclical movements has been clearly larger in the case of the growth in lending to non-financial corporations. This may to a large extent reflect the volatility of non-residential private investment compared with other components of aggregate demand. Another historical regularity discernable from the chart is that the turning points of the growth rate of loans to households have tended to lead those of loans to non-financial corporations.<sup>5</sup>

Chart A helps to put the recent strength in the growth of loans to the non-financial private sector into perspective. The increase in lending to non-financial corporations since the beginning of 2004 has led to a growth rate at the end of 2006 that was already higher than the previous peak in late 2000. Indeed, in mid-2007 the growth rate of lending to non-financial corporations reached levels that are only somewhat lower than that observed in the late 1980s.

This sustained growth of loans to both households and non-financial corporations – which has been positive over the past two and a half decades – has led to rising debt levels. Chart B shows that, in the case of households, the ratio of MFI loans to GDP has increased monotonically since the beginning of the 1980s. In the case of non-financial corporations, this ratio has been somewhat more cyclical, reflecting successive episodes of balance sheet leveraging and de-leveraging, albeit around an upward trend.

Overall, the new historical series on loans to euro area households and non-financial corporations provide the necessary statistical foundations for assessing current developments in the light of longer-term patterns. In this respect, they are an important addition to the information set from which the ECB's economic and monetary analyses draw.

<sup>5</sup> This confirms findings derived earlier on the basis of preliminary ECB estimates for sectoral loans, as presented in Box 6, entitled "The cyclical pattern of loans to households and non-financial corporations in the euro area", in the June 2007 issue of the Monthly Bulletin.

On the basis of the August data, it is premature to undertake a full assessment of the impact of recent financial market developments on the financing of non-financial corporations. On the one hand, the continued strong borrowing by non-financial corporations in August may be a sign of frontloading in anticipation of a possible deterioration of financing conditions. On the other hand, it cannot be ruled out that part of their strong borrowing also signals some difficulties that non-financial corporations may have in raising external financing via other channels. Moreover, given recent tensions in some segments of the credit market, these data are likely to reflect a slower pace of securitisation of bank loans and difficulties of offloading bridge loans initially granted in the context of leveraged buyout (LBO) transactions, which would otherwise – in the case of true-sale securitisation – have been shifted off the MFI's balance sheets. In any event, the MFI balance sheet data for August do not provide evidence of a curtailment of bank lending to the non-financial sectors. However, in this respect, the October 2007 bank lending survey for the euro area already points to a tightening of credit standards for loans to enterprises in the third quarter of 2007. (For details, see Box 2 entitled "The results of the October 2007 bank lending survey for the euro area"). Further information is required to assess the relative importance of these various effects.



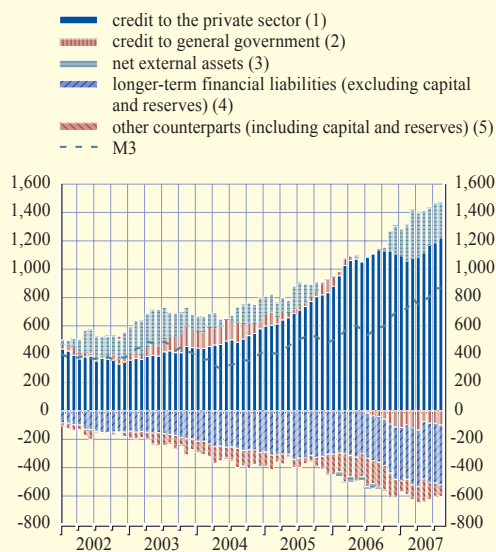
Among the other counterparts of M3, the annual growth rate of MFIs' longer-term financial liabilities (excluding capital and reserves) stood at 10.5% in August, after 10.6% in June and July. This reflected the ongoing strength of the annual growth rate of debt securities with a maturity of over two years, thus indicating a continuing willingness of money-holding sectors to purchase bank debt securities.

The monthly flow in the MFI net external asset position turned strongly negative in August, after the positive flow recorded in July. The August figure was the largest negative monthly flow recorded since early 2000. As a result, the annual flow in net external assets decreased to €247 billion in August, from €280 billion in July (see Chart 6).

Overall, the latest data (based on figures up to August 2007) confirm that the rises in key ECB interest rates since December 2005 have influenced monetary developments. They also confirm that underlying monetary dynamics remain strong. This assessment still holds when taking into account the effect that the flat yield curve has had on portfolio decisions in past quarters and the impact of the most recent financial market developments, and thus continues to point to upside risks to price stability over the medium to longer term.

**Chart 6 Counterparts of M3**

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



Source: ECB.  
Notes: M3 is shown for reference only ( $M3 = 1+2+3-4+5$ ). Longer-term financial liabilities (excluding capital and reserves) are shown with an inverted sign, since they are liabilities of the MFI sector.

**Box 2**

**THE RESULTS OF THE OCTOBER 2007 BANK LENDING SURVEY FOR THE EURO AREA**

This box describes the main results of the October 2007 bank lending survey for the euro area conducted by the Eurosystem.<sup>1</sup> Respondent banks reported that credit standards for loans to enterprises tightened in the third quarter of 2007, especially for large enterprises.<sup>2</sup> This followed a long period where standards remained basically unchanged or were eased slightly. The shift towards net tightening was in all likelihood a reflection of developments in global credit markets in recent weeks. This was confirmed by the replies to the ad hoc questions included in the October 2007 survey relating to recent credit market developments (see the last section of this box). As in previous quarters, banks reported that net demand for loans to enterprises was positive. However, it was considerably weaker in the third quarter of 2007 than in the recent

1 A comprehensive assessment of the results of the October 2007 bank lending survey for the euro area was published on 5 October 2007 on the ECB's website.  
2 The reported net percentage was 31%. The net percentage refers to the difference between the proportion of banks reporting that credit standards have been tightened and the proportion of banks reporting that they have been eased. A positive net percentage would indicate that banks have tended to tighten credit standards ("net tightening"), whereas a negative net percentage would indicate that banks have tended to ease credit standards ("net easing").

past.<sup>3</sup> The main factor contributing to loan demand in the third quarter was fixed investment, whereas net demand for loans to finance M&A activity and corporate restructuring declined significantly. For the fourth quarter of 2007, banks expect further tightening of credit standards applied to loans to enterprises, while net demand for loans to enterprises is expected to remain positive.

As regards loans to households for house purchase, banks reported a tightening of credit standards in the third quarter of 2007, following a slight net easing in the previous quarter. However, this tightening was much more limited than in the case of loans to enterprises. Net demand for loans to households for house purchase remained significantly negative in the third quarter of 2007 as a result of a deterioration in housing market prospects and worsening consumer confidence. For the fourth quarter of 2007, banks expect a further tightening of credit standards applied to loans for house purchase and a further deterioration in net demand for loans to households for house purchase.

With regard to credit standards for consumer credit and other lending to households, banks reported a slight net easing of credit standards in the third quarter of 2007, compared with basically unchanged standards in the previous quarter. Net demand for consumer credit and other lending remained slightly positive. Looking ahead, in the fourth quarter of 2007 banks expect to tighten credit standards on loans for consumer credit and other lending to households, whereas net demand is expected to remain unchanged.

### Loans or credit lines to enterprises

**Credit standards:** Reflecting the credit market developments affecting euro area banks over recent weeks, credit standards for loans or credit lines to enterprises tightened in net terms in the third quarter of 2007 (31%, compared with -3% in the previous quarter). This follows a long period where credit standards remained basically unchanged or were eased slightly (see Chart A, panel a). It may be noted that virtually all banks which tightened credit standards on loans to enterprises reported that they “tightened somewhat” rather than “tightened considerably”. For the first time since the introduction of the survey, competition from other banks contributed to a net tightening of credit standards (see Chart A, panel e). This may also be related to the fact that banks’ capital and liquidity position and their access to market funding deteriorated to some extent (see Chart A, panel b). A deterioration of banks’ perception of risks regarding general economic activity and the industry or firm-specific outlook likewise contributed to a net tightening (see Chart A, panels c and d).

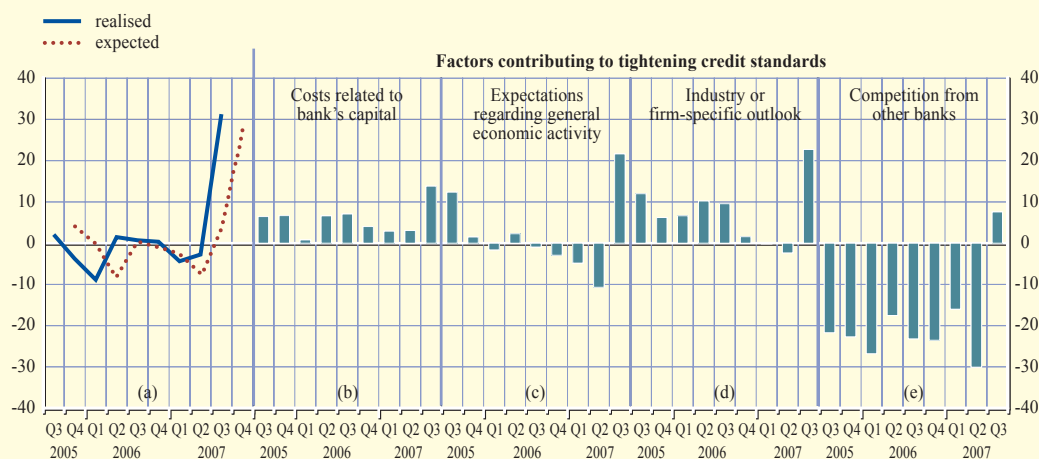
As regards the conditions and terms of credit, banks tightened credit standards by widening their margins on both average loans (11%, up from -19% in the previous quarter) and riskier loans (37%, up from 2% in the previous quarter). Other terms and conditions were also used in order to tighten credit standards in the third quarter of 2007. These included shortening the maturity of loans or credit lines, reducing the size of loans or credit lines, and demanding more loan covenants and collateral.

The net tightening of credit standards applied on loans to small and medium-sized enterprises (15%, up from -7% in the previous quarter) and, to a larger extent, to large enterprises (33%, up

<sup>3</sup> The term “net demand” refers to the difference between the proportion of banks reporting an increase in loan demand and the proportion of banks reporting a decline.

**Chart A Changes in credit standards applied to the approval of loans or credit lines to enterprises**

(net percentages)



Notes: The net percentage refers to the difference between the sum of the percentages for “tightened considerably” and “tightened somewhat” and the sum of the percentages for “eased somewhat” and “eased considerably”. “Realised” values refer to the period in which the survey was conducted. “Expected” values are the net percentages calculated from the responses given by the banks in the previous survey. For instance, “expected” values for 2007 Q4 were reported in the October 2007 survey. The net percentages for the questions related to the factors are defined as the difference between the percentage of banks reporting that the given factor contributed to a tightening and to an easing.

from -1% in the previous quarter). The particularly strong tightening of credit standards on loans to large enterprises could be related to a slowdown in M&A-related financing and a worsening of conditions with regard to securitisation and structured credit markets following the turmoil of recent weeks (see also the section on the ad hoc questions below). As regards loan maturities, the net tightening was somewhat more pronounced for long-term loans (30%, up from -4% in the previous survey) than for short-term loans (16%, up from -2% in the previous survey).

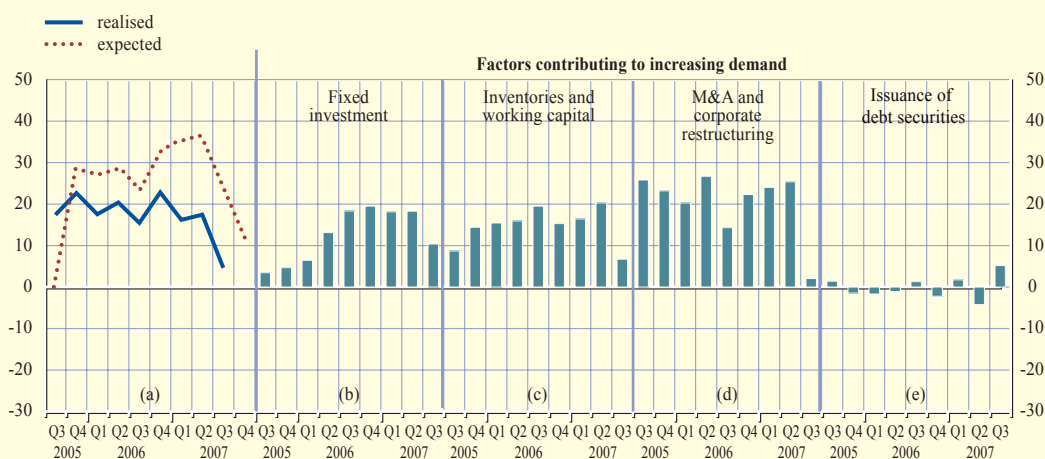
Looking ahead to the fourth quarter of 2007, banks expect a further net tightening of credit standards applied to loans to enterprises (see Chart A, panel a).

**Loan demand:** By comparison with the strong demand for corporate loans observed over the past couple of years, net demand for loans to enterprises slowed significantly in the third quarter of 2007, although it remained slightly positive (5%, compared with 18% in the previous round; see Chart B, panel a). The main reason that net demand remained positive was fixed investment, while financing for inventories and working capital, as well as for mergers and acquisitions and corporate restructuring, contributed to the slowdown in demand (see Chart B, panels c and d). Another notable factor contributing to positive loan demand (although to a relatively modest extent) was the issuance of debt securities, which may suggest that some firms have turned to banks, possibly owing to difficulties in tapping the corporate debt market for funding during the past few weeks. In terms of borrower size, net loan demand on the part of small and medium-sized enterprises continued to be stronger than that of large enterprises (6% and -1% respectively). Finally, net demand was positive across the maturity spectrum, with demand for long-term loans being somewhat stronger than that for short-term loans.

For the fourth quarter of 2007, demand for loans to enterprises is expected to remain positive, although less so than in the previous quarter (see Chart B, panel a). Specifically, banks expect

Chart B Changes in demand for loans or credit lines to enterprises

(net percentages of banks reporting a positive contribution to demand)



Notes: The net percentages for the questions on demand for loans are defined as the difference between the sum of the percentages for “increased considerably” and “increased somewhat” and the sum of the percentages for “decreased somewhat” and “decreased considerably”. “Realised” values refer to the period in which the survey was conducted. “Expected” values are the net percentages calculated from the responses given by the banks in the previous survey. For instance, “expected” values for 2007 Q3 were reported in the October 2007 survey.

corporate net demand to remain positive across all firm sizes and loan maturities in the fourth quarter of 2007.

### Loans to households for house purchase

**Credit standards:** In the third quarter of 2007, banks reported a net tightening of credit standards for housing loans to households, following a slight net easing in the previous quarter (12%, up from -1% in the previous survey round; see Chart C, panel a). The main factors behind the net tightening were some deterioration in banks’ balance sheet positions (see Chart C, panel d) and a worsening of both housing market prospects and expectations regarding general economic activity (see Chart C, panels b and c). Competition from other banks continued to contribute to a net easing, although less so than in previous quarters (see Chart C, panel e).

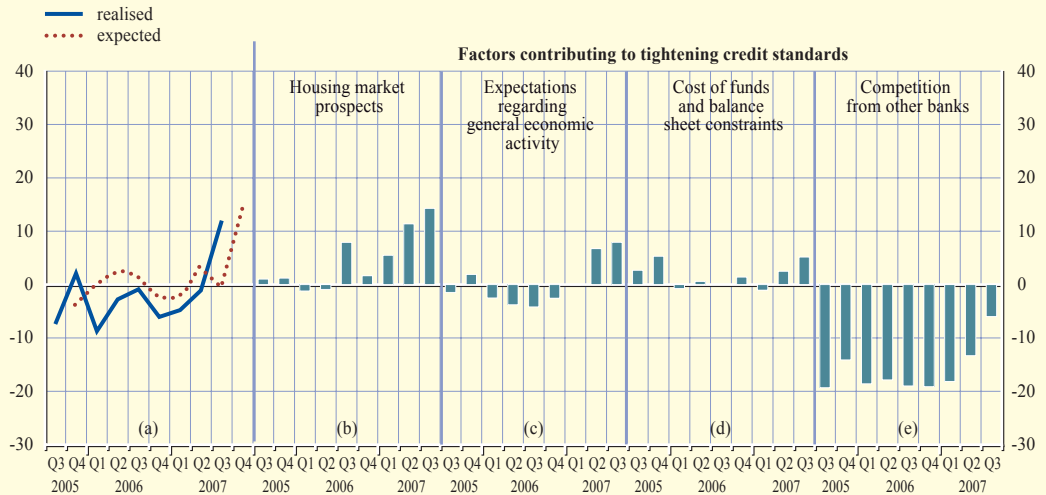
The net tightening of credit standards for loans for house purchase was implemented mainly by widening the margins on riskier loans and via higher collateral requirements and loan-to-value ratios. At the same time, margins on average loans continued to contribute to a net easing, but somewhat less than in previous quarters (-8%, up from -22% in the previous quarter).

For the fourth quarter of 2007, respondent banks expect a further net tightening of credit standards for loans to households for house purchase (see Chart C, panel a).

**Loan demand:** Net demand for loans to households for house purchase remained significantly negative in the third quarter of 2007 (at -15%, up from -22% in the previous quarter; see Chart D, panel a). This essentially reflected a less favourable assessment of housing market prospects and a worsening of consumer confidence, which dampened net demand more than in the previous quarter. It should also be noted that the bank lending survey does not directly

### Chart C Changes in credit standards applied to the approval of loans to households for house purchase

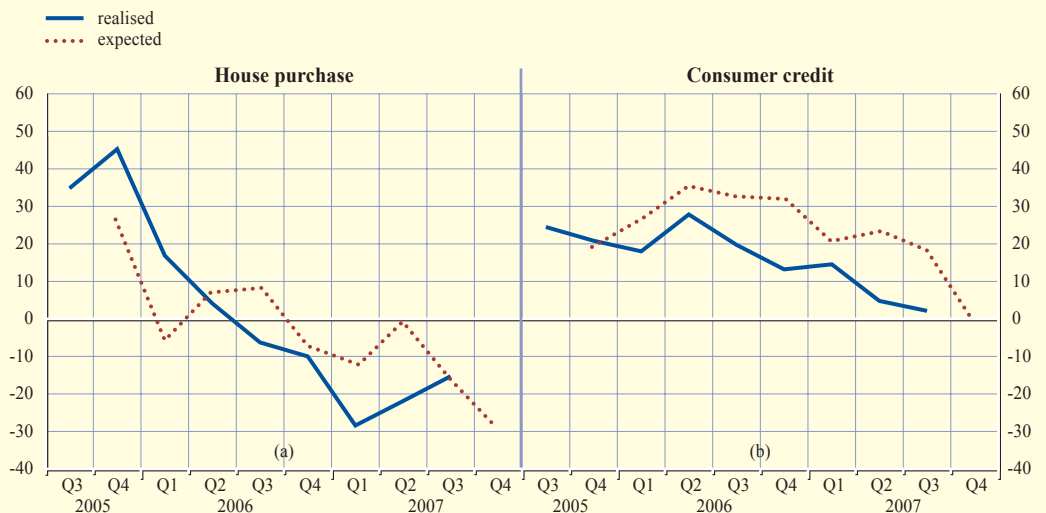
(net percentages of banks contributing to tightening credit standards)



Notes: The net percentage refers to the difference between the sum of the percentages for “tightened considerably” and “tightened somewhat” and the sum of the percentages for “eased somewhat” and “eased considerably”. “Realised” values refer to the period in which the survey was conducted. “Expected” values are the net percentages calculated from the responses given by the banks in the previous survey. For instance, “expected” values for 2007 Q4 were reported in the October 2007 survey. The net percentages for the questions related to the factors are defined as the difference between the percentage of banks reporting that the given factor contributed to a tightening and to an easing.

### Chart D Changes in demand for loans to households for house purchase and consumer credit

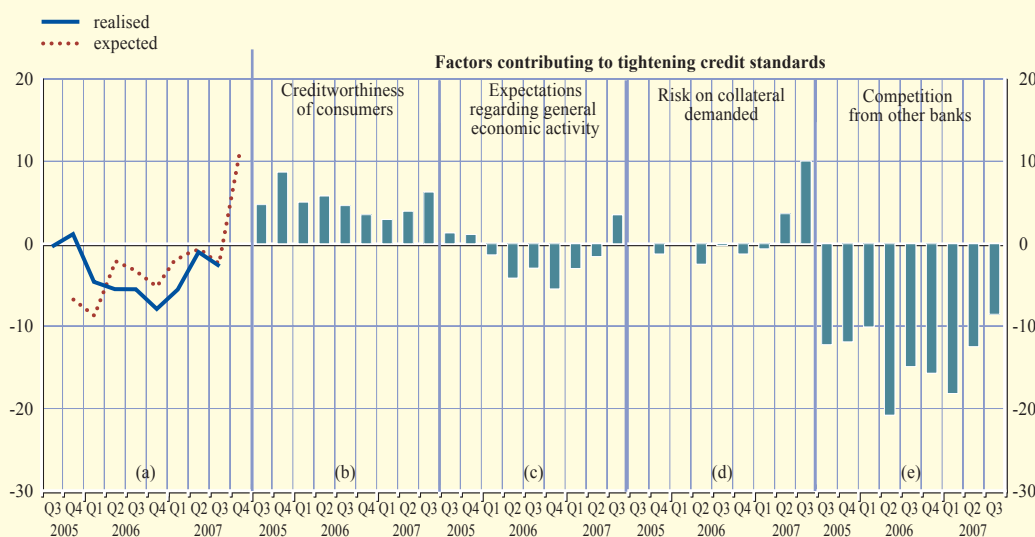
(net percentages of banks reporting a positive contribution to demand)



Notes: The net percentages for the questions on demand for loans are defined as the difference between the sum of the percentages for “increased considerably” and “increased somewhat” and the sum of the percentages for “decreased somewhat” and “decreased considerably”. “Realised” values refer to the period in which the survey was conducted. “Expected” values are the net percentages calculated from the responses given by the banks in the previous survey. For instance, “expected” values for 2007 Q3 were reported in the October 2007 survey.

**Chart E Changes in credit standards applied to the approval of consumer credit and other lending to households**

(net percentages of banks contributing to tightening credit standards)



Notes: The net percentage refers to the difference between the sum of the percentages for “tightened considerably” and “tightened somewhat” and the sum of the percentages for “eased somewhat” and “eased considerably”. “Realised” values refer to the period in which the survey was conducted. “Expected” values are the net percentages calculated from the responses given by the banks in the previous survey. For instance, “expected” values for 2007 Q4 were reported in the October 2007 survey. The net percentages for the questions related to the factors are defined as the difference between the percentage of banks reporting that the given factor contributed to a tightening and to an easing.

capture other factors affecting loan demand for house purchase, in particular the level of interest rates, which may be an additional driving force behind the decline in demand observed in recent quarters. Looking ahead to the fourth quarter of 2007, banks expect net demand to remain significantly negative (see Chart D, panel a).

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

**Credit standards:** In the third quarter of 2007, banks reported a slight net easing of the credit standards applied to the approval of loans to households for consumer credit and other lending, as compared with basically unchanged standards in the previous quarter (-3%, up from -1% in the previous round; see Chart E, panel a). Competition from other banks remained the main driver behind the net easing (see Chart E, panel e), whereas consumer creditworthiness and risk on collateral demanded, as well as less favourable expectations regarding the general economic outlook, were the main factors contributing to a tightening (see Chart E, panels b to d). The net easing was mainly implemented via the lengthening of loan maturities, whereas margins on average and riskier loans contributed to a tightening. For the fourth quarter of 2007, responding banks expect credit standards for consumer credit and other lending to households to tighten (11%, compared with -2% in the previous round; see Chart E, panel a).

**Loan demand:** Banks reported that net demand for consumer credit and other lending to households remained positive but basically unchanged in the third quarter of 2007 (2%, compared with 5% in the previous round; see Chart D, panel b). For the fourth quarter of 2007, banks expect net demand for loans to households for consumer credit and other lending to remain basically unchanged.



### Ad hoc questions on the recent credit market developments

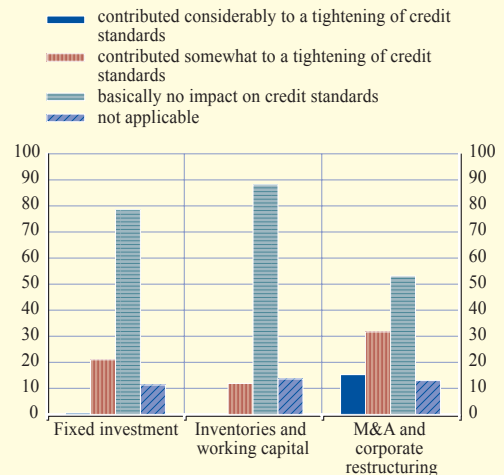
For the second time, the survey included a set of ad hoc questions. The questions added this time aim to gauge the extent to which the tensions in US sub-prime mortgage-related bonds and their spillover into structured credit markets in August 2007 – which have led to a more cautious valuation of credit risk worldwide – have affected banks' credit standards for loans and credit lines to enterprises and loans to households in the euro area. The questions focus first on the impact on credit standards and then on access to wholesale funding.

Consistent with the regular questions in the survey, the ad hoc questions suggest that the impact of credit events has differed depending on the loan segment. Loans and credit lines to enterprises were more affected than loans to households. In particular, credit standards for loans and credit lines to large enterprises were tightened somewhat, as reported by around one-third of the responding banks. Credit standards for loans and credit lines to small and medium-sized enterprises were also tightened somewhat, and by more than those for loans to households for house purchase or for consumption and other purposes.

In the past three months banks have tightened credit standards for loans to enterprises, in particular with respect to loans related to M&As and corporate restructuring (see Chart F). Moreover, banks expect credit market tensions to have a somewhat greater effect on credit standards over the next three months than has been seen over the past three months.

Banks generally reported that the recent tensions in the credit markets have hampered access to wholesale funding over the past three months.<sup>4</sup> In particular, securitisation activities have been hampered for the selling of loans for house purchase and corporate loans. Banks also experienced difficulties in accessing wholesale funds through the interbank money market. It should be noted that banks had difficulties in raising funds through both medium to long-term bonds and short-term debt securities over the past three months. Wholesale funding market access is not expected to become easier over the next three months, although the picture varies somewhat by funding source (see Chart G). Access to interbank and debt securities markets is expected to continue to be hampered over the next three months, with only a slight improvement (i.e. a reduction in the percentage of banks responding “considerably hampered”, and a corresponding increase in the percentage of banks responding “somewhat hampered”). By

**Chart F Effect of the recent credit market events on banks' credit standards for the approval of loans and credit lines to enterprises over the past three months (percentages of banks)**

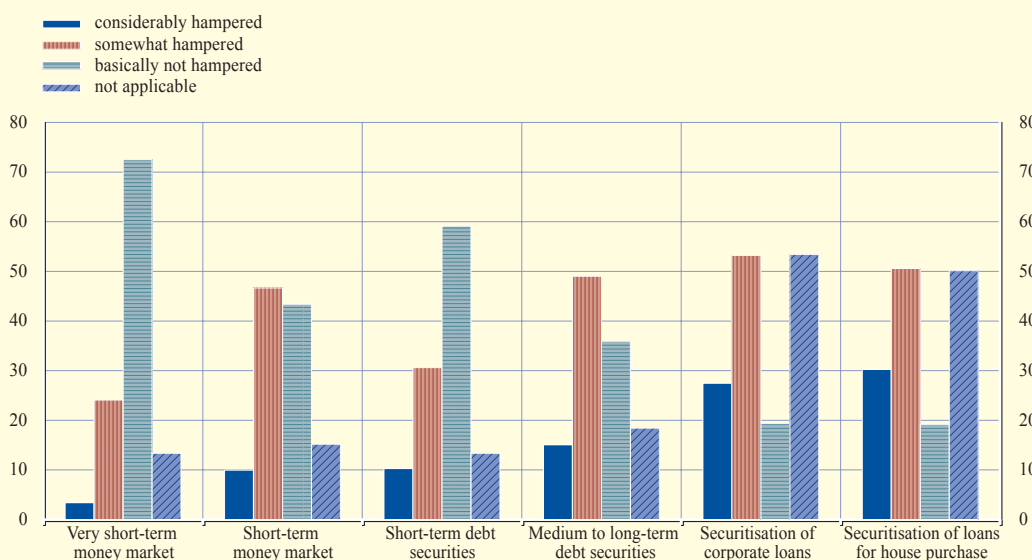


Note: The column “not applicable” is calculated as the number of banks replying “not applicable” as a percentage of the total number of banks participating in the survey. All the other columns are calculated as the number of banks choosing a particular reply as a percentage of the number of banks not replying “not applicable”. Euro area figures are weighted averages of country results.

<sup>4</sup> It should be noted that not all the funding methods are relevant for the banks in the various euro area countries.

Chart G Expected access to wholesale funding over the next three months

(percentages of banks)



Note: The column “not applicable” is calculated as the number of banks replying “not applicable” as a percentage of the total number of banks participating in the survey. All the other columns are calculated as the number of banks choosing a particular reply as a percentage of the number of banks not replying “not applicable”. Euro area figures are weighted averages of country results.

contrast, securitisation of corporate loans is expected to become somewhat more difficult over the next three months by comparison with the last three months.

Difficulties in accessing wholesale funding over the next three months are also expected to exert some impact on the amounts that those banks are willing to lend and/or the margin at which funds are lent over the next three months. Banks’ willingness to lend over the next three months may, to some extent, be further affected by the effect of the credit events on costs related to the banks’ capital positions.

## 2.2 SECURITIES ISSUANCE

*In July 2007 the growth rate of debt securities issued by euro area residents remained unchanged at the robust rate observed in the previous month. This reflected increases in the annual growth rates of debt securities issued by MFIs, non-monetary financial institutions and non-financial corporations, while the debt issuance activity of the general government sector moderated. Issuance of quoted shares increased slightly, although it remained relatively subdued compared with debt issuance.*

### DEBT SECURITIES

The annual growth rate of debt securities issued by euro area residents was 9.0% in July 2007, unchanged from June (see Table 3). As regards the maturity structure of debt securities issuance,

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

Issuing sector	Amount outstanding (EUR billions) 2007 July	Annual growth rates <sup>1)</sup>					
		2006 Q3	2006 Q4	2007 Q1	2007 Q2	2007 June	2007 July
<b>Debt securities:</b>	<b>11,811</b>	<b>7.0</b>	<b>7.9</b>	<b>8.0</b>	<b>8.7</b>	<b>9.0</b>	<b>9.0</b>
MFIs	4,905	8.4	9.8	10.5	10.6	10.7	10.8
Non-monetary financial corporations	1,319	26.0	28.2	26.4	27.1	26.2	27.2
Non-financial corporations	702	4.2	4.8	5.6	7.0	8.8	10.2
General government	4,884	2.8	2.8	2.4	3.2	3.8	3.3
<i>of which:</i>							
Central government	4,577	2.3	2.4	2.1	3.1	3.8	3.3
Other general government	307	11.8	9.1	6.8	5.8	3.4	2.6
<b>Quoted shares:</b>	<b>6,640</b>	<b>1.2</b>	<b>1.1</b>	<b>1.1</b>	<b>1.2</b>	<b>1.4</b>	<b>1.5</b>
MFIs	1,081	1.8	2.0	2.3	1.8	1.8	1.4
Non-monetary financial corporations	607	1.5	1.1	1.0	1.5	1.6	1.5
Non-financial corporations	4,951	1.1	0.8	0.8	1.0	1.3	1.5

Source: ECB.

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

the annual growth rate of short-term securities issuance increased to 12.8% in July, from 11.7% in the previous month, while that of long-term securities issuance moderated slightly, declining from 8.7% to 8.6%. The annual rate of growth of long-term floating rate securities was again – at 16.0% – significantly higher than that of long-term fixed rate securities, which stood at 5.4% in July. This might reflect continued relatively high demand for floating rate securities in an environment characterised by a relatively flat yield curve.

The annual growth rate of debt securities issued by non-financial corporations increased to 10.2% in July (see Chart 7), moving closer to the rates of growth observed for debt securities issued by MFIs. The increase is linked to a base effect related to the very low net issuance activity observed in July 2006 and non-financial corporations' somewhat elevated net issuance of short-term debt securities in July 2007. In fact, in terms of the maturity structure, in July 2007 the annual growth rate of debt securities issued by non-financial corporations increased to 7.3% in the case of long-term securities, up from 7.0% in the previous month, while the annual growth rate of short-term securities recorded a further sharp increase to 25.2%, up from 18.6% in June.

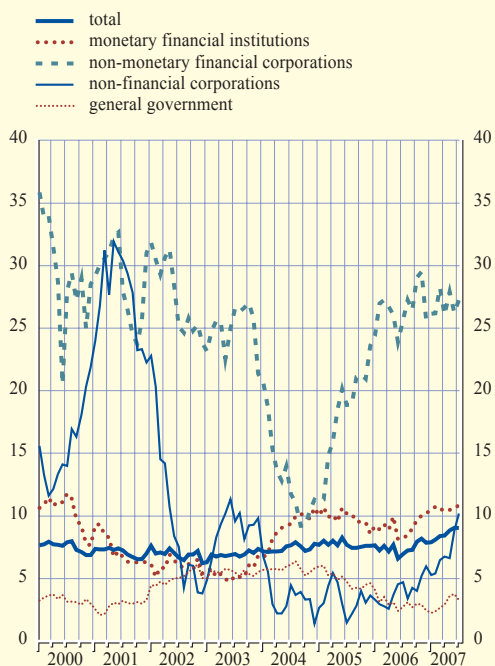
In July 2007 the annual growth rate of debt securities issued by MFIs remained robust at 10.8%, signalling that banks are continuing to raise funds to meet the considerable demand arising from the strong growth of loans to non-financial corporations. This can be attributed mainly to the robust annual growth rate of MFIs' issuance of short-term securities, which reached 14.4% in July, while the growth rate of MFIs' issuance of long-term securities moderated slightly, falling from 10.5% in June to 10.3% in July.

The annual growth rate of debt securities issued by non-monetary financial corporations increased further to 27.2% in July, standing at a significantly higher level than those of the other sectors. Most of the issuance activity of this sector was probably related to banks' securitisation activities and the funding of private equity funds.

The annual growth rate of debt securities issued by the general government sector moderated to 3.3% in July, from 3.8% in June. The growth rate of debt securities issued by the central government

**Chart 7 Sectoral breakdown of debt securities issued by euro area residents**

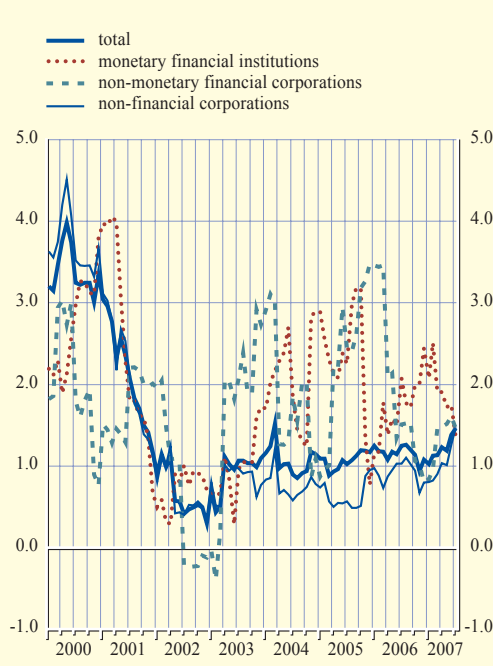
(annual growth rates)



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

**Chart 8 Sectoral breakdown of quoted shares issued by euro area residents**

(annual growth rates)



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

sector also slowed to 3.3% in July, from 3.8% in June, and the annual growth rate of the issuance activity of the other general government sector declined from 3.4% in June to 2.6% in July.

### QUOTED SHARES

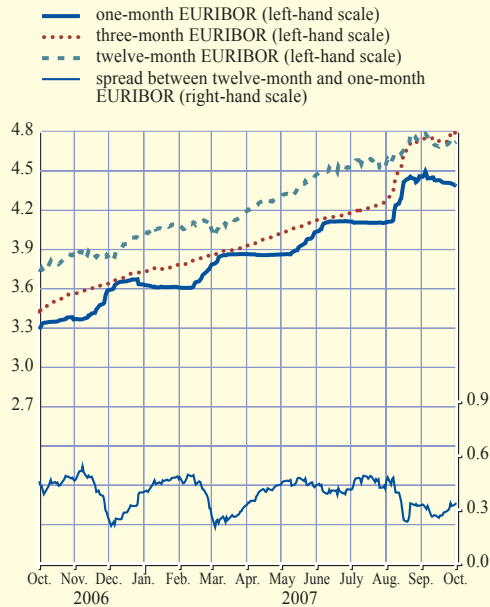
The annual growth rate of quoted shares issued by euro area residents increased slightly to 1.5% in July, up from 1.4% in June (see Table 3). The annual growth rate of quoted shares issued by MFIs moderated slightly, falling to 1.4%, which was similar to the growth rates observed across other sectors (see Chart 8). The annual growth rate of quoted shares issued by non-monetary financial institutions moderated slightly, falling from 1.6% in June to 1.5% in July, and that of quoted shares issued by non-financial corporations increased to 1.5% in July, up from 1.3% in the previous month.

### 2.3 MONEY MARKET INTEREST RATES

*The unusually marked spread between secured and unsecured money market interest rates at maturities beyond the very short term persisted in September. At the same time, the slope of the money market yield curve remained broadly unchanged, with the spread between comparable twelve-month and one-month money market interest rates broadly stable at around 30 basis points.*

**Chart 9 Money market interest rates**

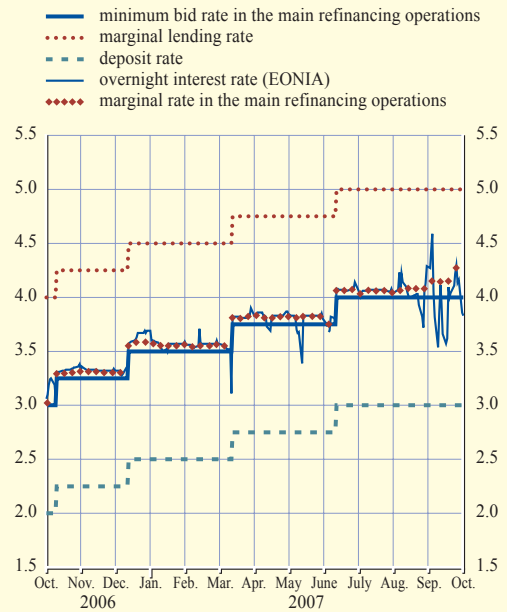
(percentages per annum; daily data)



Sources: ECB and Reuters.

**Chart 10 ECB interest rates and the overnight interest rate**

(percentages per annum; daily data)



Sources: ECB and Reuters.

In September the spread between secured and unsecured interbank interest rates at maturities beyond the very short term remained elevated, reflecting continued tensions in the longer maturities of the money market. The spread between the unsecured EURIBOR and secured rates (for example, the EUREPO, an index for private sector repurchase agreements) rose significantly against the background of the market turbulence in August. These spreads remained at elevated levels throughout September, with the spread between the three-month EURIBOR and the three-month EUREPO standing at 74 basis points on 2 October, somewhat higher than the level observed at the end of August on account of the usual end-of-year effect.

In the course of September, the three-month EURIBOR rose by 10 basis points to 4.74% on 2 October. The EURIBOR at one, six and twelve-month maturities remained broadly unchanged, standing at 4.38%, 4.75% and 4.72% respectively on 2 October 2007. As a consequence, the slope of the money market yield curve was relatively stable in the period under review, with the spread between the twelve-month and the one-month EURIBOR increasing only slightly from 33 basis points at the beginning of September to 34 basis points on 2 October 2007 (see Chart 9).

The interest rates implied by the prices of three-month EURIBOR futures maturing in December 2007, March 2008 and June 2008 stood at 4.63%, 4.36% and 4.25% respectively on 2 October. Compared with the levels observed at the beginning of September, the interest rate implied by the December 2007 contract rose by 10 basis points, while the rates implied by the March 2008 and June 2008 contracts decreased by 2 and 7 basis points respectively.

In early September the EONIA drifted up to reach a level of 4.588% on 4 September as market participants perceived prevailing liquidity conditions to be tight (see Chart 10).<sup>1</sup> On 6 September the Governing Council decided to keep the key ECB interest rates unchanged, with the minimum bid rate in the Eurosystem's main refinancing operations remaining at 4.00%. Also on 6 September, the EONIA reversed its upward trend, largely as a result of a liquidity-providing fine-tuning operation that injected an additional €42.2 billion into the market. Given the liquidity situation anticipated by the ECB for the end of the maintenance period, a liquidity-absorbing fine-tuning operation was launched on 11 September, the last day of the maintenance period, through which the ECB absorbed €60 billion; the EONIA was set at 3.865%. In the first week of the new maintenance period ending on 9 October, the EONIA fell to 3.573% on 17 September, after the ECB had conducted a supplementary longer-term refinancing operation (LTRO) of €75 billion on 13 September. After 25 September, the EONIA rose on account of the usual end-of-quarter effect to stand at 4.162% on 28 September, thereafter falling to below 4% as a result of loose liquidity conditions.

In the Eurosystem's regular weekly main refinancing operations on 11 and 18 September, the ECB allotted €10 and €36 billion more than the respective benchmark amounts. The resulting marginal rates were set at 4.15% and 4.14% respectively. In the third main refinancing operation on 25 September, the ECB allotted €33 billion more than the benchmark amount and the marginal rate was set higher at 4.27%, due to the end-of-quarter effect. In the last operation on 2 October, the ECB allotted €7.5 billion above the benchmark amount, resulting in a marginal rate of 4.14%.

In the supplementary longer-term refinancing operation conducted by the Eurosystem on 13 September 2007, the ECB allotted €75 billion, which resulted in marginal and weighted average rates of 4.35% and 4.52% respectively. In the Eurosystem's regular longer-term refinancing operation (conducted according to the usual LTRO procedure, with a fixed allotment amount of €50 billion) on 26 September 2007, the marginal and weighted average rates were set at 4.50% and 4.63% respectively. The marginal rates in the two operations were 40 and 22 basis points lower respectively than the three-month EURIBOR prevailing on the respective dates.

## 2.4 BOND MARKETS

*The decline in euro area and US long-term government bond yields in July and August came to a halt in September. At the same time, implied bond market volatility abated somewhat in most major markets as the impact of financial tensions gradually subsided in many – although not all – financial market segments.*

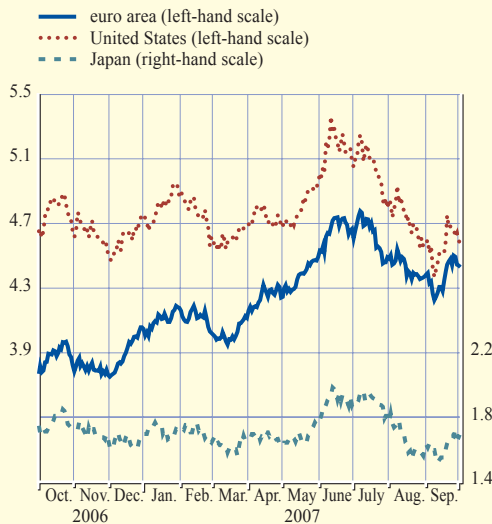
After the high levels of volatility observed in July and August, bond markets stabilised somewhat in September and early October as the first signs of a normalisation started to be seen (even in the credit markets, the epicentre of the financial tensions), which seemed to lift investors' general attitude towards risk. Ten-year government bond yields in the euro area increased slightly, by around 5 basis points, between end-August and 2 October 2007, to stand at 4.4% on the latter date (see Chart 11). Bond yields in the United States remained broadly unchanged over the same period and stood at 4.6% on 2 October. As a result, the differential between US long-term bond yields and comparable euro area yields changed little over the review period. In Japan, ten-year government bond yields increased somewhat compared with end-August, standing at around 1.7%

<sup>1</sup> Since 1 September the EONIA has been calculated to three decimal places.



Chart 11 Long-term government bond yields

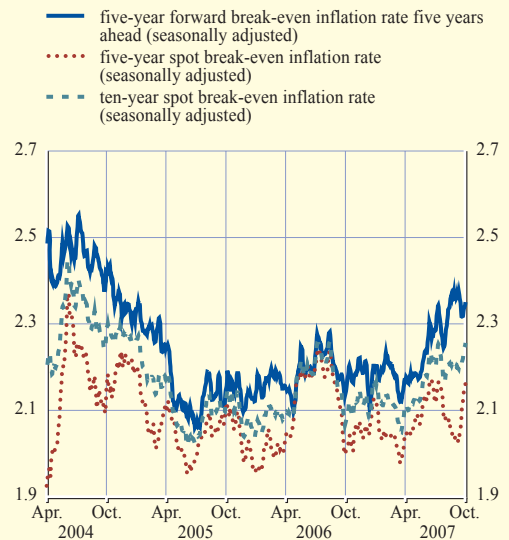
(percentages per annum; daily data)



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

Chart 12 Zero-coupon spot and forward break-even inflation rates

(percentages per annum; five-day moving averages of daily data)



Sources: Reuters and ECB calculations.

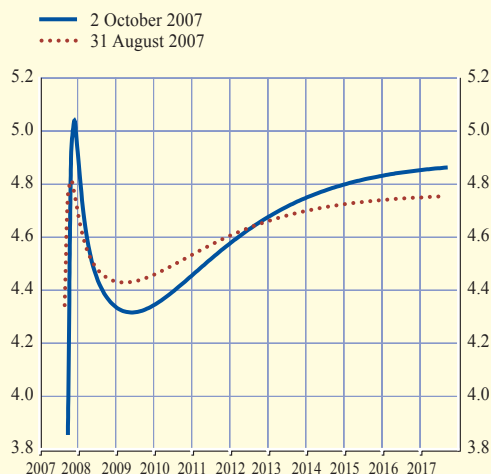
on 2 October. Market participants' uncertainty regarding short-term bond market developments, as measured by implied volatility extracted from options, declined at least slightly in the three major markets.

In the United States, developments in the long-term government bond markets appear, to some extent, to be driven by a rebound in bond market risk premia following the strong declines observed during the initial stages of the financial tensions. Those declines were linked to a partial reversal of the flight-to-safety portfolio shifts observed over the previous two months. On 18 September the FOMC decided to lower its target for the federal funds rate by 50 basis points to 4.75%. As a result of the decision, short to medium-term monetary policy rate expectations were revised downwards. US long-term bond yield developments in September might also be related to slightly higher longer-term inflation expectations, as reflected in US break-even inflation rates. Working in the opposite direction, less favourable housing market, labour market and business confidence indicators released over the review period probably dampened the upward pressure on US bond yields.

In the euro area, long-term nominal government bond yields generally followed the trend developments in the global markets, and increased somewhat over the course of the review period. It should, however, be noted that euro area bond yields have not fully recovered from the declines observed earlier this summer following the outbreak of the credit tensions. The increases in euro area long-term nominal interest rates were accompanied by marginally higher long-term index-linked bond yields. This supports the view that market participants, despite the financial market tensions, continue to consider the outlook for economic activity in the euro area to be relatively favourable.

**Chart 13 Implied forward euro area overnight interest rates**

(percentages per annum; daily data)

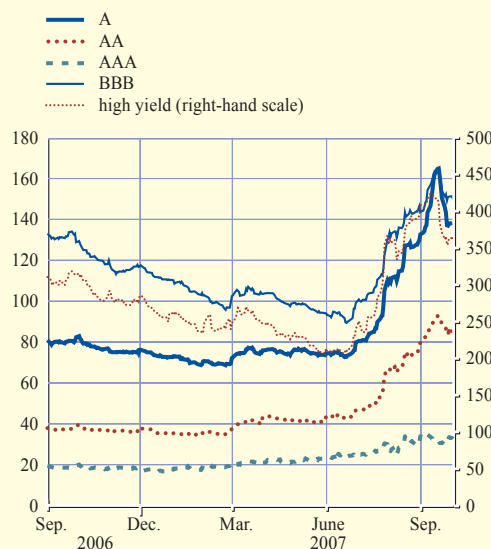


Sources: ECB estimates and Reuters.

Notes: The implied forward yield curve, which is derived from the term structure of interest rates observed in the market, reflects market expectations of future levels for short-term interest rates. The method used to calculate these implied forward yield curves was outlined in Box 4 of the January 1999 issue of the Monthly Bulletin. The data used in the estimate are zero coupon swap rates.

**Chart 14 Corporate bond spreads in the euro area**

(in basis points; daily data)



Sources: Thomson Financial Datastream 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 as provided by Merrill Lynch.

Long-term break-even inflation rates remained broadly unchanged in the period under review. For instance, the five-year forward break-even inflation rate five years ahead, a measure of only long-term inflation expectations and related risk premia, remained virtually unchanged throughout and stood at a level of around 2.35% on 2 October (see Chart 12). However, given that the financial market environment remains relatively volatile, any interpretation of market participants' inflation outlook on the basis of bond markets should be regarded with more caution than usual.

The implied forward overnight interest rate curve in the euro area experienced an upward shift at longer horizons between the end of August and early October 2007 (see Chart 13). The upward shift in implied forward rates at longer maturities probably reflects a rebound in corresponding risk premia. On 6 September the ECB's decision to keep its key interest rates unchanged was widely anticipated by market participants and had little effect on expectations regarding short-term interest rates.

Financing costs in the euro area corporate bond market increased somewhat in September for most firms, as reflected, for instance, by a 15 basis point increase in the yields offered on bonds issued by BBB-rated companies. Similarly, the relative cost of BBB-rated corporate bond financing, as measured by the differential vis-à-vis comparable government bond yields, also edged higher, increasing by around 10 basis points over the same period. It should, however, be noted that the recent increases in corporate bond spreads are much smaller than those witnessed in July and August (see Chart 14). Finally, in early October corporate bond spreads for all credit ratings stood at levels not too far from their historical averages since 1999. This fact tends to support the view that the general repricing of credit risk in the context of the financial market turmoil has not been excessive to date (see Box 3).

### Box 3

#### THE RECENT REPRICING OF CREDIT RISK

What started in mid-June as intensified concerns about losses in the US sub-prime mortgage market later developed into widespread financial tensions, bringing about a general reassessment of financial market risks (in particular credit and liquidity risk) and a reduced appetite for risk among investors across the globe. The general repricing of credit risk can be gauged by developments in the corporate bond and credit derivatives markets, where spreads have widened markedly across the whole rating spectrum (see Chart 14 in the main text). The general character of the repricing of credit risk notwithstanding, the financial tensions have affected financial institutions more than non-financial corporations. This box provides some evidence on the differences between financial and non-financial corporations in the euro area as regards the impact of the turmoil. It also assesses the recent repricing of credit risk, mainly in the non-financial corporate sector, from the perspective of an econometric model based on BBB-rated bonds as a representative example.

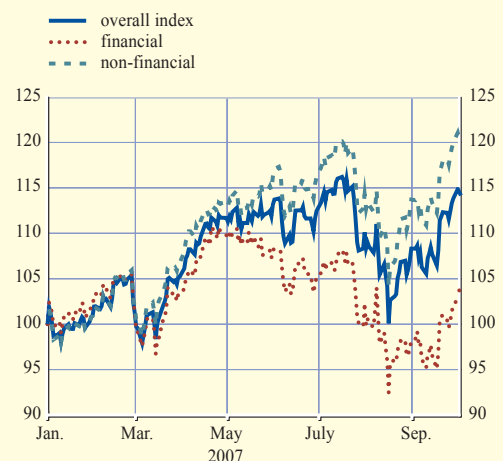
#### Developments in non-financial and financial corporate bond spreads

Corporate bond spreads for most of 2005 and 2006 were in a tightening trend, albeit with some small interruptions in the spring of both years. The extremely low levels reached by credit spreads at the lower end of the rating spectrum in particular were one manifestation of the general environment of unusually low pricing and perceptions of both financial and economic risks. However, between the end of June and 2 October 2007 bond spreads for BBB-rated non-financial corporations increased by around 40 basis points to stand at 100 basis points. For the same rating class, spreads for financial corporations increased by almost 90 basis points over the same period to stand at a level of 195 basis points. A similar message emerges from sectoral stock prices, with the financial sector recording losses of 1.5% over that period, while the broad market index increased by around 2% (see Chart A). The stock price index for the non-financial sector increased by around 3.5%.

The underperformance of the financial sector reflects the changes in market participants' perceptions of the credit risk faced by financial institutions (including banks). This reflects the fact that financial institutions have the greatest exposure to those market segments which are at the epicentre of the turmoil, namely asset-backed securities and structured finance in general. These have suffered the most from declines in asset values and the drying up of market liquidity and activity. Market perceptions of the earnings and credit outlook for financial corporations have therefore deteriorated in the face of these difficulties.

Chart A Sectoral stock prices in the euro area

(1 January 2007 = 100)



Sources: Thomson Financial Datastream and ECB calculations.

### An econometric model explaining corporate bond spreads

In order to gauge the extent to which corporate bond spreads might have been mispriced before and after the outbreak of the turmoil, one needs a “benchmark” that links credit spreads to corporate bond determinants. To this end, this box reports results from an econometric model based on the cointegration methodology, which explain BBB-rated corporate bond spreads in the euro area using a few variables representing factors suggested in the literature.<sup>1,2</sup>

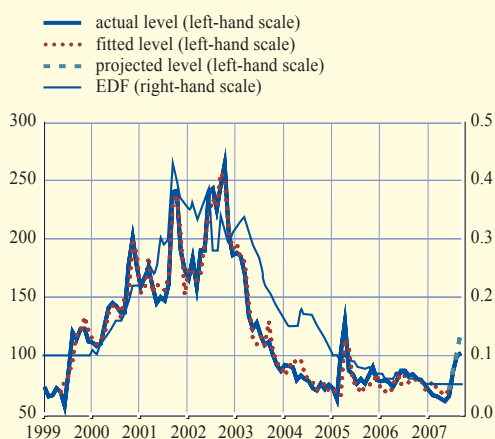
The model suggests that corporate bond spreads share a long-term equilibrium relationship with several explanatory variables intended to capture, directly or indirectly, changes in default risk, the business and interest rate cycles, and the market’s perceptions of financial risks. More precisely, the model incorporates expected default frequencies (Moody’s KMV EDFs), the business sentiment indicator Ifo, the three-month EURIBOR and implied stock market volatility as measured by the VSTOXX index. Evidencing this long-term equilibrium relationship, the one-month lagged equilibrium error drives current changes in corporate bond spreads in a statistically and economically significant manner, such that the equilibrium error tends to correct itself over time.

1 See, for example, Merton, R. C. (1974), “On the pricing of corporate debt: the risk structure of interest rates”, *Journal of Finance* 29, 449-470; and Collin-Dufresne, P., R. Goldstein and S. Martin (2001), “The determinants of credit spread changes”, *Journal of Finance* 56, 2177-2207.

2 Credit spreads are measured as the yield differential between the Merrill Lynch yield index for financial and non-financial bonds and comparable government bond yields. Monthly credit spread changes are constructed at the end of the month, when the indices are rebalanced in the event that a company has left or joined the index. Option-adjusted spreads (OASs) are used. The OAS is a measure of the amount of optionality priced into a callable or puttable bond. These spreads are purged of any embedded options, coupon effects or index rebalancing effects.

**Chart B Actual and fitted values for the spreads of BBB-rated non-financial corporate bonds**

(end-of-month data; spreads in basis points and EDFs in percentages)



Sources: Bloomberg and ECB calculations.  
Note: The last three observations for the fitted level refer to the conditional forecasted values for the last three months of the sample (July to September 2007).

**Chart C Error correction term from the long-term relationship for the spreads of BBB-rated non-financial corporate bonds**

(end-of-month data; basis points)



Source: ECB calculations.

Chart B plots the actual BBB-rated bond spread for non-financial corporations together with the fitted values from the full error-correction model, in which these values are shown only up until June 2007, the last month for which the default data are available. For the period July to September the chart also shows projected spread levels, assuming that the expected default frequency rate subsequently remains at its June level. As judged by the model fit, the four determinants tend to explain the corporate bond spreads relatively well.

The recent turmoil has caused a marked increase in the corporate bond spread, to levels more in line with their average levels observed since 1999. However, the fact that this spread increase can, to a large extent, be captured by the model seems to suggest that it may be part of a general correction or “normalisation” of credit spreads following the historically low levels observed in 2006. In particular, the model suggests that in the first half of 2007 the spread for non-financial corporations was lower – although only modestly so – than could be expected on the basis of its determinants (see again Chart B). The same message is presented in Chart C, which shows the long-run equilibrium relationship between the spread and its determinants. However, it should be noted that, according to the model, the recent spread widening mainly reflected the significant increases in stock market volatility and the short-term interest rate. The proxy for economic activity, the Ifo, played only a minor role in the spread increase, and there is no evidence thus far that default rates increased from their extremely low levels, which might also reflect previous conditions of ample credit availability. Hence, unless corporate bond defaults also correct upwards towards historical averages some time in the future in a maturing credit cycle, the observed correction in the BBB-spread for non-financial corporate bonds might not be fully sustained if the turmoil were to abate, with stock market volatility and money market rates declining accordingly.

In principle, the same pattern of behaviour and interpretations also applies to the spreads for financial corporations. This notwithstanding, corporate bond spreads for the financial sector seem to have overshot in a more significant manner the values suggested by a similar econometric model. This could reflect higher premia being demanded by investors on the basis of the high level of uncertainty surrounding the soundness of the sector. Alternatively, the overshooting could also reflect an overreaction by investors, which could unwind in the absence of further adverse shocks to market sentiment.

All in all, the findings of the econometric models seem to suggest that the recent widening of credit spreads mainly reflects a correction of the compensation required for anticipated financial rather than macroeconomic risks. Moreover, the increases in corporate bond spreads for non-financial corporations are more moderate and broadly consistent with a “normalisation” of spreads from the historical low levels reached previously. By contrast, the increases in spreads for financial entities have been stronger and could reflect a more pessimistic view on the part of investors regarding profitability in the overall financial sector in the context of the current prevailing market tensions. As the models rely on data collected for the period after the introduction of the euro in January 1999, they are estimated on the basis of a rather small sample and may, therefore, be subject to some instability and uncertainty. Caution is therefore warranted when interpreting the results derived from these models.

## 2.5 INTEREST RATES ON LOANS AND DEPOSITS

*In July 2007 most MFI interest rates continued their upward trend. Long-term interest rates on deposits of households and non-financial corporations increased by around 30 basis points in July as compared with the previous month.*

In July 2007 short-term MFI interest rates on deposits and loans either remained unchanged or increased, depending on the maturity, while the three-month money market rate increased by 7 basis points (see Table 4 and Chart 15). The only exception was short-term interest rates on loans to households for consumption purposes, which declined by 8 basis points between June and July 2007. Interest rates on loans to households for house purchase with a floating rate and initial rate fixation of up to one year increased by 8 basis points. At the same time, MFI interest rates on loans to non-financial corporations with a floating rate and an initial rate fixation period of up to one year increased by 6 basis points for loans of up to €1 million and remained almost unchanged for loans of over €1 million. In addition, bank rates on deposits by households and

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

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

							Change in basis points up to July 2007 <sup>2)</sup>		
	2006 Q2	2006 Q3	2006 Q4	2007 Q1	2007 June	2007 July	2006 Dec.	2007 Mar.	2007 June
<b>MFI interest rates on deposits</b>									
Deposits from households									
with an agreed maturity of up to one year	2.56	2.87	3.27	3.51	3.77	3.85	58	34	8
with an agreed maturity of over two years	2.57	2.68	2.84	2.71	2.73	3.00	16	29	27
redeemable at notice of up to three months	2.03	2.26	2.37	2.38	2.41	2.44	7	6	3
redeemable at notice of over three months	2.52	2.68	2.86	3.14	3.31	3.39	53	25	8
Overnight deposits from non-financial corporations	1.23	1.36	1.53	1.72	1.79	1.82	29	10	3
Deposits from non-financial corporations									
with an agreed maturity of up to one year	2.70	2.98	3.47	3.67	3.93	4.01	54	34	8
with an agreed maturity of over two years	3.23	3.70	4.04	3.61	4.09	4.41	37	80	32
<b>MFI interest rates on loans</b>									
Loans to households for consumption									
with a floating rate and an initial rate fixation of up to one year	7.08	7.79	7.60	7.69	8.09	8.01	41	32	-8
Loans to households for house purchase									
with a floating rate and an initial rate fixation of up to one year	4.02	4.31	4.55	4.78	4.99	5.07	52	29	8
with an initial rate fixation of over five and up to ten years	4.51	4.63	4.55	4.69	4.89	5.01	46	32	12
Bank overdrafts to non-financial corporations	5.46	5.69	5.80	6.06	6.18	6.31	51	25	13
Loans to non-financial corporations of up to €1 million									
with a floating rate and an initial rate fixation of up to one year	4.47	4.74	5.08	5.29	5.53	5.59	51	30	6
with an initial rate fixation of over five years	4.40	4.59	4.67	4.83	5.00	5.08	41	25	8
Loans to non-financial corporations of over €1 million									
with a floating rate and an initial rate fixation of up to one year	3.74	4.03	4.50	4.67	4.88	4.90	40	23	2
with an initial rate fixation of over five years	4.26	4.48	4.63	4.86	5.17	5.18	55	32	1
<b>Memo items</b>									
Three-month money market interest rate	2.99	3.34	3.68	3.89	4.15	4.22	54	33	7
Two-year government bond yield	3.47	3.62	3.79	3.94	4.45	4.48	69	54	3
Five-year government bond yield	3.78	3.70	3.83	3.95	4.57	4.55	72	60	-2

Source: ECB.

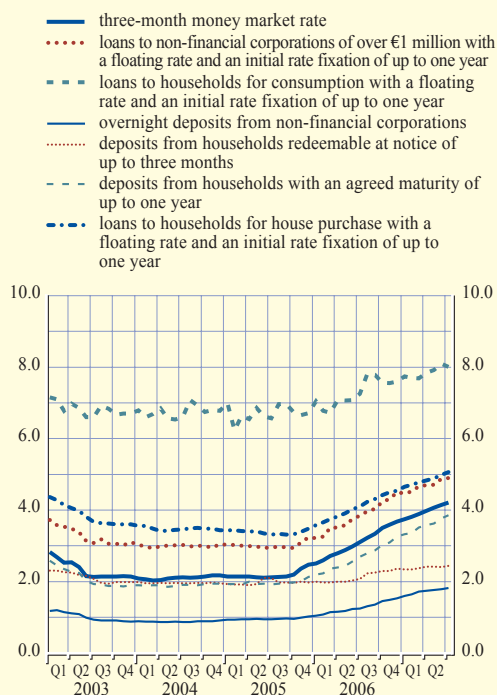
1) The weight-adjusted MFI interest rates are calculated using country weights constructed from a 12-month moving average of new business volumes. For further information, see the box entitled "Analysing MFI interest rates at the euro area level" in the August 2004 issue of the Monthly Bulletin. Quarterly data refer to the end of the quarter.

2) Figures may not add up due to rounding.



**Chart 15 Short-term MFI interest rates and a short-term market rate**

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

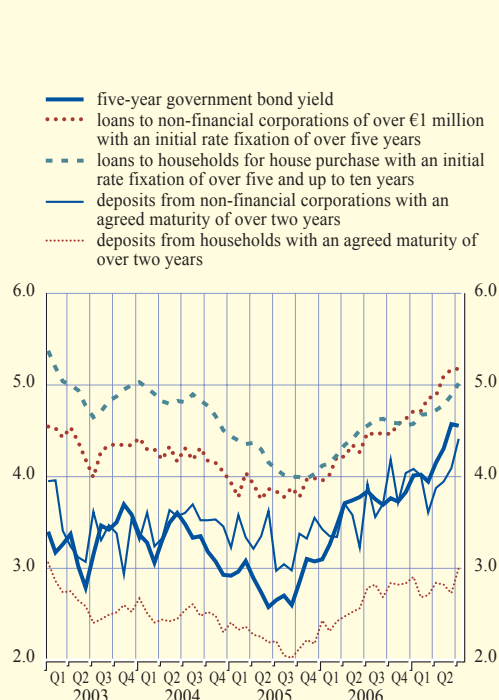


Source: ECB.

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

**Chart 16 Long-term MFI interest rates and a long-term market rate**

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



Source: ECB.

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

non-financial corporations with an agreed maturity of up to one year increased by 8 basis points.

Looking back over a longer period, the speed of the pass-through from market interest rates to bank rates – which were, to some extent, lagging behind the cycle of gradual increases observed in market interest rates since late 2005 – has increased over the past few months. Between September 2005 and July 2007 the three-month money market rate rose by around 210 basis points. At the same time, MFI interest rates on deposits by households with an initial rate fixation period of up to one year rose by around 190 basis points. In addition, bank interest rates on loans with a floating rate and an initial rate fixation period of one year increased by around 180 basis points for loans to non-financial corporations of up to €1 million and by 175 basis points for loans for house purchase. By contrast, short-term MFI interest rates on loans to households for consumption purposes rose by only around 105 basis points.

In July 2007 long-term MFI interest rates on deposits with a maturity of over two years increased by 27 basis points for households and by 32 basis points for non-financial corporations (see

Table 4 and Chart 16), while the yield on two-year and five-year government bonds remained broadly unchanged in that month. At the same time, long-term MFI rates on loans to households for house purchase rose by 12 basis points, while long-term rates on loans to non-financial corporations increased by 8 basis points for loans of up to €1 million, but remained stable for loans of more than €1 million (see Chart 16).

In the case of long-term MFI rates, a lagged pass-through of the increases seen in market interest rates since September 2005 is still being observed. The yields on two and five-year euro area government bonds rose by 227 and 195 basis points respectively between September 2005 and July 2007. Over the same period long-term deposit rates for households increased by only 98 basis points. As for lending rates, MFI interest rates on loans to households for house purchase with an initial rate fixation period of over five and up to ten years rose by only 102 basis points. In the case of loans to non-financial corporations with an initial rate fixation period of over five years, MFI interest rates increased by between 102 and 130 basis points, depending on the size of the loan. Factors explaining the fact that bank spreads remain low are likely to include increased competition among banks and non-banks, as well as the easing of credit standards over the last few years up to the second quarter of 2007. A relatively sluggish pass-through to long-term lending rates has, however, to some extent been observed also in the past.

## 2.6 EQUITY MARKETS

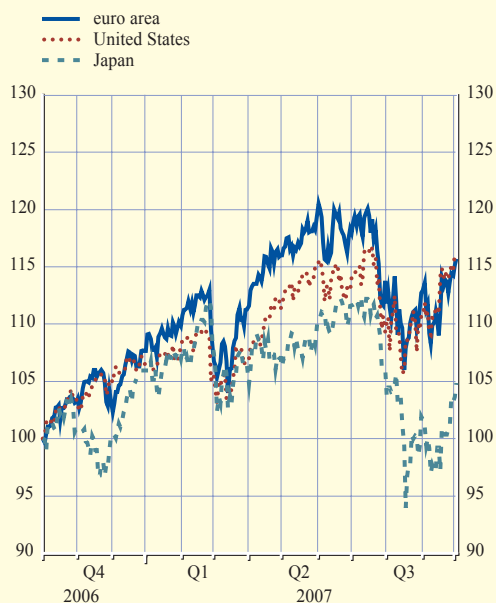
*Global stock prices stabilised in September as the credit concerns that seized financial markets over the previous two months eased somewhat, particularly for the higher credit quality segments. In the euro area, strong actual and expected profitability provided ongoing support to stock prices. Implied stock market volatility abated in September from the heights reached in August.*

In September and early October broad-based stock price indices stabilised in the euro area and the United States after the sharp sell-offs of the summer months (see Chart 17). Although tensions remained high in certain segments of the financial markets, there was a growing perception among market participants that the credit crisis had possibly reached its peak, which supported stock prices worldwide. In addition, central bank interventions also seemed to contribute to a more optimistic stock market sentiment. Overall, stock prices in the euro area and the United States, as measured by the Dow Jones EURO STOXX and the Standard & Poor's 500 index, increased by 3% and 5% respectively between the end of August and 2 October. Stock prices in Japan, as measured by the Nikkei 225 index, increased by 6% over the same period. At the same time, implied stock market volatility, a gauge of market participants' perception of stock market uncertainty, abated from the heights reached in August (see Chart 18).

The rebound in US stock prices reflected some indications that credit markets have generally begun to function more normally. This, in turn, may have led investors to demand somewhat lower equity risk premia in order to hold stocks. US stock markets also reacted positively to the FOMC's decision, taken on 18 September, to lower its target for the federal funds rate by 50 basis points. The Standard & Poor's 500 index increased by nearly 3% after the Federal Reserve announced its move. There are two main reasons why stock markets reacted so strongly to the interest rate reduction. First, the reduction was larger than had been anticipated by market participants. As a consequence, part of the upturn in stock prices can be traced to a positive discount or opportunity cost effect. Second, the decision appears, in the eyes of market participants, to have reduced the likelihood of a sharp near-term slowdown in economic activity, which seems to have also fostered

**Chart 17 Stock price indices**

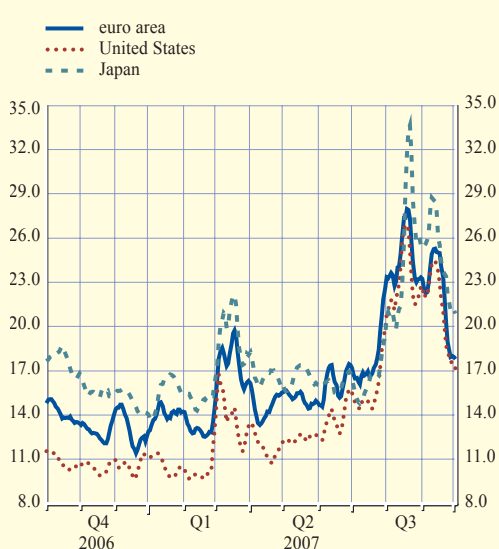
(index: 1 October 2006 = 100; daily data)



Sources: Reuters and Thomson Financial Datastream.  
 Note: The indices used are the Dow Jones EURO STOXX broad index for the euro area, the Standard & Poor's 500 index for the United States and the Nikkei 225 index for Japan.

**Chart 18 Implied stock market volatility**

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



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

a rebound in investors' risk appetite and the corresponding portfolio shifts from government bonds to riskier assets such as equities. Both actual and expected annual earnings growth rates for corporations included in the Standard & Poor's 500 index changed little in September and thus remained at robust levels from a historical perspective. At the same time, the generally less favourable data releases over the review period probably dampened the increases in US stock prices.

Euro area stock prices increased over the review period. Generally robust profitability provides continued support to stock market valuations in the euro area. In September actual year-on-year growth in earnings per share for firms in the Dow Jones EURO STOXX index stood at 16% and thus remained basically unchanged from the previous month. As discussed in Box 4, the robust earnings growth observed on an aggregated euro area basis in 2007 is, to a large extent, broadly based across the countries of the euro area. At the same time, stock market analysts expected the earnings per share for companies in that index to grow at a rate of around 9% over the next 12 months and around 8% over the next three to five years, which was slightly lower than in August.<sup>2</sup> In September there was a growing perception among investors that the balance sheets for euro area firms, and the non-financial sector in particular, should remain strong enough to mitigate many of the potential problems arising from the credit tensions. Against this background, the decline in the equity risk premium on euro area stocks exerted upward pressure on stock

2 The data on actual and expected earnings per share are from Thomson Financial I/B/E/S.

prices. Working in the opposite direction, somewhat higher interest rates in the euro area as well as somewhat less favourable business sentiment throughout the review period probably dampened stock prices.

**Box 4****VOLATILITY AND CROSS-COUNTRY DISPERSION OF CORPORATE EARNINGS IN THE EURO AREA**

Corporate profitability has a close and mutually dependent relationship with aggregate economic activity, notwithstanding the fact that globalisation might, over time, have weakened somewhat the links between profit and domestic output. However, earnings cycles tend to display much larger amplitudes and volatility than cycles in GDP, the broadest measure of aggregate economic activity. This, in turn, makes it relatively difficult to extract reliable signals about the business cycle from developments in the earnings of listed corporations, for which almost real-time data are available. This box extends the analysis of the relationship between listed firms' earnings and GDP growth in the euro area as presented in a box in the previous issue of this publication.<sup>1</sup> It shows that the decline observed in fluctuations in euro area nominal GDP growth over the past few decades has been mirrored by a similar trend decline in the volatility of euro area firms' listed earnings growth. Furthermore, it provides evidence that euro area firms' recent strong earnings performance is broadly based across the countries of the euro area and that cross-country differences in earnings growth appear to be related to differences in GDP growth.

The reduction of output and inflation volatility, often dubbed the "Great Moderation", is one of the most notable macroeconomic changes of recent decades for developed economies, including the euro area. It has been argued that more price stability-oriented central banks have contributed to the more stable macroeconomic environment. In addition, given the positive influence that earnings exert on economic activity, it is also possible that developments in the corporate sector have supported the more stable macroeconomic conditions. Most notably, improved management of inventories and financial innovation have been put forward as potential explanations for this phenomenon.<sup>2</sup> Moreover, it cannot be ruled out that increased economic and financial integration within the euro area has brought about greater similarities in business conditions and thus earnings developments.<sup>3</sup> As a consequence, although the causality between the two measures can work in both directions, the functioning of the financial market can play a vital role also for developments in the real economy.

With these perspectives in mind, Chart A shows a measure of the volatility of annual nominal GDP growth and corporate earnings for the euro area over the past three decades. Two interesting features can be seen in the chart. First, it is clear that the smoother fluctuations observed in euro area output growth are indeed mirrored by a similar evolution in euro area profitability. Second, both earnings volatility and GDP volatility have tended to increase sharply ahead of

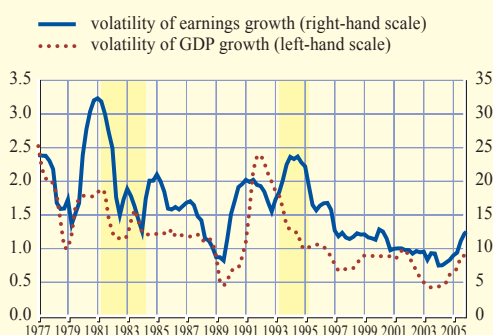
1 See Box 5, entitled "The relationship between listed companies' earnings growth and output growth in the economy as a whole", in the September 2007 issue of the Monthly Bulletin.

2 See, for example, M. McConnell and G. Pérez-Quiros, "Output fluctuations in the United States: what has changed since the early 1980s?", *American Economic Review*, Vol. 90, No 5, 2000, pp. 1464-1475.

3 See L. Baele, A. Ferrando, P. Hördahl, E. Krylova and C. Monnet, "Measuring financial integration in the euro area", ECB Occasional Paper No 23, May 2004.

**Chart A Volatility of earnings and nominal GDP growth in the euro area**

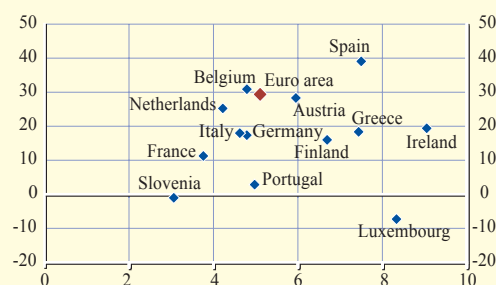
(standard deviation of three-year centred moving average; quarterly data)



Sources: Thomson Financial Datastream and ECB calculations. Note: Shaded areas represent recessions as defined by the Centre for Economic Policy Research.

**Chart B Growth rates of nominal GDP and listed companies' earnings**

(annual percentage changes; x-axis: GDP growth, y-axis: earnings growth)



Sources: Thomson Financial Datastream and ECB calculations. Note: Average growth rates for the first and second quarters of 2007.

economic downturns (using the Centre for Economic Policy Research's definition of a recession), as depicted by the shaded areas in the chart. As data on corporate earnings are available more quickly than national account statistics, earnings volatility may provide early warning signals regarding potential turning points in the business cycle.

In addition to the increased persistence observed in euro area corporate earnings growth (which also implies lower volatility), another notable feature witnessed in recent years is the continued high level of corporate earnings growth, displaying double-digit growth rates significantly above the long-term historical averages.<sup>4</sup> Using earnings data based on the Thomson Financial Datastream total stock market index, the annual growth rates of euro area corporate earnings averaged almost 30% in 2007, compared with an average of around 12% over the period 1991-2006.<sup>5</sup> This development has raised concerns about a slowdown in earnings growth, at least over the medium term as the eventual outcome of a maturing earnings cycle, especially in view of the fact that nominal earnings growth in the first two quarters of 2007 exceeded nominal GDP growth by around 25 percentage points in the euro area.

Turning to a cross-country perspective, two issues are examined: first, the extent to which corporate earnings growth rates have differed across the euro area countries both in the recent past and historically; and second, the question of whether recent differences in national earnings growth are also mirrored in the relevant countries' current economic growth rates. The table below shows that corporate earnings growth in 2007 (up to June) has been above its long-term average (since 1991) in the majority of euro area countries. Although the recent strong earnings performance has been somewhat more pronounced in some euro area countries, it has thus been a relatively broad-based phenomenon.

4 Other measures of profitability derived from annual reports have also stood at record levels in recent years, as found, for example, in Box 5, entitled "Financial statement information on listed non-financial corporations", in the June 2007 issue of the Monthly Bulletin.

5 Estimates are derived from the price-earnings ratio and the price index of the Thomson Financial Datastream total market index for the euro area, which contains a sample of 1,313 firms. While these data should be regarded with some caution, in particular owing to an upward bias resulting from the non-recording of losses, more micro-based earnings derived from annual reports and hence including losses are not readily available for an equally large sample and such a long time period.

**Corporate earnings growth in the euro area countries**

(annual percentage changes; percentage points)

	Average earnings growth in 2007	Average earnings growth in the period 1991-2006	Difference
BE	30.9	7.6	23.3
DE	17.4	7.5	9.9
IE	19.4	11.7	7.7
GR	18.4	14.0	4.4
ES	39.1	5.8	33.2
FR	11.3	7.1	4.1
IT	18.0	7.4	10.6
LU	-7.3	12.7	-20.0
NL	25.2	9.3	16.0
AT	28.3	10.8	17.5
PT	2.8	5.6	-2.8
SI	-1.0	14.9	-15.9
FI	16.0	18.2	-2.3
Euro area	29.4	11.9	17.5

Source: Thomson Financial Datastream and ECB calculations.  
Note: 2007 data refer to the period Jan.-June. Luxembourg data refer to the period Jan. 1993-June 2007 and Slovenian data refer to the period Apr. 2001-June 2007.

suggests that the recent high rate of profit growth is, by and large, a broad-based phenomenon across the euro area countries, and that the dispersion observed in levels of earnings growth is fairly closely related to differences in output growth.

To further understand the (albeit quite modest) differences observed in earnings performance, it is helpful to remember that corporate earnings growth can be expected to be related to economic activity, as strong earnings growth should generally be reflected in high levels of GDP growth and vice versa. In view of this fact, Chart B indicates that the dispersion observed in earnings performance across the euro area countries in 2007 may, to some extent, reflect differences in nominal GDP growth. In particular, the link between nominal GDP growth and corporate earnings appears strong for the largest euro area countries.

To sum up, the analysis in this box shows that despite the impressive growth rates of euro area corporate earnings in recent years, the volatility of profits has in fact declined to an extent consistent with the “Great Moderation” hypothesis. Moreover, a cross-country analysis



## 3 PRICES AND COSTS

Annual HICP inflation is estimated to have increased to 2.1% in September 2007 from 1.7% in August, after having been below 2% for 12 consecutive months. A particularly strong effect from the decline of energy prices in September 2006 contributed significantly to this increase. Owing mainly to the marked decline in energy prices a year ago, combined with the recent substantial increase in oil prices, the inflation rate is expected to remain significantly above 2% in the remaining months of 2007 and in early 2008. In addition, cost pressures still present in the production chain and the ongoing surge in the prices of some agricultural commodities in world markets may have a further upward impact on the annual growth rate of the overall HICP in the coming months. Beyond the short term, risks to inflation developments remain on the upside. They continue to include the possibility of further increases in the prices of oil and agricultural products, as well as additional increases in administered prices and indirect taxes beyond those announced so far, stronger than expected wage dynamics, and higher pricing power of firms in market segments with low competition.

### 3.1 CONSUMER PRICES

#### FLASH ESTIMATE FOR SEPTEMBER 2007

According to Eurostat's flash estimate, HICP inflation was 2.1% in September 2007 (see Table 5). A detailed breakdown of the HICP components will be available in mid-October. Nevertheless, available information suggests that the energy component, and in particular a strong base effect from the substantial decrease in energy prices observed one year earlier, contributed significantly to the estimated increase in HICP inflation in September.

#### HICP INFLATION UP TO AUGUST 2007

Overall euro area annual HICP inflation slowed to 1.7% in August 2007, from 1.8% in July (see Chart 19). For 12 months in a row, overall HICP inflation had fluctuated between 1.6% and 1.9%, mostly driven by developments in the energy component, and in particular by favourable base effects influencing this component in the first half of 2007.

The decrease in overall HICP inflation in August was due to the contribution from the most volatile HICP components. The annual rate of change in HICP energy prices fell sharply in August, to -0.9%, and the annual rate of change in unprocessed food prices declined further to 2.4%, from

**Table 5 Price developments**

(annual percentage changes, unless otherwise indicated)

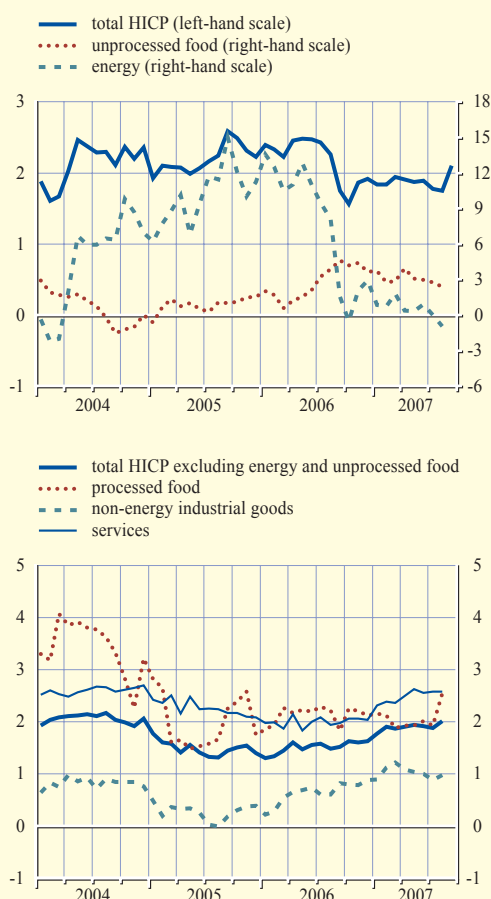
	2005	2006	2007 Apr.	2007 May	2007 June	2007 July	2007 Aug.	2007 Sep.
<b>HICP and its components</b>								
Overall index <sup>1)</sup>	2.2	2.2	1.9	1.9	1.9	1.8	1.7	2.1
Energy	10.1	7.7	0.4	0.3	0.9	0.0	-0.9	.
Unprocessed food	0.8	2.8	3.9	3.1	3.0	2.8	2.4	.
Processed food	2.0	2.1	1.9	1.9	2.0	1.9	2.5	.
Non-energy industrial goods	0.3	0.6	1.1	1.0	1.0	0.9	1.0	.
Services	2.3	2.0	2.5	2.6	2.6	2.6	2.6	.
<b>Other price indicators</b>								
Industrial producer prices	4.1	5.1	2.4	2.4	2.2	1.8	1.7	.
Oil prices (EUR per barrel)	44.6	52.9	50.2	50.3	52.6	55.2	52.4	55.2
Non-energy commodity prices	9.4	24.8	15.3	11.9	14.2	7.8	5.4	6.9

Sources: Eurostat, HWWI and ECB calculations based on Thomson Financial Datastream.

1) HICP inflation in September 2007 refers to Eurostat's flash estimate.

**Chart 19 Breakdown of HICP inflation: main components**

(annual percentage changes; monthly data)



Source: Eurostat.

2.8% in July. These changes more than compensated for the impact of an increase in the annual growth rate of the HICP excluding unprocessed food and energy to 2.0% in August, from 1.9% in the previous six months. This was its highest growth rate since the end of 2004.

This increase was mostly fuelled by a significant rise in the annual rate of change in processed food prices, to 2.5% in August from 1.9% in July, in the context of a surge in the prices of some agricultural commodities in world markets. These developments were driven by a combination of factors affecting both supply (higher energy prices, low levels of inventories, unfavourable weather conditions in some producing areas) and demand (higher consumption of meat and dairy products in emerging economies, rising government incentives to grow crops for biofuel production).<sup>1</sup> Against the background of strong rises in the prices of dairy and cereal products reported in a number of euro area countries, the “milk, eggs and cheese” sub-component of the HICP recorded a particularly sharp increase in August. This may reflect the slow adjustment of the volumes produced to meet the rising demand, given specific supply capacity constraints. A rise was also recorded in the tobacco sub-component of the index (largely caused by an increase in tobacco prices in France).

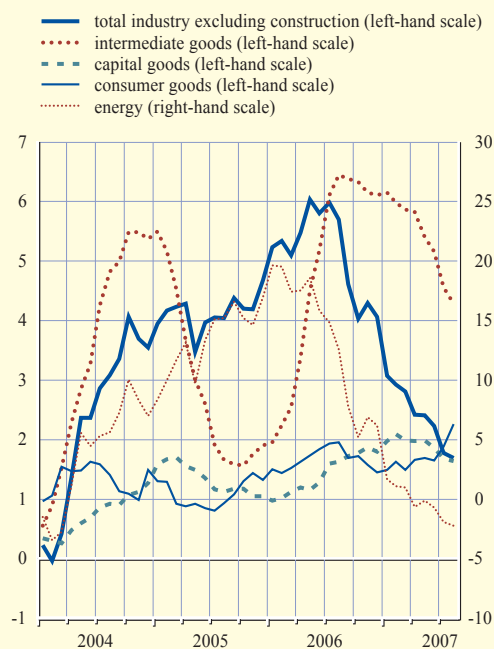
The annual rate of change in non-energy industrial goods prices rose to 1.0% in August from 0.9% in the previous month, mainly reflecting the partial reversal of the stronger than usual seasonal discounts observed in July, especially in clothing and footwear prices. Despite the strong inflationary pressures signalled by domestic producer prices for consumer goods, and the fact that capacity utilisation in the manufacturing sector currently stands at a historically high level, the annual growth rate of the non-energy industrial goods component of the HICP has remained moderate over the last few months. These recent developments are consistent with the simultaneous decline in import price inflation for consumer goods, which is most likely the result of exchange rate developments.

By contrast, the annual rate of change in HICP services prices was stable in August, standing at an elevated level of 2.6% for the fourth consecutive month. The acceleration in services price inflation observed since the beginning of the year is partly explained by the impact of the rise in

<sup>1</sup> For more information, see the box entitled “Recent food price developments in world markets and the euro area” in the September 2007 issue of the Monthly Bulletin.

**Chart 20 Breakdown of industrial producer prices**

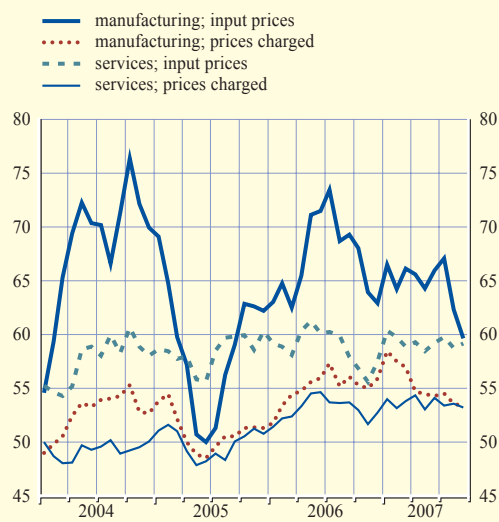
(annual percentage changes; monthly data)



Sources: Eurostat and ECB calculations.

**Chart 21 Producer input and output price surveys**

(diffusion indices; monthly data)



Source: NTC Economics.  
Note: An index value above 50 indicates an increase in prices, whereas a value below 50 indicates a decrease.

German VAT, but may also reflect a higher pass-through of demand and cost pressures to customers as a result of firms in the services sector having greater pricing power.

### 3.2 INDUSTRIAL PRODUCER PRICES

In August 2007 the annual rate of change in overall industrial producer prices (excluding construction) declined further to 1.7%, from 1.8% in July, significantly below its peak of 6% in July 2006 (see Chart 20). This small decline largely reflected developments in energy producer prices, which contributed negatively to overall industrial producer price inflation. Excluding energy and construction, annual producer price inflation was unchanged at the elevated rate of 2.9% in August, as a result of counteracting developments among its components. The annual rate of change of both intermediate and capital goods decreased slightly, continuing the gradual downward path observed in both components. Further down the production chain, global food price increases put upward pressure on producer prices for consumer food items, in particular dairy products. This was one of the main factors behind the strong rise in the annual growth rate of non-durable consumer goods prices to 2.3% in August, the highest growth rate seen in this sector since the end of 2001. Overall, despite some easing in the earlier stages of production, price pressures along the production chain remain elevated. The strong increases in the producer prices of some consumer goods can also be expected to have an impact at the retail level. Moreover, the recent increases in oil prices, together with upcoming unfavourable base effects, are likely to put upward pressure on energy producer prices in the coming months.

The most recent information on price-setting from the NTC Economics Purchasing Managers' Survey (see Chart 21) shows some decrease in price pressures in the manufacturing sector, most notably stemming from input costs. In September 2007 the indicator of (non-wage) input costs in the manufacturing sector decreased strongly for the second month in a row. According to survey respondents, the recent rise in oil prices has been offset by falling prices for other inputs, in particular metals. By contrast, the input price index in the services sector increased marginally, with higher interest rates, rising wage pressures and higher transport costs reported as the main sources of cost pressure by survey respondents. Output price indicators for both manufacturing and services decreased slightly in September. Nevertheless, all price-related survey indicators continue to show high levels by historical standards.

Developments in capacity utilisation, which has increased recently and is currently standing at high levels in both manufacturing and services, appear however to play only a limited role in explaining producer price developments in the euro area (see Box 5).

**Box 5****CAPACITY UTILISATION IN THE EURO AREA: MEASURES AND IMPLICATIONS**

The pressure of demand on the supply capacity of the economy is an important factor for monetary policy-makers. Various measures of economic slack have been developed to evaluate and monitor this pressure – the output gap, unemployment relative to the non-accelerating inflation rate of unemployment and capacity utilisation.<sup>1</sup> This box focuses on the latter. It discusses different indicators of capacity utilisation in the euro area for the manufacturing and services industries, assesses the strength of current capacity pressures within the economy and outlines some implications of capacity utilisation developments for producer prices.

**Gauging capacity pressures from opinion survey measures**

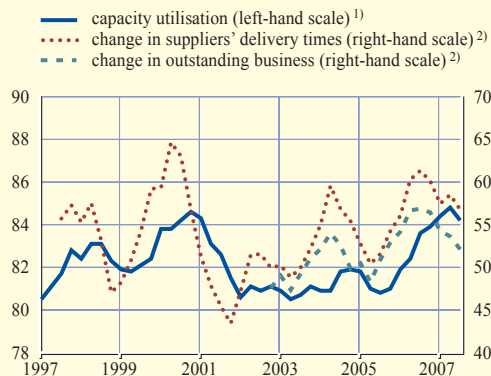
A direct measure of capacity utilisation for the euro area is provided on a quarterly basis by the European Commission's Business and Consumer Surveys. The manufacturing survey asks respondents to provide an estimate of the current level of utilisation as a percentage of total production capacity.<sup>2</sup> Indirect measures of capacity pressures in manufacturing can be derived from the survey of purchasing managers conducted by NTC Economics (the Purchasing Managers' Index (PMI)), which asks respondents every month about changes in suppliers' delivery times and in firms' outstanding business. Taken together, the two replies provide an indication of the balance between demand and supply: if demand runs ahead of supply, suppliers' delivery times lengthen and backlogs of outstanding business grow, i.e. capacity pressure in the economy should increase. Data on capacity pressures in services industries are more limited. The main indicator available is the assessment of outstanding business provided by the PMI

1 For a discussion of output gap measures, see the box entitled "The (un)reliability of output gap estimates in real time" in the February 2005 issue of the Monthly Bulletin. On capacity utilisation, see also the box entitled "Developments in survey data on limits to manufacturing production" in the January 2007 issue of the Monthly Bulletin.

2 The survey question reads as follows: "At what capacity is your company currently operating (as a percentage of full capacity)?" Answers are collected in January, April, July and October of each year. When considering measures of capacity within firms, a key issue is what is meant by "capacity", i.e. whether it refers only to the utilisation of physical capital used in production. In this box it is assumed that, in judging capacity utilisation, survey respondents provide an answer about their overall resource utilisation, i.e. they consider both capital and labour inputs. This assumption is based on the overall content of the survey, which explicitly asks about various production constraints, including shortages of capital, labour and other inputs, suggesting that respondents have all those production inputs in mind when evaluating their capacity utilisation.

**Chart A Survey measures of capacity pressures in manufacturing**

(quarterly data; seasonally adjusted)

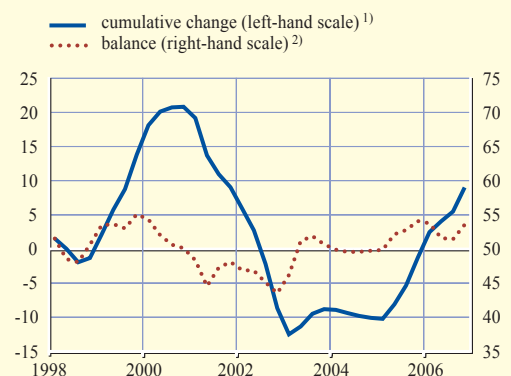


Sources: European Commission Business and Consumer Surveys, NTC Economics and ECB calculations.

- 1) As a percentage of total capacity.
- 2) An index value of 50 indicates an increase; a value below 50 indicates a decrease.

**Chart B Outstanding business in market services**

(quarterly data; seasonally adjusted)



Sources: NTC Economics and ECB calculations.

Notes: Market services exclude retail trade and post and telecommunication services.

- 1) Cumulated diffusion index since September 1997, where the diffusion index is rescaled by subtracting 50.
- 2) An index value of 50 indicates an increase; a value below 50 indicates a decrease.

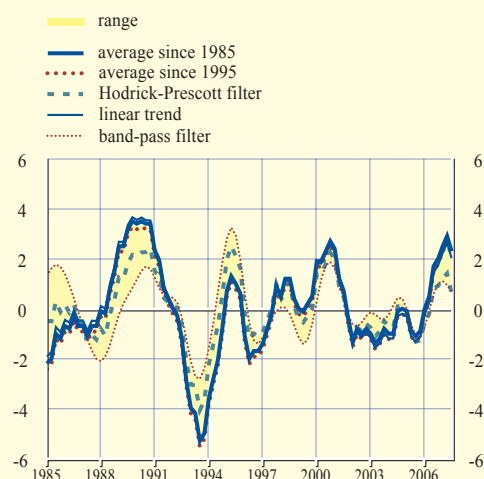
survey in the services industries, which covers market services (excluding the retail and post and telecommunication industries).

Overall, these indicators suggest that capacity pressures have risen over the past two years. In the manufacturing sector, direct measures increased sharply in recent quarters to levels broadly comparable with the previous peak at the end of 2000, before falling slightly in July 2007. Changes in suppliers' delivery times and outstanding business suggest a similar picture of high but declining levels of capacity utilisation (Chart A). In the services sector, the "outstanding business" balance provides only an indication of changes in the balance of supply and demand (Chart B). However, a crude indicator of the level of capacity pressure can be constructed by cumulating consecutive changes in the outstanding business balance. In order to assess the magnitude of capacity pressures, a reference value would also be needed, corresponding to a period when capacity pressures were close to normal, which is difficult without a sufficiently long back-run of data. Nevertheless, the cumulative index can be used to assess capacity pressures relative to previous peaks. According to this indicator, current pressures in the services sector have not yet reached the levels experienced in 2000 and 2001, but are still rising (Chart B).

The European Commission's business survey in manufacturing provides a quantitative estimate of the current degree of capacity utilisation in the euro area. For this measure to be a useful indicator of capacity pressures in the economy, sustainable rises in output (or "trend" increases) need to be separated from increases that reflect utilisation. One option is to assess utilisation relative to some long-run average. However, this method could overstate current capacity pressures if "trend" utilisation has changed over time. For example, utilisation may have increased if competition has forced firms to work more efficiently (i.e. at higher rates of utilisation); technological change may have allowed firms to operate routinely with less spare capacity; or the decline in the volatility of demand observed over recent years may have allowed firms to reduce the capacity they previously retained to cushion themselves against sudden

**Chart C Range of deviations from “trend” of manufacturing sector capacity utilisation**

(percentage deviation from trend)

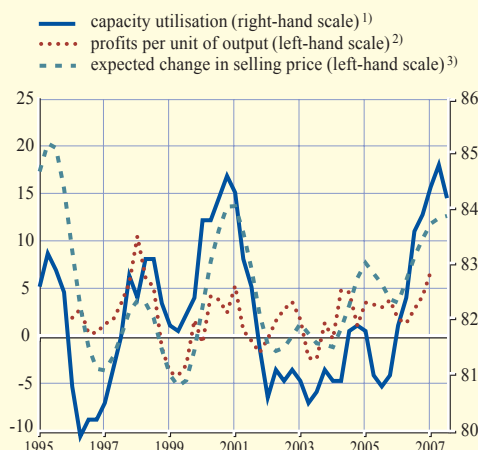


Sources: European Commission Business and Consumer Surveys and ECB calculations.

Note: The chart shows the percentage deviation from trend of capacity utilisation, with “trend” measured using different techniques: the average rate of utilisation since 1985; the average rate of utilisation since 1995; a linear trend since 1985; a Hodrick-Prescott filter; and a band-pass filter.

**Chart D Capacity utilisation in manufacturing and unit profits and expected change in output prices of industrial firms**

(seasonally adjusted data)



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

1) As a percentage of total capacity.  
2) Defined as gross operating surplus per unit of output in industry. Industry excludes construction. Annual percentage changes.  
3) Percentage balances; a positive value indicates an increase; a negative value indicates a decrease.

surges in demand. Another option, therefore, is to assess utilisation relative to some long-run linear trend or a statistical filter (e.g. Hodrick-Prescott or band-pass filter).

Chart C shows a range of estimates for the deviation of capacity utilisation from trend in the manufacturing industry, based on different methods of determining trend utilisation. The measures are broadly consistent in suggesting that capacity utilisation is currently above trend, although there is some variation between the different estimates of capacity pressures. Estimates based on average figures for trend suggest that current capacity pressures are similar to the peak at the end of 2000; other measures (using a linear trend and statistical filters) indicate that capacity pressures are somewhat lower.

### How are capacity pressures affecting prices?

Faced with persistent increases in demand and high capacity utilisation, firms are likely to respond by increasing investment, thereby expanding capacity. In the short run, however, rising capacity utilisation may increase price pressure by raising production costs and lending firms some degree of pricing power. With high levels of utilisation, bottlenecks in production and resource shortages may appear, and firms may face higher costs owing to a scarcity of factors of production that are fixed in the short term. High utilisation rates may also be associated with reduced marginal productivity, which in turn can imply higher overall unit costs of production. Moreover, if firms have a degree of pricing power, they may take advantage of stronger demand conditions and raise profit margins. The combination of rising costs and mark-ups may put upward pressure on prices and, hence, on inflation.



There is some evidence that higher capacity utilisation has provided firms with a degree of pricing power in the euro area. Profits per unit of output have tended to increase as utilisation has increased, and manufacturing firms have also demonstrated a greater ability or willingness to raise their selling prices when capacity utilisation has risen (Chart D). Empirically, however, a firm and stable link between measures of capacity utilisation and producer prices in the euro area is more difficult to demonstrate. The more general discussion about a possible flattening of the Phillips curve in industrial countries over the past decade is relevant in this context.<sup>3</sup>

Several interpretations have been put forward to explain the apparent flattening of the Phillips curve, including the influence of technological change and globalisation. More fundamentally, it has been argued that a more credible monetary policy dampens movements in actual inflation by anchoring inflation expectations, implying that the role of capacity constraints weakens and that of inflation expectations increases. For example, if monetary authorities are quick to tighten policy in response to indications of rising capacity pressures, increases in such indicators are not followed by rising prices simply because monetary policy reacts more firmly to bring inflation under control when capacity constraints signal risks to price stability. Accordingly, a close monitoring of such indicators continues to be important in assessing risks to price stability.

<sup>3</sup> See, for example, Chapter 3 entitled “How has globalisation affected inflation?” of the IMF’s “World Economic Outlook”, April 2006.

### 3.3 LABOUR COST INDICATORS

Overall, information from labour cost indicators points to still contained wage developments in the first half of 2007 in the euro area as a whole (see Table 6).

The annual growth rate of euro area hourly labour costs increased to 2.5% in the second quarter of 2007, from 2.3% in the first quarter, but remains somewhat lower than the average growth rate observed in 2006 (see Chart 22). This increase was mainly explained by developments in Germany, following a significant drop in the previous quarter. In the rest of the euro area the signals were mixed, with annual growth in hourly labour costs increasing in Italy but easing in Spain and France, as compared with the first quarter.

**Table 6 Labour cost indicators**

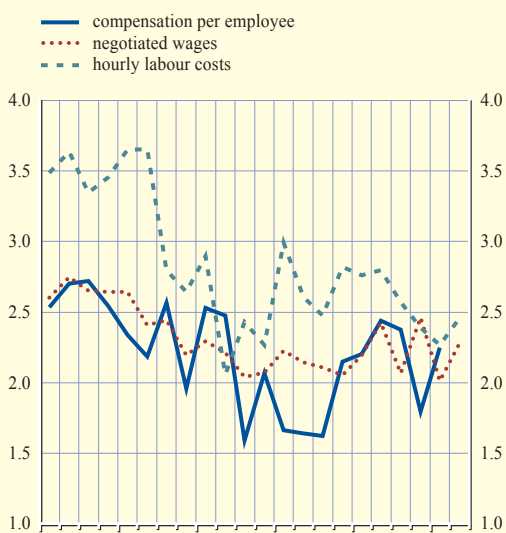
(annual percentage changes, unless otherwise indicated)

	2005	2006	2006 Q2	2006 Q3	2006 Q4	2007 Q1	2007 Q2
Negotiated wages	2.1	2.3	2.4	2.1	2.5	2.0	2.3
Total hourly labour costs	2.7	2.6	2.8	2.6	2.4	2.3	2.5
Compensation per employee	1.8	2.2	2.4	2.4	1.8	2.3	.
<i>Memo items:</i>							
Labour productivity	0.7	1.4	1.3	1.2	1.7	1.4	0.8
Unit labour costs	1.0	0.8	1.2	1.1	0.1	0.8	.

Sources: Eurostat, national data and ECB calculations.

Chart 22 Selected labour cost indicators

(annual percentage changes; quarterly data)



Sources: Eurostat, national data and ECB calculations.

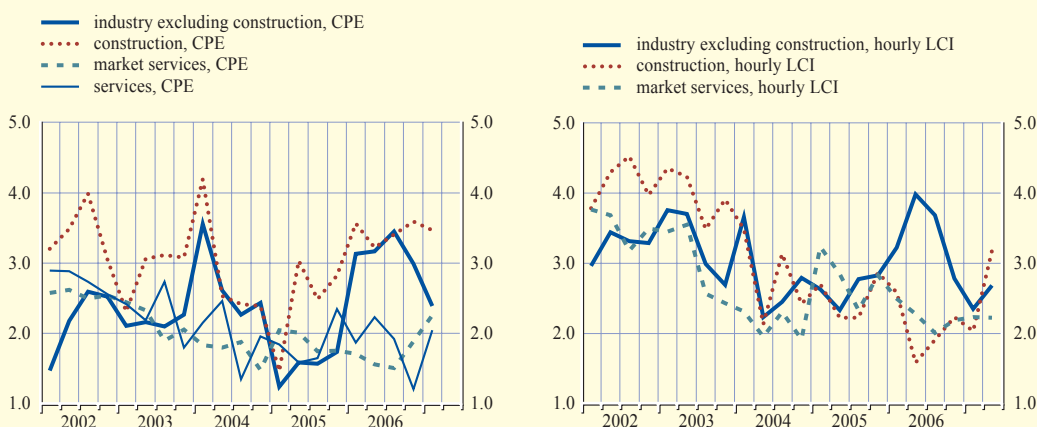
At the sectoral level, hourly labour cost growth in industry excluding construction increased to 2.7% in the second quarter of 2007, also largely owing to the volatility of developments in Germany, which was the result of base effects and the impact of one-off payments (see Chart 23). Hourly labour cost growth also rose significantly in the construction sector, while it remained contained in the market services sector as compared with the first quarter.

Information from other labour cost indicators is broadly consistent with the assessment of still moderate wage developments in the first half of 2007. Negotiated wage growth increased to 2.3% in the second quarter of 2007, but remains close to its 2006 average. Compensation per employee rose in the first quarter, to 2.3% (revised downwards from 2.5%), up from 1.8% in the fourth quarter of 2006. Available country information suggests the possibility of a lower increase in compensation per employee in the

second quarter. Given the strong decrease in labour productivity growth in the second quarter, even moderate growth in compensation per employee would result in some increase in the annual rate of growth of unit labour costs in that quarter.

Chart 23 Sectoral labour cost developments

(annual percentage changes; quarterly data)



Sources: Eurostat and ECB calculations.

Note: CPE stands for "compensation per employee" and LCI stands for "labour cost index".

### 3.4 THE OUTLOOK FOR INFLATION

The short-term profile of annual HICP inflation will continue to be determined largely by developments in the energy component. In particular, effects stemming from past oil price fluctuations, which were previously favourable, are expected to exert upward pressure on overall inflation in the last months of 2007. The inflation rate is expected to remain elevated in early 2008, before moderating again. Domestic price pressures persist, as signalled by the recent rise in the HICP excluding unprocessed food and energy. In addition, developments in processed food prices, related to the recent surge in the prices of some agricultural commodities in world markets, may have a further upward impact on the annual growth rate of the overall HICP in the coming months, and may also influence consumers' inflation perceptions and expectations.

Looking ahead, the balance of risks to the inflation outlook remains on the upside. Annual HICP inflation could be affected in particular by further increases in the prices of oil and agricultural products, as well as by additional increases in administered prices and indirect taxes beyond those anticipated thus far. There are risks of stronger than expected wage dynamics, in a context of high capacity utilisation and tight labour market conditions. Furthermore, if consumption remains sustained and capacity utilisation high, demand pressures may increase firms' pricing power, especially in market segments with lower competition.

## 4 OUTPUT, DEMAND AND THE LABOUR MARKET

The data for the first half of 2007 confirm that the pace of euro area activity normalised, as expected, with quarterly real GDP growth rates declining to 0.5% on average, from 0.7% in the second half of 2006. The latest available indicators suggest that the sustained real economic growth experienced in the first half of 2007 has continued through the summer. As reported in surveys, business sentiment remains favourable in industry and survey data for the services sector continue to signal positive developments, although gradually moderating in both cases, while unemployment currently stands at a historically low rate. Risks to the economic outlook are on the downside in both the short and medium term, particularly in view of the uncertainty created by the tensions in the financial markets, concerns about protectionist pressures and possible disorderly developments owing to global imbalances and, among other things, further oil and commodity price rises.

### 4.1 OUTPUT AND DEMAND DEVELOPMENTS

#### REAL GDP AND EXPENDITURE COMPONENTS

No new information on national accounts has been made available since Eurostat's first estimate of real GDP growth in the second quarter of 2007. This estimate was released last month and indicated that euro area economic activity slowed in the spring. Taking into account the volatility of quarterly figures and a number of special factors, such as weather conditions, that had a significant influence on economic activity in the first quarter of the year and a significant impact of the opposite sign in the second quarter, the economy of the euro area maintained considerable dynamism (see Chart 24). Over the period, euro area real GDP growth was in line with potential output and investment growth remained strong, although it decelerated, while private consumption expanded moderately. The available information from demand indicators suggests that this pattern continued in the summer.

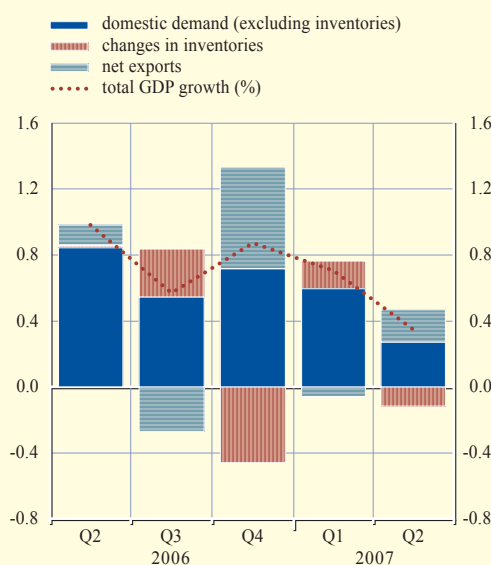
#### SECTORAL OUTPUT AND INDUSTRIAL PRODUCTION

Changes in the sectoral composition of value added growth in the first half of 2007 mirrored adjustments in the demand composition of GDP growth. Over the period, value added growth in the industrial sector was buoyant, albeit slowing, while value added growth in the services sector remained robust.

Also from the supply side perspective, the latest indicators of activity confirm that this shift in the composition of value added growth continues along the same lines. In July 2007 industrial production (excluding construction) increased by 0.8% on a three-month moving average basis, reflecting strong contributions from both the energy and capital goods sectors (see Chart 25). In three-month-on-three-month terms, industrial new orders (excluding heavy transport equipment) rose by 2.5% in July, compared with 2.0% in the previous month. In the construction sector, which accounts

Chart 24 Real GDP growth and contributions

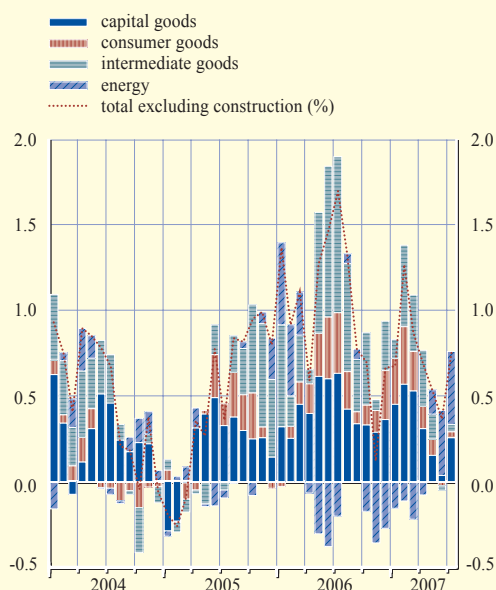
(quarter-on-quarter growth rate and quarterly percentage point contributions; seasonally adjusted)



Sources: Eurostat and ECB calculations.

**Chart 25 Industrial production growth and contributions**

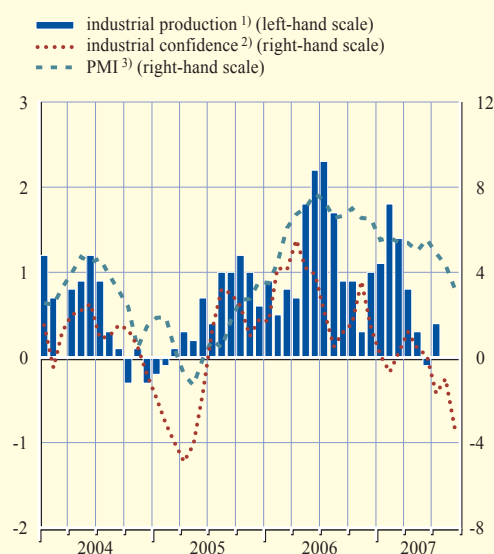
(growth rate and percentage point contributions; monthly data; seasonally adjusted)



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

**Chart 26 Industrial production, industrial confidence and the PMI**

(monthly data; seasonally adjusted)



Sources: Eurostat, European Commission Business and Consumer Surveys, NTC Economics and ECB calculations.  
Note: All series refer to manufacturing.  
1) Three-month-on-three-month percentage changes.  
2) Percentage balances; changes compared with three months earlier.  
3) Purchasing Managers' Index; deviations from an index value of 50.

for about 20% of value added in industry, production in July was almost unchanged from the previous month, and stood about 3% higher than its level one year ago.

Overall, the latest available information suggests that growth in the industrial sector is likely to have remained robust in the third quarter of 2007, not least due to the powerful carry-over effect that the results for July should have on the average level for the quarter as a whole. Once short-term volatility is duly taken into account, the new data on industrial production corroborate the assessment of still strong but decelerating growth in the industrial sector at the current juncture of the economic cycle.

#### SURVEY DATA FOR THE INDUSTRIAL AND SERVICES SECTORS

Survey data available up to September suggest that the normalisation of economic activity continued in the third quarter of 2007 (see Chart 26).

According to NTC Economics survey data, the composite Purchasing Managers' Index (PMI) stood at 56.5 in the third quarter of 2007, compared with 57.2 in the second quarter. The index remains well above the theoretical threshold of 50, indicating growth in both the industrial and services sectors. A significant decline is observed in the PMI for the manufacturing and services sectors in September, however, which illustrates the downside risks to activity associated with the recent increase in uncertainty regarding economic prospects. A similar picture is conveyed by the European Commission confidence indicators for industry and services, which declined in September – albeit remaining at high levels.

## INDICATORS OF HOUSEHOLD SPENDING

The latest indicators of household spending provide mixed signals about private consumption growth.

On the one hand, the relatively muted growth indicated in the available hard data appears to have continued into the third quarter of 2007 (see Chart 27). Euro area retail sales fell by 0.2% on a three-month-on-three-month basis in July, following an increase of 0.1% in the previous month, reflecting a decline in sales of food products which offset a small increase in sales of non-food items. Euro area new passenger car registrations rose by 0.7% on a three-month-on-three-month basis in August. Retail sales confidence declined substantially in September.

On the other hand, prospects for private consumption growth remain reasonably positive. Despite the weakness in retail trade and car registrations, overall private consumption has been relatively robust recently. Due to strong non-retail consumption, quarterly growth in private consumption rebounded to 0.5% in the second quarter of 2007. Moreover, with favourable developments continuing in the labour market, conditions remain supportive for private consumption growth looking ahead.

## 4.2 LABOUR MARKET

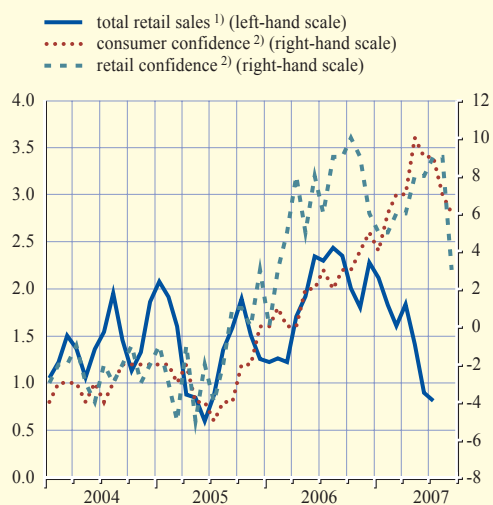
The latest available data confirm the favourable trends seen in the euro area labour market.

### UNEMPLOYMENT

The euro area unemployment rate remained at 6.9% in August, unchanged from the previous month (see Chart 28). The unemployment rate has declined by a significant 0.9 percentage point

**Chart 27 Retail sales and confidence in the retail trade and household sectors**

(monthly data)



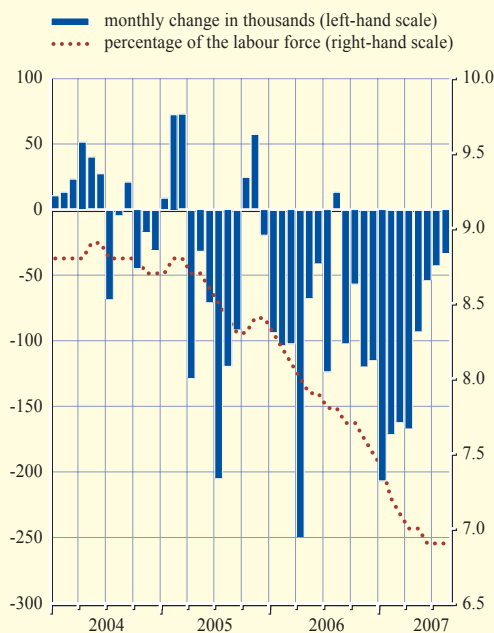
Sources: European Commission Business and Consumer Surveys and Eurostat.

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

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

**Chart 28 Unemployment**

(monthly data; seasonally adjusted)



Source: Eurostat.



**Table 7 Employment growth**

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

	Annual rates		Quarterly rates				
	2005	2006	2006 Q2	2006 Q3	2006 Q4	2007 Q1	2007 Q2
Whole economy	0.9	1.5	0.6	0.2	0.4	0.6	0.5
<i>of which:</i>							
Agriculture and fishing	-1.1	-1.2	0.8	-1.2	-0.8	0.2	.
Industry	-0.2	0.6	0.3	0.2	0.5	0.8	.
Excluding construction	-1.3	-0.2	0.1	0.0	0.0	0.1	.
Construction	2.5	2.6	0.7	0.7	1.7	2.2	.
Services	1.4	2.0	0.7	0.3	0.4	0.5	.
Trade and transport	0.7	1.5	0.8	0.2	0.1	0.4	.
Finance and business	2.4	3.6	1.0	1.0	0.9	0.9	.
Public administration <sup>1)</sup>	1.4	1.6	0.5	0.1	0.3	0.3	.

Sources: Eurostat and ECB calculations.

1) Also includes education, health and other services.

in the last twelve months and currently stands at its lowest rate since the early 1980s. In August the number of unemployed persons fell by about 33,000 compared with the previous month.

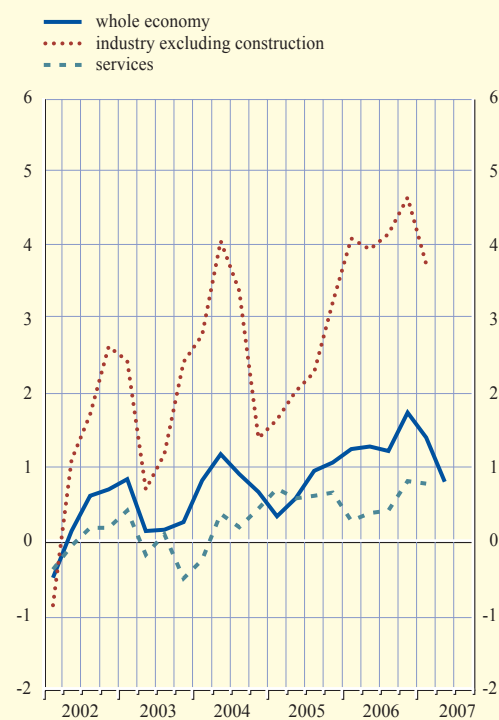
## EMPLOYMENT

According to the latest Eurostat release, euro area employment grew strongly in the second quarter of 2007, to stand at a quarterly rate of 0.5% (see Table 7). Furthermore, the information that has become available since the previous release points to even more positive developments in the first quarter of 2007 than were initially estimated: employment growth in the first quarter of the year has been revised upwards by 0.2 percentage point, to 0.6%. According to the available sectoral breakdown, this upward revision mainly reflects better than expected developments in the industrial sector, in particular in construction.

Annual labour productivity growth in the euro area slowed in the second quarter of 2007 as a result of a combination of the continuing improvement in labour market trends and a normalisation of euro area economic activity (see Chart 29). This deceleration in labour productivity is also in line with the current cyclical position of the euro area economy, notwithstanding the possible trend improvements that can be achieved via the implementation of structural reforms. An analysis of sectoral patterns of total factor productivity growth in euro area countries since the mid-1990s is presented in Box 6.

**Chart 29 Labour productivity**

(annual percentage changes)



Sources: Eurostat and ECB calculations.

The favourable trends prevailing in the euro area labour market in recent years seem to have continued in the third quarter of 2007, according to survey data available up to September. According to the NTC Economics PMI survey, employment growth in the third quarter remained dynamic in both the industrial and services sectors. The employment expectations reported by the European Commission's survey convey a similar picture.

**Box 6****SECTORAL PATTERNS OF TOTAL FACTOR PRODUCTIVITY GROWTH IN THE EURO AREA COUNTRIES**

Productivity gains are the prime engine of economic growth in industrialised countries. Improvements in aggregate labour productivity can generally be attributed to the amount of machinery or capital used per unit of labour, changes in the quality of labour and a third factor, often termed total factor productivity (TFP).<sup>1</sup> The latter captures changes in total output which do not result from variations in inputs. It is a measure of “disembodied” technical progress or other efficiency gains in the production process, such as managerial or organisational improvements. In practice, TFP growth is computed as the residual output or value added growth remaining after improvements attributable to changes in labour and capital inputs have been taken into account.

In view of the recent release of the EU KLEMS Growth and Productivity Accounts database,<sup>2</sup> this box discusses the main patterns of TFP developments in a number of euro area countries since the mid-1990s. The EU KLEMS database represents a valuable source of information at an industry level, allowing a deeper analysis of the structure, breadth and composition of TFP growth in euro area economies to be carried out. This box focuses on productivity growth in the market economy since the measurement of TFP is subject to a number of caveats which apply more acutely to non-market services.<sup>3</sup> The EU KLEMS dataset has not yet been fully endorsed by national statistical institutes, which suggests that some caution should be used when drawing conclusions.

According to the EU KLEMS database, TFP growth in the euro area declined from an average annual growth rate of 0.9% during the period 1980-1995 to 0.5% in 1996-2004.<sup>4</sup> The slowdown appears particularly striking in comparison with the United States – where TFP growth increased from 0.7% to 1.6% in the same periods. The decline of aggregate TFP growth occurred in almost all euro area countries included in the dataset, with the only exceptions being Finland and the Netherlands (see the table below). For several countries, including some of the bigger euro area countries, the decline in TFP was not only substantially more pronounced than the average, but has also led to a negative average growth rate since the mid-1990s.

The deceleration of euro area TFP growth mainly stemmed from the manufacturing industries (excluding electrical industries) and the other production sector, followed by distribution

1 For a discussion of aggregate labour productivity developments in the euro area, see the March 2005 issue of the Monthly Bulletin (Box 9) and the article entitled “Labour productivity developments in the euro area: aggregate trends and sectoral patterns” in the July 2004 Monthly Bulletin.

2 EU KLEMS (European level (EU) analysis of capital (K), labour (L), energy (E), materials (M) and service (S) inputs) is a statistical and analytical research project financed by the European Commission.

3 Non-market services include public administration, education, health and social work, and real estate activities.

4 The euro area aggregate consists of Germany, Spain, France, Italy, the Netherlands, Austria and Finland. Alternative estimates of TFP have been provided by the European Commission and the OECD. Although precise figures on TFP may vary significantly across datasets as a result of different definitions of capital and labour inputs, they all show that TFP growth in the euro area has decelerated since the mid-1990s.

## Sectoral contributions to change in TFP growth<sup>1)</sup>

	Average TFP growth		Change in TFP growth	Sectoral contributions to change in TFP growth					
	1980-1995	1996-2004		Electrical machinery, post and communication services	Total manufacturing, excluding electrical	Other production <sup>2)</sup>	Distribution	Finance and business, except real estate services	Personal services
Belgium	0.51	0.33	-0.17	0.11	-0.32	0.00	-0.04	0.15	-0.10
Germany	1.09	0.36	-0.73	0.20	-0.02	0.14	-0.03	-0.99	-0.08
Spain	0.68	-0.92	-1.60	-0.16	-0.48	-0.78	-0.35	0.30	-0.11
France	1.04	0.67	-0.37	0.17	0.05	-0.29	-0.42	-0.11	0.20
Italy	0.51	-0.65	-1.15	0.06	-0.82	0.02	-0.59	0.24	-0.03
Luxembourg	3.18	-0.48	-3.66	0.39	-0.76	-0.02	-0.92	-2.65	-0.10
The Netherlands	0.26	1.05	0.79	0.14	-0.08	-0.17	0.44	0.17	0.32
Austria	1.36	1.19	-0.17	-0.06	0.14	0.24	-0.09	-0.48	0.04
Finland	1.47	2.61	1.14	0.91	-0.01	-0.07	0.32	0.07	-0.01
Euro area	0.85	0.46	-0.39	0.14	-0.20	-0.19	-0.11	-0.08	0.04
United States	0.65	1.61	0.96	0.17	0.01	0.09	0.30	0.32	0.01

Source: ECB computation based on EU KLEMS data.

1) Slovenia has not been incorporated due to missing data for the period 1980-1995. Data are not available for Greece, Ireland and Portugal.

2) This sector includes mining and quarrying; electricity, gas and water supply; construction; and agriculture, hunting, forestry and fishing.

(i.e. wholesale and retail trade, transport and storage) and the financial and business services sector. The manufacturing sector (other than electronics) and the other production sector each accounted for -0.2 percentage point, largely as a result of developments in Spain and Italy in the case of the former sector and Spain and France in the case of the latter sector. Activity in the distribution sector and the financial and business services sector had a substantially smaller impact. The four biggest euro area countries showed a significant decline in at least one of these major sectors. This decline was partly offset by the positive contribution of the electronics and telecommunications sector, which showed an increase in average TFP growth in almost all countries. These dynamics result, with minor exceptions in some countries, from changes in TFP growth rather than a shift in the sectoral composition of value added.

A detailed picture of the structure of TFP productivity growth is illustrated below by means of so-called Harberger diagrams, which depict the cumulative contribution of sectors to TFP growth together with their cumulative value added shares for the period 1996-2004.<sup>5</sup> Sectors are ordered according to their TFP growth rates so as to distinguish the fastest growing ones (closer to the origin) from those with negative growth (at the end of the distribution), thereby making it possible to identify whether TFP growth is broad-based or concentrated in specific sectors. A situation in which all sectors contribute positively, and to the same extent, to aggregate TFP growth would correspond to a sectoral distribution of TFP gains along a straight, upward sloping line. If not all industries show positive TFP growth, the Harberger diagram is a hump-shaped curve.

Significant differences emerge in the underlying sectoral basis across euro area countries. On the one hand, in Finland, Slovenia and, to a lesser extent, the Netherlands, TFP growth appears

5 Harberger, A.C., (1998), "A Vision of the Growth Process", *American Economic Review*, Vol. 88, No 1, pp. 1-32.

to be fairly equally distributed and broad-based across sectors, which is similar to the situation in the United States. On the other hand, there is a cluster of countries, including Belgium, Spain, Italy and Luxembourg, with localised TFP growth. In countries with negative aggregate TFP growth rates, the share of value added represented by the sectors contributing positively to TFP growth amounts to no more than one-fourth of the market economy. In the case of Germany, France and Austria, which fall between the group with an equal distribution and the group with a localised growth pattern, TFP growth is fairly broad-based but the negative contribution of specific sectors – such as, for example, the business services sector in Germany – lead to a hump-shaped pattern of distribution.

In most countries, information and communications technology (ICT) producing sectors, such as the communications and electrical equipment sectors, are among the fastest growing sectors. In some countries, this could be related to the deregulation of the communications sector in the 1990s. The electricity, gas and water supply sector, which has been partly deregulated in some countries in recent years, also made a positive contribution to TFP growth.<sup>6</sup> Notwithstanding this broad similarity, the group of countries with very localised sectoral growth is marked by weak or negative TFP growth in sectors which are typically identified as not being very ICT-intensive, as well as in ICT-intensive sectors such as the financial intermediation or business services sectors.<sup>7</sup> For the countries falling between the group with an equal distribution and the group with a localised growth pattern, on average the more ICT-intensive sectors have been the main source of negative TFP growth since the mid-1990s.

The deceleration and low level of TFP growth, and the very localised sectoral basis of TFP growth apparent from the EU KLEMS data reflect the challenge that a number of euro area countries face in raising trend productivity gains. This may be particularly demanding in countries where the expansion of employment in recent years has been associated with the inclusion of some low-skilled segments of the labour force. In the context of the Lisbon process, a number of policy areas have been identified where further reform is needed to raise trend productivity gains. In particular, the updated Integrated Guidelines<sup>8</sup> emphasise the need to achieve higher productivity growth through more market competition, especially in the services sector; labour market flexibility to allow firms to better adjust to changing market conditions; raising the skill level of the workforce, as well as improving the quality of education systems and their responsiveness to labour market needs; and, finally, stronger action to foster innovation – including more decisive efforts to meet the Lisbon target of raising research and development expenditure to 3% of GDP by 2010 – are seen to be essential.

6 A discussion of the evolution of the regulatory framework in network industries can be found in Martin, R., M. Roma and I. Vansteenkiste (2005), “Regulatory Reforms in Selected EU Network Industries”, ECB Occasional Paper Series No 28.

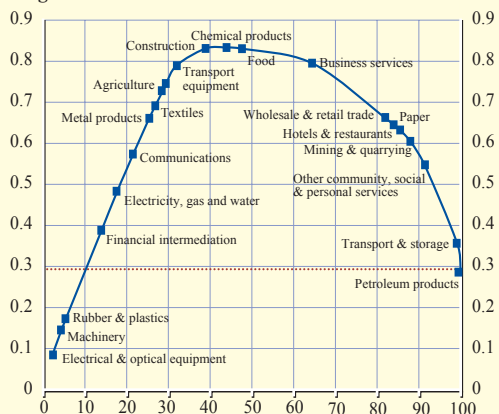
7 A classification of ICT-intensive and non-ICT-intensive sectors can be found in Gomez-Salvador, R., A. Musso, M. Stocker and J. Turunen (2006), “Labour Productivity Developments in the Euro Area”, ECB Occasional Paper Series No 53. This classification is not fully applicable to TFP data in EU KLEMS. In this context, textiles, paper, machinery, transport equipment, furniture, wholesale and retail trade, financial intermediation and business services can be classified as ICT intensive. The non-ICT-intensive sectors include agriculture; mining and quarrying; food; wood; petroleum products; chemicals; rubber and plastics; non-metallic mineral products; metal products; electricity, gas and water; construction; hotels and restaurants; transport and storage; and other community, social and personal services.

8 A discussion of the 2007 update of the Integrated Guidelines for the implementation of the Lisbon strategy for the euro area Member States as a whole is provided in the April 2007 issue of the Monthly Bulletin. Country-specific guidelines address additional issues.

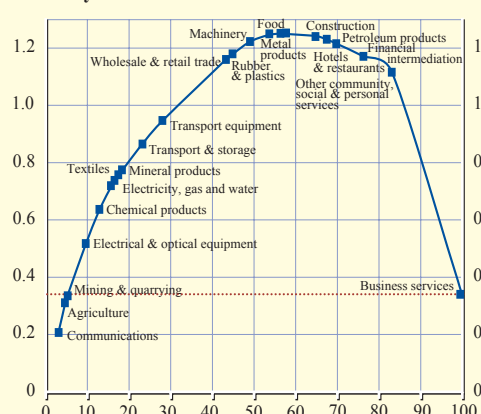
## Sectoral contributions to market economy TFP growth, 1996-2004

(percentage points; percentages)

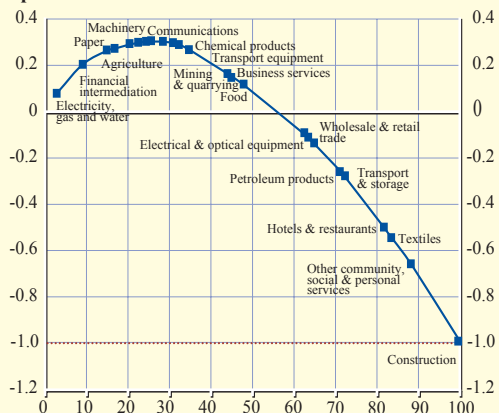
### Belgium



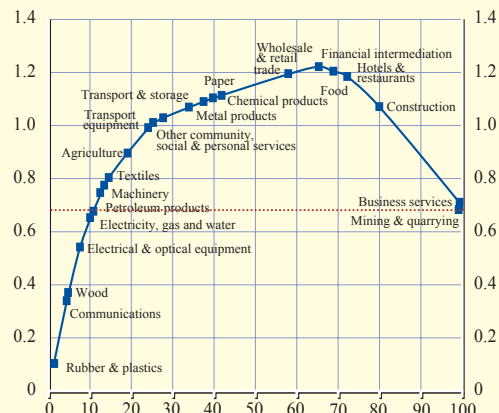
### Germany



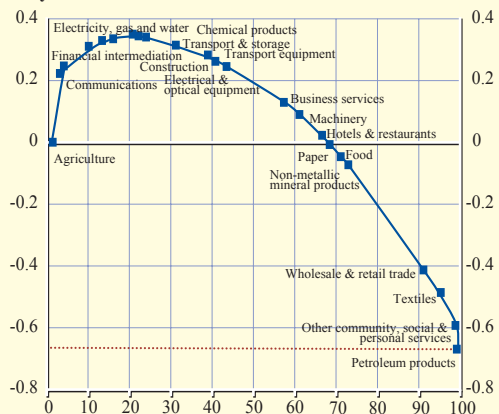
### Spain



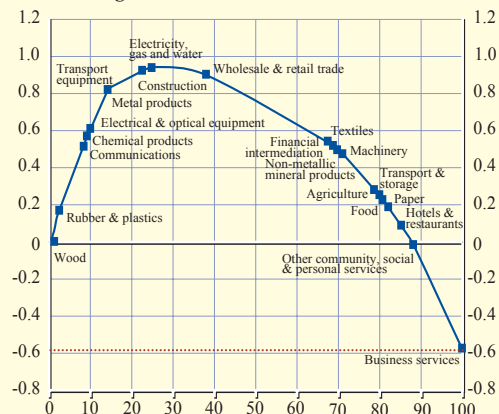
### France



### Italy



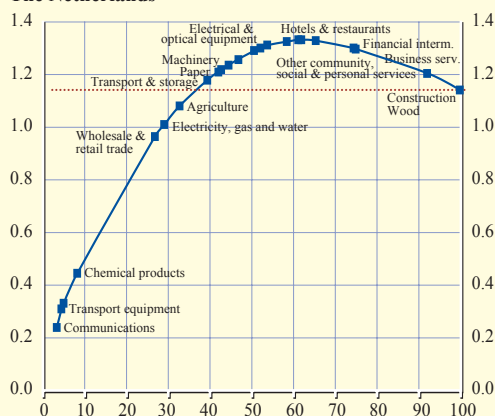
### Luxembourg



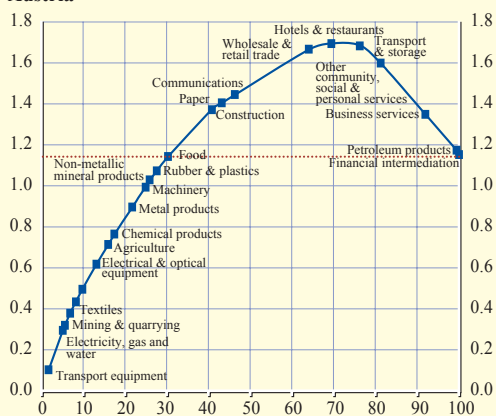
### Sectoral contributions to market economy TFP growth, 1996-2004

(percentage points; percentages)

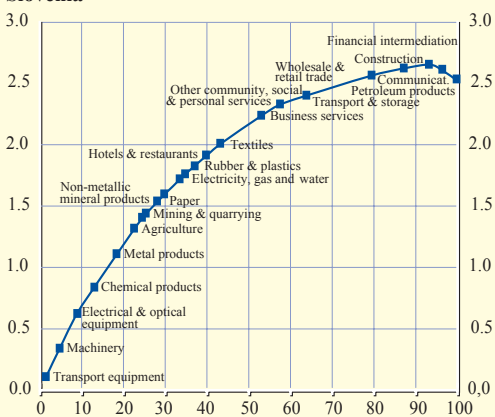
#### The Netherlands



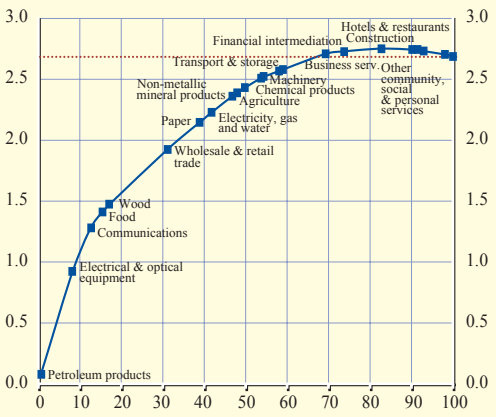
#### Austria



#### Slovenia



#### Finland



Source: ECB computation based on EU KLEMS data.

Note: The horizontal axis shows the cumulative sectoral value added shares and the vertical axis shows the sectoral contribution to aggregate TFP growth. The fastest growing sectors are close to the origin, while those with negative TFP growth are at the end of the distribution. The dotted line indicates the aggregate level of TFP growth for the market economy. Small discrepancies with the figures provided in the table may emerge due to the aggregation procedure.

### 4.3 THE OUTLOOK FOR ECONOMIC ACTIVITY

Overall, the available data suggest that the sustained real economic growth experienced in the euro area in the first half of 2007 has continued through the summer. While financial market volatility appears to have contributed to a decline in euro area consumer and business confidence indicators in September, these indicators remain above their historical averages and continue to point to ongoing sustained growth during the second half of 2007. Looking further ahead, available forecasts for 2008 continue to confirm the main scenario of real GDP growing at around trend potential. Global economic activity is expected to remain robust and to provide support for euro area exports and investment. Consumption growth in the euro area should strengthen further, in line with developments in real disposable income, as employment conditions continue to remain supportive.



Risks to this outlook are on the downside. They relate mainly to a potentially broader impact of the reappraisal of risk currently occurring in financial markets, concerns about protectionist pressures and possible disorderly developments related to global imbalances as well as further oil and commodity price rises.

## 5 EXCHANGE RATE AND BALANCE OF PAYMENTS DEVELOPMENTS

### 5.1 EXCHANGE RATES

Following a spell of general stability in the preceding months, the euro appreciated in nominal effective terms in the three-month period to September 2007 as a result of a rather broad-based strengthening of the single currency in nominal bilateral terms.

#### EFFECTIVE EXCHANGE RATE OF THE EURO

On 2 October 2007 the nominal effective exchange rate of the euro – as measured against the currencies of 24 of the euro area's important trading partners – was 2% above that at the end of June and about 3% higher than at the beginning of 2007 (see Chart 30). The single currency traded mostly sideways in the course of July and August, with a clear appreciation emerging only in September.

From a longer-term perspective, in September 2007 the CPI-deflated real effective exchange rate of the euro, calculated vis-à-vis the same group of trading partners, traded about 2.6% above its level of December 2006.

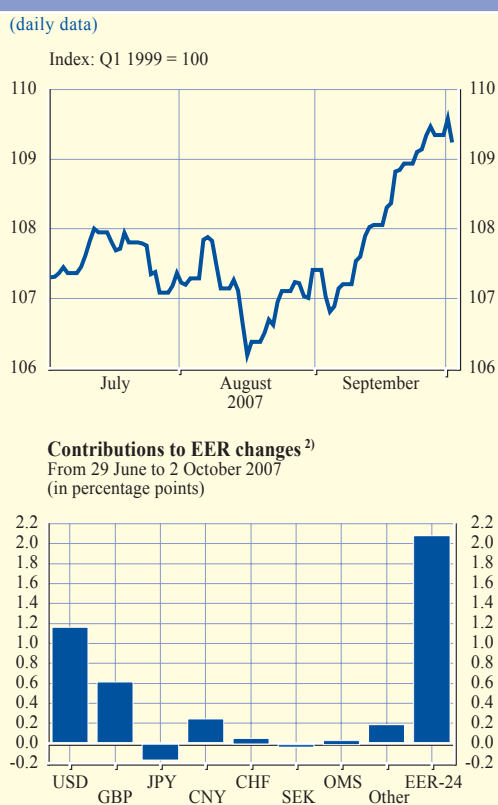
#### US DOLLAR/EURO

Between July and mid-August the euro weakened against the US dollar as market participants reassessed their degree of risk aversion in response to the turbulence in credit markets worldwide. Thereafter, the US dollar started to lose ground on account of soft data in the US housing and labour markets and firmer market expectations about a turn in the direction of the US monetary policy stance; expectations that were eventually realised by the lowering of the target for the federal funds rate by 50 basis points to 4.75% at the FOMC meeting of 18 September. On 2 October the euro traded at USD 1.42, 4.9% above its level at the end of June and about 6.5% stronger than at the beginning of 2007 (see Chart 31).

#### JAPANESE YEN/EURO

The euro remained broadly stable vis-à-vis the Japanese yen at around JPY 168 in the first three weeks of July, some minor swings notwithstanding. After reaching a peak of JPY 168.68 on 13 July, the euro depreciated sharply against the Japanese currency in the context of a broad-based strengthening of the yen. This was particularly pronounced in the first half of August, amid turbulence in global financial markets which reportedly led to a scaling back of outstanding carry trade positions on the

Chart 30 Euro effective exchange rate and its decomposition <sup>1)</sup>



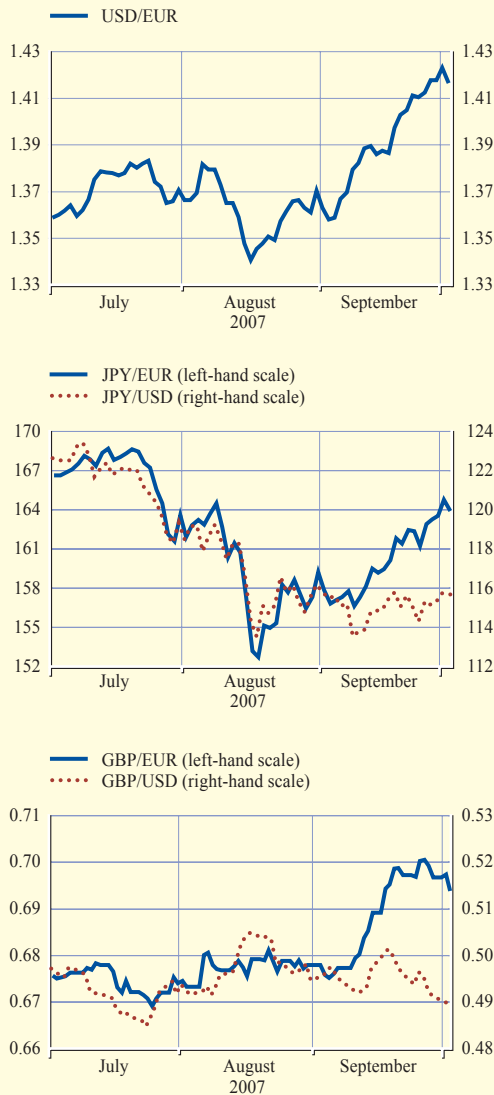
Source: ECB.

1) An upward movement of the index represents an appreciation of the euro against the currencies of the most important trading partners of the euro area and all non-euro area EU Member States.

2) Contributions to EER-24 changes are displayed individually for the currencies of the six main trading partners of the euro area. The category "Other Member States (OMS)" refers to the aggregate contribution of the currencies of the non-euro area Member States (except the GBP and SEK). The category "Other" refers to the aggregate contribution of the remaining six trading partners of the euro area in the EER-24 index. Changes are calculated using the corresponding overall trade weights in the EER-24 index.

**Chart 31 Patterns in exchange rates**

(daily data)



Source: ECB.

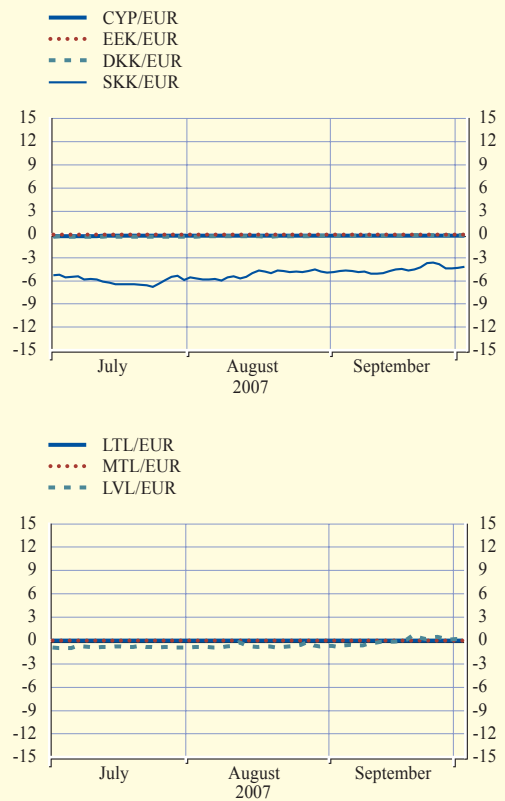
Japanese currency on account of increased risk aversion and repricing of risk by global investors. The renewed strengthening of the euro since mid-August seems to relate to tentative signs of easing tensions in financial markets. On 2 October the euro stood at JPY 163.92, 1.6% lower than at the end of June and 12.2% higher than the 2006 average (see Chart 31).

**EU MEMBER STATES' CURRENCIES**

Since the end of June 2007, most currencies participating in ERM II have remained stable and have continued to trade at, or close to, their respective central rates (see Chart 32). The Slovak koruna, whose central rate was revalued in March, continued to trade on the strong side of its new central rate. However, the deviation from its ERM II central rate narrowed to 4.2% as the Slovak currency weakened by about 1% vis-à-vis the euro between the end of June and 2 October. The Latvian lats also depreciated against the euro (1%), thereby moving slightly (0.1%) into the

**Chart 32 Patterns in exchange rates in ERM II**

(daily data; deviation from the central rate in percentage points)



Source: ECB.

Note: A positive (negative) deviation from the central rate against the euro implies that the currency is on the weak (strong) side of the band. For the Danish krone, the fluctuation band is  $\pm 2.25\%$ ; for all other currencies, the standard fluctuation band of  $\pm 15\%$  applies.

weaker side of the unilaterally set fluctuation band of  $\pm 1\%$  after trading, for a long period, close to the stronger side of this band.

With regard to the currencies of other EU Member States not participating in ERM II, between the end of June and 2 October 2007 the euro appreciated by 2.9% against the pound sterling, by 2.1% against the Hungarian forint and by 7.1% against the Romanian leu, while it depreciated by 4.3% against the Czech koruna.

### OTHER CURRENCIES

Over the last three months the euro has appreciated by about half a percentage point vis-à-vis the Swiss franc and the Australian dollar, while it depreciated by about 1% vis-à-vis the Canadian dollar and by 3.5% vis-à-vis the Norwegian krone. Meanwhile, the euro strengthened vis-à-vis the currencies of the main Asian trading partners.

## 5.2 BALANCE OF PAYMENTS

*The 12-month cumulated euro area current account up to July 2007 recorded a small surplus of about 0.1% of euro area GDP compared with a deficit of 0.6% a year earlier, largely reflecting the continued increase in the goods surplus since July 2006. In the financial account, combined direct and portfolio investment continued to record large net inflows in the 12-month period to July 2007, as opposed to net outflows a year earlier.*

### TRADE AND THE CURRENT ACCOUNT

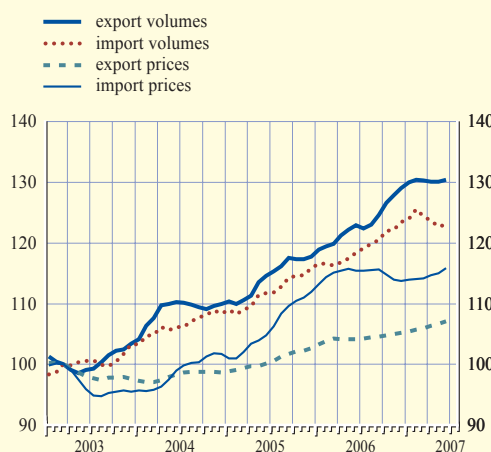
In July 2007 the three-month moving average of the value of exports and imports of goods and services rose by 0.7% and 1.4% (quarter on quarter in seasonally adjusted terms) respectively. This compares with corresponding growth rates of 1.3% and 0.6% in the three-month period to April. While the slowdown in exports growth was largely due to weaker exports in services, the increase in import growth stems from higher growth in imports of goods (see Table 8).

The breakdown of trade in goods into volumes and prices, available up to the second quarter of 2007, indicates that the growth in import values stems from import price developments (see Chart 33). After being almost flat in the first quarter, the unit values index of imported goods increased by 1.5% quarter on quarter in the second quarter of the year, possibly reflecting the recent pick-up in world commodity and oil prices. Meanwhile, import volumes contracted by 1.2% in the second quarter after posting a moderate increase of 0.8% in the previous quarter.

On the exports side, the volume-price breakdown of extra-euro area goods trade suggests that export volumes have remained largely stable

**Chart 33 Breakdown of trade in goods into volumes and prices**

(index: 2003 Q1 = 100; seasonally adjusted; three-month moving average)



Sources: Eurostat and ECB calculations.  
Note: Latest observations are for June 2007.

**Table 8 Main items of the euro area balance of payments**

(seasonally adjusted, unless otherwise indicated)

			Three-month moving average figures ending				12-month cumulated figures ending	
	2007 June	2007 July	2006 Oct.	2007 Jan.	2007 April	2007 July	2006 July	2007 July
<i>EUR billions</i>								
<b>Current account</b>	7.3	1.7	0.1	2.7	0.2	0.4	-27.9	10.0
Goods balance	7.9	2.6	3.2	5.0	5.5	4.9	14.8	55.4
Exports	126.0	124.9	118.9	122.0	122.9	123.9	1,316.3	1,463.0
Imports	118.1	122.2	115.7	117.0	117.4	119.1	1,301.5	1,407.6
Services balance	4.6	3.0	2.4	3.1	3.8	3.4	37.8	37.8
Exports	38.9	37.9	35.7	36.8	38.0	38.1	422.7	445.8
Imports	34.3	34.9	33.3	33.8	34.2	34.7	385.0	408.0
Income balance	-0.2	1.3	1.1	0.4	-1.4	-3.1	-8.6	-9.0
Current transfers balance	-5.0	-5.2	-6.5	-5.7	-7.6	-4.9	-71.8	-74.2
<b>Financial account<sup>1)</sup></b>	-40.7	50.6	15.9	-2.6	-12.4	3.7	105.5	13.8
Combined net direct and portfolio investment	25.1	36.6	1.8	22.1	21.0	17.7	-43.4	187.8
Net direct investment	-45.0	2.7	-14.4	-19.0	-13.8	-18.6	-123.1	-197.1
Net portfolio investment	70.1	33.9	16.2	41.0	34.7	36.3	79.6	384.9
Equities	80.7	50.5	1.5	26.2	13.0	47.3	128.9	264.0
Debt instruments	-10.6	-16.6	14.7	14.8	21.8	-11.0	-49.3	120.9
Bonds and notes	4.7	-20.7	12.3	24.7	23.2	-9.2	-7.7	153.0
Money market instruments	-15.3	4.1	2.4	-9.9	-1.4	-1.8	-41.6	-32.1
<i>Percentage changes over previous period</i>								
<b>Goods and services</b>								
Exports	4.1	-1.3	3.4	2.7	1.3	0.7	12.3	9.8
Imports	0.6	3.1	2.1	1.2	0.6	1.4	16.4	7.7
<b>Goods</b>								
Exports	4.2	-0.9	4.7	2.6	0.8	0.9	12.8	11.1
Imports	1.1	3.5	2.4	1.1	0.3	1.4	18.3	8.2
<b>Services</b>								
Exports	3.9	-2.7	-0.6	3.2	3.3	0.2	10.6	5.4
Imports	-1.1	1.7	1.0	1.4	1.4	1.2	10.3	6.0

Source: ECB.

Note: Figures may not add up due to rounding.

1) Figures refer to balances (net flows). A positive (negative) sign indicates a net inflow (outflow). Not seasonally adjusted.

over the first half of 2007 (see Chart 33). To some extent, these developments may be seen as a normalisation after a period of strong growth at the end of 2006. Somewhat weaker foreign demand in the first half of 2007 may have contributed to the slowdown in extra-euro area exports. Meanwhile, goods export prices rose by 1.1% in the second quarter after posting an increase of 0.7% in the first quarter of 2007.

Taking a longer-term perspective, the 12-month cumulated current account up to July recorded a surplus of €10.0 billion (about 0.1% of euro area GDP), compared with a deficit of €27.9 billion a year earlier (see Chart 34). This shift largely resulted from developments in the goods surplus which – in 12-month cumulated terms – rose by €40.6 billion compared with the previous year. By contrast, the balances for services and income remained broadly unchanged, while the deficit in current transfers increased by €2.4 billion.

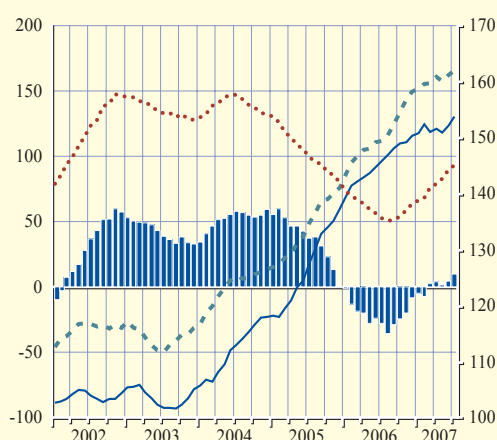
## FINANCIAL ACCOUNT

In the three-month period to July 2007 the combined direct and portfolio investment of the euro area recorded monthly average net inflows of €17.7 billion, as opposed to average net inflows of

**Chart 34 The euro area current account and trade balances**

(EUR billions; monthly data; seasonally adjusted)

- current account balance (12-month cumulated data; left-hand scale)
- ..... trade balance (12-month cumulated data; left-hand scale)
- - - exports of goods and services (3-month moving average; right-hand scale)
- imports of goods and services (3-month moving average; right-hand scale)

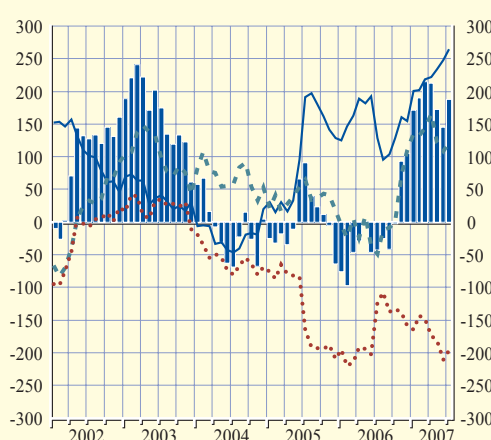


Source: ECB.

**Chart 35 Euro area combined direct and portfolio investment**

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

- net direct and portfolio investment
- ..... net foreign direct investment
- - - net debt instruments
- net equity flows



Source: ECB.

€21 billion in the period up to April (Table 8). The moderate decline in the combined figure is mostly attributable to larger net outflows in direct investment.

From a longer-term perspective, cumulated net inflows in combined direct and portfolio investment amounted to €187.8 billion in the 12-month period to July 2007, compared with net outflows of €43.4 billion a year earlier. Higher net inflows in portfolio investment (by €305 billion), compared with a year earlier, were only partly offset by increased net outflows in direct investment (see Chart 35).

The developments in cumulated portfolio investment flows continued to be driven primarily by increasing net inflows in debt instruments that were almost entirely accounted for by higher net purchases of euro area bonds and notes by non-residents. By contrast, the higher cumulated net inflows in equity securities were mainly attributable to lower net purchases of foreign equity by euro area residents.





## ARTICLES

# LONG-TERM DEVELOPMENTS IN MFI LOANS TO HOUSEHOLDS IN THE EURO AREA: MAIN PATTERNS AND DETERMINANTS



*Identifying and understanding the main patterns and determinants of developments in loans that euro area monetary financial institutions (MFIs) grant to households is an important element in the overall assessment of economic and monetary developments, as well as of the monetary policy transmission mechanism.*

*Historical time series for MFI loans to households have recently become available for the period since the early 1980s. They demonstrate that borrowing by households has risen consistently more strongly than disposable income, reflecting to a large extent strong borrowing for house purchase. This also implies that asset price and wealth developments have, over time, assumed a larger role in determining household loan dynamics. At the same time, assessing the historical pattern of household loan developments purely on the basis of the macroeconomic determinants of loan demand remains to some extent inconclusive, given that loan developments over the past two decades are also likely to reflect a number of structural influences, such as financial innovation and changes in mortgage market regulation, as well as the shift to a low-inflation and credible monetary policy environment in the euro area in the context of EMU.*

### I INTRODUCTION

One important element in the ECB's recent assessment of economic and monetary developments, and of the impact that changes in official interest rates have had on these developments, has been the moderation in the growth of household borrowing observed since the spring of 2006. More specifically, the annual growth rate of MFI loans to households declined from almost 10% in March 2006 to just above 7% in June 2007. In order to gain an appreciation of the factors behind such developments and assess the possible implications for other economic variables of major interest to a central bank, knowledge and understanding of the historical developments in borrowing dynamics are necessary. However, until recently, official euro area data on MFI loans by sector were only available for the period since 1998. These data have now been complemented with historical time series dating back to 1980 (see the box entitled "New euro area historical series on MFI loans to households and non-financial corporations" in this issue of the Monthly Bulletin).

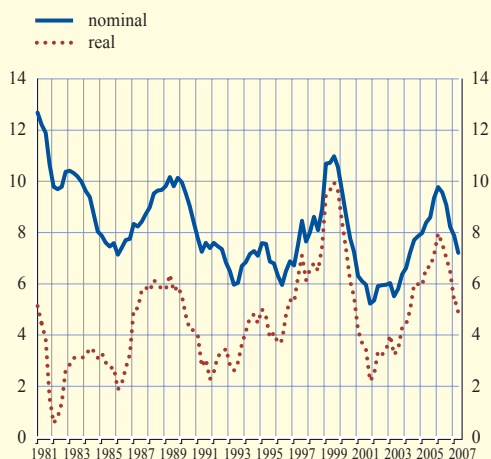
MFI loans to households account for a substantial part of the overall financing of the euro area household sector and of liquidity creation in the domestic economy more generally. This can be shown by a number of simple ratios. In early 2007 the outstanding

amount of loans taken from MFIs accounted for 90% of the euro area household sector's loan financing and for 84% of its total liabilities. In recent years the new business in MFI loans to households has amounted to almost 30% of the household sector's disposable income, and by early 2007 the stock of MFI loans had reached a level of around 85% of disposable income. Finally, looking at loans to households from the perspective of bank balance sheets, they account for more than 50% of all MFI loans to the private sector and are thus a very important source of money creation.

Understanding the dynamics and determinants of MFI loans to households is a necessary first step in the process of gauging their influence on, for instance, households' investment and consumption activities, debt servicing costs and the associated impact on disposable income net of interest payments, or developments in asset prices. However, it should be borne in mind that the historical time series for the euro area can reflect very diverse developments at the country level, given that markets for household debt financing have remained more segmented than, for instance, goods markets, and that they have seen quite different degrees of liberalisation and deregulation over the past decades. The usual caveat that caution is required in interpreting "synthetic" euro area data for the period prior to the start of Stage Three of EMU in January 1999 therefore needs

Chart 1 MFI loans to households

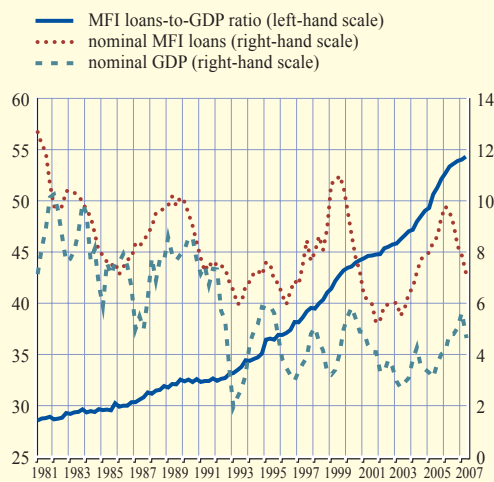
(annual percentage changes)



Sources: ECB and Eurostat.  
Note: The real series has been calculated using the GDP deflator.

Chart 2 MFI loans to households, GDP and the debt ratio in the euro area

(annual percentage changes; percentages)



Sources: ECB and Eurostat.

to be given even more weight than usual in this context.

The remainder of this article is structured into four sections. Section 2 describes the stylised facts of growth in loans to households for the period since 1980.<sup>1</sup> Section 3 discusses developments in total household loans in the light of the evolution of their likely macroeconomic and structural determinants. Section 4 examines the extent to which developments in individual loan categories can be better understood by relating them to more specific determinants. Section 5 offers some concluding remarks.

Overall, this article discusses developments in MFI loans to households from the perspective of explaining trends in financing. Loans to households constitute a large share of banks' assets and the credit risk potentially associated with household borrowing thus also makes understanding household loan dynamics an important issue for the monitoring of financial stability. Financial stability issues, however, such as the risk content of MFIs' loan portfolios associated with households' ability to repay

debt, are regularly discussed in the ECB's Financial Stability Review.

## 2 LOANS TO HOUSEHOLDS: SOME STYLISED FACTS

Over the period since 1980, MFI loans to households in the euro area have increased at an average annual rate of around 8%. This average expansion can be examined and put into perspective in several ways.

First, over the period under review, the annual growth rate of total nominal loans to households has seen three discernible cyclical peaks, each at around 10%, at the end of the 1980s, at the end of the 1990s and, more recently, in early 2006 (see Chart 1). In between these peaks, loan growth moderated to cyclical troughs of around 6%.

1 See also the article entitled "Developments in the debt financing of the euro area private sector" in the November 2003 issue of the Monthly Bulletin, which presented a first analysis of longer-term developments in household debt financing in the broader context of private sector debt financing.

Second, the average annual rate and the cyclical peaks and troughs in loan growth are quite different when looking at loan dynamics adjusted for price developments. In particular, the period of high inflation in the first half of the 1980s implies that in real terms (using the GDP deflator) annual loan growth has been much lower than in nominal terms, and that the peak observed at the end of the 1980s was much lower than the peaks at the end of the 1990s and in early 2006. Splitting the sample into two parts of equal length in mid-1993 shows that average loan growth was higher in the first half of the sample than in the second when looking at nominal series, while the opposite holds when looking at loan growth in real terms.

Third, the expansion of nominal loans to households has on average been stronger than that of nominal GDP or nominal disposable income of the household sector and thus implies a rise in the respective debt ratios. For instance, in 1980 the outstanding amount of MFI loans to households amounted to somewhat less than

30% of GDP, while in early 2007 the ratio stood at around 55% (see Chart 2). In the first half of the sample up to mid-1993, the rise in indebtedness was still relatively muted, but in the second half it accelerated and the ratio increased by around 1½ percentage points per annum. However, while this increase was strong from a historical perspective for the euro area, it was less pronounced than, for instance, in the United Kingdom, where the corresponding ratio between MFI loans to households and GDP rose by around 2 percentage points per annum from the mid-1990s, reaching somewhat more than 70% in early 2007.

Fourth, the new historical data on MFI loans to households provide a breakdown by purpose into the following categories: loans for house purchase; consumer credit; and other lending, which is a residual item (some conceptual issues regarding the classification of loans to households by purpose are discussed in Box 1).

#### Box 1

#### CONCEPTUAL ISSUES REGARDING THE CLASSIFICATION OF LOANS TO HOUSEHOLDS BY PURPOSE

Banks grant loans for a number of very different purposes. In the case of households, the statistical classification in place distinguishes between loans for house purchase, consumer credit and “other lending”. While, with the exception of the unspecific other lending, these purposes appear *prima facie* to be clear-cut, there may nevertheless be different connotations when it comes to judging where loans for specific purposes might be recorded. This complication is compounded by the fact that the MFI granting the loan will not always be aware of the ultimate purpose of the loan the client is taking out. As an understanding of which types of loan are recorded under which of the three loan categories is important to meaningfully assess the respective loan developments, this box briefly highlights some conceptual issues against the background of the relevant ECB regulations.<sup>1</sup>

#### Loans for house purchase

This category accounts for the bulk of total MFI loans to households (71% in the second quarter of 2007) and comprises credit extended for the purpose of investing in housing, including purchasing an existing residential property (for own use or to let); purchasing land; building residences; and home improvements. In principle, this loan category comprises all loans for house

<sup>1</sup> See Regulation ECB/2001/13 of 22 November 2001 concerning the consolidated balance sheet of the monetary financial institutions sector (OJ L 333, 17.12.2001, p. 1), as amended.

purchase, regardless of whether they are secured on residential property or not. On the other hand, loans that are secured on residential property but not extended for the purpose of investing in housing should in principle not be included in this category. This implies that loan instruments that allow homeowners to withdraw equity from their residential property (mortgage or housing equity withdrawal) should in principle not be recorded as loans for house purchase.<sup>2</sup>

### Consumer credit

This category corresponds to 13% of total MFI loans to households (as at the second quarter of 2007) and includes loans granted for the purpose of personal use in the financing of consumption of goods and services, such as motor vehicles; furniture, appliances and other consumer durables; holiday travel, etc. In the case of consumer credit, the distinction between purpose and collateral may be greater than in the case of loans for house purchase, as the purchase of consumer goods and services by means of credit may well be secured by residential property (especially for credit with longer original maturity). Credit card loans and overdrafts on current accounts are also typically included in this category.

### Other lending

This category accounts for 16% of total MFI loans to households (as at the second quarter of 2007). It is a residual item and includes loans granted for purposes such as education (student loans), the acquisition of financial assets and debt consolidation. Moreover, given that the household sector also includes unincorporated businesses (sole proprietors and partnerships), other lending also comprises credit that in principle may reflect business purposes such as the financing of working capital or the purchase of capital goods, rather than pure consumption or residential investment purposes. In addition, loans granted to non-profit institutions serving households are normally also classified in this category, except for loans extended to housing associations that are used to acquire residential property, which should be recorded as loans for house purchase, to the extent that they can be identified.

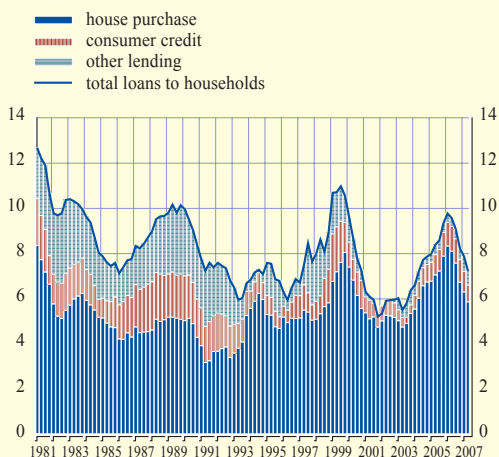
In practice, these classification principles cannot always be strictly followed across all euro area countries. For example, in some national statistical frameworks the overriding classification principle is the type of security against which the loan is granted rather than its actual purpose, leading for instance to the classification of all loans secured on residential property as loans for house purchase. In addition, household current account overdrafts may in some countries be recorded under other lending, irrespective of whether they mainly finance consumption expenditure. While such classification issues should not distort the main patterns of development in the individual loan categories, they need to be borne in mind, especially when it comes to assessing shorter-term developments. It should be noted, however, that work is ongoing to further harmonise these loan categories across countries.

2 The replies to an ad hoc question included in the July 2006 round of the Eurosystem's bank lending survey suggest that, at the euro area level, mortgage equity withdrawal is not quantitatively significant (see Box 2 entitled "The results of the July 2006 bank lending survey for the euro area" in the August 2006 issue of the Monthly Bulletin).

Charts 3 and 4 show that similar developments in the annual growth of total loans to households over time can reflect different dynamics and contributions from these loan categories. Loans for house purchase have historically accounted for the bulk of annual loan growth, reflecting

**Chart 3 Contributions to growth in MFI loans to households**

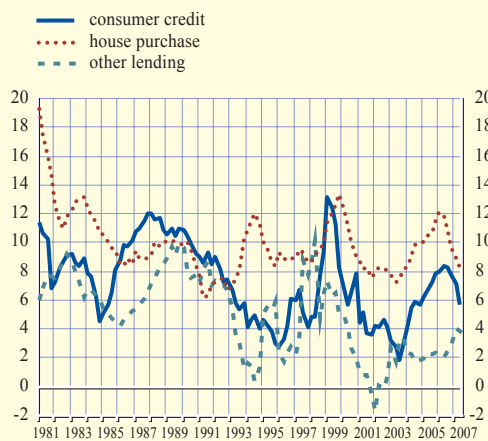
(annual percentage changes; percentage points)



Source: ECB.

**Chart 4 Loans to households by purpose**

(annual percentage changes)



Source: ECB.

the fact that they represent the largest share of the total outstanding amounts of loans and that on average they have also exhibited the strongest growth rates. This is particularly evident for the second half of the review period, when the annual average growth rate of loans for house purchase was almost double that of consumer credit and almost three times that of other lending, and accounted for almost 6 percentage points out of the 7½% average annual growth of total loans to households.

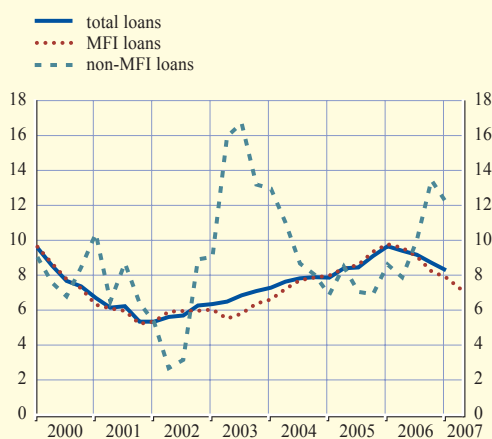
In the first half of the review period, consumer credit and, in particular, other lending to households still played an important role in shaping household sector loan dynamics, with a joint contribution to total loan growth almost equal to that of loans for house purchase. This reflects the initially high combined share of other lending and consumer credit in total loans to households, of more than 50% in the early 1980s. Over time, this has diminished to less than one-third in recent years. Thus, although the movements in growth of other lending were quite pronounced in the second half of the period, this did not have a strong impact on the pattern of growth in total loans to households.

The cyclical movements of growth in the respective loan categories have shown varying degrees of synchronisation in the period since 1980. While in the second half of the period developments in the growth rate of loans for house purchase were relatively closely aligned with those of consumer credit, this was not the case in the first half of the period. A lack of co-movement was particularly apparent in 1993 and 1994, when growth in loans for house purchase strengthened, while growth in consumer credit declined further. The opposite was observed in 1985 and 1986, when growth in consumer credit strengthened, while growth in loans for house purchase continued to decline (see Chart 4).

Such a lack of co-movement can obviously reflect a number of factors. First, the various loan categories may simply be influenced by different determinants which themselves follow diverse cyclical patterns (see Sections 3 and 4). Second, there may have been specific developments in individual countries of the euro area which had a strong impact on particular loan categories and may have distorted the relationship with more fundamental

**Chart 5 Loans to households by lender**

(annual percentage changes)



Source: ECB.

determinants. One example is the strong increase in the growth of loans for house purchase at the euro area level in 1993 and 1994, which to a large extent can be explained by the impact of government programmes in Germany following German reunification, in a period when developments in consumer credit and other lending were still negatively affected by the economic downturn.<sup>2</sup> Another example is the strong increase in the growth of consumer credit at the euro area level in 1985 and 1986, which may reflect to a large extent the impact of structural changes in the banking sector, such as the 1984 Banking Act and the 1985-86 financial reforms in France.<sup>3</sup>

A final issue in the assessment of the growth pattern of MFI loans to households is the degree to which it is influenced by a shift in the source of borrowing from MFIs to other sectors, such as insurance corporations or specialised lending corporations. The available data from the euro area sector accounts suggest that, on balance, such influences have been limited in the past few years. One exception in this respect has been associated with large-scale, “true-sale” securitisation operations in 2003, where MFIs shifted loan portfolios off their balance sheet by selling them to special-purpose vehicles,

which are part of the other financial intermediaries sector. In such instances, developments in loans held by non-MFIs may need to be analysed in conjunction with those in MFI loans to better understand the pattern of the latter (see Chart 5).

Overall, the stylised facts described in this section show that the developments in MFI loans in the period since 1980 have been multifaceted, and they suggest that it is unlikely that a limited set of traditional macroeconomic determinants can provide consistent explanations across the full period.

### 3 TOTAL LOANS TO HOUSEHOLDS AND THEIR DETERMINANTS

Developments in household borrowing are the outcome of the interaction of both demand and supply-side forces. However, the classification of factors as demand or supply-side is not always straightforward, as some variables can affect loan dynamics from both sides. This section therefore identifies and groups together the main determinants of total loans to households in the following broad categories: (i) scale variables; (ii) variables related to financing terms; (iii) variables related to the broader household balance sheet position; (iv) factors related to structural changes in the banking sector; and (v) other factors. It should be noted that, while this distinction between factors may be useful for presentational purposes, it is their interaction that jointly determines household borrowing dynamics. Indeed, the borrowing capacity of households depends inter alia on their income, the financing conditions they face, their existing debt level, the typical duration of the loans available to them, and their financial and housing wealth.

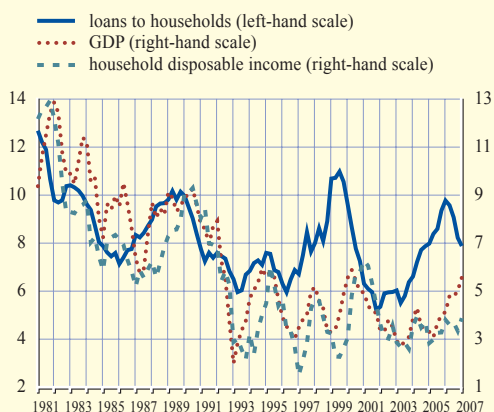
2 See the article entitled “The development of bank lending to the private sector” in the October 2002 issue of the Monthly Report of the Deutsche Bundesbank.

3 See the study entitled “Developments in France’s banking system since the late 1960s” in the 2002 Annual Report of the Commission Bancaire.



**Chart 6 MFI loans to households, GDP and income**

(annual percentage changes)



Sources: ECB and Eurostat.

## SCALE VARIABLES

Households generally take out loans in order to finance consumption and investment expenditure that they cannot or do not want to finance from their current incomes and/or savings. According to the life-cycle hypothesis, households passively use such debt financing to smooth their expenditures over time in line with their expected lifetime income. In principle, there should thus be no visible co-movement between debt, on the one hand, and expenditures, which capture the size of the underlying transactions that generate households' financing needs (such as private consumption and residential investment), on the other. However, if capital markets are imperfect and households are therefore limited in the amounts they can borrow against their future income, liquidity constraints provide scope for a positive correlation between developments in household debt financing and scale variables.<sup>4</sup> In such a set-up, scale variables such as general economic activity or household disposable income reflect households' borrowing capacity, since higher levels of income can support a greater debt repayment burden, thus allowing households to acquire more debt.<sup>5</sup> At the same time, such scale variables also affect the supply of loans by influencing lenders' assessment of

macroeconomic risks and, hence, their willingness to lend.

Given that total MFI loans to households encompass borrowing acquired for a diverse set of purposes, their evolution would be expected to be related to developments in broad economic indicators and not to variables that are specific to a particular financing need. Indeed, Chart 6 illustrates that total loans to households followed relatively closely the evolution of general economic activity, as captured by nominal GDP, and household disposable income in the first half of the period reviewed, i.e. from 1980 to 1993. Thereafter, the influence of other factors of a conjunctural as well as a structural nature, which are discussed below, appears to have somewhat reduced the strength of this relationship.

## TERMS OF FINANCING

The terms of financing encompass the cost of financing as well as other features of the loan contract, such as the maturity of the loan. The cost of financing comprises both interest and non-interest costs, such as fees and charges. Moreover, in some countries interest payments are influenced by direct or indirect subsidies and taxes, particularly in the case of loans for house purchase, which suggests that the cost of financing that is relevant for household borrowing decisions is an after-tax measure.<sup>6</sup> A higher cost of financing reduces both the willingness and the capacity of households to take on debt, and is thus likely to have a negative effect on households' demand for loans. Developments in the cost of financing can also affect lenders' willingness to finance

4 By contrast with cyclical developments, even in the absence of capital market imperfections, the long-term trends in household borrowing should be related to long-term developments in scale variables, which shape households' expectations regarding their lifetime or permanent income.

5 This notwithstanding, it can be envisaged that households may take advantage of an increase in income, particularly a transitory one, in order to reduce their indebtedness.

6 See G. Wolswijk (2005), "On some fiscal effects on mortgage debt growth in the EU", ECB Working Paper No 526, September.

**Chart 7 Household sector debt-to-disposable income ratio and interest rates**



Sources: ECB and Eurostat.  
 Note: Household sector debt refers to the outstanding amounts of total MFI loans to households.

households, although in this case the direction of the effect is not clear-cut. While a higher lending rate can in principle increase the supply of loanable funds, it may have an adverse effect on lenders' assessment of the risks attached to lending to households, thereby reducing their willingness to provide funding.

Information on bank lending rates applicable to loans to households in the euro area is not available for a large part of the period under review. Given this limitation, the cost of borrowing is proxied in Chart 7 by short and long-term market interest rates. As illustrated in the chart, the relationship between the cost of borrowing and household debt dynamics in the euro area is clearly negative: the overall downward trend of short and long-term market interest rates in the period since 1980 is mirrored by the continued increase in the debt-to-income ratio. In addition, episodic increases in interest rates during this period appear to coincide with a stabilisation of household indebtedness (e.g. between early 1980 and early 1982, between mid-1989 and late 1992 and in 2001). The faster increase in household indebtedness since 1993 seems to be related, inter alia, to the sharp fall in interest rates in the context of the

shift to a low-inflation and credible monetary policy environment in the context of EMU.

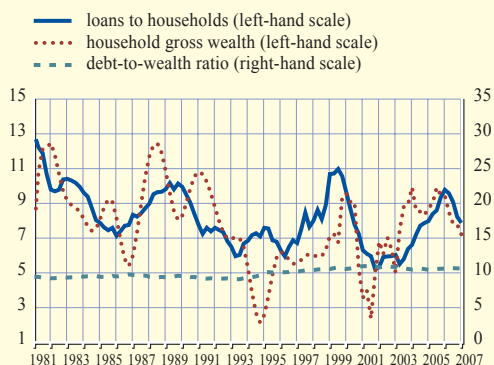
## HOUSEHOLD BALANCE SHEET POSITION

Household borrowing dynamics are likely to bear a close relationship to developments on the assets side of the sector's balance sheet. For instance, higher household wealth (housing wealth in particular) can boost households' capacity to borrow and lenders' willingness to provide finance since, by being used as collateral, it can partly alleviate the informational frictions that the lending process entails, thereby enabling a greater flow of funds to households on more favourable terms. At the same time, higher wealth may also be the mirror image of increased financing needs if, for instance, it reflects a rise in house prices and thus the requirement to raise more funding to acquire the same amount of assets. In addition, higher wealth increases the possibility to raise or smooth consumption and investment expenditure, where at least part of this smoothing will be financed by greater recourse to the loan market. Mortgage equity withdrawal is a case in point.

Chart 8 illustrates the relationship between growth in total MFI loans to households and growth in households' gross wealth (i.e. the sum of housing and financial wealth). This relationship appears to be a relatively close one, especially in the period since 1996. Around the turn of the century in particular, the IT-driven boom and bust in the equity markets appear to have influenced loan dynamics via their effect on household wealth, the annual growth rate of which increased markedly until mid-2000 and subsequently declined sharply. Nevertheless, the slowdown in wealth and loan growth in the aftermath of the IT-driven bust was moderated by the continued strong increase in residential property prices. Moreover, the robust growth in household loans in the period from mid-2003 was broadly in line with the evolution of total wealth. The close link between the two sides of the household balance sheet is

Chart 8 MFI loans to households and wealth

(annual percentage changes; percentages)

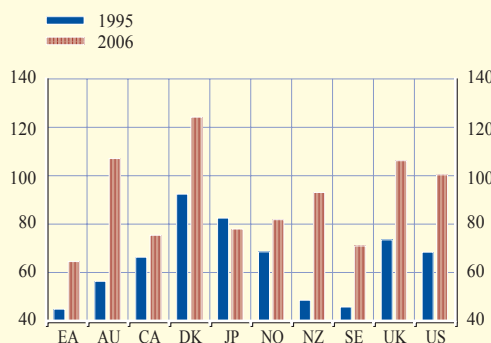


Source: ECB.

Notes: Household gross wealth comprises gross financial wealth and housing wealth. Financial wealth data are based on a number of sources. They have been constructed on the basis of euro area quarterly integrated accounts and financial accounts data as well as national data sources. For more information on the methodology underlying the estimates of housing wealth data, see Box 5 entitled "Estimates of housing wealth for households in the euro area" in the December 2006 issue of the Monthly Bulletin.

Chart 9 Household indebtedness in the euro area and selected countries

(percentage of nominal GDP)



Sources: ECB, Eurostat, BIS, OECD, Federal Reserve, Bank of Japan, Reserve Bank of New Zealand and Sveriges Riksbank.

Notes: EA stands for "euro area". Household indebtedness is defined here as the outstanding stocks of total liabilities of households and non-profit institutions serving households, rather than just MFI loans. Moreover, the figures are not necessarily fully comparable across countries owing to differences in institutional sectoral classification. Data for Denmark are available only for the period since 1998.

also evident in the relatively stable debt-to-wealth ratio, which has hovered around 10% throughout the review period.

An additional factor related to households' broader balance sheet position that affects the demand for loans is the level of debt that households have already taken on. More specifically, the higher the level of existing debt, the lower the capacity of households to service additional debt and, as a result, the lower their demand for new loans. In this respect, the strong rise in household debt in the period since 1993 is also partly related to the still relatively low level of household indebtedness, compared with industrialised countries such as the United States, the United Kingdom or Japan, as shown in Chart 9. Nevertheless, while the level of indebtedness is an important factor affecting household loan growth, differences in other determinants, such as housing market dynamics, also need to be taken into consideration when making cross-country comparisons.

## FACTORS RELATED TO STRUCTURAL CHANGES IN THE BANKING SECTOR

Most of the factors outlined thus far influence both the demand for and the supply of loans to households. Factors that tend to exert an influence on household borrowing dynamics mainly from the supply side are those relating to developments in the banking sector. Such developments pertain to gradual changes, of a structural nature, in the markets for loans to households. A significant example of such changes is the process of deregulation and liberalisation of financial markets that occurred in euro area countries, mainly in the 1980s and early 1990s.<sup>7</sup>

Prior to this, loans to households were often only available through specialised institutions with preferential status (e.g. benefiting from tax or funding subsidies, or implicit or explicit government guarantees). Furthermore, lending,

<sup>7</sup> For a discussion of the deregulation of mortgage markets in OECD countries, see N. Girouard and S. Blöndal (2001), "House prices and economic activity", OECD Economics Department Working Paper No 279.

and for that matter deposit, interest rates were often regulated. In addition, the amounts of loans were often subject to quantitative limits or to a maximum duration. As a result of such extensive regulation, a considerable share of households were in effect excluded from the credit market and developed a significant pent-up demand for loans. The lifting of the restrictions on household lending in the context of the deregulation and liberalisation of the financial markets allowed previously credit-constrained households, following a period of “learning”, to satisfy this demand.

The increased competitive pressures faced by providers of credit to households as a result of the opening-up of the market, which have been accentuated by the process of European financial integration, are also likely to have improved the financing conditions for households. For the period since 2003, these improvements have been visible in the results of the Eurosystem’s bank lending survey for the euro area. At the same time, increased competition has spurred a wave of financial innovation leading to a wider array of loan products, for instance loans for house purchase with flexible repayment options, variable rate loans with fixed instalments (so-called “accordion” loans), and loan products that allow households to withdraw mortgage equity.<sup>8</sup> In addition, in the case of loans for house purchase, changes in specific bank practices – regarding, for instance, the maximum amount of finance banks are willing to provide against the value of the property acquired (i.e. the loan-to-value ratio) – are also likely to have affected household borrowing.

Against this background, credit market participation has increased, a development that is confirmed by survey data from the European Community Household Panel (ECHP). The survey only covers the years from 1994 to 2001, but shows that over this period the share of euro area households that assumed some debt rose by approximately 3 percentage points.<sup>9</sup>

Financial innovations have also affected the ways that lenders fund themselves (e.g. through securitisation) and manage their risks (e.g. using credit default swaps), thereby also having an upward impact on the supply of loans to households. However, it should be noted that, while the relevance of these factors cannot be ignored, their measurement is complex and as a result their influence is often disregarded in the empirical literature.

#### **OTHER FACTORS**

In addition to the determinants of household loan developments outlined above, there are some important factors that do not fall under any of these categories. One such factor is expectations regarding future income. A household’s decision to take out a loan is essentially a decision to engage in spending in the current period that will be paid for out of future income. It follows that households’ expectations regarding their future employment and income prospects, to a large extent, shape their current demand for loans. Similarly, lenders’ assessment of households’ income prospects influences their willingness to extend credit. Household expectations are not directly observable, but indicators such as consumer confidence and unemployment rates may be useful proxy measures for households’ inclination to finance current expenditure out of future income.

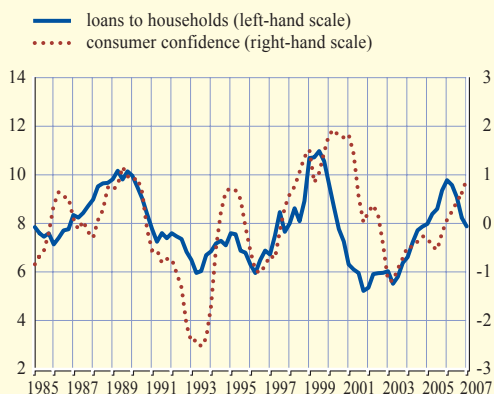
Chart 10 shows that household loan growth appears to have moved fairly closely in line with consumer confidence over the past two decades, also in periods such as 1998-2000, when loan growth was exceptionally high, significantly above the levels that other determinants, such as GDP growth, would have implied. The buoyant dynamics of household

<sup>8</sup> See Box 7 entitled “The influence of mortgage product innovations on risks to household debt sustainability” in the December 2005 issue of the ECB’s Financial Stability Review.

<sup>9</sup> The ECHP survey ceased in 2001. The regulations for its envisaged successor as a source of relevant information, the EU Statistics on Income and Living Conditions (EU-SILC), only became fully applicable in 2007.

**Chart 10 MFI loans to households and  
consumer confidence**

(annual percentage changes; percentage balances)



Sources: ECB and European Commission.  
Note: The consumer confidence series has been normalised.

loan growth in this period were arguably related to households' positive expectations regarding future economic and income growth in the context of the IT-driven boom in the equity markets.

Another factor that can have a significant bearing on longer-term developments in household borrowing is demographic characteristics. For instance, a larger population or, for a given population size, a shift towards a smaller average household size will tend to imply a higher demand for housing and thus a higher demand for housing loans, not least because of the possibly increased property prices. Moreover, the age distribution of the population can affect household loan developments; for example, young households, which have not yet accumulated significant wealth and still have low income relative to their future income, tend to have greater recourse to credit in order to finance current expenditure.

Some tentative evidence on the quantitative impact of the various determinants of total loans to households in the euro area discussed in this section is provided in Box 2.

**Box 2****GAUGING THE RELATIVE IMPORTANCE OF DETERMINANTS OF LOANS TO HOUSEHOLDS**

The discussion in the main text has highlighted the main factors that appear to be relevant for interpreting developments in household borrowing in the euro area. However, on the basis of this descriptive analysis, it is not possible to gain a clear understanding of the relative importance of each factor at each point in time. It is therefore necessary to complement this presentation with additional techniques. This box thus provides some insights into the quantitative impact of the main determinants of loan dynamics and how this has evolved over time.

The approach adopted in this box is to calculate the contributions to the growth of total MFI loans to households in the euro area of a selected set of variables, on the basis of estimates obtained from a simple econometric model. The variables in the model cover the main types of determinant identified in the main text for which data are available, and are in line with common practice in the relevant literature. More specifically, loans to households ( $l$ ) are regressed on GDP ( $y$ ), short-term market interest rates ( $str$ ), long-term market interest rates ( $ltr$ ) and the household wealth ratio ( $w$ ).<sup>1, 2</sup> Loans to households and GDP are expressed in logs, and all variables are in first differences and in real terms. Two lags of the dependent variable are also

1 The household wealth ratio has been calculated as total nominal household gross wealth (financial plus housing wealth) over nominal GDP.

2 Other factors suggested in the main text, for instance demographics and consumer confidence, are not included in the final estimated equation as they did not yield significant results.

used in the estimation, which covers the period from the first quarter of 1981 until the first quarter of 2007. The estimated equation<sup>3</sup> (*t* statistics are provided in brackets) is:

$$\Delta l_t = 0.23\Delta y_t - 0.11\Delta str_{t-1} - 0.14\Delta tr_{t-2} + 0.04\Delta w_t + 0.55\Delta l_{t-1} + 0.24\Delta l_{t-2} + \varepsilon_t$$

(2.1)      (-2.5)      (-3.7)      (2.5)      (5.2)      (2.3)

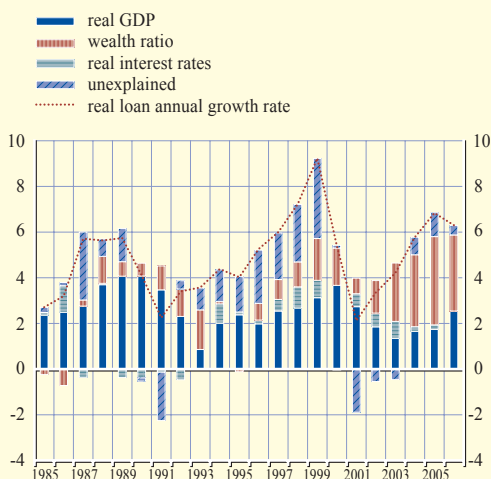
It should be noted that short and long-term market rates enter the estimated equation with one and two lags respectively, reflecting the length of the pass-through process from market to bank lending rates as well as the typically slow reaction of household loan demand to changes in lending rates.

The coefficients obtained from the estimated equation can then be used to decompose the annual growth rate of total loans to households into the contributions of the various determinants. As illustrated in the chart, developments in real GDP and household wealth are the main drivers of household borrowing dynamics throughout the period. However, as also noted in the main text, the impact of real GDP appears to dominate during the first part of the period, while its relative importance declines in the second half, particularly from 2002 onwards when wealth explains most of the loan growth in the context of strong increases in residential property prices. The contribution of developments in real interest rates has been predominantly positive from 1994 onwards, reflecting the marked decline in interest rates in the run-up to Stage Three of EMU and their low level thereafter.

While for most of the period under review the fundamental determinants used in the estimation appear to account for the bulk of the growth in household borrowing, there are occasions when the part of loan dynamics not explained by these factors is quite large. To the extent that such episodes relate to isolated exceptional events, this should not necessarily be a cause for concern, given the purpose of the exercise. However, it appears that the model systematically underestimates household loan growth in the period from 1993 to 1999. This is arguably due to the influence of some factors not captured by the variables included in the estimation. Indeed, in the main text it is argued

### Decomposition of household loan growth

(annual percentage changes; percentage points)



Sources: ECB and ECB calculations.

Notes: Real interest rate effects incorporate the impact of changes in both the short and the long-term market rates. The effect of the lagged dependent variable ( $\Delta l_{t-1}$  and  $\Delta l_{t-2}$ ) has been recursively allocated to the other explanatory variables used in the estimation. Owing to the lagged data requirements that this calculation imposes, the period shown in the chart has had to be reduced to 1985-2006.

<sup>3</sup> A more elegant and rigorous modelling approach would involve the estimation of a vector error correction model, as for instance estimated in the case of total loans to the private sector in the euro area in A. Calza, M. Manrique and J. Sousa (2003), "Aggregate loans to the euro area private sector", ECB Working Paper No 202. Such a model is not, however, currently available for loans to households. It should also be borne in mind that the relationship between the credit aggregate and some of its determinants may be subject to non-linearities; see for example S. Kaufmann and M. T. Valderrama (2004), "Modeling credit aggregates", Oesterreichische Nationalbank Working Paper No 90.



that the process of financial market deregulation and liberalisation is likely to have affected loan dynamics during this period. Moreover, the transition towards an environment of low inflation and credible monetary policy in anticipation of EMU entry, at least in some euro area countries, stimulated loan growth over and above the direct effect of short-run changes in interest rates. Finally, the inflated expectations regarding future income prospects in the context of the IT-driven boom in the latter part of this period appear to have also encouraged households to acquire more debt.

Overall, the results presented above suggest that while the relative importance of the factors underlying household loan dynamics has changed during the period considered, real GDP and wealth remain the main drivers of household borrowing. At the same time, factors omitted from the analysis appear to have had a significant bearing on loan growth developments in the 1993-99 period. Unfortunately, however, quantitative measures of these factors are not readily available for the euro area.

#### 4 LOANS TO HOUSEHOLDS BY PURPOSE AND SOME SPECIFIC DETERMINANTS

The factors discussed in the previous section were not specific to any particular borrowing purpose. However, when the focus of the analysis is shifted to the individual components of total loans to households, it is conceivable that determinants which are more specific to the purpose of individual loan categories may be more informative. This section assesses whether such potential purpose-specific determinants can provide additional insights compared with the more general determinants.

##### LOANS TO HOUSEHOLDS FOR HOUSE PURCHASE

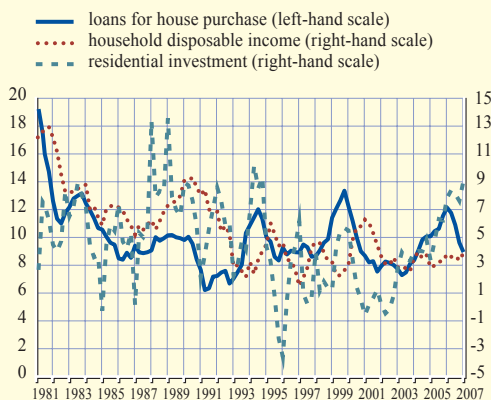
Loans to households for house purchase, given their specific purpose, should in principle move in line with variables capturing developments in housing market activity. Chart 11 illustrates the relationship between the growth rate of loans for house purchase and that of residential investment. It appears that while the two series move broadly together, their relationship is not that close – indeed, it is weaker than that between loans for house purchase and more general scale variables such as household disposable income. This reflects the high volatility of residential investment as well as the fact that this series does not capture transactions in the secondary market for

housing, which typically represent the bulk of overall property transactions. A more appropriate variable capturing housing market activity would be total housing market turnover, reliable estimates for which are not, however, available for the euro area.

Turning to determinants related to households' broader financial position, Chart 12 shows that a more encompassing view of household balance sheets, such as the one offered by total wealth, is more successful in explaining developments in loans for house purchase than

Chart 11 MFI loans to households for house purchase, income and investment

(annual percentage changes)

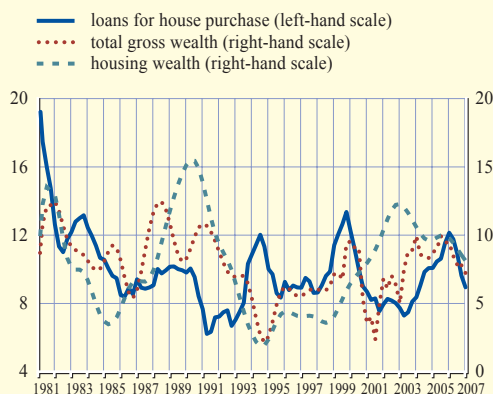


Sources: ECB and Eurostat.



**Chart 12 MFI loans to households for house purchase and household wealth**

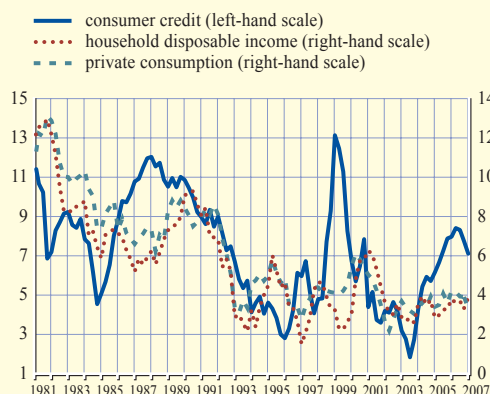
(annual percentage changes)



Source: ECB.  
Note: See notes to Chart 8.

**Chart 13 Consumer credit, income and consumption**

(annual percentage changes)



Sources: ECB and Eurostat.

a more focused one that is limited to housing wealth only. This may be due to the closer alignment between total wealth and the business cycle. The relationship between housing wealth and loans for house purchase has been surprisingly weak throughout the period considered. This may to some extent reflect the fact that rising house prices, which largely drive developments in housing wealth, do not always coincide with increased transactions in the housing market, which underlie the demand for housing loans.

### CONSUMER CREDIT

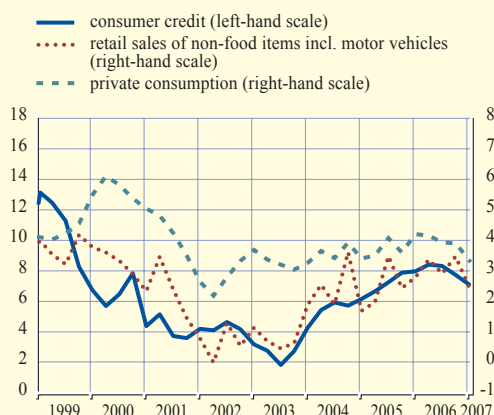
In principle, consumer credit is used to finance consumption expenditure and, unless this results in a full smoothing of consumption, developments in the two series should thus display a relatively close co-movement. Chart 13 suggests that the empirical evidence for such co-movement in the euro area is mixed. While the two series tend to move in tandem for most of the period under review, at times their dynamics diverge considerably, a pattern also observed in the relationship of consumer credit with a broader scale variable such as household disposable income. This is especially evident during episodes of strong asset price increases.

In these instances, it could be that households use more of their income and/or savings to finance the acquisition of financial and real assets. This implies increased recourse to consumer credit in order to maintain their desired level of consumption.

In addition, the weak correlation observed between consumer credit and private consumption is partly related to the fact that household consumption includes a substantial element that is not generally considered to be financed by debt, for instance purchases of small-ticket items such as food (including beverages and tobacco products) or regular expenditures such as rents. Indeed, households typically acquire consumer credit in order to finance the purchase of big-ticket items such as furniture, household appliances and motor vehicles. Chart 14 shows the relationship between consumer credit and a more relevant measure of consumer expenditure that is more likely to be financed by credit, which is only available from 1999. This measure, which comprises retail sales of non-food items and expenditure on motor vehicles, exhibits a considerably closer co-movement with consumer credit.

**Chart 14 Consumer credit, consumption and retail sales**

(annual percentage changes)

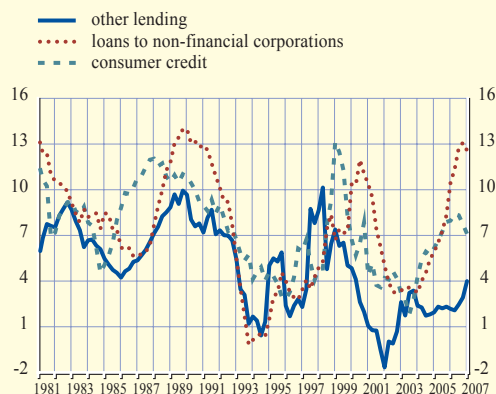


Sources: ECB, Eurostat and ECB calculations.

Note: The growth rate of retail sales of non-food items including motor vehicles is a weighted average of the growth rate of nominal retail sales of non-food items and that of an index of motor vehicle sales based on new car registrations adjusted by the relevant price index. The weights are based on the relative shares of these items in private consumption.

**Chart 15 Other MFI lending to households, consumer credit and MFI loans to non-financial corporations**

(annual percentage changes)



Source: ECB.

## OTHER LOANS TO HOUSEHOLDS

As highlighted in Box 1, other lending to households covers loans acquired for heterogeneous purposes that can include, for example, the financing of consumption and business investment expenditure. This implies that the identification of an appropriate scale variable in the case of other lending to households is not straightforward.

Chart 15 illustrates the diverse purposes of loans classified as other lending to households by relating their evolution to that of consumer credit and of loans to non-financial corporations. Throughout the period considered all three series follow relatively similar patterns. However, while the relationship of other lending to households with loans to non-financial corporations is stronger in the first half of the review period, it subsequently appears to break down, and in the second half of the period the evolution of other lending is more closely related to that of consumer credit.

Overall, specific determinants that, *prima facie*, would be expected to have a close relationship with individual categories of MFI loans to households do not appear to be better suited to explaining loan dynamics than more general determinants. While a breakdown of loans to households by purpose provides important information in itself, it thus appears difficult to gain a better understanding of the factors driving aggregate loan dynamics by examining the factors driving individual loan categories.

## 5 CONCLUSION

This article has discussed the main patterns of the newly available historical data on MFI loans to households over the past two and a half decades. Looking through the cyclical fluctuations, household borrowing dynamics have on average been stronger than growth in disposable income, resulting in increased household indebtedness. At the same time, the dynamics of individual loan categories have differed substantially on occasion, with the role

of lending for house purchase becoming increasingly dominant over the years.

It appears that while standard macroeconomic determinants can adequately explain borrowing dynamics for a significant part of the period reviewed, there are episodes during which special factors also play a decisive role. These factors include structural changes related to the deregulation of banking markets and financial innovation, the shift to a low-inflation and credible monetary policy environment in the context of EMU, as well as the pronounced changes in income expectations during the IT-driven boom and bust in the equity markets.

Overall, general economic activity, as captured by GDP, appears to have been the main driver of loan developments in the first half of the review period. In the second half, however, the importance of this factor declined as household wealth assumed an increasingly prominent role. Against this background, an assessment of the strength of and developments in household borrowing in the past few years is inevitably conditional on the sustainability of asset price valuations, which to a large extent drive the evolution of household wealth.

# THE COLLATERAL FRAMEWORKS OF THE FEDERAL RESERVE SYSTEM, THE BANK OF JAPAN AND THE EUROSISTEM<sup>1</sup>

## ARTICLES

The collateral frameworks of the Federal Reserve System, the Bank of Japan and the Eurosystem

*The collateral frameworks of the Federal Reserve System, the Bank of Japan and the Eurosystem to support the implementation of monetary policy are based on similar principles. Nevertheless, each central bank has translated these principles into practice in different ways, against the background of its specific economic and institutional constraints. The purpose of this article is to compare the collateral frameworks of these three entities. Section 1 explains why central banks only lend on a collateralised basis and describes the fundamental principles which guide the design of the collateral framework. Section 2 describes what constraints each central bank has faced and how these have impacted on the design of the collateral framework. Section 3 compares the eligibility criteria and risk control measures. Section 4 provides some statistics on the volumes of eligible collateral available to counterparties in the three regions and on the use of the different assets as collateral. Section 5 assesses how each central bank has aimed at avoiding market distortions in implementing its collateral framework. Section 6 concludes.*

## I WHY DO CENTRAL BANKS ONLY LEND AGAINST COLLATERAL?

Open market operations represent the key instrument used by all three central banks for supplying liquidity to the banking sector. Open market operations can be conducted on either an outright or a temporary basis. Outright purchases result in assets being bought in the open market and remaining on the balance sheet of the central bank, leading to a permanent increase in banks' holdings of central bank money. Temporary open market operations, on the other hand, involve lending central bank money to banks with a fixed and usually short maturity. These operations allow the central bank to manage marginal liquidity conditions in the interbank market for overnight reserves and thus to steer very short-term money market interest rates so as to implement monetary policy decisions.

All three central banks also conduct two other main types of credit operation, i.e. the Lombard facility and intraday credit. The Lombard facility – known as the marginal lending facility in the Eurosystem, the primary credit facility in the Federal Reserve System and the complementary lending facility in the Bank of Japan – aims to provide a safety valve for the interbank market, so that, when the market cannot provide the necessary liquidity, a bank can still obtain it from the central bank, albeit at a higher rate.<sup>2</sup> Moreover, central banks provide, on an intraday basis, the

working balances which banks need to carry out payments.

For all these different types of credit operation – open market operations, the Lombard facility and intraday credit – the central bank requires counterparties to pledge collateral as security.<sup>3</sup> The primary reason why a central bank lends to the banking sector against collateral is to maintain the soundness of its assets effectively and efficiently. This can be elaborated on from various aspects:

- Collateralised lending reduces the operational complexity that would arise with unsecured lending, such as the need to monitor very actively counterparties' creditworthiness, as well as to calculate and

1 The comments, evaluations and judgements regarding the collateral frameworks or methodologies adopted by the other central banks in this article are solely those of the ECB and do not necessarily reflect the views of the other entities. For the purposes of this article, the term central bank is used generically to refer not only to an individual central bank, but also to central banking systems, such as the Eurosystem and the Federal Reserve System.

2 In the United States, until the reform of the Federal Reserve System's discount window in 2003, lending was only made on a discretionary basis at below-market rates. There were, however, certain exceptions, such as a special liquidity facility with an above-market rate that was put in place in late 1999 to ease liquidity pressures during the changeover to the new century. The complementary lending facility was introduced in 2001 in Japan.

3 The Federal Reserve System does not require intraday credit to be collateralised except in certain circumstances (e.g. if the counterparty needs additional daylight capacity beyond its net debit cap, or if there are concerns about the counterparty's financial condition).

monitor credit limits. Furthermore, uncollateralised lending requires a high degree of discretion and may not therefore be compatible with the principles of transparency and accountability.

- Collateralised lending allows the central bank to lend at the same rate to all counterparties, which is important for ensuring the smooth transmission of monetary policy.
- As the market may assume that the central bank has inside information that could be used to assess a bank's financial strength, reducing a counterparty's credit limit or charging a higher rate may send unintended signals to the market and be misinterpreted.
- Financial independence from the government is a key factor in contributing to the central bank's overall independence in the implementation of monetary policy. Collateralisation of lending to counterparties

helps guard the central bank's financial independence by reducing the risk of losses. Furthermore, even if financial independence is not threatened, small losses could, in certain circumstances, have a damaging effect on the central bank's reputation.

Of course, assuming that the collateral can be legally transferred to the central bank and that adequate valuation and risk control measures can be designed, there is, in theory, an almost infinitely wide range of assets that could potentially perform the role of collateral. This may cover liquid marketable fixed-income securities, such as government and corporate bonds, equity-style instruments, loans to the public sector, corporations or consumers, and even assets, such as real estate and commodities. Therefore, in order to guide decision-making on what types of asset to accept as collateral, each central bank has established some guidelines or principles for its collateral framework (see Box 1).

#### Box 1

### PRINCIPLES OF THE COLLATERAL FRAMEWORKS

#### Federal Reserve System

The Federal Reserve System has decided to adhere to four principles for managing its assets. These principles, which were published in December 2002 in the publicly available document entitled "Alternative Instruments for Open Market and Discount Window Operations", are as follows:

- The Federal Reserve System must have effective control over the stock of high-powered money and the size of its balance sheet.
- The Federal Reserve System should structure its portfolio and undertake its activities so as to minimise their effect on relative asset values and credit allocation within the private sector.
- The Federal Reserve System should manage its portfolio to minimise risks in a manner consistent with the achievement of its goals and to maintain sufficient liquidity to be able to conduct potentially large actions at short notice.

- The Federal Reserve System should place a high priority on transparency and accountability.

### Bank of Japan

The Bank of Japan has published its principles concerning eligible collateral in a document entitled “Guidelines on Eligible Collateral”. The following three principles are mentioned:

- With a view to maintaining the soundness of the Bank’s assets, the Bank shall only accept collateral with sufficient creditworthiness and marketability. Moreover, there should be no obstacles to the Bank’s exercising of its rights, including the security interest.
- The Bank shall give proper consideration to the smooth operation of its business and efficient use of collateral.
- The Bank shall make effective use of market information, such as ratings by rating agencies in assessing the eligibility of collateral and market prices in calculating collateral prices, and public information in evaluating the creditworthiness of corporate debt obligations, asset-backed securities (ABS) and asset-backed commercial paper (ABCP).

### Eurosystem

Unlike those of the Federal Reserve System and the Bank of Japan, the Eurosystem’s principles are not stated explicitly, but can be derived mostly from the EC Treaty and the ESCB Statute. The core principles are:

- Collateral must protect the Eurosystem from incurring losses in its credit operations.
- The volume of collateral available to counterparties must ensure that the Eurosystem can effectively conduct monetary policy operations and promote the use of the TARGET payment system.
- Eurosystem operations should be equally accessible to a broad set of counterparties.
- Eligible collateral should offer cost-efficient transfer and mobilisation conditions, credit risk evaluation and monitoring possibilities.
- The Eurosystem shall act in accordance with the principle of an open market economy with free competition, favouring an efficient allocation of resources.
- The collateral framework should be simple and transparent.

These principles can be distilled down to a rather similar set of elements:

- First, all three central banks require eligible collateral to be creditworthy in order to maintain the soundness of the bank's assets.
- Second, the type and quantity of eligible collateral must allow the central bank to conduct its open market operations smoothly, even for large amounts at very short notice. In addition, the choice and quantity of collateral available must allow the payment systems to function efficiently.
- Third, all three central banks strive for efficiency. Thus, in its mobilisation, the collateral ideally should not incur costs that exceed the actual benefits to counterparties.
- Fourth, all three central banks aim for a high degree of transparency and accountability in order to ensure that the public trusts that the institution is behaving objectively, responsibly and with integrity, and that it is not favouring any special interests. For the collateral framework, this means selecting assets for eligibility based on objective and publicly available principles and criteria, while avoiding unnecessary discretion.
- Fifth, all three central banks, albeit in rather different ways, strive to avoid distortions to asset prices or to market participants' behaviour which would lead to an overall loss in welfare.

## **2 COMMON GOAL, DIFFERENT IMPLEMENTATION**

One of the asset classes which would normally most readily comply with these principles is marketable securities issued by the central government. Government securities are generally the asset class which is most available on banks' balance sheets and thus they ensure that operations of a sufficient size can be conducted without disrupting financial

markets. Government bonds have a low cost of mobilisation, as they can be easily transferred and handled through securities settlement systems, and the information required for pricing and evaluating their credit risk is publicly available. Furthermore, accepting government bonds would not conflict with the central bank's objectives of being transparent and accountable, as well as of avoiding the creation of market distortions.

Having said this, there are other types of asset that also clearly fulfil these principles. In fact, all three central banks have expanded the eligibility criteria beyond central government debt securities, although to different degrees. The Federal Reserve System, in its temporary open market operations, accepts not only government securities, but also securities issued by the government-sponsored agencies and mortgage-backed securities guaranteed by the agencies; in its primary credit facility operations, the Federal Reserve System accepts a very wide range of assets, such as corporate and consumer loans, as well as cross-border collateral. For temporary lending operations, the Bank of Japan and the Eurosystem accept as collateral a very wide range of private-sector fixed income securities, as well as loans to the public and private sector. For each central bank, the decision to expand the eligibility criteria beyond government securities can be explained by several factors related to the overall design of the operational framework, such as the size of the temporary operations and the decision on how many counterparties can participate, as well as by the financial environment in which the central bank operates, in particular, the depth and integration of non-government securities markets. These factors are explored in detail in the following two sub-sections.

### **2.1 CHOICES OF THE OVERALL OPERATIONAL FRAMEWORK**

One of the key aspects of the operational framework which impacts on the collateral framework is how the central bank supplies liquidity to the banking sector. Table 1 compares



**Table 1 Comparison of sizes of credit operations**

(averages for 2006, in EUR billions)

	Federal Reserve System		Eurosystem		Bank of Japan	
	Average outstanding amount	% of balance sheet	Average outstanding amount	% of balance sheet	Average outstanding amount	% of balance sheet
Temporary operations	19	3	422.4	38	274	34
Lombard facility	0.2	0	0.1	0	0.6	0.1
Intraday credit	102 <sup>1)</sup>	15	260 <sup>2)</sup>	24	124.3	15.5
Total	121	18	682.5	62	398.9	49.7

Source: Federal Reserve System, ECB and Bank of Japan.

Note: Converted to euro using end-2006 exchange rates.

1) 2005 data.

2) Estimate.

the size of central bank credit operations, both in terms of amounts outstanding and as a proportion of their total balance sheet.

The table raises a number of interesting observations. First, the size of the Federal Reserve System's temporary open market operations is significantly lower than that of the Eurosystem and the Bank of Japan, both in absolute amounts and as a proportion of the balance sheet. This is because the Federal Reserve System primarily supplies funds to the banking sector via outright operations, which accounted for 90% of its balance sheet at the end of 2006. The Federal Reserve System's temporary operations play the role of smoothing short to medium-term fluctuations in liquidity needs at the margin. Second, for all three central banks, the size of the Lombard facility is negligible, in line with its role of providing funds when the market cannot provide them and putting a ceiling on overnight interest rates. Third, the Eurosystem issues by far the largest volume of intraday credit, both in absolute terms and as a proportion of its balance sheet.

The size of the temporary operations clearly has an impact on the choice of collateral: all other things being equal, the larger the size of the operations, the greater the need to expand the type of collateral accepted to a wider set of instruments in order to ensure that the central bank has the ability to conduct monetary policy and ensure the smooth operation of the payments system. This has had a significant influence on

the design of the Eurosystem's and the Bank of Japan's collateral frameworks, as both conduct much larger temporary operations than the Federal Reserve System.

A second important aspect of the overall operational set-up, which impacts on the design of the collateral frameworks, is the choice of counterparties that can participate in the various central bank operations. To ensure that its open market operations can be conducted efficiently on a daily basis and also at very short notice, the Federal Reserve System uses only a small group of currently 21 "primary dealers". These primary dealers are relied upon to redistribute liquidity to the rest of the banking sector. For the primary credit facility, the approach is different: all 7,000 credit institutions which have a reserve account with the Federal Reserve Bank and an adequate supervisory rating are allowed access. The Eurosystem's operational framework has been guided, instead, by the principle of ensuring access to its refinancing operations to any counterparty that so desires. All credit institutions subject to minimum reserve requirements can thus participate in the main temporary operations, provided they meet some basic requirements. Currently, about 1,700 are eligible to participate in regular open market operations, although in practice fewer than 500 participate regularly in such operations; whereas 2,150 have access to the Lombard facility and a similar number can use intraday credit. The Bank of Japan takes an intermediate approach in order to ensure that it can operate

in a wide range of different markets and instruments, but at the same time also maintain operational efficiency: around 150 counterparties are eligible to participate in the fund-supplying operations against pooled collateral, but they must also fulfil certain criteria.

The selection of counterparties has certain implications: all other things being equal, the wider their range, the more heterogeneous are the types of collateral asset held on their balance sheets. In the case of the Eurosystem, this heterogeneity of counterparties' balance sheets was even greater – relative to the other two central banks – due to the fragmented nature of national financial markets upon the inception of the euro in 1999. The Eurosystem has therefore considered it especially important to take into account this heterogeneity when designing its collateral framework, in order to ensure that banks in the different countries of the euro area can participate in central bank operations with relatively similar costs of collateral and without needing to significantly restructure their balance sheets. In the case of the Federal Reserve System, however, the relatively few counterparties participating in open market operations are very active in the government and agency securities market. It can therefore be fairly confident that these banks have large holdings of the same type of collateral. By contrast, for its primary credit facility operations, the Federal Reserve System has chosen a very diverse range of counterparties – even broader than that of the Eurosystem for open market operations – and it caters for this by accepting a very broad range of collateral.

Lastly, from an institutional perspective, it should be mentioned that the Eurosystem is also bound by Article 102 of the EC Treaty, which prohibits the public sector from having privileged access to finance from credit institutions. In designing the institutional framework for the single monetary policy, it was decided (in the form of a statement attached to Council Regulation (EC) No. 3604/93) that distinguishing between debt issued by public and private entities in the definition of eligible

collateral for central bank operations would only be permitted where such distinctions “are justified exclusively by differences in the solvency of the issuers or in the liquidity of the market of their debt instruments”. This essentially means that the Eurosystem cannot give preferential treatment to government bonds in its collateral framework and that any eligibility rules must be objectively and uniformly applied to both public and private-sector issuers. This institutional constraint does not apply to the other two central banks.

## 2.2 EXTERNAL CONSTRAINTS

In addition to the design of the overall operational framework, the central bank needs to take into account its specific financial environment, in particular the size of the government and private bond markets relative to the demand for collateral.

In the United States, there are three fixed-income assets – the US Treasury paper, the agency bond securities and mortgage-backed securities – which have large outstanding amounts, are highly liquid and standardised, have a high credit quality and are widely held on the primary dealers' balance sheets. The large size and liquidity of the markets for these assets ensure that the central bank can intervene at short notice and for large amounts, without disturbing financial markets.

The high credit rating of the issuers ensures that the Federal Reserve System faces little risk; in addition, the fact that all these securities are book-entry format and can be easily priced and settled ensures operational efficiency; lastly, operating in highly standardised markets of a limited number of public or quasi-public entities ensures transparency. Given the relatively small size of the Federal Reserve System's temporary operations (and the fact that the majority of these are already collateralised with US Treasury securities), it would probably be feasible to implement monetary policy only with government bonds. However, given that two other markets exist,

which also obviously fulfil the Federal Reserve System's principles, granting them eligibility provides even more flexibility to counterparties with relatively limited additional costs.

An important challenge for the Federal Reserve System occurred in the late 1990s and early 2000s, when there were expectations about persistent US Treasury budgetary surpluses, leading to a scarcity of US Treasury securities, as well as concerns about the impact on the implementation of monetary policy. The Federal Reserve System considered a range of different solutions, such as expanding the range of assets for its outright operations to include non-Treasury securities, or modifying and expanding its discount window operations to make it the main source of funds for the banking sector. At the same time, it assessed whether these changes to its operational framework would still comply with its core principles, in particular the effective implementation of monetary policy and the need for market neutrality.

In the euro area, private sector bond markets have not yet reached the same scale as in the United States, where the vast majority of residential mortgages are funded through the capital markets, in which the government-sponsored agencies have played a critical role. In the EU, however, the funding of residential mortgages is still predominantly done through retail deposits. It is estimated that retail deposits accounted for approximately 70% of €5.1 trillion of outstanding residential mortgage balances in the EU in 2005, with only 27.5% funded through securities, such as covered bonds and mortgage-backed securities, and the remainder through unsecured borrowing. In addition, in the EU, the corporate bond market is less developed than in the United States, as firms have traditionally tended to obtain financing directly from banks rather than the capital markets. The fact that loans still form a major part of the assets of Eurosystem counterparties, and will likely continue to do so for the foreseeable future, was one of the reasons why the Eurosystem developed a euro

area-wide eligibility framework for bank loans, which was launched at the start of 2007.

As well as having a more bank-based financial system, the other major influence on the set-up of the Eurosystem's collateral framework is the ongoing process of integration of the euro area financial markets. Whereas the other two central banks have had well-integrated markets for a long time, the Eurosystem needed to take into account the highly diverse nature of national financial markets at the start of 1999 when designing its collateral framework. One of the clearest consequences of this situation was the establishment of two tiers of collateral, with the first tier based on euro area-wide harmonised eligibility criteria and the second tier targeted towards the specific needs of the local banking sector. Although the level of segmentation in financial markets has subsided significantly over the last eight years and the two-tier list was finally phased out in 2007, the fact that some segments of the market are still not fully integrated continues to impact on the Eurosystem's collateral policy. At the same time, the Eurosystem's collateral framework has also had some positive effects in terms of fostering the integration of financial markets. For example, through the establishment of the Correspondent Central Banking Model (CCBM), the Eurosystem has facilitated the use of collateral on a cross-border basis in credit operations with the Eurosystem, thereby providing an additional incentive for counterparties to diversify their portfolios across assets in different countries. The use of collateral on a cross-border basis in credit operations with the Eurosystem increased from 12% in 1999 to more than 50% in 2006 as a result of the CCBM.

In Japan, private sector bond markets are also less developed than in the United States, with only a very small proportion of mortgages being financed through mortgage-related securities, and corporations mainly obtaining financing from banks rather than the capital markets. However, given that the government bond market is extremely deep, with higher

outstanding issuance volume than both the US and euro area government bond markets, the lack of alternative private sector bond markets has posed fewer difficulties for the Bank of Japan than for the Eurosystem. Nevertheless, the Bank of Japan has modified its collateral framework as the economic and financial environment has changed. It has also broadened the range of eligible collateral to include relatively new instruments, such as asset-backed securities (ABS), as the marketability of these instruments has increased. Furthermore, it made loans to the Deposit Insurance Corporation, as well as to the Government's "Special Account for the Allotment of Local Allocation Tax and Local Transfer Tax", eligible in early 2002. These actions noticeably increased the amount of eligible collateral and hence contributed to the smooth provision of liquidity under the quantitative easing policy.

### 3 ELIGIBILITY CRITERIA AND RISK CONTROL MEASURES

This section describes how the three central banks have translated their principles into eligibility criteria, while also taking into account the various external constraints that they face. The precise eligibility criteria are summarised very broadly in Table 2.

There are a number of interesting similarities and differences. First, the eligibility criteria for the Federal Reserve System's open market operations are fundamentally issuer-based: all debt securities issued by the US Treasury are eligible, plus all senior debt issued by the government-sponsored agencies (the largest of which are Fannie Mae, Freddie Mac and the Federal Home Loan Bank), plus all the mortgage-backed securities which are fully guaranteed by the same agencies. For the Eurosystem and the Bank of Japan's refinancing operations against pooled collateral, the eligibility criteria are more general and not issuer-based, so as to encompass a broader range of assets.

Second, the Federal Reserve System accepts a substantially wider range of collateral for its primary credit facility than in its open market operations; furthermore, the range of collateral accepted for its primary credit facility is also broader than that accepted in the Lombard facility at the Eurosystem and the Bank of Japan. For example, foreign currency-denominated securities, securities issued abroad, and mortgage loans to households are eligible for the Federal Reserve System's primary credit facility, but would not be eligible in Japan or the euro area.

Third, the Eurosystem is the only central bank that accepts unsecured bonds issued by credit institutions as collateral in its main open market operations, although these are eligible in the Federal Reserve System's primary credit facility. The Bank of Japan does not accept unsecured bonds issued by counterparties of the Bank to avoid disclosing the Bank's judgement on any particular counterparty's creditworthiness and collateralising credit to the counterparties with liabilities of the counterparties which may be redeemed by proceeds from the central bank's credit itself.

Fourth, ABS are generally eligible for use in the main open market operations of all three central banks, although, in the case of the United States, they must be guaranteed by a government agency. In 2006 the Eurosystem established some additional specific criteria that must be fulfilled by ABS and asset-backed commercial paper (ABCP)<sup>4</sup>: as well as fulfilling the other general eligibility criteria, such as being denominated in euro and settled in the euro area etc., there must be a true sale of the underlying assets to the special purpose vehicle (SPV)<sup>5</sup> which issues the debt security, and the SPV must be bankruptcy remote so that the

4 Only a very small number of ABCP are currently eligible, mainly because they do not fulfil one of the general eligibility criteria, in particular the requirement to be traded on a regulated market or non-regulated market that is accepted by the ECB.

5 A true sale is the legal sale of an underlying portfolio of securities from the originator to the SPV, implying that investors in the issued notes are not vulnerable to claims against the originator of the assets.

Table 2 Comparison of eligibility criteria

	Federal Reserve System (temporary open market operations)	Federal Reserve System (primary credit facility)	Eurosystem	Bank of Japan	
Type of asset	Marketable debt securities	√	√	√ Debtor must not be a counterparty	
	Equities	-	√ Government agency stocks only	-	
	Bank loans	-	√	√ Debtor must be a non-financial corporation or public-sector entity √ Debtor must not be a counterparty	
Type of issuer/debtor	Central government	√	√	√	
	Government agency	√	√	√	
	Regional, local government	-	√	√	
	Corporate	-	√	√ Debtor must not be a counterparty	
	Bank	-	√	√ Debtor must not be a counterparty	
	Supranational	-	√	√ International financial institutions	
	Asset-backed securities	√ Only if guaranteed by an agency	√	√ Only if there is a true sale of assets and the SPV is bankruptcy remote from the originator	√ Only if there is a true sale of assets and the SPV is bankruptcy remote from the originator
	Household	-	√ Residential property and consumer loans	-	-
Issuer residence	Domestic	√	√	√	
	Foreign	-	√ Includes foreign governments, supranationals and European Pfandbriefe issuers	√ For marketable securities, it includes all 30 countries of the European Economic Area (EEA), the four non-EEA G10 countries and supranationals. √ Valid only for commercial paper that is guaranteed by a domestic resident, certain foreign governments and supranationals	
Seniority	Senior	√	√	√	
	Subordinated	-	-	-	
Credit standards	Minimum credit threshold for issuer or asset	Not applicable	Minimum rating of BBB or equivalent, but AAA for some complex or foreign currency assets	Minimum single A or equivalent Minimum rating varies from single A to AAA depending on issuer group and asset class <sup>1)</sup> ; JGBs, government guaranteed bonds and municipal bonds are eligible regardless of the ratings	
Settlement	Domestic	√	√	√	
	Foreign	-	√ Euroclear, Clearstream and third party custodians	-	
Currency	Domestic	√	√	√	
	Foreign	-	√ Usually only the major currencies	-	

1) For bills, commercial paper, loans on deeds to companies and other corporate debt, the Bank of Japan evaluates collateral eligibility based on its own criteria for assessing a firm's creditworthiness. Additionally, for some assets, the Bank of Japan requires debtors to have at least a certain credit rating level from credit rating agencies.

underlying assets are beyond the reach of the originator and its creditors, including in the event of the originator's insolvency; the underlying assets must also not consist of credit-linked notes or similar claims resulting from the transfer of credit risk by means of credit derivatives. One of the clearest consequences of these criteria is that synthetic securitisations<sup>6</sup>, as well as collateralised bond obligations which include tranches of synthetic ABS as underlying assets, are not eligible. However, despite the introduction of these additional criteria, the volume of potentially eligible ABS is still very large, amounting to €746 billion at the end of August 2007 which is estimated at 58% of the entire European ABS market. The Bank of Japan has also established specific eligibility criteria for ABS and ABCP which are similar to those of the Eurosystem; there must be a true sale (i.e. no synthetic securitisation) and the SPV must be bankruptcy remote; alternative measures must also be set up for the collection of receivables and the securities must be rated AAA by a rating agency. In its open market operations, the Federal Reserve System only accepts mortgage-backed securities which are guaranteed by one of the government agencies (which incidentally also only constitute true sale securitisation), but in its discount window operations it will accept a wide range of ABS, ABCP and collateral debt obligations, including synthetic securitisation. Furthermore, in August 2007, there was a minor change in the discount window collateral policy which implied that a bank could pledge ABCP of issuers to whom that bank also provides liquidity enhancements, such as a line of credit.

Fifth, the Eurosystem and the Bank of Japan (as well as the Federal Reserve System in its primary credit facility) accept bank loans to corporations and the public sector as collateral.

Sixth, in terms of foreign collateral, there are both similarities and differences. In their open market operations, all three central banks only accept collateral in local currency, which is also issued and settled domestically. However,

unlike the other two central banks, the Eurosystem also accepts assets issued by entities from some countries outside the European Economic Area for its operations.

Lastly, all three central banks have somewhat different approaches regarding the assessment of compliance with the eligibility criteria and the disclosure to the banks as to which assets are eligible. The Federal Reserve System, in its open market operations, publishes its eligibility criteria in several documents and on its website. Owing to the simplicity of the assets it accepts, there is no need to publish a list of eligible assets on its website. For its primary credit facility, the Federal Reserve System publishes a general guide regarding the eligibility criteria and suggests that the counterparty contact its local Federal Reserve Bank regarding specific questions on the details of eligibility. The Bank of Japan publishes a general guideline on eligibility on its website, which for most assets sufficiently clarifies whether a specific asset is eligible or not. For some assets, whose obligors are private companies in most cases, the Bank of Japan only assesses eligibility upon the counterparty's request. For the Eurosystem, the ECB publishes a definitive list of all eligible marketable securities on a daily basis. Owing to the Eurosystem's very large and diverse collateral framework (about 26,000 securities are listed in the eligible asset database), as well as the decentralised settlement of transactions at the level of the Eurosystem NCBs, this is important both for transparency to counterparties and for operational efficiency. For obvious reasons, the eligibility of bilateral credit claims can only be assessed on request and a list cannot be published.

Once the eligibility criteria for counterparties and the collateral assets have been decided, the risk control framework then plays a crucial complementary role in ensuring that residual risks are kept at acceptably low levels. There

<sup>6</sup> A synthetic securitisation uses credit derivatives to achieve the same credit-risk transfer as a true sale structure, but without physically transferring the assets.



are various tools that can be used for this purpose: counterparty borrowing limits; limits on collateral issuers or sectors; collateral valuation procedures; initial haircuts; margin calls; and close links prohibitions. All three central banks use a combination of these tools and, unlike in the choice of eligible collateral, the underlying methodologies and practices of the risk control frameworks are relatively similar:

- First, none of the central banks currently use counterparty borrowing limits for their temporary operations, and no predetermined limits are placed on exposure to certain individual collateral issuers or guarantors.
- Second, regarding the valuation of collateral, there are only some minor differences in the practices of the three central banks. For the Federal Reserve System's repo operations, valuation is carried out daily using prices from a variety of private vendors. For its primary credit facility operations, revaluation takes place at least weekly and is based on market prices, if available. In the case of the Eurosystem, valuation is carried out daily using the most representative price source, and, if no up-to-date price exists, theoretical valuation is used. At the Bank of Japan, daily valuation is used for the Japanese government bond repos, but weekly revaluation is used for the standing pool of collateral. For the valuation of bank loans, all three central banks generally use face value with the application of higher haircuts, generally depending on the maturity of the loan.
- Third, all three central banks use haircuts to take account of liquidity and market risk. The haircuts depend on the liquidity characteristics of the asset, issuer group, asset type, the residual maturity of the asset, and the coupon type. For the primary credit facility, if a market price does not exist, the Federal Reserve System uses the face value and applies higher haircuts.
- Fourth, all three central banks use global margin calls in case the aggregate value of the collateral pool falls below the total borrowing by the counterparty in a particular operation, i.e. margin calls are not calculated on an asset-by-asset basis.
- Fifth, all three central banks prohibit counterparties from using assets where they

**Table 3 Comparison of volumes of potentially eligible collateral**

(amounts outstanding, yearly average, 2005)

	Federal Reserve System (open market operations only)	Eurosystem (all credit operations)	Bank of Japan (all credit operations)
<b>Total eligible collateral</b>	<b>€8.7 trillion</b>	<b>€10.8 trillion</b>	<b>€7.2 trillion</b>
<i>of which %</i>			
Central government	40	39	73
Government agencies	25	0	1
Financial institutions	0	22	0
Mortgage-backed securities guaranteed by government agencies	35	0	0
Other asset-backed securities	0	4	0
Other securities	0	13	13
Loans	0	23	12

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

Notes: The figures for the Federal Reserve System only refer to the temporary open market operations, while for the Eurosystem and the Bank of Japan the figures refer to collateral eligible for all types of credit operation. In the case of loans eligible for credit operations of the Bank of Japan and the Eurosystem, it is the total amounts outstanding of loans to corporations (but not including small enterprises in Japan) and the public sector by domestically licensed banks. The obligors of these loans do not necessarily fulfil the eligibility criteria of the Bank of Japan and the Eurosystem and thus represent an indicative maximum volume. The quantity of Japanese commercial paper and corporate bonds, included under the category "Other securities", is only a rough estimation and only a proportion of these securities would fulfil the Bank of Japan's criteria.



may have a close financial link with the issuer, which would negate the protection from the collateral. This minimises the risk of a double default scenario.

#### **4 STATISTICS ON VOLUMES OF ELIGIBLE COLLATERAL AND ITS USE BY COUNTERPARTIES IN CENTRAL BANK CREDIT OPERATIONS**

Table 3 provides some figures for the volumes of securities and loans which were eligible for open market operations in the Federal Reserve System and for all credit operations for the other two central banks in 2005.

When converted to euro using end-2005 exchange rates, the Eurosystem has the largest amount of eligible collateral, at €10.8 trillion, compared with the Federal Reserve System at €8.7 trillion and the Bank of Japan at €7.2 trillion.<sup>7</sup> The ratios of eligible collateral to the size of the operations that need to be collateralised show some interesting differences: for the Eurosystem and the Bank of Japan, eligible collateral is 16 and 18 times larger than the operations respectively, but for the Federal Reserve System eligible collateral is 453 times larger than the operations, essentially because of their relatively small size. Even based on the assumption that the Federal Reserve System collateralises intraday credit, this ratio only falls to 72.

There are also a number of differences regarding the actual composition of collateral. Although, for all three central banks, central government securities provide the bulk of potentially eligible collateral, the proportion of government securities is substantially higher for Japan (73%) than for the United States (40%) and the euro area (39%). Another interesting difference is the high volume of mortgage-backed securities eligible in the United States (35%) compared with Japan and the euro area, reflecting the significant role of the US government-sponsored agencies in fostering a large and liquid mortgage

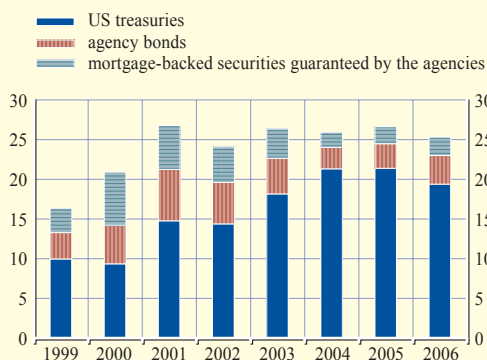
securities market. In the euro area, although ABS account for only 4% of eligible collateral, as already mentioned, this represents 58% of the whole ABS market. Loans to the public and corporate sectors also constitute a significant amount of eligible collateral in the Eurosystem (23%) and the Bank of Japan (13%), but are not accepted by the Federal Reserve System in its open market operations. Finally, it can be noted that the Eurosystem is the only central bank for which bonds issued by financial institutions play an important role, comprising 22% of all eligible collateral. In the case of the Bank of Japan and the Federal Reserve System, these types of bonds are not eligible for open market operations.

Of course, only a fraction of the potentially eligible assets are actually held on the balance sheets of the counterparties. Furthermore, the composition of the assets on the individual balance sheets will not match the overall composition of total eligible assets, as counterparties are likely to have very different investment strategies. According to informal surveys of the Federal Reserve System's primary dealers, its counterparties hold approximately 9% of all eligible collateral; in the case of the Eurosystem and the Bank of Japan, the percentage is roughly estimated to be significantly higher, at 33% and 40% respectively. The volume and composition of eligible assets held on counterparties' balance sheets is clearly an important factor in determining their actual use as collateral with the central banks.

<sup>7</sup> For the Federal Reserve System, however, the figures only refer to the temporary open market operations; the volume of collateral that is potentially eligible for the primary credit facility is not available, but it is estimated to amount to tens of trillions of US dollars.

**Chart 1 Composition of collateral used for repo operations with the Federal Reserve System**

(yearly averages, in USD billions)

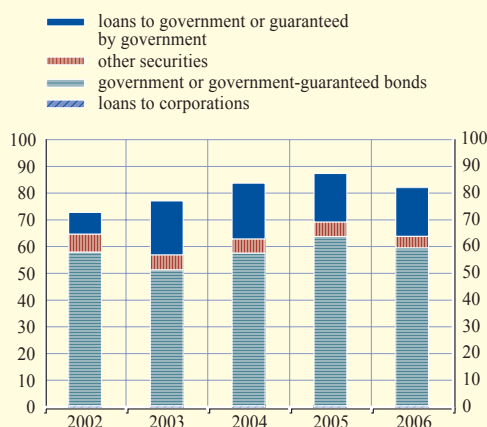


Source: Federal Reserve System.

As can be seen in Chart 1, in the Federal Reserve System's repo operations, US Treasury securities have been the dominant type of collateral used, and the share has been increasing substantially from a low of 45% in 2000 to around 80% in the last three years. On the other hand, mortgage-backed securities and agency bonds, which are in fact held in similar volumes to Treasuries on primary dealers' balance sheets, together account for only a fifth of collateral used. For the primary credit facility, bank loans are the dominant type of collateral, accounting for 73%

**Chart 2 Composition of collateral used for temporary operations with the Bank of Japan**

(yearly averages, in JPY trillions)



Source: Bank of Japan.

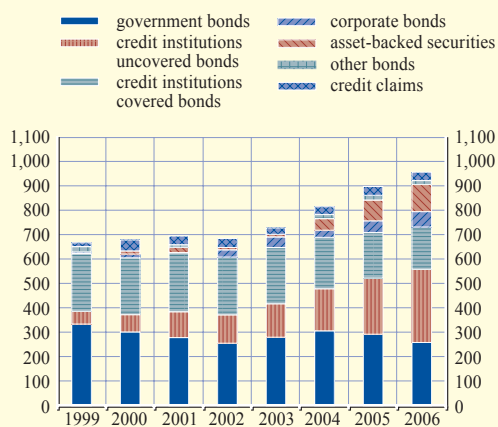
of total collateral pledged in March 2007, ABS are the next largest asset class, accounting for 15%, followed by corporate bonds with 7%.

In the case of the Bank of Japan, Japanese government or government-guaranteed bonds constitute a large share of collateral used, averaging around 70% for the last three years, while loans to corporations and loans to government or guaranteed by government accounted for 23% on average (see Chart 2). The remainder is composed of a broad range of local government or private sector marketable assets. The overwhelming majority of the loans on deeds are direct obligations of the Japanese government or guaranteed by the government; only a very small fraction consists of obligations of corporations. Thus, the total amount of collateral which consists of obligations of the government has averaged at more than 90% over the last four years.

As regards the Eurosystem, Chart 3 shows, first, that the amount of collateral mobilised has increased from €668 billion in 1999 to €959 billion in 2006, due primarily to larger temporary operations which were required to match the increase in banknotes in circulation. The composition of collateral has also changed

**Chart 3 Composition of collateral used for temporary operations with the Eurosystem**

(yearly averages, in EUR billions)



Source: ECB.

significantly over this period, reflecting changes in financial markets and the type of marketable securities held on banks' balance sheets. In 1999 government bonds accounted for just over half of all collateral mobilised; by 2006 their share had fallen to only 27%. The significant increase in collateral mobilised over this period was satisfied by unsecured bonds issued by credit institutions and ABS (the underlying assets of which have also been predominantly originated by credit institutions). This trend towards the use of unsecured bank bonds and ABS is driven partly by the strong increase in demand for collateral by the Eurosystem (which has risen significantly faster than holdings of eligible government bonds on counterparties' balance sheets<sup>8</sup>) but also by the more efficient use of collateral by counterparties, with government bonds being reserved for more profitable trades in the interbank repo market and for the securities lending business. Compared with the Federal Reserve System and the Bank of Japan, the Eurosystem now receives by far the lowest percentage of government collateral. This trend of substitution of government bonds is likely to be reinforced by the introduction of credit claims as eligible collateral from the start of 2007. Although the collateral used within the Eurosystem is becoming less liquid, creditworthiness is maintained thanks to the single A minimum credit rating threshold.

## 5 IMPACT OF COLLATERAL FRAMEWORKS ON THE MARKET

Although the impact of temporary operations on the relative prices of securities is likely to be substantially lower than that of outright operations, it cannot be ruled out that decisions on the types of collateral eligible for temporary operations could also have an impact on the market in a number of ways. As already mentioned briefly when discussing the principles underlying the collateral framework, all three central banks take into account the impact that their collateral framework might have on financial markets. The Federal Reserve System

explicitly aims to structure its portfolio and undertakes its activities so as to minimise their effect on relative asset prices and credit allocation in the private sector. The Eurosystem and Bank of Japan do not have the explicit objective of avoiding any influence on relative prices in financial markets, but instead endeavour to ensure that, if there is an impact, it does not lead to a negative effect on financial markets or social welfare in general.<sup>9</sup>

In theory, there are a number of ways in which the collateral framework can have an impact on the market.

First, if a central bank grants eligibility to an asset, it increases its liquidity, which would then raise its value in the secondary market relative to assets that are not eligible. This could also enhance the ability of the issuer to obtain credit from the private sector relative to issuers whose assets are not eligible. It is, however, a difficult exercise to quantify this "eligibility premium", since the effect may be muted due to several institutional factors. The most straightforward approach is to monitor price changes of previously ineligible securities when they become eligible. When this analysis was carried out for the euro area in 2005, when eligibility was granted to securities issued in euro in the euro area by residents outside of the European Economic Area, no clear evidence of a liquidity premium appeared.<sup>10</sup> In the case of illiquid assets, such as bank loans, the eligibility premium is likely to be more significant, but any calculations would be fraught with difficulties due to the lack of market prices.

8 Using balance sheet data from euro area monetary and financial institutions, holdings of euro area government securities have increased only marginally from €1.1 trillion in 1999 to €1.3 trillion in 2006, at an average annual growth rate of 2%. Aggregate demand for collateral, on the other hand, increased at a rate of 5% over the same period.

9 This is related to the Eurosystem's statutory obligation, set out in Article 105(1) of the EC Treaty, which states that "the ESCB shall act in accordance with the principle of an open market economy with free competition, favouring an efficient allocation of resources".

10 See "Credit risk mitigation in central bank operations and its effects on financial markets: the case of the Eurosystem", ECB Occasional Paper Series, No. 49, August 2006.

Second, the risk control framework could also in theory have an impact on the market. For example, if the haircuts applied to the securities accepted as collateral do not accurately reflect the fundamental market and liquidity risks of an asset, there could be incentives for arbitrage between the different assets, which could affect the price of the securities and the corresponding allocation of credit to the issuers. However, this secondary effect of the haircuts on an asset's market price should be even lower than the eligibility premium discussed above.

Third, the market can also be affected by the design of the open market operations. For example, at one extreme, the central bank could have separate auctions for each different type of collateral conducted in separate operations, i.e. an operation for government bonds, an operation for corporate bonds, and so on. The experience of the Federal Reserve System is somewhat closer to this approach as it conducts three operations, one for each type of underlying collateral, and acts as a price-taker in the auctions. Furthermore, operation sizes are selected across collateral types, relative to benchmarks for each type. At the other extreme, as in the Eurosystem's and the Bank of Japan's fund-supplying operations against pooled collateral, the central bank only conducts a single operation, which can be collateralised by a pool comprising a whole spectrum of liquid and illiquid instruments, the composition of which can be freely chosen by counterparties.

Furthermore, the tools chosen by the three central banks to avoid distortion to market prices are different. In order to minimise any effects on relative asset prices, the Federal Reserve System accepts only highly liquid assets in its temporary open market operations. If the market is very deep and liquid, the additional value granted by the eligibility as collateral with the central bank is likely to be insignificant. The Eurosystem, on the other hand, accepts a very broad range of collateral, ranging from highly liquid to illiquid, but avoids creating distortions by using objective and publicly available criteria in its asset

selection and ensuring that assets with similar properties are treated in a similar manner. For example, the eligibility criterion for creditworthiness is assessed through publicly available credit ratings, ensuring no discretion on the part of the Eurosystem and thus no perception of an official approval. The risk of creating distortions through granting eligibility and applying haircuts has been further reduced by a strategy of substantial diversification across issuers and asset types and by ensuring that the aggregate volume of eligible collateral is abundant. The eligibility criteria have also been designed to be very general so that the Eurosystem's collateral framework can adapt rather easily to developments in financial markets. For example, ABS automatically became eligible as their growth took off at the start of the decade, and it was only in 2006 that the Eurosystem adopted specific eligibility criteria for these securities. In its collateral framework, the Bank of Japan has strived to make effective use of market information, such as ratings by rating agencies in assessing the eligibility of collateral and market prices in calculating collateral prices. The Bank has also tried to expand the list of eligible collateral so that instruments in newly developed markets are not treated unfavourably.

## 6 CONCLUSION

This article illustrates that the fundamental principles of the collateral frameworks of the Federal Reserve System, the Bank of Japan and the Eurosystem are similar. They strive to have a collateral framework which ensures that monetary policy is implemented effectively and that payment systems operate smoothly; they aim to ensure that the central bank takes on a very limited counterparty risk; furthermore, they aim at a high degree of operational efficiency, transparency and accountability, and, in different ways, not to negatively affect market equilibria. Nevertheless, these normative principles have been translated into practice in different ways to take account of economic and institutional constraints which are specific to

each central bank, illustrating that there is no single optimal design for a collateral framework. Despite these practical differences, there are still important lessons – both on a policy and technical level – which can be learned from comparing the specific eligibility criteria and risk control frameworks of the three central banks. Lastly, a central bank – through the design of its collateral framework and open market operations – has an impact on the functioning of financial markets. For example, the Eurosystem has had some positive repercussions on financial market integration through its collateral policy; more recently, by extending eligibility to credit claims at the start of 2007, it has confirmed a framework which existed before the setting-up of the euro in some euro area countries and generalised the liquidity profile of this asset class so that it can now be instantly converted into central bank money in all euro area countries. The impact of a central bank’s collateral policy on financial markets is a subject of high interest, which can be explored further from both a normative and empirical perspective.

# CIRCULATION AND SUPPLY OF EURO BANKNOTES AND PREPARATIONS FOR THE SECOND SERIES OF BANKNOTES

## ARTICLES

Circulation and supply of euro banknotes and preparations for the second series of banknotes

*It is the Eurosystem's task to ensure a smooth and efficient supply of euro banknotes and to maintain their integrity. In order to fulfil its task with regard to the supply of euro banknotes, the Eurosystem focused on the further development of its internal policy framework for the production, distribution and processing of euro banknotes in the first few years after the 2002 cash changeover. More recently, attention has shifted to the organisation of the cash cycle in the euro area with a view to, where appropriate, harmonising the cash services provided by NCBs and improving the efficiency of the cash cycle. The implementation of the framework for banknote recycling and the roadmap for a greater convergence of the cash services provided by NCBs are important means to achieve this objective. At the same time, the Eurosystem is providing support for the cash changeovers in Cyprus and Malta, the two countries that will adopt the euro as their currency on 1 January 2008.*

*With regard to its other main task, namely protecting the integrity of the euro, the Eurosystem has been working on research relating to improved and new security features since the 2002 cash changeover. Although counterfeiting statistics do not currently give rise to major concerns, the Eurosystem needs to anticipate new technological developments in counterfeiting in order to stay ahead of the counterfeiters. Therefore, the Eurosystem initiated a project in 2005 for the launch of a new series of euro banknotes with improved and new security features in a few years time.*

## 1 DEVELOPMENT OF CIRCULATION

At the end of August 2007, the number of euro banknotes in circulation came to 11.2 billion, with a total value of €637 billion. The annual growth rates of the value in circulation, albeit declining in the past few years, remained strong. The annual growth rate of the €500 banknote has shown the strongest decline, and came down to 9.4% at the end of August 2007, which was by that date broadly similar to the annual growth rates of the €100 and €50 banknotes. The annual growth rates of the low-denomination banknotes, by contrast, have been fluctuating between 3% and 6% over the past few years.

The development of overall circulation can be partly explained by the fact that high-denomination banknotes were non-existent in several countries of the euro area before the cash changeover, so that the use and holdings of these denominations have not yet completely reached a new equilibrium. However, it seems as though this process of “re-optimisation” in currency demand is slowly coming to an end.

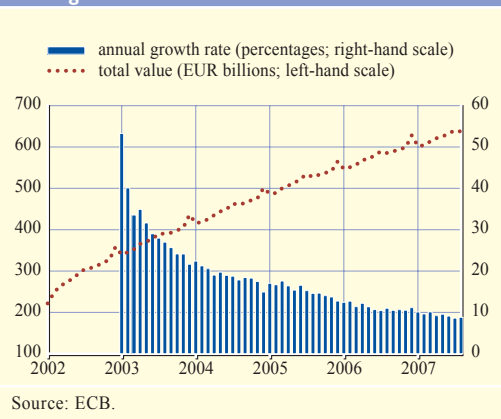
The charts below provide more detailed information by illustrating developments since the launch of the euro in terms of both value (see Chart 1) and pieces (see Chart 2).

## 2 FRAMEWORK FOR RECYCLING BANKNOTES

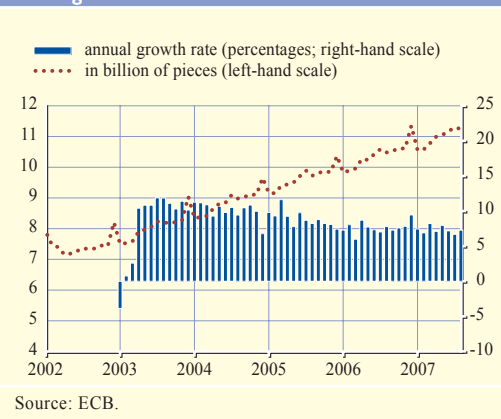
The ECB framework for the detection of counterfeits and the sorting of banknotes for fitness by credit institutions and other professional cash handlers, which was adopted by the Governing Council in December 2004, represents the Eurosystem's new, common policy for the recirculation of euro banknotes within the cash cycle. This framework – which is also referred to as the Banknote Recycling Framework (BRF) – had to be implemented at the national level by the NCBs by the end of 2006; for Banka Slovenije, the deadline is the end of 2007. Thus far, this target has been achieved by 11 NCBs, and implementation has reached an advanced stage in the two remaining euro area Member States. Depending on the competencies of the NCBs, the framework has been implemented by governmental decree, obligatory central bank instructions or contractual arrangements between the NCBs and the individual credit institutions. In view of the increased activities of non-banks in banknote distribution to the general public via automated teller machines (ATMs), the ECB pays particular attention to ensuring that such institutions, too, comply with the standards set out in the BRF in order to treat all cash handlers equally.



**Chart 1 Total value of euro banknotes in circulation in the period from January 2002 to August 2007**



**Chart 2 Total number of euro banknotes in circulation in the period from January 2002 to August 2007**



The new regulations oblige credit institutions and other professional cash handlers to only supply euro banknotes to their customers that have either been withdrawn at an NCB or that have been checked for authenticity and quality (fitness for circulation) in accordance with the common standards of the BRF. If banknotes are recycled to the general public via ATMs, the mandatory checks must be performed by means of a banknote handling machine that has been approved by the ECB for recycling purposes after the manufacturer had proven to an NCB that the machine authenticates and sorts banknotes reliably. Individual machines are approved for recycling use, in principle, for a period of one year. This is made clear through the publication of the tested models on the ECB's internet website for one year. In a scenario where banknotes are recycled by bank tellers, the required checks of authenticity and fitness must be carried out by trained staff members unless the banknotes were processed on an NCB-tested machine beforehand.

The tests of banknote handling machines, which are coordinated by the ECB, are conducted in a decentralised manner by the NCBs on the basis of a common procedure. Since the adoption of the common testing procedure by the Governing Council in December 2005, a wide range of machines produced by manufacturers throughout the world have passed the tests and new machine

types are being developed. The ECB has taken various measures to further unify the conditions of testing and regularly updates the underlying "test deck", i.e. the set of genuine and counterfeit banknotes, with new counterfeits found in circulation.

### 3 ROADMAP

The single euro cash area has been reality for some years now, but there are still some difficulties for large-scale cross-border cash operations. Therefore, the Governing Council of the ECB has underlined the importance of a fair competitive environment for cash operations on several occasions and, accordingly, the Eurosystem has implemented a number of measures relating to its cash services. In February 2007, the ECB adopted a roadmap for procedural steps contributing, in the medium term, to an increased convergence of the cash services offered by NCBs. Greater convergence is important, first, because it would allow different stakeholders – in particular those with major cross-border cash activities – to fully reap the benefits of the common currency and, second, because it would result in fair competitive treatment.

At the same time, it was underlined that the Eurosystem did not envisage developing a "one-size-fits-all" cash supply system. The



different national economic and geographical environments need to be taken into account and the process of convergence will require some flexibility regarding customer requirements, the cash infrastructure and transitional periods for implementation.

As a first step along the road towards putting this roadmap into practice, remote access to NCBs' cash services is being implemented as from 1 July 2007. This means that credit institutions located in the euro area will have access to the cash services provided by an NCB in another participating Member State, provided that these foreign credit institutions meet the same conditions for withdrawals and lodgements as the national credit institutions. Other issues that are part of the roadmap and under consideration are the development of common packaging standards for the free-of-charge lodgement and withdrawal of banknotes from NCBs, and a common Eurosystem approach to electronic data communications with professional clients. The impact of, in particular, possible common packaging standards on the operations of different parties in the cash cycle will be high since, in order to achieve a certain level of harmonisation, investments need to be made by NCBs and commercial parties in all countries that currently use different solutions. Furthermore, the need for a further harmonisation of the NCBs' opening hours is being investigated, taking into account the differences in the cash infrastructures in the Member States. The Eurosystem is also considering the introduction of orientation-independent banknote lodgements and withdrawals as a common, free-of-charge service, given that technological developments for both banknote processing machines and cash dispensers (ATMs) today allow banknotes to be read and processed in all four orientations. All the aforementioned measures are meant to improve efficiency and to develop the single euro cash area further. In this context, it is worth noting that, currently, the main inhibitor of large-scale cross-border cash operations in the euro area are the different national rules governing cash transports and, especially, the rules regarding the use of firearms. However,

these are outside the ECB's area of competence. Nevertheless, the ECB supports the initiatives for further harmonisation in this area at the European level.

#### 4 THE CASH CHANGEOVER IN SLOVENIA AND FUTURE CASH CHANGEOVERS

On 1 January 2007, the euro was successfully introduced in Slovenia. After a two-week period of dual circulation, during which payments were possible in both tolar and euro, the euro became the sole legal tender on 15 January 2007. The changeover was organised as a "big bang", i.e. without a transitional period, unlike the 12 "first-wave" countries, which had introduced the euro banknotes and coins on 1 January 2002.

On 10 July 2007, the Council of the European Union decided to allow Cyprus and Malta to adopt the euro as their currency as from 1 January 2008. The Guideline on certain cash changeover matters adopted by the Governing Council of the ECB on 14 July 2006 will be the basis on which the Eurosystem will provide support for the changeover preparations in Cyprus and Malta.

Both countries will introduce the euro banknotes and coins on the basis of a "big-bang" scenario with a dual circulation period of one month. The Eurosystem will provide a total of some 170 million euro banknotes to cover the launch requirements needed for the changeover and for 2008 on the basis of a borrowing arrangement. The deliveries will take place in autumn 2007, ensuring a timely start of the "frontloading" and "sub-frontloading" operations.<sup>1</sup>

1 "Frontloading" refers to the supply of euro banknotes and coins by the NCB to credit institutions before the introduction of the euro. "Sub-frontloading" means the distribution by credit institutions of frontloaded euro banknotes and coins to retailers and other businesses.

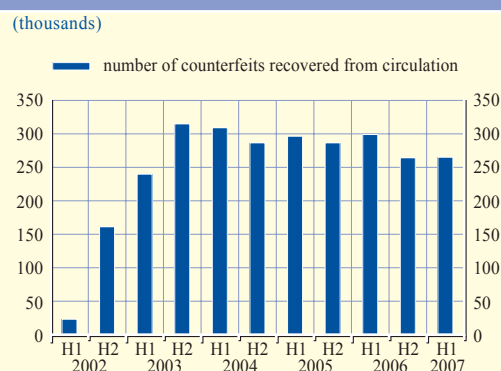
In Cyprus, the frontloading of euro banknotes will start on 19 November 2007. The frontloading of euro coins, which – following a tender procedure – were minted by the Mint of Finland, will begin on 22 October 2007. As of these dates, the sub-frontloading of euro cash will also start. Some 40,000 pre-packed coin starter kits containing a suitable mix of denominations for cash transactions in the first days after €-day, worth €172 each, will be available to businesses and retailers as from 3 December 2007. Moreover, 250,000 mini-kits, worth €17.09 each, will be available to the general public as from the same date.

In Malta, the frontloading of euro banknotes will start in late October/early November 2007. The frontloading of euro coins, which – again following a tender procedure – were produced by Monnaie de Paris, started in late September 2007. Sub-frontloading operations to businesses will begin on 1 December 2007, together with the distribution of coin starter-kits with a value of €131 each to small businesses, notably retailers. The general public will be able to buy mini-kits worth €11.65 as from 10 December 2007.

In Cyprus and Malta, legacy banknotes and coins will be redeemed by the central bank for ten and two years respectively.

Article 52 of the Statute of the European System of Central Banks and of the European Central Bank requires the Governing Council of the ECB to take the necessary measures to ensure that banknotes denominated in currencies with irrevocably fixed exchange rates to the euro are exchanged by the NCBs at their respective par values. Against this background, the Governing Council of the ECB adopted a Guideline on the exchange of these banknotes on 24 July 2006. In connection with the introduction of the euro in Cyprus and Malta, the NCBs of the Member States that have adopted the euro will thus exchange banknotes denominated in Cyprus pounds and Maltese liri against euro at par value from 1 January until 28 February 2008. This service will be free of charge. The

**Chart 3 Number of counterfeits recovered from circulation**



Source: ECB.

maximum amount is limited to €1,000 for any given party/transaction on any one day. A list of NCB locations at which the banknotes can be exchanged, and their respective opening hours, can be found on the ECB's website.

## 5 COUNTERFEITING AND TECHNICAL TRENDS

For the last four years, the total number of counterfeits withdrawn from circulation has broadly been stable, averaging out at a little under 50,000 pieces per month. Chart 3 shows that more recently, the average has declined towards the level of 40,000 pieces per month.

The effectiveness of a counterfeit deterrence system that prevents personal computers and digital imaging tools from capturing and reproducing the image of a protected banknote has had a significant impact on the counterfeiting techniques applied over time. The Central Bank Counterfeit Deterrence Group (CBCDG), in which the ECB participates, along with many other central banks around the world, aims to promote the voluntary adoption by hardware and software producers of a counterfeit deterrence system to prevent the use of PCs, digital imaging equipment and software in the counterfeiting of banknotes. In the early days of the euro banknotes, a significant proportion of the counterfeits was produced with the aid of

inkjet and laser printers, as well as colour copiers. However, the effectiveness of CBCDG developments has caused the volume of counterfeits produced by PC-related techniques to decline considerably, while that of counterfeits produced on the basis of traditional printing techniques has increased. Nowadays, approximately half the counterfeits detected and withdrawn from circulation were those produced with fewer than ten distinctly identifiable sources of traditional printing technology.

## 6 PLANNING OF THE SECOND EURO BANKNOTE SERIES

The counterfeiting situation does not currently give any cause to change the existing series of euro banknotes. However, in order to be prepared for new developments in counterfeiting and to stay technologically ahead of the counterfeiters, the ECB, like other central banks, must continuously improve the resilience of the banknotes against counterfeiting. For that reason, the Governing Council approved the master plan for the development and introduction of the second series of euro

banknotes (ES2) in April 2005. That provided a starting point for further planning and development. The master plan stipulates that the ES2 design is to be based on the “ages and styles” theme of the current series, ensuring that the new banknotes will be immediately recognisable as euro banknotes. The master plan also provides for the ES2 banknotes to be issued gradually, with intervals between the issuance of different denominations, at least the first of which will be introduced one at a time. In the course of 2005, the ECB ascertained the functional and technical requirements of different groups of banknote users through consultations and public research. In this phase of the project’s initiation, a short-list of visual and machine-readable security features was established, from among which the final security features will be selected. Throughout the development of the ES2 banknotes, the ECB will remain in contact with all relevant stakeholders (see Box 1).

In order to be able to select the appropriate security features, an extensive programme has been run to test the viability of both an industrial production of the various features and the large-scale production of banknotes with the short-

### Box 1

#### STAKEHOLDERS IN THE DEVELOPMENT OF THE SECOND SERIES OF EURO BANKNOTES

The main challenge in developing a new series of banknotes is ensuring that, on the one hand, the new banknotes are innovative and difficult to counterfeit, and that, on the other, they are easy to check and have security features that can be easily communicated. At the same time, the euro banknotes should be made sufficiently resistant to wear and tear. Another aspect of particular relevance for the development of the euro banknotes is the need to ensure that all printing works (currently 15 printing works are accredited for printing euro banknotes) are able to deliver the same consistently high quality. In addition, the Eurosystem should take account of the needs of the different stakeholders. Public surveys and meetings with European associations, such as the European Payments Council, the European Security Transport Association, EuroCommerce, the European consumer associations and the European Blind Union, provide the ECB with feedback on what is needed. Other stakeholders are the vending machine industry and operators of commercial cash centres that process euro banknotes in large quantities. These stakeholders have become ever more important over the years, especially with the implementation of the framework for banknote recycling, and are becoming key players in

the cash cycle. The ECB is therefore also in close contact with the manufacturers of such machines and/or banknote sensors. As in the case of the introduction of the first series of euro banknotes, these manufacturers will be invited by the ECB to adjust and test their equipment once test notes with the final specifications are available.

listed features. At the same time, information on various aspects of the security features has been collected, such as their resilience to counterfeiting, quality control requirements, costs, intellectual property rights, supply chain situations, as well as health, safety and environmental issues. This process of industrial validation, in which all aspects of the potential security features were tested, has almost been completed.

Once the security features have been selected, the development programme will enter into the next phase, determining the design of the new series of euro banknotes. The challenge to be dealt with by the designer is to integrate the selected security features into an aesthetically attractive design that makes the banknote, as such, secure and user-friendly. A user-friendly banknote has a design with easy to recognise security features which can be communicated to the public in a clear and simple way. In order to have guidance for the design of the banknotes and to learn how the communication on the euro banknotes can be improved the ECB carried out several studies (see Box 2). Taking this into consideration, the designer has also to preserve as much as possible of the design elements of the current series, so that the banknotes of the new series can be clearly

recognised as euro banknotes. Therefore, elements such as the windows, gateways, bridges, the European flag and the map of Europe will be retained in the new series of euro banknotes. The map on the reverse side of the banknotes will be amended to depict the enlarged European Union. The establishment of the design will be followed by the “origination”<sup>2</sup> work required for producing the ES2 banknotes, and the elaboration of the accompanying draft technical specifications.

The last step before large-scale printing will be a pilot production run carried out at a few printing works, in which all process-related aspects will be extensively analysed. The large-scale production will require extensive preparations in terms of potential investments in printing machinery and the implementation of any new quality management requirements and production monitoring systems.

After the launch of the ES2 banknotes, the circulation of banknotes of the old series will gradually decrease. At some point in time, their

<sup>2</sup> “Origination” covers the process of high-quality image preparation and the transformation of designs into production tools, such as printing plates and production forms for the different manufacturing steps.

## Box 2

### COMMUNICATION ASPECTS RELATED TO THE INTRODUCTION OF THE SECOND SERIES OF EURO BANKNOTES

Qualitative surveys carried out by the ECB suggest that cash users do not usually pay much attention to the security features of the euro banknotes and are familiar with only a limited number of these features. Only a tiny fraction of the respondents was able to name or describe their functionalities. Knowledge is, in most cases, limited to the traditional security features – to the tactile properties, the watermark and the security thread. The research results show that

people trust that central banks issue safe banknotes and, probably as a consequence thereof, hardly check them. Furthermore, the public seems to experience some difficulties in locating the security features on the banknotes. Therefore, communicating on the security features of the banknotes is an important and ongoing challenge. It can be aided by a user-friendly banknote design. Against this background, the ECB has been testing potential new security features and artistic designs for the ES2 banknotes through qualitative research into public perceptions. Its outcome will be taken into consideration during the development of the ES2 banknotes so as to pave the way for the euro banknotes to be well accepted by the public.

With respect to communications on the current series of banknotes, such qualitative research has helped to make communication tools, such as brochures, leaflets and electronic communication media more easily comprehensible by avoiding technical terms for the security features and by providing simple instructions on how to authenticate a banknote.

circulation will have reached a level at which these banknotes will hardly be used in daily cash transactions. In line with the policies of most central banks with regard to their currencies, the ECB will inform the public well in advance as to when the euro banknotes of the old series will lose their legal tender status, i.e. when the first series of euro banknotes would no longer be accepted as a means of payment. However, euro banknotes of the old series will be redeemed by the NCBs for an unlimited period of time.

endeavours are aimed at obtaining efficient and effective national solutions that acknowledge technical advances, rather than at having identical cash cycles in all euro area Member States. Furthermore, work is in progress to develop a new series of euro banknotes that contain improved and new security features, while the design will remain close to that of the current series. Given the considerable lead-time necessary for such developments, the first denomination of the new series is expected to be issued in a few years time.

## 7 CONCLUSION

The continuous growth of euro banknote circulation indicates that, despite the development of other means of payment, euro cash remains an important payment instrument. This article shows that the Eurosystem is working on measures that should improve the efficiency of the cash cycle and, where appropriate, further integrate the national cash systems in the euro area. On account of the great differences in the national cash cycles and the many different parties involved, this is a long and complex process that requires time, significant effort and considerable investment. One of the main objectives is to increase the convergence both of the services offered by the NCBs and of the quality of the banknotes in circulation. At the same time, the Eurosystem's



# EURO AREA STATISTICS







# CONTENTS<sup>1</sup>

	<b>EURO AREA OVERVIEW</b>	
	Summary of economic indicators for the euro area	S5
<b>I</b>	<b>MONETARY POLICY STATISTICS</b>	
	1.1 Consolidated financial statement of the Eurosystem	S6
	1.2 Key ECB interest rates	S7
	1.3 Eurosystem monetary policy operations allotted through tenders	S8
	1.4 Minimum reserve and liquidity statistics	S9
<b>2</b>	<b>MONEY, BANKING AND INVESTMENT FUNDS</b>	
	2.1 Aggregated balance sheet of euro area MFIs	S10
	2.2 Consolidated balance sheet of euro area MFIs	S11
	2.3 Monetary statistics	S12
	2.4 MFI loans, breakdown	S14
	2.5 Deposits held with MFIs, breakdown	S17
	2.6 MFI holdings of securities, breakdown	S20
	2.7 Revaluation of selected MFI balance sheet items	S21
	2.8 Currency breakdown of selected MFI balance sheet items	S22
	2.9 Aggregated balance sheet of euro area investment funds	S24
	2.10 Assets of euro area investment funds broken down by investment policy and type of investor	S25
<b>3</b>	<b>EURO AREA ACCOUNTS</b>	
	3.1 Integrated economic and financial accounts by institutional sector	S26
	3.2 Euro area non-financial accounts	S30
	3.3 Households	S32
	3.4 Non-financial corporations	S33
	3.5 Insurance corporations and pension funds	S34
<b>4</b>	<b>FINANCIAL MARKETS</b>	
	4.1 Securities, other than shares, by original maturity, residency of the issuer and currency	S35
	4.2 Securities, other than shares, issued by euro area residents, by sector of the issuer and instrument type	S36
	4.3 Growth rates of securities, other than shares, issued by euro area residents	S38
	4.4 Quoted shares issued by euro area residents	S40
	4.5 MFI interest rates on euro-denominated deposits and loans by euro area residents	S42
	4.6 Money market interest rates	S44
	4.7 Government bond yields	S45
	4.8 Stock market indices	S46
<b>5</b>	<b>PRICES, OUTPUT, DEMAND AND LABOUR MARKETS</b>	
	5.1 HICP, other prices and costs	S47
	5.2 Output and demand	S50
	5.3 Labour markets	S54
<b>6</b>	<b>GOVERNMENT FINANCE</b>	
	6.1 Revenue, expenditure and deficit/surplus	S55
	6.2 Debt	S56

1) For further information, please contact us at: [statistics@ecb.europa.eu](mailto:statistics@ecb.europa.eu). See the ECB Statistical Data Warehouse on the Statistics section of the ECB website (<http://sdw.ecb.europa.eu>) for longer runs and more detailed data.

6.3	Change in debt	S57
6.4	Quarterly revenue, expenditure and deficit/surplus	S58
6.5	Quarterly debt and change in debt	S59
<b>7</b>	<b>EXTERNAL TRANSACTIONS AND POSITIONS</b>	
7.1	Balance of payments	S60
7.2	Monetary presentation of the balance of payments	S65
7.3	Geographical breakdown of the balance of payments and international investment position	S66
7.4	International investment position (including international reserves)	S68
7.5	Trade in goods	S70
<b>8</b>	<b>EXCHANGE RATES</b>	
8.1	Effective exchange rates	S72
8.2	Bilateral exchange rates	S73
<b>9</b>	<b>DEVELOPMENTS OUTSIDE THE EURO AREA</b>	
9.1	In other EU Member States	S74
9.2	In the United States and Japan	S75
	<b>LIST OF CHARTS</b>	S76
	<b>TECHNICAL NOTES</b>	S77
	<b>GENERAL NOTES</b>	S83

#### **ENLARGEMENT OF THE EURO AREA ON 1 JANUARY 2007 TO INCLUDE SLOVENIA**

Unless otherwise indicated, all data series covering observations for 2007 relate to the Euro 13 (the euro area including Slovenia) for the whole time series. For interest rates, monetary statistics and the HICP (and, for consistency reasons, the components and counterparts of M3 and the components of the HICP), the statistical series relating to the euro area cover the EU Member States that had adopted the euro at the time to which the statistics relate. Where applicable, this is indicated in the tables by means of a footnote. In such cases, where underlying data are available, absolute and percentage changes for 2001 and 2007, calculated from a base in 2000 and in 2006, use a series which takes into account the impact of the entry of Greece and Slovenia, respectively, into the euro area. Historical data referring to the euro area before the entry of Slovenia are available on the ECB web site at <http://www.ecb.europa.eu/stats/services/downloads/html/index.en.html>

#### **Conventions used in the tables**

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



# EURO AREA OVERVIEW

## Summary of economic indicators for the euro area

(annual percentage changes, unless otherwise indicated)

### 1. Monetary developments and interest rates

	M1 <sup>1)</sup>	M2 <sup>1)</sup>	M3 <sup>1),2)</sup>	M3 <sup>1),2)</sup> 3-month moving average (centred)	MFI loans to euro area residents excluding MFIs and general government <sup>1)</sup>	Securities other than shares issued in euro by non-MFI corporations <sup>1)</sup>	3-month interest rate (EURIBOR, % per annum, period averages)	10-year government bond yield (% per annum, period averages)
	1	2	3	4	5	6	7	8
2005	10.4	7.9	7.4	-	8.1	12.6	2.18	3.44
2006	8.6	8.7	8.4	-	10.9	15.8	3.08	3.86
2006 Q4	6.8	8.7	9.0	-	11.2	16.6	3.59	3.86
2007 Q1	7.0	9.1	10.2	-	10.6	15.9	3.82	4.08
Q2	6.2	9.2	10.6	-	10.5	17.5	4.07	4.42
Q3	.	.	.	-	.	.	4.49	4.48
2007 Apr.	6.0	8.8	10.3	10.6	10.4	16.7	3.98	4.25
May	5.9	9.3	10.6	10.6	10.4	17.8	4.07	4.37
June	6.1	9.5	10.9	11.1	10.8	18.2	4.15	4.66
July	6.8	10.4	11.7	11.4	11.0	19.5	4.22	4.63
Aug.	6.8	10.6	11.6	.	11.2	.	4.54	4.43
Sep.	.	.	.	.	.	.	4.74	4.37

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

	HICP	Industrial producer prices	Hourly labour costs	Real GDP	Industrial production excluding construction	Capacity utilisation in manufacturing (percentages)	Employment	Unemployment (% of labour force)
	1	2	3	4	5	6	7	8
2005	2.2	4.1	2.7	1.5	1.3	81.2	0.9	8.6
2006	2.2	5.1	2.6	2.8	4.0	83.3	1.5	7.9
2007 Q1	1.9	2.9	2.3	3.2	3.8	84.6	1.7	7.2
Q2	1.9	2.4	2.4	2.5	2.6	84.5	1.7	7.0
Q3	.	.	.	.	.	.	.	.
2007 Apr.	1.9	2.4	-	-	2.9	84.8	-	7.0
May	1.9	2.4	-	-	2.7	-	-	7.0
June	1.9	2.2	-	-	2.3	-	-	6.9
July	1.8	1.8	-	-	3.6	84.2	-	6.9
Aug.	1.7	1.7	-	-	.	-	-	6.9
Sep.	2.1	.	-	-	.	-	-	.

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

(EUR billions, unless otherwise indicated)

	Balance of payments (net transactions)				Reserve assets (end-of-period positions)	Effective exchange rate of the euro: EER-24 <sup>3)</sup> (index, 1999 Q1 = 100)		USD/EUR exchange rate
	Current and capital accounts	Goods	Direct investment	Portfolio investment		Nominal	Real (CPI)	
							7	
	1	2	3	4	5	6	7	8
2005	10.3	45.4	-210.0	146.1	320.1	103.3	104.2	1.2441
2006	0.4	28.6	-158.8	263.5	325.8	103.6	104.5	1.2556
2006 Q4	22.5	17.8	-59.4	120.4	325.8	104.6	105.4	1.2887
2007 Q1	2.8	7.6	-24.2	122.2	331.6	105.5	106.1	1.3106
Q2	-2.9	19.5	-82.9	90.6	325.3	107.1	107.7	1.3481
Q3	.	.	.	.	.	107.6	108.2	1.3738
2007 Apr.	-3.7	4.3	-24.5	15.6	330.0	107.1	107.8	1.3516
May	-12.1	4.2	-13.4	5.0	327.4	107.3	107.9	1.3511
June	12.9	11.0	-45.0	70.1	325.3	106.9	107.4	1.3419
July	4.1	7.9	2.7	33.9	328.8	107.6	108.1	1.3716
Aug.	.	.	.	.	330.4	107.1	107.7	1.3622
Sep.	.	.	.	.	.	108.2	108.9	1.3896

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

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

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



# MONETARY POLICY STATISTICS

## I.1 Consolidated financial statement of the Eurosystem

(EUR millions)

### 1. Assets

	2007 7 September	2007 14 September	2007 21 September	2007 28 September
<b>Gold and gold receivables</b>	171,940	171,902	171,868	186,233
<b>Claims on non-euro area residents in foreign currency</b>	144,749	145,388	147,045	141,973
<b>Claims on euro area residents in foreign currency</b>	25,156	23,871	23,219	23,907
<b>Claims on non-euro area residents in euro</b>	15,891	16,255	14,750	16,098
<b>Lending to euro area credit institutions in euro</b>	446,286	534,036	420,612	455,216
Main refinancing operations	256,001	269,001	155,001	190,000
Longer-term refinancing operations	190,001	264,999	264,999	265,000
Fine-tuning reverse operations	0	0	0	0
Structural reverse operations	0	0	0	0
Marginal lending facility	279	19	611	215
Credits related to margin calls	5	17	1	1
<b>Other claims on euro area credit institutions in euro</b>	11,099	11,346	12,805	13,276
<b>Securities of euro area residents in euro</b>	94,853	94,678	94,537	95,415
<b>General government debt in euro</b>	37,145	37,148	37,148	37,122
<b>Other assets</b>	260,264	264,683	267,599	281,156
<b>Total assets</b>	1,207,383	1,299,307	1,189,583	1,250,396

### 2. Liabilities

	2007 7 September	2007 14 September	2007 21 September	2007 28 September
<b>Banknotes in circulation</b>	639,169	637,460	634,952	637,292
<b>Liabilities to euro area credit institutions in euro</b>	182,577	276,266	155,114	192,150
Current accounts (covering the minimum reserve system)	181,548	274,577	154,671	186,667
Deposit facility	1,029	1,677	427	5,472
Fixed-term deposits	0	0	0	0
Fine-tuning reverse operations	0	0	0	0
Deposits related to margin calls	0	12	16	11
<b>Other liabilities to euro area credit institutions in euro</b>	142	143	139	170
<b>Debt certificates issued</b>	0	0	0	0
<b>Liabilities to other euro area residents in euro</b>	68,059	64,333	76,318	73,572
<b>Liabilities to non-euro area residents in euro</b>	20,927	22,058	21,786	23,913
<b>Liabilities to euro area residents in foreign currency</b>	135	572	646	613
<b>Liabilities to non-euro area residents in foreign currency</b>	18,647	18,143	18,529	18,112
<b>Counterpart of special drawing rights allocated by the IMF</b>	5,517	5,517	5,517	5,398
<b>Other liabilities</b>	86,307	88,912	90,678	99,223
<b>Revaluation accounts</b>	117,010	117,010	117,010	131,060
<b>Capital and reserves</b>	68,893	68,893	68,894	68,893
<b>Total liabilities</b>	1,207,383	1,299,307	1,189,583	1,250,396

Source: ECB.

**1.2 Key ECB interest rates**

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

	With effect from <sup>b)</sup>	Deposit facility		Main refinancing operations			Marginal lending facility	
				Fixed rate tenders	Variable rate tenders	Change	Level	Change
		Fixed rate	Minimum bid rate	Level				
		1	2	3	4	5	6	7
1999	1 Jan.	2.00	-	3.00	-	-	4.50	-
	4 <sup>2)</sup>	2.75	0.75	3.00	-	...	3.25	-1.25
	22	2.00	-0.75	3.00	-	...	4.50	1.25
	9 Apr.	1.50	-0.50	2.50	-	-0.50	3.50	-1.00
	5 Nov.	2.00	0.50	3.00	-	0.50	4.00	0.50
2000	4 Feb.	2.25	0.25	3.25	-	0.25	4.25	0.25
	17 Mar.	2.50	0.25	3.50	-	0.25	4.50	0.25
	28 Apr.	2.75	0.25	3.75	-	0.25	4.75	0.25
	9 June	3.25	0.50	4.25	-	0.50	5.25	0.50
	28 <sup>3)</sup>	3.25	...	-	4.25	...	5.25	...
	1 Sep.	3.50	0.25	-	4.50	0.25	5.50	0.25
	6 Oct.	3.75	0.25	-	4.75	0.25	5.75	0.25
2001	11 May	3.50	-0.25	-	4.50	-0.25	5.50	-0.25
	31 Aug.	3.25	-0.25	-	4.25	-0.25	5.25	-0.25
	18 Sep.	2.75	-0.50	-	3.75	-0.50	4.75	-0.50
	9 Nov.	2.25	-0.50	-	3.25	-0.50	4.25	-0.50
2002	6 Dec.	1.75	-0.50	-	2.75	-0.50	3.75	-0.50
2003	7 Mar.	1.50	-0.25	-	2.50	-0.25	3.50	-0.25
	6 June	1.00	-0.50	-	2.00	-0.50	3.00	-0.50
2005	6 Dec.	1.25	0.25	-	2.25	0.25	3.25	0.25
2006	8 Mar.	1.50	0.25	-	2.50	0.25	3.50	0.25
	15 June	1.75	0.25	-	2.75	0.25	3.75	0.25
	9 Aug.	2.00	0.25	-	3.00	0.25	4.00	0.25
	11 Oct.	2.25	0.25	-	3.25	0.25	4.25	0.25
	13 Dec.	2.50	0.25	-	3.50	0.25	4.50	0.25
2007	14 Mar.	2.75	0.25	-	3.75	0.25	4.75	0.25
	13 June	3.00	0.25	-	4.00	0.25	5.00	0.25

Source: ECB.

- 1) From 1 January 1999 to 9 March 2004, the date refers to the deposit and marginal lending facilities. For main refinancing operations, changes in the rate are effective from the first operation following the date indicated. The change on 18 September 2001 was effective on that same day. From 10 March 2004 onwards, the date refers to the deposit and marginal lending facilities and to the main refinancing operations (changes effective from the first main refinancing operation following the Governing Council discussion), unless otherwise indicated.
- 2) On 22 December 1998 the ECB announced that, as an exceptional measure between 4 and 21 January 1999, a narrow corridor of 50 basis points would be applied between the interest rates for the marginal lending facility and the deposit facility, aimed at facilitating the transition to the new monetary regime by market participants.
- 3) On 8 June 2000 the ECB announced that, starting from the operation to be settled on 28 June 2000, the main refinancing operations of the Eurosystem would be conducted as variable rate tenders. The minimum bid rate refers to the minimum interest rate at which counterparties may place their bids.

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

(EUR millions; interest rates in percentages per annum)

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

Date of settlement	Bids (amount)	Number of participants	Allotment (amount)	Variable rate tenders			Running for (...) days
				Minimum bid rate	Marginal rate <sup>4)</sup>	Weighted average rate	
	1	2	3	4	5	6	7
Main refinancing operations							
2007 6 June	331,056	322	279,000	3.75	3.75	3.77	7
13	363,785	344	282,000	4.00	4.06	4.07	7
20	365,298	361	288,000	4.00	4.06	4.07	7
27	340,137	341	313,500	4.00	4.07	4.08	7
4 July	357,489	334	298,000	4.00	4.03	4.05	7
11	382,686	352	292,000	4.00	4.06	4.06	7
18	375,272	376	301,500	4.00	4.06	4.06	7
25	370,371	358	315,500	4.00	4.06	4.07	7
1 Aug.	373,286	329	298,000	4.00	4.04	4.06	7
8	391,978	319	292,500	4.00	4.06	4.07	7
15	426,994	344	310,000	4.00	4.08	4.10	7
22	439,747	355	275,000	4.00	4.08	4.09	7
29	352,724	320	210,000	4.00	4.08	4.09	7
5 Sep.	426,352	356	256,000	4.00	4.15	4.19	7
12	406,119	381	269,000	4.00	4.14	4.17	7
19	356,281	371	155,000	4.00	4.15	4.16	7
26	368,995	378	190,000	4.00	4.27	4.29	7
3 Oct.	298,721	316	163,000	4.00	4.14	4.16	7
Longer-term refinancing operations							
2006 30 Nov.	72,782	168	40,000	-	3.58	3.58	91
21 Dec.	74,150	161	40,000	-	3.66	3.67	98
2007 1 Feb.	79,099	164	50,000	-	3.72	3.74	85
1 Mar.	80,110	143	50,000	-	3.80	3.81	91
29	76,498	148	50,000	-	3.87	3.87	91
27 Apr.	71,294	148	50,000	-	3.96	3.97	90
31 May	72,697	147	50,000	-	4.06	4.07	91
28 June	66,319	139	50,000	-	4.11	4.12	91
26 July	78,703	144	50,000	-	4.20	4.20	98
24 Aug.	125,787	146	40,000	-	4.49	4.61	91
30	119,755	168	50,000	-	4.56	4.62	91
13 Sep.	139,021	140	75,000	-	4.35	4.52	90
27	85,353	159	50,000	-	4.50	4.63	84

#### 2. Other tender operations

Date of settlement	Type of operation	Bids (amount)	Number of participants	Allotment (amount)	Fixed rate tenders	Variable rate tenders			Running for (...) days
					Fixed rate	Minimum bid rate	Marginal rate <sup>4)</sup>	Weighted average rate	
	1	2	3	4	5	6	7	8	9
2006 8 Aug.	Collection of fixed-term deposits	19,860	21	18,000	2.75	-	-	-	1
5 Sep.	Collection of fixed-term deposits	13,635	17	11,500	3.00	-	-	-	1
10 Oct.	Reverse transaction	36,120	26	9,500	-	3.00	3.05	3.06	1
12 Dec.	Reverse transaction	21,565	25	2,500	-	3.25	3.32	3.33	1
2007 13 Mar.	Collection of fixed-term deposits	2,300	2	2,300	3.50	-	-	-	1
17 Apr.	Collection of fixed-term deposits	42,245	35	22,500	3.75	-	-	-	1
14 May	Collection of fixed-term deposits	2,460	7	2,460	3.75	-	-	-	1
12 June	Collection of fixed-term deposits	12,960	11	6,000	3.75	-	-	-	1
10 July	Reverse transaction	17,385	18	2,500	-	4.00	4.06	4.07	1
9 Aug.	Reverse transaction	94,841	49	94,841	4.00	-	-	-	1
10	Reverse transaction	110,035	62	61,050	-	4.00	4.05	4.08	3
13	Reverse transaction	84,452	59	47,665	-	4.00	4.06	4.07	1
14	Reverse transaction	45,967	41	7,700	-	4.00	4.07	4.07	1
6 Sep.	Reverse transaction	90,895	46	42,245	-	4.00	4.06	4.13	1
11	Collection of fixed-term deposits	66,388	37	60,000	4.00	-	-	-	1

Source: ECB.

- 1) The amounts shown may differ slightly from those in Section 1.1 due to operations allotted but not settled.
- 2) With effect from April 2002, split tender operations, i.e. operations with one-week maturity conducted as standard tenders in parallel with a main refinancing operation, are classified as main refinancing operations. For split tender operations conducted before this month, see Table 2 in Section 1.3.
- 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.



**1.4 Minimum reserve and liquidity statistics**

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

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

Reserve base as at <sup>1)</sup>	Total	Liabilities to which a 2% reserve coefficient is applied		Liabilities to which a 0% reserve coefficient is applied		
		Deposits (overnight, up to 2 years' agreed maturity and notice period)	Debt securities up to 2 years' agreed maturity	Deposits (over 2 years' agreed maturity and notice period)	Repos	Debt securities over 2 years' agreed maturity
	1	2	3	4	5	6
2005	14,040.7	7,409.5	499.2	1,753.5	1,174.9	3,203.6
2006	15,648.3	8,411.7	601.9	1,968.4	1,180.3	3,486.1
2007 Q1	16,253.0	8,634.2	657.4	2,009.8	1,358.8	3,592.8
2007 Apr.	16,456.1	8,764.2	677.6	2,021.0	1,387.2	3,606.1
May	16,718.7	8,886.3	701.9	2,044.3	1,439.8	3,646.4
June	16,753.3	8,940.5	677.6	2,066.6	1,383.5	3,685.1
July	16,770.1	8,956.1	694.0	2,037.2	1,392.1	3,690.7

**2. Reserve maintenance**

Maintenance period ending on:	Required reserves	Credit institutions' current accounts	Excess reserves	Deficiencies	Interest rate on minimum reserves
	1	2	3	4	5
2005	152.0	153.0	1.0	0.0	2.07
2006	172.5	173.2	0.7	0.0	3.30
2007 Q1	179.8	180.6	0.8	0.0	3.55
Q2	185.3	186.2	0.9	0.0	3.80
2007 10 July	188.3	189.6	1.2	0.0	4.06
7 Aug.	191.3	192.0	0.7	0.0	4.06
11 Sep.	191.9	192.7	0.9	0.0	4.09
9 Oct. <sup>6)</sup>	192.5	.	.	.	.

**3. Liquidity**

Maintenance period ending on:	Liquidity-providing factors					Liquidity-absorbing factors					Credit institutions' current accounts	Base money
	Monetary policy operations of the Eurosystem					Deposit facility	Other liquidity-absorbing operations <sup>2)</sup>	Banknotes in circulation	Central government deposits with the Eurosystem	Other factors (net)		
	Eurosystem's net assets in gold and foreign currency	Main refinancing operations	Longer-term refinancing operations	Marginal lending facility	Other liquidity-providing operations							
	1	2	3	4	5	6	7	8	9	10	11	12
2005	313.2	301.3	90.0	0.0	0.0	0.1	0.3	539.8	51.0	-39.6	153.0	692.9
2006	327.0	313.1	120.0	0.1	0.1	0.1	0.0	598.6	54.9	-66.4	173.2	771.8
2007 Q1	321.6	288.7	134.6	0.0	0.0	0.5	0.8	606.2	47.1	-90.0	180.6	787.2
2007 17 Apr.	323.6	281.7	145.7	0.5	0.0	0.3	0.9	614.8	48.2	-95.2	182.6	797.7
14 May	326.1	281.6	150.0	0.3	0.0	0.5	0.1	620.0	51.3	-97.2	183.2	803.8
12 June	326.4	284.9	150.0	0.3	0.0	0.2	0.2	625.2	49.1	-99.4	186.2	811.7
10 July	323.0	295.4	150.0	0.2	0.1	0.3	0.0	631.3	53.9	-106.4	189.6	821.2
7 Aug.	316.7	301.7	150.0	0.1	0.0	0.4	0.0	639.7	52.3	-115.8	192.0	832.1
11 Sep.	317.3	268.7	171.7	0.2	10.7	0.4	1.7	639.2	52.3	-117.8	192.7	832.4

Source: ECB.

1) End of period.

2) Starting from 1 January 2007, includes monetary policy operations in the form of collection of fixed-term deposits which were conducted by Banka Slovenije before 1 January 2007 and were still outstanding after this date.



# MONEY, BANKING AND INVESTMENT FUNDS

## 2.1 Aggregated balance sheet of euro area MFIs <sup>1)</sup>

(EUR billions; outstanding amounts at end of period)

### 1. Assets

	Total	Loans to euro area residents				Holdings of securities other than shares issued by euro area residents				Money market fund shares/units <sup>2)</sup>	Holdings of shares/other equity issued by euro area residents	External assets	Fixed assets	Remaining assets
		Total	General government	Other euro area residents	MFIs	Total	General government	Other euro area residents	MFIs					
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Eurosystem														
2005	1,404.9	635.5	20.7	0.6	614.2	185.7	165.6	2.1	18.1	-	14.8	337.0	14.7	217.2
2006	1,558.2	695.7	19.7	0.6	675.3	217.0	187.5	2.5	27.0	-	17.2	351.4	14.7	262.4
2007 Q1	1,576.7	693.3	19.7	0.6	673.0	238.0	205.5	2.1	30.4	-	17.4	359.6	14.8	253.6
2007 Apr.	1,588.8	700.1	19.1	0.6	680.4	243.5	210.2	2.2	31.1	-	17.7	355.8	15.3	256.4
May	1,629.8	724.7	18.1	0.6	705.9	248.1	213.5	2.1	32.5	-	17.8	354.0	15.3	269.8
June	1,651.5	751.5	17.7	0.6	733.1	249.8	213.2	2.2	34.3	-	17.8	354.1	15.4	263.0
July	1,669.9	762.7	17.7	0.6	744.3	254.5	216.8	2.2	35.5	-	17.5	357.5	15.7	262.0
Aug. <sup>(6)</sup>	1,649.6	730.5	17.7	0.6	712.1	256.1	217.4	2.2	36.6	-	17.6	360.6	15.6	269.2
MFIs excluding the Eurosystem														
2005	23,631.5	13,681.7	826.9	8,285.1	4,569.7	3,498.6	1,429.4	551.5	1,517.7	83.1	1,008.7	3,652.8	165.7	1,540.9
2006	25,973.9	14,904.2	810.5	9,160.3	4,933.4	3,555.2	1,276.5	645.8	1,632.8	83.5	1,194.5	4,330.1	172.6	1,733.9
2007 Q1	27,107.8	15,340.0	801.4	9,441.0	5,097.6	3,661.0	1,282.2	685.8	1,693.0	92.4	1,244.5	4,684.7	195.1	1,890.1
2007 Apr.	27,479.0	15,500.4	802.3	9,526.0	5,172.2	3,671.1	1,258.8	706.3	1,706.0	96.9	1,314.3	4,802.2	199.6	1,894.5
May	27,847.8	15,613.6	797.8	9,600.2	5,215.7	3,746.4	1,291.6	733.9	1,720.9	95.0	1,352.8	4,901.2	200.6	1,938.1
June	28,062.4	15,778.7	798.1	9,711.6	5,268.9	3,763.6	1,284.4	758.2	1,721.0	96.1	1,277.0	4,872.5	201.5	2,073.1
July	28,139.0	15,880.2	799.7	9,809.5	5,271.0	3,773.7	1,257.3	775.5	1,740.9	97.1	1,260.0	4,927.3	198.1	2,002.7
Aug. <sup>(6)</sup>	28,163.3	15,965.5	793.2	9,848.0	5,324.3	3,743.3	1,228.1	780.8	1,734.4	95.5	1,247.9	4,915.9	198.2	1,997.0

### 2. Liabilities

	Total	Currency in circulation	Deposits of euro area residents				Money market fund shares/units <sup>3)</sup>	Debt securities issued <sup>4)</sup>	Capital and reserves	External liabilities	Remaining liabilities
			Total	Central government	Other general government/other euro area residents	MFIs					
	1	2	3	4	5	6	7	8	9	10	11
Eurosystem											
2005	1,404.9	582.7	385.4	24.4	14.5	346.5	-	0.1	202.9	27.6	206.2
2006	1,558.2	647.0	431.6	33.7	15.9	382.0	-	0.1	208.6	35.3	235.6
2007 Q1	1,576.7	632.7	455.6	44.8	17.5	393.3	-	0.3	216.3	39.5	232.4
2007 Apr.	1,588.8	641.6	455.5	42.0	19.8	393.7	-	0.1	213.6	43.1	234.9
May	1,629.8	644.9	482.3	47.2	21.3	413.8	-	0.1	211.4	42.5	248.6
June	1,651.5	652.6	495.2	51.2	23.3	420.7	-	0.1	207.0	51.0	245.6
July	1,669.9	660.0	511.4	53.3	21.8	436.4	-	0.1	209.5	43.9	244.8
Aug. <sup>(6)</sup>	1,649.6	657.0	482.8	52.9	17.5	412.5	-	0.1	212.3	46.9	250.5
MFIs excluding the Eurosystem											
2005	23,631.5	-	12,212.2	149.2	7,211.9	4,851.2	698.9	3,858.3	1,310.6	3,518.0	2,033.5
2006	25,973.9	-	13,257.2	124.2	7,890.6	5,242.4	697.7	4,247.6	1,449.7	3,991.1	2,330.5
2007 Q1	27,107.8	-	13,595.8	139.0	8,060.9	5,395.9	758.7	4,424.8	1,529.7	4,255.7	2,543.1
2007 Apr.	27,479.0	-	13,693.8	131.6	8,111.4	5,450.8	779.2	4,447.9	1,546.8	4,407.7	2,603.6
May	27,847.8	-	13,850.8	152.6	8,177.2	5,521.0	797.5	4,502.3	1,547.6	4,519.8	2,629.7
June	28,062.4	-	14,029.5	170.2	8,278.0	5,581.3	795.6	4,521.2	1,554.9	4,450.4	2,710.8
July	28,139.0	-	14,039.8	126.0	8,325.0	5,588.9	809.7	4,548.1	1,571.8	4,496.7	2,672.9
Aug. <sup>(6)</sup>	28,163.3	-	14,047.5	120.2	8,323.0	5,604.3	801.7	4,575.8	1,572.4	4,537.7	2,628.3

Source: ECB.

- 1) Data refer to the changing composition of the euro area. For further information, see the General notes.
- 2) Amounts issued by euro area residents. Amounts issued by non-euro area residents are included in external assets.
- 3) Amounts held by euro area residents.
- 4) Amounts issued with maturity up to two years held by non-euro area residents are included in external liabilities.

**2.2 Consolidated balance sheet of euro area MFIs <sup>1)</sup>**

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

**1. Assets**

	Total 1	Loans to euro area residents			Holdings of securities other than shares issued by euro area residents			Holdings of shares/ other equity issued by other euro area residents 8	External assets 9	Fixed assets 10	Remaining assets 11
		Total 2	General government 3	Other euro area residents 4	Total 5	General government 6	Other euro area residents 7				
Outstanding amounts											
2005	17,870.7	9,133.3	847.5	8,285.7	2,148.5	1,595.0	553.6	710.5	3,989.7	180.4	1,708.2
2006	19,743.5	9,991.1	830.2	9,161.0	2,112.3	1,464.0	648.3	829.9	4,681.5	187.3	1,941.4
2007 Q1	20,649.7	10,262.7	821.1	9,441.6	2,175.6	1,487.7	687.9	857.6	5,044.2	209.9	2,099.5
2007 Apr.	20,919.1	10,348.0	821.4	9,526.6	2,177.5	1,469.0	708.5	916.8	5,157.9	214.9	2,104.0
May	21,217.6	10,416.7	815.9	9,600.8	2,241.1	1,505.1	736.0	928.0	5,255.2	215.9	2,160.7
June	21,398.4	10,528.1	815.9	9,712.2	2,258.0	1,497.6	760.4	880.4	5,226.6	216.9	2,288.4
July	21,461.0	10,627.6	817.5	9,810.1	2,251.8	1,474.1	777.7	865.5	5,284.8	213.7	2,217.6
Aug. <sup>(e)</sup>	21,452.0	10,659.6	810.9	9,848.6	2,228.5	1,445.5	783.0	853.8	5,276.5	213.9	2,219.8
Transactions											
2005	1,608.6	708.9	12.8	696.0	156.2	76.2	80.0	53.2	448.5	1.4	240.4
2006	1,998.2	877.3	-14.4	891.6	10.6	-96.8	107.4	98.5	802.0	6.4	203.5
2007 Q1	884.7	254.0	-8.2	262.2	63.2	19.0	44.2	20.8	394.4	0.5	151.8
2007 Apr.	307.1	92.5	0.4	92.1	3.7	-17.0	20.7	57.0	151.4	1.0	1.6
May	269.8	69.4	-5.5	74.9	60.5	36.4	24.1	6.3	77.3	1.0	55.3
June	197.0	119.0	-0.4	119.4	19.8	-5.7	25.5	-46.8	-20.7	1.0	124.8
July	90.7	102.3	1.5	100.8	-5.9	-23.9	18.1	-11.1	79.6	-3.3	-71.0
Aug. <sup>(e)</sup>	-12.2	32.3	-6.5	38.8	-24.4	-30.3	5.8	-10.1	-12.1	0.1	2.0

**2. Liabilities**

	Total 1	Currency in circulation 2	Deposits of central government 3	Deposits of other general government/ other euro area residents 4	Money market fund shares/ units <sup>3)</sup> 5	Debt securities issued <sup>3)</sup> 6	Capital and reserves 7	External liabilities 8	Remaining liabilities 9	Excess of inter-MFI liabilities 10
2005	17,870.7	532.8	173.6	7,226.4	615.8	2,322.6	1,200.6	3,545.6	2,239.7	13.7
2006	19,743.5	592.2	157.9	7,906.5	614.1	2,587.9	1,276.5	4,026.5	2,566.1	15.7
2007 Q1	20,649.7	588.4	183.8	8,078.4	666.3	2,701.6	1,341.8	4,295.3	2,775.4	18.7
2007 Apr.	20,919.1	594.7	173.6	8,131.2	682.3	2,710.9	1,345.1	4,450.8	2,838.5	-8.0
May	21,217.6	597.6	199.8	8,198.6	702.5	2,749.0	1,316.4	4,562.2	2,878.4	13.2
June	21,398.4	604.9	221.4	8,301.3	699.6	2,766.0	1,347.4	4,501.3	2,956.4	0.0
July	21,461.0	612.9	179.3	8,346.7	712.6	2,771.9	1,369.3	4,540.6	2,917.7	9.9
Aug. <sup>(e)</sup>	21,452.0	610.5	173.1	8,340.5	706.1	2,805.0	1,373.0	4,584.6	2,878.8	-19.6
Transactions										
2005	1,608.6	64.4	10.9	495.7	-3.0	213.5	96.2	448.0	333.8	-50.8
2006	1,998.2	59.4	-15.2	683.7	27.0	285.6	57.3	601.6	253.4	45.4
2007 Q1	884.7	-4.2	24.8	157.1	54.5	117.5	39.0	292.5	196.8	6.9
2007 Apr.	307.1	6.3	-10.2	57.5	18.0	19.0	-4.0	191.2	46.6	-17.4
May	269.8	2.8	26.2	65.1	15.6	32.3	-28.3	91.6	45.4	19.0
June	197.0	7.3	21.6	102.2	-2.6	17.5	35.4	-57.1	78.8	-6.0
July	90.7	8.0	-42.7	47.8	13.7	9.7	22.0	58.0	-39.5	13.9
Aug. <sup>(e)</sup>	-12.2	-2.3	-6.2	-7.2	-6.9	32.3	4.6	40.7	-36.9	-30.2

Source: ECB.

- 1) Data refer to the changing composition of the euro area. For further information, see the General notes.
- 2) Amounts held by euro area residents.
- 3) Amounts issued with maturity up to two years held by non-euro area residents are included in external liabilities.

## 2.3 Monetary statistics <sup>1)</sup>

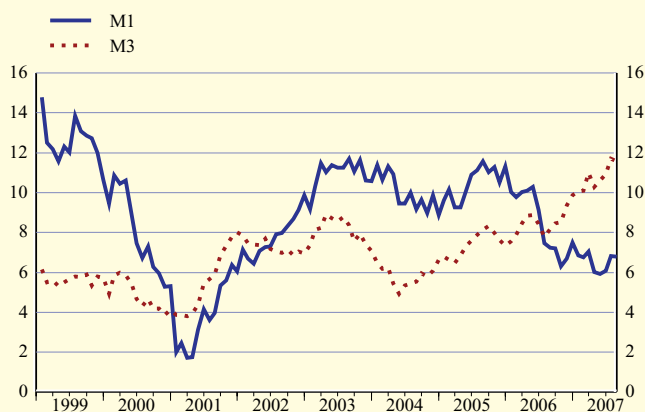
(EUR billions and annual growth rates; seasonally adjusted; outstanding amounts and growth rates at end of period, transactions during period)

### 1. Monetary aggregates <sup>2)</sup> and counterparts

	M1		M2	M3-M2	M3	M3 3-month moving average (centred)	Longer-term financial liabilities	Credit to general government	Credit to other euro area residents		Net external assets <sup>3)</sup>
	1	2	3	4	5	6	7	8	Loans		11
									9	10	
Outstanding amounts											
2005	3,419.4	2,653.2	6,072.6	999.4	7,072.0	-	5,000.2	2,472.5	9,561.0	8,287.3	422.2
2006	3,676.6	2,953.1	6,629.7	1,102.1	7,731.8	-	5,428.7	2,321.2	10,658.5	9,167.4	632.9
2007 Q1	3,746.8	3,064.9	6,811.8	1,190.3	8,002.0	-	5,604.1	2,301.4	10,978.1	9,444.7	766.4
2007 Apr.	3,740.1	3,106.4	6,846.5	1,190.3	8,036.9	-	5,634.6	2,277.1	11,095.8	9,516.8	731.5
May	3,768.7	3,127.9	6,896.6	1,217.3	8,113.9	-	5,653.3	2,313.9	11,212.4	9,592.8	726.6
June	3,784.4	3,170.8	6,955.2	1,227.7	8,183.0	-	5,723.1	2,300.4	11,321.0	9,683.5	720.4
July	3,804.9	3,228.6	7,033.5	1,236.1	8,269.6	-	5,766.7	2,285.9	11,434.6	9,782.6	740.6
Aug. <sup>(e)</sup>	3,827.7	3,273.2	7,100.9	1,243.2	8,344.1	-	5,800.0	2,265.2	11,552.1	9,888.0	692.1
Transactions											
2005	337.0	138.9	475.9	8.5	484.4	-	401.5	94.5	835.5	700.4	0.1
2006	255.5	309.9	565.4	130.2	695.6	-	427.0	-114.1	1,105.0	896.5	200.2
2007 Q1	63.6	105.4	169.0	91.1	260.1	-	150.0	-23.7	298.7	258.8	141.4
2007 Apr.	-5.5	43.9	38.4	1.1	39.5	-	35.0	-22.5	122.9	79.2	-32.9
May	27.9	20.6	48.4	21.4	69.9	-	13.8	37.0	109.4	76.8	-5.0
June	14.6	43.7	58.3	8.9	67.2	-	75.2	-12.1	118.4	98.6	-2.1
July	21.2	58.9	80.1	8.8	88.9	-	48.2	-15.0	121.1	102.0	22.9
Aug. <sup>(e)</sup>	22.4	44.3	66.8	8.9	75.7	-	30.8	-22.4	120.1	105.7	-48.9
Growth rates											
2005 Dec.	11.3	5.4	8.5	0.9	7.3	7.5	8.9	4.1	9.6	9.2	0.1
2006 Dec.	7.5	11.7	9.3	13.2	9.9	9.8	8.5	-4.7	11.6	10.8	200.2
2007 Mar.	7.0	12.7	9.5	20.1	11.0	10.5	9.2	-4.9	10.9	10.6	341.2
2007 Apr.	6.0	12.4	8.8	19.4	10.3	10.6	9.1	-5.6	10.8	10.4	315.8
May	5.9	13.6	9.3	18.6	10.6	10.6	8.7	-3.1	11.1	10.4	297.5
June	6.1	13.9	9.5	19.8	10.9	11.1	9.3	-3.6	11.5	10.8	262.2
July	6.8	15.0	10.4	19.5	11.7	11.4	9.3	-3.7	11.6	11.0	279.6
Aug. <sup>(e)</sup>	6.8	15.3	10.6	17.8	11.6	.	9.4	-4.2	11.8	11.2	246.6

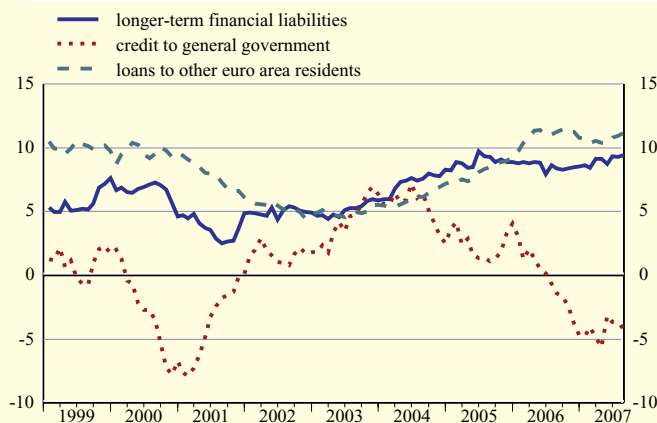
### C1 Monetary aggregates <sup>1)</sup>

(annual growth rates; seasonally adjusted)



### C2 Counterparts <sup>1)</sup>

(annual growth rates; seasonally adjusted)



Source: ECB.

1) Data refer to the changing composition of the euro area. For further information, see the General notes.

2) Monetary liabilities of MFIs and central government (post office, treasury) vis-à-vis non-MFI euro area residents excluding central government (M1, M2, M3; see glossary).

3) Values in the section "growth rates" are sums of the transactions during the 12 months ending in the period indicated.

## 2.3 Monetary statistics <sup>1)</sup>

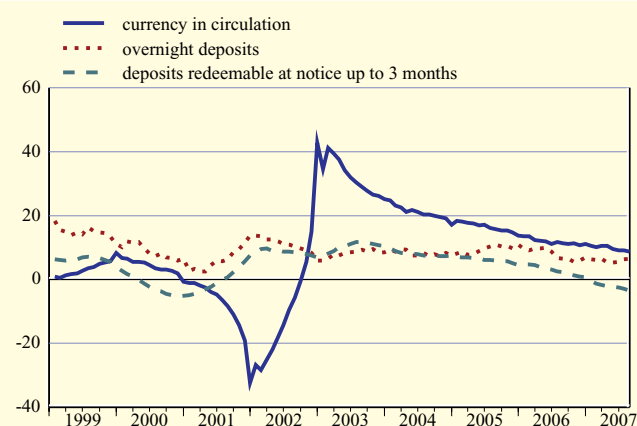
(EUR billions and annual growth rates; seasonally adjusted; outstanding amounts and growth rates at end of period, transactions during period)

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

	Currency in circulation	Overnight deposits	Deposits with agreed maturity up to 2 years	Deposits redeemable at notice up to 3 months	Repos	Money market fund shares/units	Debt securities up to 2 years	Debt securities over 2 years	Deposits redeemable at notice over 3 months	Deposits with agreed maturity over 2 years	Capital and reserves
	1	2	3	4	5	6	7	8	9	10	11
Outstanding amounts											
2005	521.5	2,897.9	1,109.9	1,543.2	241.6	631.6	126.2	2,202.6	86.9	1,511.2	1,199.6
2006	579.0	3,097.6	1,401.7	1,551.4	272.0	631.4	198.7	2,396.2	102.4	1,654.6	1,275.6
2007 Q1	592.1	3,154.7	1,528.2	1,536.8	280.3	670.0	239.9	2,461.4	107.8	1,696.4	1,338.5
2007 Apr.	597.4	3,142.7	1,573.3	1,533.0	271.6	676.3	242.4	2,467.7	108.7	1,707.3	1,351.0
May	597.8	3,170.9	1,595.6	1,532.3	270.5	691.8	255.0	2,488.9	108.6	1,729.1	1,326.7
June	599.2	3,185.3	1,645.0	1,525.8	285.0	701.0	241.8	2,516.3	109.4	1,749.1	1,348.3
July	604.7	3,200.2	1,709.4	1,519.2	291.2	704.8	240.1	2,525.7	110.7	1,764.7	1,365.6
Aug. <sup>(e)</sup>	608.2	3,219.5	1,761.8	1,511.4	287.5	695.4	260.3	2,547.9	111.1	1,769.4	1,371.6
Transactions											
2005	63.2	273.8	69.1	69.8	-5.9	-2.0	16.4	198.4	-4.3	111.2	96.1
2006	57.5	198.0	300.8	9.2	31.2	28.8	70.2	216.3	15.5	137.8	57.5
2007 Q1	12.6	51.0	120.9	-15.4	8.4	40.9	41.8	68.3	4.6	40.4	36.7
2007 Apr.	5.3	-10.8	47.6	-3.6	-8.6	8.4	1.4	17.1	1.0	11.8	5.1
May	0.4	27.5	21.3	-0.8	-1.1	10.9	11.6	16.4	-0.1	21.3	-23.9
June	1.3	13.3	49.5	-5.8	13.0	9.5	-13.6	28.3	0.9	20.2	25.9
July	5.5	15.7	65.5	-6.6	6.3	4.4	-1.9	13.4	1.2	16.2	17.4
Aug. <sup>(e)</sup>	3.6	18.9	52.1	-7.8	-3.8	-9.8	22.6	19.1	0.5	4.4	6.9
Growth rates											
2005 Dec.	13.8	10.9	6.5	4.4	-2.4	-0.3	15.7	10.0	-4.7	8.1	8.9
2006 Dec.	11.0	6.8	27.2	0.6	13.0	4.7	54.5	9.9	17.8	9.1	4.7
2007 Mar.	10.5	6.4	32.3	-1.7	19.3	12.2	51.9	11.0	20.6	9.0	5.3
2007 Apr.	10.5	5.2	31.2	-2.0	13.5	13.2	52.4	10.8	20.4	8.8	5.7
May	9.6	5.3	34.7	-2.3	10.3	13.8	48.0	10.7	18.4	9.1	3.9
June	9.2	5.5	35.0	-2.5	14.5	14.5	48.6	11.0	17.6	9.6	5.5
July	9.2	6.4	37.5	-2.9	14.5	14.4	46.8	10.8	17.0	9.9	5.4
Aug. <sup>(e)</sup>	8.7	6.4	38.5	-3.5	11.4	12.8	44.2	10.9	15.4	9.6	6.2

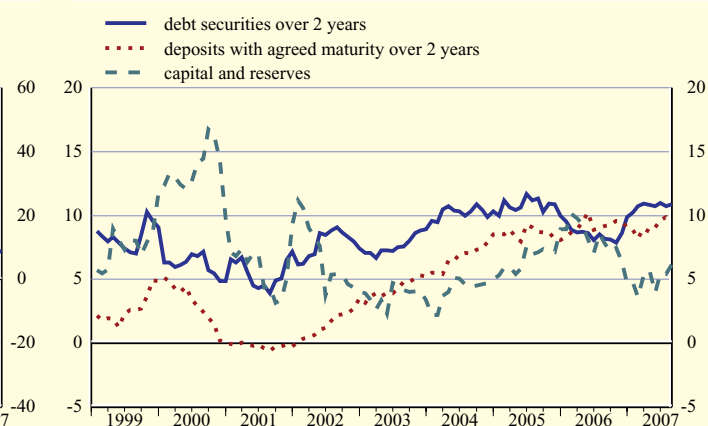
### C3 Components of monetary aggregates <sup>1)</sup>

(annual growth rates; seasonally adjusted)



### C4 Components of longer-term financial liabilities <sup>1)</sup>

(annual growth rates; seasonally adjusted)



Source: ECB.

<sup>1)</sup> Data refer to the changing composition of the euro area. For further information, see the General notes.

## 2.4 MFI loans, breakdown <sup>1), 2)</sup>

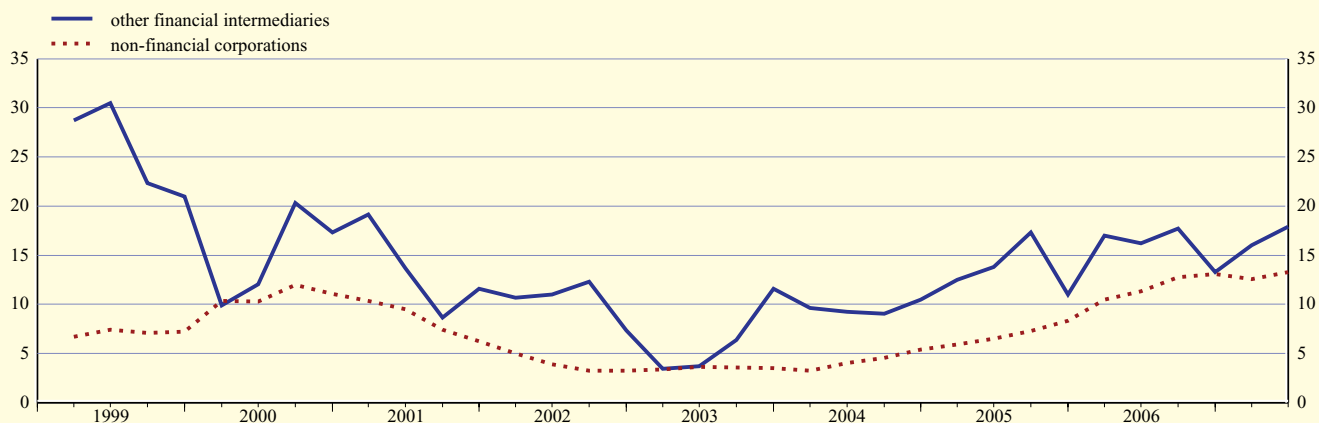
(EUR billions and annual growth rates; outstanding amounts and growth rates at end of period, transactions during period)

### 1. Loans to financial intermediaries and non-financial corporations <sup>3)</sup>

	Insurance corporations and pension funds		Other financial intermediaries <sup>4)</sup>		Non-financial corporations			
	Total		Total		Total	Up to 1 year	Over 1 year and up to 5 years	Over 5 years
	1	Up to 1 year 2	3	Up to 1 year 4	5	6	7	8
Outstanding amounts								
2005	64.6	41.6	620.4	370.2	3,409.1	1,037.7	594.0	1,777.3
2006	82.8	55.2	696.0	420.6	3,844.5	1,137.9	707.1	1,999.5
2007 Q1	98.5	71.7	774.5	488.6	3,957.4	1,172.1	738.8	2,046.5
2007 Apr.	105.6	79.4	794.5	502.5	3,998.4	1,188.7	749.4	2,060.3
May	109.0	82.4	789.0	492.3	4,047.4	1,196.8	765.3	2,085.4
June	110.4	83.5	802.5	502.6	4,107.2	1,225.3	775.5	2,106.4
July	111.5	84.7	813.1	505.3	4,168.7	1,241.9	791.8	2,135.0
Aug. <sup>(e)</sup>	110.6	85.4	820.3	506.3	4,187.2	1,233.2	801.8	2,152.2
Transactions								
2005	15.0	9.8	60.8	29.2	262.7	56.8	54.3	151.6
2006	18.1	13.9	81.9	57.7	446.2	100.5	123.1	222.6
2007 Q1	15.8	16.6	71.1	67.9	105.6	31.2	29.5	44.9
2007 Apr.	7.2	7.8	22.0	15.1	44.1	17.7	11.2	15.1
May	3.3	2.9	-5.8	-10.8	49.4	7.9	16.5	25.1
June	1.5	1.1	13.2	9.8	66.8	34.2	10.7	21.9
July	1.2	1.2	11.8	3.9	62.2	16.5	16.3	29.4
Aug. <sup>(e)</sup>	-0.9	0.8	8.1	1.6	17.9	-9.5	10.1	17.3
Growth rates								
2005 Dec.	30.6	31.2	11.0	8.7	8.3	5.8	9.9	9.3
2006 Dec.	28.0	33.3	13.3	15.6	13.1	9.7	20.8	12.4
2007 Mar.	20.4	26.1	16.0	19.6	12.6	9.9	18.7	12.1
2007 Apr.	20.2	26.7	16.3	18.2	12.4	9.4	18.9	11.9
May	25.5	33.9	14.5	14.2	12.8	10.3	19.4	12.0
June	30.6	40.6	17.9	20.4	13.3	11.3	19.8	12.1
July	24.0	31.9	20.5	24.2	13.6	11.5	19.4	12.8
Aug. <sup>(e)</sup>	27.9	39.9	19.6	22.2	14.2	13.2	20.2	12.7

### C5 Loans to financial intermediaries and non-financial corporations <sup>2)</sup>

(annual growth rates)



Source: ECB.

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

2) Data refer to the changing composition of the euro area. For further information, see the General notes.

3) Before January 2003 data were collected in March, June, September and December each year. Monthly data prior to January 2003 are derived from quarterly data.

4) This category includes investment funds.

## 2.4 MFI loans, breakdown <sup>1), 2)</sup>

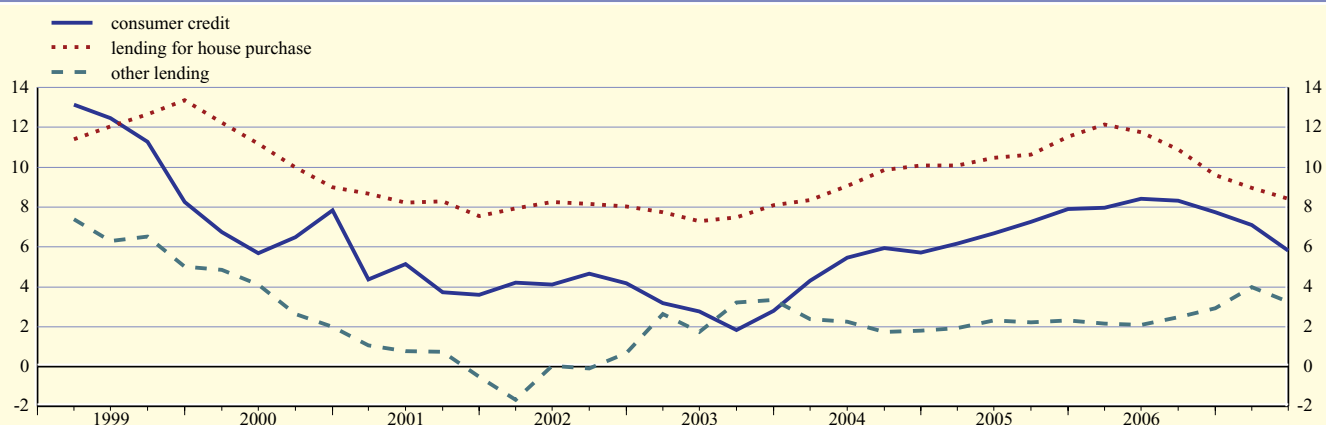
(EUR billions and annual growth rates; outstanding amounts and growth rates at end of period, transactions during period)

### 2. Loans to households <sup>3)</sup>

	2. Loans to households <sup>3)</sup>												
	Total	Consumer credit				Lending for house purchase				Other lending			
	Total	Up to 1 year	Over 1 year and up to 5 years	Over 5 years	Total	Up to 1 year	Over 1 year and up to 5 years	Over 5 years	Total	Up to 1 year	Over 1 year and up to 5 years	Over 5 years	
	1	2	3	4	5	6	7	8	9	10	11	12	13
Outstanding amounts													
2005	4,191.0	554.1	129.1	200.7	224.3	2,915.3	15.2	67.5	2,832.6	721.6	147.3	99.9	474.4
2006	4,537.0	586.6	135.3	202.7	248.5	3,212.0	15.6	72.1	3,124.4	738.4	146.2	101.5	490.7
2007 Q1	4,610.6	590.2	132.0	202.4	255.8	3,272.0	16.1	71.9	3,184.0	748.4	147.5	102.4	498.4
2007 Apr.	4,627.6	593.7	133.3	202.2	258.2	3,286.3	15.7	71.9	3,198.6	747.6	146.4	102.7	498.4
May	4,654.8	595.7	133.0	203.5	259.2	3,311.7	15.9	72.2	3,223.6	747.4	145.2	102.6	499.6
June	4,691.5	601.8	134.9	205.1	261.8	3,337.0	16.3	72.1	3,248.6	752.7	150.1	103.9	498.6
July	4,716.2	606.0	136.0	205.5	264.5	3,359.5	15.7	72.4	3,271.4	750.8	146.3	104.5	500.0
Aug. <sup>(e)</sup>	4,729.8	605.5	135.0	204.9	265.6	3,374.1	15.7	72.6	3,285.7	750.3	144.1	104.6	501.6
Transactions													
2005	357.5	40.7	9.0	11.6	20.0	300.6	0.7	4.8	295.0	16.2	3.8	1.3	11.1
2006	345.4	42.7	8.2	4.8	29.6	281.8	1.5	4.6	275.7	20.9	1.4	3.8	15.7
2007 Q1	69.8	2.1	-3.2	-0.6	5.9	58.9	0.6	0.2	58.1	8.8	0.7	0.7	7.4
2007 Apr.	18.8	4.1	1.4	-0.1	2.8	15.1	-0.4	0.0	15.5	-0.4	-1.0	0.4	0.2
May	28.0	2.3	-0.2	1.3	1.2	25.4	0.1	0.3	25.0	0.3	-1.2	0.2	1.3
June	38.0	6.6	2.0	1.8	2.8	25.7	0.4	-0.1	25.4	5.7	4.9	1.4	-0.7
July	25.7	4.2	1.2	0.4	2.5	22.9	-0.2	0.4	22.8	-1.4	-3.7	0.6	1.7
Aug. <sup>(e)</sup>	13.8	-0.4	-0.9	-0.7	1.2	14.5	0.1	0.2	14.2	-0.3	-2.2	0.2	1.7
Growth rates													
2005 Dec.	9.4	7.9	7.5	6.1	9.8	11.5	5.1	7.5	11.7	2.3	2.6	1.3	2.4
2006 Dec.	8.2	7.7	6.5	2.4	13.3	9.6	9.7	6.8	9.7	2.9	1.0	3.9	3.3
2007 Mar.	7.9	7.1	5.8	1.5	12.8	9.0	13.6	6.4	9.0	4.0	1.7	4.1	4.6
2007 Apr.	7.6	7.0	6.1	0.8	12.9	8.6	12.2	6.5	8.6	3.8	1.1	5.1	4.3
May	7.4	6.0	4.2	0.3	11.9	8.6	12.9	6.2	8.6	3.6	1.3	4.9	4.0
June	7.2	5.8	4.5	0.8	10.8	8.4	10.3	3.8	8.5	3.2	0.5	5.5	3.7
July	7.0	5.8	4.8	0.8	10.7	8.1	8.8	3.6	8.2	3.2	0.5	5.9	3.5
Aug. <sup>(e)</sup>	7.0	5.7	4.8	0.7	10.4	8.1	9.2	3.8	8.2	3.3	-0.1	5.9	3.7

### C6 Loans to households <sup>2)</sup>

(annual growth rates)



Source: ECB.

- 1) MFI sector excluding the Eurosystem; sectoral classification is based on ESA 95.
- 2) Data refer to the changing composition of the euro area. For further information, see the General notes.
- 3) Including non-profit institutions serving households. Before January 2003 data were collected in March, June, September and December each year. Monthly data prior to January 2003 are derived from quarterly data.



## 2.4 MFI loans, breakdown <sup>1), 2)</sup>

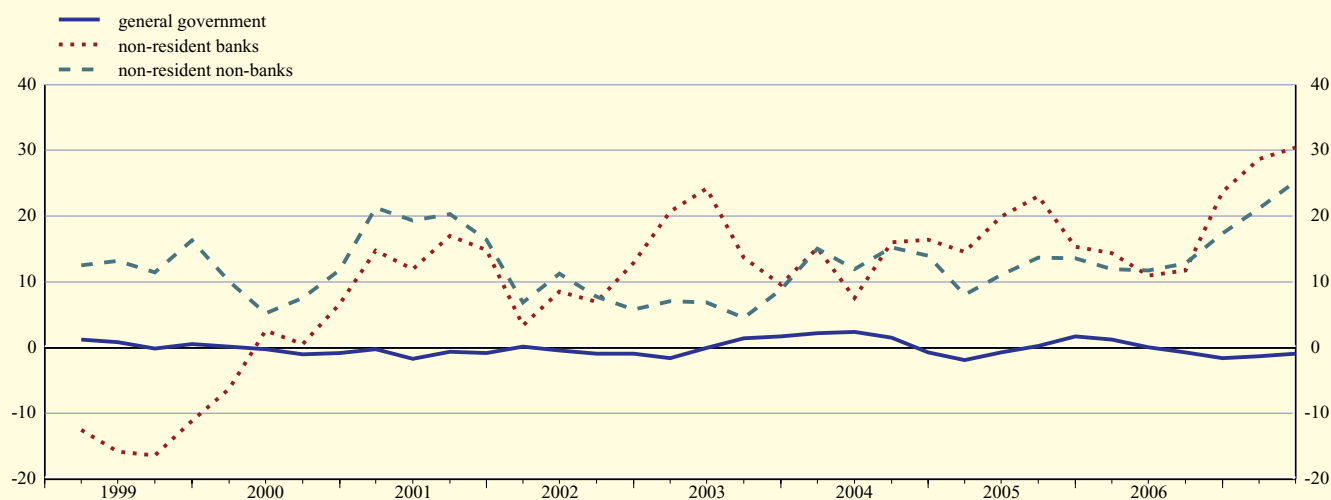
(EUR billions and annual growth rates; outstanding amounts and growth rates at end of period, transactions during period)

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

	General government					Non-euro area residents				
	Total	Central government	Other general government			Total	Banks <sup>3)</sup>	Non-banks		
			State government	Local government	Social security funds			Total	General government	Other
	1	2	3	4	5	6	7	8	9	10
Outstanding amounts										
2004	811.9	130.1	252.3	405.7	23.8	1,974.7	1,342.2	632.5	61.3	571.1
2005	826.9	125.1	246.8	425.8	29.2	2,485.2	1,722.1	763.1	66.0	697.1
2006 Q2	809.0	106.5	234.5	436.0	32.0	2,611.3	1,839.9	771.5	66.5	705.0
Q3	803.6	101.2	230.1	436.6	35.7	2,735.9	1,919.9	816.1	66.5	749.6
Q4	810.5	104.1	232.5	448.1	25.8	2,924.3	2,061.0	863.4	63.2	800.2
2007 Q1	801.4	97.2	225.2	447.8	31.2	3,169.7	2,265.1	904.6	60.0	844.6
Q2 <sup>(p)</sup>	798.1	96.6	218.8	449.9	32.8	3,282.2	2,338.9	943.3	60.6	882.7
Transactions										
2004	-5.6	2.2	-13.9	17.3	-11.2	275.6	194.9	80.4	1.8	78.6
2005	13.7	-5.6	-8.1	21.9	5.5	296.8	207.9	89.0	4.7	84.3
2006 Q2	-6.8	-11.6	-6.4	8.3	2.9	56.3	42.8	13.5	3.6	9.9
Q3	-3.3	-3.1	-4.3	0.4	3.6	120.2	75.8	44.3	-0.7	45.0
Q4	7.4	3.7	2.4	11.2	-9.8	224.8	172.7	52.1	-2.7	54.8
2007 Q1	-8.2	-6.9	-6.3	-0.3	5.3	272.7	222.0	50.8	-3.1	53.8
Q2 <sup>(p)</sup>	-3.5	-0.9	-5.5	1.2	1.7	131.2	84.3	47.0	0.6	46.3
Growth rates										
2004 Dec.	-0.7	1.7	-5.2	4.4	-32.1	15.6	16.4	13.9	3.1	15.2
2005 Dec.	1.7	-4.3	-3.2	5.4	22.9	14.8	15.3	13.6	7.7	14.2
2006 June	0.0	-14.1	-6.3	7.4	12.2	11.2	10.9	11.7	7.3	12.1
Sep.	-0.7	-13.3	-7.9	6.5	9.1	12.1	11.8	12.8	2.9	13.8
Dec.	-1.6	-14.0	-5.8	5.1	-11.6	21.8	23.7	17.4	-4.2	19.5
2007 Mar.	-1.3	-15.2	-6.1	4.6	6.8	26.4	28.7	21.2	-4.4	23.5
June <sup>(p)</sup>	-0.9	-6.9	-5.9	2.9	2.5	28.9	30.4	25.3	-8.7	28.5

### C7 Loans to government and non-euro area residents <sup>2)</sup>

(annual growth rates)



Source: ECB.

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

2) Data refer to the changing composition of the euro area. For further information, see the General notes.

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

## 2.5 Deposits held with MFIs, breakdown <sup>1), 2)</sup>

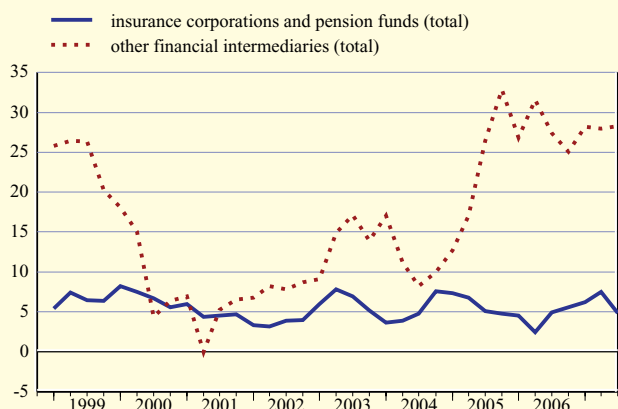
(EUR billions and annual growth rates; outstanding amounts and growth rates at end of period, transactions during period)

### 1. Deposits by financial intermediaries

	Insurance corporations and pension funds							Other financial intermediaries <sup>3)</sup>						
	Total	Overnight	With agreed maturity		Redeemable at notice		Repos	Total	Overnight	With agreed maturity		Redeemable at notice		Repos
			Up to 2 years	Over 2 years	Up to 3 months	Over 3 months				Up to 2 years	Over 2 years	Up to 3 months	Over 3 months	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Outstanding amounts														
2005	612.6	67.8	51.9	469.7	1.2	1.4	20.6	880.4	233.9	185.0	329.8	10.5	0.1	121.1
2006	650.0	70.2	57.1	495.4	1.0	1.4	24.9	1,140.3	283.1	251.8	469.4	10.6	0.2	125.1
2007 Q1	658.8	72.3	58.4	503.0	1.1	1.2	22.9	1,264.7	318.6	267.7	515.7	11.4	0.3	151.0
2007 Apr.	666.2	70.2	63.2	506.3	1.0	1.2	24.4	1,277.9	307.2	276.8	530.5	11.3	0.3	151.8
May	659.4	65.5	60.1	508.7	0.9	1.2	23.0	1,304.4	315.6	274.3	551.1	11.4	0.3	151.7
June	656.4	65.1	58.0	512.2	0.8	1.2	19.1	1,346.8	320.5	288.1	571.8	11.5	0.2	154.6
July <sup>(p)</sup>	670.9	72.8	61.2	514.0	0.9	1.2	20.8	1,369.8	321.0	292.5	589.0	13.4	0.3	153.6
Aug. <sup>(e)</sup>	665.5	61.5	68.5	512.8	0.8	1.1	20.8	1,362.6	300.6	300.5	590.8	11.8	0.2	158.5
Transactions														
2005	26.3	7.4	-0.6	19.2	0.4	0.0	-0.2	176.1	40.1	37.3	96.8	1.5	0.0	0.4
2006	37.9	2.7	5.5	25.6	-0.2	0.0	4.4	249.2	45.5	67.8	130.5	0.3	0.1	4.9
2007 Q1	8.6	2.1	1.0	7.6	0.1	-0.2	-2.0	124.8	35.8	16.2	46.2	0.7	0.0	26.0
2007 Apr.	7.0	-2.6	4.9	3.3	-0.1	0.0	1.5	15.8	-10.7	10.0	15.6	0.0	0.0	0.8
May	-6.8	-4.7	-3.1	2.5	-0.1	0.0	-1.4	25.3	8.1	-3.0	20.2	0.1	0.0	0.0
June	-3.0	-0.4	-2.2	3.4	0.0	0.0	-3.9	41.2	5.1	14.0	20.8	0.0	0.0	1.4
July <sup>(p)</sup>	14.5	7.7	3.3	1.8	0.1	0.0	1.7	24.3	0.8	4.8	17.7	1.9	0.0	-1.0
Aug. <sup>(e)</sup>	-5.4	-11.3	7.3	-1.2	-0.1	-0.1	0.0	-7.5	-20.6	8.0	1.8	-1.6	-0.1	4.9
Growth rates														
2005 Dec.	4.5	12.4	-1.2	4.3	36.0	2.9	-0.8	26.9	22.2	25.0	47.3	14.3	-	0.4
2006 Dec.	6.2	4.0	10.7	5.4	-16.3	-3.4	21.2	28.2	19.5	36.8	38.9	2.9	-	4.0
2007 Mar.	7.5	10.4	15.9	5.9	-2.9	-14.3	16.0	27.9	15.6	37.6	38.1	4.1	-	12.4
2007 Apr.	6.0	2.9	25.5	5.6	-11.0	-13.9	-13.0	23.3	9.9	25.5	38.0	8.5	-	7.2
May	6.1	-1.6	31.0	5.7	-19.9	-14.6	-10.2	25.8	13.3	33.1	39.5	-2.1	-	4.3
June	4.8	-5.5	21.0	5.7	-20.5	-13.6	-13.7	28.2	13.3	35.6	41.4	5.9	-	10.5
July <sup>(p)</sup>	5.9	10.9	18.0	5.2	-11.7	-10.1	-16.6	31.9	19.9	38.4	42.6	36.0	-	12.5
Aug. <sup>(e)</sup>	4.6	-0.7	31.8	4.2	-21.3	270.4	-27.7	31.2	15.0	40.5	42.9	25.4	-	12.8

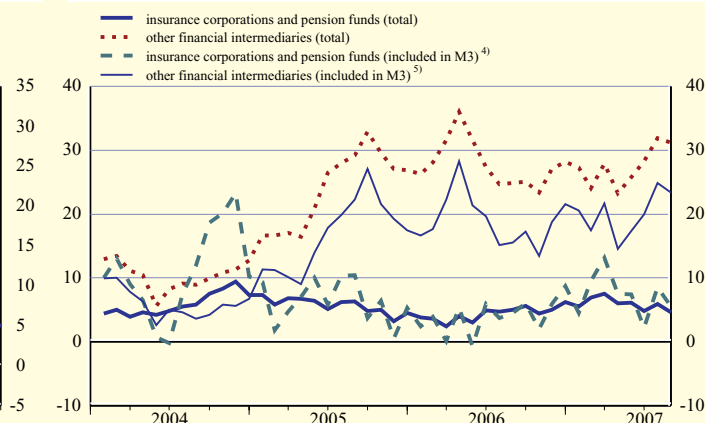
### C8 Total deposits by sector <sup>2)</sup>

(annual growth rates)



### C9 Total deposits and deposits included in M3 by sector <sup>2)</sup>

(annual growth rates)



Source: ECB.

- 1) MFI sector excluding the Eurosystem; sectoral classification is based on ESA 95.
- 2) Data refer to the changing composition of the euro area. For further information, see the General notes.
- 3) This category includes investment funds.
- 4) Covers deposits in columns 2, 3, 5 and 7.
- 5) Covers deposits in columns 9, 10, 12 and 14.

## 2.5 Deposits held with MFIs, breakdown <sup>1), 2)</sup>

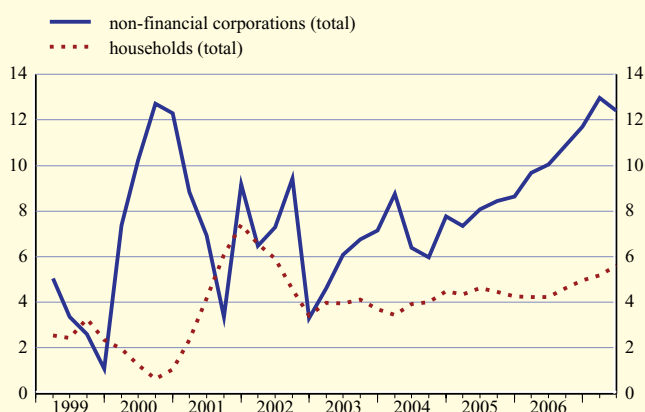
(EUR billions and annual growth rates; outstanding amounts and growth rates at end of period, transactions during period)

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

	Non-financial corporations							Households <sup>3)</sup>						
	Total	Overnight	With agreed maturity		Redeemable at notice		Repos	Total	Overnight	With agreed maturity		Redeemable at notice		Repos
			Up to 2 years	Over 2 years	Up to 3 months	Over 3 months				Up to 2 years	Over 2 years	Up to 3 months	Over 3 months	
Outstanding amounts														
2005	1,211.9	769.2	305.1	67.2	44.5	1.2	24.6	4,343.1	1,685.9	534.0	631.7	1,354.2	84.5	52.8
2006	1,343.1	851.8	355.3	69.4	40.5	1.3	24.8	4,552.6	1,751.2	669.0	606.8	1,355.7	99.8	70.0
2007 Q1	1,349.0	833.0	379.3	68.9	39.4	1.3	27.0	4,589.5	1,727.5	745.0	593.1	1,342.2	105.4	76.4
2007 Apr.	1,348.8	833.3	382.8	68.9	37.9	1.3	24.5	4,616.5	1,746.3	765.1	587.0	1,336.5	105.7	76.0
May	1,370.9	844.4	392.0	68.6	37.7	1.3	26.9	4,631.6	1,749.5	783.2	581.2	1,333.4	105.5	78.8
June	1,386.0	861.4	392.4	68.5	36.1	1.3	26.4	4,678.4	1,785.8	802.3	577.2	1,329.3	106.2	77.7
July	1,384.3	840.8	413.7	68.0	34.7	1.5	25.6	4,680.2	1,766.5	832.9	572.4	1,319.0	106.8	82.6
Aug. <sup>(6)</sup>	1,392.8	828.8	435.9	68.2	31.9	1.5	26.6	4,679.1	1,740.1	860.4	569.0	1,315.4	107.2	87.0
Transactions														
2005	96.6	88.9	11.4	-1.6	3.7	-0.4	-5.4	177.7	125.1	16.3	-2.8	45.9	-4.0	-2.9
2006	141.2	85.7	55.7	3.9	-4.2	0.1	0.2	215.2	65.7	137.5	-23.1	2.5	15.4	17.2
2007 Q1	3.3	-19.8	23.5	-0.6	-1.4	-0.7	2.2	25.1	-29.1	70.9	-14.8	-13.9	5.5	6.4
2007 Apr.	1.3	1.0	4.2	0.2	-1.5	0.0	-2.6	27.9	19.0	20.8	-6.1	-5.6	0.3	-0.4
May	21.6	10.8	8.9	-0.4	-0.2	0.0	2.4	14.8	3.1	17.9	-5.9	-3.0	-0.2	2.8
June	15.2	17.1	0.4	-0.1	-1.7	0.0	-0.5	47.2	36.3	19.2	-3.9	-4.2	0.7	-1.0
July	-1.0	-20.3	21.7	-0.4	-1.3	0.1	-0.8	2.2	-19.1	30.9	-4.8	-10.2	0.7	4.8
Aug. <sup>(6)</sup>	8.3	-12.1	22.1	0.2	-2.9	0.0	1.0	-1.6	-26.4	27.4	-3.6	-3.6	0.4	4.4
Growth rates														
2005 Dec.	8.6	13.1	3.8	-2.0	9.0	-29.0	-18.2	4.3	8.5	3.1	-0.4	3.3	-4.5	-5.1
2006 Dec.	11.7	11.2	18.4	5.7	-9.4	5.9	0.6	5.0	3.9	25.8	-3.7	0.2	18.2	32.6
2007 Mar.	13.0	12.0	22.6	-2.2	-16.1	-29.8	25.4	5.2	2.9	35.0	-4.8	-1.9	22.1	38.7
2007 Apr.	11.7	11.1	21.0	-3.1	-17.9	-36.0	14.3	5.1	2.2	37.8	-5.4	-2.2	22.1	40.4
May	11.7	9.4	25.5	-4.0	-17.8	-36.2	10.7	5.3	2.5	39.0	-6.0	-2.2	20.2	39.1
June	12.4	10.0	26.2	-4.5	-18.0	-29.5	20.0	5.6	3.2	40.2	-6.3	-2.5	19.2	32.9
July	12.8	8.6	32.0	-4.0	-19.6	-26.2	9.0	5.4	2.5	41.1	-6.6	-3.1	18.4	31.1
Aug. <sup>(6)</sup>	12.3	7.8	32.8	-3.8	-26.7	-59.9	3.6	5.6	2.8	41.9	-7.0	-3.3	16.9	30.1

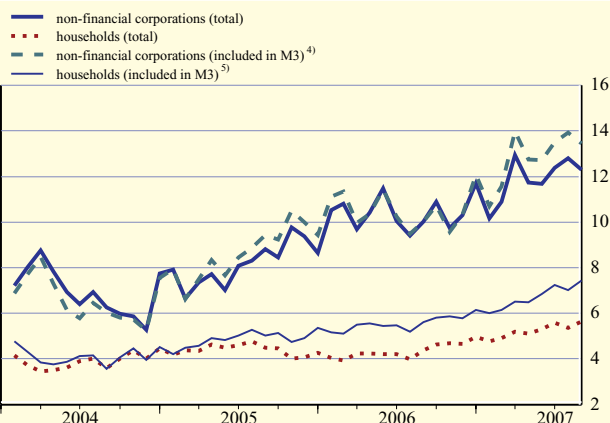
### C10 Total deposits by sector <sup>2)</sup>

(annual growth rates)



### C11 Total deposits and deposits included in M3 by sector <sup>2)</sup>

(annual growth rates)



Source: ECB.

- 1) MFI sector excluding the Eurosystem; sectoral classification is based on ESA 95.
- 2) Data refer to the changing composition of the euro area. For further information, see the General notes.
- 3) Including non-profit institutions serving households.
- 4) Covers deposits in columns 2, 3, 5 and 7.
- 5) Covers deposits in columns 9, 10, 12 and 14.

**2.5 Deposits held with MFIs, breakdown <sup>1), 2)</sup>**

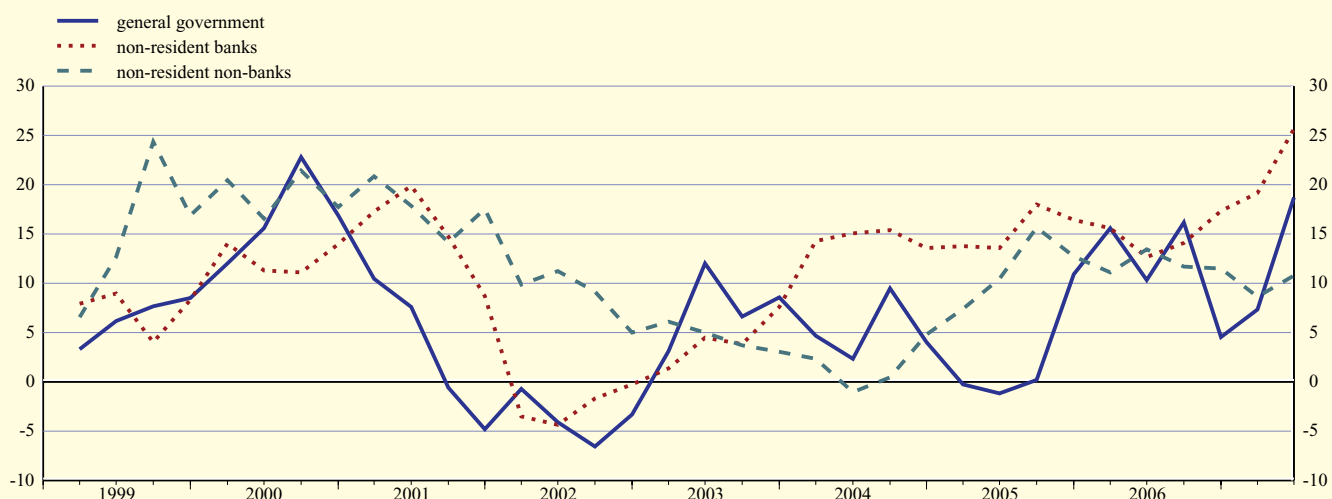
(EUR billions and annual growth rates; outstanding amounts and growth rates at end of period, transactions during period)

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

	General government					Non-euro area residents				
	Total	Central government	Other general government			Total	Banks <sup>3)</sup>	Non-banks		
			State government	Local government	Social security funds			Total	General government	Other
	1	2	3	4	5	6	7	8	9	10
Outstanding amounts										
2004	282.2	137.7	30.5	69.6	44.4	2,428.9	1,748.0	680.9	103.4	577.5
2005	313.1	149.2	38.3	80.9	44.7	3,050.5	2,250.5	800.0	125.8	674.2
2006 Q2	317.2	138.1	39.6	82.6	56.9	3,202.9	2,368.0	834.9	128.3	706.6
Q3	333.0	147.7	41.6	83.5	60.2	3,369.2	2,492.1	877.1	133.3	743.7
Q4	329.0	124.2	45.4	91.8	67.6	3,429.0	2,557.1	871.9	128.6	743.3
2007 Q1	337.8	139.0	42.1	88.8	67.9	3,663.9	2,778.3	885.6	132.4	753.2
Q2 <sup>(p)</sup>	380.7	170.2	43.8	95.2	71.5	3,820.0	2,903.4	916.6	136.7	780.0
Transactions										
2004	11.0	2.7	1.8	2.7	3.8	247.1	214.9	32.0	6.9	25.0
2005	30.8	11.2	7.8	11.5	0.3	381.1	292.8	88.3	22.4	66.0
2006 Q2	-6.0	-9.1	1.5	5.6	8.0	7.9	-8.3	16.2	0.1	16.2
Q3	15.8	9.6	2.0	0.9	3.3	157.5	117.5	40.0	5.1	34.9
Q4	-6.7	-24.0	3.8	6.1	7.4	100.7	105.7	-5.0	-4.8	-0.2
2007 Q1	7.8	14.1	-3.3	-3.3	0.2	256.6	237.2	19.4	3.6	15.8
Q2 <sup>(p)</sup>	42.9	31.2	1.8	6.3	3.6	176.2	140.7	35.5	4.3	31.2
Growth rates										
2004 Dec.	-4.0	2.0	-5.6	4.1	9.3	11.0	13.5	-4.8	7.2	4.4
2005 Dec.	10.9	8.1	25.4	16.6	0.6	15.4	16.4	12.7	21.6	11.2
2006 June	10.3	2.7	13.0	18.8	17.5	12.9	12.7	13.4	8.2	14.4
Sep.	16.2	10.1	15.8	17.2	33.3	13.4	14.0	11.7	6.5	12.7
Dec.	4.5	-16.5	18.4	10.8	51.3	15.8	17.3	11.5	2.2	13.2
2007 Mar.	7.3	-6.3	10.4	12.3	38.6	16.4	19.2	8.6	3.1	9.6
June <sup>(p)</sup>	18.7	22.2	10.6	12.1	25.5	21.7	25.6	10.8	6.4	11.6

**C12 Deposits by government and non-euro area residents <sup>2)</sup>**

(annual growth rates)



Source: ECB.

- 1) MFI sector excluding the Eurosystem; sectoral classification is based on ESA 95.
- 2) Data refer to the changing composition of the euro area. For further information, see the General notes.
- 3) The term "banks" is used in this table to indicate institutions of a similar type to MFIs resident outside the euro area.

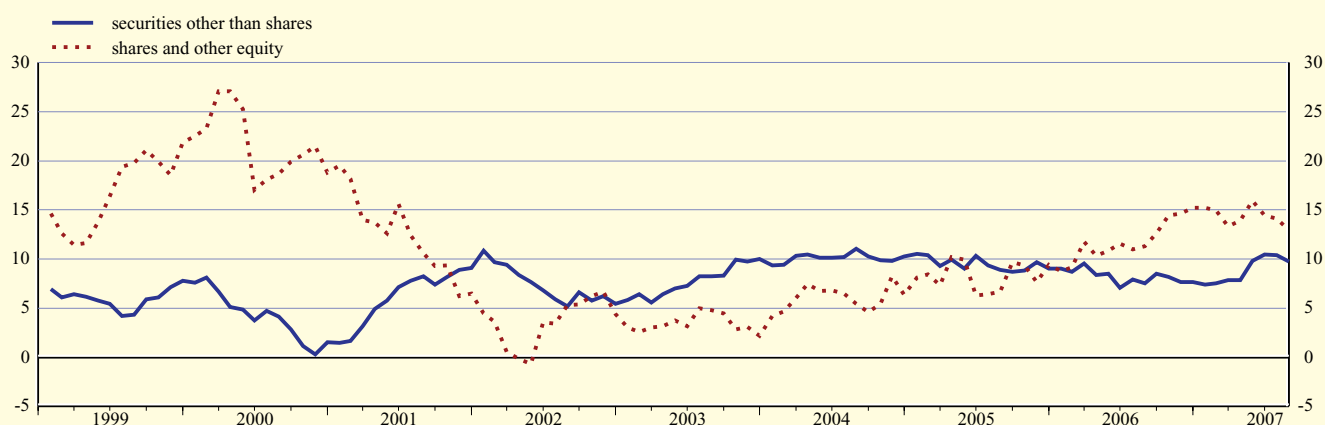
## 2.6 MFI holdings of securities, breakdown <sup>1), 2)</sup>

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

	Securities other than shares							Shares and other equity				
	Total	MFIs		General government		Other euro area residents		Non-euro area residents	Total	MFIs	Non-MFIs	Non-euro area residents
		Euro	Non-euro	Euro	Non-euro	Euro	Non-euro					
	1	2	3	4	5	6	7	8	9	10	11	12
Outstanding amounts												
2005	4,418.9	1,450.4	67.3	1,412.5	17.0	525.7	25.8	920.3	1,254.7	308.5	700.1	246.1
2006	4,663.8	1,560.5	72.3	1,260.4	16.2	615.7	30.1	1,108.6	1,490.3	377.3	817.2	295.8
2007 Q1	4,842.7	1,616.6	76.5	1,266.6	15.6	651.7	34.1	1,181.7	1,576.5	399.7	844.8	332.0
2007 Apr.	4,863.2	1,629.4	76.6	1,243.4	15.4	672.0	34.4	1,192.1	1,654.0	410.8	903.6	339.7
May	4,984.0	1,641.8	79.1	1,275.8	15.8	699.1	34.8	1,237.6	1,703.7	438.2	914.6	351.0
June	5,005.7	1,641.2	79.7	1,268.8	15.6	724.0	34.2	1,242.2	1,623.6	409.9	867.1	346.5
July	5,044.6	1,652.1	88.8	1,241.9	15.4	739.6	35.9	1,270.9	1,607.3	407.5	852.5	347.3
Aug. <sup>(e)</sup>	5,003.3	1,650.8	83.5	1,212.9	15.2	745.9	34.9	1,260.1	1,586.7	407.1	840.7	338.8
Transactions												
2005	356.3	85.7	2.0	52.3	-0.9	71.9	7.7	137.6	109.1	26.5	53.4	29.2
2006	336.8	122.7	10.6	-122.7	0.5	100.4	6.5	218.7	194.4	58.8	97.0	38.6
2007 Q1	190.1	55.6	5.2	2.7	-0.8	37.0	7.6	82.9	78.5	20.6	20.7	37.2
2007 Apr.	33.0	13.4	1.4	-22.7	0.2	19.8	0.9	20.2	72.6	9.2	57.0	6.4
May	109.7	15.7	0.5	31.5	0.3	24.2	-0.1	37.7	42.7	27.3	6.4	9.1
June	24.5	0.2	0.6	-6.2	-0.1	26.0	-0.6	4.6	-79.7	-28.0	-46.9	-4.8
July	46.4	9.9	9.4	-26.7	-0.2	16.0	2.1	35.8	-11.7	-2.0	-11.2	1.5
Aug. <sup>(e)</sup>	-42.2	-2.1	-5.4	-29.9	-0.3	6.9	-1.0	-10.4	-17.1	0.2	-10.2	-7.2
Growth rates												
2005 Dec.	9.0	6.3	3.6	4.2	-4.5	16.0	43.8	18.2	9.4	9.4	8.0	13.6
2006 Dec.	7.7	8.5	16.5	-8.9	3.0	19.3	25.7	24.2	15.2	18.7	13.7	15.2
2007 Mar.	7.8	7.9	18.4	-10.2	-3.3	21.3	40.6	25.2	13.3	21.0	6.4	24.1
2007 Apr.	7.9	8.4	15.8	-11.7	-4.1	22.6	36.6	25.9	13.9	20.7	6.6	28.6
May	9.8	7.6	19.9	-8.1	-2.6	24.9	39.0	28.8	16.0	22.6	8.0	32.2
June	10.5	8.8	26.1	-8.6	-7.1	27.5	43.8	28.7	14.4	18.6	7.5	30.1
July	10.4	8.5	33.4	-9.3	-7.8	27.8	47.5	27.9	14.1	19.6	5.8	32.5
Aug. <sup>(e)</sup>	9.7	7.7	26.0	-9.8	-10.5	29.3	39.9	25.9	13.0	18.5	5.2	29.3

## C13 MFI holdings of securities <sup>2)</sup>

(annual growth rates)



Source: ECB.

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

2) Data refer to the changing composition of the euro area. For further information, see the General notes.

**2.7 Revaluation of selected MFI balance sheet items <sup>1), 2)</sup>**

(EUR billions)

**1. Write-offs/write-downs of loans to households <sup>3)</sup>**

	Consumer credit				Lending for house purchase				Other lending			
	Total	Up to 1 year	Over 1 year and up to 5 years	Over 5 years	Total	Up to 1 year	Over 1 year and up to 5 years	Over 5 years	Total	Up to 1 year	Over 1 year and up to 5 years	Over 5 years
	1	2	3	4	5	6	7	8	9	10	11	12
2005	-4.1	-1.7	-0.9	-1.5	-4.4	-0.3	-1.1	-3.0	-9.8	-2.7	-3.2	-3.9
2006	-3.9	-1.5	-0.9	-1.6	-2.7	-0.1	-0.1	-2.4	-6.7	-1.1	-2.0	-3.6
2007 Q1	-1.0	-0.3	-0.3	-0.5	-0.7	-0.1	0.0	-0.6	-1.9	-0.4	-0.3	-1.2
2007 Apr.	-0.3	0.0	-0.1	-0.1	-0.2	0.0	0.0	-0.2	-0.3	0.0	-0.1	-0.2
May	-0.2	-0.1	-0.1	-0.1	-0.1	0.0	0.0	-0.1	-0.6	0.0	-0.3	-0.2
June	-0.3	-0.1	-0.1	-0.1	-0.2	0.0	0.0	-0.2	-0.5	0.0	-0.1	-0.4
July	-0.2	-0.1	-0.1	-0.1	-0.1	0.0	0.0	-0.1	-0.3	-0.1	-0.1	-0.2
Aug. <sup>(e)</sup>	-0.2	-0.1	-0.1	-0.1	-0.1	0.0	0.0	-0.1	-0.3	0.0	-0.1	-0.2

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

	Non-financial corporations				Non-euro area residents		
	Total	Up to 1 year	Over 1 year and up to 5 years	Over 5 years	Total	Up to 1 year	Over 1 year
	1	2	3	4	5	6	7
2005	-19.3	-7.4	-5.6	-6.2	-1.2	-0.3	-0.9
2006	-13.2	-3.5	-4.6	-5.1	-0.8	-0.1	-0.7
2007 Q1	-2.8	-0.5	-0.7	-1.7	-0.1	0.0	-0.1
2007 Apr.	-0.5	-0.1	-0.2	-0.2	0.0	0.0	0.0
May	-1.4	-0.2	-0.8	-0.4	-0.7	0.0	-0.7
June	-1.1	-0.1	-0.4	-0.6	-0.4	0.0	-0.4
July	-0.5	-0.1	-0.1	-0.3	0.0	0.0	0.0
Aug. <sup>(e)</sup>	-0.5	-0.1	-0.2	-0.2	0.0	0.0	0.0

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

	Securities other than shares							Shares and other equity				
	Total	MFIs		General government		Other euro area residents		Non-euro area residents	Total	MFIs	Non-MFIs	Non-euro area residents
		Euro	Non-euro	Euro	Non-euro	Euro	Non-euro					
	1	2	3	4	5	6	7	8	9	10	11	12
2005	21.5	3.4	0.5	6.7	0.7	1.3	0.2	8.6	25.7	5.0	14.4	6.3
2006	-8.6	1.2	-0.4	-7.9	-0.2	-0.4	-0.3	-0.7	31.5	7.1	16.3	8.0
2007 Q1	-4.2	-1.5	-0.2	0.2	0.0	-0.5	-0.1	-2.1	7.4	0.7	6.7	0.0
2007 Apr.	0.6	0.3	-0.1	-0.6	-0.1	0.5	0.0	0.5	6.0	1.9	2.9	1.2
May	-1.3	-0.5	0.1	-1.4	0.0	-0.2	0.0	0.6	7.2	0.2	4.8	2.3
June	-3.2	-0.4	0.0	-1.7	0.0	-0.2	0.0	-0.7	-0.5	-0.3	-0.6	0.4
July	-0.8	0.5	0.1	0.6	0.0	-0.3	-0.1	-1.6	-3.1	-0.5	-2.0	-0.7
Aug. <sup>(e)</sup>	0.4	0.4	0.1	0.9	0.0	-0.5	0.0	-0.4	-3.9	-0.6	-2.0	-1.3

Source: ECB.

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

2) Data refer to the changing composition of the euro area. For further information, see the General notes.

3) Including non-profit institutions serving households.

## 2.8 Currency breakdown of selected MFI balance sheet items <sup>1),2)</sup>

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

### 1. Deposits

	MFIs <sup>3)</sup>							Non-MFIs						
	All currencies (outstanding amount)	Euro <sup>4)</sup>	Non-euro currencies				All currencies (outstanding amount)	Euro <sup>4)</sup>	Non-euro currencies					
			Total						Total					
			USD	JPY	CHF	GBP			USD	JPY	CHF	GBP		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	
By euro area residents														
2004	4,709.0	91.4	8.6	5.0	0.5	1.5	1.1	6,778.5	97.2	2.8	1.7	0.3	0.1	0.4
2005	4,851.2	90.9	9.1	5.6	0.4	1.5	1.0	7,361.0	96.8	3.2	1.9	0.3	0.1	0.5
2006 Q2	5,057.9	90.3	9.7	5.6	0.4	1.5	1.5	7,648.5	96.6	3.4	2.0	0.3	0.1	0.6
Q3	5,091.2	90.4	9.6	5.7	0.4	1.5	1.2	7,760.9	96.4	3.6	2.2	0.3	0.1	0.6
Q4	5,242.4	90.7	9.3	5.6	0.4	1.5	1.2	8,014.8	96.4	3.6	2.2	0.3	0.1	0.6
2007 Q1	5,395.9	90.5	9.5	5.6	0.5	1.4	1.2	8,199.9	96.3	3.7	2.3	0.3	0.1	0.6
Q2 <sup>(p)</sup>	5,581.3	90.5	9.5	5.7	0.4	1.3	1.2	8,448.3	96.3	3.7	2.3	0.3	0.1	0.6
By non-euro area residents														
2004	1,748.0	46.7	53.3	35.8	2.1	3.2	9.5	680.9	55.4	44.6	28.9	1.5	2.2	9.3
2005	2,250.5	46.2	53.8	35.4	2.7	2.8	10.0	800.0	51.8	48.2	32.1	1.7	2.2	9.2
2006 Q2	2,368.0	47.7	52.3	34.1	2.1	2.7	10.5	834.9	52.5	47.5	31.1	1.5	2.3	9.2
Q3	2,492.1	47.3	52.7	34.4	2.2	2.6	10.3	877.1	51.7	48.3	31.2	1.6	2.1	10.1
Q4	2,557.1	45.3	54.7	35.1	2.3	2.7	11.5	871.9	50.7	49.3	32.0	1.3	2.0	10.4
2007 Q1	2,778.3	46.4	53.6	34.3	2.5	2.5	11.2	885.6	51.1	48.9	31.8	1.6	2.2	9.4
Q2 <sup>(p)</sup>	2,903.4	45.1	54.9	34.5	2.6	2.5	11.9	916.6	51.0	49.0	32.6	1.3	1.9	9.2

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

	All currencies (outstanding amount)	Euro <sup>4)</sup>	Non-euro currencies				
			Total				
			USD	JPY	CHF	GBP	
1	2	3	4	5	6	7	
2004	3,653.9	84.6	15.4	7.6	1.7	1.9	2.7
2005	4,051.7	81.2	18.8	9.6	1.8	1.9	3.2
2006 Q2	4,273.7	81.2	18.8	9.5	1.7	1.9	3.2
Q3	4,383.1	80.9	19.1	9.8	1.6	1.9	3.3
Q4	4,485.5	80.5	19.5	10.0	1.6	1.9	3.5
2007 Q1	4,673.7	80.7	19.3	9.8	1.7	1.9	3.5
Q2 <sup>(p)</sup>	4,794.8	80.2	19.8	10.1	1.6	1.9	3.7

Source: ECB.

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



**2.8 Currency breakdown of selected MFI balance sheet items <sup>1),2)</sup>**

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

**3. Loans**

	MFIs <sup>3)</sup>							Non-MFIs						
	All currencies (outstanding amount)	Euro <sup>4)</sup>	Non-euro currencies				All currencies (outstanding amount)	Euro <sup>4)</sup>	Non-euro currencies					
			Total						Total					
			USD	JPY	CHF	GBP			USD	JPY	CHF	GBP		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	
To euro area residents														
2004	4,457.8	-	-	-	-	-	8,367.5	96.6	3.4	1.4	0.2	1.3	0.4	
2005	4,569.7	-	-	-	-	-	9,112.0	96.3	3.7	1.6	0.2	1.3	0.5	
2006 Q2	4,730.2	-	-	-	-	-	9,591.3	96.4	3.6	1.7	0.1	1.2	0.5	
Q3	4,790.9	-	-	-	-	-	9,786.9	96.3	3.7	1.7	0.1	1.2	0.6	
Q4	4,933.4	-	-	-	-	-	9,970.8	96.4	3.6	1.6	0.2	1.1	0.5	
2007 Q1	5,097.6	-	-	-	-	-	10,242.4	96.4	3.6	1.7	0.2	1.1	0.5	
Q2 <sup>(p)</sup>	5,268.9	-	-	-	-	-	10,509.7	96.2	3.8	1.8	0.2	1.1	0.6	
To non-euro area residents														
2004	1,342.2	51.4	48.6	29.9	3.7	2.2	8.7	632.5	42.2	57.8	40.1	2.6	4.5	7.2
2005	1,722.1	48.5	51.5	30.5	4.3	2.0	10.1	763.1	38.2	61.8	43.7	1.8	4.1	8.6
2006 Q2	1,839.9	49.6	50.4	29.4	2.8	2.4	10.6	771.5	40.3	59.7	42.2	1.1	4.1	8.3
Q3	1,919.9	50.2	49.8	29.1	2.3	2.4	10.8	816.1	41.2	58.8	41.1	1.8	3.8	8.5
Q4	2,061.0	50.7	49.3	28.9	2.0	2.3	11.0	863.4	39.3	60.7	43.2	1.1	4.0	8.6
2007 Q1	2,265.1	51.7	48.3	27.7	2.2	2.5	10.8	904.6	41.3	58.7	41.8	1.0	4.1	8.1
Q2 <sup>(p)</sup>	2,338.9	50.0	50.0	28.6	2.1	2.4	11.8	943.3	39.7	60.3	43.1	1.1	3.8	8.0

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

	Issued by MFIs <sup>3)</sup>							Issued by non-MFIs						
	All currencies (outstanding amount)	Euro <sup>4)</sup>	Non-euro currencies				All currencies (outstanding amount)	Euro <sup>4)</sup>	Non-euro currencies					
			Total						Total					
			USD	JPY	CHF	GBP			USD	JPY	CHF	GBP		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	
Issued by euro area residents														
2004	1,422.7	95.8	4.2	1.8	0.3	0.5	1.3	1,765.4	98.2	1.8	0.9	0.5	0.1	0.3
2005	1,517.7	95.6	4.4	2.0	0.3	0.4	1.4	1,980.9	97.8	2.2	1.1	0.3	0.1	0.5
2006 Q2	1,585.3	95.8	4.2	1.9	0.3	0.4	1.3	2,002.8	97.8	2.2	1.2	0.3	0.1	0.6
Q3	1,626.6	95.8	4.2	2.2	0.2	0.3	1.2	1,969.4	97.7	2.3	1.3	0.3	0.1	0.6
Q4	1,632.8	95.6	4.4	2.3	0.2	0.3	1.3	1,922.3	97.6	2.4	1.3	0.3	0.1	0.7
2007 Q1	1,693.0	95.5	4.5	2.3	0.3	0.3	1.4	1,968.0	97.5	2.5	1.3	0.3	0.1	0.8
Q2 <sup>(p)</sup>	1,721.0	95.4	4.6	2.2	0.3	0.3	1.5	2,042.6	97.6	2.4	1.3	0.3	0.1	0.7
Issued by non-euro area residents														
2004	341.4	50.3	49.7	28.6	1.0	0.5	17.0	410.5	44.8	55.2	30.5	8.6	0.7	9.2
2005	397.5	51.0	49.0	28.5	0.8	0.5	15.7	522.8	38.3	61.7	35.0	7.8	0.8	12.6
2006 Q2	439.9	53.5	46.5	26.8	0.9	0.5	15.0	537.7	40.1	59.9	33.5	5.6	0.8	14.6
Q3	475.2	52.4	47.6	28.4	0.7	0.6	14.5	581.5	38.2	61.8	35.6	4.7	0.8	15.4
Q4	514.4	52.2	47.8	28.8	0.7	0.4	14.5	594.2	38.9	61.1	36.5	4.9	0.8	14.2
2007 Q1	545.3	52.7	47.3	28.5	0.6	0.5	14.4	636.3	38.2	61.8	36.9	4.4	0.6	14.8
Q2 <sup>(p)</sup>	581.8	52.0	48.0	28.4	0.7	0.5	14.6	660.3	37.8	62.2	37.2	4.2	0.7	15.0

Source: ECB.

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

2) Data refer to the changing composition of the euro area. For further information, see the General notes.

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

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

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

(EUR billions; outstanding amounts at end of period)

### 1. Assets

	Total 1	Deposits 2	Holdings of securities other than shares			Holdings of shares/ other equity 6	Holdings of investment fund shares 7	Fixed assets 8	Other assets 9
			Total 3	Up to 1 year 4	Over 1 year 5				
2005 Q4	4,791.4	291.5	1,848.4	109.6	1,738.8	1,684.7	505.3	176.1	285.4
2006 Q1	5,199.6	316.0	1,905.5	139.9	1,765.6	1,898.2	569.3	177.3	333.3
Q2	5,138.0	316.9	1,908.6	145.2	1,763.3	1,777.9	601.0	180.3	353.3
Q3	5,359.0	317.5	1,985.0	178.4	1,806.6	1,874.4	631.3	181.5	369.2
Q4	5,551.3	320.6	2,005.8	170.6	1,835.2	2,022.0	670.6	187.9	344.3
2007 Q1 <sup>(p)</sup>	5,714.7	333.0	2,030.8	180.3	1,850.5	2,069.1	718.0	188.9	374.9

### 2. Liabilities

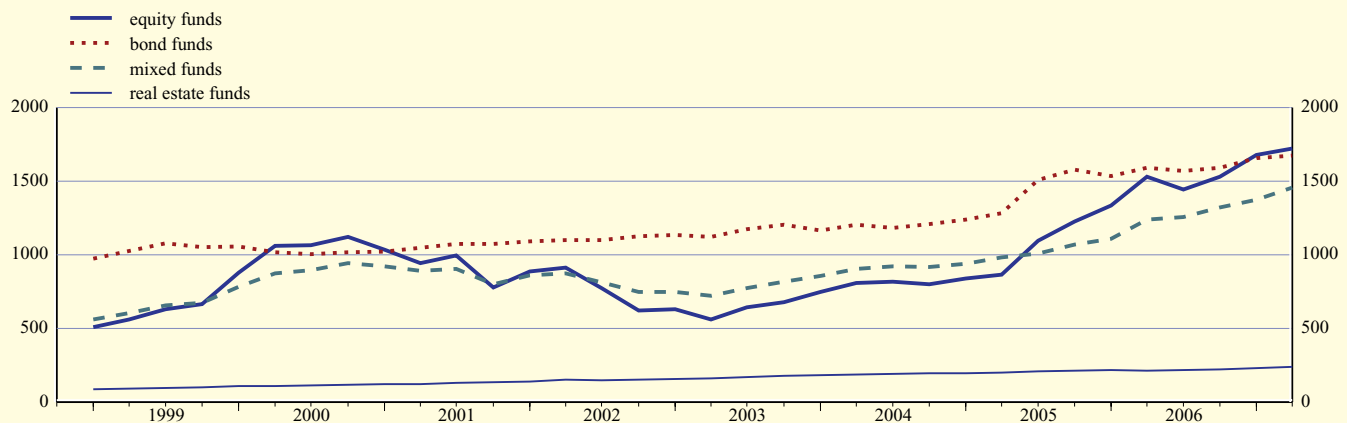
	Total 1	Deposits and loans taken 2	Investment fund shares 3	Other liabilities 4
2005 Q4	4,791.4	61.8	4,519.0	210.5
2006 Q1	5,199.6	73.6	4,871.3	254.7
Q2	5,138.0	76.4	4,789.6	272.0
Q3	5,359.0	75.9	4,999.5	283.7
Q4	5,551.3	77.8	5,217.0	256.4
2007 Q1 <sup>(p)</sup>	5,714.7	81.6	5,350.2	282.9

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

	Total 1	Funds by investment policy				Funds by type of investor		
		Equity funds 2	Bond funds 3	Mixed funds 4	Real estate funds 5	Other funds 6	General public funds 7	Special investors' funds 8
2005 Q4	4,791.4	1,337.3	1,538.1	1,109.8	216.2	590.0	3,661.3	1,130.1
2006 Q1	5,199.6	1,532.0	1,592.6	1,239.4	214.0	621.5	3,999.0	1,200.5
Q2	5,138.0	1,443.3	1,569.3	1,257.0	217.4	650.9	3,913.3	1,224.7
Q3	5,359.0	1,533.4	1,594.2	1,321.3	221.2	688.9	4,085.5	1,273.5
Q4	5,551.3	1,680.7	1,657.0	1,375.8	231.8	606.0	4,252.1	1,299.2
2007 Q1 <sup>(p)</sup>	5,714.7	1,723.0	1,674.8	1,459.0	238.4	619.4	4,376.0	1,338.8

### CI4 Total assets of investment funds

(EUR billions)



Source: ECB.

1) Other than money market funds. For further details, see the General notes.

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

(EUR billions; outstanding amounts at end of period)

**1. Funds by investment policy**

	Total 1	Deposits 2	Holdings of securities other than shares			Holdings of shares/ other equity 6	Holdings of investment fund shares 7	Fixed assets 8	Other assets 9
			Total 3	Up to 1 year 4	Over 1 year 5				
Equity funds									
2005 Q4	1,337.3	50.9	45.9	5.7	40.3	1,146.7	60.3	-	33.5
2006 Q1	1,532.0	55.2	51.5	6.3	45.2	1,309.7	71.1	-	44.6
Q2	1,443.3	52.3	51.4	6.5	44.9	1,221.7	69.3	-	48.6
Q3	1,533.4	53.8	76.1	33.2	42.9	1,284.3	66.8	-	52.3
Q4	1,680.7	56.1	66.0	22.7	43.3	1,429.5	74.3	-	54.8
2007 Q1 <sup>(p)</sup>	1,723.0	59.3	65.8	25.7	40.1	1,461.7	78.0	-	58.4
Bond funds									
2005 Q4	1,538.1	100.0	1,251.8	67.6	1,184.2	38.6	46.3	-	101.3
2006 Q1	1,592.6	108.9	1,285.4	82.6	1,202.8	41.1	49.3	-	107.9
Q2	1,569.3	106.5	1,264.7	87.3	1,177.4	38.5	47.5	-	112.1
Q3	1,594.2	105.5	1,288.5	86.8	1,201.8	41.6	48.2	-	110.3
Q4	1,657.0	108.3	1,343.6	91.1	1,252.5	45.4	49.8	-	110.0
2007 Q1 <sup>(p)</sup>	1,674.8	112.3	1,356.6	94.7	1,261.9	44.5	52.5	-	108.9
Mixed funds									
2005 Q4	1,109.8	60.9	441.1	26.9	414.1	315.9	202.0	0.1	89.9
2006 Q1	1,239.4	67.9	465.4	38.6	426.7	349.6	238.5	0.1	117.9
Q2	1,257.0	72.0	484.1	40.3	443.8	318.6	253.6	0.2	128.6
Q3	1,321.3	68.4	510.6	45.2	465.4	332.3	272.3	0.3	137.4
Q4	1,375.8	71.0	519.4	43.4	476.0	364.0	292.8	0.4	128.2
2007 Q1 <sup>(p)</sup>	1,459.0	73.5	530.2	45.1	485.1	380.4	322.0	0.3	152.5
Real estate funds									
2005 Q4	216.2	14.5	7.8	1.5	6.3	1.4	6.9	175.1	10.4
2006 Q1	214.0	15.1	6.1	1.7	4.4	1.8	4.4	176.5	10.1
Q2	217.4	15.5	5.6	1.5	4.1	1.6	5.4	179.4	9.9
Q3	221.2	16.4	6.0	1.6	4.4	1.9	6.2	180.3	10.4
Q4	231.8	17.6	6.1	1.7	4.4	2.2	7.0	187.0	11.9
2007 Q1 <sup>(p)</sup>	238.4	18.9	6.7	1.9	4.8	2.3	9.6	188.4	12.6

**2. Funds by type of investor**

	Total 1	Deposits 2	Holdings of securities other than shares 3	Holdings of shares/ other equity 4	Holdings of investment fund shares 5	Fixed assets 6	Other assets 7
2005 Q4	3,661.3	242.9	1,277.9	1,372.7	381.1	150.1	236.7
2006 Q1	3,999.0	263.4	1,334.4	1,551.3	427.5	150.2	272.2
Q2	3,913.3	257.1	1,321.4	1,449.8	452.2	151.2	281.6
Q3	4,085.5	260.6	1,374.1	1,531.3	470.9	151.2	297.3
Q4	4,252.1	265.4	1,402.4	1,650.2	498.2	155.2	280.6
2007 Q1 <sup>(p)</sup>	4,376.0	275.3	1,420.5	1,694.0	528.6	155.6	302.0
Special investors' funds							
2005 Q4	1,130.1	48.6	570.6	312.0	124.3	25.9	48.7
2006 Q1	1,200.5	52.7	571.0	346.9	141.7	27.1	61.1
Q2	1,224.7	59.9	587.2	328.1	148.8	29.1	71.7
Q3	1,273.5	56.9	610.9	343.1	160.5	30.2	71.9
Q4	1,299.2	55.2	603.4	371.8	172.4	32.7	63.7
2007 Q1 <sup>(p)</sup>	1,338.8	57.7	610.3	375.1	189.3	33.3	73.0

Source: ECB.



## EURO AREA ACCOUNTS

### 3.1 Integrated economic and financial accounts by institutional sector

(EUR billions)

Uses	Euro area	Households	Non-financial corporations	Financial corporations	General government	Rest of the world
2007 Q1						
<b>External account</b>						
Exports of goods and services						467.7
<i>Trade balance</i> <sup>1)</sup>						-14.6
<b>Generation of income account</b>						
Gross value added (basic prices)						
Taxes less subsidies on products						
Gross domestic product (market prices)						
Compensation of employees	980.2	101.2	617.8	49.7	211.5	
Other taxes less subsidies on production	19.5	5.3	7.7	3.2	3.3	
Consumption of fixed capital	312.9	84.9	176.4	10.9	40.8	
<i>Net operating surplus and mixed income</i> <sup>1)</sup>	561.8	275.6	257.2	29.0	0.0	
<b>Allocation of primary income account</b>						
Net operating surplus and mixed income						3.9
Compensation of employees						
Taxes less subsidies on production						
Property income	742.3	44.8	292.2	342.3	63.1	119.6
Interest	428.0	42.7	71.8	250.5	63.1	73.8
Other property income	314.3	2.1	220.4	91.8	0.0	45.9
<i>Net national income</i> <sup>1)</sup>	1,811.7	1,468.5	76.8	47.5	218.9	
<b>Secondary distribution of income account</b>						
Net national income						
Current taxes on income, wealth, etc.	219.2	185.4	26.1	7.4	0.3	1.4
Social contributions	374.6	374.6				0.7
Social benefits other than social transfers in kind	379.8	1.4	15.2	23.8	339.5	1.0
Other current transfers	181.2	66.6	22.3	46.3	46.0	11.3
Net non-life insurance premiums	43.8	32.7	9.5	0.9	0.7	1.7
Non-life insurance claims	44.1			44.1		0.8
Other	93.3	33.8	12.8	1.3	45.4	8.8
<i>Net disposable income</i> <sup>1)</sup>	1,788.6	1,306.7	43.2	50.2	388.4	
<b>Use of income account</b>						
Net disposable income						
Final consumption expenditure	1,627.1	1,207.7			419.4	
Individual consumption expenditure	1,464.1	1,207.7			256.5	
Collective consumption expenditure	162.9				162.9	
Adjustment for the change in net equity of households in pension fund reserves	14.2	0.1	3.0	11.1	0.0	0.0
<i>Net saving/current external account</i> <sup>1)</sup>	161.5	113.2	40.2	39.2	-31.0	2.3
<b>Capital account</b>						
Net saving / current external account						
Gross capital formation	476.7	152.0	270.7	10.3	43.6	
Gross fixed capital formation	440.4	148.2	238.9	10.1	43.2	
Changes in inventories and acquisitions less disposals of valuables	36.4	3.8	31.8	0.3	0.4	
Consumption of fixed capital						
Acquisitions less disposals of non-produced non-financial assets	0.4	-0.2	0.3	0.1	0.1	-0.4
Capital transfers	37.9	7.9	1.4	2.3	26.2	7.2
Capital taxes	5.7	5.5	0.2	0.0	0.0	0.0
Other capital transfers	32.2	2.4	1.2	2.3	26.2	7.2
<i>Net lending (+)/net borrowing (-) (from capital account)</i> <sup>1)</sup>	2.2	55.8	-41.9	38.7	-50.4	-2.2
Statistical discrepancy	0.0	7.8	-7.8	0.0	0.0	0.0

Sources: ECB and Eurostat.

1) For the calculation of the balancing items, see the Technical notes.

**3.1 Integrated economic and financial accounts by institutional sector (cont'd)**

(EUR billions)

Resources	Euro area	Households	Non-financial corporations	Financial corporations	General government	Rest of the world
<b>2007 Q1</b>						
<b>External account</b>						
Imports of goods and services						453.1
<i>Trade balance</i>						
<b>Generation of income account</b>						
Gross value added (basic prices)	1,874.5	467.0	1,059.1	92.8	255.6	
Taxes less subsidies on products	243.9					
Gross domestic product (market prices) <sup>2)</sup>	2,118.4					
Compensation of employees						
Other taxes less subsidies on production						
Consumption of fixed capital						
<i>Net operating surplus and mixed income</i>						
<b>Allocation of primary income account</b>						
Net operating surplus and mixed income	561.8	275.6	257.2	29.0	0.0	
Compensation of employees	982.4	982.4				1.8
Taxes less subsidies on production	263.4				263.4	0.1
Property income	746.5	255.3	111.8	360.8	18.7	115.5
Interest	422.3	66.9	39.3	309.8	6.3	79.6
Other property income	324.3	188.4	72.5	50.9	12.4	35.9
<i>Net national income</i>						
<b>Secondary distribution of income account</b>						
Net national income	1,811.7	1,468.5	76.8	47.5	218.9	
Current taxes on income, wealth, etc.	219.9				219.9	0.6
Social contributions	374.3	1.1	18.4	35.0	319.9	1.0
Social benefits other than social transfers in kind	378.0	378.0				2.8
Other current transfers	159.3	87.1	11.6	45.1	15.4	33.1
Net non-life insurance premiums	44.1			44.1		1.4
Non-life insurance claims	43.4	34.0	8.2	0.8	0.3	1.5
Other	71.9	53.1	3.4	0.2	15.2	30.2
<i>Net disposable income</i>						
<b>Use of income account</b>						
Net disposable income	1,788.6	1,306.7	43.2	50.2	388.4	
Final consumption expenditure						
Individual consumption expenditure						
Collective consumption expenditure						
Adjustment for the change in net equity of households in pension fund reserves	14.3	14.3				0.0
<i>Net saving/current external account</i>						
<b>Capital account</b>						
Net saving / current external account	161.5	113.2	40.2	39.2	-31.0	2.3
Gross capital formation						
Gross fixed capital formation						
Changes in inventories and acquisitions less disposals of valuables						
Consumption of fixed capital	312.9	84.9	176.4	10.9	40.8	
Acquisitions less disposals of non-produced non-financial assets						
Capital transfers	42.8	17.5	14.0	1.5	9.7	2.3
Capital taxes	5.7				5.7	0.0
Other capital transfers	37.0	17.5	14.0	1.5	4.0	2.3
<i>Net lending (+)/net borrowing (-) (from capital account)</i>						
Statistical discrepancy						

Sources: ECB and Eurostat.

2) Gross domestic product is equal to gross value added of all domestic sectors plus net taxes (taxes less subsidies) on products.

### 3.1 Integrated economic and financial accounts by institutional sector (cont'd)

(EUR billions)

Assets	Euro area	Households	Non-financial corporations	MFIs	Other financial inter- mediaries	Insurance corporations and pension funds	General govern- ment	Rest of the world
2007 Q1								
<b>Opening balance sheet, financial assets</b>								
Total financial assets		16,918.5	13,408.5	19,715.4	9,371.1	5,956.0	2,688.7	13,215.5
Monetary gold and special drawing rights (SDRs)				180.9				
Currency and deposits		5,333.8	1,577.0	2,154.6	1,238.3	730.4	504.1	3,519.6
Short-term debt securities		30.3	112.1	90.6	256.2	212.7	22.7	693.2
Long-term debt securities		1,431.5	189.0	3,249.6	1,864.6	1,903.8	203.5	2,026.3
Loans		23.6	1,676.6	10,858.8	1,283.5	361.6	361.0	1,405.8
<i>of which long-term</i>		19.6	926.5	8,267.8	953.7	298.9	316.7	.
Shares and other equity		4,926.5	7,243.9	1,722.9	4,487.9	2,323.6	1,057.2	4,880.7
Quoted shares		1,213.0	1,780.7	659.8	2,357.9	820.4	380.2	.
Unquoted shares and other equity		2,067.7	5,057.8	800.0	1,509.6	462.6	544.0	.
Mutual fund shares		1,645.8	405.4	263.2	620.4	1,040.7	133.0	.
Insurance technical reserves		4,918.1	131.0	1.9	0.0	143.6	3.1	182.8
Other accounts receivable and financial derivatives		254.7	2,479.0	1,456.1	240.6	280.1	537.1	507.1
<i>Net financial worth</i>								
<b>Financial account, transactions in financial assets</b>								
Total transactions in financial assets		157.0	194.3	839.4	231.1	100.9	34.7	646.1
Monetary gold and special drawing rights (SDRs)				-0.4				0.4
Currency and deposits		17.5	29.2	211.9	110.9	26.8	15.2	269.9
Short-term debt securities		14.8	7.7	10.1	52.4	14.7	3.0	22.7
Long-term debt securities		15.7	-15.3	135.3	-10.8	40.2	3.2	138.3
Loans		-1.0	33.4	308.8	18.4	-4.1	-4.4	79.7
<i>of which long-term</i>		-1.1	23.1	148.9	32.4	1.9	1.1	.
Shares and other equity		17.2	67.7	53.0	41.1	17.3	-0.3	125.6
Quoted shares		-6.7	-5.8	19.4	21.6	-2.5	-0.1	.
Unquoted shares and other equity		25.4	60.7	24.3	-20.6	2.7	-3.7	.
Mutual fund shares		-1.4	12.9	9.2	40.1	17.1	3.5	.
Insurance technical reserves		66.2	2.4	0.0	0.0	3.8	0.0	6.2
Other accounts receivable and financial derivatives		26.7	69.2	120.8	19.2	2.1	18.0	3.4
<i>Changes in net financial worth due to transactions</i>								
<b>Other changes account, financial assets</b>								
Total other changes in financial assets		164.2	164.0	26.4	74.6	22.6	19.3	65.6
Monetary gold and special drawing rights (SDRs)				4.6				
Currency and deposits		-2.0	-1.9	-17.6	-0.9	-0.1	0.9	-18.5
Short-term debt securities		-1.3	0.1	0.6	14.8	0.2	0.2	-12.6
Long-term debt securities		11.0	2.0	-9.6	-13.5	-14.3	0.5	-7.0
Loans		-0.1	7.5	8.0	7.5	-6.4	0.0	33.5
<i>of which long-term</i>		-0.1	4.3	11.2	7.0	-0.6	0.0	.
Shares and other equity		155.7	177.4	45.4	50.2	37.9	18.5	44.5
Quoted shares		47.8	100.7	31.9	38.4	24.0	11.0	.
Unquoted shares and other equity		97.7	74.3	11.5	7.5	5.9	6.9	.
Mutual fund shares		10.1	2.4	2.0	4.3	8.0	0.6	.
Insurance technical reserves		1.3	-0.3	0.0	0.0	-0.4	0.0	1.0
Other accounts receivable and financial derivatives		-0.3	-20.7	-4.9	16.4	5.6	-0.8	24.6
<i>Other changes in net financial worth</i>								
<b>Closing balance sheet, financial assets</b>								
Total financial assets		17,239.7	13,766.8	20,581.3	9,676.9	6,079.4	2,742.7	13,926.7
Monetary gold and special drawing rights (SDRs)				185.0				
Currency and deposits		5,349.3	1,604.2	2,348.9	1,348.3	757.0	520.2	3,771.0
Short-term debt securities		43.8	119.8	101.3	323.3	227.6	26.0	703.3
Long-term debt securities		1,458.2	175.6	3,375.3	1,840.4	1,929.7	207.1	2,157.6
Loans		22.4	1,717.5	11,175.6	1,309.4	351.2	356.6	1,519.0
<i>of which long-term</i>		18.4	953.9	8,427.8	993.2	300.2	317.7	.
Shares and other equity		5,099.4	7,489.0	1,821.3	4,579.1	2,378.9	1,075.4	5,050.9
Quoted shares		1,254.2	1,875.6	711.1	2,417.9	841.9	391.2	.
Unquoted shares and other equity		2,190.8	5,192.8	835.8	1,496.5	471.3	547.2	.
Mutual fund shares		1,654.5	420.7	274.4	664.8	1,065.8	137.1	.
Insurance technical reserves		4,985.7	133.1	1.9	0.0	147.1	3.1	190.0
Other accounts receivable and financial derivatives		281.0	2,527.6	1,571.9	276.3	287.9	554.3	535.1
<i>Net financial worth</i>								

Source: ECB.

## 3.1 Integrated economic and financial accounts by institutional sector (cont'd)

(EUR billions)

Liabilities	Euro area	Households	Non-financial corporations	MFIs	Other financial intermediaries	Insurance corporations and pension funds	General government	Rest of the world
<b>2007 Q1</b>								
<b>Opening balance sheet, liabilities</b>								
Total liabilities		5,409.2	21,609.4	20,073.1	9,326.3	6,066.9	6,712.9	11,894.9
Monetary gold and special drawing rights (SDRs)								
Currency and deposits			0.0	12,151.6	210.8	3.9	345.6	2,345.9
Short-term debt securities			267.6	325.2	70.2	0.1	560.7	194.0
Long-term debt securities			425.5	2,500.6	1,251.7	26.1	4,357.0	2,307.5
Loans		5,021.3	6,250.1		1,260.5	155.8	1,075.5	2,207.7
<i>of which long-term</i>		4,709.8	4,214.2		610.8	79.6	944.1	.
Shares and other equity			12,070.1	3,209.7	6,311.3	656.3	4.8	4,390.6
Quoted shares			4,458.0	1,056.0	299.1	320.8	0.0	.
Unquoted shares and other equity			7,612.1	1,215.3	867.8	335.5	4.8	.
Mutual fund shares				938.4	5,144.4			.
Insurance technical reserves		32.7	325.8	53.3	0.5	4,967.7	0.6	
Other accounts payable and financial derivatives		355.2	2,270.3	1,832.7	221.2	257.1	368.8	449.3
<i>Net financial worth</i> <sup>1)</sup>	-1,139.6	11,509.3	-8,200.9	-357.7	44.8	-111.0	-4,024.2	
<b>Financial account, transactions in liabilities</b>								
Total transactions in liabilities		93.4	244.0	802.0	231.7	99.0	85.2	648.3
Monetary gold and special drawing rights (SDRs)								
Currency and deposits			0.0	413.6	3.8	0.0	-7.4	271.3
Short-term debt securities			15.9	33.2	-2.7	-0.1	49.3	29.8
Long-term debt securities			-4.8	97.2	81.2	0.0	38.5	94.4
Loans		75.1	143.2		37.1	19.4	7.0	148.9
<i>of which long-term</i>		77.1	93.9		-0.3	1.5	-20.3	.
Shares and other equity			59.7	77.9	104.9	3.1	0.0	76.1
Quoted shares			6.9	5.2	8.3	0.5	0.0	.
Unquoted shares and other equity			52.8	-0.6	8.3	2.6	0.0	.
Mutual fund shares				73.2	88.3			.
Insurance technical reserves		0.0	1.0	0.6	-0.1	77.2	0.0	
Other accounts payable and financial derivatives		18.3	28.9	179.5	7.6	-0.6	-2.2	27.8
<i>Changes in net financial worth due to transactions</i> <sup>1)</sup>	2.2	63.6	-49.7	37.4	-0.6	1.9	-50.4	-2.2
<b>Other changes account, liabilities</b>								
Total other changes in liabilities		10.6	396.0	65.3	44.6	17.6	-20.3	18.5
Monetary gold and special drawing rights (SDRs)								
Currency and deposits			0.0	-5.2	0.1	0.0	0.0	-35.0
Short-term debt securities			0.3	-1.4	0.0	0.0	2.6	0.3
Long-term debt securities			2.8	-4.2	-1.5	-0.1	-30.5	2.6
Loans		7.0	29.7		4.3	-2.5	-2.9	14.6
<i>of which long-term</i>		5.7	17.4		1.6	-0.7	-3.1	.
Shares and other equity			354.5	72.4	64.4	14.0	0.1	24.2
Quoted shares			197.1	38.9	36.1	7.2	0.0	.
Unquoted shares and other equity			157.4	35.7	-2.6	6.8	0.1	.
Mutual fund shares				-2.3	30.9			.
Insurance technical reserves		0.0	0.0	0.0	0.0	1.7	0.0	
Other accounts payable and financial derivatives		3.6	8.6	3.7	-22.7	4.5	10.4	11.9
<i>Other changes in net financial worth</i> <sup>1)</sup>	-42.6	153.7	-232.0	-38.8	30.0	5.0	39.6	47.1
<b>Closing balance sheet, liabilities</b>								
Total liabilities		5,513.2	22,249.3	20,940.4	9,602.6	6,183.6	6,777.7	12,561.7
Monetary gold and special drawing rights (SDRs)								
Currency and deposits			0.0	12,560.0	214.7	3.9	338.2	2,582.2
Short-term debt securities			283.9	357.1	67.5	0.1	612.6	224.0
Long-term debt securities			423.6	2,593.5	1,331.3	26.1	4,364.9	2,404.5
Loans		5,103.4	6,422.9		1,302.0	172.6	1,079.5	2,371.2
<i>of which long-term</i>		4,792.6	4,325.5		612.1	80.4	920.7	.
Shares and other equity			12,484.3	3,360.0	6,480.6	673.4	4.9	4,490.8
Quoted shares			4,662.0	1,100.2	343.5	328.5	0.0	.
Unquoted shares and other equity			7,822.3	1,250.5	873.5	344.9	4.9	.
Mutual fund shares				1,009.3	5,263.6			.
Insurance technical reserves		32.7	326.8	53.9	0.4	5,046.6	0.6	
Other accounts payable and financial derivatives		377.1	2,307.8	2,015.9	206.1	261.0	377.1	489.0
<i>Net financial worth</i> <sup>1)</sup>	-1,180.0	11,726.5	-8,482.6	-359.1	74.3	-104.1	-4,035.0	

Source: ECB.



### 3.2 Euro area non-financial accounts

(EUR billions; four-quarter cumulated flows)

Uses	2003	2004	2005	2005 Q2- 2006 Q1	2005 Q3- 2006 Q2	2005 Q4- 2006 Q3	2006 Q1- 2006 Q4	2006 Q2- 2007 Q1
<b>Generation of income account</b>								
Gross value added (basic prices)								
Taxes less subsidies on products								
Gross domestic product (market prices)								
Compensation of employees	3,657.2	3,762.4	3,865.4	3,897.8	3,936.9	3,974.8	4,008.8	4,050.7
Other taxes less subsidies on production	110.7	123.1	131.2	131.6	133.6	134.1	130.1	129.0
Consumption of fixed capital	1,074.5	1,121.3	1,172.2	1,183.2	1,195.5	1,207.9	1,219.3	1,232.5
<i>Net operating surplus and mixed income</i> <sup>1)</sup>	1,847.6	1,943.6	1,991.1	2,017.7	2,028.6	2,060.2	2,110.6	2,147.0
<b>Allocation of primary income account</b>								
Net operating surplus and mixed income								
Compensation of employees								
Taxes less subsidies on production								
Property income	2,276.2	2,324.8	2,521.9	2,590.8	2,673.9	2,745.9	2,838.6	2,933.6
Interest	1,265.8	1,241.0	1,313.2	1,358.6	1,414.3	1,483.4	1,551.9	1,616.9
Other property income	1,010.4	1,083.8	1,208.7	1,232.2	1,259.6	1,262.5	1,286.7	1,316.7
<i>Net national income</i> <sup>1)</sup>	6,356.9	6,628.4	6,830.7	6,909.2	6,986.5	7,074.5	7,179.6	7,273.9
<b>Secondary distribution of income account</b>								
Net national income								
Current taxes on income, wealth, etc.	856.8	882.6	932.4	948.2	972.6	991.5	1,023.5	1,035.1
Social contributions	1,388.2	1,427.5	1,468.8	1,483.1	1,499.0	1,515.3	1,529.5	1,541.2
Social benefits other than social transfers in kind	1,407.5	1,452.3	1,493.8	1,505.4	1,516.0	1,526.5	1,537.6	1,543.9
Other current transfers	658.2	683.2	703.8	700.4	701.1	703.3	705.2	707.2
Net non-life insurance premiums	174.0	175.9	177.2	176.7	175.6	175.3	174.1	174.4
Non-life insurance claims	174.6	176.4	178.1	177.2	176.0	175.3	174.1	174.8
Other	309.7	330.9	348.5	346.6	349.5	352.7	356.9	357.9
<i>Net disposable income</i> <sup>1)</sup>	6,286.8	6,551.1	6,745.5	6,825.4	6,902.8	6,988.8	7,091.7	7,188.2
<b>Use of income account</b>								
Net disposable income								
Final consumption expenditure	5,844.8	6,054.5	6,276.6	6,340.0	6,401.9	6,458.8	6,519.0	6,578.9
Individual consumption expenditure	5,223.7	5,410.6	5,616.3	5,676.4	5,732.3	5,785.0	5,838.2	5,891.6
Collective consumption expenditure	621.1	643.9	660.3	663.6	669.6	673.8	680.9	687.3
Adjustment for the change in net equity of households in pension funds reserves	54.7	58.3	60.2	60.4	60.8	61.1	61.3	62.3
<i>Net saving</i> <sup>1)</sup>	442.2	496.8	469.2	485.6	501.1	530.3	572.9	609.5
<b>Capital account</b>								
Net saving								
Gross capital formation	1,485.4	1,568.1	1,646.2	1,689.0	1,716.2	1,757.3	1,790.5	1,828.2
Gross fixed capital formation	1,482.7	1,555.1	1,627.6	1,655.0	1,682.8	1,713.3	1,758.2	1,800.1
Changes in inventories and acquisitions less disposals of valuables	2.7	13.0	18.6	34.0	33.4	44.0	32.3	28.1
Consumption of fixed capital								
Acquisitions less disposals of non-produced non-financial assets	0.6	-1.1	0.1	0.9	1.4	1.6	1.3	1.1
Capital transfers	181.3	164.6	172.7	160.4	156.9	170.2	185.7	186.2
Capital taxes	35.9	29.8	24.0	24.3	23.6	22.3	22.2	22.8
Other capital transfers	145.5	134.8	148.8	136.1	133.2	148.0	163.6	163.4
<i>Net lending (+)/net borrowing (-) (from capital account)</i> <sup>1)</sup>	42.9	67.9	9.0	-7.1	-8.5	-8.0	13.6	28.1

Sources: ECB and Eurostat.

1) For the calculation of the balancing items, see the Technical notes.

**3.2 Euro area non-financial accounts (cont'd)**

(EUR billions; four-quarter cumulated flows)

Resources	2003	2004	2005	2005 Q2- 2006 Q1	2005 Q3- 2006 Q2	2005 Q4- 2006 Q3	2006 Q1- 2006 Q4	2006 Q2- 2007 Q1
<b>Generation of income account</b>								
Gross value added (basic prices)	6,690.0	6,950.5	7,159.9	7,230.3	7,294.6	7,377.1	7,468.8	7,559.2
Taxes less subsidies on products	760.9	796.6	838.0	857.5	873.7	884.1	902.6	922.5
Gross domestic product (market prices) <sup>2)</sup>	7,450.8	7,747.1	7,997.9	8,087.8	8,168.2	8,261.2	8,371.4	8,481.6
Compensation of employees								
Other taxes less subsidies on production								
Consumption of fixed capital								
<i>Net operating surplus and mixed income</i>								
<b>Allocation of primary income account</b>								
Net operating surplus and mixed income	1,847.6	1,943.6	1,991.1	2,017.7	2,028.6	2,060.2	2,110.6	2,147.0
Compensation of employees	3,664.3	3,769.5	3,871.3	3,903.4	3,942.6	3,980.7	4,014.8	4,057.0
Taxes less subsidies on production	880.6	933.3	980.7	999.3	1,017.7	1,028.7	1,043.4	1,060.3
Property income	2,240.6	2,306.8	2,509.6	2,579.6	2,671.6	2,750.9	2,849.4	2,943.3
Interest	1,234.5	1,206.7	1,285.7	1,334.4	1,392.8	1,465.9	1,536.6	1,600.4
Other property income	1,006.1	1,100.1	1,223.9	1,245.2	1,278.8	1,285.0	1,312.9	1,342.9
<i>Net national income</i>								
<b>Secondary distribution of income account</b>								
Net national income	6,356.9	6,628.4	6,830.7	6,909.2	6,986.5	7,074.5	7,179.6	7,273.9
Current taxes on income, wealth, etc.	858.7	885.4	935.9	951.9	977.1	996.0	1,028.1	1,039.6
Social contributions	1,387.2	1,426.5	1,468.3	1,482.7	1,498.6	1,514.9	1,529.1	1,540.7
Social benefits other than social transfers in kind	1,401.2	1,445.0	1,486.5	1,498.1	1,508.8	1,519.2	1,530.2	1,536.6
Other current transfers	593.6	611.3	622.9	620.5	620.6	620.7	620.5	624.8
Net non-life insurance premiums	174.6	176.4	178.1	177.2	176.0	175.3	174.1	174.8
Non-life insurance claims	171.3	173.6	175.7	174.9	173.5	172.8	171.7	172.2
Other	247.7	261.3	269.0	268.4	271.1	272.7	274.7	277.8
<i>Net disposable income</i>								
<b>Use of income account</b>								
Net disposable income	6,286.8	6,551.1	6,745.5	6,825.4	6,902.8	6,988.8	7,091.7	7,188.2
Final consumption expenditure								
Individual consumption expenditure								
Collective consumption expenditure								
Adjustment for the change in net equity of households in pension funds reserves	54.9	58.5	60.4	60.6	61.0	61.3	61.5	62.5
<i>Net saving</i>								
<b>Capital account</b>								
Net saving	442.2	496.8	469.2	485.6	501.1	530.3	572.9	609.5
Gross capital formation								
Gross fixed capital formation								
Changes in inventories and acquisitions less disposals of valuables								
Consumption of fixed capital	1,074.5	1,121.3	1,172.2	1,183.2	1,195.5	1,207.9	1,219.3	1,232.5
Acquisitions less disposals of non-produced non-financial assets								
Capital transfers	193.5	181.3	186.7	174.4	169.3	182.9	199.1	201.6
Capital taxes	35.9	29.8	24.0	24.3	23.6	22.3	22.2	22.8
Other capital transfers	157.6	151.5	162.7	150.0	145.7	160.6	176.9	178.8
<i>Net lending (+)/net borrowing (-) (from capital account)</i>								

Sources: ECB and Eurostat.

2) Gross domestic product is equal to gross value added of all domestic sectors plus net taxes (taxes less subsidies) on products.

### 3.3 Households

(EUR billions; four-quarter cumulated flows; outstanding amounts at end-of-period)

	2003	2004	2005	2005 Q2- 2006 Q1	2005 Q3- 2006 Q2	2005 Q4- 2006 Q3	2006 Q1- 2006 Q4	2006 Q2- 2007 Q1
<b>Income, saving and changes in net worth</b>								
Compensation of employees (+)	3,664.3	3,769.5	3,871.3	3,903.4	3,942.6	3,980.7	4,014.8	4,057.0
Gross operating surplus and mixed income (+)	1,231.3	1,284.9	1,330.3	1,346.0	1,363.7	1,383.0	1,407.7	1,429.3
Interest receivable (+)	237.8	228.8	226.5	229.4	234.9	242.3	250.0	257.0
Interest payable (-)	123.4	123.2	126.3	129.7	135.3	143.6	151.2	159.3
Other property income receivable (+)	611.3	642.7	691.7	703.9	713.9	717.4	723.4	730.0
Other property income payable (-)	8.7	9.2	9.2	9.2	9.2	9.3	9.3	9.3
Current taxes on income and wealth (-)	702.5	706.7	739.6	750.7	764.5	772.1	789.8	796.4
Net social contributions (-)	1,384.4	1,423.7	1,464.7	1,479.0	1,494.7	1,511.0	1,525.2	1,536.8
Net social benefits (+)	1,396.4	1,440.0	1,481.3	1,492.8	1,503.3	1,513.7	1,524.7	1,531.0
Net current transfers receivable (+)	65.1	65.0	69.2	69.1	68.1	66.9	68.8	71.9
<b>= Gross disposable income</b>	4,987.2	5,168.2	5,330.5	5,375.9	5,422.8	5,468.1	5,513.8	5,574.3
Final consumption expenditure (-)	4,306.6	4,461.6	4,621.9	4,670.3	4,714.6	4,755.5	4,799.1	4,843.1
Changes in net worth in pension funds (+)	54.6	58.1	60.0	60.1	60.6	60.8	61.1	62.0
<b>= Gross saving</b>	735.2	764.6	768.7	765.8	768.7	773.4	775.8	793.3
Consumption of fixed capital (-)	288.0	303.3	318.0	321.1	324.4	327.7	330.7	334.3
Net capital transfers receivable (+)	12.6	19.0	20.8	18.4	17.3	23.4	25.2	24.8
Other changes in net worth <sup>1)</sup> (+)	229.2	285.9	617.7	712.0	499.0	351.1	447.5	326.7
<b>= Changes in net worth <sup>1)</sup></b>	689.0	766.2	1,089.2	1,175.0	960.6	820.2	917.8	810.5
<b>Investment, financing and changes in net worth</b>								
Net acquisition of non-financial assets (+)	482.3	512.0	537.1	549.1	559.2	573.4	586.8	601.6
Consumption of fixed capital (-)	288.0	303.3	318.0	321.1	324.4	327.7	330.7	334.3
Financial investment (+)								
Currency and deposits	220.6	246.0	239.2	245.8	250.2	270.4	282.4	277.8
<i>of which M3 deposits <sup>2)</sup></i>	166.1	168.5	207.7	214.5	215.7	226.1	242.1	251.6
Short-term debt securities	-34.5	6.6	-19.0	-2.1	3.8	13.0	16.3	20.1
Long-term debt securities	23.9	71.1	30.0	37.7	39.1	83.0	72.2	49.2
Shares and other equity	89.8	-18.6	128.8	85.4	46.0	-9.6	-23.5	-2.3
Quoted shares	29.5	-51.1	9.1	-24.6	-24.9	-35.1	-14.9	-3.7
Unquoted shares and other equity	-19.0	36.8	61.0	66.8	44.0	36.0	17.1	34.1
Mutual fund shares	79.3	-4.3	58.7	43.3	26.9	-10.5	-25.7	-32.7
<i>of which money market fund shares</i>	14.4	-19.4	-10.1	-11.5	-9.0	-10.0	-4.9	1.6
Life insurance and pension fund reserves	231.0	251.2	298.2	309.1	298.1	294.5	272.2	255.2
Financing (-)								
Loans	262.8	312.2	388.7	418.1	417.4	414.8	404.5	391.1
<i>of which from euro area MFIs</i>	211.6	277.4	357.5	379.6	382.6	371.0	345.4	336.9
Other changes in financial assets (+)								
Shares and other equity	266.9	240.8	507.5	606.2	420.7	310.5	396.2	299.7
Life insurance and pension fund reserves	29.0	58.2	135.9	115.1	63.4	44.9	34.8	16.8
Remaining net flows (+)	-69.2	14.6	-61.7	-32.2	22.0	-17.5	15.6	17.7
<b>= Changes in net worth <sup>1)</sup></b>	689.0	766.2	1,089.2	1,175.0	960.6	820.2	917.8	810.5
<b>Financial balance sheet</b>								
Financial assets (+)								
Currency and deposits	4,569.8	4,807.4	5,053.3	5,075.0	5,166.8	5,197.2	5,333.8	5,349.3
<i>of which M3 deposits <sup>2)</sup></i>	3,405.1	3,576.6	3,787.0	3,813.3	3,887.9	3,911.3	4,025.1	4,073.0
Short-term debt securities	25.5	33.0	14.7	25.9	33.5	36.7	30.3	43.8
Long-term debt securities	1,292.6	1,350.9	1,372.1	1,415.6	1,413.6	1,435.5	1,431.5	1,458.2
Shares and other equity	3,695.2	3,917.5	4,553.8	4,802.0	4,681.7	4,797.1	4,926.5	5,099.4
Quoted shares	797.0	849.5	1,039.0	1,140.9	1,071.1	1,154.1	1,213.0	1,254.2
Unquoted shares and other equity	1,415.3	1,575.9	1,877.6	1,987.7	1,984.6	2,017.5	2,067.7	2,190.8
Mutual fund shares	1,483.0	1,492.1	1,637.2	1,673.4	1,626.0	1,625.5	1,645.8	1,654.5
<i>of which money market fund shares</i>	263.8	249.0	235.3	213.4	216.0	211.1	186.4	195.1
Life insurance and pension fund reserves	3,541.0	3,850.3	4,284.4	4,383.1	4,423.2	4,509.7	4,591.4	4,655.1
Remaining net assets	184.8	218.0	174.3	169.6	192.6	192.3	217.1	224.2
Liabilities (-)								
Loans	3,960.3	4,276.8	4,650.8	4,733.1	4,839.1	4,920.5	5,021.3	5,103.4
<i>of which from euro area MFIs</i>	3,521.2	3,809.0	4,191.6	4,280.8	4,384.5	4,459.3	4,537.7	4,611.3
<b>= Net financial wealth</b>	9,348.6	9,900.2	10,801.8	11,138.1	11,072.4	11,248.1	11,509.3	11,726.5

Sources: ECB and Eurostat.

1) Excluding changes in net worth due to other changes in non-financial assets such as revaluations of residential property.

2) Deposit liabilities of MFIs and central government (e.g. post offices or treasuries) vis-à-vis households which are part of M3 (see glossary).

## 3.4 Non-financial corporations

(EUR billions; four-quarter cumulated flows; outstanding amounts at end-of-period)

	2003	2004	2005	2005 Q2- 2006 Q1	2005 Q3- 2006 Q2	2005 Q4- 2006 Q3	2006 Q1- 2006 Q4	2006 Q2- 2007 Q1
<b>Income and saving</b>								
Gross value added (basic prices) (+)	3,781.5	3,928.2	4,034.5	4,075.7	4,106.6	4,155.2	4,217.1	4,269.4
Compensation of employees (-)	2,304.5	2,371.7	2,430.2	2,450.5	2,475.1	2,499.1	2,524.7	2,554.0
Other taxes less subsidies on production (-)	59.1	66.4	72.4	72.1	74.1	74.4	73.2	71.9
= <b>Gross operating surplus (+)</b>	1,417.9	1,490.0	1,531.9	1,553.1	1,557.4	1,581.7	1,619.2	1,643.5
Consumption of fixed capital (-)	608.7	632.8	661.3	667.2	674.0	681.2	688.0	695.7
= <b>Net operating surplus (+)</b>	809.3	857.3	870.5	886.0	883.4	900.5	931.2	947.9
Property income receivable (+)	318.0	363.4	410.3	423.1	433.5	445.9	461.9	471.6
Interest receivable	124.2	118.4	125.1	131.0	137.5	145.0	151.2	154.5
Other property income receivable	193.8	244.9	285.2	292.1	296.0	300.9	310.7	317.1
Interest and rents payable (-)	228.0	226.0	233.6	240.0	247.3	257.2	267.8	278.6
= <b>Net entrepreneurial income (+)</b>	899.3	994.6	1,047.2	1,069.0	1,069.5	1,089.2	1,125.4	1,140.9
Distributed income (-)	690.6	748.3	828.6	843.2	858.6	861.7	881.0	896.1
Taxes on income and wealth payable (-)	116.7	131.6	147.4	150.1	156.8	166.7	180.4	186.5
Social contributions receivable (+)	73.5	73.6	74.0	73.9	74.1	74.3	74.5	75.1
Social benefits payable (-)	59.9	60.5	62.0	62.0	62.1	62.3	62.3	62.4
Net other current transfers payable (-)	43.1	48.3	47.9	45.6	46.1	46.3	45.6	45.4
Changes in net worth of households in pension funds (-)	13.0	12.8	11.8	11.9	12.0	12.1	12.1	12.1
= <b>Net saving</b>	49.5	66.7	23.6	30.1	7.9	14.4	18.5	13.5
<b>Investment, financing and saving</b>								
Net acquisition of non-financial assets (+)	167.5	190.0	206.0	230.6	239.8	255.1	260.3	269.1
Gross fixed capital formation (+)	775.3	815.0	850.9	866.8	882.5	897.2	919.3	940.8
Consumption of fixed capital (-)	608.7	632.8	661.3	667.2	674.0	681.2	688.0	695.7
Net acquisition of other non-financial assets (+)	0.9	7.8	16.5	31.0	31.3	39.1	29.1	24.0
Financial investment (+)								
Currency and deposits	115.2	83.5	152.6	161.0	168.8	164.3	175.2	188.2
<i>of which M3 deposits <sup>1)</sup></i>	63.0	73.8	99.3	103.9	108.9	116.8	138.5	157.7
Debt securities	-33.5	-56.9	-20.4	-4.6	13.9	-0.7	22.1	3.8
Loans	141.6	61.0	138.5	99.8	104.5	108.5	129.2	156.9
Shares and other equity	176.8	177.7	162.3	179.1	228.0	191.0	206.7	233.0
Remaining net assets (+)	7.2	70.4	31.3	90.6	119.5	163.4	169.9	139.1
Financing (-)								
Debt	294.9	216.1	403.0	467.6	576.6	630.5	657.1	670.8
Loans	217.2	196.0	395.0	462.4	555.8	593.1	605.5	618.6
<i>of which from euro area MFIs</i>	102.8	163.9	262.7	334.2	371.8	422.7	446.2	442.7
Debt securities	62.6	6.7	-4.6	-7.6	8.6	25.4	39.6	42.1
Pension fund reserves	15.0	13.5	12.6	12.7	12.2	12.0	12.0	10.0
Shares and other equity	185.3	188.6	184.9	209.0	238.6	171.6	207.3	222.1
Quoted shares	19.1	11.9	101.3	96.1	113.5	39.7	32.4	41.1
Unquoted shares and other equity	166.1	176.7	83.6	112.9	125.1	131.9	174.9	181.0
Net capital transfers receivable (-)	45.0	54.3	58.9	49.8	51.4	65.2	80.5	83.7
= <b>Net saving</b>	49.5	66.7	23.6	30.1	7.9	14.4	18.5	13.5
<b>Financial balance sheet</b>								
Financial assets								
Currency and deposits	1,194.2	1,262.2	1,417.4	1,428.8	1,472.2	1,512.8	1,577.0	1,604.2
<i>of which M3 deposits <sup>1)</sup></i>	984.2	1,042.9	1,147.3	1,131.9	1,167.0	1,199.4	1,277.4	1,284.5
Debt securities	395.9	310.4	285.9	297.1	307.7	296.0	301.0	295.4
Loans	1,337.8	1,389.5	1,524.3	1,544.2	1,577.6	1,608.0	1,676.6	1,717.5
Shares and other equity	4,842.9	5,340.7	6,250.1	6,696.2	6,611.0	6,905.4	7,243.9	7,489.0
Remaining net assets (+)	281.0	316.8	288.2	316.5	358.5	350.6	339.7	352.9
Liabilities								
Debt	6,068.3	6,237.2	6,646.2	6,802.7	7,003.0	7,127.2	7,269.0	7,457.2
Loans	5,151.3	5,268.4	5,667.8	5,816.8	5,997.2	6,116.0	6,250.1	6,422.9
<i>of which from euro area MFIs</i>	3,034.4	3,152.2	3,409.1	3,525.4	3,640.2	3,731.6	3,844.5	3,957.0
Debt securities	628.6	667.5	664.6	669.1	686.3	688.7	693.1	707.4
Pension fund reserves	288.5	301.2	313.8	316.8	319.5	322.6	325.8	326.8
Shares and other equity	8,077.2	8,977.0	10,468.5	11,207.0	11,016.2	11,364.5	12,070.1	12,484.3
Quoted shares	2,732.2	2,987.3	3,681.2	4,088.5	3,947.3	4,091.8	4,458.0	4,662.0
Unquoted shares and other equity	5,345.1	5,989.7	6,787.2	7,118.5	7,068.8	7,272.7	7,612.1	7,822.3

Sources: ECB and Eurostat.

1) Deposit liabilities of MFIs and central government (e.g. post offices or treasuries) vis-à-vis non-financial corporations which are part of M3 (see glossary).

### 3.5 Insurance corporations and pension funds

(EUR billions; four-quarter cumulated flows; outstanding amounts at end-of-period)

	2003	2004	2005	2005 Q2- 2006 Q1	2005 Q3- 2006 Q2	2005 Q4- 2006 Q3	2006 Q1- 2006 Q4	2006 Q2- 2007 Q1
<b>Financial account, financial transactions</b>								
Financial investment (+)								
Currency and deposits	29.9	49.8	27.4	16.6	38.2	49.6	68.5	85.1
<i>of which M3 deposits<sup>1)</sup></i>	7.0	12.4	7.0	0.1	7.8	8.2	12.4	17.9
Short-term debt securities	10.8	22.6	21.3	15.2	0.2	-8.8	-0.5	11.9
Long-term debt securities	140.7	132.6	140.7	135.0	133.2	137.7	129.0	133.5
Loans	11.7	6.6	-7.8	8.1	15.4	18.1	13.5	-4.7
Shares and other equity	59.0	46.3	120.3	141.1	139.4	146.7	133.0	103.2
Quoted shares	9.5	14.0	21.4	17.8	17.0	16.1	18.3	12.8
Unquoted shares and other equity	5.2	-1.0	14.1	17.3	22.5	27.8	-25.0	23.7
Mutual fund shares	44.3	33.3	84.9	106.1	99.9	102.7	89.7	66.7
<i>of which money market fund shares</i>	6.8	3.3	-0.8	-0.7	-4.0	-5.3	2.6	3.6
Remaining net assets (+)	-2.4	12.4	23.8	17.5	6.5	3.2	-5.2	8.2
Financing (-)								
Debt securities	5.0	-1.8	0.1	-0.5	-0.4	-0.4	4.1	4.0
Loans	12.3	4.6	9.5	22.5	23.9	32.6	27.8	26.9
Shares and other equity	11.4	12.7	10.4	10.1	9.3	12.5	7.9	10.6
Insurance technical reserves	237.0	261.2	331.0	339.8	329.7	328.0	306.9	295.5
Net equity of households in life insurance and pension fund reserves	210.3	229.5	289.8	303.5	293.5	288.4	263.7	249.8
Prepayments of insurance premiums and reserves for outstanding claims	26.8	31.6	41.2	36.3	36.2	39.6	43.2	45.7
<b>= Changes in net financial worth due to transactions</b>	<b>-16.2</b>	<b>-6.4</b>	<b>-25.2</b>	<b>-38.4</b>	<b>-29.6</b>	<b>-26.3</b>	<b>-8.4</b>	<b>0.2</b>
<b>Other changes account</b>								
Other changes in financial assets (+)								
Shares and other equity	107.2	109.4	200.8	231.0	125.3	121.1	183.8	149.4
Other net assets	-10.2	161.1	42.2	22.7	-17.3	3.7	-46.5	-52.4
Other changes in liabilities (-)								
Shares and other equity	98.2	20.6	118.2	129.5	88.6	91.6	56.3	42.1
Insurance technical reserves	33.7	85.2	145.6	118.7	68.7	53.9	48.5	32.2
Net equity of households in life insurance and pension fund reserves	34.2	65.4	151.6	126.0	69.4	53.7	47.7	29.8
Prepayments of insurance premiums and reserves for outstanding claims	-0.5	19.8	-5.9	-7.4	-0.8	0.2	0.8	2.4
<b>= Other changes in net financial worth</b>	<b>-34.9</b>	<b>164.8</b>	<b>-20.8</b>	<b>5.6</b>	<b>-49.2</b>	<b>-20.6</b>	<b>32.5</b>	<b>22.6</b>
<b>Financial balance sheet</b>								
Financial assets (+)								
Currency and deposits	580.0	630.7	661.1	671.2	685.8	705.3	730.4	757.0
<i>of which M3 deposits<sup>1)</sup></i>	121.1	132.6	141.6	136.9	139.7	143.3	153.4	154.7
Short-term debt securities	69.2	205.8	212.8	215.8	214.0	214.1	212.7	227.6
Long-term debt securities	1,488.4	1,659.9	1,820.3	1,834.7	1,851.6	1,916.0	1,903.8	1,929.7
Loans	364.1	359.4	356.8	369.1	370.9	370.9	361.6	351.2
Shares and other equity	1,530.1	1,685.8	2,006.9	2,126.3	2,100.9	2,209.5	2,323.6	2,378.9
Quoted shares	526.0	574.7	698.2	734.5	705.8	754.2	820.4	841.9
Unquoted shares and other equity	305.7	336.3	395.8	421.9	423.6	438.7	462.6	471.3
Mutual fund shares	698.4	774.8	912.8	969.9	971.5	1,016.6	1,040.7	1,065.8
<i>of which money market fund shares</i>	65.8	69.0	83.4	83.1	87.2	87.5	87.3	89.7
Remaining net assets (+)	89.7	109.7	161.2	164.9	162.1	166.9	162.8	170.1
Liabilities (-)								
Debt securities	23.4	21.9	22.0	22.1	22.3	23.0	26.3	26.1
Loans	125.8	119.2	127.7	147.3	151.9	161.6	155.8	172.6
Shares and other equity	430.2	463.5	592.0	620.7	585.4	636.3	656.3	673.4
Insurance technical reserves	3,789.4	4,135.7	4,612.3	4,718.9	4,772.1	4,873.0	4,967.7	5,046.6
Net equity of households in life insurance and pension fund reserves	3,208.5	3,503.4	3,944.8	4,042.5	4,089.4	4,175.8	4,256.2	4,322.1
Prepayments of insurance premiums and reserves for outstanding claims	580.9	632.3	667.5	676.4	682.8	697.3	711.5	724.5
<b>= Net financial wealth</b>	<b>-247.3</b>	<b>-88.9</b>	<b>-135.0</b>	<b>-127.0</b>	<b>-146.4</b>	<b>-111.4</b>	<b>-111.0</b>	<b>-104.1</b>

Source: ECB.

1) Deposit liabilities of MFIs and central government (e.g. post offices or treasuries) vis-à-vis insurance corporations and pension funds which are part of M3 (see glossary).



## FINANCIAL MARKETS

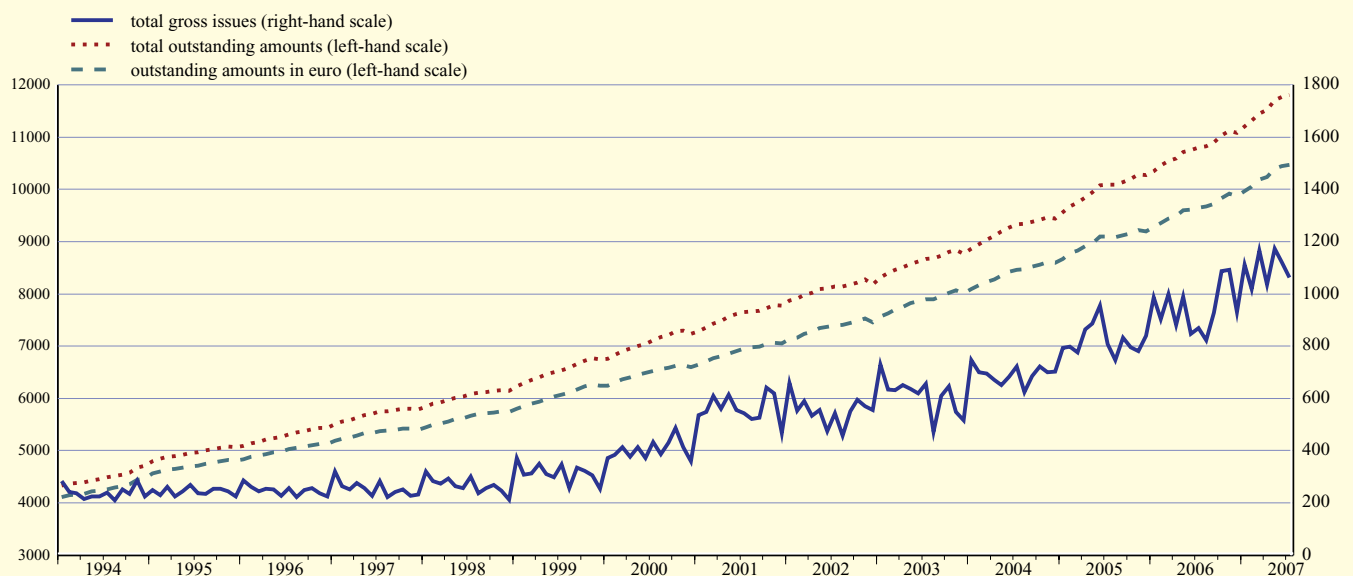
### 4.1 Securities, other than shares, by original maturity, residency of the issuer and currency

(EUR billions and period growth rates; seasonally adjusted; transactions during the month and end-of-period outstanding amounts; nominal values)

	Total in euro <sup>1)</sup>			By euro area residents								
	Outstanding amounts	Gross issues	Net issues	In euro			In all currencies					
				Outstanding amounts	Gross issues	Net issues	Outstanding amounts	Gross issues	Net issues	Annual growth rates	Seasonally adjusted <sup>2)</sup>	
1	2	3	4	5	6	7	8	9	10	Net issues	6-month growth rates	
Total												
2006 July	11,370.8	883.9	17.4	9,652.5	820.2	33.5	10,799.3	868.2	43.6	7.0	56.5	6.8
Aug.	11,403.2	837.9	31.9	9,674.1	780.0	21.1	10,829.1	822.8	24.6	7.2	74.2	7.0
Sep.	11,523.8	1,004.1	120.2	9,724.6	882.0	50.2	10,897.8	927.9	57.0	7.3	63.0	6.9
Oct.	11,619.3	1,106.3	93.3	9,828.0	1,023.0	101.6	11,033.2	1,086.0	122.2	7.9	112.6	8.0
Nov.	11,757.8	1,134.6	137.7	9,919.5	1,036.6	90.8	11,124.5	1,092.7	107.4	8.2	94.7	8.2
Dec.	11,733.7	977.0	-25.0	9,864.7	885.1	-56.1	11,079.7	929.8	-60.1	7.9	51.6	8.6
2007 Jan.	11,832.9	1,145.7	99.2	9,962.1	1,052.1	97.5	11,206.9	1,111.7	116.1	7.9	74.6	8.9
Feb.	11,936.3	1,038.2	103.5	10,052.1	951.8	90.2	11,316.6	1,017.9	117.0	8.1	88.3	9.1
Mar.	12,162.1	1,251.8	224.6	10,183.1	1,112.8	129.7	11,453.3	1,165.4	135.9	8.4	101.6	9.8
Apr.	12,184.2	1,039.0	21.7	10,237.7	980.7	54.2	11,518.5	1,035.5	71.4	8.4	62.4	8.8
May	12,397.5	1,215.7	214.2	10,398.8	1,113.2	161.9	11,706.5	1,174.0	183.2	8.8	137.3	9.5
June	12,525.6	1,217.3	128.0	10,439.7	1,064.9	40.9	11,764.2	1,121.1	54.9	9.0	49.1	9.4
July	.	.	.	10,472.3	1,001.5	31.6	11,810.6	1,063.0	48.7	9.0	64.2	9.1
Long-term												
2006 July	10,364.5	193.1	38.8	8,758.7	158.8	24.7	9,769.6	177.7	36.0	7.1	54.0	7.0
Aug.	10,380.9	90.5	16.6	8,770.0	71.6	11.5	9,787.8	88.3	21.1	7.5	66.3	7.3
Sep.	10,474.6	218.5	94.0	8,824.9	156.7	55.2	9,857.2	175.7	62.9	7.5	57.7	7.2
Oct.	10,575.8	224.8	98.8	8,895.3	173.9	68.4	9,949.8	206.5	86.1	8.1	94.6	8.2
Nov.	10,710.8	226.0	134.2	8,989.9	167.2	93.9	10,043.3	193.4	108.6	8.3	93.8	8.9
Dec.	10,732.0	171.3	18.5	9,008.7	132.8	15.8	10,070.0	152.9	13.1	8.1	59.4	9.0
2007 Jan.	10,808.7	231.3	76.5	9,059.2	176.6	50.5	10,141.5	200.4	61.6	8.1	67.6	9.2
Feb.	10,901.5	230.9	92.9	9,135.7	183.1	76.6	10,231.7	216.7	98.1	8.3	75.9	9.4
Mar.	11,033.0	271.5	131.5	9,226.0	206.5	90.1	10,325.0	227.3	95.2	8.4	72.1	9.6
Apr.	11,073.7	180.9	40.4	9,256.6	154.5	30.3	10,361.6	176.1	44.0	8.4	52.0	8.6
May	11,260.2	265.8	188.1	9,391.7	198.1	136.7	10,516.8	223.7	151.3	8.9	107.6	8.8
June	11,358.2	256.3	96.6	9,453.4	187.7	60.4	10,594.2	214.1	73.8	8.7	43.8	8.5
July	.	.	.	9,468.2	160.8	14.6	10,620.4	185.9	28.0	8.6	49.0	8.0

### C15 Total outstanding amounts and gross issues of securities, other than shares, issued by euro area residents

(EUR billions)



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

- 1) Total euro-denominated securities, other than shares, issued by euro area residents and non-euro area residents.
- 2) For the calculation of the growth rates, see the Technical notes. The 6-month growth rates have been annualised.

## 4.2 Securities, other than shares, issued by euro area residents, by sector of the issuer and instrument type

(EUR billions ; transactions during the month and end-of-period outstanding amounts; nominal values)

### 1. Outstanding amounts and gross issues

	Outstanding amounts						Gross issues					
	Total	MFIs (including Eurosystem)	Non-MFI corporations		General government		Total	MFIs (including Eurosystem)	Non-MFI corporations		General government	
			Financial corporations other than MFIs	Non-financial corporations	Central government	Other general government			Financial corporations other than MFIs	Non-financial corporations	Central government	Other general government
1	2	3	4	5	6	7	8	9	10	11	12	
	Total											
2005	10,270	4,122	926	612	4,327	283	9,875	6,988	325	1,032	1,435	95
2006	11,080	4,566	1,156	645	4,408	305	11,334	8,377	414	1,118	1,339	85
2006 Q3	10,898	4,448	1,063	636	4,452	298	2,619	1,928	79	265	329	18
Q4	11,080	4,566	1,156	645	4,408	305	3,109	2,365	144	336	241	23
2007 Q1	11,453	4,762	1,236	657	4,489	309	3,295	2,446	126	285	415	23
Q2	11,764	4,871	1,291	693	4,601	308	3,331	2,359	113	452	389	18
2007 Apr.	11,519	4,811	1,231	666	4,501	310	1,036	749	29	133	119	7
May	11,706	4,873	1,272	678	4,574	308	1,174	825	50	156	138	5
June	11,764	4,871	1,291	693	4,601	308	1,121	785	34	163	132	6
July	11,811	4,905	1,319	702	4,577	307	1,063	747	44	151	115	6
	Short-term											
2005	945	482	7	90	361	5	7,797	6,046	45	943	729	33
2006	1,010	570	12	94	329	4	9,175	7,375	60	1,023	686	31
2006 Q3	1,041	561	12	96	367	4	2,177	1,733	16	249	171	8
Q4	1,010	570	12	94	329	4	2,556	2,086	14	305	144	7
2007 Q1	1,128	621	12	106	385	4	2,651	2,132	16	271	222	8
Q2	1,170	627	11	120	407	5	2,717	2,072	12	413	210	9
2007 Apr.	1,157	638	12	113	389	5	859	659	5	124	68	3
May	1,190	652	12	120	401	5	950	727	3	144	73	3
June	1,170	627	11	120	407	5	907	686	5	145	69	3
July	1,190	642	10	128	406	5	877	669	3	142	60	3
	Long-term <sup>1)</sup>											
2005	9,324	3,639	919	522	3,966	278	2,078	942	280	89	706	61
2006	10,070	3,996	1,144	551	4,079	301	2,159	1,002	355	95	653	54
2006 Q3	9,857	3,887	1,051	540	4,085	294	442	196	63	16	158	9
Q4	10,070	3,996	1,144	551	4,079	301	553	279	130	31	97	16
2007 Q1	10,325	4,141	1,224	551	4,105	304	644	314	110	13	192	14
Q2	10,594	4,244	1,280	572	4,194	304	614	287	101	39	179	8
2007 Apr.	10,362	4,173	1,220	552	4,112	305	176	89	24	9	51	3
May	10,517	4,221	1,261	558	4,173	303	224	98	47	12	65	2
June	10,594	4,244	1,280	572	4,194	304	214	100	30	18	64	3
July	10,620	4,264	1,309	574	4,171	302	186	78	41	9	55	3
	Of which long-term fixed rate											
2005	6,725	2,020	459	412	3,616	217	1,230	414	91	54	622	48
2006	7,048	2,136	535	420	3,719	237	1,289	476	137	61	576	39
2006 Q3	6,975	2,112	508	415	3,708	233	275	94	22	11	140	8
Q4	7,048	2,136	535	420	3,719	237	280	117	44	20	90	10
2007 Q1	7,164	2,212	561	421	3,728	243	402	172	39	9	169	13
Q2	7,306	2,256	575	433	3,798	244	339	133	28	24	147	7
2007 Apr.	7,190	2,223	567	419	3,737	244	103	43	12	5	39	3
May	7,268	2,234	575	424	3,791	244	116	38	11	7	57	2
June	7,306	2,256	575	433	3,798	244	120	52	5	11	50	2
July	7,296	2,268	579	433	3,771	245	107	41	9	5	50	3
	Of which long-term variable rate											
2005	2,266	1,351	456	93	306	60	718	432	188	27	58	12
2006	2,603	1,507	601	117	314	64	716	405	214	31	51	15
2006 Q3	2,490	1,450	537	110	333	60	134	76	40	4	13	2
Q4	2,603	1,507	601	117	314	64	231	124	86	11	5	6
2007 Q1	2,713	1,560	655	117	320	61	201	114	69	4	13	1
Q2	2,830	1,603	697	127	343	59	222	110	72	15	23	1
2007 Apr.	2,728	1,574	644	120	329	61	62	37	12	4	9	0
May	2,783	1,591	677	121	334	59	82	37	36	4	5	0
June	2,830	1,603	697	127	343	59	78	37	25	7	9	1
July	2,856	1,602	722	129	345	57	64	25	32	4	3	0

Source: ECB.

1) The residual difference between total long-term debt securities and fixed and variable rate long-term debt securities consists of zero coupon bonds and revaluation effects.



## 4.2 Securities, other than shares, issued by euro area residents, by sector of the issuer and instrument type

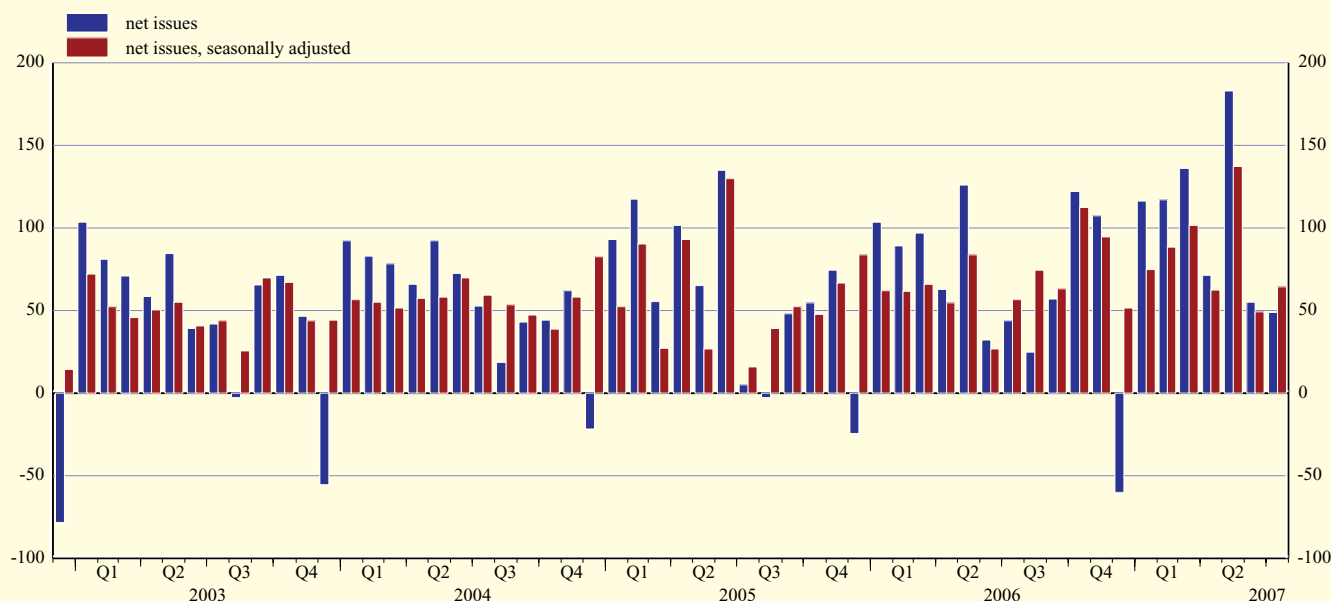
(EUR billions unless otherwise indicated; transactions during the period; nominal values)

### 2. Net issues

	Non-seasonally adjusted						Seasonally adjusted					
	Total	MFIs (including Eurosysteem)	Non-MFI corporations		General government		Total	MFIs (including Eurosysteem)	Non-MFI corporations		General government	
			Financial corporations other than MFIs	Non-financial corporations	Central government	Other general government			Financial corporations other than MFIs	Non-financial corporations	Central government	Other general government
1	2	3	4	5	6	7	8	9	10	11	12	
	Total											
2005	721.6	319.9	176.1	21.6	171.5	32.4	724.4	323.8	172.8	21.4	173.8	32.6
2006	805.3	419.0	237.1	36.4	90.5	22.4	807.1	424.5	233.5	36.6	90.1	22.4
2006 Q3	125.3	78.7	34.9	-2.4	14.5	-0.4	193.8	99.2	55.5	3.2	32.7	3.2
Q4	169.5	98.1	96.0	10.0	-41.2	6.7	258.9	133.5	68.0	14.2	38.2	5.0
2007 Q1	369.0	187.8	81.6	13.0	82.7	3.9	264.5	123.1	98.8	10.7	29.3	2.6
Q2	309.4	105.1	56.5	35.6	112.4	-0.1	248.8	113.3	43.4	27.3	65.7	-0.9
2007 Apr.	71.4	50.2	-2.9	9.5	13.3	1.3	62.4	39.3	3.9	5.7	11.9	1.7
May	183.2	60.2	40.0	12.0	72.6	-1.7	137.3	56.4	36.4	5.7	39.9	-1.1
June	54.9	-5.3	19.3	14.1	26.5	0.3	49.1	17.6	3.1	15.9	13.9	-1.4
July	48.7	34.2	28.9	9.5	-23.0	-1.1	64.2	30.1	32.1	7.9	-5.8	0.0
	Long-term											
2005	713.9	296.5	176.5	21.9	186.3	32.7	715.0	298.2	173.3	21.7	189.1	32.8
2006	756.0	346.5	231.7	33.0	121.5	23.3	756.1	348.4	228.3	32.8	123.3	23.3
2006 Q3	120.0	62.4	33.5	2.6	21.5	0.0	178.0	74.0	54.4	5.0	41.1	3.5
Q4	207.8	96.3	95.3	12.2	-3.2	7.2	247.8	121.3	67.4	9.7	44.0	5.5
2007 Q1	254.9	141.9	81.9	1.0	26.7	3.3	215.6	108.0	98.8	7.6	-0.9	2.1
Q2	269.1	100.5	57.6	21.5	90.2	-0.6	203.4	96.2	44.4	14.9	49.2	-1.3
2007 Apr.	44.0	34.6	-2.4	2.3	8.7	0.8	52.0	34.7	4.7	2.3	9.1	1.3
May	151.3	46.6	40.0	5.5	61.0	-1.8	107.6	37.1	36.1	2.1	33.4	-1.1
June	73.8	19.3	20.0	13.7	20.5	0.4	43.8	24.5	3.6	10.6	6.7	-1.5
July	28.0	19.3	29.7	1.9	-21.8	-1.2	49.0	17.6	33.2	0.6	-2.6	0.2

### C16 Net issues of securities, other than shares, seasonally adjusted and non-seasonally adjusted

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



Source: ECB.

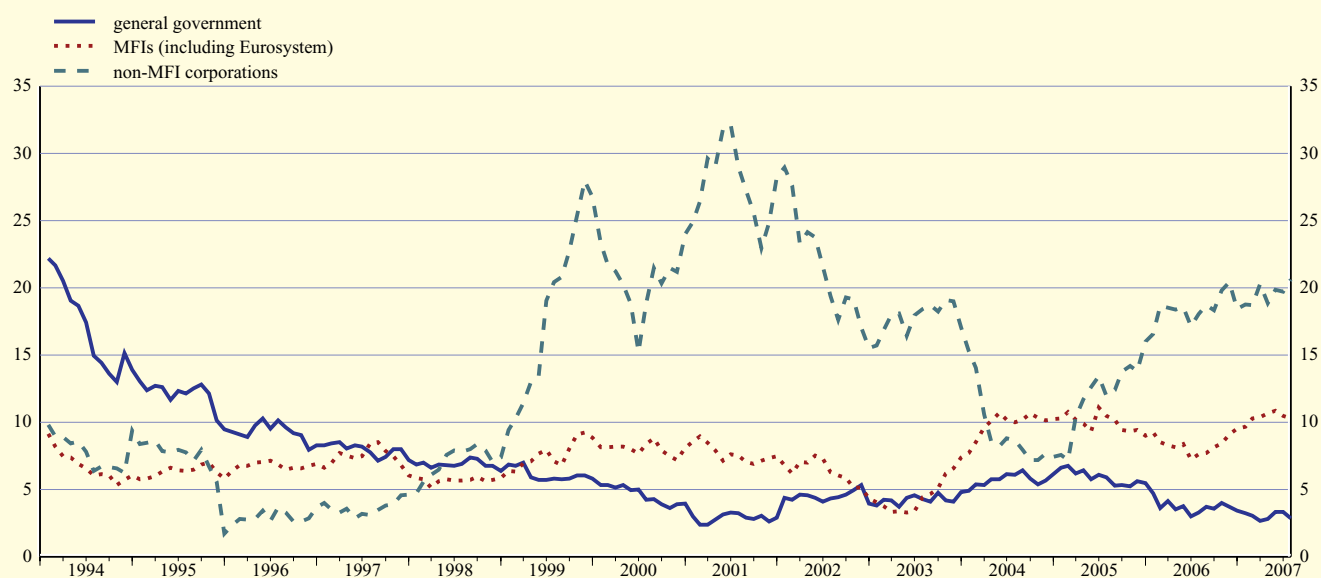
### 4.3 Growth rates of securities, other than shares, issued by euro area residents <sup>1)</sup>

(percentage changes)

	Annual growth rates (non-seasonally adjusted)						6-month seasonally adjusted growth rates					
	Total	MFIs (including Eurosystem)	Non-MFI corporations		General government		Total	MFIs (including Eurosystem)	Non-MFI corporations		General government	
			Financial corporations other than MFIs	Non-financial corporations	Central government	Other general government			Financial corporations other than MFIs	Non-financial corporations	Central government	Other general government
	1	2	3	4	5	6	7	8	9	10	11	12
Total												
2006 July	7.0	8.3	25.6	4.7	2.2	11.8	6.8	9.1	25.0	5.0	1.1	10.5
Aug.	7.2	8.4	27.2	3.4	2.5	12.2	7.0	9.2	23.7	2.7	2.0	9.4
Sep.	7.3	9.0	26.4	4.3	2.2	10.4	6.9	9.1	22.9	5.0	1.7	8.1
Oct.	7.9	9.6	29.1	4.0	2.6	9.5	8.0	10.2	27.1	5.1	2.3	8.5
Nov.	8.2	10.0	29.5	5.2	2.5	8.8	8.2	9.4	28.5	4.6	3.2	7.0
Dec.	7.9	10.2	25.7	6.0	2.1	7.9	8.6	11.0	25.8	5.6	3.2	5.6
2007 Jan.	7.9	10.5	26.1	5.3	1.9	7.4	8.9	12.0	27.3	5.6	2.7	4.4
Feb.	8.1	10.7	26.2	5.4	2.1	5.8	9.1	12.3	28.6	8.2	2.3	2.1
Mar.	8.4	10.4	28.2	6.5	2.4	6.7	9.8	11.8	33.6	8.0	3.1	5.1
Apr.	8.4	10.6	26.1	6.8	2.6	7.3	8.8	10.9	25.1	8.2	2.9	6.1
May	8.8	10.5	27.9	6.6	3.5	5.1	9.5	11.5	27.1	8.4	3.8	3.3
June	9.0	10.7	26.2	8.8	3.8	3.4	9.4	10.5	26.6	12.0	4.3	1.1
July	9.0	10.8	27.2	10.2	3.3	2.6	9.1	9.7	27.4	14.8	3.9	0.8
Long-term												
2006 July	7.1	7.6	25.5	6.0	2.7	12.0	7.0	8.0	24.4	5.5	2.2	10.5
Aug.	7.5	7.7	26.9	5.5	3.1	12.5	7.3	8.2	23.1	4.3	3.2	9.3
Sep.	7.5	8.1	26.1	5.7	3.1	10.9	7.2	8.6	22.1	5.8	2.6	8.5
Oct.	8.1	8.4	28.7	5.2	3.6	10.0	8.2	9.3	26.6	4.9	3.2	9.0
Nov.	8.3	9.1	29.2	5.7	3.3	9.4	8.9	10.4	28.2	3.7	3.9	7.6
Dec.	8.1	9.5	25.3	6.4	3.1	8.4	9.0	10.5	25.7	5.5	4.3	6.2
2007 Jan.	8.1	9.6	25.8	6.3	2.9	7.6	9.2	11.3	27.2	7.0	3.6	4.8
Feb.	8.3	10.3	25.9	5.7	2.9	6.0	9.4	12.4	28.8	7.1	2.6	2.6
Mar.	8.4	10.4	27.9	6.2	2.4	6.9	9.6	12.1	33.8	6.5	2.1	5.2
Apr.	8.4	10.7	26.0	5.7	2.5	7.4	8.6	12.0	25.5	6.4	1.7	5.8
May	8.9	10.8	27.9	4.9	3.2	5.1	8.8	11.2	27.4	6.2	2.5	2.8
June	8.7	10.5	26.4	7.0	3.3	3.4	8.5	10.4	27.1	8.4	2.4	0.6
July	8.6	10.3	27.5	7.3	2.9	2.7	8.0	9.3	28.1	7.6	2.1	0.6

### C17 Annual growth rates of long-term debt securities, by sector of the issuer, in all currencies combined

(annual percentage changes)



Source: ECB.

1) For the calculation of the growth rates, see the Technical notes. The 6-month growth rates have been annualised.

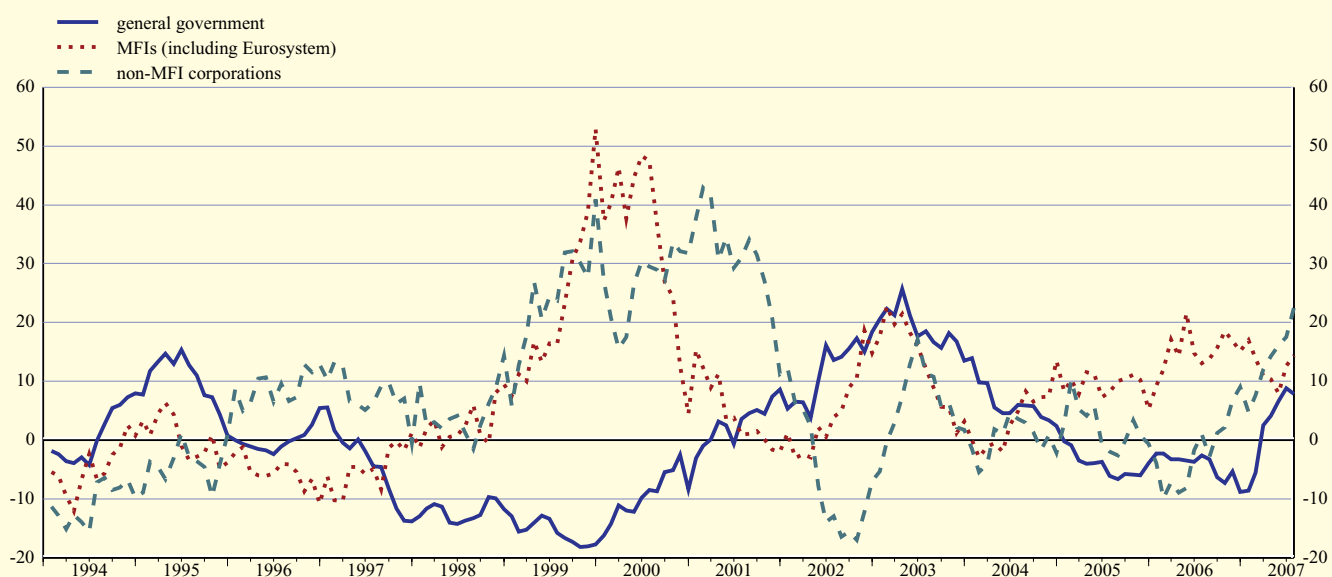
**4.3 Growth rates of securities, other than shares, issued by euro area residents <sup>1)</sup> (cont'd)**

(percentage changes)

	Long-term fixed rate						Long-term variable rate					
	Total	MFIs (including Eurosystem)	Non-MFI corporations		General government		Total	MFIs (including Eurosystem)	Non-MFI corporations		General government	
			Financial corporations other than MFIs	Non-financial corporations	Central government	Other general government			Financial corporations other than MFIs	Non-financial corporations	Central government	Other general government
13	14	15	16	17	18	19	20	21	22	23	24	
	In all currencies combined											
2005	4.7	3.1	5.7	0.3	5.5	15.0	19.5	18.6	35.8	22.1	9.9	4.8
2006	4.5	4.7	13.8	1.1	3.1	13.4	16.4	11.8	41.3	27.4	5.2	4.5
2006 Q3	4.4	4.6	14.9	1.0	2.8	13.7	14.8	10.0	38.1	30.3	4.1	6.5
Q4	5.1	5.4	19.5	1.8	3.1	11.1	15.5	11.0	36.4	26.9	5.5	4.8
2007 Q1	5.3	6.3	19.5	3.8	2.9	7.9	15.0	12.1	32.4	21.6	1.5	4.1
Q2	5.5	7.5	18.7	3.9	2.6	7.7	15.9	12.1	34.9	18.4	5.7	-0.7
2007 Feb.	5.5	6.7	20.8	3.6	3.0	6.6	14.7	12.3	30.7	20.8	1.1	3.6
Mar.	5.2	7.1	19.2	4.3	2.2	8.2	16.0	12.0	36.2	20.3	3.7	2.3
Apr.	5.3	7.6	18.7	3.7	2.2	9.0	15.7	12.3	32.9	19.6	5.7	1.8
May	5.7	7.3	19.9	3.3	3.0	7.4	15.9	12.1	35.5	16.1	6.0	-3.3
June	5.7	8.0	16.0	5.0	3.0	5.3	16.2	11.8	36.3	18.8	7.0	-3.6
July	5.4	8.3	16.7	5.4	2.2	5.0	16.0	11.0	37.6	19.0	6.5	-6.1
	In euro											
2005	4.3	0.9	9.2	-0.2	5.4	15.3	18.9	17.3	35.2	22.0	10.3	5.4
2006	3.8	3.1	11.3	0.3	3.2	13.6	15.2	10.1	37.8	30.4	5.4	3.6
2006 Q3	3.7	3.1	11.2	-0.2	2.9	13.7	13.3	8.0	33.6	34.1	4.1	5.1
Q4	4.3	4.1	14.8	0.1	3.3	11.1	14.5	9.5	33.5	29.8	5.6	3.8
2007 Q1	4.7	5.5	15.3	1.7	3.2	7.9	13.7	10.8	28.9	22.8	1.5	3.6
Q2	4.8	6.8	15.5	1.5	2.9	7.6	15.1	11.2	32.2	19.2	5.8	-1.3
2007 Feb.	4.8	5.8	15.8	1.5	3.3	6.6	13.5	11.2	27.3	21.9	1.1	3.3
Mar.	4.5	6.3	15.5	1.6	2.5	8.1	15.0	11.3	32.3	21.3	3.8	1.9
Apr.	4.7	7.1	15.6	1.2	2.5	8.9	14.9	11.4	30.2	20.7	5.8	1.4
May	5.1	6.7	16.5	0.9	3.3	7.2	15.2	11.1	33.1	16.9	6.1	-3.9
June	5.0	7.2	13.3	2.9	3.2	5.3	15.6	10.9	34.5	18.8	7.1	-4.3
July	4.7	7.5	13.9	4.2	2.4	5.1	15.3	9.9	35.6	18.4	6.6	-7.0

**C18 Annual growth rates of short-term debt securities, by sector of the issuer, in all currencies combined**

(annual percentage changes)



Source: ECB.

1) For the calculation of the growth rates, see the Technical notes.

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

(EUR billions, unless otherwise indicated; market values)

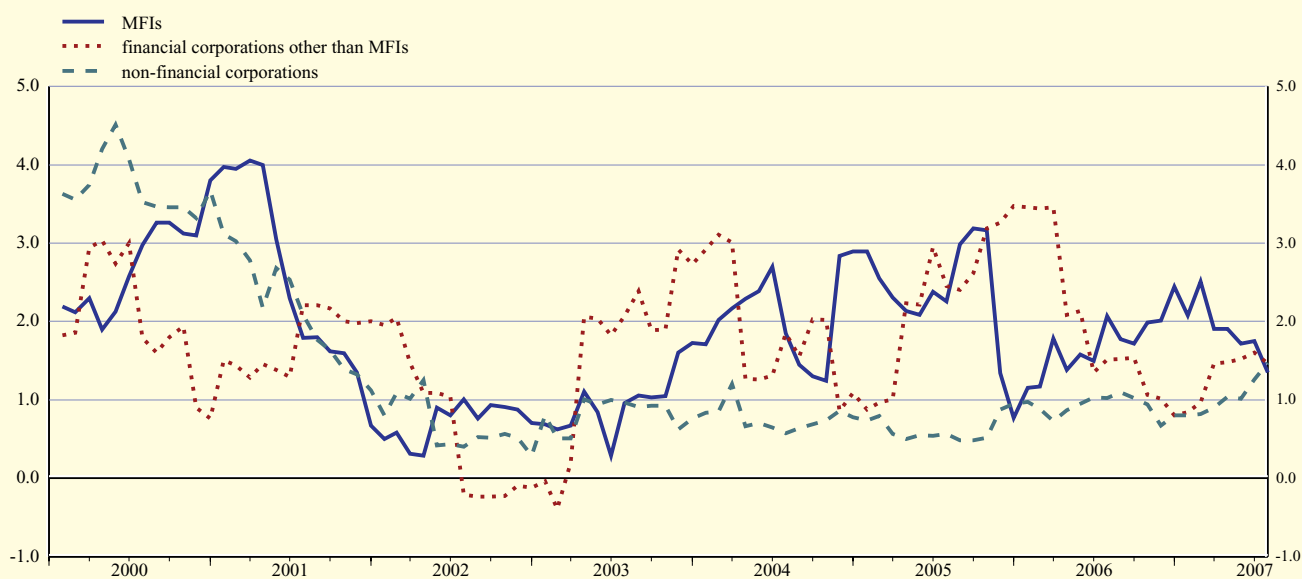
##### 1. Outstanding amounts and annual growth rates

(outstanding amounts as end-of-period)

	Total			MFIs		Financial corporations other than MFIs		Non-financial corporations	
	Total	Index Dec. 01 = 100	Annual growth rates (%)	Total	Annual growth rates (%)	Total	Annual growth rates (%)	Total	Annual growth rates (%)
	1	2	3	4	5	6	7	8	9
2005 July	4,638.2	103.1	1.0	727.9	2.3	467.7	2.5	3,442.6	0.6
Aug.	4,613.0	103.1	1.1	723.5	3.0	458.2	2.4	3,431.4	0.5
Sep.	4,834.1	103.2	1.1	764.1	3.2	484.8	2.6	3,585.2	0.5
Oct.	4,666.6	103.4	1.2	752.4	3.2	481.5	3.2	3,432.7	0.5
Nov.	4,889.2	103.7	1.2	809.2	1.3	514.6	3.3	3,565.4	0.9
Dec.	5,063.5	103.8	1.2	836.4	0.8	541.8	3.5	3,685.3	0.9
2006 Jan.	5,296.6	103.8	1.2	884.8	1.2	536.8	3.5	3,875.0	1.0
Feb.	5,436.6	103.8	1.2	938.8	1.2	562.7	3.4	3,935.1	0.9
Mar.	5,637.3	103.9	1.2	962.3	1.8	580.0	3.5	4,094.9	0.7
Apr.	5,662.8	104.0	1.1	948.8	1.4	573.9	2.1	4,140.1	0.9
May	5,373.0	104.1	1.2	896.7	1.6	534.5	2.1	3,941.8	0.9
June	5,384.8	104.3	1.1	905.0	1.5	530.6	1.3	3,949.1	1.0
July	5,381.0	104.4	1.3	918.4	2.1	544.4	1.5	3,918.2	1.0
Aug.	5,545.2	104.4	1.3	958.6	1.8	595.7	1.5	3,990.8	1.1
Sep.	5,689.4	104.5	1.2	986.1	1.7	607.7	1.5	4,095.6	1.0
Oct.	5,869.1	104.6	1.1	1,015.6	2.0	614.5	1.1	4,239.0	0.9
Nov.	5,922.6	104.7	0.9	1,024.3	2.0	603.8	1.0	4,294.5	0.7
Dec.	6,139.4	104.9	1.1	1,056.3	2.4	623.2	0.8	4,459.9	0.8
2007 Jan.	6,310.4	104.9	1.0	1,111.3	2.1	641.7	0.8	4,557.4	0.8
Feb.	6,223.4	105.0	1.1	1,081.2	2.5	633.4	1.0	4,508.8	0.8
Mar.	6,423.5	105.1	1.1	1,099.9	1.9	644.6	1.5	4,678.9	0.9
Apr.	6,671.7	105.3	1.2	1,156.5	1.9	670.5	1.5	4,844.7	1.0
May	6,944.3	105.4	1.2	1,161.3	1.7	684.0	1.5	5,099.0	1.0
June	6,862.1	105.7	1.4	1,115.5	1.8	671.8	1.6	5,074.8	1.3
July	6,639.8	105.9	1.5	1,081.0	1.4	607.5	1.5	4,951.3	1.5

#### C19 Annual growth rates for quoted shares issued by euro area residents

(annual percentage changes)



Source: ECB.

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

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

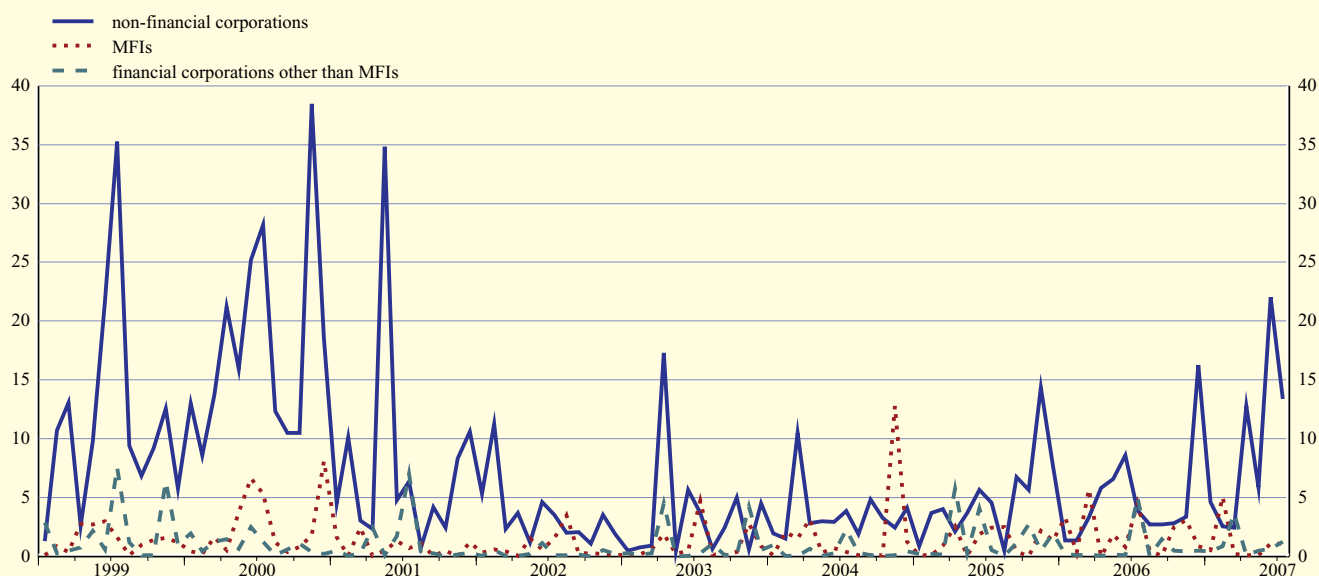
(EUR billions; market values)

### 2. Transactions during the month

	Total			MFIs			Financial corporations other than MFIs			Non-financial corporations		
	Gross issues	Redemptions	Net issues	Gross issues	Redemptions	Net issues	Gross issues	Redemptions	Net issues	Gross issues	Redemptions	Net issues
	1	2	3	4	5	6	7	8	9	10	11	12
2005 July	7.5	6.6	0.9	2.4	2.9	-0.4	0.5	0.0	0.5	4.5	3.7	0.8
Aug.	2.9	2.2	0.8	2.5	0.0	2.5	0.0	0.2	-0.1	0.4	2.0	-1.6
Sep.	8.2	2.3	5.9	0.4	0.0	0.4	1.1	0.1	1.0	6.7	2.2	4.5
Oct.	8.3	1.6	6.8	0.0	0.1	-0.1	2.7	0.0	2.7	5.6	1.4	4.2
Nov.	17.0	3.9	13.0	2.1	0.0	2.1	0.5	0.1	0.4	14.4	3.9	10.5
Dec.	10.9	7.4	3.5	1.3	4.3	-3.0	1.9	0.4	1.5	7.7	2.6	5.0
2006 Jan.	4.8	0.8	4.1	3.3	0.0	3.3	0.2	0.0	0.2	1.3	0.7	0.6
Feb.	1.7	1.7	0.0	0.3	0.1	0.2	0.1	0.0	0.1	1.3	1.6	-0.3
Mar.	9.1	5.4	3.7	5.7	0.0	5.7	0.1	0.0	0.1	3.3	5.4	-2.1
Apr.	5.8	0.5	5.4	0.0	0.2	-0.1	0.0	0.0	0.0	5.8	0.3	5.5
May	8.6	2.2	6.4	1.9	0.0	1.8	0.2	0.0	0.2	6.5	2.2	4.4
June	9.4	2.7	6.8	0.8	0.3	0.5	0.1	0.1	0.0	8.6	2.4	6.2
July	13.4	6.6	6.8	4.5	0.0	4.5	5.0	3.5	1.5	3.9	3.1	0.8
Aug.	3.2	1.8	1.4	0.4	0.0	0.4	0.0	0.1	-0.1	2.7	1.6	1.1
Sep.	4.2	0.5	3.7	0.0	0.0	0.0	1.5	0.0	1.4	2.7	0.5	2.2
Oct.	5.8	1.2	4.6	2.5	0.0	2.5	0.5	0.0	0.5	2.8	1.2	1.6
Nov.	6.9	2.1	4.8	3.1	0.0	3.1	0.4	0.2	0.3	3.3	1.9	1.5
Dec.	17.6	5.1	12.5	0.9	0.3	0.5	0.5	0.0	0.5	16.3	4.7	11.5
2007 Jan.	5.5	3.9	1.6	0.5	0.1	0.4	0.4	0.0	0.4	4.6	3.8	0.8
Feb.	8.4	2.0	6.4	5.0	0.0	5.0	0.9	0.0	0.9	2.5	2.0	0.5
Mar.	6.3	1.7	4.6	0.2	0.0	0.2	3.6	0.4	3.3	2.4	1.4	1.1
Apr.	13.0	0.4	12.6	0.1	0.3	-0.2	0.1	0.0	0.1	12.8	0.2	12.6
May	6.4	1.8	4.5	0.1	0.0	0.1	0.5	0.0	0.5	5.8	1.8	4.0
June	23.7	1.6	22.1	1.0	0.0	1.0	0.6	0.0	0.6	22.0	1.6	20.4
July	15.7	1.8	13.8	1.1	0.0	1.1	1.2	0.3	0.9	13.4	1.5	11.8

### C20 Gross issues of quoted shares by sector of the issuer

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



Source: ECB.

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

## 4.5 MFI interest rates on euro-denominated deposits and loans by euro area residents <sup>1)</sup>

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

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

	Deposits from households						Deposits from non-financial corporations				Repos
	Overnight <sup>2)</sup>	With agreed maturity			Redeemable at notice <sup>2),3)</sup>		Overnight <sup>2)</sup>	With agreed maturity			
	1	Up to 1 year	Over 1 and up to 2 years	Over 2 years	Up to 3 months	Over 3 months	7	Up to 1 year	Over 1 and up to 2 years	Over 2 years	
2006 Aug.	0.85	2.79	2.97	2.82	2.23	2.63	1.32	2.92	3.25	3.78	2.86
Sep.	0.86	2.87	3.15	2.66	2.26	2.68	1.36	2.99	3.45	3.82	2.96
Oct.	0.90	3.04	3.30	2.87	2.30	2.75	1.45	3.19	3.58	4.24	3.14
Nov.	0.91	3.10	3.34	2.80	2.30	2.81	1.49	3.26	3.47	3.66	3.23
Dec.	0.92	3.27	3.31	2.79	2.38	2.87	1.51	3.47	4.99	3.88	3.41
2007 Jan.	0.98	3.33	3.48	2.92	2.35	2.98	1.61	3.49	3.91	4.07	3.46
Feb.	1.00	3.37	3.64	2.72	2.35	3.07	1.64	3.48	3.80	4.15	3.47
Mar.	1.02	3.51	3.65	2.68	2.39	3.14	1.71	3.67	3.84	3.72	3.64
Apr.	1.04	3.59	3.68	2.78	2.42	3.20	1.75	3.74	4.01	3.87	3.70
May	1.06	3.62	3.51	2.72	2.43	3.25	1.78	3.74	3.80	3.72	3.73
June	1.08	3.78	3.79	2.64	2.42	3.32	1.77	3.94	4.10	4.16	3.90
July	1.10	3.86	3.90	2.83	2.45	3.40	1.81	4.02	4.26	4.50	3.95

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

	Bank overdrafts <sup>2)</sup>	Consumer credit				Lending for house purchase					Other lending by initial rate fixation		
		By initial rate fixation			Annual percentage rate of charge <sup>4)</sup>	By initial rate fixation				Annual percentage rate of charge <sup>4)</sup>	Floating rate and up to 1 year	Over 1 and up to 5 years	Over 5 years
		Floating rate and up to 1 year	Over 1 and up to 5 years	Over 5 years		Floating rate and up to 1 year	Over 1 and up to 5 years	Over 5 and up to 10 years	Over 10 years				
2006 Aug.	9.92	7.73	6.38	8.15	8.07	4.21	4.37	4.60	4.40	4.59	4.65	5.27	4.94
Sep.	10.05	7.72	6.24	8.09	7.94	4.30	4.37	4.61	4.45	4.66	4.76	5.30	4.98
Oct.	10.03	7.50	5.99	8.17	7.76	4.42	4.45	4.58	4.47	4.73	4.93	5.18	4.80
Nov.	10.07	7.66	6.12	8.15	7.81	4.49	4.50	4.58	4.47	4.76	4.97	5.26	4.91
Dec.	10.03	7.56	6.05	7.97	7.71	4.56	4.58	4.56	4.49	4.80	4.93	5.24	4.82
2007 Jan.	10.14	7.63	6.68	8.39	8.25	4.68	4.60	4.60	4.50	4.83	5.13	5.43	4.92
Feb.	10.31	7.69	6.83	8.27	8.28	4.71	4.71	4.70	4.61	4.90	5.27	5.38	5.14
Mar.	10.22	7.51	6.68	8.34	8.14	4.79	4.76	4.71	4.62	4.94	5.26	5.60	5.20
Apr.	10.29	7.77	6.69	8.24	8.15	4.85	4.73	4.75	4.67	5.00	5.28	5.57	5.21
May	10.32	8.10	6.73	8.30	8.27	4.88	4.80	4.81	4.74	5.02	5.38	5.65	5.32
June	10.38	8.07	6.66	8.24	8.25	5.00	4.93	4.90	4.82	5.15	5.49	5.77	5.37
July	10.38	8.01	6.77	8.34	8.36	5.07	4.93	5.02	4.90	5.26	5.54	5.82	5.40

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

	Bank overdrafts <sup>2)</sup>	Other loans up to EUR 1 million by initial rate fixation			Other loans over EUR 1 million by initial rate fixation		
		Floating rate and up to 1 year	Over 1 and up to 5 years	Over 5 years	Floating rate and up to 1 year	Over 1 and up to 5 years	Over 5 years
		1	2	3	4	5	6
2006 Aug.	5.56	4.70	5.09	4.60	3.98	4.33	4.49
Sep.	5.69	4.75	5.02	4.54	4.04	4.41	4.47
Oct.	5.76	4.91	5.17	4.57	4.24	4.38	4.45
Nov.	5.82	5.00	5.25	4.68	4.31	4.62	4.58
Dec.	5.80	5.08	5.24	4.71	4.50	4.77	4.63
2007 Jan.	5.94	5.16	5.31	4.69	4.44	4.67	4.70
Feb.	6.03	5.21	5.44	4.86	4.50	4.69	4.71
Mar.	6.04	5.30	5.45	4.88	4.65	4.81	4.87
Apr.	6.12	5.37	5.47	4.88	4.69	4.99	4.90
May	6.12	5.43	5.57	4.95	4.71	5.10	5.12
June	6.17	5.53	5.70	5.03	4.88	5.28	5.17
July	6.29	5.58	5.75	5.08	4.88	5.01	5.15

Source: ECB.

1) Data refer to the changing composition of the euro area. For further information, see the General notes.

2) For this instrument category, new business and outstanding amounts coincide. End-of-period.

3) For this instrument category, households and non-financial corporations are merged and allocated to the household sector, since the outstanding amounts of non-financial corporations are negligible compared with those of the household sector in all participating Member States combined.

4) The annual percentage rate of charge covers the total cost of a loan. The total cost comprises an interest rate component and a component of other (related) charges, such as the cost of inquiries, administration, preparation of documents, guarantees, etc.

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

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

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

	Deposits from households					Deposits from non-financial corporations			Repos
	Overnight <sup>1)</sup>	With agreed maturity		Redeemable at notice <sup>1),2)</sup>		Overnight <sup>1)</sup>	With agreed maturity		
		Up to 2 years	Over 2 years	Up to 3 months	Over 3 months		Up to 2 years	Over 2 years	
	1	2	3	4	5	6	7	8	9
2006 Aug.	0.85	2.52	3.05	2.23	2.63	1.32	2.93	3.68	2.81
Sep.	0.86	2.59	3.08	2.26	2.68	1.36	3.00	3.69	2.90
Oct.	0.90	2.69	3.10	2.30	2.75	1.45	3.15	3.80	3.05
Nov.	0.91	2.78	3.05	2.30	2.81	1.49	3.24	3.80	3.14
Dec.	0.92	2.89	3.05	2.38	2.87	1.51	3.42	3.88	3.29
2007 Jan.	0.98	2.99	3.06	2.35	2.98	1.61	3.45	3.91	3.36
Feb.	1.00	3.07	3.12	2.35	3.07	1.64	3.49	3.92	3.41
Mar.	1.02	3.16	3.05	2.39	3.14	1.71	3.61	3.93	3.54
Apr.	1.04	3.23	3.06	2.42	3.20	1.75	3.67	3.93	3.59
May	1.06	3.30	3.03	2.43	3.25	1.78	3.72	3.96	3.66
June	1.08	3.39	3.04	2.42	3.32	1.77	3.87	3.99	3.79
July	1.10	3.49	3.02	2.45	3.40	1.81	3.92	4.00	3.85

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

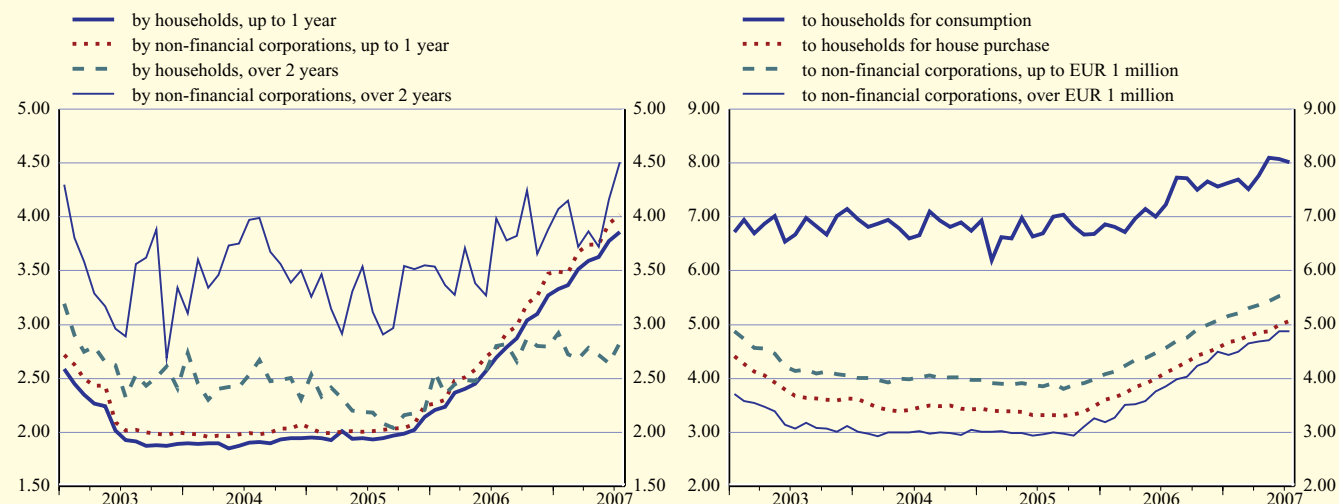
	Loans to households					Loans to non-financial corporations			
	Lending for house purchase, with maturity			Consumer credit and other loans, with maturity		With maturity			
	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Up to 1 year	Over 1 and up to 5 years	Over 5 years
	1	2	3	4	5	6	7	8	9
2006 Aug.	4.72	4.23	4.60	8.19	6.71	5.82	4.85	4.33	4.48
Sep.	4.82	4.27	4.62	8.30	6.81	5.87	4.93	4.40	4.53
Oct.	4.90	4.29	4.65	8.35	6.81	5.88	5.07	4.51	4.57
Nov.	4.98	4.33	4.68	8.33	6.81	5.91	5.14	4.59	4.63
Dec.	5.01	4.34	4.70	8.41	6.81	5.93	5.23	4.66	4.68
2007 Jan.	5.05	4.38	4.72	8.53	6.83	5.95	5.30	4.76	4.77
Feb.	5.11	4.46	4.79	8.66	6.95	5.96	5.37	4.83	4.83
Mar.	5.14	4.45	4.79	8.62	6.88	5.95	5.43	4.90	4.84
Apr.	5.14	4.48	4.80	8.67	6.96	5.97	5.50	4.94	4.87
May	5.16	4.48	4.82	8.71	6.95	5.97	5.50	4.98	4.90
June	5.21	4.53	4.86	8.68	6.94	6.01	5.62	5.09	4.96
July	5.29	4.55	4.89	8.80	6.96	6.09	5.69	5.15	5.01

#### C21 New deposits with agreed maturity

(percentages per annum excluding charges; period averages)

#### C22 New loans at floating rate and up to 1 year initial rate fixation

(percentages per annum excluding charges; period averages)



Source: ECB.



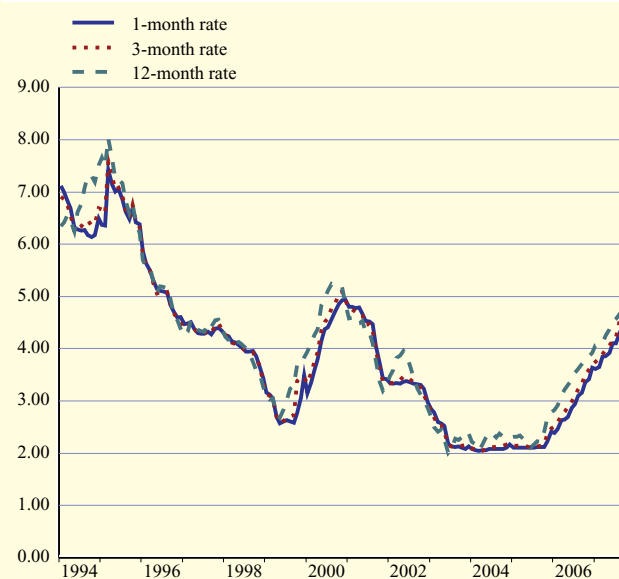
## 4.6 Money market interest rates

(percentages per annum; period averages)

	Euro area <sup>1,2)</sup>					United States	Japan
	Overnight deposits (EONIA)	1-month deposits (EURIBOR)	3-month deposits (EURIBOR)	6-month deposits (EURIBOR)	12-month deposits (EURIBOR)	3-month deposits (LIBOR)	3-month deposits (LIBOR)
	1	2	3	4	5	6	7
2004	2.05	2.08	2.11	2.15	2.27	1.62	0.05
2005	2.09	2.14	2.18	2.23	2.33	3.56	0.06
2006	2.83	2.94	3.08	3.23	3.44	5.19	0.30
2006 Q3	2.94	3.06	3.22	3.41	3.62	5.43	0.41
Q4	3.36	3.46	3.59	3.72	3.86	5.37	0.49
2007 Q1	3.61	3.71	3.82	3.94	4.09	5.36	0.62
Q2	3.86	3.96	4.07	4.20	4.38	5.36	0.69
Q3	4.05	4.28	4.49	4.56	4.65	5.45	0.89
2006 Sep.	3.04	3.16	3.34	3.53	3.72	5.38	0.42
Oct.	3.28	3.35	3.50	3.64	3.80	5.37	0.44
Nov.	3.33	3.42	3.60	3.73	3.86	5.37	0.48
Dec.	3.50	3.64	3.68	3.79	3.92	5.36	0.56
2007 Jan.	3.56	3.62	3.75	3.89	4.06	5.36	0.56
Feb.	3.57	3.65	3.82	3.94	4.09	5.36	0.59
Mar.	3.69	3.84	3.89	4.00	4.11	5.35	0.71
Apr.	3.82	3.86	3.98	4.10	4.25	5.35	0.66
May	3.79	3.92	4.07	4.20	4.37	5.36	0.67
June	3.96	4.10	4.15	4.28	4.51	5.36	0.73
July	4.06	4.11	4.22	4.36	4.56	5.36	0.77
Aug.	4.05	4.31	4.54	4.59	4.67	5.48	0.92
Sep.	4.03	4.43	4.74	4.75	4.72	5.49	0.99

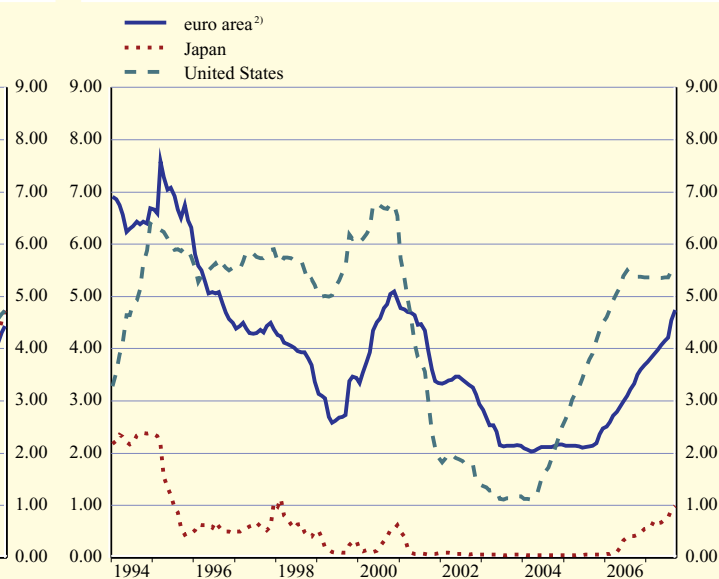
### C23 Euro area money market rates <sup>2)</sup>

(monthly; percentages per annum)



### C24 3-month money market rates

(monthly; percentages per annum)



Source: ECB.

- 1) Before January 1999 synthetic euro area rates were calculated on the basis of national rates weighted by GDP. For further information, see the General notes.
- 2) Data refer to the changing composition of the euro area. For further information, see the General notes.

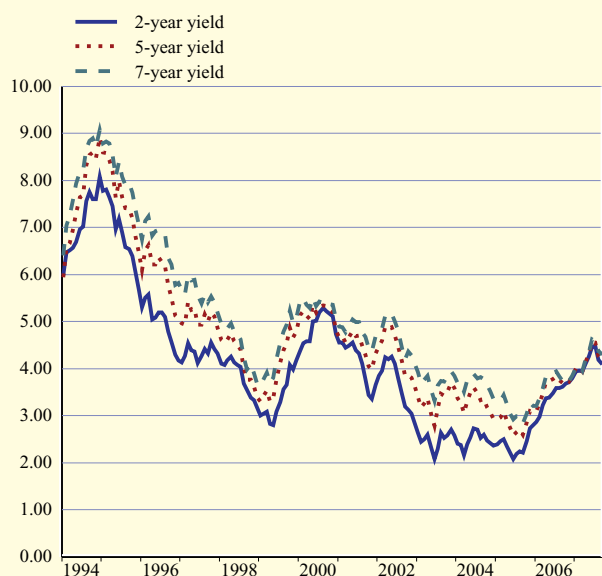
## 4.7 Government bond yields

(percentages per annum; period averages)

	Euro area <sup>1,2)</sup>					United States	Japan
	2 years	3 years	5 years	7 years	10 years	10 years	10 years
	1	2	3	4	5	6	7
2004	2.47	2.77	3.29	3.70	4.14	4.26	1.50
2005	2.38	2.55	2.85	3.14	3.44	4.28	1.39
2006	3.44	3.51	3.64	3.72	3.86	4.79	1.74
2006 Q3	3.60	3.66	3.76	3.84	3.97	4.90	1.80
Q4	3.73	3.73	3.77	3.79	3.86	4.63	1.70
2007 Q1	3.95	3.96	3.99	4.02	4.08	4.68	1.68
Q2	4.27	4.30	4.34	4.38	4.42	4.84	1.74
Q3	4.26	4.30	4.34	4.42	4.48	4.74	1.72
2006 Sep.	3.62	3.64	3.70	3.74	3.84	4.72	1.68
Oct.	3.69	3.70	3.77	3.80	3.88	4.73	1.76
Nov.	3.71	3.70	3.73	3.74	3.80	4.60	1.70
Dec.	3.79	3.79	3.83	3.84	3.90	4.57	1.64
2007 Jan.	3.94	3.96	4.02	4.02	4.10	4.76	1.71
Feb.	3.96	3.98	4.02	4.07	4.12	4.73	1.71
Mar.	3.94	3.94	3.95	3.96	4.02	4.56	1.62
Apr.	4.11	4.12	4.15	4.20	4.25	4.69	1.67
May	4.26	4.28	4.31	4.34	4.37	4.75	1.67
June	4.45	4.51	4.57	4.62	4.66	5.11	1.89
July	4.48	4.52	4.55	4.59	4.63	5.01	1.89
Aug.	4.19	4.23	4.27	4.38	4.43	4.68	1.65
Sep.	4.10	4.14	4.19	4.30	4.37	4.51	1.61

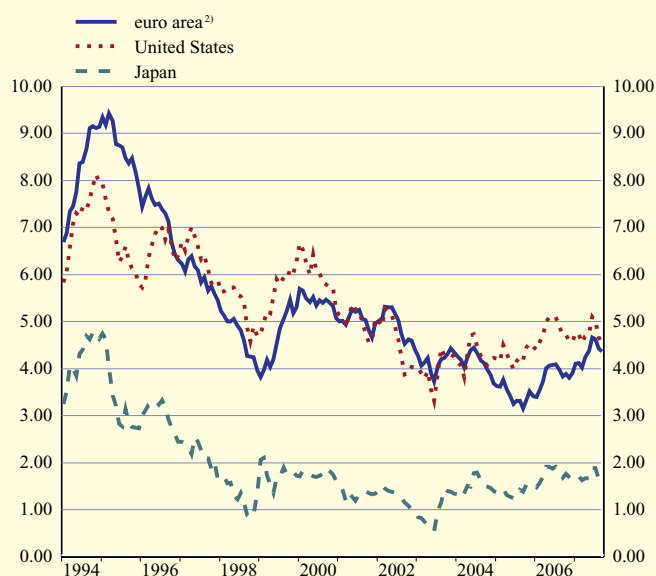
### C25 Euro area government bond yields <sup>2)</sup>

(monthly; percentages per annum)



### C26 10-year government bond yields

(monthly; percentages per annum)



Source: ECB.

- 1) To December 1998, euro area yields are calculated on the basis of harmonised national government bond yields weighted by GDP. Thereafter, the weights are the nominal outstanding amounts of government bonds in each maturity band.
- 2) Data refer to the changing composition of the euro area. For further information, see the General notes.

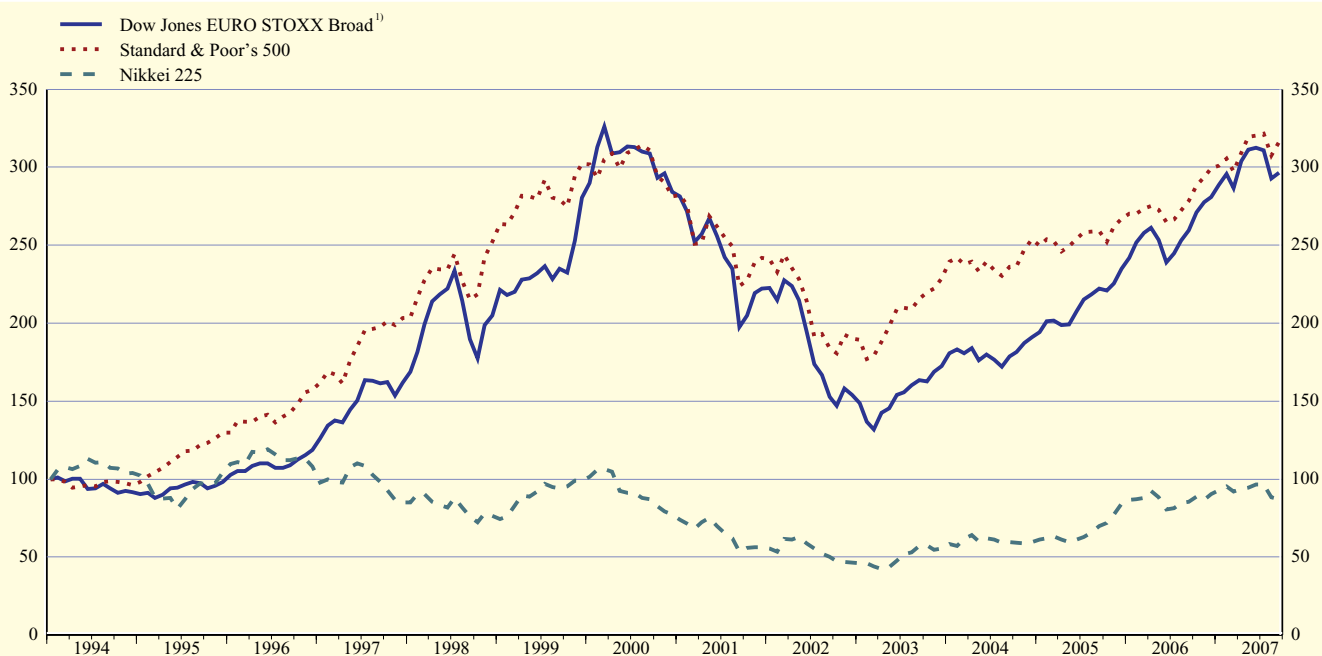
## 4.8 Stock market indices

(index levels in points; period averages)

	Dow Jones EURO STOXX indices <sup>1)</sup>												United States	Japan
	Benchmark		Main industry indices											
	Broad	50	Basic materials	Consumer services	Consumer goods	Oil & gas	Financials	Industrials	Technology	Utilities	Telecom.	Health care		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	
2004	251.1	2,804.8	251.4	163.4	219.9	300.5	238.2	258.6	298.3	266.3	399.2	395.9	1,131.1	11,180.9
2005	293.8	3,208.6	307.0	181.3	245.1	378.6	287.7	307.3	297.2	334.1	433.1	457.0	1,207.4	12,421.3
2006	357.3	3,795.4	402.3	205.0	293.7	419.8	370.3	391.3	345.3	440.0	416.8	530.2	1,310.5	16,124.0
2006 Q3	350.2	3,726.8	399.7	202.0	287.9	410.1	364.7	378.4	325.8	438.1	397.8	532.9	1,288.6	15,622.2
Q4	383.3	4,032.4	450.4	219.3	315.1	432.7	400.7	419.5	343.1	490.8	450.1	526.3	1,389.2	16,465.0
2007 Q1	402.5	4,150.5	489.9	233.3	335.7	422.8	418.6	462.7	349.4	512.3	472.8	527.2	1,424.8	17,363.9
Q2	429.0	4,416.2	549.6	246.8	373.0	454.1	434.2	512.5	376.6	556.0	475.8	536.7	1,496.6	17,678.7
Q3	416.4	4,317.6	568.3	233.5	373.3	465.6	399.8	494.4	400.9	556.3	476.7	503.8	1,489.8	16,907.5
2006 Sep.	359.9	3,817.6	410.4	208.4	297.2	401.9	379.1	389.6	331.3	456.0	405.6	525.4	1,317.5	15,930.9
Oct.	375.8	3,975.8	435.6	216.9	306.8	419.4	397.5	405.6	341.1	475.6	431.1	532.2	1,363.4	16,515.7
Nov.	384.8	4,052.8	451.8	220.1	319.2	438.6	401.3	420.2	343.6	490.5	456.8	517.4	1,389.4	16,103.9
Dec.	389.5	4,070.4	464.4	221.0	319.3	440.4	403.4	433.3	344.6	507.0	463.1	529.4	1,416.2	16,790.2
2007 Jan.	400.4	4,157.8	476.4	229.1	328.2	426.5	419.8	452.2	350.4	505.0	485.0	538.1	1,423.9	17,270.0
Feb.	410.3	4,230.2	496.6	235.9	339.4	428.2	428.3	476.2	355.3	524.7	481.0	530.4	1,445.3	17,729.4
Mar.	397.5	4,070.5	497.9	235.1	340.2	413.9	408.6	461.2	343.0	508.5	452.6	512.9	1,407.0	17,130.0
Apr.	421.7	4,330.7	531.7	247.6	363.9	437.2	432.7	493.8	362.4	540.4	477.4	531.5	1,462.7	17,466.5
May	431.7	4,444.8	545.5	248.5	374.4	454.1	439.8	514.4	374.5	559.2	476.2	547.7	1,511.3	17,577.7
June	433.4	4,470.2	571.9	244.2	380.4	471.1	429.4	529.0	393.1	568.2	473.8	529.9	1,514.5	18,001.4
July	431.3	4,449.0	585.9	242.6	384.7	491.4	418.7	529.3	399.8	563.1	467.1	513.1	1,520.9	17,986.8
Aug.	406.4	4,220.6	550.8	227.8	362.5	444.5	393.5	479.0	390.0	544.4	469.2	495.4	1,454.6	16,461.0
Sep.	411.3	4,284.4	569.1	230.1	373.2	461.5	386.3	473.8	414.7	562.7	495.9	503.2	1,496.0	16,233.9

## C27 Dow Jones EURO STOXX Broad, Standard & Poor's 500 and Nikkei 225

(January 1994 = 100; monthly averages)



Source: ECB.

1) Data refer to the changing composition of the euro area. For further information, see the General notes.

# PRICES, OUTPUT, DEMAND AND LABOUR MARKETS



## 5.1 HICP, other prices and costs

(annual percentage changes, unless otherwise indicated)

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

	Total					Total (s.a., percentage change on previous period)						Memo item: Administered prices <sup>2)</sup>		
	Index 2005 = 100	Total			Goods	Services	Total	Processed food	Unprocessed food	Non-energy industrial goods	Energy (n.s.a.)	Services	Total HICP excluding administered prices	Administered prices
		Total excl. unprocessed food and energy												
% of total <sup>3)</sup>	100.0	100.0	82.8	59.2	40.8	100.0	11.9	7.6	30.0	9.6	40.8	86.2	13.8	
	1	2	3	4	5	6	7	8	9	10	11	12	13	
2003	95.8	2.1	2.0	1.8	2.5	-	-	-	-	-	-	2.0	2.2	
2004	97.9	2.1	2.1	1.8	2.6	-	-	-	-	-	-	2.0	3.2	
2005	100.0	2.2	1.5	2.1	2.3	-	-	-	-	-	-	2.1	2.8	
2006	102.2	2.2	1.5	2.3	2.0	-	-	-	-	-	-	2.1	3.0	
2006 Q2	102.4	2.5	1.5	2.8	2.0	0.8	0.5	0.5	0.3	3.9	0.5	2.4	3.1	
Q3	102.5	2.1	1.5	2.3	2.0	0.5	0.4	1.8	0.2	0.6	0.6	2.0	3.1	
Q4	102.8	1.8	1.6	1.6	2.1	0.1	0.8	0.7	0.3	-4.2	0.6	1.6	2.9	
2007 Q1	102.9	1.9	1.9	1.6	2.4	0.5	0.4	0.0	0.3	1.0	0.7	1.7	2.8	
Q2	104.4	1.9	1.9	1.5	2.6	0.8	0.4	0.8	0.2	3.3	0.7	1.8	2.4	
2007 Apr.	104.2	1.9	1.9	1.5	2.5	0.3	0.1	0.9	0.0	1.4	0.3	1.8	2.6	
May	104.4	1.9	1.9	1.4	2.6	0.2	0.1	-0.3	0.1	0.9	0.3	1.8	2.4	
June	104.5	1.9	1.9	1.5	2.6	0.2	0.2	0.3	0.0	0.5	0.2	1.8	2.3	
July	104.3	1.8	1.9	1.2	2.6	0.2	0.1	0.4	0.0	0.5	0.2	1.7	2.1	
Aug. <sup>4)</sup>	104.3	1.7	2.0	1.2	2.6	0.1	0.7	0.4	0.2	-0.9	0.1	1.7	2.1	
Sep.	.	2.1	.	.	.	.	.	.	.	.	.	.	.	

	Goods						Services					
	Food (incl. alcoholic beverages and tobacco)			Industrial goods			Housing	Transport	Communication	Recreation and personal	Miscellaneous	
	Total	Processed food	Unprocessed food	Total	Non-energy industrial goods	Energy						
% of total <sup>3)</sup>	19.6	11.9	7.6	39.6	30.0	9.6	10.2	6.2	6.4	3.1	14.4	6.7
	14	15	16	17	18	19	20	21	22	23	24	25
2003	2.8	3.3	2.1	1.2	0.8	3.0	2.4	2.0	2.9	-0.6	2.7	3.4
2004	2.3	3.4	0.6	1.6	0.8	4.5	2.4	1.9	2.8	-2.0	2.4	5.1
2005	1.6	2.0	0.8	2.4	0.3	10.1	2.6	2.0	2.7	-2.2	2.3	3.1
2006	2.4	2.1	2.8	2.3	0.6	7.7	2.5	2.1	2.5	-3.3	2.3	2.3
2006 Q2	2.0	2.2	1.6	3.1	0.7	11.6	2.5	2.1	2.8	-3.6	2.3	2.2
Q3	2.8	2.1	3.9	2.0	0.7	6.3	2.5	2.1	2.6	-3.6	2.4	2.3
Q4	2.9	2.2	4.1	1.0	0.8	1.5	2.5	2.1	2.3	-2.5	2.4	2.4
2007 Q1	2.5	2.1	3.1	1.1	1.1	1.1	2.6	2.0	2.9	-2.1	2.8	2.5
Q2	2.5	2.0	3.3	1.0	1.0	0.5	2.7	2.0	2.6	-1.9	2.9	3.6
2007 Mar.	2.3	1.9	2.9	1.4	1.2	1.8	2.6	2.0	2.9	-2.8	2.9	2.6
Apr.	2.7	1.9	3.9	1.0	1.1	0.4	2.7	2.1	2.6	-2.2	2.7	3.7
May	2.4	1.9	3.1	0.9	1.0	0.3	2.8	2.0	2.8	-1.8	2.9	3.6
June	2.4	2.0	3.0	1.0	1.0	0.9	2.8	2.0	2.4	-1.8	3.0	3.5
July	2.3	1.9	2.8	0.7	0.9	0.0	2.7	1.9	2.5	-1.7	3.0	3.5
Aug.	2.5	2.5	2.4	0.6	1.0	-0.9	2.7	2.0	2.4	-1.1	3.0	3.4

Sources: Eurostat and ECB calculations.

1) Data refer to the changing composition of the euro area. For further information, see the General notes.

2) ECB estimates based on Eurostat data; these experimental statistics can only provide an approximate measure of price administration since changes in administered prices cannot be fully isolated from other influences. Please refer to <http://www.ecb.europa.eu/stats/prices/hicp/html/index.en.html> for a note explaining the methodology used in the compilation of this indicator.

3) Referring to the index period 2007.

4) Estimate based on provisional national releases usually covering around 95% of the euro area, as well as on early information on energy prices.

## 5.1 HICP, other prices and costs

(annual percentage changes, unless otherwise indicated)

### 2. Industry, construction, residential property and commodity prices

	Industrial producer prices excluding construction										Construction <sup>1)</sup>	Residential property prices <sup>2)</sup>	World market prices of raw materials <sup>3)</sup>		Oil prices <sup>4)</sup> (EUR per barrel)
	Total (index 2000 = 100)	Total		Industry excluding construction and energy						Energy			Total	Total excluding energy	
		Manu- facturing	Total	Intermediate goods	Capital goods	Consumer goods									
						Total	Durable	Non-durable							
% of total <sup>5)</sup>	100.0	100.0	89.5	82.4	31.6	21.2	29.6	4.0	25.6	17.6			100.0	32.8	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
2003	103.4	1.4	0.9	0.8	0.8	0.3	1.1	0.6	1.2	3.7	2.2	7.0	-4.0	-4.5	25.1
2004	105.7	2.3	2.5	2.0	3.5	0.7	1.3	0.7	1.4	3.9	3.2	7.4	18.4	10.8	30.5
2005	110.1	4.1	3.2	1.8	2.9	1.3	1.1	1.3	1.1	13.4	3.1	7.9	28.5	9.4	44.6
2006	115.8	5.1	3.4	2.8	4.8	1.4	1.7	1.6	1.7	13.2	3.8	6.5	19.7	24.8	52.9
2006 Q3	116.9	5.4	3.7	3.6	6.3	1.7	1.9	1.8	1.9	11.7	4.3	-	13.4	26.6	55.7
Q4	116.6	4.1	2.8	3.5	6.2	1.8	1.6	1.7	1.6	6.1	3.9	6.0 <sup>6)</sup>	3.9	23.0	47.3
2007 Q1	117.3	2.9	2.5	3.4	6.0	2.0	1.5	1.9	1.5	1.3	.	-	-5.5	15.7	44.8
Q2	118.5	2.4	2.6	3.2	5.5	1.9	1.7	1.8	1.6	-0.5	.	.	-3.1	13.8	51.0
Q3	.	.	.	.	.	.	.	.	.	.	.	.	2.0	6.7	54.2
2007 Apr.	118.2	2.4	2.6	3.4	5.8	2.0	1.7	1.8	1.6	-0.7	-	-	-5.6	15.3	50.2
May	118.6	2.4	2.6	3.2	5.4	2.0	1.7	1.7	1.7	-0.1	-	-	-3.9	11.9	50.3
June	118.7	2.2	2.6	3.1	5.2	1.9	1.6	1.8	1.6	-0.7	-	-	0.3	14.2	52.6
July	119.0	1.8	2.3	2.9	4.6	1.7	1.9	1.7	1.9	-1.9	-	-	-1.7	7.8	55.2
Aug.	119.1	1.7	2.2	2.9	4.3	1.6	2.3	1.7	2.3	-2.2	-	-	-3.4	5.4	52.4
Sep.	.	.	.	.	.	.	.	.	.	.	-	-	12.1	6.9	55.2

### 3. Hourly labour costs<sup>7)</sup>

	Total (s.a. index 2000 = 100)	Total	By component		By selected economic activity			Memo: indicator of negotiated wages <sup>8)</sup>
			Wages and salaries	Employers' social contributions	Mining, manufacturing and energy	Construction	Services	
% of total <sup>5)</sup>	100.0	100.0	73.1	26.9	34.6	9.1	56.3	
	1	2	3	4	5	6	7	8
2003	110.8	3.2	2.9	4.0	3.3	4.0	3.0	2.4
2004	113.5	2.4	2.3	2.7	2.8	2.8	2.1	2.2
2005	116.5	2.7	2.7	2.7	2.6	2.5	2.8	2.1
2006	119.6	2.6	2.7	2.3	3.4	2.1	2.2	2.3
2006 Q2	119.2	2.8	2.9	2.4	4.0	1.6	2.3	2.4
Q3	119.9	2.6	2.7	2.4	3.7	1.9	2.0	2.1
Q4	120.6	2.4	2.4	2.1	2.8	2.2	2.2	2.5
2007 Q1	121.3	2.3	2.3	1.9	2.3	2.0	2.2	2.0
Q2	122.1	2.5	2.5	1.8	2.7	3.2	2.2	2.3

Sources: Eurostat, HWI (columns 13 and 14 in Table 2 in Section 5.1), ECB calculations based on Thomson Financial Datastream data (column 15 in Table 2 in Section 5.1), ECB calculations based on Eurostat data (column 6 in Table 2 in Section 5.1 and column 7 in Table 3 in Section 5.1) and ECB calculations (column 12 in Table 2 in Section 5.1 and column 8 in Table 3 in Section 5.1).

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

2) Experimental data based on non-harmonised national sources (see the ECB website for further details).

3) Refers to the prices expressed in euro.

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

5) In 2000.

6) The quarterly data for the second (fourth) quarter refer to semi-annual averages of the first (second) half of the year, respectively. Since some national data are only available at annual frequency, the semi-annual estimate is partially derived from annual results; therefore, the accuracy of semi-annual data is lower than the accuracy of annual data.

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

8) Experimental data (see the ECB website for further details).

**5.1 HICP, other prices and costs**

(annual percentage changes, unless otherwise indicated)

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

(seasonally adjusted)

	Total (index 2000 = 100)	Total	By economic activity					
			Agriculture, hunting, forestry and fishing	Mining, manufacturing and energy	Construction	Trade, repairs, hotels and restaurants, transport and communication	Financial, real estate, renting and business services	Public administration, education, health and other services
	1	2	3	4	5	6	7	8
Unit labour costs <sup>1)</sup>								
2003	106.7	1.9	6.3	0.5	3.3	2.1	1.8	3.1
2004	108.0	1.3	-7.8	-0.2	3.7	0.5	2.7	2.2
2005	109.1	1.0	6.8	-0.7	3.7	0.6	1.7	1.9
2006	110.0	0.8	1.6	-1.0	1.4	0.1	2.0	2.5
2006 Q1	109.9	1.0	2.2	-0.9	1.4	0.3	2.1	2.7
Q2	110.3	1.2	1.4	-0.8	0.5	0.6	1.4	3.5
Q3	110.1	1.1	3.3	-0.7	1.5	-0.1	2.4	2.8
Q4	109.9	0.1	-0.4	-1.6	2.2	-0.5	2.0	0.9
2007 Q1	110.9	0.8	-0.4	-1.3	1.7	-0.3	3.2	2.1
Compensation per employee								
2003	107.7	2.3	2.5	2.2	2.9	1.9	2.5	2.4
2004	110.0	2.2	2.6	2.7	2.9	1.5	2.0	2.3
2005	112.0	1.8	1.7	1.5	2.5	1.7	2.0	1.9
2006	114.4	2.2	1.2	3.2	3.4	1.6	1.4	2.1
2006 Q1	113.7	2.2	0.1	3.1	3.6	1.7	1.4	2.2
Q2	114.4	2.4	0.1	3.2	3.2	1.7	1.1	3.1
Q3	114.6	2.4	2.4	3.5	3.4	1.2	1.6	2.6
Q4	115.1	1.8	2.3	3.0	3.6	1.8	1.7	0.6
2007 Q1	116.2	2.3	2.9	2.4	3.5	1.5	2.8	2.1
Labour productivity <sup>2)</sup>								
2003	101.0	0.3	-3.5	1.7	-0.4	-0.1	0.7	-0.7
2004	101.9	0.9	11.2	2.9	-0.8	1.0	-0.8	0.1
2005	102.6	0.7	-4.8	2.3	-1.2	1.0	0.3	0.0
2006	104.0	1.4	-0.4	4.2	2.0	1.5	-0.5	-0.3
2006 Q2	103.8	1.3	-1.3	3.9	2.7	1.1	-0.3	-0.4
Q3	104.1	1.2	-0.8	4.2	1.9	1.3	-0.8	-0.2
Q4	104.7	1.7	2.8	4.6	1.4	2.2	-0.4	-0.3
2007 Q1	104.8	1.4	3.4	3.7	1.7	1.7	-0.4	0.0
Q2	104.6	0.8	.	.	.	.	.	.

**5. Gross domestic product deflators**

	Total (s.a. index 2000 = 100)	Total	Domestic demand			Exports <sup>3)</sup>	Imports <sup>3)</sup>	
			Total	Private consumption	Government consumption			Gross fixed capital formation
	1	2	3	4	5	6	7	8
2003	107.4	2.2	2.1	2.1	2.4	1.2	-1.2	-1.7
2004	109.5	2.0	2.2	2.1	2.3	2.4	1.1	1.6
2005	111.6	1.9	2.3	2.1	2.6	2.3	2.7	3.8
2006	113.7	1.9	2.4	2.2	2.1	2.6	2.7	4.0
2006 Q2	113.5	2.0	2.7	2.4	3.0	2.6	3.1	5.0
Q3	114.0	2.0	2.4	2.1	2.1	2.7	2.7	3.6
Q4	114.6	1.8	1.8	1.9	0.5	2.8	2.0	2.0
2007 Q1	115.3	2.2	1.9	1.7	1.5	3.0	1.6	0.6
Q2	116.0	2.2	2.0	1.8	0.7	2.9	1.4	0.9

Sources: ECB calculations based on Eurostat data.

- 1) Compensation (at current prices) per employee divided by value added (volumes) per person employed.
- 2) Value added (volumes) per person employed.
- 3) Deflators for exports and imports refer to goods and services and include cross-border trade within the euro area.

## 5.2 Output and demand

### 1. GDP and expenditure components

	GDP								
	Total	Domestic demand					External balance <sup>1)</sup>		
		Total	Private consumption	Government consumption	Gross fixed capital formation	Changes in inventories <sup>2)</sup>	Total	Exports <sup>1)</sup>	Imports <sup>1)</sup>
1	2	3	4	5	6	7	8	9	
<i>Current prices (EUR billions, seasonally adjusted)</i>									
2003	7,488.9	7,332.9	4,294.4	1,531.2	1,506.1	1.2	156.0	2,638.5	2,482.5
2004	7,772.3	7,613.8	4,448.0	1,586.8	1,572.7	6.3	158.6	2,841.1	2,682.6
2005	8,047.6	7,931.3	4,610.2	1,649.8	1,654.3	17.0	116.3	3,049.7	2,933.4
2006	8,437.3	8,337.7	4,799.2	1,716.4	1,787.6	34.5	99.6	3,388.6	3,289.0
2006 Q2	2,099.3	2,076.1	1,195.0	429.4	444.4	7.4	23.2	837.5	814.3
Q3	2,121.2	2,102.8	1,206.3	430.5	451.3	14.8	18.3	851.4	833.0
Q4	2,150.5	2,111.6	1,215.1	432.6	462.3	1.5	38.9	879.9	841.0
2007 Q1	2,179.7	2,143.7	1,220.3	438.9	475.1	9.4	36.0	889.1	853.1
Q2	2,199.3	2,160.7	1,234.2	440.9	476.9	8.7	38.5	902.1	863.5
<i>percentage of GDP</i>									
2006	100.0	98.8	56.9	20.3	21.2	0.4	1.2	-	-
<i>Chain-linked volumes (prices of the previous year, seasonally adjusted<sup>3)</sup>)</i>									
<i>quarter-on-quarter percentage changes</i>									
2006 Q2	1.0	0.9	0.4	0.2	2.7	-	-	1.6	1.3
Q3	0.6	0.9	0.5	0.5	0.7	-	-	1.1	1.9
Q4	0.9	0.3	0.5	0.4	1.7	-	-	3.1	1.6
2007 Q1	0.7	0.8	0.0	0.8	2.0	-	-	0.8	0.9
Q2	0.3	0.2	0.5	0.1	-0.2	-	-	1.1	0.6
<i>annual percentage changes</i>									
2003	0.8	1.5	1.2	1.8	1.2	-	-	1.1	3.1
2004	2.0	1.9	1.6	1.3	2.3	-	-	6.9	6.7
2005	1.5	1.7	1.5	1.3	2.6	-	-	4.3	5.1
2006	2.8	2.6	1.8	1.9	5.0	-	-	8.0	7.8
2006 Q2	2.9	2.6	1.8	1.6	5.7	-	-	8.1	7.5
Q3	2.8	3.0	1.7	1.8	5.0	-	-	6.9	7.6
Q4	3.3	2.5	2.1	2.2	5.9	-	-	9.2	7.2
2007 Q1	3.2	2.8	1.4	2.0	7.4	-	-	6.7	5.9
Q2	2.5	2.1	1.5	1.9	4.3	-	-	6.2	5.1
<i>contributions to quarter-on-quarter percentage changes of GDP in percentage points</i>									
2006 Q2	1.0	0.9	0.2	0.0	0.6	0.0	0.1	-	-
Q3	0.6	0.8	0.3	0.1	0.2	0.3	-0.3	-	-
Q4	0.9	0.3	0.3	0.1	0.4	-0.5	0.6	-	-
2007 Q1	0.7	0.8	0.0	0.2	0.4	0.2	-0.1	-	-
Q2	0.3	0.2	0.3	0.0	0.0	-0.1	0.2	-	-
<i>contributions to annual percentage changes of GDP in percentage points</i>									
2003	0.8	1.4	0.7	0.4	0.3	0.1	-0.6	-	-
2004	2.0	1.8	0.9	0.3	0.5	0.2	0.2	-	-
2005	1.5	1.7	0.8	0.3	0.5	0.0	-0.2	-	-
2006	2.8	2.6	1.0	0.4	1.0	0.1	0.2	-	-
2006 Q2	2.9	2.6	1.0	0.3	1.2	0.0	0.3	-	-
Q3	2.8	2.9	1.0	0.4	1.0	0.5	-0.1	-	-
Q4	3.3	2.5	1.2	0.4	1.2	-0.4	0.9	-	-
2007 Q1	3.2	2.8	0.8	0.4	1.5	0.0	0.4	-	-
Q2	2.5	2.0	0.8	0.4	0.9	-0.1	0.5	-	-

Sources: Eurostat and ECB calculations.

1) Exports and imports cover goods and services and include cross-border intra-euro area trade. They are not fully consistent with Tables 7.1.2 and 7.3.1.

2) Including acquisitions less disposals of valuables.

3) Annual data are not adjusted for the variations in the number of working days.



## 5.2 Output and demand

## 2. Value added by economic activity

	Gross value added (basic prices)							Taxes less subsidies on products
	Total	Agriculture, hunting, forestry and fishing activities	Mining, manufacturing and energy	Construction	Trade, repairs, hotels and restaurants, transport and communication	Financial, real estate, renting and business activities	Public administration, education, health and other services	
	1	2	3	4	5	6	7	8
	Current prices (EUR billions, seasonally adjusted)							
2003	6,728.1	150.8	1,394.7	390.8	1,427.4	1,831.1	1,533.3	760.9
2004	6,977.5	153.8	1,430.4	412.5	1,478.7	1,908.0	1,594.1	794.8
2005	7,209.5	142.5	1,458.3	438.2	1,516.8	1,997.5	1,656.1	838.1
2006	7,535.7	138.2	1,522.9	481.1	1,569.1	2,105.6	1,718.7	901.6
2006 Q2	1,875.0	34.1	377.7	119.1	389.7	524.1	430.2	224.4
Q3	1,897.2	34.9	383.3	122.1	395.3	530.1	431.7	223.9
Q4	1,917.8	35.1	388.3	124.8	399.6	536.2	433.8	232.7
2007 Q1	1,941.8	35.3	396.1	128.3	401.9	541.9	438.3	237.9
Q2	1,961.1	35.8	400.7	128.1	405.1	549.1	442.3	238.2
	<i>percentage of value added</i>							
2006	100.0	1.8	20.2	6.4	20.8	27.9	22.8	-
	Chain-linked volumes (prices of the previous year, seasonally adjusted <sup>1)</sup> )							
	<i>quarter-on-quarter percentage changes</i>							
2006 Q2	1.0	0.1	0.9	2.9	1.2	1.2	0.3	0.5
Q3	0.6	-0.3	0.9	1.0	0.7	0.6	0.2	0.5
Q4	0.7	0.8	1.0	1.3	0.8	0.8	0.3	2.0
2007 Q1	0.8	1.7	1.2	1.9	0.5	0.8	0.4	-0.3
Q2	0.5	-0.5	0.6	-1.6	0.6	0.9	0.4	-0.6
	<i>annual percentage changes</i>							
2003	0.7	-6.1	0.2	0.1	0.7	1.6	0.9	1.6
2004	2.1	10.4	2.4	0.8	2.5	1.6	1.5	1.6
2005	1.5	-5.9	0.7	1.3	1.6	2.6	1.4	1.6
2006	2.7	-1.6	3.7	4.4	2.8	3.0	1.2	3.4
2006 Q2	2.8	-1.4	3.7	4.6	2.9	3.3	1.3	3.6
Q3	2.9	-2.4	4.1	4.8	3.0	3.1	1.2	2.5
Q4	3.3	0.4	4.6	5.3	3.7	3.4	1.3	3.8
2007 Q1	3.2	2.3	4.0	7.3	3.2	3.5	1.3	2.7
Q2	2.6	1.7	3.6	2.6	2.6	3.1	1.3	1.6
	<i>contributions to quarter-on-quarter percentage changes of value added in percentage points</i>							
2006 Q2	1.0	0.0	0.2	0.2	0.2	0.3	0.1	-
Q3	0.6	0.0	0.2	0.1	0.2	0.2	0.0	-
Q4	0.7	0.0	0.2	0.1	0.2	0.2	0.1	-
2007 Q1	0.8	0.0	0.2	0.1	0.1	0.2	0.1	-
Q2	0.5	0.0	0.1	-0.1	0.1	0.2	0.1	-
	<i>contributions to annual percentage changes of value added in percentage points</i>							
2003	0.7	-0.1	0.1	0.0	0.1	0.4	0.2	-
2004	2.1	0.2	0.5	0.0	0.5	0.4	0.3	-
2005	1.5	-0.1	0.1	0.1	0.3	0.7	0.3	-
2006	2.7	0.0	0.8	0.3	0.6	0.8	0.3	-
2006 Q2	2.8	0.0	0.8	0.3	0.6	0.9	0.3	-
Q3	2.9	0.0	0.8	0.3	0.6	0.9	0.3	-
Q4	3.3	0.0	0.9	0.3	0.8	1.0	0.3	-
2007 Q1	3.2	0.0	0.8	0.5	0.7	1.0	0.3	-
Q2	2.6	0.0	0.7	0.2	0.5	0.9	0.3	-

Sources: Eurostat and ECB calculations.

1) Annual data are not adjusted for the variations in the number of working days.

## 5.2 Output and demand

(annual percentage changes, unless otherwise indicated)

### 3. Industrial production

	Total		Industry excluding construction									Construction
	Total (s.a. index 2000 = 100)	Total	Industry excluding construction and energy							Energy		
			Manu- facturing	Total	Interme- diate goods	Capital goods	Consumer goods					
							Total	Durable	Non-durable			
% of total <sup>1)</sup>	100.0	82.9	82.9	75.0	74.0	30.0	22.4	21.5	3.6	17.9	8.9	17.1
	1	2	3	4	5	6	7	8	9	10	11	12
2004	2.1	102.5	2.2	2.2	2.1	2.4	3.4	0.6	0.1	0.7	2.2	-0.5
2005	1.2	103.9	1.3	1.3	1.1	0.9	2.8	0.4	-1.0	0.7	1.3	-0.2
2006	3.8	108.1	4.0	4.4	4.4	5.0	5.8	2.5	4.2	2.2	0.8	4.1
2006 Q3	4.1	108.7	4.2	4.5	4.4	5.8	5.7	1.7	5.1	1.2	1.5	3.9
Q4	4.2	109.4	4.0	4.9	4.9	5.4	6.6	3.3	5.5	2.9	-3.3	6.9
2007 Q1	4.6	110.3	3.8	5.8	6.0	6.4	7.1	3.9	4.3	3.9	-7.4	10.9
Q2	2.9	110.7	2.6	3.1	3.1	2.8	4.6	2.1	1.3	2.2	-0.6	2.8
2007 Feb.	5.0	110.3	4.1	6.0	6.1	7.1	7.5	3.2	4.8	2.9	-7.1	12.0
Mar.	5.3	111.0	4.2	5.8	6.0	6.6	6.9	4.5	4.5	4.5	-6.6	11.1
Apr.	3.0	110.0	2.9	3.9	4.0	3.7	5.2	2.8	1.5	3.0	-2.9	3.6
May	2.3	111.2	2.7	2.9	2.8	2.4	4.0	2.0	0.4	2.3	2.0	2.1
June	3.4	111.1	2.3	2.6	2.5	2.3	4.6	1.5	2.0	1.4	-0.7	2.7
July	3.6	111.7	3.6	4.3	4.4	3.5	6.5	2.9	2.0	3.0	-0.8	1.6
<i>month-on-month percentage changes (s.a.)</i>												
2007 Feb.	0.9	-	0.6	0.6	0.5	0.7	0.9	0.1	0.7	-0.1	0.7	0.8
Mar.	0.9	-	0.6	0.4	0.8	0.5	0.2	0.8	0.2	1.0	0.9	0.5
Apr.	-1.9	-	-0.9	-1.1	-1.6	-1.6	-1.1	-1.0	-2.0	-0.9	0.6	-1.2
May	0.9	-	1.0	0.9	1.0	0.8	1.1	0.7	1.8	0.5	2.8	0.1
June	0.8	-	-0.1	-0.1	0.0	0.1	0.2	-0.4	0.0	-0.4	0.4	0.5
July	0.2	-	0.6	0.7	0.6	0.4	1.1	0.4	0.0	0.4	0.3	0.0

### 4. Industrial new orders and turnover, retail sales and new passenger car registrations

	Industrial new orders		Industrial turnover		Retail sales							New passenger car registrations	
	Manufacturing <sup>2)</sup> (current prices)		Manufacturing (current prices)		Current prices	Constant prices						Total (s.a., thousands) <sup>3)</sup>	Total
	Total (s.a. index 2000 = 100)	Total	Total (s.a. index 2000 = 100)	Total	Total	Total (s.a. index 2000 = 100)	Total	Food, beverages, tobacco	Non-food				
									Textiles, clothing, footwear	Household equipment			
% of total <sup>1)</sup>	100.0	100.0	100.0	100.0	100.0	100.0	43.7	56.3	10.6	14.8	12	13	
	1	2	3	4	5	6	7	8	9	10	11	12	13
2004	104.0	7.3	106.3	5.1	2.3	105.3	1.6	1.2	1.7	1.9	3.3	926	1.0
2005	109.2	3.9	110.8	3.6	2.2	106.7	1.3	0.7	1.7	2.3	1.2	941	1.6
2006	119.2	9.2	118.9	7.3	3.4	108.9	2.1	0.7	2.7	2.9	4.9	969	2.9
2006 Q3	120.8	9.1	119.9	6.5	3.9	109.3	2.3	1.3	2.8	3.5	5.1	950	-0.9
Q4	122.9	7.4	121.9	7.6	3.4	109.7	2.3	-0.2	3.5	3.1	7.0	985	5.1
2007 Q1	125.3	8.1	124.5	7.6	2.6	109.6	1.6	0.3	2.4	4.2	4.2	950	-1.7
Q2	129.7	10.7	126.1	6.4	2.1	109.8	0.9	-0.2	1.7	3.0	2.4	950	-1.9
2007 Mar.	127.2	7.6	126.0	5.8	3.8	110.2	2.7	2.0	3.1	5.9	5.1	970	0.8
Apr.	126.6	10.5	124.0	9.4	2.8	110.1	1.6	0.5	2.5	6.8	2.9	916	-5.8
May	128.4	7.7	126.4	5.1	1.0	109.3	0.0	-0.5	0.1	-1.8	0.9	965	-0.8
June	134.2	14.0	127.8	5.2	2.4	110.0	1.1	-0.7	2.7	4.1	3.5	968	0.7
July	128.7	10.9	127.0	9.8	2.3	110.4	1.2	-1.5	3.0	5.3	3.4	947	0.8
Aug.	.	.	.	.	.	.	.	.	.	.	.	956	0.7
<i>month-on-month percentage changes (s.a.)</i>													
2007 Mar.	-	2.1	-	1.6	0.8	-	0.6	0.7	0.4	0.1	1.0	-	3.5
Apr.	-	-0.5	-	-1.6	0.0	-	-0.1	-0.1	0.1	1.4	-1.0	-	-5.6
May	-	1.5	-	2.0	-0.6	-	-0.7	-0.8	-0.8	-3.4	-0.4	-	5.4
June	-	4.5	-	1.1	0.7	-	0.6	-0.1	1.1	2.8	1.4	-	0.3
July	-	-4.0	-	-0.6	0.5	-	0.4	0.3	0.3	0.9	0.0	-	-2.1
Aug.	-	.	-	.	.	-	.	.	.	.	.	-	0.9

Sources: Eurostat, except columns 12 and 13 in Table 4 in Section 5.2 (ECB calculations based on data from the ACEA, European Automobile Manufacturers' Association).

1) In 2000.

2) Includes manufacturing industries working mainly on the basis of orders, representing 62.6% of total manufacturing in 2000.

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

**5.2 Output and demand**(percentage balances,<sup>1)</sup> unless otherwise indicated; seasonally adjusted)**5. Business and Consumer Surveys**

	Economic sentiment indicator <sup>2)</sup> (long-term average = 100)	Manufacturing industry					Consumer confidence indicator <sup>3)</sup>				
		Industrial confidence indicator				Capacity utilisation <sup>4)</sup> (percentages)	Total <sup>5)</sup>	Financial situation over next 12 months	Economic situation over next 12 months	Unemployment situation over next 12 months	Savings over next 12 months
		Total <sup>5)</sup>	Order books	Stocks of finished products	Production expectations						
	1	2	3	4	5	6	7	8	9	10	11
2003	93.1	-10	-25	10	4	80.8	-18	-5	-20	37	-10
2004	99.2	-5	-15	8	10	81.5	-14	-4	-14	30	-9
2005	97.9	-7	-17	11	6	81.2	-14	-4	-15	28	-9
2006	106.9	2	0	6	13	83.3	-9	-3	-9	15	-9
2006 Q2	106.8	2	0	6	13	83.0	-10	-3	-10	16	-9
Q3	108.2	4	3	5	12	83.8	-8	-3	-10	12	-8
Q4	109.9	6	6	4	15	84.2	-7	-3	-7	10	-9
2007 Q1	110.0	6	7	4	14	84.6	-5	-2	-5	6	-8
Q2	111.6	6	8	4	15	84.5	-2	-1	0	2	-7
2007 Apr.	111.0	7	9	4	15	84.8	-4	-2	-3	3	-9
May	112.1	6	8	5	14	-	-1	-1	2	1	-6
June	111.7	6	7	4	15	-	-2	-1	2	2	-7
July	111.0	5	6	5	14	84.2	-2	-1	1	0	-7
Aug.	109.9	5	7	5	13	-	-4	-2	-2	3	-7
Sep.	107.1	3	3	6	11	-	-5	-3	-6	5	-7
	Construction confidence indicator			Retail trade confidence indicator				Services confidence indicator			
	Total <sup>5)</sup>	Order books	Employment expectations	Total <sup>5)</sup>	Present business situation	Volume of stocks	Expected business situation	Total <sup>5)</sup>	Business climate	Demand in recent months	Demand in the months ahead
	12	13	14	15	16	17	18	19	20	21	22
2003	-16	-23	-9	-10	-12	16	0	4	-4	3	14
2004	-12	-20	-4	-8	-12	14	1	11	6	8	18
2005	-7	-12	-2	-7	-12	13	4	11	5	10	18
2006	0	-5	5	0	3	14	13	18	13	18	23
2006 Q2	-1	-6	4	1	1	14	16	19	14	18	24
Q3	3	-2	7	2	5	13	14	19	14	19	25
Q4	3	-3	8	2	8	13	11	20	13	21	26
2007 Q1	0	-8	9	-1	1	16	12	21	16	21	25
Q2	0	-6	6	1	4	13	14	22	19	22	25
2007 Apr.	1	-6	7	0	3	17	15	23	19	24	25
May	0	-7	7	2	5	11	13	23	20	23	25
June	1	-5	6	2	4	12	13	21	18	20	25
July	0	-6	6	3	9	14	13	21	17	21	26
Aug.	-1	-9	6	3	10	14	13	21	17	21	24
Sep.	0	-8	8	-3	2	16	4	18	13	18	22

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

- 1) Difference between the percentages of respondents giving positive and negative replies.
- 2) The economic sentiment indicator is composed of the industrial, services, consumer, construction and retail trade confidence indicators; the industrial confidence indicator has a weight of 40%, the services confidence indicator a weight of 30%, the consumer confidence indicator a weight of 20% and the two other indicators a weight of 5% each. Values of the economic sentiment indicator above (below) 100 indicate above-average (below-average) economic sentiment, calculated for the period 1990 to 2006.
- 3) Owing to changes in the questionnaire used for the French survey, euro area results from January 2004 onwards are not fully comparable with previous results.
- 4) Data are collected in January, April, July and October each year. The quarterly figures shown are averages of two successive surveys. Annual data are derived from quarterly averages.
- 5) The confidence indicators are calculated as simple averages of the components shown; the assessments of stocks (columns 4 and 17) and unemployment (column 10) are used with inverted signs for the calculation of confidence indicators.

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

(annual percentage changes, unless otherwise indicated)

### 1. Employment

	Whole economy		By employment status		By economic activity					
	Millions (s.a.)		Employees	Self-employed	Agriculture, hunting, forestry and fishing	Mining, manufacturing and energy	Construction	Trade, repairs, hotels and restaurants, transport and communication	Financial, real estate, renting and business services	Public administration, education, health and other services
% of total <sup>2)</sup>	100.0	100.0	84.6	15.4	4.2	17.6	7.5	25.1	15.5	30.1
	1	2	3	4	5	6	7	8	9	10
2003	136.141	0.4	0.4	0.8	-2.6	-1.4	0.5	0.8	0.9	1.6
2004	137.358	0.9	0.7	1.8	-0.8	-1.1	1.5	1.3	2.2	1.3
2005	138.536	0.9	1.0	0.0	-1.1	-1.3	2.5	0.7	2.4	1.4
2006	140.608	1.5	1.7	0.6	-1.2	-0.2	2.6	1.5	3.6	1.6
2006 Q2	140.519	1.7	1.8	1.0	-0.1	-0.2	1.8	1.9	3.6	1.7
Q3	140.856	1.5	1.7	0.5	-1.5	0.0	2.8	1.6	3.9	1.3
Q4	141.356	1.5	1.7	0.7	-2.4	-0.3	3.9	1.4	3.8	1.5
2007 Q1	142.142	1.7	2.1	-0.1	-1.0	0.3	5.6	1.3	3.8	1.3
Q2	142.918	1.7	2.1	-0.3	.	.	.	.	.	.
	<i>quarter-on-quarter percentage changes (s.a.)</i>									
2006 Q2	0.817	0.6	0.6	0.5	0.8	0.1	0.7	0.8	1.0	0.5
Q3	0.337	0.2	0.4	-0.6	-1.2	0.0	0.7	0.2	1.0	0.1
Q4	0.500	0.4	0.4	0.0	-0.8	0.0	1.7	0.1	0.9	0.3
2007 Q1	0.786	0.6	0.6	0.4	0.2	0.1	2.2	0.4	0.9	0.3
Q2	0.776	0.5	0.6	0.5	.	.	.	.	.	.

### 2. Unemployment

(seasonally adjusted)

	Total		By age <sup>3)</sup>				By gender <sup>4)</sup>			
	Millions	% of labour force	Adult		Youth		Male		Female	
			Millions	% of labour force	Millions	% of labour force	Millions	% of labour force	Millions	% of labour force
% of total <sup>2)</sup>	100.0		75.3		24.7		48.0		52.0	
	1	2	3	4	5	6	7	8	9	10
2003	12.539	8.7	9.344	7.4	3.195	17.6	5.983	7.3	6.556	10.4
2004	12.882	8.8	9.661	7.5	3.221	17.9	6.193	7.5	6.690	10.5
2005	12.660	8.6	9.569	7.4	3.090	17.4	6.140	7.4	6.520	10.1
2006	11.747	7.9	8.851	6.7	2.897	16.5	5.636	6.7	6.112	9.3
2006 Q2	11.792	7.9	8.922	6.8	2.869	16.4	5.704	6.8	6.088	9.3
Q3	11.593	7.8	8.718	6.6	2.875	16.4	5.547	6.6	6.045	9.2
Q4	11.354	7.6	8.508	6.4	2.846	16.3	5.383	6.4	5.972	9.1
2007 Q1	10.864	7.2	8.118	6.1	2.746	15.8	5.126	6.1	5.738	8.7
Q2	10.453	7.0	7.847	5.9	2.606	15.1	4.906	5.8	5.547	8.4
2007 Mar.	10.699	7.1	7.999	6.0	2.700	15.6	5.026	6.0	5.673	8.6
Apr.	10.533	7.0	7.906	6.0	2.626	15.2	4.947	5.9	5.585	8.5
May	10.440	7.0	7.841	5.9	2.598	15.0	4.896	5.8	5.544	8.4
June	10.386	6.9	7.795	5.9	2.592	15.0	4.874	5.8	5.513	8.3
July	10.344	6.9	7.760	5.8	2.584	14.9	4.862	5.8	5.482	8.3
Aug.	10.311	6.9	7.731	5.8	2.580	14.9	4.854	5.8	5.457	8.2

Source: Eurostat.

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

2) In 2006.

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

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

# GOVERNMENT FINANCE

## 6.1 Revenue, expenditure and deficit/surplus <sup>1)</sup>

(as a percentage of GDP)

### 1. Euro area – revenue

	Total		Current revenue								Capital revenue		Memo: fiscal burden <sup>2)</sup>	
	1	2	Direct taxes		Indirect taxes	Received by EU institutions	Social contributions		Sales	Capital taxes	13			
			Households	Corporations			Employers	Employees						
			3	4	5	6	7	8	9	10	11	12	14	
1998	46.5	46.3	12.2	9.1	2.8	13.9	0.6	16.1	8.3	4.9	2.3	0.3	0.3	42.5
1999	47.0	46.7	12.5	9.3	2.9	14.1	0.6	16.1	8.3	4.9	2.3	0.3	0.3	43.0
2000	46.6	46.4	12.7	9.4	3.0	13.9	0.6	15.9	8.2	4.8	2.2	0.3	0.3	42.7
2001	45.8	45.6	12.3	9.2	2.8	13.6	0.6	15.7	8.2	4.7	2.2	0.2	0.3	41.8
2002	45.3	45.0	11.8	9.1	2.5	13.5	0.4	15.7	8.2	4.6	2.1	0.3	0.3	41.3
2003	45.2	44.5	11.5	8.9	2.3	13.5	0.4	15.8	8.3	4.7	2.1	0.6	0.5	41.3
2004	44.7	44.2	11.4	8.6	2.5	13.6	0.3	15.6	8.2	4.6	2.1	0.5	0.4	40.9
2005	45.1	44.7	11.6	8.6	2.7	13.7	0.3	15.5	8.1	4.5	2.2	0.4	0.3	41.2
2006	45.7	45.4	12.2	8.8	3.1	13.9	0.3	15.5	8.1	4.5	2.1	0.3	0.3	41.9

### 2. Euro area – expenditure

	Total		Current expenditure						Capital expenditure			Memo: primary expenditure <sup>3)</sup>		
	1	2	Compensation of employees	Intermediate consumption	Interest	Current transfers	Social payments		Subsidies	Paid by EU institutions	Investment		Capital transfers	Paid by EU institutions
							7	8						
			3	4	5	6	7	8	9	10	11	12	13	14
1998	48.8	45.1	10.6	4.7	4.6	25.2	22.2	2.1	0.5	3.8	2.4	1.4	0.1	44.2
1999	48.4	44.5	10.6	4.8	4.0	25.1	22.1	2.1	0.5	3.9	2.5	1.4	0.1	44.3
2000	47.6	43.9	10.4	4.8	3.9	24.8	21.7	2.0	0.5	3.8	2.5	1.3	0.0	43.7
2001	47.7	43.8	10.3	4.8	3.8	24.8	21.8	1.9	0.5	3.9	2.5	1.4	0.0	43.9
2002	47.8	44.0	10.4	4.9	3.5	25.2	22.3	1.9	0.5	3.8	2.4	1.4	0.0	44.3
2003	48.2	44.3	10.5	5.0	3.3	25.5	22.7	1.9	0.5	4.0	2.5	1.4	0.1	44.9
2004	47.6	43.7	10.4	5.0	3.1	25.2	22.5	1.8	0.5	3.8	2.5	1.4	0.0	44.4
2005	47.7	43.7	10.4	5.1	3.0	25.2	22.5	1.7	0.5	3.9	2.5	1.4	0.0	44.7
2006	47.3	43.2	10.3	5.0	2.9	25.0	22.3	1.7	0.5	4.1	2.5	1.6	0.0	44.4

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

	Deficit (-)/surplus (+)					Primary deficit (-)/surplus (+)	Government consumption <sup>4)</sup>						Collective consumption	Individual consumption
	Total	Central gov.	State gov.	Local gov.	Social security funds		Total	Compensation of employees	Intermediate consumption	Transfers in kind via market producers	Consumption of fixed capital	Sales (minus)		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1998	-2.3	-2.2	-0.2	0.1	0.1	2.3	19.7	10.6	4.7	4.8	1.9	2.3	8.2	11.6
1999	-1.4	-1.7	-0.1	0.1	0.4	2.7	19.9	10.6	4.8	4.8	1.9	2.3	8.3	11.6
2000	-1.0	-1.4	-0.1	0.1	0.5	2.9	19.8	10.4	4.8	4.9	1.9	2.2	8.2	11.6
2001	-1.9	-1.7	-0.4	-0.1	0.3	1.9	19.9	10.3	4.8	5.0	1.9	2.2	8.1	11.7
2002	-2.6	-2.1	-0.5	-0.2	0.2	0.9	20.3	10.4	4.9	5.1	1.9	2.1	8.2	12.0
2003	-3.1	-2.4	-0.5	-0.2	0.0	0.2	20.5	10.5	5.0	5.2	1.9	2.1	8.3	12.2
2004	-2.8	-2.4	-0.4	-0.3	0.1	0.3	20.4	10.4	5.0	5.2	1.9	2.1	8.3	12.2
2005	-2.6	-2.2	-0.3	-0.2	0.2	0.4	20.5	10.4	5.1	5.2	1.9	2.2	8.2	12.3
2006	-1.6	-1.6	-0.1	-0.2	0.3	1.3	20.4	10.3	5.0	5.2	1.9	2.1	8.0	12.4

### 4. Euro area countries – deficit (-)/surplus (+) <sup>5)</sup>

	BE	DE	IE	GR	ES	FR	IT	LU	NL	AT	PT	SI	FI
	1	2	3	4	5	6	7	8	9	10	11	12	13
2003	0.1	-4.0	0.4	-6.2	0.0	-4.1	-3.5	0.4	-3.1	-1.6	-2.9	-2.8	2.5
2004	0.0	-3.7	1.4	-7.9	-0.2	-3.6	-3.5	-1.2	-1.8	-1.2	-3.3	-2.3	2.3
2005	-2.3	-3.2	1.0	-5.5	1.1	-3.0	-4.2	-0.3	-0.3	-1.6	-6.1	-1.5	2.7
2006	0.2	-1.7	2.9	-2.6	1.8	-2.5	-4.4	0.1	0.6	-1.1	-3.9	-1.4	3.9

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

- 1) The data refer to the Euro 13. Revenue, expenditure and deficit/surplus are based on the ESA 95, but the figures exclude proceeds from the sale of UMTS licences in 2000 (the euro area deficit/surplus including those proceeds is equal to 0.0% of GDP). Transactions involving the EU budget are included and consolidated. Transactions among Member States' governments are not consolidated.
- 2) The fiscal burden comprises taxes and social contributions.
- 3) Comprises total expenditure minus interest expenditure.
- 4) Corresponds to final consumption expenditure (P.3) of general government in the ESA 95.
- 5) Includes proceeds from the sale of UMTS licences and settlements under swaps and forward rate agreements.

## 6.2 Debt <sup>1)</sup>

(as a percentage of GDP)

### 1. Euro area – by financial instrument and sector of the holder

	Total	Financial instruments				Holders				
		Currency and deposits	Loans	Short-term securities	Long-term securities	Domestic creditors <sup>2)</sup>				Other creditors <sup>3)</sup>
						Total	MFIs	Other financial corporations	Other sectors	
1	2	3	4	5	6	7	8	9	10	
1997	73.9	2.8	16.0	6.4	48.8	55.5	28.4	13.6	13.5	18.4
1998	72.6	2.7	15.0	5.3	49.6	52.2	26.5	14.5	11.2	20.4
1999	71.8	2.9	14.2	4.2	50.5	48.5	25.3	11.9	11.2	23.3
2000	69.3	2.7	13.0	3.7	49.8	44.0	22.0	11.0	11.0	25.3
2001	68.2	2.8	12.3	4.0	49.2	41.9	20.5	10.3	11.0	26.3
2002	68.0	2.7	11.7	4.5	49.1	40.0	19.3	9.7	11.0	28.0
2003	69.2	2.1	12.3	5.0	49.8	39.3	19.3	10.2	9.8	29.9
2004	69.6	2.2	11.9	5.0	50.6	37.5	18.4	9.9	9.2	32.2
2005	70.5	2.4	11.7	4.7	51.6	35.5	17.3	10.4	7.8	34.9
2006	68.8	2.5	11.3	4.1	50.9	32.7	17.6	7.6	7.5	36.1

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

	Total	Issued by <sup>4)</sup>				Original maturity			Residual maturity			Currencies	
		Central gov.	State gov.	Local gov.	Social security funds	Up to 1 year	Over 1 year	Variable interest rate	Up to 1 year	Over 1 year and up to 5 years	Over 5 years	Euro or participating currencies <sup>5)</sup>	Other currencies
1997	73.9	61.9	6.0	5.4	0.6	9.4	64.5	8.4	18.1	25.3	30.6	71.9	2.0
1998	72.6	60.9	6.1	5.3	0.4	8.1	64.5	7.5	15.4	26.4	30.8	70.8	1.8
1999	71.8	60.3	6.0	5.1	0.4	7.3	64.5	6.6	13.6	27.9	30.4	69.7	2.1
2000	69.3	58.1	5.9	4.9	0.4	6.5	62.8	5.8	13.4	27.9	28.0	67.3	1.9
2001	68.2	57.0	6.1	4.8	0.4	7.0	61.3	5.0	13.7	26.8	27.8	66.5	1.7
2002	68.0	56.6	6.3	4.8	0.4	7.6	60.4	5.0	15.3	25.2	27.5	66.6	1.5
2003	69.2	56.9	6.6	5.1	0.6	7.8	61.4	4.9	14.3	26.1	28.8	68.0	1.1
2004	69.6	57.4	6.7	5.1	0.4	7.8	61.8	4.6	14.3	26.5	28.8	68.5	1.1
2005	70.5	57.9	6.8	5.3	0.5	7.9	62.5	4.9	14.4	26.1	30.0	69.2	1.2
2006	68.8	56.2	6.6	5.4	0.6	7.5	61.3	4.6	13.7	25.1	30.0	67.9	0.9

### 3. Euro area countries

	BE	DE	IE	GR	ES	FR	IT	LU	NL	AT	PT	SI	FI
	1	2	3	4	5	6	7	8	9	10	11	12	13
2003	98.6	63.9	31.2	107.8	48.8	62.4	104.3	6.3	52.0	64.6	56.8	28.6	44.3
2004	94.3	65.7	29.7	108.5	46.2	64.3	103.8	6.6	52.6	63.9	58.2	28.9	44.1
2005	93.2	67.9	27.4	107.5	43.2	66.2	106.2	6.1	52.7	63.5	63.6	28.4	41.4
2006	89.1	67.9	24.9	104.6	39.9	63.9	106.8	6.8	48.7	62.2	64.7	27.8	39.1

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

- 1) The data refer to the Euro 13. Gross general government debt at nominal value and consolidated between sub-sectors of government. Holdings by non-resident governments are not consolidated. Data are partially estimated.
- 2) Holders resident in the country whose government has issued the debt.
- 3) Includes residents of euro area countries other than the country whose government has issued the debt.
- 4) Excludes debt held by general government in the country whose government has issued it.
- 5) Before 1999, this comprises debt in ECU, in domestic currency and in the currencies of other Member States which have adopted the euro.

**6.3 Change in debt <sup>1)</sup>**

(as a percentage of GDP)

**1. Euro area – by source, financial instrument and sector of the holder**

	Total	Source of change				Financial instruments				Holders			
		Borrowing requirement <sup>2)</sup>	Valuation effects <sup>3)</sup>	Other changes in volume <sup>4)</sup>	Aggregation effect <sup>5)</sup>	Currency and deposits	Loans	Short-term securities	Long-term securities	Domestic creditors <sup>6)</sup>	MFIs	Other financial corporations	Other creditors <sup>7)</sup>
		1	2	3	4	5	6	7	8	9	10	11	12
1998	1.8	2.2	-0.3	0.0	-0.1	0.1	-0.3	-0.8	2.8	-0.9	-0.7	1.5	2.7
1999	2.0	1.6	0.4	0.0	0.0	0.2	-0.2	-0.9	2.8	-1.8	-0.2	-2.0	3.8
2000	1.0	1.1	0.0	0.0	-0.1	0.0	-0.5	-0.3	1.9	-2.1	-2.0	-0.4	3.1
2001	1.9	1.9	-0.1	0.1	0.0	0.2	-0.2	0.4	1.4	-0.2	-0.6	-0.2	2.1
2002	2.1	2.7	-0.5	0.0	0.0	0.0	-0.2	0.7	1.6	-0.4	-0.5	-0.3	2.6
2003	3.1	3.3	-0.2	0.0	0.0	-0.6	0.9	0.6	2.1	0.4	0.6	0.7	2.7
2004	3.1	3.2	-0.1	0.0	0.0	0.2	0.1	0.1	2.7	-0.3	-0.3	0.1	3.4
2005	3.1	3.1	0.1	-0.1	0.0	0.3	0.3	-0.1	2.6	-0.7	-0.4	0.8	3.8
2006	1.5	1.4	0.1	0.0	0.0	0.2	0.1	-0.4	1.6	-1.2	1.0	-2.3	2.7

**2. Euro area – deficit-debt adjustment**

	Change in debt	Deficit (-)/ surplus (+) <sup>8)</sup>	Deficit-debt adjustment <sup>9)</sup>											
			Total	Transactions in main financial assets held by general government							Valuation effects	Exchange rate effects	Other changes in volume	Other <sup>10)</sup>
				Total	Currency and deposits	Loans	Securities <sup>11)</sup>	Shares and other equity	Privatisations	Equity injections				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	
1998	1.8	-2.3	-0.5	-0.2	0.2	0.0	0.1	-0.4	-0.7	0.2	-0.3	0.0	0.0	0.0
1999	2.0	-1.4	0.6	0.0	0.5	0.1	0.0	-0.5	-0.7	0.1	0.4	0.2	0.0	0.2
2000	1.0	0.0	1.0	1.0	0.7	0.2	0.2	0.0	-0.4	0.2	0.0	0.1	0.0	0.0
2001	1.9	-1.8	0.0	-0.5	-0.6	0.1	0.1	-0.1	-0.3	0.1	-0.1	0.0	0.1	0.6
2002	2.1	-2.6	-0.4	0.1	0.1	0.0	0.0	0.0	-0.3	0.2	-0.5	-0.1	0.0	0.0
2003	3.1	-3.1	0.0	0.1	0.0	0.0	0.0	0.1	-0.2	0.2	-0.2	-0.1	0.0	0.1
2004	3.1	-2.8	0.3	0.3	0.2	0.0	0.1	0.0	-0.4	0.2	-0.1	-0.1	0.0	0.1
2005	3.1	-2.6	0.5	0.7	0.3	0.1	0.2	0.1	-0.2	0.2	0.1	0.1	-0.1	-0.1
2006	1.5	-1.6	-0.1	0.3	0.4	-0.1	0.2	-0.1	-0.4	0.1	0.1	0.0	0.0	-0.5

Source: ECB.

- 1) The data refer to the Euro 13 and are partially estimated. Annual change in gross nominal consolidated debt is expressed as a percentage of GDP, i.e.  $[\text{debt}(t) - \text{debt}(t-1)] \div \text{GDP}(t)$ .
- 2) The borrowing requirement is by definition equal to transactions in debt.
- 3) Includes, in addition to the impact of foreign exchange movements, effects arising from measurement at nominal value (e.g. premia or discounts on securities issued).
- 4) Includes, in particular, the impact of the reclassification of units and certain types of debt assumption.
- 5) The difference between the changes in the aggregated debt, resulting from the aggregation of countries' debt, and the aggregation of countries' change in debt is due to variations in the exchange rates used for aggregation before 2001.
- 6) Holders resident in the country whose government has issued the debt.
- 7) Includes residents of euro area countries other than the country whose government has issued the debt.
- 8) Including proceeds from sales of UMTS licences.
- 9) The difference between the annual change in gross nominal consolidated debt and the deficit as a percentage of GDP.
- 10) Mainly composed of transactions in other assets and liabilities (trade credits, other receivables/payables and financial derivatives).
- 11) Excluding financial derivatives.



## 6.4 Quarterly revenue, expenditure and deficit/surplus <sup>1)</sup>

(as a percentage of GDP)

### 1. Euro area – quarterly revenue

	Total		Current revenue					Capital revenue		Memo: fiscal burden <sup>2)</sup>
	1	2	Direct taxes	Indirect taxes	Social contributions	Sales	Property income	8	Capital taxes	
2001 Q1	42.3	41.8	10.5	12.7	15.2	1.8	0.8	0.4	0.2	38.6
Q2	46.9	46.5	13.4	13.0	15.6	2.0	1.6	0.4	0.2	42.3
Q3	43.5	43.1	11.6	12.4	15.5	1.9	0.9	0.4	0.3	39.8
Q4	49.1	48.6	13.5	13.9	16.3	2.9	1.1	0.5	0.3	44.0
2002 Q1	41.9	41.5	10.1	12.7	15.4	1.7	0.8	0.4	0.2	38.5
Q2	45.6	45.1	12.6	12.7	15.5	2.0	1.6	0.5	0.3	41.1
Q3	43.5	43.1	11.2	12.8	15.5	1.9	0.8	0.4	0.3	39.7
Q4	49.2	48.6	13.4	14.1	16.3	3.0	0.9	0.6	0.3	44.1
2003 Q1	41.9	41.5	9.8	12.8	15.6	1.7	0.7	0.5	0.2	38.4
Q2	46.0	44.5	12.1	12.7	15.8	2.0	1.3	1.5	1.2	41.7
Q3	42.9	42.4	10.8	12.7	15.5	1.9	0.7	0.5	0.2	39.3
Q4	49.3	48.3	13.2	14.2	16.3	2.9	0.8	1.0	0.3	43.9
2004 Q1	41.4	41.0	9.6	12.8	15.4	1.7	0.6	0.5	0.3	38.1
Q2	45.1	44.3	12.2	13.1	15.4	2.0	0.9	0.8	0.6	41.2
Q3	42.7	42.2	10.6	12.7	15.4	1.9	0.7	0.5	0.3	39.0
Q4	49.4	48.4	13.0	14.4	16.2	2.9	0.8	1.0	0.4	44.1
2005 Q1	42.1	41.6	9.9	12.9	15.4	1.7	0.6	0.5	0.2	38.5
Q2	44.9	44.3	11.9	13.3	15.3	2.0	1.0	0.6	0.3	40.8
Q3	43.4	42.8	11.0	12.9	15.3	1.9	0.7	0.7	0.3	39.6
Q4	49.6	48.8	13.5	14.4	16.2	3.0	0.9	0.8	0.3	44.4
2006 Q1	42.7	42.2	10.3	13.3	15.3	1.7	0.8	0.5	0.3	39.2
Q2	46.1	45.6	12.6	13.7	15.4	2.0	1.2	0.5	0.3	41.9
Q3	43.8	43.3	11.5	13.0	15.4	1.9	0.8	0.5	0.3	40.1
Q4	50.0	49.3	14.3	14.4	16.0	2.9	0.9	0.7	0.3	45.0
2007 Q1	42.4	42.0	10.3	13.5	14.9	1.6	0.9	0.5	0.3	39.0

### 2. Euro area – quarterly expenditure and deficit/surplus

	Total		Current expenditure					Capital expenditure			Deficit (-)/ surplus (+)	Primary deficit (-)/ surplus (+)	
	1	2	Total	Compensation of employees	Intermediate consumption	Interest	Current transfers	Social benefits	Subsidies	Investment			Capital transfers
2001 Q1	45.6	42.3	10.0	4.2	4.0	24.1	20.8	1.3	3.4	1.9	1.5	-3.4	0.6
Q2	46.3	42.8	10.2	4.6	3.9	24.1	20.8	1.3	3.5	2.4	1.1	-0.7	4.5
Q3	46.1	42.5	10.0	4.6	3.8	24.1	20.8	1.4	3.7	2.5	1.2	-2.6	1.2
Q4	51.1	46.2	11.0	5.7	3.6	25.9	22.1	1.7	4.9	3.2	1.7	-2.0	1.5
2002 Q1	46.2	42.8	10.3	4.3	3.7	24.5	21.2	1.3	3.5	2.0	1.5	-4.3	-0.6
Q2	46.6	43.2	10.3	4.9	3.5	24.4	21.2	1.3	3.4	2.3	1.1	-1.0	2.5
Q3	46.9	43.2	10.0	4.7	3.5	24.9	21.5	1.4	3.7	2.5	1.2	-3.3	0.2
Q4	50.9	46.5	11.1	5.7	3.3	26.4	22.7	1.6	4.4	2.8	1.6	-1.7	1.6
2003 Q1	46.9	43.4	10.3	4.5	3.5	25.1	21.5	1.3	3.5	1.9	1.6	-4.9	-1.5
Q2	47.4	43.8	10.4	4.8	3.4	25.2	21.8	1.3	3.6	2.4	1.2	-1.4	2.0
Q3	47.1	43.4	10.2	4.8	3.3	25.1	21.7	1.3	3.7	2.5	1.2	-4.2	-0.9
Q4	51.3	46.4	11.0	5.7	3.1	26.5	22.9	1.5	4.8	3.3	1.6	-1.9	1.2
2004 Q1	46.5	43.1	10.3	4.6	3.2	25.0	21.4	1.2	3.3	1.9	1.4	-5.0	-1.8
Q2	46.6	43.3	10.4	4.8	3.1	24.9	21.6	1.2	3.3	2.3	1.0	-1.5	1.6
Q3	46.2	42.8	10.0	4.7	3.2	25.0	21.6	1.3	3.4	2.5	1.0	-3.4	-0.3
Q4	50.8	45.9	11.0	5.7	3.0	26.2	22.7	1.4	4.9	3.1	1.8	-1.4	1.6
2005 Q1	47.1	43.3	10.3	4.7	3.1	25.2	21.4	1.2	3.8	1.9	1.9	-5.0	-1.9
Q2	46.5	43.1	10.3	5.0	3.2	24.6	21.5	1.1	3.4	2.4	1.0	-1.6	1.6
Q3	45.9	42.5	9.9	4.8	2.9	24.8	21.4	1.2	3.4	2.5	0.9	-2.5	0.5
Q4	50.7	45.9	11.1	5.8	2.8	26.3	22.7	1.4	4.8	3.1	1.6	-1.2	1.6
2006 Q1	45.7	42.5	10.1	4.5	3.0	25.0	21.3	1.2	3.1	1.9	1.2	-3.0	0.0
Q2	46.1	42.7	10.3	4.9	3.1	24.4	21.3	1.1	3.4	2.4	1.0	0.0	3.1
Q3	46.3	42.1	9.9	4.7	2.9	24.6	21.2	1.2	4.3	2.5	1.7	-2.6	0.3
Q4	50.8	45.3	10.7	5.8	2.7	26.1	22.4	1.4	5.5	3.3	2.2	-0.8	1.9
2007 Q1	44.8	41.5	9.9	4.5	2.9	24.2	20.6	1.2	3.3	2.0	1.2	-2.4	0.6

Source: ECB calculations based on Eurostat and national data.

1) Revenue, expenditure and deficit/surplus are based on the ESA 95. Transactions between the EU budget and entities outside the government sector are not included. Otherwise, and except for different data transmission deadlines, the quarterly data are consistent with the annual data. The data are not seasonally adjusted.

2) The fiscal burden comprises taxes and social contributions.

## 6.5 Quarterly debt and change in debt

(as a percentage of GDP)

### 1. Euro area – Maastricht debt by financial instrument<sup>1)</sup>

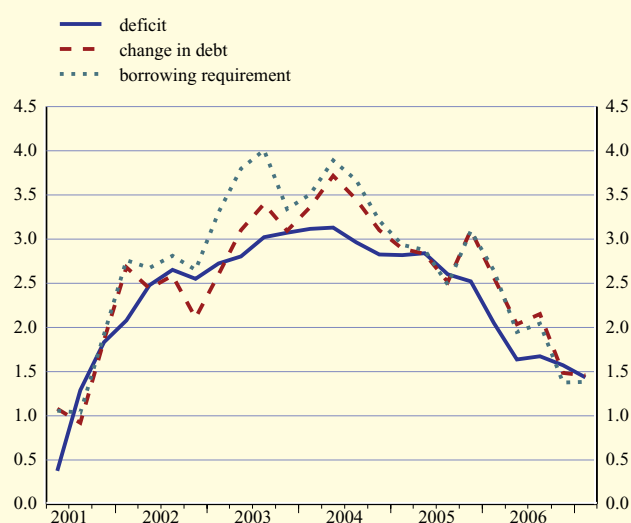
	Total 1	Financial instruments			
		Currency and deposits 2	Loans 3	Short-term securities 4	Long-term securities 5
2004 Q2	71.2	2.2	12.1	5.5	51.5
Q3	71.1	2.3	12.0	5.5	51.3
Q4	69.6	2.2	11.9	5.0	50.6
2005 Q1	71.0	2.2	11.9	5.2	51.7
Q2	71.7	2.3	11.6	5.2	52.5
Q3	71.3	2.4	11.7	5.2	52.0
Q4	70.5	2.4	11.7	4.7	51.6
2006 Q1	70.9	2.5	11.7	4.9	51.7
Q2	71.0	2.5	11.6	4.9	52.0
Q3	70.5	2.5	11.6	4.7	51.6
Q4	68.8	2.5	11.3	4.1	50.9
2007 Q1	69.1	2.4	11.3	4.8	50.5

### 2. Euro area – deficit-debt adjustment

	Change in debt 1	Deficit (-)/ surplus (+) 2	Deficit-debt adjustment								Memo: Borrowing requirement 11
			Total 3	Transactions in main financial assets held by general government				Valuation effects and other changes in volume 9	Other 10		
				Total 4	Currency and deposits 5	Loans 6	Securities 7			Shares and other equity 8	
2004 Q2	5.8	-1.5	4.3	3.9	3.4	0.1	0.2	0.2	0.0	0.3	5.8
Q3	1.8	-3.4	-1.6	-1.2	-1.4	0.0	0.2	0.1	-0.3	-0.2	2.1
Q4	-3.1	-1.4	-4.5	-3.3	-2.5	0.1	-0.2	-0.6	0.0	-1.2	-3.0
2005 Q1	7.3	-5.0	2.3	2.2	1.3	0.1	0.3	0.5	0.1	0.0	7.2
Q2	5.5	-1.6	3.8	3.5	2.5	0.1	0.4	0.5	0.0	0.4	5.5
Q3	0.6	-2.5	-1.9	-2.5	-2.4	0.0	0.3	-0.3	0.0	0.5	0.5
Q4	-0.6	-1.2	-1.8	-0.5	-0.1	0.0	-0.3	-0.1	-0.1	-1.2	-0.5
2006 Q1	4.9	-3.0	2.0	1.3	1.1	0.1	0.6	-0.5	-0.3	0.9	5.2
Q2	3.3	0.0	3.2	3.2	2.5	0.1	0.4	0.2	0.7	-0.6	2.6
Q3	1.1	-2.6	-1.5	-0.8	-0.7	-0.1	0.0	0.0	0.1	-0.8	1.0
Q4	-3.0	-0.8	-3.8	-2.3	-1.4	-0.6	-0.1	-0.2	-0.1	-1.5	-2.9
2007 Q1	4.7	-2.4	2.3	1.7	1.0	0.1	0.6	0.0	-0.4	0.9	5.0

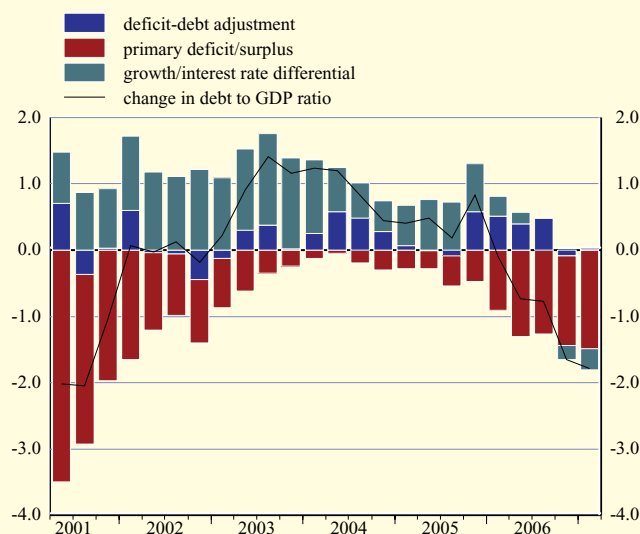
### C28 Deficit, borrowing requirement and change in debt

(four-quarter moving sum as a percentage of GDP)



### C29 Maastricht debt

(annual change in the debt to GDP ratio and underlying factors)



Source: ECB calculations based on Eurostat and national data.

1) The stock data in quarter t are expressed as a percentage of the sum of GDP in t and the previous three quarters.



# EXTERNAL TRANSACTIONS AND POSITIONS

## 7.1 Balance of payments

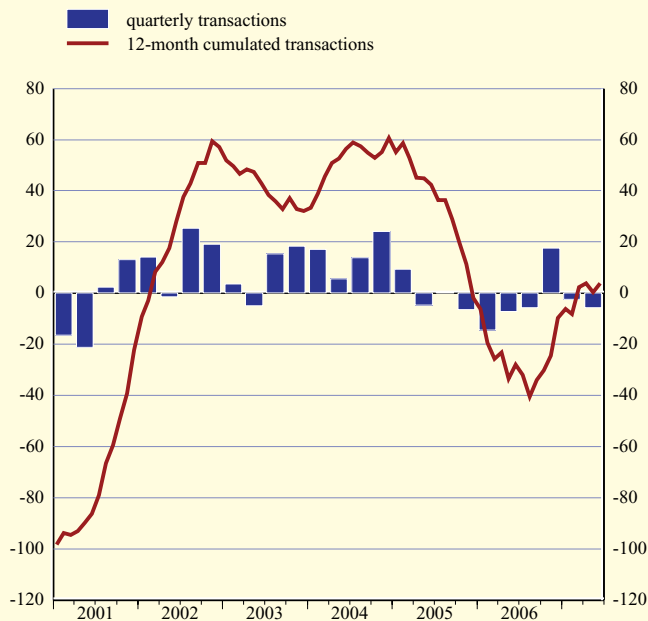
(EUR billions; net transactions)

### 1. Summary balance of payments

	Current account					Capital account	Net lending/borrowing to/from rest of the world (columns 1+6)	Financial account						Errors and omissions
	Total	Goods	Services	Income	Current transfers			Total	Direct investment	Portfolio investment	Financial derivatives	Other investment	Reserve assets	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
2004	60.7	100.5	32.6	-13.7	-58.6	16.6	77.3	-18.7	-68.6	72.9	-8.3	-27.1	12.5	-58.6
2005	-1.9	45.4	34.8	-11.6	-70.5	12.1	10.3	25.5	-210.0	146.1	-13.9	85.3	18.0	-35.8
2006	-9.7	28.6	35.8	1.4	-75.5	10.1	0.4	117.1	-158.8	263.5	-1.9	15.5	-1.3	-117.5
2006 Q2	-7.2	6.8	12.5	-10.6	-15.8	1.3	-5.8	39.1	-20.0	97.6	-2.1	-34.9	-1.5	-33.3
Q3	-5.7	7.5	9.8	0.9	-23.9	2.1	-3.6	51.0	-43.9	22.3	7.9	67.8	-3.2	-47.4
Q4	17.7	17.8	8.5	6.7	-15.4	4.8	22.5	-45.8	-59.4	120.4	-0.1	-104.2	-2.4	23.3
2007 Q1	-2.4	7.6	5.6	5.4	-21.0	5.2	2.8	-12.0	-24.2	122.2	-17.2	-91.4	-1.4	9.2
Q2	-5.7	19.5	13.9	-22.3	-16.9	2.8	-2.9	-21.8	-82.9	90.6	-13.0	-12.1	-4.4	24.8
2006 July	-1.2	4.1	4.2	-1.1	-8.4	0.8	-0.4	8.2	-10.8	4.6	3.4	12.3	-1.3	-7.8
Aug.	-5.9	-2.2	1.8	1.5	-7.0	1.0	-4.8	3.7	-5.5	-22.5	-2.5	35.0	-0.8	1.2
Sep.	1.4	5.6	3.8	0.5	-8.5	0.2	1.7	39.1	-27.7	40.2	7.1	20.5	-1.1	-40.7
Oct.	-0.8	5.6	2.6	-0.9	-8.1	0.5	-0.3	5.1	-10.0	30.8	6.3	-22.1	0.1	-4.8
Nov.	4.8	7.2	2.1	2.7	-7.3	0.9	5.7	-11.0	-12.9	58.9	-2.0	-54.4	-0.6	5.3
Dec.	13.7	5.0	3.8	4.9	0.0	3.4	17.1	-39.9	-36.5	30.7	-4.4	-27.7	-1.9	22.8
2007 Jan.	-6.1	-4.4	0.2	-0.3	-1.7	2.3	-3.7	43.1	-7.4	33.5	-4.6	24.5	-3.0	-39.3
Feb.	-5.7	2.3	2.3	1.5	-11.9	1.2	-4.5	-11.0	-11.0	23.0	-8.4	-14.2	-0.5	15.5
Mar.	9.4	9.6	3.1	4.2	-7.4	1.6	11.1	-44.0	-5.9	65.6	-4.2	-101.7	2.2	33.0
Apr.	-4.3	4.3	3.0	-4.3	-7.3	0.6	-3.7	17.7	-24.5	15.6	-4.1	32.5	-1.8	-14.0
May	-14.0	4.2	3.9	-17.3	-4.9	1.9	-12.1	1.1	-13.4	5.0	-1.9	12.3	-0.7	11.0
June	12.6	11.0	7.0	-0.6	-4.7	0.2	12.9	-40.7	-45.0	70.1	-7.0	-56.8	-1.9	27.8
July	3.3	7.9	4.1	-1.2	-7.5	0.9	4.1	50.6	2.7	33.9	-10.7	27.9	-3.2	-54.7
<i>12-month cumulated transactions</i>														
2007 July	8.4	56.2	37.7	-9.3	-76.2	14.9	23.2	13.8	-197.1	384.9	-36.4	-124.3	-13.3	-37.0

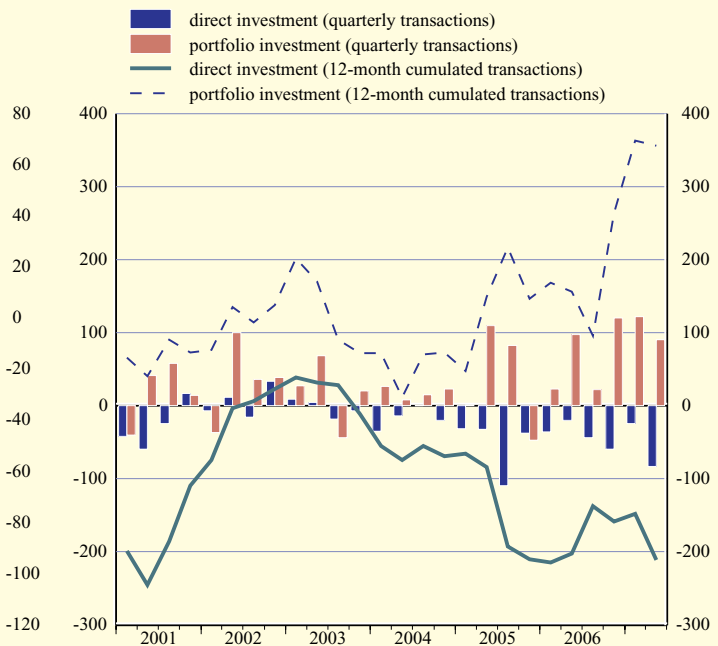
### C30 B.o.p. current account balance

(EUR billions)



### C31 B.o.p. net direct and portfolio investment

(EUR billions)



Source: ECB.

**7.1 Balance of payments**

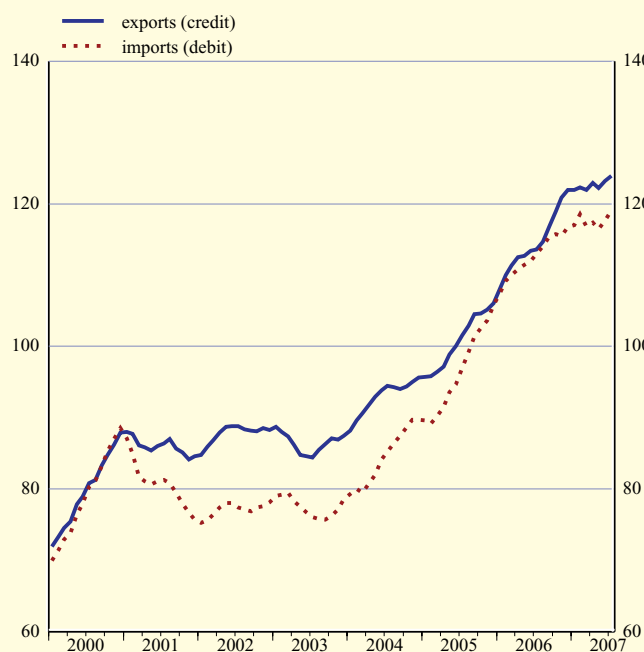
(EUR billions; transactions)

**2. Current and capital accounts**

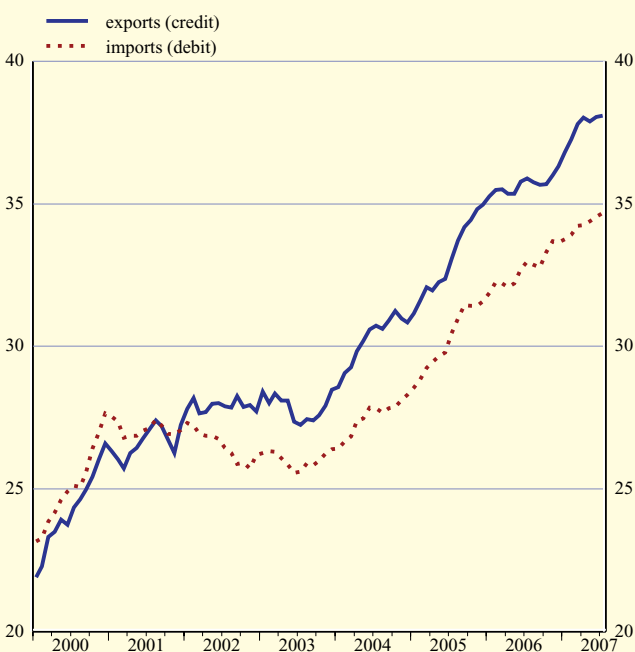
	Current account										Capital account		
	Total			Goods		Services		Income		Current transfers		Credit	Debit
	Credit	Debit	Net	Credit	Debit	Credit	Debit	Credit	Debit	Credit	Debit		
1	2	3	4	5	6	7	8	9	10	11	12	13	
2004	1,866.8	1,806.0	60.7	1,129.3	1,028.9	366.4	333.8	288.9	302.7	82.1	140.7	24.6	8.1
2005	2,066.1	2,067.9	-1.9	1,224.2	1,178.9	401.8	367.0	354.7	366.2	85.4	155.9	24.1	12.0
2006	2,343.0	2,352.8	-9.7	1,389.0	1,360.4	429.3	393.6	438.1	436.7	86.6	162.1	23.7	13.6
2006 Q2	584.9	592.1	-7.2	343.5	336.6	107.5	95.1	116.4	127.0	17.5	33.4	4.5	3.2
Q3	575.8	581.4	-5.7	342.1	334.6	114.1	104.3	104.0	103.1	15.5	39.4	4.4	2.4
Q4	637.2	619.5	17.7	373.2	355.4	110.2	101.7	126.1	119.3	27.7	43.1	8.8	4.0
2007 Q1	609.3	611.7	-2.4	359.5	351.9	103.6	98.0	119.4	114.0	26.8	47.8	7.7	2.5
Q2	636.2	641.9	-5.7	371.6	352.1	114.1	100.2	133.0	155.3	17.5	34.4	4.9	2.2
2007 May	209.0	223.1	-14.0	123.2	118.9	37.7	33.7	41.3	58.6	6.9	11.8	2.6	0.7
June	226.2	213.6	12.6	129.3	118.3	41.0	34.0	50.3	51.0	5.6	10.3	0.9	0.7
July	220.6	217.4	3.3	129.7	121.9	42.9	38.8	42.6	43.8	5.4	12.8	1.8	0.9
	Seasonally adjusted												
2006 Q2	576.3	580.8	-4.5	340.4	335.9	107.3	98.1	107.6	109.3	21.0	37.4	.	.
Q3	590.0	594.5	-4.4	350.5	346.2	107.0	98.3	111.1	109.1	21.5	40.8	.	.
Q4	618.5	611.8	6.7	365.7	350.2	109.0	100.9	119.8	117.4	24.0	43.3	.	.
2007 Q1	629.1	624.7	4.4	365.8	350.4	113.4	102.7	128.1	130.8	21.8	40.8	.	.
Q2	627.6	629.8	-2.2	369.5	352.8	114.1	103.6	123.0	134.3	21.0	39.1	.	.
2006 Nov.	202.5	203.1	-0.6	122.1	115.0	36.6	33.9	37.9	39.9	5.9	14.2	.	.
Dec.	215.1	208.6	6.5	124.2	119.9	36.8	33.0	44.2	41.9	9.9	13.9	.	.
2007 Jan.	203.8	201.6	2.1	119.7	116.1	37.1	34.5	42.2	41.5	4.8	9.6	.	.
Feb.	213.3	217.1	-3.8	123.0	119.6	37.9	34.4	40.3	44.0	12.1	19.1	.	.
Mar.	212.0	206.0	6.0	123.1	114.8	38.4	33.9	45.5	45.3	5.0	12.1	.	.
Apr.	204.9	206.5	-1.6	122.6	117.9	37.7	34.5	38.7	39.4	5.9	14.6	.	.
May	206.3	214.2	-7.8	120.9	116.9	37.5	34.7	39.1	49.5	8.8	13.1	.	.
June	216.4	209.2	7.3	126.0	118.1	38.9	34.3	45.2	45.4	6.3	11.3	.	.
July	215.0	213.3	1.7	124.9	122.2	37.9	34.9	44.0	42.7	8.2	13.4	.	.

**C32 B.o.p. goods**

(EUR billions, seasonally adjusted; three-month moving average)


**C33 B.o.p. services**

(EUR billions, seasonally adjusted; three-month moving average)



Source: ECB.

## 7.1 Balance of payments

(EUR billions)

### 3. Income account

(transactions)

	Compensation of employees		Investment income											
	Credit	Debit	Total		Direct investment				Portfolio investment				Other investment	
			Credit	Debit	Equity		Debt		Equity		Debt		Credit	Debit
					Credit	Debit	Credit	Debit	Credit	Debit	Credit	Debit		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	
2004	15.5	7.9	273.4	294.7	100.6	76.2	13.4	12.8	24.5	56.2	67.7	77.0	67.2	72.4
2005	15.7	9.3	339.0	357.0	121.5	89.1	14.0	13.5	31.3	71.2	78.1	82.4	94.1	100.7
2006	16.1	10.0	421.9	426.7	129.2	72.4	18.4	16.3	38.1	99.5	100.4	89.4	135.8	149.0
2006 Q1	4.0	2.2	87.6	85.1	22.9	12.9	4.2	3.4	8.2	16.0	22.7	21.8	29.6	31.0
Q2	4.0	2.4	112.4	124.6	38.1	18.6	4.5	4.0	13.2	43.0	24.0	23.1	32.5	36.0
Q3	4.0	2.9	100.0	100.1	26.8	15.4	4.5	4.1	8.5	21.4	25.8	21.2	34.4	38.1
Q4	4.2	2.5	121.9	116.8	41.3	25.6	5.2	4.9	8.1	19.1	27.9	23.4	39.4	43.9
2007 Q1	4.0	1.9	115.5	112.1	31.9	18.8	5.0	5.0	9.5	18.7	27.8	25.0	41.3	44.6

### 4. Direct investment

(net transactions)

	By resident units abroad							By non-resident units in the euro area						
	Total	Equity capital and reinvested earnings			Other capital (mostly inter-company loans)			Total	Equity capital and reinvested earnings			Other capital (mostly inter-company loans)		
		Total	MFIs excluding Eurosystem	Non-MFIs	Total	MFIs excluding Eurosystem	Non-MFIs		Total	MFIs excluding Eurosystem	Non-MFIs	Total	MFIs excluding Eurosystem	Non-MFIs
2004	-161.0	-171.1	-21.4	-149.8	10.1	0.1	10.0	92.4	95.7	0.7	95.0	-3.3	0.5	-3.8
2005	-301.6	-242.0	-11.0	-230.9	-59.7	-0.2	-59.5	91.6	64.0	0.7	63.2	27.7	-0.3	28.0
2006	-322.6	-265.8	-34.7	-231.1	-56.8	-1.0	-55.8	163.8	136.7	4.2	132.5	27.0	0.3	26.7
2006 Q2	-112.5	-92.0	-6.5	-85.5	-20.5	-0.6	-19.9	92.5	79.6	0.5	79.1	12.8	1.0	11.9
Q3	-73.5	-65.1	-10.4	-54.6	-8.4	0.2	-8.6	29.6	25.6	1.2	24.4	4.0	-0.3	4.3
Q4	-80.2	-59.1	-16.1	-43.0	-21.1	-0.7	-20.3	20.8	13.7	0.9	12.8	7.1	0.0	7.1
2007 Q1	-76.9	-53.3	-5.0	-48.3	-23.6	2.1	-25.7	52.7	21.3	0.8	20.5	31.4	-0.8	32.3
Q2	-113.5	-82.8	-5.1	-77.7	-30.7	-1.5	-29.2	30.6	33.7	0.6	33.0	-3.1	1.1	-4.2
2006 July	-21.1	-18.1	-1.5	-16.5	-3.1	0.1	-3.1	10.3	7.1	0.4	6.7	3.3	-0.1	3.4
Aug.	-4.3	-7.4	-3.6	-3.8	3.1	0.0	3.1	-1.2	4.6	0.4	4.1	-5.7	-0.1	-5.6
Sep.	-48.0	-39.6	-5.3	-34.3	-8.5	0.1	-8.5	20.4	14.0	0.4	13.6	6.4	-0.1	6.5
Oct.	-20.4	-11.8	-5.8	-6.0	-8.6	0.1	-8.7	10.4	5.1	1.1	4.0	5.3	1.5	3.8
Nov.	-12.8	-17.0	-1.9	-15.1	4.1	-0.2	4.3	-0.1	0.1	-0.2	0.3	-0.2	-1.7	1.5
Dec.	-47.0	-30.3	-8.5	-21.9	-16.6	-0.7	-15.9	10.4	8.5	0.0	8.5	2.0	0.1	1.9
2007 Jan.	-22.7	-22.2	-2.7	-19.5	-0.4	2.3	-2.8	15.3	8.1	0.3	7.8	7.2	-1.0	8.1
Feb.	-30.8	-10.9	5.7	-16.6	-19.9	-0.3	-19.6	19.9	11.6	4.2	7.4	8.3	0.2	8.0
Mar.	-23.4	-20.2	-8.0	-12.2	-3.2	0.1	-3.4	17.6	1.6	-3.7	5.2	16.0	-0.1	16.1
Apr.	-30.1	-19.1	-1.3	-17.8	-11.1	-0.4	-10.7	5.6	4.9	-0.1	5.0	0.7	0.6	0.1
May	-32.9	-28.0	-3.0	-25.1	-4.9	0.1	-5.1	19.5	24.5	0.6	24.0	-5.0	0.5	-5.5
June	-50.5	-35.8	-0.8	-34.9	-14.7	-1.2	-13.5	5.5	4.2	0.2	4.0	1.2	0.0	1.2
July	-13.1	-9.9	-0.7	-9.2	-3.2	0.6	-3.8	15.8	5.3	0.3	5.1	10.4	0.8	9.6

Source: ECB.

**7.1 Balance of payments**

(EUR billions; transactions)

**5. Portfolio investment by instrument and sector of holder**

	Equity					Debt instruments									
	Assets				Liabilities	Bonds and notes					Money market instruments				
	Eurosystème	MFIs excluding Eurosystème	Non-MFIs			Eurosystème	MFIs excluding Eurosystème	Non-MFIs		Liabilities	Eurosystème	MFIs excluding Eurosystème	Non-MFIs		Liabilities
				General gov.				General gov.					General gov.		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
2004	0.0	-22.4	-84.1	-3.7	126.8	0.6	-81.9	-98.1	-2.1	273.5	0.0	-43.1	-14.9	0.1	16.5
2005	-0.1	-14.4	-119.8	-3.5	263.2	-0.7	-119.6	-142.2	-0.8	248.6	0.1	-14.5	-0.1	0.1	45.6
2006	0.0	-25.2	-110.1	-6.1	289.7	-2.4	-168.7	-123.1	-1.1	464.4	-2.0	-48.6	-14.4	0.1	4.1
2006 Q2	0.0	11.1	7.2	-2.6	32.8	1.0	-23.4	-25.6	0.1	116.5	-3.2	-7.6	-0.7	-3.2	-10.4
Q3	0.0	-4.7	-23.7	-0.9	53.5	-0.4	-51.9	-15.7	-0.2	80.9	1.9	-25.0	0.7	3.1	6.8
Q4	0.0	-12.0	-16.0	-1.8	83.0	-2.9	-39.6	-45.7	-0.8	185.2	-1.4	-18.5	-4.3	4.0	-7.4
2007 Q1	0.0	-20.8	0.5	-0.8	107.3	-0.7	-50.5	-37.7	-1.2	137.4	0.7	-23.3	-13.3	-5.5	22.7
Q2	0.0	-5.5	-3.4	-	89.6	-0.4	-55.1	-46.9	-	108.8	-0.1	-15.1	-9.3	-	28.0
2006 July	0.0	3.2	-11.7	-	42.8	0.2	-13.2	-2.0	-	6.2	0.4	-18.1	-1.1	-	-2.0
Aug.	0.0	-4.7	-7.2	-	-13.6	0.0	-8.9	-9.1	-	15.1	1.0	0.2	1.2	-	3.3
Sep.	0.0	-3.2	-4.8	-	24.2	-0.6	-29.8	-4.6	-	59.6	0.5	-7.1	0.5	-	5.5
Oct.	0.0	-4.9	-5.3	-	23.7	-1.8	-15.4	-21.2	-	53.5	-0.3	-5.8	-6.2	-	14.4
Nov.	0.0	0.1	-10.2	-	26.9	-0.5	-25.5	-11.5	-	71.1	-0.4	-9.6	4.2	-	14.2
Dec.	0.0	-7.3	-0.5	-	32.4	-0.6	1.3	-13.0	-	60.6	-0.8	-3.1	-2.4	-	-36.1
2007 Jan.	0.0	-5.6	-1.3	-	44.2	-0.1	-32.0	-10.1	-	34.3	0.5	-7.7	-7.9	-	19.3
Feb.	0.0	-19.0	-9.2	-	38.3	-0.1	-16.3	-9.7	-	37.7	0.1	-5.2	-2.2	-	8.6
Mar.	0.0	3.8	11.0	-	24.8	-0.6	-2.3	-17.9	-	65.4	0.2	-10.4	-3.2	-	-5.2
Apr.	0.0	1.0	-12.9	-	1.1	0.0	-22.8	-3.4	-	39.5	0.0	-3.2	0.2	-	16.2
May	0.0	-9.2	6.8	-	13.2	-0.2	-27.1	-20.7	-	36.4	0.0	-7.4	-2.6	-	15.6
June	0.0	2.7	2.7	-	75.3	-0.2	-5.2	-22.8	-	32.9	-0.1	-4.5	-6.9	-	-3.8
July	0.0	-1.7	0.0	-	52.2	-0.5	-23.3	-11.4	-	14.6	0.0	-1.9	4.2	-	1.7

**6. Other investment by sector**

	Total		Eurosystème		General government		MFIs (excluding Eurosystème)						Other sectors			
	Assets	Liabilities	Assets	Liabilities	Assets	Liabilities	Total		Long-term		Short-term		Assets	Liabilities		
							Assets	Liabilities	Assets	Liabilities	Assets	Liabilities				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
2004	-310.7	283.6	0.4	7.8	-1.6	-2.0	-3.8	-260.1	245.7	6.2	-17.0	-266.3	262.7	-49.3	-9.1	33.8
2005	-569.1	654.3	-0.9	6.7	5.1	-2.4	-2.2	-395.5	483.5	-96.9	55.3	-298.6	428.2	-177.7	-6.0	166.4
2006	-758.3	773.9	-2.9	18.6	3.3	-3.0	1.2	-523.6	492.2	-134.2	84.1	-389.5	408.1	-235.1	25.0	261.8
2006 Q2	-113.7	78.8	0.9	2.1	-11.0	-12.1	0.3	-57.5	9.0	-15.1	21.6	-42.4	-12.5	-46.0	6.7	67.4
Q3	-144.5	212.3	0.5	4.9	12.3	8.5	6.3	-119.9	161.7	-32.6	21.3	-87.3	140.5	-37.4	10.7	39.4
Q4	-281.0	176.8	-1.1	4.7	-5.5	-3.2	-3.2	-210.6	98.6	-73.6	28.2	-136.9	70.3	-63.8	18.1	76.8
2007 Q1	-414.2	322.8	-5.3	6.1	3.8	5.2	1.4	-290.4	266.7	-76.6	29.7	-213.9	237.0	-122.2	-39.2	48.5
Q2	-223.3	211.2	-3.3	9.9	-15.6	-15.6	-0.1	-122.0	173.6	-83.0	53.0	-39.0	120.7	-82.4	-10.7	27.8
2006 July	-58.8	71.1	1.6	1.0	7.2	7.1	2.1	-48.5	64.9	-10.4	8.6	-38.1	56.3	-19.1	8.0	3.1
Aug.	11.1	23.9	-1.5	1.3	0.6	0.0	-0.6	7.3	18.7	-7.1	6.7	14.4	12.0	4.8	0.2	4.5
Sep.	-96.8	117.3	0.5	2.5	4.6	1.5	4.8	-78.6	78.1	-15.1	6.0	-63.5	72.1	-23.2	2.5	31.8
Oct.	-106.9	84.8	-0.5	-1.1	-2.4	-4.1	-2.1	-78.5	64.3	-42.1	5.5	-36.5	58.8	-25.4	3.2	23.7
Nov.	-151.4	97.0	0.5	3.2	-3.8	-4.3	1.6	-106.4	71.3	-10.8	27.9	-95.6	43.4	-41.7	-8.5	21.0
Dec.	-22.7	-5.0	-1.1	2.5	0.7	5.2	-2.7	-25.6	-37.0	-20.8	-5.1	-4.8	-31.9	3.3	23.4	32.1
2007 Jan.	-154.3	178.8	-1.4	3.8	1.0	1.3	-4.8	-100.6	154.6	-31.9	10.4	-68.7	144.2	-53.2	-33.3	25.1
Feb.	-130.7	116.5	-3.6	-0.4	0.1	1.5	4.4	-90.0	81.5	-7.9	8.6	-82.1	72.9	-37.3	-7.7	31.1
Mar.	-129.2	27.4	-0.3	2.7	2.6	2.4	1.7	-99.8	30.6	-36.7	10.8	-63.1	19.8	-31.8	1.8	-7.6
Apr.	-154.2	186.7	0.8	2.1	1.1	-2.3	0.5	-125.6	163.8	-17.0	9.1	-108.6	154.7	-30.4	-6.9	20.2
May	-63.4	75.6	-2.5	-0.8	-4.8	-5.0	-0.3	-27.2	76.5	-25.1	38.2	-2.1	38.3	-28.9	-1.3	0.2
June	-5.7	-51.1	-1.6	8.6	-11.9	-8.2	-0.3	30.8	-66.7	-41.0	5.6	71.7	-72.3	-23.0	-2.6	7.4
July	-6.8	34.7	0.5	-6.7	18.0	14.1	-1.9	-38.6	47.3	-13.2	12.1	-25.3	35.2	13.2	5.5	-4.0

Source: ECB.

## 7.1 Balance of payments

(EUR billions; transactions)

### 7. Other investment by sector and instrument

	Eurosystem				General government								
	Assets		Liabilities		Assets					Liabilities			
	Loans/currency and deposits	Other assets	Loans/currency and deposits	Other liabilities	Trade credits	Loans/currency and deposits			Other assets	Trade credits	Loans	Other liabilities	
						Total	Loans	Currency and deposits					
1	2	3	4	5	6	7	8	9	10	11	12		
2004	0.6	-0.3	7.8	0.0	0.0	-0.4	1.7	-2.0	-1.3	0.0	-3.7	-0.2	
2005	-0.9	0.0	6.6	0.0	0.0	6.3	8.8	-2.4	-1.1	0.0	-1.9	-0.3	
2006	-2.9	0.0	18.6	0.0	0.0	4.2	7.2	-3.0	-0.8	0.0	1.3	-0.1	
2006 Q1	-3.2	0.0	6.9	0.1	0.0	7.7	4.0	3.8	-0.2	0.0	-1.8	-0.4	
Q2	0.9	0.0	2.1	0.0	0.0	-10.8	1.4	-12.1	-0.3	0.0	0.2	0.1	
Q3	0.5	0.0	4.8	0.0	0.0	12.3	3.7	8.5	0.1	0.0	6.2	0.1	
Q4	-1.1	0.0	4.7	0.0	0.0	-5.0	-1.9	-3.2	-0.5	0.0	-3.3	0.0	
2007 Q1	-5.3	0.0	6.1	0.1	0.0	3.9	-1.3	5.2	-0.2	0.0	1.5	-0.1	

	MFIs (excluding Eurosystem)				Other sectors								
	Assets		Liabilities		Assets					Liabilities			
	Loans/currency and deposits	Other assets	Loans/currency and deposits	Other liabilities	Trade credits	Loans/currency and deposits			Other assets	Trade credits	Loans	Other liabilities	
						Total	Loans	Currency and deposits					
13	14	15	16	17	18	19	20	21	22	23	24		
2004	-256.2	-4.0	242.8	2.9	-6.2	-39.0	-30.0	-9.1	-4.1	9.5	22.8	1.6	
2005	-392.3	-3.2	481.9	1.6	-8.9	-152.2	-146.2	-6.0	-16.7	11.8	148.8	5.8	
2006	-519.6	-4.1	489.2	3.0	-6.9	-217.7	-242.7	25.0	-10.6	15.1	239.9	6.8	
2006 Q1	-131.8	-3.9	217.0	5.9	-3.8	-75.7	-65.2	-10.5	-8.4	4.4	68.2	5.6	
Q2	-58.0	0.5	14.6	-5.6	-3.7	-44.2	-50.9	6.7	1.9	4.1	67.9	-4.7	
Q3	-118.8	-1.0	159.5	2.3	2.4	-36.0	-46.8	10.7	-3.8	3.2	33.2	3.0	
Q4	-210.9	0.4	98.2	0.4	-1.7	-61.8	-79.8	18.1	-0.3	3.4	70.5	2.9	
2007 Q1	-282.2	-8.3	264.7	2.0	-2.4	-111.6	-72.4	-39.2	-8.2	-2.0	45.2	5.3	

### 8. Reserve assets

	Total	Monetary gold	Special drawing rights	Reserve position in the IMF	Foreign exchange						Other claims	
					Total	Currency and deposits		Securities				Financial derivatives
						With monetary authorities and the BIS	With banks	Equity	Bonds and notes	Money market instruments		
1	2	3	4	5	6	7	8	9	10	11	12	
2004	12.5	1.2	0.5	4.0	6.8	-2.9	3.3	0.5	18.3	-12.2	-0.1	0.0
2005	18.0	3.9	-0.2	8.6	5.8	0.2	7.2	0.0	-4.9	3.3	0.0	0.0
2006	-1.3	4.2	-0.5	5.2	-10.4	6.1	-2.8	0.0	-19.4	5.7	0.0	0.2
2006 Q1	5.9	0.8	0.0	3.4	2.2	6.2	-4.8	0.0	-4.1	4.9	0.0	-0.5
Q2	-1.5	1.4	0.0	-0.5	-3.1	0.9	2.4	0.0	-7.2	0.7	0.0	0.7
Q3	-3.2	0.9	-0.3	0.8	-4.6	1.0	-2.9	0.0	-4.1	1.4	0.0	0.0
Q4	-2.4	1.1	-0.2	1.6	-4.9	-2.0	2.5	0.0	-4.0	-1.3	0.0	0.0
2007 Q1	-1.4	0.4	0.0	0.8	-2.6	1.4	-5.0	0.4	-5.5	6.1	0.0	0.0

Source: ECB.



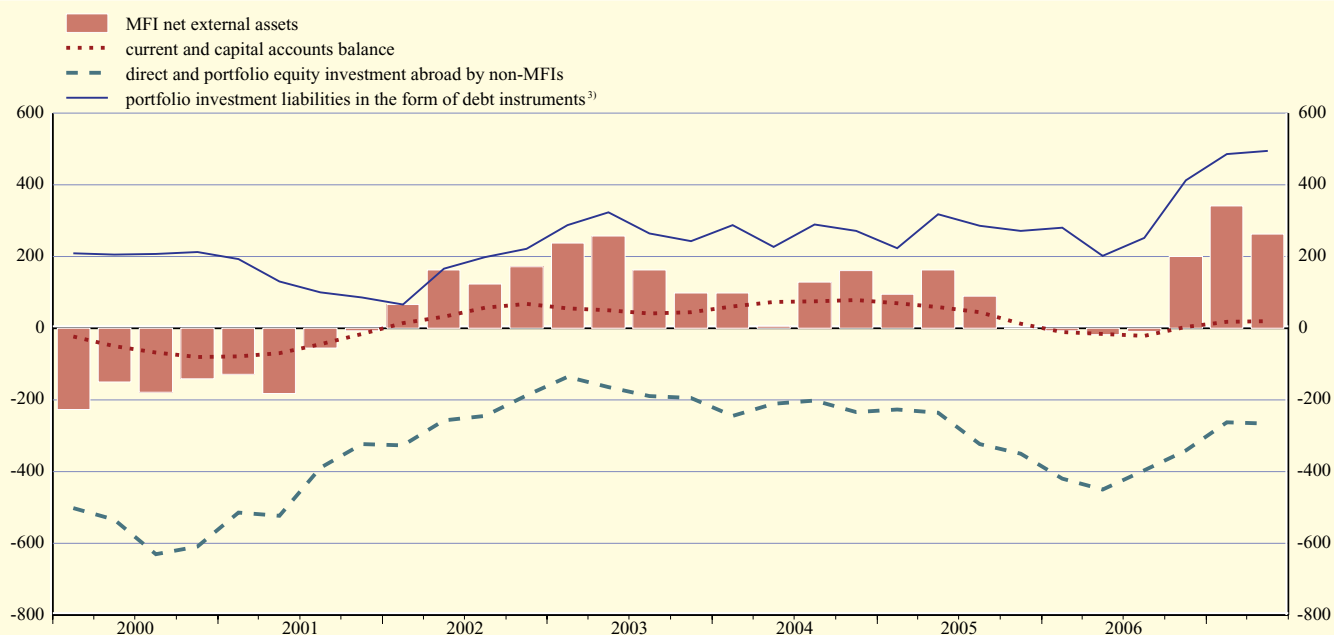
**7.2 Monetary presentation of the balance of payments <sup>1)</sup>**

(EUR billions; transactions)

	B.o.p. items balancing transactions in the external counterpart of M3											Memo: Transactions in the external counterpart of M3
	Current and capital accounts balance	Direct investment		Portfolio investment			Other investment		Financial derivatives	Errors and omissions	Total of columns 1 to 10	
		By resident units abroad (non-MFIs)	By non- resident units in the euro area	Assets	Liabilities		Assets	Liabilities				
					Non-MFIs	Equity <sup>2)</sup>						
1	2	3	4	5	6	7	8	9	10	11	12	
2004	79.1	-139.7	91.7	-196.8	116.9	270.5	-51.0	29.7	-8.3	-58.0	134.0	161.2
2005	12.0	-290.5	92.0	-261.6	220.2	270.4	-172.6	164.2	-13.9	-35.8	-15.5	0.5
2006	2.8	-286.9	163.4	-247.1	228.8	413.0	-231.5	262.8	-1.9	-118.6	184.8	200.4
2006 Q2	-5.5	-105.4	91.5	-19.0	26.3	101.5	-56.9	67.7	-2.1	-34.2	63.8	60.2
Q3	-2.9	-63.3	29.8	-38.7	20.2	78.1	-25.1	45.6	7.9	-47.4	4.3	2.1
Q4	23.1	-63.3	20.9	-65.7	66.9	158.7	-69.4	73.4	-0.1	23.0	167.4	176.1
2007 Q1	2.8	-74.1	53.6	-50.5	88.6	147.2	-118.5	49.9	-17.2	9.2	90.9	102.0
Q2	-2.9	-107.0	29.5	-59.6	78.8	109.9	-98.0	27.7	-13.0	24.8	-9.9	-17.8
2006 July	-0.2	-19.7	10.4	-14.8	24.6	7.6	-11.9	5.2	3.4	-8.0	-3.2	3.9
Aug.	-4.6	-0.7	-1.1	-15.1	-8.4	11.1	5.4	3.8	-2.5	1.2	-11.0	-19.0
Sep.	2.0	-42.9	20.4	-8.9	4.0	59.4	-18.5	36.6	7.1	-40.6	18.6	17.2
Oct.	-0.2	-14.7	8.9	-32.6	13.2	51.6	-27.8	21.5	6.4	-5.5	20.9	25.8
Nov.	5.8	-10.7	1.6	-17.4	31.4	80.3	-45.5	22.5	-2.0	5.1	71.3	69.2
Dec.	17.4	-37.9	10.3	-15.7	22.3	26.8	3.9	29.4	-4.4	23.3	75.3	81.1
2007 Jan.	-3.7	-22.3	16.2	-19.3	34.2	47.2	-52.2	20.3	-4.6	-39.3	-23.6	-22.9
Feb.	-4.5	-36.2	19.6	-21.1	42.9	41.7	-37.2	35.5	-8.4	15.5	48.0	40.6
Mar.	11.1	-15.6	17.7	-10.1	11.5	58.3	-29.1	-5.9	-4.2	33.0	66.5	84.3
Apr.	-3.7	-28.4	5.1	-16.2	-1.2	34.6	-29.3	20.7	-4.1	-14.0	-36.4	-39.9
May	-12.1	-30.1	19.0	-16.5	11.5	38.2	-33.7	-0.1	-1.9	11.0	-14.7	-14.3
June	12.9	-48.4	5.4	-27.0	68.4	37.0	-34.9	7.1	-7.0	27.8	41.2	36.4
July	4.1	-13.0	14.9	-7.2	37.5	13.5	31.2	-5.9	-10.7	-54.7	9.8	21.6
	<i>12-month cumulated transactions</i>											
2007 July	24.3	-300.9	138.3	-207.1	267.4	499.7	-267.7	185.5	-36.4	-37.2	265.8	280.1

**C34 Main b.o.p. transactions underlying the developments in MFI net external assets <sup>1)</sup>**

(EUR billions; 12-month cumulated transactions)



Source: ECB.

1) Data refer to the changing composition of the euro area. For further information, see the General notes.

2) Excluding money market fund shares/units.

3) Excluding debt securities with a maturity of up to two years issued by euro area MFIs.

## 7.3 Geographical breakdown of the balance of payments and international investment position

(EUR billions)

### 1. Balance of payments: current and capital accounts

(cumulated transactions)

	Total	European Union 27 (outside the euro area)						Canada	Japan	Switzerland	United States	Other
		Total	Denmark	Sweden	United Kingdom	Other EU countries	EU institutions					
2006 Q2 to 2007 Q1	1	2	3	4	5	6	7	8	9	10	11	12
Credits												
<b>Current account</b>	2,407.1	910.8	49.3	76.1	469.3	255.4	60.8	31.6	55.3	156.8	389.7	862.9
Goods	1,418.2	515.1	32.4	51.5	227.8	203.3	0.1	17.8	34.1	80.2	199.0	572.0
Services	435.4	156.4	9.0	11.9	104.7	25.5	5.4	6.5	11.1	42.5	79.2	139.8
Income	465.9	174.9	7.4	12.1	125.2	23.9	6.4	6.8	9.9	28.2	104.2	141.9
of which: investment income	449.8	169.5	7.3	12.0	123.4	23.7	3.0	6.7	9.9	21.8	102.7	139.2
Current transfers	87.5	64.5	0.5	0.7	11.7	2.6	49.0	0.6	0.2	5.8	7.3	9.1
<b>Capital account</b>	25.5	20.8	0.0	0.0	0.8	0.1	19.8	0.0	0.4	0.4	0.9	2.9
Debits												
<b>Current account</b>	2,404.7	794.1	40.2	73.5	384.2	199.0	97.3	24.2	88.5	148.4	338.4	1,011.1
Goods	1,378.6	404.8	27.4	47.2	171.7	158.4	0.0	11.2	53.9	69.5	133.5	705.7
Services	399.1	129.4	7.3	9.6	84.3	28.1	0.1	5.8	7.6	30.9	86.0	139.4
Income	463.4	156.2	5.0	15.9	118.6	9.1	7.7	5.5	26.5	42.7	112.0	120.6
of which: investment income	453.7	150.6	4.9	15.8	117.4	4.8	7.7	5.4	26.3	42.2	111.1	118.2
Current transfers	163.6	103.7	0.5	0.9	9.6	3.3	89.5	1.8	0.5	5.3	7.0	45.4
<b>Capital account</b>	12.1	1.8	0.0	0.2	1.1	0.3	0.1	0.1	0.1	0.5	1.6	8.0
Net												
<b>Current account</b>	2.4	116.8	9.1	2.7	85.1	56.4	-36.5	7.3	-33.1	8.4	51.3	-148.2
Goods	39.7	110.3	4.9	4.3	56.0	44.9	0.1	6.6	-19.8	10.7	65.5	-133.6
Services	36.4	27.0	1.7	2.3	20.4	-2.6	5.2	0.7	3.4	11.6	-6.7	0.4
Income	2.5	18.7	2.5	-3.8	6.6	14.9	-1.4	1.3	-16.5	-14.4	-7.8	21.2
of which: investment income	-3.9	18.9	2.4	-3.9	6.1	18.9	-4.7	1.3	-16.5	-20.4	-8.3	21.1
Current transfers	-76.1	-39.2	0.0	-0.2	2.1	-0.8	-40.5	-1.2	-0.3	0.5	0.3	-36.2
<b>Capital account</b>	13.4	19.0	0.0	-0.1	-0.3	-0.2	19.6	-0.1	0.4	-0.1	-0.7	-5.1

### 2. Balance of payments: direct investment

(cumulated transactions)

	Total	European Union 27 (outside the euro area)						Canada	Japan	Switzerland	United States	Offshore financial centres	Other
		Total	Denmark	Sweden	United Kingdom	Other EU countries	EU institutions						
2006 Q2 to 2007 Q1	1	2	3	4	5	6	7	8	9	10	11	12	13
<b>Direct investment</b>	-147.6	-60.9	6.8	5.7	-49.5	-24.0	0.1	-10.8	9.5	-12.2	-35.7	26.3	-63.9
Abroad	-343.2	-151.2	-0.1	3.0	-125.6	-28.4	0.0	-16.5	3.7	-16.8	-67.9	-32.8	-61.6
Equity/reinvested earnings	-269.6	-129.7	-0.6	4.6	-106.7	-26.9	0.0	-6.8	6.0	-8.6	-48.4	-28.5	-53.6
Other capital	-73.6	-21.6	0.5	-1.6	-18.9	-1.5	0.0	-9.6	-2.4	-8.2	-19.5	-4.3	-8.0
In the euro area	195.5	90.4	6.9	2.7	76.1	4.5	0.1	5.6	5.8	4.7	32.2	59.2	-2.3
Equity/reinvested earnings	140.2	61.4	7.9	-1.3	53.7	1.0	0.1	0.0	3.0	7.9	13.9	50.4	3.6
Other capital	55.3	28.9	-1.0	4.0	22.4	3.5	0.0	5.7	2.9	-3.2	18.2	8.8	-5.9

Source: ECB.

## 7.3 Geographical breakdown of the balance of payments and international investment position

(EUR billions)

## 3. Balance of payments: portfolio investment assets by instrument

(cumulated transactions)

	Total	European Union 27 (outside the euro area)						Canada	Japan	Switzerland	United States	Offshore financial centres	Other
		Total	Denmark	Sweden	United Kingdom	Other EU countries	EU institutions						
2006 Q2 to 2007 Q1	1	2	3	4	5	6	7	8	9	10	11	12	13
<b>Portfolio investment assets</b>	-445.7	-101.0	-7.2	-14.2	-80.7	-0.7	1.7	-8.1	0.4	-3.7	-191.7	-96.6	-45.0
Equity	-58.5	2.7	-2.3	-0.9	4.4	1.5	-0.1	0.1	1.4	0.6	-33.9	-34.0	4.7
Debt instruments	-387.2	-103.7	-4.9	-13.3	-85.1	-2.2	1.8	-8.2	-1.0	-4.3	-157.8	-62.6	-49.6
Bonds and notes	-293.1	-79.9	-5.0	-10.0	-65.8	-1.1	2.0	-6.5	-4.6	-1.7	-118.7	-36.7	-45.0
Money market instruments	-94.2	-23.8	0.2	-3.3	-19.3	-1.1	-0.2	-1.7	3.7	-2.6	-39.1	-25.9	-4.6

## 4. Balance of payments: other investment by sector

(cumulated transactions)

	Total	European Union 27 (outside the euro area)						Canada	Japan	Switzerland	United States	Offshore financial centres	Internat. organisations	Other
		Total	Denmark	Sweden	United Kingdom	Other EU countries	EU institutions							
2006 Q2 to 2007 Q1	1	2	3	4	5	6	7	8	9	10	11	12	13	14
<b>Other investment</b>	-162.6	-214.3	-16.1	8.4	-192.6	-22.8	8.8	0.4	32.8	-9.9	64.5	-40.2	15.8	-11.7
Assets	-953.3	-701.8	-35.9	-4.3	-623.2	-35.4	-3.0	-0.6	15.4	-46.4	-67.4	-79.6	-3.3	-69.7
General government	-0.5	-8.8	-0.7	0.2	-7.8	0.0	-0.6	0.0	-0.4	0.0	0.0	0.1	-1.1	9.8
MFIs	-683.3	-476.2	-34.9	-1.3	-408.7	-31.2	-0.1	0.5	11.8	-42.2	-65.3	-54.4	-2.3	-55.2
Other sectors	-269.5	-216.8	-0.4	-3.2	-206.7	-4.2	-2.3	-1.0	4.0	-4.2	-2.1	-25.2	0.1	-24.3
Liabilities	790.7	487.4	19.8	12.7	430.6	12.6	11.7	1.0	17.4	36.5	131.9	39.4	19.1	58.0
General government	4.8	5.5	0.0	0.0	0.2	0.0	5.2	0.0	-0.3	-0.6	-0.2	0.1	2.5	-2.1
MFIs	553.8	303.9	19.1	10.4	264.7	9.6	0.0	-0.4	15.3	38.7	98.6	33.4	16.5	47.8
Other sectors	232.1	178.1	0.7	2.2	165.7	3.0	6.5	1.4	2.4	-1.6	33.5	5.9	0.1	12.3

## 5. International investment position

(end-of-period outstanding amounts)

	Total	European Union 27 (outside the euro area)						Canada	Japan	Switzerland	United States	Offshore financial centres	Internat. organisations	Other
		Total	Denmark	Sweden	United Kingdom	Other EU countries	EU institutions							
2005	1	2	3	4	5	6	7	8	9	10	11	12	13	14
<b>Direct investment</b>	324.1	-142.8	0.8	-17.3	-292.9	166.8	-0.2	25.2	4.7	35.3	-1.6	-13.9	-0.3	417.5
Abroad	2,710.3	957.2	33.8	81.0	651.8	190.6	0.0	76.1	68.8	241.8	558.1	316.1	0.0	492.2
Equity/reinvested earnings	2,184.8	753.5	29.7	56.8	502.1	164.9	0.0	64.9	63.6	193.8	419.2	297.1	0.0	392.8
Other capital	525.4	203.7	4.1	24.2	149.6	25.7	0.0	11.2	5.2	48.1	138.9	19.0	0.0	99.4
In the euro area	2,386.2	1,100.0	33.0	98.3	944.7	23.8	0.2	50.9	64.1	206.6	559.6	330.0	0.3	74.6
Equity/reinvested earnings	1,777.9	874.0	26.9	81.9	757.1	8.0	0.1	45.9	53.5	142.2	396.0	199.7	0.0	66.7
Other capital	608.2	226.0	6.1	16.4	187.6	15.8	0.1	5.1	10.7	64.4	163.6	130.2	0.3	8.0
<b>Portfolio investment assets</b>	3,874.9	1,202.7	61.2	119.3	861.3	90.8	70.0	83.4	270.4	122.3	1,308.8	411.5	30.8	445.0
Equity	1,733.6	422.4	10.9	46.5	342.4	22.6	0.0	21.7	182.4	112.1	617.1	155.6	1.4	220.9
Debt instruments	2,141.3	780.3	50.3	72.8	519.0	68.2	70.0	61.7	88.0	10.2	691.7	255.9	29.4	224.1
Bonds and notes	1,826.7	652.8	45.9	61.6	408.2	67.2	69.9	60.2	62.4	7.8	592.5	228.7	28.7	193.7
Money market instruments	314.6	127.5	4.3	11.2	110.8	1.0	0.1	1.5	25.6	2.4	99.2	27.2	0.7	30.5
<b>Other investment</b>	-304.2	-50.7	51.8	15.4	17.8	9.3	-145.0	4.5	9.4	-81.5	-13.0	-216.6	-22.8	66.4
Assets	3,664.7	1,872.1	77.0	62.0	1,618.3	105.1	9.8	21.7	92.6	209.2	510.6	354.2	41.8	562.6
General government	102.2	17.4	0.2	0.3	8.9	0.5	7.5	0.1	0.1	0.1	3.3	1.2	35.8	44.2
MFIs	2,515.2	1,432.7	65.7	44.5	1,243.0	78.5	0.9	11.6	67.1	122.0	316.3	245.0	5.4	315.2
Other sectors	1,047.4	422.0	11.0	17.2	366.4	26.0	1.4	10.0	25.4	87.2	191.0	107.9	0.6	203.2
Liabilities	3,969.0	1,922.8	25.2	46.6	1,600.5	95.8	154.8	17.2	83.1	290.7	523.6	570.7	64.6	496.2
General government	46.5	23.7	0.0	0.3	3.3	0.0	20.1	0.0	0.8	0.1	7.4	0.2	3.3	11.1
MFIs	3,180.6	1,491.7	20.0	26.3	1,270.8	74.0	100.6	12.2	55.5	243.9	400.6	518.2	60.0	398.5
Other sectors	741.9	407.4	5.2	20.0	326.4	21.8	34.0	5.0	26.8	46.7	115.6	52.3	1.4	86.6

Source: ECB.

## 7.4 International investment position (including international reserves)

(EUR billions, unless otherwise indicated; end-of-period outstanding amounts)

### 1. Summary international investment position

	Total	Total as a % of GDP	Direct investment	Portfolio investment	Financial derivatives	Other investment	Reserve assets
	1	2	3	4	5	6	7
Net international investment position							
2002	-714.9	-9.8	179.5	-940.9	-12.6	-307.1	366.1
2003	-784.9	-10.5	87.4	-916.1	-7.5	-255.4	306.7
2004	-829.9	-10.7	106.7	-996.6	-14.9	-206.2	281.0
2005	-817.1	-10.1	324.1	-1,142.6	-14.4	-304.2	320.1
2006 Q4	-1,059.4	-12.6	385.9	-1,510.3	-14.9	-245.9	325.8
2007 Q1	-1,073.2	-12.6	368.9	-1,594.1	6.9	-186.4	331.5
Outstanding assets							
2002	7,419.6	102.1	2,005.9	2,291.9	133.1	2,622.6	366.1
2003	7,964.9	106.4	2,169.3	2,658.1	160.8	2,670.0	306.7
2004	8,768.7	112.6	2,337.1	3,035.8	174.1	2,940.8	281.0
2005	10,806.1	134.2	2,710.3	3,874.9	236.1	3,664.7	320.1
2006 Q4	12,288.2	145.7	2,959.6	4,376.2	288.6	4,337.8	325.8
2007 Q1	12,995.2	152.1	3,019.3	4,562.3	339.2	4,742.9	331.5
Outstanding liabilities							
2002	8,134.5	111.9	1,826.4	3,232.7	145.7	2,929.7	-
2003	8,749.8	116.9	2,081.9	3,574.2	168.3	2,925.4	-
2004	9,598.6	123.3	2,230.4	4,032.3	189.0	3,147.0	-
2005	11,623.2	144.3	2,386.2	5,017.6	250.5	3,969.0	-
2006 Q4	13,347.5	158.3	2,573.8	5,886.5	303.5	4,583.7	-
2007 Q1	14,068.4	164.7	2,650.4	6,156.4	332.3	4,929.3	-

### 2. Direct investment

	By resident units abroad						By non-resident units in the euro area					
	Equity capital and reinvested earnings			Other capital (mostly inter-company loans)			Equity capital and reinvested earnings			Other capital (mostly inter-company loans)		
	Total	MFIs excluding Eurosystem	Non- MFIs	Total	MFIs excluding Eurosystem	Non- MFIs	Total	MFIs excluding Eurosystem	Non- MFIs	Total	MFIs excluding Eurosystem	Non- MFIs
1	2	3	4	5	6	7	8	9	10	11	12	
2002	1,544.6	132.3	1,412.3	461.3	1.6	459.7	1,295.6	42.1	1,253.5	530.8	2.7	528.1
2003	1,726.8	124.4	1,602.4	442.5	2.1	440.4	1,510.1	46.2	1,464.0	571.8	3.2	568.6
2004	1,897.4	144.6	1,752.8	439.7	3.1	436.5	1,661.2	43.9	1,617.4	569.1	8.2	560.9
2005	2,184.8	166.5	2,018.3	525.4	6.6	518.8	1,777.9	45.9	1,732.1	608.2	10.1	598.1
2006 Q4	2,385.7	192.6	2,193.1	574.0	2.8	571.1	1,937.8	47.7	1,890.2	635.9	10.1	625.8
2007 Q1	2,427.1	206.9	2,220.1	592.2	3.4	588.8	1,960.9	45.6	1,915.3	689.5	12.7	676.8

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

	Equity					Debt instruments												
	Assets				Liabilities	Bonds and notes					Money market instruments							
	Eurosystem		MFIs excluding Eurosystem			Non-MFIs		Eurosystem		MFIs excluding Eurosystem		Non-MFIs		Eurosystem		MFIs excluding Eurosystem		Non-MFIs
			General gov.	Other sectors				General gov.	Other sectors			General gov.	Other sectors			General gov.	Other sectors	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15			
2002	0.7	43.6	8.3	799.2	1,364.4	7.2	403.1	6.3	784.7	1,660.1	1.3	189.4	1.1	47.1	208.2			
2003	1.7	53.5	11.5	1,026.2	1,570.4	9.3	460.2	8.0	846.0	1,755.7	1.1	191.5	0.6	48.5	248.0			
2004	2.1	73.9	16.1	1,160.6	1,755.9	7.9	540.7	9.7	938.0	2,041.3	0.9	231.4	0.4	54.2	235.1			
2005	3.0	100.8	26.6	1,603.3	2,428.0	8.3	693.0	11.6	1,113.9	2,271.9	0.8	260.5	0.4	52.9	317.6			
2006 Q4	2.8	131.4	34.7	1,816.0	2,980.6	10.4	809.1	11.4	1,197.1	2,603.1	0.9	300.8	0.2	61.3	302.7			
2007 Q1	2.8	148.5	35.6	1,856.0	3,123.5	10.5	848.4	12.6	1,248.3	2,720.9	0.1	325.3	5.8	68.1	312.0			

Source: ECB.

**7.4 International investment position (including international reserves)**

(EUR billions, unless stated otherwise; end-of-period outstanding amounts)

**4. Other investment by instrument**

	Eurosystem					General government						
	Assets		Liabilities			Assets				Liabilities		
	Loans/currency and deposits	Other assets	Loans/currency and deposits	Other liabilities	Trade credits	Loans/currency and deposits			Other assets	Trade credits	Loans	Other liabilities
						Total	Loans	Currency and deposits				
1	2	3	4	5	6	7	8	9	10	11	12	
2002	4.9	0.3	57.2	0.1	1.4	62.1	57.4	4.7	55.4	0.1	42.6	13.8
2003	5.2	0.7	66.0	0.2	0.2	59.0	53.2	5.8	42.4	0.0	42.3	3.8
2004	4.7	0.3	74.5	0.2	0.2	62.3	54.1	8.3	42.6	0.0	42.4	3.4
2005	5.4	0.4	82.2	0.2	0.1	57.5	45.7	11.8	44.6	0.0	42.8	3.6
2006 Q4	8.4	0.4	100.0	0.2	0.0	56.0	40.7	15.3	45.1	0.0	44.0	3.7
2007 Q1	13.6	0.3	105.9	0.3	0.0	52.0	41.8	10.2	45.0	0.0	46.1	3.9

	MFIs (excluding Eurosystem)				Other sectors							
	Assets		Liabilities		Assets				Liabilities			
	Loans/currency and deposits	Other assets	Loans/currency and deposits	Other liabilities	Trade credits	Loans/currency and deposits			Other assets	Trade credits	Loans	Other liabilities
						Total	Loans	Currency and deposits				
13	14	15	16	17	18	19	20	21	22	23	24	
2002	1,685.1	61.0	2,250.8	48.4	174.4	487.4	199.3	288.1	90.7	104.5	364.3	47.8
2003	1,734.6	38.5	2,241.9	31.0	169.2	535.9	206.7	329.2	84.3	107.2	387.3	45.7
2004	1,950.5	45.4	2,423.0	42.2	172.4	568.8	236.8	332.0	93.5	110.2	401.4	49.7
2005	2,453.1	56.3	3,045.8	52.4	185.1	730.4	374.9	355.5	131.9	125.3	547.5	69.1
2006 Q4	2,879.0	58.7	3,413.8	55.8	173.9	977.8	598.1	379.7	138.5	124.9	749.3	92.1
2007 Q1	3,141.4	70.0	3,657.9	64.4	185.1	1,088.2	650.5	437.8	147.2	131.4	812.0	107.4

**5. International reserves**

	Reserve assets													Memo		
	Total	Monetary gold		Special drawing rights	Reserve position in the IMF	Foreign exchange							Other claims	Claims on euro area residents in foreign currency	Predetermined short-term net drains in foreign currency	
		In EUR billions	In fine troy ounces (millions)			Total	Currency and deposits		Securities			Financial derivatives				
							With monetary authorities and the BIS	With banks	Total	Equity	Bonds and notes					Money market instruments
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Eurosystem																
2002	366.1	130.4	399.022	4.8	25.0	205.8	10.3	35.3	159.8	1.0	120.2	38.5	0.4	0.0	22.4	-26.3
2003	306.7	130.0	393.543	4.4	23.3	149.0	10.0	30.4	107.9	1.0	80.5	26.5	0.7	0.0	20.3	-16.3
2004	281.0	125.4	389.998	3.9	18.6	133.0	12.5	25.5	94.7	0.5	58.5	35.6	0.4	0.0	19.1	-12.8
2005	320.1	163.4	375.861	4.3	10.6	141.7	12.6	21.4	107.9	0.6	69.6	37.7	-0.2	0.0	25.6	-17.9
2006 Q3	325.1	174.2	367.958	4.5	7.0	139.4	4.5	25.3	109.7	0.5	79.1	30.1	-0.1	0.0	26.8	-21.9
2006 Q4	325.8	176.3	365.213	4.6	5.2	139.7	6.3	22.5	110.7	0.5	79.4	30.8	0.3	0.0	24.6	-21.5
2007 Q1	331.5	180.4	363.108	4.6	4.3	142.2	4.9	27.6	109.4	0.1	84.6	24.7	0.3	0.0	25.1	-22.6
2007 June	325.3	172.8	358.767	4.7	4.3	143.5	5.7	27.7	110.1	-	-	-	0.0	0.0	26.6	-24.6
2007 July	328.8	173.6	357.491	4.7	4.1	146.4	5.1	30.8	110.3	-	-	-	0.2	0.0	25.1	-26.9
2007 Aug.	330.4	175.2	357.219	4.8	4.0	146.5	6.2	28.5	111.5	-	-	-	0.2	0.0	28.5	-27.6
of which held by the European Central Bank																
2002	45.5	8.1	24.656	0.2	0.0	37.3	1.2	9.9	26.1	0.0	19.5	6.7	0.0	0.0	3.0	-5.2
2003	36.9	8.1	24.656	0.2	0.0	28.6	1.4	5.0	22.2	0.0	14.9	7.3	0.0	0.0	2.8	-1.5
2004	35.1	7.9	24.656	0.2	0.0	27.0	2.7	3.3	21.1	0.0	9.7	11.3	0.0	0.0	2.6	-1.3
2005	41.5	10.1	23.145	0.2	0.0	31.2	5.1	2.5	23.6	0.0	10.6	12.9	0.0	0.0	2.9	-0.9
2006 Q3	40.8	10.1	21.312	0.2	0.0	30.5	1.4	3.8	25.3	0.0	18.4	6.9	0.0	0.0	2.9	-0.7
2006 Q4	39.9	9.9	20.572	0.4	0.0	29.6	1.6	1.5	26.5	0.0	19.1	7.4	0.0	0.0	2.8	-0.3
2007 Q1	40.5	10.3	20.632	0.4	0.0	29.9	1.4	3.3	25.2	0.0	19.5	5.8	0.0	0.0	3.0	-0.6
2007 June	40.5	9.4	19.442	0.4	0.0	30.7	1.2	3.0	26.5	-	-	-	0.0	0.0	3.2	-1.6
2007 July	41.4	9.4	19.442	0.4	0.0	31.6	0.7	4.3	26.5	-	-	-	0.0	0.0	3.0	-2.2
2007 Aug.	40.4	9.5	19.442	0.5	0.0	30.4	1.2	2.4	26.8	-	-	-	0.0	0.0	3.4	-1.0

Source: ECB.

## 7.5 Trade in goods

(seasonally adjusted, unless otherwise indicated)

### 1. Values, volumes and unit values by product group

	Total (n.s.a.)		Exports (f.o.b.)					Imports (c.i.f.)					
	Exports	Imports	Total			Memo: Manufactures	Total			Memo:			
			Intermediate	Capital	Consumption		Intermediate	Capital	Consumption	Manufactures	Oil		
	1	2	3	4	5	6	7	8	9	10	11	12	13
Values (EUR billions; annual percentage changes for columns 1 and 2)													
2003	-2.3	0.5	1,056.8	499.2	221.3	299.8	915.6	987.8	552.9	164.0	240.0	709.0	109.1
2004	8.9	9.4	1,142.8	545.8	246.7	314.6	994.9	1,073.2	604.4	183.3	255.4	767.5	129.2
2005	7.8	13.5	1,237.2	590.1	269.6	334.7	1,068.2	1,223.1	705.0	206.5	275.9	842.5	186.3
2006	11.2	13.4	1,380.6	665.0	289.6	369.6	1,182.9	1,392.6	827.7	208.9	304.4	938.6	225.2
2006 Q1	16.1	22.7	332.4	159.2	71.4	90.3	282.8	338.8	199.1	53.3	74.2	224.2	55.5
Q2	9.4	14.5	340.4	163.0	71.6	91.0	290.4	345.8	205.5	52.7	75.6	231.8	57.4
Q3	8.0	10.4	346.7	168.0	71.5	92.1	296.8	352.6	212.4	51.4	75.9	236.3	60.0
Q4	11.7	7.7	361.1	174.8	75.1	96.2	312.9	355.3	210.8	51.5	78.6	246.3	52.4
2007 Q1	9.7	5.4	367.2	176.2	77.6	97.1	312.9	359.5	212.5	52.9	79.1	251.0	46.9
Q2	9.0	4.1	371.6	176.6	78.2	98.6	317.3	360.7	215.8	51.1	79.1	249.1	52.5
2007 Feb.	10.2	7.7	122.1	58.6	26.0	32.1	103.6	121.5	72.0	18.2	26.5	84.3	15.4
Mar.	7.1	0.7	123.2	59.0	25.9	32.5	106.2	117.9	69.3	16.4	26.7	83.1	15.3
Apr.	11.2	6.3	122.6	58.2	26.2	32.1	104.9	119.4	71.4	16.6	26.2	82.1	17.2
May	6.7	1.7	123.3	58.7	25.9	32.7	105.7	120.0	72.3	16.9	26.1	83.4	18.0
June	9.4	4.5	125.6	59.7	26.1	33.8	106.7	121.3	72.1	17.6	26.8	83.6	17.3
July	14.7	11.7	125.0	.	.	.	.	125.7	.	.	.	.	.
Volume indices (2000 = 100; annual percentage changes for columns 1 and 2)													
2003	1.0	3.6	108.5	105.9	106.8	113.1	108.2	101.9	100.2	97.1	109.7	100.2	103.2
2004	9.0	6.5	117.5	115.6	119.9	118.4	117.9	107.9	104.2	109.2	117.4	108.2	105.3
2005	4.9	5.1	123.7	120.2	129.5	123.5	124.0	113.8	107.5	123.7	123.6	116.3	109.8
2006	7.5	5.8	133.3	130.0	136.5	132.3	133.7	120.9	114.1	125.0	131.8	125.3	110.0
2006 Q1	10.7	8.9	128.8	125.4	134.2	129.7	128.2	117.5	110.2	124.8	127.9	119.9	106.0
Q2	5.2	4.0	132.0	128.4	135.5	129.9	132.0	119.6	112.5	126.0	132.1	124.6	107.4
Q3	5.0	4.5	133.9	130.9	135.6	131.9	134.3	121.7	116.1	124.4	131.0	125.7	116.7
Q4	9.0	6.0	138.6	135.2	140.8	137.6	140.3	124.7	117.7	124.9	136.1	130.9	109.8
2007 Q1	8.0	6.4	140.1	134.5	145.3	137.7	139.3	125.7	117.8	129.1	136.6	132.5	100.7
Q2	6.0	3.7	140.1	133.4	145.3	139.0	140.1	124.2	117.1	126.2	135.9	131.3	105.6
2007 Feb.	7.9	8.6	139.4	134.0	146.3	135.9	138.2	127.3	119.7	131.4	137.1	133.0	101.2
Mar.	5.4	1.6	140.8	135.0	144.3	138.5	141.5	123.4	114.9	121.1	138.3	131.9	97.6
Apr.	8.4	6.7	139.2	132.5	146.0	136.1	139.3	124.1	117.2	122.9	134.8	129.9	105.3
May	3.6	2.4	139.4	132.9	144.5	138.0	140.0	124.6	118.5	125.5	134.7	132.2	109.6
June	6.3	2.2	141.8	134.7	145.4	142.9	141.0	124.0	115.7	130.3	138.1	131.9	101.9
July	.	.	.	.	.	.	.	.	.	.	.	.	.
Unit value indices (2000 = 100; annual percentage changes for columns 1 and 2)													
2003	-3.2	-3.0	97.6	96.2	96.3	101.1	97.4	94.8	93.6	92.3	99.5	96.0	86.4
2004	-0.1	2.6	97.5	96.4	95.7	101.3	97.1	97.3	98.4	91.8	98.9	96.3	99.6
2005	2.8	7.9	100.2	100.2	96.8	103.4	99.1	105.0	111.2	91.2	101.5	98.3	137.6
2006	3.5	7.3	103.7	104.5	98.6	106.6	101.8	112.7	123.1	91.3	105.1	101.7	166.7
2006 Q1	4.9	12.8	103.4	103.7	99.0	106.2	101.6	112.9	122.6	93.3	105.6	101.5	170.3
Q2	4.0	10.1	103.4	103.7	98.3	106.9	101.3	113.2	124.0	91.5	104.2	101.1	173.8
Q3	2.8	5.6	103.8	104.8	98.1	106.5	101.7	113.4	124.1	90.4	105.4	102.1	167.1
Q4	2.5	1.5	104.4	105.6	99.2	106.7	102.6	111.5	121.5	90.1	105.1	102.2	155.5
2007 Q1	1.6	-0.9	105.1	107.0	99.4	107.6	103.4	111.9	122.5	89.6	105.4	102.9	151.4
Q2	2.8	0.4	106.3	108.2	100.2	108.2	104.3	113.6	125.1	88.5	105.9	103.0	161.9
2007 Feb.	2.1	-0.8	105.3	107.2	99.1	108.1	103.5	112.1	122.5	90.6	105.4	103.3	148.7
Mar.	1.6	-0.9	105.2	107.1	100.0	107.5	103.6	112.2	122.7	89.0	105.5	102.6	153.2
Apr.	2.6	-0.4	105.9	107.7	100.1	107.9	104.0	113.0	124.0	88.5	106.2	102.9	159.2
May	3.0	-0.7	106.4	108.2	100.1	108.6	104.3	113.1	124.3	88.2	105.7	102.8	160.5
June	2.9	2.2	106.6	108.6	100.3	108.2	104.5	114.8	126.9	88.8	105.8	103.3	166.0
July	.	.	.	.	.	.	.	.	.	.	.	.	.

Sources: Eurostat and ECB calculations based on Eurostat data (volume indices and seasonal adjustment of unit value indices).

**7.5 Trade in goods**

(EUR billions, unless otherwise indicated; seasonally adjusted)

**2. Geographical breakdown**

	Total	European Union 27 (outside the euro area)				Russia	Switzer-land	Turkey	United States	Asia			Africa	Latin America	Other countries
	1	Denmark	Sweden	United Kingdom	Other EU countries	6	7	8	9	China	Japan	Other Asian countries	13	14	15
<b>Exports (f.o.b.)</b>															
2003	1,056.8	24.9	38.6	194.5	125.0	29.1	63.3	24.8	167.0	35.1	31.2	135.3	59.2	37.9	90.9
2004	1,142.8	25.7	42.2	205.4	138.3	35.9	66.2	32.1	172.6	40.3	33.2	150.4	64.2	40.4	96.1
2005	1,237.2	29.0	45.1	203.2	157.9	43.6	70.7	34.8	185.0	43.3	34.0	165.9	72.9	46.9	104.9
2006	1,380.6	31.2	49.6	214.7	193.7	55.2	77.2	38.5	199.6	53.6	34.5	183.5	77.1	54.4	118.0
2006 Q1	332.4	7.6	11.7	53.3	44.5	12.5	18.2	9.6	49.6	12.6	8.8	43.5	19.3	13.1	28.1
Q2	340.4	7.8	12.2	53.3	47.6	13.0	18.6	9.8	49.6	12.8	8.5	45.1	18.9	13.3	30.1
Q3	346.7	7.8	12.7	54.3	49.5	14.2	19.6	9.6	49.6	13.6	8.6	45.9	19.0	13.7	28.7
Q4	361.1	8.0	13.1	53.8	52.1	15.5	20.9	9.5	50.8	14.6	8.6	48.9	19.8	14.2	31.2
2007 Q1	367.2	8.3	13.5	56.1	53.8	15.8	20.5	10.1	49.2	14.2	8.7	49.3	21.3	14.9	31.4
Q2	371.6	8.4	13.9	56.2	55.2	16.6	20.1	9.8	49.0	15.1	8.9	49.3	21.0	15.2	32.9
2007 Feb.	122.1	2.8	4.4	18.7	17.8	5.2	6.8	3.2	16.4	4.8	2.9	16.3	7.1	5.0	10.6
Mar.	123.2	2.8	4.5	18.6	18.2	5.4	6.7	3.4	16.1	4.7	2.9	16.4	7.1	5.0	11.4
Apr.	122.6	2.8	4.4	18.5	18.2	5.4	6.7	3.3	16.8	4.9	2.9	16.1	7.0	5.1	10.4
May	123.3	2.8	4.7	18.8	18.5	5.6	6.8	3.3	15.9	5.2	2.9	16.3	7.0	5.1	10.4
June	125.6	2.7	4.8	18.9	18.5	5.6	6.6	3.2	16.3	5.0	3.0	16.9	7.0	5.0	12.1
July	125.0	.	.	.	.	5.7	6.4	3.3	16.2	5.0	3.0	16.8	7.1	5.0	.
<i>% share of total exports</i>															
2006	100.0	2.3	3.6	15.6	14.0	4.0	5.6	2.8	14.5	3.9	2.5	13.3	5.6	3.9	8.5
<b>Imports (c.i.f.)</b>															
2003	987.8	23.7	36.9	138.6	108.9	47.3	50.4	19.2	110.5	74.4	52.0	141.8	68.8	39.7	75.6
2004	1,073.2	25.4	39.8	145.0	116.6	56.4	53.5	23.2	113.1	92.1	54.4	160.9	72.8	45.2	74.9
2005	1,223.1	26.3	42.2	152.6	129.2	76.7	58.0	25.2	119.9	117.9	53.1	189.8	95.9	53.5	82.8
2006	1,392.6	27.8	47.4	165.8	153.7	94.6	62.1	29.1	128.5	143.7	56.4	213.0	109.5	66.0	94.9
2006 Q1	338.8	6.9	11.4	41.4	35.3	23.4	15.0	7.0	31.6	33.2	14.2	52.3	26.9	15.6	24.6
Q2	345.8	6.8	11.4	42.7	37.3	24.5	15.4	7.5	31.8	35.0	14.0	53.7	27.0	15.9	22.8
Q3	352.6	7.1	12.0	41.3	39.4	23.8	15.9	7.3	32.3	35.9	14.2	54.3	27.7	16.7	24.7
Q4	355.3	6.9	12.6	40.4	41.8	23.0	15.8	7.3	32.8	39.6	14.0	52.7	27.9	17.8	22.8
2007 Q1	359.5	7.0	12.8	40.3	42.0	22.9	16.7	7.9	33.3	41.8	14.7	52.3	26.0	18.1	23.8
Q2	360.7	7.1	13.0	41.4	43.6	23.7	16.6	7.9	32.1	39.9	14.1	53.0	27.4	17.5	23.7
2007 Feb.	121.5	2.3	4.2	13.6	13.9	7.7	5.6	2.7	11.4	13.9	5.0	18.0	8.9	6.1	8.3
Mar.	117.9	2.3	4.2	13.2	14.1	7.6	5.6	2.6	10.7	14.2	4.7	16.7	8.3	5.8	8.0
Apr.	119.4	2.4	4.3	13.9	14.2	8.0	5.6	2.6	10.7	13.0	4.5	17.6	8.6	5.7	8.2
May	120.0	2.3	4.4	13.6	14.6	7.8	5.5	2.6	11.0	13.3	4.9	17.8	9.3	5.9	7.1
June	121.3	2.4	4.3	13.9	14.8	7.9	5.5	2.7	10.4	13.5	4.6	17.5	9.4	5.9	8.4
July	125.7	.	.	.	.	8.2	5.6	2.7	10.8	14.6	5.0	18.2	9.4	5.9	.
<i>% share of total imports</i>															
2006	100.0	2.0	3.4	11.9	11.0	6.8	4.5	2.1	9.2	10.3	4.1	15.3	7.9	4.7	6.8
<b>Balance</b>															
2003	69.1	1.2	1.7	55.9	16.1	-18.1	12.9	5.6	56.5	-39.3	-20.8	-6.4	-9.7	-1.8	15.3
2004	69.6	0.4	2.4	60.4	21.7	-20.5	12.7	8.9	59.4	-51.8	-21.1	-10.6	-8.5	-4.9	21.2
2005	14.1	2.7	2.9	50.6	28.7	-33.1	12.7	9.6	65.1	-74.6	-19.1	-23.9	-23.0	-6.7	22.0
2006	-11.9	3.4	2.2	48.9	40.0	-39.4	15.1	9.5	71.1	-90.1	-21.9	-29.6	-32.4	-11.7	23.1
2006 Q1	-6.5	0.7	0.3	11.9	9.2	-10.8	3.1	2.6	18.0	-20.6	-5.3	-8.8	-7.7	-2.5	3.4
Q2	-5.4	0.9	0.8	10.6	10.3	-11.5	3.2	2.3	17.8	-22.2	-5.6	-8.6	-8.0	-2.6	7.3
Q3	-5.8	0.7	0.7	13.0	10.1	-9.6	3.6	2.4	17.3	-22.3	-5.6	-8.3	-8.7	-3.0	4.0
Q4	5.7	1.1	0.5	13.4	10.4	-7.4	5.1	2.2	18.0	-25.0	-5.4	-3.8	-8.0	-3.6	8.3
2007 Q1	7.7	1.4	0.7	15.8	11.8	-7.1	3.8	2.2	15.9	-27.6	-6.0	-2.9	-4.7	-3.2	7.6
Q2	10.9	1.4	0.9	14.8	11.7	-7.1	3.5	1.9	16.9	-24.8	-5.2	-3.7	-6.4	-2.3	9.2
2007 Feb.	0.6	0.5	0.2	5.1	4.0	-2.5	1.2	0.5	5.0	-9.1	-2.1	-1.7	-1.8	-1.1	2.3
Mar.	5.3	0.5	0.3	5.3	4.1	-2.2	1.1	0.7	5.5	-9.4	-1.8	-0.2	-1.1	-0.8	3.4
Apr.	3.2	0.4	0.1	4.6	4.1	-2.6	1.2	0.6	6.1	-8.2	-1.6	-1.6	-1.6	-0.6	2.2
May	3.3	0.6	0.3	5.1	4.0	-2.3	1.3	0.7	4.9	-8.1	-2.0	-1.4	-2.3	-0.8	3.3
June	4.4	0.4	0.5	5.1	3.7	-2.2	1.0	0.5	5.9	-8.5	-1.6	-0.7	-2.4	-0.9	3.7
July	-0.7	.	.	.	.	-2.4	0.9	0.6	5.4	-9.6	-2.0	-1.4	-2.3	-0.8	.

Sources: Eurostat and ECB calculations based on Eurostat data (balance and columns 5, 12 and 15).



## EXCHANGE RATES

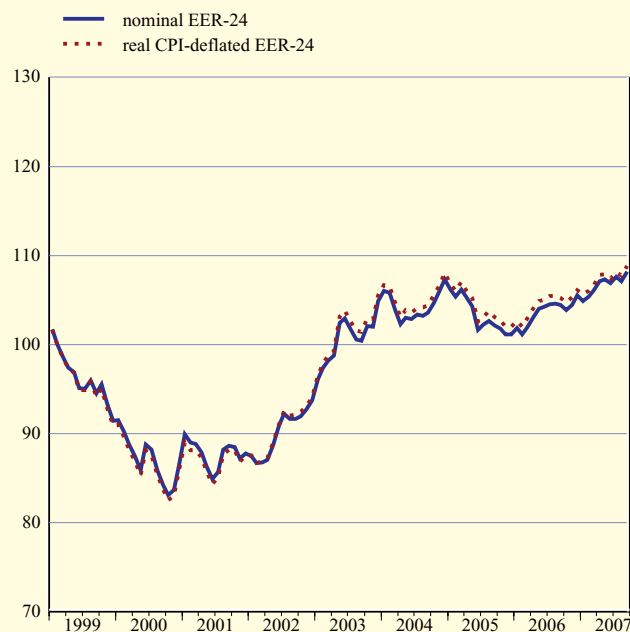
### 8.1 Effective exchange rates <sup>1)</sup>

(period averages; index 1999 Q1=100)

	EER-24						EER-44		
	Nominal	Real CPI	Real PPI	Real GDP deflator	Real ULCM	Real ULCT	Nominal	Real CPI	
	1	2	3	4	5	6	7	8	
2004	104.3	105.1	104.2	103.5	101.0	103.7	111.2	105.6	
2005	103.3	104.2	102.5	102.3	99.4	102.1	109.7	103.7	
2006	103.6	104.5	102.9	102.3	99.8	101.7	110.0	103.4	
2006 Q3	104.5	105.4	103.7	103.0	101.2	102.7	111.2	104.5	
Q4	104.6	105.4	104.1	103.2	99.7	101.0	111.3	104.3	
2007 Q1	105.5	106.1	104.5	104.0	99.8	102.2	112.0	104.8	
Q2	107.1	107.7	104.6	105.4	101.1	103.2	113.5	106.0	
Q3	107.6	108.2	104.9	.	.	.	114.1	106.5	
2006 Sep.	104.4	105.2	103.4	-	-	-	111.1	104.2	
Oct.	103.9	104.7	103.4	-	-	-	110.4	103.6	
Nov.	104.5	105.3	103.9	-	-	-	111.1	104.2	
Dec.	105.5	106.1	104.9	-	-	-	112.3	105.0	
2007 Jan.	104.9	105.6	104.4	-	-	-	111.5	104.3	
Feb.	105.4	106.1	104.6	-	-	-	111.9	104.6	
Mar.	106.1	106.7	104.6	-	-	-	112.7	105.4	
Apr.	107.1	107.8	105.0	-	-	-	113.7	106.3	
May	107.3	107.9	104.5	-	-	-	113.6	106.1	
June	106.9	107.4	104.2	-	-	-	113.1	105.6	
July	107.6	108.1	104.6	-	-	-	113.9	106.3	
Aug.	107.1	107.7	104.6	-	-	-	113.7	106.1	
Sep.	108.2	108.9	105.6	-	-	-	114.7	107.1	
	<i>% change versus previous month</i>								
2007 Sep.	1.0	1.1	1.0	-	-	-	1.0	0.9	
	<i>% change versus previous year</i>								
2007 Sep.	3.6	3.5	2.1	-	-	-	3.3	2.8	

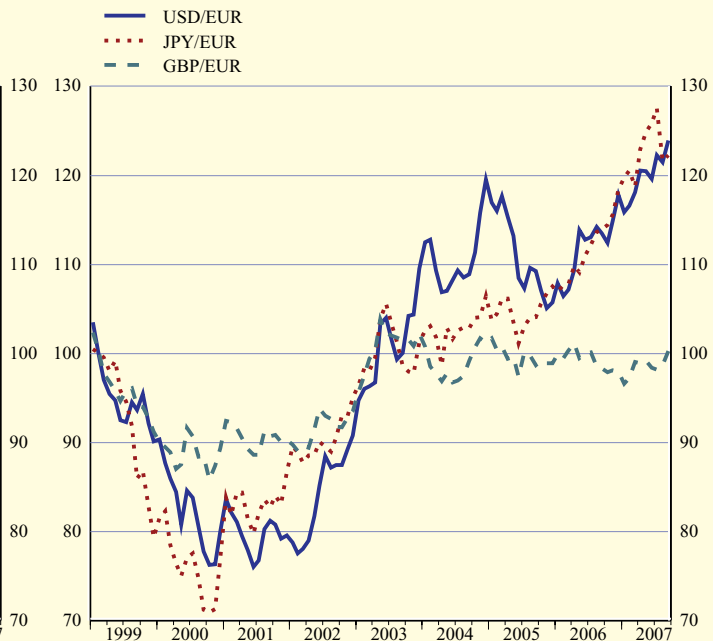
### C35 Effective exchange rates

(monthly averages; index 1999 Q1=100)



### C36 Bilateral exchange rates

(monthly averages; index 1999 Q1=100)



Source: ECB.

1) For the definition of the trading partner groups and other information, please refer to the General notes.



## 8.2 Bilateral exchange rates

(period averages; units of national currency per euro)

	Danish krone 1	Swedish krona 2	Pound sterling 3	US dollar 4	Japanese yen 5	Swiss franc 6	South Korean won 7	Hong Kong dollar 8	Singapore dollar 9	Canadian dollar 10	Norwegian krone 11	Australian dollar 12
2004	7.4399	9.1243	0.67866	1.2439	134.44	1.5438	1,422.62	9.6881	2.1016	1.6167	8.3697	1.6905
2005	7.4518	9.2822	0.68380	1.2441	136.85	1.5483	1,273.61	9.6768	2.0702	1.5087	8.0092	1.6320
2006	7.4591	9.2544	0.68173	1.2556	146.02	1.5729	1,198.58	9.7545	1.9941	1.4237	8.0472	1.6668
2007 Q1	7.4524	9.1894	0.67062	1.3106	156.43	1.6162	1,230.80	10.2334	2.0073	1.5357	8.1690	1.6670
Q2	7.4500	9.2573	0.67880	1.3481	162.89	1.6478	1,252.05	10.5372	2.0562	1.4791	8.1060	1.6214
Q3	7.4446	9.2639	0.68001	1.3738	161.90	1.6473	1,274.31	10.7250	2.0841	1.4374	7.9175	1.6229
2007 Mar.	7.4494	9.2992	0.68021	1.3242	155.24	1.6124	1,248.82	10.3464	2.0186	1.5472	8.1340	1.6704
Apr.	7.4530	9.2372	0.67934	1.3516	160.68	1.6375	1,257.99	10.5634	2.0476	1.5334	8.1194	1.6336
May	7.4519	9.2061	0.68136	1.3511	163.22	1.6506	1,253.27	10.5642	2.0581	1.4796	8.1394	1.6378
June	7.4452	9.3290	0.67562	1.3419	164.55	1.6543	1,245.39	10.4854	2.0619	1.4293	8.0590	1.5930
July	7.4410	9.1842	0.67440	1.3716	166.76	1.6567	1,259.70	10.7247	2.0789	1.4417	7.9380	1.5809
Aug.	7.4429	9.3231	0.67766	1.3622	159.05	1.6383	1,273.37	10.6469	2.0744	1.4420	7.9735	1.6442
Sep.	7.4506	9.2835	0.68887	1.3896	159.82	1.6475	1,291.46	10.8151	2.1009	1.4273	7.8306	1.6445
	<i>% change versus previous month</i>											
2007 Sep.	0.1	-0.4	1.7	2.0	0.5	0.6	1.4	1.6	1.3	-1.0	-1.8	0.0
	<i>% change versus previous year</i>											
2007 Sep.	-0.1	0.2	2.0	9.2	7.3	4.0	6.5	9.2	4.5	0.5	-5.2	-2.3
	Czech koruna 13	Estonian kroon 14	Cyprus pound 15	Latvian lats 16	Lithuanian litas 17	Hungarian forint 18	Maltese lira 19	Polish zloty 20	Slovak koruna 21	Bulgarian lev 22	New Roma- nian leu <sup>1)</sup> 23	
2004	31.891	15.6466	0.58185	0.6652	3.4529	251.66	0.4280	4.5268	40.022	1.9533	40,510	
2005	29.782	15.6466	0.57683	0.6962	3.4528	248.05	0.4299	4.0230	38.599	1.9558	3,6209	
2006	28.342	15.6466	0.57578	0.6962	3.4528	264.26	0.4293	3.8959	37.234	1.9558	3,5258	
2007 Q1	28.037	15.6466	0.57915	0.7023	3.4528	252.32	0.4293	3.8863	34.347	1.9558	3,3812	
Q2	28.272	15.6466	0.58272	0.6986	3.4528	248.31	0.4293	3.8005	33.751	1.9558	3,2789	
Q3	27.941	15.6466	0.58417	0.6988	3.4528	251.82	0.4293	3.7900	33.579	1.9558	3,2321	
2007 Mar.	28.057	15.6466	0.57985	0.7088	3.4528	249.86	0.4293	3.8859	33.813	1.9558	3,3692	
Apr.	28.015	15.6466	0.58148	0.7036	3.4528	246.00	0.4293	3.8144	33.491	1.9558	3,3338	
May	28.231	15.6466	0.58303	0.6965	3.4528	248.42	0.4293	3.7819	33.736	1.9558	3,2836	
June	28.546	15.6466	0.58352	0.6963	3.4528	250.29	0.4293	3.8074	34.002	1.9558	3,2243	
July	28.359	15.6466	0.58412	0.6969	3.4528	246.90	0.4293	3.7682	33.326	1.9558	3,1345	
Aug.	27.860	15.6466	0.58420	0.6978	3.4528	255.20	0.4293	3.8116	33.603	1.9558	3,2246	
Sep.	27.573	15.6466	0.58420	0.7021	3.4528	253.33	0.4293	3.7891	33.829	1.9558	3,3481	
	<i>% change versus previous month</i>											
2007 Sep.	-1.0	0.0	0.0	0.6	0.0	-0.7	0.0	-0.6	0.7	0.0	3.8	
	<i>% change versus previous year</i>											
2007 Sep.	-2.9	0.0	1.3	0.9	0.0	-7.7	0.0	-4.4	-9.8	0.0	-5.1	
	Chinese yuan renminbi <sup>2)</sup> 24	Croatian kuna <sup>2)</sup> 25	Icelandic krona 26	Indonesian rupiah <sup>2)</sup> 27	Malaysian ringgit <sup>2)</sup> 28	New Zealand dollar 29	Philippine peso <sup>2)</sup> 30	Russian rouble <sup>2)</sup> 31	South African rand 32	Thai baht <sup>2)</sup> 33	New Turkish lira <sup>3)</sup> 34	
2004	10.2967	7.4967	87.14	11,127.34	4.7273	1.8731	69.727	35.8192	8.0092	50.077	1,777,052	
2005	10.1955	7.4008	78.23	12,072.83	4.7119	1.7660	68.494	35.1884	7.9183	50.068	1,6771	
2006	10.0096	7.3247	87.76	11,512.37	4.6044	1.9373	64.379	34.1117	8.5312	47.594	1,8090	
2007 Q1	10.1688	7.3656	89.28	11,934.33	4.5842	1.8836	63.609	34.4795	9.4919	44.538	1,8492	
Q2	10.3476	7.3494	85.82	12,082.62	4.6204	1.8188	63.134	34.8589	9.5688	44.011	1,8029	
Q3	10.3834	7.3080	86.71	12,705.62	4.7608	1.8508	63.035	35.0350	9.7645	43.220	1,7685	
2007 Mar.	10.2467	7.3641	88.69	12,144.32	4.6212	1.8952	64.069	34.5680	9.7417	43.320	1,8659	
Apr.	10.4400	7.3967	88.36	12,290.98	4.6449	1.8394	64.421	34.9054	9.6089	44.010	1,8362	
May	10.3689	7.3258	85.12	11,927.80	4.5962	1.8441	63.136	34.8999	9.4855	44.507	1,8029	
June	10.2415	7.3313	84.26	12,056.30	4.6237	1.7738	61.968	34.7739	9.6198	43.492	1,7728	
July	10.3899	7.2947	83.16	12,441.28	4.7184	1.7446	62.418	35.0292	9.5712	41.870	1,7574	
Aug.	10.3162	7.3161	88.46	12,765.65	4.7457	1.8786	62.862	34.9211	9.8391	43.337	1,7921	
Sep.	10.4533	7.3134	88.59	12,927.37	4.8249	1.9358	63.911	35.1723	9.8912	44.570	1,7536	
	<i>% change versus previous month</i>											
2007 Sep.	1.3	0.0	0.1	1.3	1.7	3.0	1.7	0.7	0.5	2.8	-2.1	
	<i>% change versus previous year</i>											
2007 Sep.	3.5	-1.1	-0.8	11.0	3.3	-0.5	-0.2	3.3	4.6	-6.4	-7.1	

Source: ECB.

1) Data prior to July 2005 refer to the Romanian leu; 1 new Romanian leu is equivalent to 10,000 old Romanian lei.

2) For these currencies the ECB computes and publishes euro reference exchange rates as from 1 April 2005. Previous data are indicative.

3) Data prior to January 2005 refer to the Turkish lira; 1 new Turkish lira is equivalent to 1,000,000 old Turkish liras.



## DEVELOPMENTS OUTSIDE THE EURO AREA

### 9.1 In other EU Member States

(annual percentage changes, unless otherwise indicated)

#### 1. Economic and financial developments

	Bulgaria	Czech Republic	Denmark	Estonia	Cyprus	Latvia	Lithuania	Hungary	Malta	Poland	Romania	Slovakia	Sweden	United Kingdom
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
<b>HICP</b>														
2005	6.0	1.6	1.7	4.1	2.0	6.9	2.7	3.5	2.5	2.2	9.1	2.8	0.8	2.1
2006	7.4	2.1	1.9	4.4	2.2	6.6	3.8	4.0	2.6	1.3	6.6	4.3	1.5	2.3
2006 Q4	5.7	1.1	1.6	4.5	1.5	6.2	4.2	6.4	1.1	1.3	4.8	3.5	1.4	2.7
2007 Q1	5.3	1.7	1.9	5.1	1.4	7.6	4.4	8.8	0.8	2.0	3.9	2.1	1.7	2.8
Q2	4.7	2.6	1.5	5.8	1.8	8.5	5.0	8.5	-0.9	2.3	3.9	1.7	1.4	2.6
2007 Apr.	4.4	2.7	1.7	5.6	1.6	8.8	4.9	8.7	-1.1	2.2	3.8	2.0	1.6	2.8
May	4.5	2.4	1.7	5.9	1.9	7.8	5.0	8.4	-1.0	2.3	3.9	1.5	1.2	2.5
June	5.3	2.6	1.3	6.0	1.7	8.9	5.0	8.5	-0.6	2.6	3.9	1.5	1.3	2.4
July	6.8	2.5	1.1	6.5	2.3	9.5	5.1	8.3	-0.2	2.5	4.1	1.2	1.4	1.9
Aug.	9.3	2.6	0.9	6.1	2.2	10.2	5.6	7.1	0.6	2.1	5.0	1.2	1.2	1.8
<b>General government deficit (-)/surplus (+) as a % of GDP</b>														
2004	2.2	-2.9	2.0	2.3	-4.1	-1.0	-1.5	-6.5	-4.9	-5.7	-1.5	-2.4	0.8	-3.1
2005	1.9	-3.5	4.7	2.3	-2.3	-0.2	-0.5	-7.8	-3.1	-4.3	-1.4	-2.8	2.1	-3.1
2006	3.3	-2.9	4.2	3.8	-1.5	0.4	-0.3	-9.2	-2.6	-3.9	-1.9	-3.4	2.2	-2.8
<b>General government gross debt as a % of GDP</b>														
2004	37.9	30.7	44.0	5.2	70.3	14.5	19.4	59.4	73.9	45.7	18.8	41.5	52.4	40.3
2005	29.2	30.4	36.3	4.4	69.2	12.0	18.6	61.7	72.4	47.1	15.8	34.5	52.2	42.2
2006	22.8	30.4	30.2	4.1	65.3	10.0	18.2	66.0	66.5	47.8	12.4	30.7	46.9	43.5
<b>Long-term government bond yield as a % per annum, period average</b>														
2007 Mar.	4.22	3.76	3.96	-	4.47	5.14	4.24	6.79	4.38	5.19	7.53	4.24	3.79	4.88
Apr.	4.28	3.92	4.18	-	4.44	5.52	4.18	6.65	4.44	5.28	7.39	4.26	4.04	5.10
May	4.26	4.23	4.34	-	4.44	6.03	4.36	6.53	4.61	5.29	7.39	4.40	4.15	5.20
June	4.57	4.53	4.65	-	4.44	5.62	4.57	6.71	5.12	5.52	7.05	4.66	4.44	5.49
July	4.79	4.59	4.58	-	4.44	5.28	4.89	6.58	5.18	5.60	6.86	4.70	4.45	5.46
Aug.	4.79	4.48	4.39	-	4.44	5.32	4.80	6.80	4.94	5.68	6.93	4.65	4.25	5.19
<b>3-month interest rate as a % per annum, period average</b>														
2007 Mar.	4.19	2.56	4.07	4.06	3.97	6.30	4.05	8.10	4.18	4.22	7.49	4.48	3.43	5.55
Apr.	4.30	2.60	4.16	4.42	3.99	9.32	4.41	8.20	4.19	4.31	7.33	4.05	3.51	5.65
May	4.40	2.77	4.28	4.69	3.99	9.99	4.89	-	4.23	4.44	7.62	4.16	3.57	5.77
June	4.53	2.93	4.37	4.74	3.99	8.09	4.91	8.02	4.36	4.52	7.26	4.27	3.67	5.88
July	4.69	3.07	4.42	4.73	4.05	6.66	4.97	7.87	4.48	4.78	6.92	4.34	3.78	6.02
Aug.	4.80	3.28	4.66	4.94	4.43	7.99	5.25	7.83	4.36	4.91	6.69	4.33	3.96	6.42
<b>Real GDP</b>														
2005	6.2	6.5	3.1	10.2	3.9	10.6	7.6	4.1	3.1	3.6	4.2	6.0	2.9	1.8
2006	6.1	6.4	3.5	11.2	3.8	11.9	7.5	3.9	3.2	6.1	7.7	8.3	4.2	2.8
2006 Q4	5.7	6.1	3.7	11.0	3.7	11.7	7.0	3.1	3.4	6.9	7.7	9.6	4.3	3.2
2007 Q1	6.2	6.2	2.7	10.1	4.0	11.2	8.0	2.6	3.5	6.8	6.0	9.0	3.4	3.1
Q2	6.6	6.0	0.6	7.6	3.8	11.0	7.7	1.6	3.7	6.9	5.6	9.4	3.2	3.1
<b>Current and capital accounts balance as a % of GDP</b>														
2005	-11.0	-1.5	3.9	-9.3	-5.4	-11.2	-5.9	-6.0	-5.5	-1.3	-7.9	-8.6	7.1	-2.3
2006	-15.1	-2.8	2.5	-13.2	-5.8	-21.1	-9.6	-5.9	-3.7	-2.6	-10.4	-8.4	6.7	-3.2
2006 Q4	-24.5	-4.8	1.3	-14.1	-25.4	-26.0	-10.5	-4.1	-4.0	-3.3	-10.7	-7.3	7.4	-3.8
2007 Q1	-27.2	2.1	-1.4	-21.1	-13.2	-24.4	-12.2	-5.0	-10.1	-2.4	-16.8	0.1	9.4	-3.6
Q2	-18.2	-4.8	2.7	-12.9	-6.2	-22.7	-14.6	-6.6	-4.7	-4.2	-16.3	-7.9	.	-2.4
<b>Unit labour costs</b>														
2005	2.4	-0.7	1.0	2.6	1.3	15.2	3.4	3.1	0.3	0.3	.	0.5	0.6	3.9
2006	4.5	1.0	2.1	8.0	0.1	14.0	7.0	.	0.5	.	.	1.2	-0.4	2.5
2006 Q4	7.1	1.8	3.4	11.2	-	-	10.0	-	0.5	-	-	0.6	0.1	1.8
2007 Q1	14.6	3.1	4.5	16.0	-	-	9.2	-	-0.3	-	-	0.3	4.5	0.5
Q2	13.2	2.6	5.5	20.1	-	-	8.1	-	-0.2	-	-	-0.6	3.9	2.5
<b>Standardised unemployment rate as a % of labour force (s.a.)</b>														
2005	10.1	7.9	4.8	7.9	5.2	8.9	8.2	7.2	7.3	17.7	7.2	16.3	7.4	4.8
2006	8.9	7.1	3.9	5.9	4.6	6.9	5.6	7.4	7.3	13.8	7.3	13.3	7.1	5.3
2006 Q4	8.2	6.5	3.7	5.5	4.2	6.3	4.8	7.5	6.9	12.2	7.2	12.3	6.4	5.3
2007 Q1	7.7	5.8	3.9	4.9	4.0	6.3	4.7	7.3	6.6	10.9	6.5	11.3	6.4	5.4
Q2	7.0	5.6	3.7	5.2	4.0	5.8	4.3	7.2	6.5	9.9	6.7	11.3	5.9	5.3
2007 Apr.	7.2	5.7	3.7	5.1	4.0	5.9	4.4	7.2	6.4	10.2	6.7	11.3	6.1	5.3
May	7.0	5.6	3.7	5.2	4.0	5.8	4.4	7.2	6.5	10.0	6.7	11.3	6.0	5.3
June	6.8	5.5	3.7	5.2	3.8	5.7	4.2	7.2	6.4	9.6	6.8	11.2	5.6	5.2
July	6.7	5.4	3.3	5.5	4.0	5.6	4.3	7.3	6.3	9.4	7.1	11.1	5.4	.
Aug.	6.5	5.3	3.3	5.5	3.9	5.5	4.1	7.3	6.4	9.1	7.2	11.1	5.5	.

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

## 9.2 In the United States and Japan

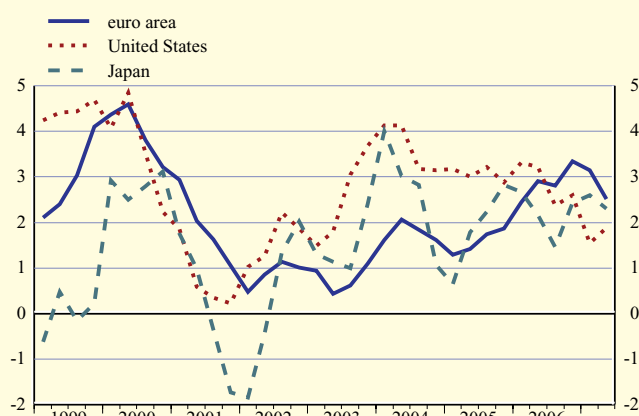
(annual percentage changes, unless otherwise indicated)

### 1. Economic and financial developments

	Consumer price index	Unit labour costs <sup>1)</sup> (manufacturing)	Real GDP	Industrial production index (manufacturing)	Unemployment rate as a % of labour force (s.a.)	Broad money <sup>2)</sup>	3-month interbank deposit rate <sup>3)</sup> as a % per annum	10-year government bond yield <sup>3)</sup> as a % per annum	Exchange rate <sup>4)</sup> as national currency per euro	Fiscal deficit (-)/ surplus (+) as a % of GDP	Gross public debt <sup>5)</sup> as a % of GDP
	1	2	3	4	5	6	7	8	9	10	11
United States											
2003	2.3	0.8	2.5	1.3	6.0	7.0	1.22	4.00	1.1312	-4.8	48.0
2004	2.7	-0.1	3.6	3.0	5.5	4.7	1.62	4.26	1.2439	-4.6	48.8
2005	3.4	-0.5	3.1	4.0	5.1	4.3	3.56	4.28	1.2441	-3.7	49.2
2006	3.2	-1.5	2.9	5.0	4.6	4.7	5.19	4.79	1.2556	-2.3	48.5
2006 Q3	3.3	-3.9	2.4	6.1	4.7	4.6	5.43	4.90	1.2743	-2.6	48.5
Q4	1.9	0.4	2.6	3.6	4.5	4.9	5.37	4.63	1.2887	-1.9	48.5
2007 Q1	2.4	0.9	1.5	2.3	4.5	5.3	5.36	4.68	1.3106	-2.6	49.4
Q2	2.7	3.7	1.9	2.0	4.5	6.2	5.36	4.84	1.3481	.	.
Q3	.	.	.	.	.	.	5.45	4.74	1.3738	.	.
2007 May	2.7	.	.	2.1	4.5	6.3	5.36	4.75	1.3511	.	.
June	2.7	.	.	1.9	4.5	6.1	5.36	5.11	1.3419	.	.
July	2.4	.	.	2.3	4.6	6.1	5.36	5.01	1.3716	.	.
Aug.	2.0	.	.	1.6	4.6	6.7	5.48	4.68	1.3622	.	.
Sep.	.	.	.	.	.	.	5.49	4.51	1.3896	.	.
Japan											
2003	-0.2	-3.9	1.5	3.2	5.2	1.7	0.06	0.99	130.97	-7.9	151.4
2004	0.0	-4.9	2.7	5.5	4.7	1.9	0.05	1.50	134.44	-6.2	157.6
2005	-0.3	-0.6	1.9	1.1	4.4	1.8	0.06	1.39	136.85	-6.4	164.2
2006	0.2	-2.6	2.2	4.8	4.1	1.1	0.30	1.74	146.02	.	.
2006 Q3	0.6	-2.8	1.4	5.6	4.1	0.6	0.41	1.80	148.09	.	.
Q4	0.3	-3.6	2.5	5.9	4.1	0.6	0.49	1.70	151.72	.	.
2007 Q1	-0.1	-2.2	2.6	3.0	4.0	1.0	0.62	1.68	156.43	.	.
Q2	-0.1	.	1.7	2.4	3.8	1.5	0.69	1.74	162.89	.	.
Q3	.	.	.	.	.	.	0.89	1.72	161.90	.	.
2007 May	0.0	.	.	3.8	3.8	1.5	0.67	1.67	163.22	.	.
June	-0.2	.	.	1.1	3.7	1.9	0.73	1.89	164.55	.	.
July	0.0	.	.	3.2	3.6	2.1	0.77	1.89	166.76	.	.
Aug.	-0.2	.	.	4.3	3.8	1.8	0.92	1.65	159.05	.	.
Sep.	.	.	.	.	.	.	0.99	1.61	159.82	.	.

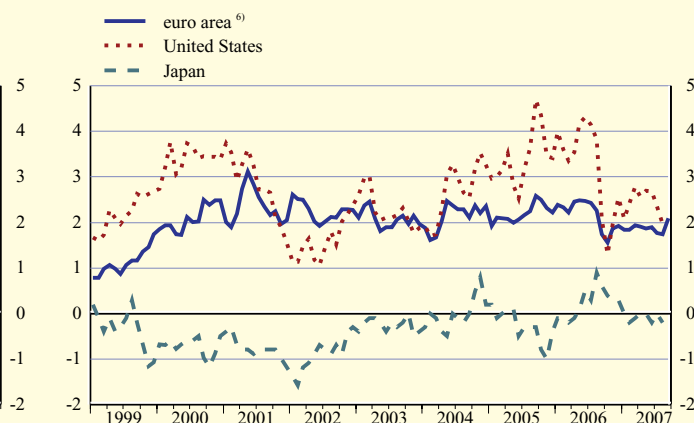
### C37 Real gross domestic product

(annual percentage changes; quarterly)



### C38 Consumer price indices

(annual percentage changes; monthly)



Sources: National data (columns 1, 2 (United States), 3, 4, 5 (United States), 6, 9 and 10); OECD (column 2 (Japan)); Eurostat (column 5 (Japan), euro area chart data); Reuters (columns 7 and 8); ECB calculations (column 11).

1) Data for the United States are seasonally adjusted.

2) Average-of-period values; M2 for US, M2+CDs for Japan.

3) For more information, see Sections 4.6 and 4.7.

4) For more information, see Section 8.2.

5) Gross consolidated general government debt (end of period).

6) Data refer to the changing composition of the euro area. For further information, see the General notes.



## LIST OF CHARTS

C1	Monetary aggregates	S12
C2	Counterparts	S12
C3	Components of monetary aggregates	S13
C4	Components of longer-term financial liabilities	S13
C5	Loans to financial intermediaries and non-financial corporations	S14
C6	Loans to households	S15
C7	Loans to government and non-euro area residents	S16
C8	Total deposits by sector (financial intermediaries)	S17
C9	Total deposits and deposits included in M3 by sector (financial intermediaries)	S17
C10	Total deposits by sector (non-financial corporations and households)	S18
C11	Total deposits and deposits included in M3 by sector (non-financial corporations and households)	S18
C12	Deposits by government and non-euro area residents	S19
C13	MFI holdings of securities	S20
C14	Total assets of investment funds	S24
C15	Total outstanding amounts and gross issues of securities, other than shares, issued by euro area residents	S35
C16	Net issues of securities, other than shares, seasonally adjusted and non-seasonally adjusted	S37
C17	Annual growth rates of long-term debt securities, by sector of the issuer, in all currencies combined	S38
C18	Annual growth rates of short-term debt securities, by sector of the issuer, in all currencies combined	S39
C19	Annual growth rates for quoted shares issued by euro area residents	S40
C20	Gross issues of quoted shares by sector of the issuer	S41
C21	New deposits with agreed maturity	S43
C22	New loans at floating rate and up to 1 year initial rate fixation	S43
C23	Euro area money market rates	S44
C24	3-month money market rates	S44
C25	Euro area government bond yields	S45
C26	10-year government bond yields	S45
C27	Dow Jones EURO STOXX Broad, Standard & Poor's 500 and Nikkei 225	S46
C28	Deficit, borrowing requirement and change in debt	S59
C29	Maastricht debt	S59
C30	B.o.p. current account balance	S60
C31	B.o.p. net direct and portfolio investment	S60
C32	B.o.p. goods	S61
C33	B.o.p. services	S61
C34	Main b.o.p. transactions underlying the developments in MFI net external assets	S65
C35	Effective exchange rates	S72
C36	Bilateral exchange rates	S72
C37	Real gross domestic product	S75
C38	Consumer price indices	S75



## TECHNICAL NOTES

### RELATING TO THE EURO AREA OVERVIEW

#### CALCULATION OF GROWTH RATES FOR MONETARY DEVELOPMENTS

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

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

where  $I_t$  is the index of adjusted outstanding amounts as at month  $t$  (see also below). Likewise, for the year ending in month  $t$ , the average growth rate is calculated as:

$$b) \left( \frac{0.5I_t + \sum_{i=1}^{11} I_{t-i} + 0.5I_{t-12}}{0.5I_{t-12} + \sum_{i=1}^{11} I_{t-i-12} + 0.5I_{t-24}} - 1 \right) \times 100$$

### RELATING TO SECTIONS 2.1 TO 2.6

#### CALCULATION OF TRANSACTIONS

Monthly transactions are calculated from monthly differences in outstanding amounts adjusted for reclassifications, other revaluations, exchange rate variations and any other changes which do not arise from transactions.

If  $L_t$  represents the outstanding amount at the end of month  $t$ ,  $C_t^M$  the reclassification adjustment in month  $t$ ,  $E_t^M$  the exchange rate adjustment and  $V_t^M$  the other revaluation adjustments, the transactions  $F_t^M$  in month  $t$  are defined as:

$$c) F_t^M = (L_t - L_{t-1}) - C_t^M - E_t^M - V_t^M$$

Similarly, the quarterly transactions  $F_t^Q$  for the quarter ending in month  $t$  are defined as:

$$d) F_t^Q = (L_t - L_{t-3}) - C_t^Q - E_t^Q - V_t^Q$$

where  $L_{t-3}$  is the amount outstanding at the end of month  $t-3$  (the end of the previous quarter)

and, for example,  $C_t^Q$  is the reclassification adjustment in the quarter ending in month  $t$ .

For those quarterly series for which monthly observations are now available (see below), the quarterly transactions can be derived as the sum of the three monthly transactions in the quarter.

#### CALCULATION OF GROWTH RATES FOR MONTHLY SERIES

Growth rates may be calculated from transactions or from the index of adjusted outstanding amounts. If  $F_t^M$  and  $L_t$  are defined as above, the index  $I_t$  of adjusted outstanding amounts in month  $t$  is defined as:

$$e) I_t = I_{t-1} \times \left( 1 + \frac{F_t^M}{L_{t-1}} \right)$$

The base of the index (of the non-seasonally adjusted series) is currently set as December 2006 = 100. Time series of the index of adjusted outstanding amounts are available on the ECB's website ([www.ecb.europa.eu](http://www.ecb.europa.eu)) under the "Money, banking and financial markets" subsection of the "Statistics" section.

The annual growth rate  $a_t$  for month  $t$  – i.e. the change in the 12 months ending in month  $t$  – may be calculated using either of the following two formulae:

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

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

Unless otherwise indicated, the annual growth rates refer to the end of the indicated period. For example, the annual percentage change for the year 2002 is calculated in g) by dividing the index of December 2002 by the index of December 2001.

Growth rates for intra-annual periods may be derived by adapting formula g). For example, the month-on-month growth rate  $a_t^M$  may be calculated as:

$$h) a_t^M = \left( \frac{I_t}{I_{t-1}} - 1 \right) \times 100$$

Finally, the three-month moving average (centred) for the annual growth rate of M3 is obtained as  $(a_{t+1} + a_t + a_{t-1})/3$ , where  $a_t$  is defined as in f) or g) above.

#### CALCULATION OF GROWTH RATES FOR QUARTERLY SERIES

If  $F_t^Q$  and  $L_{t-3}$  are defined as above, the index  $I_t$  of adjusted outstanding amounts for the quarter ending in month  $t$  is defined as:

$$i) I_t = I_{t-3} \times \left( 1 + \frac{F_t^Q}{L_{t-3}} \right)$$

The annual growth rate in the four quarters ending in month  $t$ , i.e.  $a_t$ , may be calculated using formula g).

#### SEASONAL ADJUSTMENT OF THE EURO AREA MONETARY STATISTICS<sup>1</sup>

The approach used relies on a multiplicative decomposition through X-12-ARIMA.<sup>2</sup> The seasonal adjustment may include a day-of-the-week adjustment, and for some series is carried out indirectly by means of a linear combination of components. In particular, this is the case for M3, derived by aggregating the seasonally adjusted series for M1, M2 less M1, and M3 less M2.

The seasonal adjustment procedures are first applied to the index of adjusted outstanding amounts.<sup>3</sup> The resulting estimates of the seasonal factors are then applied to the levels and to the adjustments arising from reclassifications and revaluations, in turn

yielding seasonally adjusted transactions. Seasonal (and trading day) factors are revised at annual intervals or as required.

#### RELATING TO SECTIONS 3.1 TO 3.5

#### EQUALITY OF USES AND RESOURCES

In Table 3.1 the data conform to a basic accounting identity. As regards non-financial transactions, total uses equal total resources for each transaction category. Likewise in the financial account, this accounting identity is also reflected, i.e. for each financial instrument category, total transactions in financial assets equal total transactions in liabilities. In the other changes in assets account and the financial balance sheets, total financial assets equal total liabilities for each financial instrument category, with the exception of monetary gold and special drawing rights, which are by definition not a liability of any sector.

#### CALCULATION OF BALANCING ITEMS

The balancing items at the end of each account in Tables 3.1 and 3.2 are computed as follows:

The trade balance equals imports minus exports of goods and services vis-à-vis the euro area rest of the world.

1 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.europa.eu](http://www.ecb.europa.eu)), under the "Money, banking and financial markets" sub-section.

2 For details, see Findley, D., Monsell, B., Bell, W., Otto, M., and Chen, B. C. (1998), "New Capabilities and Methods of the X-12-ARIMA Seasonal Adjustment Program", *Journal of Business and Economic Statistics*, 16, 2, 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.

3 It follows that for the seasonally adjusted series, the level of the index for the base period, i.e. December 2001, generally differs from 100, reflecting the seasonality of that month.

Net operating surplus and mixed income is defined for resident sectors only and is calculated as gross value added (gross domestic product at market prices for the euro area) minus compensation of employees (uses) minus other taxes less subsidies on production (uses) minus consumption of fixed capital (uses).

Net national income is defined for resident sectors only and is computed as net operating surplus and mixed income plus compensation of employees (resources) plus taxes less subsidies on production (resources) plus net property income (resources minus uses).

Net disposable income is also only defined for resident sectors and equals net national income plus net current taxes on income and wealth (resources minus uses) plus net social contributions (resources minus uses) plus net social benefits other than social transfers in kind (resources minus uses) plus net other current transfers (resources minus uses).

Net saving is defined for resident sectors and is calculated as net disposable income plus the net adjustment for the change in net equity of households in pension funds reserves (resources minus uses) minus final consumption expenditure (uses). For the rest of the world, current external account is compiled as the trade balance plus all net income (resources minus uses).

Net lending/net borrowing is computed from the capital account as net saving plus net capital transfers (resources minus uses) minus gross capital formation (uses) minus acquisitions less disposals of non-produced non-financial assets (uses) plus consumption of fixed capital (resources). It can also be calculated in the financial account as total transactions in financial assets minus total transactions in liabilities (also known as changes in net financial worth (wealth) due to transactions). For the household and non-financial corporation sectors, there is a statistical discrepancy between these balancing items computed from

the capital account and the financial account, respectively.

Changes in net worth (wealth) are calculated as changes in net worth (wealth) due to savings and capital transfers plus other changes in net financial worth (wealth). It currently excludes other changes in non-financial assets due to unavailability of data.

Net financial worth (wealth) is calculated as total financial assets minus total liabilities, whereas changes in net financial worth (wealth) are equal to the sum of changes in net financial worth (wealth) due to transactions (lending/ net borrowing from the financial account) and other changes in net financial worth (wealth).

Finally, changes in net financial worth (wealth) due to transactions are computed as total transactions in financial assets minus total transactions in liabilities and other changes in net financial worth (wealth) are calculated as total other changes in financial assets minus total other changes in liabilities.

#### RELATING TO SECTION 4.3 AND 4.4

#### CALCULATION OF GROWTH RATES FOR DEBT SECURITIES AND QUOTED SHARES

Growth rates are calculated on the basis of financial transactions and therefore exclude reclassifications, revaluations, exchange rate variations and any other changes which do not arise from transactions. They may be calculated from transactions or from the index of notional stocks. If  $N_t^M$  represents the transactions (net issues) in month  $t$  and  $L_t$  the level outstanding at the end of the month  $t$ , the index  $I_t$  of notional stocks in month  $t$  is defined as:

$$j) \quad I_t = I_{t-1} \times \left( 1 + \frac{N_t^M}{L_{t-1}} \right)$$

As a base, the index is set equal to 100 on December 2001. The growth rate  $a_t$  for month  $t$  corresponding to the change in the 12 months ending in month  $t$ , may be calculated using either of the following two formulae:



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

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

The method used to calculate the growth rates for securities other than shares is the same as that used for the monetary aggregates, the only difference being that an “N” is used rather than an “F”. The reason for this is to distinguish between the different ways of obtaining “net issues” for securities issues statistics and the equivalent “transactions” calculated used for the monetary aggregates.

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

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

where  $I_t$  is the index of notional stocks as at month t. Likewise, for the year ending in month t, the average growth rate is calculated as:

$$n) \left( \frac{0.5I_t + \sum_{i=1}^{11} I_{t-i} + 0.5I_{t-12}}{0.5I_{t-12} + \sum_{i=1}^{11} I_{t-i-12} + 0.5I_{t-24}} - 1 \right) \times 100$$

The calculation formula used for Section 4.3 is also used for Section 4.4 and is likewise based on that used for the monetary aggregates. Section 4.4 is based on market values and the basis for the calculation are financial transactions, which exclude reclassifications, revaluations or any other changes that do not arise from transactions. Exchange rate variations are not included as all quoted shares covered are denominated in euro.

## SEASONAL ADJUSTMENT OF SECURITIES ISSUES STATISTICS<sup>4</sup>

The approach used relies on a multiplicative decomposition through X-12-ARIMA. The seasonal adjustment for the securities issues total is carried out indirectly by means of a linear combination of sector and maturity component breakdowns.

The seasonal adjustment procedures are applied to the index of notional stocks. The resulting estimates of the seasonal factors are then applied to the outstanding amounts, from which seasonally adjusted net issues are derived. Seasonal factors are revised at annual intervals or as required.

Similar as depicted in formula l) and m), the growth rate  $a_t$  for month t corresponding to the change in the 6 months ending in month t, may be calculated using either of the following two formulae:

$$o) a_t = \left[ \prod_{i=0}^5 \left( 1 + \frac{N_{t-i}^M}{L_{t-1-i}} \right) - 1 \right] \times 100$$

$$p) a_t = \left( \frac{I_t}{I_{t-6}} - 1 \right) \times 100$$

## RELATING TO TABLE I IN SECTION 5.1

### SEASONAL ADJUSTMENT OF THE HICP<sup>4</sup>

The approach used relies on multiplicative decomposition through X-12-ARIMA (see footnote 2 on page S78). 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

<sup>4</sup> For details, see “Seasonal adjustment of monetary aggregates and HICP for the euro area”, ECB (August 2000) and the “Statistics” section of the ECB’s website ([www.ecb.europa.eu](http://www.ecb.europa.eu)), under the “Money, banking and financial markets” sub-section.



factors are revised at annual intervals or as required.

#### **RELATING TO TABLE 2 IN SECTION 7.1**

#### **SEASONAL ADJUSTMENT OF THE BALANCE OF PAYMENTS CURRENT ACCOUNT**

The approach relies on multiplicative decomposition through X-12-ARIMA (see footnote 2 on page S78). The raw data for goods, services and income are pre-adjusted to take a working-day effect into account. The working-day adjustment in goods and services is corrected for national public holidays. Data on goods credits are also pre-adjusted for Easter. The seasonal adjustment for these items is carried out using these pre-adjusted series. 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 (and trading day) factors are revised at semi-annual intervals or as required.





## GENERAL NOTES

The “Euro area statistics” section of the Monthly Bulletin focuses on statistics for the euro area as a whole. More detailed and longer runs of data, with further explanatory notes, are available in the “Statistics” section of the ECB’s website ([www.ecb.europa.eu](http://www.ecb.europa.eu)). This allows user-friendly access to data via the ECB Statistical Data Warehouse (<http://sdw.ecb.europa.eu/>), which includes search and download facilities. Further services available under the “Data services” sub-section include the subscription to different datasets and a repository of compressed Comma Separated Value (CSV) files. For further information, please contact us at: [statistics@ecb.europa.eu](mailto:statistics@ecb.europa.eu).

In general, the cut-off date for the statistics included in the Monthly Bulletin is the day preceding the first meeting in the month of the ECB’s Governing Council. For this issue, the cut-off date was 2 October 2007.

Unless otherwise indicated, all data series covering observations for 2007 relate to the Euro 13 (i.e. the euro area including Slovenia) for the whole time series. For interest rates, monetary statistics and the HICP (and, for consistency reasons, the components and counterparts of M3 and the components of the HICP), the statistical series refer to the changing composition of the euro area. Where applicable, this is indicated in the tables by means of a footnote. In such cases, where underlying data are available, absolute and percentage changes for 2001 and 2007, calculated from bases in 2000 and 2006, use a series which takes into account the impact of the entry of Greece and Slovenia, respectively, into the euro area. Historical data referring to the euro area before the entry of Slovenia are available on the ECB’s website at <http://www.ecb.europa.eu/stats/services/downloads/html/index.en.html>.

The statistical series referring to the changing composition of the euro area are based on the euro area composition at the time to which the statistics relate. Thus, data prior to 2001 refer to the Euro 11, i.e. the following 11 EU Member States: Belgium, Germany, Ireland, Spain,

France, Italy, Luxembourg, the Netherlands, Austria, Portugal and Finland. Data from 2001 to 2006 refer to the Euro 12, i.e. the Euro 11 plus Greece. Data after 2007 refer to the Euro 13, i.e. the Euro 12 plus Slovenia.

Given that the composition of the ECU does not coincide with the former currencies of the countries which have adopted the single currency, pre-1999 amounts converted from the participating currencies into ECU at current ECU exchange rates are affected by movements in the currencies of EU Member States which have not adopted the euro. To avoid this effect on the monetary statistics, the pre-1999 data in Sections 2.1 to 2.8 are expressed in units converted from national currencies at the irrevocable euro exchange rates established on 31 December 1998. Unless otherwise indicated, price and cost statistics before 1999 are based on data expressed in national currency terms.

Methods of aggregation and/or consolidation (including cross-country consolidation) have been used where appropriate.

Recent data are often provisional and may be revised. Discrepancies between totals and their components may arise from rounding.

The group “Other EU Member States” comprises Bulgaria, the Czech Republic, Denmark, Estonia, Cyprus, Latvia, Lithuania, Hungary, Malta, Poland, Romania, Slovakia, Sweden and the United Kingdom.

In most cases, the terminology used within the tables follows international standards, such as those contained in the European System of Accounts 1995 (ESA 95) and the IMF Balance of Payments Manual. Transactions refer to voluntary exchanges (measured directly or derived), while flows also encompass changes in outstanding amounts owing to price and exchange rate changes, write-offs, and other changes.

In the tables, the term “up to (x) years” means “up to and including (x) years”.

## OVERVIEW

Developments in key indicators for the euro area are summarised in an overview table.

## MONETARY POLICY STATISTICS

Section 1.4 shows statistics on minimum reserve and liquidity factors. Annual and quarterly observations refer to averages of the last reserve maintenance period of the year/quarter. Until December 2003, the maintenance periods started on the 24th calendar day of a month and ran to the 23rd of the following month. On 23 January 2003 the ECB announced changes to the operational framework, which were implemented on 10 March 2004. As a result of these changes, maintenance periods start on the settlement day of the main refinancing operation (MRO) following the Governing Council meeting at which the monthly assessment of the monetary policy stance is scheduled. A transitional maintenance period was defined to cover the period from 24 January to 9 March 2004.

Table 1 in Section 1.4 shows the components of the reserve base of credit institutions subject to reserve requirements. The liabilities vis-à-vis other credit institutions subject to the ESCB's minimum reserve system, the ECB and participating national central banks are excluded from the reserve base. When a credit institution cannot provide evidence of the amount of its issues of debt securities with a maturity of up to two years held by the institutions mentioned above, it may deduct a certain percentage of these liabilities from its reserve base. The percentage for calculating the reserve base was 10% until November 1999 and 30% thereafter.

Table 2 in Section 1.4 contains average data for completed maintenance periods. The amount of the reserve requirement of each individual credit institution is first calculated by applying the reserve ratio for the corresponding categories of liabilities to the eligible liabilities, using the

balance sheet data from the end of each calendar month. Subsequently, each credit institution deducts from this figure a lump-sum allowance of €100,000. The resulting required reserves are then aggregated at the euro area level (column 1). The current account holdings (column 2) are the aggregate average daily current account holdings of credit institutions, including those that serve the fulfilment of reserve requirements. The excess reserves (column 3) are the average current account holdings over the maintenance period in excess of the required reserves. The deficiencies (column 4) are defined as the average shortfalls of current account holdings from required reserves over the maintenance period, computed on the basis of those credit institutions that have not fulfilled their reserve requirement. The interest rate on minimum reserves (column 5) is equal to the average, over the maintenance period, of the ECB's rate (weighted according to the number of calendar days) on the Eurosystem's main refinancing operations (see Section 1.3).

Table 3 in Section 1.4 shows the banking system's liquidity position, which is defined as the current account holdings in euro of credit institutions in the euro area with the Eurosystem. All amounts are derived from the consolidated financial statement of the Eurosystem. The other liquidity-absorbing operations (column 7) exclude the issuance of debt certificates initiated by national central banks in Stage Two of EMU. The net other factors (column 10) represent the netted remaining items in the consolidated financial statement of the Eurosystem. The credit institutions' current accounts (column 11) are equal to the difference between the sum of liquidity-providing factors (columns 1 to 5) and the sum of liquidity-absorbing factors (columns 6 to 10). The base money (column 12) is calculated as the sum of the deposit facility (column 6), the banknotes in circulation (column 8) and the credit institutions' current account holdings (column 11).

## MONEY, BANKING AND INVESTMENT FUNDS

Section 2.1 shows the aggregated balance sheet of the monetary financial institution (MFI) sector, i.e. the sum of the harmonised balance sheets of all MFIs resident in the euro area. MFIs are central banks, credit institutions as defined under Community law, money market funds and other institutions whose business it is to receive deposits and/or close substitutes for deposits from entities other than MFIs and, for their own account (at least in economic terms), to grant credits and/or make investments in securities. A complete list of MFIs is published on the ECB's website.

Section 2.2 shows the consolidated balance sheet of the MFI sector, which is obtained by netting the aggregated balance sheet positions between MFIs in the euro area. Due to limited heterogeneity in recording practices, the sum of the inter-MFI positions is not necessarily zero; the balance is shown in column 10 of the liabilities side of Section 2.2. Section 2.3 sets out the euro area monetary aggregates and counterparts. These are derived from the consolidated MFI balance sheet, and include positions of non-MFIs resident in the euro area held with MFIs resident in the euro area; they also take account of some monetary assets/liabilities of central government. Statistics on monetary aggregates and counterparts are adjusted for seasonal and trading-day effects. The external liabilities item of Sections 2.1 and 2.2 shows the holdings by non-euro area residents of i) shares/units issued by money market funds located in the euro area and ii) debt securities issued with a maturity of up to two years by MFIs located in the euro area. In Section 2.3, however, these holdings are excluded from the monetary aggregates and contribute to the item "net external assets".

Section 2.4 provides an analysis by sector, type and original maturity of loans granted by MFIs other than the Eurosystem (the banking system) resident in the euro area. Section 2.5 shows a sectoral and instrument analysis of deposits held with the euro area banking system. Section

2.6 shows the securities held by the euro area banking system, by type of issuer.

Sections 2.2 to 2.6 include transactions, which are derived as differences in outstanding amounts adjusted for reclassifications, revaluations, exchange rate variations and any other changes which do not arise from transactions. Section 2.7 shows selected revaluations which are used in the derivation of transactions. Sections 2.2 to 2.6 also provide growth rates in terms of annual percentage changes based on the transactions. Section 2.8 shows a quarterly currency breakdown of selected MFI balance sheet items.

Details of the sector definitions are set out in the "Monetary Financial Institutions and Markets Statistics Sector Manual – Guidance for the statistical classification of customers. Third Edition" (ECB, March 2007). The "Guidance Notes to the Regulation ECB/2001/13 on the MFI Balance Sheet Statistics" (ECB, November 2002) explains practices recommended to be followed by the NCBs. Since 1 January 1999 the statistical information has been collected and compiled on the basis of Regulation ECB/1998/16 of 1 December 1998 concerning the consolidated balance sheet of the Monetary Financial Institutions sector<sup>1</sup>, as last amended by Regulation ECB/2003/10<sup>2</sup>.

In line with this Regulation, the balance sheet item "money market paper" has been merged with the item "debt securities" on both the assets and liabilities side of the MFI balance sheet.

Section 2.9 shows end-of-quarter outstanding amounts for the balance sheet of the euro area investment funds (other than money market funds). The balance sheet is aggregated and therefore includes, among the liabilities, holdings by investment funds of shares/units issued by other investment funds. Total assets/liabilities are also broken down by investment policy (equity funds, bond funds, mixed funds,

1 OJ L 356, 30.12.1998, p. 7.

2 OJ L 250, 2.10.2003, p. 19.

real estate funds and other funds) and by type of investor (general public funds and special investors' funds). Section 2.10 shows the aggregated balance sheet for each investment fund sector as identified by investment policy and type of investor.

### EURO AREA ACCOUNTS

Section 3.1 shows quarterly integrated euro area accounts data, which provide comprehensive information on the economic activities of households (including non-profit institutions serving households), non-financial corporations, financial corporations and general government, as well as on the interactions between these sectors and the euro area rest of the world. The non-seasonally adjusted current prices data are displayed for the last available quarter following a simplified sequence of accounts in accordance with the methodological framework of the European System of Accounts 1995 (ESA 95).

In short, the sequence of accounts (transactions) comprises: 1) the generation of income account, which shows how the production activity translates into various categories of income; 2) the allocation of primary income account, which records receipts and expenses relating to various forms of property income (for the economy as a whole, the balancing item of the primary income account is national income); 3) the secondary distribution of income account, which shows how the national income of an institutional sector changes because of current transfers; 4) the use of income account, which shows how disposable income is spent on consumption or saved; 5) the capital account, which shows how savings and net capital transfers are spent in the acquisition of non-financial assets (the balancing item of the capital account is net lending/net borrowing); and 6) the financial account, which records the net acquisitions of financial assets and the net incurrence of liabilities. As each non-financial transaction is mirrored by a financial transaction, the balancing item of the financial account conceptually also equals net lending/net

borrowing as calculated from the capital account.

In addition, opening and closing financial balance sheets are presented which give a picture of the financial wealth of each individual sector at a given point in time. Finally, other changes in financial assets and liabilities (e.g. resulting from the impact of asset price changes) are also shown.

The sector coverage of the financial account and of the financial balance sheets is more detailed for the financial corporations sector, showing a breakdown into MFIs, other financial intermediaries (including financial auxiliaries), and insurance corporations and pension funds.

Section 3.2 shows four-quarter cumulated flows (transactions) for the so-called non-financial accounts of the euro area (i.e. accounts 1 to 5 presented above) also following the simplified sequence of accounts.

Section 3.3 shows four-quarter cumulated flows (transactions and other changes) for households' income, expenditure and accumulation accounts, and outstanding amounts for the financial balance sheet accounts, following a more analytical presentation. Sector-specific transactions and balancing items are arranged in such a way as to more easily depict financing and investment decisions of households, whilst respecting the account identities as presented in Sections 3.1 and 3.2.

Section 3.4 displays four-quarter cumulated flows (transactions) for non-financial corporations' income and accumulation accounts, and outstanding amounts for the financial balance sheet accounts, following a more analytical presentation.

Section 3.5 shows four-quarter cumulated financial flows (transactions and other changes) and outstanding amounts for the financial balance sheets of insurance corporations and pension funds.

## FINANCIAL MARKETS

The series on financial market statistics for the euro area cover the EU Member States that had adopted the euro at the time to which the statistics relate (changing composition), with the exception of statistics on securities issues (Tables 4.1 to 4.4), which relate to the Euro 13 (i.e. the Euro 12 plus Slovenia) for the whole time series (fixed composition).

Statistics on securities other than shares and quoted shares (Sections 4.1 to 4.4) are produced by the ECB using data from the ESCB and the BIS. Section 4.5 presents MFI interest rates on euro-denominated deposits and loans by euro area residents. Statistics on money market interest rates, long-term government bond yields and stock market indices (Sections 4.6 to 4.8) are produced by the ECB using data from wire services.

Statistics on securities issues cover securities other than shares (debt securities), which are presented in Sections 4.1, 4.2 and 4.3, and quoted shares, which are presented in Section 4.4. Debt securities are broken down into short-term and long-term securities. "Short-term" means securities with an original maturity of one year or less (in exceptional cases two years or less). Securities with a longer maturity, or with optional maturity dates, the latest of which is more than one year away, or with indefinite maturity dates, are classified as "long-term". Long-term debt securities issued by euro area residents are further broken down into fixed and variable rate issues. Fixed rate issues consist of issues where the coupon rate does not change during the life of the issues. Variable rate issues include all issues where the coupon is periodically refixed by reference to an independent interest rate or index. The statistics on debt securities are estimated to cover approximately 95% of total issues by euro area residents. Euro-denominated securities indicated in Sections 4.1, 4.2 and 4.3 also include items expressed in national denominations of the euro.

Section 4.1 shows securities other than shares, by original maturity, residency of the issuer and currency. The section presents outstanding amounts, gross issues and net issues of securities other than shares denominated in euro and securities other than shares issued by euro area residents in euro and in all currencies for total and long-term debt securities. Net issues differ from the changes in outstanding amounts owing to valuation changes, reclassifications and other adjustments. This section also presents seasonally adjusted statistics including annualised six-month seasonally adjusted growth rates for total and long-term debt securities. The latter are calculated from the seasonally adjusted index of notional stocks from which the seasonal effects have been removed. See the Technical notes for details.

Section 4.2 contains a sectoral breakdown of outstanding amounts, gross issues and net issues for issuers resident in the euro area in line with the ESA 95. The ECB is included in the Eurosystem.

The total outstanding amounts for total and long-term debt securities in column 1 of Table 1 in Section 4.2, corresponds to the data on outstanding amounts for total and long-term debt securities issued by euro area residents in column 7 of Section 4.1. The outstanding amounts for total and long-term debt securities issued by MFIs in column 2 of Table 1 in Section 4.2 are broadly comparable with data for debt securities issued as shown on the liabilities side of the aggregated MFI balance sheet in column 8 of Table 2 in Section 2.1. The total net issues for total debt securities in column 1 of Table 2 in Section 4.2 correspond to the data on total net issues by euro area residents in column 9 of Section 4.1. The residual difference between long-term debt securities and total fixed and variable rate long-term debt securities in Table 1 in Section 4.2 consists of zero coupon bonds and revaluation effects.

Section 4.3 shows non-seasonally and seasonally adjusted growth rates for debt



securities issued by euro area residents (broken down by maturity, type of instrument, sector of the issuer and currency), which are based on financial transactions that occur when an institutional unit incurs or redeems liabilities. The growth rates therefore exclude reclassifications, revaluations, exchange rate variations and any other changes which do not arise from transactions. The seasonally adjusted growth rates have been annualised for presentational purposes. See the Technical notes for details.

Section 4.4, columns 1, 4, 6 and 8, show the outstanding amounts of quoted shares issued by euro area residents broken down by issuing sector. The monthly data for quoted shares issued by non-financial corporations correspond to the quarterly series shown in Section 3.2 (main liabilities, column 21).

Section 4.4, columns 3, 5, 7 and 9, show annual growth rates for quoted shares issued by euro area residents (broken down by the sector of the issuer), which are based on financial transactions that occur when an issuer sells or redeems shares for cash excluding investments in the issuers' own shares. Transactions include the quotation of an issuer on a stock exchange for the first time and the creation or deletion of new instruments. The calculation of annual growth rates excludes reclassifications, revaluations and any other changes which do not arise from transactions.

Section 4.5 presents statistics on all the interest rates that MFIs resident in the euro area apply to euro-denominated deposits and loans vis-à-vis households and non-financial corporations resident in the euro area. Euro area MFI interest rates are calculated as a weighted average (by corresponding business volume) of the euro area countries' interest rates for each category.

MFI interest rate statistics are broken down by type of business coverage, sector, instrument category and maturity, period of notice or initial period of interest rate fixation. The new MFI interest rate statistics replace the ten transitional

statistical series on euro area retail interest rates that have been published in the ECB's Monthly Bulletin since January 1999.

Section 4.6 presents money market interest rates for the euro area, the United States and Japan. For the euro area, a broad spectrum of money market interest rates is covered spanning from interest rates on overnight deposits to those on twelve-month deposits. Before January 1999 synthetic euro area interest rates were calculated on the basis of national rates weighted by GDP. With the exception of the overnight rate to December 1998, monthly, quarterly and yearly values are period averages. Overnight deposits are represented by interbank deposit bid rates up to December 1998. From January 1999 column 1 of Section 4.6 shows the euro overnight index average (EONIA). These are end-of-period rates up to December 1998 and period averages thereafter. From January 1999 interest rates on one-, three-, six- and twelve-month deposits are euro interbank offered rates (EURIBOR); until December 1998, London interbank offered rates (LIBOR) where available. For the United States and Japan, interest rates on three-month deposits are represented by LIBOR.

Section 4.7 presents government bond yields for the euro area, the United States and Japan. Until December 1998, two-, three-, five- and seven-year euro area yields were end-of-period values and ten-year yields period averages. Thereafter, all yields are period averages. Until December 1998, euro area yields were calculated on the basis of harmonised national government bond yields weighted by GDP; thereafter, the weights are the nominal outstanding amounts of government bonds in each maturity band. For the United States and Japan, ten-year yields are period averages.

Section 4.8 shows stock market indices for the euro area, the United States and Japan.



## PRICES, OUTPUT, DEMAND AND LABOUR MARKETS

Most of the data described in this section are produced by the European Commission (mainly Eurostat) and national statistical authorities. Euro area results are obtained by aggregating data for individual countries. As far as possible, the data are harmonised and comparable. Statistics on hourly labour costs, GDP and expenditure components, value added by economic activity, industrial production, retail sales and passenger car registrations are adjusted for the variations in the number of working days.

The Harmonised Index of Consumer Prices (HICP) for the euro area (Table 1 in Section 5.1) is available from 1995 onwards. It is based on national HICPs, which follow the same methodology in all euro area countries. The breakdown by goods and services components is derived from the Classification of individual consumption by purpose (Coicop/HICP). The HICP covers monetary expenditure on final consumption by households on the economic territory of the euro area. The table includes seasonally adjusted HICP data and experimental HICP-based estimates of administered prices which are compiled by the ECB.

Industrial producer prices (Table 2 in Section 5.1), industrial production, industrial new orders, industrial turnover and retail sales (Section 5.2) are covered by Council Regulation (EC) No 1165/98 of 19 May 1998 concerning short-term statistics<sup>3</sup>. The breakdown by end-use of products for industrial producer prices and industrial production is the harmonised sub-division of industry excluding construction (NACE sections C to E) into Main Industrial Groupings (MIGs) as defined by Commission Regulation (EC) No 586/2001 of 26 March 2001<sup>4</sup>. Industrial producer prices reflect the ex-factory gate prices of producers. They include indirect taxes except VAT and other deductible taxes. Industrial production reflects the value added of the industries concerned.

World market prices of raw materials (Table 2 in Section 5.1) measures price changes of euro-denominated euro area imports compared with the base period.

The labour cost indices (Table 3 in Section 5.1) measure the changes in labour costs per hour worked in industry (including construction) and market services. Their methodology is laid down in Regulation (EC) No 450/2003 of the European Parliament and of the Council of 27 February 2003 concerning the labour cost index<sup>5</sup> and in the implementing Commission Regulation (EC) No 1216/2003 of 7 July 2003<sup>6</sup>. A breakdown of hourly labour costs for the euro area is available by labour cost component (wages and salaries, and employers' social contributions plus employment-related taxes paid by the employer less subsidies received by the employer) and by economic activity. The ECB calculates the indicator of negotiated wages (memo item in Table 3 of Section 5.1) on the basis of non-harmonised, national-definition data.

Unit labour cost components (Table 4 in Section 5.1), GDP and its components (Tables 1 and 2 in Section 5.2), GDP deflators (Table 5 in Section 5.1) and employment statistics (Table 1 in Section 5.3) are results of the ESA 95 quarterly national accounts.

Industrial new orders (Table 4 in Section 5.2) measure the orders received during the reference period and cover industries working mainly on the basis of orders – in particular textile, pulp and paper, chemical, metal, capital goods and durable consumer goods industries. The data are calculated on the basis of current prices.

Indices for turnover in industry and for the retail trade (Table 4 in Section 5.2) measure the turnover, including all duties and taxes with the exception of VAT, invoiced during the

3 OJ L 162, 5.6.1998, p. 1.

4 OJ L 86, 27.3.2001, p. 11.

5 OJ L 69, 13.3.2003, p. 1.

6 OJ L 169, 8.7.2003, p. 37.

reference period. Retail trade turnover covers all retail trade excluding sales of motor vehicles and motorcycles, and except repairs. New passenger car registrations covers registrations of both private and commercial passenger cars.

Qualitative business and consumer survey data (Table 5 in Section 5.2) draw on the European Commission Business and Consumer Surveys.

Unemployment rates (Table 2 in Section 5.3) conform to International Labour Organization (ILO) guidelines. They refer to persons actively seeking work as a share of the labour force, using harmonised criteria and definitions. The labour force estimates underlying the unemployment rate are different from the sum of the employment and unemployment levels published in Section 5.3.

## GOVERNMENT FINANCE

Sections 6.1 to 6.5 show the general government fiscal position in the euro area. The data are mainly consolidated and are based on the ESA 95 methodology. The annual euro area aggregates in Sections 6.1 to 6.3 are compiled by the ECB from harmonised data provided by the NCBs, which are regularly updated. The deficit and debt data for the euro area countries may therefore differ from those used by the European Commission within the excessive deficit procedure. The quarterly euro area aggregates in Sections 6.4 and 6.5 are compiled by the ECB on the basis of Eurostat and national data.

Section 6.1 presents annual figures on general government revenue and expenditure on the basis of definitions laid down in Commission Regulation (EC) No 1500/2000 of 10 July 2000<sup>7</sup> amending the ESA 95. Section 6.2 shows details of general government gross consolidated debt at nominal value in line with the Treaty provisions on the excessive deficit procedure. Sections 6.1 and 6.2 include summary data for the individual euro area countries owing to their importance in the

framework of the Stability and Growth Pact. The deficits/surpluses presented for the individual euro area countries correspond to excessive deficit procedure B.9, as defined by Commission Regulation (EC) No 351/2002 of 25 February 2002 amending Council Regulation (EC) No 3605/93 as regards references to the ESA 95. Section 6.3 presents changes in general government debt. The difference between the change in the government debt and the government deficit – the deficit-debt adjustment – is mainly explained by government transactions in financial assets and by foreign exchange valuation effects. Section 6.4 presents quarterly figures on general government revenue and expenditure on the basis of definitions laid down in Regulation (EC) No 1221/2002 of the European Parliament and of the Council of 10 June 2002<sup>8</sup> on quarterly non-financial accounts for general government. Section 6.5 presents quarterly figures on gross consolidated government debt, the deficit-debt adjustment and the government borrowing requirement. These figures are compiled using data provided by the Member States under Regulations (EC) No 501/2004 and 1222/2004 and data provided by the National Central Banks.

## EXTERNAL TRANSACTIONS AND POSITIONS

The concepts and definitions used in balance of payments (b.o.p.) and international investment position (i.i.p.) statistics (Sections 7.1 to 7.4) are generally in line with the IMF Balance of Payments Manual (fifth edition, October 1993), the ECB Guideline of 16 July 2004 on the statistical reporting requirements of the ECB (ECB/2004/15)<sup>9</sup> and the amending ECB Guideline of 31 May 2007 (ECB/2007/3)<sup>10</sup>. Additional references about the methodologies and sources used in the euro area b.o.p. and i.i.p. statistics can be found in the ECB publication entitled “European Union balance of payments/

7 OJ L 172, 12.7.2000, p. 3.

8 OJ L 179, 9.7.2002, p. 1.

9 OJ L 354, 30.11.2004, p. 34.

10 OJ L 159, 20.6.2007, p. 48.

international investment position statistical methods” (May 2007), and in the following Task Force reports: “Portfolio investment collection systems” (June 2002), “Portfolio investment income” (August 2003) and “Foreign direct investment” (March 2004), which can be downloaded from the ECB’s website. In addition, the report by the ECB/European Commission (Eurostat) Task Force on Quality of balance of payments and international investment position statistics (June 2004) is available on the website of the Committee on Monetary, Financial and Balance of Payments Statistics ([www.cmfb.org](http://www.cmfb.org)). The annual quality report on the euro area b.o.p./i.i.p., which is based on the Task Force’s recommendations, is available on the ECB’s website. The presentation of net transactions in the financial account follows the sign convention of the IMF Balance of Payments Manual: an increase of assets appears with a minus sign, while an increase of liabilities appears with a plus sign. In the current account and capital account, both credit and debit transactions are presented with a plus sign.

The euro area b.o.p. is compiled by the ECB. The recent monthly figures should be regarded as provisional. Data are revised when figures for the following month and/or the detailed quarterly b.o.p. are published. Earlier data are revised periodically or as a result of methodological changes in the compilation of the source data.

In Section 7.1, Table 2 contains seasonally adjusted data for the current account. Where appropriate, the adjustment covers also working-day, leap year and/or Easter effects. Table 5 provides a sectoral breakdown of euro area purchasers of securities issued by non-residents of the euro area. It is not yet possible to show a sectoral breakdown of euro area issuers of securities acquired by non-residents. In Tables 6 and 7 the breakdown between “loans” and “currency and deposits” is based on the sector of the non-resident counterpart, i.e. assets vis-à-vis non-resident banks are classified as deposits, whereas assets vis-à-vis other non-resident sectors are classified as

loans. This breakdown follows the distinction made in other statistics, such as the MFI consolidated balance sheet, and conforms to the IMF Balance of Payments Manual.

Section 7.2 contains a monetary presentation of the b.o.p.: the b.o.p. transactions mirroring the transactions in the external counterpart of M3. The data follow the sign conventions of the b.o.p., except for the transactions in the external counterpart of M3 taken from money and banking statistics (column 12), where a positive sign denotes an increase of assets or a decrease of liabilities. In portfolio investment liabilities (columns 5 and 6), the b.o.p. transactions include sales and purchases of equity and debt securities issued by MFIs in the euro area, apart from shares of money market funds and debt securities with a maturity of up to two years. A methodological note on the monetary presentation of the euro area b.o.p. is available in the “Statistics” section of the ECB’s website. See also Box 1 in the June 2003 issue of the Monthly Bulletin.

Section 7.3 presents a geographical breakdown of the euro area b.o.p. (Tables 1 to 4) and i.i.p. (Table 5) vis-à-vis main partner countries individually or as a group, distinguishing between EU Member States outside the euro area and countries or areas outside the European Union. The breakdown also shows transactions and positions vis-à-vis EU institutions (which, apart from the ECB, are treated statistically as outside the euro area, regardless of their physical location) and for some purposes also offshore centres and international organisations. Tables 1 to 4 show cumulative b.o.p. transactions in the latest available four quarters; Table 5 shows a geographical breakdown of the i.i.p. for the latest available end-year. The breakdown does not cover transactions or positions in portfolio investment liabilities, financial derivatives and international reserves. The geographical breakdown is described in the article entitled “Euro area balance of payments and international investment position vis-à-vis main counterparts” in the February 2005 issue of the Monthly Bulletin.

The data on the euro area i.i.p. in Section 7.4 are based on positions vis-à-vis non-residents of the euro area, considering the euro area as a single economic entity (see also Box 9 in the December 2002 issue of the Monthly Bulletin). The i.i.p. is valued at current market prices, with the exception of direct investment, where book values are used to a large extent. The quarterly i.i.p. is compiled on the basis of the same methodological framework as the annual i.i.p. As some data sources are not available on a quarterly basis (or are available with a delay), the quarterly i.i.p. is partly estimated on the basis of financial transactions and asset prices and foreign exchange developments.

The outstanding amounts of the Eurosystem's international reserves and related assets and liabilities are shown in Section 7.4, Table 5, together with the part held by the ECB. These figures are not fully comparable with those of the Eurosystem's weekly financial statement owing to differences in coverage and valuation. The data in Table 5 are in line with the recommendations for the IMF/BIS template on international reserves and foreign currency liquidity. Changes in the gold holdings of the Eurosystem (column 3) are due to transactions in gold within the terms of the Central Bank Gold Agreement of 26 September 1999, which was updated on 8 March 2004. More information on the statistical treatment of the Eurosystem's international reserves can be found in a publication entitled "Statistical treatment of the Eurosystem's international reserves" (October 2000), which can be downloaded from the ECB's website. The website also contains more comprehensive data in accordance with the template on international reserves and foreign currency liquidity.

Section 7.5 shows data on euro area external trade in goods. The main source is Eurostat. The ECB derives volume indices from Eurostat value and unit value indices, and performs seasonal adjustment of unit value indices, while value data are seasonally and working-day adjusted by Eurostat.

The breakdown by product group in columns 4 to 6 and 9 to 11 of Table 1 in Section 7.5 is in line with the classification by Broad Economic Categories. Manufactured goods (columns 7 and 12) and oil (column 13) are in line with the SITC Rev. 3 definition. The geographical breakdown (Table 2 in Section 7.5) shows main trading partners individually or in regional groups. Mainland China excludes Hong Kong.

Owing to differences in definitions, classification, coverage and time of recording, external trade data, in particular for imports, are not fully comparable with the goods item in the balance of payments statistics (Sections 7.1 to 7.3). The difference for imports has been around 5% in recent years (ECB estimate), a significant part of which relates to the inclusion of insurance and freight services in the external trade data (c.i.f. basis).

## EXCHANGE RATES

Section 8.1 shows nominal and real effective exchange rate (EER) indices for the euro calculated by the ECB on the basis of weighted averages of bilateral exchange rates of the euro against the currencies of the euro area's trading partners. A positive change denotes an appreciation of the euro. Weights are based on trade in manufactured goods with the trading partners in the periods 1995-1997 and 1999-2001, and are calculated to account for third-market effects. The EER indices result from the linking at the beginning of 1999 of the indices based on 1995-1997 weights to those based on 1999-2001 weights. The EER-24 group of trading partners is composed of the 14 non-euro area EU Member States, Australia, Canada, China, Hong Kong, Japan, Norway, Singapore, South Korea, Switzerland and the United States. The EER-44 group includes, in addition to the EER-24, the following countries: Algeria, Argentina, Brazil, Chile, Croatia, Iceland, India, Indonesia, Israel, Malaysia, Mexico, Morocco, New Zealand, the Philippines, Russia, South Africa, Taiwan, Thailand, Turkey

and Venezuela. Real EERs are calculated using consumer price indices, producer price indices, gross domestic product deflators, unit labour costs in manufacturing and unit labour costs in the total economy.

For more detailed information on the calculation of the EERs, see Box 8 entitled “The effective exchange rates of the euro following the recent euro area and EU enlargements” in the March 2007 issue of the Monthly Bulletin and the ECB’s Occasional Paper No 2 (“The effective exchange rates of the euro” by Luca Buldorini, Stelios Makrydakis and Christian Thimann, February 2002), which can be downloaded from the ECB’s website.

The bilateral rates shown in Section 8.2 are monthly averages of those published daily as reference rates for these currencies.

## DEVELOPMENTS OUTSIDE THE EURO AREA

Statistics on other EU Member States (Section 9.1) follow the same principles as those for data relating to the euro area. Data for the United States and Japan contained in Section 9.2 are obtained from national sources.



## ANNEXES

# CHRONOLOGY OF MONETARY POLICY MEASURES OF THE EUROSYSTEM<sup>1</sup>



### 13 JANUARY 2005

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.

### 14 JANUARY 2005

The Governing Council of the ECB decides to increase the allotment amount for each of the longer-term refinancing operations to be conducted in the year 2005 from €25 billion to €30 billion. This increased amount takes into consideration the higher liquidity needs of the euro area banking system anticipated in 2005. The Eurosystem will however continue to provide the bulk of liquidity through its main refinancing operations. The Governing Council may decide to adjust the allotment amount again at the beginning of 2006.

### 3 FEBRUARY, 3 MARCH, 7 APRIL, 4 MAY, 2 JUNE, 7 JULY, 4 AUGUST, 1 SEPTEMBER, 6 OCTOBER AND 3 NOVEMBER 2005

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.

### 1 DECEMBER 2005

The Governing Council of the ECB decides to increase the minimum bid rate on the main refinancing operations by 0.25 percentage point to 2.25%, starting from the operation to be settled on 6 December 2005. In addition, it decides to increase the interest rates on both the marginal lending facility and the deposit facility by 0.25 percentage point, to 3.25% and

1.25% respectively, both with effect from 6 December 2005.

### 16 DECEMBER 2005

The Governing Council of the ECB decides to increase the allotment amount for each of the longer-term refinancing operations to be conducted in the year 2006 from €30 billion to €40 billion. This increased amount takes two aspects into consideration. First, the liquidity needs of the euro area banking system are expected to increase further in the year 2006. Second, the Eurosystem has decided to increase slightly the share of the liquidity needs satisfied by the longer-term refinancing operations. The Eurosystem will, however, continue to provide the bulk of liquidity through its main refinancing operations. The Governing Council may decide to adjust the allotment amount again at the beginning of 2007.

### 12 JANUARY AND 2 FEBRUARY 2006

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 2.25%, 3.25% and 1.25% respectively.

### 2 MARCH 2006

The Governing Council of the ECB decides to increase the minimum bid rate on the main refinancing operations by 25 basis points to 2.50%, starting from the operation to be settled on 8 March 2006. In addition, it decides to increase the interest rates on both the

<sup>1</sup> The chronology of monetary policy measures of the Eurosystem taken between 1999 and 2004 can be found on pages 176 to 180 of the ECB's Annual Report 1999, on pages 205 to 208 of the ECB's Annual Report 2000, on pages 219 to 220 of the ECB's Annual Report 2001, on pages 234 to 235 of the ECB's Annual Report 2002, on pages 217 to 218 of the ECB's Annual Report 2003 and on page 217 of the ECB's Annual Report 2004 respectively.



marginal lending facility and the deposit facility by 25 basis points, to 3.50% and 1.50% respectively, both with effect from 8 March 2006.

#### **6 APRIL AND 4 MAY 2006**

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 JUNE 2006**

The Governing Council of the ECB decides to increase the minimum bid rate on the main refinancing operations by 25 basis points to 2.75%, starting from the operation to be settled on 15 June 2006. In addition, it decides to increase the interest rates on both the marginal lending facility and the deposit facility by 25 basis points, to 3.75% and 1.75% respectively, both with effect from 15 June 2006.

#### **6 JULY 2006**

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.

#### **3 AUGUST 2006**

The Governing Council of the ECB decides to increase the minimum bid rate on the main refinancing operations by 25 basis points to 3.0%, starting from the operation to be settled on 9 August 2006. In addition, it decides to increase the interest rates on both the marginal lending facility and the deposit facility by

25 basis points, to 4.0% and 2.0%, both with effect from 9 August 2006.

#### **31 AUGUST 2006**

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 3.0%, 4.0% and 2.0% respectively.

#### **5 OCTOBER 2006**

The Governing Council of the ECB decides to increase the minimum bid rate on the main refinancing operations by 25 basis points to 3.25%, starting from the operation to be settled on 11 October 2006. In addition, it decides to increase the interest rates on both the marginal lending facility and the deposit facility by 25 basis points, to 4.25% and 2.25%, both with effect from 11 October 2006.

#### **2 NOVEMBER 2006**

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.

#### **7 DECEMBER 2006**

The Governing Council of the ECB decides to increase the minimum bid rate on the main refinancing operations by 25 basis points to 3.50%, starting from the operation to be settled on 13 December 2006. In addition, it decides to increase the interest rates on both the marginal lending facility and the deposit facility by 25 basis points, to 4.50% and 2.50%, both with effect from 13 December 2006.



**21 DECEMBER 2006**

The Governing Council of the ECB decides to increase the allotment amount for each of the longer-term refinancing operations to be conducted in the year 2007 from €40 billion to €50 billion. This increased amount takes the following aspects into consideration: the liquidity needs of the euro area banking system have grown strongly in recent years and are expected to increase further in the year 2007. Therefore the Eurosystem has decided to increase slightly the share of the liquidity needs satisfied by the longer-term refinancing operations. The Eurosystem will, however, continue to provide the bulk of liquidity through its main refinancing operations. The Governing Council may decide to adjust the allotment amount again at the beginning of 2008.

**11 JANUARY AND 8 FEBRUARY 2007**

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 3.50%, 4.50% and 2.50% respectively.

**8 MARCH 2007**

The Governing Council of the ECB decides to increase the minimum bid rate on the main refinancing operations by 25 basis points to 3.75%, starting from the operation to be settled on 14 March 2007. In addition, it decides to increase the interest rates on both the marginal lending facility and the deposit facility by 25 basis points, to 4.75% and 2.75%, both with effect from 14 March 2007.

**12 APRIL AND 10 MAY 2007**

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.

**6 JUNE 2007**

The Governing Council of the ECB decides to increase the minimum bid rate on the main refinancing operations by 25 basis points to 4%, starting from the operation to be settled on 13 June 2007. In addition, it decides to increase by 25 basis points the interest rates on both the marginal lending facility and the deposit facility, to 5% and 3% respectively, with effect from 13 June 2007.

**5 JULY, 2 AUGUST, 6 SEPTEMBER AND 4 OCTOBER 2007**

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 4.00%, 5.00% and 3.00% respectively.







## DOCUMENTS PUBLISHED BY THE EUROPEAN CENTRAL BANK SINCE 2006

This list is designed to inform readers about selected documents published by the European Central Bank since January 2006. For Working Papers, the list only refers to publications released between July and September 2007. Unless otherwise indicated, hard copies can be obtained or subscribed to free of charge, stock permitting, by contacting [info@ecb.europa.eu](mailto:info@ecb.europa.eu).

For a complete list of documents published by the European Central Bank and by the European Monetary Institute, please visit the ECB's website (<http://www.ecb.europa.eu>).

### ANNUAL REPORT

“Annual Report 2005”, April 2006.

“Annual Report 2006”, April 2007.

### CONVERGENCE REPORT

“Convergence Report May 2006”.

“Convergence Report December 2006”.

“Convergence Report May 2007”.

### MONTHLY BULLETIN ARTICLES

“The predictability of the ECB's monetary policy”, January 2006.

“Hedge funds: developments and policy implications”, January 2006.

“Assessing house price developments in the euro area”, February 2006.

“Fiscal policies and financial markets”, February 2006.

“The importance of public expenditure reform for economic growth and stability”, April 2006.

“Portfolio management at the ECB”, April 2006.

“Monetary and exchange rate arrangements of the euro area with selected third countries and territories”, April 2006.

“The contribution of the ECB and the Eurosystem to European financial integration”, May 2006.

“The single list in the collateral framework of the Eurosystem”, May 2006.

“Equity issuance in the euro area”, May 2006.

“Measures of inflation expectations in the euro area”, July 2006.

“Competitiveness and the export performance of the euro area”, July 2006.

“Sectoral money holding: determinants and recent developments”, August 2006.

“The evolution of large-value payment systems in the euro area”, August 2006.

“Demographic change in the euro area: projections and consequences”, October 2006.

“Integrated financial and non-financial accounts for the institutional sectors in the euro area”, October 2006.

“Monetary policy ‘activism’”, November 2006.

“The Eurosystem's experience with fine-tuning operations at the end of the reserve maintenance period”, November 2006.

“Financial development in central, eastern and south-eastern Europe”, November 2006.

“The enlarged EU and euro area economies”, January 2007.

“Developments in the structural features of the euro area labour markets over the last decade”, January 2007.

“Putting China's economic expansion in perspective”, January 2007.

“Challenges to fiscal sustainability in the euro area”, February 2007.

“The EU arrangements for financial crisis management”, February 2007.

“Migrant remittances to regions neighbouring the EU”, February 2007.

“Communicating monetary policy to financial markets”, April 2007.

“Output growth differentials in the euro area: sources and implications”, April 2007.

“From government deficit to debt: bridging the gap”, April 2007.

“Measured inflation and inflation perceptions in the euro area”, May 2007.

“Competition in and economic performance of the euro area services sector”, May 2007.

“Determinants of growth in the EU Member States of central and eastern Europe”, May 2007.

“Share buybacks in the euro area”, May 2007.

“Interpreting monetary developments since mid-2004”, July 2007.

“Oil-exporting countries: key structural features, economic developments and oil revenue recycling”, July 2007.

“Adjustment of global imbalances in a financially integrating world”, August 2007.

“The financing of small and medium-sized enterprises in the euro area”, August 2007.

“Leveraged buyouts and financial stability”, August 2007.

“Long-term developments in MFI loans to households in the euro area: main patterns and determinants”, October 2007.

“The collateral frameworks of the Federal Reserve System, the Bank of Japan and the Eurosystem”, October 2007.

“Circulation and supply of euro banknotes and preparations for the second series of banknotes”, October 2007.

#### **STATISTICS POCKET BOOK**

Available monthly since August 2003.

#### **LEGAL WORKING PAPER SERIES**

- 1 “The developing EU legal framework for clearing and settlement of financial instruments” by K. M. Löber, February 2006.
- 2 “The application of multilingualism in the European Union context” by P. Athanassiou, March 2006.
- 3 “National central banks and Community public sector procurement legislation: a critical overview” by J. García-Andrade and P. Athanassiou, October 2006.
- 4 “Privileges and immunities of the European Central Bank” by G. Gruber and M. Benisch, June 2007.
- 5 “Legal and institutional aspects of the currency changeover following the restoration of the independence of the Baltic States” by K. Drēviņa, K. Laurinavičius and A. Tupits, July 2007.

#### **OCCASIONAL PAPER SERIES**

- 43 “The accumulation of foreign reserves” by an International Relations Committee Task Force, February 2006.
- 44 “Competition, productivity and prices in the euro area services sector” by a task force of the Monetary Policy Committee of the European System of Central Banks, April 2006.
- 45 “Output growth differentials across the euro area countries: some stylised facts” by N. Benalal, J. L. Diaz del Hoyo, B. Pierluigi and N. Vidalis, May 2006.

- 46 “Inflation persistence and price-setting behaviour in the euro area – a summary of the IPN evidence” by F. Altissimo, M. Ehrmann and F. Smets, June 2006.
- 47 “The reform and implementation of the Stability and Growth Pact” by R. Morris, H. Ongena and L. Schuknecht, June 2006.
- 48 “Macroeconomic and financial stability challenges for acceding and candidate countries” by the International Relations Committee Task Force on Enlargement, July 2006.
- 49 “Credit risk mitigation in central bank operations and its effects on financial markets: the case of the Eurosystem” by U. Bindseil and F. Papadia, August 2006.
- 50 “Implications for liquidity from innovation and transparency in the European corporate bond market” by M. Laganà, M. Peřina, I. von Köppen-Mertes and A. Persaud, August 2006.
- 51 “Macroeconomic implications of demographic developments in the euro area” by A. Maddaloni, A. Musso, P. Rother, M. Ward-Warmedinger and T. Westermann, August 2006.
- 52 “Cross-border labour mobility within an enlarged EU” by F. F. Heinz and M. Ward-Warmedinger, October 2006.
- 53 “Labour productivity developments in the euro area” by R. Gomez-Salvador, A. Musso, M. Stocker and J. Turunen, October 2006.
- 54 “Quantitative quality indicators for statistics – an application to euro area balance of payment statistics” by V. Damia and C. Picón Aguilar, November 2006.
- 55 “Globalisation and euro area trade: interactions and challenges” by U. Baumann and F. di Mauro, February 2007.
- 56 “Assessing fiscal soundness: theory and practice” by N. Giammarioli, C. Nickel, P. Rother and J.-P. Vidal, March 2007.
- 57 “Understanding price developments and consumer price indices in south-eastern Europe” by S. Herrmann and E. K. Polgar, March 2007.
- 58 “Long-term growth prospects for the Russian economy” by R. Beck, A. Kamps and E. Mileva, March 2007.
- 59 “The ECB Survey of Professional Forecasters (SPF) – A review after eight years’ experience” by C. Bowles, R. Friz, V. Genre, G. Kenny, A. Meyler and T. Rautanen, April 2007.
- 60 “Commodity price fluctuations and their impact on monetary and fiscal policies in Western and Central Africa” by U. Böwer, A. Geis and A. Winkler, April 2007.
- 61 “Determinants of growth in the central and eastern European EU Member States – A production function approach” by O. Arratibel, F. Heinz, R. Martin, M. Przybyla, L. Rawdanowicz, R. Serafini and T. Zumer, April 2007.
- 62 “Inflation-linked bonds from a central bank perspective” by J. A. Garcia and A. van Rixtel, June 2007.
- 63 “Corporate finance in the euro area – including background material” by the Task Force of the Monetary Policy Committee of the ESCB, June 2007.
- 64 “The use of portfolio credit risk models in central banks” by the Task Force of the Market Operations Committee of the ESCB, July 2007.
- 65 “The performance of credit rating systems in the assessment of collateral used in Eurosystem monetary policy operations” by F. Coppens, F. González and G. Winkler, July 2007.
- 66 “Structural reforms in EMU and the role of monetary policy – a survey of the literature” by N. Leiner-Killinger, V. López Pérez, R. Stiegert and G. Vitale, July 2007.
- 67 “Towards harmonised balance of payments and international investment position statistics – the experience of the European compilers” by J.-M. Israël and C. Sánchez Muñoz, July 2007.
- 68 “The securities custody industry” by D. Chan, F. Fontan, S. Rosati and D. Russo, August 2007.

- 69 “Fiscal policy in Mediterranean countries – developments, structures and implications for monetary policy” by M. Sturm and F. Gurtner, August 2007.
- 70 “The search for Columbus’ egg: finding a new formula to determine quotas at the IMF” by M. Skala, C. Thimann and R. Wölfinger, August 2007.
- 71 “The economic impact of the Single Euro Payments Area” by H. Schmiedel, August 2007.
- 72 “The role of financial markets and innovation in productivity and growth in Europe” by P. Hartmann, F. Heider, E. Papaioannou and M. Lo Duca, September 2007.
- 73 “Reserve accumulation: objective or by-product?” by J. O. de Beaufort Wijnholds and L. Søndergaard, September 2007.

#### RESEARCH BULLETIN

Research Bulletin, No 4, April 2006 (online only).

Research Bulletin, No 5, December 2006.

Research Bulletin, No 6, June 2007.

#### WORKING PAPER SERIES

- 773 “Exchange rate volatility and growth in small open economies at the EMU periphery” by G. Schnabl, July 2007.
- 774 “Shocks, structures or monetary policies? The euro area and the United States after 2001” by L. Christiano, R. Motto and M. Rostagno, July 2007.
- 775 “The dynamic behaviour of budget components and output” by A. Afonso and P. Claeys, July 2007.
- 776 “Insights gained from conversations with labour market decision-makers” by T. F. Bewley, July 2007.
- 777 “Downward nominal wage rigidity in the OECD” by S. Holden and F. Wulfsberg, July 2007.
- 778 “Employment protection legislation and wages” by M. Leonardi and G. Pica, July 2007.
- 779 “On-the-job search and the cyclical dynamics of the labour market” by M. U. Krause and T. A. Lubik, July 2007.
- 780 “Dynamics and monetary policy in a fair wage model of the business cycle” by D. de la Croix, G. de Walque and R. Wouters, July 2007.
- 781 “Wage inequality in Spain: recent developments” by M. Izquierdo and A. Lacuesta, July 2007.
- 782 “Panel data estimates of the production function and product and labour market imperfections” by S. Dobbelaere and J. Mairesse, July 2007.
- 783 “The cyclical dynamics of effective wages within employer-employee matches: evidence from German panel data” by S. Anger, July 2007.
- 784 “Understanding the dynamics of labour shares and inflation” by M. Lawless and K. Whelan, July 2007.
- 785 “Aggregating Phillips curves” by J. Imbs, E. Jondeau and F. Pelgrin, July 2007.
- 786 “The economic impact of merger control: what is special about banking?” by E. Carletti, P. Hartmann and S. Ongena, July 2007.
- 787 “Finance and growth: a macroeconomic assessment of the evidence from a European angle” by E. Papaioannou, July 2007.
- 788 “Evaluating the real effect of bank branching deregulation: comparing contiguous counties across US state borders” by R. R. Huang, July 2007.

- 789 “Modelling the impact of external factors on the euro area’s HICP and real economy: a focus on pass-through and the trade balance” by L. Landolfo, July 2007.
- 790 “Asset prices, exchange rates and the current account” by M. Fratzscher, L. Juvenal and L. Sarno, August 2007.
- 791 “Inquiries on dynamics of transition economy convergence in a two-country model” by J. Brůha and J. Podpiera, August 2007.
- 792 “Euro area market reactions to the monetary developments press release” by J. Coffinet and S. Gouteron, August 2007.
- 793 “Structural econometric approach to bidding in the main refinancing operations of the Eurosystem” by N. Cassola, C. Ewerhart and C. Morana, August 2007.
- 794 “(Un)naturally low? Sequential Monte Carlo tracking of the US natural interest rate” by M. J. Lombardi and S. Sgherri, August 2007.
- 795 “Assessing the impact of a change in the composition of public spending: a DSGE approach” by R. Straub and I. Tchakarov, August 2007.
- 796 “The impact of exchange rate shocks on sectoral activity and prices in the euro area” by E. Hahn, August 2007.
- 797 “Joint estimation of the natural rate of interest, the natural rate of unemployment, expected inflation, and potential output” by L. Benati and G. Vitale, August 2007.
- 798 “The transmission of US cyclical developments to the rest of the world” by S. Dées and I. Vansteenkiste, August 2007.
- 799 “Monetary policy shocks in a two-sector open economy: an empirical study” by R. Llaudes, August 2007.
- 800 “Is the corporate bond market forward-looking?” by J. Hilscher, August 2007.
- 801 “Uncovered interest parity at distant horizons: evidence on emerging economies and non-linearities” by A. Mehl and L. Cappiello, August 2007.
- 802 “Investigating time variation in the marginal predictive power of the yield spread” by L. Benati and C. Goodhart, August 2007.
- 803 “Optimal monetary policy in an estimated DSGE for the euro area” by S. Adjemian, M. Darracq Pariès and S. Moyen, August 2007.
- 804 “Growth accounting for the euro area: a structural approach” by T. Proietti and A. Musso, August 2007.
- 805 “The pricing of risk in European credit and corporate bond markets” by A. Berndt and I. Obreja, August 2007.
- 806 “State dependency and firm-level optimisation: a contribution to Calvo price staggering” by P. McAdam and A. Willman, August 2007.
- 807 “Cross-border lending contagion in multinational banks” by A. Derviz and J. Podpiera, September 2007.
- 808 “Model misspecification, the equilibrium natural interest rate and the equity premium” by O. Tristani, September 2007.
- 809 “Is the new Keynesian Phillips curve flat?” by K. Kuester, G. J. Müller and S. Stölting, September 2007.
- 810 “Inflation persistence: euro area and new EU Member States” by M. Franta, B. Saxa and K. Šmídková, September 2007.
- 811 “Instability and non-linearity in the euro area Phillips curve” by A. Musso, L. Stracca and D. van Dijk, September 2007.
- 812 “The uncovered return parity condition” by L. Cappiello and R. A. De Santis, September 2007.
- 813 “The role of the exchange rate for adjustment in boom and bust episodes” by R. Martin, L. Schuknecht and I. Vansteenkiste, September 2007.



- 814 “Choice of currency in bond issuance and the international role of currencies” by N. Siegfried, E. Simeonova and C. Vespro, September 2007.
- 815 “Do international portfolio investors follow firms’ foreign investment decisions?” by R. A. De Santis and P. Ehling, September 2007.
- 816 “The role of credit aggregates and asset prices in the transmission mechanism: a comparison between the euro area and the United States” by S. Kaufmann and M. T. Valderrama, September 2007.

#### **OTHER PUBLICATIONS**

- “Bond markets and long-term interest rates in non-euro area Member States of the European Union and in acceding countries – Statistical tables”, January 2006 (online only).
- “Data collection from credit institutions and other professional cash handlers under the Framework for banknote recycling”, January 2006 (online only).
- “Euro Money Market Survey 2005”, January 2006.
- “Euro area balance of payments and international investment position statistics – Annual quality report”, February 2006.
- “Towards a Single Euro Payments Area – Objectives and Deadlines (4th Progress Report)”, February 2006 (with the exception of the English version, online only).
- “Handbook for the compilation of flows statistics on the MFI balance sheet”, February 2006 (online only).
- “Methodological notes for the compilation of the revaluation adjustment”, February 2006 (online only).
- “National implementation of Regulation ECB/2001/13”, February 2006 (online only).
- “Payment and securities settlement systems in the European Union and in the acceding countries – Addendum incorporating 2004 data (Blue Book)”, March 2006.
- “ECB statistics: an overview”, April 2006.
- “TARGET Annual Report 2005”, May 2006.
- “Financial Stability Review”, June 2006.
- “Business continuity oversight expectations for systemically important payment systems (SIPS)”, June 2006 (online only).
- “Communication on TARGET2”, July 2006 (online only).
- “Government Finance Statistics Guide”, August 2006.
- “Implementation of banknote recycling framework”, August 2006.
- “The implementation of monetary policy in the euro area: General documentation on Eurosystem monetary policy instruments and procedures”, September 2006.
- “Differences in MFI interest rates across euro area countries”, September 2006.
- “Indicators of financial integration in the euro area”, September 2006.
- “Recent developments in supervisory structures in EU and acceding countries”, October 2006 (online only).
- “EU banking structures”, October 2006.
- “EU banking sector stability”, November 2006.
- “The ESCB’s governance structure as applied to ESCB statistics”, November 2006.
- “Third progress report on TARGET2”, November 2006 (online only).
- “The Eurosystem’s view of a ‘SEPA for cards’”, November 2006 (online only).
- “Financial Stability Review”, December 2006.
- “The European Central Bank – History, role and functions”, second revised edition, December 2006.



- “Assessment of accounting standards from a financial stability perspective”, December 2006 (online only).
- “Research Bulletin No 5”, December 2006.
- “Extension of the transmission period laid down in the ECB Banknote Recycling Framework for six euro area countries”, December 2006.
- “Payment and securities settlement systems in the European Union and in the acceding countries – addendum incorporating 2005 data” (Blue Book), December 2006.
- “Acceptance criteria for third-party rating tools within the Eurosystem Credit Assessment Framework”, December 2006 (online only).
- “Correspondent central banking model (CCBM) – procedure for Eurosystem counterparties”, December 2006 (online only).
- “Government finance statistics guide”, January 2007.
- “Letter from the ECB President to Ms Pervenche Berès, Chairwoman of the Committee on Economic and Monetary Affairs, European Parliament”, January 2007.
- “Letter from the ECB President to Mr Jean-Marie Cavada, Chairman of the Committee on Civil Liberties, Justice and Home Affairs, European Parliament”, January 2007.
- “Euro area balance of payments and international investment position statistics – Annual quality report”, February 2007.
- “List of monetary financial institutions and institutions subject to minimum reserves”, February 2007 (online only).
- “Financial statistics for a global economy – proceedings of the 3rd ECB conference on statistics”, February 2007.
- “Euro Money Market Study 2006”, February 2007 (online only).
- “Letter from the ECB President to Ms Pervenche Berès, Chairwoman of the Committee on Economic and Monetary Affairs, European Parliament”, February 2007.
- “Monetary financial institutions and markets statistics sector manual”, March 2007.
- “Financial integration in Europe”, March 2007.
- “TARGET2-Securities - The blueprint”, March 2007 (online only).
- “TARGET2-Securities - Technical feasibility”, March 2007 (online only).
- “TARGET2-Securities - Operational feasibility”, March 2007 (online only).
- “TARGET2-Securities - Legal feasibility”, March 2007 (online only).
- “TARGET2-Securities - Economic feasibility”, March 2007 (online only).
- “Risk measurement and systemic risk. Fourth joint central bank research conference 8-9 November 2005. In cooperation with the Committee on the Global Financial System”, April 2007.
- “How the euro became our money. A short history of the euro banknotes and coins”, April 2007.
- “Large banks and private equity-sponsored leveraged buyouts in the EU”, April 2007.
- “TARGET Annual Report 2006”, May 2007 (online only).
- “European Union balance of payments: international investment position statistical methods”, May 2007.
- “Bond markets and long-term interest rates in non-euro area Member States of the European Union: statistical tables”, May 2007 (online only).
- “The euro bonds and derivatives markets”, June 2007 (online only).
- “Review of the international role of the euro”, June 2007.
- “Fourth Progress Report on TARGET2, General Functional Specifications”, June 2007.
- “Financial Stability Review”, June 2007.
- “Monetary policy: a journey from theory to practice”, June 2007.
- “Eurosystem staff macroeconomic projections for the euro area”, June 2007 (online only).

“The Eurosystem policy principles on the location and operation of infrastructures settling euro-denominated payment transactions”, July 2007 (online only).

“Fifth SEPA progress report”, July 2007 (online only).

“Potential impact of Solvency II on financial stability”, July 2007.

“The role of central counterparties – issues related to central counterparty clearing”, ECB-Fed Chicago conference, 3-4 April 2006, July 2007.

“European legislation on financial markets: Settlement Finality Directive, Financial Collateral Directive, Winding-Up Directive for Credit Institutions”, July 2007.

“Payment and securities settlement systems in the European Union” (Blue Book), Vol. 1: euro area countries, Vol. 2: non-euro area countries, August 2007.

#### **INFORMATION BROCHURES**

“The European Central Bank, the Eurosystem, the European System of Central Banks”, May 2006.

“TARGET2-Securities brochure”, September 2006.

“The Single Euro Payments Area (SEPA): an integrated retail payments market”, November 2006.

“A single currency: an integrated market infrastructure”, September 2007.



## GLOSSARY

This glossary contains selected items that are frequently used in the Monthly Bulletin. A more comprehensive and detailed glossary can be found on the ECB's website ([www.ecb.europa.eu/home/glossary/html/index.en.html](http://www.ecb.europa.eu/home/glossary/html/index.en.html)).

**Autonomous liquidity factors:** liquidity factors that do not normally stem from the use of monetary policy instruments. Such factors are, for example, banknotes in circulation, government deposits with the central bank and the net foreign assets of the central bank.

**Balance of payments (b.o.p.):** a statistical statement that summarises, for a specific period of time, the economic transactions of an economy with the rest of the world.

**Bank lending survey (BLS):** a quarterly survey on lending policies that has been conducted by the Eurosystem since January 2003. It addresses qualitative questions on developments in credit standards, terms and conditions of loans and loan demand for both enterprises and households to a predefined sample group of banks in the euro area.

**Borrowing requirement (general government):** net incurrence of debt by general government.

**Capital account:** a b.o.p. account that covers all capital transfers and acquisitions/disposals of non-produced, non-financial assets between residents and non-residents.

**Central parity (or central rate):** the exchange rate of each ERM II member currency vis-à-vis the euro, around which the ERM II fluctuation margins are defined.

**Compensation per employee:** the total remuneration, in cash or in kind, that is payable by employers to employees, i.e. gross wages and salaries, as well as bonuses, overtime payments and employers' social security contributions, divided by the total number of employees.

**Consolidated balance sheet of the MFI sector:** a balance sheet obtained by netting out inter-MFI positions (e.g. inter-MFI loans and deposits) in the aggregated MFI balance sheet. It provides statistical information on the MFI sector's assets and liabilities vis-à-vis residents of the euro area not belonging to this sector (i.e. general government and other euro area residents) and vis-à-vis non-euro area residents. It is the main statistical source for the calculation of monetary aggregates, and it provides the basis for the regular analysis of the counterparts of M3.

**Current account:** a b.o.p. account that covers all transactions in goods and services, income and current transfers between residents and non-residents.

**Debt (financial accounts):** loans, deposit liabilities, debt securities issued and pension fund reserves of non-financial corporations (resulting from employers' direct pension commitments on behalf of their employees), valued at market value at the end of the period. However, due to data limitations, the debt given in the quarterly financial accounts does not include loans granted by non-financial sectors (e.g. inter-company loans) or by banks outside the euro area, whereas these components are included in the annual financial accounts.

**Debt (general government):** the gross debt (deposits, loans and debt securities excluding financial derivatives) at nominal value outstanding at the end of the year and consolidated between and within the sectors of general government.

**Debt security:** a promise on the part of the issuer (i.e. the borrower) to make one or more payment(s) to the holder (the lender) on a specified future date or dates. Such securities usually carry a specific rate of interest (the coupon) and/or are sold at a discount to the amount that will be repaid at maturity. Debt securities issued with an original maturity of more than one year are classified as long-term.

**Debt-to-GDP ratio (general government):** the ratio of general government debt to GDP at current market prices. It is the subject of one of the fiscal criteria laid down in Article 104(2) of the Treaty establishing the European Community to define the existence of an excessive deficit.

**Deficit (general government):** the general government's net borrowing, i.e. the difference between total government revenue and total government expenditure.

**Deficit-debt adjustment (general government):** the difference between the general government deficit and the change in general government debt.

**Deficit ratio (general government):** the ratio of the general government deficit to GDP at current market prices. It is the subject of one of the fiscal criteria laid down in Article 104(2) of the Treaty establishing the European Community to define the existence of an excessive deficit. It is also referred to as the budget deficit ratio or the fiscal deficit ratio.

**Deflation:** a decline in the general price level, e.g. in the consumer price index.

**Deposit facility:** a standing facility of the Eurosystem which counterparties may use to make overnight deposits, remunerated at a pre-specified interest rate, at an NCB.

**Direct investment:** cross-border investment for the purpose of obtaining a lasting interest in an enterprise resident in another economy (assumed, in practice, for ownership of at least 10% of the ordinary shares or voting power). Included are equity capital, reinvested earnings and other capital associated with inter-company operations. The direct investment account records net transactions/positions in assets abroad by euro area residents (as "direct investment abroad") and net transactions/positions in euro area assets by non-residents (as "direct investment in the euro area").

**Effective exchange rates (EERs) of the euro (nominal/real):** weighted averages of bilateral euro exchange rates against the currencies of the euro area's main trading partners. The ECB publishes nominal EER indices for the euro against two groups of trading partners: the EER-24 (comprising the 14 non-euro area EU Member States and the 10 main trading partners outside the EU) and the EER-44 (composed of the EER-24 and 20 additional countries). The weights used reflect the share of each partner country in euro area trade and account for competition in third markets. Real EERs are nominal EERs deflated by a weighted average of foreign, relative to domestic, prices or costs. They are thus measures of price and cost competitiveness.

**EONIA (euro overnight index average):** a measure of the effective interest rate prevailing in the euro interbank overnight market. It is calculated as a weighted average of the interest rates

on unsecured overnight lending transactions denominated in euro, as reported by a panel of contributing banks.

**Equities:** securities representing ownership of a stake in a corporation. They comprise shares traded on stock exchanges (quoted shares), unquoted shares and other forms of equity. Equities usually produce income in the form of dividends.

**ERM II (exchange rate mechanism II):** the exchange rate arrangement that provides the framework for exchange rate policy cooperation between the euro area countries and the EU Member States not participating in Stage Three of EMU.

**EURIBOR (euro interbank offered rate):** the rate at which a prime bank is willing to lend funds in euro to another prime bank, computed daily for interbank deposits with different maturities of up to 12 months.

**Euro area:** the area formed by those EU Member States in which the euro has been adopted as the single currency in accordance with the Treaty establishing the European Community.

**European Commission surveys:** harmonised surveys of business and/or consumer sentiment conducted on behalf of the European Commission in each of the EU Member States. Such questionnaire-based surveys are addressed to managers in the manufacturing, construction, retail and services industries, as well as to consumers. From each monthly survey, composite indicators are calculated that summarise the replies to a number of different questions in a single indicator (confidence indicators).

**Eurosystem:** the central banking system made up of the ECB and the NCBs of those EU Member States that have already adopted the euro.

**Eurozone Purchasing Managers' Surveys:** surveys of business conditions in manufacturing and in services industries conducted for a number of countries in the euro area and used to compile indices. The Eurozone Manufacturing Purchasing Managers' Index (PMI) is a weighted indicator calculated from indices of output, new orders, employment, suppliers' delivery times and stocks of purchases. The services sector survey asks questions on business activity, expectations of future business activity, the amount of business outstanding, incoming new business, employment, input prices and prices charged. The Eurozone Composite Index is calculated by combining the results from the manufacturing and services sector surveys.

**External trade in goods:** exports and imports of goods with countries outside the euro area, measured in terms of value and as indices of volume and unit value. External trade statistics are not comparable with the exports and imports recorded in the national accounts, as the latter include both intra-euro area and extra-euro area transactions, and also combine goods and services. Nor are they fully comparable with the goods item in b.o.p. statistics. Besides methodological adjustments, the main difference is that imports in external trade statistics are recorded including insurance and freight services, whereas they are recorded free on board in the goods item in the b.o.p. statistics.

**Financial account:** a b.o.p. account that covers all transactions in direct investment, portfolio investment, other investment, financial derivatives and reserve assets, between residents and non-residents.

**Fixed rate tender:** a tender procedure in which the interest rate is specified in advance by the central bank and in which participating counterparties bid the amount of money they wish to transact at the fixed interest rate.

**General government:** a sector defined in the ESA 95 as comprising resident entities that are engaged primarily in the production of non-market goods and services intended for individual and collective consumption and/or in the redistribution of national income and wealth. Included are central, regional and local government authorities as well as social security funds. Excluded are government-owned entities that conduct commercial operations, such as public enterprises.

**Gross domestic product (GDP):** the value of an economy's total output of goods and services less intermediate consumption, plus net taxes on products and imports. GDP can be broken down by output, expenditure or income components. The main expenditure aggregates that make up GDP are household final consumption, government final consumption, gross fixed capital formation, changes in inventories, and imports and exports of goods and services (including intra-euro area trade).

**Harmonised Index of Consumer Prices (HICP):** a measure of consumer prices that is compiled by Eurostat and harmonised for all EU Member States.

**Hourly labour cost index:** a measure of labour costs, including gross wages and salaries (in cash and in kind, including bonuses) and other labour costs (employers' social contributions plus employment-related taxes paid by the employer minus subsidies received by the employer), per hour actually worked (including overtime).

**Implied volatility:** the expected volatility (i.e. standard deviation) in the rates of change of the price of an asset (e.g. a share or a bond). It can be derived from the asset's price, maturity date and exercise price of its options, as well as from a riskless rate of return, using an option pricing model such as the Black-Scholes model.

**Index of negotiated wages:** a measure of the direct outcome of collective bargaining in terms of basic pay (i.e. excluding bonuses) at the euro area level. It refers to the implied average change in monthly wages and salaries.

**Industrial producer prices:** factory-gate prices (transportation costs are not included) of all products sold by industry excluding construction on the domestic markets of the euro area countries, excluding imports.

**Industrial production:** the gross value added created by industry at constant prices.

**Inflation:** an increase in the general price level, e.g. in the consumer price index.

**Inflation-indexed government bonds:** debt securities issued by the general government, the coupon payments and principal of which are linked to a specific consumer price index.

**International investment position (i.i.p.):** the value and composition of an economy's outstanding net financial claims on (or financial liabilities to) the rest of the world.

**International reserves:** external assets readily available to and controlled by monetary authorities for directly financing or regulating the magnitude of payments imbalances through intervention in exchange markets. The international reserves of the euro area comprise non-euro denominated claims on non-euro area residents, gold, special drawing rights (SDRs) and the reserve positions in the IMF which are held by the Eurosystem.

**Job vacancies:** a collective term covering newly created jobs, unoccupied jobs or jobs about to become vacant in the near future, for which the employer has taken recent active steps to find a suitable candidate.

**Key ECB interest rates:** the interest rates, set by the Governing Council, which reflect the monetary policy stance of the ECB. They are the minimum bid rate on the main refinancing operations, the interest rate on the marginal lending facility and the interest rate on the deposit facility.

**Labour force:** the sum total of persons in employment and the number of unemployed.

**Labour productivity:** the output that can be produced with a given input of labour. It can be measured in several ways, but is commonly measured as GDP at constant prices divided by either total employment or total hours worked.

**Longer-term refinancing operation:** a regular open market operation executed by the Eurosystem in the form of reverse transactions. Such operations are carried out through a monthly standard tender and normally have a maturity of three months.

**M1:** a narrow monetary aggregate that comprises currency in circulation plus overnight deposits held with MFIs and central government (e.g. at the post office or treasury).

**M2:** an intermediate monetary aggregate that comprises M1 plus deposits redeemable at a period of notice of up to and including three months (i.e. short-term savings deposits) and deposits with an agreed maturity of up to and including two years (i.e. short-term time deposits) held with MFIs and central government.

**M3:** a broad monetary aggregate that comprises M2 plus marketable instruments, in particular repurchase agreements, money market fund shares and units, and debt securities with a maturity of up to and including two years issued by MFIs.

**Main refinancing operation:** a regular open market operation executed by the Eurosystem in the form of reverse transactions. Such operations are carried out through a weekly standard tender and normally have a maturity of one week.

**Marginal lending facility:** a standing facility of the Eurosystem which counterparties may use to receive overnight credit from an NCB at a pre-specified interest rate against eligible assets.

**MFI credit to euro area residents:** MFI loans granted to non-MFI euro area residents (including general government and the private sector) and MFI holdings of securities (shares, other equity and debt securities) issued by non-MFI euro area residents.



**MFI interest rates:** the interest rates that are applied by resident credit institutions and other MFIs, excluding central banks and money market funds, to euro-denominated deposits and loans vis-à-vis households and non-financial corporations resident in the euro area.

**MFI longer-term financial liabilities:** deposits with an agreed maturity of over two years, deposits redeemable at a period of notice of over three months, debt securities issued by euro area MFIs with an original maturity of more than two years and the capital and reserves of the euro area MFI sector.

**MFI net external assets:** the external assets of the euro area MFI sector (such as gold, foreign currency banknotes and coins, securities issued by non-euro area residents and loans granted to non-euro area residents) minus the external liabilities of the euro area MFI sector (such as non-euro area residents' deposits and repurchase agreements, as well as their holdings of money market fund shares/units and debt securities issued by MFIs with a maturity of up to and including two years).

**MFIs (monetary financial institutions):** financial institutions which together form the money-issuing sector of the euro area. These include the Eurosystem, resident credit institutions (as defined in Community law) and all other resident financial institutions whose business is to receive deposits and/or close substitutes for deposits from entities other than MFIs and, for their own account (at least in economic terms), to grant credit and/or invest in securities. The latter group consists predominantly of money market funds.

**Minimum bid rate:** the lower limit to the interest rates at which counterparties may submit bids in the variable tenders.

**Other investment:** an item in the b.o.p. and the i.i.p. that covers the financial transactions/positions with non-residents in trade credits, deposits and loans, and other accounts receivable and payable.

**Portfolio investment:** euro area residents' net transactions and/or positions in securities issued by non-residents of the euro area ("assets") and non-residents' net transactions and/or positions in securities issued by euro area residents ("liabilities"). Included are equity securities and debt securities (bonds and notes, and money market instruments). Transactions are recorded at the effective price paid or received, less commissions and expenses. To be regarded as a portfolio asset, ownership in an enterprise must be equivalent to less than 10% of the ordinary shares or voting power.

**Price stability:** the maintenance of price stability is the primary objective of the Eurosystem. The Governing Council defines price stability as a year-on-year increase in the HICP for the euro area of below 2%. The Governing Council has also made it clear that, in the pursuit of price stability, it aims to maintain inflation rates below, but close to, 2% over the medium term.

**Purchasing power parity (PPP):** the rate at which one currency is converted into another so as to equalise the purchasing power of the two currencies by eliminating the differences in the price levels prevailing in the countries concerned. In their simplest form, PPPs show the ratio of the prices in national currency of the same good or service in different countries.



**Reference value for M3 growth:** the annual growth rate of M3 over the medium term that is consistent with the maintenance of price stability. At present, the reference value for annual M3 growth is 4½%.

**Reserve requirement:** the minimum amount of reserves a credit institution is required to hold with the Eurosystem. Compliance is determined on the basis of the average of the daily balances over a maintenance period of around one month.

**Survey of Professional Forecasters (SPF):** a quarterly survey that has been conducted by the ECB since 1999 to collect macroeconomic forecasts on euro area inflation, real GDP growth and unemployment from a panel of experts affiliated to financial and non-financial organisations based in the EU.

**Unit labour costs:** a measure of total labour costs per unit of output calculated for the euro area as the ratio of total compensation per employee to labour productivity (defined as GDP at constant prices per person employed).

**Variable rate tender:** a tender procedure where the counterparties bid both the amount of money they wish to transact with the central bank and the interest rate at which they wish to enter into the transaction.

**Write-down:** a downward adjustment to the value of loans recorded in the balance sheets of MFIs when it is recognised that the loans have become partly unrecoverable.

**Write-off:** the removal of the value of loans from the balance sheets of MFIs when the loans are considered to be totally unrecoverable.

**Yield curve:** a graphical representation of the relationship between the interest rate or yield and the residual maturity at a given point in time for debt securities with the same credit risk but different maturity dates. The slope of the yield curve can be measured as the difference between the interest rates or yield at two selected maturities.



ISSN 1561013-6



9 771561 013006