MONTHLY BULLETIN

MONTHLY **BULLETIN** JANUARY





EUROSYSTEM











In 2008 all ECB publications feature a motif taken from the €10 banknote.





# MONTHLY BULLETIN JANUARY 2008

### © European Central Bank 2008

### 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

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 9 January 2008.

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



### **CONTENTS**

| ED | ITORIAL   | 5  | EURO AREA STATISTICS                                     | \$1 |
|----|---|----|--|-----|
|    | ONOMIC AND MONETARY VELOPMENTS  | 9  | ANNEXES  Character of manateman alice                    |     |
| Th | ne external environment of the euro area  | 9  | Chronology of monetary policy measures of the Eurosystem | 1   |
| M  | onetary and financial developments  | 14 | Documents published by the European                      |     |
| Pr | ices and costs  | 35 | Central Bank since 2007                                  | V   |
| Οι | utput, demand and the labour market   | 42 | Glossary   | XI  |
|    | schange rate and balance of payments velopments   | 51 |  |     |
| В  | oxes:   |    |  |     |
| 1  | Recent liquidity operations and their impact on monetary aggregates   | 15 |  |     |
| 2  | Review of statistics on payments<br>and securities trading, clearing<br>and settlement                            | 25 |  |     |
| 3  | Accounting for recent and prospective movements in HICP inflation: the role of base effects                       | 40 |  |     |
| 4  | Labour productivity developments<br>in the euro area: results from the latest<br>release of the EU KLEMS database | 46 |  |     |
| 5  | The euro area following the entry of Cyprus and Malta   | 53 |  |     |
| 6  | Recent developments in the international investment position of the euro area                                     | 59 |  |     |
| AR | TICLES  | 61 |  |     |
|    | oductivity developments and onetary policy  | 61 |  |     |
|    | obalisation, trade and the euro area acroeconomy  | 75 |  |     |
|    | ne Eurosystem's experience with recasting autonomous factors and  |    |  |     |
| ex | cess reserves   | 89 |  |     |

### **ABBREVIATIONS**

| COUNTRIES |                | LU | Luxembourg     |
|-----------|----------------|----|----------------|
| BE        | Belgium        | HU | Hungary        |
| BG        | Bulgaria       | MT | Malta          |
| CZ        | Czech Republic | NL | Netherlands    |
| DK        | Denmark        | AT | Austria        |
| DE        | Germany        | PL | Poland         |
| EE        | Estonia        | PT | Portugal       |
| ΙE        | Ireland        | RO | Romania        |
| GR        | Greece         | SI | Slovenia       |
| ES        | Spain          | SK | Slovakia       |
| FR        | France         | FI | Finland        |
| IT        | Italy          | SE | Sweden         |
| CY        | Cyprus         | UK | United Kingdom |
| LV        | Latvia         | JP | Japan          |
| LT        | Lithuania      | 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 OrganizationIMF International Monetary FundMFI 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 10 January 2008, 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. According to the information that has become available since the previous meeting of the Governing Council on 6 December 2007, strong short-term upward pressure on inflation has continued, with HICP inflation remaining at 3.1% in December. As regards the medium term, and in a context of very vigorous money and credit growth, the Governing Council's assessment of upside risks to price stability has been fully confirmed. The Governing Council remains prepared to act pre-emptively so that second-round effects and upside risks to price stability over the medium term do not materialise and, consequently, medium and long-term inflation expectations remain firmly anchored in line with price stability. Reflecting its mandate, such anchoring is of the highest priority to the Governing Council. The economic fundamentals of the euro area are sound. However, the ongoing reappraisal of risk in financial markets is still accompanied by uncertainty about its potential impact on the real economy and the risks surrounding the outlook for economic activity are on the downside. The Governing Council will continue to monitor very closely all developments over the coming weeks.

Starting with the economic analysis, the latest information on economic activity suggests that quarterly growth at the turn of the year was at a more moderate pace than the quarter-on-quarter rate of 0.8% observed in the third quarter of 2007 (revised upwards from 0.7%). This assessment is in line with indicators for business and consumer confidence which, while declining over the past few months, generally remain at levels that continue to point to ongoing growth.

The Governing Council's main scenario remains that of real GDP growth broadly in line with trend potential. The fundamentals of the euro area economy are sound, profitability has been sustained, employment growth has been robust and unemployment rates have fallen to levels not seen for 25 years. Consumption growth should therefore continue to contribute to economic expansion, in line with real disposable income, and investment growth should provide ongoing support. On the expectation that the global economy will, on balance, remain resilient — with the slowdown in economic growth in the United States being mitigated by the continued strength of emerging market economies — external demand should continue to support euro area exports.

That said, uncertainty about the prospects for economic growth remains high and the risks surrounding the outlook for economic activity lie on the downside. The latter relate mainly to a potentially broader than currently expected impact of the ongoing reappraisal of risk in financial markets on financing conditions and economic sentiment, with a negative impact on world and euro area growth. Further downside risks stem from the scope for additional oil and other commodity price rises, concerns about protectionist pressures and the possibility of disorderly developments due to global imbalances.

With regard to price developments, according to Eurostat's flash estimate the annual HICP inflation rate was 3.1% in December 2007, unchanged from November. This confirms the strong upward pressure on inflation in the short term, stemming mainly from strong increases in oil and food prices in recent months.

Looking ahead, the annual HICP inflation rate is expected to remain significantly above 2% in the coming months and is likely to moderate only gradually in the course of 2008. Hence, the period of temporarily high rates of inflation would be somewhat more protracted than previously expected. Moreover, it is important to stress that the expectation of a moderation in the rate of inflation – which is embedded in the December 2007 Eurosystem staff macroeconomic projections – assumes some reversal of the recent rises in commodity prices – in line with what is currently captured by futures prices – and, more fundamentally,

that recent oil and food price dynamics and their impact on HICP inflation do not have broadlybased second-round effects on wage and pricesetting behaviour.

Risks to this medium-term outlook for price developments are fully confirmed to lie on the upside. These risks include the possibility that stronger than currently expected wage growth may emerge, taking into account capacity constraints and the positive developments in labour markets. Furthermore, the pricing power of firms - notably in market segments with low competition – could be stronger than expected. At this juncture, it is imperative that all parties concerned meet their responsibilities and that second-round effects on wage and pricesetting stemming from current inflation rates be avoided. In the view of the Governing Council, this is absolutely essential in order to preserve price stability in the medium run and thereby the purchasing power of all euro area citizens. The Governing Council is monitoring wage negotiations in the euro area countries with particular attention. Any indexation scheme of nominal wages to prices should be eliminated. Finally, further rises in oil and agricultural prices, continuing the strong upward trend observed in recent months, as well as increases in administered prices and indirect taxes beyond those foreseen thus far, could materialise.

The monetary analysis confirms the prevailing upside risks to price stability at medium to longer-term horizons. Money and credit have both continued to grow vigorously in recent months. The annual growth rate of M3 in November, unchanged at 12.3%, is likely to have been influenced by a number of temporary factors, such as the flattening of the yield curve, the financial market turmoil and specific transactions associated with the restructuring of certain banking groups. Nonetheless, even taking these special factors into account, the underlying rate of monetary expansion remains strong. Moreover, the sustained expansion of loans to the domestic private sector, which grew at an annual rate of 11.0% in November, points to the continued vigour of underlying monetary

dynamics. Monetary developments continue to require very careful monitoring, both to detect underlying trends associated with inflationary pressures at longer horizons and to form a better understanding of shorter-term monetary dynamics.

Such monitoring will also provide a more complete picture of the response of the private sector to the increased volatility in financial markets. A broad assessment of underlying trends in money and credit growth is particularly important at present given recent financial market developments. Heightened financial volatility may influence the short-term behaviour of money-holders and thereby complicate the extraction of the underlying trend monetary developments. At the same time, monetary and credit data can also offer an important insight into how financial institutions, households and firms have responded to the financial market turmoil.

For the time being, however, there is little evidence that the financial market turbulence since early August 2007 has strongly influenced the dynamics of broad money and credit aggregates. Indeed, the growth of bank loans to the domestic private sector has remained robust in recent months, which may suggest that the supply of credit has not been impaired thus far. The growth of M1 and household borrowing have moderated further over the past few quarters, reflecting the impact of higher key ECB interest rates since December 2005 rather than the influence of the financial turmoil. Borrowing by non-financial corporations remains very strong. Further data and analysis will be required in order to obtain a more complete picture of the impact of the financial market developments on banks' balance sheets, financing conditions and money and credit growth.

To sum up, a cross-check of the outcome of the economic analysis with that of the monetary analysis fully confirms the assessment that there are upside risks to price stability over the medium term, in a context of very vigorous money and credit growth and sound economic

fundamentals in the euro area. At the same time, the potential impact on the real economy of the ongoing reappraisal of risk in financial markets remains uncertain. Consequently, the Governing Council will monitor very closely all developments. In addition, it remains prepared to act pre-emptively so that second-round effects and upside risks to price stability do not materialise and, consequently, medium and long-term inflation expectations remain firmly anchored in line with price stability. Reflecting its mandate, such anchoring is of the highest priority to the Governing Council.

Turning to fiscal policy, most euro area countries have submitted their updated stability programmes. On this basis, after a reduction in the euro area aggregate deficit ratio in 2007, an increase in the ratio is projected for 2008 despite many countries not having achieved sound fiscal positions. There is a clear risk that some countries will fail to comply with the provisions of the preventive arm of the Stability and Growth Pact, thereby undermining the credibility of the Pact. In 2008 some countries with fiscal imbalances will consolidate by less than the required minimum of 0.5% of GDP in structural terms. Much more ambitious policies will be necessary to ensure that all countries achieve their medium-term objectives by 2010 at the latest, in accordance with their commitment of April 2007.

With regard to structural reforms, the new threeyear cycle of the Lisbon strategy for growth and jobs has started. While the achievements made over the last three years of the relaunched strategy are encouraging, it is important that governments step up their reform efforts to deliver enhanced knowledge and innovation, competitiveness and labour market flexibility. Such reforms are crucial to raising productivity and fostering employment opportunities in the euro area.

This issue of the Monthly Bulletin contains three articles. The first article discusses developments in euro area labour productivity and its implications for monetary policy. The second

article analyses the opportunities and challenges for the euro area macroeconomy posed by globalisation. The third article examines the Eurosystem's experience with forecasting autonomous factors and excess reserves.

## ECONOMIC AND MONETARY DEVELOPMENTS

The external environment of the euro area

## ECONOMIC AND MONETARY DEVELOPMENTS

## I THE EXTERNAL ENVIRONMENT OF THE EURO AREA

Overall, global economic activity remains resilient, as the robust economic conditions in emerging markets continue to mitigate the global repercussions of the US slowdown. On account of higher commodity prices and unfavourable base effects, headline consumer price inflation rebounded sharply in industrialised countries in November. On balance, risks to the outlook for growth are judged to lie on the downside. These downside risks relate mainly to a potentially broader than currently expected impact of the ongoing reappraisal of risk in financial markets on financing conditions and economic sentiment, with a negative impact on world and euro area growth. Further downside risks stem from the scope for additional oil and other commodity price rises, concerns about protectionist pressures and the possibility of disorderly developments due to global imbalances.

### I.I DEVELOPMENTS IN THE WORLD ECONOMY

Overall, global economic activity remains resilient, as the robust economic conditions in emerging markets continue to mitigate the global repercussions of the US slowdown. Up to October, industrial production in the OECD countries (excluding the euro area) remained relatively robust. Survey evidence on global business conditions points however to some deceleration of world economic growth.

On account of higher commodity prices and unfavourable base effects, headline consumer price inflation rebounded sharply in industrialised countries in November (see Chart 1). For the OECD countries the annual rate of change of the consumer price index (CPI) was 3.3% in November (up from 2.8% in October), while the CPI excluding food and energy remained broadly unchanged at an annual rate of 2.0%. More recent survey evidence on global input prices suggests that average costs rose sharply in December.



### **UNITED STATES**

In the United States, economic activity according to the final release expanded at its strongest pace in four years in the third quarter of 2007 even though housing fared worse than suggested by the preliminary release. Quarterly real GDP growth increased to an annualised rate of 4.9% from 3.8% in the second quarter. Residential investment subtracted a full percentage point from growth, but every other broad component of GDP advanced strongly. In particular, exports grew solidly, increasing by 19.1% on a quarterly annualised basis. Subsequently the pace of expansion in US activity seems to have moderated from its very strong rate in the third quarter. This is inter alia suggested by the Institute for Supply Management (ISM) December manufacturing survey, which fell below the contraction/expansion threshold of 50, together with the weak December non-farm payroll employment reading.

As regards price developments, in November the seasonally adjusted consumer price index recorded its largest monthly increase in over two years. As a result, the headline CPI was 4.3% higher in

November 2007 than it was a year earlier. This increase can be mainly attributed to strong year-on-year increases in energy prices reflecting in part a strong base effect. In addition, food prices also added to headline inflation, having increased in November by 4.8% over the past year. At the same time, core inflation remained broadly stable, with the core CPI increasing by 2.3% in November 2007 compared with a year earlier.

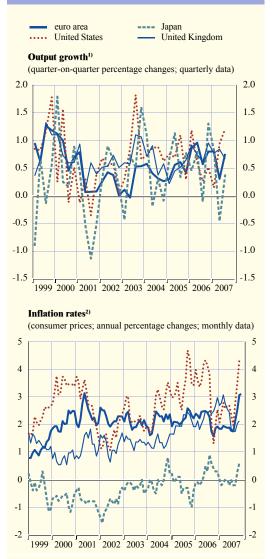
On 11 December 2007 the US Federal Open Market Committee decided to cut its target for the federal funds rate by 25 basis points to 4.25%. The changes also included a 25 basis point reduction in the discount rate to 4.75%.

### **IAPAN**

In Japan, economic activity has continued to recover, while inflation has remained subdued. Output has been supported by healthy domestic demand and strong exports. The results of the Bank of Japan's December 2007 Tankan Survey showed that business conditions have remained favourable, despite some moderation in business sentiment. However all enterprises revised upwards their investment plans for the fiscal year 2007 (ending in March 2008), and companies continue to report a growing sense of labour shortage pointing to further improvement in employment conditions.

Consumer price inflation has remained subdued (see Chart 2), owing to persistent downward pressures, especially on wages. However consumer price inflation has recently returned to positive territory, reflecting past increases in the price of imported raw materials. In November 2007 the annual change in the CPI was 0.6% after 0.3% in October, while the annual change in the CPI excluding fresh food was 0.4% after 0.1% in October.

### 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.

### **UNITED KINGDOM**

In the United Kingdom, quarterly real GDP growth stood at 0.7% in the third quarter of 2007, slightly weaker than in the previous quarter. Private consumption and investment accelerated from the previous quarter, resulting in a strong increase in imports and, thus, a negative contribution of net exports. No impact of the recent financial turmoil is evident in the GDP data so far, but the latest credit condition survey pointed to a reduction in credit availability and growth in retail sales

## ECONOMIC AND MONETARY DEVELOPMENTS

The external environment of the euro area

moderated in October and November. In November, annual HICP inflation was unchanged from the previous month at 2.1%, as higher fuel and food prices were compensated by lower utility bills.

On 10 January 2008 the Bank of England's Monetary Policy Committee left its main policy rate unchanged at 5.5%.

### **OTHER EUROPEAN COUNTRIES**

In most other EU countries outside the euro area, output growth in recent quarters has moderated slightly but still remained strong, while inflation generally increased.

In Sweden and Denmark, real economic developments continued to diverge. In Sweden in the third quarter of 2007 real GDP growth moderated slightly to 0.6% (quarter on quarter) and the contribution of net exports was significantly negative. In contrast, in Denmark, real GDP growth increased strongly to 1.3% (quarter on quarter) owing to robust domestic demand (the contribution of net exports was broadly neutral). In both countries inflation rose substantially in November to 2.5% and 2.4% respectively, reflecting mainly rising food and energy prices.

In the four largest central and eastern European economies (the Czech Republic, Hungary, Poland and Romania) the weighted average of output growth in the third quarter was unchanged from the previous quarter at 1.1% (quarter on quarter). Real GDP growth picked up in Hungary to 0.3%, it moderated slightly in Poland to 1.2%, and remained unchanged in the Czech Republic at 1.4%. In November, HICP inflation increased in all of these countries, with the exception of Romania, where it declined slightly, although remaining at a very high level. Rising food and energy prices were the main factors behind the pick-up in the inflation rates. The rise in annual inflation was the highest in the Czech Republic, where it rose from 2.8% in September to 5.1% in November. This was mainly on account of higher prices for food and non-alcoholic beverages. On 7 January 2008 Banca Naţională a României increased interest rates by 50 basis points to 8.0% given the expected rise in inflation on the back of higher food prices and stronger demand pressures.

### **EMERGING ASIA**

In emerging Asia, economic activity continued to expand at a robust pace in the last months of 2007, driven by both domestic demand and strong exports in most countries. Simultaneously, inflationary pressures picked up further in this region, largely driven by increasing food prices.

In China, industrial production grew by 17.3% year on year in November, at a level close to the average of the first ten months. Export growth remained at elevated levels whilst following a slightly declining path throughout 2007. The trade surplus continued to widen bringing the cumulated surplus from January to November 2007 to USD 238.1 billion, up by 52% compared with the same period in the previous year. Retail sales data pointed to strong consumption in the last months of the year. In November annual consumer price inflation increased to 6.9% from 6.5% in October, with higher food prices largely driving the rise. With effect from 25 December 2007, the People's Bank of China raised the reserve requirement ratio by 100 basis points to 14.5%, a strong increase relative to the more gradual augmentations (each of 50 basis points) applied in the previous 18 months. Also, the key policy interest rates were raised with effect from 21 December 2007: the benchmark one-year lending rate by 18 basis points to 7.47%, and the one-year deposit rate by 27 basis points to 4.14%.

#### **LATIN AMERICA**

In Latin America, economic activity remained robust, driven by domestic demand. In Brazil, real GDP growth rebounded in the third quarter, expanding at an annual rate of 5.6% after 4.8% in the previous quarter. In November consumer price inflation stood at 4.2% on an annual basis, largely unchanged since August. Activity has also maintained a robust momentum in Argentina, with real GDP growing at 8.7% on an annual basis in the third quarter. Consumer price inflation, however, remained elevated, with an annual rate of 8.5% in December, unchanged from November. In Mexico, economic activity recovered in the third quarter with real GDP expanding at 3.7%, while industrial production posted the highest annual growth rate since December a year earlier (at 3.0%). Annual inflation stood at 3.8% in December, slightly down from November.



### **1.2 COMMODITY MARKETS**

After surging in November oil prices remained fairly volatile in December, but reached new historical highs at the beginning of January, with the price of Brent crude oil standing at USD 95.7 on 9 January. At the beginning of December prices eased on signs of a possible US economic slowdown, while changing market perceptions about the likelihood of a global economic slowdown combined with the unwinding of speculative positions in the commodities markets contributed to market volatility. But underlying market tightness in combination with low inventories data and renewed geopolitical tensions led to prices picking up again towards the end of the year. Overall, markets remain tight as robust oil demand in non-OECD countries compensates for weaker OECD demand. The International Energy Agency's (IEA) medium-term demand outlook for 2008 was revised upwards in December as non-OECD demand is expected to offset some weakness in OECD demand. According to the IEA, world oil demand is now expected to have risen by 1.1% in 2007 and to rise by 2.5% in 2008. At the same time the supply side remains restricted, as OPEC decided not to increase its production quota in its early December meeting and non-OPEC output fell short of expectations. In addition, the longer-term outlook for oil supply has tightened; the IEA hinted that it will review its oil reserves forecast in light of a possible downward revision of oil discovery rates over the next decade. Looking ahead, robust oil demand, limited crude oil supply growth and low spare capacity are likely to keep oil prices at elevated levels, in particular if geopolitical tensions fail to subside. Market participants expect oil prices to stay at elevated levels in the medium term with December 2009 futures currently trading at USD 88.

After easing towards the end of November, the prices of non-energy commodities rebounded in December. Agricultural and food prices picked up again driven by strong demand from non-OECD countries amid low inventories data. On the other hand the prices of industrial raw materials and, in particular, of non-ferrous metals have declined significantly since mid-October as economic growth in some OECD countries slowed down. In aggregate terms, the price index for non-energy

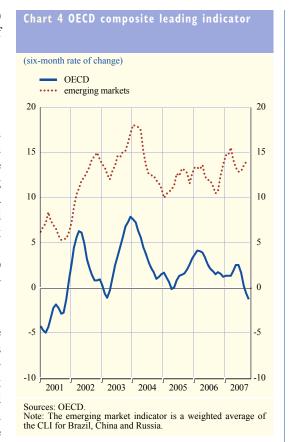
The external environment of the euro area

commodities (denominated in US dollars) was approximately 12% higher at the end of December than a year earlier.

### 1.3 OUTLOOK FOR THE EXTERNAL ENVIRONMENT

The resilient albeit moderating global expansion continues to bode well for the outlook for foreign demand for euro area goods and services in the medium run. In October, the composite leading indicator (CLI) for the OECD suggested that a moderate downturn in economic activity lies ahead in the OECD area, reflecting a weakening outlook for all the major OECD economies (see Chart 4). At the same time, the latest data for major OECD non-member economies point to continued steady expansion in China, India and Brazil.

On balance, risks to the outlook for growth are judged to lie on the downside. These downside risks relate mainly to a potentially broader than currently expected impact of the ongoing reappraisal of risk in financial markets on financing conditions and economic sentiment, with a negative impact on world and euro area growth. Further downside risks stem from the scope for additional oil and



other commodity price rises, concerns about protectionist pressures and the possibility of disorderly developments due to global imbalances.

### 2 MONETARY AND FINANCIAL DEVELOPMENTS

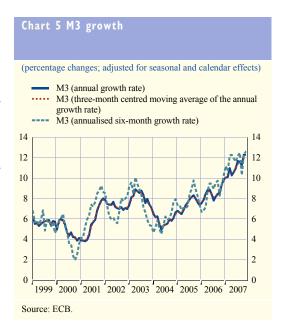
### 2.1 MONEY AND MFI CREDIT

The underlying pace of monetary and credit expansion remained strong in November, with the annual growth rate of M3 standing at 12.3% and the annual rate of growth of MFI loans to the private sector standing at 11.0%. At the same time, M3 growth continued to be stimulated by the flat yield curve and thus overstates somewhat the underlying pace of monetary expansion. The dynamics of broad money and credit aggregates have – at least thus far – been largely unaffected by the recent financial turmoil. Moreover, while the turmoil continues to have an impact on some components and counterparts, there is evidence that this impact has waned over the past two months for certain specific components, notably flows into money market fund shares/units. Furthermore, the increases in key ECB interest rates since December 2005 continue to influence money and credit developments, moderating the growth of M1 and borrowing by households. Overall, the underlying rate of monetary expansion remains strong, pointing to upside risks to price stability over the medium to longer term.

### THE BROAD MONETARY AGGREGATE M3

In November 2007 the annual growth rate of the broad monetary aggregate M3 remained stable at 12.3%, unchanged from the record high observed in October (see Chart 5). This reflects a further strong month-on-month increase of 1.0%, which was somewhat larger than the average monthly increases seen earlier in 2007. The strength of recent short-term monetary dynamics is also illustrated by the high level of annualised six-month growth rates.

M3 growth currently overstates the underlying pace of monetary expansion, as the flat yield curve renders the remuneration of shorter-term monetary assets attractive by comparison with riskier non-monetary assets outside M3. However, the continued robust growth of loans in November supports the view that monetary dynamics are being driven largely by



fundamental forces and the underlying rate of monetary expansion thus remains strong.

The growth of broad money and credit aggregates has been largely unaffected by the recent financial turmoil. Visible effects have been concentrated in specific components and counterparts of M3 that are closely related to the nature of the turmoil, such as the loans and deposits of other non-monetary financial intermediaries, holdings of money market fund shares/units and debt securities, and flows in MFIs' net external assets. While developments in individual months should not be over-interpreted owing to their volatility, for some specific balance sheet items that have been affected by the financial turmoil, the initial effects observed in August and September appear to have dissipated somewhat in the November data. By contrast, the ECB's liquidity operations in the context of the financial turmoil have not directly affected broad monetary and credit developments (see the box entitled "Recent liquidity operations and their impact on monetary aggregates").

## ECONOMIC AND MONETARY DEVELOPMENTS

Monetary and financial developments

The increases in key ECB interest rates since December 2005 continue to influence money and credit developments. This is visible both in the gradual moderation of the annual growth rate of M1, as opportunity costs have risen, and in the broad stabilisation of the annual growth rate of loans to the private sector. In particular, the annual growth rate of loans to households has moderated further over the past month.

#### Rox

### RECENT LIQUIDITY OPERATIONS AND THEIR IMPACT ON MONETARY AGGREGATES

Since the onset of the financial turmoil in August 2007 the ECB has undertaken a number of liquidity operations with a view to alleviating money market tensions. These tensions have emerged as a consequence of heightened uncertainty regarding the nature and extent of financial intermediaries' exposure to credit and liquidity risks, notably stemming from the US sub-prime mortgage market and associated derivative instruments. The tensions in the money markets are thus a symptom of the financial turmoil.

The main feature of the ECB's recent liquidity operations has been the decision to systematically allot more than the benchmark amount<sup>1</sup> in the Eurosystem's one-week main refinancing operations (MROs) and to increase the share of liquidity provided via longer-term refinancing operations (LTROs), which have a maturity of around three months.<sup>2</sup> This box examines the relationship between these open market operations and the recent strong growth in broad monetary aggregates and credit. In order to analyse this relationship, both direct and indirect effects need to be considered.

All open market operations conducted by the ECB as part of its implementation of monetary policy (including the operations conducted since the start of August to address money market tensions) are transactions between the Eurosystem and euro area credit institutions (the most important subset of the MFI sector, which comprises mainly the Eurosystem, credit institutions and money market funds). These transactions create deposits with the Eurosystem that are held by individual credit institutions and can be circulated among them. In the context of the consolidated MFI balance sheet, all inter-MFI positions, as well as positions between MFIs and the Eurosystem, are netted out. Given that the consolidated MFI balance sheet is the basis for the compilation of monetary aggregates, transactions between the Eurosystem and its counterparties in the form of monetary policy operations cannot have any direct impact on M3, irrespective of their volume.

Furthermore, the operations conducted by the ECB since early August in order to contain money market tensions have not changed the total amount of liquidity provided within each of the maintenance periods for the fulfilment of required reserves,<sup>3</sup> but rather the timing of the provision of liquidity within the maintenance period and the maturity structure of the Eurosystem's outstanding operations.

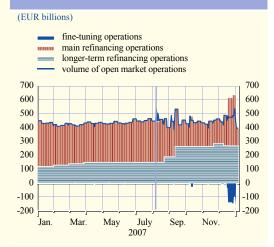
- 1 The benchmark is the amount of liquidity which would permit the fulfilment of reserve requirements at an aggregate level in a smooth manner over the remaining days of the reserve maintenance period, taking into account, inter alia, forecasts for autonomous factors.
- 2 For a detailed description of the ECB's liquidity operations in the first two months of the turmoil, see Box 3, entitled "The ECB's additional open market operations in the period from 8 August to 5 September 2007", in the September 2007 issue of the Monthly Bulletin. For the subsequent months, see Box 3, entitled "Liquidity conditions and monetary policy operations in the period from 8 August to 13 November 2007", in the December 2007 issue of the Monthly Bulletin.
- 3 For a more detailed presentation of the current operational framework, see the article entitled "Changes to the Eurosystem's operational framework for monetary policy" in the August 2003 issue of the Monthly Bulletin.

Charts A and B illustrate these points. Chart A shows that the net volume of outstanding open market operations has not increased, on average, compared with the pre-turmoil period, remaining at around €450 billion. This was also the case for the December maintenance period, during which fine-tuning operations absorbed part of the additional liquidity provided for the end of the year via MROs. Chart A also shows how the share of LTROs in outstanding open market operations has increased at the expense of MROs.

Chart B illustrates the change in the timing of the provision of liquidity over the maintenance period, as measured by the daily reserve surplus<sup>4</sup>. By contrast with normal circumstances (represented in the chart by average behaviour between December 2004 and August 2007), the daily reserve surplus has been large and positive in the first part of the maintenance periods between August 2007 and January 2008, and consequently negative over the remainder of those periods in order to achieve a balanced position on average over the maintenance period as a whole.

While the ECB's open market operations do not have a direct impact on money and credit aggregates, they may have affected monetary developments indirectly through their impact on short-term money market interest rates and the pass-through of these rates to bank lending and deposit rates. Such indirect effects, which work through the opportunity cost of holding money and the cost of external financing, reflect demand by households and firms for money and bank credit.

### Chart A Structure of overall liquidity provision by type of operation



Source: ECB. Note: Last observation is 8 January 2008. The vertical line marks 9 August 2007.

### Chart B Average reserve surplus for each day of the maintenance period

(EUR billions)

periods between 8 August 2007 and 8 January 2008 periods between 8 December 2004 and 7 August 2007



Source: ECB.

Note: The horizontal axis represents the number of days until the end of the maintenance period.

Yet, it should be noted that the primary aim of the ECB's open market operations during the recent financial turmoil has been – as under normal circumstances – to keep very short-term money market interest rates (such as the EONIA) close to the minimum bid rate in MROs, which is the main signal of the monetary policy stance determined by the Governing Council. To the extent that the changes in the timing and maturity structure of operations have helped to re-establish "normal" conditions at the very short end of the money market yield curve (see Chart C), these have served to offset any indirect influence on monetary developments caused by the financial turmoil through developments in very short-term interest rates.

4 On a given day, the daily reserve surplus is the current account holdings in excess of the minimum reserve requirement.

Monetary and financial developments

Under normal circumstances, the signal embodied in very short-term interest rates is then transmitted smoothly along the money market yield curve to longer maturity rates that are more relevant for private sector spending and pricing decisions.<sup>5</sup>

Chart C also shows that the spread between the three-month EONIA swap (a measure of expected developments in the EONIA over the next three months) and the three-month EURIBOR (an unsecured interbank interest rate) remained large between August and December 2007 as tensions persisted in the money market at longer maturities, implying that the transmission of the monetary policy signal along the money market yield curve has been distorted. Higher market rates at term maturities in the unsecured interbank market will, to a certain extent, influence the cost of bank funding, thus



Source: ECB.

Note: The shaded area marks the period after 9 August 2007.

potentially also affecting the cost of bank borrowing for firms and households. A rise in borrowing costs is likely to have a dampening impact on loans and thus has the potential to influence monetary dynamics.

5 For more information, see Box 2, entitled "Volatility of the overnight interest rate and its transmission along the money market yield curve", in the August 2007 issue of the Monthly Bulletin.

### MAIN COMPONENTS OF M3

The annual growth rate of M1 declined to 6.2% in November 2007, down from 6.5% in October. This reflects a moderation in the annual growth rates of both components of M1, i.e. overnight deposits and currency in circulation (see Table 1). The annual growth rate of M1 is currently influenced by two countervailing forces, namely a dampening effect stemming from the rising opportunity cost of holding M1 on the one hand and – given the continued strength of economic activity in late 2007 – a stimulative effect resulting from increased transaction-related demand for M1 on the other.

The annual growth rate of short-term deposits other than overnight deposits decreased to 16.7% in November, down from 17.0% in October, but continued to make the largest contribution to annual M3 growth. Within this aggregate, the annual growth rate of deposits with an agreed maturity of up to two years (i.e. short-term time deposits) decreased but nevertheless remained very high, while the annual rate of decline of deposits redeemable at notice of up to three months (i.e. short-term savings deposits) moderated slightly.

The continued strong growth of short-term time deposits reflects the relative attractiveness of their remuneration, which has broadly followed 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 widened in the period up to September and thus supported shifts from M1 and savings deposits into time deposits. This spread stopped widening in October, and the monetary flow data for October and November do not point to any further substitution.

| lable I | Summary | table of | monetary       | variables                       |
|---------|---------|----------|----------------|---------------------------------|
|         | ounina, |          | III O II O UMI | , , , , , , , , , , , , , , , , |

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

|   | Outstanding amount |      |      | Annual gro | wth rates |      |      |
|---|--------------------|------|------|------------|-----------|------|------|
|   | as a percentage of | 2006 | 2007 | 2007       | 2007      | 2007 | 2007 |
|   | M3 1)              | Q4   | Q1   | Q2         | Q3        | Oct. | Nov. |
| M1  | 44.8               | 6.8  | 7.0  | 6.2        | 6.5       | 6.5  | 6.2  |
| Currency in circulation                             | 7.2                | 11.1 | 10.5 | 10.0       | 8.8       | 8.1  | 7.7  |
| Overnight deposits                                  | 37.6               | 6.0  | 6.3  | 5.5        | 6.1       | 6.2  | 5.9  |
| M2 - M1 (= other short-term deposits)               | 40.0               | 11.1 | 11.9 | 13.1       | 15.0      | 17.0 | 16.7 |
| Deposits with an agreed maturity of up to two years | 22.2               | 25.2 | 29.5 | 33.2       | 37.6      | 41.9 | 40.4 |
| Deposits redeemable at notice of up to three months | 17.8               | 1.1  | -0.8 | -2.1       | -3.2      | -4.2 | -4.1 |
| M2  | 84.8               | 8.7  | 9.1  | 9.2        | 10.3      | 11.2 | 10.9 |
| M3 - M2 (= marketable instruments)                  | 15.2               | 11.3 | 16.9 | 19.3       | 18.7      | 19.0 | 20.4 |
| M3  | 100.0              | 9.0  | 10.2 | 10.6       | 11.5      | 12.3 | 12.3 |
| Credit to euro area residents                       |                    | 8.8  | 8.0  | 8.1        | 8.7       | 9.4  | 9.2  |
| Credit to general government                        |                    | -3.1 | -4.5 | -4.3       | -3.9      | -4.0 | -4.2 |
| Loans to general government                         |                    | -0.4 | -1.3 | -1.2       | -0.9      | -2.2 | -1.8 |
| Credit to the private sector                        |                    | 11.9 | 11.1 | 11.0       | 11.7      | 12.4 | 12.2 |
| Loans to the private sector                         |                    | 11.2 | 10.6 | 10.5       | 11.0      | 11.2 | 11.0 |
| Longer-term financial liabilities                   |                    |      |      |            |           |      |      |
| (excluding capital and reserves)                    |                    | 9.0  | 10.0 | 10.3       | 10.3      | 9.0  | 8.0  |

Source: ECB

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

In the context of the relatively flat yield curve in the euro area, monetary assets remunerated at levels close to market rates, such as time deposits and marketable instruments, remain attractive by comparison with riskier longer-maturity assets outside M3, since they offer greater liquidity and lower risk at little cost in terms of return.

Indeed, the annual growth rate of marketable instruments increased further in November, to 20.4%, up from 19.0% in October. This masks divergent developments across the various instruments. On the one hand, the annual growth rate of repurchase agreements and MFIs' short-term debt securities increased, while the annual growth rate of money market fund shares/units, which is the largest component of marketable instruments, declined slightly. Money market fund shares/units suffered particularly large net outflows in August and September, which account for the decline in the annual growth rate. These outflows are likely to have reflected general risk aversion towards such funds, as investors seemingly felt unable to judge the risks taken by individual funds in terms of exposure to asset-backed securities at a time when the price of such instruments was volatile and difficult to assess. In October and November these outflows were offset by renewed inflows, suggesting that the initial impact of the financial turmoil on money market fund shares/units in general has abated somewhat.

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) remained broadly unchanged in November. However, developments differed across money-holding sectors. In particular, the moderation seen in the annual growth rate of financial intermediaries' holdings of M3 deposits was offset by the strengthening observed in the annual growth rate of holdings of M3 deposits by households, the largest money-holding sector, and to a lesser extent non-financial corporations.

Monetary and financial developments

### MAIN COUNTERPARTS OF M3

On the counterparts side, the annual growth rate of total credit to euro area residents decreased somewhat, while remaining at a robust level. This moderation reflects both the increased annual rate of decline of credit to general government and a somewhat lower annual rate of growth of credit to the private sector. In November MFIs again reduced their holdings of government debt securities. This trend has - with some brief exceptions - been observed since mid-2006 and is typical of periods in which key policy rates and funding costs increase.

Loans to the private sector continued to increase strongly, growing at an annual rate of 11.0% in November, having stood at 11.2% in October. The small moderation observed in November reflects developments in lending to both households and insurance corporations and pension funds, while the annual growth rate of MFI loans to non-financial corporations and other non-monetary financial intermediaries increased slightly.

The annual growth rate of loans to other financial intermediaries (OFIs) increased to 23.1% in November, up from 22.9% in the previous month. The level of this annual growth rate reflects, inter alia, loans related to the takeover of an MFI, investment funds' demand for larger liquidity buffers, the use of credit lines to conduits and structured investment vehicles (SIVs), and MFIs' increased preference for secured interbank lending through electronic trading platforms (located in the OFI sector) since the onset of the financial market turmoil.

The annual growth rate of loans to households declined to 6.5% in November, down from 6.8% in the previous month. This continued the trend observed since early 2006, reflecting higher lending rates and the moderation seen in housing market dynamics in a number of euro area economies. As yet, there is no evidence to suggest that this represents a disruption of the supply of bank loans to households as a consequence of the financial turmoil. Looking specifically at the annual growth rate of loans for house purchase, which declined to 7.6%, down from 7.9% in October (see Table 2),

| Table 2 MFI |  |  |
|-------------|--|--|
|             |  |  |

|   | Outstanding amount as a |      |      |      |      |      |      |
|---|-------------------------|------|------|------|------|------|------|
|   | percentage              | 2006 | 2007 | 2007 | 2007 | 2007 | 2007 |
|   | of the total 1)         | Q4   | Q1   | Q2   | Q3   | Oct. | Nov. |
| Non-financial corporations                  | 42.8                    | 13.0 | 13.0 | 12.7 | 13.8 | 13.9 | 14.0 |
| Up to one year                              | 29.4                    | 10.5 | 9.9  | 10.1 | 12.1 | 11.8 | 12.0 |
| Over one and up to five years               | 19.4                    | 20.5 | 19.9 | 19.2 | 19.9 | 20.5 | 21.0 |
| Over five years                             | 51.2                    | 12.0 | 12.4 | 12.0 | 12.7 | 12.7 | 12.8 |
| Households 2)                               | 47.5                    | 8.6  | 8.1  | 7.5  | 7.0  | 6.8  | 6.5  |
| Consumer credit <sup>3)</sup>               | 12.7                    | 8.0  | 7.1  | 6.5  | 5.7  | 5.5  | 5.0  |
| Lending for house purchase 3)               | 71.5                    | 10.2 | 9.4  | 8.6  | 8.1  | 7.9  | 7.6  |
| Other lending                               | 15.8                    | 2.7  | 3.2  | 3.6  | 3.2  | 3.2  | 3.1  |
| Insurance corporations and pension funds    | 1.1                     | 29.1 | 27.6 | 23.8 | 26.6 | 30.2 | 14.5 |
| Other non-monetary financial intermediaries | 8.6                     | 16.4 | 12.3 | 15.9 | 19.8 | 22.9 | 23.1 |

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.

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

the moderation observed in euro area countries with strong borrowing dynamics is proceeding in a gradual manner and is in line with developments prior to the start of the turmoil.

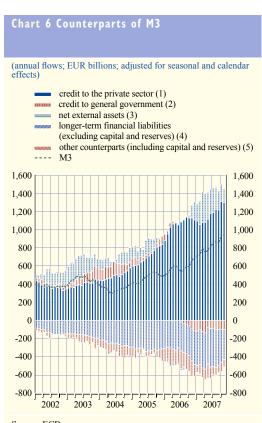
The annual growth rate of MFI loans to non-financial corporations rose slightly to 14.0% in November, up from 13.9% in October, and remains at a very high level by the standards of the past three decades. Between August and November MFIs granted €165 billion of loans to non-financial corporations, which is fairly substantial by comparison with earlier periods and suggests that the supply of bank credit is not being hampered for the time being. At the same time, insofar as a general reassessment of risks has taken place, some borrowers may face higher prices for their credit risk. The overwhelming majority of new MFI loans granted to non-financial corporations during the turmoil have been of a medium to long-term nature. While short-term lending increased somewhat in November, the extent of such increases was not unusual for this time of year. Taken together, the continued strong loan dynamics appear, therefore, to reflect strong fundamentals on the part of non-financial corporations and not, for instance, banks' difficulties in removing bridge loans (related to LBO and/or M&A deals) from their balance sheets, which would force them to roll over increasing amounts of short-term loans. While there is currently no clear evidence of a downward or upward impact on lending to non-financial corporations as a result of a dislocation in credit markets, some moderation is expected given the tightening of credit standards and increases in MFIs' lending rates.

The strong growth of MFI loans to the private non-financial sector also raises the question of the

extent to which this can be explained by the re-intermediation of previously securitised bank loans. Thus far, the information available on the volume of "derecognised" loans on MFIs' balance sheets during the turmoil suggests that re-intermediation by banks has not inflated the growth of loans to the private non-financial sector and that the strong growth rate observed thus reflects "business as usual".

Among the other counterparts of M3, the annual growth rate of MFIs' longer-term financial liabilities (excluding capital and reserves) declined to 8.0% in November, down from 9.0% in October. This further moderation in November was broadly based across the individual components, with developments in longer-term debt securities making the largest contribution to the slowdown.

Over the 12 months to November 2007 an inflow of €151 billion was recorded for MFIs' net external asset position, down from €189 billion in the previous month and the peak of €340 billion recorded in March (see Chart 6). Looking at developments in this position during the turmoil, after substantial outflows in August and September, a strong inflow of €41 billion was observed in November and an inflow of



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.

Monetary and financial developments

€0.3 billion was recorded in October. Fluctuations in the net external asset position of MFIs are not uncommon in times of heightened uncertainty, as investors seek to reallocate funds across global markets.

Overall, the November data show continued robust growth in the broad money and credit aggregates. Although specific components and counterparts of M3 have been affected, aggregate broad money and credit dynamics have – at least thus far – been largely unaffected by the recent financial turmoil. Underlying monetary growth therefore remains strong, pointing to upside risks to price stability in the medium to longer term, particularly in an environment of already ample liquidity.

#### 2.2 SECURITIES ISSUANCE

In October 2007 debt securities issued by euro area residents continued to grow at a robust pace, unchanged from the previous month. This reflected a slight increase in the annual growth rate of debt securities issued by both the MFI sector and non-financial corporations, which compensated for the moderate deceleration observed for the general government sector. The growth rate of debt securities issued by non-monetary financial institutions posted a small decline. Issuance of quoted shares increased only marginally, but still remained subdued in comparison with that of debt securities.

### **DEBT SECURITIES**

The annual growth rate of debt securities issued by euro area residents was 9.1% in October 2007, unchanged from September (see Table 3). As regards the maturity structure of debt securities issued, the annual growth rate of short-term securities issuance increased to 21.8% in October, from 18.9% in the previous month, while that of long-term securities issuance moderated slightly, falling from 8.0% to 7.7%. Where the latter are concerned, the annual rate of growth of floating rate securities in October was again significantly higher, at 15.3%, than the rate of growth of fixed rate securities, which stood at 4.6% in that month. This might reflect the persistence of relatively high demand

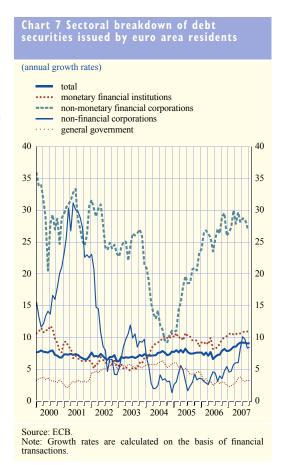
|                                     | Amount outstanding (EUR billions) |      |      |      |      |      |     |
|-------------------------------------|-----------------------------------|------|------|------|------|------|-----|
|                                     | 2007                              | 2006 | 2007 | 2007 | 2007 | 2007 | 200 |
| Issuing sector                      | Oct.                              | Q4   | Q1   | Q2   | Q3   | Sep. | Oc  |
| Debt securities:                    | 12,014                            | 7.9  | 8.1  | 8.8  | 9.2  | 9.1  | 9   |
| MFIs                                | 5,050                             | 9.8  | 10.5 | 10.5 | 10.9 | 10.9 | 11  |
| Non-monetary financial corporations | 1,388                             | 28.2 | 27.3 | 28.9 | 28.4 | 27.3 | 26  |
| Non-financial corporations          | 686                               | 4.3  | 4.9  | 6.3  | 9.3  | 8.3  | 8   |
| General government                  | 4,890                             | 2.8  | 2.4  | 3.2  | 3.3  | 3.3  | 3   |
| of which:                           |                                   |      |      |      |      |      |     |
| Central government                  | 4,575                             | 2.4  | 2.1  | 3.1  | 3.3  | 3.2  | 3   |
| Other general government            | 315                               | 9.1  | 6.8  | 5.7  | 3.0  | 4.2  | 5   |
| Quoted shares:                      | 6,903                             | 1.0  | 1.1  | 1.2  | 1.4  | 1.4  | 1   |
| MFIs                                | 1,052                             | 2.0  | 2.3  | 1.8  | 1.5  | 1.9  |     |
| Non-monetary financial corporations | 629                               | 1.1  | 1.0  | 1.5  | 1.4  | 1.1  | 3   |
| Non-financial corporations          | 5,222                             | 0.8  | 0.8  | 1.0  | 1.4  | 1.3  |     |

Source: ECB

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

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 slightly to 8.5% in October, up from 8.3% in the previous month (see Chart 7). In terms of the maturity structure, the annual growth rate of long-term debt securities issued by nonfinancial corporations decreased significantly to 5.3% in October, from 6.0% in September, while the annual growth rate of short-term debt securities issued by non-financial corporations, rose by 4 percentage points to stand at 25.2% in October. In periods of market turbulence such as that observed recently, it can be useful to look at short-term developments on the basis of seasonally adjusted data for the most recent period. Although caution is warranted when interpreting these data, they can help identify turning points in the series. Three-month annualised growth rates constructed on the basis of seasonally adjusted data indicate a significant reduction in the rate of growth of debt securities issued by non-financial corporation as from August 2007, probably reflecting the increase in spreads between corporate and government bond yields. Evidence from private data providers



confirms that debt financing for high-yield non-financial corporate borrowers has become almost non-existent.

In October 2007 the annual growth rate of debt securities issued by MFIs increased slightly to stand at 11.1%, signalling that banks continue to be able to raise funds in the financial markets to an extent that allows them to meet the considerable demand arising from the strong growth of loans to non-financial corporations. This increase stems from the strong issuance of short-term securities, the annual growth rate of which increased to stand at 25.2% in October, 1.4 percentage points above the figure recorded for September. The growth rate of MFIs' issuance of long-term securities decreased slightly to 8.9% in the same period. Seasonally adjusted data for long-term securities point to an increase in this growth rate in October, after the strong declines of August and September, as financial market conditions improved in the course of October. The significant growth in MFIs short-term debt securities over the past few months appears to be related to the financial market turmoil. As spreads on long-term bonds increased significantly as from the summer, banks refinanced part of their long-term claims through the issuance of short-term debt securities.

The annual growth rate of debt securities issued by non-monetary financial corporations decreased moderately from 27.3% in September to 26.9% in October 2007, but still remained at a high level. Most of the issuance activity in this sector is related to banks' securitisation activities, which was adversely affected by the financial market turmoil. Nevertheless, in both September and October,

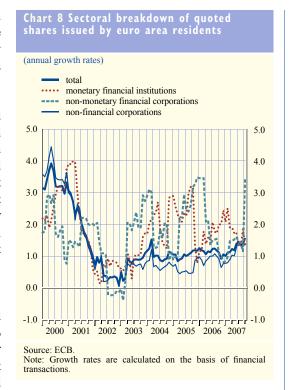
Monetary and financial developments

net issuing activity remained strong, although it weakened somewhat. In October 2007 the annual growth rate of debt securities issued by this sector was also affected on the upside by a large transaction in one euro area country.

The annual growth rate of debt securities issued by the general government sector decreased slightly, falling to 3.1% in October, from 3.3% in September. This reduction reflected a moderate slowdown in the growth of debt securities issued by the central government sector, which declined from 3.2% in September to 3.0% in October, while the annual growth rate of issuance by the other general government sector increased to 5.5%.

### **OUOTED SHARES**

The annual growth rate of quoted shares issued by euro area residents increased to 1.6% in October 2007, from 1.4% in September (see Table 3). This reflects the significant increase in the growth rates of issuance of quoted shares by non-monetary financial institutions,



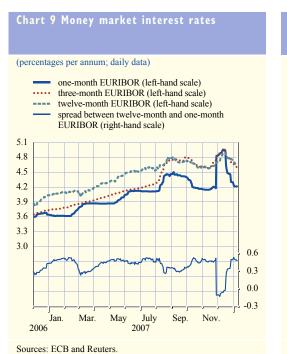
while issuance by non-financial corporations increased only moderately, to stand at 3.5% and 1.4% respectively. The annual growth rate of quoted shares issued by MFIs decreased by 0.5 percentage point to 1.4% in October 2007 (see Chart 8).

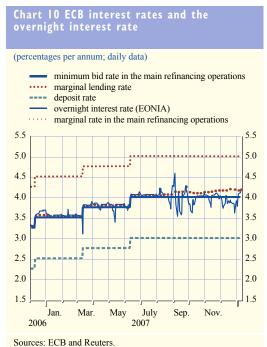
### 2.3 MONEY MARKET INTEREST RATES

Unsecured money market interest rates increased significantly in December, reflecting the tensions that typically emerge in the money market towards the end of the year. In early January, once these year-end tensions had been weathered, unsecured rates declined to end-November levels. Nonetheless, by historical standards spreads between unsecured and secured money market interest rates remain exceptionally pronounced at maturities beyond the very short term.

In December unsecured money market interest rates increased significantly. This reflected the tensions that typically emerge in the money market towards the end of the year, which were exacerbated, on this occasion, by the conditions seen in the money market since August. In early January, once the year-end tensions had been weathered, unsecured money market rates declined, broadly returning to the levels observed at the end of November. On 9 January the one-month, three-month, six-month and twelve-month EURIBOR rates stood at 4.21%, 4.60%, 4.64% and 4.65% respectively, i.e. 62, 24, 14 and 6 basis points lower than the levels observed on 3 December (see Chart 9).

The spread between the twelve-month and one-month EURIBOR rates rose to 44 basis points on 9 January, compared with -12 basis points on 3 December (see Chart 9). This reflected the





dissipation of the year-end effect at shorter maturities. Furthermore, spreads between unsecured EURIBOR rates and secured rates such as EUREPO (an index for rates on private sector repurchase agreements) remain elevated by historical standards owing to the tensions seen in money markets since August. Nonetheless, these spreads have declined somewhat since the beginning of December. Having stood at 82 basis points on 3 December, the spread between the three-month EURIBOR and the three-month EUREPO declined to reach 55 basis points on 9 January, again in large part because of the passing of the year-end period.

The interest rates implied by the prices of three-month EURIBOR futures maturing in March, June and September 2008 stood at 4.50%, 4.33% and 4.17% respectively on 9 January, representing increases of 7, 9 and 7 basis points respectively by comparison with the levels observed on 3 December.

On 6 December the Governing Council decided to keep the key ECB interest rates unchanged, with the minimum bid rate in the Eurosystem's main refinancing operations (MROs) remaining at 4.00%.

Given the liquidity situation anticipated by the ECB at the end of the maintenance period ending on 11 December, a liquidity-absorbing fine-tuning operation was launched on the last day of that period, through which the ECB absorbed €21 billion. The EONIA stood at 4.038% on that day (see Chart 10). In the first few days of the new maintenance period, which ended on 15 January, the EONIA stabilised at around 4%, before settling below 4% towards the end of the year, particularly in the final trading days of the year. At the beginning of January the EONIA returned to more normal levels close to 4%.

In the course of December tensions in the money market intensified owing to the uncertainties related to year-end. Against this background, in the last maintenance period of the year, which started on 12 December, the ECB reinforced its policy of allocating liquidity in excess of the benchmark amount in its main refinancing operations while still aiming for balanced liquidity conditions at the end of

## ECONOMIC AND MONETARY DEVELOPMENTS

Monetary and financial developments

the maintenance period. Consequently, on 11 December, in the first regular weekly main refinancing operation of that maintenance period, the ECB allotted €218.5 billion (€35 billion above the benchmark). On 18 December, in the second MRO of that maintenance period (conducted as a two-week operation with a commitment to satisfy all bids at or above a rate of 4.21%), the ECB allotted a total of €348.607 billion (€168.1 billion above the benchmark). An additional €20 billion was allotted in the third MRO on 28 December. Frequent fine-tuning operations were conducted throughout the year-end period and in the first few days of the new year in order to absorb excess liquidity in the market. On 3 January, in the fourth MRO of the period, the ECB allotted a total of €128.5 billion. In the last MRO of the maintenance period the ECB allotted a total of €151.5 billion. The marginal rates for these five operations were 4.18%, 4.21%, 4.20%, 4.18% and 4.20% respectively.

A supplementary longer-term refinancing operation was conducted on 12 December (with a fixed allotment amount of  $\epsilon$ 60 billion), in which the ECB allotted the full amount, resulting in marginal and weighted average rates of 4.81% and 4.88% respectively. On 20 December, in the Eurosystem's regular longer-term refinancing operation (conducted with a fixed allotment amount of  $\epsilon$ 50 billion), the ECB allotted  $\epsilon$ 48.476 billion with marginal and weighted average rates of 4.00% and 4.56% respectively. The marginal rate in this operation was 79 basis points lower than the three-month EURIBOR prevailing on that date.

Payment and securities clearing and settlement systems play a pivotal role in a modern economy. The smooth functioning of these systems is essential to the efficient conduct of monetary policy. Box 2 reviews the enhanced statistical framework for payments and securities trading, clearing and settlement.

### Box 2

### REVIEW OF STATISTICS ON PAYMENTS AND SECURITIES TRADING, CLEARING AND SETTLEMENT

Since 16 November 2007 statistics on payments and securities trading, clearing and settlement have been available in an electronic format in the ECB's Statistical Data Warehouse (SDW), which is accessible via the ECB's website at http://sdw.ecb.europa.eu. The release of the statistics in this format followed a comprehensive review carried out between 2004 and 2006, in which the ECB, the national central banks of the EU and the relevant data providers established and implemented an enhanced statistical framework for payments and securities trading, clearing and settlement. These efforts have led to statistics in these fields being largely harmonised.

### Development of payment and securities statistics

The ECB publishes annual statistics on the payment and securities systems in the EU. These statistics represent a unique source of data for a wide audience and are used for a variety of purposes ranging from the analysis of policy questions and the proper conduct of oversight by central banks to the benchmarking of banks' development and market positions and various research activities by academics and students.

The EU's national central banks originally began collecting payment and securities statistics in the late 1980s using a decentralised approach. Those statistics were based largely on data reported

on a voluntary basis and were collected in order to meet the need for some basic assessment. The scope of those data was extended in line with market developments (e.g. to take account of e-money transactions), with continued reliance on a non-binding methodological framework and simple data processing. Following increases in the number of reporting countries, the range of data and the general level of interest in the statistics in the early 2000s, the ECB and the national central banks of the EU have reviewed and improved the methodological soundness and comparability of the data through the harmonisation of methodologies and the establishment of a legal framework with common reporting requirements. Data are now stored in the SDW, which is easily accessible and offers various options as regards the viewing and downloading of data. The new procedures have also led to improved timeliness, with the statistics now available less than 11 months after the end of the year in question. A further improvement in terms of timeliness – to less than 10 months – is envisaged for 2008.

### Statistics on payments and payment systems

As regards statistics on payments and payment systems, the review focused on the harmonisation of concepts across countries. There was also a limited extension of the coverage of the statistics and some changes to breakdowns. The requirements for payment statistics are now set out in an ECB guideline<sup>1</sup>. Data are available from 2000 onwards and include statistics on cashless payments by non-MFIs and statistics on interbank funds transfer systems.

Statistics on cashless payments by non-MFIs cover all transactions, both domestic and cross-border, where the payer and/or the beneficiary is a non-MFI<sup>2</sup>. The statistics are broken down by payment instrument as illustrated in Chart A.

Cashless payments by non-MFIs are made using a variety of instruments and are cleared and

settled in different ways in the various EU Member States, depending on the specific ways in which the national payment systems are set up. As a result, there are several thousand institutions reporting statistics – mostly banks or their associations, but also providers of clearing and settlement infrastructure and other institutions offering payment services as defined by the Payment Services Directive (PSD)<sup>3</sup>. This explains some of the difficulties faced in the past in applying harmonised concepts and methodologies to the collection of payment and securities data.

Statistics on interbank funds transfer systems cover not only direct and indirect participation in payment systems, but also payment transactions by credit institutions and non-MFIs according

#### Chart A Use of payment instruments by non-MFIs in the EU (billion transactions per year) credit transfers · · · direct debits --- cards cheques e-money transactions 30 30 25 25 20 20 15 15 10 10 5 5 2001 2000 2002 2003 2004 2005 2006 Source: ECB.

- 1 Guideline of the ECB of 1 August 2007 on monetary, financial institutions and markets statistics (recast) (ECB/2007/9).
- 2 Non-MFIs comprise: non-financial corporations; households; non-profit institutions serving households; general government including central government; other financial intermediaries and financial auxiliaries; and insurance corporations and pension funds.
- 3 Directive 2007/64/EC of the European Parliament and of the Council of 13 November 2007 on payment services in the internal market.

Monetary and financial developments

to a harmonised list of transaction types. Data on the extent to which transactions are concentrated among the five largest senders are also included. The 58 payment systems currently reporting data represent the most significant systems in the EU. Given that the number of systems is small and the range of transactions in any given system is limited and specified by the rules of the system, data collection procedures are less complex than for the statistics on cashless payments by non-MFIs.

The statistics provide a picture of how payment systems are used in each individual country. This depends on a variety of factors, such as the banking structure, the institutional set-up of the national payment system and the legal framework for payment instruments.

### Securities trading, clearing and settlement statistics

In the past, statistics on securities trading, clearing and settlement were less developed than those on payments and payment systems. The review therefore focused on drawing up detailed reporting requirements and harmonised methodologies, resulting in more comprehensive statistics. Data are now available from 2005 onwards for securities settlement and from 2006 onwards for securities trading and clearing. The statistics on securities trading, clearing and settlement have been collected on the basis of either existing national legislation or framework agreements concluded with data providers.

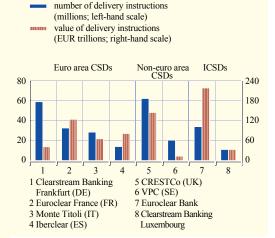
Statistics on securities trading are provided by stock exchanges – mostly through the Federation of European Securities Exchanges – and other systems that constitute regulated markets within the meaning of the Investment Services Directive<sup>4</sup>. These data cover the number of direct participants, the number of listed securities at the end of the year, the market capitalisation of

listed companies at the end of the year and the total number and value of executed trades.

Statistics on securities clearing are supplied by central counterparties, some of which provide clearing services in several European countries. These data comprise the number of clearing members at the end of the year and the various types of transaction cleared (such as OTC and non-OTC derivatives, repos and outright transactions). The data also indicate whether contracts were cleared or transferred through a clearing link.<sup>5</sup>

Statistics on securities settlement are provided by central securities depositories (CSDs), including the international CSDs (ICSDs) located in Belgium and Luxembourg. These data cover direct participation in the CSDs, securities held on accounts at the end of the year, the number and value of delivery instructions for securities





Source: ECB.

1) CSDs with a total value of delivery instructions of more than €10 trillion.

- 4 Council Directive 93/22/EEC of 10 May 1993 on investment services in the securities field, as amended.
- 5 A contract is cleared or transferred through a clearing link between two CCPs in cases where the buyer and the seller are clearing members of different CCPs.

moved between accounts during the year (as shown in Chart B for the main CSDs in the EU), and new issues and redemptions of securities issued through or originally held in safekeeping in the CSDs.

### **Outlook**

The new statistical framework is intended to remain stable until 2011 so that data providers, national central banks and data users can adapt to the new requirements and gain experience with the enhanced statistics. Nevertheless, the dialogue among stakeholders will continue in order to identify the possible implications of new developments such as the implementation of the SEPA and the PSD.

### 2.4 BOND MARKETS

In December 2007 and early January 2008, long-term government bond yields underwent considerable swings, but changed little overall in comparison with end-November. The strong downward trend in yields observed in the previous months was initially reversed as more risky financial market segments showed incipient signs of stabilisation. Thereafter, intensified market concerns about the US economic outlook resurfaced and drove bond yields still lower on a global scale. Implied bond market volatility increased to new highs in the United States, while stabilising at elevated levels in the euro area.

After the latest surge in financial market volatility in November, long-term government bond yields rebounded amid signs of stabilisation in equity and credit markets in early December. In late December and early January, however, bond yields again came under pressure in the wake of data releases on housing market conditions and business confidence in the United States, which were

weaker than expected by market participants. Overall, ten-year government bond yields decreased slightly in the euro area between end-November 2007 and 9 January 2008, and declined somewhat more in the United States in that period, standing at 4.2% and 3.9% respectively on the latter date (see Chart 11). Consequently, the differential between US long-term bond yields and comparable euro area bond yields widened somewhat in absolute terms in the period under review. In Japan, ten-year government bond yields changed little overall compared with end-November, standing at around 1.5% on 9 January. Market participants' uncertainty regarding short-term bond market developments, as measured by the implied volatility extracted from options, remained elevated in the euro area, while it rose to unusually high levels in the United States.

The increase in long-term bond yields in the United States in most of December appeared to be driven mainly by a rebound in bond market



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

Monetary and financial developments

risk premia following the strong decline in November. Those increases in risk premia probably reflected investors' partial unwinding of earlier flight-to-safety portfolio shifts. In addition, the release of November figures for producer and consumer price inflation, which exceeded market expectations, contributed to the upward pressure on bond yields. By contrast, the decision taken by the Federal Open Market Committee (FOMC) on 11 December, to lower its target for the federal funds rate by 25 basis points to 4.25%, and the ensuing communication, triggered a noticeable but rather short-lived decline in bond yields across the whole maturity spectrum amid sharply declining equity prices. The most recent decreases in nominal bond yields, which were to a large extent driven by decreases in real yields, appear mainly to reflect market participants' increasing concerns about the outlook for economic activity in the United States. Long-term forward break-even inflation rates remained at elevated levels throughout the review period.

In the euro area, nominal long-term government bond yields generally followed the rise in the United States in early December, but fluctuated within a rather narrow range thereafter. The initial increases in nominal long-term euro area bond yields were predominantly attributable to higher real yields, as measured by long-term index-linked bond yields. This suggests that market participants continue to consider the outlook for economic activity in the euro area to be relatively favourable, despite the recent signs of moderation. In this respect, it should also be noted that long-term bond yields in the euro area remain at levels similar to those observed in May, i.e. before the onset of the financial turmoil.

Long-term break-even inflation rates changed only little across all horizons in the course of the period under review. The five-year forward break-even inflation rate five years ahead, a measure of only long-term inflation expectations and related risk premia, thus remained at a somewhat elevated level of around 2.4% on 9 January (see Chart 12).

The implied forward overnight interest rate curve in the euro area shifted downward by around 10 basis points at medium-term horizons between the end of November 2007 and early January 2008 (see Chart 13). Long-term forward rates remained virtually unchanged. The ECB's decision of 6 December to keep its key interest rates unchanged was widely anticipated by market participants, and thus had little effect on the forward rate curve.

Euro area investment-grade credit spreads in the corporate bond market generally stabilised in December 2007, after a sharp increase in the previous month. While the most highly rated corporate bond spreads remained largely stable, the relative cost of BBB-rated corporate bond financing, as measured by the differential vis-à-vis comparable government bond yields, increased further by around 25 basis points in the period under review. High-yield spreads increased perceptibly, especially towards the end of the review period. The elevated current

### 



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

levels of corporate bond spreads probably reflect an increase in the magnitude of risk perceived by investors.

### 2.5 INTEREST RATES ON LOANS AND DEPOSITS

In October 2007 developments in MFI interest rates were mixed. Over a longer period, the pass-through of short-term market interest rates to bank interest rates was broadly in line with past behaviour, while the spread between government bond yields and long-term MFI interest rates widened significantly, reflecting the increase in the funding costs of banks.

In October 2007 developments in short-term MFI interest rates on deposits and loans were mixed, depending on the sector involved (see Table 4 and Chart 14), after the overall increases in August and September. The most significant decrease was observed in interest rates on new loans to households for consumption, which decreased by 41 basis points between

September and October 2007, reversing an increase in the previous month. This rate, however, is often characterised by high volatility. Interest rates on new loans to households for house purchase with a floating rate and an initial rate fixation period of up to one year increased by 6 basis points in October. At the same time, MFI interest rates on new loans to non-financial corporations with floating rates and an initial rate fixation period of up to one year increased by 3 basis points. By contrast, MFI interest rates on new loans of over €1 million to non-financial corporations declined by 11 basis points, probably reflecting the contemporaneous decline in spreads on corporate bonds in October. In addition, bank rates on deposits by non-financial corporations with an agreed maturity of up to one year decreased by around 6 basis points, while deposits by households with the same maturity increased slightly by 3 basis points. In the same period, three-month money market rates decreased by 5 basis points. Overall, the discontinuation of the upward trend in short-term bank interest rates in October reflected the improvement in financial market conditions in that month, especially those for corporations.

Looking back over a longer period, short-term MFI interest rates rose over the past few months, broadly in line with developments in market rates. Between June and October 2007, a period characterised by increased financial market volatility and credit market tensions, the three-month money market rates rose by 50 basis points. At the same time, MFIs' short-term interest rates on household deposits rose by 33 basis points. In parallel, short-term rates on loans of up to €1 million to non-financial corporations increased by 42 basis points, while those on loans for house purchase rose by 30 basis points and those on loans for consumption remained unchanged.

In October 2007 long-term MFI interest rates on deposits with a maturity of over two years increased significantly, by 14 basis points for deposits by both households and non-financial corporations

| percentages per annum; basis points; weight-adjuster   |              | ,            |              |              |              |              |          | Change in basis points up to Oct. 2007 <sup>2)</sup> |      |  |
|--|--------------|--------------|--------------|--------------|--------------|--------------|----------|--|------|--|
|  | 2006         | 2006         | 2007         | 2007         | 2007         | 2007         | 2007     | 2007   | 200′ |  |
|  | Q3           | Q4           | Q1           | Q2           | Sep.         | Oct.         | Mar.     | June   | Sep  |  |
| MFI interest rates on deposits   |              |              |              |              |              |              |          |  |      |  |
| Deposits from households with an agreed maturity of up to one year   | 2.87         | 3.27         | 3.51         | 3.77         | 4.07         | 4.10         | 59       | 33   |      |  |
| with an agreed maturity of up to one year<br>with an agreed maturity of over two years   | 2.68         | 2.84         | 2.71         | 2.73         | 3.08         | 3.22         | 59<br>51 | 33<br>49   | 1.   |  |
| redeemable at notice of up to three months   | 2.26         | 2.37         | 2.38         | 2.73         | 2.57         | 2.59         | 21       | 18   | 1    |  |
| redeemable at notice of over three months  | 2.68         | 2.86         | 3.14         | 3.31         | 3.50         | 3.57         | 43       | 26   |      |  |
|  |              |              |              |              |              |              |          |  |      |  |
| Overnight deposits from non-financial corporations   | 1.36         | 1.53         | 1.72         | 1.79         | 1.92         | 1.95         | 23       | 16   |      |  |
| Deposits from non-financial corporations   |              |              |              |              |              |              |          |  |      |  |
| with an agreed maturity of up to one year  | 2.98         | 3.47         | 3.67         | 3.93         | 4.13         | 4.07         | 40       | 14   | -    |  |
| with an agreed maturity of over two years  MFI interest rates on loans   | 3.70         | 4.03         | 3.61         | 4.09         | 4.37         | 4.51         | 90       | 42   | 1    |  |
| Loans to households for consumption with a floating rate and an initial rate fixation of up to one year  | 7.79         | 7.60         | 7.69         | 8.09         | 8.50         | 8.09         | 40       | 0  | -4   |  |
| Loans to households for house purchase with a floating rate and an initial rate fixation of up to one year with an initial rate fixation of over five and up | 4.31         | 4.55         | 4.78         | 4.99         | 5.23         | 5.29         | 51       | 30   |      |  |
| to ten years   | 4.63         | 4.55         | 4.69         | 4.89         | 5.08         | 5.07         | 38       | 18   |      |  |
| Bank overdrafts to non-financial corporations  | 5.69         | 5.80         | 6.06         | 6.18         | 6.50         | 6.55         | 49       | 37   |      |  |
| Loans to non-financial corporations of up to $\in$ 1 million with a floating rate and an initial rate fixation of  |              |              |              |              |              |              |          |  |      |  |
| up to one year   | 4.74         | 5.08         | 5.29         | 5.53         | 5.92         | 5.95         | 66       | 42   |      |  |
| with an initial rate fixation of over five years   | 4.59         | 4.67         | 4.83         | 5.00         | 5.24         | 5.26         | 43       | 26   |      |  |
| Loans to non-financial corporations of over € 1 million with a floating rate and an initial rate fixation of   |              |              |              |              |              |              |          |  |      |  |
| up to one year   | 4.03         | 4.50         | 4.68         | 4.90         | 5.21         | 5.10         | 42       | 20   | -1   |  |
| with an initial rate fixation of over five years   | 4.48         | 4.63         | 4.86         | 5.17         | 5.43         | 5.33         | 47       | 16   | -1   |  |
| Memo items   | 2.24         | 2.60         | 2.00         | 4.15         | 4.54         | 4.66         | 0.0      |  |      |  |
| Fhree-month money market interest rate  Fwo-year government bond yield   | 3.34<br>3.62 | 3.68<br>3.79 | 3.89<br>3.94 | 4.15<br>4.45 | 4.74<br>4.10 | 4.69<br>4.11 | 80<br>17 | 54<br>-34  |      |  |
|  | 10/          | 1/4          | 1 44         | 447          | 4 10         | 4            | 1/       |  |      |  |

30 One PCB.

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.

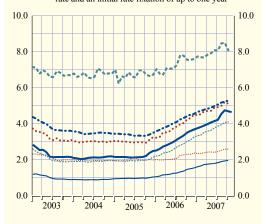
2) Figures may not add up due to rounding.

(see Table 4 and Chart 15), while the yield on two-year government bonds remained broadly unchanged between September and October 2007. At the same time, long-term MFI rates on loans to households for house purchase and on loans of up to €1 million to non-financial corporations remained unchanged, while rates on long-term loans of over €1 million to non-financial corporations decreased by 10 basis points. Overall, the observed pass-through from policy rates to bank lending rates continues to be broadly in line with historical patterns. The decrease observed in October in rates on loans to non-financial corporations is also consistent with a decrease in credit risk as perceived by market participants, as is reflected in a tightening in spreads for credit default swaps and corporate bonds, as well as swap rates, between mid-September and end-October 2007.

### Chart 14 Short-term MFI interest rates and a short-term market rate

(percentages per annum; rates on new business; weight-adjusted!)

- three-month money market rate
- •••• loans to non-financial corporations of over €1 million with a floating rate and an initial rate fixation of up to one year
- ---- loans to households for consumption with a floating rate and an initial rate fixation of up to one year
- overnight deposits from non-financial corporations
   deposits from households redeemable at notice of up to three months
- deposits from households with an agreed maturity of up to one year
- ---- loans to households for house purchase with a floating rate and an initial rate fixation of up to one year



### 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 15 Long-term MFI interest rates and a long-term market rate

(percentages per annum; rates on new business; weight-adjusted))

- five-year government bond yield
- loans to non-financial corporations of over
   €1 million with an initial rate fixation of over five years
- ---- loans to households for house purchase with an initial rate fixation of over five and up to ten years
- deposits from non-financial corporations with an agreed maturity of over two years
- deposits from households with an agreed maturity of over two years



### Source: ECB.

Source: E.B.

1) For the period from December 2003 onwards, the weightadjusted 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.

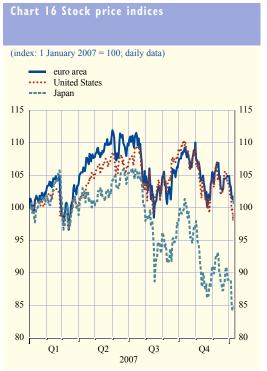
From a longer-term perspective, the spreads between long-term MFI interest rates and government bond yields increased significantly over the past few months. The yields on two and five-year euro area government bonds declined by around 30 and 40 basis points respectively between June and October 2007. Over the same period, long-term deposit rates for households increased by 49 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 18 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 16 and 26 basis points, depending on the size of the loan. Overall, looking at the period up to October, banks appear to have passed on some of the increase in funding costs that resulted from the difficulties in short-term money markets and other financial market segments. For example, spreads on bonds issued by banks, as measured by the IBOXX index, increased by 55 basis points between June and October 2007.

Monetary and financial developments

### 2.6 EQUITY MARKETS

After experiencing a considerable rebound between the end of November and early December, stock prices generally followed a downward trend amid resurfacing market concerns about the outlook for economic growth, particularly in the United States. While the growth of actual earnings remained robust in the euro area in the last few months, actual earnings showed clear signs of moderation in the United States. By contrast, data on expected earnings seemed to provide continuous support to stock prices in both markets. Implied stock market volatility rose somewhat further relative to the elevated levels of end-November.

At the beginning of December 2007, broad-based stock price indices in the euro area and the United States rebounded perceptibly after the pronounced sell-off observed in November (see Chart 16). Later, in late December 2007 and early January 2008, stock markets experienced new setbacks on renewed market concerns about the outlook for economic growth, in particular, in the United States. Overall, stock prices in the



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.

euro area, as measured by the Dow Jones EURO STOXX index, declined by around 5% between the end of November 2007 and 9 January 2008. Stock prices in the United States, as measured by the Standard & Poor's 500 index, also declined by around 5%, while stock prices in Japan, as measured by the Nikkei 225 index, experienced a sharper decline of 7%.

The decline in stock prices in the United States probably reflected, among other things, downward revisions in investors' perceptions of the outlook for general economic activity, and thus corporate profits, in the US economy in reaction to recent macroeconomic data releases. The new data published on housing and labour market developments, and on business confidence in the manufacturing sector, have generally been weaker than anticipated by market participants and have thus exerted downward pressure on stock prices, particularly in the financial sector. Although data on the expected growth of earnings for corporations included in the Standard & Poor's 500 index remained at robust levels in December, the declining trend in the annual growth rate of actual earnings per share observed over the past few months became even more pronounced. In addition, more companies and professional stock market analysts revised their earnings estimates downward in December, especially those for the next 12 months, but also those for the next three to five years.

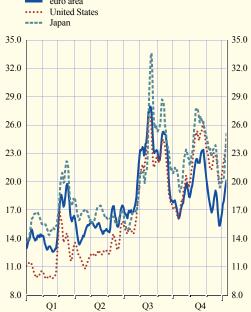
In line with the global stock market environment, euro area stock prices declined over the period under review. Although the euro area stock market fared slightly better than other major markets, concerns among market participants over the spillover effects from a possibly sharper than anticipated slowdown in the United States also appear to have dampened investors' appetite for euro area equity exposure. However, the persistently robust growth of euro area companies' actual and expected earnings in

December continued to support euro area stocks. Actual year-on-year growth in earnings per share for firms in the Dow Jones EURO STOXX index stood at 15% in December, up slightly from the previous month, with stock market analysts expecting the earnings per share for companies in that index to grow at an annual rate of 9% over the next 12 months, and by 8% over the next three to five years, almost unchanged from the figures of November. In addition to the continued strong growth in actual earnings, recent readings of euro area business confidence indicators suggest that not only analysts but also euro area corporations remain sanguine about the economic outlook. As regards sectoral stock price performance, the only gains were observed in the basic materials and the oil and gas sectors, reflecting the recent rally in the prices of oil and other commodities, and in the non-cyclical health-care and utility sectors.

Implied stock market volatility, a measure of market participants' uncertainty about shortterm stock market developments, increased somewhat further in the major markets (see Chart 17). Consequently, the unusual pattern of US implied volatility significantly exceeding the corresponding euro area measure of risk perception, which had emerged in November, appears to persist.

### Chart 17 Implied stock market volatility

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



Source: Bloomberg. Note: The implied volatility series reflects the expected standard deviation of percentage changes in stock prices over a period of deviation of percentage trianges in stock prices over a percest, 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

Prices and costs

### 3 PRICES AND COSTS

In December 2007 euro area HICP inflation is estimated to have been unchanged at 3.1%, after having increased strongly in November. These developments were essentially driven by increases in energy and food prices. Price pressures remain elevated along the production chain and input cost pressure is high, especially in services. Overall, the annual HICP inflation rate is expected to remain significantly above 2% in the coming months, and is likely to moderate only gradually in the course of 2008. This expectation of a moderation in inflation rates is based on the assumption that there will be some reversal of the recent rises in commodity prices in international markets, as currently embedded in futures prices, and, more fundamentally, that broadly based secondround effects on wage and price-setting behaviour do not materialise. Risks to this outlook are fully confirmed to lie on the upside. These risks include the possibility that stronger than currently expected wage growth may emerge, taking into account the existence of capacity constraints and the positive developments in labour markets. Furthermore, the pricing power of firms, especially in market segments with low competition, could be stronger than expected. Finally, oil and agricultural prices may rise further, continuing the strong upward trend observed in recent months, and increases in administered prices and indirect taxes beyond those foreseen thus far could occur.

### 3.1 CONSUMER PRICES

### FLASH ESTIMATE FOR DECEMBER 2007

According to Eurostat's flash estimate, euro area HICP inflation was 3.1% in December 2007, unchanged from November (see Table 5). Although no official estimate of the breakdown of the HICP components for December is available yet, anecdotal evidence suggests that developments in the energy component exerted some downward pressure on the overall HICP index in several countries. This downward impact may have been offset by some increase in processed food prices.

| Table 5 Price developments                              |      |      |      |      |      |      |      |      |  |  |
|---|------|------|------|------|------|------|------|------|--|--|
| (annual percentage changes, unless otherwise indicated) |      |      |      |      |      |      |      |      |  |  |
|   | 2006 | 2007 | 2007 | 2007 | 2007 | 2007 | 2007 | 2007 |  |  |
|   |      |      | July | Aug. | Sep. | Oct. | Nov. | Dec. |  |  |
| HICP and its components                                 |      |      |      |      |      |      |      |      |  |  |
| Overall index 1)  | 2.2  |      | 1.8  | 1.7  | 2.1  | 2.6  | 3.1  | 3.1  |  |  |
| Energy  | 7.7  |      | 0.0  | -0.9 | 3.0  | 5.5  | 9.7  |      |  |  |
| Unprocessed food  | 2.8  |      | 2.8  | 2.4  | 2.1  | 3.1  | 3.0  |      |  |  |
| Processed food  | 2.1  |      | 1.9  | 2.5  | 3.1  | 3.8  | 4.6  |      |  |  |
| Non-energy industrial goods                             | 0.6  |      | 0.9  | 1.0  | 1.0  | 1.1  | 1.1  |      |  |  |
| Services  | 2.0  | -    | 2.6  | 2.6  | 2.5  | 2.5  | 2.5  |      |  |  |
| Other price indicators                                  |      |      |      |      |      |      |      |      |  |  |
| Industrial producer prices                              | 5.1  |      | 1.8  | 1.8  | 2.7  | 3.3  | 4.2  |      |  |  |
| Oil prices (EUR per barrel)                             | 52.9 | 52.8 | 55.2 | 52.4 | 55.2 | 57.7 | 62.8 | 62.8 |  |  |
| Non-energy commodity prices                             | 24.8 | 9.2  | 7.8  | 5.4  | 6.9  | 3.5  | -0.1 | 1.4  |  |  |

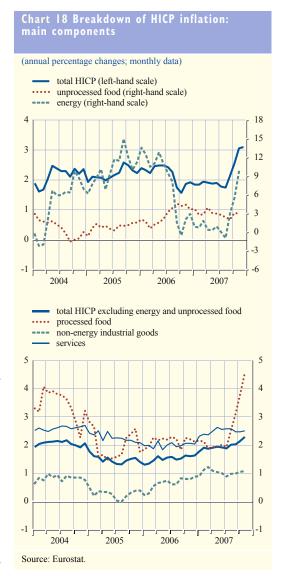
Sources: Eurostat, HWWI and ECB calculations based on Thomson Financial Datastream. Note: Data on industrial producer prices refer to the euro area including Cyprus and Malta. 1) HICP inflation in December 2007 refers to Eurostat's flash estimate.

## HICP INFLATION UP TO NOVEMBER 2007

Strong short-term upward pressure on inflation was already visible in November, with the overall annual HICP inflation rate reaching 3.1%, substantially up from 2.6% in October (see Chart 18). This increase, which was mainly due to strong energy and – to a lesser extent – processed food price developments, represents the highest growth rate observed in annual HICP inflation since May 2001.

In November the annual rate of change in HICP energy prices rose to 9.7%, considerably up from 5.5% in October. This was mostly due to a sharp month-on-month increase in energy prices, reflecting the pass-through of the recent rise in oil prices in international markets, as well as higher margins owing to the increased pricing power of energy suppliers. A base effect from the previous year's oil price developments also had some upward impact on the annual growth rate of energy prices, although more limited than in the previous two months. The annual rate of change in unprocessed food prices declined slightly in November, mainly as a result of fruit and vegetable price developments, while meat prices increased somewhat.

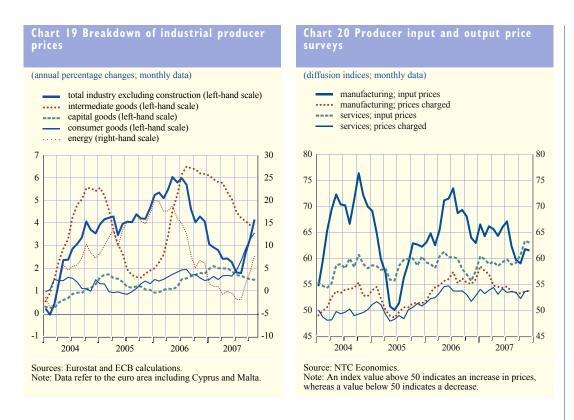
The annual rate of change in the HICP excluding unprocessed food and energy also rose in November, to 2.3%, its highest rate since the end of 2002. As in the previous two months, this increase was essentially driven by a rise in processed food prices, especially those of dairy products and cereals, reflecting the global



pressure in some food commodity prices. By contrast, the annual rate of change in the two largest HICP components remained unchanged. Inflation in services prices stood at 2.5%, while that in HICP non-energy industrial goods prices remained at 1.1%. Short-term dynamics in these two components have been moderate over the past few months. However, they are currently growing at rates above the average calculated over the period since January 1999, partly owing to the impact of the VAT increase in Germany in January 2007.

# 3.2 INDUSTRIAL PRODUCER PRICES

The annual rate of change in overall industrial producer prices (excluding construction) recorded its third consecutive increase, rising substantially to 4.2% in November from 3.3% in October (see Chart 19). This was mainly due to a strong increase in energy prices and, to a lesser extent, in food producer prices. Excluding energy and construction, annual producer price



inflation remained unchanged in November at the elevated level of 3.2%. As in previous months, this reflected counteracting developments among its components. On the one hand, the annual rate of change in intermediate goods prices decreased slightly in November, remaining on a downward path as a result of the appreciation of the euro and subdued dynamics in raw materials prices, while that of capital goods prices remained unchanged. On the other hand, the annual rate of change in the producer prices of overall consumer goods rose further to 3.6%, driven by a further sizeable increase in the producer prices of food consumer goods. However, excluding tobacco and food prices, the annual rate of change in the producer prices of consumer goods remained at around 1.3% throughout the year, which continues to suggest a levelling-off of pipeline pressures on HICP non-energy industrial goods prices. Overall, the November data for industrial producer prices confirm the previous months' assessment of elevated price pressures at different stages of the production chain, in particular from energy and food items.

The most recent information on firms' price-setting behaviour from the NTC Economics Purchasing Managers' Index (PMI) confirms a picture of high input cost pressures in both the manufacturing and services sectors and suggests some constraints on firms' ability to pass these increased costs through to their output prices (see Chart 20). According to PMI survey data, input cost indicators for both manufacturing and services remained high by historical standards in December, following a strong increase in November. In particular, the input price index for services remained close to its peak of the previous month, which survey respondents attributed to higher oil and food prices and rising wage pressures. In December the indicators of prices charged remained at elevated levels for both sectors, but increased only marginally. This appears to confirm the limited pricing power of firms in recent months.

| (annual percentage changes, unless otherw | wise indicated) |      |      |      |      |      |     |
|---|-----------------|------|------|------|------|------|-----|
|   | 2005            | 2006 | 2006 | 2006 | 2007 | 2007 | 200 |
|   |                 |      | Q3   | Q4   | Q1   | Q2   | Q   |
| Negotiated wages                          | 2.1             | 2.3  | 2.1  | 2.5  | 2.0  | 2.3  | 2.  |
| Total hourly labour costs                 | 2.7             | 2.6  | 2.6  | 2.3  | 2.3  | 2.4  | 2.  |
| Compensation per employee                 | 1.8             | 2.2  | 2.4  | 1.8  | 2.2  | 1.9  | 2.  |
| Memo items: Labour productivity           | 0.7             | 1.3  | 1.3  | 1.6  | 1.3  | 0.7  | 0.  |
| Unit labour costs                         | 1.0             | 0.9  | 1.1  | 0.2  | 0.9  | 1.2  | 1.  |

Sources: Eurostat, national data and ECB calculations.

Note: Data on negotiated wages and hourly labour costs do not include Cyprus and Malta.

### 3.3 LABOUR COST INDICATORS

The latest information derived from the various labour cost indicators, which are all now available for the third quarter of 2007, points to a continuation of contained wage developments, remaining broadly in line with developments in 2006 (see Table 6).

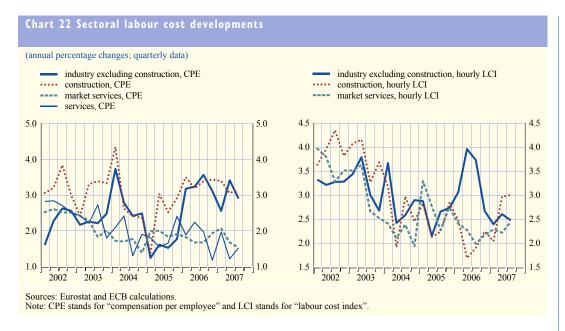
The increase in negotiated wages in the third quarter of 2007 was 2.2%, compared with 2.3% in the second quarter, and was comparable to the average growth observed in 2006 (see Chart 21). The annual growth rate of hourly labour costs in the non-agricultural business sector rose to 2.5% in the third quarter, which was only slightly higher than the growth rate recorded in the second quarter, and broadly in line with the average for 2006. Owing to statistical issues, data on compensation per employee for the first three quarters of 2007 have been revised significantly downwards. The annual growth rate of compensation per employee increased slightly to 2.0% in the third quarter,

from 1.9% in the previous quarter, somewhat below the average growth rates recorded in the previous year. Given the subdued growth in labour productivity, the annual growth rate of unit labour costs remained unchanged at 1.2% in the third quarter of 2007.

Trends in labour cost developments differed across sectors (see Chart 22). In industry (excluding construction), information for the third quarter confirms the picture of average growth in compensation per employee in 2007 remaining broadly in line with the developments observed in 2006. By contrast, in the market services sector, the annual growth rate of compensation per employee showed a further decrease in the third quarter. In the construction sector, the annual growth rate of compensation per employee also moderated in the course of the year, in line with the first signs of a slowdown in employment growth in that sector. This is consistent with a stabilisation of growth in hourly labour costs in construction at a high level in the third quarter.



Sources: Eurostat, national data and ECB calculations. Note: Data on compensation per employee refer to the euro area including Cyprus and Malta.



Looking ahead, preliminary information on wage developments in the last quarter of 2007 does not suggest any acceleration compared with the two preceding quarters. Information from the latest wage negotiations, as well as the expected impact of the phasing-out of measures to reduce social security contributions, points to a likely increase in wage growth in 2008, in particular in the public sector.

# 3.4 THE OUTLOOK FOR INFLATION

Overall, energy and food prices are expected to keep annual headline HICP inflation significantly above 2% in the coming months. The annual HICP inflation rate is likely to moderate only gradually in the course of 2008, assuming that there will be some reversal of the recent rises in energy and food prices in international markets, as currently embedded in futures prices, and, more fundamentally, that currently high inflation rates do not lead to broadly based second-round effects on wage and price-setting. In addition, favourable base effects are expected in 2008 (see Box 3).

Risks to this outlook are fully confirmed to lie on the upside and include the possibility that wage developments may be stronger than currently expected, taking into account the existence of capacity constraints and the positive signs from labour markets. Furthermore, stronger than expected pricing power of firms, notably in market segments with low competition, could materialise. Finally, further rises in oil and agricultural prices could occur, continuing the strong upward trend observed in recent months, as could unanticipated increases in administered prices and indirect taxes.

# ACCOUNTING FOR RECENT AND PROSPECTIVE MOVEMENTS IN HICP INFLATION: THE ROLE OF BASE **EFFECTS**

In the 12 months to November 2007, annual HICP inflation rose from 1.9% to 3.1%, on the back of the sharp increases in energy and processed food prices recorded in particular since August 2007.1 A key question when interpreting changes in annual rates of growth is to what extent they reflect price developments in the current year (i.e. actual "news" between one month and the next) and to what extent they reflect a carry-over from price volatility in the previous year through the so-called "base effect". The base effect can be defined as the contribution to the change in the year-on-year inflation rate in a particular month that stems from a deviation of the month-on-month rate of change in the base month (i.e. the same month one year earlier) from its usual or "normal" pattern, taking account of seasonal fluctuations.<sup>2</sup> Variations in the seasonal patterns of price changes from one year to the next may also induce noise in the annual rate. This box reviews the role of base effects in driving recent and prospective HICP inflation developments.

The derivation of a monthly seasonal pattern for each HICP component makes it possible to separate the contributions of base effects and those of current developments to monthly changes in the annual rate of HICP inflation.3 Chart A shows that base effects stemming from energy

- 1 For more information on food prices, see the box entitled "Euro area food prices: recent developments and outlook" in the December 2007 issue of the Monthly Bulletin.
- 2 See the box entitled "Base effects and their impact on HICP inflation in early 2005" in the January 2005 issue of the Monthly Bulletin. See also the box entitled "The role of base effects in driving recent and prospective developments in HICP inflation" in the January 2007 issue of the Monthly Bulletin.
- The contribution of base effects to the monthly changes in the year-on-year rate of inflation is calculated as the deviation of the (non-seasonally adjusted) month-on-month change 12 months earlier from the estimated "normal" month-on-month change. The "normal" month-on-month change is obtained by adding an estimated seasonal factor for each month to the average month-on-month change observed since January 1995.

# Chart A Decomposition of the monthly change in annual HICP inflation

(percentage points)

#### energy base effects non-energy base effects current inflation developments 1) change in the year-on-year inflation rate 0.6 0.6 0.4 0.4 0.2 0.2 0.0 0.0 -0.2 -0.2 -04 -0.4May Nov Jan Mar. July Sep. Nov 2006 2007

Sources: Eurostat and ECB calculations. 1) Calculated as the difference between the change in the yearon-year inflation rate and the combined base effects from energy and non-energy components.

# Chart B Decomposition of the change in annual HICP inflation since November 2006

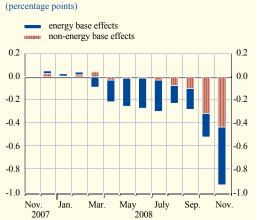


Sources: Eurostat and ECB calculations. 1) Calculated as the difference between the change in the year-on-year inflation rate and the combined base effects from energy and non-energy components

Prices and costs

prices had a favourable (downward) impact on annual HICP inflation in the first half of 2007 and a strong unfavourable (upward) impact in September and October. In December energy base effects are estimated to have been negligible. Base effects from non-energy components were, overall, relatively small in 2007. For the year as a whole, favourable and unfavourable base effects from energy and nonenergy components broadly offset one another, and most of the cumulative increase in annual HICP inflation was accounted for by current inflation developments (see Chart B). Of the total rise in HICP inflation between November 2006 and November 2007, 0.2 percentage point reflected a cumulative upward impact of energy base effects, while the remaining 1 percentage point reflected price dynamics in 2007.





Sources: Eurostat and ECB calculations.

In 2008 base effects from both energy and non-energy prices are expected to make substantial downward contributions to inflation developments (see Chart C). The impact will generally be concentrated towards the end of the year as the significant increases in energy and food prices recorded in the second half of 2007 will drop out of the annual comparison 12 months later. Other possible favourable base effects related to the disappearance from the annual comparison of the German VAT and university fee increases in 2007 would have their main impact during the period from January to April 2008. Even if domestic energy and food prices evolve in line with their historical trends, the implied base effects would pull down HICP inflation by around 1 percentage point cumulatively in the 12 months to November 2008. However, the extent to which these favourable base effects will also lead to lower HICP inflation hinges crucially on the absence of further shocks to oil and food prices and on the evolution of the other HICP components. Clearly, therefore, it cannot be taken for granted that, by the end of 2008, inflation will fall by the amount depicted in Chart C.

# 4 OUTPUT, DEMAND AND THE LABOUR MARKET

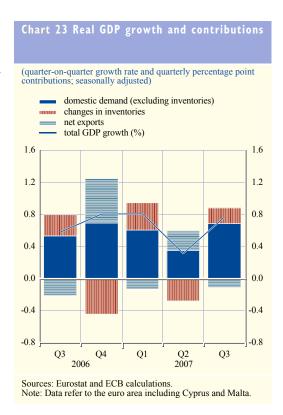
Eurostat's second estimate of euro area real GDP growth in the third quarter of 2007 was 0.8%, which is 0.1 percentage point higher than the previous estimate. Information available at the beginning of the fourth quarter suggests some moderation of economic activity in the industrial sector but also, to a lesser extent, in the services sector. However, while business and consumer confidence indicators have declined over the past few months, they generally remain at levels pointing to sustained growth. Overall, the fundamentals of the euro area remain sound, profitability has been sustained, employment growth has been robust and the unemployment rate has fallen to levels not seen for 25 years. The main scenario therefore remains that of real GDP growth broadly in line with potential. The most recent forecasts from international organisations broadly confirm this assessment. The risks surrounding this outlook for economic growth are on the downside. They relate mainly to a potentially broader than currently expected impact of the ongoing reappraisal of risk in financial markets on financing conditions and economic sentiment, with a negative impact on world and euro area growth. Further downside risks stem from the scope for additional oil and other commodity price rises, concerns about protectionist pressures and the possibility of disorderly developments due to global imbalances.

## 4.1 OUTPUT AND DEMAND DEVELOPMENTS

## **REAL GDP AND EXPENDITURE COMPONENTS**

According to Eurostat's second estimate of national accounts data, real GDP growth reached 0.8% in the third quarter of 2007, which is 0.1 percentage point higher than the previous estimate (see Chart 23). The upward revision is mainly attributable to a higher contribution from domestic demand, at 0.6 percentage point, on account of higher investment growth than previously estimated. The estimate of private consumption growth was left unchanged, at 0.5%, confirming the positive indications observed in the previous quarter. The slightly negative contribution of net trade and the positive contribution of inventories were both confirmed.

The first estimate of the breakdown of total investment for the third quarter of 2007 was also made available with Eurostat's release. Non-construction investment growth accelerated somewhat in the third quarter, rising to 1.4% from



0.9% in the second quarter. Construction investment rebounded over the same period, to 1.0% quarter on quarter, following the decline of 1.0% observed in the previous quarter. This breakdown confirms the assessment presented in previous issues of the Monthly Bulletin regarding the strength of investment growth and the specific developments which affected the construction sector in the second quarter.

In sum, the latest estimate of national accounts data confirms that euro area economic growth remained robust in the first three quarters of 2007, albeit somewhat weaker, on average, than in 2006.

Output, demand and the labour market

## SECTORAL OUTPUT AND INDUSTRIAL PRODUCTION

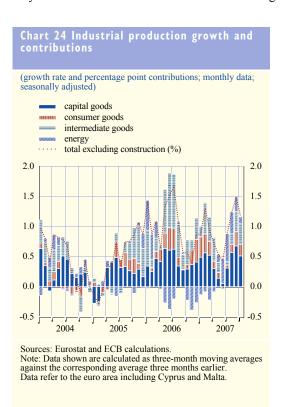
Eurostat's second estimate of national accounts data left the sectoral composition of value added growth in the third quarter of 2007 broadly unchanged. The contributions of both the industry and services sectors to euro area total value added were confirmed, at 0.3 and 0.5 percentage point, respectively.

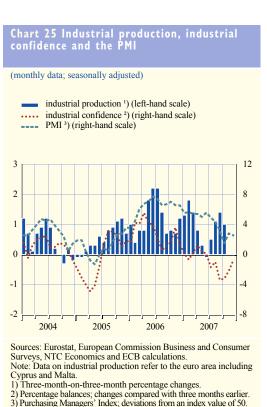
The latest information suggests that the contribution of industry to euro area real GDP growth in the fourth quarter of 2007 was lower than in the third quarter. Industrial production (excluding construction) increased by 0.4% month on month in October, following a decline of 0.8% in the previous month (see Chart 24). The increase in October was mainly driven by capital and intermediate goods production. Energy production represented a drag on growth, possibly related to the effects of weather conditions in some parts of the euro area. In three-month-on-three-month terms, industrial new orders (excluding heavy transport equipment) rose by 0.6% in October, compared with 1.2% in the previous month, confirming the view that the expansion of this sector may be slowing. In the construction sector, production increased by 0.6% in the three months to November.

Overall, the most recent information suggests that industrial production is likely to have been weaker in the fourth quarter than in the third quarter.

# SURVEY DATA FOR THE INDUSTRIAL AND SERVICES SECTORS

Survey data also point to slower growth in the fourth quarter of 2007. Both the Purchasing Managers' Index (PMI) and the European Commission's indicator suggest that the average level of industrial activity in the fourth quarter was lower than in the previous quarter (see Chart 25). As regards services, both the Commission's indicator and the PMI stood below their historical average levels, although they remained at levels consistent with sustained growth in the fourth quarter. Overall, the surveys for





both the industrial and services sectors suggest that the GDP growth rate in the fourth quarter of 2007 may have been lower than in the third quarter.

# INDICATORS OF HOUSEHOLD SPENDING

Available indicators of household spending suggest that consumption growth was somewhat weaker in the fourth quarter of 2007, following the recovery of private consumption growth to 0.5% in the third quarter.

In November retail sales in the euro area declined by 0.5% month on month, following a decline of 0.7% in October, while new passenger car registrations also decreased for the second month in a row, falling by 0.7% month on month in November (see Chart 26). It is therefore unlikely that either component provided a positive contribution to private consumption growth in the fourth quarter of 2007. The European Commission's retail trade confidence indicator, which signals the perceptions of retailers, declined slightly in December but remained at a historically high level. Meanwhile, euro area consumer confidence declined slightly further in December, mainly reflecting a deterioration in consumers' perceptions of their personal financial situation. Consumer confidence remains above its historical average level, but has fallen since the peak observed in May 2007. Although indicators point to somewhat weaker consumption growth in the fourth quarter of 2007 than in the third quarter, conditions are favourable in the labour market, implying that the outlook for private consumption in 2008 is broadly positive.

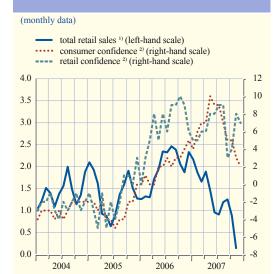
# 4.2 LABOUR MARKET

The euro area labour market has shown a clear improvement in recent years and, despite some moderation, this favourable trend has been confirmed by the latest data.

# **UNEMPLOYMENT**

In November the euro area standardised unemployment rate remained stable, at 7.2%, following a decline of 0.1 percentage point

Chart 26 Retail sales and confidence in the retail trade and household sectors



Sources: Eurostat and European Commission Business and Consumer Surveys

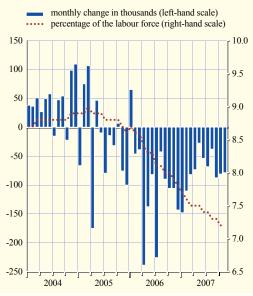
Note: Data on total retail sales refer to the euro area including Cyprus and Malta.

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

 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 27 Unemployment

(monthly data; seasonally adjusted)



Source: Eurostat.

Note: Data refer to the euro area including Cyprus and Malta.

Output, demand and the labour market

| lable | / Empl | loyment | tgrowth |
|-------|--------|---------|---------|
|       |        |         |         |

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

|                          | Annual | rates |      | S    |      |      |      |
|--------------------------|--------|-------|------|------|------|------|------|
|                          | 2005   | 2006  | 2006 | 2006 | 2007 | 2007 | 2007 |
|                          |        |       | Q3   | Q4   | Q1   | Q2   | Q3   |
| Whole economy            | 0.9    | 1.5   | 0.2  | 0.4  | 0.6  | 0.6  | 0.3  |
| of which:                |        |       |      |      |      |      |      |
| Agriculture and fishing  | -1.0   | -1.2  | -1.3 | -0.8 | 0.8  | -1.0 | -1.3 |
| Industry                 | -0.2   | 0.6   | 0.3  | 0.4  | 0.6  | 0.4  | 0.1  |
| Excluding construction   | -1.3   | -0.3  | 0.0  | 0.0  | 0.1  | 0.1  | 0.1  |
| Construction             | 2.5    | 2.7   | 0.9  | 1.5  | 1.8  | 1.2  | 0.1  |
| Services                 | 1.4    | 2.0   | 0.3  | 0.4  | 0.6  | 0.7  | 0.5  |
| Trade and transport      | 0.7    | 1.5   | 0.0  | 0.2  | 0.7  | 0.9  | 0.7  |
| Finance and business     | 2.4    | 3.6   | 1.0  | 1.0  | 1.4  | 1.0  | 0.7  |
| Public administration 1) | 1.4    | 1.7   | 0.1  | 0.4  | 0.2  | 0.5  | 0.3  |

Sources: Eurostat and ECB calculations.

1) Also includes education, health and other services.

in October (see Chart 27). This figure reflects a monthly fall of almost 80,000 in the numbers of unemployed persons across the euro area, and points to a slightly faster rate of reduction in the numbers of unemployed persons during the fourth quarter compared with the previous quarter. The unemployment rate has declined significantly, by 0.8 percentage point, in the 12 months to November.

# **EMPLOYMENT**

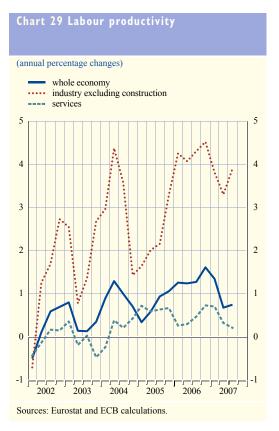
Eurostat's second estimate confirmed that euro area employment growth was 0.3% quarter on quarter in the third quarter of 2007, following increases of 0.6% in the previous two quarters (see Table 7). The sectoral breakdown, which has now become available, shows that the moderation in employment growth in the third quarter was due to developments in the construction sector and, to a lesser extent, in the services sector. In the latter sector, the moderation in employment growth was broadly based across the various subsectors (namely trade and transport, finance and business,



and public administration). In the third quarter employment growth in industry excluding construction remained unchanged from the previous quarter, at a low but still positive rate. In annual terms, employment grew by 1.9% in the third quarter, following an increase of 1.8% in the previous quarter.

The favourable developments in the euro area labour market in recent years appear to have continued in the fourth quarter of 2007, based on survey data available to December (see Chart 28). According to the NTC Economics PMI survey, employment continued to grow in December in both the industrial and services sectors. The employment expectations reported in the European Commission's Business and Consumer Survey convey a similar picture.

In the third quarter of 2007 annual labour productivity grew by 0.7%, which was the same rate as in the previous quarter (see Chart 29). The importance of productivity developments for monetary policy is assessed in the article entitled "Productivity developments and monetary policy". A review of key trends in



euro area labour productivity at the aggregate and sectoral levels is provided in Box 4 entitled "Labour productivity developments in the euro area: results from the latest release of the EU KLEMS database".

### Box 4

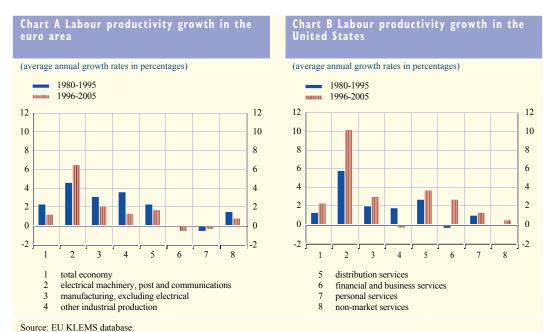
# LABOUR PRODUCTIVITY DEVELOPMENTS IN THE EURO AREA: RESULTS FROM THE LATEST RELEASE OF THE EU KLEMS DATABASE

Productivity gains are the key factor driving improvements in real output growth and standards of living in the medium to long run. This box reports the main data on euro area labour productivity growth that have been made available in the EU KLEMS database. In particular, it compares key trends in euro area labour productivity at the aggregate and sectoral levels over the period 1996-2005 with those seen in the period 1980-1995. It also draws comparisons with the United States.

The public version of the EU KLEMS Growth and Productivity Accounts database was launched in Brussels on 15 March 2007 and the values for a number of the variables it records were updated in November 2007. These data are the result of a two-year project by researchers

<sup>1</sup> The name of the EU KLEMS database comes from the fact that it decomposes developments in economic growth into the contributions of the various factors of production and intermediate inputs - capital (K), labour (L), energy (E), material (M) and services (S).

Output, demand and the labour market



Note: Data for the euro area exclude Greece, Ireland, Cyprus, Luxembourg, Malta, Portugal and Slovenia.

based at 16 institutions across the EU, led by the Groningen Growth and Development Centre and the National Institute of Economic and Social Research in collaboration with Eurostat. The European Commission initiated and funded the project. The data consist of time series covering the period 1970-2005 which measure output growth, employment, capital formation and total factor productivity (TFP) at a disaggregated industry level across 25 EU countries as well as in the United States and Japan.<sup>2</sup> The EU KLEMS database provides very valuable information for assessing structural trends in real output and labour productivity. Nevertheless, these data are still at a preliminary stage and should benefit from thorough validation by national statistical institutes (NSIs). To this end, it is envisaged that the EU KLEMS project will include a further component, namely a "statistical module" whereby the NSIs will be involved in the regular compilation of this dataset which is, for the present, research-oriented. Such involvement is encouraged at the European level and should enable EU policy-makers to make greater use of official statistics on productivity developments for monitoring and decision-making.

Labour productivity can be measured in terms of real gross value added and total hours worked. Euro area labour productivity growth (measured as average year-on-year volume growth of gross value added per hour worked) slowed markedly from 2.3% in the period 1980-1995 to 1.2% in the period 1996-2005 (see Chart A), while euro area real gross value added growth (measured in terms of average annual growth) declined moderately from 2.2% in the first period to 1.9% in the second. In the United States, labour productivity growth rose from 1.3% to 2.3% in the same two periods, while US real gross value added growth also increased – from 2.7% to 3.1% (see Chart B). The slowdown in euro area labour productivity growth is largely due to an increase in total hours worked, from a negative average annual growth rate (-0.2%) in the period 1980-1995 to a positive rate (0.8%) in the period 1996-2005. This contrasts with a decrease in the average annual growth rate of total hours worked in the United States from 1.4% in the first period to 0.9% in the second.

<sup>2</sup> For more details, see Timmer, M., M. O'Mahony and B. van Ark, EU KLEMS Growth and Productivity Accounts: An Overview, available from www.euklems.net.

Together with the faster real gross value added growth mentioned above, this slower pace of labour input growth has contributed to the rise in US labour productivity growth recorded over the second period. Overall, this means that there was a clear reversal in labour productivity growth between the two periods, as a result of which US labour productivity growth overtook that seen in the euro area during the second period.<sup>3</sup>

Developments in labour productivity growth across economic activities can be seen in Charts A and B. As shown in Chart A, in the period 1996-2005 the euro area saw positive contributions from the electrical machinery, post and communications industries – which include information and communication technology (ICT)-producing activities – and, to a lesser extent, from manufacturing (excluding electrical), other industrial production, distribution services and non-market services. In contrast, the rate of labour productivity growth was negative in personal services as well as in financial and business services. The economic activities exhibiting a decline in labour productivity growth in comparison with the previous period from 1980 to 1995 were manufacturing (excluding electrical), other industrial production, distribution services, financial and business services and non-market services.

Chart B shows that US labour productivity growth was stronger for a majority of economic activities than in the euro area in the period 1996-2005. The labour productivity growth rates over this second period were considerable for all other industries (above 2% per year) and exceed those seen in the euro area, as well as being higher than in the period 1980-1995. As in the euro area, the electrical machinery, post and communications industries show the fastest pace of labour productivity growth in the second period. Overall, a comparison of Charts A and B indicates that in the second period there was a labour productivity differential in standard manufacturing (that is, excluding electrical) in favour of the United States, as well as a quantitatively larger differential in market services (i.e. distribution services, financial and business services and personal services).

Real output growth trends can be further analysed in terms of growth accounting, whereby real output developments are attributed to the rates of change in capital, labour and TFP. Rather than attempting a full real output growth decomposition, the table below reports annual TFP growth, which appears to be the key factor behind the larger difference between real output growth in the United States and that in the euro area in the second period.<sup>4</sup> This component is assessed with regard to the market economy (i.e. the total economy excluding real estate activities and non-market services, namely health, education and government services). In the period 1980-1995 euro area average annual TFP growth (at 0.9%) was slightly above that seen in the United States (at 0.7%). In the period 1996-2005 euro area TFP growth fell to 0.4%, while US TFP growth rose considerably, to reach 1.4%. The decline in euro area TFP growth in the second period was fairly broad-based and included manufacturing (excluding electrical) and other industrial production as well as services activities such as distribution services and financial and business services. The only economic activities with higher TFP growth in the second period

<sup>3</sup> For a recent analysis of the differences between the performance of the euro area and of the United States in terms of real output and labour productivity growth since the mid-1990s, see van Ark, B., M. O'Mahony and G. Ypma (eds.), The EU KLEMS Productivity Report: An Overview of Results from the EU KLEMS Growth and Productivity Accounts for the European Union, EU Member States and Major Other Countries in the World, Issue No 1, March 2007.

<sup>4</sup> For a more detailed analysis of sectoral euro area TFP growth using EU KLEMS data, see the box entitled "Sectoral patterns of total factor productivity growth in euro area countries", ECB Monthly Bulletin, October 2007.

Output, demand and the labour market

# Total factor productivity growth

(annual average growth rates in percentages)

|   | Euro      | area      | United    | States    |
|---|-----------|-----------|-----------|-----------|
|   | 1980-1995 | 1996-2005 | 1980-1995 | 1996-2005 |
| Market economy                                | 0.9       | 0.4       | 0.7       | 1.4       |
| Electrical machinery, post and communications | 2.6       | 4.8       | 3.8       | 7.1       |
| Manufacturing, excluding electrical           | 1.5       | 0.9       | 0.9       | 1.5       |
| Other industrial production                   | 1.6       | 0.2       | 1.2       | -0.7      |
| Distribution services                         | 1.3       | 0.7       | 1.8       | 2.4       |
| Financial and business services               | -1.0      | -1.3      | -2.3      | 0.1       |
| Personal services                             | -1.1      | -0.9      | 0.6       | 0.7       |

Source: EU KLEMS database.

Note: Data for the euro area exclude Greece, Ireland, Cyprus, Luxembourg, Malta, Portugal and Slovenia.

than in the first were the electrical machinery, post and communications industries and personal services.<sup>5</sup>

As mentioned above, work is still in progress on the EU KLEMS database and caution is therefore required when interpreting the data. Analysis of the current EU KLEMS dataset shows that euro area productivity growth was limited over the second period, and lagged behind that of the United States during the same period. Moreover, it broadly corroborates earlier findings which attribute the slowdown in euro area labour productivity growth in the second period to developments in some services activities that make use of ICT (such as distribution services and financial services). The poor labour productivity and TFP growth performance of euro area market services reflects insufficient technological and innovation spillovers as well as market rigidities.<sup>6</sup> It is, however, worth noting that TFP growth does not just capture technological progress. It reflects other factors such as benefits from economies of scale, variations in capacity utilisation and measurement errors, representing, as it does, all factors other than changing amounts of labour and capital. Finally, the fact that labour and product market rigidities are a drag on euro area labour productivity growth is a reminder that, despite significant progress in some areas, the implementation of structural reforms has not yet enabled a knowledge-based economy to be launched. Further efforts are therefore required – as advocated in the renewed Lisbon strategy - in order to facilitate the allocation of resources to their most productive uses while fostering labour productivity growth and technological progress.

# 4.3 THE OUTLOOK FOR ECONOMIC ACTIVITY

The latest information on economic activity confirms the assessment made in previous issues of the Monthly Bulletin that the quarterly growth of euro area real GDP is likely to have moderated somewhat around the turn of the year. Growth in the industrial sector was particularly strong in the

January 2008

<sup>5</sup> Among the sources of disparities between economic growth in the United States and in the euro area, other than TFP growth, capital accumulation does not appear to have contributed to the widening of the gap (despite the greater dynamism of the ICT capital component in the US economy).

<sup>6</sup> See van Ark, B., M. O'Mahony and G. Ypma (eds.), op. cit; and the article entitled "Productivity developments and monetary policy" in this issue of the ECB Monthly Bulletin.

<sup>7</sup> See Nicoletti, G., and S. Scarpetta, "Regulation, productivity and growth: OECD evidence", *Economic Policy*, Issue 36, 2003; "Competition, productivity and prices in the euro area services sector", ECB Occasional Paper No 44 issued by the Task Force of the Monetary Policy Committee of the ESCB, April 2006; Gómez-Salvador, R., A. Musso, M. Stocker and J. Turunen, "Labour productivity developments in the euro area", ECB Occasional Paper No 53, October 2006; and the box entitled "Developments in euro area productivity and the need for structural reforms" in the ECB Annual Report 2006.

third quarter of 2007 but slowed in the fourth quarter. Business and consumer confidence indicators have declined over the past few months, although they generally remain at levels pointing to sustained growth, thereby confirming the main scenario of real GDP growth broadly in line with trend potential. Overall, the fundamentals of the euro area remain sound, profitability has been sustained, employment growth has been robust and the unemployment rate has fallen to levels not seen for 25 years. Consumption growth should therefore continue to contribute to economic expansion, in line with real disposable income, and investment growth should provide ongoing support. On the expectation that the global economy will, on balance, remain resilient – with the slowdown in economic growth in the United States being mitigated by the continued strength of emerging market economies – external demand should support euro area exports.

Nevertheless, uncertainty about the prospects for economic growth remains high and the risks surrounding the outlook for economic activity lie on the downside. These risks relate mainly to a potentially broader than currently expected impact of the ongoing reappraisal of risk in financial markets on financing conditions and economic sentiment, with a negative impact on world and euro area growth. Further downside risks stem from the scope for additional oil and other commodity price rises, concerns about protectionist pressures and the possibility of disorderly developments due to global imbalances.

Exchange rate and balance of payments developments

# 5 EXCHANGE RATE AND BALANCE OF PAYMENTS DEVELOPMENTS

# **5.1 EXCHANGE RATES**

The euro appreciated in nominal effective terms in the three-month period to the end of December 2007, with the greatest part of the appreciation occurring in the course of November. In particular, this reflected a strengthening of the single currency in nominal bilateral terms vis-à-vis the US dollar and the pound sterling.

# EFFECTIVE EXCHANGE RATE OF THE EURO

On 9 January 2008 the nominal effective exchange rate of the euro – as measured against the currencies of 22 of the euro area's important trading partners<sup>1</sup> – was 2.4% above the level at the end of September and approximately 6% higher than at the beginning of 2007 (see Chart 30). After a moderate appreciation in October, the single currency strengthened more noticeably in the course of November. This was possibly related to renewed concerns in global credit markets, which may have led market participants to expect some divergence in monetary policy directions in the United States and the euro area. In December, the appreciation was again moderate, accompanied by some shorter-term volatility.

Taking a longer-term perspective, in December 2007 the CPI-deflated real effective exchange rate of the euro calculated vis-à-vis the currencies of the main trading partners, traded 7% above its average level in 2006.

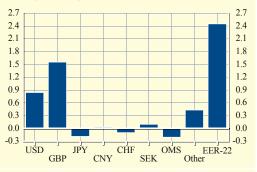
# **US DOLLAR/EURO**

Following a change in direction of the US monetary policy stance, there was a sharp appreciation in the euro. It continued to appreciate throughout most of October and November, reflecting in part the market impact of a new series of soft US macroeconomic data and further credit-related concerns. The associated expectations by market participants of a further lowering of US policy rates in the first half of 2008 may also have weighed on the US dollar. In December, the US dollar initially appreciated vis-à-vis the euro, notwithstanding a further reduction by 25





# **Contributions to EER changes** <sup>2)</sup> From 28 September 2007 to 9 January 2008 (in percentage points)



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-22 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

The category "Other" refers to the aggregate contribution of the remaining six trading partners of the euro area in the EER-22 index. Changes are calculated using the corresponding overall trade weights in the EER-22 index.

basis points in the federal funds rate. The strength of the dollar in this period may have been related to stronger than expected macroeconomic data releases in the United States and a less risk-averse

<sup>1</sup> As a result of the adoption of the euro by Malta and Cyprus on 1 January 2008, the effective exchange rate of the euro is calculated vis-à-vis 22 of the euro area's important trading partners instead of 24 previously.

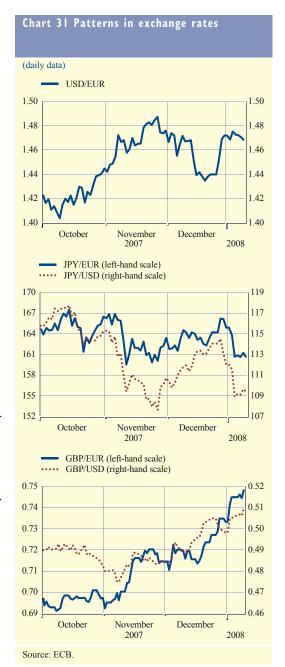
environment fostered by the coordinated decision by major central banks to address the liquidity strains in money markets. In the last few days of the year, however, the euro more than offset the previous losses, on account of fresh signs of weakness in US housing and labour markets, as well as in the manufacturing sector. On 9 January 2008 the euro traded at USD 1.47, 3.5% above its level at the end of September and 11.5% stronger than at the beginning of 2007 (see Chart 31).

## **JAPANESE YEN/EURO**

In the last three months of 2007 the behaviour of the euro/yen exchange rate broadly reflected developments in global credit markets and the associated volatility of financial prices and exchange rates. As concerns about creditrelated risks rose again around mid-October and possibly had a moderating effect on activity in carry trades, the yen temporarily rebounded. A more significant appreciation of the yen vis-à-vis the euro was then recorded in November, in the context of increasing volatility in the foreign exchange market. In December the yen gave up the gains of the previous two months, possibly on account of a less risk averse environment and some downward revisions to the economic outlook by market participants as a result of the December Tankan survey. The yen surged sharply at the start of January 2008 to the levels prevailing in the second half of November. On 9 January 2008 the euro stood at JPY 160.61, 1.8% weaker than its level at the end of September 2007 and 2.3% stronger than at the beginning of 2007 (see Chart 31).

# **EU MEMBER STATES' CURRENCIES**

Since the end of September 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, which after the revaluation in March had continued to trade on the strong side of its new central rate, appreciated further in October and the first half of November, but thereafter tended to weaken. On 9 January 2008 the deviation of the Slovak koruna from its ERM II central rate was 6%. The Latvian lats strengthened by about 1% visà-vis the euro from the end of September 2007 and on 9 January 2008 was 0.8% stronger than the central rate of the unilaterally set fluctuation band of  $\pm 1\%$ .

On 1 January 2008 Cyprus and Malta adopted the euro. Box 5 briefly presents the main economic features of these countries and the policy challenges in the years ahead.

Exchange rate and balance of payments developments

# Box 5

# THE EURO AREA FOLLOWING THE ENTRY OF CYPRUS AND MALTA

On 1 January 2008 Cyprus and Malta adopted the euro, leading to an increase in the number of euro area countries from 13 to 15. The irrevocable conversion rate between the Cypriot pound and the euro was set at CYP 0.585274 and between the Maltese lira and the euro at MTL 0.4293. These rates are identical to the central rates agreed on 2 May 2005, when the Cypriot and Maltese currencies entered the Exchange Rate Mechanism II (ERM II).

Cyprus and Malta are very small economies in comparison to the euro area. Consequently, the statistical and macroeconomic features of the euro area do not change significantly following the latest enlargement (see Table).

# Key economic characteristics of the enlarged euro area

|                                    | Reporting period | Unit          | Euro area excl.<br>Cyprus and Malta | Euro area incl.<br>Cyprus and Malta | Cyprus | Malta |
|------------------------------------|------------------|---------------|-------------------------------------|-------------------------------------|--------|-------|
| Population and economic activity   |                  |               |                                     |                                     |        |       |
| Total population 1)                | 2006             | millions      | 317.4                               | 318.5                               | 0.8    | 0.4   |
| GDP                                | 2006             | EUR billions  | 8436                                | 8455                                | 15     | 5     |
| GDP per capita                     | 2006             | EUR thousands | 26.6                                | 26.5                                | 19.0   | 12.5  |
| GDP per capita (PPP)               | 2006             | EU-13=100     | 100.0                               | 99.5                                | 85.3   | 68.6  |
| GDP (share of world GDP) 2)        | 2006             | %             | 14.7                                | 14.7                                | 0.0    | 0.0   |
| Sectors of production 3)           |                  |               |                                     |                                     | ***    |       |
| Agriculture, fishing, forestry     | 2006             | % of total    | 1.8                                 | 1.8                                 | 3.0    | 2.9   |
| Industry (including construction)  | 2006             | % of total    | 26.6                                | 26.5                                | 19.7   | 23.2  |
| Services (including non-market     |                  |               |                                     |                                     |        |       |
| services)                          | 2006             | % of total    | 71.6                                | 71.6                                | 77.3   | 74.0  |
| Monetary and financial             |                  |               |                                     |                                     |        |       |
| indicators                         |                  |               |                                     |                                     |        |       |
| Credit to the private sector 4)    | 2006             | % of GDP      | 126.6                               | 126.6                               | 130.7  | 116.5 |
| Stock market capitalisation        | 2006             | % of GDP      | 76.0                                | 76.0                                | 84.2   | 68.0  |
| External trade                     |                  |               |                                     |                                     |        |       |
| Exports of goods and services 5)   | 2006             | % of GDP      | 21.6                                | 21.6                                | 47.2   | 87.6  |
| Imports of goods and services 5)   | 2006             | % of GDP      | 20.9                                | 20.9                                | 51.3   | 91.4  |
| Current account balance 5)         | 2006             | % of GDP      | -0.2                                | -0.2                                | -5.9   | -6.7  |
| Labour market                      |                  |               |                                     |                                     |        |       |
| Labour force participation rate 6) | 2006             | %             | 70.6                                | 70.6                                | 73.0   | 59.2  |
| Unemployment rate                  | 2006             | %             | 8.2                                 | 8.2                                 | 4.6    | 7.3   |
| Employment rate 6)                 | 2006             | %             | 64.6                                | 64.6                                | 69.6   | 54.8  |
| General government                 |                  |               |                                     |                                     |        |       |
| Surplus (+) or deficit (-)         | 2006             | % of GDP      | -1.6                                | -1.6                                | -1.2   | -2.5  |
| Revenue                            | 2006             | % of GDP      | 45.6                                | 45.6                                | 42.6   | 41.6  |
| Expenditure                        | 2006             | % of GDP      | 47.2                                | 47.2                                | 43.8   | 44.1  |
| Gross debt outstanding             | 2006             | % of GDP      | 68.6                                | 68.6                                | 65.2   | 64.7  |

Sources: Eurostat, IMF, European Commission, ECB and ECB calculations. 1) Annual average

<sup>1)</sup> Annual average.
2) GDP shares are based on a purchasing power parity (PPP) valuation of country GDPs.
3) Based on real value added. Data for Cyprus and Malta refer to 2004.
4) Credit comprises loans and holdings of securities as well as holdings of shares and other equities.
5) Balance of payment data. Euro area data are compiled on the basis of transactions with residents of countries outside the euro area

<sup>(</sup>i.e. excluding intra-euro area flows).
6) Share of the working age population (i.e. those aged between 15 and 64).

In terms of population, including the combined Cypriot and Maltese populations of 1.2 million, the euro area is one of the largest economies in the world, with a total population of 318 million in 2006.

Euro area GDP amounted to €8,436 billion in 2006, while the GDP in Cyprus and Malta was €15 and €5 billion, respectively. Thus, the combined GDP of these two countries accounts for about 0.2% of the GDP of the enlarged euro area. In 2006 the GDP per capita in PPP terms of Cyprus and Malta stood at 85% and 69% of the euro area average, respectively. In recent years, real GDP in Cyprus has grown faster than in the euro area, whereas Malta has made less progress in catching up.

The production structures of Cyprus and Malta are broadly similar to those of the euro area, although there are certain differences. In both countries, agriculture contributes more to the total value added than in the euro area. The share of services is higher in Cyprus, reflecting its relatively high dependence on tourism and financial services, while that of industry is lower. The financial sector in Malta is generally less developed than in the euro area, as reflected in the lower contribution of outstanding credit to the private sector and the lower level of stock market capitalisation as a share of GDP. In contrast, in Cyprus, both of these financial indicators are higher than in the euro area, reflecting the importance of the financial sector.

Both Cyprus and Malta are small and very open economies, which already traded extensively with the euro area and the European Union (EU) prior to adopting the euro. In 2006 the euro area countries accounted for 51.5% of Cyprus' imports and 29.6% of its exports, while they accounted for 51.0% of Malta's imports and 37.0% of its exports.

The labour markets in Cyprus and Malta differ from that of the euro area. The labour market in Cyprus is relatively flexible with a low unemployment rate, high labour participation and a high employment rate compared with the euro area. However, the labour market in Malta is characterised by low participation and a low employment rate. Since 2004, Cyprus and Malta have benefited from complete freedom of movement for persons within the EU, which has improved their capacity to absorb local shocks. Indeed, in recent years, both economies have been able to benefit from increased integration of foreign workers in their labour markets, which has helped to avoid bottlenecks in certain segments of the economy.

The general government deficits in Cyprus and Malta have declined in recent years, reaching 1.2% and 2.5% of GDP in 2006, respectively, compared with a deficit of 1.6% in the euro area. The ratio of general government debt to GDP is relatively close to that of the euro area (at around 65% of GDP in both countries).

For Cyprus and Malta, entry in the euro area means that the benefits of the Single Market are further enhanced by the single currency, which offers a credible framework for monetary policy and price stability in an environment that is characterised by the absence of exchange rate uncertainty. In order to fully reap the advantages of the euro and allow adjustment mechanisms to operate efficiently within the enlarged currency area, further efforts should be made with structural reform and appropriate policies should be implemented.

In the short term, following the euro changeover, the conversion of prices into euro should not provide an opportunity to raise prices in an unjustified manner, especially in a situation where

# ECONOMIC AND MONETARY DEVELOPMENTS

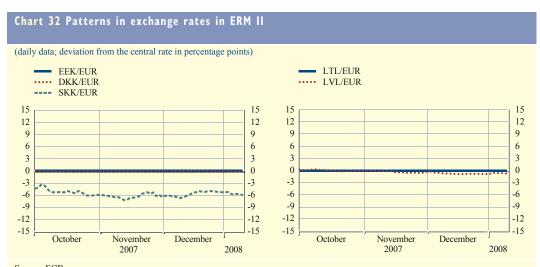
Exchange rate and balance of payments developments

food and energy prices are already exerting upward pressures on inflation in the euro area as a whole.

Looking further ahead, it will be important for the economies of Cyprus and Malta to continue on sustainable and credible paths of fiscal consolidation based on structural measures and to improve their fiscal performances by tangibly reducing their debt ratios. It will also be important to maintain moderate wage developments that take into account labour productivity growth, labour market conditions and developments in competitor countries. In Malta, attention must also be paid to overcoming the structural constraints on economic growth and job creation, notably by fostering labour participation. In both countries, the strengthening of competition in product markets and improvements in the functioning of the labour market are key elements in this regard. In Cyprus, for example, the indexation mechanisms for wages and some social benefits (cost of living allowances) should be overhauled in order to reduce risks associated with inflation inertia.

Such structural reforms will not only make the economies of Cyprus and Malta more resilient to shocks, but will also create the best conditions for sustainable economic expansion, employment growth and price stability.

With regard to the currencies of other EU Member States not participating in ERM II, between the end of September 2007 and 9 January 2008, the euro appreciated by 7.4% vis-à-vis the pound sterling. The strengthening of the euro intensified in November and December, as market expectations of further interest rate cuts in the United Kingdom grew. Over the same period, the euro appreciated by slightly over 9% vis-à-vis the Romanian leu, while it depreciated by 5.6% against the Czech koruna and by 4.8% against the Polish zloty.



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 ±2.25%; for all other currencies, the standard fluctuation band of ±15% applies.

### **OTHER CURRENCIES**

Since the end of September 2007 the euro has depreciated by 1.4% vis-à-vis the Swiss franc, while it has appreciated by 4.4% against the Canadian dollar, 3.3% vis-à-vis the Australian dollar and 2.2% vis-à-vis the Norwegian krone. Meanwhile, the euro strengthened vis-à-vis some of the currencies of the main Asian trading partners. The euro remained broadly stable against the Chinese renminbi, whose rate of appreciation vis-à-vis the US dollar started to increase around mid-December 2007.

# **5.2 BALANCE OF PAYMENTS**

The 12-month cumulated current account of the euro area showed a surplus of around 0.3% of GDP in October 2007, compared with a deficit of 0.3% of GDP a year earlier, largely reflecting an increase in the goods surplus. In the financial account, the large net inflows in combined direct and portfolio investment registered in the 12-month period to October 2007 reflected significantly higher net inflows in portfolio investment.

|  |           |            | Three-month moving average figures ending |          |       |       | 12-month cumulated figures ending |        |
|--|-----------|------------|---|----------|-------|-------|-----------------------------------|--------|
|  | 2007      | 2007       | 2007                                      | 2007     | 2007  | 2007  | 2006                              | 2007   |
|  | Sep.      | Oct.       | Jan.                                      | Apr.     | July  | Oct.  | Oct.                              | Oct    |
|  |           | EUR bil    |   |          |       |       |                                   |        |
| Current account                              | 1.9       | 1.3        | 1.5                                       | 1.9      | 3.9   | 2.6   | -22.8                             | 29.    |
| Goods balance                                | 4.4       | 7.6        | 4.7                                       | 5.7      | 5.8   | 6.6   | 13.3                              | 68.    |
| Exports                                      | 128.0     | 129.3      | 122.2                                     | 123.3    | 124.9 | 128.9 | 1,360.5                           | 1,498. |
| Imports                                      | 123.6     | 121.6      | 117.5                                     | 117.7    | 119.2 | 122.3 | 1,347.2                           | 1,429. |
| Services balance                             | 4.0       | 2.2        | 3.2                                       | 4.3      | 3.5   | 3.4   | 34.9                              | 43.    |
| Exports                                      | 39.3      | 39.0       | 36.8                                      | 38.8     | 38.6  | 39.2  | 423.3                             | 460.   |
| Imports                                      | 35.3      | 36.8       | 33.6                                      | 34.6     | 35.1  | 35.8  | 388.4                             | 417.   |
| Income balance                               | -0.2      | 1.6        | -0.2                                      | -1.2     | -0.2  | 0.4   | 7.9                               | -3     |
| Current transfers balance                    | -6.4      | -10.1      | -6.2                                      | -6.8     | -5.3  | -7.8  | -78.8                             | -78.   |
| Financial account 1)                         | -5.8      | -81.9      | -0.3                                      | 0.9      | 9.9   | -8.0  | 139.6                             | 7      |
| Combined net direct and portfolio investment | 22.3      | -32.6      | 24.2                                      | 25.1     | 13.9  | 1.5   | 27.3                              | 194    |
| Net direct investment                        | -22.8     | 21.3       | -17.3                                     | -2.7     | -20.5 | -2.9  | -125.8                            | -130   |
| Net portfolio investment                     | 45.2      | -53.8      | 41.5                                      | 27.8     | 34.4  | 4.4   | 153.1                             | 324    |
| Equities                                     | 21.4      | -5.9       | 28.6                                      | 8.2      | 44.2  | 0.6   | 131.1                             | 244    |
| Debt instruments                             | 23.7      | -47.9      | 12.9                                      | 19.6     | -9.8  | 3.9   | 22.0                              | 79     |
| Bonds and notes                              | 1.8       | -11.4      | 23.1                                      | 19.1     | -9.5  | 0.3   | 87.6                              | 99     |
| Money market instruments                     | 21.9      | -36.5      | -10.2                                     | 0.5      | -0.3  | 3.5   | -65.6                             | -19    |
| P  | ercentage | changes or | ver previou                               | s period |       |       |                                   |        |
| Goods and services                           |           |            |   |          |       |       |                                   |        |
| Exports                                      | -0.9      | 0.6        | 2.7                                       | 2.0      | 0.9   | 2.8   | 12.5                              | 9      |
| Imports                                      | 1.3       | -0.3       | 1.1                                       | 0.8      | 1.3   | 2.5   | 15.8                              | 6      |
| Goods  |           |            |   |          |       |       |                                   |        |
| Exports                                      | -1.0      | 1.0        | 2.5                                       | 1.0      | 1.3   | 3.1   | 13.7                              | 10     |
| Imports                                      | 1.6       | -1.6       | 1.1                                       | 0.1      | 1.3   | 2.6   | 18.4                              | 6      |
| Services                                     |           |            |   |          |       |       |                                   |        |
| Exports                                      | -0.4      | -0.8       | 3.6                                       | 5.6      | -0.5  | 1.6   | 8.7                               | 8      |
| Imports                                      | 0.0       | 4.4        | 1.3                                       | 3.0      | 1.5   | 2.0   | 7.7                               | ,      |

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.

Exchange rate and balance of payments developments

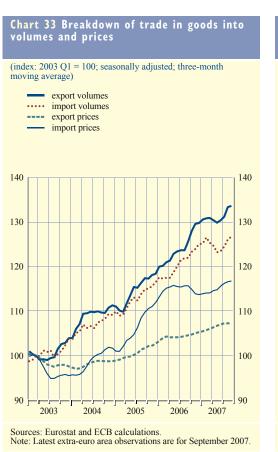
## TRADE AND THE CURRENT ACCOUNT

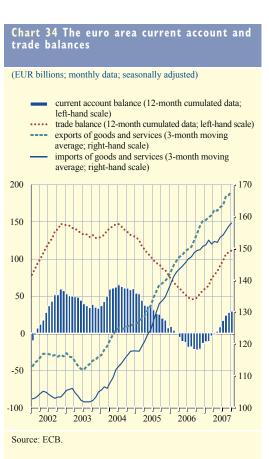
In October 2007 the value of exports and imports of goods and services grew by 2.8% and 2.5%, respectively (in terms of seasonally adjusted three-month moving average figures), compared with corresponding growth rates of 0.9% and 1.3% in the three-month period to July. Growth in both exports and imports largely reflects developments in goods (see Table 8).

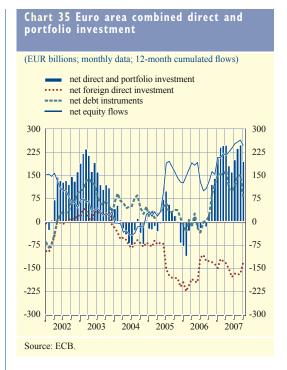
The breakdown of trade in goods into volumes and prices up to September 2007 indicates that the acceleration in the growth rate of exports stemmed from increased volumes owing to higher foreign demand (see Chart 33).

On the imports side, the volume-price breakdown of extra-euro area goods trade suggests that import prices continued to increase in the three-month period to September, reflecting the large increases in oil prices. Meanwhile, import volumes increased again, with rising imports of consumer and capital goods, which appeared to be mostly related to the pick-up in euro area domestic demand and industrial production in the third quarter 2007.

Taking a longer-term perspective, the 12-month cumulated current account to October recorded a surplus of  $\in$ 29.5 billion (around 0.3% of euro area GDP), compared with a deficit of  $\in$ 22.8 billion a year earlier (see Chart 34). This shift largely resulted from developments in the goods surplus. Despite the rise in oil prices and the resulting higher deficit in the oil balance, the goods surplus increased by  $\in$ 55 billion in 12-month cumulated terms compared with the previous year. This is







explained by robust foreign demand, which was very strong in the last quarter of 2006, decelerated in the first half of 2007 and picked up again in the third quarter of 2007, notwithstanding the appreciation of the effective exchange rate of the euro. By contrast, the surplus for services increased moderately, while the income balance registered a small deficit compared with a surplus a year earlier. The balance of current transfers remained unchanged, showing a deficit of €78.4 billion.

# FINANCIAL ACCOUNT

In the three-month period to October 2007, the combined direct and portfolio investment of the euro area recorded monthly average net inflows of €1.5 billion, as opposed to average net inflows of €13.9 billion in the three-month period to July (Table 8). The sharp decrease in the combined figure is mostly attributable to the large net outflows in debt instruments in October 2007.

While it is likely that cross-border portfolio investment in August and September 2007 was influenced by the credit market turbulence and the subsequent repricing of risk by global investors, the October data suggested a renewed interest in cross-border investment in both equity and long-term bonds by euro area and foreign investors.

From a longer-term perspective, cumulated net inflows in combined direct and portfolio investment amounted to €194.1 billion in the 12-month period to October 2007, compared with net inflows of €27.3 billion a year earlier. The sharp rise in net capital inflows reflected a significant increase in net portfolio investment inflows (of €172 billion), while net outflows in direct investment oscillated around €150 billion throughout the year (see Chart 35). The higher net inflows in debt instruments were mostly 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 could be mainly attributed to lower net purchases of foreign equity by euro area residents.

Box 6 entitled "Recent developments in the international investment position of the euro area" reports on the main components of and contributions to changes in the international investment position of the euro area up to the end of 2006.

Exchange rate and balance of payments developments

# Box 6

-20

-60

-100

-140

-180

#### RECENT DEVELOPMENTS IN THE INTERNATIONAL INVESTMENT POSITION OF THE EURO AREA

At the end of 2006 the euro area international investment position recorded net liabilities of 12.1% of GDP, compared with 6.1% of GDP at the end of 1999 (see Chart A). The increase in the net liability position since 1999 mainly reflects revaluation effects related to movements in exchange rates, although, recently, financial transactions have also played a role.

As a percentage of GDP, the gross liability position of the euro area rose 61 percentage points from 1999 to 2006, reaching 161% of GDP at the end of 2006. At the same time, the euro area's gross external assets increased by 55 percentage points, to 148% of GDP at the end of 2006. In order to understand these movements, the assets and liabilities of both direct and portfolio investment and the other categories of the international investment position have been split into their debt and equity components in Chart A. Debt instruments (debt securities, deposits and loans) account for almost two thirds of total gross external assets and liabilities at the end of 2006, while equity represents just over a third. In recent years the net liability position increased for both equity and debt.

The rise in gross euro area cross-border assets and liabilities since 1999 is mostly accounted for by financial transactions. However, these transactions have been similar in magnitude for assets and liabilities during recent years and have thus only had a limited impact on the net international

# Chart A Breakdown of euro area international investment position by instrument

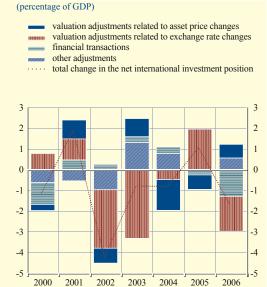


1999 2000 2001 2002 2003 2004 2005 2006

Source: ECB.

Note: Equity consists of the categories "Direct investment, Equity capital and Reinvested earnings" and "Portfolio investment, Equities securities". Debt consists of the categories "Direct investment, Other capital", "Portfolio investment, Debt securities", "Other investment (excluding trade credits) and "Official reserve assets".

# Chart B Decomposition of annual changes in the net international investment position



Source: ECB

-6

-10

-14

-18

investment position, with the exception of 2000 and 2006 (see Chart B). In 2006, particularly large net purchases of euro area bonds and notes by non-residents contributed to the increase in the net liability position of the euro area.<sup>2</sup>

Nevertheless, the increase in the euro area's net liability position between 1999 and 2006 can mostly be attributed to the appreciation of the euro in recent years. Revaluation effects owing to changes in the exchange rate have a much greater impact on the euro area's external assets than on its external liabilities, since the former are mostly denominated in foreign currencies, whereas the latter are mainly denominated in euro. Revaluations resulting from financial asset price changes have largely affected the gross equity asset and liability positions, since developments in euro area and foreign stock markets were broadly similar from 1999 to 2006. However, on balance, they have also slightly increased the euro area's net liability position.

- 1 Note that "other adjustments" can include company write-offs, institutional and instrument reclassifications, survey coverage changes and residual adjustments arising from the reconciliation of stock and flow data.
- 2 For more information about the methodology used to estimate the international investment position, see the box entitled "Explaining changes in the net international investment position of the euro area" in the January 2007 issue of the Monthly Bulletin.

# **ARTICLES**

# PRODUCTIVITY DEVELOPMENTS AND MONETARY POLICY



Since 1995, the average rate of growth of euro area labour productivity has remained around 1.3% per year, much lower than in the United States over the same period and than in the euro area in the 1980s and early 1990s. To date, there are no clear signs of an inversion of this declining trend, even if some evidence supports the view that the slowdown may have recently come to a halt. Within such an uncertain environment, monetary policy must exploit all available information to form its best assessment of future productivity developments and of the ensuing outlook for inflation. At the same time, future productivity trends will always remain shrouded in uncertainty; their estimates are likely to be revised with the arrival of new information. A benign assessment of their inflationary implications at any point in time must not lower monetary policy's vigilance against the risks to price stability. It is particularly important that other economic policies play their role in curing the causes of the European productivity slowdown, through a timely and determined implementation of the Lisbon agenda.

## I INTRODUCTION

The protracted slowdown in productivity growth in recent years represents one of the most notable developments in the euro area. During the period in which the United States enjoyed a productivity revival, apparently linked to the development of new Information and Communication Technologies (ICT), euro area productivity growth fell to the lowest levels seen since the Second World War. The latest data suggest that this declining trend may have come to a halt in recent years but, to date, there is no conclusive sign of an inversion of this trend.

The persistence of the productivity slowdown is a source of concern. For developed economies, where the process of capital accumulation has reached a mature stage, labour productivity growth is the main engine of economic growth per capita in the long run. At the same time, variations in the rate of productivity growth shape the environment in which monetary policy operates.

This article reviews past and current developments in euro area productivity growth and discusses their implications for monetary policy. The difficulty in gauging future trends in productivity growth makes the task of maintaining price stability more challenging for the central bank. Within such an uncertain environment, monetary policy must exploit all available information to form its best assessment

of the future development of productivity and of the ensuing outlook for inflation.

A central bank must also acknowledge that estimates of trends in productivity growth will always remain shrouded in uncertainty. Perceptions of imminent upside risks to price stability may prove to be misplaced with the benefit of hindsight. Conversely, a benign assessment of the inflationary consequences of productivity developments may turn out to be overly optimistic ex post, when more information becomes available. Monetary policy must always remain vigilant against risks to price stability.

While the main focus of the article is on the implications of productivity developments for monetary policy, it should be noted that the best contribution that monetary policy can make to economic growth is to ensure that price stability is maintained in the economy over the medium term.<sup>1</sup> The experience of the past 20 years demonstrates that low and stable inflation is accompanied by low output volatility. In turn, stable macroeconomic conditions and prospects tend to be conducive to growth. Other economic policies must play a role in curing the causes of

1 Evidence of a detrimental effect of inflation on output growth is provided, for example, in Barro, R. (1997), "Determinants of economic growth: a cross-country empirical study", Lionel Robbins Lecture, Cambridge, Mass.: MIT Press, and Fischer, S. (1993), "The role of macroeconomic factors in growth", Journal of Monetary Economics 32, pp. 485-512. the sluggish growth rate of European productivity through the timely and resolute implementation of the Lisbon agenda.

## PRODUCTIVITY GROWTH: PAST TRENDS

Three broad phases can be identified when comparing western European and US labour productivity growth, measured by real GDP per hour worked, over the post-Second World War period. The first phase (1950s to 1973), the "golden age of productivity", was characterised by high rates of growth of output per hour worked in both economic areas. Productivity growth was especially high in the euro area, where it remained almost 3 percentage points higher than in the United States from 1960 until 1973 (see Chart 1). For Europe, this was a period of catching-up growth: capital deepening allowed European economies to reduce the gap in productivity separating them from the United States immediately after the War.<sup>2</sup>

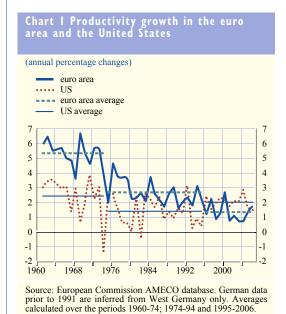
In the early 1970s, productivity growth slowed down markedly on both sides of the Atlantic. Nevertheless, Europe continued to perform better than the United States on average, and the productivity gap between Europe and the United

States was almost closed in the first half of the 1990s.

From the mid-1990s onwards, euro area productivity decelerated further. Output growth remained roughly unchanged, but the growth rate of total hours worked increased with respect to the previous periods. Consequently, labour productivity decelerated to an average rate of 1.3%, approximately 1.4 percentage points less than over the 1974-94 period. These developments are not common to the United States. Over the same years, the rate of productivity growth in the United States increased to 1.9% on average, from an average of 1.4% over the previous 20 years. The different productivity performance was reflected in a corresponding disparity in the rates of GDP growth. Between 1995 and 2006, output expanded at an average rate of 3.1% in the United States, compared to 2.1% in the euro area.

Some of the differences between the euro area and US performance are in the sectors producing ICT,3 but these differences are not sufficient to explain the large discrepancy between overall labour productivity growth in the euro area and in the United States. The bulk of the cross-Atlantic gap in aggregate productivity growth is concentrated in more traditional, ICT-using sectors, where European firms do not seem to have exploited the benefits of new technologies to their full extent. Over the 1995-2005 period,

- For further discussions of productivity developments in the euro area and in the United States, see Box 4 of this ECB Monthly Bulletin. Other relevant information on this topic can also be found in the ECB Monthly Bulletin article entitled "Labour productivity developments in the euro area: aggregate trends and sectoral patterns", in July 2004, and the ECB Monthly Bulletin boxes entitled "Developments in euro area labour productivity". in March 2005, "Developments in euro area labour quality and their implications for labour productivity growth", in October 2005, and "Labour productivity and price developments in the euro area services sector: the role of competition", in April 2006.
- See, for example, S.D. Oliner and D.E. Sichel (2000), "The resurgence of growth in the late 1990s: is information technology the story?", Journal of Economic Perspectives 14, pp. 3-22. There are, of course, different views on the role of the IT-producing sector in the US productivity revival. See, for example, R.J. Gordon (2000), "Does the new economy measure up to the great inventions of the past?", Journal of Economic Perspectives 14, pp. 49-74; K. Stiroh (2002), "Information technology and the U.S. productivity revival: what do the industry data say?", American Economic Review 92, pp. 1559-1576.



#### ARTICLES

Productivity developments and monetary policy

compared with the previous 15 years, euro area labour productivity growth fell in most non-ICT related sectors and especially in market services, including distribution, financial and business services, while at the same time, it significantly accelerated in the United States.4 The slow exploitation of new technologies in European ICT-using sectors is also confirmed by growth accounting analyses, which break down the rate of growth of labour productivity into three main components: capital deepening, increases in labour quality, and the rate of growth of total factor productivity (TFP), which is a more specific measure of disembodied technological progress associated with the use of all factor inputs. These analyses demonstrate that the strongest determinant of the labour productivity slowdown in ICT-using sectors is the net reduction in the rate of growth of TFP.

The weak TFP growth performance suggests the presence of factors which prevent, or slow down, the process of exploitation of all the advantages of the new technologies in the euro area lagging industries. The structural rigidities which characterise the euro area economy – a less flexible labour market, a lower degree of competition in product markets and higher barriers to entry for new firms as well as a less developed capital market – are therefore likely to be responsible for its poor productivity performance. Conversely, the more flexible structural characteristics of the US economy would have proved to be better suited for the challenges and opportunities of technological innovation. The reasons are intuitively clear: a higher degree of competition creates incentives to invest and innovate; flexible labour markets facilitate the re-allocation of resources; developed capital markets, including a mature venture capital industry, are instrumental to the financing of new innovative firms.

The importance of structural rigidities has been confirmed by a few studies that measure differences in the regulatory restrictions of nonmanufacturing sectors of OECD countries.5 These studies find that highly regulated environments tend to be associated with lower

investment and productivity growth. This evidence is broadly in line with the hypothesis that ICTs have the largest impact on productivity growth indirectly, namely by sparking further innovations in managerial processes, procedures and organisational structures, and by facilitating complementary innovations. For example, computers and internet reduce communication costs and allow for more flexible and decentralised organisational structures. The full benefits of the productivity acceleration can only be reaped if there are no obstacles to organisational change.6

Studies have found a strong negative correlation between anti-competitive regulation and innovation.<sup>7</sup> The effect comes largely through larger barriers to entry, which reduce competition and the incentive of incumbents to innovate.8 The negative consequences for productivity growth are minor in an environment where no other firms innovate, but are rather dramatic when technological progress boosts productivity. The recent decline in euro area productivity growth may then be a peculiar result of the coexistence of regulation and

- Source: EUKLEMS database.
- For example, A. Alesina, S. Ardagna, G. Nicoletti and F. Schiantarelli (2005), "Regulation and investment", Journal of the European Economic Association 3, pp. 791-825, find that regulatory reforms have had a significant positive impact on capital accumulation in the transport, communication and utilities sectors, especially in the long run. G. Nicoletti and S. Scarpetta (2003), "Regulation, productivity and growth", Economic Policy 18, pp. 9-72, find that various measures of anticompetitive product market regulations significantly reduce TFP growth at the industry level.
- See for, example, van Ark, Bart and Inklaar, Robert, 2006, "Catching up or getting stuck? Europe's troubles to exploit ICT's productivity potential", GGDC Research Memorandum GD-79, Groningen Growth and Development Centre, University of Groningen.
- G. Nicoletti and S. Scarpetta (2005), "Regulation and economic performance: product market reforms and productivity in the OECD", OECD Economics Department Working Paper No. 460 At the same time, there is some evidence that higher competitive pressure leads to more innovative and efficient work organisation. See N. Bloom, R. Sadun and J. Van Reenen (2007), "Americans do I.T. better: U.S. multinationals and the productivity miracle", NBER Working Paper No. 13085.
- For example, see P. Aghion, N. Bloom, R. Blundell, R. Griffith and P. Howitt (2005), "Competition and innovation: an inverted U relationship", Quarterly Journal of Economics 120, pp. 701-28. This paper also shows that the relationship between competition and regulation may be different for different levels of competition.

| (annual percentage changes) |      |      |      |      |      |      |      |      |      |    |
|-----------------------------|------|------|------|------|------|------|------|------|------|----|
|                             | 2002 | 2003 | 2004 | 2005 | 2006 | 2006 | 2006 | 2007 | 2007 | 20 |
|                             |      |      |      |      |      | Q3   | Q4   | Q1   | Q2   |    |
| Whole economy               | 0.2  | 0.4  | 1.0  | 0.7  | 1.4  | 1.3  | 1.7  | 1.3  | 0.7  |    |
| of which:                   |      |      |      |      |      |      |      |      |      |    |
| Agriculture and fishing     | 1.8  | -3.6 | 11.9 | -4.8 | -0.3 | -0.6 | 2.8  | 2.3  | 3.2  |    |
| Industry                    | 0.9  | 1.3  | 2.1  | 1.2  | 3.5  | 3.5  | 3.5  | 2.8  | 1.6  |    |
| Excluding construction      | 1.3  | 1.9  | 3.1  | 2.2  | 4.3  | 4.4  | 4.7  | 3.8  | 3.3  |    |
| Construction                | 0.0  | -0.2 | -0.6 | -1.0 | 1.8  | 1.7  | 1.0  | 1.5  | -2.3 |    |
| Services                    | -0.1 | -0.1 | 0.2  | 0.7  | 0.5  | 0.5  | 0.7  | 0.7  | 0.3  |    |
| Trade and transport         | 0.2  | -0.2 | 0.9  | 1.0  | 1.5  | 1.5  | 2.2  | 1.7  | 1.1  |    |
| Finance and business        | -0.5 | 0.6  | -0.7 | 0.3  | -0.5 | -0.8 | -0.5 | -0.4 | -1.2 |    |
| Public administration       | -0.2 | -0.7 | 0.1  | 0.0  | -0.4 | -0.2 | -0.4 | 0.0  | 0.0  |    |

technological innovation. While regulation has probably become less stringent in more recent years, it has become more costly for firms in an era of rapid technological progress driven by ICT.

Despite a large number of studies published in recent years, the sources of the euro area productivity slowdown are still not fully understood. This increases the difficulty of gauging future trends from current developments.

# 3 PRODUCTIVITY GROWTH: RECENT DEVELOPMENTS

The main difficulty when trying to estimate underlying trends in productivity growth is that these unfold amidst extremely high volatility on a quarterly basis. Developments in 2007 are illustrative in this respect.

Data released by Eurostat during the spring of 2007 showed a clear acceleration in labour productivity growth (per person) in 2006, reaching 1.4% compared with 0.7% in 2005. In year-on-year terms, labour productivity growth peaked at 1.7% in the fourth quarter of 2006. At the sectoral level, positive developments in labour productivity were mainly driven by developments in industry (excluding construction). However, labour productivity growth in the services sector also showed signs

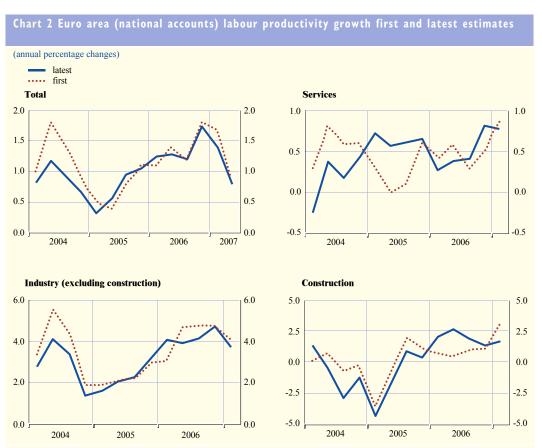
of improvement, recording an increase of 0.8% year on year in the fourth quarter of 2006. These positive developments could be interpreted as a signal of a more positive outlook for the future, possibly a consequence of the successful implementation of some market reforms. However, latest available national account data released by Eurostat in autumn 2007 suggest a more sceptical assessment: labour productivity growth declined in the second quarter of 2007 and currently stands well below its peak at the end of 2006 (see Table 1).

The difficult task of disentangling structural from cyclical movements in macroeconomic time series is further complicated by non-negligible data uncertainty. For example, Chart 2 illustrates the difference between the first estimate of labour productivity growth published by Eurostat for a given quarter and the latest estimates released on 11 October 2007 for the current and past quarters. First estimates published during 2005 clearly underestimated labour productivity growth in the services sector.

A final difficulty when estimating trends in technological developments is that they do not happen in isolation, but typically take place at the same time as other unforeseeable events, such as oil price or exchange rate shocks. The box presents estimates of how observed labour productivity developments in the euro area may be attributed to various shocks within a general equilibrium model.

## **ARTICLES**

Productivity developments and monetary policy



Source: Eurostat.

Note: The latest estimate refers to the second release of euro area national accounts published by Eurostat on 11 October 2007.

### Box

# ANALYSING RECENT PRODUCTIVITY DEVELOPMENTS THROUGH THE LENS OF A GENERAL EQUILIBRIUM MODEL

In the following analysis, developments in labour productivity during the period 2001-07 are interpreted through the lens of the New Area-Wide Model (NAWM)<sup>1</sup>. The NAWM builds on recent advances in developing micro-founded dynamic stochastic general equilibrium (DSGE) models suitable for quantitative policy analysis. Featuring optimising behaviour and forward-looking expectations on the part of households and firms, supply-side factors tend to have a pronounced influence already in the short run, despite the existence of nominal and real rigidities.

Specifically, the model is used to decompose past fluctuations in productivity growth around its trend growth rate into contributions of economically interpretable factors, or "structural shocks". These structural shocks are identified by estimating the NAWM using a relatively large set of euro area data. To facilitate the interpretation of the historical decomposition, these shocks

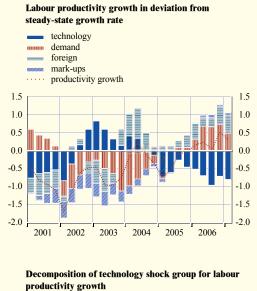
<sup>1</sup> Further information on the model can be found in Kai Christoffel, Günter Coenen and Anders Warne (2007), "Conditional versus Unconditional Forecasting with the New Area-Wide Model of the Euro Area" available at: www.nber.org/~confer/2007/si2007/efsfprg.html.

(17 in total) are grouped in four distinct categories: (i) technology shocks (determining supply-side developments); (ii) demand shocks (affecting private and public spending); (iii) mark-up shocks (influencing wage and price-setting decisions on the part of households and firms, respectively); and (iv) foreign shocks (capturing various influences originating in the model's external sector).

An important feature of the analysis is that a structural model like the NAWM allows going beyond growth accounting exercises. Standard growth accounting decomposes developments labour productivity contributions of total factor productivity (TFP) growth and capital deepening. However, the decomposition is based on a number of simplifying assumptions, including that markets are perfectly competitive and that the prices of factors of production - capital and labour — tend to remain close to their longrun equilibrium levels. In practice, deviations from perfect competition are widespread and the user cost of capital (or, the capital rental rate) and real wages can vary significantly over time in response to various shocks affecting the economy. While the standard growth accounting framework can be adjusted to account for these features, the NAWM captures these effects naturally within a general equilibrium setting, allowing also for endogenous movements in the capital-labour ratio (i.e. capital deepening).

Another novelty of using the NAWM for productivity analysis is that it distinguishes

# Decomposition of labour productivity growth (in deviation from steady state)





Note: Based on simulation of the NAWM, the upper panel of the chart depicts the historical decomposition of year-on-year labour productivity growth over the period from the first quarter of 2001 to the first quarter of 2007. Labour productivity growth rates are reported in deviation from the calibrated steady-state growth rate of 1.2 percent per annum. Observed labour productivity growth is decomposed into the contributions of four distinct groups of shocks. The lower panel shows the decomposition of the technology shock group.

three types of technology shocks: transitory shocks to TFP, which shift the production capacity of firms for given factor inputs temporarily; permanent shocks, which have a permanent impact on the efficiency of labour inputs in the production of goods and services; and investment-specific technology shocks, which have a direct but transitory impact on the efficiency of newly installed capital goods. A permanent productivity shock translates into a lasting increase in wages and gives rise to an increase in permanent income and therefore in output. By contrast, a transitory increase in productivity will affect demand less strongly, having its main impact on the costs of production. Investment-specific shocks are a key factor explaining capital deepening.

The upper panel of the chart depicts the decomposition of year-on-year labour productivity growth (measured in terms of real GDP per person employed) over the period 2001-07 into

## **ARTICLES**

Productivity developments and monetary policy

the contributions of the estimated structural shocks. Labour productivity growth is measured in deviation from a steady-state growth rate of 1.2% per annum which has been calibrated to match the average rate of productivity growth over the model's estimation sample ranging from 1985 to 2005. Notice that the decomposition does not aim at explaining the trend growth rate of productivity. The decomposition can be used to illustrate which factors have been important in explaining the movements in labour productivity growth around its trend value. The lower panel of the chart provides a more detailed analysis of the contribution of the technology shock group, which comprises three distinct types of technology shocks, as discussed earlier.

A first observation is that according to the NAWM, over the recent years, the factors identified as technology shocks have contributed less to productivity developments in the euro area than would have been predicted on the basis of historical trends, with the exception of the period 2003-05. This is evident from the fact that the bars indicating the impact of technology has been mostly on the negative side in the upper panel of the chart. This is in line with the observation that throughout the 2001-07 period, growth in output has been mostly below the long-term trend growth rate as calibrated in the NAWM.

Demand shocks and foreign shocks have also played an important role in affecting the rate of growth of observed labour productivity. The contribution of demand shocks was negative during the slowdown in the 2002-05 period. With the recent cyclical recovery of labour productivity starting in 2005 the contribution of demand shocks becomes again important, rising to around 0.5% in 2006. From 2001 onwards until 2004, external developments had a significant negative impact on productivity in the euro area, most likely triggered by the downturn in economic activity in the United States and its negative international spillovers, whereas from 2004 onwards foreign shocks have been contributing positively.

The decomposition of the overall contribution of technology shocks into the contributions of the three distinct types of technology shocks is shown in the lower panel of the chart. This decomposition suggests that from 2005 onwards capital deepening (due to strong investment activity caused by positive investment-specific technology shocks) gradually offsets the adverse effects of transitory and permanent technology shocks on labour productivity growth. Positive contributions of permanent technology shocks are limited to the year 2001 and the first half of 2004, whereas transitory technology shocks make a positive contribution only from mid-2002 to mid-2003.

In summary, the model suggests that there is hardly evidence in favour of sustained improvements in labour productivity growth beyond the steady-state component assumed in the NAWM. When assessed through the lens of the model, recent developments in labour productivity seem mostly driven by demand factors. In particular, the recent pick-up in labour productivity growth is explained by vigorous domestic demand and favourable external developments. The positive contributions of technological advancements are limited to investment-specific technology shocks. Overall, however, the contributions of technological advancements fall short of those predicted on the basis of historical trends.

Given the aforementioned difficulties, the realtime assessment of the degree of permanent changes to productivity should be based on a wide set of indicators, rather than focusing on one or a few summary statistics. Further to trend estimates computed from labour productivity data, for example, it is also important to look at the sources behind productivity growth using growth accounting techniques, as well as using relevant monthly indicators which are available in a more timely fashion.

One way of estimating the long-run trend of labour productivity growth is to employ statistical tests for the presence of a break. Table 2 shows that the current estimate of euro area long-run labour productivity growth is 0.74 over the period from the first quarter of 1997 to the first quarter of 2007. Most of the gains in labour productivity are the outcome of developments in industry. The contribution from the services sector is 0.18 percentage points.

Statistical tests can be slow to detect changes in the equilibrium growth rate of economic time series, which usually take place gradually. The extraction of smooth trends might be preferred from this viewpoint, even if there is evidence that these methods are not always reliable. Chart 3 presents an estimate of this sort, which signals that labour productivity growth has been edging up for the past two years. However, taking into account the uncertainty surrounding these estimates, it is not possible to conclude that the trend shifted upwards by a significant margin.<sup>10</sup> The figure also shows a mild pick-up in the recent contribution of trend TFP growth. Current estimates of the long-run trend of labour productivity growth, however, stand at 1.1%, well below the 1.7% peak reached at the end of 2006.

Other indicators are broadly in line with these results. Estimates of TFP point to a recent pickup in its contribution to labour productivity growth, but this contribution remains subdued by historical standards. Moreover, it was accompanied by a non-negligible contribution from capital deepening over 2004-06, a development often observed temporarily during cyclical upturns.

Overall, latest available data do not provide strong signals to suggest that the historical decline in labour productivity growth has been reversed in recent years. However, there is evidence that indicates that the productivity slowdown may have come to a halt.

- See, for example, Box 5 of the February 2005 ECB Monthly Bulletin entitled "The unreliability of output gap estimates in real time"
- 10 Other methods used to compute long-run trends in labour productivity growth lead to similar conclusions. See, for example, "Drift and breaks in labor productivity", by Luca Benati, Journal of Economic Dynamics and Control, Vol. 31, pp. 2847-2877.

Table 2 Break estimate of the euro area long-run trend of labour productivity growth

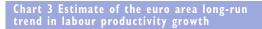
(annual nercentage changes)

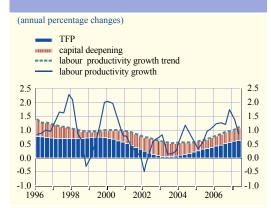
| (annual percentage changes) |                   |              |        |              |                   |              |  |
|-----------------------------|-------------------|--------------|--------|--------------|-------------------|--------------|--|
|                             | 1970 Q2 - 1979 Q2 |              | 1979 Q | 2 - 1997 Q4  | 1997 Q4 - 2007 Q1 |              |  |
|                             | Growth            | Contribution | Growth | Contribution | Growth            | Contribution |  |
| Total                       | 2.91              | 2.91         | 1.63   | 1.63         | 0.74              | 0.74         |  |
| Services                    | 1.79              | 0.76         | 0.75   | 0.38         | 0.28              | 0.18         |  |
| Industry                    | 2.58              | 0.79         | 2.58   | 0.74         | 2.58              | 0.53         |  |
| Construction                | 0.86              | 0.08         | 0.86   | 0.07         | 0.86              | 0.06         |  |
| Agriculture                 | 4.43              | 0.82         | 4.43   | 0.54         | 4.43              | 0.24         |  |
| Labour Reallocation         | -                 | 0.46         | -      | -0.10        | -                 | -0.28        |  |

Notes: Using the techniques described in Bai and Perron (1998) suggests the presence of two breaks in total and services labour roductivity growth. Breaks in total and services labour productivity growth occurred in 1979Q2 and 1997Q4. Empirical evidence of the presence of breaks in labour productivity growth in other sectors is not strong and therefore the average rate of growth over the whole sample period is used as the long-run trend of labour productivity growth. For details on the statistical test for the presence of multiple breaks, see Bai, J. and P. Perron (1998), "Estimating and testing linear models with multiple structural changes", Econometrica, Vol. 66, No. 1, pp. 47-78.

### **ARTICLES**

**Productivity** developments and monetary policy





Notes: Computation of the long-run trend in labour productivity growth has been carried out using the statistical production function model described in Proietti, T; A. Musso and T. Westermann (2007), "Estimating Potential Output and the Output Gap for the Euro Area: a model based production function process." Experience Recogning Vol. 32, pp. 85, 113 , Empirical Economics, Vol. 33, pp. 85-113.

# MACROECONOMIC CONSEQUENCES OF PERCEIVED CHANGES IN PRODUCTIVITY **GROWTH**

The development of productivity growth, likewise other economic developments, affects the environment in which monetary policy operates. It exerts an influence on aggregate output and prices and can, therefore, endanger the ability of the central bank to fulfil its statutory objectives. For the ECB, the primary objective is to maintain price stability over the medium term. This is defined as a year-onyear increase in the Harmonised Index of Consumer Prices for the euro area below, but close to 2%.11

As illustrated in Section 3, it is very hard to recognise changes in trend productivity growth in real time. Nevertheless, in order to provide a benchmark for the discussion of monetary policy implications, it is useful to analyse first the unrealistic scenario whereby a productivity slowdown is known to be permanent. In this case, its consequences for potential output and equilibrium real interest rates can be estimated with sufficient precision.

A fall in trend productivity growth would be associated with a lower rate of growth of potential output. Ceteris paribus, the lower potential output growth would generate upward pressure on prices over the medium term. The trend rate of growth of money should decrease in order to neutralise such inflationary pressure. In the medium term, lower rates of economic growth, lower real wage increases and higher levels of unemployment would be sustainable. Growth theories suggest that equilibrium real interest rates would also decrease proportionally to trend productivity growth. If price stability maintained and inflation expectations remain well-anchored, the lower real rate would spill over one-to-one into a lower nominal interest rate in the new equilibrium.

While medium to long-term tendencies associated with a productivity slowdown are clear, its consequences on prices along the adjustment path are ambiguous. Both inflationary and deflationary pressures could arise, depending on the effects of the slowdown on aggregate demand and aggregate supply.

A productivity slowdown will, in fact, tend to produce two competing effects. The first effect, which can be denoted as "supply effect", derives from the lower potential output growth associated with the productivity slowdown. Ceteris paribus, the fall in potential output implies that firms will find it more difficult to satisfy aggregate demand. To some extent, this will lead to a temporary increase in output above potential, namely a positive output gap, for example through a temporary increase in hours worked. At the same time, firms will have an incentive to increase prices, thus generating upward pressure on inflation.

The second effect of the productivity slowdown is to reduce individuals' net wealth, to the extent that lower productivity growth is reflected in a lower growth of future profits and wages, and

<sup>11</sup> See the articles entitled "The stability-oriented monetary policy strategy of the Eurosystem", in the January 1999 ECB Monthly Bulletin, and "The outcome of the ECB's evaluation of its monetary policy strategy" in the June 2003 ECB Monthly Bulletin

thus in currently lower asset prices and reduced human capital. These expectations, in turn, will tend to depress consumption, to the extent that individuals attempt to avoid large fluctuations in their consumption patterns over time. Investment would also slow down due to the reduction of profitable investment opportunities. For given potential output growth, the fall in consumption and investment, which can be denoted as "demand effect", will thus give rise to excess aggregate supply thereby leading to downward pressure on inflation.

Whether inflation tends to increase or fall in response to a productivity slowdown will depend on which of these two effects dominates. If supply effects were to dominate in the short run, the central bank would need to increase interest rates for some time, as potential GDP falls more rapidly than actual GDP, to ensure that the price stability objective were not jeopardised. On the other hand, if demand effects were to prove stronger in the short run, the appropriate monetary policy reaction would be to keep interest rates lower than otherwise, so as to prevent the emergence of negative pressures on prices. For example, supply effects will tend to dominate when productivity developments are perceived to be short-lived. In this case, potential output growth would automatically be depressed, but net wealth would not be affected much, given perceptions that future consumption and investment possibilities ultimately remain unchanged. Aggregate demand would thus react little, and notably less than aggregate supply.

Structural features of the economy, which will also lead to a predominance of the supply effects, are a low degree of financial development, or the existence of credit constraints. Well functioning financial markets are important, because asset prices tend to reflect expected changes in future economic conditions. A productivity slowdown would, for example, be quickly reflected in a reduction of the value of wealth invested in the equity market. In a less financially developed economy, adverse productivity developments would affect fewer individuals and, if their propensity to consume is less sensitive to

variations in wealth, possibly cause smaller adjustments in aggregate demand.

The demand effect will dominate instead when productivity developments are perceived to be very persistent, or permanent. A scenario of permanently lower productivity growth is ultimately associated with a slower increase in standards of living and would easily give rise to marked declines in equity prices, hence a strong negative wealth effect.

The demand effect will also tend to dominate in economies characterised by more flexible production structures. In this case, actual output will fall more rapidly in line with potential output through a reduction in firms' capacity utilisation. Conversely, in the case of a technological acceleration, production structures and organisations will be adapted quicker to reap the benefits of the improved technologies. Obviously, the demand effect will also be stronger when financial markets are fully developed and there is widespread participation in equity markets.

# 5 IMPLICATIONS FOR MONETARY POLICY

Developments in trend productivity growth are difficult to recognise in real time and can generate both inflationary and deflationary pressures in the short run. It is therefore not possible to draw unambiguous conclusions with regard to the most appropriate direction of the monetary policy response to a perceived slowdown in productivity growth. Nevertheless, some broader policy implications can be drawn based on economic research and past experiences.

First, given that most of the short-term dynamics of labour productivity growth tend to be of a transitory nature, while persistent changes occur rarely and are often quantitively smaller, a cautious approach is warranted when interpreting new developments in productivity. From this viewpoint, it would certainly be too early to interpret the recent, timid increases in euro area labour productivity growth as initial

Productivity developments and monetary policy

signs of a productivity revival, possibly spurred on by advances in ICT.

Second, the assessment of the nature — persistent or temporary — of productivity developments must be allowed to change over time, in light of new information and economic data. A central bank must pay attention to all relevant information in order to form its best assessment of productivity developments as part of the analysis of the risks to price stability. If labour productivity growth data point persistently in the same direction, and if movements in other macroeconomic and microeconomic data provide supporting evidence, a conjecture that the recent recovery is cyclical should be progressively revised in favour of the hypothesis that it is more persistent.

The ECB's monetary policy strategy is well equipped to cope with the uncertainty related to possible changes in productivity growth because it does not pre-commit the ECB to react mechanically to some indicators or forecasts. By relying on two pillars, the ECB's strategy explicitly acknowledges that there is uncertainty regarding the true structure of the economy and consequently the true nature of the transmission process. By allowing it to exploit the information from various types of analysis and by focusing in detail on the nature of shocks hitting the economy, the ECB's strategy is likely to continue to serve well in an environment of pervasive uncertainty surrounding future productivity developments.

Third, misperception of the nature of productivity developments is the norm, rather than the exception. Since persistent changes in productivity growth are, by nature, relatively infrequent, they will often be mistaken for temporary fluctuations. Acknowledging that the risk of misperceptions is unavoidable, it is important for monetary policy to prevent such misperceptions from spilling over into inappropriate decisions. Monetary policy should only react gradually to perceived economic developments. When measurement errors are

likely to occur, a strong policy response to mismeasured economic variables can induce undesirable fluctuations in inflation and real output, with adverse, sometimes dramatic, consequences for economic prosperity. One of the proposed explanations of the so-called Great Inflation of the 1970s in the United States relies exactly on the hypothesis that a major misperception of the economy's productive capacity in real time led to an overly expansionary monetary policy. A strong policy response to real-time information runs the risk of proving to be misguided ex post, once the assessment of economic conditions is revised on the basis of more reliable information.

Fourth, monetary policy should always remain vigilant about threats to price stability. Underlying inflationary pressures may be detected too late, if arising from developments - such as those connected with productivity growth – that are difficult to recognise in real time. Research work comparing the effects of different policy rules suggests that, when actual inflation dynamics are inconsistent with the definition of price stability, the monetary policy stance should be gradually, but persistently adapted, even if the assessment of inflationary trends remains benign. 12 Conversely, underlying trends, which have not yet affected actual inflation, should be monitored closely, but not necessarily reflected in policy decisions if they are imperfectly measured.

Finally, it is of paramount importance for a central bank to ensure that inflation expectations remain well-anchored. Maintaining inflation expectations closely in line with the ECB's definition of price stability ensures that, if and when inflationary shocks materialise, they are less costly to correct in terms of macroeconomic disruption. At the same time, firmly anchored inflation expectations are a precondition for a measured short-term response to economic

<sup>12</sup> See, for example, A. Orphanides and J. Williams, "Robust monetary policy rules with unknown natural rate", Brookings Papers on Economic Activity 2:2002, pp. 63-118.

disturbances, with a view to ensuring more balanced macroeconomic conditions.

### 6 IMPLICATIONS FOR OTHER POLICIES

Changes in the trend growth rate of labour productivity are key determinants of economic growth and are relevant for monetary policymaking, but the best contribution that monetary policy can make to sustainable growth is to foster a stable macroeconomic environment through the maintenance of price stability. Structural policies must take responsibility for creating conditions conducive to better productivity and growth performance.

In the euro area, significant progress has been made in some areas, for example to reduce barriers to competition. Several network industries, such as telecommunications, are now fully or largely open to competition.

This progress notwithstanding, the implementation of structural reforms has been thus far too slow, thereby calling for further efforts – as advocated in the revised Lisbon strategy – in order to facilitate the reallocation of resources to their most productive uses, while fostering labour productivity growth and technological advances.

The extension and deepening of the EU internal market remains a priority. Concrete steps in this direction are the pursuit of effective competition in the energy market, the implementation of the Services Directive, and the general process of increasing further financial market integration. At the same time, it is important to create an entrepreneurial-friendly economic environment, to support innovation through higher investment in research and development and human capital formation. This implies less red tape for small and medium-sized enterprises to help them develop at home and across borders, as well as positive action to remove obstacles which prevent access to the finance they need. Venture capital is crucial to support the emergence of new and innovative firms willing to reap the

benefits of opening markets and to embark on creative or innovative ventures for commercial exploitation on a larger scale.

Product market reforms must be accompanied by labour market reforms. Such reform should aim at increasing participation rates by increasing incentives to work. In Europe, incentives to work are undermined by the legal and regulatory environment, the tax systems and social institutions. Any barriers to cross-border labour mobility should be removed, because labour mobility is an essential element of the Internal Market and an important channel for adjustment in the context of monetary union.

Finally, in a world where job security is reduced, education and training systems need to continuously adjust to the labour market needs to enable workers to master transitions between jobs and keep up with technological developments. Activation measures help to shorten unemployment spells which could lead to a loss of workers' capacities and productivity.

#### 7 CONCLUSION

Since 1995, the average rate of growth of euro area labour productivity has remained around 1.3% per year, a level which represents a marked slowdown compared to those in the 1980s and early 1990s. At the same time, the US economy enjoyed a remarkable productivity revival.

The bulk of the cross-Atlantic gap in aggregate productivity growth can be explained in terms of different rates of adoption of ICT in traditional economic sectors. Euro area firms appear to have been unable to exploit the benefits of the new technologies to their full extent, in line with the hypothesis that new technologies have the largest impact on productivity growth indirectly, namely by sparking further innovations in managerial processes, procedures and organisational structures, and by facilitating complementary innovations. Increasing the flexibility of the

#### **ARTICLES**

Productivity developments and monetary policy

euro area economies through further structural reforms is an important precondition to foster an inversion of the productivity decline.

To date, there are no clear signs of an inversion of this trend, even if some evidence supports the view that the slowdown may have come to a halt.

Within such an uncertain environment, monetary policy must exploit all available information to form its best assessment of future productivity developments and of the ensuing outlook for inflation. However, estimates of the trend growth rate of productivity are notoriously difficult and bound to remain shrouded in uncertainty. A benign assessment of the implications of underlying productivity developments must not reduce monetary policy's vigilance against the risks to price stability.

# GLOBALISATION, TRADE AND THE EURO AREA MACROECONOMY

The process of globalisation – or the entrance of new participants into the global market-place and the growing economic and financial interdependence between existing participants – has accelerated over the last decade, with important consequences for the euro area macroeconomy. Globalisation should significantly benefit the euro area macroeconomy through more efficient resource allocation, along with welfare gains from deepening specialisation, cheaper products, greater product choice and, ultimately, higher living standards for all citizens. In the euro area, the opportunities implied by globalisation, in conjunction with other important ongoing and related phenomena (such as rapid technological change), also imply challenges and call for greater flexibility so as to facilitate macroeconomic adjustment and to fully realise these benefits. Structural reforms have a decisive role to play in supporting an increase in the euro area's competitiveness, in augmenting the euro area's growth potential and in reducing frictions associated with adjustment. However, in order to continue reaping the benefits of globalisation in the future, it is important to continue to foster global openness in goods, services, labour and financial markets, and to fight protectionism.

#### I INTRODUCTION

As economies have become increasingly interdependent via trade, production and financial market linkages, globalisation has received considerable attention over the last decade.1 What distinguishes the most recent phase of globalisation is not just falling transport costs or tariffs – a process which has been ongoing for decades now - but rather new production paradigms enabled by both an expansion of global productive capacity and major technological changes facilitating access to and the transfer of trade, capital, people and knowledge across borders. Accordingly, distinguishing between the impact technological change and that of trade openness is very difficult in practice.

Figures commonly used to gauge economic openness, such as data on international trade and capital flows, have increased substantially over the last decade. Partly as a result of the increasing role of central and eastern European countries as trade partners, as well as rapidly increasing imports from Asia (especially China), the trade openness of the euro area has increased rather markedly, especially since the mid-1990s, and has remained higher than in other major advanced economies, such as the United States or Japan. Global cross-border capital flows have also been growing at an extremely robust pace over the last decade, increasing threefold as a percentage of GDP.<sup>2</sup> This has corresponded to

a similar dynamism in the euro area, where the ongoing strength of capital flows is reflected in the considerable increase in the euro area's stock of foreign assets and liabilities over the period 1999-2006, with the stock of outward and inward foreign direct investment virtually doubling as a percentage of GDP since 1999.

The rapidly changing world implied by these forces has influenced a wide array of developments in advanced and emerging economies alike. While many important developments have been taking place in the financial sphere, this article focuses exclusively on gauging the macroeconomic impact of trade globalisation on the euro area, leaving aside the issue of changes implied by financial globalisation. Notwithstanding difficulties in gauging globalisation's ultimate economic impact, given interlinkages with other phenomena, along with its changing pace and characteristics, this article reviews some stylised facts and assesses its likely effects in two steps. First, it analyses the euro area's international performance, with globalisation having placed a premium on competitiveness in an international context, given a need for increased specialisation (Section 2). Second, it assesses globalisation's prospective role in domestic adjustment with

**ARTICLES** 

Globalisation, trade and the euro area macroeconomy

<sup>1</sup> In July 2007 the ECB hosted a conference on "Globalisation and the macroeconomy". The papers presented at the conference can be downloaded at http://www.ecb.europa.eu/events/conferences/ html/global\_macro.en.html.

<sup>2</sup> Source: IMF balance of payments statistics.

a focus on the supply side of the economy, analysing globalisation and its implications for productivity, labour markets and prices (Section 3). Lastly, some conclusions are drawn while highlighting the key role that policies can play in facilitating an efficient adjustment to a changing global environment (Section 4).

### 2 GLOBALISATION AND EURO AREA TRADE AND COMPETITIVENESS

This section looks at how globalisation has affected export market shares and how this may be related to the export specialisation of the euro area vis-à-vis emerging countries. On the imports side, the way in which globalisation has changed the composition of imports in terms of trade partners is examined.

#### **EXPORTS, COMPETITIVENESS AND SPECIALISATION**

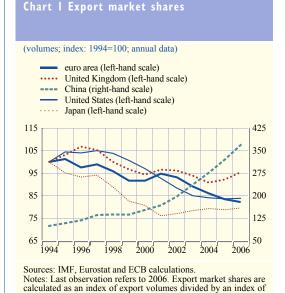
Against the background of the emergence of low-cost countries as major participants in world trade, export volume market shares of advanced industrialised economies – such as the euro area, the United States, the United Kingdom and Japan – have fallen in recent years, while the shares of countries such as China have increased

developments, it may not be surprising that the losses in export market shares occurring across a variety of advanced industrialised countries cannot be fully explained by changes in traditional measures of price competitiveness.3 Nevertheless, despite the decline in export market share, extra-euro area export volumes have been growing very rapidly in recent years, due to persistently robust growth in foreign demand. Given that these favourable global demand conditions are also largely driven by globalisation forces, this positive impact on exports has more than offset the dampening effect of the loss in market share. Indeed, the global economy has been growing at levels above previous trends in recent years and the euro area has benefited significantly from this.

dramatically (Chart 1 and Box 1). Given these

As the rise in China's export market share seems to be the main counterpart to the loss in the euro area's export market share, the following examines Chinese exports in terms of their composition and how they compare with the export specialisation of the euro area and other competitors.

In terms of the Balassa indices<sup>4</sup> of revealed comparative advantage by factor intensity, euro area exporters have been largely specialising in capital and research-intensive products, as well as in labour-intensive goods, over the period 1993-2004 (Table 1). However, the euro area seems somewhat overweight in labour-intensive sectors, where China has both a natural comparative advantage and a high degree of specialisation. By contrast, other advanced



foreign demand (where foreign demand is defined as a country-

specific export-weighted sum of foreign import volumes of

- 3 For further details, see Task Force of the Monetary Policy Committee of the European System of Central Banks, "Competitiveness and the export performance of the euro area", ECB Occasional Paper No 30, June 2005, and the article entitled "Competitiveness and the export performance of the euro area" in the July 2006 issue of the ECB's Monthly Bulletin.
- 4 The Balassa index of revealed comparative advantage is calculated as the share of a particular type of product in a country's exports divided by the share of that product in world exports. An index greater than one indicates that a country specialises in that export product. Balassa indices of revealed comparative advantage by factor intensity for the euro area and other countries are also reported in Table 2 in U. Baumann and F. di Mauro, "Globalisation and euro area trade: interactions and challenges", ECB Occasional Paper No 55, March 2007.

goods and services)

Globalisation, trade and the euro area macroeconomy

competitor countries, such as the United States, do not have a revealed comparative advantage in labour-intensive products, but are relatively more specialised in exports of researchintensive goods. Overall, the sectoral export specialisation by factor intensity generally seems to broadly reflect the countries' relative factor endowments, with higher-skilled workers being relatively abundant in the euro area and the United States, and cheaper, lower-skilled workers being prevalent in China.

However, there are several caveats regarding these measures of revealed comparative advantage. First, some products are difficult to classify by factor intensity as they use several factors of production. Second, the classification by factor intensity may be misleading if a country focuses primarily on the labour-intensive production stages of a predominantly researchintensive good. This may apply particularly to China, where its increase in specialisation in research-intensive products in recent years may be due to foreign firms outsourcing the labourintensive parts of production to China for a variety of research or capital-intensive products and then using China as an export base.

Turning to Balassa indices of export specialisation by technological content, distinguishing between

high, medium and low-technology sectors shows that, over the period 1993-2004, the euro area was relatively specialised in medium-high-tech exports and appeared to be less open to direct competition in these sectors from China, which specialises primarily in low-tech sectors, particularly textiles, clothing and footwear (Table 1).5 This is not true, however, for all euro area countries. In particular, Greece, Portugal and, to a lesser extent, Italy appeared to be more specialised in low and medium-low-tech sectors (such as textiles, clothing and footwear), which were especially vulnerable to competition from Asian economies, particularly China.6

- Another criticism of measures of revealed comparative advantage is that the internationalisation of production may render measures of export specialisation less meaningful nowadays as exported goods now embody substantial international outsourcing of production inputs. However, Baumann and di Mauro compute an index of trade specialisation which nets intermediate imports out of exports and find that it gives similar results to the traditional Balassa indices of export specialisation reported in this article.
- See Box 3 in ECB Occasional Paper No 55, as well as P. S. Esteves and C. Reis, "Measuring export competitiveness: Revisiting the effective exchange rate weights for the euro area countries", Banco de Portugal Working Paper No 11, 2006.

exports by factor intensity and hnological content

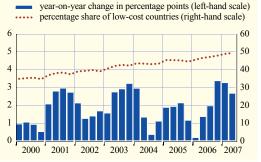
|                                   | Euro<br>area | United<br>States | China |
|-----------------------------------|--------------|------------------|-------|
| Factor intensity                  |              |                  |       |
| Raw materials-intensive           | 0.5          | 0.7              | 0.6   |
| Labour-intensive                  | 1.1          | 0.7              | 2.2   |
| Capital-intensive                 | 1.2          | 0.9              | 0.4   |
| Research-intensive                | 1.1          | 1.4              | 0.9   |
| Technological content             |              |                  |       |
| High-technology industries        | 0.9          | 1.4              | 1.0   |
| Medium-high-technology industries | 1.2          | 1.1              | 0.6   |
| Low-technology industries         | 0.9          | 0.8              | 1.6   |
| - Textiles, clothing, footwear    | 0.9          | 0.4              | 3.6   |

Sources: Chelem and ECB calculations. See also ECB Occasional

Notes: Balassa index of revealed comparative advantage. Average for the period 1993-2004. An index greater than one indicates that a country specialises in that type of export.

# Chart 2 Share of extra-euro area

(value shares in euro; quarterly data)



Source: Eurostat and ECB calculations.

Note: "Low-cost countries" are: Algeria, Argentina, ASEAN, Brazil, Chile, Central America and the Caribbean, the CIS, China, India, eastern European countries that have joined the EU since 1 May 2004, rest of North Africa, rest of Africa, rest of Asia, rest of South America, and Turkey.

#### IMPORTS AND THE RISING SHARE OF LOW-COST **COUNTRIES**

Over the last decade, both intra and extra-euro area imports of manufactured goods have shown robust growth, but the ratio of intra to extra-euro area trade volumes has declined, which again – does not seem to be fully explained by movements in relative prices. Globalisation forces have been driving the relatively stronger growth of extra-euro area imports, with outsourcing to low-cost countries and the internationalisation of production playing an important role. Since the start of the 2000s, the share of low-cost countries in extra-euro area manufacturing imports has increased from just over one-third to almost a half (Chart 2). Among the low-cost countries. China and the new EU Member States were the main contributors to this increase, with their shares roughly doubling since the mid-1990s.

In summary, the emergence of new global trade participants such as China has stimulated world trade growth and boosted euro area exports, but has at the same time shrunk the market shares of the incumbent advanced industrialised economies such as the euro area. Nevertheless, the extent of this loss in market share may also be connected to the export specialisation of the euro area and how it compares with that of these new competitors. Meanwhile, extra-euro area imports are growing faster than intra-euro area trade, triggered by higher euro area import penetration from low-cost countries.

One possible implication of the internationalisation of production is that the rising trend in outsourcing has led to higher correlation between imports and exports by increasing the reliance of euro area exporters on imported intermediate inputs. ECB Occasional Paper No 30, June 2005, by a Task Force of the Monetary Policy Committee of the European System of Central Banks shows that the import content of exports (which is the inverse of the value added per unit of export) - measured as the long-run elasticity of imports with respect to a one-unit increase in exports - has risen for the euro area, from 38% in 1995 to around 44% in 2000.

#### CHINA AND INDIA'S INTEGRATION INTO THE GLOBAL ECONOMY

One of the most fundamental changes shaping the global economy is the rapid advent of emerging economies as major trading partners. Due to their sheer size, the emergence of China and – more recently – India is often perceived to be illustrative of the systemic implications entailed by these trends. In this context, this box aims to shed light on the main features of China's and India's integration into global trade in goods and services.

Owing to sustained growth and an increasing opening-up to international trade, China's integration into the global economy has proceeded rapidly since the early 1990s. China's share of world output, measured at market exchange rates, rose from around 2% in 1990 to 5.5% in 2006. Similarly, China accounted for 6.5% of world trade in goods and services in 2006, compared with less than 2% in 1990. India's importance in world output and trade, while rising, is more recent and limited thus far (with shares of 1.8% and 1.5% respectively). However, India's share of world trade in services has risen markedly in the last few years, to reach nearly 3% in 2006. From a euro area perspective, China accounted for 10.3% of extra-euro area imports of goods in 2006, more than twice the share of Latin America as a whole (4.7%), while India's share was still relatively low (slightly above 1%).

Focusing on global trade in goods, estimates by ECB staff using a gravity model of trade provide an insight into the overall depth of China and India's integration in global trade, as well as into

1 When GDP is adjusted in purchasing power parity (PPP) terms, China's share of world output is significantly higher, slightly above 15% in 2006. India's share is also higher, over 6% in the same year. In PPP terms, the United States accounted for the largest share in 2006 (nearly 20%), followed by China, the euro area (14.6%), Japan (6.3%) and India.

#### **ARTICLES**

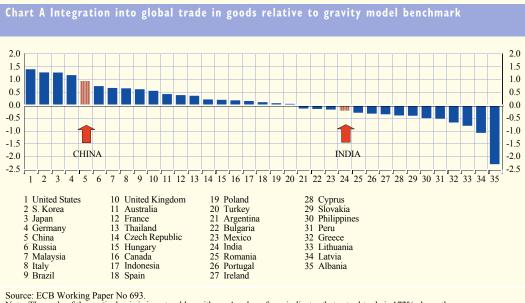
Globalisation, trade and the euro area macroeconomy

possible future developments.<sup>2</sup> Gravity models relate trade between two countries to economic size, the distance between these countries, as well as dummy variables for a common language, a common border, a common history or membership of the same free trade area.<sup>3</sup> According to the results, China is already more integrated in global trade in goods than average, based on the benchmark suggested by the model, whereas India is not (see Chart A, which compares actual trade in goods with the value predicted by the model). A breakdown of these results by trading partner indicates that China is particularly well integrated with other Asian economies, which also reflects its integration into a regional production network for export activity (sometimes called the "Asian production chain"), with both domestic and foreign investors exploiting China's comparative advantage in low-cost labour. This gives China a central role as a processing and assembly location for inputs imported from other emerging Asian economies, which are then re-exported to matureeconomy markets. Looking forward, however, recent evidence suggests that China's role may gradually be shifting from that of a processing hub to an economy increasingly able to domestically produce certain capital goods (e.g. machinery and equipment) and intermediate goods (e.g. iron and steel). In this setting, the ensuing process of import substitution seems to be one of the factors driving the increase in China's trade surplus, especially since 2005.

At variance with China, India is less integrated with other economies than suggested by the explanatory variables of the gravity model, which mostly hinges on weak trade links with other Asian economies.

Turning to the composition of exports of goods, China has been characterised by a noticeable shift since the early 1990s, when it was primarily exporting low-tech goods such as clothing, leather or yarns and fabrics (Chart B). Since then, the share of high-tech goods, such as electronic

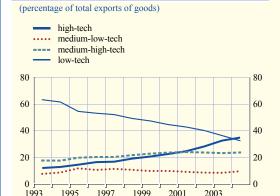
- 2 See M. Bussière and B. Schnatz, "Evaluating China's integration in world trade with a gravity model based benchmark", ECB Working Paper No 693, November 2006.
- See Bussière and Schnatz, loc. cit., for further details. The model is estimated with a sample of bilateral trade flows (i.e. exports and imports together) in goods across 61 countries, using annual data covering the period 1980-2003.



Note: The scale of the vertical axis is in natural logarithms. A value of one indicates that actual trade is 172% above the

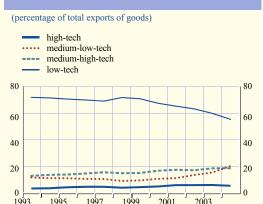
model's predicted value ( $e^1$ -1  $\approx 1.72$ )

### Chart B Breakdown of China's exports by commodity



Source: Chelem database of the Centre d'Etudes Prospectives et d'Informations Internationales (CEPII).

### Chart C Breakdown of India's exports by commodity



Source: Chelem database of the Centre d'Etudes Prospectives et d'Informations Internationales (CEPII).

products, has risen and has accounted for a dominant share of China's exports in most recent years. By contrast, India still mostly exports low-tech goods (Chart C), such as jewellery and works of art. One implication of this is that China is increasingly in a position to compete with exports of goods from mature economies, which is less the case for India.

On the other hand, India seems to specialise more in exports of services than China: the share of services in total exports reaches 38% in India (of which information technology and information technology-enabled services account for a large part), compared with less than 9% in China. In absolute terms, however, China still exports more services than India. Transportation, including maritime transportation, is one of China's key exports in this respect, most likely reflecting activities related to its role as a manufacturing hub in Asia.

## 3 GLOBALISATION AND EURO AREA DOMESTIC ADJUSTMENT

This section focuses on three key aspects of domestic macroeconomic adjustment in the euro area, namely globalisation's influence on productivity, labour markets and prices.

#### **GLOBALISATION AND EURO AREA PRODUCTIVITY**

In principle, globalisation has an important role to play in boosting euro area productivity by facilitating total factor productivity spillovers across economies and stimulating innovation in response to competitive pressures. In particular, globalisation is expected to boost productivity through three main channels. First, it may

contribute to technology transfer, both through input flows (the cross-border movements of capital goods and labour) and the transfer of multifactor productivity (e.g. the convergence of management techniques to best practice standards). Second, the international competitive pressures associated with globalisation may encourage firms to be more innovative in order to maintain their market presence. Third, globalisation may result in higher average productivity in the economy through both a more productive composition of firms and the possibility for firms to increase the scale of their operations. In this respect, globalisation also offers greater opportunities for the euro area to concentrate on areas of higher comparative advantage.

Globalisation, trade and the euro area macroeconomy

While the above arguments imply increasing productivity through globalisation, a general decline in the growth rate of aggregate euro area productivity has been observed over the last decade, despite steadily increasing international openness - although several factors other than globalisation may have played an important or even dominant role in the productivity slowdown. Hourly labour productivity growth fell from an average of 2.3% over the period 1985-1995 to an average of 1.3% over the period 1996-2006, while international openness increased strongly (see Chart 3). Similarly, the contribution of total factor productivity to GDP growth fell from an annual average growth rate of 0.9% over the period 1980-1995 to 0.2% over the period 1995-2004.

An analysis of the sectoral dimension of these aggregate productivity developments yields a more nuanced picture. Indeed, a positive relationship between growth in openness and productivity in manufacturing in several countries is highlighted in empirical work.<sup>8</sup> Firm-level studies indicate that the channels which would be expected to boost productivity in response to openness – notably technological spillovers and increased competition – form an important mechanism in propagating such gains.<sup>9</sup>

### Chart 3 Hourly labour productivity growth and trade openness in the euro area



Sources: ECB calculations based on Eurostat and AMECO data. Note: Trade openness is defined here as the sum of extra-euro area export values and import values expressed as a percentage of GDP.

When comparing the weak euro area productivity outcome on aggregate with the United States over the last decade, it appears that diverging trends in labour productivity growth in recent years mainly reflect developments in a number of specific services sectors such as retail, wholesale and some financial services where weak euro area productivity growth contrasts with strong gains registered in the United States.<sup>10</sup> This suggests that competition, possibly associated with globalisation, has fostered productivity in the United States and, at the same time, hints at a productivity shortfall for the euro area as a whole, in particular in areas which can also be characterised as more sheltered from international competitive pressures. In addition, structural rigidities in some sectors may have contributed to inhibiting the beneficial effects of globalisation. In this vein, protectionist policies, as well as product and labour market rigidities. may have prevented prospective productivity gains from materialising in the euro area.

### GLOBALISATION AND EURO AREA LABOUR MARKETS

The impact of globalisation on euro area labour markets can be characterised by the interplay of two main mechanisms — one relating to an allocational channel as globalisation contributes to changing the sectoral, occupational and skill composition of employment, and another whereby higher activity resulting from globalisation lifts demand for all labour. With regard to the former channel, standard trade theory would suggest that, in advanced economies, changing specialisation given relative factor or technology endowments would

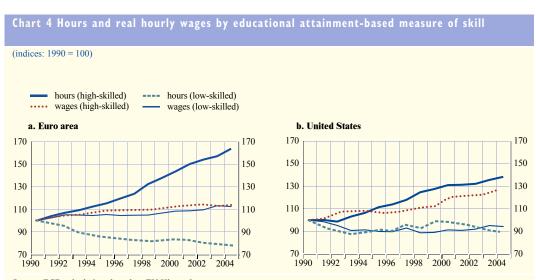
- 8 See, for example, H. Badinger, "Market size, trade, competition and productivity: evidence from OECD manufacturing industries", Applied Economics, No. 39(17), 2007.
- 9 See G. Ottaviano, D. Taglioni and F. di Mauro, "Deeper, wider and more competitive? Monetary integration, eastern enlargement and competitiveness in the European Union", paper presented at the ECB conference on "Globalisation and the macroeconomy", July 2007, and R. Baldwin, H. Braconier and R. Forslid, "Multinationals, endogenous growth, and technological spillovers: Theory and evidence", Review of International Economics, 13(5), 2005, pp. 945-63.
- 10 See, for example, R. Gomez-Salvador, A. Musso, M. Stocker and J. Turunen, "Labour productivity developments in the euro area", ECB Occasional Paper No 53, October 2006.

imply, on the one hand, increased labour demand for high-skilled workers; on the other hand, increased import competition should lead to a decline in labour demand for the low-skilled. A changing skill composition of labour demand and changes in remuneration, even within skill groups, could result from globalisation, in particular as implied by changes in the global labour supply in conjunction with enhanced production fragmentation possibilities. Obviously, rigidities present in the economy can prolong the movement of labour from declining to expanding activities. <sup>11</sup>

The impact of globalisation on euro area labour markets appears to have been mainly visible in the form of a redistribution of employment across sectoral, occupational and skill categories. In particular, the rise in offshoring which characterises the recent phase of globalisation has been commonly associated with a skill bias in labour demand (see Chart 4) – likely interacting with other sources of skill-biased change including, for instance, rapid technological change. In the euro area, adjustment in labour demand has mainly resulted in a discrepancy of growth in hours worked, according to an educational attainment-based skill classification, as real wages across this skill categorisation have

shown little differentiation.<sup>13</sup> This contrasts with the case of the United States, where wages have tended to display more differentiation across skill categories and where, accordingly, the downward impact on labour demand for lower-skilled workers could be cushioned. Empirical evidence for the euro area suggests an increase in the real wage elasticity of labour demand in the recent past, particularly for traditionally lower-skilled occupations, confirming stronger pressure on employment in low-skilled sectors.<sup>14</sup> This

- 11 Migration flows may play a role in facilitating such adjustments and, indeed, there are signs of steadily increasing inflows of migrants to the euro area, with a heterogeneous skill mix depending on their geographical origin (see F. Heinz and M. Ward-Warmedinger, "Cross-border labour mobility within an enlarged EU", ECB Occasional Paper No 52, October 2006).
- 12 For more on evolving trends in offshoring within advanced economies, see for example R. Feenstra, "Globalization and its impact on labor", Global Economy Lecture, Vienna Institute for International Economic Studies, February 2007, and R. Baldwin, "Globalisation: the great unbundling(s)", paper for the Finnish Prime Minister's Office, Economic Council of Finland as part of the EU Presidency, 2006.
- 13 Education-based skill classifications have some limitations, notably that they could be affected not only by the skill content of work, but also by changes in educational attainment patterns.
- 14 See G. Pula and F. Skudelny, "The impact of rising imports from low-cost countries on euro area prices and labour markets some preliminary findings", paper presented at the ECB conference on "Globalisation and the macroeconomy", July 2007, and M. Molnar, N. Pain and D. Taglioni, "The internationalisation of production, international outsourcing and OECD labour markets", OECD Economics Department Working Paper No 561, 2006.



Source: ECB calculations based on EU Klems data.

Notes: Wages are deflated using producer prices. Skill data derived from national data on educational attainment, with the high-skilled comprising those with university level education, and the low-skilled comprising those with primary and/or secondary education (depending on the country). Data refer to the total economy, i.e. manufacturing plus services.

Globalisation, trade and the euro area macroeconomy

| Table 2 Euro area empl          | oyment |       |                      |
|---------------------------------|--------|-------|----------------------|
| (millions)                      |        |       |                      |
|                                 | 1996   | 2006  | change,<br>1996-2006 |
| Total                           | 123.6  | 140.6 | 17.0                 |
| Industry                        | 34.5   | 35.0  | 0.5                  |
| Industry excluding construction | 25.4   | 24.5  | -0.9                 |
| Construction                    | 9.1    | 10.5  | 1.4                  |
| Services                        | 81.5   | 98.9  | 17.4                 |
| Trade and transport             | 30.3   | 35.1  | 4.8                  |
| Finance and business            | 15.0   | 21.6  | 6.7                  |
| Other services                  | 36.2   | 42.1  | 6.0                  |
| Agriculture                     | 6.7    | 5.8   | -0.9                 |

underlines that the euro area would benefit from more flexible real wages, as the apparent lack of real wage flexibility of less-skilled workers may have contributed to undermining growth in hours worked for this group. At the same time, the latter development could imply a more general need to upgrade skills in the euro area.15

Sources: Eurostat data and ECB calculations

Notwithstanding the lack of wage differentiation across skill categories, globalisation may have been one factor contributing to the recent generalised wage moderation within the euro area (for instance, through immigration, offshoring or the threat of offshoring). This wage moderation, in turn, may have facilitated the large employment gains witnessed over recent years in the euro area, in particular in the services sectors (see Table 2).

Indeed, attributing gross job losses in some segments of the labour market to globalisation may conceal potential net gains in employment as the process encourages within and crosssector job movements to more productive areas where the euro area has a comparative advantage. Survey data suggest that job losses associated with offshoring have been limited as a proportion of gross job losses in the euro area economy.16 More importantly, job losses within industry (excluding construction) have been offset by employment gains elsewhere, in particular within the services sector (see Table 2). On the whole, however, it is difficult

disentangle globalisation effects from what appears to be an ongoing decline in manufacturing sector employment given a structural shift to the services sector on the one hand, and technological change and structural changes in labour markets on the other hand.

#### **GLOBALISATION AND EURO AREA PRICES**

Globalisation could embed some effects on consumer price inflation, as well as on relative prices in the short term, through two main mechanisms, though monetary policy would ultimately determine inflation over longer horizons. First, a direct relative price effect would be expected as globalisation contributes both to decreases in some prices, given lower import prices for manufacturing imports from low-cost countries (see Box 2), and to increases in other prices through stronger global demand for, among other things, energy or other commodities from emerging markets. Such relative price movements could have a short-term aggregate impact on the HICP either to the extent that these movements are sizeable or to the extent that adjustment frictions and imperfect information imply a prolonged impact. Second, increased competitive pressures associated with globalisation could constitute an indirect channel affecting prices as they contribute to compressing firms' price-cost markups or change price elasticities, and thereby exert a moderating influence on inflation. While this potential to increase the elasticity of firms' prices to marginal costs would imply a strengthening of the relationship between inflation and measures of domestic slack (commonly referred to as the Phillips curve slope), it could equally be argued that in an increasingly globalised environment, there could be a growing role for global measures of slack, in addition to domestic measures of slack, in the domestic inflation process.

examination of recent import price An developments in the euro area reveals that rising imports from low-cost countries put downward

<sup>15</sup> See also IMF, "Globalization and Inequality", World Economic Outlook, October 2007, pp. 36-65.

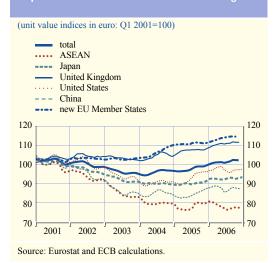
<sup>16</sup> See NTC Economics, "Special focus chapter on outsourcing", April 2007.

pressure on extra-euro area manufacturing import prices over the period 1995-2004. This is mostly due to the increasing share of low-cost countries in euro area imports, combined with the relatively lower prices of imports from low-cost countries. Based on detailed data disaggregated both by sectors and countries over the above period, the levels of euro area import prices (proxied by absolute unit value indices) from China and the new EU Member States are estimated, on average, to be substantially lower than the prices of imports from advanced industrialised countries such as the United States, Japan or the United Kingdom.<sup>17</sup> Overall, it is estimated that the increase in import penetration from low-cost countries may have dampened euro area import prices manufactured goods by an average approximately 2 percentage points each year over this period, an effect almost equally accounted for by China and the new EU Member States.<sup>18</sup> Most of this downward impact is due to a "share effect", which captures the downward impact on import prices of the rising import share of low-cost countries combined with the relatively lower price level of low-cost import suppliers. There was also a second smaller downward impact due to the differentials in the growth of import prices across different import suppliers (the "price effect"), which captures the impact of lower import price inflation from the low-cost countries relative to the high-cost countries over the period.<sup>19</sup>

More recently, while the prices of imports from China to the euro area still appear generally subdued (also partly as a result of movements in the exchange rate), some upward import price pressures may be originating from the new EU Member States (Chart 5 and Box 2). The ultimate impact of such a development on manufacturing import prices depends on the extent to which they are offset by the continued growth of the import shares of these countries in the euro area, combined with their lower prices.

The recent euro area experience indicates that imports from low-cost countries have had an impact on relative domestic prices over the last decade, although downward pressure on prices of manufactured goods contrasted with

Chart 5 Prices of euro area manufacturing imports from selected countries and regions



a strong increase in prices for commodities (see Chart 6). Empirical studies estimating the relative price effect using data on various EU countries for a number of sectors suggest a net downward impact of trade openness amounting, on average, to about zero to 1 percentage point on euro area annual manufacturing producer price inflation and a net downward impact of, on average, zero to 0.3 percentage point (depending on the inclusion of the impact of commodity prices) on annual consumer price inflation over the period of five to ten years up to 2005.20 This effect is mainly due to increasing shares of low-cost countries in the euro area import basket, which was offset, at least partly, by increases in commodity prices (e.g. energy

<sup>17</sup> This calculation is subject to caveats, notably that the accuracy of the results may be affected by the fact that unit value indices do not control for changes in quality.

<sup>18</sup> See the box entitled "Effects of the rising trade integration of low-cost countries on euro area import prices" in the August 2006 issue of the ECB's Monthly Bulletin for further details.

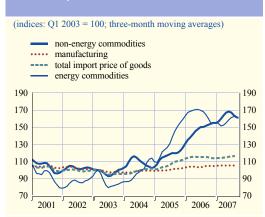
<sup>19</sup> This calculation is based on the methodology used by S. B. Kamin, M. Marazzi and J. W. Schindler, "Is China exporting deflation?", Board of Governors of the Federal Reserve System International Finance Discussion Paper No 791, 2004. Further details are given in Box 6 of the August 2006 issue of the ECB's Monthly Bulletin.

<sup>20</sup> See, for example, N. Pain, I. Koske and M. Sollie, "Globalisation and inflation in the OECD economies", OECD Economics Department Working Paper No 52, 2006, and Pula and Skudelny, loc. cit.

#### **ARTICLES**

Globalisation, trade and the euro area macroeconomy





Sources: ECB, HWWA and Eurostat. Notes: Last observation relates to July 2007, except for nonenergy commodities (October 2007). All prices are in euro. and food prices) in the context of heightened global demand pressures.<sup>21</sup>

Evidence on the role of international competitive pressures in compressing firms' markups is mixed. On the one hand, theoretical models would predict that pro-competitive effects contribute to reducing markups as domestic firms compete with international firms. On the other hand, the currently high profitability of firms would suggest that profit markups have not been compressed at the aggregate level. Empirical evidence is fairly limited due to the complex nature of the markup formation process and measurement issues.

21 For a recent discussion of the rise in local food prices, see Box 4 in the December 2007 issue of the Monthly Bulletin.

#### Box 2

## RECENT DEVELOPMENTS IN PRICE PRESSURES ARISING FROM THE NEW EU MEMBER STATES AND LARGE EMERGING ECONOMIES

Excluding Slovenia that joined the euro area in January 2007, the 11 Member States that joined the EU in 2004 and 2007 (EU11) and emerging economies play a growing role as trading partners of the euro area. The share of the EU11 economies in euro area imports stood at around 11% in recent years. Similarly, China accounted for around 10% of euro area imports of goods in 2006, while India's share was slightly above 1% (see Box 1). Price and cost developments in these economies affect euro area import prices and, in turn, have implications for overall inflation developments in the euro area. This box reviews recent price and cost developments in the EU11, as well as in two of the largest emerging economies – namely China and India – in order to assess the existence of potential risks to inflation originating from these two regions.

Inflation developments in EU11 economies in recent years have been very much influenced by adjustments in administered and regulated prices, changes in indirect taxes and demand trends. At the same time, looking at the four largest EU11 economies (the Czech Republic, Hungary, Poland and Slovakia) as a representative sub-sample for the EU11 as a whole, global trade integration seems in recent years to have contributed to the disinflation process in these countries via a diminishing contribution of industrial prices to the overall HICP. This diminishing contribution is likely to reflect, inter alia, the impact of stronger competition from abroad and the wider availability of cheaper foreign goods. As regards cost developments, while compensation per employee in most EU11 economies has grown significantly faster than in the euro area in recent years, wage increases have been accompanied in most cases by significant gains in labour productivity. This has contributed to moderate growth in unit labour costs, notably in the largest of the EU11 economies. However, productivity gains in the Baltic States were insufficient to prevent strong growth in unit labour costs.

| Table A Expo       | rt prices |      |      |      | Table B Unit       | labour co | sts  |      |      |
|--------------------|-----------|------|------|------|--------------------|-----------|------|------|------|
| (annual percentage | changes)  |      |      |      | (annual percentage | changes)  |      |      |      |
|                    | 2003      | 2004 | 2005 | 2006 |                    | 2003      | 2004 | 2005 | 2006 |
| Bulgaria           | -0.2      | 6.4  | 7.3  | 11.9 | Bulgaria           | 3.0       | 1.0  | 2.4  | 4.5  |
| Czech Republic     | 0.1       | 2.7  | -2.4 | -0.7 | Czech Republic     | 3.6       | 1.5  | -0.6 | 1.7  |
| Estonia            | 1.2       | 1.0  | 3.4  | 9.6  | Estonia            | 5.6       | 3.0  | 2.5  | 8.1  |
| Cyprus             | -0.2      | 4.1  | 2.8  | 1.5  | Cyprus             | 9.5       | 1.6  | 1.3  | 0.1  |
| Latvia             | 8.6       | 11.0 | 10.3 | 9.2  | Latvia             | 5.6       | 6.4  | 15.2 | 14.0 |
| Lithuania          | -0.7      | 7.3  | 7.9  | 5.2  | Lithuania          | 0.9       | 3.3  | 5.9  | 8.8  |
| Hungary            | 0.1       | -1.1 | -0.3 | 6.5  | Hungary            | 6.4       | 6.6  | 3.1  |      |
| Malta              | -1.1      | -1.8 | 5.3  | 8.3  | Malta              | 6.0       | 0.5  | 0.2  | 0.5  |
| Poland             | 6.2       | 8.3  | -2.6 | 2.3  | Poland             | -3.2      | -2.1 | 0.3  |      |
| Romania            | 17.9      | 13.4 | -0.9 | 5.7  | Romania            | 16.0      | 7.7  |      |      |
| Slovakia           | 1.5       | 1.8  | -1.9 | 2.2  | Slovakia           | 5.6       | 3.2  | 0.5  | 1.2  |
| EU111)             | 4.9       | 6.0  | -0.8 | 3.5  | EU111)             | 3.2       | 1.9  | 1.1  |      |
| Euro area          | -1.3      | 1.2  | 2.6  | 2.7  | Euro area          | 1.8       | 1.0  | 1.2  | 1.1  |

Source: Eurostat.

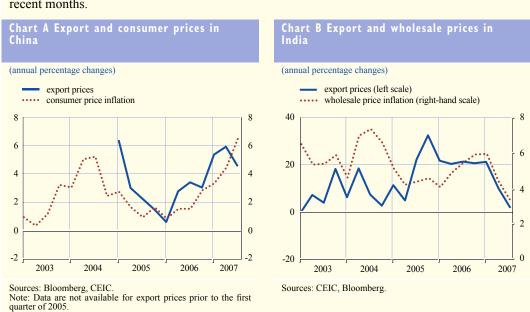
1) Weighted average of countries above, using GDP weights.

Source: Eurostat

1) Weighted average of countries above, using GDP weights.

In this context, there has not recently been any clear trend in the dynamics of export prices in the EU11, with each country experiencing rather specific patterns. It therefore remains difficult to assess the future transmission of domestic price and cost developments in the EU11 countries to the euro area via export prices.

Turning to large emerging economies, a noteworthy feature of both China and India is the recent significant upturn in domestic inflationary pressures. In China, consumer price inflation (CPI) increased from 1% in July 2006 to 6.9% in November 2007, its highest rate in a decade, largely due to higher food prices. In India, wholesale price inflation (WPI) - the Reserve Bank of India's main inflation measure - reached a peak of above 7% in February 2007, but reverted to around 3% in November. Admittedly, it is possible that higher domestic inflation could feed into wages and, eventually, export prices. In this respect, export price growth has increased in China in recent months.



Globalisation, trade and the euro area macroeconomy

The ultimate impact of these developments on euro area manufacturing import prices depends on the extent to which they are offset by the continued growth in the import shares of these countries in the euro area, combined with their lower prices.

Widespread evidence for a growing role of global measures of economic slack in the inflation process of the euro area and other advanced economies is also limited. On balance, most studies suggest that the quantitative extent of any such impacts on advanced economies is still small or insignificant.<sup>22</sup> Indeed, other factors such as the more efficient conduct and credibility of monetary policy, fiscal discipline and structural reforms (and, largely coinciding with this, fewer macroeconomic shocks) may have played a more important role in any observed change in the relationship between inflation and demand conditions. Still, there is reason to believe that, in integrated markets, local labour market conditions become less and less important for domestic price setting, in particular if factors of production (capital and labour) become increasingly mobile.

#### 4 CONCLUSION

In gauging the impact of globalisation on the euro area's external performance, it would appear that globalisation has increased export competition in world markets, while simultaneously stimulating world demand and increasing the import content of exports. Regarding imports, globalisation has been accompanied in the euro area by a higher share of imports of manufactured goods from low-cost countries, which has also affected import prices and, in general, inflationary pressures. However, this downward impact on inflation has been offset, at least partly, by the higher demand for commodities from low-cost countries, resulting in increasing commodity import prices.

With regard to globalisation and domestic macroeconomic adjustment in the euro area, the phenomenon of globalisation is difficult to

isolate, given that it is intertwined with several other ongoing structural changes, such as policy changes, along with technological change and its diffusion. Notwithstanding these difficulties, some conclusions can be drawn for euro area productivity, labour markets and prices. While a positive impact of globalisation on euro area productivity is not discernible at the aggregate level, sectoral studies point towards such a favourable influence, as generally evident in areas more exposed to international competitive pressures. The impact of globalisation on euro area labour markets is most visible in terms of a skill bias in labour demand, which points to a downward adjustment of low-skilled hours worked and an upward adjustment of highskilled hours worked, while real wage trends have remained rather similar across both skill groups. Meanwhile, the recent moderation of overall wage developments, possibly influenced by globalisation, in addition to other factors, may have contributed to strong euro area employment growth, in particular in the services sector. In addition to these possible effects on productivity and labour markets, globalisation may have increased economic welfare in other ways, such as cheaper products and greater product choice. Concerning the impact of globalisation on prices, increasing trade openness seems to have had a downward impact on manufacturing price developments, which has been offset, at least partly, by upward pressure from commodity import prices that derived from strong growth of commodity imports by emerging markets. At the

<sup>22</sup> In particular, the empirical findings of a significant global output gap in Phillips curve relations reported in C. Borio and A. Filardo, "Globalisation and inflation: New cross-country evidence on the global determinants of domestic inflation", Bank for International Settlements 2007, contrast with the findings of a negligible role in J. Ihrig, S. Kamin, D. Lindner and J. Marquez, "Some simple tests of the globalization and inflation hypothesis", Board of Governors of the Federal Reserve System International Finance Discussion Paper No 891, April 2007.

same time, there is mixed evidence of a notable compression in the markups of euro area firms in response to globalisation, while evidence of a clear role for global measures of slack in the domestic inflation process remains limited.

Synthesising the international and domestic impacts of globalisation for the euro area, one key message that emerges is the crucial role of structural policies in reaping its potential benefits and in facilitating adjustment to globalisation. Appropriate structural reforms remain particularly important with a view to boosting the euro area's competitiveness. These include, in particular, policies which support education, research and innovation and facilitate smooth economic adjustment in a dynamic environment. Globalisation also implies a need to search for further efficiency gains in the conduct of fiscal policy. More generally, in order to continue to benefit from globalisation in the future, it is important to continue to foster global openness in goods, services, labour and financial markets, and to fight protectionism. As for monetary policy in a phase of heightened globalisation, it is necessary to actively monitor possible ongoing changes in the inflation process. At the same time, efficient adjustment can be best facilitated by focusing on price stability and continuing to anchor inflation expectations in the face of considerable relative price shocks.

### THE EUROSYSTEM'S EXPERIENCE WITH FORECASTING AUTONOMOUS FACTORS AND EXCESS RESERVES

The Eurosystem's reserve requirements, together with its forecasts of autonomous factors and excess reserves, form the basis for the calibration of the liquidity supply through its open market operations and hence for the steering of short-term money market interest rates close to the minimum bid rate in main refinancing operations determined by the Governing Council. This article analyses the properties of autonomous factors and excess reserves, the Eurosystem's forecasting procedures and the related forecast errors. From the perspective of the Eurosystem's liquidity management, the most important individual autonomous factors in terms of their size and variability are banknotes in circulation and government deposits. Although the fluctuations in autonomous factors and excess reserves are not stable over time (especially over the year end), and this may occasionally lead to increased forecast errors (outliers), the article shows that overall the forecasting methodology employed leads to unbiased estimates of the banking system's liquidity needs.

#### **INTRODUCTION**

When determining the allotment amount in main refinancing and fine-tuning operations (MROs and FTOs, respectively), the European Central Bank (ECB) takes into account a forecast of the liquidity needs of the banking sector, usually for a horizon of up to one week. These liquidity needs stem from three different sources: reserve requirements, excess reserves and autonomous factors. While reserve requirements determined with a high degree of precision at the beginning of the reserve maintenance period, the forecasts for excess reserves and autonomous factors are subject to uncertainty over the horizon of up to one week. Autonomous factors denote all items in the balance sheet of the Eurosystem that are not monetary policy instruments denominated in euro. Excess reserves are defined as the average difference between banks' current account holdings and their reserve requirements.

An underestimation of liquidity needs usually implies that the ECB has allocated insufficient funds in open market operations. Particularly in the last week of the reserve maintenance period, when banks have limited scope to postpone the fulfilment of their reserve requirements, there may be an upward drift in the spread between short-term money market interest rates and the minimum bid rate. Conversely, an overestimation may lead to a downward drift. Hence, the better the forecasts of autonomous factors and excess reserves, the better the ECB can calibrate its open market operations and meet the objective of steering short-term money market rates close to its policy rate, namely the minimum bid rate in MROs.

It is particularly important for the Eurosystem's liquidity forecasts to be unbiased from a statistical point of view and for this to be well understood by market participants. If the liquidity needs of the banking sector were systematically underestimated, the ECB would regularly allocate insufficient liquidity in open market operations, and market participants would, in the course of time, make frequent recourse to the marginal lending facility in order to satisfy their liquidity needs. Very shortterm money market interest rates would display an upward drift towards the marginal lending rate. In contrast, a systematic overestimation of banks' liquidity needs would lead to a downward drift towards the deposit rate.

This article reviews the main properties of autonomous factors and excess reserves, and assesses the degree of unbiasedness of the Eurosystem's liquidity forecasts. For the statistical analysis of the forecast errors, the period from January 2003 to October 2007 is used in order to exclude the effects from the cash changeover in 2002. Section 2 describes the size, variability and feasibility of forecasting the various autonomous factors distinguished in the Eurosystem's balance sheet. Section 3 discusses the properties of the forecast errors for the aggregate autonomous factors. Section 4 provides a similar analysis for excess reserves. Section 5 examines statistics

#### **ARTICLES**

The Eurosystem's experience with forecasting autonomous factors and excess reserves

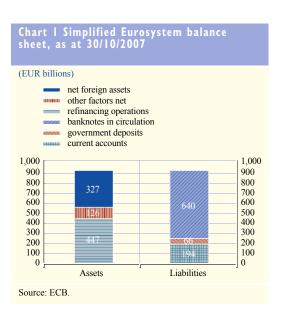
on the same-day error of the total liquidity forecast - i.e. the sum of the forecast errors of the aggregate autonomous factors and excess reserves – on the last day of the maintenance period. This forecast, and its unbiasedness, is of particular importance for the calibration of the end-of-period fine-tuning operation and for the steering of the interbank overnight rate earlier in the maintenance period. Section 6 concludes.

#### 2 **AUTONOMOUS FACTORS**

#### 2.I OVERVIEW

As mentioned above, aggregate autonomous factors impose a liquidity need on the banking system and thus have a net liquidity-absorbing effect. However, individual autonomous factors can be both liquidity-providing and liquidityabsorbing, depending on which side of the central bank's balance sheet they appear. An increase in an autonomous factor on the asset side is, ceteris paribus, liquidity-providing, because it reflects the fact that the central bank has purchased assets against liquidity - i.e. current account holdings and has therefore reduced banks' need to obtain liquidity via refinancing operations in order to fulfil their reserve requirements. Conversely, an increase in an autonomous factor on the liability side is liquidity-absorbing, because it reflects the fact that the banking system has bought a claim on the central bank against a reduction in their current account holdings, which need to be replenished through increased refinancing operations.

The simplified Eurosystem balance sheet in Chart 1 distinguishes four autonomous factors: "government deposits", "banknotes in circulation", "net foreign assets" and "other factors net". Government deposits and banknotes in circulation are the largest liquidity-absorbing autonomous factors, while net foreign assets is the largest liquidity-providing autonomous factor. Refinancing operations constitute the largest item on the asset side. The ECB adjusts these to the total sum of autonomous factors



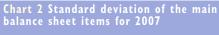
plus reserve requirements and excess reserves, as described above, in order to keep short-term money market rates close to the minimum bid rate. The item "other factors net" is a net residual representing three autonomous factors of minor importance on both the asset and the liability sides (see below).

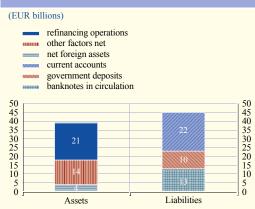
Banknotes, government deposits and other factors net display considerable variation (see Chart 2). Despite their large size, net foreign assets show only small fluctuations, while other factors net and government deposits show relatively large fluctuations compared with their size.

Autonomous factors are forecast on a daily basis for a horizon of up to the end of the current maintenance period or at least the next two weeks. The forecast procedure is generally decentralised in the sense that the national central banks (NCBs) forecast the autonomous factors in their domestic balance sheets, which are then aggregated by the ECB to provide a euro area forecast. In this process, a variety of approaches – such as econometric models, expert judgement and knowledge about cash flows from specific transactions are applied, taking into account the properties of the individual factors mentioned below. In addition to this decentralised procedure, a

#### **ARTICLES**

The Eurosystem's experience with forecasting autonomous factors and excess reserves





Source: ECB.
Note: The total sum of standard deviations on the asset and liability sides in the simplified balance sheet does not match owing to non-linearity and correlations between various items.

centralised structural time series model is applied for banknotes in circulation.<sup>1</sup>

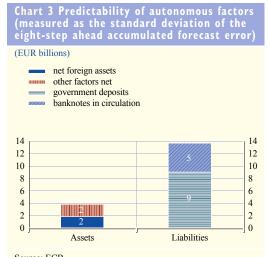
While the large fluctuations in government deposits and banknotes in circulation mentioned above are also associated with large forecast errors (see Chart 3), the same is not true for other factors net, which shows small forecast errors of the same magnitude as those calculated for net foreign assets.

These statistics show that government deposits and banknotes in circulation are by far the most important autonomous factors for the Eurosystem's liquidity management, causing the largest fluctuations and forecasting errors in liquidity needs. Net foreign assets and other factors net are relatively large in size, but show limited variability and forecast errors.

#### 2.2 SPECIFIC PROPERTIES

#### **BANKNOTES IN CIRCULATION**

Banknotes are issued by the NCBs of the Eurosystem and the ECB. Since vault cash does not count towards reserve requirements, no distinction is made between banknotes within the banking sector and those outside. Demand for banknotes is mainly determined by the share of cash transactions in the economy and store



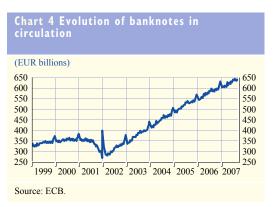
Source: ECB.

Note: The accumulated forecast error denotes the sum of the differences between this forecast and the realised value for each day over the week (from one allotment decision to the other).

of value motives. In particular, there may be a large demand for euro banknotes from outside the euro area, mainly for store of value motives.

The evolution of banknotes in circulation is characterised by an upward trend, which has been particularly strong since the cash changeover in 2002 (see Chart 4) and by clearly

1 The model is based on the aggregate time series for banknotes (i.e. the Eurosystem total) in terms of components, such as trends, seasonality and patterns with a direct interpretation (see next subsection). Seasonal components include intra-year effects; intra-month effects; and moving and fixed calendar effects. The forecast of the structural time series model and the decentralised forecasts by NCBs are combined, taking into account the past performance of the two techniques, as well as expert judgement. The model is estimated in state space form using a Kalman filter technique.





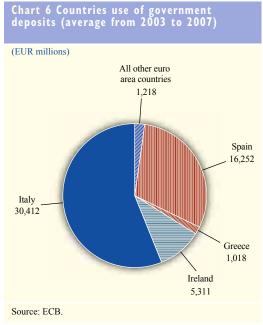
discernible intra-week, intra-month and intrayear patterns (See Chart 5).

In the structural time series model used to forecast banknotes in circulation in combination with the decentralised procedure, a distinction is made between intra-week seasonality (mainly related to weekend shopping activities), intramonth seasonality (mainly related to salary and pension payments) and, most importantly, intra-annual seasonality (reflecting important public holiday periods like Christmas/New Year and summer holidays). Important one-off special events affecting banknotes include the changeover to the new millenium and the aforementioned euro cash changeover.

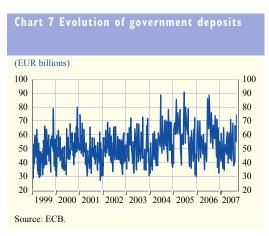
#### **GOVERNMENT DEPOSITS**

Some NCBs have traditionally fulfilled the role of "fiscal agent" for their domestic government and have continued to do so in Economic and Monetary Union. Within the Eurosystem there are significant variations between countries with regard to government deposits and their volatility, which mainly relate to institutional features inherited from the past (see Chart 6).

Aggregate government deposits do not display a clear trend (See Chart 7). However, some NCBs



show a muted monthly pattern, which is mainly related to the use of the treasury accounts. For the Banca d'Italia, for example, the most significant monthly variations reflect payments relating to the collection of taxes (between the 19th and the 23rd of each month) and social security contributions. Payments of salaries, pensions and social benefits (mainly at the beginning of the month), payments related to debt management and payments related to the settlement of foreign exchange transactions are also significant. In close cooperation with their respective treasuries, most NCBs have implemented measures to reduce volatility and enhance the predictability of government deposits.



The Eurosystem's experience with forecasting autonomous factors and excess reserves

#### **NET FOREIGN ASSETS**

The net foreign assets of the Eurosystem consist mainly of foreign exchange reserves and holdings of gold, which are held for investment purposes and the preparation of foreign exchange interventions. Given the very exceptional nature of the latter, movements in the net foreign assets are mainly driven by portfolio reallocations, which are usually known at least three business days before settlement and can thus be forecast relatively easily.

#### OTHER FACTORS NET

The net residual "other factors net" shown in the above simplified balance sheet consists of the net sum of the following three less significant autonomous factors, which are treated separately in the Eurosystem's daily forecasting procedure.

#### Items in course of settlement

To the extent that payments between commercial banks are settled using current accounts held by the central bank, a time difference between credit and debit operation will have an impact on liquidity provision. Therefore, the importance of this autonomous factor depends largely on the design of the payment system (mainly clearing of cheques) and varies from country to country. However, owing to the advanced state of development of payment systems, this autonomous factor is usually rather small in terms of size, variability and forecast errors.

#### Net assets denominated in euro

The NCBs generally hold euro portfolios to meet pension obligations, invest (and build up) capital buffers, or increase monetary income. In practice, most changes in these portfolios are driven by investment transactions which, as foreign exchange transactions, are usually known at least three days in advance. The TARGET accounts of ESCB central banks outside the euro area are another possible source of movement in this autonomous factor.

#### Other autonomous factors

The central bank capital and reserves, as well as revaluation accounts make up a large part of

other autonomous factors, which is the residual item identified in the Euroystem's daily liquidity forecasting procedure. Usually, changes in this residual are relatively limited and for the most part simply mirror developments in other net assets denominated in euro and/or net foreign assets.

#### 3 FORECAST ERRORS FOR AGGREGATE AUTONOMOUS FACTORS

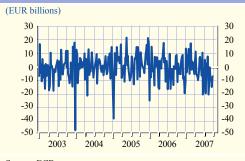
As already mentioned, the quality of the forecasts and, in particular, their unbiasedness, is of utmost importance. An overview of the statistical properties of the forecast errors for autonomous factors is provided in this section, distinguishing between weekly accumulated errors and sameday errors. The former are important for assessing the precision of the calibration of the weekly MRO allotments, while the latter are important for end-of-period FTOs.

### WEEKLY ACCUMULATED AGGREGATE FORECAST ERRORS FOR AUTONOMOUS FACTORS

The weekly accumulated aggregate forecast errors<sup>2</sup> for autonomous factors on the MRO allotment days fluctuated around a mean of  $\in$ -200 million (median  $\in$ -14 million). However, the standard deviation of slightly more than  $\in$ 9 billion

2 The one week ahead forecasts on each MRO allotment day are usually conducted from Tuesday to Tuesday, inclusive. The accumulated error denotes the sum of the differences between this forecast and the realised value for each day over the relevant week. Negative values denote an underestimation of autonomous factors.

Chart 8 Accumulated forecast errors for total autonomous factors over the week



renders this figure insignificantly different from zero, indicating an absence of statistical bias. Errors fluctuated between extremes of  $\[ \in \] 21$  billion and  $\[ \in \] 46$  billion in the weeks ending 24 May 2005 and 30 December 2003, respectively (see Chart 8).

Chart 8 also illustrates that the period of increased market volatility since August 2007 has been associated with a slightly increased frequency of large forecast errors. These were caused, in particular, by government deposits and other factors net. However, overall, the forecasting feasibility has not significantly deteriorated in this period.

An analysis of the average monthly variance of the forecast errors reveals that autonomous factors (notably banknotes in circulation) display greater variance in December and January. Controlling for two large outliers occurring as a result of this,<sup>3</sup> the forecast errors closely resemble a normal distribution (see Chart 9). Overall, the forecast errors for the accumulated weekly autonomous factors are unbiased<sup>4</sup>, including during the recent period of increased market volatility.

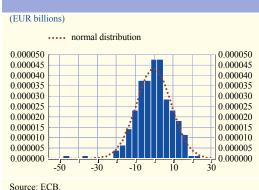
### SAME-DAY AGGREGATE FORECAST ERRORS FOR AUTONOMOUS FACTORS

The forecast errors for the same-day aggregate forecast underlying the calibration of any end-of-period fine-tuning operations display properties very similar to the weekly accumulated aggregate forecast errors for autonomous factors (see Chart 10). Two large negative outliers were observed, which both fell in the periods with the highest variance in December and January.<sup>5</sup>

#### 4 EXCESS RESERVES

In comparison with autonomous factors and reserve requirements, excess reserves are a tiny, but equally important liquidity need at the margin. In contrast to the reserve requirements, excess reserves are not remunerated by the Eurosystem and are therefore costly to banks. Nevertheless, a variety of reasons for holding excess reserves

Chart 9 Histogram showing forecast errors for accumulated autonomous factors

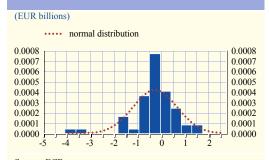


Source. ECB. Note: The dashed curve represents the fitted normal distribution (s=69 billion).

have been identified,<sup>6</sup> which include avoiding operative and administrative costs, maintaining buffers to insure against liquidity shocks late in the day, inactive management of bank's current accounts, fulfilling liquidity requirements under national laws, and missing access to the deposit facility of the Eurosystem.

- 3 €-46 billion (government deposits) observed on 30 December 2003 and €-38 billion (banknotes in circulation) observed on 11 January 2005.
- 4 Formal tests do not reject normality of forecast errors Furthermore, there is no evidence of serial correlation.
- 5 €-3.8 billion (government deposits) occurred on 23 December 2003 and €-3.2 billion (banknotes) occurred on 18 January 2005.
- 6 See Box on excess reserves in the October 2005 issue of the Monthly Bulletin.



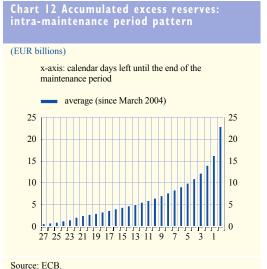


Source: ECB.
Note: The dashed curve represents the fitted normal distribution (s= €900 million).

#### **ARTICLES**

The Eurosystem's experience with forecasting autonomous factors and excess reserves





In the period from March 2004 (when the operational framework was amended)7 September 2006, the average daily excess reserves amounted to €710 million (median €727 million), while they have been somewhat higher since October 2006, with a daily average of €896 million (median €836 million). In July 2007 a maximum daily average of €1,251 million<sup>8</sup> was reached (see Chart 11).

Daily excess reserves rise exponentially during a maintenance period, because the likelihood increases day by day that credit institutions have fulfilled their reserve requirements. The possible use of excess reserves as a buffer against noncompliance with reserve requirements (for instance, in case of not receiving an expected payment) implies that a particularly high share of total excess reserves is held on the last day.

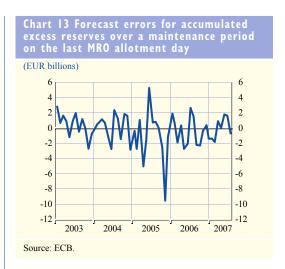
#### FORECASTING PROCEDURES

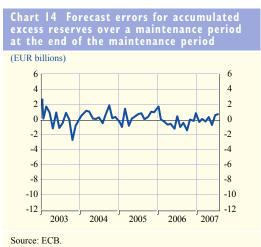
Source: ECB

Excess reserves for a given maintenance period are forecast at three different points in time as information on actually accumulated excess reserves becomes available to the Eurosystem, following the pattern in Chart 12. First, at the beginning of the maintenance period, when no or very little information is available, a forecast is made exclusively on the basis of observations from previous maintenance periods. Second, on the allotment day of the last MRO of the maintenance period, part of the excess reserves will already have accumulated (usually around one third of the total amount for the maintenance period), which provides a basis for a revised forecast. Finally, on the last day of the maintenance period, information on actually accumulated excess reserve holdings up to the penultimate day of the maintenance period is obtained (usually around two thirds of excess reserves of the total amount for the maintenance period). This information significantly improves the forecast<sup>9</sup> and is an important input in the calculation of the expected liquidity imbalance on the last day of the maintenance period, which is used to calibrate the possible end-of-period FTOs.

The abovementioned three forecasts of excess reserves are based on time series models. which take into account the most recent available cumulative figure on excess reserves. Complementary sources of information, which include forecasts by NCBs of their domestic excess reserves and anecdotal evidence, are used to improve the forecast quality.

- For a detailed description of the changes to the framework, see the article entitled "Initial experience with the changes to the Eurosystem's operational framework for monetary policy implementation" in the February 2005 issue of the Monthly Bulletin.
- Here one individual bank used its current account holdings for liquidity needs for securities settlement.
- A fractional integrated ARIMAX model is used, which improves forecast performance measured by root mean square errors by a factor of four compared with trivial methods (e.g. assuming values of the previous maintenance period as forecasts).





Charts 13 and 14 display the errors in the Eurosystem's forecast of excess reserves (expressed in accumulated terms over a maintenance period) on the day of the last MRO (thus with a one-week horizon) and on the last day of the maintenance period (with a one-day horizon), respectively.

#### **SAME-DAY FORECAST ERRORS**

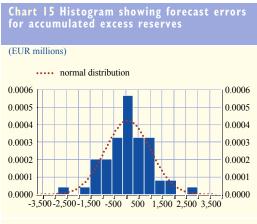
The histogram of the series of same-day errors 10 shows that errors are centred around zero with a statistically insignificant mean (the average amounts to €3 million). Furthermore, the forecast errors for excess reserves show no time dependence, either on the last MRO allotment or on the last day of the maintenance period, indicating that errors do not follow a systematic pattern. Interestingly, neither the absolute level of excess reserves, nor the forecast errors, have been significantly affected by the increased financial market volatility since August 2007. Overall, there are no indications that the forecast errors for excess reserves are biased.

#### 5 FORECAST ERRORS FOR THE LIQUIDITY IMBALANCE ON THE LAST DAY OF A MAINTENANCE PERIOD

The last day of every maintenance period has a special significance, since liquidity imbalances can no longer be addressed via a MRO allotment or a FTO. Unavoidably, therefore,

recourse is made to standing facilities, leading to volatility in the overnight rate. As a result of the changes made to the operational framework in 2004, the time between the allotment of the last MRO and the last day of the maintenance period increased to seven calendar days. The resulting longer forecast horizon increased the size of the liquidity imbalances. To counter the effect on short-term interest rates, the ECB frequently uses FTOs, conducted on the last day of the maintenance period with a maturity of one day.

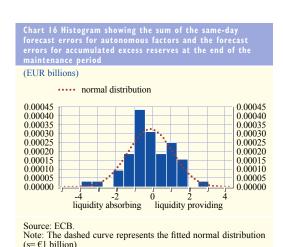
10 The analysis only regards the same-day errors, since these are relevant for the liquidity imbalance on the last day of the maintenance period.



Source: ECB. Note: The dashed curve represents the fitted normal distribution (s= €940 million).

#### **ARTICLES**

The Eurosystem's experience with forecasting autonomous factors and excess reserves



When deciding on the need for and the scale of the FTO, the main part of the expected liquidity imbalance for the last day are already known, consisting of the forecast errors for autonomous factors realised up to the last day. The remaining uncertainty stems from two sources: the sameday aggregate error in the autonomous factor forecast for the last day of the maintenance period and the difference between the most recent excess reserves forecast and the realised excess reserves, which were assessed in the preceding sections. Since both of these sets of errors appear to be random (around a zero mean, i.e. the forecast is unbiased), the same applies to the sum of the two errors.

The joint errors of the two forecasts are concentrated around a small, insignificant mean (see Chart 16). The recent period of market volatility did not lead to additional outliers in forecasting the end-of-period imbalances.

#### 6 CONCLUSION

This article has provided information on the properties of individual and aggregate autonomous factors and excess reserves. It has explained how the Eurosystem forecasts these liquidity factors in order to determine the adequate allotment amounts in open market operations and has reviewed the errors made in these forecasts in order to check that they are unbiased.

The findings of the article can be summarised follows. From the perspective of the Eurosystem's liquidity management, the most significant individual autonomous government deposits and banknotes in circulation, which both exhibit relative large fluctuations and forecast errors. Excess reserves is a tiny, but significant liquidity need at the margin, which can be predicted with a high degree of precision on the last day of the maintenance period. The variance in both the aggregate autonomous factors and excess reserves shows some seasonality, increasing in December and January, meaning that large forecast errors occasionally occur in this period of the year. However, an assessment of the forecast performance for the period from January 2003 to October 2007 shows that the forecasting procedures led to unbiased estimates for both liquidity factors. Although the recent period of increased market volatility has been associated with some large autonomous factor forecasting errors, it has not led to a significant deterioration in the forecast performance for either aggregate autonomous factors or excess reserves. This identification of the forecast errors as statistically unbiased also holds for weekly accumulated errors, as well as same-day error on the last day of the maintenance period.

### **EURO AREA STATISTICS**



### **CONTENTS** <sup>1</sup>

|     |      | AREA OVERVIEW   |           |
|-----|------|---|-----------|
|     | Sum  | mary of economic indicators for the euro area   | \$ !      |
| ı i | MON  | ETARY POLICY STATISTICS   |           |
|     | 1.1  | Consolidated financial statement of the Eurosystem  | S         |
|     | 1.2  | Key ECB interest rates  | S 7       |
|     | 1.3  | Eurosystem monetary policy operations allotted through tenders  | \$8       |
|     | 1.4  | Minimum reserve and liquidity statistics  | SS        |
| 2   | MON  | EY, BANKING AND INVESTMENT FUNDS  |           |
|     | 2.1  | Aggregated balance sheet of euro area MFIs  | \$10      |
|     | 2.2  | Consolidated balance sheet of euro area MFIs  | \$1       |
|     | 2.3  | Monetary statistics   | \$12      |
|     | 2.4  | MFI loans, breakdown  | \$14      |
|     | 2.5  | Deposits held with MFIs, breakdown  | \$17      |
|     | 2.6  | MFI holdings of securities, breakdown   | \$20      |
|     | 2.7  | Revaluation of selected MFI balance sheet items   | <b>S2</b> |
|     | 2.8  | Currency breakdown of selected MFI balance sheet items  | \$27      |
|     | 2.9  | Aggregated balance sheet of euro area investment funds  | \$24      |
|     | 2.10 | Assets of euro area investment funds broken down by investment policy and type of investor                | \$25      |
| 3   | EURO | AREA ACCOUNTS   |           |
|     | 3.1  | Integrated economic and financial accounts by institutional sector  | \$26      |
|     | 3.2  | Euro area non-financial accounts  | \$30      |
|     | 3.3  | Households  | \$37      |
|     |      | Non-financial corporations  | \$33      |
|     | 3.5  | Insurance corporations and pension funds  | \$34      |
| 4   | FINA | NCIAL MARKETS   |           |
|     | 4.1  | Securities, other than shares, by original maturity, residency of the issuer and currency                 | \$35      |
|     | 4.2  | Securities, other than shares, issued by euro area residents, by sector of the issuer and instrument type | \$36      |
|     | 4.3  | Growth rates of securities, other than shares, issued by euro area residents                              | \$38      |
|     | 4.4  | Quoted shares issued by euro area residents   | \$40      |
|     | 4.5  | MFI interest rates on euro-denominated deposits and loans by euro area residents                          | \$47      |
|     | 4.6  | Money market interest rates   | \$44      |
|     | 4.7  | Government bond yields  | \$45      |
|     | 4.8  | Stock market indices  | \$46      |
| 5   | PRIC | ES, OUTPUT, DEMAND AND LABOUR MARKETS   |           |
|     | 5.1  | HICP, other prices and costs  | \$47      |
|     | 5.2  | Output and demand   | \$50      |
|     | 5.3  | Labour markets  | \$54      |
| 6   | GOVE | RNMENT FINANCE  |           |
|     | 6.1  | Revenue, expenditure and deficit/surplus  | \$55      |
|     | 6.2  | Debt  | \$56      |

<sup>1</sup> For further infomation, please contact us at: 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  | \$57 |
|---|---|------|
|   | 6.4 Quarterly revenue, expenditure and deficit/surplus                                      | \$58 |
|   | 6.5 Quarterly debt and change in debt   | \$59 |
| , | EXTERNAL TRANSACTIONS AND POSITIONS   |      |
|   | 7.1 Balance of payments   | \$60 |
|   | 7.2 Monetary presentation of the balance of payments  | \$65 |
|   | 7.3 Geographical breakdown of the balance of payments and international investment position | \$66 |
|   | 7.4 International investment position (including international reserves)                    | 868  |
|   | 7.5 Trade in goods  | \$70 |
| 3 | EXCHANGE RATES  |      |
|   | 8.1 Effective exchange rates  | \$72 |
|   | 8.2 Bilateral exchange rates  | \$73 |
| ) | DEVELOPMENTS OUTSIDE THE EURO AREA  |      |
|   | 9.1 In other EU Member States   | \$74 |
|   | 9.2 In the United States and Japan  | \$75 |
|   | LIST OF CHARTS  | \$76 |
|   | TECHNICAL NOTES   | \$77 |
|   | GENERAL NOTES   | \$83 |

#### ENLARGEMENT OF THE EURO AREA ON I JANUARY 2008 TO INCLUDE CYPRUS AND MALTA

Unless otherwise indicated, all data series covering observations for 2008 relate to the Euro 15 (the euro area including Cyprus and Malta) 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, 2007 and 2008, calculated from a base in 2000, 2006 and 2007, use a series which takes into account the impact of the entry of Greece, Slovenia and Cyprus and Malta, respectively, into the euro area. Historical data referring to the euro area before the entry of Cyprus and Malta 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

| 66 22 | data do not | :-4/1-4-   |         | 1: 1.1 .   |
|-------|-------------|------------|---------|------------|
| _     | data do not | exist/data | are not | anniicanie |

"." data are not yet available

"..." nil or negligible

"billion" 109

(p) provisional

s.a. seasonally adjusted

n.s.a. non-seasonally adjusted





### **EURO AREA OVERVIEW**

Summary of economic indicators for the euro area

#### 1. Monetary developments and interest rates

|                | M1 1) | M2 <sup>1)</sup> | M3 <sup>1), 2)</sup> | M3 1), 2) 3-month moving average (centred) | MFI loans to<br>euro area<br>residents<br>excluding MFIs<br>and general<br>government 1) | Securities other<br>than shares issued<br>in euro by non-MFI<br>corporations <sup>(1)</sup> | 3-month<br>interest rate<br>(EURIBOR,<br>% per annum,<br>period<br>averages) | 10-year<br>government<br>bond yield<br>(% per annum,<br>period<br>averages) |
|----------------|-------|------------------|----------------------|--|--|---|--|---|
|                | 1     | 2                | 3                    | 4  | 5  | 6   | 7  | 8   |
| 2006           | 8.6   | 8.7              | 8.4                  | -  | 10.9   | 15.7  | 3.08   | 3.86  |
| 2007           |       |                  |                      | -  |  |   | 4.28   | 4.33  |
| 2007 Q1        | 7.0   | 9.1              | 10.2                 | -  | 10.6   | 16.3  | 3.82   | 4.08  |
| Q2             | 6.2   | 9.2              | 10.6                 | -  | 10.5   | 18.5  | 4.07   | 4.42  |
| Q3             | 6.5   | 10.3             | 11.5                 | -  | 11.0   | 20.0  | 4.49   | 4.48  |
| Q2<br>Q3<br>Q4 |       |                  |                      | -  |  |   | 4.72   | 4.34  |
| 2007 July      | 6.8   | 10.4             | 11.7                 | 11.4                                       | 11.0   | 20.5  | 4.22   | 4.63  |
| Aug.           | 6.7   | 10.5             | 11.6                 | 11.5                                       | 11.2   | 20.3  | 4.54   | 4.43  |
| Sep.           | 6.0   | 10.2             | 11.3                 | 11.7                                       | 11.0   | 19.0  | 4.74   | 4.37  |
| Oct.           | 6.5   | 11.2             | 12.3                 | 11.9                                       | 11.2   | 19.3  | 4.69   | 4.40  |
| Nov.           | 6.2   | 10.9             | 12.3                 |  | 11.0   |   | 4.64   | 4.25  |
| Dec.           |       |                  |                      |  |  |   | 4.85   | 4.38  |

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

|                           | HICP              | Industrial<br>producer<br>prices | Hourly<br>labour<br>costs | Real GDP    | Industrial<br>production<br>excluding<br>construction | Capacity<br>utilisation in<br>manufacturing<br>(percentages) | Employment  | Unemployment<br>(% of labour<br>force) |
|---------------------------|-------------------|----------------------------------|---------------------------|-------------|---|--|-------------|--|
|                           | 1                 | 2                                | 3                         | 4           | 5   | 6  | 7           | 8                                      |
| 2006<br>2007              | 2.2               | 5.1                              | 2.6                       | 2.8         | 4.0   | 83.3   | 1.5         | 8.2                                    |
| 2007 Q2<br>Q3<br>Q4       | 1.9<br>1.9        | 2.4<br>2.1                       | 2.4<br>2.5                | 2.5<br>2.7  | 2.7<br>3.9  | 84.6<br>84.3   | 1.8<br>1.9  | 7.5<br>7.3                             |
| 2007 July<br>Aug.<br>Sep. | 1.8<br>1.7<br>2.1 | 1.8<br>1.8<br>2.7                | -<br>-<br>-               | -<br>-<br>- | 4.0<br>4.4<br>3.3                                     | 84.3   | -<br>-<br>- | 7.4<br>7.3<br>7.3                      |
| Oct.<br>Nov.<br>Dec.      | 2.6<br>3.1<br>3.1 | 3.3<br>4.1                       | -                         | -           | 3.7   | 84.2   | -           | 7.2<br>7.2                             |

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

(EUR billions, unless otherwise indicated)

|   | Bal                      | ance of payments         | (net transactions)           |                               | Reserve assets<br>(end-of-period          |  |  | USD/EUR<br>exchange rate                                 |
|---|--------------------------|--------------------------|------------------------------|-------------------------------|---|--|--|--|
|   | Current and capital      | Goods                    | Direct<br>investment         | Portfolio<br>investment       | positions)                                | (index, 1999                                       | 8  |  |
|   | accounts                 | Goods                    | mvestment                    | mvestment                     |   | Nominal  | Real (CPI)   |  |
|   | 1                        | 2                        | 3                            | 4                             | 5   | 6  | 7  | 8  |
| 2006<br>2007                                      | -3.7                     | 23.0                     | -136.4                       | 276.4                         | 325.8                                     | 103.6<br>107.7                                     | 104.5<br>108.3                                     | 1.2556<br>1.3705   |
| 2007 Q1<br>Q2<br>Q3<br>Q4                         | 4.8<br>1.2<br>13.1       | 8.6<br>20.3<br>20.2      | -14.6<br>-69.1<br>-29.9      | 129.8<br>69.5<br>97.3         | 331.5<br>325.3<br>340.5                   | 105.5<br>107.1<br>107.6<br>110.5                   | 106.1<br>107.7<br>108.2<br>111.1                   | 1.3106<br>1.3481<br>1.3738<br>1.4486                     |
| 2007 July<br>Aug.<br>Sep.<br>Oct.<br>Nov.<br>Dec. | 5.7<br>1.7<br>5.7<br>3.1 | 9.4<br>4.5<br>6.3<br>7.7 | 0.1<br>-7.2<br>-22.8<br>21.3 | 30.2<br>21.9<br>45.2<br>-53.8 | 328.8<br>330.4<br>340.5<br>346.6<br>339.2 | 107.6<br>107.1<br>108.2<br>109.4<br>111.0<br>111.2 | 108.1<br>107.7<br>108.8<br>110.0<br>111.6<br>111.8 | 1.3716<br>1.3622<br>1.3896<br>1.4227<br>1.4684<br>1.4570 |

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**

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

#### 1. Assets

|   | 2007 14 December | <b>2007 21 December</b> | 2007 28 December | <b>2008 4 January</b> |
|---|------------------|-------------------------|------------------|-----------------------|
| Gold and gold receivables                             | 185,303          | 184,534                 | 201,546          | 201,744               |
| Claims on non-euro area residents in foreign currency | 142,707          | 137,587                 | 135,171          | 137,995               |
| Claims on euro area residents in foreign currency     | 25,100           | 35,720                  | 41,911           | 41,698                |
| Claims on non-euro area residents in euro             | 13,960           | 13,580                  | 13,827           | 14,705                |
| Lending to euro area credit institutions in euro      | 488,669          | 617,134                 | 637,176          | 397,546               |
| Main refinancing operations                           | 218,501          | 348,608                 | 368,607          | 128,499               |
| Longer-term refinancing operations                    | 270,004          | 268,476                 | 268,476          | 268,487               |
| Fine-tuning reverse operations                        | 0                | 0                       | 0                | 0                     |
| Structural reverse operations                         | 0                | 0                       | 0                | 0                     |
| Marginal lending facility                             | 163              | 48                      | 91               | 560                   |
| Credits related to margin calls                       | 1                | 2                       | 2                | 0                     |
| Other claims on euro area credit institutions in euro | 23,417           | 23,796                  | 23,898           | 26,212                |
| Securities of euro area residents in euro             | 98,351           | 97,236                  | 96,045           | 98,175                |
| General government debt in euro                       | 37,097           | 37,097                  | 37,063           | 38,705                |
| Other assets  | 323,814          | 326,277                 | 324,609          | 329,010               |
| Total assets  | 1,338,418        | 1,472,961               | 1,511,244        | 1,285,790             |

#### 2. Liabilities

|  | 2007 14 December | 2007 21 December | 2007 28 December | 2008 4 January |
|--|------------------|------------------|------------------|----------------|
| Banknotes in circulation                                   | 659,561          | 675,881          | 676,677          | 670,815        |
| Liabilities to euro area credit institutions in euro       | 235,017          | 355,995          | 379,181          | 144,214        |
| Current accounts (covering the minimum reserve system)     | 234,762          | 214,185          | 267,335          | 143,652        |
| Deposit facility   | 223              | 236              | 8,831            | 554            |
| Fixed-term deposits  | 0                | 141,565          | 101,580          | 0              |
| Fine-tuning reverse operations                             | 0                | 0                | 0                | 0              |
| Deposits related to margin calls                           | 32               | 9                | 1,435            | 8              |
| Other liabilities to euro area credit institutions in euro | 158              | 142              | 126              | 349            |
| Debt certificates issued                                   | 0                | 0                | 0                | 0              |
| Liabilities to other euro area residents in euro           | 58,045           | 49,857           | 46,173           | 57,571         |
| Liabilities to non-euro area residents in euro             | 31,378           | 38,188           | 45,090           | 45,584         |
| Liabilities to euro area residents in foreign currency     | 444              | 888              | 2,490            | 1,591          |
| Liabilities to non-euro area residents in foreign currency | 19,869           | 16,843           | 15,552           | 17,594         |
| Counterpart of special drawing rights allocated by the IMF | 5,398            | 5,398            | 5,278            | 5,311          |
| Other liabilities  | 128,568          | 129,785          | 124,377          | 123,693        |
| Revaluation accounts                                       | 131,060          | 131,060          | 147,410          | 147,665        |
| Capital and reserves                                       | 68,920           | 68,924           | 68,890           | 71,403         |
| Total liabilities  | 1,338,418        | 1,472,961        | 1,511,244        | 1,285,790      |

#### 1.2 Key ECB interest rates

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

| With effect from 1)    | Deposit      | facility       | Ma                 | in refinancing operation | Marginal lending facility |              |                |
|------------------------|--------------|----------------|--------------------|--------------------------|---------------------------|--------------|----------------|
|                        |              |                | Fixed rate tenders | Variable rate tenders    |                           |              |                |
|                        |              |                | Fixed rate         | Minimum bid rate         |                           |              |                |
|                        | Level        | Change         | Level              | Level                    | Change                    | Level        | Change         |
|                        | 1            | 2              | 3                  | 4                        | 5                         | 6            | 7              |
| 1999 1 Jan.            | 2.00         | -              | 3.00               | -                        | -                         | 4.50         | -              |
| 4 2)                   | 2.75         | 0.75           | 3.00<br>3.00       | -                        |                           | 3.25         | -1.25          |
| 22<br>9 Apr.           | 2.00<br>1.50 | -0.75<br>-0.50 | 2.50               | -                        | -0.50                     | 4.50<br>3.50 | 1.25<br>-1.00  |
| 5 Nov.                 | 2.00         | 0.50           | 3.00               | -                        | 0.50                      | 4.00         | 0.50           |
| 2000 4 Feb.            | 2.25         | 0.25           | 3.25               | -                        | 0.25                      | 4.25         | 0.25           |
| 17 Mar.                | 2.50         | 0.25           | 3.50               | -                        | 0.25                      | 4.50         | 0.25           |
| 28 Apr.                | 2.75         | 0.25           | 3.75               | -                        | 0.25                      | 4.75         | 0.25           |
| 9 June                 | 3.25         | 0.50           | 4.25               | -                        | 0.50                      | 5.25         | 0.50           |
| 28 3)                  | 3.25<br>3.50 | 0.25           | -                  | 4.25<br>4.50             | 0.25                      | 5.25<br>5.50 | 0.25           |
| 1 Sep.<br>6 Oct.       | 3.75         | 0.25           |                    | 4.30<br>4.75             | 0.25                      | 5.30<br>5.75 | 0.25           |
|                        |              |                |                    |                          |                           |              |                |
| 2001 11 May<br>31 Aug. | 3.50<br>3.25 | -0.25<br>-0.25 | -                  | 4.50<br>4.25             | -0.25<br>-0.25            | 5.50<br>5.25 | -0.25<br>-0.25 |
| 18 Sep.                | 2.75         | -0.23          | -                  | 3.75                     | -0.23<br>-0.50            | 4.75         | -0.23          |
| 9 Nov.                 | 2.75         | -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         | -0.23          |                    | 2.00                     | -0.23                     | 3.00         | -0.23          |
| 2005 6 Dec.            | 1.25         | 0.25           |                    | 2.25                     | 0.25                      | 3.25         | 0.25           |
|                        |              |                |                    |                          |                           |              |                |
| 2006 8 Mar.<br>15 June | 1.50<br>1.75 | 0.25<br>0.25   | -                  | 2.50<br>2.75             | 0.25<br>0.25              | 3.50<br>3.75 | 0.25<br>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           |

- 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 1), 2)

#### 1. Main and longer-term refinancing operations 3)

| Date of settlement | Bids (amount) | Number of participants | Allotment (amount) | V                  |                             | Running for () days   |          |
|--------------------|---------------|------------------------|--------------------|--------------------|-----------------------------|-----------------------|----------|
| 56416411641        | (amount)      | par ucipanio           | (amount)           | Minimum bid rate   | Marginal rate <sup>4)</sup> | Weighted average rate | (m) anys |
|                    | 1             | 2                      | 3                  | 4                  | 5                           | 6                     | 7        |
|                    |               |                        | Main refinan       | cing operations    |                             |                       |          |
| 2007 12 Sep.       | 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        |
| 10                 | 322,684       | 342                    | 218,000            | 4.00               | 4.12                        | 4.16                  | 7        |
| 17                 | 283,439       | 349                    | 171,000            | 4.00               | 4.11                        | 4.14                  | 7        |
| 24                 | 304,089       | 348                    | 182,000            | 4.00               | 4.11                        | 4.14                  | 7        |
| 31                 | 287,241       | 308                    | 170,000            | 4.00               | 4.14                        | 4.16                  | 7        |
| 7 Nov.             | 275,580       | 300                    | 160,000            | 4.00               | 4.14                        | 4.15                  | 7        |
| 14                 | 280,458       | 298                    | 182,000            | 4.00               | 4.15                        | 4.16                  | 7        |
| 21                 | 277,051       | 299                    | 169,000            | 4.00               | 4.17                        | 4.19                  | 7        |
| 28                 | 257,966       | 283                    | 178,000            | 4.00               | 4.18                        | 4.20                  | 7        |
| 5 Dec.             | 253,519       | 273                    | 163,000            | 4.00               | 4.18                        | 4.20                  | 7        |
| 12                 | 280,565       | 284                    | 218,500            | 4.00               | 4.18                        | 4.21                  | .7       |
| 19                 | 377,148       | 390                    | 348,607            | 4.00               | 4.21                        | 4.21                  | 16       |
| 28                 | 47,652        | 118                    | 20,000             | 4.00               | 4.20                        | 4.27                  | 7        |
| 2008 4 Jan.        | 275,291       | 269                    | 128,500            | 4.00               | 4.18                        | 4.21                  | 5        |
| 9                  | 283,354       | 301                    | 151,500            | 4.00               | 4.20                        | 4.22                  | 7        |
|                    |               |                        | Longer-term refi   | nancing operations |                             |                       |          |
| 2007 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       |
| 1 Nov.             | 87,587        | 157                    | 50,000             | -                  | 4.45                        | 4.53                  | 91       |
| 23                 | 147,977       | 130                    | 60,000             | -                  | 4.55                        | 4.61                  | 90       |
| 29                 | 132,386       | 175                    | 50,000             | -                  | 4.65                        | 4.70                  | 91       |
| 12 Dec.            | 105,126       | 122                    | 60,000             | -                  | 4.81                        | 4.88                  | 92       |
| 20                 | 48,476        | 97                     | 48,476             | -                  | 4.00                        | 4.56                  | 98       |

#### 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<br>bid rate   | Marginal<br>rate 4) | Weighted average rate |   |
|                    | 1                                 | 2             | 3                      | 4                  | 5                  | 6                     | 7                   | 8                     | 9 |
| 2007 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 |
| 9 Oct.             | Collection of fixed-term deposits | 40,235        | 18                     | 24,500             | 4.00               | -                     | -                   | _                     | 1 |
| 12                 | Collection of fixed-term deposits | 40,080        | 22                     | 30,000             | 4.00               | -                     | -                   | -                     | 5 |
| 13 Nov.            | Collection of fixed-term deposits | 27,750        | 10                     | 27,750             | 4.00               | -                     | -                   | _                     | 1 |
| 7 Dec.             | Collection of fixed-term deposits | 37,615        | 30                     | 8,000              | 4.00               | _                     | _                   | _                     | 5 |
| 11                 | Collection of fixed-term deposits | 23,550        | 20                     | 21,000             | 4.00               | -                     | -                   | _                     | 1 |
| 17                 | Collection of fixed-term deposits | 36,610        | 25                     | 36,610             | 4.00               | _                     | _                   | _                     | 2 |
| 19                 | Collection of fixed-term deposits | 133,610       | 52                     | 133,610            | 4.00               | -                     | -                   | -                     | 1 |
| 20                 | Collection of fixed-term deposits | 165,815       | 58                     | 150,000            | 4.00               | -                     | -                   | _                     | 1 |
| 21                 | Collection of fixed-term deposits | 141,565       | 55                     | 141,565            | 4.00               | -                     | -                   | -                     | 6 |
| 27                 | Collection of fixed-term deposits | 145,640       | 49                     | 145,640            | 4.00               | -                     | -                   | -                     | 1 |
| 28                 | Collection of fixed-term deposits | 160,450       | 52                     | 150,000            | 4.00               | -                     | -                   | -                     | 3 |
| 2008 2 Jan.        | Collection of fixed-term deposits | 168,640       | 54                     | 168,640            | 4.00               | -                     | -                   | -                     | 1 |
| 3                  | Collection of fixed-term deposits | 212,620       | 69                     | 200,000            | 4 00               | _                     | _                   | _                     | 1 |

The amounts shown may differ slightly from those in Section 1.1 due to operations allotted but not settled.

With effect from April 2002, split tender operations, i.e. operations with one-week maturity conducted as standard tenders in parallel with a main refinancing operation, are classified as main refinancing operations. For split tender operations conducted before this month, see Table 2 in Section 1.3.

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.

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

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

| Reserve<br>base | Total    | Liabilities to which a 2% res  | serve coefficient is applied                         | Liabilities to which a 0% reserve coefficient is applied            |         |   |  |  |
|-----------------|----------|--|--|---|---------|---|--|--|
| as at 1)        |          | Deposits<br>(overnight,<br>up to 2 years'<br>agreed maturity<br>and notice period) | Debt securities<br>up to 2 years'<br>agreed maturity | Deposits<br>(over 2 years'<br>agreed maturity<br>and notice period) | Repos   | Debt securities<br>over 2 years'<br>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   |  |  |
| Q2              | 16,753.3 | 8,940.5  | 677.6  | 2,066.6   | 1,383.5 | 3,685.1   |  |  |
| 2007 July       | 16,822.3 | 8,955.9  | 694.0  | 2,089.3   | 1,392.1 | 3,690.9   |  |  |
| Aug.            | 16,890.0 | 8,994.1  | 713.9  | 2,086.8   | 1,407.8 | 3,687.5   |  |  |
| Sep.            | 16,968.2 | 9,073.2  | 745.5  | 2,075.7   | 1,424.9 | 3,649.0   |  |  |
| Oct. 2)         | 17,242.4 | 9,255.8  | 799.4  | 2,098.1   | 1,425.0 | 3,664.2   |  |  |

#### 2. Reserve maintenance

| Maintenance<br>period | Required reserves | Credit institutions' current accounts | Excess reserves | Deficiencies | Interest rate on minimum reserves |
|-----------------------|-------------------|---------------------------------------|-----------------|--------------|-----------------------------------|
| ending on:            | 1                 | 2                                     | 3               | 4            | 5                                 |
| 2006                  | 172.5             | 173.2                                 | 0.7             | 0.0          | 3.30                              |
| 2007                  | 195.9             | 196.8                                 | 1.0             | 0.0          | 4.17                              |
| 2007 Q1               | 179.8             | 180.6                                 | 0.8             | 0.0          | 3.55                              |
| Q2<br>Q3              | 185.3             | 186.2                                 | 0.9             | 0.0          | 3.80                              |
| Q3                    | 191.9             | 192.7                                 | 0.9             | 0.0          | 4.09                              |
| 2007 9 Oct.           | 192.5             | 193.4                                 | 0.9             | 0.0          | 4.18                              |
| 13 Nov.               | 193.7             | 194.4                                 | 0.7             | 0.0          | 4.12                              |
| 11 Dec.               | 195.9             | 196.8                                 | 1.0             | 0.0          | 4.17                              |
| 2008 15 Jan. (e) 3)   | 199.8             |                                       |                 |              |                                   |

#### 3. Liquidity

| Maintenance<br>period<br>ending on:                               |  | Liquidity  | -providing fact Monetary po                        | ns of the Euro                         | Liquidity-absorbing factors osystem            |  |  |  |   | Credit<br>institutions'<br>current<br>accounts           | Base<br>money                                      |  |
|---|--|--|--|--|--|--|--|--|---|--|--|--|
|   | Eurosystem's<br>net assets<br>in gold<br>and foreign<br>currency | Main<br>refinancing<br>operations                  | Longer-term refinancing operations                 | Marginal<br>lending<br>facility        | Other<br>liquidity-<br>providing<br>operations | Deposit<br>facility                    | Other<br>liquidity-<br>absorbing<br>operations | Banknotes<br>in<br>circulation                     | Central<br>government<br>deposits<br>with the<br>Eurosystem | Other<br>factors<br>(net)                                | <b>1</b> 000 <b>1</b> 00                           |  |
|   | 1  | 2  | 3  | 4                                      | 5  | 6                                      | 7  | 8  | 9   | 10   | 11   | 12   |
| 2005<br>2006  | 313.2<br>327.0   | 301.3<br>313.1                                     | 90.0<br>120.0                                      | 0.0<br>0.1                             | 0.0<br>0.1                                     | 0.1<br>0.1                             | 0.3<br>0.0                                     | 539.8<br>598.6                                     | 51.0<br>54.9  | -39.6<br>-66.4   | 153.0<br>173.2                                     | 692.9<br>771.8                                     |
| 2007 Q2   | 326.4  | 284.9  | 150.0  | 0.3                                    | 0.0  | 0.2                                    | 0.2  | 625.2  | 49.1  | -99.4  | 186.2  | 811.7  |
| 2007 10 July<br>7 Aug.<br>11 Sep.<br>9 Oct.<br>13 Nov.<br>11 Dec. | 323.0<br>316.7<br>317.3<br>321.9<br>327.6<br>327.5               | 295.4<br>301.7<br>268.7<br>194.3<br>180.2<br>173.0 | 150.0<br>150.0<br>171.7<br>262.3<br>265.0<br>278.6 | 0.2<br>0.1<br>0.2<br>0.3<br>0.1<br>0.3 | 0.1<br>0.0<br>10.7<br>0.0<br>0.0<br>0.0        | 0.3<br>0.4<br>0.4<br>1.6<br>0.6<br>0.4 | 0.0<br>0.0<br>1.7<br>0.9<br>5.1<br>2.2         | 631.3<br>639.7<br>639.2<br>637.3<br>640.1<br>644.6 | 53.9<br>52.3<br>52.3<br>63.7<br>55.9<br>61.9                | -106.4<br>-115.8<br>-117.8<br>-118.0<br>-123.3<br>-126.6 | 189.6<br>192.0<br>192.7<br>193.4<br>194.4<br>196.8 | 821.2<br>832.1<br>832.4<br>832.3<br>835.1<br>841.9 |

- The end-October 2007 reserve base is used for the calculation of the reserve requirements of euro area credit institutions for the maintenance period ending in January 2008 and therefore includes the reserve bases of credit institutions in Cyprus and Malta. For reserve base figures as from end-October 2007, credit institutions located in other euro area countries may have decided to deduct from their own reserve bases any liabilities owed to credit institutions located in Cyprus and Malta.
   Owing to the adoption of the euro by Cyprus and Malta on 1 January 2008, the reserve requirement is an average weighted by the number of calendar days of the reserve requirements for the then 13 countries of the euro area for the period 12-31 December 2007 and the reserve requirements for the 15 countries now in the euro area for the
- period 1-15 January 2008.



## MONEY, BANKING AND INVESTMENT FUNDS

## 2.1 Aggregated balance sheet of euro area MFIs 1) (EUR billions; outstanding amounts at end of period)

#### 1. Assets

|              | Total                | Lo                   | ans to euro a         | rea resident                    | ts                 |                    | ngs of securi<br>ssued by eur |                |                    | Money<br>market<br>fund | Holdings<br>of shares/<br>other equity | External assets    | Fixed assets   | Remaining<br>assets |
|--------------|----------------------|----------------------|-----------------------|---------------------------------|--------------------|--------------------|-------------------------------|----------------|--------------------|-------------------------|--|--------------------|----------------|---------------------|
|              |                      | Total                | General<br>government | Other<br>euro area<br>residents | MFIs               | Total              | General<br>government         |                | MFIs               | shares/<br>units 2)     | issued by<br>euro area<br>residents    |                    |                |                     |
|              | 1                    | 2                    | 3                     | 4                               | 5                  | 6                  | 7                             | 8              | 9                  | 10                      | 11                                     | 12                 | 13             | 14                  |
|              |                      |                      |                       |                                 |                    |                    | Eurosystem                    |                |                    |                         |  |                    |                |                     |
| 2005<br>2006 | 1,404.9<br>1,558.2   | 635.5<br>695.7       | 20.7<br>19.7          | 0.6<br>0.6                      | 614.2<br>675.3     | 185.7<br>217.0     | 165.6<br>187.5                | 2.1<br>2.5     | 18.1<br>27.0       | -                       | 14.8<br>17.2                           | 337.0<br>351.4     | 14.7<br>14.7   | 217.2<br>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               |
| Q2           | 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               |
| 2007 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.         | 1,649.6<br>1,707.3   | 730.5<br>753.5       | 17.7<br>17.8          | 0.6<br>0.6                      | 712.1<br>735.1     | 256.1<br>259.5     | 217.4<br>219.3                | 2.2<br>2.2     | 36.6<br>38.0       | -                       | 17.6<br>17.7                           | 360.6<br>368.8     | 15.6<br>15.6   | 269.2<br>292.3      |
| Sep.<br>Oct. | 1,781.8              | 800.2                | 17.8                  | 0.6                             | 781.8              | 262.3              | 220.4                         | 2.2            | 39.8               | -                       | 17.7                                   | 378.1              | 15.6           | 307.6               |
| Nov. (p)     | 1,805.5              | 814.3                | 17.8                  | 0.6                             | 795.9              | 266.9              | 223.3                         | 2.1            | 41.6               | -                       | 17.6                                   | 367.9              | 15.6           | 323.2               |
|              |                      |                      |                       |                                 |                    | MFIs exc           | luding the Eu                 | ırosystem      |                    |                         |  |                    |                |                     |
| 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             |
| Q2           | 28,066.3             | 15,775.4             | 798.2                 | 9,712.6                         | 5,264.6            | 3,759.0            | 1,281.7                       | 761.2          | 1,716.1            | 96.6                    | 1,273.9                                | 4,888.9            | 201.7          | 2,070.8             |
| 2007 July    | 28,140.3             | 15,881.4             | 799.7                 | 9,809.8                         | 5,271.9            | 3,774.4            | 1,257.7                       | 777.0          | 1,739.7            | 97.1                    | 1,260.1                                | 4,928.0            | 198.2          | 2,001.2             |
| Aug.         | 28,161.5             | 15,964.3             | 793.1                 | 9,848.9                         | 5,322.3            | 3,741.8            | 1,228.5                       | 780.9          | 1,732.4            | 95.5                    | 1,248.4                                | 4,917.7            | 198.4          | 1,995.4             |
| Sep.<br>Oct. | 28,481.1<br>29,140.7 | 16,160.8<br>16,544.0 | 793.2<br>944.0        | 9,945.5<br>10.024.6             | 5,422.1<br>5,575.4 | 3,747.5<br>3,832.2 | 1,214.5<br>1,213.7            | 804.0<br>884.7 | 1,728.9<br>1,733.8 | 95.6<br>98.6            | 1,255.9<br>1,307.1                     | 4,879.7<br>4,986.4 | 203.0<br>216.5 | 2,138.6<br>2,155.9  |
| Nov. (p)     | 29,419.7             | 16,710.4             | 944.9                 | 10,024.0                        | 5,660.7            | 3,849.8            | 1,212.2                       | 899.9          | 1,737.7            | 99.2                    | 1,295.7                                | 5,022.5            | 215.2          | 2,226.9             |

#### 2. Liabilities

|                                     | Total                            | Currency                | 1                                | Deposits of euro        | o area residents   |                               | Money<br>market                        | Debt<br>securities            | Capital<br>and                | External liabilities          | Remaining<br>liabilities      |
|-------------------------------------|----------------------------------|-------------------------|----------------------------------|-------------------------|--|-------------------------------|--|-------------------------------|-------------------------------|-------------------------------|-------------------------------|
|                                     |                                  | circulation             | Total                            | Central<br>government   | Other general<br>government/<br>other euro<br>area residents | MFIs                          | fund<br>shares/<br>units <sup>3)</sup> | issued 4)                     | reserves                      | 111021110                     |                               |
|                                     | 1                                | 2                       | 3                                | 4                       | 5  | 6                             | 7                                      | 8                             | 9                             | 10                            | 11                            |
|                                     |                                  |                         |                                  |                         | Eurosystem   |                               |  |                               |                               |                               |                               |
| 2005<br>2006                        | 1,404.9<br>1,558.2               | 582.7<br>647.0          | 385.4<br>431.6                   | 24.4<br>33.7            | 14.5<br>15.9   | 346.5<br>382.0                | -                                      | 0.1<br>0.1                    | 202.9<br>208.6                | 27.6<br>35.3                  | 206.2<br>235.6                |
| 2007 Q1<br>Q2                       | 1,576.7<br>1,651.5               | 632.7<br>652.6          | 455.6<br>495.2                   | 44.8<br>51.2            | 17.5<br>23.3   | 393.3<br>420.7                |  | 0.3<br>0.1                    | 216.3<br>207.0                | 39.5<br>51.0                  | 232.4<br>245.6                |
| 2007 July<br>Aug.                   | 1,669.9<br>1,649.6               | 660.0<br>657.0          | 511.4<br>482.8<br>510.7          | 53.3<br>52.9<br>51.7    | 21.8<br>17.5   | 436.4<br>412.5<br>439.9       | -                                      | 0.1<br>0.1<br>0.1             | 209.5<br>212.3<br>222.6       | 43.9<br>46.9                  | 244.8<br>250.5                |
| Sep.<br>Oct.<br>Nov. <sup>(p)</sup> | 1,707.3<br>1,781.8<br>1,805.5    | 657.2<br>661.9<br>665.5 | 561.6<br>570.0                   | 54.9<br>48.2            | 19.1<br>22.9<br>24.1   | 439.9<br>483.8<br>497.7       | -                                      | 0.1<br>0.1<br>0.1             | 228.7<br>226.0                | 48.3<br>51.8<br>53.9          | 268.4<br>277.7<br>290.0       |
|                                     |                                  |                         |                                  | MFIs                    | excluding the Eu   | rosystem                      |  |                               |                               |                               |                               |
| 2005<br>2006                        | 23,631.5<br>25,973.9             | -<br>-                  | 12,212.2<br>13,257.2             | 149.2<br>124.2          | 7,211.9<br>7,890.6   | 4,851.2<br>5,242.4            | 698.9<br>697.7                         | 3,858.3<br>4,247.6            | 1,310.6<br>1,449.7            | 3,518.0<br>3,991.1            | 2,033.5<br>2,330.5            |
| 2007 Q1<br>Q2                       | 27,107.8<br>28,066.3             | -<br>-                  | 13,595.8<br>14,021.0             | 139.0<br>169.8          | 8,060.9<br>8,278.3   | 5,395.9<br>5,572.9            | 758.7<br>795.6                         | 4,424.8<br>4,523.4            | 1,529.7<br>1,551.2            | 4,255.7<br>4,451.8            | 2,543.1<br>2,723.2            |
| 2007 July<br>Aug.<br>Sep.           | 28,140.3<br>28,161.5<br>28,481.1 | -                       | 14,038.8<br>14,042.7<br>14,241.4 | 126.8<br>120.6<br>144.2 | 8,324.5<br>8,319.4<br>8,403.8                                | 5,587.6<br>5,602.6<br>5,693.4 | 809.7<br>801.7<br>776.7                | 4,549.1<br>4,576.4<br>4,574.4 | 1,568.4<br>1,567.7<br>1,583.6 | 4,498.5<br>4,539.2<br>4,525.9 | 2,675.9<br>2,633.8<br>2,779.1 |
| Oct.<br>Nov. (p)                    | 29,140.7<br>29,419.7             | -                       | 14,616.7<br>14,794.1             | 129.4<br>151.5          | 8,626.0<br>8,687.8   | 5,861.3<br>5,954.8            | 782.6<br>795.9                         | 4,646.3<br>4,650.1            | 1,637.5<br>1,637.1            | 4,628.8<br>4,636.9            | 2,828.8<br>2,905.6            |

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

  Amounts issued by euro area residents. Amounts issued by non-euro area residents are included in external assets.

  Amounts held by euro area residents.

  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    | Loans to | euro area res         | idents                          |          | ecurities other<br>y euro area re |                                 | Holdings<br>of shares/<br>other equity    | External assets | Fixed assets | Remaining assets |
|-----------|----------|----------|-----------------------|---------------------------------|----------|-----------------------------------|---------------------------------|---|-----------------|--------------|------------------|
|           |          | Total    | General<br>government | Other<br>euro area<br>residents | Total    | General<br>government             | Other<br>euro area<br>residents | issued by<br>other euro area<br>residents |                 |              |                  |
|           | 1        | 2        | 3                     | 4                               | 5        | 6                                 | 7                               | 8   | 9               | 10           | 11               |
|           |          |          |                       |                                 | Outstand | ing 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          |
| Q2        | 21,414.1 | 10,529.2 | 816.0                 | 9,713.2                         | 2,258.4  | 1,494.9                           | 763.4                           | 880.3                                     | 5,243.0         | 217.1        | 2,286.1          |
| 2007 July | 21,462.9 | 10,627.9 | 817.4                 | 9,810.4                         | 2,253.7  | 1,474.6                           | 779.2                           | 865.9                                     | 5,285.5         | 213.8        | 2,216.1          |
| Aug.      | 21,454.0 | 10,660.4 | 810.9                 | 9,849.5                         | 2,229.0  | 1,446.0                           | 783.1                           | 854.2                                     | 5,278.3         | 214.0        | 2,218.2          |
| Sep.      | 21,705.1 | 10,757.1 | 811.0                 | 9,946.1                         | 2,240.1  | 1,433.8                           | 806.2                           | 856.7                                     | 5,248.4         | 218.6        | 2,384.1          |
| Oct.      | 22,238.5 | 10,987.0 | 961.8                 | 10,025.2                        | 2,320.9  | 1,434.0                           | 886.9                           | 918.8                                     | 5,364.5         | 232.1        | 2,415.2          |
| Nov. (p)  | 22,439.2 | 11,068.0 | 962.7                 | 10,105.4                        | 2,337.4  | 1,435.4                           | 902.0                           | 909.4                                     | 5,390.4         | 230.8        | 2,503.1          |
| -         | ,        |          |                       |                                 |          | sactions                          |                                 |   |                 |              |                  |
| 2005      | 1,608.0  | 708.9    | 12.8                  | 696.0                           | 156.2    | 76.2                              | 80.0                            | 53.2                                      | 448.0           | 1.4          | 240.4            |
| 2006      | 1,997.9  | 877.3    | -14.4                 | 891.6                           | 10.6     | -96.8                             | 107.4                           | 98.5                                      | 801.7           | 6.4          | 203.5            |
| 2007 Q1   | 884.6    | 254.0    | -8.2                  | 262.2                           | 63.2     | 19.0                              | 44.2                            | 20.8                                      | 394.4           | 0.5          | 151.8            |
| Q2        | 788.1    | 282.0    | -5.4                  | 287.4                           | 84.4     | 11.0                              | 73.4                            | 16.7                                      | 222.3           | 3.2          | 179.4            |
| 2007 July | 77.7     | 101.7    | 1.4                   | 100.3                           | -4.0     | -20.6                             | 16.5                            | -10.6                                     | 64.2            | -3.3         | -70.2            |
| Aug.      | -11.9    | 32.9     | -6.6                  | 39.5                            | -25.4    | -29.7                             | 4.3                             | -10.5                                     | -10.9           | 0.1          | 1.9              |
| Sep.      | 326.0    | 108.9    | 0.3                   | 108.7                           | 13.1     | -11.3                             | 24.3                            | 1.9                                       | 32.4            | 4.6          | 165.2            |
| Oct.      | 347.7    | 77.6     | -3.4                  | 81.0                            | 53.5     | 6.3                               | 47.2                            | 48.1                                      | 147.7           | 4.8          | 15.9             |
| Nov. (p)  | 264.2    | 87.5     | 0.9                   | 86.6                            | 15.6     | -1.0                              | 16.6                            | -5.4                                      | 80.5            | -1.3         | 87.3             |

#### 2. Liabilities

|           | Total    | circulation | Deposits of<br>central<br>government | other general<br>government/<br>other euro area<br>residents | Money market<br>fund shares/<br>units 2) | Debt<br>securities<br>issued <sup>3)</sup> | Capital<br>and<br>reserves | External<br>liabilities | Remaining liabilities | Excess<br>of inter-<br>MFI<br>liabilities |
|-----------|----------|-------------|--------------------------------------|--|--|--|----------------------------|-------------------------|-----------------------|---|
|           | 1        | 2           | 3                                    |  | 5  | 6  | 7                          | 8                       | 9                     | 10  |
|           |          |             |                                      | C  | Outstanding amou                         |  |                            |                         |                       |   |
| 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       | 158.0                                | 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                                      |
| Q2        | 21,414.1 | 604.9       | 221.0                                | 8,301.6  | 699.1                                    | 2,773.1                                    | 1,346.8                    | 4,502.8                 | 2,968.8               | -4.1                                      |
| 2007 July | 21,462.9 | 612.9       | 180.1                                | 8,346.2  | 712.6                                    | 2,774.1                                    | 1,366.2                    | 4,542.4                 | 2,920.8               | 7.7                                       |
| Aug.      | 21,454.0 | 610.5       | 173.6                                | 8,336.9  | 706.1                                    | 2,807.6                                    | 1,368.3                    | 4,586.1                 | 2,884.2               | -19.3                                     |
| Sep.      | 21,705.1 | 610.4       | 196.0                                | 8,422.9  | 681.0                                    | 2,807.6                                    | 1,389.5                    | 4,574.2                 | 3,047.5               | -24.0                                     |
| Oct.      | 22,238.5 | 613.5       | 184.3                                | 8,648.8  | 684.0                                    | 2,872.8                                    | 1,460.0                    | 4,680.6                 | 3,106.5               | -12.0                                     |
| Nov. (p)  | 22,439.2 | 618.6       | 199.8                                | 8,711.9  | 696.7                                    | 2,870.9                                    | 1,459.3                    | 4,690.8                 | 3,195.5               | -4.2                                      |
| -         |          |             |                                      |  | Transactions                             |  |                            |                         |                       |   |
| 2005      | 1,608.0  | 64.4        | 10.9                                 | 495.7  | -3.0                                     | 213.5                                      | 95.5                       | 448.0                   | 333.9                 | -50.8                                     |
| 2006      | 1,997.9  | 59.4        | -15.2                                | 683.7  | 27.0                                     | 285.6                                      | 57.2                       | 601.6                   | 253.2                 | 45.4                                      |
| 2007 Q1   | 884.6    | -4.2        | 24.8                                 | 157.1  | 54.5                                     | 117.5                                      | 38.9                       | 292.5                   | 196.8                 | 6.9                                       |
| Q2        | 788.1    | 16.5        | 37.2                                 | 225.1  | 30.5                                     | 70.9                                       | 2.4                        | 230.5                   | 183.4                 | -8.4                                      |
| 2007 July | 77.7     | 8.0         | -41.5                                | 47.1   | 14.4                                     | 4.7  | 19.7                       | 58.4                    | -48.8                 | 15.8                                      |
| Aug.      | -11.9    | -2.3        | -6.5                                 | -10.3  | -6.9                                     | 32.4                                       | 3.8                        | 40.4                    | -34.8                 | -27.7                                     |
| Sep.      | 326.0    | -0.1        | 22.4                                 | 98.6   | -25.9                                    | 18.0                                       | 16.3                       | 53.8                    | 137.6                 | 5.4                                       |
| Oct.      | 347.7    | 3.1         | -16.5                                | 76.2   | 13.4                                     | 23.2                                       | 41.7                       | 136.5                   | 47.9                  | 22.3                                      |
| Nov. (P)  | 264.2    | 5.1         | 15.5                                 | 67.7   | 11.6                                     | 6.3  | 6.4                        | 49.9                    | 86.1                  | 15.6                                      |

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

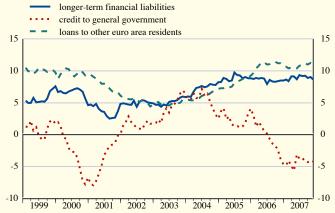
2.3 Monetary statistics (EUR billions and annual growth rates; seasonally adjusted; outstanding amounts and growth rates at end of period, transactions during period)

#### 1. Monetary aggregates 2) and counterparts

|   |  |  | M2                                       | M3-M2                                    | M3                                       | M3<br>3-month<br>moving      | Longer-term<br>financial<br>liabilities     | Credit to<br>general<br>government       | Credit to euro area re                       | esidents                                  | Net<br>external<br>assets 3)              |
|---|--|--|--|--|--|------------------------------|---|--|--|---|---|
|   | M1                                       | M2-M1                                    |  |  |  | average<br>(centred)         |   |  |  | Loans                                     |   |
|   | 1  | 2  | 3  | 4  | Outstanding                              | 6                            | 7   | 8  | 9  | 10  | 11  |
|   |  |  |  |  |  | amounts                      |   |  |  |   |   |
| 2005<br>2006                                  | 3,419.4<br>3,676.6                       | 2,653.2<br>2,953.1                       | 6,072.6<br>6,629.7                       | 999.4<br>1,102.1                         | 7,072.0<br>7,731.8                       | -<br>-                       | 5,000.2<br>5,428.7                          | 2,472.5<br>2,321.2                       | 9,561.0<br>10,658.5                          | 8,287.3<br>9,167.4                        | 425.8<br>636.8                            |
| 2007 Q1<br>Q2                                 | 3,746.8<br>3,785.1                       | 3,064.9<br>3,170.7                       | 6,811.8<br>6,955.8                       | 1,190.3<br>1,228.3                       | 8,002.0<br>8,184.1                       | -                            | 5,604.1<br>5,728.2                          | 2,301.4<br>2,297.9                       | 10,978.1<br>11,324.9                         | 9,444.7<br>9,684.5                        | 755.9<br>728.3                            |
| 2007 July<br>Aug.<br>Sep.<br>Oct.             | 3,805.4<br>3,825.2<br>3,817.2<br>3,838.1 | 3,228.3<br>3,273.7<br>3,316.3<br>3,421.2 | 7,033.8<br>7,098.9<br>7,133.6<br>7,259.4 | 1,235.6<br>1,243.2<br>1,259.9<br>1,272.7 | 8,269.4<br>8,342.1<br>8,393.5<br>8,532.0 | -<br>-<br>-<br>-             | 5,765.5<br>5,795.9<br>5,790.7<br>5,920.4    | 2,286.4<br>2,265.6<br>2,253.4<br>2,400.5 | 11,436.7<br>11,553.5<br>11,642.8<br>11,864.5 | 9,782.9<br>9,888.8<br>9,955.1<br>10,042.6 | 728.5<br>696.2<br>669.3<br>668.0          |
| Nov. (p)                                      | 3,856.0                                  | 3,446.8                                  | 7,302.8                                  | 1,310.2                                  | 8,613.0                                  | -                            | 5,919.7                                     | 2,389.0                                  | 11,924.2                                     | 10,101.5                                  | 694.2                                     |
|   |  |  |  |  | Transact                                 | ions                         |   |  |  |   |   |
| 2005<br>2006                                  | 337.0<br>255.5                           | 138.9<br>309.9                           | 475.9<br>565.4                           | 8.5<br>130.2                             | 484.4<br>695.6                           | -                            | 400.8<br>427.0                              | 94.5<br>-114.1                           | 835.5<br>1,105.0                             | 700.4<br>896.5                            | 0.1<br>200.2                              |
| 2007 Q1<br>Q2                                 | 63.6<br>37.7                             | 105.4<br>108.0                           | 169.0<br>145.7                           | 91.1<br>32.1                             | 260.1<br>177.8                           | -                            | 150.0<br>123.9                              | -23.7<br>-0.1                            | 298.7<br>354.9                               | 258.8<br>255.6                            | 127.0<br>-27.0                            |
| 2007 July<br>Aug.<br>Sep.<br>Oct.<br>Nov. (p) | 21.0<br>19.4<br>-5.1<br>22.2<br>18.9     | 58.8<br>45.1<br>47.0<br>74.0<br>28.2     | 79.8<br>64.5<br>41.9<br>96.2<br>47.1     | 7.9<br>10.4<br>19.7<br>21.7<br>37.3      | 87.7<br>74.9<br>61.6<br>117.9<br>84.4    | -<br>-<br>-<br>-             | 42.1<br>27.4<br>9.4<br>56.4<br>14.8         | -11.8<br>-21.9<br>-11.2<br>-1.2<br>-13.8 | 119.5<br>118.9<br>101.8<br>175.8<br>71.6     | 101.4<br>106.4<br>78.3<br>89.5<br>65.3    | 3.0<br>-32.6<br>-30.4<br>0.3<br>41.0      |
|   |  |  |  |  | Growth r                                 | ates                         |   |  |  |   |   |
| 2005 Dec.<br>2006 Dec.                        | 11.3<br>7.5                              | 5.4<br>11.7                              | 8.5<br>9.3                               | 0.9<br>13.2                              | 7.3<br>9.9                               | 7.5<br>9.8                   | 8.9<br>8.5                                  | 4.1<br>-4.7                              | 9.6<br>11.6                                  | 9.2<br>10.8                               | 0.1<br>200.2                              |
| 2007 Mar.<br>June                             | 7.0<br>6.1                               | 12.7<br>13.9                             | 9.5<br>9.5                               | 20.1<br>19.9                             | 11.0<br>11.0                             | 10.5<br>11.1                 | 9.1<br>9.3                                  | -4.9<br>-3.7                             | 10.9<br>11.6                                 | 10.6<br>10.8                              | 339.6<br>270.0                            |
| 2007 July<br>Aug.<br>Sep.<br>Oct.<br>Nov. (p) | 6.8<br>6.7<br>6.0<br>6.5<br>6.2          | 15.0<br>15.3<br>15.4<br>17.0<br>16.7     | 10.4<br>10.5<br>10.2<br>11.2<br>10.9     | 19.4<br>17.9<br>17.9<br>19.0<br>20.4     | 11.7<br>11.6<br>11.3<br>12.3<br>12.3     | 11.4<br>11.5<br>11.7<br>11.9 | 9.2<br>9.3<br>8.9<br>9.1<br>8.6             | -3.7<br>-4.1<br>-4.3<br>-4.0<br>-4.2     | 11.6<br>11.8<br>11.6<br>12.4<br>12.2         | 11.0<br>11.2<br>11.0<br>11.2<br>11.0      | 270.8<br>242.6<br>204.4<br>188.9<br>151.0 |
| CI Monetary a (annual growth rates;           |  | ed)                                      |  |  |  |                              | cerparts <sup>1)</sup><br>th rates; seasona | lly adjusted)                            |  |   |   |

## CI Monetary aggregates (1)





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

  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).

  Values in the section "growth rates" are sums of the transactions during the 12 months ending in the period indicated. 1) 2) 3)

#### 2.3 Monetary statistics 1)

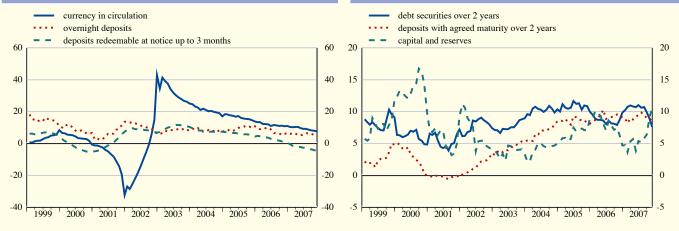
(EUR billions and annual growth rates; seasonally adjusted; outstanding amounts and growth rates at end of period, transactions during period)

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

|           | Currency in circulation | Overnight deposits |         | Deposits<br>redeemable<br>at notice up<br>to 3 months | Repos         | Money<br>market<br>fund<br>shares/units | Debt<br>securities<br>up to<br>2 years | Debt<br>securities<br>over<br>2 years | Deposits<br>redeemable<br>at notice<br>over 3 months | Deposits<br>with agreed<br>maturity<br>over 2 years | Capital<br>and<br>reserves |
|-----------|-------------------------|--------------------|---------|---|---------------|---|--|---------------------------------------|--|---|----------------------------|
|           | 1                       | 2                  | 3       | 4   | 5             | 6                                       | 7                                      | 8                                     | 9  | 10  | 11                         |
|           |                         |                    |         |   | Outstanding a | mounts                                  |  |                                       |  |   |                            |
| 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                   | 3,097.5            | 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                    |
| Q2        | 599.2                   | 3,186.0            | 1,645.2 | 1,525.5   | 285.1         | 700.5                                   | 242.8                                  | 2,522.4                               | 109.4  | 1,748.6   | 1,347.7                    |
| 2007 July | 604.7                   | 3,200.8            | 1,709.4 | 1,518.9   | 290.6         | 704.8                                   | 240.2                                  | 2,527.8                               | 110.7  | 1,764.6   | 1,362.4                    |
| Aug.      | 608.2                   | 3,217.0            | 1,762.9 | 1,510.8   | 287.2         | 695.4                                   | 260.6                                  | 2,550.2                               | 111.1  | 1,767.8   | 1,366.8                    |
| Sep.      | 610.6                   | 3,206.6            | 1,807.8 | 1,508.5   | 298.0         | 679.9                                   | 282.0                                  | 2,525.6                               | 113.0  | 1,769.9   | 1,382.2                    |
| Oct.      | 617.8                   | 3,220.3            | 1,883.9 | 1,537.4   | 288.7         | 684.6                                   | 299.3                                  | 2,563.8                               | 120.6  | 1,780.7   | 1,455.4                    |
| Nov. (P)  | 618.8                   | 3,237.2            | 1,913.5 | 1,533.3   | 300.1         | 700.1                                   | 309.9                                  | 2,554.3                               | 120.5  | 1,782.3   | 1,462.6                    |
|           |                         |                    |         |   | Transacti     | ons                                     |  |                                       |  |   |                            |
| 2005      | 63.2                    | 273.8              | 69.1    | 69.8  | -5.9          | -2.0                                    | 16.4                                   | 198.4                                 | -4.3   | 111.2   | 95.5                       |
| 2006      | 57.5                    | 198.0              | 300.8   | 9.2   | 31.2          | 28.8                                    | 70.2                                   | 216.3                                 | 15.5   | 137.8   | 57.4                       |
| 2007 Q1   | 12.6                    | 51.0               | 120.9   | -15.4   | 8.4           | 40.9                                    | 41.8                                   | 68.3                                  | 4.6  | 40.4  | 36.6                       |
| Q2        | 7.0                     | 30.6               | 118.5   | -10.5   | 3.4           | 28.3                                    | 0.4                                    | 62.8                                  | 1.7  | 52.9  | 6.5                        |
| 2007 July | 5.5                     | 15.5               | 65.4    | -6.6  | 5.6           | 5.2                                     | -2.8                                   | 9.3                                   | 1.2  | 16.5  | 15.1                       |
| Aug.      | 3.6                     | 15.9               | 53.2    | -8.2  | -3.5          | -9.8                                    | 23.7                                   | 17.9                                  | 0.5  | 2.9   | 6.1                        |
| Sep.      | 2.4                     | -7.5               | 49.1    | -2.1  | 14.2          | -16.3                                   | 21.8                                   | -7.0                                  | 1.9  | 4.1   | 10.5                       |
| Oct.      | 7.2                     | 15.0               | 84.4    | -10.4   | -9.3          | 15.1                                    | 15.9                                   | -2.3                                  | 0.8  | 13.5  | 44.4                       |
| Nov. (P)  | 1.0                     | 17.9               | 32.1    | -4.0  | 11.5          | 14.4                                    | 11.4                                   | -2.1                                  | -0.1   | 2.5   | 14.4                       |
|           |                         |                    |         |   | Growth ra     | ates                                    |  |                                       |  |   |                            |
| 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                        |
| June      | 9.2                     | 5.5                | 35.1    | -2.5  | 14.6          | 14.4                                    | 49.2                                   | 11.0                                  | 17.6   | 9.6   | 5.4                        |
| 2007 July | 9.2                     | 6.4                | 37.5    | -2.9  | 14.3          | 14.4                                    | 46.9                                   | 10.6                                  | 17.0   | 9.9   | 5.2                        |
| Aug.      | 8.7                     | 6.3                | 38.6    | -3.5  | 11.2          | 12.8                                    | 44.9                                   | 10.7                                  | 15.4   | 9.5   | 5.9                        |
| Sep.      | 8.2                     | 5.6                | 38.2    | -3.6  | 11.7          | 9.5                                     | 55.5                                   | 9.9                                   | 15.1   | 9.0   | 6.4                        |
| Oct.      | 8.1                     | 6.2                | 41.9    | -4.2  | 12.7          | 11.4                                    | 51.2                                   | 8.8                                   | 13.8   | 8.9   | 9.2                        |
| Nov. (P)  | 7.7                     | 5.9                | 40.4    | -4.1  | 15.9          | 11.0                                    | 56.9                                   | 7.6                                   | 11.5   | 8.5   | 10.4                       |

## C3 Components of monetary aggregates 1) (annual growth rates; seasonally adjusted)

## C4 Components of longer-term financial liabilities (annual growth rates; seasonally adjusted)



Source: ECB.

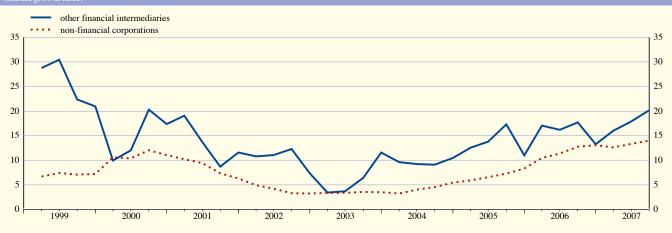
1) Data refer to the changing composition of the euro area. For further information, see the General notes.

## 2.4 MFI loans, breakdown 1), 2) (EUR billions and annual growth rates;

#### 1. Loans to financial intermediaries and non-financial corporations 3)

|           | Insurance con<br>and pensio |                 | Other fr<br>intermed |                    |         | Non-financial   | corporations                        |                 |
|-----------|-----------------------------|-----------------|----------------------|--------------------|---------|-----------------|-------------------------------------|-----------------|
|           | Total                       | Up to<br>1 year | Total                | Up to<br>1 year    | Total   | Up to<br>1 year | Over 1 year<br>and up to<br>5 years | Over<br>5 years |
|           | 1                           | 2               | 3                    | 4                  | 5       | 6               | 7                                   | 8               |
|           |                             |                 | Ου                   | itstanding 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              | 3,957.3 | 1,172.1         | 738.8                               | 2,046.4         |
| Q2        | 110.5                       | 83.5            | 802.2                | 502.3              | 4,107.8 | 1,223.3         | 777.1                               | 2,107.5         |
| 2007 July | 111.5                       | 84.7            | 813.2                | 506.0              | 4,168.9 | 1,241.1         | 791.7                               | 2,136.1         |
| Aug.      | 110.6                       | 85.4            | 821.0                | 506.8              | 4,186.7 | 1,230.4         | 803.0                               | 2,153.2         |
| Sep.      | 111.9                       | 87.9            | 851.1                | 532.7              | 4,230.9 | 1,252.8         | 811.1                               | 2,166.9         |
| Oct.      | 115.5                       | 90.4            | 865.6                | 527.4              | 4,272.0 | 1,250.7         | 828.3                               | 2,193.1         |
| Nov. (p)  | 108.5                       | 83.2            | 871.2                | 529.7              | 4,328.7 | 1,271.0         | 841.8                               | 2,215.8         |
|           |                             |                 |                      | 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               | 106.1   | 31.2            | 29.6                                | 45.3            |
| Q2        | 12.0                        | 11.8            | 29.0                 | 13.9               | 161.0   | 57.8            | 40.0                                | 63.2            |
| 2007 July | 1.1                         | 1.2             | 12.3                 | 5.1                | 61.8    | 17.7            | 14.7                                | 29.4            |
| Aug.      | -0.9                        | 0.8             | 8.7                  | 1.4                | 17.2    | -11.4           | 11.4                                | 17.2            |
| Sep.      | 1.4                         | 2.5             | 33.9                 | 28.3               | 49.6    | 24.1            | 9.5                                 | 16.0            |
| Oct.      | 3.7                         | 2.6             | 16.1                 | -4.1               | 39.5    | -1.3            | 16.7                                | 24.1            |
| Nov. (p)  | -7.0                        | -7.2            | 8.0                  | 4.1                | 58.8    | 20.6            | 14.6                                | 23.6            |
|           |                             |                 |                      | 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            |
| June      | 30.7                        | 40.6            | 17.9                 | 20.4               | 13.3    | 11.1            | 20.1                                | 12.2            |
| 2007 July | 24.0                        | 31.9            | 20.6                 | 24.4               | 13.6    | 11.5            | 19.4                                | 12.8            |
| Aug.      | 27.9                        | 39.9            | 19.7                 | 22.3               | 14.2    | 12.9            | 20.4                                | 12.8            |
| Sep.      | 25.5                        | 40.2            | 20.2                 | 22.7               | 14.0    | 13.0            | 19.9                                | 12.4            |
| Oct.      | 30.2                        | 46.6            | 22.9                 | 22.3               | 13.9    | 11.8            | 20.5                                | 12.7            |
| Nov. (p)  | 14.5                        | 22.7            | 23.1                 | 23.4               | 14.0    | 12.0            | 21.0                                | 12.8            |

## C5 Loans to financial intermediaries and non-financial corporations 2)



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

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

  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.

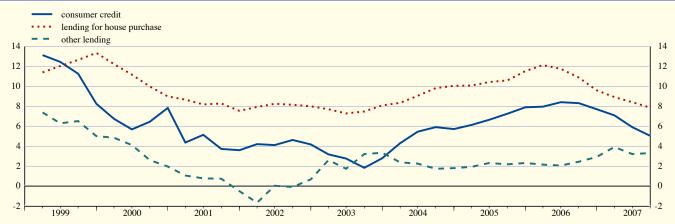
  This category includes investment funds.

## 2.4 MFI loans, breakdown 1), 2)

#### 2. Loans to households 3)

| 1 year and up to 5 years 1 year and up to 5 years 5 years 1 year and up to 5 years 1 year and up | Over years  13  474.4 490.7 498.5 |
|--|-----------------------------------|
|  | 474.4<br>490.7<br>498.5           |
|  | 490.7<br>498.5                    |
| Outstanding amounts  | 490.7<br>498.5                    |
|  | 198.5                             |
|  |                                   |
|  |                                   |
|  | 199.0                             |
|  | 500.3                             |
|  | 501.9<br>501.3                    |
|  | 501.8                             |
|  | 502.7                             |
| 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 1   | 11.1                              |
| 2006 345.4 42.6 8.2 4.8 29.5 281.8 1.5 4.6 275.8 20.9 1.4 3.8 1  | 15.7                              |
|  | 7.1                               |
| Q2 85.3 13.6 3.1 2.5 8.0 65.9 0.3 0.8 64.8 5.8 2.9 1.9   | 1.1                               |
|  | 1.7                               |
|  | 1.7                               |
|  | 0.4<br>1.0                        |
|  | 1.0                               |
| 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 13.2 9.6 9.7 6.8 9.7 2.9 1.0 3.9   | 3.3                               |
|  | 4.6                               |
| June 7.2 5.9 4.4 0.6 11.3 8.4 11.0 4.6 8.5 3.2 0.5 5.3   | 3.6                               |
|  | 3.5                               |
|  | 3.7                               |
|  | 3.6<br>3.4                        |
| Oct. 6.8 5.5 4.5 0.6 10.2 7.9 10.5 4.5 7.9 3.2 1.0 5.2 Nov. (P) 6.5 5.0 1.8 0.7 10.4 7.6 8.3 4.7 7.7 3.1 1.5 4.9   | 3.4                               |

# (annual growth rates)



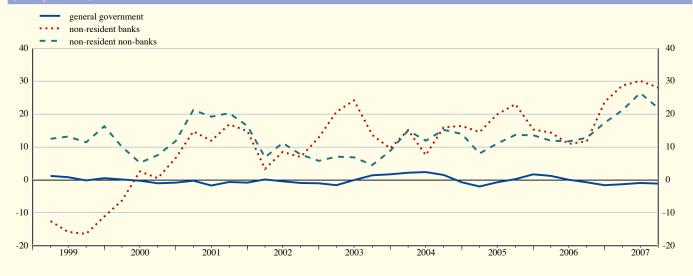
- MFI sector excluding the Eurosystem; sectoral classification is based on ESA 95.
  Data refer to the changing composition of the euro area. For further information, see the General notes.
  Including non-profit institutions serving households. Before January 2003 data were collected in March, June,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

## 2.4 MFI loans, breakdown 1), 2) (EUR billions and annual growth rates;

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

|                                    |                         | G                     | eneral governme         | nt                      |                             |                               | Non-e                         | euro area reside        | ents                  |                         |
|------------------------------------|-------------------------|-----------------------|-------------------------|-------------------------|-----------------------------|-------------------------------|-------------------------------|-------------------------|-----------------------|-------------------------|
|                                    | Total                   | Central government    | Other                   | general governm         | ent                         | Total                         | Banks 3)                      |                         | Non-banks             |                         |
|                                    |                         | government            | State<br>government     | Local<br>government     | Social<br>security<br>funds |                               |                               | Total                   | General<br>government | Other                   |
|                                    | 1                       | 2                     | 3                       | 4                       | 5                           | 6                             | 7                             | 8                       | 9                     | 10                      |
|                                    |                         |                       |                         | Outsta                  | nding amounts               |                               |                               |                         |                       |                         |
| 2005<br>2006                       | 826.9<br>810.5          | 125.1<br>104.1        | 246.8<br>232.5          | 425.8<br>448.1          | 29.2<br>25.8                | 2,485.2<br>2,924.3            | 1,722.1<br>2,061.0            | 763.1<br>863.4          | 66.0<br>63.2          | 697.1<br>800.2          |
| 2007 Q1<br>Q2<br>Q3 <sup>(p)</sup> | 801.4<br>798.2<br>793.2 | 97.2<br>95.7<br>92.4  | 225.2<br>218.8<br>213.9 | 447.8<br>446.1<br>447.8 | 31.2<br>37.6<br>39.1        | 3,169.7<br>3,286.4<br>3,301.4 | 2,265.1<br>2,334.3<br>2,354.1 | 904.6<br>952.0<br>947.3 | 60.0<br>61.4<br>59.9  | 844.6<br>890.6<br>887.5 |
|                                    |                         |                       |                         | Tr                      | ansactions                  |                               |                               |                         |                       |                         |
| 2005<br>2006                       | 13.7<br>-13.4           | -5.6<br>-17.6         | -8.1<br>-14.3           | 21.9<br>21.9            | 5.5<br>-3.4                 | 296.8<br>532.5                | 207.9<br>402.9                | 89.0<br>129.6           | 4.7<br>-2.8           | 84.3<br>132.3           |
| 2007 Q1<br>Q2<br>Q3 <sup>(p)</sup> | -8.2<br>-3.4<br>-5.0    | -6.9<br>-1.8<br>-3.2  | -6.3<br>-5.5<br>-5.0    | -0.3<br>-2.5<br>1.7     | 5.3<br>6.4<br>1.5           | 272.7<br>135.3<br>76.0        | 222.0<br>79.6<br>57.5         | 50.8<br>55.7<br>18.5    | -3.1<br>1.5<br>-1.6   | 53.8<br>54.2<br>20.0    |
|                                    |                         |                       |                         | Gr                      | rowth rates                 |                               |                               |                         |                       |                         |
| 2005 Dec.<br>2006 Dec.             | 1.7<br>-1.6             | -4.3<br>-14.0         | -3.2<br>-5.8            | 5.4<br>5.1              | 22.9<br>-11.6               | 14.8<br>21.8                  | 15.3<br>23.7                  | 13.6<br>17.4            | 7.7<br>-4.2           | 14.2<br>19.5            |
| 2007 Mar.<br>June<br>Sep. (p)      | -1.3<br>-0.9<br>-1.1    | -15.2<br>-7.7<br>-8.2 | -6.1<br>-5.9<br>-6.3    | 4.6<br>2.0<br>2.3       | 6.8<br>17.3<br>9.7          | 26.4<br>29.0<br>26.2          | 28.7<br>30.1<br>28.1          | 21.2<br>26.5<br>21.9    | -4.4<br>-7.4<br>-8.8  | 23.5<br>29.7<br>24.6    |

## C7 Loans to government and non-euro area residents 2)



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

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

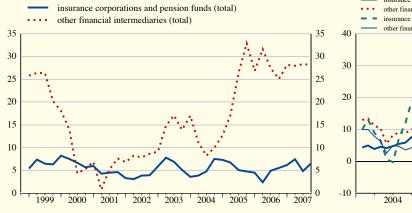
#### 2.5 Deposits held with MFIs, breakdown 1), 2)

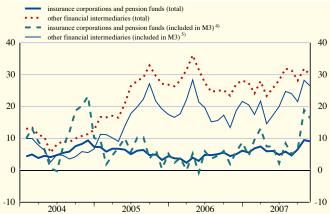
#### 1. Deposits by financial intermediaries

|   |   | Insu                                 | rance corpoi                         | ations an                                 | d pension fu                              | ınds                             |   |   |   | Other finan                               | cial interm                               | nediaries 3)                         |                                  |   |
|---|---|--------------------------------------|--------------------------------------|---|---|----------------------------------|---|---|---|---|---|--------------------------------------|----------------------------------|---|
|   | Total                                     | Overnight                            | With agreed                          | maturity                                  | Redeemabl                                 | e at notice                      | Repos                                     | Total   | Overnight                                 | With agree                                | d maturity                                | Redeemable                           | e at notice                      | Repos                                     |
|   |   |                                      | Up to 2 years                        | Over 2<br>years                           | Up to<br>3 months                         | Over<br>3 months                 |   |   |   | Up to 2 years                             | Over<br>2 years                           | Up to<br>3 months                    | Over<br>3 months                 |   |
|   | 1   | 2                                    | 3                                    | 4   | 5   | 6                                | 7   | 8   | 9   | 10  | 11  | 12                                   | 13                               | 14  |
|   |   |                                      |                                      |   |   | Outstand                         | ing amounts                               |   |   |   |   |                                      |                                  |   |
| 2005<br>2006                                  | 612.6<br>650.0                            | 67.8<br>70.2                         | 51.9<br>57.1                         | 469.7<br>495.4                            | 1.2<br>1.0                                | 1.4<br>1.4                       | 20.6<br>24.9                              | 880.4<br>1,140.3                                    | 233.9<br>283.1                            | 185.0<br>251.8                            | 329.8<br>469.4                            | 10.5<br>10.6                         | 0.1<br>0.2                       | 121.1<br>125.1                            |
| 2007 Q1<br>Q2                                 | 658.8<br>656.4                            | 72.3<br>65.0                         | 58.4<br>58.0                         | 503.0<br>512.2                            | 1.1<br>0.8                                | 1.2<br>1.2                       | 22.9<br>19.2                              | 1,264.7<br>1,347.3                                  | 318.6<br>321.0                            | 267.7<br>288.2                            | 515.7<br>571.7                            | 11.4<br>11.5                         | 0.3<br>0.2                       | 151.0<br>154.6                            |
| 2007 July<br>Aug.<br>Sep.<br>Oct.<br>Nov. (p) | 670.8<br>665.7<br>676.6<br>695.8<br>691.5 | 72.7<br>61.4<br>67.8<br>73.6<br>69.0 | 61.2<br>68.0<br>62.9<br>73.9<br>76.3 | 514.0<br>513.6<br>522.9<br>524.6<br>524.9 | 0.9<br>0.8<br>0.8<br>0.8                  | 1.2<br>1.1<br>1.1<br>1.1<br>1.1  | 20.8<br>20.8<br>21.0<br>21.8<br>19.3      | 1,369.0<br>1,364.2<br>1,386.5<br>1,425.5<br>1,447.4 | 321.9<br>302.0<br>326.2<br>317.9<br>334.8 | 290.7<br>303.0<br>305.9<br>340.1<br>327.9 | 589.2<br>588.6<br>581.0<br>599.6<br>607.7 | 13.4<br>11.8<br>13.0<br>12.4<br>11.7 | 0.3<br>0.2<br>0.8<br>0.8<br>0.9  | 153.6<br>158.6<br>159.5<br>154.6<br>164.5 |
|   |   |                                      |                                      |   |   | Tran                             | sactions                                  | -   |   |   |   |                                      |                                  |   |
| 2005<br>2006                                  | 26.3<br>37.9                              | 7.4<br>2.7                           | -0.6<br>5.5                          | 19.2<br>25.6                              | 0.4<br>-0.2                               | 0.0<br>0.0                       | -0.2<br>4.4                               | 176.1<br>249.2                                      | 40.1<br>45.5                              | 37.3<br>67.8                              | 96.8<br>130.5                             | 1.5<br>0.3                           | 0.0<br>0.1                       | 0.4<br>4.9                                |
| 2007 Q1<br>Q2                                 | 8.6<br>-2.8                               | 2.1<br>-7.7                          | 1.0<br>-0.3                          | 7.6<br>9.2                                | 0.1<br>-0.2                               | -0.2<br>0.0                      | -2.0<br>-3.7                              | 124.8<br>82.8                                       | 35.8<br>3.0                               | 16.2<br>21.0                              | 46.2<br>56.5                              | 0.7<br>0.1                           | 0.0<br>0.0                       | 26.0<br>2.2                               |
| Aug.<br>Sep.<br>Oct.<br>Nov. (p)              | 14.5<br>-5.2<br>13.6<br>19.4<br>-4.2      | 7.7<br>-11.3<br>6.5<br>5.9<br>-4.5   | 3.3<br>6.8<br>-4.9<br>11.1<br>2.5    | 1.8<br>-0.4<br>11.7<br>1.6<br>0.3         | 0.1<br>-0.1<br>0.0<br>0.0<br>0.0          | 0.0<br>-0.1<br>0.0<br>0.0<br>0.0 | 1.6<br>0.0<br>0.3<br>0.8<br>-2.5          | 23.0<br>-5.1<br>26.8<br>41.4<br>22.7                | 1.1<br>-20.0<br>25.4<br>-7.7<br>17.6      | 2.9<br>12.3<br>4.6<br>34.9<br>-13.3       | 18.0<br>-0.7<br>-9.4<br>19.5<br>9.2       | 1.9<br>-1.6<br>1.2<br>-0.5<br>-0.7   | 0.0<br>-0.1<br>0.6<br>0.0<br>0.0 | -1.0<br>4.9<br>4.3<br>-4.8<br>9.9         |
|   |   |                                      |                                      |   |   | Grov                             | vth rates                                 |   |   |   |   |                                      |                                  |   |
| 2005 Dec.<br>2006 Dec.                        | 4.5<br>6.2                                | 12.4<br>4.0                          | -1.2<br>10.7                         | 4.3<br>5.4                                | 36.0<br>-16.3                             | -                                | -0.8<br>21.2                              | 26.9<br>28.2  | 22.2<br>19.5                              | 25.0<br>36.8                              | 47.3<br>38.9                              | 14.3<br>2.9                          | -                                | 0.4<br>4.0                                |
| 2007 Mar.<br>June                             | 7.5<br>4.8                                | 10.4<br>-5.6                         | 15.9<br>21.1                         | 5.9<br>5.7                                | -2.9<br>-20.8                             | -                                | 16.0<br>-13.3                             | 27.9<br>28.3  | 15.6<br>13.5                              | 37.6<br>35.6                              | 38.1<br>41.4                              | 4.1<br>5.9                           | -                                | 12.4<br>10.5                              |
| 2007 July<br>Aug.<br>Sep.<br>Oct.<br>Nov. (p) | 5.9<br>4.7<br>6.5<br>9.5<br>9.1           | 10.8<br>-0.8<br>1.4<br>11.5<br>8.2   | 18.0<br>30.8<br>23.4<br>53.5<br>51.7 | 5.2<br>4.4<br>6.6<br>6.9<br>7.0           | -11.7<br>-21.3<br>-18.2<br>-19.8<br>-18.8 | -<br>-<br>-<br>-                 | -16.6<br>-27.7<br>-13.7<br>-22.0<br>-29.0 | 31.8<br>31.3<br>28.2<br>31.8<br>29.9                | 20.2<br>15.6<br>18.7<br>21.1<br>22.0      | 37.6<br>41.6<br>31.1<br>43.9<br>35.2      | 42.6<br>42.4<br>38.5<br>36.9<br>34.8      | 36.0<br>25.3<br>29.0<br>23.1<br>9.0  | -<br>-<br>-<br>-                 | 12.5<br>12.8<br>11.0<br>15.1<br>21.2      |

## C8 Total deposits by sector <sup>2)</sup> (annual growth rates)

## Total deposits and deposits included in M3





- 1) MFI sector excluding the Eurosystem; sectoral classification is based on ESA 95.
- Data refer to the changing composition of the euro area. For further information, see the General notes.

- This category includes investment funds.
  Covers deposits in columns 2, 3, 5 and 7.
  Covers deposits in columns 9, 10, 12 and 14.

#### 2.5 Deposits held with MFIs, breakdown 1), 2)

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

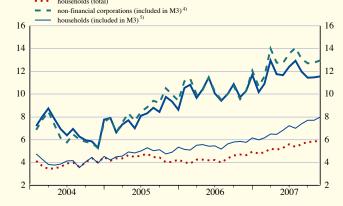
|   |   |   | Non-finan                                 | cial corpo                           | orations                             |                          |                                      |   |   | Н   | ouseholds 3                               | )   |   |                                      |
|---|---|---|---|--------------------------------------|--------------------------------------|--------------------------|--------------------------------------|---|---|---|---|---|---|--------------------------------------|
|   | Total   | Overnight                                 | With agreed                               | maturity                             | Redeemabl                            | e at notice              | Repos                                | Total   | Overnight   | With agree                                | d maturity                                | Redeemable  | e at notice                               | Repos                                |
|   |   |   | Up to<br>2 years                          | Over 2<br>years                      | Up to 3 months                       | Over 3 months            |                                      |   |   | Up to 2 years                             | Over<br>2 years                           | Up to 3 months                                      | Over<br>3 months                          |                                      |
|   | 1   | 2   | 3   | 4                                    | 5                                    | 6                        | 7                                    | 8   | 9   | 10  | 11  | 12  | 13  | 14                                   |
|   |   |   |   |                                      |                                      | Outstand                 | ling 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                                 |
| Q2  | 1,386.0   | 861.6                                     | 392.5                                     | 68.2                                 | 36.1                                 | 1.3                      | 26.4                                 | 4,678.1   | 1,785.8   | 802.3                                     | 577.1                                     | 1,329.0   | 106.2                                     | 77.7                                 |
| 2007 July<br>Aug.<br>Sep.<br>Oct.<br>Nov. (p) | 1,385.6<br>1,388.7<br>1,405.3<br>1,415.4<br>1,429.6 | 840.5<br>825.8<br>845.1<br>836.7<br>850.9 | 415.5<br>435.1<br>438.5<br>459.9<br>460.1 | 67.8<br>68.0<br>64.3<br>64.2<br>61.7 | 34.7<br>31.9<br>31.6<br>29.0<br>31.3 | 1.5<br>1.5<br>1.4<br>1.4 | 25.6<br>26.6<br>24.4<br>24.2<br>24.2 | 4,679.9<br>4,678.2<br>4,706.2<br>4,855.0<br>4,876.4 | 1,766.6<br>1,739.4<br>1,754.3<br>1,730.4<br>1,734.4 | 832.9<br>860.4<br>886.4<br>927.5<br>953.8 | 572.2<br>569.0<br>565.7<br>559.5<br>556.3 | 1,318.8<br>1,315.2<br>1,308.0<br>1,442.3<br>1,434.7 | 106.8<br>107.2<br>107.9<br>109.0<br>110.0 | 82.6<br>87.0<br>84.0<br>86.3<br>87.3 |
| · · · · · · · · · · · · · · · · · · ·         | ,   |   |   |                                      |                                      | Tran                     | sactions                             | ,   | ,   |   |   | ,   |   |                                      |
| 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                                  |
| Q2  | 38.1  | 29.2                                      | 13.6                                      | -0.6                                 | -3.4                                 | 0.0                      | -0.6                                 | 89.5  | 58.5  | 58.0                                      | -15.9                                     | -13.1   | 0.8                                       | 1.4                                  |
| 2007 July                                     | 0.2   | -20.8                                     | 23.4                                      | -0.3                                 | -1.3                                 | 0.1                      | -0.8                                 | 2.2   | -19.1   | 30.9                                      | -4.8                                      | -10.2   | 0.7                                       | 4.8                                  |
| Aug.  | 3.0   | -14.8                                     | 19.5                                      | 0.2                                  | -2.9                                 | 0.0                      | 1.0                                  | -2.3  | -27.3   | 27.4                                      | -3.5                                      | -3.6  | 0.4                                       | 4.4                                  |
| Sep.  | 20.5  | 20.5                                      | 4.8                                       | -2.3                                 | -0.2                                 | 0.0                      | -2.2                                 | 29.5  | 15.3  | 27.0                                      | -3.2                                      | -7.2  | 0.7                                       | -3.0                                 |
| Oct.  | 10.7  | -7.8                                      | 20.8                                      | -0.1                                 | -1.9                                 | -0.1                     | -0.2                                 | 2.7   | -23.8   | 40.4                                      | -4.5                                      | -12.9   | 1.1                                       | 2.4                                  |
| Nov. (p)                                      | 17.5  | 14.3                                      | 3.3                                       | -2.4                                 | 2.3                                  | 0.0                      | 0.0                                  | 21.7  | 4.1   | 26.7                                      | -3.5                                      | -7.6  | 1.0                                       | 1.0                                  |
|   |   |   |   |                                      |                                      | Grov                     | wth 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                                 |
| June  | 12.4  | 10.1                                      | 26.2                                      | -4.8                                 | -18.0                                | -29.5                    | 20.0                                 | 5.6   | 3.2   | 40.2                                      | -6.3                                      | -2.5  | 19.2                                      | 32.9                                 |
| 2007 July                                     | 12.9  | 8.6                                       | 32.5                                      | -4.2                                 | -19.6                                | -26.2                    | 9.0                                  | 5.4   | 2.5   | 41.1                                      | -6.6                                      | -3.2  | 18.4                                      | 31.1                                 |
| Aug.  | 12.0  | 7.4                                       | 32.6                                      | -4.1                                 | -26.7                                | -59.9                    | 3.6                                  | 5.6   | 2.8   | 41.9                                      | -7.0                                      | -3.3  | 16.9                                      | 30.1                                 |
| Sep.  | 11.4  | 7.2                                       | 32.4                                      | -8.5                                 | -28.4                                | -26.9                    | -2.9                                 | 5.8   | 2.7   | 43.9                                      | -7.2                                      | -3.5  | 16.0                                      | 29.6                                 |
| Oct.  | 11.5  | 7.4                                       | 31.2                                      | -8.7                                 | -30.7                                | -31.9                    | -3.0                                 | 5.8   | 1.8   | 46.6                                      | -7.4                                      | -4.1  | 14.6                                      | 29.1                                 |
| Nov. (p)                                      | 11.6  | 6.7                                       | 32.6                                      | -11.2                                | -24.4                                | -31.8                    | 1.9                                  | 6.0   | 1.8   | 47.1                                      | -7.5                                      | -4.0  | 12.5                                      | 27.5                                 |

## C10 Total deposits by sector <sup>2)</sup> (annual growth rates)

#### non-financial corporations (total) households (total) 14 14 12 12 10 10 8 8 4 2 2007 1999 2000 2001 2002 2003 2004 2005 2006

## I Total deposits and deposits included in M3 sector 2) (annual growth rates)

non-financial corporations (total) households (total)



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

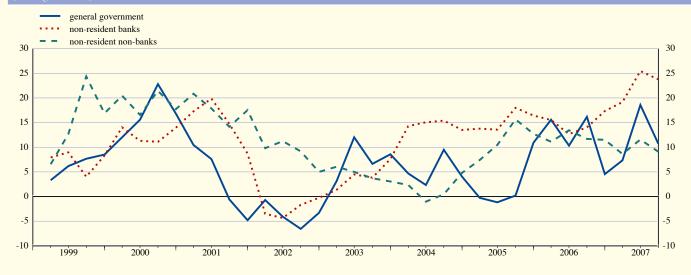
  Data refer to the changing composition of the euro area. For further information, see the General notes.
- Including non-profit institutions serving households. Covers deposits in columns 2, 3, 5 and 7. Covers deposits in columns 9, 10, 12 and 14.

#### 2.5 Deposits held with MFIs, breakdown 1), 2)

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

|                         |                | Ger                | neral governme      | nt                  |                             |                    | Non-               | euro area resido | ents                  |                |
|-------------------------|----------------|--------------------|---------------------|---------------------|-----------------------------|--------------------|--------------------|------------------|-----------------------|----------------|
|                         | Total          | Central government | Other               | general governi     | nent                        | Total              | Banks 3)           |                  | Non-banks             |                |
|                         |                | 5                  | State<br>government | Local<br>government | Social<br>security<br>funds |                    |                    | Total            | General<br>government | Other          |
|                         | 1              | 2                  | 3                   | 4                   | 5                           | 6                  | 7                  | 8                | 9                     | 10             |
|                         |                |                    |                     | Out                 | standing amount             | S                  |                    |                  |                       |                |
| 2005<br>2006            | 313.1<br>329.0 | 149.2<br>124.2     | 38.3<br>45.4        | 80.9<br>91.8        | 44.7<br>67.6                | 3,050.5<br>3,429.0 | 2,250.5<br>2,557.1 | 800.0<br>871.9   | 125.8<br>128.6        | 674.2<br>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<br>Q3 <sup>(p)</sup> | 380.2<br>373.4 | 169.8<br>144.2     | 43.8<br>60.0        | 95.2<br>97.5        | 71.4<br>71.7                | 3,821.5<br>3,873.8 | 2,898.7<br>2,946.7 | 922.8<br>927.2   | 137.5<br>145.5        | 785.3<br>781.7 |
| Q3 */                   | 373.4          | 144.2              | 00.0                | 91.3                |                             | 3,073.0            | 2,940.7            | 921.2            | 143.3                 | /01./          |
|                         |                |                    |                     |                     | Transactions                |                    |                    |                  |                       |                |
| 2005                    | 30.8           | 11.2               | 7.8                 | 11.5                | 0.3                         | 381.1              | 292.8              | 88.3             | 22.4                  | 66.0           |
| 2006                    | 14.2           | -24.5              | 7.0                 | 8.7                 | 22.9                        | 476.6              | 385.8              | 90.8             | 2.8                   | 88.0           |
| 2007 Q1                 | 7.8            | 14.1               | -3.3                | -3.3                | 0.2                         | 256.6              | 237.2              | 19.4             | 3.6                   | 15.8           |
| Q2<br>Q3 <sup>(p)</sup> | 42.4<br>-7.4   | 30.8<br>-26.2      | 1.7<br>16.1         | 6.4<br>2.3          | 3.5<br>0.4                  | 177.7<br>127.0     | 136.1<br>103.9     | 41.6<br>23.1     | 5.2<br>8.0            | 36.4<br>15.1   |
| Q <sub>3</sub>          | -7.4           | -20.2              | 10.1                | 2.3                 | Growth rates                | 127.0              | 103.7              | 23.1             | 0.0                   | 13.1           |
|                         |                |                    |                     |                     |                             |                    |                    |                  |                       |                |
| 2005 Dec.<br>2006 Dec.  | 10.9<br>4.5    | 8.1<br>-16.5       | 25.4<br>18.4        | 16.6<br>10.8        | 0.6<br>51.3                 | 15.4<br>15.8       | 16.4<br>17.3       | 12.7<br>11.5     | 21.6<br>2.2           | 11.2<br>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                    | 18.5           | 21.9               | 10.5                | 12.2                | 25.3                        | 21.8               | 25.4               | 11.5             | 7.1                   | 12.3           |
| Sep. (p)                | 10.7           | -3.6               | 44.0                | 13.6                | 19.0                        | 19.9               | 23.8               | 9.1              | 9.0                   | 9.1            |

## C12 Deposits by government and non-euro area residents 2)



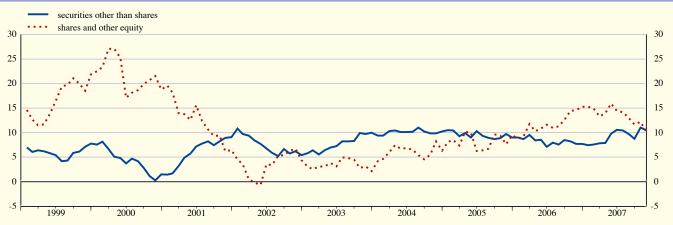
- 1) MFI sector excluding the Eurosystem; sectoral classification is based on ESA 95.
- Data refer to the changing composition of the euro area. For further information, see the General notes.

  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 an

|                     |         |         | 5        | Securities o | ther than sh | ares              |          |                         |         | Shares and | l other equity | y                       |
|---------------------|---------|---------|----------|--------------|--------------|-------------------|----------|-------------------------|---------|------------|----------------|-------------------------|
|                     | Total   | MF      | FIs      | Gen<br>gover |              | Other<br>area res |          | 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                      |
|                     |         |         |          |              | Out          | standing am       | ounts    |                         |         |            |                |                         |
| 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                   |
| Q2                  | 5,010.6 | 1,637.1 | 78.9     | 1,266.1      | 15.6         | 727.1             | 34.1     | 1,251.7                 | 1,623.3 | 406.8      | 867.1          | 349.4                   |
| 2007 July           | 5,045.7 | 1,651.0 | 88.7     | 1,242.4      | 15.4         | 741.2             | 35.8     | 1,271.3                 | 1,607.5 | 407.2      | 852.9          | 347.4                   |
| Aug.                | 5,002.0 | 1,648.7 | 83.7     | 1,213.4      | 15.2         | 747.1             | 33.8     | 1,260.1                 | 1,587.6 | 407.2      | 841.1          | 339.2                   |
| Sep.                | 4,973.6 | 1,646.8 | 82.1     | 1,199.8      | 14.7         | 768.4             | 35.6     | 1,226.1                 | 1,606.6 | 412.3      | 843.6          | 350.8                   |
| Oct.                | 5,090.8 | 1,648.6 | 85.2     | 1,199.0      | 14.7         | 846.5             | 38.2     | 1,258.7                 | 1,654.2 | 401.8      | 905.4          | 347.1                   |
| Nov. <sup>(p)</sup> | 5,120.7 | 1,657.5 | 80.3     | 1,197.6      | 14.6         | 866.0             | 33.9     | 1,270.9                 | 1,646.7 | 399.3      | 896.4          | 351.0                   |
|                     |         |         |          |              |              | Transaction       | ıs       |                         |         |            |                |                         |
| 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                    |
| Q2                  | 172.3   | 26.2    | 2.4      | -0.1         | 0.3          | 73.1              | 0.2      | 70.2                    | 35.2    | 5.5        | 16.6           | 13.2                    |
| 2007 July           | 43.0    | 13.0    | 10.1     | -23.3        | -0.2         | 14.5              | 2.0      | 26.8                    | -10.8   | 1.2        | -10.7          | -1.3                    |
| Aug.                | -43.9   | -2.7    | -5.2     | -29.4        | -0.3         | 6.4               | -2.0     | -10.8                   | -17.4   | 0.1        | -10.5          | -7.0                    |
| Sep.                | -4.6    | -2.9    | 0.8      | -13.3        | 0.0          | 21.4              | 2.9      | -13.5                   | 18.5    | 6.0        | 1.9            | 10.5                    |
| Oct.                | 145.3   | 42.8    | 3.9      | 5.6          | 0.2          | 44.1              | 3.1      | 45.5                    | 38.6    | -6.1       | 48.1           | -3.4                    |
| Nov. (p)            | 44.9    | 8.3     | -3.5     | -3.5         | 0.1          | 20.3              | -3.6     | 26.8                    | 0.5     | -1.9       | -5.4           | 7.8                     |
|                     |         |         |          |              |              | Growth rate       | es       |                         |         |            |                |                         |
| 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                    |
| June                | 10.6    | 8.6     | 25.9     | -8.8         | -7.1         | 28.0              | 43.4     | 29.5                    | 14.4    | 17.8       | 7.5            | 31.0                    |
| 2007 July           | 10.5    | 8.5     | 34.4     | -9.3         | -7.8         | 28.1              | 47.0     | 27.7                    | 14.2    | 19.6       | 5.9            | 32.4                    |
| Aug.                | 9.7     | 7.7     | 27.2     | -9.7         | -10.5        | 29.5              | 35.5     | 25.8                    | 13.0    | 18.5       | 5.2            | 29.3                    |
| Sep.                | 8.7     | 6.4     | 27.2     | -9.8         | -5.7         | 31.2              | 48.8     | 21.2                    | 11.7    | 19.2       | 3.7            | 25.4                    |
| Oct.                | 11.0    | 8.4     | 32.2     | -8.7         | -3.6         | 35.8              | 53.7     | 23.3                    | 12.2    | 17.0       | 7.5            | 19.8                    |
| Nov. (p)            | 10.5    | 7.8     | 23.0     | -9.1         | -5.2         | 37.3              | 41.9     | 21.8                    | 10.1    | 7.6        | 6.2            | 24.8                    |

## C13 MFI holdings of securities 2)



- 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 3)

|           |       | Consum          | er credit                           |                 | L     | ending for h    | ouse purchase                       | -               | Other lending |                 |                                     |                 |
|-----------|-------|-----------------|-------------------------------------|-----------------|-------|-----------------|-------------------------------------|-----------------|---------------|-----------------|-------------------------------------|-----------------|
|           | Total | Up to<br>1 year | Over 1 year<br>and up to<br>5 years | Over<br>5 years | Total | Up to<br>1 year | Over 1 year<br>and up to<br>5 years | Over<br>5 years | Total         | Up to<br>1 year | Over 1 year<br>and up to<br>5 years | Over<br>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            |
| Q2        | -0.8  | -0.2            | -0.3                                | -0.3            | -0.4  | 0.0             | 0.0                                 | -0.4            | -1.4          | 0.0             | -0.5                                | -0.8            |
| 2007 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.      | -0.2  | -0.1            | -0.1                                | -0.1            | -0.1  | 0.0             | 0.0                                 | -0.1            | -0.3          | 0.0             | -0.1                                | -0.2            |
| Sep.      | -0.4  | -0.1            | -0.1                                | -0.2            | -0.3  | 0.0             | 0.0                                 | -0.2            | -0.7          | -0.1            | -0.3                                | -0.3            |
| Oct.      | -0.3  | -0.1            | -0.1                                | -0.1            | -0.1  | 0.0             | 0.0                                 | -0.1            | -0.5          | -0.1            | -0.2                                | -0.2            |
| Nov. (p)  | -0.3  | 0.0             | -0.1                                | -0.1            | -0.2  | 0.0             | -0.1                                | -0.1            | -0.4          | 0.0             | -0.1                                | -0.3            |

#### ${\bf 2.}\ Write-offs/write-downs\ of\ loans\ to\ non-financial\ corporations\ and\ non-euro\ area\ residents$

|           |       | Non-financial corpo | orations                            |                 | Non-euro a | rea residents   |                |
|-----------|-------|---------------------|-------------------------------------|-----------------|------------|-----------------|----------------|
|           | Total | Up to<br>1 year     | Over 1 year<br>and up to<br>5 years | Over<br>5 years | Total      | Up to<br>1 year | Over 1<br>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           |
| Q2        | -3.0  | -0.4                | -1.4                                | -1.2            | -1.2       | 0.0             | -1.2           |
| 2007 July | -0.5  | -0.1                | -0.1                                | -0.3            | 0.0        | 0.0             | 0.0            |
| Aug.      | -0.5  | -0.1                | -0.2                                | -0.2            | 0.0        | 0.0             | 0.0            |
| Sep.      | -0.8  | -0.1                | -0.5                                | -0.3            | -0.1       | 0.0             | -0.1           |
| Oct.      | -0.8  | 0.0                 | -0.5                                | -0.3            | -0.9       | -0.9            | 0.0            |
| Nov. (p)  | -0.6  | -0.1                | -0.2                                | -0.3            | -0.1       | 0.0             | -0.1           |

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

|           |       |                              | S        | ecurities ot | her than sh |           |          | Shares and | l other equity | y    |          |                         |
|-----------|-------|------------------------------|----------|--------------|-------------|-----------|----------|------------|----------------|------|----------|-------------------------|
|           | Total | government area residents re |          |              |             |           |          |            |                | MFIs | Non-MFIs | Non-euro area residents |
|           | 1     | Euro                         | Non-euro | Euro<br>4    | Non-euro    | Euro<br>6 | Non-euro | 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                     |
| Q2        | -4.0  | -0.7                         | 0.0      | -3.8         | -0.1        | 0.0       | -0.1     | 0.6        | 12.7           | 1.7  | 6.8      | 4.2                     |
| 2007 July | -1.2  | 0.4                          | 0.1      | 0.4          | 0.0         | -0.3      | -0.1     | -1.7       | -3.3           | -0.6 | -2.0     | -0.6                    |
| Aug.      | -0.4  | 0.0                          | 0.1      | 0.3          | 0.0         | -0.3      | 0.0      | -0.4       | -2.9           | -0.1 | -1.6     | -1.2                    |
| Sep.      | -0.9  | 0.2                          | -0.1     | -0.2         | -0.1        | -0.1      | 0.0      | -0.6       | 0.6            | -1.0 | 0.5      | 1.1                     |
| Oct.      | -2.5  | 0.7                          | 0.1      | -3.8         | 0.0         | -0.2      | 0.0      | 0.8        | 7.5            | 1.3  | 3.6      | 2.6                     |
| Nov. (p)  | -1.0  | -0.5                         | 0.0      | 2.1          | 0.0         | -0.8      | -0.1     | -1.7       | -8.0           | -0.5 | -3.6     | -3.8                    |

- 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

|                                    |                               |                      | MFI                  | (S <sup>3)</sup>     |                   |                   |                      |                               |                      | Non-l                | MFIs                 |                   |                   |                   |
|------------------------------------|-------------------------------|----------------------|----------------------|----------------------|-------------------|-------------------|----------------------|-------------------------------|----------------------|----------------------|----------------------|-------------------|-------------------|-------------------|
|                                    | All<br>currencies             | Euro 4)              |                      | Non-euro             | currencie         | S                 |                      | All<br>currencies             | Euro 4)              |                      | Non-euro             | currencies        |                   |                   |
|                                    | (outstanding amount)          |                      | Total                |                      |                   |                   | (                    | (outstanding<br>amount)       |                      | 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 ar        | ea resider           | nts                           |                      |                      |                      |                   |                   |                   |
| 2005<br>2006                       | 4,851.2<br>5,242.4            | 90.9<br>90.7         | 9.1<br>9.3           | 5.6<br>5.6           | 0.4<br>0.4        | 1.5<br>1.5        | 1.0<br>1.2           | 7,361.0<br>8,014.8            | 96.8<br>96.4         | 3.2<br>3.6           | 1.9<br>2.2           | 0.3<br>0.3        | 0.1<br>0.1        | 0.5<br>0.6        |
| 2007 Q1<br>Q2<br>Q3 <sup>(p)</sup> | 5,395.9<br>5,572.9<br>5,693.4 | 90.5<br>90.5<br>91.2 | 9.5<br>9.5<br>8.8    | 5.6<br>5.8<br>5.4    | 0.5<br>0.4<br>0.4 | 1.4<br>1.3<br>1.3 | 1.2<br>1.1<br>0.9    | 8,199.9<br>8,448.1<br>8,548.0 | 96.3<br>96.3<br>96.1 | 3.7<br>3.7<br>3.9    | 2.3<br>2.3<br>2.4    | 0.3<br>0.3<br>0.3 | 0.1<br>0.1<br>0.1 | 0.6<br>0.6<br>0.6 |
|                                    |                               |                      |                      |                      | B                 | y non-euro        | area resid           | lents                         |                      |                      |                      |                   |                   |                   |
| 2005<br>2006                       | 2,250.5<br>2,557.1            | 46.2<br>45.3         | 53.8<br>54.7         | 35.4<br>35.1         | 2.7<br>2.3        | 2.8<br>2.7        | 10.0<br>11.5         | 800.0<br>871.9                | 51.8<br>50.7         | 48.2<br>49.3         | 32.1<br>32.0         | 1.7<br>1.3        | 2.2<br>2.0        | 9.2<br>10.4       |
| 2007 Q1<br>Q2<br>Q3 <sup>(p)</sup> | 2,778.3<br>2,898.7<br>2,946.7 | 46.4<br>45.0<br>46.0 | 53.6<br>55.0<br>54.0 | 34.3<br>34.8<br>34.1 | 2.5<br>2.6<br>2.7 | 2.5<br>2.4<br>2.4 | 11.2<br>11.8<br>11.5 | 885.6<br>922.8<br>927.2       | 51.1<br>51.2<br>49.8 | 48.9<br>48.8<br>50.2 | 31.8<br>32.3<br>33.4 | 1.6<br>1.3<br>1.1 | 2.2<br>1.8<br>1.9 | 9.4<br>9.7<br>9.7 |

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

|         | All                  | Euro 4) |       | Non-eu | uro currencies |     |     |
|---------|----------------------|---------|-------|--------|----------------|-----|-----|
|         | (outstanding amount) |         | Total |        |                |     |     |
|         | amount)              |         |       | USD    | JPY            | CHF | GBP |
|         | 1                    | 2       | 3     | 4      | 5              | 6   | 7   |
| 2005    | 4,051.7              | 81.2    | 18.8  | 9.6    | 1.8            | 1.9 | 3.2 |
| 2006    | 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      | 4,797.0              | 80.2    | 19.8  | 10.1   | 1.6            | 1.8 | 3.7 |
| Q3 (p)  | 4,859.7              | 80.8    | 19.2  | 9.7    | 1.6            | 1.8 | 3.6 |

- 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

|                                    |                               |                      | MF                   | 'Is 3)               |                   |                   |                      |                         |                      | Non-                 | MFIs                 |                   |                   |                   |
|------------------------------------|-------------------------------|----------------------|----------------------|----------------------|-------------------|-------------------|----------------------|-------------------------|----------------------|----------------------|----------------------|-------------------|-------------------|-------------------|
|                                    | All<br>currencies             | Euro 4)              |                      | Non-eu               | ro currencie      | S                 |                      | All<br>currencies       | Euro 4)              |                      | Non-eur              | o currencies      | ;                 |                   |
|                                    | (outstanding amount)          |                      | Total                |                      |                   |                   | (                    | (outstanding amount)    |                      | 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 a         | rea residei          | nts                     |                      |                      |                      |                   |                   |                   |
| 2005<br>2006                       | 4,569.7<br>4,933.4            | -                    |                      | -                    | -                 | -                 | -                    | 9,112.0<br>9,970.8      | 96.3<br>96.4         | 3.7<br>3.6           | 1.6<br>1.6           | 0.2<br>0.2        | 1.3<br>1.1        | 0.5<br>0.5        |
| 2007 Q1                            | 5,097.6                       |                      |                      | _                    | _                 | _                 |                      | 10,242.4                | 96.4                 | 3.6                  | 1.7                  | 0.2               | 1.1               | 0.5               |
| Q2<br>Q3 <sup>(p)</sup>            | 5,264.6<br>5,422.1            | -                    | -                    | -                    | -                 | -                 | -                    | 10,510.8<br>10,738.7    | 96.2<br>96.1         | 3.8<br>3.9           | 1.8<br>1.9           | 0.2               | 1.0<br>1.0        | 0.6<br>0.5        |
|                                    |                               |                      |                      |                      | Т                 | o non-euro        | area resid           | dents                   |                      |                      |                      |                   |                   |                   |
| 2005<br>2006                       | 1,722.1<br>2,061.0            | 48.5<br>50.7         | 51.5<br>49.3         | 30.5<br>28.9         | 4.3<br>2.0        | 2.0<br>2.3        | 10.1<br>11.0         | 763.1<br>863.4          | 38.2<br>39.3         | 61.8<br>60.7         | 43.7<br>43.2         | 1.8<br>1.1        | 4.1<br>4.0        | 8.6<br>8.6        |
| 2007 Q1<br>Q2<br>Q3 <sup>(p)</sup> | 2,265.1<br>2,334.3<br>2,354.1 | 51.7<br>50.3<br>48.9 | 48.3<br>49.7<br>51.1 | 27.7<br>28.7<br>28.6 | 2.2<br>1.9<br>2.0 | 2.5<br>2.4<br>2.5 | 10.8<br>11.7<br>12.6 | 904.6<br>952.0<br>947.3 | 41.3<br>39.4<br>38.8 | 58.7<br>60.6<br>61.2 | 41.8<br>43.1<br>43.6 | 1.0<br>1.0<br>1.1 | 4.1<br>3.8<br>3.8 | 8.1<br>8.4<br>8.3 |

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

|                                    |                               |                      | Issued by            | MFIs 3)              |                   |                   |                      |                               |                      | Issued by            | non-MFIs             |                   |                   |                      |
|------------------------------------|-------------------------------|----------------------|----------------------|----------------------|-------------------|-------------------|----------------------|-------------------------------|----------------------|----------------------|----------------------|-------------------|-------------------|----------------------|
|                                    | All<br>currencies             | Euro 4)              |                      | Non-eur              | o currencie       | S                 |                      | All<br>currencies             | Euro 4)              |                      | Non-eur              | o currencies      | į                 |                      |
|                                    | (outstanding amount)          |                      | Total                |                      |                   |                   |                      | (outstanding amount)          |                      | Total                |                      |                   |                   |                      |
|                                    |                               |                      |                      | USD                  | JPY               | CHF               | GBP                  |                               |                      |                      | USD                  | JPY               | CHF               | GBP                  |
|                                    | 1                             | 2                    | 3                    | 4                    | 5                 | 6                 | 7                    | 8                             | 9                    | 10                   | 11                   | 12                | 13                | 14                   |
|                                    |                               |                      |                      |                      | Iss               | ued by euro       | area res             | idents                        |                      |                      |                      |                   |                   |                      |
| 2005<br>2006                       | 1,517.7<br>1,632.8            | 95.6<br>95.6         | 4.4<br>4.4           | 2.0<br>2.3           | 0.3<br>0.2        | 0.4<br>0.3        | 1.4<br>1.3           | 1,980.9<br>1,922.3            | 97.8<br>97.6         | 2.2<br>2.4           | 1.1<br>1.3           | 0.3<br>0.3        | 0.1<br>0.1        | 0.5<br>0.7           |
| 2007 Q1<br>Q2<br>Q3 <sup>(p)</sup> | 1,693.0<br>1,716.1<br>1,728.9 | 95.5<br>95.4<br>95.3 | 4.5<br>4.6<br>4.7    | 2.3<br>2.2<br>2.3    | 0.3<br>0.3<br>0.3 | 0.3<br>0.3<br>0.2 | 1.4<br>1.6<br>1.5    | 1,968.0<br>2,042.9<br>2,018.6 | 97.5<br>97.6<br>97.5 | 2.5<br>2.4<br>2.5    | 1.3<br>1.3<br>1.4    | 0.3<br>0.3<br>0.3 | 0.1<br>0.1<br>0.1 | 0.8<br>0.7<br>0.7    |
|                                    |                               |                      |                      |                      | Issue             | d by non-e        | uro area r           | esidents                      |                      |                      |                      |                   |                   |                      |
| 2005<br>2006                       | 397.5<br>514.4                | 51.0<br>52.2         | 49.0<br>47.8         | 28.5<br>28.8         | 0.8<br>0.7        | 0.5<br>0.4        | 15.7<br>14.5         | 522.8<br>594.2                | 38.3<br>38.9         | 61.7<br>61.1         | 35.0<br>36.5         | 7.8<br>4.9        | 0.8<br>0.8        | 12.6<br>14.2         |
| 2007 Q1<br>Q2<br>Q3 <sup>(p)</sup> | 545.3<br>584.1<br>576.2       | 52.7<br>51.9<br>53.8 | 47.3<br>48.1<br>46.2 | 28.5<br>28.5<br>26.8 | 0.6<br>0.7<br>0.7 | 0.5<br>0.5<br>0.4 | 14.4<br>14.6<br>15.0 | 636.3<br>667.6<br>650.0       | 38.2<br>37.4<br>35.4 | 61.8<br>62.6<br>64.6 | 36.9<br>36.9<br>38.8 | 4.4<br>4.3<br>4.3 | 0.6<br>0.7<br>0.7 | 14.8<br>15.7<br>15.0 |

- MFI sector excluding the Eurosystem; sectoral classification is based on ESA 95.
  Data refer to the changing composition of the euro area. For further information, see the General notes.
  For non-euro area residents, the term "MFIs" refers to institutions of a similar type to euro area MFIs.
  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   | Deposits |         | ldings of securition | es      | Holdings<br>of shares/<br>other | Holdings of<br>investment<br>fund shares | Fixed assets | Other assets |
|---------|---------|----------|---------|----------------------|---------|---------------------------------|--|--------------|--------------|
|         |         |          | Total   | Up to                | Over    | equity                          |  |              |              |
|         |         |          |         | 1 year               | 1 year  |                                 |  |              |              |
|         | 1       | 2        | 3       | 4                    | 5       | 6                               | 7  | 8            | 9            |
| 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      | 5,137.9 | 316.9    | 1,908.6 | 145.2                | 1,763.3 | 1,777.9                         | 601.0                                    | 180.3        | 353.2        |
| 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 | 5,712.9 | 332.4    | 2.031.5 | 181.0                | 1,850.6 | 2.068.7                         | 718.7                                    | 188.9        | 372.7        |
| O2 (p)  | 6,002.9 | 349.7    | 2,042.3 | 192.8                | 1,849.4 | 2,216.4                         | 784.5                                    | 194.7        | 415.3        |

#### 2. Liabilities

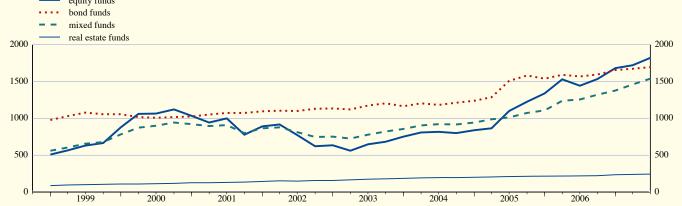
|         | Total   | Deposits and loans taken |         | Other liabilities |
|---------|---------|--------------------------|---------|-------------------|
|         | 1       | 2                        | 3       | 4                 |
| 2006 Q1 | 5,199.6 | 73.6                     | 4,871.3 | 254.7             |
| Q2      | 5,137.9 | 76.4                     | 4,789.5 | 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 | 5,712.9 | 82.2                     | 5,349.4 | 281.7             |
| O2 (p)  | 6,002.9 | 90.8                     | 5,596.6 | 315.5             |

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

|                           | Total                                    |  | Fund                                     | ls by investment po                      | licy                             |                                  | Funds by typ                             | e of investor                            |
|---------------------------|--|--|--|--|----------------------------------|----------------------------------|--|--|
|                           |  | Equity<br>funds                          | Bond<br>funds                            | Mixed<br>funds                           | Real estate<br>funds             | Other<br>funds                   | General<br>public<br>funds               | Special<br>investors'<br>funds           |
|                           | 1  | 2  | 3  | 4  | 5                                | 6                                | 7  | 8  |
| 2006 Q1<br>Q2<br>Q3<br>Q4 | 5,199.6<br>5,137.9<br>5,359.0<br>5,551.3 | 1,531.9<br>1,443.3<br>1,533.3<br>1,680.5 | 1,592.6<br>1,569.3<br>1,594.2<br>1,657.0 | 1,239.4<br>1,257.0<br>1,321.5<br>1,376.0 | 214.0<br>217.4<br>221.2<br>231.8 | 621.5<br>650.9<br>688.9<br>606.0 | 3,999.0<br>3,913.2<br>4,085.5<br>4,252.1 | 1,200.5<br>1,224.7<br>1,273.5<br>1,299.2 |
| 2007 Q1<br>Q2 (p)         | 5,712.9<br>6,002.9                       | 1,723.2<br>1,822.9                       | 1,674.9<br>1,693.8                       | 1,459.3<br>1,539.4                       | 238.4<br>244.1                   | 617.1<br>702.9                   | 4,372.4<br>4,591.3                       | 1,340.6<br>1,411.6                       |

## C14 Total assets of investment funds (EUR billions)





<sup>1)</sup> 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   | Deposits |         | ngs of securities<br>er than shares |                | Holdings<br>of shares/<br>other | Holdings of<br>investment<br>fund shares | Fixed assets | Other assets |
|-------------------|---------|----------|---------|-------------------------------------|----------------|---------------------------------|--|--------------|--------------|
|                   |         |          | Total   | Up to<br>1 year                     | Over<br>1 year | equity                          |  |              |              |
|                   | 1       | 2        | 3       | 4                                   | 5              | 6                               | 7  | 8            | 9            |
|                   |         | ·        |         | Equity funds                        | ·              |                                 |  |              |              |
| 2006 Q1           | 1,531.9 | 55.1     | 51.5    | 6.3                                 | 45.2           | 1,309.6                         | 71.1                                     | -            | 44.6         |
| Q2                | 1,443.3 | 52.3     | 51.4    | 6.5                                 | 44.9           | 1,221.7                         | 69.3                                     |              | 48.6         |
| Q3                | 1,533.3 | 53.8     | 76.1    | 33.2                                | 42.9           | 1,284.3                         | 66.8                                     | -            | 52.3         |
| Q4                | 1,680.5 | 56.1     | 66.0    | 22.7                                | 43.3           | 1,429.3                         | 74.3                                     |              | 54.8         |
| 2007 Q1           | 1,723.2 | 59.3     | 65.7    | 25.7                                | 40.0           | 1,461.2                         | 78.4                                     | -            | 58.6         |
| Q2 <sup>(p)</sup> | 1,822.9 | 60.9     | 67.9    | 27.4                                | 40.5           | 1,545.4                         | 83.9                                     |              | 64.9         |
|                   |         |          |         | Bond funds                          |                |                                 |  |              |              |
| 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           | 1,674.9 | 112.3    | 1,356.5 | 95.1                                | 1,261.4        | 44.5                            | 52.5                                     |              | 109.0        |
| Q2 (p)            | 1,693.8 | 115.1    | 1,346.9 | 99.6                                | 1,247.3        | 62.9                            | 55.7                                     |              | 113.2        |
|                   |         |          |         | Mixed funds                         |                |                                 |  |              |              |
| 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          | 318.7                           | 253.6                                    | 0.2          | 128.5        |
| Q3                | 1,321.5 | 68.5     | 510.6   | 45.2                                | 465.4          | 332.3                           | 272.3                                    | 0.3          | 137.4        |
| Q4                | 1,376.0 | 71.0     | 519.4   | 43.4                                | 476.0          | 364.2                           | 292.8                                    | 0.4          | 128.2        |
| 2007 Q1           | 1,459.3 | 73.8     | 530.5   | 45.5                                | 485.0          | 380.8                           | 322.3                                    | 0.3          | 151.5        |
| Q2 (p)            | 1,539.4 | 83.6     | 528.9   | 50.2                                | 478.8          | 400.2                           | 346.1                                    | 0.9          | 179.6        |
|                   |         |          |         | Real estate fund                    | ds             |                                 |  |              |              |
| 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           | 238.4   | 18.9     | 6.7     | 1.9                                 | 4.8            | 2.3                             | 9.6                                      | 188.4        | 12.6         |
| Q2 <sup>(p)</sup> | 244.1   | 18.9     | 6.6     | 1.9                                 | 4.7            | 2.1                             | 10.1                                     | 193.1        | 13.2         |

#### 2. Funds by type of investor

|                   | Total   | Deposits | Holdings of<br>securities<br>other than<br>shares | Holdings of<br>shares/<br>other<br>equity | Holdings of investment fund shares | Fixed assets | Other assets |
|-------------------|---------|----------|---|---|------------------------------------|--------------|--------------|
|                   | 1       | 2        | 3   | 4   | 5                                  | 6            | 7            |
|                   |         |          | General pub                                       | olic funds                                |                                    |              |              |
| 2006 Q1           | 3,999.0 | 263.4    | 1,334.4   | 1,551.3                                   | 427.5                              | 150.2        | 272.2        |
| Q2                | 3,913.2 | 257.1    | 1,321.4   | 1,449.8                                   | 452.2                              | 151.2        | 281.5        |
| 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           | 4,372.4 | 274.3    | 1,420.7   | 1,693.3                                   | 529.0                              | 155.6        | 299.5        |
| Q2 <sup>(p)</sup> | 4,591.3 | 284.5    | 1,430.0   | 1,817.2                                   | 576.9                              | 160.1        | 322.7        |
|                   |         |          | Special inves                                     | tors' funds                               |                                    |              |              |
| 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           | 1,340.6 | 58.0     | 610.8   | 375.4                                     | 189.7                              | 33.3         | 73.2         |
| Q2 <sup>(p)</sup> | 1,411.6 | 65.3     | 612.3   | 399.2                                     | 207.6                              | 34.7         | 92.6         |



## **EURO AREA ACCOUNTS**

# 3.1 Integrated economic and financial accounts by institutional sector

| Uses  | Euro<br>area  | Households   | Non-financial corporations                    | Financial corporations                             | General<br>government                        | Rest of<br>the world                          |
|---|---|--|---|--|--|---|
| 2007 Q2   |   |  |   | -  | _  |   |
| External account  |   |  |   |  |  |   |
| Exports of goods and services  Trade balance 1)   |   |  |   |  |  | 487.7<br>-31.9                                |
| Generation of income account  |   |  |   |  |  |   |
| Gross value added (basic prices) Taxes less subsidies on products Gross domestic product (market prices) Compensation of employees Other taxes less subsidies on production Consumption of fixed capital Net operating surplus and mixed income 1)  | 1,052.2<br>39.6<br>316.7<br>561.4                                   | 107.5<br>6.1<br>86.3<br>285.8                            | 671.9<br>26.4<br>178.2<br>249.5               | 52.7<br>3.8<br>11.1<br>26.2                        | 220.1<br>3.3<br>41.1<br>0.0                  |   |
| Allocation of primary income account  | 301.4   | 203.0  | 249.3   | 20.2   | 0.0  |   |
| Net operating surplus and mixed income Compensation of employees Taxes less subsidies on production   | 000.2   | 46.4   | 0710  | 422.2  | 60.2   | 4.1   |
| Property income Interest Other property income Net national income 1)   | 903.2<br>456.0<br>447.2<br>1,883.6                                  | 46.4<br>44.3<br>2.2<br>1,580.8                           | 364.2<br>76.0<br>288.2<br>29.8                | 423.2<br>266.5<br>156.8<br>38.1                    | 69.3<br>69.3<br>0.0<br>234.8                 | 133.2<br>79.6<br>53.7                         |
| Secondary distribution of income account  |   |  |   |  |  |   |
| Net national income Current taxes on income, wealth, etc. Social contributions Social benefits other than social transfers in kind Other current transfers Net non-life insurance premiums Non-life insurance claims Other Net disposable income 1) | 285.7<br>393.8<br>393.0<br>176.9<br>44.7<br>44.6<br>87.6<br>1,867.0 | 210.4<br>393.8<br>1.4<br>69.6<br>32.9<br>36.8<br>1,382.3 | 57.9<br>17.4<br>23.4<br>10.3<br>13.1<br>-39.4 | 17.0<br>25.7<br>46.9<br>0.9<br>44.6<br>1.4<br>34.8 | 0.4<br>348.4<br>37.0<br>0.7<br>36.3<br>489.2 | 4.8<br>0.8<br>0.6<br>7.2<br>1.1<br>0.7<br>5.4 |
| Use of income account   |   |  |   |  |  |   |
| Net disposable income Final consumption expenditure Individual consumption expenditure Collective consumption expenditure Adjustment for the change in net equity of households in pension fund reserves Net saving/current external account 10     | 1,680.1<br>1,507.9<br>172.1<br>17.9<br>187.0                        | 1,238.5<br>1,238.5<br>0.1<br>161.7                       | 3.6<br>-43.0                                  | 14.2<br>20.7                                       | 441.6<br>269.4<br>172.1<br>0.0<br>47.7       | 0.1<br>-8.0                                   |
| Capital account   |   |  |   |  |  |   |
| Net saving / current external account Gross capital formation Gross fixed capital formation Changes in inventories and acquisitions less disposals of valuables Consumption of fixed capital  | 495.7<br>496.5<br>-0.8  | 165.1<br>165.3<br>-0.2                                   | 268.2<br>269.1<br>-0.9                        | 10.3<br>10.1<br>0.2                                | 52.1<br>52.0<br>0.1                          |   |
| Acquisitions less disposals of non-produced non-financial assets Capital transfers Capital taxes Other capital transfers Net lending (+)/net borrowing (-) (from capital account) 1) Statistical discrepancy  | 0.5<br>35.0<br>5.9<br>29.1<br>9.6<br>0.0                            | -0.1<br>8.9<br>5.7<br>3.2<br>83.0<br>-5.0                | 0.7<br>2.1<br>0.2<br>1.8<br>-120.2<br>5.0     | 0.2<br>1.9<br>0.0<br>1.9<br>20.1<br>0.0            | -0.3<br>22.1<br>22.1<br>26.7<br>0.0          | -0.5<br>4.4<br>0.0<br>4.4<br>-9.6<br>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<br>area   | Households                                 | Non-financial corporations      | Financial corporations          | General<br>government               | Rest of<br>the world                 |
|---|--|--|---------------------------------|---------------------------------|-------------------------------------|--------------------------------------|
| 2007 Q2   |  |  |                                 |                                 |                                     |                                      |
| External account  |  |  |                                 |                                 |                                     |                                      |
| Imports of goods and services  Trade balance  |  |  |                                 |                                 |                                     | 455.8                                |
| Generation of income account  |  |  |                                 |                                 |                                     |                                      |
| Gross value added (basic prices) Taxes less subsidies on products Gross domestic product (market prices) <sup>2)</sup> Compensation of employees Other taxes less subsidies on production Consumption of fixed capital Net operating surplus and mixed income | 1,969.9<br>237.7<br>2,207.6                          | 485.6                                      | 1,126.0                         | 93.8                            | 264.5                               |                                      |
| Allocation of primary income account  |  |  |                                 |                                 |                                     |                                      |
| Net operating surplus and mixed income Compensation of employees Taxes less subsidies on production Property income Interest Other property income  | 561.4<br>1,053.7<br>278.5<br>893.2<br>450.6<br>442.7 | 285.8<br>1,053.7<br>287.8<br>69.0<br>218.8 | 249.5<br>144.6<br>41.2<br>103.4 | 26.2<br>435.1<br>332.6<br>102.5 | 0.0<br>278.5<br>25.7<br>7.7<br>18.0 | 2.6<br>-1.2<br>143.2<br>85.0<br>58.2 |
| Net national income   |  |  |                                 |                                 |                                     |                                      |
| Secondary distribution of income account  |  |  |                                 |                                 |                                     |                                      |
| Net national income Current taxes on income, wealth, etc. Social contributions Social benefits other than social transfers in kind Other current transfers Net non-life insurance premiums  | 1,883.6<br>289.8<br>393.6<br>391.0<br>158.3<br>44.6  | 1,580.8<br>1.1<br>391.0<br>84.6            | 29.8<br>17.9<br>11.7            | 38.1<br>40.6<br>45.8<br>44.6    | 234.8<br>289.8<br>334.0             | 0.6<br>1.0<br>2.5<br>25.9<br>1.2     |
| Non-life insurance claims Other Net disposable income   | 44.2<br>69.5   | 34.3<br>50.3                               | 8.8<br>2.9                      | 0.9                             | 0.3<br>16.0                         | 1.1<br>23.6                          |
| Use of income account   |  |  |                                 |                                 |                                     |                                      |
| Net disposable income Final consumption expenditure Individual consumption expenditure Collective consumption expenditure Adjustment for the change in net equity of households in pension fund reserves Net saving/current external account                  | 1,867.0  | 1,382.3                                    | -39.4                           | 34.8                            | 489.2                               | 0.0                                  |
| Capital account   |  |  |                                 |                                 |                                     |                                      |
| Net saving / current external account Gross capital formation Gross fixed capital formation Changes in inventories and acquisitions less disposals of valuables   | 187.0<br>316.7                                       | 161.7<br>86.3                              | -43.0<br>178.2                  | 20.7                            | 47.7                                | -8.0                                 |
| Consumption of fixed capital Acquisitions less disposals of non-produced non-financial assets Capital transfers   | 37.1   | 9.0  | 176.2                           | 0.8                             | 11.9                                | 2.3                                  |
| Capital transfers Capital transfers Other capital transfers Net lending (+)/net borrowing (-) (from capital account) Statistical discrepancy  | 5.9<br>31.2  | 9.0  | 15.5                            | 0.8                             | 5.9                                 | 0.0 2.3                              |

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<br>area | Households         | Non-financial corporations | MFIs                | Other<br>financial<br>inter- | Insurance corporations and pension | General<br>govern-<br>ment | Rest of<br>the world |
|---|--------------|--------------------|----------------------------|---------------------|------------------------------|------------------------------------|----------------------------|----------------------|
| Opening balance sheet, financial assets   |              |                    |                            |                     | mediaries                    | funds                              |                            |                      |
|   |              | 17 270 4           | 12 970 2                   | 20,002,0            | 0.702.0                      | 6.071.4                            | 2,742.5                    | 13,961.2             |
| Total financial assets  Monetary gold and special drawing rights (SDRs)                 |              | 17,278.4           | 13,870.3                   | 20,882.9<br>185.0   | 9,703.0                      | 6,071.4                            | 2,742.3                    | 13,901.2             |
| Currency and deposits   |              | 5,364.8            | 1,630.7                    | 2,404.3             | 1,367.9                      | 751.6                              | 529.4                      | 3,785.2              |
| Short-term debt securities  |              | 45.6               | 123.4                      | 102.3               | 257.2                        | 227.6                              | 25.4                       | 774.2                |
| Long-term debt securities   |              | 1,419.4            | 158.2                      | 3,449.2             | 1,882.7                      | 1,927.2                            | 206.3                      | 2,153.2              |
| Loans of which long-term  |              | 21.4<br>18.0       | 1,744.7<br>964.9           | 11,370.6<br>8,567.3 | 1,326.2<br>999.5             | 350.5<br>296.8                     | 355.3<br>316.2             | 1,427.4              |
| Shares and other equity   |              | 5,129.4            | 7,552.3                    | 1,795.8             | 4,585.9                      | 2,376.5                            | 1,083.9                    | 5,100.7              |
| Quoted shares   |              | 1,252.5            | 1,915.3                    | 688.6               | 2,394.8                      | 852.9                              | 393.3                      | .,                   |
| Unquoted shares and other equity  |              | 2,213.0            | 5,218.4                    | 831.4               | 1,524.9                      | 460.8                              | 549.6                      |                      |
| Mutual fund shares  |              | 1,663.9            | 418.5                      | 275.8               | 666.3                        | 1,062.8                            | 141.0                      |                      |
| Insurance technical reserves Other accounts receivable and financial derivatives        |              | 5,003.1<br>294.8   | 133.2<br>2,527.8           | 1.9<br>1,573.8      | 0.0<br>283.1                 | 145.9<br>292.1                     | 3.1<br>539.1               | 192.1<br>528.4       |
| Net financial worth   |              | 294.6              | 2,321.0                    | 1,373.6             | 203.1                        | 292.1                              | 339.1                      | 320.4                |
| Financial account, transactions in financial assets                                     |              |                    |                            |                     |                              |                                    |                            |                      |
| <u> </u>  |              | 15(0               | 106.2                      | 722.7               | 204.1                        | 74.4                               | 115.5                      | 177.5                |
| Total transactions in financial assets  Monetary gold and special drawing rights (SDRs) |              | 156.8              | 196.2                      | 722.7<br>-0.6       | 294.1                        | 74.4                               | 115.5                      | 477.5<br>0.6         |
| Currency and deposits   |              | 103.6              | 38.3                       | 90.1                | 81.6                         | 5.5                                | 91.1                       | 188.3                |
| Short-term debt securities  |              | -1.5               | 5.0                        | 10.0                | 31.8                         | 10.3                               | 7.1                        | 36.5                 |
| Long-term debt securities   |              | -0.9               | 14.8                       | 144.9               | 33.0                         | 44.7                               | 4.5                        | 109.2                |
| Loans   |              | 0.5                | 46.6                       | 338.0               | 35.4                         | 4.0                                | 3.1                        | 24.1                 |
| of which long-term  |              | 0.5                | 11.3                       | 213.0               | 34.3                         | -1.1                               | 0.0                        | 100.0                |
| Shares and other equity Quoted shares   |              | 17.0<br>2.4        | 84.7<br>38.2               | 33.0<br>0.0         | 119.3<br>50.0                | 8.2<br>-0.7                        | 3.2<br>0.1                 | 108.8                |
| Unquoted shares and other equity  |              | 9.7                | 57.2                       | 27.1                | 23.6                         | 6.5                                | -0.5                       |                      |
| Mutual fund shares  |              | 4.9                | -10.7                      | 5.9                 | 45.7                         | 2.4                                | 3.5                        |                      |
| Insurance technical reserves  |              | 58.0               | 0.9                        | 0.0                 | 0.0                          | 3.6                                | 0.0                        | 3.3                  |
| Other accounts receivable and financial derivatives                                     |              | -19.9              | 5.8                        | 107.2               | -6.9                         | -1.9                               | 6.5                        | 6.9                  |
| Changes in net financial worth due to transactions                                      |              |                    |                            |                     |                              |                                    |                            |                      |
| Other changes account, financial assets   |              |                    |                            |                     |                              |                                    |                            |                      |
| Total other changes in financial assets   |              | -29.8              | 199.1                      | 22.8                | -0.8                         | 13.4                               | 49.5                       | 107.9                |
| Monetary gold and special drawing rights (SDRs) Currency and deposits                   |              | -5.3               | -3.2                       | -7.0<br>-11.9       | -2.1                         | 2.9                                | 0.2                        | -24.1                |
| Short-term debt securities  |              | -0.6               | 4.5                        | 1.9                 | 1.7                          | 0.7                                | 0.2                        | -24.1                |
| Long-term debt securities   |              | -55.2              | -5.2                       | -8.8                | -54.4                        | -26.7                              | -3.2                       | -42.7                |
| Loans   |              | 0.0                | 6.7                        | -23.5               | -9.7                         | 0.3                                | -1.3                       | 12.6                 |
| of which long-term  |              | 0.0                | 7.8                        | -10.4               | -10.0                        | 0.2                                | -1.3                       |                      |
| Shares and other equity   |              | 35.6               | 178.3                      | 55.6                | 85.5                         | 41.9                               | 53.6                       | 153.1                |
| Quoted shares Unquoted shares and other equity  |              | 40.8<br>-28.0      | 36.4<br>139.2              | 50.6<br>2.6         | 77.7<br>3.8                  | 5.6<br>10.4                        | 46.6<br>3.8                |                      |
| Mutual fund shares  |              | 22.8               | 2.7                        | 2.4                 | 4.0                          | 25.9                               | 3.2                        |                      |
| Insurance technical reserves  |              | -2.3               | 0.0                        | 0.0                 | 0.0                          | -5.0                               | 0.0                        | -4.7                 |
| Other accounts receivable and financial derivatives                                     |              | -2.0               | 18.1                       | 16.5                | -21.8                        | -0.7                               | 0.0                        | 16.2                 |
| Other changes in net financial worth  |              |                    |                            |                     |                              |                                    |                            |                      |
| Closing balance sheet, financial assets   |              |                    |                            |                     |                              |                                    |                            |                      |
| Total financial assets  |              | 17,405.4           | 14,265.6                   | 21,628.4            | 9,996.3                      | 6,159.3                            | 2,907.5                    | 14,546.0             |
| Monetary gold and special drawing rights (SDRs)   |              | 5 462 1            | 1.665.0                    | 177.5               | 1 447 4                      | 760.0                              | (20.6                      | 2 040 4              |
| Currency and deposits Short-term debt securities  |              | 5,463.1<br>43.5    | 1,665.8<br>133.0           | 2,482.5<br>114.2    | 1,447.4<br>290.7             | 760.0<br>238.7                     | 620.6<br>32.6              | 3,949.4<br>808.1     |
| Long-term debt securities   |              | 1,363.2            | 167.8                      | 3,585.3             | 1,861.3                      | 1,945.2                            | 207.7                      | 2,219.7              |
| Loans   |              | 21.8               | 1,798.0                    | 11,685.1            | 1,351.9                      | 354.9                              | 357.2                      | 1,464.1              |
| of which long-term  |              | 18.5               | 984.0                      | 8,770.0             | 1,023.8                      | 295.8                              | 314.9                      |                      |
| Shares and other equity   |              | 5,182.1            | 7,815.3                    | 1,884.3             | 4,790.7                      | 2,426.5                            | 1,140.7                    | 5,362.6              |
| Quoted shares   |              | 1,295.7            | 1,989.9                    | 739.2               | 2,522.5                      | 857.9                              | 440.0                      |                      |
| Unquoted shares and other equity Mutual fund shares                                     |              | 2,194.7<br>1,691.7 | 5,414.9<br>410.5           | 861.1<br>284.1      | 1,552.2<br>716.0             | 477.6<br>1,091.1                   | 552.9<br>147.8             |                      |
| Insurance technical reserves  |              | 5,058.7            | 134.0                      | 1.9                 | 0.0                          | 1,091.1                            | 3.1                        | 190.6                |
| Other accounts receivable and financial derivatives  Net financial worth                |              | 273.0              | 2,551.7                    | 1,697.4             | 254.3                        | 289.5                              | 545.7                      | 551.6                |
| Source: ECB.  |              |                    |                            |                     |                              |                                    |                            |                      |

# 3.1 Integrated economic and financial accounts by institutional sector (cont'd) (EUR billions)

| Liabilities 2007 Q2   | Euro<br>area | Households | Non-financial corporations | MFIs               | Other<br>financial<br>inter-<br>mediaries | Insurance<br>corporations<br>and pension<br>funds | General<br>govern-<br>ment | Rest of<br>the world |
|---|--------------|------------|----------------------------|--------------------|---|---|----------------------------|----------------------|
| Opening balance sheet, liabilities                                    |              |            |                            |                    | mediai res                                | Tunus   |                            |                      |
| Total liabilities   |              | 5,544.0    | 22,276.5                   | 21,296.4           | 9,641.0                                   | 6,192.2   | 6,760.0                    | 12.614.6             |
| Monetary gold and special drawing rights (SDRs)                       |              | 5,5        | 22,27013                   | 21,23011           | 3,011.0                                   | 0,132.2   | 0,700.0                    | 12,01110             |
| Currency and deposits   |              |            | 23.5                       | 12,883.2           | 214.0                                     | 3.9   | 337.5                      | 2,371.6              |
| Short-term debt securities  |              |            | 281.0<br>429.5             | 357.4<br>2,594.0   | 69.1<br>1,375.9                           | 0.1<br>26.1                                       | 612.5<br>4,358.6           | 235.6<br>2,412.1     |
| Long-term debt securities Loans                                       |              | 5,096.7    | 6,380.1                    | 2,394.0            | 1,373.9                                   | 183.7   | 1,080.2                    | 2,412.1              |
| of which long-term  |              | 4,771.7    | 4,300.3                    |                    | 601.6                                     | 78.7  | 922.4                      | 2,500.0              |
| Shares and other equity   |              |            | 12,497.1                   | 3,360.5            | 6,470.4                                   | 662.4   | 4.9                        | 4,629.2              |
| Quoted shares   |              |            | 4,664.1                    | 1,100.2            | 342.0                                     | 328.4   | 0.0                        | •                    |
| Unquoted shares and other equity<br>Mutual fund shares                |              |            | 7,833.0                    | 1,244.5<br>1,015.9 | 858.8<br>5,269.6                          | 334.0   | 4.9                        | •                    |
| Insurance technical reserves  |              | 32.6       | 329.8                      | 53.2               | 0.6                                       | 5,062.6   | 0.5                        | ·                    |
| Other accounts payable and financial derivatives                      |              | 414.7      | 2,335.4                    | 2,048.1            | 216.4                                     | 253.5   | 365.8                      | 405.3                |
| Net financial worth 1)  | -1,161.6     | 11,734.5   | -8,406.2                   | -413.6             | 62.0                                      | -120.8  | -4,017.5                   |                      |
| Financial account, transactions in liabilities                        |              |            |                            |                    |   |   |                            |                      |
| Total transactions in liabilities                                     |              | 78.7       | 311.5                      | 705.7              | 281.6                                     | 83.8  | 88.8                       | 487.1                |
| Monetary gold and special drawing rights (SDRs) Currency and deposits |              |            | 0.0                        | 484.1              | 4.9                                       | 0.0   | -12.7                      | 122.3                |
| Short-term debt securities  |              |            | 22.8                       | 12.8               | -3.1                                      | 0.0   | 43.4                       | 23.3                 |
| Long-term debt securities   |              |            | 15.9                       | 83.0               | 65.9                                      | -0.3  | 63.5                       | 122.3                |
| Loans   |              | 97.5       | 202.9                      |                    | 52.5                                      | 16.0  | -8.8                       | 91.6                 |
| of which long-term  |              | 90.7       | 104.8                      | 46.1               | 20.6                                      | -0.3  | -11.1                      |                      |
| Shares and other equity Ouoted shares                                 |              |            | 58.1<br>34.9               | 46.1<br>0.5        | 165.9<br>2.6                              | 2.7<br>0.3  | 0.0                        | 101.3                |
| Unquoted shares and other equity                                      |              |            | 23.2                       | 2.8                | 20.5                                      | 2.4   | 0.0                        | •                    |
| Mutual fund shares  |              |            | 23.2                       | 42.8               | 142.8                                     | 2.1   | 0.0                        |                      |
| Insurance technical reserves  |              | -0.1       | 2.0                        | 0.4                | 0.0                                       | 63.3  | 0.0                        |                      |
| Other accounts payable and financial derivatives                      |              | -18.7      | 9.7                        | 79.3               | -4.5                                      | 2.0   | 3.5                        | 26.3                 |
| Changes in net financial worth due to transactions 1)                 | 9.6          | 78.0       | -115.3                     | 17.0               | 12.5                                      | -9.4  | 26.7                       | -9.6                 |
| Other changes account, liabilities                                    |              |            |                            |                    |   |   |                            |                      |
| Total other changes in liabilities                                    |              | 8.7        | 389.2                      | -30.3              | 70.3                                      | 12.3  | -98.1                      | 17.0                 |
| Monetary gold and special drawing rights (SDRs)                       |              |            | 0.0                        | 22.7               | 1.0                                       | 0.0   | 0.0                        | 22.7                 |
| Currency and deposits Short-term debt securities                      |              |            | 0.0<br>0.6                 | -22.7<br>0.9       | 1.9<br>-0.1                               | 0.0<br>0.0  | 0.0<br>-0.1                | -22.7<br>4.3         |
| Long-term debt securities   |              |            | -6.8                       | -7.6               | -21.6                                     | -0.5  | -116.1                     | -43.7                |
| Loans   |              | 6.3        | 11.0                       |                    | -12.1                                     | -6.7  | -0.1                       | -13.2                |
| of which long-term  |              | 7.8        | 21.6                       |                    | -9.0                                      | -4.9  | -0.1                       |                      |
| Shares and other equity   |              |            | 369.7                      | 3.9                | 89.1                                      | 25.9  | 0.7                        | 114.4                |
| Quoted shares Unquoted shares and other equity                        |              |            | 361.9<br>7.8               | 20.4<br>-21.6      | 18.1<br>18.1                              | 9.4<br>16.4                                       | 0.0<br>0.7                 | •                    |
| Mutual fund shares  |              |            | 7.0                        | 5.2                | 52.9                                      | 10.4  | 0.7                        |                      |
| Insurance technical reserves  |              | 0.0        | 0.0                        | 0.0                | 0.0                                       | -12.0   | 0.0                        |                      |
| Other accounts payable and financial derivatives                      |              | 2.4        | 14.7                       | -4.8               | 13.1                                      | 5.6   | 17.5                       | -22.2                |
| Other changes in net financial worth 1)                               | -97.9        | -38.6      | -190.1                     | 53.1               | -71.1                                     | 1.1   | 147.6                      | 91.0                 |
| Closing balance sheet, liabilities                                    |              |            |                            |                    |   |   |                            |                      |
| Total liabilities  Manatawa and and anasial drawing rights (SDRs)     |              | 5,631.4    | 22,977.1                   | 21,971.9           | 9,992.9                                   | 6,288.3   | 6,750.6                    | 13,118.6             |
| Monetary gold and special drawing rights (SDRs) Currency and deposits |              |            | 23.5                       | 13,344.6           | 220.8                                     | 3.8   | 324.8                      | 2,471.2              |
| Short-term debt securities  |              |            | 304.4                      | 371.1              | 66.0                                      | 0.2   | 655.8                      | 263.3                |
| Long-term debt securities   |              |            | 438.6                      | 2,669.4            | 1,420.2                                   | 25.3  | 4,306.0                    | 2,490.8              |
| Loans   |              | 5,200.4    | 6,594.1                    |                    | 1,334.9                                   | 193.1   | 1,071.3                    | 2,639.2              |
| of which long-term  |              | 4,870.2    | 4,426.7                    | 3 410 6            | 613.2                                     | 73.5<br>690.9                                     | 911.3                      | 4,844.9              |
| Shares and other equity Quoted shares                                 |              |            | 12,925.0<br>5,060.9        | 3,410.6<br>1,121.1 | 6,725.4<br>362.7                          | 338.1   | 5.6<br>0.0                 | 4,044.9              |
| Unquoted shares and other equity                                      |              |            | 7,864.0                    | 1,225.7            | 897.4                                     | 352.8   | 5.6                        |                      |
| Mutual fund shares  |              |            | ,                          | 1,063.8            | 5,465.3                                   |   |                            |                      |
| Insurance technical reserves  |              | 32.5       | 331.8                      | 53.6               | 0.6                                       | 5,113.9   | 0.5                        |                      |
| Other accounts payable and financial derivatives                      | 1.040.0      | 398.4      | 2,359.8                    | 2,122.6            | 225.0                                     | 261.1   | 386.7                      | 409.4                |
| Net financial worth 1)  | -1,249.9     | 11,773.9   | -8,711.6                   | -343.5             | 3.4                                       | -129.0  | -3,843.2                   |                      |
| Source: ECB.  |              |            |                            |                    |   |   |                            |                      |

# 3.2 Euro area non-financial accounts (EUR billions; four-quarter cumulated flows)

| Uses  | 2003    | 2004    | 2005    | 2005 Q3-<br>2006 Q2 | 2005 Q4-<br>2006 Q3 | 2006 Q1-<br>2006 Q4 | 2006 Q2-<br>2007 Q1 | 2006 Q3-<br>2007 Q2 |
|---|---------|---------|---------|---------------------|---------------------|---------------------|---------------------|---------------------|
| Generation of income account  | ·       |         |         |                     |                     | ,                   |                     |                     |
| Gross value added (basic prices) Taxes less subsidies on products Gross domestic product (market prices) Compensation of employees Other taxes less subsidies on production Consumption of fixed capital Net operating surplus and mixed income 1)  | 3,664.0 | 3,770.3 | 3,876.2 | 3,952.4             | 3,991.6             | 4,027.3             | 4,069.2             | 4,109.1             |
|   | 110.7   | 123.0   | 130.8   | 132.9               | 133.5               | 131.1               | 131.4               | 132.2               |
|   | 1,074.6 | 1,122.3 | 1,174.8 | 1,200.5             | 1,213.2             | 1,225.2             | 1,235.9             | 1,246.3             |
|   | 1,890.8 | 1,989.2 | 2,049.6 | 2,093.0             | 2,122.8             | 2,162.6             | 2,199.2             | 2,235.8             |
| Allocation of primary income account  |         |         |         |                     |                     |                     |                     |                     |
| Net operating surplus and mixed income Compensation of employees Taxes less subsidies on production Property income Interest Other property income Net national income 1)   | 2,281.3 | 2,332.6 | 2,543.9 | 2,711.1             | 2,801.3             | 2,914.8             | 3,003.7             | 3,100.6             |
|   | 1,267.0 | 1,241.2 | 1,325.0 | 1,438.6             | 1,515.7             | 1,591.6             | 1,659.0             | 1,721.1             |
|   | 1,014.3 | 1,091.4 | 1,219.0 | 1,272.6             | 1,285.7             | 1,323.2             | 1,344.7             | 1,379.5             |
|   | 6,407.5 | 6,689.6 | 6,909.3 | 7,069.6             | 7,150.7             | 7,232.9             | 7,328.8             | 7,417.7             |
| Secondary distribution of income account  |         |         |         |                     |                     |                     |                     |                     |
| Net national income Current taxes on income, wealth, etc. Social contributions Social benefits other than social transfers in kind Other current transfers Net non-life insurance premiums Non-life insurance claims Other Net disposable income 1) | 856.8   | 882.3   | 932.0   | 972.0               | 990.6               | 1,023.4             | 1,037.1             | 1,059.9             |
|   | 1,388.3 | 1,427.2 | 1,468.6 | 1,499.4             | 1,516.1             | 1,530.1             | 1,541.3             | 1,554.2             |
|   | 1,408.0 | 1,452.8 | 1,496.8 | 1,520.2             | 1,531.2             | 1,541.8             | 1,548.9             | 1,558.9             |
|   | 658.3   | 683.2   | 702.5   | 700.4               | 702.9               | 704.7               | 708.8               | 717.5               |
|   | 174.0   | 175.8   | 175.8   | 175.4               | 175.5               | 174.8               | 175.5               | 176.7               |
|   | 174.6   | 176.3   | 176.7   | 175.9               | 175.7               | 174.8               | 175.8               | 176.9               |
|   | 309.8   | 331.1   | 350.1   | 349.1               | 351.8               | 355.2               | 357.6               | 363.9               |
|   | 6,337.6 | 6,612.0 | 6,823.3 | 6,984.9             | 7,064.2             | 7,143.8             | 7,239.8             | 7,329.3             |
| Use of income account   |         |         |         |                     |                     |                     |                     |                     |
| Net disposable income Final consumption expenditure Individual consumption expenditure Collective consumption expenditure Adjustment for the change in net equity of households in pension funds reserves Net saving 1)                             | 5,854.3 | 6,075.9 | 6,307.3 | 6,442.1             | 6,501.2             | 6,562.3             | 6,615.9             | 6,664.1             |
|   | 5,232.7 | 5,430.7 | 5,645.2 | 5,770.6             | 5,825.9             | 5,880.9             | 5,929.0             | 5,974.2             |
|   | 621.5   | 645.1   | 662.1   | 671.4               | 675.3               | 681.4               | 686.9               | 690.0               |
|   | 54.5    | 57.5    | 59.1    | 60.7                | 61.3                | 61.7                | 61.9                | 62.4                |
|   | 483.5   | 536.4   | 516.4   | 543.2               | 563.3               | 581.9               | 624.3               | 665.4               |
| Capital account   |         |         |         |                     |                     |                     |                     |                     |
| Net saving Gross capital formation Gross fixed capital formation Changes in inventories and acquisitions less disposals of valuables Consumption of fixed capital   | 1,526.8 | 1,606.5 | 1,693.9 | 1,769.5             | 1,810.4             | 1,838.3             | 1,878.9             | 1,914.3             |
|   | 1,525.8 | 1,597.4 | 1,682.3 | 1,745.4             | 1,773.6             | 1,809.3             | 1,854.8             | 1,889.0             |
|   | 1.1     | 9.1     | 11.6    | 24.1                | 36.8                | 29.1                | 24.0                | 25.3                |
| Acquisitions less disposals of non-produced non-financial assets Capital transfers Capital taxes Other capital transfers Net lending (+)/net borrowing (-) (from capital account) 1)  | 0.6     | -1.1    | -0.1    | 1.1                 | 1.3                 | 1.3                 | 1.1                 | 1.1                 |
|   | 182.6   | 166.9   | 179.3   | 162.2               | 174.8               | 190.5               | 191.1               | 191.7               |
|   | 35.9    | 29.8    | 24.2    | 23.8                | 22.5                | 22.3                | 22.9                | 23.4                |
|   | 146.8   | 137.1   | 155.1   | 138.4               | 152.4               | 168.2               | 168.2               | 168.3               |
|   | 42.9    | 69.9    | 11.0    | -14.4               | -22.5               | -18.9               | -4.4                | 11.2                |

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   |                |                |                | 2005 Q3-       | 2005 Q4-       | 2006 Q1-       | 2006 Q2-       | 2006 Q3-       |
|---|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
|   | 2003           | 2004           | 2005           | 2006 Q2        | 2006 Q3        | 2006 Q4        | 2007 Q1        | 2007 Q2        |
| Generation of income account  |                |                |                |                |                |                |                |                |
| Gross value added (basic prices)                                    | 6,740.1        | 7,004.9        | 7,231.5        | 7,378.8        | 7,461.0        | 7,546.2        | 7,635.7        | 7,723.4        |
| Taxes less subsidies on products                                    | 760.8          | 796.4          | 838.8          | 874.5          | 885.1          | 903.3          | 922.4          | 936.2          |
| Gross domestic product (market prices) <sup>2)</sup>                | 7,500.9        | 7,801.3        | 8,070.2        | 8,253.3        | 8,346.1        | 8,449.5        | 8,558.1        | 8,659.6        |
| Compensation of employees   |                |                |                |                |                |                |                |                |
| Other taxes less subsidies on production                            |                |                |                |                |                |                |                |                |
| Consumption of fixed capital  |                |                |                |                |                |                |                |                |
| Net operating surplus and mixed income                              |                |                |                |                |                |                |                |                |
| Allocation of primary income account                                |                |                |                |                |                |                |                |                |
| Net operating surplus and mixed income                              | 1,890.8        | 1,989.2        | 2,049.6        | 2,093.0        | 2,122.8        | 2,162.6        | 2,199.2        | 2,235.8        |
| Compensation of employees   | 3,671.2        | 3,777.4        | 3,881.8        | 3,958.1        | 3,997.4        | 4,033.1        | 4,075.2        | 4,115.1        |
| Taxes less subsidies on production                                  | 880.7          | 933.1          | 981.1          | 1,017.7        | 1,028.7        | 1,044.4        | 1,061.8        | 1,076.0        |
| Property income   | 2,246.2        | 2,322.5        | 2,540.8        | 2,711.9        | 2,803.1        | 2,907.6        | 2,996.3        | 3,091.4        |
| Interest  | 1,236.2        | 1,210.5        | 1,298.9        | 1,414.3        | 1,493.5        | 1,568.2        | 1,633.9        | 1,698.8        |
| Other property income Net national income                           | 1,010.0        | 1,112.0        | 1,241.9        | 1,297.6        | 1,309.6        | 1,339.3        | 1,362.4        | 1,392.6        |
| Secondary distribution of income account                            |                |                |                |                |                |                |                |                |
| Net national income   | 6,407.5        | 6,689.6        | 6,909.3        | 7,069.6        | 7,150.7        | 7,232.9        | 7,328.8        | 7,417.7        |
| Current taxes on income, wealth, etc.                               | 858.7          | 885.4          | 935.7          | 976.6          | 995.2          | 1,028.2        | 1,042.3        | 1,066.8        |
| Social contributions  | 1,387.3        | 1,426.2        | 1,468.1        | 1,498.9        | 1,515.5        | 1,529.6        | 1,540.8        | 1,553.6        |
| Social benefits other than social transfers in kind                 | 1,401.5        | 1,445.3        | 1,489.2        | 1,512.7        | 1,523.7        | 1,534.4        | 1,541.1        | 1,550.9        |
| Other current transfers   | 593.9          | 610.9          | 620.9          | 619.1          | 619.8          | 618.7          | 622.9          | 630.7          |
| Net non-life insurance premiums  Non-life insurance claims          | 174.6<br>171.3 | 176.3<br>173.5 | 176.7<br>174.3 | 175.9<br>173.2 | 175.7<br>172.9 | 174.8<br>172.3 | 175.8<br>173.1 | 176.9<br>174.4 |
| Other   | 248.0          | 261.2          | 269.9          | 270.0          | 271.2          | 271.6          | 274.0          | 279.4          |
| Net disposable income   | 240.0          | 201.2          | 207.7          | 270.0          | 2/1.2          | 271.0          | 274.0          | 2/7.4          |
| Use of income account   |                |                |                |                |                |                |                |                |
| Net disposable income   | 6,337.6        | 6,612.0        | 6,823.3        | 6,984.9        | 7,064.2        | 7,143.8        | 7,239.8        | 7,329.3        |
| Final consumption expenditure                                       |                |                |                |                |                |                |                |                |
| Individual consumption expenditure                                  |                |                |                |                |                |                |                |                |
| Collective consumption expenditure                                  |                |                |                |                |                |                |                |                |
| Adjustment for the change in net equity of households               | 547            | 57.6           | 50.4           | 61.0           | 61.6           | 62.0           | 62.2           | (2.7           |
| in pension funds reserves Net saving                                | 54.7           | 57.6           | 59.4           | 61.0           | 61.6           | 62.0           | 02.2           | 62.7           |
| Capital account   |                |                |                |                |                |                |                |                |
| Net saving  | 483.5          | 536.4          | 516.4          | 543.2          | 563.3          | 581.9          | 624.3          | 665.4          |
| Gross capital formation Gross fixed capital formation               |                |                |                |                |                |                |                |                |
| Changes in inventories and acquisitions less disposals of valuables |                |                |                |                |                |                |                |                |
| Consumption of fixed capital  | 1,074.6        | 1,122.3        | 1,174.8        | 1,200.5        | 1,213.2        | 1,225.2        | 1,235.9        | 1,246.3        |
| Acquisitions less disposals of non-produced non-financial assets    | 104.0          | 102.5          | 102.0          | 174.0          | 107.6          | 204.1          | 206.4          | 206.5          |
| Capital transfers   | 194.8<br>35.9  | 183.5<br>29.8  | 192.9<br>24.2  | 174.8<br>23.8  | 187.6<br>22.5  | 204.1<br>22.3  | 206.4<br>22.9  | 206.5<br>23.4  |
| Capital taxes Other capital transfers                               | 158.9          | 29.8<br>153.8  | 24.2<br>168.7  | 23.8<br>151.0  | 22.5<br>165.1  | 22.3<br>181.8  | 183.5          | 23.4<br>183.2  |
| Net lending (+)/net borrowing (-) (from capital account)            | 156.9          | 155.0          | 100.7          | 151.0          | 105.1          | 101.0          | 105.5          | 103.2          |
| The terming ( 1 ) the borrowing (-) Grom cupital account)           |                |                |                |                |                |                |                |                |

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 Q3-<br>2006 Q2 | 2005 Q4-<br>2006 Q3 | 2006 Q1-<br>2006 Q4 | 2006 Q2-<br>2007 Q1 | 2006 Q3-<br>2007 Q2 |
|--|---------|-------------|----------|---------------------|---------------------|---------------------|---------------------|---------------------|
| Income, saving and changes in net worth        |         | '           |          |                     |                     |                     |                     |                     |
| Compensation of employees (+)                  | 3,671.2 | 3,777.4     | 3,881.8  | 3,958.1             | 3,997.4             | 4,033.1             | 4,075.2             | 4,115.1             |
| Gross operating surplus and mixed income (+)   | 1,230.9 | 1,285.0     | 1,334.8  | 1,368.6             | 1,389.3             | 1,410.2             | 1,431.2             | 1,452.2             |
| Interest receivable (+)                        | 237.5   | 230.4       | 226.9    | 237.7               | 246.3               | 255.9               | 262.3               | 268.8               |
| Interest payable (-)                           | 124.1   | 124.1       | 127.6    | 137.1               | 146.6               | 154.5               | 161.8               | 169.1               |
| Other property income receivable (+)           | 615.3   | 648.0       | 694.0    | 718.2               | 722.0               | 733.0               | 739.6               | 749.2               |
| Other property income payable (-)              | 8.7     | 9.2         | 9.4      | 9.4                 | 9.5                 | 9.4                 | 9.5                 | 9.5                 |
| Current taxes on income and wealth (-)         | 702.5   | 706.5       | 739.4    | 763.6               | 770.8               | 788.6               | 796.9               | 810.0               |
| Net social contributions (-)                   | 1,384.5 | 1,423.4     | 1,464.5  | 1,495.1             | 1,511.7             | 1,525.8             | 1,536.9             | 1,549.8             |
| Net social benefits (+)                        | 1,396.7 | 1,440.3     | 1,483.9  | 1,507.2             | 1,518.2             | 1,528.9             | 1,535.5             | 1,545.4             |
| Net current transfers receivable (+)           | 65.1    | 64.7        | 68.2     | 65.5                | 63.9                | 63.9                | 65.7                | 65.8                |
| = Gross disposable income                      | 4,997.0 | 5,182.7     | 5,348.7  | 5,450.2             | 5,498.6             | 5,546.7             | 5,604.5             | 5,658.2             |
| Final consumption expenditure (-)              | 4,316.1 | 4,482.4     | 4,649.1  | 4,749.6             | 4,792.8             | 4,836.7             | 4,874.8             | 4,911.6             |
| Changes in net worth in pension funds (+)      | 54.4    | 57.3        | 58.9     | 60.6                | 61.1                | 61.5                | 61.7                | 62.2                |
| = Gross saving                                 | 735.2   | 757.5       | 758.5    | 761.2               | 766.9               | 771.5               | 791.4               | 808.8               |
| Consumption of fixed capital (-)               | 288.0   | 303.3       | 318.7    | 326.5               | 330.5               | 334.5               | 337.6               | 340.6               |
| Net capital transfers receivable (+)           | 12.6    | 18.9        | 24.4     | 22.2                | 27.2                | 30.2                | 28.6                | 25.9                |
| Other changes in net worth (+)                 | 247.1   | 285.3       | 600.1    | 481.4               | 333.3               | 456.9               | 366.8               | 476.5               |
| = Changes in net worth 1)                      | 706.9   | 758.4       | 1,064.4  | 938.3               | 796.9               | 924.1               | 849.2               | 970.6               |
| Investment, financing and changes in net worth |         |             |          |                     |                     |                     |                     |                     |
| Net acquisition of non-financial assets (+)    | 497.9   | 527.3       | 558.9    | 583.6               | 597.7               | 609.6               | 625.2               | 636.2               |
| Consumption of fixed capital (-)               | 288.0   | 303.3       | 318.7    | 326.5               | 330.5               | 334.5               | 337.6               | 340.6               |
| Financial investment (+)                       |         |             |          |                     |                     |                     |                     |                     |
| Currency and deposits                          | 222.3   | 248.5       | 240.1    | 247.4               | 267.3               | 279.0               | 276.0               | 289.0               |
| of which M3 deposits <sup>2)</sup>             | 166.1   | 168.5       | 207.7    | 215.7               | 226.1               | 242.1               | 251.6               | 279.1               |
| Short-term debt securities                     | -34.4   | 7.0         | -18.7    | 2.9                 | 12.8                | 16.0                | 23.0                | 13.0                |
| Long-term debt securities                      | 18.4    | 67.8        | 22.2     | 28.2                | 70.0                | 61.3                | 52.6                | 44.2                |
| Shares and other equity                        | 85.5    | -13.5       | 116.0    | 22.1                | -26.9               | -33.7               | -3.6                | 14.1                |
| Quoted shares                                  | 27.1    | -47.7       | 3.5      | -27.0               | -31.4               | -13.2               | 2.0                 | -0.8                |
| Unquoted shares and other equity               | -19.2   | 36.7        | 56.8     | 26.7                | 20.5                | 8.2                 | 24.3                | 32.4                |
| Mutual fund shares                             | 77.6    | -2.5        | 55.7     | 22.4                | -16.0               | -28.7               | -29.9               | -17.5               |
| of which money market fund shares              | 14.4    | -19.4       | -10.1    | -8.9                | -9.8                | -4.8                | 2.2                 | 9.6                 |
| Life insurance and pension fund reserves       | 231.0   | 251.2       | 300.3    | 300.8               | 297.9               | 276.5               | 255.3               | 252.6               |
| Financing (-)                                  | 2642    | 214.2       | 201.7    | 415.7               | 412.0               | 202.4               | 204.2               | 265.0               |
| Loans  | 264.2   | 314.2       | 391.7    | 415.7               | 413.0               | 392.4               | 384.3               | 365.9               |
| of which from euro area MFIs                   | 219.9   | 288.9       | 371.7    | 397.9               | 386.5               | 360.4               | 352.8               | 334.0               |
| Other changes in financial assets (+)          | 265.5   | 225.1       | 500.0    | 422.0               | 221.2               | 120.7               | 227.7               | 400.2               |
| Shares and other equity                        | 265.5   | 235.1       | 522.3    | 433.0               | 331.2               | 430.7               | 337.7               | 498.2               |
| Life insurance and pension fund reserves       | 29.0    | 56.9        | 129.4    | 68.9                | 55.2                | 48.8                | 33.5                | 44.0                |
| Remaining net flows (+)                        | -56.0   | -4.2        | -95.7    | -6.3                | -64.7               | -37.2               | -28.5               | -114.2              |
| = Changes in net worth 1)                      | 706.9   | 758.4       | 1,064.4  | 938.3               | 796.9               | 924.1               | 849.2               | 970.6               |
| Financial balance sheet                        |         |             |          |                     |                     |                     |                     |                     |
| Financial assets (+) Currency and deposits     | 4,579.1 | 4,827.3     | 5,078.3  | 5,181.8             | 5,204.8             | 5,343.0             | 5,364.8             | 5,463.1             |
| of which M3 deposits <sup>2)</sup>             | 3,405.1 | 3,576.6     | 3,787.0  | 3,887.9             | 3,911.3             | 4,025.1             | 4,073.0             | 4,175.5             |
| Short-term debt securities                     | 24.7    | 32.7        | 15.6     | 33.6                | 37.0                | 30.2                | 45.6                | 43.5                |
| Long-term debt securities                      | 1,304.1 | 1,356.4     | 1,338.8  | 1.373.1             | 1,383.2             | 1,391.5             | 1,419.4             | 1,363.2             |
| Shares and other equity                        | 3,699.5 | 3,921.1     | 4,559.3  | 4,669.8             | 4,798.4             | 4,956.3             | 5,129.4             | 5,182.1             |
| Quoted shares                                  | 774.1   | 832.0       | 1,000.7  | 1,041.7             | 1,128.4             | 1,192.1             | 1,252.5             | 1,295.7             |
| Unquoted shares and other equity               | 1,437.1 | 1,592.2     | 1,918.2  | 1,998.9             | 2,042.1             | 2,119.0             | 2,213.0             | 2,194.7             |
| Mutual fund shares                             | 1,488.3 | 1,496.9     | 1,640.5  | 1,629.2             | 1,627.9             | 1,645.2             | 1,663.9             | 1,691.7             |
| of which money market fund shares              | 263.8   | 249.0       | 235.3    | 215.9               | 211.1               | 186.3               | 195.1               | 208.5               |
| Life insurance and pension fund reserves       | 3,541.0 | 3,849.1     | 4,278.8  | 4,426.1             | 4,517.4             | 4,604.0             | 4,668.9             | 4,722.8             |
| Remaining net assets                           | 188.7   | 224.3       | 174.4    | 193.3               | 189.0               | 195.1               | 203.1               | 199.7               |
| Liabilities (-)                                | 100.7   | 224.3       | 1/7.4    | 175.5               | 107.0               | 175.1               | 203.1               | 177.1               |
| Loans  | 3,929.4 | 4,256.5     | 4,632.8  | 4,837.4             | 4,919.5             | 5,017.1             | 5,096.7             | 5,200.4             |
| of which from euro area MFIs                   | 3,561.4 | 3,860.7     | 4,257.3  | 4,456.6             | 4,534.8             | 4,617.9             | 4,696.2             | 4,781.3             |
| = Net financial wealth                         | 9,407.7 | 9,954.3     | 10,812.4 |                     | 11,210.2            | 11,503.0            | 11,734.5            | 11,773.9            |
|  | 5,107.7 | ,,,,,,,,,,, | 10,012.7 | 11,010.2            | 11,210.2            | 11,505.0            | 11,751.5            | 11,. 15.5           |

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 a

|  |                |                |                | 2005 Q3-       | 2005 Q4-       | 2006 Q1-       | 2006 Q2-         | 2006 Q3-         |
|--|----------------|----------------|----------------|----------------|----------------|----------------|------------------|------------------|
|  | 2003           | 2004           | 2005           | 2006 Q2        | 2006 Q3        | 2006 Q4        | 2007 Q1          | 2007 Q2          |
| Income and saving  |                |                |                |                |                |                |                  |                  |
| Gross value added (basic prices) (+)   | 3,831.0        | 3,983.2        | 4,102.4        | 4,180.8        | 4,226.0        | 4,282.6        | 4,338.4          | 4,396.2          |
| Compensation of employees (-)  | 2,309.7        | 2,379.8        | 2,442.3        | 2,490.3        | 2,515.2        | 2,540.1        | 2,568.0          | 2,598.4          |
| Other taxes less subsidies on production (-)   | 59.1           | 66.2           | 72.1           | 73.2           | 73.4           | 73.6           | 73.8             | 74.4             |
| = Gross operating surplus (+)  | 1,462.2        | 1,537.2        | 1,587.9        | 1,617.4        | 1,637.4        | 1,668.9        | 1,696.7          | 1,723.4          |
| Consumption of fixed capital (-)   | 608.8          | 633.5<br>903.7 | 663.2<br>924.8 | 676.3<br>941.0 | 682.9          | 689.4<br>979.6 | 695.1            | 700.6            |
| = Net operating surplus (+) Property income receivable (+)   | 853.4<br>320.1 | 903.7<br>372.6 | 924.8<br>426.4 | 941.0<br>442.7 | 954.5<br>450.1 | 461.2          | 1,001.6<br>465.5 | 1,022.7<br>478.8 |
| Interest receivable  | 126.6          | 121.7          | 131.1          | 140.9          | 147.2          | 152.5          | 156.7            | 161.1            |
| Other property income receivable   | 193.5          | 251.0          | 295.3          | 301.8          | 302.9          | 308.7          | 308.8            | 317.7            |
| Interest and rents payable (-)   | 228.2          | 226.3          | 234.7          | 252.5          | 264.2          | 277.3          | 289.5            | 300.6            |
| = Net entrepreneurial income (+)   | 945.3          | 1,050.0        | 1,116.5        | 1,131.2        | 1,140.4        | 1,163.5        | 1,177.6          | 1,200.9          |
| Distributed income (-)   | 692.3          | 751.0          | 834.2          | 865.0          | 873.6          | 897.1          | 904.7            | 919.5            |
| Taxes on income and wealth payable (-)   | 116.6          | 134.6          | 147.4          | 159.6          | 170.0          | 184.8          | 189.6            | 198.2            |
| Social contributions receivable (+)  | 73.4           | 73.6           | 74.2           | 75.5           | 76.3           | 76.7           | 77.3             | 75.7             |
| Social benefits payable (-)  | 59.8           | 60.4           | 62.2           | 62.2           | 62.4           | 61.9           | 62.0             | 63.6             |
| Net other current transfers payable (-)<br>Changes in net worth of households in pension funds (-) | 42.7<br>13.0   | 49.6<br>12.8   | 48.8<br>11.8   | 46.7<br>13.3   | 46.4<br>14.0   | 45.6<br>14.7   | 46.7<br>14.7     | 47.6<br>14.6     |
| = Net saving   | 94.3           | 115.1          | 86.3           | 59.9           | 50.3           | 36.1           | 37.2             | 33.1             |
| -  | 71.5           | 115.1          | 00.5           | 33.3           | 50.5           | 50.1           | 37.2             | 55.1             |
| Investment, financing and saving   |                |                |                |                |                |                |                  |                  |
| Net acquisition of non-financial assets (+)  | 192.3          | 210.7          | 232.4          | 266.1          | 282.8          | 285.7          | 299.1            | 316.9            |
| Gross fixed capital formation (+)  | 801.5          | 839.7          | 884.4          | 918.8          | 932.4          | 948.1          | 973.1            | 995.8            |
| Consumption of fixed capital (-)   | 608.8          | 633.5          | 663.2          | 676.3          | 682.9          | 689.4          | 695.1            | 700.6            |
| Net acquisition of other non-financial assets (+) Financial investment (+)                         | -0.4           | 4.5            | 11.1           | 23.6           | 33.3           | 27.0           | 21.1             | 21.7             |
| Currency and deposits  | 106.6          | 91.0           | 144.9          | 154.5          | 145.7          | 167.4          | 194.1            | 185.2            |
| of which M3 deposits 1)  | 63.0           | 73.8           | 99.3           | 108.9          | 116.8          | 138.5          | 157.7            | 158.1            |
| Debt securities  | -27.2          | -55.1          | -21.9          | -0.5           | -13.6          | 3.7            | -9.0             | 0.2              |
| Loans  | 139.1          | 66.4           | 132.5          | 130.6          | 136.9          | 161.1          | 175.9            | 189.0            |
| Shares and other equity  | 175.4          | 183.0          | 173.4          | 221.6          | 183.3          | 186.4          | 198.6            | 217.2            |
| Remaining net assets (+)   | 41.7           | 80.3           | 54.2           | 122.5          | 147.1          | 147.3          | 128.3            | 120.9            |
| Financing (-)  | 207.0          | 2164           | 207.2          | 5560           | 602.4          | 622 <b>5</b>   | 650.0            | 602.0            |
| Debt   | 297.0<br>219.1 | 216.4<br>195.6 | 397.2<br>382.4 | 556.2<br>530.2 | 602.4<br>560.4 | 633.7<br>578.2 | 650.2<br>593.9   | 683.9<br>613.9   |
| Loans of which from euro area MFIs   | 110.3          | 169.1          | 269.2          | 380.2          | 431.3          | 452.5          | 449.8            | 492.0            |
| Debt securities  | 62.9           | 7.3            | 2.2            | 12.6           | 28.2           | 432.3          | 43.8             | 58.9             |
| Pension fund reserves  | 15.1           | 13.5           | 12.6           | 13.4           | 13.8           | 14.5           | 12.5             | 11.2             |
| Shares and other equity  | 190.2          | 188.5          | 172.0          | 227.5          | 164.4          | 202.0          | 215.9            | 227.7            |
| Quoted shares  | 19.2           | 11.9           | 100.5          | 114.2          | 37.3           | 33.4           | 43.2             | 60.2             |
| Unquoted shares and other equity   | 171.0          | 176.6          | 71.4           | 113.3          | 127.1          | 168.6          | 172.7            | 167.6            |
| Net capital transfers receivable (-)   | 46.4           | 56.3           | 60.0           | 51.3           | 65.0           | 79.8           | 83.6             | 84.8             |
| = Net saving   | 94.3           | 115.1          | 86.3           | 59.9           | 50.3           | 36.1           | 37.2             | 33.1             |
| Financial balance sheet  |                |                |                |                |                |                |                  |                  |
| Financial assets   |                |                |                |                |                |                |                  |                  |
| Currency and deposits  | 1,164.3        | 1,237.8        | 1,393.2        | 1,452.1        | 1,491.3        | 1,563.9        | 1,630.7          | 1,665.8          |
| of which M3 deposits 1)  | 984.2          | 1,042.9        | 1,147.3        | 1,167.0        | 1,199.4        | 1,277.4        | 1,284.5          | 1,322.7          |
| Debt securities  | 406.9          | 322.8          | 290.3          | 306.6          | 292.7          | 287.3          | 281.6            | 300.8            |
| Loans  | 1,341.7        | 1,394.9        | 1,521.5        | 1,596.3        | 1,627.1        | 1,694.8        | 1,744.7          | 1,798.0          |
| Shares and other equity  | 4,823.8        | 5,319.7        | 6,273.3        | 6,643.7        | 6,946.8        | 7,302.5        | 7,552.3          | 7,815.3          |
| Remaining net assets (+) Liabilities   | 233.4          | 279.5          | 261.1          | 323.2          | 304.4          | 299.0          | 349.0            | 349.4            |
| Debt   | 6,029.2        | 6,211.5        | 6,606.7        | 6,977.2        | 7,088.2        | 7,226.8        | 7,420.4          | 7,668.8          |
| Loans  | 5,112.5        | 5,242.5        | 5,622.6        | 5,965.0        | 6,069.7        | 6,200.9        | 6,380.1          | 6,594.1          |
| of which from euro area MFIs   | 3,092.6        | 3,215.1        | 3,478.1        | 3,714.3        | 3,806.7        | 3,918.3        | 4,034.0          | 4,189.8          |
| Debt securities  | 628.2          | 667.8          | 670.2          | 691.5          | 694.0          | 697.7          | 710.4            | 742.9            |
| Pension fund reserves  | 288.5          | 301.2          | 313.8          | 320.7          | 324.4          | 328.3          | 329.8            | 331.8            |
| Shares and other equity  | 8,069.9        | 8,979.1        | 10,458.1       | 11,016.1       | 11,375.5       | 12,087.8       | 12,497.1         | 12,925.0         |
| Quoted shares  | 2,732.0        | 2,987.1        | 3,681.0        | 3,945.4        | 4,082.5        | 4,457.1        | 4,664.1          | 5,060.9          |
| Unquoted shares and other equity   | 5,337.9        | 5,992.0        | 6,777.1        | 7,070.8        | 7,293.0        | 7,630.7        | 7,833.0          | 7,864.0          |

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)

|  |                 |                | 1               | 2005 Q3-        | 2005 Q4-        | 2006 Q1-        | 2006 Q2-        | 2006 Q3-        |
|--|-----------------|----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
|  | 2003            | 2004           | 2005            | 2006 Q2         | 2006 Q3         | 2006 Q4         | 2007 Q1         | 2007 Q2         |
| Financial account, financial transactions  |                 |                |                 |                 |                 |                 |                 |                 |
| Financial investment (+)   |                 |                |                 |                 |                 |                 |                 |                 |
| Currency and deposits  | 29.7            | 50.0           | 25.6            | 36.6            | 48.9            | 64.8            | 81.7            | 72.6            |
| of which M3 deposits 1) Short-term debt securities   | 7.0<br>10.8     | 12.4<br>22.4   | 7.0<br>20.5     | 7.8<br>-0.4     | 8.2<br>-8.8     | 12.4<br>0.2     | 17.9<br>12.6    | 2.3<br>26.5     |
| Long-term debt securities  | 140.8           | 132.8          | 129.2           | 133.6           | -6.6<br>145.0   | 143.9           | 148.7           | 161.9           |
| Loans  | 11.6            | 6.6            | -2.6            | 10.2            | 10.7            | 4.5             | -9.2            | -6.9            |
| Shares and other equity  | 58.9            | 45.2           | 137.1           | 144.9           | 141.4           | 124.8           | 89.3            | 69.0            |
| Quoted shares  | 9.5             | 13.0           | 31.6            | 24.1            | 14.7            | 16.9            | 12.4            | 5.3             |
| Unquoted shares and other equity   | 5.1             | -1.1           | 18.2            | 21.5            | 25.5            | 20.3            | 13.0            | 15.3            |
| Mutual fund shares   | 44.3            | 33.3           | 87.3            | 99.2            | 101.1           | 87.5            | 63.8            | 48.4            |
| of which money market fund shares  | 6.8             | 3.3            | -0.9            | -4.3            | -5.6            | 2.3             | 3.3             | -0.5            |
| Remaining net assets (+) Financing (-)   | -3.6            | 9.9            | 9.1             | 8.2             | 15.0            | 13.0            | 26.5            | 24.6            |
| Debt securities  | 5.0             | -1.8           | 0.1             | -0.4            | -0.4            | 4.0             | 4.0             | 3.6             |
| Loans  | 12.4            | 4.4            | 12.5            | 27.6            | 37.1            | 32.6            | 33.9            | 43.5            |
| Shares and other equity  | 11.4<br>237.0   | 12.9<br>261.2  | 8.5<br>335.3    | 6.8<br>335.0    | 10.8<br>334.1   | 7.1<br>314.0    | 9.4<br>299.5    | 11.1<br>297.0   |
| Insurance technical reserves  Net equity of households in life insurance and pension fund reserves                     | 210.3           | 229.5          | 291.8           | 296.0           | 291.4           | 267.0           | 249.0           | 247.6           |
| Prepayments of insurance premiums and reserves for   | 210.3           | 229.3          | 291.0           | 290.0           | 291.4           | 207.0           | 249.0           | 247.0           |
| outstanding claims   | 26.8            | 31.6           | 43.5            | 39.0            | 42.7            | 47.0            | 50.5            | 49.4            |
| = Changes in net financial worth due to transactions   | -17.7           | -9.8           | -37.5           | -35.9           | -29.3           | -6.5            | 2.8             | -7.4            |
| Other changes account  |                 |                |                 |                 |                 |                 |                 |                 |
| Other changes in financial assets (+)  |                 |                |                 |                 |                 |                 |                 |                 |
| Shares and other equity  | 107.3           | 110.3          | 190.4           | 127.3           | 125.2           | 192.1           | 153.6           | 245.7           |
| Other net assets   | -10.1           | 159.2          | 43.5            | -14.9           | 0.7             | -51.5           | -67.6           | -82.9           |
| Other changes in liabilities (-)   |                 |                |                 |                 |                 |                 |                 |                 |
| Shares and other equity  | 98.3            | 20.7           | 117.4           | 83.9            | 86.2            | 49.9            | 36.4            | 101.2           |
| Insurance technical reserves   | 33.7            | 84.3           | 139.4           | 72.4            | 61.3            | 58.0            | 44.5            | 39.1            |
| Net equity of households in life insurance and pension fund reserves   | 34.2            | 64.6           | 145.6           | 75.1            | 63.9            | 62.0            | 47.0            | 46.6            |
| Prepayments of insurance premiums and reserves for outstanding claims  | -0.5            | 19.8           | -6.2            | -2.7            | -2.6            | -4.0            | -2.5            | -7.5            |
| = Other changes in net financial worth   | -34.8           | 164.3          | -22.9           | -43.9           | -21.6           | 32.6            | 5.1             | 22.5            |
| Financial balance sheet  | 31.0            | 101.5          | 22.5            | 15.5            | 21.0            | 32.0            | 5.1             |                 |
| Financial assets (+)   |                 |                |                 |                 |                 |                 |                 |                 |
| Currency and deposits  | 579.0           | 630.8          | 659.3           | 684.3           | 704.3           | 724.3           | 751.6           | 760.0           |
| of which M3 deposits 1)  | 121.1           | 132.6          | 141.6           | 139.7           | 143.3           | 153.4           | 154.7           | 143.2           |
| Short-term debt securities   | 69.5            | 205.9          | 212.1           | 213.4           | 213.4           | 212.7           | 227.6           | 238.7           |
| Long-term debt securities  | 1,489.0         | 1,659.4        | 1,808.8         | 1,843.4         | 1,910.8         | 1,902.5         | 1,927.2         | 1,945.2         |
| Loans  | 363.5           | 358.9          | 362.5           | 372.2           | 371.8           | 361.7           | 350.5           | 354.9           |
| Shares and other equity  | 1,528.9         | 1,684.3        | 2,011.8         | 2,111.9         | 2,213.0         | 2,328.7         | 2,376.5         | 2,426.5         |
| Quoted shares  | 526.1           | 574.9          | 701.5           | 717.2           | 761.2           | 832.1           | 852.9           | 857.9           |
| Unquoted shares and other equity   | 306.4           | 336.6          | 397.1           | 422.0           | 435.3           | 457.5           | 460.8           | 477.6           |
| Mutual fund shares   | 696.4<br>65.8   | 772.9<br>69.0  | 913.2<br>83.3   | 972.7<br>87.0   | 1,016.5<br>87.2 | 1,039.1<br>87.3 | 1,062.8<br>89.5 | 1,091.1<br>90.0 |
| of which money market fund shares Remaining net assets (+)   | 106.7           | 122.5          | 159.6           | 167.4           | 176.4           | 176.5           | 180.7           | 169.1           |
| Liabilities (-)  | 100.7           | 122.3          | 139.0           | 107.4           | 170.4           | 170.5           | 160.7           | 109.1           |
| Debt securities  | 23.4            | 21.9           | 22.0            | 22.3            | 23.0            | 26.2            | 26.1            | 25.5            |
| Loans  | 126.8           | 120.0          | 132.0           | 158.1           | 169.0           | 164.9           | 183.7           | 193.1           |
| Shares and other equity  | 429.7           | 463.3          | 589.3           | 578.6           | 628.5           | 646.3           | 662.4           | 690.9           |
| Insurance technical reserves   | 3,789.4         | 4,134.9        | 4,609.6         | 4,777.8         | 4,882.9         | 4,981.5         | 5,062.6         | 5,113.9         |
| Net equity of households in life insurance and pension fund reserves<br>Prepayments of insurance premiums and reserves | 3,208.5         | 3,502.6        | 3,940.0         | 4,092.8         | 4,183.6         | 4,268.9         | 4,335.9         | 4,387.1         |
| repayments of insurance premiums and reserves  |                 |                |                 |                 |                 |                 |                 |                 |
| for outstanding claims  = Net financial wealth   | 580.9<br>-232.8 | 632.3<br>-78.2 | 669.6<br>-138.7 | 685.0<br>-144.2 | 699.3<br>-113.7 | 712.6<br>-112.5 | 726.7<br>-120.8 | 726.8<br>-129.0 |

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).

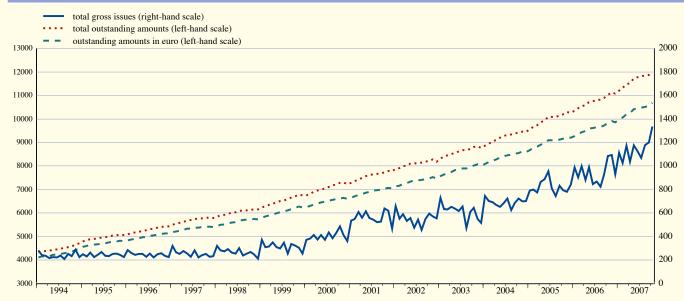


## FINANCIAL MARKETS

## 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 value

|  | ,  | Fotal in euro 1)  |  | By euro area residents   |   |   |  |  |   |  |   |  |
|--|--|---|--|--|---|---|--|--|---|--|---|--|
|  |  | rotar in euro   |  |  | In euro   |   |  |  | In all cu   | rrencies   |   |  |
|  | Outstanding<br>amounts   | Gross issues  | Net issues   | Outstanding<br>amounts   | Gross issues  | Net issues  | Outstanding<br>amounts   | Gross issues   | Net issues  | Annual growth rates  | Seasonally  |  |
|  | 1  | 2   | 3  | 4  | 5   | 6   | 7  | 8  | 9   | 10   | Net issues  | 6-month<br>growth rates<br>12                                      |
|  | 1  | 2   |  | 4  | 3   | Total   | 1  | 0  | 9   | 10   | - 11  | 12   |
| 2006 Oct.<br>Nov.<br>Dec.  | 11,617.3<br>11,755.9<br>11,732.1   | 1,106.3<br>1,134.7<br>977.3   | 93.3<br>137.7<br>-24.7   | 9,826.4<br>9,917.8<br>9,863.4  | 1,023.0<br>1,036.6<br>885.4   | 101.6<br>90.8<br>-55.8  | 11,031.6<br>11,122.9<br>11,078.4   | 1,086.0<br>1,092.7<br>930.1  | 122.2<br>107.4<br>-59.8   | 7.9<br>8.2<br>7.9  | 112.6<br>94.7<br>51.7   | 8.0<br>8.2<br>8.6  |
| 2007 Jan.<br>Feb.<br>Mar.  | 11,830.7<br>11,940.6<br>12,172.2   | 1,145.7<br>1,044.7<br>1,258.0   | 98.9<br>110.0<br>230.4   | 9,960.5<br>10,057.0<br>10,193.8  | 1,052.2<br>958.3<br>1,119.0   | 97.5<br>96.6<br>135.5   | 11,205.4<br>11,321.6<br>11,464.0   | 1,111.8<br>1,024.4<br>1,171.6  | 116.1<br>123.5<br>141.7   | 7.9<br>8.2<br>8.5  | 74.7<br>94.8<br>107.4   | 8.9<br>9.3<br>10.1   |
| Apr.<br>May<br>June  | 12,194.9<br>12,408.3<br>12,538.6   | 1,039.8<br>1,216.4<br>1,219.7<br>1,074.9                                      | 22.4<br>214.3<br>130.1<br>3.9  | 10,249.0<br>10,410.1<br>10,454.3   | 981.4<br>1,113.9<br>1,067.5<br>1,002.8  | 54.8<br>162.0<br>44.1<br>29.1   | 11,529.8<br>11,718.5<br>11,776.0<br>11,824.1   | 1,036.4<br>1,175.4<br>1,123.7<br>1,068.5   | 72.0<br>183.9<br>54.7<br>50.3   | 8.5<br>9.0<br>9.2<br>9.2   | 63.2<br>138.0<br>48.5<br>66.0   | 9.0<br>9.7<br>9.6<br>9.4   |
| July<br>Aug.<br>Sep.<br>Oct.   | 12,543.5<br>12,571.8<br>12,665.6   | 1,074.9<br>1,183.3<br>1,243.9   | 28.4<br>93.1   | 10,484.3<br>10,510.4<br>10,569.9<br>10,691.7   | 1,002.8<br>1,130.7<br>1,154.6<br>1,266.9  | 26.4<br>58.8<br>120.8   | 11,824.1<br>11,845.8<br>11,876.8<br>12,014.2   | 1,068.5<br>1,179.1<br>1,200.7<br>1,334.8   | 27.4<br>48.4<br>137.9   | 9.2<br>9.2<br>9.1<br>9.1   | 84.5<br>59.9<br>122.0   | 9.4<br>9.1<br>8.2<br>9.2   |
|  |  |   |  | <u> </u>   | <u> </u>  | Long-term   | · · ·  | ·  |   |  |   |  |
| 2006 Oct.<br>Nov.<br>Dec.  | 10,573.9<br>10,708.9<br>10,730.4   | 224.8<br>226.0<br>171.6   | 98.8<br>134.2<br>18.8  | 8,893.7<br>8,988.2<br>9,007.4  | 173.9<br>167.2<br>133.1   | 68.4<br>93.9<br>16.1  | 9,948.3<br>10,041.8<br>10,068.7  | 206.5<br>193.4<br>153.2  | 86.1<br>108.6<br>13.4   | 8.1<br>8.3<br>8.1  | 94.6<br>93.8<br>59.5  | 8.2<br>8.9<br>9.0  |
| 2007 Jan.<br>Feb.<br>Mar.<br>Apr.<br>May<br>June<br>July<br>Aug.<br>Sep.<br>Oct. | 10,806.6<br>10,905.8<br>11,043.1<br>11,084.5<br>11,271.0<br>11,371.2<br>11,398.9<br>11,392.9<br>11,419.4 | 231.3<br>237.4<br>277.6<br>181.7<br>266.4<br>258.6<br>197.8<br>102.4<br>158.1 | 76.2<br>99.4<br>137.2<br>41.1<br>188.2<br>98.8<br>27.3<br>-6.6<br>26.1 | 9,057.7<br>9,140.6<br>9,236.7<br>9,267.9<br>9,403.1<br>9,468.0<br>9,480.3<br>9,473.1<br>9,492.2<br>9,547.1 | 176.6<br>189.6<br>212.6<br>155.2<br>198.7<br>190.2<br>161.6<br>86.6<br>133.3<br>189.9 | 50.5<br>83.1<br>95.9<br>31.0<br>136.7<br>63.5<br>12.0<br>-7.8<br>18.7<br>56.2 | 10,140.0<br>10,236.7<br>10,335.7<br>10,373.0<br>10,528.9<br>10,609.5<br>10,634.0<br>10,631.9<br>10,623.4<br>10,676.3 | 200.4<br>223.2<br>233.4<br>176.9<br>225.0<br>216.6<br>187.6<br>103.8<br>146.5<br>214.0 | 61.5<br>104.6<br>101.0<br>44.7<br>152.0<br>77.0<br>26.3<br>-2.6<br>16.4<br>62.8 | 8.1<br>8.4<br>8.6<br>8.5<br>9.0<br>8.9<br>8.8<br>8.5<br>8.0<br>7.7 | 67.7<br>82.4<br>77.8<br>52.9<br>108.3<br>46.7<br>47.4<br>50.4<br>12.0<br>71.3 | 9.2<br>9.5<br>9.9<br>8.9<br>9.1<br>8.8<br>8.3<br>7.6<br>6.2<br>6.6 |

## 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<br>(including      | Non-MFI co                             | orporations                | General go            | overnment                      | Total           | MFIs<br>(including | Non-MFI co                             | orporations                | General go            | overnment                      |  |
|                    |                         | Eurosystem)             | Financial corporations other than MFIs | Non-financial corporations | Central<br>government | Other<br>general<br>government |                 | Eurosystem)        | Financial corporations other than MFIs | Non-financial corporations | Central<br>government | Other<br>general<br>government |  |
|                    | 1                       | 2                       | 3                                      | 4                          | 5                     | 6                              | 7               | 8                  | 9                                      | 10                         | 11                    | 12                             |  |
| ****               | 10.00                   |                         |  |                            |                       | Total                          | 0.0=4           |                    |  |                            |                       |                                |  |
| 2005<br>2006       | 10,269<br>11,078        | 4,119<br>4,563          | 933<br>1,167                           | 607<br>636                 | 4,327<br>4,408        | 283<br>305                     | 9,874<br>11,334 | 6,988<br>8,377     | 325<br>419                             | 1,031<br>1,113             | 1,435<br>1,339        | 95<br>85                       |  |
| 2006 Q4<br>2007 Q1 | 11,078<br>11,464        | 4,563<br>4,758          | 1,167<br>1,260                         | 636<br>648                 | 4,408<br>4,489        | 305<br>309                     | 3,109<br>3,308  | 2,364<br>2,446     | 147<br>140                             | 334<br>285                 | 241<br>415            | 23<br>23                       |  |
| Q2<br>Q3           | 11,776<br>11,877        | 4,865<br>4,952          | 1,318                                  | 684<br>677                 | 4,601                 | 308<br>310                     | 3,335           | 2,359              | 117<br>89                              | 453<br>392                 | 389<br>345            | 18<br>19                       |  |
| 2007 July          | 11,877                  | 4,932                   | 1,351<br>1,344                         | 693                        | 4,586<br>4,577        | 307                            | 3,448<br>1,068  | 2,603<br>749       | 46                                     |                            | 115                   |                                |  |
| Aug.               | 11.846                  | 4,930<br>4,952          | 1,354                                  | 683<br>677                 | 4,571                 | 308<br>310                     | 1,179           | 920<br>934         | 22<br>21                               | 152<br>135                 | 97                    | 6<br>5<br>8                    |  |
| Sep.<br>Oct.       | 11,877<br>12,014        | 5,050                   | 1,351<br>1,388                         | 686                        | 4,586<br>4,575        | 310                            | 1,201<br>1,335  | 1,001              | 60                                     | 105<br>125                 | 132<br>140            | 10                             |  |
|                    |                         |                         |  |                            |                       | Short-term                     |                 |                    |  |                            |                       |                                |  |
| 2005<br>2006       | 945<br>1,010            | 482<br>570              | 7<br>12                                | 90<br>94                   | 361<br>329            | 5<br>4                         | 7,797<br>9,175  | 6,046<br>7,375     | 45<br>60                               | 943<br>1,023               | 729<br>686            | 33<br>31                       |  |
| 2006 Q4            | 1.010                   | 570                     | 12                                     | 94                         | 329                   | 4                              | 2,556           | 2,086              | 14                                     | 305                        | 144                   | 7                              |  |
| 2007 Q1<br>Q2      | 1,128<br>1,166          | 621<br>623              | 12<br>11                               | 106<br>120                 | 385<br>407            | 4<br>5                         | 2,651<br>2,717  | 2,132<br>2,072     | 16<br>12                               | 271<br>413                 | 222<br>210            | 8<br>9                         |  |
| Q3                 | 1,253                   | 712                     | 9                                      | 117                        | 409                   | 5<br>7                         | 3,010           | 2,404              | 10                                     | 378                        | 207                   | 11                             |  |
| 2007 July<br>Aug.  | 1,190<br>1,214          | 642<br>666              | 10<br>10                               | 128<br>119                 | 406<br>413            | 5<br>5                         | 881<br>1,075    | 672<br>862         | 3 4                                    | 142<br>134                 | 60<br>72<br>75        | 3<br>3<br>5                    |  |
| Sep.<br>Oct.       | 1,214<br>1,253<br>1,338 | 712<br>774              | 9<br>17                                | 117<br>126                 | 409<br>414            | 5<br>7<br>7                    | 1,054<br>1,121  | 870<br>904         | 3<br>11                                | 102<br>117                 | 75<br>84              | 5<br>4                         |  |
| - Oct.             | 1,550                   | 774                     | 17                                     | 120                        | 717                   | Long-term 1)                   | 1,121           | 704                | - 11                                   | 117                        | 0+                    |                                |  |
| 2005               | 9,323                   | 3,637                   | 926                                    | 516                        | 3,966                 | 278                            | 2,077           | 942                | 280                                    | 88                         | 706                   | 61                             |  |
| 2006<br>2006 Q4    | 10,069<br>10,069        | 3,993                   | 1,155<br>1,155                         | 542<br>542                 | 4,079<br>4,079        | 301<br>301                     | 2,159<br>553    | 1,002<br>279       | 360<br>133                             | 90                         | 653<br>97             | 54<br>16                       |  |
| 2007 Q1            | 10,336                  | 3,993<br>4,137<br>4,242 | 1,248<br>1,307                         | 542<br>563                 | 4,105<br>4,194        | 304<br>304                     | 657<br>619      | 313<br>287         | 123<br>105                             | 13<br>40                   | 192<br>179            | 14                             |  |
| Q2<br>Q3           | 10,610<br>10,623        | 4,242                   | 1,342                                  | 560                        | 4,177                 | 304                            | 438             | 198                | 79                                     | 14                         | 138                   | 8                              |  |
| 2007 July          | 10,634<br>10,632        | 4,261<br>4,264          | 1,334<br>1,344                         | 566<br>564                 | 4,171<br>4,158        | 302<br>303                     | 188<br>104      | 77<br>57           | 43<br>18                               | 10<br>1                    | 55<br>25              | 3<br>2<br>3<br>5               |  |
| Aug.<br>Sep.       | 10,623                  | 4,241                   | 1,342                                  | 560                        | 4,177                 | 304                            | 146             | 64                 | 19                                     | 3                          | 58                    | $\frac{2}{3}$                  |  |
| Oct.               | 10,676                  | 4,277                   | 1,372                                  | 559                        | 4,161                 | ch long-term f                 | 214             | 97                 | 48                                     | 8                          | 55                    | 5                              |  |
| 2005               | 6,724                   | 2,020                   | 462                                    | 408                        | 3,616                 | 217                            | 1,229           | 414                | 92                                     | 53                         | 622                   | 48                             |  |
| 2006               | 7,047                   | 2,136                   | 543                                    | 413                        | 3,719                 | 237                            | 1,289           | 475                | 142                                    | 56                         | 576                   | 39                             |  |
| 2006 Q4<br>2007 Q1 | 7,047<br>7,163          | 2,136<br>2,211<br>2,256 | 543<br>569                             | 413<br>413                 | 3,719<br>3,728        | 237<br>243                     | 280<br>402      | 116<br>172         | 46<br>40                               | 18<br>9                    | 90<br>169             | 10<br>13<br>7                  |  |
| Q2<br>Q3           | 7,306<br>7,305          | 2,256<br>2,254          | 583<br>590                             | 426<br>421                 | 3,798<br>3,793        | 244<br>246                     | 339<br>261      | 132<br>100         | 28<br>24                               | 24<br>7                    | 147<br>123            | 7<br>7                         |  |
| 2007 July          | 7,297                   | 2,267                   | 588                                    | 426                        | 3,771                 | 245                            | 109             | 41                 | 10                                     | 5                          | 50                    |                                |  |
| Aug.<br>Sep.       | 7,298<br>7,305          | 2,269<br>2,254          | 595<br>590                             | 425<br>421                 | 3,764<br>3,793        | 245<br>246                     | 66<br>86        | 32<br>28           | 12<br>2                                | 0                          | 21<br>52              | 3<br>2<br>3                    |  |
| Oct.               | 7,315                   | 2,280                   | 592                                    | 424                        | 3,769                 | 250                            | 126             | 54                 | 16                                     | 5                          | 47                    | 4                              |  |
| 2005               | 2.266                   | 1.250                   | 450                                    | 00                         |                       | long-term va                   |                 | 122                | 100                                    | 27                         | 50                    |                                |  |
| 2005<br>2006       | 2,266<br>2,603          | 1,350<br>1,507          | 458<br>603                             | 92<br>115                  | 306<br>314            | 60<br>64                       | 718<br>716      | 432<br>405         | 188<br>214                             | 27<br>31                   | 58<br>51              | 12<br>15                       |  |
| 2006 Q4<br>2007 Q1 | 2,603                   | 1,507                   | 603<br>669                             | 115<br>115                 | 314                   | 64                             | 232             | 124<br>114         | 86                                     | 11                         | 5<br>13               | 7                              |  |
| Q2                 | 2,725<br>2,846          | 1,560<br>1,603          | 714                                    | 126                        | 320<br>343            | 61<br>60                       | 213<br>227      | 111                | 82<br>76                               | 4<br>16                    | 23                    | 1                              |  |
| Q3<br>2007 July    | 2,867<br>2,869          | 1,605<br>1,602          | 739<br>735                             | 127<br>128                 | 338<br>345            | 57<br>58                       | 138<br>64       | 71<br>24           | 52<br>32                               | 5                          | 3                     | 1 0                            |  |
| Aug.               | 2,864                   | 1,606                   | 737                                    | 127                        | 336                   | 58                             | 27              | 19                 | 5                                      | 1                          | 2                     | 1                              |  |
| Sep.<br>Oct.       | 2,867<br>2,901          | 1,605<br>1,608          | 739<br>767                             | 127<br>125                 | 338<br>344            | 57<br>58                       | 47<br>71        | 28<br>28           | 15<br>32                               | 1 3                        | 4<br>6                | 0<br>1                         |  |

Source: ECB.

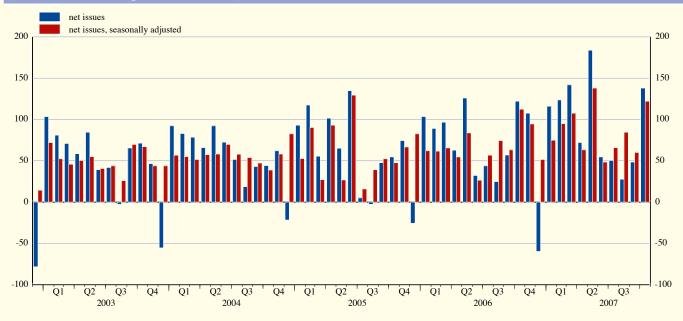
1) The residual difference between total long-term debt securities and fixed and variable rate long-term debt securities consists of zero coupon bonds and revaluation effects.

## **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-season   | ally adjusted |            |            | Seasonally adjusted |                    |              |               |            |            |
|-----------|-------|--------------------|--------------|---------------|------------|------------|---------------------|--------------------|--------------|---------------|------------|------------|
|           | Total | MFIs<br>(including | Non-MFI co   | orporations   | General go | overnment  | Total               | MFIs<br>(including | Non-MFI co   | orporations   | General go | vernment   |
|           |       | Eurosystem)        | Financial    | Non-financial | Central    | Other      |                     | Eurosystem)        | Financial    | Non-financial | Central    | Other      |
|           |       |                    | corporations | corporations  | government | general    |                     |                    | corporations | corporations  | government | general    |
|           |       |                    | other than   | -             | _          | government |                     |                    | other than   | -             | _          | government |
|           |       |                    | MFIs         |               | _          |            | ,                   |                    | MFIs         |               |            |            |
|           | 1     | 2                  | 3            | 4             | 5          | 6          | 7                   | 8                  | 9            | 10            | 11         | 12         |
|           |       |                    |              |               |            | Total      |                     |                    |              |               |            |            |
| 2005      | 720.5 | 319.8              | 175.8        | 20.9          | 171.5      | 32.4       | 723.3               | 323.7              | 172.6        | 20.8          | 173.8      | 32.6       |
| 2006      | 805.2 | 418.5              | 241.3        | 32.6          | 90.5       | 22.3       | 806.9               | 424.0              | 237.7        | 32.8          | 90.1       | 22.3       |
| 2006 Q4   | 169.8 | 97.8               | 99.0         | 7.6           | -41.2      | 6.7        | 258.9               | 133.1              | 70.8         | 11.9          | 38.2       | 5.0        |
| 2007 Q1   | 381.3 | 187.1              | 94.6         | 13.0          | 82.7       | 3.9        | 276.8               | 122.4              | 112.0        | 10.6          | 29.3       | 2.6        |
| Q2        | 310.5 | 102.5              | 59.5         | 36.3          | 112.4      | -0.1       | 249.8               | 110.7              | 46.1         | 28.1          | 65.6       | -0.9       |
| Q3        | 126.1 | 100.9              | 39.0         | -4.8          | -11.1      | 2.2        | 210.4               | 126.5              | 67.1         | 2.2           | 8.4        | 6.1        |
| 2007 July | 50.3  | 37.1               | 27.2         | 10.1          | -23.0      | -1.1       | 66.0                | 33.0               | 30.4         | 8.5           | -5.8       | 0.0        |
| Aug.      | 27.4  | 33.6               | 9.8          | -10.3         | -6.3       | 0.6        | 84.5                | 53.1               | 29.6         | -6.5          | 6.0        | 2.4        |
| Sep.      | 48.4  | 30.3               | 2.0          | -4.6          | 18.1       | 2.6        | 59.9                | 40.5               | 7.1          | 0.3           | 8.3        | 3.7        |
| Oct.      | 137.9 | 86.1               | 47.8         | 9.4           | -9.8       | 4.5        | 122.0               | 61.9               | 44.9         | 4.7           | 6.2        | 4.2        |
|           |       |                    |              |               |            | Long-term  |                     |                    |              |               |            |            |
| 2005      | 712.9 | 296.4              | 176.2        | 21.3          | 186.3      | 32.7       | 713.9               | 298.0              | 173.0        | 21.0          | 189.1      | 32.8       |
| 2006      | 755.9 | 346.0              | 235.9        | 29.2          | 121.5      | 23.3       | 755.9               | 347.9              | 232.4        | 29.0          | 123.3      | 23.3       |
| 2006 Q4   | 208.1 | 96.0               | 98.3         | 9.8           | -3.2       | 7.2        | 247.9               | 120.9              | 70.1         | 7.4           | 44.0       | 5.5        |
| 2007 Q1   | 267.1 | 141.1              | 94.9         | 1.0           | 26.7       | 3.3        | 227.9               | 107.2              | 112.0        | 7.5           | -0.9       | 2.1        |
| Q2        | 273.7 | 101.3              | 60.6         | 22.3          | 90.2       | -0.6       | 207.8               | 97.1               | 47.1         | 15.8          | 49.2       | -1.3       |
| Q3        | 40.1  | 14.5               | 40.7         | -1.4          | -14.0      | 0.3        | 109.8               | 28.2               | 69.2         | 1.2           | 7.0        | 4.1        |
| 2007 July | 26.3  | 18.8               | 27.9         | 2.4           | -21.8      | -1.2       | 47.4                | 17.2               | 31.5         | 1.2           | -2.6       | 0.2        |
| Aug.      | -2.6  | 2.7                | 9.7          | -1.7          | -13.8      | 0.6        | 50.4                | 20.4               | 29.6         | 0.8           | -2.6       | 2.3        |
| Sep.      | 16.4  | -7.0               | 3.1          | -2.2          | 21.6       | 0.9        | 12.0                | -9.3               | 8.1          | -0.8          | 12.3       | 1.7        |
| Oct.      | 62.8  | 33.2               | 40.3         | 0.1           | -14.9      | 4.1        | 71.3                | 30.6               | 36.4         | -1.7          | 2.2        | 3.8        |

## C16 Net issues of securities, other than shares, seasonally adjusted and non-seasonally adjusted (EUR billions; transactions during the month; nominal values)



## 4.3 Growth rates of securities, other than shares, issued by euro area residents (percentage changes)

|  |  | Annual g  | rowth rates (n                                       | on-seasonally  | adjusted)                                     |  | 6-month seasonally adjusted growth rates             |  |  |  |  |  |
|--|--|---|--|--|---|--|--|--|--|--|--|--|
|  | Total  | MFIs<br>(including                                  | Non-MFI co   | orporations  | General go                                    | overnment  | Total  | MFIs<br>(including   | Non-MFI co   | orporations  | General go   | vernment   |
|  | 1  | Eurosystem)   | Financial<br>corporations<br>other than<br>MFIs<br>3 | Non-financial corporations                           | Central<br>government                         | Other<br>general<br>government                       | 7  | Eurosystem)  |  | Non-financial corporations                           | Central<br>government                                | Other<br>general<br>government                       |
|  | 1  | 2   |  | 7  | 5   | Total  | 7  | O  | 9  | 10   | 11   | 12   |
| 2006 Oct.  | 7.9  | 9.6   | 29.1   | 3.5  | 2.6   | 9.5  | 8.0  | 10.2   | 27.8   | 4.1  | 2.3  | 8.4  |
| Nov.   | 8.2  | 10.0  | 29.5   | 4.7  | 2.5   | 8.8  | 8.2  | 9.4  | 29.1   | 3.6  | 3.2  | 7.0  |
| Dec.   | 7.9  | 10.2  | 26.0   | 5.4  | 2.1   | 7.9  | 8.6  | 11.0   | 26.8   | 4.1  | 3.2  | 5.5  |
| 2007 Jan.  | 7.9  | 10.5  | 26.6   | 4.5  | 1.9   | 7.4  | 8.9  | 11.9   | 27.9   | 4.9  | 2.7  | 4.4  |
| Feb.   | 8.2  | 10.7  | 27.3   | 4.7  | 2.1   | 5.8  | 9.3  | 12.2   | 30.6   | 7.5  | 2.3  | 2.1  |
| Mar.   | 8.5  | 10.4  | 30.0   | 5.7  | 2.4   | 6.6  | 10.1   | 11.7   | 36.7   | 7.3  | 3.1  | 5.1  |
| Apr.   | 8.5  | 10.6  | 27.9   | 6.0  | 2.6   | 7.2  | 9.0  | 10.9   | 28.1   | 7.7  | 2.9  | 6.1  |
| May  | 9.0  | 10.4  | 29.7   | 6.0  | 3.5   | 5.1  | 9.7  | 11.5   | 30.1   | 8.1  | 3.8  | 3.3  |
| June   | 9.2  | 10.6  | 28.2   | 8.2  | 3.8   | 3.4  | 9.6  | 10.3   | 29.4   | 12.4   | 4.3  | 1.1  |
| July   | 9.2  | 10.8  | 28.7   | 10.1   | 3.3   | 2.6  | 9.4  | 9.7  | 29.7   | 15.5   | 3.9  | 0.7  |
| Aug.   | 9.2  | 11.0  | 28.6   | 9.7  | 3.1   | 2.6  | 9.1  | 9.9  | 26.9   | 12.0   | 3.9  | 3.0  |
| Sep.   | 9.1  | 10.9  | 27.3   | 8.3  | 3.2   | 4.2  | 8.2  | 10.3   | 18.8   | 9.5  | 3.3  | 3.5  |
| Oct.   | 9.1  | 11.1  | 26.9   | 8.5  | 3.0   | 5.5  | 9.2  | 11.2   | 25.8   | 9.2  | 3.1  | 5.1  |
|  |  |   |  |  |   | Long-term  |  |  |  |  |  |  |
| 2006 Oct.  | 8.1  | 8.4   | 28.7   | 4.7  | 3.6   | 10.0   | 8.2  | 9.3  | 27.3   | 3.7  | 3.2  | 9.0  |
| Nov.   | 8.3  | 9.1   | 29.2   | 5.1  | 3.3   | 9.4  | 8.9  | 10.4   | 28.8   | 2.5  | 3.9  | 7.6  |
| Dec.   | 8.1  | 9.5   | 25.6   | 5.7  | 3.1   | 8.4  | 9.0  | 10.5   | 26.7   | 3.8  | 4.3  | 6.2  |
| 2007 Jan.<br>Feb.<br>Mar.<br>Apr.<br>May<br>June<br>July<br>Aug. | 8.1<br>8.4<br>8.6<br>8.5<br>9.0<br>8.9<br>8.8<br>8.5 | 9.6<br>10.3<br>10.3<br>10.6<br>10.8<br>10.5<br>10.3 | 26.3<br>27.1<br>29.7<br>27.8<br>29.7<br>28.4<br>29.0 | 5.4<br>4.8<br>5.3<br>4.8<br>4.2<br>6.3<br>7.2<br>7.0 | 2.9<br>2.4<br>2.5<br>3.2<br>3.3<br>2.9<br>2.4 | 7.6<br>5.9<br>6.9<br>7.4<br>5.1<br>3.4<br>2.7<br>2.6 | 9.2<br>9.5<br>9.9<br>8.9<br>9.1<br>8.8<br>8.3<br>7.6 | 11.3<br>12.4<br>12.1<br>11.9<br>11.2<br>10.4<br>9.3<br>8.0 | 27.8<br>30.8<br>37.0<br>28.5<br>30.4<br>30.0<br>30.5<br>27.5 | 6.0<br>6.2<br>5.6<br>5.8<br>6.0<br>8.8<br>8.3<br>7.9 | 3.6<br>2.6<br>2.1<br>1.7<br>2.5<br>2.4<br>2.1<br>2.1 | 4.8<br>2.6<br>5.2<br>5.8<br>2.8<br>0.6<br>0.6<br>2.7 |
| Sep.   | 8.0  | 9.1   | 27.9   | 6.0  | 2.4   | 3.5  | 6.2  | 6.2  | 19.5   | 6.3  | 2.8  | 1.9  |
| Oct.   | 7.7  | 8.9   | 26.7   | 5.3  | 2.0   | 4.6  | 6.6  | 5.9  | 24.9   | 4.8  | 2.4  | 3.6  |

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

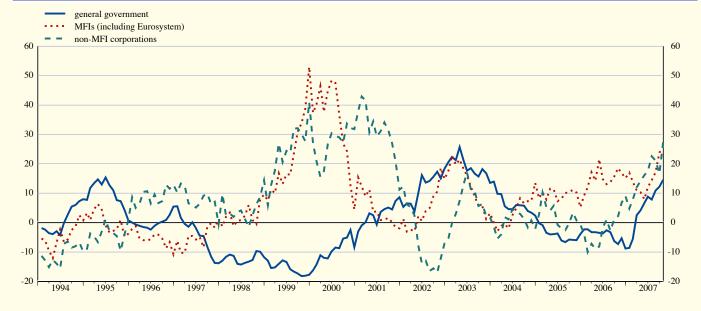


<sup>1)</sup> For the calculation of the growth rates, see the Technical notes. The 6-month growth rates have been annualised.

## 4.3 Growth rates of securities, other than shares, issued by euro area residents (cont'd)

|  |                                 |  | Long-tern                                    | ı fixed rate                           |  |  | Long-term variable rate                      |   |  |  |  |  |
|--|---------------------------------|--|--|--|--|--|--|---|--|--|--|--|
|  | Total                           | MFIs<br>(including                     | Non-MFI co                                   | orporations                            | General go                             | overnment                              | Total  | MFIs<br>(including                        | Non-MFI co                                   | orporations                                  | General go                             | overnment                                    |
|  |                                 | Eurosystem)                            | Financial corporations other than MFIs       | Non-financial corporations             | Central<br>government                  | Other<br>general<br>government         |  | Eurosystem)                               | Financial corporations other than MFIs       | Non-financial corporations                   | Central<br>government                  | Other<br>general<br>government               |
|  | 13                              | 14                                     | 15   | 16                                     | 17                                     | 18                                     | 19   | 20  | 21   | 22   | 23                                     | 24   |
|  |                                 |  |  |  | In all                                 | currencies con                         | nbined                                       |   |  |  |  |  |
| 2005<br>2006                                     | 4.7<br>4.5                      | 3.1<br>4.7                             | 5.6<br>13.8                                  | 0.4<br>0.9                             | 5.5<br>3.1                             | 15.0<br>13.4                           | 19.5<br>16.4                                 | 18.6<br>11.8                              | 35.6<br>41.0                                 | 22.3<br>28.0                                 | 9.9<br>5.2                             | 4.8<br>4.5                                   |
| 2006 Q4<br>2007 Q1<br>Q2<br>Q3                   | 5.0<br>5.3<br>5.5<br>5.3        | 5.4<br>6.3<br>7.5<br>8.0               | 19.9<br>20.5<br>19.8<br>17.5                 | 1.1<br>2.7<br>2.7<br>4.6               | 3.1<br>2.9<br>2.6<br>2.3               | 11.0<br>7.7<br>7.5<br>5.0              | 15.5<br>15.2<br>16.5<br>16.2                 | 11.0<br>12.1<br>12.1<br>11.1              | 36.1<br>33.1<br>37.5<br>39.1                 | 27.4<br>21.9<br>18.9<br>19.5                 | 5.5<br>1.5<br>5.7<br>4.7               | 5.0<br>4.6<br>-0.3<br>-4.8                   |
| 2007 May<br>June<br>July                         | 5.7<br>5.7<br>5.4               | 7.3<br>8.0<br>8.3                      | 20.9<br>17.0<br>17.5                         | 2.1<br>3.9<br>4.9                      | 3.0<br>3.0<br>2.2                      | 7.3<br>5.1<br>4.8                      | 16.5<br>16.9<br>16.5                         | 12.1<br>11.8<br>11.0                      | 38.1<br>39.2<br>39.8                         | 16.9<br>19.7<br>20.2                         | 6.0<br>7.0<br>6.5                      | -2.8<br>-3.1<br>-5.5                         |
| Aug.<br>Sep.<br>Oct.                             | 5.3<br>5.0<br>4.6               | 8.2<br>6.8<br>6.9                      | 18.2<br>16.6<br>14.7                         | 5.1<br>3.9<br>4.5                      | 1.9<br>2.5<br>1.7                      | 4.7<br>5.6<br>6.8                      | 16.0<br>15.3<br>15.3                         | 11.1<br>10.6<br>10.0                      | 38.8<br>38.0<br>37.6                         | 19.1<br>18.7<br>12.9                         | 3.3<br>1.5<br>5.2                      | -5.2<br>-4.5<br>-3.7                         |
| 2005   | 4.2                             | 0.0                                    | 0.0  | 0.1                                    |  | In euro                                | 10.0   | 17.2                                      | 25.0   | 22.1   | 10.2                                   |  |
| 2005<br>2006                                     | 4.3<br>3.8                      | 0.9<br>3.1                             | 8.9<br>11.2                                  | -0.1<br>0.1                            | 5.4<br>3.2                             | 15.3<br>13.6                           | 18.9<br>15.2                                 | 17.3<br>10.1                              | 35.0<br>37.6                                 | 22.1<br>30.9                                 | 10.3<br>5.4                            | 5.4<br>3.7                                   |
| 2006 Q4<br>2007 Q1<br>Q2<br>Q3                   | 4.3<br>4.7<br>4.8<br>4.7        | 4.1<br>5.4<br>6.8<br>7.2               | 14.9<br>16.0<br>16.2<br>14.5                 | -0.3<br>1.1<br>0.8<br>3.3              | 3.3<br>3.2<br>2.9<br>2.5               | 11.0<br>7.7<br>7.4<br>5.2              | 14.5<br>14.0<br>15.8<br>15.6                 | 9.5<br>10.9<br>11.2<br>10.3               | 33.3<br>29.7<br>35.0<br>37.3                 | 30.3<br>23.3<br>19.7<br>18.6                 | 5.6<br>1.5<br>5.8<br>4.8               | 4.0<br>4.1<br>-0.8<br>-5.7                   |
| 2007 May<br>June<br>July<br>Aug.<br>Sep.<br>Oct. | 5.0<br>5.0<br>4.7<br>4.6<br>4.5 | 6.6<br>7.2<br>7.4<br>7.4<br>5.9<br>6.3 | 17.2<br>14.0<br>14.7<br>15.1<br>13.5<br>12.9 | 0.2<br>2.3<br>3.7<br>3.8<br>2.4<br>3.1 | 3.3<br>3.2<br>2.4<br>2.1<br>2.9<br>1.9 | 7.0<br>5.2<br>4.9<br>5.0<br>5.9<br>7.1 | 15.8<br>16.4<br>15.9<br>15.5<br>14.7<br>14.9 | 11.1<br>10.9<br>9.9<br>10.5<br>9.8<br>9.6 | 35.8<br>37.5<br>37.9<br>37.0<br>36.3<br>35.6 | 17.6<br>19.5<br>19.4<br>18.0<br>17.7<br>11.7 | 6.1<br>7.1<br>6.6<br>3.4<br>1.7<br>5.3 | -3.4<br>-3.7<br>-6.4<br>-6.1<br>-5.4<br>-4.4 |

## C18 Annual growth rates of short-term debt securities, by sector of the issuer, in all currencies combined



<sup>1)</sup> For the calculation of the growth rates, see the Technical notes.

## **4.4 Quoted shares issued by euro area residents** (EUR billions, unless otherwise indicated; market values)

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

(outstanding amounts as end-of-period)

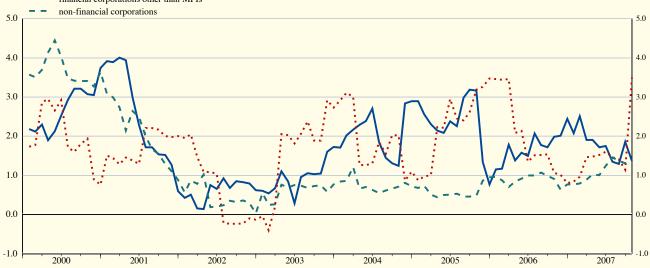
|           | Total   |                           |                               |         | Financial corporations        | other than MFIs | •                             |         |                         |
|-----------|---------|---------------------------|-------------------------------|---------|-------------------------------|-----------------|-------------------------------|---------|-------------------------|
|           | Total   | Index<br>Dec. 01 =<br>100 | Annual<br>growth<br>rates (%) | Total   | Annual<br>growth<br>rates (%) | Total           | Annual<br>growth<br>rates (%) | Total   | Annual growth rates (%) |
|           | 1       | 2                         | 3                             | 4       | 5                             | 6               | 7                             | 8       | 9                       |
| 2005 Oct. | 4,666.6 | 103.1                     | 1.2                           | 752.4   | 3.2                           | 481.5           | 3.2                           | 3,432.7 | 0.5                     |
| Nov.      | 4,889.2 | 103.4                     | 1.2                           | 809.2   | 1.3                           | 514.6           | 3.3                           | 3,565.4 | 0.9                     |
| Dec.      | 5,063.5 | 103.5                     | 1.2                           | 836.4   | 0.8                           | 541.8           | 3.5                           | 3,685.3 | 0.9                     |
| 2006 Jan. | 5,304.1 | 103.6                     | 1.2                           | 884.8   | 1.2                           | 536.8           | 3.5                           | 3,882.4 | 1.0                     |
| Feb.      | 5,443.8 | 103.6                     | 1.2                           | 938.8   | 1.2                           | 562.8           | 3.4                           | 3,942.2 | 0.9                     |
| Mar.      | 5,645.4 | 103.6                     | 1.2                           | 962.3   | 1.8                           | 580.1           | 3.5                           | 4,102.9 | 0.7                     |
| Apr.      | 5,670.2 | 103.7                     | 1.1                           | 948.8   | 1.4                           | 573.9           | 2.1                           | 4,147.5 | 0.8                     |
| May       | 5,379.5 | 103.8                     | 1.2                           | 896.7   | 1.6                           | 534.5           | 2.1                           | 3,948.3 | 0.9                     |
| June      | 5,391.0 | 104.0                     | 1.1                           | 905.0   | 1.5                           | 530.7           | 1.3                           | 3,955.3 | 1.0                     |
| July      | 5,387.8 | 104.1                     | 1.2                           | 918.4   | 2.1                           | 544.5           | 1.5                           | 3,924.9 | 1.0                     |
| Aug.      | 5,569.1 | 104.1                     | 1.2                           | 958.6   | 1.8                           | 595.8           | 1.5                           | 4,014.8 | 1.1                     |
| Sep.      | 5,710.2 | 104.2                     | 1.2                           | 986.1   | 1.7                           | 607.8           | 1.5                           | 4,116.3 | 1.0                     |
| Oct.      | 5,897.5 | 104.3                     | 1.1                           | 1,015.6 | 2.0                           | 614.5           | 1.1                           | 4,267.3 | 0.9                     |
| Nov.      | 5,951.6 | 104.4                     | 0.9                           | 1,024.3 | 2.0                           | 603.9           | 1.0                           | 4,323.5 | 0.6                     |
| Dec.      | 6,169.3 | 104.6                     | 1.1                           | 1,056.3 | 2.4                           | 623.3           | 0.8                           | 4,489.7 | 0.8                     |
| 2007 Jan. | 6,343.8 | 104.6                     | 1.0                           | 1,111.3 | 2.1                           | 641.9           | 0.8                           | 4,590.6 | 0.8                     |
| Feb.      | 6,259.2 | 104.7                     | 1.1                           | 1,081.2 | 2.5                           | 633.5           | 1.0                           | 4,544.5 | 0.8                     |
| Mar.      | 6,476.0 | 104.8                     | 1.1                           | 1,099.9 | 1.9                           | 644.8           | 1.5                           | 4,731.3 | 0.9                     |
| Apr.      | 6,724.1 | 105.0                     | 1.2                           | 1,156.5 | 1.9                           | 670.7           | 1.5                           | 4,896.9 | 1.0                     |
| May       | 7,003.2 | 105.1                     | 1.2                           | 1,161.3 | 1.7                           | 684.3           | 1.5                           | 5,157.6 | 1.0                     |
| June      | 6,924.9 | 105.4                     | 1.4                           | 1,115.5 | 1.8                           | 672.3           | 1.6                           | 5,137.1 | 1.2                     |
| July      | 6,701.5 | 105.6                     | 1.5                           | 1,081.1 | 1.4                           | 608.3           | 1.5                           | 5,012.1 | 1.5                     |
| Aug.      | 6,586.7 | 105.6                     | 1.4                           | 1,041.6 | 1.3                           | 583.3           | 1.4                           | 4,961.8 | 1.4                     |
| Sep.      | 6,652.0 | 105.6                     | 1.4                           | 1,030.5 | 1.9                           | 596.8           | 1.1                           | 5,024.7 | 1.3                     |
| Oct.      | 6,903.4 | 105.9                     | 1.6                           | 1,052.3 | 1.4                           | 628.7           | 3.5                           | 5,222.4 | 1.4                     |

#### C19 Annual growth rates for quoted shares issued by euro area residents





financial corporations other than MFIs



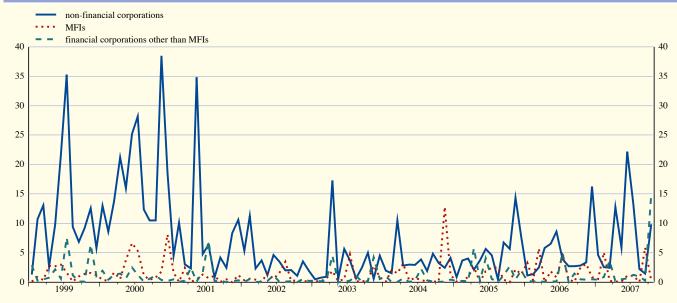
1) For the calculation of the index and the growth rates, see the Technical notes.

## **4.4 Quoted shares issued by euro area residents** <sup>1)</sup> (EUR billions; market values)

#### 2. Transactions during the month

|           |              | Total       |            |              | MFIs        |            | Financial cor | porations other | er than MFIs | Non-fir      | nancial corpora | ations     |
|-----------|--------------|-------------|------------|--------------|-------------|------------|---------------|-----------------|--------------|--------------|-----------------|------------|
|           | 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 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. | 4.6          | 0.8         | 3.9        | 3.3          | 0.0         | 3.3        | 0.2           | 0.0             | 0.2          | 1.1          | 0.7             | 0.4        |
| 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.      | 8.3          | 5.4         | 2.9        | 5.7          | 0.0         | 5.7        | 0.1           | 0.0             | 0.1          | 2.5          | 5.4             | -3.0       |
| Apr.      | 5.8          | 0.5         | 5.3        | 0.0          | 0.2         | -0.1       | 0.0           | 0.0             | 0.0          | 5.8          | 0.3             | 5.5        |
| May       | 8.5          | 2.2         | 6.3        | 1.9          | 0.0         | 1.8        | 0.2           | 0.0             | 0.2          | 6.5          | 2.2             | 4.3        |
| June      | 9.4          | 2.7         | 6.7        | 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          | 16.2         | 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        | 0.4           | 0.0             | 0.4          | 5.8          | 1.8             | 4.0        |
| June      | 23.8         | 1.6         | 22.3       | 1.0          | 0.0         | 1.0        | 0.6           | 0.0             | 0.6          | 22.2         | 1.6             | 20.6       |
| July      | 15.7         | 1.8         | 13.8       | 1.1          | 0.0         | 1.1        | 1.2           | 0.3             | 0.9          | 13.3         | 1.5             | 11.8       |
| Aug.      | 3.2          | 6.6         | -3.4       | 0.0          | 0.1         | -0.1       | 1.0           | 1.4             | -0.5         | 2.2          | 5.1             | -2.8       |
| Sep.      | 7.5          | 2.5         | 5.1        | 5.9          | 0.0         | 5.9        | 0.2           | 0.3             | -0.1         | 1.4          | 2.1             | -0.7       |
| Oct.      | 25.0         | 7.4         | 17.6       | 0.3          | 2.6         | -2.4       | 14.9          | 0.5             | 14.4         | 9.9          | 4.3             | 5.6        |

## C20 Gross issues of quoted shares by sector of the issuer (EUR billions; transactions during the month; market values)



<sup>1)</sup> 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 fr              | om household | s              |                             | Deposits from non-financial corporations |              |                          |              |      |
|-----------|--------------|--------------|--------------------------|--------------|----------------|-----------------------------|--|--------------|--------------------------|--------------|------|
|           | Overnight 2) | Wit          | th agreed matur          | ity          | Redeemable a   | at notice <sup>2), 3)</sup> | Overnight 2)                             | Wit          | h agreed matur           | ity          |      |
|           |              | Up to 1 year | Over 1 and up to 2 years | Over 2 years | Up to 3 months | Over 3 months               |  | Up to 1 year | Over 1 and up to 2 years | Over 2 years |      |
|           | 1            | 2            | 3                        | 4            | 5              | 6                           | 7  | 8            | 9                        | 10           | 11   |
| 2006 Nov. | 0.91         | 3.10         | 3.34                     | 2.80         | 2.30           | 2.81                        | 1.49                                     | 3.26         | 3.46                     | 3.66         | 3.23 |
| Dec.      | 0.92         | 3.27         | 3.31                     | 2.79         | 2.38           | 2.87                        | 1.51                                     | 3.47         | 4.95                     | 3.87         | 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         | 3.83                     | 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         | 4.09                     | 4.16         | 3.90 |
| July      | 1.10         | 3.86         | 3.90                     | 2.97         | 2.45           | 3.40                        | 1.81                                     | 4.01         | 4.16                     | 4.51         | 3.95 |
| Aug.      | 1.14         | 3.93         | 3.93                     | 3.01         | 2.53           | 3.46                        | 1.89                                     | 4.08         | 4.33                     | 4.20         | 3.93 |
| Sep.      | 1.16         | 4.07         | 3.98                     | 2.92         | 2.58           | 3.50                        | 1.91                                     | 4.14         | 4.34                     | 4.41         | 3.97 |
| Oct.      | 1.17         | 4.11         | 4.16                     | 3.32         | 2.54           | 3.57                        | 1.96                                     | 4.07         | 4.37                     | 4.64         | 3.92 |

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

|                   | Bank<br>overdrafts 2) |                                      | Consumer credit  By initial rate fixation Annu |                 |                   |                                      | Lending for house purchase     |                                 |                  |                   |                                      | Other lending by initial rate fixation |                 |  |
|-------------------|-----------------------|--------------------------------------|--|-----------------|-------------------|--------------------------------------|--------------------------------|---------------------------------|------------------|-------------------|--------------------------------------|--|-----------------|--|
|                   |                       | By initi                             | al rate fixation                               | on              | Annual percentage | F                                    | By initial rate                | e fixation                      |                  | Annual percentage |                                      |  |                 |  |
|                   |                       | Floating rate<br>and up to<br>1 year | Over 1<br>and up to<br>5 years                 | Over<br>5 years | rate of charge 4) | Floating rate<br>and up to<br>1 year | Over 1<br>and up to<br>5 years | Over 5<br>and up to<br>10 years | Over<br>10 years | rate of charge 4) | Floating rate<br>and up to<br>1 year | Over 1<br>and up to<br>5 years         | Over<br>5 years |  |
|                   | 1                     | 2                                    | 3  | 4               | 5                 | 6                                    | 7                              | 8                               | 9                | 10                | 11                                   | 12                                     | 13              |  |
| 2006 Nov.<br>Dec. | 10.07<br>10.03        | 7.66<br>7.55                         | 6.12<br>6.05                                   | 8.15<br>7.97    | 7.81<br>7.71      | 4.49<br>4.56                         | 4.50<br>4.58                   | 4.58<br>4.56                    | 4.47<br>4.49     | 4.76<br>4.80      | 4.97<br>4.93                         | 5.26<br>5.24                           | 4.91<br>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.<br>Mar.      | 10.31<br>10.22        | 7.69<br>7.51                         | 6.83<br>6.68                                   | 8.27<br>8.34    | 8.28<br>8.14      | 4.71<br>4.79                         | 4.71<br>4.76                   | 4.70<br>4.71                    | 4.61<br>4.62     | 4.90<br>4.94      | 5.27<br>5.26                         | 5.38<br>5.60                           | 5.14<br>5.20    |  |
| Apr.<br>May       | 10.29<br>10.32        | 7.77<br>8.10                         | 6.69<br>6.73                                   | 8.24<br>8.30    | 8.15<br>8.27      | 4.85<br>4.88                         | 4.73<br>4.80                   | 4.75<br>4.81                    | 4.67<br>4.74     | 5.00<br>5.02      | 5.29<br>5.38                         | 5.57<br>5.65                           | 5.21<br>5.32    |  |
| June<br>July      | 10.38<br>10.49        | 8.07<br>8.06                         | 6.66<br>6.76                                   | 8.25<br>8.30    | 8.25<br>8.35      | 5.00<br>5.06                         | 4.93<br>4.93                   | 4.90<br>5.02                    | 4.82<br>4.91     | 5.15<br>5.26      | 5.49<br>5.54                         | 5.77<br>5.80                           | 5.37<br>5.41    |  |
| Aug.              | 10.55                 | 8.43                                 | 6.85   | 8.31            | 8.48              | 5.15                                 | 4.98                           | 5.08                            | 4.90             | 5.24              | 5.36                                 | 5.93                                   | 5.47            |  |
| Sep.<br>Oct.      | 10.53<br>10.64        | 8.48<br>8.08                         | 6.83<br>6.86                                   | 8.39<br>8.28    | 8.54<br>8.38      | 5.23<br>5.28                         | 5.02<br>5.03                   | 5.09<br>5.07                    | 5.02<br>5.09     | 5.31<br>5.42      | 5.46<br>5.63                         | 5.87<br>6.04                           | 5.51<br>5.56    |  |

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

|           | Bank<br>overdrafts 2) |                                | ans up to EUR 1 mil<br>initial rate fixation | lion         |                                | loans over EUR 1 mi<br>y 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  | 7            |
| 2006 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         | 4.51                           | 4.69   | 4.71         |
| Mar.      | 6.04                  | 5.30                           | 5.45   | 4.88         | 4.66                           | 4.81   | 4.87         |
| Apr.      | 6.12                  | 5.37                           | 5.47   | 4.88         | 4.70                           | 4.99   | 4.90         |
| May       | 6.12                  | 5.43                           | 5.57   | 4.95         | 4.72                           | 5.10   | 5.12         |
| June      | 6.17                  | 5.53                           | 5.70   | 5.03         | 4.89                           | 5.28   | 5.17         |
| July      | 6.30                  | 5.58                           | 5.77   | 5.09         | 4.90                           | 4.95   | 5.17         |
| Aug.      | 6.35                  | 5.77                           | 5.86   | 5.17         | 5.01                           | 5.46   | 5.29         |
| Sep.      | 6.49                  | 5.93                           | 5.90   | 5.23         | 5.20                           | 5.60   | 5.41         |
| Oct.      | 6.53                  | 5.95                           | 5.98   | 5.22         | 5.11                           | 5.08   | 5.31         |

- Data refer to the changing composition of the euro area. For further information, see the General notes.
   For this instrument category, new business and outstanding amounts coincide. End-of-period.
- 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)

|  |  | Depos  | sits from househ   | olds   |  | Deposits from  | rporations   | Repos  |  |
|--|--|--|--|--|--|--|--|--|--|
|  | Overnight 1)   | With agreed  | maturity   | Redeemable a   | t notice 1),2)   | Overnight 1)   | 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 Nov.<br>Dec.  | 0.91<br>0.92   | 2.78<br>2.89   | 3.05<br>3.05   | 2.30<br>2.38   | 2.81<br>2.87   | 1.49<br>1.51   | 3.24<br>3.42   | 3.80<br>3.88   | 3.14<br>3.29   |
| 2007 Jan.<br>Feb.<br>Mar.<br>Apr.<br>May<br>June<br>July<br>Aug.<br>Sep. | 0.98<br>1.00<br>1.02<br>1.04<br>1.06<br>1.08<br>1.10<br>1.14 | 2.99<br>3.07<br>3.16<br>3.23<br>3.30<br>3.39<br>3.49<br>3.58<br>3.68 | 3.06<br>3.12<br>3.05<br>3.06<br>3.03<br>3.04<br>3.02<br>3.03<br>3.06 | 2.35<br>2.35<br>2.39<br>2.42<br>2.43<br>2.42<br>2.45<br>2.53<br>2.58 | 2.98<br>3.07<br>3.14<br>3.20<br>3.25<br>3.32<br>3.40<br>3.46<br>3.50 | 1.61<br>1.64<br>1.71<br>1.75<br>1.78<br>1.77<br>1.81<br>1.89 | 3.45<br>3.49<br>3.61<br>3.67<br>3.72<br>3.87<br>3.92<br>4.03<br>4.13 | 3.91<br>3.92<br>3.93<br>3.93<br>3.96<br>3.99<br>4.00<br>4.07<br>4.09 | 3.36<br>3.41<br>3.59<br>3.66<br>3.79<br>3.85<br>3.89<br>3.93 |
| Oct.   | 1.17   | 3.78   | 3.09   | 2.54   | 3.57   | 1.96   | 4.17   | 4.12   | 3.93   |

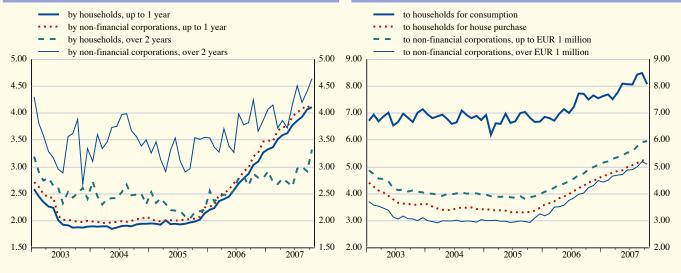
#### 5. Interest rates on loans (outstanding amounts)

|           |  |                                      | Loans to h |              | Loans to no                       | on-financial corpo | rations       |                          |              |  |
|-----------|--|--------------------------------------|------------|--------------|-----------------------------------|--------------------|---------------|--------------------------|--------------|--|
|           | Lendi  | ng for house purcha<br>with maturity | ase,       | Consum       | er credit and other with maturity | loans,             | With maturity |                          |              |  |
|           | Up to 1 year Over 1 and up to 5 years  1 2 3 |                                      |            | 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 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               | 5.44          | 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      | 5.20   | 4.53                                 | 4.86       | 8.68         | 6.94                              | 6.01               | 5.62          | 5.09                     | 4.96         |  |
| July      | 5.28   | 4.57                                 | 4.89       | 8.80         | 6.95                              | 6.06               | 5.70          | 5.15                     | 5.00         |  |
| Aug.      | 5.35   | 4.58                                 | 4.90       | 8.85         | 6.97                              | 6.08               | 5.76          | 5.24                     | 5.05         |  |
| Sep.      | 5.39   | 4.64                                 | 4.94       | 8.99         | 7.00                              | 6.13               | 5.91          | 5.34                     | 5.14         |  |
| Oct.      | 5.44   | 4.67                                 | 4.98       | 9.02         | 7.09                              | 6.18               | 5.96          | 5.44                     | 5.21         |  |

#### C21 New deposits with agreed maturity

(percentages per annum excluding charges; period averages)





# 4.6 Money market interest rates (percentages per annum; period averages)

|  |  |  | Euro area 1),2)  |  |  | United States  | Japan  |
|--|--|--|--|--|--|--|--|
|  | Overnight<br>deposits<br>(EONIA)                                     | 1-month<br>deposits<br>(EURIBOR)                                     | 3-month<br>deposits<br>(EURIBOR)                             | 6-month<br>deposits<br>(EURIBOR)                                     | 12-month<br>deposits<br>(EURIBOR)                                    | 3-month<br>deposits<br>(LIBOR)                       | 3-month<br>deposits<br>(LIBOR)                               |
|  | 1  | 2  | 3  | 4  | 5  | 6  | 7  |
| 2005<br>2006<br>2007   | 2.09<br>2.83<br>3.87   | 2.14<br>2.94<br>4.08   | 2.18<br>3.08<br>4.28   | 2.23<br>3.23<br>4.35   | 2.33<br>3.44<br>4.45   | 3.56<br>5.19<br>5.30                                 | 0.06<br>0.30<br>0.79   |
| 2006 Q4<br>2007 Q1<br>Q2<br>Q3<br>Q4                                     | 3.36<br>3.61<br>3.86<br>4.05   | 3.46<br>3.71<br>3.96<br>4.28   | 3.59<br>3.82<br>4.07<br>4.49                                 | 3.72<br>3.94<br>4.20<br>4.56   | 3.86<br>4.09<br>4.38<br>4.65   | 5.37<br>5.36<br>5.36<br>5.45                         | 0.49<br>0.62<br>0.69<br>0.89                                 |
| 2006 Dec.  | 3.95<br>3.50   | 4.37<br>3.64   | 4.72<br>3.68   | 4.70<br>3.79   | 4.68<br>3.92   | 5.02<br>5.36   | 0.96   |
| 2007 Jan.<br>Feb.<br>Mar.<br>Apr.<br>May<br>June<br>July<br>Aug.<br>Sep. | 3.56<br>3.57<br>3.69<br>3.82<br>3.79<br>3.96<br>4.06<br>4.05<br>4.03 | 3.62<br>3.65<br>3.84<br>3.86<br>3.92<br>4.10<br>4.11<br>4.31<br>4.43 | 3.75<br>3.82<br>3.89<br>3.98<br>4.07<br>4.15<br>4.22<br>4.54 | 3.89<br>3.94<br>4.00<br>4.10<br>4.20<br>4.28<br>4.36<br>4.59<br>4.75 | 4.06<br>4.09<br>4.11<br>4.25<br>4.37<br>4.51<br>4.56<br>4.67<br>4.72 | 5.36<br>5.36<br>5.35<br>5.35<br>5.36<br>5.36<br>5.49 | 0.56<br>0.59<br>0.71<br>0.66<br>0.67<br>0.73<br>0.77<br>0.92 |
| Oct.<br>Nov.<br>Dec.   | 3.94<br>4.02<br>3.88   | 4.24<br>4.22<br>4.71   | 4.69<br>4.64<br>4.85   | 4.66<br>4.63<br>4.82   | 4.65<br>4.61<br>4.79   | 5.15<br>4.96<br>4.97                                 | 0.97<br>0.91<br>0.99   |

### C23 Euro area money market rates 2)

## C24 3-month money market rates



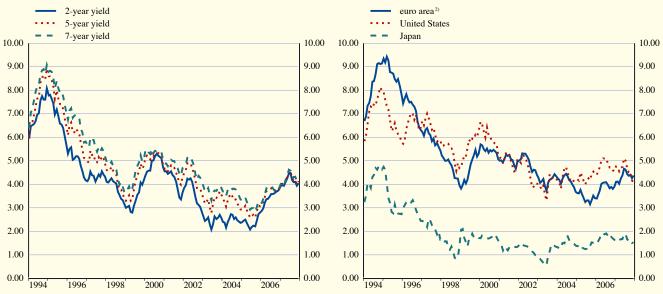
- Before January 1999 synthetic euro area rates were calculated on the basis of national rates weighted by GDP. For further information, see the General notes.
  Data refer to the changing composition of the euro area. For further information, see the General notes.

### 4.7 Government bond yields

|                |         | Eu      | ro area 1),2) |         |          | United States | Japan    |
|----------------|---------|---------|---------------|---------|----------|---------------|----------|
|                | 2 years | 3 years | 5 years       | 7 years | 10 years | 10 years      | 10 years |
|                | 1       | 2       | 3             | 4       | 5        | 6             | 7        |
| 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     |
| 2007           | 4.13    | 4.15    | 4.20          | 4.27    | 4.33     | 4.63          | 1.68     |
| 2006 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     |
| Q2<br>Q3<br>Q4 | 4.03    | 4.06    | 4.12          | 4.25    | 4.34     | 4.27          | 1.57     |
| 2006 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     |
| Oct.           | 4.11    | 4.16    | 4.21          | 4.32    | 4.40     | 4.52          | 1.66     |
| Nov.           | 3.94    | 3.96    | 4.00          | 4.15    | 4.25     | 4.16          | 1.51     |
| Dec.           | 4.05    | 4.06    | 4.14          | 4.29    | 4.38     | 4.10          | 1.53     |

## C25 Euro area government bond yields 2)

## C26 10-year government bond yields



- Source: ECB.

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

# 4.8 Stock market indices (index levels in points; period averages)

|                    |                | Dow Jones EURO STOXX indices <sup>1)</sup> Benchmark Main industry indices |                    |                      |                   |                |                |                |                |                |                |                | United<br>States            | Japan                |
|--------------------|----------------|--|--------------------|----------------------|-------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-----------------------------|----------------------|
|                    | Bench          | ımark  |                    |                      |                   |                | Main indus     | stry indices   |                |                |                |                |                             |                      |
|                    | Broad          | 50   | Basic<br>materials | Consumer<br>services | Consumer<br>goods | Oil &<br>gas   |                | Industrials    | Technology     | Utilities      | Telecom.       | Health care    | Standard<br>& Poor's<br>500 | Nikkei<br>225        |
|                    | 1              | 2  | 3                  | 4                    | 5                 | 6              | 7              | 8              | 9              | 10             | 11             | 12             | 13                          | 14                   |
| 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             |
| 2007               | 416.4          | 4,315.8  | 543.8              | 235.4                | 366.5             | 449.6          | 408.3          | 488.4          | 383.4          | 561.4          | 492.7          | 519.2          | 1,476.5                     | 16,984.4             |
| 2006 Q4<br>2007 Q1 | 383.3<br>402.5 | 4,032.4<br>4,150.5   | 450.4<br>489.9     | 219.3<br>233.3       | 315.1<br>335.7    | 432.7<br>422.8 | 400.7<br>418.6 | 419.5<br>462.7 | 343.1<br>349.4 | 490.8<br>512.3 | 450.1<br>472.8 | 526.3<br>527.2 | 1,389.2<br>1,424.8          | 16,465.0<br>17,363.9 |
|                    | 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          | 1,424.6                     | 17,503.9             |
| Q2<br>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             |
| Q4                 | 417.8          | 4,377.9  | 567.3              | 228.3                | 383.8             | 455.7          | 381.2          | 484.1          | 406.3          | 620.0          | 544.8          | 509.2          | 1,494.6                     | 16,002.5             |
| 2006 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<br>568.2 | 476.2          | 547.7          | 1,511.3                     | 17,577.7             |
| June<br>July       | 433.4<br>431.3 | 4,470.2<br>4,449.0   | 571.9<br>585.9     | 244.2<br>242.6       | 380.4<br>384.7    | 471.1<br>491.4 | 429.4<br>418.7 | 529.0<br>529.3 | 393.1<br>399.8 | 563.1          | 473.8<br>467.1 | 529.9<br>513.1 | 1,514.5<br>1,520.9          | 18,001.4<br>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          | 1,320.9                     | 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             |
| Oct.               | 427.1          | 4,430.8  | 587.6              | 234.9                | 394.6             | 463.8          | 399.4          | 492.9          | 419.5          | 602.4          | 527.9          | 507.6          | 1,539.7                     | 16,910.4             |
| Nov.               | 411.4          | 4,314.9  | 549.1              | 225.3                | 380.2             | 450.3          | 369.1          | 477.1          | 400.8          | 624.1          | 555.0          | 501.9          | 1,461.3                     | 15,514.0             |
| Dec.               | 414.5          | 4,386.0  | 564.0              | 224.1                | 375.8             | 452.5          | 374.0          | 481.8          | 397.8          | 634.9          | 552.6          | 518.6          | 1,480.0                     | 15,520.1             |

# 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

#### 1. Harmonised Index of Consumer Prices 1)

|   |   |  | Total                                   |                                 |                                 | Total (s.a., percentage change on previous period) |                                 |                                 |                                   |                                  |                                 | Memo item: Administered prices 2) |                                 |
|---|---|--|---|---------------------------------|---------------------------------|--|---------------------------------|---------------------------------|-----------------------------------|----------------------------------|---------------------------------|-----------------------------------|---------------------------------|
|   | Index<br>2005 = 100                       |  | Total excl. unprocessed food and energy | Goods                           | Services                        | Total  | Processed<br>food               | Unprocessed food                | Non-energy<br>industrial<br>goods | Energy<br>(n.s.a.)               | Services                        |                                   |                                 |
| % of total 3)   | 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<br>2004<br>2005<br>2006                                    | 95.8<br>97.9<br>100.0<br>102.2            | 2.1<br>2.1<br>2.2<br>2.2               | 2.0<br>2.1<br>1.5<br>1.5                | 1.8<br>1.8<br>2.1<br>2.3        | 2.5<br>2.6<br>2.3<br>2.0        | -<br>-<br>-<br>-                                   | -                               | -                               | -                                 | -                                | -                               | 2.0<br>2.0<br>2.1<br>2.1          | 2.2<br>3.2<br>2.8<br>3.0        |
| 2006 Q3<br>Q4<br>2007 Q1<br>Q2<br>Q3                            | 102.5<br>102.8<br>102.9<br>104.4<br>104.4 | 2.1<br>1.8<br>1.9<br>1.9<br>1.9        | 1.5<br>1.6<br>1.9<br>1.9<br>2.0         | 2.3<br>1.6<br>1.6<br>1.5<br>1.5 | 2.0<br>2.1<br>2.4<br>2.6<br>2.5 | 0.6<br>0.0<br>0.5<br>0.8<br>0.6                    | 0.5<br>0.7<br>0.3<br>0.5<br>1.1 | 1.9<br>0.6<br>0.1<br>0.9<br>0.9 | 0.2<br>0.3<br>0.3<br>0.2<br>0.2   | 0.6<br>-4.2<br>1.0<br>3.3<br>0.7 | 0.6<br>0.6<br>0.7<br>0.7<br>0.6 | 2.0<br>1.6<br>1.7<br>1.8<br>1.8   | 3.1<br>2.9<br>2.8<br>2.4<br>2.1 |
| 2007 July<br>Aug.<br>Sep.<br>Oct.<br>Nov.<br>Dec. <sup>4)</sup> | 104.3<br>104.3<br>104.7<br>105.2<br>105.8 | 1.8<br>1.7<br>2.1<br>2.6<br>3.1<br>3.1 | 1.9<br>2.0<br>2.0<br>2.1<br>2.3         | 1.2<br>1.2<br>1.9<br>2.6<br>3.4 | 2.6<br>2.6<br>2.5<br>2.5<br>2.5 | 0.2<br>0.1<br>0.2<br>0.4<br>0.6                    | 0.2<br>0.7<br>0.7<br>1.1<br>0.8 | 0.4<br>0.3<br>0.3<br>0.6<br>0.3 | 0.0<br>0.1<br>0.1<br>0.1<br>0.1   | 0.5<br>-0.9<br>0.6<br>0.6<br>3.4 | 0.2<br>0.1<br>0.1<br>0.2<br>0.2 | 1.7<br>1.7<br>2.1<br>2.6<br>3.2   | 2.1<br>2.1<br>2.1<br>2.2<br>2.2 |

|   |  |  | Goods                                  |  |                                   |   | Services                               |  |  |  |  |  |
|---|--|--|--|--|-----------------------------------|---|--|--|--|--|--|--|
|   | Food (incl. alc                        | oholic beverage                        | es and tobacco)                        |  | Industrial good                   | s                                       | Hous                                   | ing                                    | Transport                              | Communication                                | Recreation<br>and                      | Miscellaneous                          |
|   | Total                                  | Processed<br>food                      | Unprocessed food                       | Total                                  | Non-energy<br>industrial<br>goods | Energy                                  |  | Rents                                  |  |  | personal                               |  |
| % of total 3)                                     | 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<br>2004<br>2005<br>2006                      | 2.8<br>2.3<br>1.6<br>2.4               | 3.3<br>3.4<br>2.0<br>2.1               | 2.1<br>0.6<br>0.8<br>2.8               | 1.2<br>1.6<br>2.4<br>2.3               | 0.8<br>0.8<br>0.3<br>0.6          | 3.0<br>4.5<br>10.1<br>7.7               | 2.4<br>2.4<br>2.6<br>2.5               | 2.0<br>1.9<br>2.0<br>2.1               | 2.9<br>2.8<br>2.7<br>2.5               | -0.6<br>-2.0<br>-2.2<br>-3.3                 | 2.7<br>2.4<br>2.3<br>2.3               | 3.4<br>5.1<br>3.1<br>2.3               |
| 2006 Q3<br>Q4<br>2007 Q1<br>Q2<br>Q3              | 2.8<br>2.9<br>2.5<br>2.5<br>2.5<br>2.5 | 2.1<br>2.2<br>2.1<br>2.0<br>2.5        | 3.9<br>4.1<br>3.1<br>3.3<br>2.4        | 2.0<br>1.0<br>1.1<br>1.0<br>0.9        | 0.7<br>0.8<br>1.1<br>1.0<br>1.0   | 6.3<br>1.5<br>1.1<br>0.5<br>0.7         | 2.5<br>2.5<br>2.6<br>2.7<br>2.7        | 2.1<br>2.1<br>2.0<br>2.0<br>2.0        | 2.6<br>2.3<br>2.9<br>2.6<br>2.4        | -3.6<br>-2.5<br>-2.1<br>-1.9<br>-1.5         | 2.4<br>2.4<br>2.8<br>2.9<br>3.0        | 2.3<br>2.4<br>2.5<br>3.6<br>3.4        |
| 2007 June<br>July<br>Aug.<br>Sep.<br>Oct.<br>Nov. | 2.4<br>2.3<br>2.5<br>2.7<br>3.5<br>4.0 | 2.0<br>1.9<br>2.5<br>3.1<br>3.8<br>4.6 | 3.0<br>2.8<br>2.4<br>2.1<br>3.1<br>3.0 | 1.0<br>0.7<br>0.6<br>1.5<br>2.1<br>3.2 | 1.0<br>0.9<br>1.0<br>1.0<br>1.1   | 0.9<br>0.0<br>-0.9<br>3.0<br>5.5<br>9.7 | 2.8<br>2.7<br>2.7<br>2.7<br>2.7<br>2.7 | 2.0<br>1.9<br>2.0<br>2.0<br>2.0<br>2.0 | 2.4<br>2.5<br>2.4<br>2.4<br>2.5<br>2.6 | -1.8<br>-1.7<br>-1.1<br>-1.6<br>-2.1<br>-1.9 | 3.0<br>3.0<br>3.0<br>2.9<br>2.9<br>3.0 | 3.5<br>3.5<br>3.4<br>3.2<br>3.2<br>3.2 |

Sources: Eurostat and ECB calculations.

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

#### 2. Industry, construction, residential property and commodity prices

|   | ion 1 property prices of raw (1           |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                   | Oil prices 4)<br>(EUR per |                            |  |   |  |
|---|---|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|-----------------------------------|---------------------------|----------------------------|--|---|--|
|   | Total<br>(index                           | Т                               | `otal                           |                                 | Industry exc                    | luding co                       | nstructio                       | n and ener                      | gy                              | Energy                            |                           | prices 2)                  | mate   | erials <sup>3)</sup>                    | barrel)                                      |
|   | 2000 = 100)                               |                                 | Manu-<br>facturing              | Total                           | Intermediate<br>goods           | Capital<br>goods                | (                               | Consumer                        | goods                           |                                   |                           |                            | Т  | otal                                    |  |
|   |   |                                 | 0                               |                                 | 6                               | 6                               | Total                           | Durable                         | Non-durable                     |                                   |                           |                            |  | Total<br>excluding<br>energy            |  |
| % of total 5)                                     | 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   |
| 2004<br>2005<br>2006<br>2007                      | 105.7<br>110.1<br>115.8                   | 2.3<br>4.1<br>5.1               | 2.5<br>3.2<br>3.4               | 2.0<br>1.8<br>2.8               | 3.5<br>2.9<br>4.8               | 0.7<br>1.4<br>1.4               | 1.3<br>1.1<br>1.7               | 0.7<br>1.3<br>1.6               | 1.4<br>1.1<br>1.7               | 4.0<br>13.6<br>13.3               | 4.1<br>3.1<br>4.1         | 7.4<br>7.9<br>6.5          | 18.4<br>28.5<br>19.7<br>3.9                  | 10.8<br>9.4<br>24.8<br>9.2              | 30.5<br>44.6<br>52.9<br>52.8                 |
| 2006 Q4<br>2007 Q1<br>Q2<br>Q3<br>Q4              | 116.6<br>117.3<br>118.5<br>119.3          | 4.1<br>2.9<br>2.4<br>2.1        | 2.8<br>2.5<br>2.6<br>2.7        | 3.5<br>3.4<br>3.2<br>3.0        | 6.2<br>6.0<br>5.4<br>4.3        | 1.8<br>2.0<br>2.0<br>1.6        | 1.6<br>1.5<br>1.7<br>2.4        | 1.7<br>1.9<br>1.8<br>1.8        | 1.6<br>1.5<br>1.6<br>2.5        | 6.0<br>1.2<br>-0.4<br>-0.7        | 4.6<br>4.4<br>4.4<br>3.5  | 6.0 <sup>6</sup><br>-<br>- | 3.9<br>-5.5<br>-3.1<br>2.0<br>23.5           | 23.0<br>15.7<br>13.8<br>6.7<br>1.6      | 47.3<br>44.8<br>51.0<br>54.2<br>61.0         |
| 2007 July<br>Aug.<br>Sep.<br>Oct.<br>Nov.<br>Dec. | 119.1<br>119.2<br>119.6<br>120.4<br>121.4 | 1.8<br>1.8<br>2.7<br>3.3<br>4.1 | 2.3<br>2.3<br>3.4<br>3.9<br>4.8 | 2.9<br>3.0<br>3.1<br>3.2<br>3.2 | 4.5<br>4.2<br>4.1<br>3.9<br>3.7 | 1.7<br>1.7<br>1.6<br>1.5<br>1.5 | 1.9<br>2.3<br>2.9<br>3.3<br>3.6 | 1.7<br>1.8<br>1.9<br>1.8<br>1.9 | 1.9<br>2.4<br>3.0<br>3.6<br>3.9 | -1.8<br>-2.0<br>1.7<br>4.2<br>7.8 | -<br>-<br>-<br>-          | -<br>-<br>-<br>-<br>-      | -1.7<br>-3.4<br>12.1<br>19.5<br>26.9<br>24.1 | 7.8<br>5.4<br>6.9<br>3.5<br>-0.1<br>1.4 | 55.2<br>52.4<br>55.2<br>57.7<br>62.8<br>62.8 |

#### 3. Hourly labour costs 7)

|                     | Total<br>(s.a. index<br>2000 = 100) | Total             | Ву                    | component                       | By selec                               | rity              | Memo:<br>indicator |   |
|---------------------|-------------------------------------|-------------------|-----------------------|---------------------------------|--|-------------------|--------------------|---|
|                     |                                     |                   | Wages and<br>salaries | Employers' social contributions | Mining,<br>manufacturing<br>and energy | Construction      | Services           | of<br>negotiated<br>wages <sup>8)</sup> |
| % of total 5)       | 100.0                               | 100.0             | 73.1                  | 26.9                            | 34.6                                   | 9.1               | 56.3               |   |
|                     | 1                                   | 2                 | 3                     | 4                               | 5                                      | 6                 | 7                  | 8                                       |
| 2003                | 110.9                               | 3.2               | 2.9                   | 4.2                             | 3.2<br>2.9                             | 3.8               | 3.1                | 2.4                                     |
| 2004<br>2005        | 113.7<br>116.7                      | 2.5<br>2.7        | 2.3<br>2.7            | 3.0<br>2.6                      | 2.6                                    | 2.6<br>2.5        | 2.2<br>2.8         | 2.1<br>2.1                              |
| 2006                | 119.7                               | 2.6               | 2.7                   | 2.3                             | 3.4                                    | 2.1               | 2.2                | 2.3                                     |
| 2006 Q3<br>Q4       | 120.1<br>120.8                      | 2.6<br>2.3        | 2.7<br>2.4            | 2.5<br>2.0                      | 3.7<br>2.7                             | 1.9<br>2.2        | 2.0<br>2.2         | 2.1<br>2.5                              |
| 2007 Q1<br>Q2<br>Q3 | 121.5<br>122.2<br>123.0             | 2.3<br>2.4<br>2.5 | 2.4<br>2.5<br>2.5     | 1.9<br>1.8<br>2.2               | 2.4<br>2.6<br>2.5                      | 2.0<br>3.0<br>3.0 | 2.3<br>2.2<br>2.4  | 2.0<br>2.3<br>2.2                       |

Sources: Eurostat, HWWI (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) Input prices for residential buildings.

- Experimental data based on non-harmonised national sources (see the ECB website for further details).
- Refers to the prices expressed in euro.
- 4) Brent Blend (for one-month forward delivery).
- 5) In 2000.
- 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. Hourly labour costs for the whole economy, excluding agriculture, public administration, education, health and services not elsewhere classified. Owing to differences in 6)
- 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

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

(seasonally adjusted)

|          | Total<br>(index | Total |  |  |                   | By economic activity  |   |   |
|----------|-----------------|-------|--|--|-------------------|---|---|---|
|          | 2000 = 100)     |       | Agriculture, hunting, forestry and fishing | Mining,<br>manufacturing<br>and energy | Construction      | Trade, repairs, hotels and restaurants, transport and communication | Financial, real estate,<br>renting and business<br>services | Public administration,<br>education, health<br>and other services |
|          | 1               | 2     | 3  | 4                                      | 5                 | 6   | 7   | 8   |
|          |                 |       |  | Ţ                                      | Init labour costs |   | •   |   |
| 2003     | 106.7           | 1.9   | 6.5  | 0.4                                    | 3.3               | 2.0   | 1.8   | 3.2   |
| 2004     | 107.9           | 1.2   | -9.5                                       | -0.2                                   | 3.6               | 0.4   | 2.6   | 2.2   |
| 2005     | 109.1           | 1.0   | 7.0  | -0.7                                   | 3.5               | 0.6   | 1.7   | 1.8   |
| 2006     | 110.0           | 0.9   | 1.3  | -1.0                                   | 1.5               | 0.2   | 2.1   | 2.5   |
| 2006 Q3  | 110.0           | 1.1   | 3.2  | -0.7                                   | 1.6               | -0.2  | 2.6   | 2.7   |
| Q4       | 110.0           | 0.2   | -0.4                                       | -1.4                                   | 2.2               | -0.4  | 2.0   | 0.9   |
| 2007 Q1  | 110.8           | 0.9   | 0.2  | -1.2                                   | 1.6               | -0.4  | 3.5   | 2.0   |
|          | 111.5           | 1.2   | 1.3  | 0.1                                    | 5.6               | 0.2   | 3.3   | 0.7   |
| Q2<br>Q3 | 111.4           | 1.2   | 1.2  | -1.0                                   | 5.6               | 0.6   | 2.6   | 1.7   |
|          |                 |       |  | Comp                                   | ensation per emp  | oloyee  |   |   |
| 2003     | 107.7           | 2.3   | 2.5  | 2.3                                    | 3.1               | 1.9   | 2.5   | 2.5   |
| 2004     | 110.0           | 2.1   | 1.3  | 2.8                                    | 2.9               | 1.4   | 1.9   | 2.3   |
| 2005     | 112.0           | 1.8   | 1.5  | 1.5                                    | 2.5               | 1.7   | 2.0   | 1.9   |
| 2006     | 114.5           | 2.2   | 1.2  | 3.3                                    | 3.4               | 1.7   | 1.6   | 2.0   |
| 2006 Q3  | 114.7           | 2.4   | 2.4  | 3.6                                    | 3.4               | 1.3   | 1.8   | 2.6   |
| Q4       | 115.1           | 1.8   | 2.8  | 3.1                                    | 3.4               | 1.8   | 1.6   | 0.5   |
| 2007 Õ1  | 116.2           | 2.2   | 3.3  | 2.6                                    | 3.4               | 1.3   | 2.5   | 2.2   |
| O2       | 116.6           | 1.9   | 4.8  | 3.4                                    | 3.0               | 1.3   | 1.7   | 0.9   |
| Q2<br>Q3 | 116.9           | 2.0   | 4.5  | 2.9                                    | 3.1               | 1.2   | 1.7   | 1.7   |
|          |                 |       |  | La                                     | bour productivity | y <sup>2)</sup>   |   |   |
| 2003     | 101.0           | 0.4   | -3.8                                       | 1.8                                    | -0.2              | -0.2  | 0.7   | -0.7  |
| 2004     | 101.9           | 1.0   | 12.0                                       | 3.1                                    | -0.6              | 0.9   | -0.7  | 0.1   |
| 2005     | 102.7           | 0.7   | -5.2                                       | 2.3                                    | -1.1              | 1.0   | 0.3   | 0.0   |
| 2006     | 104.1           | 1.3   | -0.1                                       | 4.3                                    | 1.8               | 1.5   | -0.5  | -0.4  |
| 2006 Q3  | 104.2           | 1.3   | -0.8                                       | 4.3                                    | 1.7               | 1.5   | -0.8  | -0.1  |
| Q4       | 104.7           | 1.6   | 3.2  | 4.5                                    | 1.2               | 2.2   | -0.4  | -0.4  |
| 2007 Q1  | 104.9           | 1.3   | 3.0  | 3.8                                    | 1.8               | 1.7   | -0.9  | 0.2   |
|          | 104.6           | 0.7   | 3.4  | 3.3                                    | -2.4              | 1.1   | -1.5  | 0.2   |
| Q2<br>Q3 | 105.0           | 0.7   | 3.3  | 3.9                                    | -2.3              | 0.5   | -0.9  | 0.0   |

#### 5. Gross domestic product deflators

|         | Total<br>(s.a. index | Total |       | Domest      | ic demand   |                     | Exports 3) | Imports 3) |
|---------|----------------------|-------|-------|-------------|-------------|---------------------|------------|------------|
|         | 2000 = 100)          |       | Total | Private     |             | Gross fixed capital |            |            |
|         |                      |       |       | consumption | consumption | formation           |            |            |
|         | 1                    | 2     | 3     | 4           | 5           | 6                   | 7          | 8          |
| 2003    | 107.4                | 2.1   | 2.0   | 2.1         | 2.4         | 1.2                 | -1.2       | -1.7       |
| 2004    | 109.5                | 2.0   | 2.2   | 2.1         | 2.3         | 2.5                 | 1.1        | 1.6        |
| 2005    | 111.6                | 1.9   | 2.3   | 2.1         | 2.6         | 2.4                 | 2.6        | 3.8        |
| 2006    | 113.7                | 1.9   | 2.4   | 2.2         | 2.1         | 2.7                 | 2.7        | 4.0        |
| 2006 Q3 | 114.0                | 2.0   | 2.3   | 2.1         | 2.2         | 2.8                 | 2.7        | 3.6        |
| Q4      | 114.5                | 1.8   | 1.8   | 1.8         | 0.6         | 2.7                 | 2.0        | 2.1        |
| 2007 Q1 | 115.3                | 2.2   | 1.9   | 1.7         | 1.5         | 3.2                 | 1.6        | 0.8        |
| Q2      | 116.1                | 2.3   | 2.0   | 1.8         | 0.7         | 3.2                 | 2.0        | 1.0        |
| Q3      | 116.5                | 2.2   | 2.1   | 1.7         | 1.5         | 2.9                 | 1.6        | 1.1        |

- 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.

#### 1. GDP and expenditure components

|                                      |   |   |   |   | GDP                                       |                                   |                                      |   |   |
|--------------------------------------|---|---|---|---|---|-----------------------------------|--------------------------------------|---|---|
|                                      | Total   |   | I   | Domestic demand                           |   |                                   | Е                                    | xternal balance 1)                        |   |
|                                      |   | Total   | Private consumption                                 | Government consumption                    | Gross fixed capital formation             | Changes in inventories 2)         | Total                                | Exports 1)                                | Imports 1)                                |
|                                      | 1   | 2   | 3   | 4   | 5   | 6                                 | 7                                    | 8   | 9   |
|                                      |   |   | Cur   | rent prices (EUR bi                       | llions, seasonally ad                     | ljusted)                          |                                      |   |   |
| 2003<br>2004<br>2005<br>2006         | 7,489.3<br>7,773.9<br>8,051.1<br>8,438.4            | 7,332.9<br>7,613.4<br>7,932.4<br>8,336.7            | 4,295.6<br>4,449.5<br>4,612.8<br>4,801.0            | 1,531.4<br>1,587.0<br>1,651.2<br>1,719.2  | 1,505.3<br>1,572.5<br>1,656.2<br>1,790.2  | 0.6<br>4.4<br>12.2<br>26.4        | 156.4<br>160.5<br>118.7<br>101.7     | 2,639.8<br>2,844.3<br>3,057.6<br>3,390.6  | 2,483.4<br>2,683.8<br>2,938.9<br>3,288.9  |
| 2006 Q3<br>Q4<br>2007 Q1<br>Q2<br>Q3 | 2,121.9<br>2,148.7<br>2,180.8<br>2,202.1<br>2,228.1 | 2,101.7<br>2,110.1<br>2,146.4<br>2,161.6<br>2,190.7 | 1,206.8<br>1,215.2<br>1,220.7<br>1,235.6<br>1,248.0 | 431.1<br>433.0<br>439.9<br>441.8<br>446.7 | 452.0<br>462.4<br>475.9<br>479.1<br>486.8 | 11.8<br>-0.5<br>9.9<br>5.1<br>9.3 | 20.2<br>38.6<br>34.4<br>40.6<br>37.4 | 851.8<br>879.0<br>889.8<br>904.8<br>927.3 | 831.6<br>840.5<br>855.4<br>864.2<br>889.9 |
|                                      |   |   |   |   | age of GDP                                |                                   |                                      |   |   |
| 2006                                 | 100.0   | 98.8  | 56.9  | 20.4                                      | 21.2                                      | 0.3                               | 1.2                                  | -   | -   |
|                                      |   |   | Chain-linked vo                                     |   | e previous year, seas                     |                                   |                                      |   |   |
|                                      |   |   |   |   | er percentage chang                       | es                                |                                      |   |   |
| 2006 Q3<br>Q4<br>2007 Q1<br>Q2<br>Q3 | 0.6<br>0.8<br>0.8<br>0.3<br>0.8                     | 0.8<br>0.2<br>1.0<br>0.1<br>0.9                     | 0.5<br>0.5<br>0.0<br>0.6<br>0.5                     | 0.5<br>0.4<br>0.9<br>0.1<br>0.6           | 0.8<br>1.6<br>1.9<br>-0.1<br>1.2          | -<br>-<br>-<br>-                  | -<br>-<br>-<br>-                     | 1.1<br>3.0<br>0.8<br>0.9<br>2.2           | 1.7<br>1.7<br>1.2<br>0.3<br>2.6           |
| - Qu                                 | 0.0   | 0.5   | 0.5   |   | entage changes                            |                                   |                                      | 2.2                                       | 2.0                                       |
| 2003                                 | 0.8   | 1.5   | 1.2   | 1.8                                       | 1.3                                       |                                   |                                      | 1.1                                       | 3.1                                       |
| 2004<br>2005<br>2006                 | 2.0<br>1.5<br>2.8                                   | 1.8<br>1.7<br>2.6                                   | 1.6<br>1.5<br>1.8                                   | 1.3<br>1.4<br>1.9                         | 2.2<br>2.7<br>4.9                         | -<br>-<br>-                       | -<br>-<br>-                          | 7.0<br>4.5<br>7.8                         | 6.7<br>5.2<br>7.6                         |
| 2006 Q3<br>Q4<br>2007 Q1             | 2.9<br>3.2<br>3.2                                   | 3.0<br>2.5<br>2.9                                   | 1.7<br>2.1<br>1.4                                   | 1.8<br>2.2<br>2.0                         | 5.0<br>5.8<br>7.1                         | -<br>-<br>-                       | -<br>-<br>-                          | 6.6<br>8.8<br>6.6                         | 7.1<br>6.9<br>5.9                         |
| Q2<br>Q3                             | 2.5<br>2.7  | 2.1<br>2.2  | 1.6<br>1.6  | 2.0<br>2.1                                | 4.3<br>4.7                                | -                                 | -                                    | 5.9<br>7.1                                | 4.9<br>5.9                                |
| <b>Q</b> 5                           | 2.7   |   |   |   | entage changes of G                       | GDP in percentage                 | noints                               | 7.1                                       | 3.5                                       |
| 2006 Q3<br>Q4<br>2007 Q1<br>Q2       | 0.6<br>0.8<br>0.8<br>0.3                            | 0.8<br>0.2<br>0.9<br>0.1                            | 0.3<br>0.3<br>0.0<br>0.3                            | 0.1<br>0.1<br>0.2<br>0.0                  | 0.2<br>0.3<br>0.4<br>0.0                  | 0.3<br>-0.5<br>0.3<br>-0.3        | -0.2<br>0.6<br>-0.1<br>0.2           | -   | -   |
| $\tilde{Q}_3$                        | 0.8   | 0.9   | 0.3   | 0.1                                       | 0.3                                       | 0.2                               | -0.1                                 | _   | -   |
|                                      |   |   | contributions to                                    | annual percentage                         | changes of GDP in                         | percentage points                 |                                      |   |   |
| 2003<br>2004<br>2005<br>2006         | 0.8<br>2.0<br>1.5<br>2.8                            | 1.4<br>1.8<br>1.7<br>2.6                            | 0.7<br>0.9<br>0.9<br>1.0                            | 0.4<br>0.3<br>0.3<br>0.4                  | 0.3<br>0.4<br>0.5<br>1.0                  | 0.1<br>0.2<br>0.0<br>0.1          | -0.6<br>0.2<br>-0.2<br>0.2           | -   | -   |
| 2006 Q3<br>Q4<br>2007 Q1<br>Q2       | 2.9<br>3.2<br>3.2<br>2.5                            | 3.0<br>2.4<br>2.8<br>2.1                            | 1.0<br>1.2<br>0.8<br>0.9                            | 0.4<br>0.4<br>0.4<br>0.4                  | 1.0<br>1.2<br>1.5<br>0.9                  | 0.6<br>-0.4<br>0.1<br>-0.1        | -0.1<br>0.8<br>0.3<br>0.4            | -   |   |
| $\widetilde{Q}_3$                    | 2.7   | 2.1   | 0.9   | 0.4                                       | 1.0                                       | -0.2                              | 0.6                                  | -   | -   |

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.

#### 2. Value added by economic activity

|                          |                               |   | Gross v                                | alue added (basic pi    | rices)  |  |   | Taxes less<br>subsidies on |
|--------------------------|-------------------------------|---|--|-------------------------|---|--|---|----------------------------|
|                          | Total                         | Agriculture,<br>hunting,<br>forestry<br>and fishing<br>activities | Mining,<br>manufacturing<br>and energy | Construction            | Trade, repairs,<br>hotels and<br>restaurants,<br>transport and<br>communication | Financial, real<br>estate, renting<br>and business<br>activities | Public<br>administration,<br>education,<br>health and<br>other services | products                   |
|                          | 1                             | 2   | Current prices (                       | (EUR billions, season   | ally adjusted)  | 6  | 7   | 8                          |
| 2003                     | 6,728.3                       | 150.8   | 1,394.3                                | 390.8                   | 1,427.4   | 1,831.6  | 1,533.4   | 761.0                      |
| 2004<br>2005<br>2006     | 6,978.0<br>7,212.5<br>7,535.2 | 153.7<br>142.0<br>138.2   | 1,430.1<br>1,457.6<br>1,520.7          | 412.5<br>438.6<br>481.1 | 1,478.8<br>1,518.2<br>1,571.4   | 1,908.8<br>1,999.5<br>2,105.2                                    | 1,594.1<br>1,656.6<br>1,718.4   | 795.9<br>838.6<br>903.2    |
| 2006 Q3<br>Q4<br>2007 Q1 | 1,897.4<br>1,916.4<br>1,942.6 | 34.7<br>35.3<br>35.7  | 382.7<br>387.3<br>394.9                | 122.2<br>124.8<br>128.7 | 396.2<br>400.1<br>403.1   | 529.9<br>535.5<br>541.9  | 431.6<br>433.3<br>438.3   | 224.6<br>232.3<br>238.2    |
| Q2<br>Q3                 | 1,963.6<br>1,991.2            | 36.1<br>38.0  | 399.6<br>405.3                         | 129.1<br>131.2          | 407.2<br>411.6  | 550.0<br>558.8   | 441.6<br>446.2  | 238.6<br>236.9             |
|                          |                               |   |  | centage of value add    |   |  |   |                            |
| 2006                     | 100.0                         | 1.8   | 20.2                                   | 6.4                     | 20.9  | 27.9   | 22.8  |                            |
|                          |                               | Chain-  | -                                      |                         | ear, seasonally adjuste   | d'')   |   |                            |
| 2006.02                  | 0.6                           | 0.4   | •                                      | n-quarter percentage    |   | 0.5  | 0.2   |                            |
| 2006 Q3<br>O4            | 0.6<br>0.7                    | -0.4<br>0.8   | 0.8<br>0.9                             | 0.9<br>1.3              | 0.8<br>0.7  | 0.5<br>0.8   | 0.3<br>0.2  | 0.4<br>1.7                 |
| 2007 Q1                  | 0.9                           | 1.6   | 1.3                                    | 2.1                     | 0.6   | 0.8  | 0.5   | 0.0                        |
| Q2<br>Q3                 | 0.4<br>0.8                    | -0.9<br>-0.5  | 0.5<br>1.4                             | -1.3<br>0.2             | 0.7<br>0.9  | 0.7<br>0.8   | 0.3<br>0.3  | -0.6<br>0.7                |
| Q5                       | 0.8                           | -0.5  |  | ual percentage chan     |   | 0.8  | 0.3   | 0.7                        |
| 2003                     | 0.7                           | -6.1  | 0.3                                    | 0.1                     | 0.7   | 1.6  | 0.9   | 1.6                        |
| 2003                     | 2.1                           | 10.5  | 2.4                                    | 0.1                     | 2.5   | 1.6  | 1.4   | 1.6                        |
| 2005                     | 1.5                           | -6.2  | 0.7                                    | 1.4                     | 1.6   | 2.7  | 1.4   | 1.6                        |
| 2006                     | 2.7                           | -1.6  | 3.8                                    | 4.4                     | 2.8   | 3.0  | 1.2   | 3.4                        |
| 2006 Q3<br>O4            | 2.9<br>3.2                    | -2.5<br>0.6   | 4.1<br>4.4                             | 4.8<br>5.4              | 3.1<br>3.7  | 3.1<br>3.4   | 1.3<br>1.2  | 2.5<br>3.5                 |
| 2007 Q1                  | 3.2                           | 2.1   | 4.0                                    | 7.5                     | 3.4   | 3.3  | 1.3   | 2.7                        |
| Q2<br>Q3                 | 2.6                           | 1.0   | 3.5                                    | 3.0                     | 2.9   | 2.9  | 1.3   | 1.5                        |
| Q3                       | 2.8                           | 1.0   | 4.1                                    | 2.3                     | 3.0   | 3.2  | 1.3   | 1.8                        |
| 2006 02                  | 0.6                           |   |  |                         | of value added in perc  |  | 0.1   |                            |
| 2006 Q3<br>Q4            | 0.6<br>0.7                    | 0.0<br>0.0  | 0.2<br>0.2                             | 0.1<br>0.1              | 0.2<br>0.1  | 0.1<br>0.2   | 0.1<br>0.0  | -                          |
| 2007 Q1                  | 0.9                           | 0.0   | 0.3                                    | 0.1                     | 0.1   | 0.2  | 0.1   | -                          |
| Q2                       | 0.4<br>0.8                    | 0.0   | 0.1                                    | -0.1                    | 0.2<br>0.2  | 0.2<br>0.2   | 0.1   | -                          |
| Q3                       | 0.8                           | 0.0   | 0.3                                    | 0.0                     | ue added in percentage  |  | 0.1   |                            |
| 2002                     | 0.7                           |   | •                                      | 0 0                     |   | •  | 0.2   |                            |
| 2003<br>2004             | 0.7<br>2.1                    | -0.1<br>0.2   | 0.1<br>0.5                             | 0.0<br>0.0              | 0.1<br>0.5  | 0.4<br>0.4   | 0.2<br>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 Q3<br>O4            | 2.9<br>3.2                    | -0.1<br>0.0   | 0.8<br>0.9                             | 0.3<br>0.3              | 0.7<br>0.8  | 0.8<br>0.9   | 0.3<br>0.3  | -                          |
| 2007 Q1                  | 3.2                           | 0.0   | 0.9                                    | 0.5                     | 0.8   | 0.9  | 0.3   |                            |
| Q2                       | 2.6                           | 0.0   | 0.7                                    | 0.2                     | 0.6   | 0.8  | 0.3   | -                          |
| Q3                       | 2.8                           | 0.0   | 0.8                                    | 0.1                     | 0.6   | 0.9  | 0.3   | -                          |

Sources: Eurostat and ECB calculations.

1) Annual data are not adjusted for the variations in the number of working days.

#### 3. Industrial production

|  | Total                                  |  |  |  | Indu                                   | stry excluding o                       | construction                           | 1                               |  |  |  | Construction                           |
|--|--|--|--|--|--|--|--|---------------------------------|--|--|--|--|
|  |  | Total<br>(s.a. index                               | Т                                      | otal                                   |  | Industry ex                            | cluding con                            | struction ar                    | nd energy                              |  | Energy                                   |  |
|  |  | 2000 = 100)  |  | Manu-<br>facturing                     | Total                                  | Intermediate<br>goods                  | Capital<br>goods                       | (                               | Consumer go                            | ods                                    |  |  |
|  |  |  |  | raeturing .                            |  | goods                                  | goods                                  | Total                           | Durable                                | Non-durable                            |  |  |
| % of total 1)                                    | 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<br>2005<br>2006                             | 1.8<br>1.3<br>4.0                      | 102.5<br>103.9<br>108.0                            | 2.2<br>1.3<br>4.0                      | 2.2<br>1.3<br>4.3                      | 2.1<br>1.1<br>4.4                      | 2.4<br>0.9<br>4.9                      | 3.4<br>2.8<br>5.9                      | 0.6<br>0.4<br>2.5               | 0.1<br>-1.0<br>4.2                     | 0.7<br>0.7<br>2.2                      | 2.2<br>1.4<br>0.9                        | -0.5<br>0.4<br>4.1                     |
| 2006 Q4<br>2007 Q1<br>Q2<br>Q3                   | 4.5<br>4.8<br>2.9<br>3.8               | 109.4<br>110.5<br>110.9<br>112.6                   | 4.0<br>4.0<br>2.7<br>3.9               | 4.9<br>5.9<br>3.2<br>4.1               | 4.9<br>6.0<br>3.2<br>4.1               | 5.4<br>6.6<br>3.1<br>3.2               | 6.7<br>7.1<br>4.6<br>6.3               | 3.3<br>4.0<br>2.1<br>3.2        | 5.6<br>4.2<br>1.3<br>2.1               | 2.9<br>4.0<br>2.3<br>3.3               | -3.2<br>-7.6<br>-0.6<br>1.4              | 7.0<br>10.9<br>2.7<br>2.2              |
| 2007 May<br>June<br>July<br>Aug.<br>Sep.<br>Oct. | 2.9<br>2.5<br>4.0<br>4.4<br>3.1<br>3.6 | 111.3<br>111.3<br>112.1<br>113.3<br>112.4<br>112.8 | 2.7<br>2.5<br>4.0<br>4.4<br>3.3<br>3.7 | 2.9<br>2.8<br>4.7<br>4.7<br>3.0<br>3.5 | 2.9<br>2.7<br>4.8<br>4.8<br>3.0<br>3.6 | 2.6<br>2.7<br>4.0<br>3.2<br>2.5<br>2.7 | 3.9<br>4.7<br>7.1<br>7.1<br>5.1<br>6.5 | 2.1<br>1.6<br>2.9<br>5.1<br>1.9 | 0.4<br>2.0<br>1.7<br>4.6<br>1.1<br>0.6 | 2.4<br>1.5<br>3.1<br>5.1<br>2.0<br>1.6 | 2.0<br>-0.3<br>-1.1<br>1.6<br>4.0<br>4.5 | 2.9<br>1.7<br>2.9<br>2.9<br>0.9<br>2.2 |
|  |  |  |  |  |  | ercentage chang                        |  |                                 |  |  |  |  |
| 2007 May<br>June<br>July                         | 0.9<br>-0.1<br>0.8<br>0.9              | -<br>-<br>-  | 1.0<br>0.0<br>0.7<br>1.1               | 0.8<br>0.0<br>0.8<br>1.2               | 1.0<br>0.1<br>0.7<br>1.2               | 0.8<br>0.2<br>0.4<br>1.2               | 1.1<br>0.3<br>1.5<br>1.3               | 0.7<br>-0.3<br>0.3<br>1.8       | 1.6<br>0.1<br>-0.2<br>3.8              | 0.6<br>-0.4<br>0.4<br>1.4              | 2.8<br>0.9<br>-0.1<br>0.7                | 0.2<br>0.0<br>0.5<br>0.1               |
| Aug.<br>Sep.<br>Oct.                             | -0.8<br>0.5                            | -  | -0.8<br>0.4                            | -1.2<br>-0.5                           | -1.3<br>0.5                            | -1.4<br>0.5                            | -1.2<br>0.9                            | -1.6<br>-0.1                    | -3.6<br>0.0                            | -1.2<br>-0.1                           | 0.7<br>0.9<br>-1.4                       | -0.1<br>-0.5                           |

#### 4. Industrial new orders and turnover, retail sales and new passenger car registrations

|   |   |                                    | · · · · · ·                               |                                   | •                                      | 0  | 0                                       |  |   |  |                                   |  |  |
|---|---|------------------------------------|---|-----------------------------------|--|--|---|--|---|--|-----------------------------------|--|--|
|   | Industrial ne                             | w orders                           | Industrial t                              | urnover                           |  |  | I                                       | Retail sales                               |   |  |                                   | New passen                             |  |
|   | Manufactu<br>(current p                   |                                    | Manufac<br>(current p                     |                                   | Current prices                         |  |   | Constan                                    | t prices                                |  |                                   |  |  |
|   | Total<br>(s.a. index<br>2000 = 100)       | Total                              | Total<br>(s.a. index<br>2000 = 100)       | Total                             | Total                                  | Total<br>(s.a. index<br>2000 = 100)                | Total                                   | Food,<br>beverages,<br>tobacco             |   | Non-food  Textiles, clothing, footwear | Household<br>equipment            | Total (s.a., thousands) <sup>3)</sup>  | Total                                    |
| % of total 1)                                     | 100.0                                     | 100.0                              | 100.0                                     | 100.0                             | 100.0                                  | 100.0  | 100.0                                   | 43.7                                       | 56.3                                    | 10.6                                   | 14.8                              |  |  |
|   | 1   | 2                                  | 3   | 4                                 | 5                                      | 6  | 7                                       | 8  | 9                                       | 10                                     | 11                                | 12                                     | 13                                       |
| 2004<br>2005<br>2006                              | 104.0<br>109.2<br>119.2                   | 7.3<br>3.9<br>9.2                  | 106.3<br>110.8<br>118.9                   | 5.1<br>3.6<br>7.3                 | 2.3<br>2.2<br>3.5                      | 105.4<br>106.8<br>109.0                            | 1.6<br>1.3<br>2.1                       | 1.2<br>0.6<br>0.7                          | 1.7<br>1.7<br>2.7                       | 1.9<br>2.3<br>2.9                      | 3.3<br>1.2<br>4.9                 | 926<br>941<br>972                      | 1.0<br>1.6<br>3.2                        |
| 2006 Q4<br>2007 Q1<br>Q2<br>Q3                    | 122.8<br>124.9<br>128.9<br>129.0          | 7.3<br>7.9<br>10.4<br>6.6          | 121.9<br>124.5<br>126.0<br>127.5          | 7.6<br>7.6<br>6.4<br>6.3          | 3.4<br>2.7<br>2.1<br>2.4               | 110.0<br>109.7<br>109.8<br>110.4                   | 2.3<br>1.6<br>0.9<br>1.2                | -0.2<br>0.3<br>-0.2<br>-0.7                | 3.6<br>2.5<br>1.8<br>2.4                | 3.1<br>4.3<br>3.0<br>5.3               | 7.0<br>4.2<br>2.3<br>2.2          | 993<br>950<br>952<br>960               | 6.3<br>-1.8<br>-1.9<br>0.7               |
| 2007 June<br>July<br>Aug.<br>Sep.<br>Oct.<br>Nov. | 133.1<br>128.8<br>129.9<br>128.2<br>131.7 | 13.5<br>12.0<br>5.4<br>2.6<br>11.0 | 127.8<br>127.5<br>128.4<br>126.6<br>127.4 | 5.2<br>10.3<br>6.4<br>2.6<br>9.3  | 2.4<br>2.5<br>2.1<br>2.7<br>2.5<br>1.5 | 110.0<br>110.4<br>110.4<br>110.5<br>109.7<br>109.1 | 1.2<br>1.4<br>0.8<br>1.4<br>0.4<br>-1.4 | -0.6<br>-1.8<br>0.2<br>-0.4<br>0.1<br>-1.1 | 2.8<br>3.6<br>1.3<br>2.3<br>0.7<br>-1.7 | 4.1<br>5.6<br>0.9<br>9.3<br>1.7        | 3.5<br>4.0<br>1.9<br>0.5<br>-0.3  | 971<br>950<br>959<br>971<br>960<br>953 | 0.7<br>0.9<br>0.7<br>0.4<br>-0.3<br>-3.8 |
|   |   |                                    |   |                                   | month-on-n                             | onth percentag                                     | ge changes (                            | (s.a.)                                     |   |  |                                   |  |  |
| 2007 June<br>July<br>Aug.<br>Sep.<br>Oct.         | -<br>-<br>-<br>-                          | 4.3<br>-3.2<br>0.8<br>-1.3<br>2.7  | -<br>-<br>-<br>-                          | 1.1<br>-0.2<br>0.6<br>-1.4<br>0.7 | 0.8<br>0.5<br>0.1<br>0.4<br>-0.3       | -  | 0.7<br>0.4<br>-0.1<br>0.1<br>-0.7       | -0.1<br>0.1<br>0.1<br>0.2<br>-0.5          | 1.2<br>0.4<br>-0.2<br>0.0<br>-0.8       | 3.0<br>1.0<br>-0.4<br>2.1<br>-2.9      | 1.3<br>0.4<br>0.5<br>-1.3<br>-0.4 | -                                      | 0.4<br>-2.1<br>1.0<br>1.2<br>-1.1        |
| Nov.  | -   |                                    | -   |                                   | 0.0                                    | -  | -0.5                                    | -0.4                                       | -0.6                                    |  |                                   | -                                      | -0.7                                     |

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).

Includes manufacturing industries working mainly on the basis of orders, representing 62.6% of total manufacturing in 2000.
 Annual and quarterly figures are averages of monthly figures in the period concerned.

#### 5. Business and Consumer Surveys

|           | Economic sentiment         |                     | Man             | ıfacturing ind                    | lustry                  |                            |          | Consum                 | er confidence          | indicator 3) |                      |
|-----------|----------------------------|---------------------|-----------------|-----------------------------------|-------------------------|----------------------------|----------|------------------------|------------------------|--------------|----------------------|
|           | indicator 2)<br>(long-term | In                  | dustrial confid | ence indicator                    |                         | Capacity<br>utilisation 4) | Total 5) | Financial situation    | Economic situation     |              | Savings<br>over next |
|           | average<br>= 100)          | Total <sup>5)</sup> | Order<br>books  | Stocks of<br>finished<br>products | Production expectations | (percentages)              |          | over next<br>12 months | over next<br>12 months |              | 12 months            |
|           | 1                          | 2                   | 3               | 4                                 | 5                       | 6                          | 7        | 8                      | 9                      | 10           | 11                   |
| 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                   |
| 2007      | 109.0                      | 4                   | 5               | 5                                 | 13                      |                            | -5       | -2                     | -4                     | 4            | -8                   |
| 2006 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                      | 84.6                       | -2       | -1                     | 0                      | 2            | -7                   |
| Q3        | 109.3                      | 4                   | 5               | 5                                 | 13                      | 84.3                       | -4       | -2                     | -3                     | 3            | -7                   |
| Q4        | 105.2                      | 2                   | 1               | 7                                 | 11                      |                            | -8       | -4                     | -10                    | 6            | -10                  |
| 2007 July | 111.0                      | 5                   | 6               | 5                                 | 14                      | 84.3                       | -2       | -1                     | 1                      | 0            | -7                   |
| Aug.      | 110.0                      | 5                   | 7               | 5                                 | 13                      | -                          | -4       | -2                     | -2                     | 3            | -7                   |
| Sep.      | 106.9                      | 3                   | 3               | 7                                 | 11                      | -                          | -6       | -3                     | -7                     | 6            | -7                   |
| Oct.      | 106.0                      | 2                   | 1               | 7                                 | 11                      | 84.2                       | -6       | -3                     | -6                     | 5            | -10                  |
| Nov.      | 104.8                      | 3                   | 2               | 7                                 | 12                      | -                          | -8       | -4                     | -11                    | 7            | -11                  |
| Dec.      | 104.7                      | 2                   | 1               | 6                                 | 11                      | -                          | -9       | -5                     | -12                    | 7            | -10                  |

|                      | Construction        | on confidence          | indicator               | Reta          | il trade confid                  | dence indicator  |                                   | Ser            | vices confide       | ence indicator          |                                  |
|----------------------|---------------------|------------------------|-------------------------|---------------|----------------------------------|------------------|-----------------------------------|----------------|---------------------|-------------------------|----------------------------------|
|                      | Total <sup>5)</sup> | Order<br>books         | Employment expectations | Total 5)      | Present<br>business<br>situation | Volume of stocks | Expected<br>business<br>situation | Total 5)       | Business<br>climate | Demand in recent months | Demand in<br>the months<br>ahead |
|                      | 12                  | 13                     | 14                      | 15            | 16                               | 17               | 18                                | 19             | 20                  | 21                      | 22                               |
| 2004<br>2005         | -12<br>-7           | -20<br>-12             | -4<br>-2                | -8<br>-7      | -12<br>-12                       | 14<br>13         | 1<br>4                            | 11<br>11       | 6<br>5              | 8<br>10                 | 18<br>18                         |
| 2006<br>2007         | 0<br>-1             | -5<br>-8               | 5<br>7                  | 0             | 3 4                              | 14<br>15         | 13<br>12                          | 18<br>19       | 13<br>16            | 18<br>19                | 23<br>23                         |
| 2006 Q4<br>2007 Q1   | 3 0                 | -3<br>-8               | 8                       | 2<br>-1       | 8<br>1                           | 13<br>16         | 11<br>12                          | 20<br>21       | 13<br>16            | 21<br>21                | 26<br>25                         |
| Q2<br>Q3<br>Q4       | -1<br>-3            | -6<br>-8<br>-11        | 6<br>7<br>4             | 1<br>1<br>0   | 4<br>7<br>4                      | 13<br>14<br>16   | 14<br>10<br>13                    | 22<br>20<br>15 | 19<br>16<br>11      | 22<br>20<br>14          | 25<br>24<br>20                   |
| 2007 July<br>Aug.    | 0<br>-1             | -6<br>-9               | 6                       | 3 3           | 9<br>10                          | 14<br>14         | 13<br>13                          | 21<br>21       | 17<br>17            | 21<br>21                | 26<br>24                         |
| Sep.<br>Oct.<br>Nov. | -2<br>-4<br>-5      | -8<br>-9<br>-11<br>-12 | 8<br>6<br>5             | -3<br>-2<br>2 | 3 6                              | 15<br>17<br>16   | 4<br>8<br>15<br>15                | 18<br>18<br>13 | 13<br>15<br>10<br>9 | 18<br>17<br>12          | 22<br>22<br>18<br>19             |
| Dec.                 | -5                  | -12                    | 1                       | 1             | 4                                | 16               | 15                                | 14             | 9                   | 13                      | 19                               |

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

- 1) Difference between the percentages of respondents giving positive and negative replies.
- 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.
- Owing to changes in the questionnaire used for the French survey, curo area results from January 2004 onwards are not fully comparable with previous results.

  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.
- 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 1)

#### 1. Employment

|                                      | Whole ed  | conomy                          | By employ                       | ment status                      |   |  | By ec                           | onomic activity   |  |  |
|--------------------------------------|---|---------------------------------|---------------------------------|----------------------------------|---|--|---------------------------------|---|--|--|
|                                      | Millions (s.a.)                                     |                                 | Employees                       | Self-<br>employed                | Agriculture,<br>hunting,<br>forestry<br>and fishing | Mining,<br>manufacturing<br>and energy |                                 | Trade, repairs,<br>hotels and<br>restaurants,<br>transport and<br>communication | Financial, real<br>estate, renting<br>and business<br>services | Public<br>administration,<br>education, health<br>and other services |
| % of total 2)                        | 100.0   | 100.0                           | 84.8                            | 15.2                             | 4.2   | 17.5                                   | 7.6                             | 25.2  | 15.5   | 30.0   |
|                                      | 1   | 2                               | 3                               | 4                                | 5   | 6                                      | 7                               | 8   | 9  | 10   |
| 2003<br>2004<br>2005<br>2006         | 136.298<br>137.398<br>138.596<br>140.681            | 0.4<br>0.8<br>0.9<br>1.5        | 0.4<br>0.7<br>1.0<br>1.6        | 0.8<br>1.2<br>0.1<br>0.8         | -2.3<br>-1.4<br>-1.0<br>-1.2                        | -1.5<br>-1.3<br>-1.3<br>-0.3           | 0.3<br>1.3<br>2.5<br>2.7        | 0.8<br>1.3<br>0.7<br>1.5  | 0.9<br>2.2<br>2.4<br>3.6                                       | 1.6<br>1.3<br>1.4<br>1.7   |
| 2006 Q3<br>Q4<br>2007 Q1<br>Q2<br>Q3 | 140.890<br>141.440<br>142.334<br>143.161<br>143.630 | 1.5<br>1.5<br>1.8<br>1.8<br>1.9 | 1.7<br>1.7<br>2.1<br>2.1<br>2.0 | 0.6<br>0.8<br>0.1<br>0.0<br>1.3  | -1.7<br>-2.6<br>-0.9<br>-2.1<br>-2.3                | -0.1<br>-0.4<br>0.3<br>0.4<br>0.2      | 3.0<br>4.2<br>5.9<br>5.6<br>4.7 | 1.6<br>1.3<br>1.4<br>1.5<br>2.4   | 3.9<br>3.8<br>4.2<br>4.4<br>4.0                                | 1.4<br>1.6<br>1.1<br>1.1<br>1.3                                      |
|                                      |   |                                 |                                 | quarter-                         | on-quarter per                                      | centage changes (                      | (s.a.)                          |   |  |  |
| 2006 Q3<br>Q4<br>2007 Q1<br>Q2<br>Q3 | 0.288<br>0.550<br>0.894<br>0.827<br>0.469           | 0.2<br>0.4<br>0.6<br>0.6<br>0.3 | 0.3<br>0.4<br>0.7<br>0.6<br>0.3 | -0.5<br>0.1<br>0.4<br>0.5<br>0.3 | -1.3<br>-0.8<br>0.8<br>-1.0<br>-1.3                 | 0.0<br>0.0<br>0.1<br>0.1<br>0.1        | 0.9<br>1.5<br>1.8<br>1.2<br>0.1 | 0.0<br>0.2<br>0.7<br>0.9<br>0.7   | 1.0<br>1.0<br>1.4<br>1.0<br>0.7                                | 0.1<br>0.4<br>0.2<br>0.5<br>0.3                                      |

## **2. Unemployment** (seasonally adjusted)

|   | Tota   | al                                     |  | В                                      | y age <sup>3)</sup>                                |  |  | By                              | gender <sup>4)</sup>                               |  |
|---|--|--|--|--|--|--|--|---------------------------------|--|--|
|   | Millions   | % of labour force                      | Ac   | dult                                   | Y  | outh   | 1  | Male                            | F  | emale                                  |
|   |  |  | Millions   | % of labour force                      | Millions   | % of labour force                            | Millions   | % of labour force               | Millions   | % of labour force                      |
| % of total 2)                                     | 100.0  |  | 78.2   |  | 21.8   |  | 49.6   |                                 | 50.4   |  |
|   | 1  | 2                                      | 3  | 4                                      | 5  | 6  | 7  | 8                               | 9  | 10                                     |
| 2003<br>2004<br>2005<br>2006                      | 12.655<br>13.063<br>13.285<br>12.487                     | 8.6<br>8.8<br>8.9<br>8.2               | 9.861<br>10.132<br>10.342<br>9.761                 | 7.6<br>7.7<br>7.8<br>7.3               | 2.794<br>2.931<br>2.943<br>2.726                   | 16.3<br>17.0<br>17.2<br>16.1                 | 6.316<br>6.534<br>6.696<br>6.199                   | 7.7<br>7.9<br>8.0<br>7.4        | 6.339<br>6.529<br>6.590<br>6.288                   | 9.8<br>10.0<br>9.9<br>9.3              |
| 2006 Q3<br>Q4<br>2007 Q1<br>Q2<br>Q3              | 12.266<br>11.969<br>11.590<br>11.390<br>11.223           | 8.1<br>7.9<br>7.6<br>7.5<br>7.3        | 9.620<br>9.313<br>9.082<br>8.943<br>8.794          | 7.1<br>6.9<br>6.7<br>6.6<br>6.4        | 2.645<br>2.656<br>2.508<br>2.447<br>2.429          | 15.8<br>15.8<br>15.0<br>14.7<br>14.6         | 6.057<br>5.911<br>5.660<br>5.584<br>5.567          | 7.2<br>7.0<br>6.7<br>6.6<br>6.6 | 6.208<br>6.058<br>5.930<br>5.806<br>5.655          | 9.2<br>8.9<br>8.7<br>8.5<br>8.3        |
| 2007 June<br>July<br>Aug.<br>Sep.<br>Oct.<br>Nov. | 11.345<br>11.277<br>11.239<br>11.152<br>11.071<br>10.993 | 7.4<br>7.4<br>7.3<br>7.3<br>7.2<br>7.2 | 8.901<br>8.835<br>8.805<br>8.741<br>8.686<br>8.627 | 6.5<br>6.5<br>6.5<br>6.4<br>6.4<br>6.3 | 2.444<br>2.442<br>2.434<br>2.411<br>2.386<br>2.366 | 14.7<br>14.6<br>14.6<br>14.5<br>14.3<br>14.2 | 5.575<br>5.582<br>5.575<br>5.546<br>5.527<br>5.499 | 6.6<br>6.6<br>6.5<br>6.5<br>6.5 | 5.770<br>5.695<br>5.664<br>5.607<br>5.544<br>5.494 | 8.4<br>8.3<br>8.3<br>8.2<br>8.1<br>8.0 |

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

  Data for employment refer to persons and follow ILO recommendations.

  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.

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



### **GOVERNMENT FINANCE**

### 6.1 Revenue, expenditure and deficit/surplus 1)

#### 1. Euro area - revenue

|      | Total |      |        |            |              | Curre    | ent revenue    |               |           |           |       | Capital | revenue | Memo:<br>fiscal |
|------|-------|------|--------|------------|--------------|----------|----------------|---------------|-----------|-----------|-------|---------|---------|-----------------|
|      |       |      | Direct |            |              | Indirect |                | Social        |           |           | Sales |         | Capital | burden 2)       |
|      |       |      | taxes  | Households | Corporations | taxes    | Received by EU | contributions | Employers | Employees |       |         | taxes   |                 |
|      |       | 2    | 2      |            | ۔            | ,        | institutions   | 0             |           | 10        |       | 10      | 12      | 1.4             |
|      | 1     | 2    |        | 4          | 3            | 6        | 1              | 8             | 9         | 10        | 11    | 12      | 13      | 14              |
| 1998 | 46.6  | 46.3 | 12.2   | 9.2        | 2.7          | 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          | 14.2     | 0.6            | 16.1          | 8.3       | 4.9       | 2.3   | 0.3     | 0.3     | 43.0            |
| 2000 | 46.6  | 46.4 | 12.7   | 9.5        | 2.9          | 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   | 9.3        | 2.7          | 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 | 45.0  | 44.4 | 11.4   | 8.9        | 2.3          | 13.5     | 0.4            | 15.8          | 8.2       | 4.7       | 2.1   | 0.6     | 0.5     | 41.2            |
| 2004 | 44.6  | 44.1 | 11.3   | 8.6        | 2.5          | 13.5     | 0.3            | 15.6          | 8.1       | 4.5       | 2.1   | 0.5     | 0.4     | 40.8            |
| 2005 | 45.0  | 44.5 | 11.6   | 8.6        | 2.6          | 13.7     | 0.3            | 15.5          | 8.1       | 4.5       | 2.2   | 0.5     | 0.3     | 41.1            |
| 2006 | 45.6  | 45.3 | 12.2   | 8.8        | 3.0          | 13.9     | 0.3            | 15.5          | 8.1       | 4.5       | 2.1   | 0.3     | 0.3     | 41.8            |

#### 2. Euro area - expenditure

|      | Total |       |              |              | Current e | expenditure |          |           |              |     | Capital ex | penditure |              | Memo:<br>primary |
|------|-------|-------|--------------|--------------|-----------|-------------|----------|-----------|--------------|-----|------------|-----------|--------------|------------------|
|      |       | Total | Compensation | Intermediate | Interest  | Current     |          |           |              |     | Investment | Capital   |              | expenditure 3)   |
|      |       |       | of           | consumption  |           | transfers   | Social   | Subsidies |              |     |            | transfers | Paid by EU   |                  |
|      |       |       | employees    |              |           |             | payments |           | Paid by EU   |     |            |           | institutions |                  |
|      |       |       |              |              | _         |             | _        |           | institutions |     |            |           |              |                  |
|      | 1     | 2     | 3            | 4            | 5         | 6           | - 7      | 8         | 9            | 10  | 11         | 12        | 13           | 14               |
| 1998 | 48.9  | 45.1  | 10.6         | 4.7          | 4.6       | 25.2        | 22.2     | 2.1       | 0.5          | 3.8 | 2.4        | 1.4       | 0.1          | 44.3             |
| 1999 | 48.4  | 44.5  | 10.6         | 4.8          | 4.1       | 25.1        | 22.1     | 2.1       | 0.5          | 3.9 | 2.5        | 1.4       | 0.1          | 44.4             |
| 2000 | 47.7  | 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 | 47.9  | 44.0  | 10.4         | 4.9          | 3.5       | 25.2        | 22.3     | 1.9       | 0.5          | 3.8 | 2.4        | 1.4       | 0.0          | 44.4             |
| 2003 | 48.1  | 44.2  | 10.5         | 4.9          | 3.3       | 25.4        | 22.6     | 1.9       | 0.5          | 4.0 | 2.5        | 1.4       | 0.1          | 44.8             |
| 2004 | 47.4  | 43.6  | 10.4         | 5.0          | 3.1       | 25.1        | 22.4     | 1.7       | 0.5          | 3.8 | 2.4        | 1.4       | 0.0          | 44.3             |
| 2005 | 47.5  | 43.6  | 10.4         | 5.1          | 3.0       | 25.2        | 22.4     | 1.7       | 0.5          | 3.9 | 2.5        | 1.4       | 0.0          | 44.5             |
| 2006 | 47.2  | 43.1  | 10.2         | 5.0          | 2.9       | 25.0        | 22.2     | 1.7       | 0.5          | 4.1 | 2.5        | 1.6       | 0.0          | 44.3             |

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

|      |       | Deficit ( | -)/surplu | ıs (+) |          | Primary<br>deficit (-)/ |       |              | (            | Government o | consumption 4) |         |             |             |
|------|-------|-----------|-----------|--------|----------|-------------------------|-------|--------------|--------------|--------------|----------------|---------|-------------|-------------|
|      | Total | Central   | State     | Local  | Social   | surplus (+)             | Total |              |              |              |                |         | Collective  | Individual  |
|      |       | gov.      | gov.      | gov.   | security |                         |       | Compensation | Intermediate |              | Consumption    |         | consumption | consumption |
|      |       |           |           |        | funds    |                         |       | of employees | consumption  | in kind      | of fixed       | (minus) |             |             |
|      |       |           |           |        |          |                         |       |              |              | via market   | capital        |         |             |             |
|      | _     |           |           |        | _        |                         | -     |              |              | producers    |                |         |             |             |
|      | 1     | 2         | 3         | 4      | 5        | 6                       | 7     | 8            | 9            | 10           | 11             | 12      | 13          | 14          |
| 1998 | -2.3  | -2.3      | -0.2      | 0.1    | 0.1      | 2.3                     | 19.8  | 10.6         | 4.7          | 4.8          | 1.8            | 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          | 1.8            | 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          | 1.8            | 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          | 1.8            | 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          | 1.8            | 2.1     | 8.2         | 12.0        |
| 2003 | -3.1  | -2.4      | -0.5      | -0.2   | 0.0      | 0.2                     | 20.5  | 10.5         | 4.9          | 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          | 5.1          | 1.9            | 2.1     | 8.3         | 12.1        |
| 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  | 10.2         | 5.0          | 5.2          | 1.9            | 2.1     | 8.0         | 12.3        |

#### 4. Euro area countries - deficit (-)/surplus (+) 5)

|      | <b>BE</b> 1 | <b>DE</b> 2 | <b>IE</b> 3 | GR<br>4 | <b>ES</b> 5 | <b>FR</b> 6 | <b>IT</b> 7 | CY<br>8 | LU<br>9 | MT<br>10 | <b>NL</b><br>11 | <b>AT</b> 12 | <b>PT</b> 13 | <b>SI</b> 14 | <b>FI</b> 15 |
|------|-------------|-------------|-------------|---------|-------------|-------------|-------------|---------|---------|----------|-----------------|--------------|--------------|--------------|--------------|
| 2003 | 0.0         | -4.0        | 0.4         | -5.6    | -0.2        | -4.1        | -3.5        | -6.5    | 0.5     | -9.8     | -3.1            | -1.6         | -2.9         | -2.7         | 2.5          |
| 2004 | 0.0         | -3.8        | 1.3         | -7.3    | -0.3        | -3.6        | -3.5        | -4.1    | -1.2    | -4.9     | -1.7            | -1.2         | -3.4         | -2.3         | 2.3          |
| 2005 | -2.3        | -3.4        | 1.2         | -5.1    | 1.0         | -2.9        | -4.2        | -2.4    | -0.1    | -3.1     | -0.3            | -1.6         | -6.1         | -1.5         | 2.7          |
| 2006 | 0.4         | -1.6        | 2.9         | -2.5    | 1.8         | -2.5        | -4.4        | -1.2    | 0.7     | -2.5     | 0.6             | -1.4         | -3.9         | -1.2         | 3.8          |

- Includes proceeds from the sale of UMTS licences and settlements under swaps and forward rate agreements.

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.

The fiscal burden comprises taxes and social contributions.

Comprises total expenditure minus interest expenditure.

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

#### 6.2 Debt 1)

#### 1. Euro area - by financial instrument and sector of the holder

|      | Total |                 | Financial in | struments             |                      |       |            | Holders                      |                  |                    |
|------|-------|-----------------|--------------|-----------------------|----------------------|-------|------------|------------------------------|------------------|--------------------|
|      |       | Currency<br>and | Loans        | Short-term securities | Long-term securities |       | Domestic c | reditors 2)                  |                  | Other creditors 3) |
|      |       | deposits        |              |                       |                      | Total | MFIs       | Other financial corporations | Other<br>sectors |                    |
|      | 1     | 2               | 3            | 4                     | 5                    | 6     | 7          | 8                            | 9                | 10                 |
| 1997 | 74.1  | 2.8             | 16.2         | 6.4                   | 48.8                 | 55.6  | 28.4       | 13.6                         | 13.7             | 18.4               |
| 1998 | 72.8  | 2.7             | 15.2         | 5.3                   | 49.6                 | 52.4  | 26.5       | 14.5                         | 11.4             | 20.4               |
| 1999 | 72.0  | 2.9             | 14.4         | 4.2                   | 50.5                 | 48.8  | 25.3       | 13.8                         | 9.6              | 23.2               |
| 2000 | 69.4  | 2.7             | 13.2         | 3.7                   | 49.8                 | 44.3  | 22.0       | 12.5                         | 9.8              | 25.1               |
| 2001 | 68.3  | 2.8             | 12.4         | 4.0                   | 49.2                 | 42.1  | 20.6       | 11.2                         | 10.3             | 26.3               |
| 2002 | 68.1  | 2.7             | 11.8         | 4.5                   | 49.1                 | 40.2  | 19.3       | 10.7                         | 10.1             | 28.0               |
| 2003 | 69.1  | 2.0             | 12.3         | 5.0                   | 49.7                 | 39.4  | 19.4       | 11.2                         | 8.8              | 29.8               |
| 2004 | 69.5  | 2.2             | 11.9         | 5.0                   | 50.5                 | 37.5  | 18.4       | 10.8                         | 8.4              | 32.0               |
| 2005 | 70.3  | 2.4             | 11.8         | 4.7                   | 51.4                 | 35.5  | 17.3       | 10.9                         | 7.2              | 34.8               |
| 2006 | 68.6  | 2.5             | 11.4         | 4.1                   | 50.7                 | 32.9  | 17.6       | 8.4                          | 6.9              | 35.7               |

#### 2. Euro area - by issuer, maturity and currency denomination

|      | Total |              | Issued        | by 4)         | 1                           | 0               | riginal matu   | rity                   | R               | esidual maturi                      | ity             | Currenci                            | ies              |
|------|-------|--------------|---------------|---------------|-----------------------------|-----------------|----------------|------------------------|-----------------|-------------------------------------|-----------------|-------------------------------------|------------------|
|      |       | Central gov. | State<br>gov. | Local<br>gov. | Social<br>security<br>funds | Up to<br>1 year | Over<br>1 year | Variable interest rate | Up to<br>1 year | Over 1 year<br>and up to 5<br>years | Over<br>5 years | Euro or participating currencies 5) | Other currencies |
|      | 1     | 2            | 3             | 4             | 5                           | 6               | 7              | 8                      | 9               | 10                                  | 11              | 12                                  | 13               |
| 1997 | 74.1  | 62.1         | 6.0           | 5.4           | 0.6                         | 9.4             | 64.7           | 8.4                    | 18.1            | 25.3                                | 30.7            | 72.1                                | 2.0              |
| 1998 | 72.8  | 61.1         | 6.1           | 5.3           | 0.4                         | 8.1             | 64.6           | 7.5                    | 15.4            | 26.4                                | 30.9            | 70.9                                | 1.8              |
| 1999 | 72.0  | 60.4         | 6.0           | 5.1           | 0.4                         | 7.3             | 64.7           | 6.6                    | 13.6            | 27.9                                | 30.5            | 69.8                                | 2.1              |
| 2000 | 69.4  | 58.2         | 5.9           | 4.9           | 0.4                         | 6.5             | 62.9           | 5.8                    | 13.4            | 27.9                                | 28.1            | 67.5                                | 1.9              |
| 2001 | 68.3  | 57.1         | 6.1           | 4.8           | 0.4                         | 7.0             | 61.4           | 4.9                    | 13.7            | 26.6                                | 28.0            | 66.7                                | 1.7              |
| 2002 | 68.1  | 56.7         | 6.3           | 4.8           | 0.4                         | 7.6             | 60.5           | 4.9                    | 15.3            | 25.0                                | 27.8            | 66.7                                | 1.5              |
| 2003 | 69.1  | 56.9         | 6.5           | 5.1           | 0.6                         | 7.8             | 61.4           | 4.8                    | 14.7            | 25.8                                | 28.6            | 68.0                                | 1.1              |
| 2004 | 69.5  | 57.3         | 6.6           | 5.1           | 0.4                         | 7.8             | 61.7           | 4.6                    | 14.7            | 26.2                                | 28.7            | 68.5                                | 1.1              |
| 2005 | 70.3  | 57.8         | 6.7           | 5.3           | 0.5                         | 7.9             | 62.4           | 4.6                    | 14.9            | 25.7                                | 29.7            | 69.1                                | 1.2              |
| 2006 | 68.6  | 56.1         | 6.6           | 5.4           | 0.6                         | 7.5             | 61.2           | 4.5                    | 14.4            | 24.8                                | 29.5            | 67.7                                | 0.9              |

#### 3. Euro area countries

|              | BE           | DE           | IE           | GR           | ES           | FR           | IT             | CY           | LU         | MT           | NL           | AT           | PT           | SI           | FI           |
|--------------|--------------|--------------|--------------|--------------|--------------|--------------|----------------|--------------|------------|--------------|--------------|--------------|--------------|--------------|--------------|
|              | 1            | 2            | 3            | 4            | 5            | 6            | 7              | 8            | 9          | 10           | 11           | 12           | 13           | 14           | 15           |
| 2003         | 98.6         | 63.8         | 31.1         | 97.9         | 48.7         | 62.9         | 104.3          | 68.9         | 6.3        | 69.3         | 52.0         | 64.6         | 56.9         | 27.9         | 44.3         |
| 2004<br>2005 | 94.2<br>92.2 | 65.6<br>67.8 | 29.5<br>27.4 | 98.6<br>98.0 | 46.2<br>43.0 | 64.9<br>66.7 | 103.8<br>106.2 | 70.2<br>69.1 | 6.4<br>6.2 | 72.7<br>70.8 | 52.4<br>52.3 | 63.8<br>63.4 | 58.3<br>63.7 | 27.6<br>27.4 | 44.1<br>41.4 |
| 2005         | 88.2         | 67.5         | 25.1         | 95.3         | 39.7         | 64.2         | 106.2          | 65.2         | 6.6        | 64.7         | 47.9         | 61.7         | 64.8         | 27.1         | 39.2         |

- 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.
- Holders resident in the country whose government has issued the debt.

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

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

  Before 1999, 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 1)

#### 1. Euro area - by source, financial instrument and sector of the holder

|      | Total |                          | Source of cl            | hange  |                          | F                           | inancial | instrument            | s                    |                          | Hol  | lders                        |                    |
|------|-------|--------------------------|-------------------------|--|--------------------------|-----------------------------|----------|-----------------------|----------------------|--------------------------|------|------------------------------|--------------------|
|      |       | Borrowing requirement 2) | Valuation<br>effects 3) | Other<br>changes<br>in<br>volume <sup>4)</sup> | Aggregation<br>effect 5) | Currency<br>and<br>deposits | Loans    | Short-term securities | Long-term securities | Domestic<br>creditors 6) | MFIs | Other financial corporations | Other creditors 7) |
|      | 1     | 2                        | 3                       | 4  | 5                        | 6                           | 7        | 8                     | 9                    | 10                       | 11   | 12                           | 13                 |
| 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                  | -1.6                     | -0.2 | -0.2                         | 3.6                |
| 2000 | 1.0   | 1.1                      | 0.0                     | 0.0  | -0.1                     | 0.0                         | -0.5     | -0.3                  | 1.9                  | -2.1                     | -2.0 | -0.6                         | 3.1                |
| 2001 | 1.9   | 1.9                      | -0.1                    | 0.1  | 0.0                      | 0.2                         | -0.2     | 0.4                   | 1.4                  | -0.3                     | -0.5 | -0.8                         | 2.2                |
| 2002 | 2.1   | 2.7                      | -0.5                    | 0.0  | 0.0                      | 0.0                         | -0.2     | 0.7                   | 1.6                  | -0.5                     | -0.5 | -0.1                         | 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  | 0.8                          | 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                         | 0.2      | -0.1                  | 2.6                  | -0.7                     | -0.4 | 0.5                          | 3.8                |
| 2006 | 1.5   | 1.4                      | 0.1                     | 0.0  | 0.0                      | 0.2                         | 0.1      | -0.4                  | 1.6                  | -1.0                     | 1.0  | -2.1                         | 2.5                |

#### 2. Euro area - deficit-debt adjustment

|      |     | Deficit (-) /<br>surplus (+) 8) |       |       |            |            |                  | Deficit-de      | bt adjustment <sup>9</sup> | )          |                      |          |                  |           |
|------|-----|---------------------------------|-------|-------|------------|------------|------------------|-----------------|----------------------------|------------|----------------------|----------|------------------|-----------|
|      |     | /                               | Total |       | Transactio | ons in mai | n financial asse | ets held by ger | neral governmen            | t          | Valuation<br>effects | Exchange | Other changes in | Other 10) |
|      |     |                                 |       | Total | Currency   | Loans      | Securities 11)   | Shares and      |                            |            | enecis               | rate     | volume           |           |
|      |     |                                 |       |       | and        |            |                  | other           | Privatisations             | Equity     |                      | effects  |                  |           |
|      |     |                                 |       |       | deposits   |            |                  | 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                            | -0.5  | 0.1   | 0.1        | 0.0        | 0.0              | 0.0             | -0.3                       | 0.1        | -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                       | 0.1        | -0.2                 | -0.1     | 0.0              | 0.1       |
| 2004 | 3.1 | -2.8                            | 0.2   | 0.3   | 0.2        | 0.0        | 0.1              | 0.0             | -0.5                       | 0.2        | -0.1                 | -0.1     | 0.0              | 0.1       |
| 2005 | 3.1 | -2.6                            | 0.5   | 0.7   | 0.4        | 0.1        | 0.2              | 0.1             | -0.3                       | 0.2        | 0.1                  | 0.1      | -0.1             | -0.2      |
| 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      |

- 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. [debt(t) debt(t-1)] ÷ 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).

- Includes, in particular, the impact of the reclassification of units and certain types of debt assumption.
- The difference between the changes in the aggregated debt, resulting from the aggregation of countries' debt, and the aggregation of countries' change in debt is due to variations in the exchange rates used for aggregation before 2001.
- Holders resident in the country whose government has issued the debt.
- Includes residents of euro area countries other than the country whose government has issued the debt.
- Including proceeds from sales of UMTS licences.
- The difference between the annual change in gross nominal consolidated debt and the deficit as a percentage of GDP.
- 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 revenu | e                    |       |                 | Capital re | evenue           | Memo:<br>fiscal      |
|----------|-------|------|--------------|----------------|----------------------|-------|-----------------|------------|------------------|----------------------|
|          |       |      | Direct taxes | Indirect taxes | Social contributions | Sales | Property income |            | Capital<br>taxes | burden <sup>2)</sup> |
|          | 1     | 2    | 3            | 4              | 5                    | 6     | 7               | 8          | 9                | 10                   |
| 2001 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              | 39.7                 |
| Q4       | 49.1  | 48.7 | 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  | 45.2 | 12.6         | 12.7           | 15.5                 | 2.0   | 1.6             | 0.5        | 0.3              | 41.1                 |
| Q3<br>Q4 | 43.5  | 43.1 | 11.2         | 12.8           | 15.5                 | 1.9   | 0.8             | 0.4        | 0.3              | 39.6                 |
| 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  | 41.4 | 9.7          | 12.8           | 15.5                 | 1.7   | 0.7             | 0.5        | 0.2              | 38.3                 |
| Q2       | 45.9  | 44.4 | 12.0         | 12.7           | 15.7                 | 2.0   | 1.3             | 1.5        | 1.2              | 41.6                 |
| Q3       | 42.8  | 42.3 | 10.8         | 12.7           | 15.5                 | 1.9   | 0.7             | 0.5        | 0.2              | 39.2                 |
| Q4       | 49.2  | 48.2 | 13.1         | 14.2           | 16.2                 | 2.9   | 0.8             | 1.0        | 0.3              | 43.8                 |
| 2004 Q1  | 41.3  | 40.9 | 9.5          | 12.8           | 15.3                 | 1.7   | 0.7             | 0.4        | 0.3              | 37.9                 |
| Q2       | 45.0  | 44.2 | 12.1         | 13.0           | 15.3                 | 2.0   | 0.9             | 0.8        | 0.6              | 41.1                 |
| Q3<br>Q4 | 42.6  | 42.1 | 10.6         | 12.7           | 15.4                 | 1.9   | 0.7             | 0.5        | 0.3              | 38.9                 |
| Q4       | 49.3  | 48.3 | 13.0         | 14.4           | 16.2                 | 2.9   | 0.8             | 1.0        | 0.4              | 44.0                 |
| 2005 Q1  | 42.0  | 41.5 | 9.9          | 12.9           | 15.3                 | 1.7   | 0.6             | 0.5        | 0.3              | 38.4                 |
| Q2       | 44.8  | 44.1 | 11.9         | 13.3           | 15.2                 | 2.0   | 1.0             | 0.6        | 0.3              | 40.7                 |
| Q3       | 43.3  | 42.6 | 11.0         | 12.9           | 15.2                 | 1.9   | 0.8             | 0.7        | 0.3              | 39.5                 |
| Q3<br>Q4 | 49.4  | 48.7 | 13.4         | 14.3           | 16.2                 | 3.0   | 0.9             | 0.8        | 0.3              | 44.2                 |
| 2006 Q1  | 42.5  | 42.1 | 10.2         | 13.3           | 15.2                 | 1.7   | 0.8             | 0.5        | 0.3              | 39.0                 |
| Q2       | 45.9  | 45.4 | 12.6         | 13.6           | 15.3                 | 2.0   | 1.2             | 0.5        | 0.3              | 41.8                 |
| Q3       | 43.6  | 43.1 | 11.4         | 12.9           | 15.3                 | 1.9   | 0.8             | 0.5        | 0.3              | 39.9                 |
| Q3<br>Q4 | 49.9  | 49.3 | 14.2         | 14.4           | 16.0                 | 2.9   | 0.9             | 0.7        | 0.3              | 44.9                 |
| 2007 Q1  | 42.4  | 41.9 | 10.4         | 13.4           | 14.9                 | 1.7   | 0.9             | 0.5        | 0.3              | 38.9                 |
| Q2       | 46.4  | 45.8 | 13.1         | 13.7           | 15.1                 | 1.9   | 1.2             | 0.5        | 0.3              | 42.2                 |

#### 2. Euro area - quarterly expenditure and deficit/surplus

|         | Total |       |                           | Curren                   | t expendi | ture                 |                    |           | Capi | tal expenditu | ıre                  | Deficit (-)/<br>surplus (+) | Primary<br>deficit (-)/ |
|---------|-------|-------|---------------------------|--------------------------|-----------|----------------------|--------------------|-----------|------|---------------|----------------------|-----------------------------|-------------------------|
|         |       | Total | Compensation of employees | Intermediate consumption | Interest  | Current<br>transfers | Social<br>benefits | Subsidies |      | Investment    | Capital<br>transfers | sur prus (+)                | surplus (+)             |
|         | 1     | 2     | 3                         | 4                        | 5         | 6                    | 7                  | 8         | 9    | 10            | 11                   | 12                          | 13                      |
| 2001 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  | 42.4  | 10.0                      | 4.6                      | 3.8       | 24.1                 | 20.8               | 1.4       | 3.7  | 2.5           | 1.2                  | -2.7                        | 1.2                     |
| Q4      | 51.2  | 46.3  | 11.0                      | 5.7                      | 3.6       | 25.9                 | 22.1               | 1.7       | 4.9  | 3.2           | 1.8                  | -2.1                        | 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                        | -0.7                    |
| Q2      | 46.7  | 43.2  | 10.3                      | 4.9                      | 3.6       | 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 | 46.8  | 43.3  | 10.3                      | 4.5                      | 3.5       | 25.0                 | 21.5               | 1.3       | 3.5  | 1.9           | 1.6                  | -5.0                        | -1.5                    |
| Q2      | 47.3  | 43.7  | 10.4                      | 4.8                      | 3.4       | 25.2                 | 21.7               | 1.3       | 3.6  | 2.3           | 1.2                  | -1.4                        | 2.0                     |
| Q3      | 47.0  | 43.3  | 10.2                      | 4.8                      | 3.3       | 25.0                 | 21.6               | 1.3       | 3.7  | 2.5           | 1.2                  | -4.2                        | -0.9                    |
| Q4      | 51.2  | 46.3  | 11.0                      | 5.7                      | 3.1       | 26.5                 | 22.9               | 1.5       | 4.8  | 3.3           | 1.6                  | -1.9                        | 1.2                     |
| 2004 Q1 | 46.4  | 43.0  | 10.3                      | 4.6                      | 3.2       | 24.9                 | 21.4               | 1.2       | 3.4  | 1.9           | 1.5                  | -5.1                        | -1.9                    |
| Q2      | 46.5  | 43.2  | 10.4                      | 4.9                      | 3.1       | 24.8                 | 21.5               | 1.2       | 3.3  | 2.3           | 1.0                  | -1.5                        | 1.6                     |
| Q3      | 46.1  | 42.7  | 9.9                       | 4.7                      | 3.2       | 24.9                 | 21.5               | 1.3       | 3.4  | 2.5           | 1.0                  | -3.4                        | -0.3                    |
| Q4      | 50.7  | 45.8  | 11.0                      | 5.7                      | 3.0       | 26.2                 | 22.7               | 1.4       | 4.9  | 3.1           | 1.8                  | -1.5                        | 1.5                     |
| 2005 Q1 | 46.9  | 43.2  | 10.2                      | 4.7                      | 3.1       | 25.2                 | 21.4               | 1.2       | 3.7  | 1.9           | 1.9                  | -4.9                        | -1.8                    |
| Q2      | 46.4  | 43.0  | 10.2                      | 5.0                      | 3.2       | 24.6                 | 21.4               | 1.1       | 3.4  | 2.4           | 1.1                  | -1.7                        | 1.5                     |
| Q3      | 45.8  | 42.4  | 9.9                       | 4.8                      | 2.9       | 24.7                 | 21.4               | 1.2       | 3.5  | 2.5           | 1.0                  | -2.5                        | 0.4                     |
| Q4      | 50.7  | 45.9  | 11.1                      | 5.8                      | 2.8       | 26.2                 | 22.7               | 1.4       | 4.8  | 3.1           | 1.7                  | -1.3                        | 1.5                     |
| 2006 Q1 | 45.5  | 42.4  | 10.1                      | 4.5                      | 2.9       | 24.9                 | 21.3               | 1.2       | 3.1  | 1.9           | 1.2                  | -3.0                        | 0.0                     |
| Q2      | 46.0  | 42.6  | 10.3                      | 4.9                      | 3.1       | 24.3                 | 21.3               | 1.1       | 3.3  | 2.4           | 1.0                  | -0.1                        | 3.0                     |
| Q3      | 46.2  | 42.0  | 9.8                       | 4.7                      | 2.9       | 24.6                 | 21.2               | 1.2       | 4.2  | 2.5           | 1.8                  | -2.6                        | 0.3                     |
| Q4      | 50.7  | 45.3  | 10.7                      | 5.9                      | 2.7       | 26.0                 | 22.4               | 1.4       | 5.4  | 3.2           | 2.2                  | -0.8                        | 1.9                     |
| 2007 Q1 | 44.6  | 41.3  | 9.9                       | 4.5                      | 2.9       | 24.0                 | 20.6               | 1.1       | 3.3  | 2.0           | 1.3                  | -2.2                        | 0.7                     |
| Q2      | 45.2  | 41.8  | 10.0                      | 4.9                      | 3.1       | 23.8                 | 20.8               | 1.1       | 3.4  | 2.4           | 1.0                  | 1.2                         | 4.4                     |

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

#### 1. Euro area - Maastricht debt by financial instrument 1)

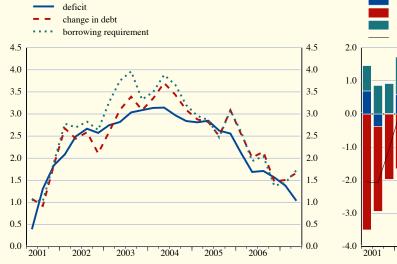
|                           | Total                        |                                 | Financial in                 | struments                |                              |
|---------------------------|------------------------------|---------------------------------|------------------------------|--------------------------|------------------------------|
|                           | 1                            | Currency and deposits 2         | Loans 3                      | Short-term securities 4  | Long-term securities 5       |
| 2004 Q3                   | 71.0                         | 2.3                             | 12.1                         | 5.5                      | 51.2                         |
| Q4                        | 69.5                         | 2.2                             | 11.9                         | 5.0                      | 50.5                         |
| 2005 Q1                   | 70.9                         | 2.2                             | 11.9                         | 5.2                      | 51.5                         |
| Q2                        | 71.6                         | 2.3                             | 11.7                         | 5.2                      | 52.4                         |
| Q3                        | 71.1                         | 2.4                             | 11.8                         | 5.2                      | 51.8                         |
| Q4                        | 70.3                         | 2.4                             | 11.8                         | 4.7                      | 51.4                         |
| 2006 Q1<br>Q2<br>Q3<br>Q4 | 70.7<br>70.8<br>70.3<br>68.6 | 2.5<br>2.5<br>2.5<br>2.5<br>2.5 | 11.7<br>11.6<br>11.6<br>11.4 | 4.9<br>4.9<br>4.7<br>4.1 | 51.5<br>51.8<br>51.4<br>50.7 |
| 2007 Q1                   | 68.9                         | 2.4                             | 11.4                         | 4.8                      | 50.3                         |
| Q2                        | 69.1                         | 2.2                             | 11.1                         | 5.1                      | 50.7                         |

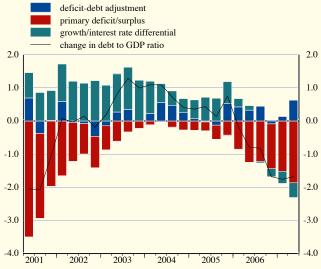
#### 2. Euro area - deficit-debt adjustment

|          | Change in debt | Deficit (-)/<br>surplus (+) |       |           |                          | Deficit-de      | ebt adjustment    |                         |  |       | Memo:<br>Borrowing |
|----------|----------------|-----------------------------|-------|-----------|--------------------------|-----------------|-------------------|-------------------------|--|-------|--------------------|
|          |                | •                           | Total | Transacti | ons in main fina         | ncial assets he | eld by general go | vernment                | Valuation effects<br>and other changes | Other | requirement        |
|          |                |                             |       | Total     | Currency<br>and deposits | Loans           | Securities        | Shares and other equity | in volume                              |       |                    |
|          | 1              | 2                           | 3     | 4         | 5                        | 6               | 7                 | 8                       | 9                                      | 10    | 11                 |
| 2004 Q3  | 1.8            | -3.4                        | -1.6  | -1.1      | -1.4                     | 0.0             | 0.2               | 0.1                     | -0.3                                   | -0.2  | 2.1                |
| Q4       | -3.0           | -1.5                        | -4.5  | -3.3      | -2.6                     | 0.1             | -0.2              | -0.6                    | 0.0                                    | -1.2  | -3.0               |
| 2005 Q1  | 7.2            | -4.9                        | 2.4   | 2.4       | 1.3                      | 0.3             | 0.3               | 0.5                     | 0.0                                    | 0.0   | 7.3                |
| Q2<br>Q3 | 5.4            | -1.7                        | 3.7   | 3.3       | 2.5                      | 0.0             | 0.3               | 0.5                     | 0.1                                    | 0.3   | 5.3                |
| Q3       | 0.6            | -2.5                        | -2.0  | -2.4      | -2.3                     | 0.0             | 0.3               | -0.4                    | 0.0                                    | 0.4   | 0.5                |
| Q4       | -0.6           | -1.3                        | -1.9  | -0.4      | 0.0                      | 0.0             | -0.3              | -0.1                    | -0.1                                   | -1.4  | -0.5               |
| 2006 Q1  | 4.8            | -3.0                        | 1.9   | 1.3       | 1.0                      | 0.1             | 0.6               | -0.5                    | -0.3                                   | 0.9   | 5.1                |
| Q2<br>Q3 | 3.3            | -0.1                        | 3.2   | 3.2       | 2.5                      | 0.1             | 0.4               | 0.2                     | 0.7                                    | -0.6  | 2.6                |
| Q3       | 1.2            | -2.6                        | -1.4  | -0.9      | -0.7                     | -0.1            | 0.0               | -0.1                    | 0.1                                    | -0.7  | 1.0                |
| Q4       | -3.0           | -0.8                        | -3.8  | -2.1      | -1.2                     | -0.6            | -0.1              | -0.2                    | -0.1                                   | -1.6  | -2.9               |
| 2007 Q1  | 4.8            | -2.2                        | 2.6   | 1.8       | 1.0                      | 0.2             | 0.6               | 0.0                     | -0.4                                   | 1.2   | 5.2                |
| Q2       | 3.8            | 1.2                         | 5.0   | 4.8       | 4.1                      | 0.0             | 0.5               | 0.1                     | 0.1                                    | 0.1   | 3.7                |

### C28 Deficit, borrowing requirement and change in debt

### C29 Maastricht debt





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

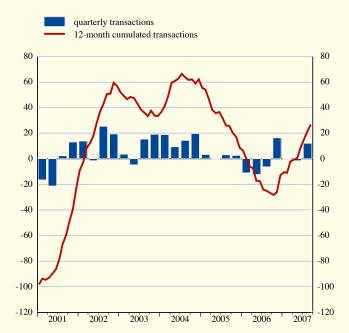
# 7.1 Balance of payments (EUR billions; net transactions)

#### 1. Summary balance of payments

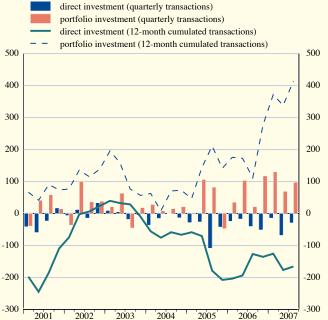
|   |   | Cu                                      | rrent acco                             | unt  |   | Capital                                | Net<br>lending/  |   |  | Financial                                    | account  |   |   | Errors and                                  |
|---|---|---|--|--|---|--|--|---|--|--|--|---|---|---|
|   | Total                                     | Goods                                   | Services                               | Income                                     | Current<br>transfers                          | account                                | borrowing<br>to/from<br>rest of<br>the world<br>(columns<br>1+6) | Total   | Direct<br>investment                           | Portfolio<br>investment                      | Financial<br>derivatives                         | Other<br>investment                             | Reserve<br>assets                           | omissions                                   |
|   | 1   | 2                                       | 3                                      | 4  | 5   | 6                                      | 7  | 8   | 9  | 10   | 11   | 12  | 13  | 14  |
| 2004<br>2005<br>2006                        | 62.0<br>8.5<br>-12.9                      | 102.9<br>47.9<br>23.0                   | 28.7<br>31.6<br>35.1                   | -9.7<br>1.9<br>6.1                         | -59.9<br>-72.9<br>-77.1                       | 16.4<br>11.3<br>9.1                    | 78.4<br>19.9<br>-3.7   | -16.8<br>24.2<br>118.0                        | -66.8<br>-208.8<br>-136.4                      | 72.1<br>141.3<br>276.4                       | -8.3<br>-16.4<br>2.5                             | -26.2<br>90.1<br>-23.2                          | 12.5<br>18.0<br>-1.3                        | -61.7<br>-44.1<br>-114.3                    |
| 2006 Q3<br>Q4<br>2007 Q1<br>Q2              | -6.1<br>16.4<br>-0.2<br>-1.4              | 6.7<br>16.9<br>8.6<br>20.3              | 10.2<br>7.6<br>7.8<br>14.4             | 1.3<br>7.3<br>4.7<br>-19.5                 | -24.3<br>-15.4<br>-21.2<br>-16.6              | 2.2<br>4.6<br>5.0<br>2.6               | -3.9<br>21.0<br>4.8<br>1.2                                       | 41.3<br>-42.2<br>4.7<br>23.2                  | -41.5<br>-52.5<br>-14.6<br>-69.1               | 21.1<br>116.9<br>129.8<br>69.5               | 12.6<br>-2.7<br>-16.4<br>-14.1                   | 52.2<br>-101.4<br>-92.5<br>41.0                 | -3.2<br>-2.4<br>-1.6<br>-4.2                | -37.5<br>21.2<br>-9.5<br>-24.4              |
| Q3<br>2006 Oct.<br>Nov.<br>Dec.             | 12.0<br>0.5<br>1.4<br>14.5                | 5.2<br>6.9<br>4.8                       | 13.5<br>2.4<br>1.6<br>3.5              | 1.7<br>1.1<br>0.3<br>5.9                   | -23.4<br>-8.2<br>-7.4<br>0.2                  | 0.5<br>0.7<br>3.3                      | 13.1<br>1.0<br>2.2<br>17.8                                       | 105.2<br>1.3<br>-10.6<br>-32.9                | -29.9<br>-14.2<br>-13.7<br>-24.6               | 97.3<br>34.9<br>57.6<br>24.3                 | -33.0<br>5.7<br>-2.9<br>-5.5                     | 75.0<br>-25.2<br>-51.0<br>-25.3                 | -4.2<br>0.1<br>-0.6<br>-1.9                 | -118.3<br>-2.3<br>8.4<br>15.1               |
| 2007 Jan.<br>Feb.<br>Mar.<br>Apr.           | -3.7<br>-3.6<br>7.1<br>-3.6               | -4.2<br>2.6<br>10.1<br>4.5              | 1.1<br>2.9<br>3.8<br>3.5               | 1.1<br>3.0<br>0.6<br>-4.0                  | -1.7<br>-12.1<br>-7.4<br>-7.6                 | 2.2<br>1.1<br>1.6<br>0.6               | -1.4<br>-2.4<br>8.7<br>-3.0                                      | 42.7<br>2.0<br>-39.9<br>40.8                  | -13.8<br>-3.2<br>2.4<br>-7.4                   | 42.7<br>22.9<br>64.2<br>-3.6                 | -4.2<br>-7.9<br>-4.3<br>-3.6                     | 20.9<br>-9.3<br>-104.1<br>56.9                  | -3.0<br>-0.5<br>1.9<br>-1.5                 | -41.2<br>0.5<br>31.2<br>-37.8               |
| May<br>June<br>July<br>Aug.<br>Sep.<br>Oct. | -11.6<br>13.8<br>4.8<br>1.5<br>5.7<br>2.0 | 4.4<br>11.3<br>9.4<br>4.5<br>6.3<br>7.7 | 4.0<br>6.9<br>4.6<br>3.5<br>5.4<br>2.5 | -14.9<br>-0.6<br>-1.8<br>1.3<br>2.1<br>1.7 | -5.1<br>-3.8<br>-7.4<br>-7.8<br>-8.2<br>-10.0 | 1.9<br>0.1<br>0.9<br>0.2<br>0.1<br>1.1 | -9.7<br>13.9<br>5.7<br>1.7<br>5.7<br>3.1                         | 2.0<br>-19.5<br>47.1<br>63.8<br>-5.8<br>-81.9 | -24.2<br>-37.4<br>0.1<br>-7.2<br>-22.8<br>21.3 | 2.5<br>70.6<br>30.2<br>21.9<br>45.2<br>-53.8 | -0.8<br>-9.7<br>-10.8<br>-11.9<br>-10.3<br>-10.9 | 25.2<br>-41.1<br>30.8<br>59.6<br>-15.4<br>-38.0 | -0.7<br>-1.9<br>-3.2<br>1.3<br>-2.3<br>-0.5 | 7.8<br>5.6<br>-52.8<br>-65.5<br>0.0<br>78.8 |
|   | 2.0                                       |   | 2.5                                    | 2.7  | 10.0  |  | nth cumulated  |   |  | 23.0   | 13.5   | 23.0  | 0.5   | , 5.0                                       |
| 2007 Oct.                                   | 28.3                                      | 68.5                                    | 43.4                                   | -5.2                                       | -78.4   | 13.9                                   | 42.2   | 7.7   | -130.6   | 324.7  | -82.8  | -90.7   | -12.9                                       | -49.9                                       |

### C30 B.o.p. current account balance





### C31 B.o.p. net direct and portfolio investment



External transactions and positions

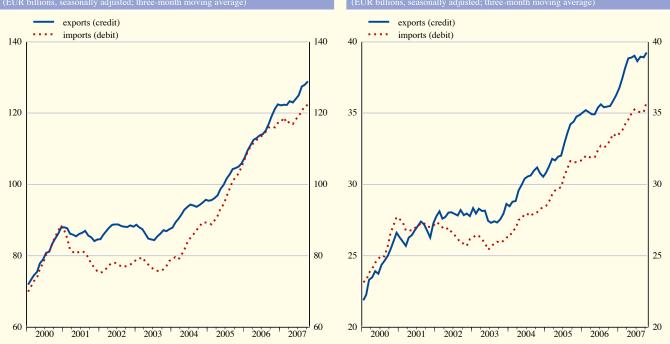
# 7.1 Balance of payments (EUR billions; transactions)

#### 2. Current and capital accounts

|  |   |   |   |   | Cu  | irrent accoun  | t  |  |  |  |  | Capital acc                     | count                           |
|--|---|---|---|---|---|--|--|--|--|--|--|---------------------------------|---------------------------------|
|  |   | Total   |   | Goods   |   | Service  | s  | Income   | e  | Current tran   | isfers   |                                 |                                 |
|  | Credit  | Debit   | Net   | Credit  | Debit   | Credit   | Debit  | Credit   | Debit  | Credit   | Debit  | Credit                          | Debit                           |
|  | 1   | 2   | 3   | 4   | 5   | 6  | 7  | 8  | 9  | 10   | 11   | 12                              | 13                              |
| 2004<br>2005<br>2006   | 1,864.7<br>2,071.2<br>2,368.9   | 1,802.7<br>2,062.6<br>2,381.7   | 62.0<br>8.5<br>-12.9                                  | 1,127.6<br>1,222.2<br>1,392.0   | 1,024.7<br>1,174.2<br>1,369.0   | 363.9<br>399.7<br>426.1  | 335.2<br>368.2<br>391.0  | 291.3<br>364.2<br>463.9  | 301.0<br>362.3<br>457.8  | 81.9<br>85.1<br>86.9   | 141.7<br>158.0<br>164.0  | 24.4<br>24.1<br>23.7            | 8.0<br>12.8<br>14.5             |
| 2006 Q3<br>Q4<br>2007 Q1<br>Q2<br>Q3                                     | 586.2<br>639.7<br>615.8<br>647.0<br>646.5                                     | 592.3<br>623.3<br>616.0<br>648.4<br>634.5                                     | -6.1<br>16.4<br>-0.2<br>-1.4<br>12.0                  | 343.3<br>374.8<br>361.3<br>373.2<br>375.5                                     | 336.6<br>357.9<br>352.8<br>353.0<br>355.3                                     | 114.0<br>109.3<br>105.3<br>116.7<br>125.2                            | 103.8<br>101.6<br>97.5<br>102.3<br>111.7                             | 113.1<br>127.6<br>122.4<br>138.6<br>129.3                            | 111.8<br>120.3<br>117.7<br>158.1<br>127.6                            | 15.8<br>28.1<br>26.7<br>18.5<br>16.5                         | 40.1<br>43.5<br>48.0<br>35.0<br>39.9                                 | 4.5<br>8.8<br>7.8<br>4.9<br>3.7 | 2.3<br>4.2<br>2.8<br>2.4<br>2.6 |
| 2007 Aug.<br>Sep.<br>Oct.  | 210.5<br>215.7<br>229.7   | 209.0<br>210.0<br>227.7   | 1.5<br>5.7<br>2.0                                     | 120.0<br>125.9<br>140.6   | 115.5<br>119.6<br>132.8   | 42.2<br>40.3<br>41.2   | 38.7<br>34.8<br>38.7   | 42.2<br>44.7<br>43.7   | 40.9<br>42.6<br>42.0   | 6.2<br>4.9<br>4.2  | 14.0<br>13.0<br>14.2   | 1.1<br>0.9<br>1.9               | 0.9<br>0.8<br>0.8               |
|  |   |   |   |   |   | easonally adjus  |  |  |  |  |  |                                 |                                 |
| 2006 Q3<br>Q4<br>2007 Q1<br>Q2<br>Q3                                     | 598.1<br>621.9<br>630.4<br>642.8<br>659.2                                     | 607.4<br>619.6<br>622.5<br>635.4<br>649.0                                     | -9.3<br>2.3<br>7.9<br>7.5<br>10.2                     | 351.3<br>367.3<br>366.7<br>371.9<br>383.8                                     | 347.9<br>351.8<br>351.6<br>354.7<br>366.0                                     | 106.4<br>108.8<br>114.5<br>117.1<br>116.7                            | 98.1<br>100.1<br>102.7<br>105.8<br>105.2                             | 119.4<br>123.5<br>126.6<br>131.7<br>136.6                            | 119.7<br>123.9<br>128.1<br>134.9<br>136.5                            | 21.0<br>22.2<br>22.6<br>22.2<br>22.1                         | 41.7<br>43.8<br>40.1<br>40.0<br>41.3                                 |                                 |                                 |
| 2007 Feb.<br>Mar.<br>Apr.<br>May<br>June<br>July<br>Aug.<br>Sep.<br>Oct. | 214.3<br>211.8<br>210.4<br>212.9<br>219.5<br>217.6<br>221.3<br>220.4<br>220.5 | 212.8<br>207.2<br>210.7<br>212.0<br>212.7<br>213.8<br>216.7<br>218.5<br>219.2 | 1.5<br>4.5<br>-0.3<br>0.9<br>6.9<br>3.8<br>4.5<br>1.9 | 122.7<br>123.8<br>123.5<br>121.7<br>126.7<br>126.5<br>129.4<br>128.0<br>129.3 | 119.5<br>115.6<br>117.9<br>117.4<br>119.3<br>120.7<br>121.6<br>123.6<br>121.6 | 38.3<br>39.1<br>39.1<br>38.5<br>39.5<br>38.0<br>39.4<br>39.3<br>39.0 | 34.2<br>34.3<br>35.2<br>35.4<br>35.3<br>34.7<br>35.3<br>35.3<br>36.8 | 42.5<br>42.8<br>41.1<br>44.7<br>45.9<br>45.3<br>45.0<br>46.2<br>46.5 | 42.3<br>44.7<br>43.0<br>45.9<br>45.9<br>44.6<br>45.4<br>46.4<br>44.9 | 10.7<br>6.1<br>6.7<br>8.0<br>7.5<br>7.8<br>7.5<br>6.8<br>5.7 | 16.8<br>12.7<br>14.6<br>13.2<br>12.2<br>13.7<br>14.4<br>13.2<br>15.8 |                                 | :<br>:<br>:<br>:<br>:           |



## C33 B.o.p. services (EUR billions, seasonally adjusted; three-month moving average)



# **7.1 Balance of payments** (EUR billions)

#### 3. Income account

(transactions)

|               | Compens<br>of emplo |            |                |                |               |              |              | Investr      | nent income  |              |              |              |              |               |
|---------------|---------------------|------------|----------------|----------------|---------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|
|               |                     |            | Tota           | ıl             |               | Direct inv   | estment      |              |              | Portfolio i  | nvestment    |              | Other inve   | estment       |
|               |                     |            |                |                | Equit         | y            | Debt         |              | Equity       | У            | Debt         |              |              |               |
|               | Credit              | Debit      | Credit         | Debit          | 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          | 15.3<br>15.4        | 7.6<br>9.2 | 275.9<br>348.8 | 293.4<br>353.1 | 99.6<br>127.0 | 78.4<br>89.1 | 12.8         | 12.6<br>13.6 | 23.8<br>31.7 | 54.2<br>69.6 | 72.6<br>82.1 | 75.6<br>80.4 | 67.2<br>93.9 | 72.6<br>100.4 |
| 2005<br>2006  | 16.0                | 9.2        | 447.8          | 447.9          | 151.4         | 94.2         | 14.2<br>18.5 | 16.7         | 39.0         | 99.0         | 101.5        | 87.2         | 137.4        | 150.4         |
| 2006 Q2       | 4.0<br>4.0          | 2.5<br>3.0 | 114.1<br>109.2 | 128.1<br>108.8 | 38.5<br>34.9  | 21.6<br>23.4 | 4.5          | 4.0<br>4.2   | 13.7<br>8.7  | 42.6<br>21.5 | 24.4<br>26.3 | 23.1<br>21.2 | 33.0<br>34.8 | 36.7<br>38.6  |
| Q3<br>Q4      | 4.2                 | 2.6        | 123.4          | 117.8          | 42.5          | 26.2         | 4.6<br>5.2   | 5.0          | 8.2          | 19.1         | 27.9         | 23.4         | 39.6         | 44.1          |
| 2007 Q1<br>Q2 | 4.0<br>4.0          | 1.9<br>2.5 | 118.5<br>134.6 | 115.8<br>155.6 | 34.4<br>38.8  | 22.5<br>22.8 | 5.1<br>5.7   | 4.9<br>4.9   | 9.6<br>16.0  | 18.2<br>52.8 | 27.8<br>28.6 | 25.4<br>28.1 | 41.6<br>45.4 | 44.8<br>47.1  |

#### 4. Direct investment

 $(net\ transactions)$ 

|  |  |  | By resid   | ent units a   | broad   |  |   |   | 1  | By non-reside  | nt units in  | the euro a  | rea   |   |
|--|--|--|--|---|---|--|---|---|--|--|--|---|---|---|
|  | Total  |  | Equity capital einvested earni   | ngs   | (mostly   | Other capital inter-company  | loans)  | Total   |  | Equity capital einvested earni   | ngs  | (mostly   | Other capital inter-company                                     | loans)  |
|  |  | Total  | MFIs<br>excluding<br>Eurosystem  | Non-<br>MFIs  | Total   | MFIs<br>excluding<br>Eurosystem  | Non-<br>MFIs  |   | Total  | MFIs<br>excluding<br>Eurosystem  | Non-<br>MFIs   | Total   | MFIs<br>excluding<br>Eurosystem                                 | Non-<br>MFIs  |
|  | 1  | 2  | 3  | 4   | 5   | 6  | 7   | 8   | 9  | 10   | 11   | 12  | 13  | 14  |
| 2004<br>2005<br>2006   | -163.1<br>-355.4<br>-334.3   | -171.1<br>-296.6<br>-265.2   | -21.4<br>-12.1<br>-35.4  | -149.7<br>-284.5<br>-229.8  | 8.0<br>-58.8<br>-69.1   | 0.1<br>-0.2<br>0.0   | 7.9<br>-58.6<br>-69.0   | 96.3<br>146.7<br>197.9  | 97.1<br>116.8<br>172.3   | 0.7<br>1.0<br>4.9  | 96.5<br>115.9<br>167.5   | -0.9<br>29.9<br>25.6  | 0.6<br>-0.3<br>0.1  | -1.5<br>30.2<br>25.5  |
| 2006 Q3<br>Q4<br>2007 Q1<br>Q2<br>Q3   | -77.2<br>-74.0<br>-92.0<br>-109.4<br>-79.1   | -67.9<br>-50.9<br>-59.6<br>-83.5<br>-49.5                                    | -10.7<br>-15.9<br>-4.7<br>-6.1<br>-14.7                                      | -57.2<br>-35.1<br>-54.9<br>-77.4<br>-34.8   | -9.3<br>-23.1<br>-32.4<br>-25.9<br>-29.6  | 0.9<br>-0.6<br>2.1<br>-1.5<br>0.0                                      | -10.2<br>-22.5<br>-34.5<br>-24.5<br>-29.6                                       | 35.8<br>21.5<br>77.4<br>40.3<br>49.2  | 31.0<br>16.6<br>48.3<br>42.4<br>26.3                                     | 1.7<br>0.9<br>0.9<br>-1.0<br>0.2                                       | 29.2<br>15.8<br>47.4<br>43.5<br>26.1                                     | 4.8<br>4.9<br>29.1<br>-2.1<br>22.9                              | -0.7<br>-0.1<br>-0.8<br>0.7<br>0.7                              | 5.5<br>4.9<br>29.9<br>-2.9<br>22.3                                      |
| 2006 Oct.<br>Nov.<br>Dec.  | -23.3<br>-13.3<br>-37.4  | -14.5<br>-16.4<br>-20.0  | -5.9<br>-2.0<br>-8.0   | -8.6<br>-14.4<br>-12.0  | -8.8<br>3.1<br>-17.4  | 0.2<br>-0.2<br>-0.6  | -9.0<br>3.3<br>-16.8  | 9.1<br>-0.4<br>12.8   | 3.7<br>0.0<br>12.9   | 1.1<br>-0.2<br>-0.1  | 2.6<br>0.2<br>13.0   | 5.4<br>-0.4<br>-0.1   | 1.5<br>-1.7<br>0.0  | 3.8<br>1.3<br>-0.1  |
| 2007 Jan.<br>Feb.<br>Mar.<br>Apr.<br>May<br>June<br>July<br>Aug.<br>Sep.<br>Oct. | -25.7<br>-36.7<br>-29.6<br>-25.3<br>-41.3<br>-42.8<br>-12.9<br>-26.1<br>-40.2<br>-24.6 | -24.1<br>-15.4<br>-20.1<br>-16.9<br>-37.1<br>-29.4<br>-8.6<br>-19.3<br>-21.7 | -2.3<br>5.6<br>-8.0<br>-1.6<br>-3.4<br>-1.1<br>-0.7<br>-3.2<br>-10.8<br>12.1 | -21.8<br>-21.0<br>-12.1<br>-15.4<br>-33.7<br>-28.3<br>-7.9<br>-16.1<br>-10.8<br>-36.2 | -1.6<br>-21.3<br>-9.5<br>-8.4<br>-4.2<br>-13.4<br>-4.3<br>-6.8<br>-18.5<br>-0.6 | 2.3<br>-0.3<br>0.1<br>-0.4<br>0.1<br>-1.2<br>0.0<br>0.7<br>-0.8<br>0.6 | -3.9<br>-21.0<br>-9.6<br>-7.9<br>-4.3<br>-12.2<br>-4.3<br>-7.6<br>-17.7<br>-1.1 | 11.9<br>33.5<br>32.0<br>17.9<br>17.1<br>5.3<br>13.0<br>18.9<br>17.4<br>45.9 | 5.8<br>25.7<br>16.7<br>13.5<br>23.4<br>5.5<br>4.3<br>6.6<br>15.4<br>30.3 | 0.3<br>4.2<br>-3.6<br>-0.6<br>0.1<br>-0.5<br>0.0<br>-0.1<br>0.3<br>0.2 | 5.6<br>21.5<br>20.4<br>14.2<br>23.3<br>5.9<br>4.3<br>6.7<br>15.1<br>30.1 | 6.0<br>7.8<br>15.3<br>4.4<br>-6.3<br>-0.2<br>8.7<br>12.4<br>1.9 | -1.0<br>0.2<br>-0.1<br>0.4<br>0.4<br>0.0<br>-0.2<br>-0.2<br>1.1 | 7.0<br>7.5<br>15.4<br>4.0<br>-6.7<br>-0.1<br>8.9<br>12.6<br>0.8<br>15.8 |

External transactions and positions

# 7.1 Balance of payments (EUR billions; transactions)

#### 5. Portfolio investment by instrument and sector of holder

|                                      |                                 | E                                    | Equity                               |                              |                                       |                                      |   |   |                              | Debt ins                                | struments                          |  |                                       |                            |                                     |
|--------------------------------------|---------------------------------|--------------------------------------|--------------------------------------|------------------------------|---------------------------------------|--------------------------------------|---|---|------------------------------|---|------------------------------------|--|---------------------------------------|----------------------------|-------------------------------------|
|                                      |                                 |                                      |                                      |                              |                                       |                                      | Bonds                                     | and note                                  | :s                           |   |                                    | Money ma                                 | rket instru                           | ments                      |                                     |
|                                      |                                 | Assets                               |                                      |                              | Liabilities                           |                                      | Assets                                    |   |                              | Liabilities                             |                                    | Assets                                   | S                                     |                            | Liabilities                         |
|                                      | Eurosystem                      | MFIs<br>excluding<br>Eurosystem      | Non-M                                | IFIs<br>General<br>gov.      |                                       | Eurosystem                           | MFIs<br>excluding<br>Eurosystem           | Non-                                      | MFIs<br>General<br>gov.      |   | Eurosystem                         | MFIs<br>excluding<br>Eurosystem          | Non-                                  | MFIs<br>General<br>gov.    |                                     |
|                                      | 1                               | 2                                    | 3                                    | 4                            | 5                                     | 6                                    | 7   | 8   | 9                            | 10                                      | 11                                 | 12                                       | 13                                    | 14                         | 15                                  |
| 2004<br>2005<br>2006                 | 0.0<br>-0.1<br>0.0              | -22.4<br>-14.2<br>-18.1              | -84.1<br>-119.9<br>-138.2            | -3.7<br>-3.5<br>-6.2         | 129.7<br>263.0<br>309.2               | 0.4<br>-0.7<br>-2.6                  | -81.9<br>-116.5<br>-169.1                 | -98.8<br>-143.2<br>-137.8                 | -2.1<br>-0.8<br>-1.1         | 270.8<br>237.1<br>500.1                 | 0.0<br>0.1<br>-8.0                 | -43.1<br>-14.5<br>-48.6                  | -14.8<br>-2.9<br>-12.6                | 0.1<br>0.1<br>0.1          | 16.2<br>53.3<br>2.1                 |
| 2006 Q3<br>Q4<br>2007 Q1<br>Q2<br>Q3 | 0.0<br>0.0<br>0.0<br>0.0<br>0.0 | 0.8<br>-14.6<br>-19.0<br>-4.9<br>4.0 | -32.6<br>-17.8<br>1.4<br>-5.3<br>5.6 | -0.9<br>-1.8<br>-0.8<br>-1.5 | 60.1<br>83.9<br>113.5<br>71.5<br>45.7 | -0.4<br>-2.9<br>-0.7<br>-0.3<br>-0.5 | -52.3<br>-39.6<br>-50.4<br>-65.7<br>-24.5 | -19.5<br>-46.7<br>-42.6<br>-50.9<br>-26.3 | -0.2<br>-0.8<br>-1.2<br>-0.5 | 87.1<br>186.1<br>141.8<br>110.9<br>43.0 | -0.1<br>-1.4<br>0.7<br>-0.1<br>0.0 | -24.9<br>-18.5<br>-23.3<br>-13.4<br>22.6 | -0.8<br>-4.1<br>-13.4<br>-9.2<br>14.7 | 3.1<br>4.0<br>-5.5<br>-4.5 | 3.9<br>-7.5<br>21.9<br>36.9<br>13.0 |
| 2006 Oct.<br>Nov<br>Dec.             |                                 | -5.7<br>-0.7<br>-8.2                 | -5.3<br>-10.2<br>-2.2                | -                            | 24.3<br>27.9<br>31.7                  | -1.8<br>-0.5<br>-0.6                 | -15.2<br>-25.6<br>1.1                     | -21.1<br>-11.4<br>-14.2                   | -<br>-<br>-                  | 58.0<br>69.6<br>58.4                    | -0.3<br>-0.4<br>-0.8               | -5.8<br>-9.6<br>-3.1                     | -6.2<br>4.3<br>-2.2                   | -<br>-<br>-                | 14.2<br>14.0<br>-35.7               |
| 2007 Jan.<br>Feb.<br>Mar<br>Apr.     | . 0.0                           | -3.8<br>-19.0<br>3.8<br>1.5          | 1.4<br>-10.6<br>10.5<br>-13.5        | -                            | 49.9<br>36.5<br>27.1<br>-11.7         | -0.1<br>-0.1<br>-0.6<br>0.0          | -31.9<br>-16.2<br>-2.2<br>-24.2           | -9.9<br>-9.2<br>-23.5<br>-9.1             | -                            | 34.4<br>39.8<br>67.6<br>35.1            | 0.5<br>0.1<br>0.2<br>0.0           | -7.8<br>-5.2<br>-10.4<br>-2.6            | -7.9<br>-2.2<br>-3.3<br>1.4           | -<br>-<br>-                | 17.8<br>9.0<br>-5.0<br>19.5         |
| May<br>June<br>July<br>Aug           | 0.0<br>0.0<br>0.0               | -9.0<br>2.6<br>-1.7<br>9.5           | 6.8<br>1.3<br>-0.5<br>-2.3           | -                            | 12.2<br>71.0<br>49.8<br>-21.0         | -0.1<br>-0.2<br>-0.5<br>0.0          | -28.0<br>-13.4<br>-23.3<br>-0.6           | -23.3<br>-18.5<br>-11.5<br>-10.3          | -                            | 36.4<br>39.4<br>14.6<br>21.5            | 0.0<br>-0.1<br>0.0<br>0.1          | -6.5<br>-4.3<br>-1.9<br>10.2             | -3.7<br>-6.9<br>4.2<br>13.0           | -                          | 17.7<br>-0.3<br>0.9<br>2.0          |
| Sep.<br>Oct.                         | 0.0<br>0.0                      | -3.8<br>-9.3                         | 8.4<br>-0.1                          | -                            | 16.9<br>3.5                           | 0.1<br>-0.3                          | -0.6<br>-12.4                             | -4.5<br>-19.4                             | -                            | 6.9<br>20.7                             | -0.1<br>0.0                        | 14.3<br>-27.5                            | -2.4<br>1.3                           | -                          | 10.1<br>-10.3                       |

#### 6. Other investment by sector

|               | Т                | otal           | Euro         | osystem     |               | General<br>governme         |              |                  | MFIs           | (excludi        | ing Eurosys  | tem)             |                |                  | Other sect                  | ors            |
|---------------|------------------|----------------|--------------|-------------|---------------|-----------------------------|--------------|------------------|----------------|-----------------|--------------|------------------|----------------|------------------|-----------------------------|----------------|
|               |                  |                |              |             |               |                             |              | T                | otal           | Lon             | g-term       | Shor             | rt-term        |                  |                             |                |
|               | Assets           | Liabilities    | Assets       | Liabilities | Assets        |                             | Liabilities  | Assets           | Liabilities    | Assets          | Liabilities  | Assets           | Liabilities    | Assets           |                             | Liabilities    |
|               |                  |                |              |             |               | Currency<br>and<br>deposits |              |                  |                |                 |              |                  |                |                  | Currency<br>and<br>deposits |                |
|               | 1                | 2              | 3            | 4           | 5             | 6                           | 7            | 8                | 9              | 10              | 11           | 12               | 13             | 14               | 15                          | 16             |
| 2004          | -310.7           | 284.5          | 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                        | 34.8           |
| 2005<br>2006  | -566.8<br>-721.5 | 656.9<br>698.3 | -0.9<br>-2.9 | 6.7<br>18.5 | 4.6<br>1.8    | -2.4<br>-3.1                | -2.2<br>1.4  | -395.2<br>-524.1 | 483.3<br>495.7 | -97.0<br>-134.2 | 55.1<br>82.6 | -298.2<br>-389.9 | 428.1<br>413.1 | -175.3<br>-196.2 | -3.9<br>-26.4               | 169.2<br>182.6 |
| 2006 Q3       | -139.9           | 192.1          | 0.5          | 4.9         | 12.0          | 8.5                         | 6.3          | -119.8           | 160.7          | -32.8           | 21.3         | -87.0            | 139.4          | -32.6            | 6.8                         | 20.2           |
| Q4            | -268.6           | 167.2          | -1.1         | 4.7         | -5.5          | -3.2                        | -3.2         | -210.8           | 98.9           | -73.0           | 26.6         | -137.7           | 72.2           | -51.3            | 5.9                         | 66.8           |
| 2007 Q1<br>Q2 | -373.0<br>-191.1 | 280.5<br>232.1 | -5.3<br>-3.5 | 5.4<br>10.9 | 7.2<br>-17.5  | 5.2<br>-17.4                | 1.6<br>-0.2  | -290.4<br>-131.7 | 266.7<br>178.7 | -76.5<br>-39.3  | 29.7<br>46.1 | -213.9<br>-92.4  | 237.0<br>132.7 | -84.6<br>-38.4   | -39.2<br>3.9                | 6.9<br>42.7    |
| Q2<br>Q3      | -228.9           | 303.9          | -1.6         | -1.3        | 18.2          | 14.1                        | 3.2          | -81.7            | 134.1          | -61.7           | 10.5         | -20.0            | 123.6          | -163.8           | -21.7                       | 167.9          |
| 2006 Oct.     | -105.3           | 80.1           | -0.5         | -1.1        | -2.4          | -4.1                        | -2.1         | -78.4            | 63.8           | -41.9           | 5.0          | -36.5            | 58.8           | -24.0            | -3.0                        | 19.5           |
| Nov.<br>Dec.  | -142.8<br>-20.5  | 91.8<br>-4.7   | 0.5<br>-1.1  | 3.2<br>2.6  | -3.8<br>0.7   | -4.3<br>5.2                 | 1.6<br>-2.6  | -106.5<br>-25.9  | 71.6<br>-36.5  | -10.6<br>-20.6  | 27.3<br>-5.7 | -95.9<br>-5.3    | 44.2<br>-30.8  | -33.0<br>5.7     | -8.3<br>17.2                | 15.5<br>31.8   |
| 2007 Jan.     | -140.9           | 161.9          | -1.1         | 3.8         | 4.5           | 1.3                         | -5.0         | -100.6           | 154.6          | -31.9           | 10.3         | -68.7            | 144.2          | -43.4            | -33.4                       | 8.4            |
| Feb.          | -117.9           | 101.9          | -3.6         | -0.4        | 0.1           | 1.5                         | 4.8          | -90.0            | 81.5           | -7.9            | 8.6          | -82.1            | 72.9           | -24.5            | -7.6                        | 22.8           |
| Mar.          | -114.2           | 10.0           | -0.3         | 2.0         | 2.6           | 2.4                         | 1.7          | -99.8            | 30.6           | -36.7           | 10.8         | -63.1            | 19.8           | -16.8            | 1.8                         | -24.4          |
| Apr.          | -136.5           | 193.4          | 0.6          | 2.9         | 0.5           | -2.9                        | 0.5          | -127.0           | 165.9          | -9.9            | 12.3         | -117.1           | 153.7          | -10.6            | -3.9                        | 24.0           |
| May<br>June   | -51.9<br>-2.6    | 77.2<br>-38.4  | -2.5<br>-1.5 | -0.8<br>8.8 | -5.8<br>-12.1 | -6.1<br>-8.4                | -0.3<br>-0.4 | -27.1<br>22.3    | 76.2<br>-63.3  | -6.0<br>-23.4   | 24.8<br>9.0  | -21.1<br>45.7    | 51.4<br>-72.4  | -16.5<br>-11.3   | 2.2<br>5.6                  | 2.1<br>16.6    |
| July          | -6.2             | 37.1           | 0.5          | -6.7        | 18.0          | 14.1                        | -1.9         | -38.0            | 48.4           | -13.7           | 12.1         | -24.3            | 36.3           | 13.3             | 5.5                         | -2.7           |
| Aug.          | -26.1            | 85.7           | -2.6         | 4.3         | 0.6           | 0.9                         | 4.0          | -10.9            | 56.9           | -23.3           | 0.5          | 12.3             | 56.3           | -13.2            | -5.0                        | 20.6           |
| Sep.          | -196.6           | 181.2          | 0.5          | 1.2         | -0.4          | -0.8                        | 1.1          | -32.8            | 28.8           | -24.7           | -2.2         | -8.1             | 31.0           | -163.9           | -22.2                       | 150.0          |
| Oct.          | -136.8           | 98.8           | -1.3         | 3.8         | 4.4           | 4.3                         | 1.7          | -101.5           | 89.9           | -24.7           | 3.8          | -76.8            | 86.2           | -38.4            | -10.2                       | 3.3            |

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

#### ${\bf 7.\ Other\ investment\ by\ sector\ and\ instrument}$

|                                      |                                    | Eu                              | rosystem                         |                                  |                                 |                                       |                                  | General                              | governme                            | nt                              |                                   |                                  |
|--------------------------------------|------------------------------------|---------------------------------|----------------------------------|----------------------------------|---------------------------------|---------------------------------------|----------------------------------|--------------------------------------|-------------------------------------|---------------------------------|-----------------------------------|----------------------------------|
|                                      | Assets                             |                                 | Liabiliti                        | es                               |                                 |                                       | Assets                           |                                      |                                     |                                 | Liabilities                       |                                  |
|                                      | Loans/currency<br>and              | Other<br>assets                 | Loans/currency<br>and            | Other<br>liabilities             | Trade<br>credits                | Loans                                 | /currency a                      | nd deposits                          | Other                               | Trade<br>credits                | Loans                             | Other<br>liabilities             |
|                                      | deposits                           |                                 | deposits                         |                                  |                                 | Total                                 | Loans                            | Currency and deposits                |                                     |                                 |                                   |                                  |
|                                      | 1                                  | 2                               | 3                                | 4                                | 5                               | 6                                     | 7                                | 8                                    | 9                                   | 10                              | 11                                | 12                               |
| 2004<br>2005<br>2006                 | 0.6<br>-0.9<br>-2.9                | -0.3<br>0.0<br>0.0              | 7.8<br>6.7<br>18.5               | 0.0<br>0.0<br>0.0                | 0.0<br>0.0<br>0.0               | -0.4<br>5.8<br>2.6                    | 1.7<br>8.2<br>5.7                | -2.0<br>-2.4<br>-3.1                 | -1.3<br>-1.2<br>-0.8                | 0.0<br>0.0<br>0.0               | -3.7<br>-1.9<br>1.5               | -0.2<br>-0.3<br>-0.1             |
| 2006 Q2<br>Q3<br>Q4<br>2007 Q1<br>Q2 | 0.9<br>0.5<br>-1.1<br>-5.3<br>-3.5 | 0.0<br>0.0<br>0.0<br>0.0<br>0.0 | 2.1<br>4.9<br>4.7<br>5.3<br>10.9 | 0.0<br>0.0<br>0.0<br>0.1<br>-0.1 | 0.0<br>0.0<br>0.0<br>0.0<br>0.0 | -11.4<br>11.9<br>-5.0<br>7.4<br>-17.1 | 0.8<br>3.5<br>-1.9<br>2.2<br>0.3 | -12.2<br>8.5<br>-3.2<br>5.2<br>-17.4 | -0.3<br>0.1<br>-0.5<br>-0.2<br>-0.3 | 0.0<br>0.0<br>0.0<br>0.0<br>0.0 | 0.3<br>6.2<br>-3.2<br>1.7<br>-0.3 | 0.1<br>0.1<br>0.0<br>-0.1<br>0.1 |

|         | MI                    | FIs (exclu   | ding Eurosystem)      |                   |               |        |            | Othe                     | er sectors      |               |             |                   |
|---------|-----------------------|--------------|-----------------------|-------------------|---------------|--------|------------|--------------------------|-----------------|---------------|-------------|-------------------|
|         | Assets                |              | Liabiliti             | es                |               |        | Assets     |                          |                 |               | Liabilities |                   |
|         | Loans/currency<br>and | Other assets | Loans/currency<br>and | Other liabilities | Trade credits | Loans  | currency a | nd deposits              | Other<br>assets | Trade credits | Loans       | Other liabilities |
|         | deposits              |              | deposits              |                   |               | Total  | Loans      | Currency<br>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           | 23.8        | 1.6               |
| 2005    | -392.1                | -3.1         | 481.7                 | 1.6               | -9.0          | -149.4 | -145.4     | -3.9                     | -17.0           | 13.5          | 149.2       | 6.5               |
| 2006    | -520.0                | -4.1         | 492.5                 | 3.2               | -5.4          | -178.6 | -152.1     | -26.4                    | -12.3           | 11.9          | 159.7       | 11.0              |
| 2006 Q2 | -58.0                 | 0.5          | 14.1                  | -5.6              | -3.3          | -32.6  | -25.6      | -7.0                     | 2.6             | 2.9           | 54.2        | -4.3              |
| Q3      | -118.8                | -1.0         | 158.5                 | 2.3               | 2.9           | -30.9  | -37.6      | 6.8                      | -4.7            | 2.9           | 12.7        | 4.6               |
| Q4      | -211.1                | 0.4          | 98.2                  | 0.6               | -2.0          | -48.9  | -54.8      | 5.9                      | -0.4            | 3.2           | 60.9        | 2.8               |
| 2007 Q1 | -282.1                | -8.3         | 264.7                 | 1.9               | -2.2          | -74.3  | -35.0      | -39.2                    | -8.1            | -2.1          | 3.6         | 5.4               |
| Q2      | -127.1                | -4.6         | 177.7                 | 1.1               | -2.7          | -29.6  | -33.5      | 3.9                      | -6.1            | 5.0           | 37.1        | 0.5               |

#### 8. Reserve assets

|                                      | Total                                | Monetary<br>gold                | Special drawing                    | Reserve<br>position in            |                                      |   | For                                | eign exchang                     | e                                    |                                   |                                 | Other<br>claims                 |
|--------------------------------------|--------------------------------------|---------------------------------|------------------------------------|-----------------------------------|--------------------------------------|---|------------------------------------|----------------------------------|--------------------------------------|-----------------------------------|---------------------------------|---------------------------------|
|                                      |                                      | 5                               | rights                             | the IMF                           | Total                                | Currency and                                | deposits                           |                                  | Securities                           |                                   | Financial derivatives           |                                 |
|                                      |                                      |                                 |                                    |                                   |                                      | With monetary<br>authorities<br>and the BIS | With<br>banks                      | Equity                           | Bonds and notes                      | Money<br>market<br>instruments    |                                 |                                 |
|                                      | 1                                    | 2                               | 3                                  | 4                                 | 5                                    | 6   | 7                                  | 8                                | 9                                    | 10                                | 11                              | 12                              |
| 2004<br>2005<br>2006                 | 12.5<br>18.0<br>-1.3                 | 1.2<br>3.9<br>4.2               | 0.5<br>-0.2<br>-0.5                | 4.0<br>8.6<br>5.2                 | 6.8<br>5.7<br>-10.2                  | -2.9<br>0.2<br>6.1                          | 3.3<br>7.2<br>-2.7                 | 0.5<br>0.0<br>0.0                | 18.3<br>-4.8<br>-19.4                | -12.2<br>3.2<br>5.7               | -0.1<br>0.0<br>0.0              | 0.0<br>0.0<br>0.0               |
| 2006 Q2<br>Q3<br>Q4<br>2007 Q1<br>Q2 | -1.6<br>-3.2<br>-2.4<br>-1.6<br>-4.2 | 1.4<br>0.9<br>1.1<br>0.4<br>0.7 | 0.0<br>-0.3<br>-0.2<br>0.0<br>-0.1 | -0.5<br>0.8<br>1.6<br>0.8<br>-0.5 | -2.5<br>-4.5<br>-4.9<br>-2.9<br>-4.2 | 0.9<br>1.0<br>-2.0<br>1.4<br>-0.8           | 3.0<br>-2.9<br>2.5<br>-5.0<br>-0.3 | 0.0<br>0.0<br>0.0<br>0.4<br>-0.1 | -7.2<br>-4.1<br>-4.0<br>-5.8<br>-2.3 | 0.7<br>1.4<br>-1.3<br>6.1<br>-0.7 | 0.0<br>0.0<br>0.0<br>0.0<br>0.0 | 0.0<br>0.0<br>0.0<br>0.0<br>0.0 |

External transactions and positions

# 7.2 Monetary presentation of the balance of payments (EUR billions; transactions)

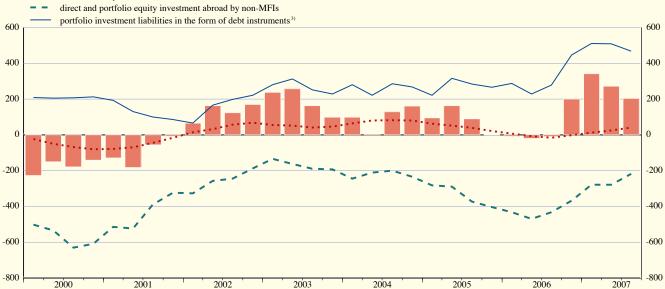
|              |                     |                      | В.с                 | .p. items bal | ancing trans   | sactions in the ex | ternal coun     | terpart of M3 | •                     |                 |                    | Memo:<br>Transactions |
|--------------|---------------------|----------------------|---------------------|---------------|----------------|--------------------|-----------------|---------------|-----------------------|-----------------|--------------------|-----------------------|
|              | Current and capital | Direct inv           | estment             | Po            | ortfolio inves | tment              | Other in        | rvestment     | Financial derivatives | Errors<br>and   | Total<br>of        | in the<br>external    |
|              | accounts<br>balance | By<br>resident       | By non-<br>resident | Assets        | Lia            | bilities           | Assets          | Liabilities   |                       | omissions       | columns<br>1 to 10 | counterpart<br>of M3  |
|              |                     | units                | units               | Non-MFIs      | Equity 2)      | Debt               | Non-MFIs        | Non-MFIs      |                       |                 |                    |                       |
|              |                     | abroad<br>(non-MFIs) | in the<br>euro area | NOII-MIFIS    | Equity 2)      | instruments 3)     | Non-MIL         | NOII-IVIFIS   |                       |                 |                    |                       |
|              | 1                   | 2                    | 3                   | 4             | 5              | 6                  | 7               | 8             | 9                     | 10              | 11                 | 12                    |
| 2004         | 80.3                | -141.8               | 95.5                | -197.3        | 119.9          | 267.5              | -51.0           | 30.6          | -8.3                  | -61.2           | 134.1              | 161.2                 |
| 2005         | 21.5                | -343.2               | 147.1               | -265.6        | 220.0          | 266.7              | -170.7          | 167.0         | -16.4                 | -43.9           | -17.7              | 0.0                   |
| 2006         | -1.6                | -298.8               | 197.8               | -288.1        | 248.3          | 446.4              | -194.2          | 183.7         | 2.5                   | -115.0          | 181.1              | 200.1                 |
| 2006 Q3      | -3.2                | -67.4                | 36.3                | -52.9         | 26.8           | 81.4               | -20.5           | 26.4          | 12.6                  | -37.4           | 2.1                | 2.1                   |
| Q4           | 21.6                | -57.4                | 21.6                | -68.4         | 67.8           | 159.2              | -56.8           | 63.5          | -2.7                  | 21.2            | 169.6              | 176.0                 |
| 2007 Q1      | 4.8                 | -89.5                | 78.3                | -54.6         | 94.8           | 150.8              | -77.4           | 8.4           | -16.4                 | -9.5            | 89.7               | 101.9                 |
| Q2<br>Q3     | 1.2<br>13.1         | -101.8<br>-63.2      | 39.6<br>47.5        | -65.4<br>-5.8 | 60.7<br>35.4   | 117.5<br>39.3      | -55.8<br>-145.6 | 42.5<br>171.1 | -14.1<br>-33.0        | -24.4<br>-118.3 | -0.1<br>-60.7      | -8.2<br>-67.0         |
|              |                     |                      |                     |               |                |                    |                 |               |                       |                 |                    |                       |
| 2006 Oct.    | 1.1                 | -17.5                | 7.5                 | -32.7         | 13.8           | 55.8               | -26.4           | 17.3          | 5.7                   | -2.8            | 21.9               | 25.8                  |
| Nov.         | 2.3                 | -11.0                | 1.3                 | -17.2         | 32.5           | 78.6               | -36.8           | 17.0          | -2.9                  | 8.3             | 72.0               | 69.2                  |
| Dec.         | 18.1                | -28.9                | 12.8                | -18.5         | 21.6           | 24.9               | 6.4             | 29.2          | -5.5                  | 15.7            | 75.7               | 81.0                  |
| 2007 Jan.    | -1.4                | -25.7                | 12.9                | -16.3         | 39.9           | 45.7               | -38.9           | 3.5           | -4.2                  | -41.2           | -25.8              | -22.9                 |
| Feb.         | -2.4                | -42.0                | 33.3                | -22.0         | 41.1           | 44.3               | -24.3           | 27.6          | -7.9                  | 0.5             | 48.0               | 40.5                  |
| Mar.         | 8.7                 | -21.7                | 32.1                | -16.3         | 13.7           | 60.7               | -14.1           | -22.6         | -4.3                  | 31.2            | 67.5               | 84.3                  |
| Apr.         | -3.0                | -23.3                | 17.5                | -21.1         | -14.3          | 33.5               | -10.1           | 24.5          | -3.6                  | -37.8           | -37.7              | -40.1                 |
| May          | -9.7                | -38.0                | 16.7                | -20.2         | 10.9           | 40.3               | -22.4           | 1.8           | -0.8                  | 7.8             | -13.5              | -15.1                 |
| June         | 13.9                | -40.5                | 5.4                 | -24.1         | 64.1           | 43.6               | -23.4           | 16.1          | -9.7                  | 5.6             | 51.1               | 47.0                  |
| July         | 5.7<br>1.7          | -12.2<br>-23.7       | 13.2<br>19.1        | -7.7<br>0.3   | 35.2<br>-11.1  | 11.4<br>26.5       | 31.3<br>-12.6   | -4.6<br>24.6  | -10.8<br>-11.9        | -52.8<br>-65.5  | 8.6<br>-52.6       | 5.8<br>-51.3          |
| Aug.         | 5.7                 | -23.7                | 16.2                | 1.4           | 11.7           | 0.2                | -164.3          | 151.1         | -10.3                 | 0.0             | -16.8              | -31.5<br>-21.5        |
| Sep.<br>Oct. | 3.7                 | -28.0                | 46.1                | -18.3         | -18.7          | -8.8               | -104.5          | 5.0           | -10.5                 | 78.8            | 5.0                | 11.3                  |
|              | 5.1                 | 57.5                 | 10.1                | 10.5          |                | h cumulated tran   |                 | 5.0           | 10.5                  | 70.0            | 5.0                | 11.5                  |
| 2007 Oct.    | 42.6                | -332.9               | 226.6               | -180.0        | 226.5          | 400.9              | -343.3          | 273.2         | -82.8                 | -49.4           | 181.5              | 188.1                 |

#### C34 Main b.o.p. transactions underlying the developments in MFI net external assets 1)



MFI net external assets

current and capital accounts balance



- Data refer to the changing composition of the euro area. For further information, see the General notes.
   Excluding money market fund shares/units.
   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   |       | Europea | an Union 27 | outside the | e euro area) |              | Canada | Japan | Switzerland | United<br>States | Other   |
|-----------------------------|---------|-------|---------|-------------|-------------|--------------|--------------|--------|-------|-------------|------------------|---------|
|                             |         | Total | Denmark | Sweden      | United      | Other EU     | EU           |        |       |             | -                |         |
|                             |         |       |         |             | Kingdom     | countries    | institutions |        |       |             |                  |         |
|                             |         |       |         |             | Ü           |              |              |        |       |             |                  |         |
| 2006 Q3 to 2007 Q2          | 1       | 2     | 3       | 4           | 5           | 6            | 7            | 8      | 9     | 10          | 11               | 12      |
|                             |         |       |         |             |             | Credits      |              |        |       |             |                  |         |
| Current account             | 2,488.7 | 947.2 | 52.1    | 80.2        | 486.9       | 267.2        | 60.7         | 33.1   | 56.0  | 159.2       | 398.3            | 894.9   |
| Goods                       | 1,452.6 | 528.3 | 33.0    | 53.2        | 229.7       | 212.2        | 0.1          | 17.9   | 34.8  | 82.8        | 197.9            | 591.0   |
| Services                    | 445.2   | 160.3 | 9.1     | 12.0        | 106.3       | 27.1         | 5.8          | 6.6    | 10.5  | 43.0        | 79.6             | 145.2   |
| Income                      | 501.7   | 193.7 | 9.5     | 14.4        | 138.2       | 25.3         | 6.4          | 8.0    | 10.5  | 27.6        | 112.9            | 149.1   |
| of which: investment income | 485.6   | 188.3 | 9.4     | 14.3        | 136.5       | 25.1         | 3.1          | 7.9    | 10.4  | 21.1        | 111.4            | 146.4   |
| Current transfers           | 89.1    | 64.9  | 0.5     | 0.6         | 12.7        | 2.6          | 48.5         | 0.6    | 0.3   | 5.8         | 7.9              | 9.5     |
| Capital account             | 26.1    | 20.6  | 0.0     | 0.0         | 0.9         | 0.1          | 19.5         | 0.0    | 0.4   | 0.4         | 0.9              | 3.7     |
|                             |         |       |         |             |             | Debits       |              |        |       |             |                  |         |
| Current account             | 2,480.0 | 818.6 | 41.3    | 75.9        | 395.1       | 209.0        | 97.3         | 26.1   | 91.1  | 154.9       | 360.2            | 1,029.1 |
| Goods                       | 1,400.2 | 413.5 | 28.0    | 49.0        | 170.7       | 165.8        | 0.0          | 12.0   | 54.7  | 71.9        | 134.2            | 713.8   |
| Services                    | 405.2   | 131.2 | 7.5     | 9.8         | 84.6        | 29.1         | 0.1          | 5.9    | 7.6   | 31.8        | 86.2             | 142.5   |
| Income                      | 508.0   | 169.9 | 5.4     | 16.1        | 130.1       | 10.3         | 8.0          | 6.3    | 28.4  | 45.7        | 132.8            | 124.8   |
| of which: investment income | 498.0   | 164.1 | 5.3     | 16.1        | 128.8       | 6.0          | 8.0          | 6.2    | 28.3  | 45.2        | 131.9            | 122.3   |
| Current transfers           | 166.6   | 104.0 | 0.4     | 0.8         | 9.7         | 3.8          | 89.2         | 1.8    | 0.4   | 5.4         | 7.0              | 47.9    |
| Capital account             | 11.7    | 1.5   | 0.0     | 0.1         | 0.8         | 0.3          | 0.2          | 0.1    | 0.1   | 0.5         | 1.6              | 7.9     |
|                             |         |       |         |             |             | Net          |              |        |       |             |                  |         |
| Current account             | 8.7     | 128.5 | 10.8    | 4.4         | 91.8        | 58.2         | -36.6        | 7.0    | -35.1 | 4.3         | 38.1             | -134.2  |
| Goods                       | 52.4    | 114.7 | 5.0     | 4.2         | 59.0        | 46.5         | 0.1          | 5.9    | -19.9 | 10.9        | 63.7             | -122.8  |
| Services                    | 40.0    | 29.1  | 1.6     | 2.2         | 21.7        | -2.0         | 5.7          | 0.7    | 2.9   | 11.2        | -6.6             | 2.7     |
| Income                      | -6.2    | 23.8  | 4.1     | -1.8        | 8.1         | 15.0         | -1.6         | 1.7    | -17.9 | -18.1       | -20.0            | 24.3    |
| of which: investment income | -12.4   | 24.2  | 4.1     | -1.8        | 7.7         | 19.1         | -4.9         | 1.7    | -17.8 | -24.1       | -20.5            | 24.2    |
| Current transfers           | -77.5   | -39.1 | 0.1     | -0.2        | 3.0         | -1.2         | -40.8        | -1.2   | -0.2  | 0.4         | 0.9              | -38.4   |
| Capital account             | 14.3    | 19.1  | 0.0     | 0.0         | 0.1         | -0.2         | 19.3         | -0.1   | 0.4   | -0.1        | -0.7             | -4.2    |

## **2. Balance of payments: direct investment** (cumulated transactions)

|                            | Total  |        | Europea | n Union 2 | 7 (outside th | ie euro area | )            | Canada | Japan | Switzerland |       | Offshore<br>financial | Other |
|----------------------------|--------|--------|---------|-----------|---------------|--------------|--------------|--------|-------|-------------|-------|-----------------------|-------|
|                            |        | Total  | Denmark | Sweden    | United        | Other EU     | EU           |        |       |             |       | centres               |       |
|                            |        |        |         |           | Kingdom       | countries    | institutions |        |       |             |       |                       |       |
| 2006 Q3 to 2007 Q2         | 1      | 2      | 3       | 4         | 5             | 6            | 7            | 8      | 9     | 10          | 11    | 12                    | 13    |
| Direct investment          | -177.6 | -34.8  | 4.4     | 0.0       | -11.2         | -28.1        | 0.1          | -18.3  | 1.5   | -25.5       | 7.4   | -23.9                 | -84.1 |
| Abroad                     | -352.6 | -108.5 | -1.1    | -6.8      | -68.1         | -32.6        | 0.0          | -25.3  | -5.7  | -31.5       | -66.7 | -34.4                 | -80.5 |
| Equity/reinvested earnings | -261.9 | -82.9  | -1.6    | -3.6      | -44.8         | -32.8        | 0.0          | -17.8  | -4.5  | -19.2       | -54.3 | -21.3                 | -61.9 |
| Other capital              | -90.7  | -25.7  | 0.5     | -3.1      | -23.2         | 0.2          | 0.0          | -7.5   | -1.2  | -12.3       | -12.3 | -13.2                 | -18.6 |
| In the euro area           | 175.0  | 73.7   | 5.5     | 6.8       | 56.8          | 4.5          | 0.1          | 7.0    | 7.2   | 6.0         | 74.1  | 10.5                  | -3.6  |
| Equity/reinvested earnings | 138.4  | 58.4   | 7.0     | 4.5       | 44.9          | 1.9          | 0.1          | -0.1   | 2.9   | 4.6         | 64.1  | 2.9                   | 5.4   |
| Other capital              | 36.6   | 15.3   | -1.5    | 2.3       | 11.9          | 2.6          | 0.0          | 7.0    | 4.3   | 1.4         | 10.0  | 7.6                   | -9.0  |

External transactions and positions

### 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                    |        | Europea | n Union 27 | 7 (outside the | e euro area) |      | Canada | Japan | Switzerland |        | Offshore financial | Other |
|-----------------------------|--------------------------|--------|---------|------------|----------------|--------------|------|--------|-------|-------------|--------|--------------------|-------|
|                             |                          | Total  | Denmark | Sweden     | United         | Other EU     | EU   |        |       |             |        | centres            |       |
|                             | Kingdom countries instit |        |         |            |                |              |      |        |       |             |        |                    |       |
| 2006 Q3 to 2007 Q2          | 1                        | 2      | 3       | 4          | 5              | 6            | 7    | 8      | 9     | 10          | 11     | 12                 | 13    |
| Portfolio investment assets | -572.7                   | -168.9 | -15.1   | -17.3      | -122.7         | -8.8         | -5.0 | -5.3   | 7.1   | -11.0       | -229.9 | -98.1              | -66.5 |
| Equity                      | -92.1                    | -10.2  | -3.2    | -2.4       | -3.2           | -1.1         | -0.1 | 2.7    | -2.4  | -8.2        | -38.6  | -38.0              | 2.6   |
| Debt instruments            | -480.6                   | -158.7 | -11.9   | -14.9      | -119.5         | -7.6         | -4.8 | -8.0   | 9.5   | -2.8        | -191.4 | -60.1              | -69.1 |
| Bonds and notes             | -372.1                   | -122.7 | -11.8   | -15.4      | -86.8          | -4.5         | -4.2 | -6.9   | -4.5  | -1.6        | -146.0 | -33.8              | -56.6 |
| Money market instruments    | -108.5                   | -36.0  | -0.1    | 0.5        | -32.7          | -3.1         | -0.6 | -1.1   | 14.0  | -1.2        | -45.4  | -26.3              | -12.6 |

#### 4. Balance of payments: other investment by sector

(cumulated transactions)

|                    | Total  |        | European | n Union 2' | 7 (outside t      | he euro are        | ea)             | Canada | Japan | Switzerland | United<br>States | -       | Internat. | Other |
|--------------------|--|--------|----------|------------|-------------------|--------------------|-----------------|--------|-------|-------------|------------------|---------|-----------|-------|
|                    |  | Total  | Denmark  | Sweden     | United<br>Kingdom | Other EU countries | EU institutions |        |       |             |                  | centres | tions     |       |
| 2006 Q3 to 2007 Q2 | 1  | 2      | 3        | 4          | 5                 | 6                  | 7               | 8      | 9     | 10          | 11               | 12      | 13        | 14    |
| Other investment   | -100.7   | -194.8 | -16.0    | 5.4        | -183.1            | -15.4              | 14.3            | -0.4   | 45.0  | 16.8        | 50.3             | -0.2    | 8.2       | -25.5 |
| Assets             | -972.6   | -653.2 | -17.5    | -3.0       | -589.0            | -40.8              | -2.8            | -1.0   | 16.6  | -52.9       | -141.4           | -50.0   | -8.0      | -82.9 |
| General government | -3.7   | -9.9   | -1.5     | 0.8        | -9.1              | 0.1                | -0.2            | -0.1   | -0.4  | 0.0         | 0.1              | 0.1     | -1.0      | 7.5   |
| MFIs               | -762.1   | -500.5 | -13.7    | -5.4       | -442.2            | -39.0              | -0.2            | 2.6    | 9.1   | -50.9       | -109.5           | -37.8   | -7.1      | -68.0 |
| Other sectors      | -206.9   | -142.7 | -2.3     | 1.6        | -137.6            | -2.0               | -2.4            | -3.6   | 7.9   | -2.0        | -32.0            | -12.2   | 0.1       | -22.4 |
| Liabilities        | 872.0  | 458.4  | 1.5      | 8.4        | 405.8             | 25.5               | 17.1            | 0.6    | 28.4  | 69.6        | 191.7            | 49.7    | 16.2      | 57.4  |
| General government | 4.5  | 4.5    | -0.1     | 0.0        | -1.1              | 0.0                | 5.7             | 0.0    | -0.3  | -0.3        | 0.0              | 0.1     | 2.7       | -2.2  |
| MFIs               | 2006 Q3 to 2007 Q2 1 2 3    Total Denmark   Switch |        |          |            |                   |                    | 5.1             | -1.6   | 26.9  | 53.8        | 138.8            | 45.6    | 13.4      | 77.5  |
| Other sectors      | 136.6  | 77.4   | 0.3      | 2.7        | 65.1              | 3.1                | 6.2             | 2.2    | 1.8   | 16.2        | 52.8             | 4.0     | 0.0       | -179  |

#### 5. International investment position

(end-of-period outstanding amounts)

|                             | Total   |         | European | n Union 2 | 7 (outside t | he euro are | ea)          | Canada | Japan | Switzerland | United<br>States | Offshore financial | Internat.<br>organisa- | Other |
|-----------------------------|---------|---------|----------|-----------|--------------|-------------|--------------|--------|-------|-------------|------------------|--------------------|------------------------|-------|
|                             |         | Total   | Denmark  | Sweden    | United       | Other EU    | EU           |        |       |             |                  | centres            | tions                  |       |
|                             |         |         |          |           | Kingdom      | countries   | institutions |        |       |             |                  |                    |                        |       |
|                             |         |         |          |           | Ü            |             |              |        |       |             |                  |                    |                        |       |
| 2006                        | 1       | 2       | 3        | 4         | 5            | 6           | 7            | 8      | 9     | 10          | 11               | 12                 | 13                     | 14    |
| Direct investment           | 417.1   | -47.3   | -7.2     | -21.0     | -218.6       | 199.8       | -0.3         | 37.3   | -6.2  | 78.1        | -24.5            | -5.6               | -0.2                   | 385.4 |
| Abroad                      | 3,075.9 | 1,147.6 | 35.1     | 83.4      | 803.8        | 225.2       | 0.0          | 90.2   | 68.2  | 300.0       | 608.0            | 329.1              | 0.0                    | 532.8 |
| Equity/reinvested earnings  | 2,510.5 | 934.2   | 32.0     | 58.1      | 644.5        | 199.5       | 0.0          | 71.0   | 63.5  | 250.1       | 453.1            | 306.8              | 0.0                    | 431.7 |
| Other capital               | 565.4   | 213.4   | 3.1      | 25.3      | 159.3        | 25.7        | 0.0          | 19.2   | 4.7   | 49.9        | 154.9            | 22.2               | 0.0                    | 101.1 |
| In the euro area            | 2,658.8 | 1,194.9 | 42.3     | 104.4     | 1,022.5      | 25.4        | 0.3          | 52.8   | 74.4  | 221.8       | 632.5            | 334.7              | 0.3                    | 147.4 |
| Equity/reinvested earnings  | 2,039.8 | 958.9   | 36.8     | 86.2      | 825.4        | 10.2        | 0.2          | 47.0   | 60.7  | 163.9       | 477.0            | 208.9              | 0.0                    | 123.4 |
| Other capital               | 619.0   | 236.0   | 5.5      | 18.2      | 197.1        | 15.2        | 0.1          | 5.8    | 13.7  | 57.9        | 155.5            | 125.8              | 0.3                    | 24.0  |
| Portfolio investment assets | 4,441.3 | 1,375.2 | 65.5     | 140.8     | 1,002.5      | 97.9        | 68.6         | 84.5   | 262.7 | 141.1       | 1,452.6          | 527.7              | 32.1                   | 565.3 |
| Equity                      | 2,012.0 | 487.1   | 12.3     | 58.0      | 393.0        | 23.6        | 0.1          | 22.6   | 181.0 | 128.6       | 670.9            | 216.5              | 1.4                    | 303.9 |
| Debt instruments            | 2,429.3 | 888.1   | 53.2     | 82.8      | 609.5        | 74.2        | 68.4         | 61.9   | 81.7  | 12.5        | 781.7            | 311.2              | 30.7                   | 261.4 |
| Bonds and notes             | 2,051.5 | 730.9   | 48.4     | 70.9      | 471.2        | 72.3        | 68.2         | 59.7   | 62.2  | 8.4         | 657.6            | 271.9              | 29.7                   | 231.1 |
| Money market instruments    | 377.8   | 157.2   | 4.8      | 11.9      | 138.3        | 2.0         | 0.2          | 2.2    | 19.6  | 4.0         | 124.1            | 39.4               | 1.0                    | 30.3  |
| Other investment            | -200.0  | 103.9   | 86.3     | 13.3      | 121.7        | 31.3        | -148.7       | -1.4   | -37.5 | -49.3       | -5.4             | -212.8             | -20.0                  | 22.6  |
| Assets                      | 4,392.0 | 2,306.6 | 111.2    | 69.0      | 1,986.6      | 130.4       | 9.4          | 19.4   | 73.6  | 263.1       | 585.9            | 438.3              | 45.7                   | 659.4 |
| General government          | 117.1   | 25.2    | 2.1      | 0.1       | 14.2         | 1.5         | 7.4          | 0.0    | 0.2   | 0.1         | 3.1              | 1.4                | 38.5                   | 48.6  |
| MFIs                        | 2,947.1 | 1,730.6 | 95.5     | 47.7      | 1,489.5      | 97.2        | 0.6          | 11.0   | 38.8  | 162.3       | 344.0            | 274.4              | 6.6                    | 379.5 |
| Other sectors               | 1,327.9 | 550.9   | 13.6     | 21.2      | 482.9        | 31.7        | 1.4          | 8.4    | 34.7  | 100.7       | 238.8            | 162.5              | 0.6                    | 231.4 |
| Liabilities                 | 4,592.0 | 2,202.8 | 25.0     | 55.7      | 1,864.9      | 99.1        | 158.1        | 20.8   | 111.2 | 312.4       | 591.4            | 651.1              | 65.6                   | 636.8 |
| General government          | 47.8    | 24.1    | 0.0      | 0.3       | 2.4          | 0.0         | 21.4         | 0.0    | 0.7   | 0.0         | 6.2              | 0.2                | 2.7                    | 13.8  |
| MFIs                        | 3,567.5 | 1,662.0 | 19.4     | 35.0      | 1,433.5      | 77.1        | 97.0         | 13.9   | 60.2  | 252.4       | 416.2            | 580.4              | 60.4                   | 522.0 |
| Other sectors               | 976.8   | 516.7   | 5.5      | 20.4      | 429.0        | 22.0        | 39.8         | 6.8    | 50.3  | 59.9        | 169.0            | 70.5               | 2.6                    | 101.0 |
| 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<br>as a % of GDP           | Direct<br>investment                     | Portfolio<br>investment                    | Financial derivatives            | Other investment                         | Reserve assets                   |
|------------------------------|--|----------------------------------|--|--|----------------------------------|--|----------------------------------|
|                              | 1  | 2                                | 3  | 4  | 5                                | 6  | 7_                               |
|                              |  |                                  | Net international inve                   | stment position                            |                                  |  |                                  |
| 2003<br>2004<br>2005<br>2006 | -790.7<br>-888.7<br>-837.7<br>-1,024.4     | -10.6<br>-11.4<br>-10.4<br>-12.1 | 85.1<br>78.2<br>361.8<br>417.1           | -930.5<br>-1,044.7<br>-1,233.9<br>-1,523.9 | -19.8<br>-37.3<br>-46.1<br>-43.5 | -232.3<br>-165.8<br>-239.6<br>-200.0     | 306.7<br>281.0<br>320.1<br>325.8 |
| 2007 Q1<br>Q2                | -1,033.5<br>-1,173.7                       | -12.1<br>-13.6                   | 407.6<br>494.9                           | -1,566.2<br>-1,701.8                       | -23.9<br>-19.9                   | -182.6<br>-272.2                         | 331.5<br>325.3                   |
|                              |  |                                  | Outstanding                              | assets                                     |                                  |  |                                  |
| 2003<br>2004<br>2005<br>2006 | 7,989.5<br>8,799.2<br>10,998.0<br>12,518.5 | 106.7<br>113.0<br>136.5<br>148.4 | 2,169.3<br>2,321.2<br>2,809.4<br>3,075.9 | 2,655.4<br>3,036.5<br>3,876.6<br>4,441.3   | 152.1<br>157.9<br>222.9<br>283.4 | 2,706.1<br>3,002.7<br>3,769.1<br>4,392.0 | 306.7<br>281.0<br>320.1<br>325.8 |
| 2007 Q1<br>Q2                | 13,115.6<br>13,654.9                       | 153.4<br>157.9                   | 3,142.4<br>3,254.7                       | 4,597.6<br>4,817.5                         | 328.2<br>384.3                   | 4,715.8<br>4,873.1                       | 331.5<br>325.3                   |
|                              |  |                                  | Outstanding li                           | abilities                                  |                                  |  |                                  |
| 2003<br>2004<br>2005<br>2006 | 8,780.2<br>9,687.9<br>11,835.7<br>13,542.9 | 117.3<br>124.4<br>146.9<br>160.5 | 2,084.2<br>2,243.0<br>2,447.6<br>2,658.8 | 3,585.9<br>4,081.3<br>5,110.5<br>5,965.2   | 171.9<br>195.1<br>269.0<br>326.9 | 2,938.3<br>3,168.5<br>4,008.6<br>4,592.0 | -<br>-<br>-                      |
| 2007 Q1<br>Q2                | 14,149.0<br>14,828.6                       | 165.5<br>171.4                   | 2,734.8<br>2,759.9                       | 6,163.7<br>6,519.3                         | 352.1<br>404.2                   | 4,898.4<br>5,145.3                       | -                                |

#### 2. Direct investment

|                      |                               |                                  | By resident                   | units abroad            |                                 |                         |                               | By nor                          | ı-resident un                 | its in the eur          | o area                          |                         |
|----------------------|-------------------------------|----------------------------------|-------------------------------|-------------------------|---------------------------------|-------------------------|-------------------------------|---------------------------------|-------------------------------|-------------------------|---------------------------------|-------------------------|
|                      |                               | Equity capital einvested earning | ngs                           | (mostly                 | Other capital inter-company     | loans)                  |                               | Equity capital reinvested earni | ngs                           | (mostly                 | Other capital inter-compan      |                         |
|                      | Total                         | MFIs<br>excluding<br>Eurosystem  | Non-<br>MFIs                  | Total                   | MFIs<br>excluding<br>Eurosystem | Non-<br>MFIs            | Total                         | MFIs<br>excluding<br>Eurosystem | Non-<br>MFIs                  | Total                   | MFIs<br>excluding<br>Eurosystem | Non-<br>MFIs            |
|                      | 1                             | 2                                | 3                             | 4                       | 5                               | 6                       | 7                             | 8                               | 9                             | 10                      | 11                              | 12                      |
| 2003<br>2004<br>2005 | 1,726.8<br>1,893.0<br>2,290.8 | 124.6<br>149.1<br>178.0          | 1,602.2<br>1,743.8<br>2,112.8 | 442.5<br>428.2<br>518.6 | 2.1<br>4.3<br>4.2               | 440.4<br>423.9<br>514.4 | 1,510.1<br>1,669.7<br>1,841.2 | 46.2<br>51.9<br>55.2            | 1,463.9<br>1,617.7<br>1,786.0 | 574.1<br>573.3<br>606.5 | 3.2<br>8.4<br>8.4               | 570.9<br>564.9<br>598.0 |
| 2006                 | 2,510.5                       | 211.2                            | 2,299.3                       | 565.4                   | 3.6                             | 561.7                   | 2,039.8                       | 59.8                            | 1,980.1                       | 619.0                   | 7.8                             | 611.1                   |
| 2007 Q1<br>Q2        | 2,548.5<br>2,632.1            | 219.7<br>228.5                   | 2,328.8<br>2,403.7            | 593.9<br>622.6          | 4.3<br>5.8                      | 589.7<br>616.8          | 2,063.0<br>2,101.0            | 55.8<br>57.3                    | 2,007.2<br>2,043.7            | 671.8<br>658.9          | 10.1<br>10.5                    | 661.6<br>648.4          |

#### ${\bf 3.}$ Portfolio investment assets by instrument and sector of holder

|               |            | 1   | Equity |                    |                    |              |                   |              |                    | Debt ins           | truments   |                   |              |                  |                |
|---------------|------------|---|--------|--------------------|--------------------|--------------|-------------------|--------------|--------------------|--------------------|------------|-------------------|--------------|------------------|----------------|
|               |            |   |        |                    |                    |              | Bond              | s and note   | s                  |                    |            | Money ma          | rket instru  | ments            |                |
|               |            | Assets  | 1      |                    | Liabilities        |              | Assets            |              |                    | Liabilities        |            | Asset             | S            |                  | Liabilities    |
|               | Eurosystem | osystem MFIs Non-MFIs excluding Eurosystem General Other gov. sectors |        |                    |                    | Eurosystem   | MFIs<br>excluding | Non-l        | MFIs               |                    | Eurosystem | MFIs<br>excluding | Non-         | MFIs             |                |
|               |            | Eurosystem General Other gov. sectors                                 |        |                    |                    |              | Eurosystem        | General gov. | Other<br>sectors   |                    |            | Eurosystem        | General gov. | Other<br>sectors |                |
|               | 1          | 2   | 3      |                    |                    | 6            | 7                 | 8            | 9                  | 10                 | 11         | 12                | 13           | 14               | 15             |
| 2003          | 1.7        | 53.5  | 11.5   | 1,023.9            | 1,571.4            | 9.3          | 460.2             | 8.0          | 845.9              | 1,774.4            | 1.1        | 191.5             | 0.6          | 48.2             | 240.0          |
| 2004          | 2.1        | 73.8  | 16.3   | 1,157.5            | 1,766.2            | 8.1          | 541.8             | 9.7          | 940.3              | 2,089.1            | 0.9        | 231.4             | 0.4          | 54.3             | 226.0          |
| 2005          | 3.0        | 99.5  |        | 1,595.3            | 2,434.4            | 8.6          | 692.5             | 11.6         | 1,122.9            | 2,371.1            | 0.8        | 262.1             | 0.4          | 52.8             | 304.9          |
| 2006          | 2.8        | 119.4   | 37.0   | 1,852.8            | 2,932.5            | 10.8         | 818.7             | 13.4         | 1,208.6            | 2,738.8            | 8.7        | 301.8             | 0.3          | 67.0             | 293.9          |
| 2007 Q1<br>Q2 | 2.8<br>3.0 | 138.4<br>148.6  |        | 1,881.9<br>1,985.5 | 3,063.8<br>3,318.6 | 10.9<br>11.2 | 859.2<br>912.3    | 14.6<br>14.8 | 1,240.9<br>1,262.9 | 2,790.4<br>2,857.5 | 8.0<br>8.1 | 325.5<br>341.8    | 5.8<br>10.4  | 71.6<br>77.5     | 309.5<br>343.1 |

External transactions and positions

# 7.4 International investment position (including international reserves) (EUR billions, unless stated otherwise; end-of-period outstanding amounts)

#### 4. Other investment by instrument

|         |                       | Eu              | rosystem              |                      |                  |       |            | General               | governme        | nt               |             |                      |
|---------|-----------------------|-----------------|-----------------------|----------------------|------------------|-------|------------|-----------------------|-----------------|------------------|-------------|----------------------|
|         | Assets                |                 | Liabilitie            | :s                   |                  |       | Assets     |                       |                 |                  | Liabilities |                      |
|         | Loans/currency<br>and | Other<br>assets | Loans/currency<br>and | Other<br>liabilities | Trade<br>credits | Loans | currency a | nd deposits           | Other<br>assets | Trade<br>credits | Loans       | Other<br>liabilities |
|         | deposits              |                 | deposits              |                      |                  | Total | Loans      | Currency and deposits |                 |                  |             |                      |
|         | 1                     | 2               | 3                     | 4                    | 5                | 6     | 7          | 8                     | 9               | 10               | 11          | 12                   |
| 2003    | 5.2                   | 0.7             | 66.0                  | 0.2                  | 24.0             | 61.1  | 55.3       | 5.8                   | 42.4            | 0.0              | 42.3        | 3.8                  |
| 2004    | 4.7                   | 0.3             | 74.5                  | 0.2                  | 23.5             | 64.4  | 56.2       | 8.3                   | 42.6            | 0.0              | 42.3        | 3.5                  |
| 2005    | 5.4                   | 0.4             | 82.1                  | 0.2                  | 19.7             | 60.8  | 49.0       | 11.8                  | 47.1            | 0.0              | 40.5        | 3.8                  |
| 2006    | 8.4                   | 0.4             | 99.9                  | 0.2                  | 14.1             | 57.8  | 42.4       | 15.4                  | 45.1            | 0.0              | 43.9        | 3.8                  |
| 2007 Q1 | 13.6                  | 0.3             | 105.1                 | 0.3                  | 14.0             | 50.2  | 39.9       | 10.2                  | 44.8            | 0.0              | 46.6        | 3.7                  |
| Q2      | 17.5                  | 0.3             | 115.8                 | 0.3                  | 13.7             | 67.1  | 39.6       | 27.5                  | 45.0            | 0.0              | 46.2        | 4.3                  |

|         | MI                    | Is (exclu    | ding Eurosystem)   |                   |               |         |            | Oth                   | er sectors   |               |             |                   |
|---------|-----------------------|--------------|--------------------|-------------------|---------------|---------|------------|-----------------------|--------------|---------------|-------------|-------------------|
|         | Assets                |              | Liabiliti          | es                |               |         | Assets     |                       |              |               | Liabilities |                   |
|         | Loans/currency<br>and | Other assets | Loans/currency and | Other liabilities | Trade credits | Loans   | currency a | nd deposits           | Other assets | Trade credits | Loans       | Other liabilities |
|         | deposits              |              | deposits           |                   |               | Total   | Loans      | Currency and deposits |              |               |             |                   |
|         | 13                    | 14           | 15                 | 16                | 17            | 18      | 19         | 20                    | 21           | 22            | 23          | 24                |
| 2003    | 1,734.6               | 38.5         | 2,241.9            | 31.3              | 164.9         | 550.0   | 221.7      | 328.3                 | 84.8         | 110.8         | 396.3       | 45.7              |
| 2004    | 1,950.8               | 45.4         | 2,423.3            | 42.1              | 170.1         | 607.0   | 277.1      | 329.9                 | 93.8         | 115.3         | 417.5       | 49.8              |
| 2005    | 2,458.5               | 56.2         | 3,045.8            | 52.3              | 189.5         | 800.8   | 455.2      | 345.6                 | 130.7        | 133.1         | 580.8       | 70.1              |
| 2006    | 2,879.1               | 59.2         | 3,413.5            | 53.8              | 187.7         | 988.7   | 613.5      | 375.2                 | 151.5        | 144.5         | 744.5       | 87.7              |
| 2007 Q1 | 3,141.4               | 70.1         | 3,657.9            | 57.3              | 196.6         | 1,031.5 | 588.3      | 443.2                 | 153.3        | 141.0         | 786.0       | 100.3             |
| Q2      | 3,256.4               | 71.6         | 3,815.4            | 62.7              | 198.7         | 1,043.1 | 621.8      | 421.4                 | 159.6        | 147.1         | 843.6       | 109.8             |

#### 5. International reserves

|   | Reserve assets               |                           |                                      |                          |                          |                              |                             |                          |                              | N                            | Memo                        |                                |                          |                          |                          |                              |
|---|------------------------------|---------------------------|--------------------------------------|--------------------------|--------------------------|------------------------------|-----------------------------|--------------------------|------------------------------|------------------------------|-----------------------------|--------------------------------|--------------------------|--------------------------|--------------------------|------------------------------|
|   |                              |                           |                                      |                          |                          |                              |                             |                          |                              |                              |                             |                                |                          |                          | Assets                   | Liabilities                  |
|   | Total                        | Monet                     | ary gold                             | Special drawing          | Reserve<br>position      |                              |                             |                          | Foreig                       | n exchang                    | je.                         |                                |                          | Other<br>claims          | Claims<br>on euro        | Predetermined<br>short-term  |
|   |                              | EUR                       | In fine<br>troy<br>ounces            | rights                   | in the IMF               |                              | Total Currency and deposits |                          | Securities                   |                              |                             | Financial<br>derivatives       |                          | area<br>residents<br>in  | net<br>drains<br>in      |                              |
|   |                              | omions                    | (millions)                           |                          |                          | monet<br>authori<br>and the  |                             | With<br>banks            | Total                        | Equity Bonds<br>and<br>notes |                             | Money<br>market<br>instruments |                          |                          | foreign<br>currency      | foreign<br>currency          |
|   | 1                            | 2                         | 3                                    | 4                        | 5                        | 6                            | 7                           | 8                        | 9                            | 10                           | 11                          | 12                             | 13                       | 14                       | 15                       | 16                           |
|   |                              |                           |                                      |                          |                          |                              | Е                           | urosysten                | n                            |                              |                             |                                |                          |                          |                          |                              |
| 2003<br>2004                              | 306.7<br>281.0               | 130.0<br>125.4            | 393.543<br>389.998                   | 4.4<br>3.9               | 23.3<br>18.6             | 149.0<br>133.0               | 10.0<br>12.5                | 30.4<br>25.5             | 107.9<br>94.7                | 1.0<br>0.5                   | 80.5<br>56.6                | 26.5<br>37.6                   | 0.7<br>0.4               | 0.0                      | 20.3<br>19.1             | -16.3<br>-12.8               |
| 2005<br>2006                              | 320.1<br>325.8               | 163.4<br>176.3            | 375.861<br>365.213                   | 4.3<br>4.6               | 10.6<br>5.2              | 141.7<br>139.7               | 12.6<br>6.3                 | 21.4<br>22.5             | 107.9<br>110.7               | 0.6<br>0.5                   | 69.4<br>79.3                | 38.0<br>30.8                   | -0.2<br>0.3              | 0.0<br>0.0               | 25.6<br>24.6             | -17.9<br>-21.5               |
| 2007 Q1<br>Q2                             | 331.5<br>325.3               | 180.4<br>172.8            | 363.109<br>358.768                   | 4.6<br>4.7               | 4.3<br>4.3               | 142.2<br>143.5               | 4.9<br>5.7                  | 27.6<br>27.7             | 109.4<br>110.1               | 0.1<br>0.2                   | 84.6<br>84.5                | 24.7<br>25.5                   | 0.3<br>0.0               | $0.0 \\ 0.0$             | 25.1<br>26.6             | -22.6<br>-24.6               |
| 2007 Sep.<br>Oct.<br>Nov.                 | 340.5<br>346.6<br>339.2      | 187.0<br>194.4<br>188.8   | 356.925<br>355.749<br>355.733        | 4.7<br>4.6<br>4.6        | 3.8<br>3.7<br>3.5        | 144.9<br>143.9<br>142.2      | 7.5<br>6.7<br>8.5           | 27.5<br>26.6<br>22.8     | 109.6<br>110.1<br>110.4      | -                            | -                           | -                              | 0.4<br>0.5<br>0.5        | 0.0<br>0.0<br>0.0        | 26.2<br>26.0<br>26.8     | -26.8<br>-26.4<br>-25.5      |
| 1407.                                     | 339.2                        | 100.0                     | 333.133                              | 4.0                      | 3.3                      |                              | hich held by t              |                          |                              | ral Bank                     |                             |                                | 0.5                      | 0.0                      | 20.6                     | -23.3                        |
| 2003<br>2004<br>2005<br>2006              | 36.9<br>35.1<br>41.5<br>39.9 | 8.1<br>7.9<br>10.1<br>9.9 | 24.656<br>24.656<br>23.145<br>20.572 | 0.2<br>0.2<br>0.2<br>0.4 | 0.0<br>0.0<br>0.0<br>0.0 | 28.6<br>27.0<br>31.2<br>29.6 | 1.4<br>2.7<br>5.1<br>1.6    | 5.0<br>3.3<br>2.5<br>1.5 | 22.2<br>21.1<br>23.6<br>26.5 | 0.0<br>0.0<br>0.0<br>0.0     | 14.9<br>7.8<br>10.4<br>19.1 | 7.3<br>13.2<br>13.2<br>7.4     | 0.0<br>0.0<br>0.0<br>0.0 | 0.0<br>0.0<br>0.0<br>0.0 | 2.8<br>2.6<br>2.9<br>2.8 | -1.5<br>-1.3<br>-0.9<br>-0.3 |
| 2007 Q1<br>Q2                             | 40.5<br>40.5                 | 10.3<br>9.4               | 20.632<br>19.442                     | 0.4<br>0.4               | 0.0                      | 29.9<br>30.7                 | 1.4<br>1.2                  | 3.3<br>3.0               | 25.2<br>26.5                 | 0.0                          | 19.5<br>20.7                | 5.8<br>5.8                     | 0.0                      | 0.0                      | 3.0<br>3.2               | -0.6<br>-1.6                 |
| 2007 Sep.<br>Oct.<br>Nov.<br>Source: ECB. | 40.1<br>39.9<br>39.4         | 10.2<br>10.6<br>10.3      | 19.442<br>19.442<br>19.442           | 0.5<br>0.5<br>0.5        | 0.0<br>0.0<br>0.0        | 29.4<br>28.8<br>28.7         | 1.3<br>0.9<br>1.1           | 2.2<br>2.4<br>1.5        | 26.0<br>25.5<br>26.1         | -                            | -                           | -<br>-<br>-                    | 0.0<br>0.0<br>0.0        | 0.0<br>0.0<br>0.0        | 3.1<br>3.4<br>3.2        | -0.7<br>-0.8<br>0.1          |

Monthly Bulletin
January 2008 5 69

7.5 Trade in goods
(seasonally adjusted, unless otherwise indicated)

#### 1. Values, volumes and unit values by product group

|                 | Total (      | n.s.a.)      |                    | E              | xports (f.     | o.b.)          |                   | Imports (c.i.f.) |                |                |                |                |                |
|-----------------|--------------|--------------|--------------------|----------------|----------------|----------------|-------------------|------------------|----------------|----------------|----------------|----------------|----------------|
|                 |              |              |                    | Tota           | ıl             |                | Memo:             |                  | Tota           | ıl             |                | Memo:          |                |
|                 | Exports      | Imports      | Γ                  | Intermediate   | Capital        | Consumption    | Manufactures      |                  | Intermediate   | Capital        | Consumption    | Manufactures   | Oil            |
|                 | 1            | 2            | 3                  | 4              | 5              | 6              | 7                 | 8                | 9              | 10             | 11             | 12             | 13             |
|                 |              |              |                    |                |                |                | rcentage changes  |                  |                |                |                |                |                |
| 2003<br>2004    | -2.3<br>8.9  | 0.5<br>9.4   | 1,059.5<br>1,146.1 | 500.9<br>544.8 | 221.7<br>247.1 | 299.8<br>314.9 | 916.9<br>996.0    | 986.8<br>1,073.4 | 553.1<br>603.7 | 165.0<br>184.3 | 240.5<br>256.3 | 708.4<br>767.8 | 109.0<br>128.9 |
| 2005            | 7.8          | 13.5         | 1,241.0            | 590.9          | 270.1          | 335.0          | 1,070.0           | 1,225.6          | 704.9          | 208.1          | 276.5          | 842.9          | 186.2<br>224.4 |
| 2006            | 12.1         | 14.5         | 1,392.8            | 675.1          | 295.1          | 372.4          | 1,194.1           | 1,404.1          | 835.9          | 219.7          | 307.4          | 952.8          |                |
| 2006 Q2<br>Q3   | 10.2<br>8.8  | 16.1<br>11.3 | 342.5<br>350.1     | 165.1<br>171.0 | 72.9<br>72.5   | 91.7<br>92.8   | 292.3<br>299.5    | 349.3<br>355.6   | 207.4<br>214.0 | 55.9<br>53.9   | 76.2<br>76.9   | 236.0<br>239.8 | 57.3<br>59.9   |
| Q4              | 12.8         | 8.6          | 364.0              | 177.6          | 76.4           | 96.7           | 315.0             | 358.3            | 213.1          | 54.4           | 79.1           | 248.6          | 52.2           |
| 2007 Q1<br>Q2   | 8.8<br>8.9   | 4.8<br>2.9   | 369.8<br>371.7     | 177.9<br>178.7 | 78.1<br>78.4   | 97.5<br>98.5   | 318.1<br>316.4    | 360.5<br>359.9   | 213.7<br>217.2 | 53.6<br>50.6   | 79.6<br>79.3   | 254.4<br>248.2 | 47.3<br>52.7   |
| Q3              | 9.3          | 5.2          | 381.8              | 183.0          | 79.6           | 100.7          | 326.7             | 372.7            | 221.1          | 52.3           | 82.4           | 257.7          | 56.8           |
| 2007 Apr.       | 11.1         | 5.6          | 122.4              | 59.0           | 26.2           | 32.3<br>32.7   | 104.5             | 119.6            | 71.9           | 16.7           | 26.4           | 81.8           | 17.2           |
| May<br>June     | 6.3<br>9.2   | 0.6<br>2.8   | 123.1<br>126.3     | 59.0<br>60.7   | 26.0<br>26.2   | 33.5           | 104.2<br>107.8    | 119.1<br>121.2   | 72.3<br>73.0   | 16.8<br>17.1   | 26.1<br>26.8   | 82.0<br>84.3   | 17.6<br>17.9   |
| July            | 13.6         | 9.0          | 125.6              | 60.5           | 25.6           | 33.4           | 107.3             | 124.3            | 74.5           | 17.6           | 27.1           | 85.8           | 19.2           |
| Aug.<br>Sep.    | 11.6<br>3.2  | 4.4<br>2.1   | 128.9<br>127.3     | 62.1<br>60.4   | 27.0<br>27.0   | 33.7<br>33.6   | 110.6<br>108.8    | 124.8<br>123.6   | 74.0<br>72.6   | 17.5<br>17.2   | 27.7<br>27.6   | 86.8<br>85.1   | 18.9<br>18.6   |
|                 |              |              |                    |                |                |                | percentage char   |                  |                |                |                |                |                |
| 2003            | 1.0          | 3.6          | 108.6              | 106.3          | 106.9          | 113.2          | 108.4             | 102.1            | 100.3          | 97.3           | 109.8          | 100.2          | 103.0          |
| 2004<br>2005    | 9.0<br>4.9   | 6.5<br>5.1   | 117.6<br>123.9     | 115.4<br>120.3 | 120.1<br>129.6 | 118.5<br>123.6 | 118.1<br>124.3    | 108.1<br>114.3   | 104.1<br>107.6 | 109.4<br>124.2 | 117.7          | 108.4<br>116.4 | 104.9<br>109.6 |
| 2003            | 8.3          | 6.8          | 134.3              | 131.9          | 138.8          | 133.3          | 135.1             | 122.1            | 115.3          | 131.0          | 123.7<br>133.0 | 127.3          | 109.6          |
| 2006 Q2         | 5.9          | 5.3          | 132.6              | 130.0          | 137.8          | 130.9          | 133.1             | 121.0            | 113.6          | 133.0          | 132.9          | 126.9          | 107.2          |
| Q3<br>Q4        | 5.8<br>10.1  | 5.5<br>6.9   | 135.0<br>139.5     | 133.2<br>137.3 | 137.3<br>143.0 | 133.0<br>138.4 | 135.7<br>141.3    | 122.9<br>126.0   | 117.1<br>119.1 | 129.4<br>131.5 | 132.7<br>136.9 | 127.5<br>132.2 | 117.0<br>108.9 |
| 2007 Q1         | 7.1          | 5.9          | 140.7              | 135.8          | 146.0          | 138.4          | 141.7             | 126.4            | 118.6          | 130.4          | 137.4          | 134.5          | 101.8          |
| Q2<br>Q3        | 5.9<br>6.5   | 2.8<br>4.1   | 140.1<br>143.6     | 135.0<br>137.7 | 145.5<br>147.4 | 139.3<br>142.2 | 140.0<br>144.4    | 124.5<br>127.7   | 118.3<br>118.7 | 124.7<br>128.5 | 136.0<br>140.2 | 131.1<br>135.9 | 106.3<br>111.9 |
| 2007 Apr.       | 8.4          | 6.1          | 138.8              | 134.2          | 146.1          |                | 139.1             | 124.7            | 118.3          | 123.4          | 135.4          | 129.7          | 105.7          |
| May             | 3.3          | 1.6          | 139.1              | 133.6          | 144.8          | 138.1<br>138.2 | 138.2             | 124.3            | 118.9          | 124.5          | 134.8          | 130.2          | 107.3          |
| June<br>July    | 6.2<br>10.3  | 0.8<br>7.6   | 142.4<br>141.5     | 137.0<br>136.4 | 145.6<br>142.0 | 141.5<br>140.4 | 142.8<br>142.0    | 124.5<br>127.7   | 117.6<br>119.6 | 126.3<br>130.2 | 137.9<br>138.4 | 133.4<br>135.7 | 105.9<br>112.4 |
| Aug.            | 9.2          | 5.1          | 146.0              | 140.3          | 150.2          | 143.6          | 147.0             | 129.0            | 120.0          | 130.2          | 141.9          | 138.1          | 113.1          |
| Sep.            | 0.7          | -0.2         | 143.3              | 136.3          | 149.9          | 142.6          | 144.3             | 126.4            | 116.3          | 125.0          | 140.2          | 133.9          | 110.1          |
| 2002            | 2.2          | 2.0          | 07.6               |                |                |                | al percentage cha |                  |                | 00.0           | 00.5           | 06.0           | 06.4           |
| 2003<br>2004    | -3.2<br>-0.1 | -3.0<br>2.6  | 97.6<br>97.5       | 96.2<br>96.4   | 96.3<br>95.7   | 101.1<br>101.4 | 97.4<br>97.1      | 94.8<br>97.3     | 93.6<br>98.4   | 92.3<br>91.7   | 99.5<br>98.9   | 96.0<br>96.3   | 86.4<br>99.6   |
| 2005            | 2.8<br>3.5   | 7.9          | 100.2<br>103.8     | 100.2          | 96.8<br>98.8   | 103.4<br>106.6 | 99.1              | 105.0            | 111.2          | 91.2<br>91.3   | 101.5          | 98.3           | 137.6          |
| 2006<br>2006 Q2 | 4.0          | 7.4          | 103.8              | 104.4          | 98.4           | 106.9          | 101.8             | 112.8<br>113.2   | 123.1<br>124.0 | 91.5           | 105.0<br>104.3 | 101.8          | 166.8<br>173.9 |
| Q3              | 2.8          | 5.6          | 103.8              | 104.8          | 98.2           | 106.5          | 101.7             | 113.5            | 124.2          | 90.6           | 105.3          | 102.2          | 166.4          |
| Q4              | 2.5          | 1.6          | 104.4              | 105.6          | 99.4           | 106.7          | 102.7             | 111.5            | 121.6          | 90.0           | 105.0          | 102.2          | 156.0          |
| 2007 Q1<br>Q2   | 1.6<br>2.8   | -1.0<br>0.1  | 105.2<br>106.2     | 107.0<br>108.1 | 99.4<br>100.2  | 107.6<br>107.9 | 103.4<br>104.1    | 111.9<br>113.4   | 122.4<br>124.7 | 89.6<br>88.4   | 105.3<br>105.9 | 102.9<br>102.9 | 151.2<br>161.1 |
| Q3              | 2.6          | 1.0          | 106.4              | 108.5          | 100.4          | 108.1          | 104.3             | 114.5            | 126.6          | 88.7           | 106.8          | 103.1          | 165.0          |
| 2007 Apr.       | 2.5          | -0.5         | 105.8              | 107.7          | 100.1          | 107.1          | 103.8             | 112.9            | 123.8          | 88.5           | 106.3          | 102.9          | 158.7          |
| May<br>June     | 2.9<br>2.9   | -1.0<br>2.0  | 106.2<br>106.5     | 108.1<br>108.5 | 100.1<br>100.2 | 108.5<br>108.3 | 104.2<br>104.3    | 112.7<br>114.5   | 123.9<br>126.4 | 88.0<br>88.6   | 105.5<br>105.8 | 102.7<br>103.1 | 159.7<br>164.8 |
| July            | 3.0          | 1.3          | 106.6              | 108.5          | 100.7          | 108.8          | 104.4             | 114.6            | 127.0          | 88.2           | 106.6          | 103.2          | 166.7          |
| Aug.<br>Sep.    | 2.2<br>2.5   | -0.7<br>2.4  | 106.0<br>106.6     | 108.4<br>108.7 | 100.2<br>100.4 | 107.4<br>108.0 | 104.0<br>104.3    | 113.8<br>115.1   | 125.7<br>127.2 | 88.0<br>89.8   | 106.4<br>107.3 | 102.5<br>103.6 | 163.2<br>165.1 |
| ~-r·            |              |              |                    |                |                |                |                   |                  |                |                | 22.10          |                |                |

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

|  |  | European                        |                                 | outside the                          | euro area)                           | Russia                                       | Switzer-<br>land                       | Turkey                                 | United<br>States                             |  | Asia   | 1  | Africa                                       | Latin<br>America                       | Other countries                      |
|--|--|---------------------------------|---------------------------------|--------------------------------------|--------------------------------------|--|--|--|--|--|--|--|--|--|--------------------------------------|
|  |  | Denmark                         | Sweden                          | United<br>Kingdom                    | Other EU countries                   |  | iand                                   |  | States                                       | China  | Japan  | Other<br>Asian<br>countries                  |  | America                                | countries                            |
|  | 1  | 2                               | 3                               | 4                                    | 5                                    | 6  | 7<br>Exports (                         | f.o.b.)                                | 9  | 10   | 11   | 12   | 13   | 14                                     | 15                                   |
| 2003<br>2004<br>2005<br>2006                     | 1,059.5<br>1,146.1<br>1,241.0<br>1,392.8           | 24.8<br>25.8<br>29.0<br>31.7    | 38.6<br>42.2<br>45.2<br>49.8    | 194.6<br>204.3<br>202.9<br>216.6     | 125.2<br>138.7<br>158.4<br>195.5     | 29.2<br>35.9<br>43.7<br>55.2                 | 62.9<br>66.6<br>70.8<br>77.7           | 24.8<br>31.9<br>34.7<br>38.9           | 167.0<br>172.6<br>185.1<br>201.0             | 35.1<br>40.4<br>43.3<br>53.9                 | 31.3<br>33.3<br>34.0<br>34.5                 | 134.7<br>151.6<br>166.4<br>184.9             | 59.4<br>64.5<br>73.3<br>77.9                 | 37.8<br>40.6<br>46.9<br>54.8           | 94.1<br>97.6<br>107.3<br>120.3       |
| 2006 Q2<br>Q3<br>Q4                              | 342.5<br>350.1<br>364.0                            | 7.9<br>7.9<br>8.1               | 12.2<br>12.7<br>13.1            | 53.9<br>54.6<br>54.8                 | 48.0<br>49.7<br>52.3                 | 12.9<br>14.2<br>15.6                         | 18.6<br>19.6<br>21.0                   | 9.9<br>9.7<br>9.7                      | 49.6<br>49.9<br>51.1                         | 12.7<br>13.7<br>14.7                         | 8.4<br>8.7<br>8.6                            | 45.0<br>46.1<br>49.0                         | 19.2<br>19.3<br>20.1                         | 13.5<br>13.7<br>14.3                   | 30.6<br>30.3<br>31.6                 |
| 2007 Q1<br>Q2<br>Q3                              | 369.8<br>371.7<br>381.8                            | 8.3<br>8.4<br>8.5               | 13.5<br>13.9<br>14.1            | 56.6<br>55.9<br>58.5                 | 54.1<br>55.3<br>57.9                 | 15.7<br>16.7<br>17.1                         | 20.5<br>20.0<br>20.5                   | 10.3<br>9.9<br>10.3                    | 49.9<br>48.6<br>49.2                         | 14.4<br>14.9<br>15.3                         | 8.8<br>8.9<br>8.4                            | 49.1<br>49.0<br>51.0                         | 21.4<br>21.6<br>22.1                         | 14.9<br>15.4<br>15.6                   | 32.2<br>33.2<br>33.2                 |
| 2007 May<br>June<br>July<br>Aug.<br>Sep.<br>Oct. | 123.1<br>126.3<br>125.6<br>128.9<br>127.3<br>130.1 | 2.8<br>2.7<br>2.9<br>2.9<br>2.7 | 4.7<br>4.8<br>4.8<br>4.8<br>4.6 | 18.3<br>19.2<br>19.4<br>20.1<br>19.1 | 18.4<br>18.8<br>19.1<br>19.6<br>19.3 | 5.6<br>5.7<br>5.7<br>5.8<br>5.6<br>5.9       | 6.7<br>6.7<br>6.9<br>6.9<br>6.9        | 3.3<br>3.3<br>3.5<br>3.5<br>3.5        | 15.5<br>16.6<br>16.3<br>16.5<br>16.4<br>16.3 | 5.1<br>5.0<br>5.0<br>5.1<br>5.2<br>5.2       | 2.9<br>3.1<br>2.8<br>2.9<br>2.6<br>2.8       | 16.2<br>16.7<br>17.0<br>17.1<br>16.9<br>17.2 | 7.1<br>7.3<br>7.3<br>7.4<br>7.3<br>7.4       | 5.0<br>5.1<br>5.2<br>5.4<br>5.1<br>5.4 | 11.5<br>11.5<br>10.1<br>11.0<br>12.0 |
| 2006   | 100.0  | 2.3                             | 3.6                             | 15.6                                 | 14.0                                 | 4.0  | share of to                            | tal exports<br>2.8                     | 14.4   | 3.9  | 2.5  | 13.3   | 5.6  | 3.9                                    | 8.6                                  |
| 2000   | 100.0  | 2.3                             | 3.0                             | 13.0                                 | 14.0                                 | 4.0  | Imports (                              |  | 14.4   | 3.9  | 2.3  | 13.3   | 3.0  | 3.9                                    | 8.0                                  |
| 2003<br>2004<br>2005<br>2006                     | 986.8<br>1,073.4<br>1,225.6<br>1,404.1             | 23.7<br>25.4<br>26.3<br>28.4    | 36.9<br>39.8<br>42.2<br>47.7    | 138.6<br>144.4<br>152.4<br>166.6     | 109.0<br>116.8<br>129.4<br>154.5     | 47.4<br>56.6<br>76.2<br>95.6                 | 50.5<br>53.3<br>58.0<br>62.4           | 19.4<br>23.2<br>25.5<br>29.5           | 110.5<br>113.3<br>120.0<br>131.0             | 74.4<br>92.3<br>117.9<br>144.4               | 52.1<br>54.0<br>53.0<br>56.9                 | 142.8<br>162.3<br>191.3<br>217.6             | 68.8<br>72.8<br>95.9<br>110.6                | 39.9<br>45.1<br>53.7<br>66.2           | 72.9<br>74.0<br>83.7<br>92.8         |
| 2006 Q2<br>Q3<br>Q4                              | 349.3<br>355.6<br>358.3                            | 7.0<br>7.2<br>7.1               | 11.6<br>12.1<br>12.6            | 42.8<br>41.3<br>41.0                 | 37.7<br>39.5<br>41.6                 | 25.5<br>24.1<br>22.2                         | 15.4<br>16.1<br>15.9                   | 7.5<br>7.5<br>7.6                      | 32.2<br>32.7<br>33.6                         | 35.4<br>35.8<br>39.7                         | 14.1<br>14.4<br>14.3                         | 54.9<br>54.8<br>54.0                         | 27.3<br>28.2<br>27.8                         | 16.3<br>16.8<br>17.4                   | 21.6<br>25.1<br>23.5                 |
| 2007 Q1<br>Q2<br>Q3                              | 360.5<br>359.9<br>372.7                            | 7.0<br>7.0<br>7.3               | 12.9<br>12.7<br>12.8            | 40.8<br>41.2<br>42.1                 | 42.3<br>43.3<br>45.3                 | 22.6<br>23.7<br>23.6                         | 16.9<br>16.5<br>17.2                   | 7.9<br>7.9<br>8.1                      | 33.7<br>32.1<br>32.7                         | 42.1<br>39.8<br>44.4                         | 14.9<br>14.2<br>14.5                         | 53.8<br>53.2<br>53.9                         | 26.5<br>27.0<br>27.8                         | 17.9<br>18.3<br>18.9                   | 21.2<br>22.9<br>24.2                 |
| 2007 May<br>June<br>July<br>Aug.<br>Sep.<br>Oct. | 119.1<br>121.2<br>124.3<br>124.8<br>123.6<br>126.1 | 2.2<br>2.4<br>2.5<br>2.4<br>2.4 | 4.3<br>4.2<br>4.2<br>4.3<br>4.3 | 13.4<br>14.0<br>14.2<br>14.3<br>13.5 | 14.3<br>15.0<br>14.7<br>15.2<br>15.3 | 7.8<br>8.0<br>8.2<br>7.8<br>7.6<br>9.0       | 5.1<br>5.7<br>5.7<br>5.8<br>5.7<br>5.8 | 2.6<br>2.7<br>2.7<br>2.7<br>2.7<br>2.7 | 10.9<br>10.6<br>10.9<br>10.8<br>11.1<br>10.4 | 13.1<br>13.7<br>14.8<br>14.9<br>14.7<br>14.5 | 4.8<br>4.8<br>4.7<br>5.1<br>4.7<br>4.9       | 17.8<br>17.9<br>18.4<br>18.1<br>17.4<br>17.4 | 8.9<br>9.6<br>9.4<br>9.1<br>9.3<br>9.2       | 6.1<br>6.2<br>6.2<br>6.3<br>6.4<br>6.5 | 7.8<br>6.5<br>7.8<br>7.9<br>8.5      |
| 2006   | 100.0  | 2.0                             | 3.4                             | 11.9                                 | 11.0                                 | 6.8  | share of to                            | tal imports<br>2.1                     | 9.3  | 10.3   | 4.1  | 15.5   | 7.9  | 4.7                                    | 6.6                                  |
| 2000   | 100.0  | 2.0                             | 5.4                             | 11.9                                 | 11.0                                 | 0.8  | Balar                                  |  | 9.3  | 10.3   | 4.1  | 15.5   | 1.9  | 4./                                    | 0.0                                  |
| 2003<br>2004<br>2005<br>2006                     | 72.7<br>72.8<br>15.4<br>-11.3                      | 1.1<br>0.4<br>2.7<br>3.3        | 1.8<br>2.4<br>3.0<br>2.1        | 56.0<br>60.0<br>50.5<br>50.0         | 16.2<br>21.9<br>29.1<br>41.0         | -18.2<br>-20.7<br>-32.5<br>-40.4             | 12.4<br>13.3<br>12.8<br>15.3           | 5.4<br>8.6<br>9.2<br>9.4               | 56.6<br>59.3<br>65.1<br>70.1                 | -39.3<br>-51.9<br>-74.6<br>-90.4             | -20.8<br>-20.7<br>-19.0<br>-22.3             | -8.1<br>-10.7<br>-24.9<br>-32.7              | -9.4<br>-8.3<br>-22.7<br>-32.7               | -2.1<br>-4.5<br>-6.8<br>-11.5          | 21.2<br>23.6<br>23.6<br>27.5         |
| 2006 Q2<br>Q3<br>Q4                              | -6.8<br>-5.5<br>5.7                                | 0.9<br>0.7<br>1.1               | 0.6<br>0.6<br>0.5               | 11.1<br>13.3<br>13.8                 | 10.4<br>10.2<br>10.7                 | -12.6<br>-9.8<br>-6.6                        | 3.2<br>3.5<br>5.0                      | 2.5<br>2.2<br>2.1                      | 17.4<br>17.2<br>17.5                         | -22.7<br>-22.1<br>-25.0                      | -5.7<br>-5.7<br>-5.6                         | -9.9<br>-8.8<br>-5.0                         | -8.2<br>-8.9<br>-7.8                         | -2.8<br>-3.2<br>-3.2                   | 9.0<br>5.2<br>8.1                    |
| 2007 Q1<br>Q2<br>Q3                              | 9.3<br>11.8<br>9.1                                 | 1.3<br>1.4<br>1.2               | 0.6<br>1.2<br>1.3               | 15.8<br>14.7<br>16.5                 | 11.8<br>12.0<br>12.7                 | -6.9<br>-7.1<br>-6.5                         | 3.6<br>3.5<br>3.4                      | 2.4<br>2.0<br>2.2                      | 16.3<br>16.5<br>16.5                         | -27.8<br>-24.9<br>-29.1                      | -6.1<br>-5.4<br>-6.1                         | -4.7<br>-4.1<br>-3.0                         | -5.1<br>-5.4<br>-5.7                         | -3.0<br>-3.0<br>-3.2                   | 10.9<br>10.3<br>9.0                  |
| 2007 May<br>June<br>July<br>Aug.<br>Sep.<br>Oct. | 4.0<br>5.1<br>1.3<br>4.1<br>3.6<br>4.0             | 0.6<br>0.3<br>0.4<br>0.5<br>0.3 | 0.4<br>0.6<br>0.5<br>0.5<br>0.4 | 4.9<br>5.2<br>5.1<br>5.8<br>5.6      | 4.1<br>3.8<br>4.4<br>4.3<br>4.0      | -2.2<br>-2.3<br>-2.5<br>-2.1<br>-2.0<br>-3.1 | 1.6<br>1.0<br>1.1<br>1.1<br>1.2<br>1.2 | 0.7<br>0.6<br>0.6<br>0.8<br>0.8        | 4.6<br>6.0<br>5.5<br>5.7<br>5.3<br>5.8       | -8.0<br>-8.7<br>-9.8<br>-9.8<br>-9.5         | -1.9<br>-1.7<br>-1.9<br>-2.2<br>-2.1<br>-2.1 | -1.6<br>-1.3<br>-1.4<br>-1.1<br>-0.5<br>-0.2 | -1.8<br>-2.3<br>-2.0<br>-1.7<br>-2.0<br>-1.9 | -1.1<br>-1.0<br>-0.9<br>-1.4<br>-1.1   | 3.6<br>5.0<br>2.3<br>3.1<br>3.5      |

Sources: Eurostat and ECB calculations based on Eurostat data (balance and columns 5, 12 and 15).



### **EXCHANGE RATES**

# 8.1 Effective exchange rates (period averages; index 1999 Q1=100)

|  |   |  | EER-24  |                                  |                                |                                  | EER-44  |  |
|--|---|--|---|----------------------------------|--------------------------------|----------------------------------|---|--|
|  | Nominal   | Real<br>CPI  | Real<br>PPI   | Real<br>GDP<br>deflator          | Real<br>ULCM                   | Real<br>ULCT                     | Nominal   | Real<br>CPI  |
|  | 1   | 2  | 3   | 4                                | 5                              | 6                                | 7   | 8  |
| 2005<br>2006<br>2007                                     | 103.3<br>103.6<br>107.7                                     | 104.2<br>104.5<br>108.3  | 102.4<br>102.9<br>105.4                                     | 102.4<br>102.4                   | 99.3<br>99.6                   | 102.1<br>101.6                   | 109.7<br>110.0<br>114.1                                     | 103.7<br>103.4<br>106.5  |
| 2006 Q4<br>2007 Q1<br>Q2<br>Q3<br>Q4                     | 104.6<br>105.5<br>107.1<br>107.6<br>110.5                   | 105.3<br>106.1<br>107.7<br>108.2<br>111.1                            | 104.1<br>104.6<br>104.7<br>105.1<br>107.0                   | 103.2<br>104.0<br>105.5<br>105.9 | 99.5<br>99.6<br>102.1<br>102.7 | 101.0<br>102.3<br>104.1<br>104.7 | 111.3<br>112.0<br>113.5<br>114.1<br>116.9                   | 104.3<br>104.8<br>106.0<br>106.4<br>108.9                            |
| 2006 Dec.  | 105.5   | 106.1  | 104.9   | -                                | _                              | -                                | 112.3   | 105.0  |
| 2007 Jan.<br>Feb.<br>Mar.<br>Apr.<br>May<br>June<br>July | 104.9<br>105.4<br>106.1<br>107.1<br>107.3<br>106.9<br>107.6 | 105.6<br>106.1<br>106.7<br>107.9<br>107.9<br>107.4<br>108.1<br>107.7 | 104.4<br>104.6<br>104.7<br>105.1<br>104.7<br>104.3<br>104.8 | -                                | -                              | -<br>-<br>-<br>-<br>-            | 111.5<br>111.9<br>112.7<br>113.7<br>113.6<br>113.1<br>113.9 | 104.3<br>104.6<br>105.4<br>106.3<br>106.1<br>105.6<br>106.3<br>106.0 |
| Aug.<br>Sep.<br>Oct.<br>Nov.<br>Dec.                     | 107.1<br>108.2<br>109.4<br>111.0<br>111.2                   | 107.7<br>108.8<br>110.0<br>111.6<br>111.8                            | 105.6<br>106.5<br>107.3<br>107.3                            | -<br>-<br>-<br>-                 | -<br>-<br>-<br>-               | -<br>-<br>-<br>-                 | 113.7<br>114.7<br>115.7<br>117.6<br>117.6                   | 106.0<br>106.9<br>107.8<br>109.5<br>109.5                            |
|  |   |  | % change versi  | us previous month                |                                |                                  |   |  |
| 2007 Dec.  | 0.2   | 0.2  | 0.0   | sus previous year                | -                              | -                                | 0.0   | 0.0  |
| 2007 Dec.  | 5.4   | 5.4  | 2.3   | -                                | -                              | -                                | 4.7   | 4.3  |

# 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.

|                      | ral exchan                 |   |                               |                            |   |                                  |                               |                            |                            |                            |                            |
|----------------------|----------------------------|---|-------------------------------|----------------------------|---|----------------------------------|-------------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| (period a            | averages; units o          | f national curre                        | ency per euro)                |                            |   |                                  |                               |                            |                            |                            |                            |
|                      | Danish<br>krone            | Swedish<br>krona                        | Pound<br>sterling do          | US Japa                    | nese Swiss<br>yen franc                   | South Korean won                 | Hong Kong<br>dollar           | Singapore<br>dollar        | Canadian<br>dollar         | Norwegian krone            | Australian<br>dollar       |
|                      | 1                          | 2                                       | 3                             | 4                          | 5 6                                       |                                  | 8                             | 9                          | 10                         | 11                         | 12                         |
| 2005                 | 7.4518                     | 9.2822                                  | 0.68380 1.2                   | 441 13                     | 6.85 1.5483                               | 1,273.61                         | 9.6768                        | 2.0702                     | 1.5087                     | 8.0092                     | 1.6320                     |
| 2006<br>2007         | 7.4591<br>7.4506           |   |                               |                            | 6.02 1.5729<br>1.25 1.6427                | 1,198.58<br>1,272.99             | 9.7545<br>10.6912             | 1.9941<br>2.0636           | 1.4237<br>1.4678           | 8.0472<br>8.0165           | 1.6668<br>1.6348           |
| 2007 Q2<br>Q3<br>Q4  | 7.4500<br>7.4446<br>7.4557 | 9.2639                                  | 0.68001 1.3                   | 738 16                     | 2.89 1.6478<br>1.90 1.6473<br>3.83 1.6596 | 1,252.05<br>1,274.31<br>1,334.12 | 10.5372<br>10.7250<br>11.2639 | 2.0562<br>2.0841<br>2.1061 | 1.4791<br>1.4374<br>1.4201 | 8.1060<br>7.9175<br>7.8778 | 1.6214<br>1.6229<br>1.6279 |
| 2007 June<br>July    | 7.4452<br>7.4410           |   |                               |                            | 4.55 1.6543<br>6.76 1.6567                | 1,245.39<br>1,259.70             | 10.4854<br>10.7247            | 2.0619<br>2.0789           | 1.4293<br>1.4417           | 8.0590<br>7.9380           | 1.5930<br>1.5809           |
| Aug.                 | 7.4429<br>7.4506           | 9.3231                                  | 0.67766 1.3                   | 622 15                     | 9.05 1.6383<br>9.82 1.6475                | 1,273.37<br>1,291.46             | 10.6469<br>10.8151            | 2.0744<br>2.1009           | 1.4420<br>1.4273           | 7.9735<br>7.8306           | 1.6442<br>1.6445           |
| Sep.<br>Oct.         | 7.4534                     | 9.1735                                  | 0.69614 1.4                   | 227 16                     | 4.95 1.6706                               | 1,301.67                         | 11.0327                       | 2.0849                     | 1.3891                     | 7.6963                     | 1.5837                     |
| Nov.<br>Dec.         | 7.4543<br>7.4599           |   |                               |                            | 2.89 1.6485<br>3.55 1.6592                | 1,348.46<br>1,356.79             | 11.4211<br>11.3619            | 2.1242<br>2.1108           | 1.4163<br>1.4620           | 7.9519<br>8.0117           | 1.6373<br>1.6703           |
|                      |                            |   |                               |                            | % change versus                           |                                  |                               |                            |                            |                            |                            |
| 2007 Dec.            | 0.1                        | 1.5                                     | 1.6                           | -0.8                       | 0.4 0.6<br>% change versu                 | 0.6                              | -0.5                          | -0.6                       | 3.2                        | 0.8                        | 2.0                        |
| 2007 Dec.            | 0.1                        | 4.4                                     | 7.1                           | 10.3                       | 5.6 3.9                                   | 11.0                             | 10.6                          | 3.7                        | -3.9                       | -1.8                       | -0.7                       |
|                      | Czech<br>koruna            | Estonian<br>kroon                       | Cyprus<br>pound               | Latvian<br>lats            | Lithuanian<br>litas                       | Hungarian<br>forint              | Maltese<br>lira               | Polish zloty               | Slovak<br>koruna           | Bulgarian<br>lev           | New Roma-<br>nian leu 1)   |
|                      | 13                         | 14                                      | 15                            | 16                         | 17  | 18                               | 19                            | 20                         | 21                         | 22                         | 23                         |
| 2005<br>2006<br>2007 | 29.782<br>28.342<br>27.766 | 15.6466<br>15.6466<br>15.6466           | 0.57683<br>0.57578<br>0.58263 | 0.6962<br>0.6962<br>0.7001 | 3.4528<br>3.4528<br>3.4528                | 248.05<br>264.26<br>251.35       | 0.4299<br>0.4293<br>0.4293    | 4.0230<br>3.8959<br>3.7837 | 38.599<br>37.234<br>33.775 | 1.9558<br>1.9558<br>1.9558 | 3.6209<br>3.5258<br>3.3353 |
| 2007 Q2<br>Q3<br>Q4  | 28.272<br>27.941<br>26.826 | 15.6466<br>15.6466                      | 0.58272<br>0.58417<br>0.58447 | 0.6986<br>0.6988<br>0.7005 | 3.4528<br>3.4528<br>3.4528                | 248.31<br>251.82<br>252.86       | 0.4293<br>0.4293<br>0.4293    | 3.8005<br>3.7900<br>3.6584 | 33.751<br>33.579<br>33.424 | 1.9558<br>1.9558<br>1.9558 | 3.2789<br>3.2321<br>3.4489 |
| 2007 June<br>July    | 28.546<br>28.359           | 15.6466<br>15.6466                      | 0.58352<br>0.58412            | 0.6963<br>0.6969           | 3.4528<br>3.4528                          | 250.29<br>246.90                 | 0.4293<br>0.4293              | 3.8074<br>3.7682           | 34.002<br>33.326           | 1.9558<br>1.9558           | 3.2243<br>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.<br>Oct.         | 27.573<br>27.335           | 15.6466<br>15.6466                      | 0.58420<br>0.58420            | 0.7021<br>0.7030           | 3.4528<br>3.4528                          | 253.33<br>251.02                 | 0.4293<br>0.4293              | 3.7891<br>3.7062           | 33.829<br>33.624           | 1.9558<br>1.9558           | 3.3481<br>3.3537           |
| Nov.<br>Dec.         | 26.733<br>26.317           | 15.6466<br>15.6466                      | 0.58420<br>0.58511            | 0.7005<br>0.6975           | 3.4528<br>3.4528                          | 254.50<br>253.18                 | 0.4293<br>0.4293              | 3.6575<br>3.6015           | 33.232<br>33.404           | 1.9558<br>1.9558           | 3.4739<br>3.5351           |
| Bec.                 | 20.317                     | 13.0100                                 | 0.50511                       |                            | % change versus                           |                                  | 0.1275                        | 3.0013                     | 33.101                     | 1.7550                     | 3.3331                     |
| 2007 Dec.            | -1.6                       | 0.0                                     | 0.2                           | -0.4                       | 0.0                                       | -0.5                             | 0.0                           | -1.5                       | 0.5                        | 0.0                        | 1.8                        |
| 2007 Dec.            | -5.3                       | 0.0                                     | 1.2                           | 0.0                        | % change versu<br>0.0                     | -0.3                             | 0.0                           | -5.5                       | -4.5                       | 0.0                        | 3.6                        |
|                      | <b>'</b>                   |   |                               |                            |   |                                  |                               |                            |                            |                            |                            |
|                      | yuan renmin                | inese<br>ibi <sup>2)</sup> Croat<br>kun |                               |                            |   |                                  |                               | rouble 2)                  | South African<br>rand      |                            | New Turkish<br>lira 3)     |
|                      |                            | 24                                      |                               |                            |   | 28 29                            |                               | 31                         | 32                         |                            | 34                         |
| 2005<br>2006         |                            | 1955 7.40<br>0096 7.32                  |                               |                            |   |                                  |                               | 35.1884<br>34.1117         | 7.9183<br>8.5312           |                            | 1.6771<br>1.8090           |
| 2007                 |                            | 4178 7.33                               |                               |                            |   |                                  |                               | 35.0183                    | 9.6596                     |                            | 1.7865                     |
| 2007 Q2<br>Q3<br>Q4  | 10.3                       | 3476 7.34<br>3834 7.30                  |                               | 2 12,082.6<br>1 12,705.6   | 2 4.620<br>2 4.760                        |                                  | 63.035                        | 34.8589<br>35.0350         | 9.5688<br>9.7645           |                            | 1.8029<br>1.7685           |
|                      |                            | 7699 7.32                               |                               |                            |   |                                  |                               | 35.6947                    | 9.8088                     |                            | 1.7261                     |
| 2007 June<br>July    | 10.3                       | 2415 7.33<br>3899 7.29                  | 947 83.1                      | 6 12,441.2                 | 8 4.718                                   | 4 1.7446                         | 62.418                        | 34.7739<br>35.0292         | 9.6198<br>9.5712           | 41.870                     | 1.7728<br>1.7574           |
| Aug.<br>Sep.         | 10.3                       | 3162 7.31<br>4533 7.31                  | 61 88.4                       |                            | 5 4.745                                   | 7 1.8786<br>9 1.9358             | 62.862                        | 34.9211<br>35.1723         | 9.8391<br>9.8912           | 43.337                     | 1.7921<br>1.7536           |
| Oct.                 | 10.0                       | 5741 7.32                               | 284 86.3                      | 0 12,945.8                 | 0 4.800                                   | 5 1.8739                         | 62.894                        | 35.4008                    | 9.6371                     | 44.898                     | 1.7089                     |
| Nov.<br>Dec.         | 10.8                       | 8957 7.33<br>7404 7.31                  | 865 89.3                      | 4 13,608.9                 | 2 4.927                                   | 9 1.9231                         | 63.271                        | 35.9174<br>35.7927         | 9.8553<br>9.9626           | 46.120                     | 1.7498<br>1.7195           |
| Dec.                 | 10.                        | 1.31                                    | 70 90.8                       |                            |   | previous month                   | 00.550                        | 33.1941                    | 9.9020                     | 74.133                     | 1./193                     |
| 2007 Dec.            |                            | -1.4                                    | 0.3 1.                        | 7 0.                       | 1 -1                                      | 4 -1.6                           | -4.3                          | -0.3                       | 1.1                        | -4.3                       | -1.7                       |
| 2007 F               |                            | 2.0                                     | 0.5                           |                            | % change versu                            |                                  |                               | 2 :                        |                            |                            | 0.1                        |
| 2007 Dec.            |                            | 3.9                                     | 0.5 -0.                       | 8 13.                      | 5 3                                       | 6 -0.9                           | -7.2                          | 3.1                        | 7.0                        | -6.5                       | -9.1                       |

- Data prior to July 2005 refer to the Romanian leu; 1 new Romanian leu is equivalent to 10,000 old Romanian lei.
   For these currencies the ECB computes and publishes euro reference exchange rates as from 1 April 2005. Previous data are indicative.
   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

#### 1. Economic and financial developments

| 1. Economic                               | Bulgaria                             | Czech<br>Republic                    | Denmark                              | Estonia                              | Latvia                                  | Lithuania                            | Hungary                              | Poland                               | Romania                              | Slovakia                             | Sweden                               | United<br>Kingdom                    |
|---|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|---|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|
|   | 1                                    | 2                                    | 3                                    | 4                                    | 5                                       | HICP 6                               | 7                                    | 8                                    | 9                                    | 10                                   | 11                                   | 12                                   |
| 2006<br>2007                              | 7.4                                  | 2.1<br>3.0                           | 1.9                                  | 4.4<br>6.7                           | 6.6                                     | 3.8                                  | 4.0                                  | 1.3                                  | 6.6                                  | 4.3                                  | 1.5                                  | 2.3                                  |
| 2007 Q2<br>Q3<br>Q4                       | 4.7<br>9.0                           | 2.6<br>2.7<br>4.9                    | 1.5<br>1.0                           | 5.8<br>6.7<br>9.2                    | 8.5<br>10.4                             | 5.0<br>5.9                           | 8.5<br>7.3                           | 2.3<br>2.4                           | 3.9<br>5.1                           | 1.7<br>1.4                           | 1.4<br>1.4                           | 2.6<br>1.8                           |
| 2007 Aug.<br>Sep.<br>Oct.                 | 9.3<br>11.0<br>10.6                  | 2.6<br>2.8<br>4.0                    | 0.9<br>1.2<br>1.8<br>2.5             | 6.1<br>7.5<br>8.7                    | 10.2<br>11.5<br>13.2                    | 5.6<br>7.1<br>7.6                    | 7.1<br>6.4<br>6.9<br>7.2             | 2.1<br>2.7<br>3.1                    | 5.0<br>6.1<br>6.9                    | 1.2<br>1.7<br>2.4                    | 1.2<br>1.6<br>1.9                    | 1.8<br>1.8<br>2.1<br>2.1             |
| Nov.<br>Dec.                              | 11.4                                 | 5.1<br>5.5                           |                                      | 9.3<br>9.7                           | 13.7                                    | 7.9                                  |                                      | 3.7                                  | 6.8                                  | 2.3                                  | 2.4                                  |                                      |
| 2004                                      | 2.3                                  | -3.0                                 | 1.9                                  | General gov                          | ernment det                             | ficit (-)/surplus                    | s (+) as a % or<br>-6.5              | -5.7                                 | -1.5                                 | -2.4                                 | 0.8                                  | -3.4                                 |
| 2004<br>2005<br>2006                      | 2.0<br>3.2                           | -3.5<br>-2.9                         | 4.6<br>4.6                           | 1.9<br>3.6                           | -0.4<br>-0.3                            | -0.5<br>-0.6                         | -7.8<br>-9.2                         | -4.3<br>-3.8                         | -1.3<br>-1.4<br>-1.9                 | -2.4<br>-2.8<br>-3.7                 | 2.4<br>2.5                           | -3.4<br>-3.3<br>-2.7                 |
| 2004                                      | 27.0                                 | 20.4                                 | 44.0                                 | Genera<br>5.1                        |   | ent gross debt a                     |                                      | 45.7                                 | 10.0                                 | 41.4                                 | 52.4                                 | 40.4                                 |
| 2004<br>2005<br>2006                      | 37.9<br>29.2<br>22.8                 | 30.4<br>30.2<br>30.1                 | 36.3<br>30.3                         | 4.4<br>4.0                           | 14.5<br>12.5<br>10.6                    | 18.6<br>18.2                         | 59.4<br>61.6<br>65.6                 | 47.1<br>47.6                         | 18.8<br>15.8<br>12.4                 | 41.4<br>34.2<br>30.4                 | 52.4<br>52.2<br>47.0                 | 40.4<br>42.1<br>43.2                 |
|   |                                      |                                      |                                      | ng-term govern                       |   |                                      |                                      |                                      |                                      |                                      |                                      |                                      |
| 2007 June<br>July<br>Aug.<br>Sep.<br>Oct. | 4.57<br>4.79<br>4.79<br>4.44<br>4.59 | 4.53<br>4.59<br>4.48<br>4.54<br>4.50 | 4.65<br>4.58<br>4.39<br>4.36<br>4.39 | -<br>-<br>-<br>-                     | 5.62<br>5.28<br>5.32<br>5.21<br>5.06    | 4.57<br>4.89<br>4.80<br>4.72<br>4.72 | 6.71<br>6.58<br>6.80<br>6.67<br>6.61 | 5.52<br>5.60<br>5.68<br>5.69<br>5.64 | 7.05<br>6.86<br>6.93<br>6.93<br>6.93 | 4.66<br>4.70<br>4.65<br>4.61<br>4.64 | 4.44<br>4.45<br>4.25<br>4.22<br>4.31 | 5.49<br>5.46<br>5.19<br>5.05<br>5.00 |
| Nov.                                      | 4.94                                 | 4.54                                 | 4.21                                 | 2                                    | 5.12                                    | 4.57                                 | 6.74                                 | 5.70                                 | 6.93                                 | 4.59                                 | 4.22                                 | 4.74                                 |
| 2007 June                                 | 4.53                                 | 2.93                                 | 4.37                                 | 3-month in<br>4.74                   | 8.09                                    | s a % per annu<br>4.91               | 8.02                                 | 4.52                                 | 7.26                                 | 4.27                                 | 3.67                                 | 5.88                                 |
| July<br>Aug.<br>Sep.<br>Oct.<br>Nov.      | 4.69<br>4.80<br>5.25<br>5.59<br>6.32 | 3.07<br>3.28<br>3.46<br>3.55<br>3.73 | 4.42<br>4.66<br>4.85<br>4.84<br>4.82 | 4.73<br>4.94<br>5.21<br>5.22<br>5.36 | 6.66<br>7.99<br>11.06<br>12.75<br>11.69 | 4.97<br>5.25<br>5.59<br>5.93<br>6.50 | 7.87<br>7.83<br>7.72<br>7.60<br>7.51 | 4.78<br>4.91<br>5.09<br>5.13<br>5.36 | 6.92<br>6.69<br>6.82<br>7.25<br>7.71 | 4.34<br>4.33<br>4.32<br>4.33<br>4.35 | 3.78<br>3.96<br>4.22<br>4.37<br>4.61 | 6.02<br>6.42<br>6.65<br>6.27<br>6.41 |
|   |                                      |                                      |                                      |                                      |   | Real GDP                             |                                      |                                      |                                      |                                      |                                      |                                      |
| 2005<br>2006                              | 6.2<br>6.1                           | 6.4<br>6.4                           | 3.1<br>3.5                           | 10.2<br>11.2                         | 10.6<br>11.9                            | 7.9<br>7.7                           | 4.1<br>3.9                           | 3.6<br>6.2                           | 4.2<br>7.7                           | 6.6<br>8.5                           | 3.3<br>4.1                           | 1.8<br>2.9                           |
| 2007 Q1<br>Q2<br>Q3                       | 6.2<br>6.6<br>4.5                    | 6.3<br>6.2<br>6.1                    | 2.9<br>0.5<br>1.7                    | 10.1<br>7.6<br>6.4                   | 11.2<br>11.0<br>10.9                    | 7.6<br>7.6<br>11.6                   | 2.6<br>1.6<br>1.1                    | 6.7<br>6.6<br>5.8                    | 6.0<br>5.6<br>5.7                    | 8.3<br>9.3<br>9.4                    | 3.2<br>2.9<br>2.6                    | 3.1<br>3.2<br>3.3                    |
|   |                                      |                                      |                                      |                                      |   | ccounts balance                      |                                      |                                      |                                      |                                      |                                      |                                      |
| 2005<br>2006                              | -11.0<br>-15.0                       | -1.5<br>-2.8                         | 4.5<br>2.6                           | -9.3<br>-13.2                        | -11.2<br>-21.1                          | -5.9<br>-9.6                         | -6.0<br>-5.9                         | -1.3<br>-2.6                         | -7.9<br>-10.5                        | -8.5<br>-7.1                         | 6.9                                  | -2.4<br>-3.8                         |
| 2007 Q1<br>Q2<br>Q3                       | -27.3<br>-18.9<br>-11.3              | 2.3<br>-4.7<br>-4.9                  | -2.0<br>2.8<br>2.9                   | -21.1<br>-11.7<br>-13.4              | -24.4<br>-22.7<br>-23.8                 | -12.2<br>-14.6<br>-10.2              | -4.6<br>-5.9<br>-3.2                 | -2.4<br>-4.2<br>-1.9                 | -16.9<br>-16.0<br>-11.0              | 1.0<br>-6.9<br>-6.6                  | 9.4<br>4.8<br>5.5                    | -5.4<br>-4.2<br>-6.2                 |
| 2005                                      | 2.4                                  | -0.6                                 | 0.9                                  | 2.6                                  | 15.2                                    | it labour costs<br>5.9               | 3.1                                  | 0.3                                  |                                      | 4.3                                  | 0.0                                  | 3.9                                  |
| 2006                                      | 4.5                                  | 1.7                                  | 2.2                                  | 8.0                                  | 14.0                                    | 8.5                                  |                                      |                                      |                                      | 1.7                                  | 0.4                                  | 2.6                                  |
| 2007 Q1<br>Q2<br>Q3                       | 14.6<br>13.2                         | 3.4<br>2.4<br>3.0                    | 4.4<br>6.3<br>3.9                    | 16.0<br>20.1<br>20.7                 | -<br>-<br>-                             | 4.6<br>7.7<br>10.8                   | -                                    | -                                    | -<br>-<br>-                          | 2.5<br>-0.4<br>0.3                   | 4.1<br>3.7<br>2.8                    | 0.3<br>2.4<br>2.3                    |
|   |                                      |                                      |                                      | Standardised                         | 1 5                                     |                                      |                                      |                                      |                                      |                                      |                                      |                                      |
| 2005<br>2006                              | 10.1                                 | 7.9<br>7.1                           | 4.8<br>3.9                           | 7.9<br>5.9                           | 8.9<br>6.9                              | 8.2<br>5.6                           | 7.2<br>7.4                           | 17.7<br>13.8                         | 7.1<br>7.3                           | 16.3<br>13.3                         | 7.4<br>7.1                           | 4.8<br>5.3                           |
| 2007 Q1<br>Q2<br>Q3                       | 7.7<br>7.1<br>6.7                    | 5.8<br>5.5<br>5.2                    | 4.0<br>3.9<br>3.8                    | 4.8<br>5.0<br>4.8                    | 6.4<br>5.9<br>5.8                       | 4.7<br>4.3<br>4.1                    | 7.3<br>7.2<br>7.2                    | 10.9<br>10.0<br>9.2                  | 6.4<br>6.7<br>6.5                    | 11.4<br>11.3<br>11.3                 | 6.5<br>6.1<br>5.8                    | 5.5<br>5.3<br>5.3                    |
| 2007 July<br>Aug.<br>Sep.<br>Oct.<br>Nov. | 6.9<br>6.6<br>6.5<br>6.1<br>5.8      | 5.3<br>5.2<br>5.1<br>5.0<br>4.8      | 3.9<br>3.9<br>3.8<br>3.3<br>3.2      | 4.7<br>4.7<br>4.8<br>5.0<br>5.2      | 6.0<br>5.8<br>5.7<br>5.5<br>5.4         | 4.2<br>4.0<br>4.0<br>4.0<br>4.0      | 7.2<br>7.3<br>7.2<br>7.3<br>7.3      | 9.5<br>9.2<br>8.9<br>8.7<br>8.5      | 6.5<br>6.5<br>6.5<br>7.3<br>7.2      | 11.4<br>11.3<br>11.3<br>11.3<br>11.0 | 5.7<br>5.8<br>5.9<br>5.9<br>6.0      | 5.3<br>5.3<br>5.2                    |

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

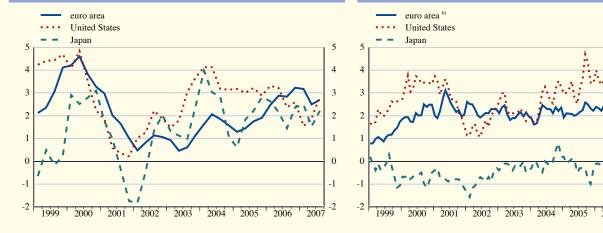
### 9.2 In the United States and Japan

#### 1. Economic and financial developments

|              | Consumer<br>price index | Unit labour<br>costs <sup>1)</sup><br>(manufacturing) | Real GDP   | Industrial<br>production<br>index<br>(manufacturing) | Unemployment<br>rate<br>as a % of<br>labour force<br>(s.a.) | Broad<br>money 2) | 3-month<br>interbank<br>deposit<br>rate <sup>3)</sup><br>as a %<br>per annum | 10-year<br>government<br>bond<br>yield <sup>3)</sup><br>as a %<br>per annum | Exchange<br>rate <sup>4)</sup><br>as national<br>currency<br>per euro | Fiscal<br>deficit (-)/<br>surplus (+)<br>as a % of<br>GDP | Gross<br>public<br>debt <sup>5)</sup><br>as a % of<br>GDP |
|--------------|-------------------------|---|------------|--|---|-------------------|--|---|---|---|---|
|              | 1                       | 2   | 3          | 4  | 5   | 6                 | 7  | 8   | 9   | 10  | 11  |
|              |                         |   |            |  | United States   |                   |  |   |   |   |   |
| 2004         | 2.7                     | -0.1  | 3.6        | 3.0  | 5.5   | 4.7               | 1.62   | 4.26  | 1.2439  | -4.4  | 48.9  |
| 2005<br>2006 | 3.4<br>3.2              | -0.5<br>-1.5  | 3.1<br>2.9 | 4.0<br>5.0   | 5.1<br>4.6  | 4.4<br>4.8        | 3.56<br>5.19   | 4.28<br>4.79  | 1.2441<br>1.2556  | -3.6<br>-2.6  | 49.2<br>48.7  |
| 2007         | 3.2                     | -1.5  | 2.9        | 5.0  | 4.6   | 4.0               | 5.30   | 4.63  | 1.3705  | -2.0  | 40.7  |
| 2006 Q4      | 1.9                     | 0.4   | 2.6        | 3.6  | 4.4   | 4.9               | 5.37   | 4.63  | 1.2887  | -2.1  | 48.7  |
| 2007 Q1      | 2.4                     | 0.9   | 1.5        | 2.3  | 4.5   | 5.4               | 5.36   | 4.68  | 1.3106  | -3.0  | 49.7  |
| Q2           | 2.7                     | 2.4   | 1.9        | 2.0  | 4.5   | 6.2               | 5.36   | 4.84  | 1.3481  | -2.6  | 48.7  |
| Q3           | 2.4                     | 2.8   | 2.8        | 1.8  | 4.7   | 6.4               | 5.45   | 4.74  | 1.3738  |   |   |
| Q4           |                         |   | •          |  | 4.8   |                   | 5.02   | 4.27  | 1.4486  |   |   |
| 2007 Aug.    | 2.0                     | -   | -          | 1.4  | 4.7   | 6.6               | 5.48   | 4.68  | 1.3622  | -   | -   |
| Sep.         | 2.8                     | -   | -          | 1.6  | 4.7   | 6.7               | 5.49   | 4.51  | 1.3896  | -   | -   |
| Oct.         | 3.5                     | -   | -          | 1.8  | 4.8   | 6.3               | 5.15   | 4.52  | 1.4227  | -   | -   |
| Nov.         | 4.3                     | -   | -          | 2.5  | 4.7   | 6.2               | 4.96   | 4.16  | 1.4684  | -   | -   |
| Dec.         |                         | -   | -          |  | 5.0   |                   | 4.97   | 4.10  | 1.4570  | -   |   |
|              |                         |   |            |  | Japan   |                   |  |   |   |   |   |
| 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  | 2.4        | 4.8  | 4.1   | 1.1               | 0.30   | 1.74  | 146.02  |   |   |
| 2007         |                         |   |            |  |   |                   | 0.79   | 1.68  | 161.25  |   |   |
| 2006 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  | 2.8        | 3.0  | 4.0   | 1.0               | 0.62   | 1.68  | 156.43  |   |   |
| Q2           | -0.1                    |   | 1.6        | 2.4  | 3.8   | 1.5               | 0.69   | 1.74  | 162.89  |   |   |
| Q3<br>Q4     | -0.1                    |   | 2.0        | 2.7  | 3.8   | 1.9               | 0.89   | 1.72  | 161.90  |   |   |
|              |                         | •   | •          | •  | •   |                   | 0.96   | 1.57  | 163.83  | •   | •   |
| 2007 Aug.    | -0.2                    |   | -          | 4.4  | 3.8   | 1.8               | 0.92   | 1.65  | 159.05  | -   | -   |
| Sep.         | -0.2                    |   | -          | 0.8  | 4.0   | 1.8               | 0.99   | 1.61  | 159.82  | -   | -   |
| Oct.         | 0.3                     |   | -          | 4.8  | 4.0   | 1.9               | 0.97   | 1.66  | 164.95  | -   | -   |
| Nov.         | 0.6                     |   | -          | 2.9  | 3.8   | 2.0               | 0.91   | 1.51  | 162.89  | -   | -   |
| Dec.         |                         |   | -          |  |   |                   | 0.99   | 1.53  | 163.55  | -   | -   |

### C37 Real gross domestic product (annual percentage changes; quarterly)

### C38 Consumer price indices



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).

- Data for the United States are seasonally adjusted. Average-of-period values; M2 for US, M2+CDs for Japan. For more information, see Sections 4.6 and 4.7. 2)
- 3)
- 4) For more information, see Section 8.2.
- Gross consolidated general government debt (end of period).
- Data refer to the changing composition of the euro area. For further information, see the General notes.

0

-1

-2



### LIST OF CHARTS

| CI  | Wonetary aggregates  | 312  |
|-----|--|------|
| C2  | Counterparts   | \$12 |
| C3  | Components of monetary aggregates  | \$13 |
| C4  | Components of longer-term financial liabilities  | \$13 |
| C5  | Loans to financial intermediaries and non-financial corporations   | \$14 |
| C6  | Loans to households  | \$15 |
| C7  | Loans to government and non-euro area residents  | \$16 |
| C8  | Total deposits by sector (financial intermediaries)  | \$17 |
| C9  | Total deposits and deposits included in M3 by sector (financial intermediaries)                            | \$17 |
| C10 | Total deposits by sector (non-financial corporations and households)                                       | 818  |
| C11 | Total deposits and deposits included in M3 by sector (non-financial corporations and households)           | 818  |
| C12 | Deposits by government and non-euro area residents   | \$19 |
| C13 | MFI holdings of securities   | \$20 |
| C14 | Total assets of investment funds   | \$24 |
| C15 | Total outstanding amounts and gross issues of securities, other than shares, issued by euro area residents | \$35 |
| C16 | Net issues of securities, other than shares, seasonally adjusted and non-seasonally adjusted               | \$37 |
| C17 | Annual growth rates of long-term debt securities, by sector of the issuer, in all currencies combined      | \$38 |
| C18 | Annual growth rates of short-term debt securities, by sector of the issuer, in all currencies combined     | \$39 |
| C19 | Annual growth rates for quoted shares issued by euro area residents  | \$40 |
| C20 | Gross issues of quoted shares by sector of the issuer  | \$41 |
| C21 | New deposits with agreed maturity  | \$43 |
| C22 | New loans at floating rate and up to 1 year initial rate fixation  | \$43 |
| C23 | Euro area money market rates   | \$44 |
| C24 | 3-month money market rates   | \$44 |
| C25 | Euro area government bond yields   | \$45 |
| C26 | 10-year government bond yields   | \$45 |
| C27 | Dow Jones EURO STOXX Broad, Standard & Poor's 500 and Nikkei 225   | \$46 |
| C28 | Deficit, borrowing requirement and change in debt  | \$59 |
| C29 | Maastricht debt  | \$59 |
| C30 | B.o.p. current account balance   | \$60 |
| C31 | B.o.p. net direct and portfolio investment   | \$60 |
| C32 | B.o.p. goods   | 861  |
| C33 | B.o.p. services  | \$61 |
| C34 | Main b.o.p. transactions underlying the developments in MFI net external assets                            | \$65 |
| C35 | Effective exchange rates   | \$72 |
| C36 | Bilateral exchange rates   | \$72 |
| C37 | Real gross domestic product  | \$75 |
| C38 | Consumer price indices   | \$75 |



### **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<sup>1-3</sup> 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) 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) 
$$a_{t} = \left[ \prod_{i=0}^{11} \left( 1 + F_{t-i}^{M} / L_{t-1-i} \right) - 1 \right] \times 100$$

g) 
$$a_t = \begin{pmatrix} I_t \\ I_{t-12} \end{pmatrix} \times 100$$

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:

$$h) \qquad a_{\scriptscriptstyle t}^{\scriptscriptstyle M} = \left( \begin{matrix} I_{\scriptscriptstyle t} \\ I_{\scriptscriptstyle t-1} \end{matrix} - 1 \right) \times 100$$

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 OUARTERLY 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<sub>t</sub>, may be calculated using formula g).

## SEASONAL ADJUSTMENT OF THE EURO AREA MONETARY STATISTICS '

The approach used relies on a multiplicative decomposition through X-12-ARIMA.<sup>2</sup> The seasonal adjustment may include a day-of-theweek 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), 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  $N_{\rm t}^{\rm M}$  represents the transactions (net issues) in month t and  $L_{\rm t}$  the level outstanding at the end of the month t, the index  $I_{\rm t}$  of notional stocks in month t is defined as:

$$J$$
)  $I_t = I_{t-1} \times \left(1 + \frac{N_t}{L_{t-1}}\right)$ 

As a base, the index is set equal to 100 on December 2001. The growth rate a<sub>t</sub> 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) 
$$a_{t} = \left[ \prod_{i=0}^{11} \left( 1 + \frac{N_{t-i}^{M}}{L_{t-1-i}} \right) - 1 \right] \times 100$$
1) 
$$a_{t} = \left( \frac{I_{t}}{I_{t-12}} - 1 \right) \times 100$$

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 4

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 1) and m), the growth rate a<sub>t</sub> 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 4

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 factors are revised at annual intervals or as required.

4 For details, see "Seasonal adjustment of monetary aggregates and HICP for the euro area", ECB (August 2000) and the "Statistics" section of the ECB's website (www.ecb.europa.eu), under the "Money, banking and financial markets" sub-section.

Technical notes

#### **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). This allows user-friendly access to data via the ECB's 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.

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 9 January 2008.

Unless otherwise indicated, all data series covering observations for 2008 relate to the Euro 15 (i.e. the euro area including Cyprus and Malta) 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, 2007 and 2008, calculated from bases in 2000, 2006 and 2007, use a series which takes into account the impact of the entry of Greece, Slovenia, and Cyprus and Malta, respectively, into the euro area. Historical data referring to the euro area before the entry of Cyprus and Malta 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 for 2007 refer to the Euro 13, i.e. the Euro 12 plus Slovenia, and data after 2008 refer to the Euro 15, i.e. the Euro 13 plus Cyprus and Malta.

Given that the composition of the European currency unit (ECU) does not coincide with the former currencies of the countries that have adopted the single currency, pre-1999 amounts originally expressed in the participating currencies and converted into ECU at current ECU exchange rates are affected by movements in the currencies of EU Member States that 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, Latvia, Lithuania, Hungary, 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 visà-vis other credit institutions subject to the ESCB's minimum reserve system, the ECB and participating national central banks (NCBs) 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 MROs (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 NCBs 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 an analysis, by sector and instrument, 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 that do not arise from transactions. Section 2.7 shows selected revaluations that 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 that NCBs are recommended to follow. Since 1 January 1999, the statistical information has been collected and compiled on the basis of Regulation ECB/1998/16 of 1 December 1998 concerning the consolidated balance sheet of the Monetary Financial Institutions sector<sup>1</sup>, as last amended by Regulation ECB/2003/10<sup>2</sup>.

In line with this Regulation, the balance sheet item "money market paper" has been merged with the item "debt securities" on both the assets and liabilities side of the MFI balance sheet.

Section 2.9 shows end-of-quarter outstanding amounts for the balance sheet of the euro area investment funds (other than money market funds). The balance sheet is aggregated and therefore includes, among the liabilities, holdings by investment funds of shares/units issued by other investment funds. Total assets/liabilities are also broken down by investment policy (equity funds, bond funds, mixed funds, real estate funds and other funds) and by type of investor (general public funds and special investors' funds). Section 2.10 shows the aggregated balance sheet for each investment fund sector, as identified by investment policy and type of investor.

<sup>1</sup> OJ L 356, 30.12.1998, p. 7.

<sup>2</sup> OJ L 250, 2.10.2003, p. 19.

#### **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 interaction between these sectors and both the euro area and the rest of the world. The non-seasonally adjusted data on current prices 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 the 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 provide 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. those resulting from the impact of changes in asset prices) 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) 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 so 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 broken down further 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 re-fixed 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. The 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 that 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 that 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-àvis 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 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, ranging 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 by households on final consumption in 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 20014. 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 eurodenominated 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 the 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 reference period. Retail trade turnover covers all retail trade (excluding sales of motor vehicles and motorcycles), except repairs. New passenger car registrations cover 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.

OJ L 162, 5.6.1998, p. 1.

<sup>4</sup> OJ L 86, 27.3.2001, p. 11.

<sup>5</sup> OJ L 69, 13.3.2003, p. 1.

<sup>6</sup> OJ L 169, 8.7.2003, p. 37

#### **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 on the basis of 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 deficitdebt adjustment - is mainly explained by government transactions in financial assets and 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 on quarterly non-financial accounts for general government8. 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 No 222/2004 and data provided by the NCBs.

#### **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)9 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/ 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), all of 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). 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 the capital

 <sup>7</sup> 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.

 $<sup>10\ \ \</sup>mathrm{OJ}\ L\ 159, 20.6.2007, p.\ 48.$ 

account, both credit and debit transactions are presented with a plus sign.

The euro area b.o.p. is compiled by the ECB. 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 also covers workingday, 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 into "loans" and "currency and deposits" is based on the sector of the nonresident counterpart, i.e. assets vis-à-vis nonresident 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 that are 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 year-end. 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 reserves" the Eurosystem's international (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.

On account of 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 b.o.p. 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 thirdmarket 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 plus Australia, Canada, China, Hong Kong, Japan, Norway, Singapore, South Korea, Switzerland and the United States. The EER-44 group includes the EER-24 and 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.

General notes

# **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. The 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'

# 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 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

1 The chronology of monetary policy measures taken by the Eurosystem between 1999 and 2005 can be found in the ECB's Annual Report for the respective years. 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 allotmennt amount again at the beginning of 2008.

## II 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, 4 OCTOBER, 8 NOVEMBER AND 6 DECEMBER 2007 AND 10 JANUARY 2008

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 2007

This list is designed to inform readers about selected documents published by the European Central Bank since January 2007. For Working Papers, the list only refers to publications released between October and December 2007. Unless otherwise indicated, hard copies can be obtained or subscribed to free of charge, stock permitting, by contacting 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 2006", April 2007.

### **CONVERGENCE REPORT**

"Convergence Report May 2007".

#### **MONTHLY BULLETIN ARTICLES**

- "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.
- "The stock market's changing structure and its consolidation: implications for the efficiency of the financial system and monetary policy", November 2007.
- "The introduction of quarterly sectoral accounts statistics for the euro area", November 2007.
- "Productivity developments and monetary policy", January 2008.

"Globalisation, trade and the euro area macroeconomy", January 2008.

"The Eurosystem's experience with forecasting autonomous factors and excess reserves", January 2008.

#### STATISTICS POCKET BOOK

Available monthly since August 2003.

## **LEGAL WORKING PAPER SERIES**

- 1 "Privileges and immunities of the European Central Bank" by G. Gruber and M. Benisch, June 2007.
- 2 "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**

- 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.
- 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.
- 74 "Analysis of revisions to general economic statistics" by H. C. Dieden and A. Kanutin, October 2007.
- "The role of the other financial intermediates in monetary and credit developments in the euro area" edited by P. Moutot and coordinated by D. Gerdesmeier, A. Lojschová and J. von Landesberger, October 2007.
- 76 "Prudential and oversight requirements for securities settlement" by D. Russo, G. Caviglia, C. Papathanassiou and S. Rosati, November 2007.
- 77 "Oil market structure, network effects and the choice of currency for oil invoicing" by E. Mileva and N. Siegfried, November 2007.

### **RESEARCH BULLETIN**

Research Bulletin, No 6, June 2007.

# **WORKING PAPER SERIES**

- 817 "Convergence and anchoring of yield curves in the euro area" by M.Ehrmann, M. Fratzscher, R. S. Gürkaynak and E. T. Swanson, October 2007.
- 818 "Is the time ripe for price level path stability?" by V. Gaspar, F. Smets and D. Vestin, October 2007.
- 819 "Proximity and linkages among coalition participants: a new voting power measure applied to the International Monetary Fund" by J. Reynaud, C. Thimann and L. Gatarek, October 2007.
- 820 "What do we really know about fiscal sustainability in the EU? A panel data diagnostic" by A. Afonso and C. Rault, October 2007.
- 821 "The social value of public information: testing the limits to transparency" by M. Ehrmann and M. Fratzscher, October 2007.
- 822 "Exchange rates pass-through to trade prices: the role of non-linearities and asymmetries" by M. Bussière, October 2007.
- 823 "Modelling Ireland's exchange rates: from EMS to EMU" by D. Bond, M. J. Harrison and E. J. O'Brien, October 2007.
- 824 "Evolving US monetary policy and the decline of inflation predictability" by L. Benati and P. Surico, October 2007.
- 825 "What can probability forecasts tell us about inflation risks?" by J. A. García and A. Manzanares, October 2007.
- 826 "Risk-sharing, finance and institutions in international portfolios" by M. Fratzscher and J. Imbs, October 2007.
- 827 "How is real convergence driving nominal convergence in the new EU Member States?" by S. M. Lein-Rupprecht, M. A. León-Ledesma and C. Nerlich, November 2007.
- 828 "Potential output growth in several industrialised countries: a comparison" by C. Cahn and A. Saint-Guilhem, November 2007.
- 829 "Modelling inflation in China: a regional perspective" by A. Mehrotra, T. Peltonen and A. Santos Rivera, November 2007.

- 830 "The term structure of euro area break-even inflation rates: the impact of seasonality" by J. Ejsing, J. A. García and T. Werner, November 2007.
- 831 "Hierarchical Markov normal mixture models with applications to financial asset returns" by J. Geweke and G. Amisano, November 2007.
- 832 "The yield curve and macroeconomic dynamics" by P. Hördahl, O. Tristani and D. Vestin, November 2007.
- 833 "Explaining and forecasting euro area exports: which competitiveness indicator performs best?" by M. Ca' Zorzi and B. Schnatz, November 2007.
- 834 "International frictions and optimal monetary policy cooperation: analytical solutions" by M. Darracq Pariès, November 2007.
- 835 "US shocks and global exchange rate configurations" by M. Fratzscher, November 2007.
- 836 "Reporting biases and survey results: evidence from European professional forecasters" by J. A. García and A. Manzanares, December 2007.
- 837 "Monetary policy and core inflation" by M. Lenza, December 2007.
- 838 "Securitisation and the bank lending channel" by Y. Altunbas, L. Gambacorta and D. Marqués, December 2007.
- 839 "Are there oil currencies? The real exchange rate of oil exporting countries" by M. M. Habib and M. Manolova Kalamova, December 2007.
- 840 "Downward wage rigidity for different workers and firms: an evaluation for Belgium using the IWFP procedure" by P. Du Caju, C. Fuss and L. Wintr, December 2007.
- 841 "Should we take inside money seriously?" by L. Stracca, December 2007.
- 842 "Saving behaviour and global imbalances: the role of emerging market economies" by G. Ferrucci and C. Miralles, December 2007.
- 843 "Fiscal forecasting: lessons from the literature and challenges" by T. Leal, J. J. Pérez, M. Tujula and J.-P. Vidal, December 2007.
- 844 "Business cycle synchronisation and insurance mechanisms in the EU" by A. Afonso and D. Furceri, December 2007.
- 845 "Run-prone banking and asset markets" by M. Hoerova, December 2007.
- 846 "Information combination and forecast (st)ability: evidence from vintages of time-series data" by C. Altavilla and M. Ciccarelli, December 2007.
- 847 "Deeper, wider and more competitive? Monetary integration, eastern enlargement and competitiveness in the European Union" by G. Ottaviano, D. Taglioni and F. di Mauro, December 2007.

# **OTHER PUBLICATIONS**

- "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 derivates 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 2007).
- "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.
- "EU banking structures". October 2007.
- "TARGET2-Securities progress report", October 2007 (online 2007).
- "Fifth progress report on TARGET2" with Annex 1 "Infomation guide for TARGET2 users" (version 1.0), Annex 2 "User information guide to TARGET2 pricing" and Annex 3 "TARGET2 compensation scheme, claim form", October 2007 (online only).
- "Euro money market survey", November 2007 (online only).
- "Review of the Lamfalussy framework: Eurosystem contribution", November 2007 (online only)
- "Correspondent central banking model (CCBM): procedures for Eurosystem counterparties", December 2007.
- "Financial Stability Review", December 2007.

# **INFORMATION BROCHURES**

"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).

**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-22 (comprising the 12 non-euro area EU Member States and the 10 main trading partners outside the EU) and the EER-42 (composed of the EER-22 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  $4\frac{1}{2}\%$ .

**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.

