



EUROPEAN CENTRAL BANK

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MONTHLY BULLETIN 10 | 2008

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## ABBREVIATIONS

### COUNTRIES

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

### OTHERS

BIS	Bank for International Settlements
b.o.p.	balance of payments
BPM5	IMF Balance of Payments Manual (5th edition)
CD	certificate of deposit
c.i.f.	cost, insurance and freight at the importer's border
CPI	Consumer Price Index
ECB	European Central Bank
EER	effective exchange rate
EMI	European Monetary Institute
EMU	Economic and Monetary Union
ESA 95	European System of Accounts 1995
ESCB	European System of Central Banks
EU	European Union
EUR	euro
f.o.b.	free on board at the exporter's border
GDP	gross domestic product
HICP	Harmonised Index of Consumer Prices
HWWI	Hamburg Institute of International Economics
ILO	International Labour Organization
IMF	International Monetary Fund
MFI	monetary financial institution
NACE Rev. 1	Statistical classification of economic activities in the European Community
NCB	national central bank
OECD	Organisation for Economic Co-operation and Development
PPI	Producer Price Index
SITC Rev. 4	Standard International Trade Classification (revision 4)
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.**



## DECISIONS OF 8 OCTOBER 2008

This issue of the Monthly Bulletin was finalised before the Governing Council's decision to cut the key ECB interest rates and to change the tender procedure and the standing facilities corridor on 8 October 2008. The press releases referring to that decision are as follows:

### MONETARY POLICY DECISIONS

Throughout the current financial crisis, central banks have engaged in continuous close consultation and have cooperated in unprecedented joint actions such as the provision of liquidity to reduce strains in financial markets.

Inflationary pressures have started to moderate in a number of countries, partly reflecting a marked decline in energy and other commodity prices. Inflation expectations are diminishing and remain anchored to price stability. The recent intensification of the financial crisis has augmented the downside risks to growth and thus has diminished further the upside risks to price stability.

Some easing of global monetary conditions is therefore warranted. Accordingly, the Bank of Canada, the Bank of England, the European Central Bank (ECB), the Federal Reserve, Sveriges Riksbank and the Swiss National Bank are today announcing reductions in policy interest rates. The Bank of Japan expresses its strong support of these policy actions.

The Governing Council of the ECB, by means of teleconferencing, has taken the following monetary policy decisions:

- The minimum bid rate on the main refinancing operations of the Eurosystem will be reduced by 50 basis points to 3.75%, with effect from the main refinancing operation to be settled on 15 October 2008.
- The interest rate on the marginal lending facility will be reduced by 50 basis points to 4.75%, with immediate effect.

- The interest rate on the deposit facility will be reduced by 50 basis points to 2.75%, with immediate effect.

In the euro area, upside inflationary risks have recently decreased further. It remains imperative to avoid broad-based second-round effects in price and wage-setting. Keeping inflation expectations firmly anchored in line with our objective and securing price stability in the medium term will support sustainable growth and employment and contribute to financial stability.

### CHANGES IN TENDER PROCEDURE AND IN THE STANDING FACILITIES CORRIDOR

The Governing Council of the European Central Bank (ECB) today decided, by means of a teleconference, on the following two measures:

- As from the operation settled on 15 October, the weekly main refinancing operations will be carried out through a fixed-rate tender procedure with full allotment at the interest rate on the main refinancing operation, i.e. currently 3.75%.
- As of 9 October, the ECB will reduce the corridor of standing facilities from 200 basis points to 100 basis points around the interest rate on the main refinancing operation. Therefore, as of 9 October, the rate of the marginal lending facility will be reduced from 100 to 50 basis points above the interest rate on the main refinancing operation, i.e. currently to 4.25%, and the rate of the deposit facility will be increased from 100 to 50 basis points below the interest rate on the main refinancing operation, i.e. currently to 3.25%.

The two measures will remain in place for as long as needed, and at least until the end of the first maintenance period of 2009, on 20 January.

The ECB will continue to steer liquidity towards balanced conditions in a way which is consistent with the objective to keep short-term rates close to the interest rate on the main refinancing operation.



## EDITORIAL<sup>1</sup>

On the basis of its regular economic and monetary analyses, at its meeting on 2 October the Governing Council decided to leave the key ECB interest rates unchanged. The Governing Council discussed extensively the recent intensification of the financial market turmoil and its possible impact on economic activity and inflation, recognising the extraordinarily high level of uncertainty stemming from latest developments. In this context, the Governing Council stressed the crucial importance of keeping inflation expectations firmly anchored in line with its objective of price stability. Price stability fosters an efficient allocation of resources, contains inflation risk premia and longer-term financing costs, and preserves the purchasing power of the euro. In so doing, it supports sustainable growth and employment and contributes to financial stability. The most recent data clearly confirm that economic activity in the euro area is weakening, with dampened domestic demand and tighter financing conditions. At the same time, the Governing Council recognised that annual inflation rates are likely to remain well above levels consistent with price stability for some time. With the weakening of demand, upside risks to price stability have diminished somewhat, but they have not disappeared. While the still strong underlying pace of monetary expansion points to upside risks to price stability over the medium term, the growth of broad money and credit aggregates is showing some further signs of moderation. Against this background, the Governing Council stressed that it remains imperative to avoid broad-based second-round effects in price and wage-setting and called upon all parties concerned to meet their responsibilities in the face of the current exceptional challenges. Accordingly, the Governing Council confirmed its determination to secure price stability in the medium term and that it will continue to monitor very closely all developments over the period ahead.

When analysing current developments in economic activity, it needs to be stressed that the current situation brings with it an extraordinarily high degree of uncertainty, in large part stemming from the recent intensification of

the financial market turmoil. This complicates any assessment of the near to medium-term economic prospects. As the world economy as a whole is feeling the adverse effects of the intensified and prolonged financial market turmoil, the most recent data clearly confirm that economic activity in the euro area is weakening, with dampened domestic demand and tighter financing conditions. The fall in oil prices from their peak in July and ongoing growth in emerging market economies might support a gradual recovery in the course of 2009.

In the view of the Governing Council, the economic outlook is subject to increased downside risks, mainly stemming from a scenario of ongoing financial market tensions affecting the real economy more adversely than currently foreseen. Other downside risks relate to the possibility of renewed increases in highly volatile energy and food prices, disorderly developments owing to global imbalances and rising protectionist pressures.

With regard to price developments, annual HICP inflation has remained considerably above the level consistent with price stability since last autumn, standing at 3.6% in September according to Eurostat's flash estimate, after 3.8% in August. This still worrying level of inflation is largely the consequence of both the direct and indirect effects of past surges in energy and food prices at the global level. Moreover, wage growth has been picking up rather strongly in recent quarters, in spite of a weaker growth momentum and at a time when labour productivity growth has decelerated. This resulted in a sharp increase in the year-on-year unit labour cost – to 3.4% – in the second quarter of this year, after several years of more moderate increases in the order of 1-1½%.

Looking ahead, on the basis of current commodity futures prices, annual HICP inflation rates are likely to remain well above levels consistent with price stability for some time, moderating gradually during the course of 2009.

<sup>1</sup> The editorial was finalised on 6 October 2008.

At the policy-relevant medium-term horizon, taking into account the weakening in demand, upside risks to price stability have diminished somewhat, but they have not disappeared. They include the possibility of previous commodity price rises having further and stronger indirect effects on consumer prices, as well as a renewed increase in commodity prices. In particular, there is a very strong concern that the emergence of broad-based second-round effects in price and wage-setting behaviour could add significantly to inflationary pressures. Moreover, unexpected rises in indirect taxes and administered prices could occur.

Against this background, it is imperative to ensure that medium to longer-term inflation expectations remain firmly anchored at levels in line with price stability. This is all the more important in an environment of very high uncertainty. Broad-based second-round effects stemming from the impact of past energy and food price increases on price and wage-setting behaviour must be avoided. The Governing Council is monitoring price-setting behaviour and wage negotiations in the euro area with particular attention and once again expressed its concern about the existence of schemes in which nominal wages are indexed to consumer prices. Such schemes involve the risk of upward shocks in inflation leading to a wage-price spiral, which would be detrimental to employment and competitiveness in the countries concerned. The Governing Council therefore calls for these schemes to be abolished.

Turning to the monetary analysis, the latest monetary data refer to the end of August and thus do not yet embody the impact of the recent intensification of the financial market turmoil. Further data will be carefully evaluated in order to assess this impact. As a general observation, previous episodes suggest that financial market tensions can have a relatively limited impact on monetary developments, but they have also been associated with large portfolio shifts and thus have exerted significant influence on monetary data.

While the still strong underlying pace of monetary expansion points to upside risks to price stability over the medium term, data up to August show that the growth of broad money and credit aggregates moderated over the past few months, reflecting the monetary policy decisions taken since 2005 to address risks to price stability. As a more detailed examination shows, the flat yield curve and the structure of bank deposit rates have led to a number of substitution effects. First, there has been a substitution from longer-term maturity assets into instruments covered by M3, which offer similar remuneration but greater liquidity and less risk. As a consequence, the annual growth rate of M3 probably overstates the underlying pace of monetary expansion. Second, there have been substitution effects within M3. In contrast to the dynamic developments in M3, annual M1 growth has fallen to very low levels. This reflects relatively attractive interest rates for time deposits, which have increased the opportunity cost of holding cash or overnight deposits.

At the level of the euro area as a whole, although the availability of bank credit has, as yet, not been significantly affected by the ongoing financial tensions, the gradual moderation of growth in loans continued in the August data, as previously anticipated, with corporate demand for credit slowing. At the same time, the growth of loans to households continues to follow the downward trend observed over the past few years, as a result of higher short-term interest rates and housing market weakness in several parts of the euro area.

To sum up, the Governing Council discussed extensively the recent intensification of the financial market turmoil and its possible impact on economic activity and inflation, recognising the extraordinarily high level of uncertainty stemming from latest developments. In this context, the Governing Council stressed how crucial it is for monetary policy to keep inflation expectations firmly anchored in line with its objective of price stability. Price stability fosters an efficient allocation of resources, contains inflation risk premia and longer-term financing



costs, and preserves the purchasing power of the euro. In so doing, it supports sustainable growth and employment and contributes to financial stability. The most recent data clearly confirm that economic activity in the euro area is weakening, with dampened domestic demand and tighter financing conditions. The cross-check of the outcome of the economic analysis with that of the monetary analysis clearly confirms that annual inflation rates are likely to remain well above levels consistent with price stability for some time and, when taking into account the weakening of demand, that upside risks to price stability have diminished somewhat, but they have not disappeared. While the still strong underlying pace of monetary expansion points to upside risks to price stability over the medium term, the growth of broad money and credit aggregates is showing some further signs of moderation. It is imperative to avoid broad-based second-round effects in price and wage-setting. All parties concerned face exceptional challenges and are called upon to meet their responsibilities. Accordingly, the Governing Council confirms its determination to secure price stability in the medium term and emphasises that it will continue to monitor very closely all developments over the period ahead.

Regarding fiscal policy, in the current situation of continuing economic uncertainty, it is essential that governments abide by the rules of the Stability and Growth Pact and ensure the sustainability of public finances. Maintaining sound public finances will enable governments to let automatic stabilisers operate freely and thus contribute to smoothing the economic cycle and to supporting private sector confidence.

Turning to structural policies, measures that foster competition and flexibility and promote moderate unit labour cost growth are of the utmost importance in the current economic circumstances. While moderate unit labour cost growth is crucial in all euro area countries, it is particularly pressing in those that have experienced a significant loss of cost and price competitiveness over recent years and where unemployment has already started to rise.

Moreover, labour market reforms fostering employment and investment and promoting skills, innovation and efficiency remain essential to support growth and real incomes in the longer term.

This issue of the Monthly Bulletin contains two articles. The first article reviews fiscal developments in the euro area and in EU Member States since the Stability and Growth Pact entered into force in 1998. The second article describes cross-border bank merger and acquisition activity in the euro area in recent years, focusing on the role of institutional investors.



# ECONOMIC AND MONETARY DEVELOPMENTS

## I THE EXTERNAL ENVIRONMENT OF THE EURO AREA

*Renewed financial market turmoil, strong fluctuations in oil and commodity prices and ongoing adjustments in housing markets continue to weigh on global economic activity. The recent strains on the US banking system and the associated financial turbulence are likely to have repercussions on the global economy. At the same time, global inflationary pressures remain elevated, although some signs of levelling-off seem to have emerged in line with the recent decrease in commodity prices. The deepening of the financial turmoil has led to increased uncertainty concerning the outlook for global economic growth, and risks lie clearly on the downside.*

### I.1 DEVELOPMENTS IN THE WORLD ECONOMY

Renewed financial market turmoil, strong fluctuations in oil and commodity prices and ongoing adjustments in housing markets continue to weigh on global economic activity. The recent strains on the US banking system and the associated financial turbulence are likely to have repercussions on the global economy. In August the global all-industry output PMI continued to stand slightly below the 50-point threshold between economic expansion and contraction, as signs that service sector activity was stabilising were more than offset by continued weakness in manufacturing. The further reduction in new orders points to subdued market conditions overall.

Global inflationary pressures remain high, although some signs of levelling-off seem to have emerged in line with the recent decrease in commodity prices. Annual consumer price inflation in the OECD area slightly declined to 4.7% in August, after a peak of 4.8% in July. Excluding food and energy, consumer prices rose by 2.3% in the year to August, unchanged with respect to the preceding month. Survey evidence on global input prices suggests a noticeable easing in cost inflation, reflecting recent falls in the cost of oil and other commodities (see Chart 1).

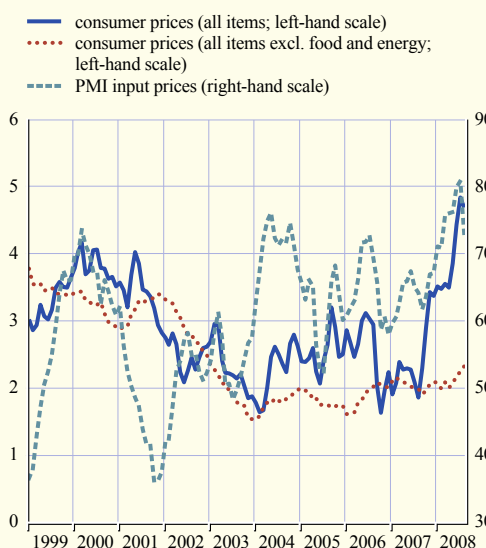
Global inflationary pressures remain high, although some signs of levelling-off seem to have emerged in line with the recent decrease in commodity prices. Annual consumer price inflation in the OECD area slightly declined to 4.7% in August, after a peak of 4.8% in July. Excluding food and energy, consumer prices rose by 2.3% in the year to August, unchanged with respect to the preceding month. Survey evidence on global input prices suggests a noticeable easing in cost inflation, reflecting recent falls in the cost of oil and other commodities (see Chart 1).

#### UNITED STATES

In the United States, according to final estimates, real GDP expanded at a 2.8% annualised rate in the second quarter of 2008. Compared with a broad stagnation in the previous two quarters, the acceleration in economic activity in the second quarter stemmed mainly from the boost of temporary fiscal stimulus measures on private consumption, solid net exports and a lessened drag from residential investment. More recently available data points to a marked deceleration in the economy in the third quarter, as labour markets have deteriorated, foreign demand has slowed, with commodity prices remaining at elevated levels. In addition, financial market strains increased substantially in September. The collapse of several financial institutions, owing to mortgage-related losses and intensified pressures in funding markets, have posed risks for the availability of credit and increased uncertainty for the economic outlook. In this context, ongoing initiatives by the US authorities to restore confidence in the financial system should alleviate some of the associated risks. The implementation of such measures, however,

Chart 1 Price developments in OECD countries

(monthly data; annual percentage changes; diffusion index)



Sources: OECD and Markit.

implies a deteriorating fiscal position over the near term.

As regards price developments, annual CPI inflation eased somewhat to 5.4% in August, but remained high by historical standards. This mostly reflected a retreat in energy cost pressures. The annual rate of inflation excluding food and energy was unchanged from the previous month and stood at 2.5% in August.

On 16 September 2008 the US Federal Open Market Committee decided to keep the target for the federal funds rate unchanged at 2.0% for the third consecutive time. The Federal Reserve System, in cooperation with the US Treasury and a number of foreign central banks, announced further initiatives to enhance its liquidity facilities and to provide support to financial markets in view of deteriorating conditions.

## JAPAN

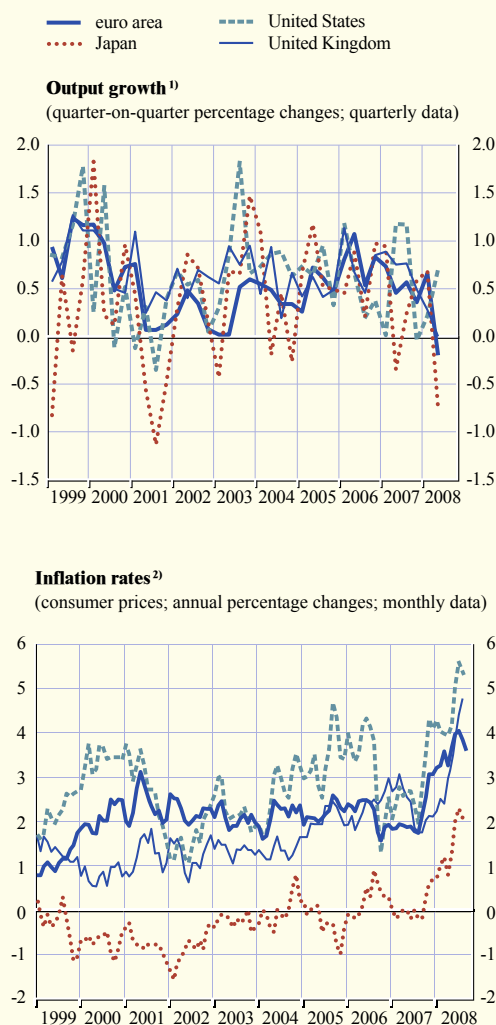
In Japan, economic activity has declined significantly, reflecting sluggish domestic demand and a slowdown in exports. In the second quarter of 2008, according to the second preliminary estimate by the Cabinet Office, real GDP decreased by 0.7% on a quarterly basis, largely offsetting the fairly strong growth recorded in the first quarter of 2008 (0.7% quarter on quarter). The contraction in activity in the second quarter of 2008 was broadly based across GDP components. Private consumption decreased by 0.5% over the quarter, subsequent to an increase of 0.7% in the first quarter, reflecting subdued real income growth and deteriorating labour market conditions. With exports and imports falling substantially (by -2.5% and -2.6% quarter on quarter respectively), the contribution of net external demand to GDP declined to -0.1 percentage point from 0.4 percentage point in the previous quarter.

Consumer price inflation accelerated over recent months owing to the rise in commodity prices. However, in August annual CPI inflation moderated to 2.1%, down from 2.3% in July, to a large extent reflecting the recent decline in the energy component. Excluding food and energy, annual CPI inflation decreased to 0.0% in August from 0.2% in July.

## UNITED KINGDOM

In the United Kingdom, the quarterly rate of output growth continued to slow down, standing at 0.0% in the second quarter, well below the long-term average (0.7%). Confidence indicators

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.

also followed a downward trend in general and have remained below long-term averages in recent quarters. House prices have declined in recent months, falling in August by around 10% and 13% year on year according to the Nationwide and Halifax indices respectively. In line with falling house prices, in the second quarter of 2008, output in construction contracted by 1.1% quarter on quarter. Annual HICP inflation rose to 4.7% in August, from 4.4% in July, reflecting a broad-based increase across HICP components. The Bank of England expects inflation to increase further in the second half of 2008.

### OTHER EUROPEAN COUNTRIES

In most of the other large EU countries outside the euro area, GDP growth was fairly stable in the second quarter of 2008, and inflation developments were mixed in August.

In Sweden, quarterly growth has continued to slow down, standing at 0.0% in the second quarter of 2008 (well below the long-term average of 0.8%). In Denmark, quarterly real GDP growth rebounded to 0.6% in the second quarter (compared with the long-term average of 0.5%), after negative growth of -0.8% in the first quarter. In August consumer and retail confidence indicators continued to decline in both countries, while annual HICP inflation increased further, reaching 4.8% in Denmark and 4.1% in Sweden. On 4 September Sveriges Riksbank increased its main policy rate by 25 basis points to 4.75%.

In three of the four largest central and eastern European countries, economic growth remained stable in the second quarter of 2008, standing at a quarterly rate of 0.6% in Hungary, 0.9% in the Czech Republic and 1.5% in Poland. The year-on-year GDP growth rate increased further in Romania and reached 9.3% in the second quarter. Indicators for retail sales and consumer confidence deteriorated in the Czech Republic and Poland in the recent months up to August, but remained broadly stable or improved in Romania and Hungary respectively. In August 2008 annual HICP inflation decreased in the Czech Republic (to 6.2% from 6.8% in July), Hungary (to 6.4% from 7.0% in July) and Romania (to 8.1% from 9.1% in July), while it remained broadly unchanged in Poland (at 4.4%). Most of the decline in annual inflation rates in the Czech Republic, Hungary and Romania was attributed to the diminishing impact of last year's price increases, while in Poland strong wage growth contributed to maintaining high inflation levels.

### EMERGING ASIA

In emerging Asia, economic performances have diverged in recent months. Although growth decelerated significantly in the second quarter of 2008 in Hong Kong, Singapore and Taiwan, it remained relatively robust in the larger economies, including China and India. In August, consumer price inflation declined in most countries, but high producer and wholesale prices, notably in India, indicate that price pressures may continue in the months ahead. Although monetary authorities have continued to tighten policy rates in many countries, real interest rates have mostly remained negative. If inflationary pressures remain at an elevated level for a prolonged period, this is expected to have a negative impact on the purchasing power of consumers. This is already the case in Hong Kong and Korea, where private consumption weakened significantly in the second quarter of 2008. In other countries, by contrast, domestic demand has remained robust.

In China, economic activity continued to weaken in August, but growth was still robust. Growth in industrial value added slowed to 12.8%, partly owing to the suspension of factory operations during the Olympic Games. After decreasing up to June, nominal exports grew surprisingly strongly at 21.1% in August and the trade surplus hit a new monthly high of USD 28.7 billion. CPI inflation slowed markedly to 4.9% compared with the same month in the previous year, from 6.3% in July.



The People's Bank of China cut reserve requirement ratios for small and medium-sized banks by 100 basis points to 16.5% and lowered the benchmark lending rate by 27 basis points to 7.2%.

### LATIN AMERICA

Although the pace of economic activity was sustained in Latin America, there was some heterogeneity in the growth performance of major economies. At the same time, inflationary pressures continue to be strong across the region. Economic activity continued to be robust in Brazil. Real GDP grew at an annual rate of 6.2% in the second quarter of 2008, up from 5.9% in the first quarter. In August, consumer price inflation fell to 6.2% on an annual basis, compared with 6.4% in July. On 10 September 2008, the Banco Central do Brasil raised its key interest rate by 75 basis points to 13.75%. Argentina also recorded strong levels of activity during the second quarter, with real GDP expanding by 7.8% on an annual basis. Consumer price inflation stood at an annual rate of 9.0% in August. Finally, in Mexico, activity continued to be weak, with industrial production growth falling by 1% on an annual basis in July, while consumer price inflation increased to 5.6% in August, up from 5.4% in July.

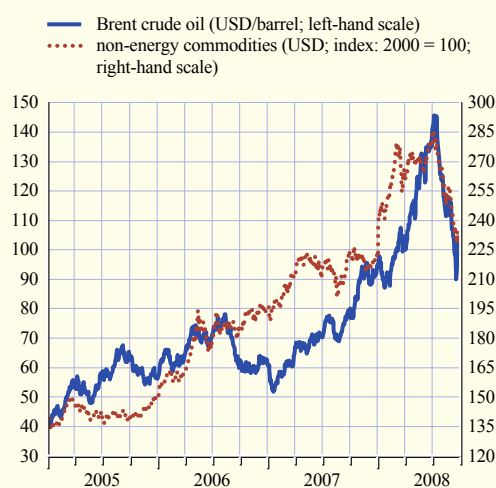
## 1.2 COMMODITY MARKETS

Oil prices fluctuated sharply in the course of September, standing at USD 97.8 on 30 September (see Chart 3), which is still 3.7% higher than at the beginning of the year (in euro terms, the increase is around 8.7%). In the second half of September, prices moved abruptly amid the unwinding of financial positions, first plunging towards USD 90 and then recovering before declining again in the context of renewed financial turbulence. Over the medium term, market participants expect prices to remain at elevated levels, with futures prices for December 2009 standing at around USD 106. However, there is an extremely high degree of volatility.

Regarding developments in underlying market fundamentals, demand continues to grow robustly in developing economies. An 11% increase was recorded for Chinese crude oil imports over the past year in August. On the supply side, OPEC has decided to strictly adhere to the production quotas agreed in September 2007, which should result in a reduction in supply over the coming months. Consequently, the supply/demand balance in global oil markets continues to be relatively tight, and the risk of future price increases remains, especially in the light of the projected supply reductions from OPEC, as well as persisting geopolitical and weather-related threats.

In September, the prices of non-energy commodities continued to decline. Metal prices moderated amid concerns over a global economic slowdown and a strong reduction in freight costs. Most agricultural commodity prices have decreased amid favourable weather conditions and concerns over a global economic slowdown. Cotton, in particular, has markedly

Chart 3 Main developments in commodity markets



Sources: Bloomberg and HWWI.

depreciated. In aggregate terms, the price index for non-energy commodities (denominated in US dollars) was approximately 10% higher towards the end of September than in the previous year.

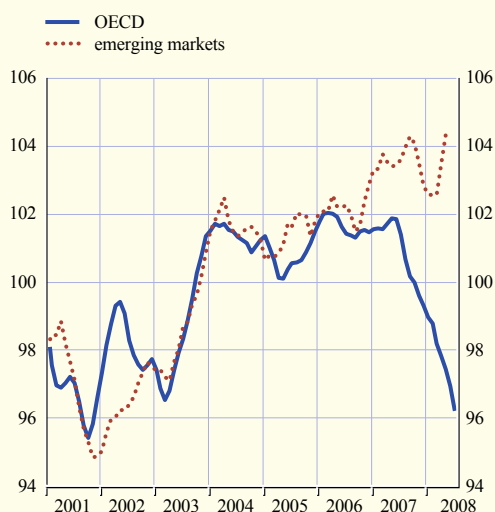
### 1.3 OUTLOOK FOR THE EXTERNAL ENVIRONMENT

The global growth slowdown is dampening the prospect of foreign demand for euro area goods and services. The OECD composite leading indicator (CLI) for June signalled a continued weakening of the outlook for economic activity in the OECD area (see Chart 4). For major non-OECD countries, this indicator pointed to a relatively robust expansion of economic activity in China, Brazil and Russia, and to a downturn in India.

The uncertainty surrounding this outlook for global economic growth remains high and is subject to increased downside risks mainly stemming from a scenario of ongoing financial market tensions affecting the real economy more adversely than currently foreseen. Other risks relate to the possibility of renewed increases in highly volatile energy and food prices, disorderly developments owing to global imbalances and rising protectionist pressures.

Chart 4 OECD composite leading indicator

(monthly data; amplitude-adjusted)



Source: OECD.

Note: The emerging market indicator is a weighted average of the CLI for Brazil, Russia and China.

## 2 MONETARY AND FINANCIAL DEVELOPMENTS

### 2.1 MONEY AND MFI CREDIT

The latest monetary data confirm the gradual moderation of broad money and credit growth that has become apparent over the past few months. This reflects the impact of higher interest rates, tighter financing conditions and slower economic growth. At the same time, the data still suggest a strong underlying pace in monetary and credit expansion in the euro area, pointing to continued upside risks to price stability over the medium term. Consistent with this overall assessment, the annual growth rate of M3 moderated somewhat further in August, but nonetheless remained vigorous at 8.8%. The flat yield curve and structure of bank deposit rates have led to substitution both into and within M3. Household time deposits have grown at a robust pace, while, by contrast, annual M1 growth has fallen to very low levels, as increases in the opportunity cost of holding cash have led to shifts out of overnight deposits. The August monetary data – which predate the intensification of the financial market tensions seen in September – still provide little evidence of an exceptional impact of the ongoing tensions in financial markets through constraints in the availability of credit or heightened risk aversion. At the same time, there continues to be clear evidence that financial tensions have directly affected specific counterparts of M3, in particular MFI credit to other financial intermediaries.

#### THE BROAD MONETARY AGGREGATE M3

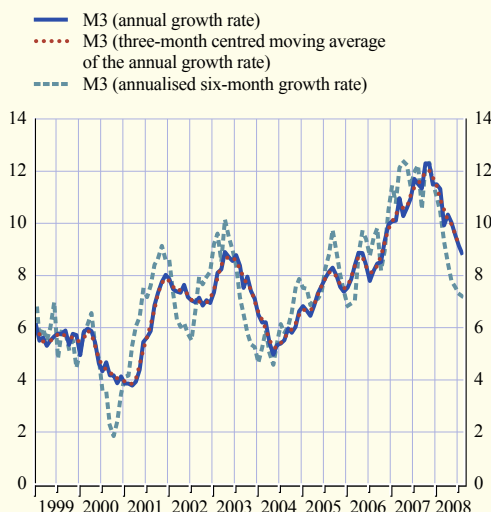
The annual rate of growth of M3 declined further in August, falling to 8.8% from 9.1% in the previous month (see Chart 5). The short-term dynamics of M3, as measured for instance by the annualised three and six-month growth rates, remain well below the annual growth rate, confirming the moderating momentum of M3 growth.

Despite the moderation seen in recent months, annual M3 growth remains vigorous. The ongoing strength of M3 growth stems partly from the flat yield curve, which continues to prompt substitution from riskier, non-monetary assets outside M3 into shorter-term monetary assets, thereby inflating headline M3 growth. Nonetheless, even after taking this factor into account, the underlying rate of monetary expansion remains strong, as reflected, for instance, in the continued vigorous expansion of household time deposits and loans to the non-financial private sector.

Overall, the latest data confirm the moderation in the growth rates of broad money and credit aggregates, reflecting the impact of higher interest rates, tighter financing conditions and slower economic growth. This notwithstanding, headline money and credit dynamics remain vigorous. In the data available up to August 2008, there is still little evidence of an exceptional impact of the ongoing tensions in financial markets on monetary dynamics. Neither is there evidence of constraints on the availability of bank credit and of portfolio shifts into money prompted by heightened risk aversion up to the end of August. However, it should be taken into account that such data predate

Chart 5 M3 growth

(percentage changes; adjusted for seasonal and calendar effects)



Source: ECB.



the intensification of the financial tensions that was observed in September 2008. At the same time, a link with the tensions in the financial markets can clearly be discerned in the evolution of certain specific counterparts of M3, such as credit to other financial intermediaries (OFIs).

### MAIN COMPONENTS OF M3

The moderation in annual M3 growth observed in August 2008 was driven by a lower contribution from both short-term deposits other than overnight deposits and from marketable instruments. At the same time, the contribution from M1 remained unchanged at its historically low level.

The annual growth rate of M1 remained unchanged at 0.2% in August (see Table 1). This historically low rate follows a protracted moderation since late 2005, as rising short-term interest rates in the euro area have increased the opportunity cost of holding currency and overnight deposits. When assessing the current low level of M1 growth in order to form a view about the economic outlook, caution is required in extrapolating from historical relationships between M1 and real activity (for a discussion of the indicator properties of M1 growth for economic activity, see Box 1).

The subdued dynamics in M1 growth mainly reflect developments in overnight deposits, the annual growth rate of which remained negative in August (-1.2%). At the same time, the annual growth rate of currency in circulation was broadly unchanged at 7.2%.

Growth in short-term deposits other than overnight deposits (M2-M1) continued to account for most of the growth in M3 in August, although their annual growth rate declined somewhat to 19.0% from 19.5% in July. This development reflects some moderation in the main sub-component, namely deposits with an agreed maturity of up to two years (i.e. short-term time deposits), which nevertheless still grew at a very high annual rate of 37.2% in August, down from 39.0% in July. Deposits redeemable at notice of up to three months (i.e. short-term savings deposits) declined further in August, albeit at a slightly reduced pace.

Table 1 Summary table of monetary variables

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

	Outstanding amount as a percentage of M3 <sup>1)</sup>	Annual growth rates					
		2007 Q3	2007 Q4	2008 Q1	2008 Q2	2008 July	2008 Aug.
<b>M1</b>	<b>41.9</b>	<b>6.5</b>	<b>5.9</b>	<b>3.8</b>	<b>2.3</b>	<b>0.2</b>	<b>0.2</b>
Currency in circulation	7.1	8.9	8.0	7.8	7.8	7.1	7.2
Overnight deposits	34.7	6.1	5.5	3.1	1.2	-1.1	-1.2
<b>M2 - M1 (= other short-term deposits)</b>	<b>43.2</b>	<b>15.0</b>	<b>16.8</b>	<b>18.3</b>	<b>19.3</b>	<b>19.5</b>	<b>19.0</b>
Deposits with an agreed maturity of up to two years	26.5	37.6	40.6	41.4	40.3	39.0	37.2
Deposits redeemable at notice of up to three months	16.7	-3.2	-3.9	-3.3	-2.3	-2.1	-1.8
<b>M2</b>	<b>85.1</b>	<b>10.3</b>	<b>10.7</b>	<b>10.3</b>	<b>10.0</b>	<b>9.1</b>	<b>8.9</b>
M3 - M2 (= marketable instruments)	14.9	18.7	19.6	16.3	10.2	9.3	8.3
<b>M3</b>	<b>100.0</b>	<b>11.5</b>	<b>12.0</b>	<b>11.2</b>	<b>10.0</b>	<b>9.1</b>	<b>8.8</b>
<b>Credit to euro area residents</b>		<b>8.7</b>	<b>9.2</b>	<b>10.0</b>	<b>9.6</b>	<b>9.1</b>	<b>9.2</b>
Credit to general government		-4.0	-4.1	-2.5	-1.2	-0.1	1.5
Loans to general government		-0.8	-1.8	-0.9	0.8	1.5	2.0
Credit to the private sector		11.6	12.2	12.7	11.9	11.0	10.8
Loans to the private sector		11.0	11.1	11.1	10.5	9.4	8.8
<b>Longer-term financial liabilities (excluding capital and reserves)</b>		<b>10.3</b>	<b>8.5</b>	<b>6.9</b>	<b>4.6</b>	<b>3.5</b>	<b>3.3</b>

Source: ECB.

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

### THE INFORMATIONAL CONTENT OF REAL M1 GROWTH FOR REAL GDP GROWTH IN THE EURO AREA

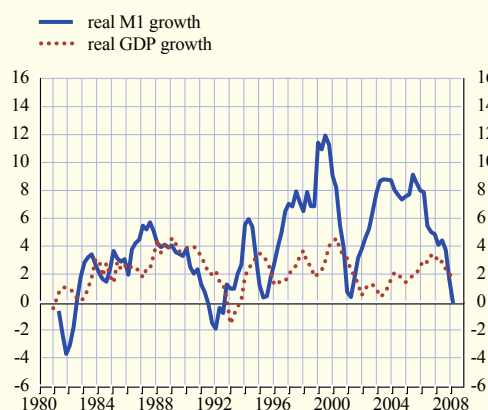
The narrow monetary aggregate M1 comprises currency in circulation and overnight deposits. While financial innovation in recent years has implied an increasing use of M1 assets for portfolio management, these assets nonetheless largely represent money balances held for transaction purposes. Therefore, M1 holdings should, at least in principle, bear a relatively close relationship to actual spending. The deceleration in M1 that started after the key ECB interest rates were raised at the end of 2005 brought the annual growth rate down to the historically low level of 0.2% in August 2008.<sup>1</sup> Depending on the strength of the connection between M1 holdings and spending, this may be seen as signalling a correspondingly strong deceleration in economic activity. Against this background, this box reviews the informational content of real M1 growth (deflated with the GDP deflator) for real GDP growth in the euro area. The analysis suggests that developments in real M1 growth provide reasonably good indications for the general direction of economic activity but less so for the magnitude of real GDP growth.

An analysis of the developments in the annual growth rates of euro area real M1 and real GDP suggests that these two variables exhibit different magnitudes of growth over time (see Chart A). This seems to be the case especially since the early 1990s, with fluctuations in real M1 growth being much larger than those in real GDP growth. A specific level of real M1 growth can thus not simply be mapped into a corresponding level of real GDP growth. At the same time, the chart also suggests that the two series display a considerable degree of co-movement and that real M1 growth often tends to lead developments in real GDP growth. Indeed, a relatively high maximum correlation value – about 53% – between the two series is found for real M1 growth leading real GDP growth by four quarters.<sup>2</sup> The correlation value reflects the degree of synchronicity between the two series, in other words how often the two series increase or decrease at the same time, irrespective of the relative magnitude of change.

This suggests that the informational content of developments in real M1 for real GDP growth relates mainly to the timing of turning points, i.e. the peaks and troughs in the cyclical pattern. Peaks and troughs can be identified in several different ways, typically leading to very similar results. Chart B, for example,

Chart A Real M1 and real GDP in the euro area

(annual percentage changes)

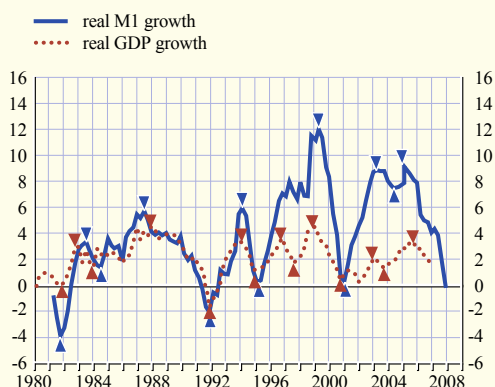


Sources: ECB and Eurostat.  
Note: M1 deflated by the GDP deflator.

- 1 The annual growth rate of nominal M1 for August 2008 is at its lowest since the early 1980s. In real terms (deflated by the HICP), annual M1 growth was negative in August, at -3.7%, but this did not represent a historical low.
- 2 The highest correlation value found for real M1 growth leading real GDP growth by four quarters is very close to that found with a lead of three quarters.

**Chart B Turning points in real M1 growth and real GDP growth in the euro area**

(annual percentage changes)

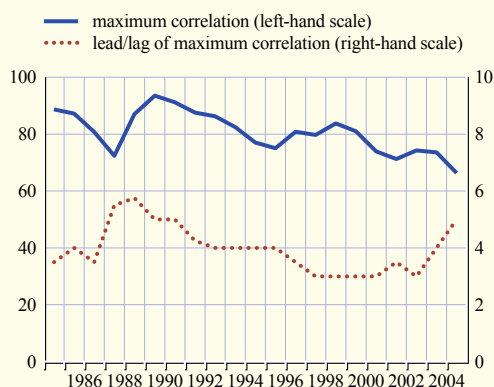


Source: ECB.

Notes: M1 deflated by the GDP deflator. The turning points are based on the Bry-Boschan algorithm. The real GDP series has been shifted back by one year.

**Chart C Maximum correlation and corresponding lead/lag shift between real M1 growth and real GDP growth**

(percentages; number of quarters)



Source: ECB.

Note: Based on an eight-year window; annual averages of quarterly centered values.

shows the turning points identified by means of an algorithm commonly used in business cycle analysis.<sup>3</sup> Overall, taking into account an average lead of about one year, almost all peaks and troughs in the annual growth rate of real M1 tend to coincide with a corresponding turning point in annual real GDP growth. At the same time, the late 1990s are a case of when turning points in real GDP growth were not associated with turning points in the real M1 growth series. In other words, over the sample period from 1980 to 2007, there do not appear to be turning points in real M1 growth that are not followed by turning points in real GDP growth, while peaks and troughs in real M1 growth are not a strictly necessary condition for peaks and troughs to be observed in real GDP growth.

Notwithstanding an overall strong coincidence in the turning points, the phase shift between real M1 growth and real GDP growth is not always precisely four quarters. Chart C shows the number of lead quarters at which a maximum correlation between real M1 growth and real GDP growth is found for rolling periods of eight years (reflecting the average duration of “classical” business cycles).<sup>4</sup> The lead fluctuates between a minimum of about 3 quarters (during most of the rolling periods centred around the late 1990s and early 2000s) and a maximum of almost 6 quarters (in the period centred around 1988). The chart also shows that the maximum correlation coefficient itself varies over time, ranging between 94% and 66%, and indicates that the link between M1 and GDP growth has become less strong in recent years.

Such changes in the overall relationship between real M1 growth and real GDP growth can be explained by specific factors affecting these two series in different ways. One example of

3 The algorithm used is the Bry-Boschan algorithm (see G. Bry and C. Boschan (1971), “Cyclical analysis of time series: selected procedures and computer programs”, NBER Technical Paper No 20). This algorithm is typically applied to indicators in levels to detect classical business cycle phases, i.e. expansions and recessions. However, this algorithm also often produces reasonable results for growth rates. Very similar results are obtained by identifying turning points by means of simple rules of thumb (based on assumptions relating to the duration of expansions and moderations) or more formal modelling approaches such as Markov-switching models.

4 The “classical” business cycle is represented by fluctuations in the level of economic activity. By contrast, “growth” or “deviation” business cycles refer to the fluctuations of economic activity around trend.

these factors is the prolonged period of a flat-shaped yield curve, which has affected M1 growth more strongly downwards since the end of 2005 than corresponds to an average cyclical pattern. Another example is the strengthening of M1 growth in the period of portfolio shifts between 2001 and 2003, a time when economic activity was relatively subdued.

In summary, developments in real M1 growth appear to have more informational content for future turning points in real GDP growth than for precise magnitudes of real GDP growth. This is confirmed by the fact that, in short-term forecasting models, M1 growth tends to have only a limited role.<sup>5</sup> However, even in the case of turning points, the relationship is not perfectly stable at a specific lead time. Therefore, particular caution should be exercised in deriving possible implications for future real GDP growth developments on the basis of the average historical relationship of this variable with real M1 growth. The strength of this relationship should always be assessed against the specific factors operating in the period under analysis.

<sup>5</sup> For more details on such models, see the article entitled “Short-term forecasts of economic activity in the euro area” in the April 2008 issue of the Monthly Bulletin.

The remuneration of short-term time deposits, unlike that of overnight and short-term savings deposits, has followed the rise in the term money market rates quite closely. The rise in short-term market interest rates since December 2005, stemming both from increases in key ECB rates and from widening money market spreads in the context of the ongoing financial market tensions, has thus rendered the remuneration of short-term time deposits particularly attractive compared with other instruments in M3 and longer-maturity assets. This, in turn, has induced substitution into short-term time deposits from both savings deposits and overnight deposits, as well as from instruments outside M3.

The annual growth of marketable instruments (M3-M2) moderated further to 8.3% in August, from 9.3% in July. This decline masks a rebound in the annual growth rate of money market fund shares/units – the largest sub-component – to 4.1% in August, from 1.0% one month earlier. Substantial inflows into money market fund shares/units were observed in August, partly offsetting the outflows recorded in the preceding five months. This development underlines the heightened volatility that has characterised the monthly flows into money market fund shares/units since the onset of the financial market tensions, as investors’ perceptions of the risks embodied in this instrument, as well as the funds’ portfolio allocations, have evolved.

Turning to other categories of marketable instruments, a very marked deceleration was observed in the annual growth rate of debt securities with a maturity of less than two years (i.e. short-term debt securities), which dropped to 9.6% in August, from 23.7% in July. While, to some extent, this development reflects a base effect, it is indicative of the retrenchment in the net issuance of short-term debt securities that has been observed in 2008, following its peak in 2007. Finally, in the case of repurchase agreements, a moderate deceleration was recorded in August, bringing the annual growth rate down to 16.7% from 17.2% in July.

The annual growth rate of M3 deposits, which comprise short-term deposits and repurchase agreements and represent the broadest monetary aggregate for which a sectoral breakdown is available, increased slightly to 10.3% in August, from 10.1% in July, contrary to the development in overall M3. From a sectoral perspective, this development reflects a small increase in the growth rate of household M3 deposits, which reached 9.3% in August, after 9.1% in July. The renewed acceleration in the growth rate of M3 deposit holdings of financial intermediaries, which took the

annual rate to 19.8% in August from 18.1% in July, also contributed to the development in overall M3 deposits. By contrast, the growth rate of deposits held by non-financial corporations decreased further to 6.3% in August, from 6.6% in July.

### MAIN COUNTERPARTS OF M3

Turning to the counterparts of M3, the growth rate of total MFI credit to euro area residents remained broadly unchanged at 9.2% in August, compared with 9.1% in July (see Table 1). Within total MFI credit, credit to general government halted its year-on-year decline and grew at a rate of 1.5%. At the same time, the annual growth rate of MFI credit to the private sector moderated further to 10.8% in August, after 11.0% in July.

Loans – the largest component of credit to the private sector – continued to grow at a robust but moderating pace in August, recording an annual growth rate of 8.8%, down from the 9.4% observed in July. All sectors – non-financial corporations, households, insurance corporations and pension funds, and other non-monetary financial intermediaries – contributed to this moderation, albeit from quite different levels (see Table 2).

Growth in MFI loans to non-financial corporations (NFCs) moderated further in August, declining to an annual rate of 12.6% from 13.1% in July. The shorter-term dynamics (captured, for example, by the annualised three-month growth rate) pointed to a more marked slowdown in loans to NFCs in recent months, although this deceleration did not continue in August. Slower growth in loans to NFCs is in line with a moderation in corporate demand for credit owing to the lagged impact of higher interest rates, the recent tightening of credit standards and the slowing of economic growth. There continues to be little evidence that the ongoing financial market tensions have directly influenced the availability of bank loans to NFCs, for example through quantitative constraints on credit supply. As regards future prospects, a further gradual moderation in the growth of MFI lending to NFCs would be in line with the current cyclical environment. Moreover, as with other indicators, the intensification of the financial tensions seen in September has increased the uncertainty surrounding the outlook for loan growth and the data will require careful interpretation going forward.

Table 2 MFI loans to the private sector

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

	Outstanding amount as a percentage of the total <sup>1)</sup>	Annual growth rates					
		2007 Q3	2007 Q4	2008 Q1	2008 Q2	2008 July	2008 Aug.
<b>Non-financial corporations</b>	<b>44.0</b>	<b>13.8</b>	<b>14.0</b>	<b>14.6</b>	<b>14.5</b>	<b>13.1</b>	<b>12.6</b>
Up to one year	28.8	12.1	11.9	12.9	12.9	11.2	10.7
Over one and up to five years	19.9	19.9	21.0	22.6	20.9	19.0	18.0
Over five years	51.2	12.7	12.7	12.8	13.0	11.9	11.7
<b>Households<sup>2)</sup></b>	<b>45.8</b>	<b>7.0</b>	<b>6.6</b>	<b>5.9</b>	<b>5.0</b>	<b>4.0</b>	<b>3.9</b>
Consumer credit <sup>3)</sup>	12.9	5.7	5.3	5.4	5.2	4.3	3.9
Lending for house purchase <sup>3)</sup>	71.5	8.1	7.6	6.7	5.6	4.3	4.1
Other lending	15.6	3.2	3.1	2.7	2.2	2.6	2.6
<b>Insurance corporations and pension funds</b>	<b>0.9</b>	<b>26.6</b>	<b>22.0</b>	<b>6.5</b>	<b>-1.5</b>	<b>-7.5</b>	<b>-8.2</b>
<b>Other non-monetary financial intermediaries</b>	<b>9.2</b>	<b>20.0</b>	<b>23.4</b>	<b>24.7</b>	<b>24.8</b>	<b>23.8</b>	<b>20.4</b>

Source: ECB.

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

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

2) As defined in the ESA 95.

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

Turning to the household sector, the downward trend in the growth in MFI loans observed since early 2006 continued in August 2008, with the annual growth rate declining to 3.9% from 4.0% in the previous month. This slowdown reflects the impact of increases in bank lending rates since late 2005 and the moderation of housing market dynamics in a number of euro area countries, as well as a tightening of credit standards. Again, as yet there is little evidence of further exceptional impact from the financial market tensions, for example through credit supply constraints. The moderation in loan growth in August was driven mainly by lending for house purchase (the annual growth rate of which declined to 4.1% from 4.3% in July). Developments in the growth rate of consumer credit followed a similar declining trend.

In recent months, the asset-backed securities (ABS) generated in the context of banks' securitisation activity have largely been retained on the balance sheets of the MFIs that originated the underlying loans, rather than being sold into the market. As a result, MFI purchases of private sector securities other than shares (which include these ABS, mainly issued by OFIs) expanded at an annual rate of 38.8% in August. This strong dynamic can be seen as a direct impact of the financial tensions on specific counterparts of M3.

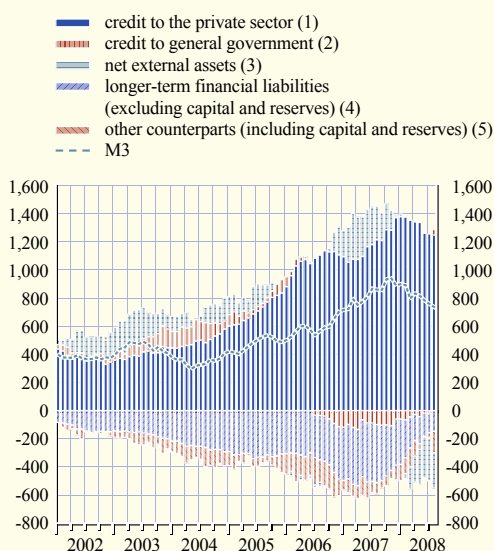
Among the other counterparts of M3, the annual growth rate of MFI longer-term financial liabilities excluding capital and reserves (LTFLs) decreased to 3.3% in August, down from 3.5% in July. This decline was due to the further decrease in the deposits redeemable at notice of over three months and to the moderation in the annual growth rate of debt securities with a maturity of over two years.

Finally, the net external asset position of MFIs recorded a monthly inflow of €17 billion in August, after successive outflows in previous months. On an annual basis, it recorded an outflow of €250 billion in August, compared with €301 billion in July.

Summing up, the ongoing moderation of growth in MFI loans to the non-financial private sector largely reflects the effects of developments in economic activity, interest rates and credit conditions on the demand for loans, with little sign of an additional effect on credit supply coming from the ongoing financial tensions (e.g. through a deterioration in the capital position of banks). Overall, while the growth of broad money and credit aggregates is showing further signs of moderation, the still strong underlying pace of monetary expansion points to continued upside risks to price stability over the medium term.

**Chart 6 Counterparts of M3**

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



Source: ECB.

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

## 2.2 SECURITIES ISSUANCE

The annual growth rate of debt securities issued by euro area residents increased slightly in July 2008. This increase was primarily the result of increasing growth rates for debt securities issued by the MFI and central government sectors, which were, however, largely offset by a decrease in the growth rate of debt securities issued by the non-financial corporation sector. The growth rate of the issuance of quoted shares remained unchanged in July.

### DEBT SECURITIES

The annual growth rate of debt securities issued by euro area residents increased again in July 2008, edging upwards to stand at 7%, up from 6.8% in June (see Table 3). As regards the maturity structure of debt securities issuance, the annual growth rates of both short and long-term securities increased by 0.1 percentage point in July to stand at 22.2% and 5.3% respectively. Issuance of longer-term securities can be broken down further into securities issued at floating and fixed rates. On account of demand factors, floating rates tend to be favoured over fixed rates in periods marked by a flat yield curve. The flat yield curve observed in recent months may therefore partly explain the fact that in July the annual rate of growth of floating rate securities was again significantly higher, at 11.4%, than the rate of growth of fixed rate securities, which stood at 3% in that month.

The annual growth rate of debt securities issued by non-financial corporations declined for the second consecutive month to stand at 2.9% in July, down from 4% in June and 6.6% in May. Viewed from a longer-term perspective, the growth rate of debt securities issuance in this sector has declined by more than 7 percentage points since July 2007, when the annual growth rate stood at 10%. In terms of the maturity structure of issuance, the annual growth rate of long-term debt securities issued by non-financial corporations declined to 2.1% in July, down from 2.4% in June, while the growth rate of short-term issuance declined to 6.4% in July, down from 12% in June.

Turning to seasonally adjusted data (which are more suitable for gauging short-term trends), the six-month annualised growth rate of debt securities issuance increased to 6.5% in July, up from 5.4% in June. This was the first increase in this growth rate since October 2007. However, this

Table 3 Securities issued by euro area residents

Issuing sector	Amount outstanding (EUR billions)	Annual growth rates <sup>1)</sup>					
		2007 Q3	2007 Q4	2008 Q1	2008 Q2	2008 June	2008 July
<b>Debt securities:</b>	<b>12,576</b>	<b>9.1</b>	<b>8.9</b>	<b>8.2</b>	<b>6.9</b>	<b>6.8</b>	<b>7.0</b>
MFIs	5,288	10.9	10.7	9.2	7.7	8.1	8.4
Non-monetary financial corporations	1,606	28.1	26.7	25.3	22.3	23.0	21.9
Non-financial corporations	693	9.2	8.7	9.6	6.3	4.0	2.9
General government	4,989	3.3	3.0	2.7	2.2	1.5	2.1
<i>of which:</i>							
Central government	4,671	3.3	2.9	2.6	2.2	1.4	2.0
Other general government	318	2.9	4.5	2.8	2.1	2.9	3.8
<b>Quoted shares:</b>	<b>4,962</b>	<b>1.4</b>	<b>1.4</b>	<b>1.3</b>	<b>1.0</b>	<b>0.7</b>	<b>0.7</b>
MFIs	689	1.8	1.3	0.8	1.5	1.8	2.8
Non-monetary financial corporations	428	0.9	2.7	2.6	2.3	2.4	2.5
Non-financial corporations	3,845	1.3	1.3	1.3	0.8	0.3	0.1

Source: ECB.

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

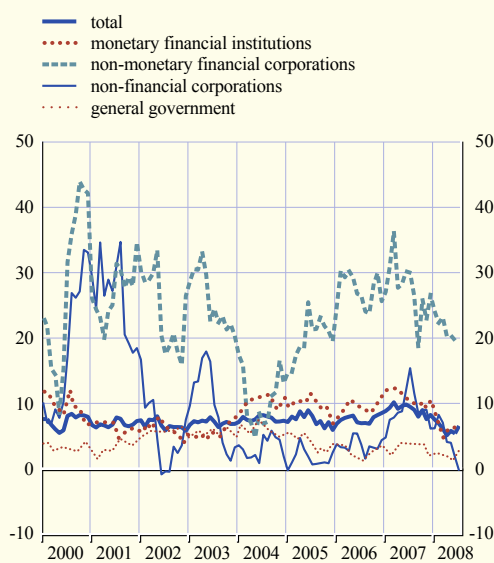
overall increase in securities issuance activity masks a further decline in the growth rate of debt securities issued by non-financial corporations. In fact, in July the six-month annualised growth rate of debt securities issued by non-financial corporations became negative for the first time since 2004, standing at -0.3% in that month, compared with 1.7% in June (see Chart 7). The reduced issuance activity visible in the seasonally adjusted data may be related, at least to some extent, to the ongoing financial market turbulence, which has brought about a general increase in the cost of market-based debt financing.

As regards the financial sector, the annual growth rate of debt securities issued by MFIs increased moderately to stand at 8.4% in July, up from 8.1% in June. In line with the trend observed since the beginning of the financial market turmoil, issuance of short-term securities remained strong, with an annual growth rate of 30.1% in July. The annual growth rate of MFIs' issuance of long-term debt securities also increased, rising from 4.8% in June to 5.1% in July. The fact that the issuance of short-term debt securities has been more robust than that of long-term securities can be attributed to the repricing that has affected financial sector issuers since the onset of the financial market turmoil. The extent of this effect can be gauged more accurately by examining short-term growth rates. Indeed, six-month seasonally adjusted data indicate that the growth rate of long-term debt securities issuance was 6.1% in July, while the growth rate of short-term issuance was significantly higher, standing at 13.4% in that month.

The annual growth rate of debt securities issued by non-monetary financial corporations decreased slightly to stand at 21.9% in July, down from 23.0% in June. Despite this decline, annual growth rates remain fairly robust in this sector. A large part of this issuance activity is related to the various securitisation activities undertaken by special-purpose vehicles (entities, usually sponsored by banks, which are set up to fulfil temporary objectives). The short-term dynamics

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

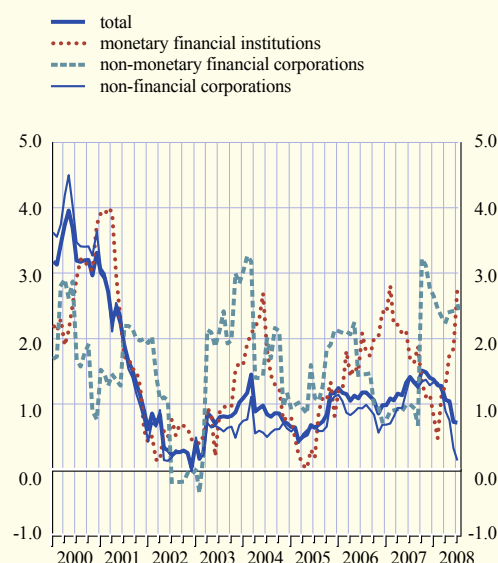
(six-month annualised seasonally adjusted growth rates)



Source: ECB.

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

(annual growth rates)



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



evidenced by the six-month annualised growth rate show that the slowdown in issuance activity in this sector has been pronounced since the summer of 2007. Nevertheless, activity remains at a relatively high level.

The annual growth rate of debt securities issued by the general government sector increased to 2.1% in July, up from 1.5% in June. This increase broadly reflected an increase in the growth rate of debt securities issued by the central government sector.

### QUOTED SHARES

The annual growth rate of quoted shares issued by euro area residents remained at 0.7% in July, unchanged from June (see Table 3). This stability broadly reflects a moderate decline in the growth rate of quoted shares issued by non-financial corporations, which fell from 0.3% to 0.1%, while the growth rate of issuance by non-monetary financial institutions increased slightly from 2.4% to 2.5%. The annual growth rate of quoted shares issued by MFIs increased by 1 percentage point to stand at 2.8% in July (see Chart 8).

## 2.3 MONEY MARKET INTEREST RATES

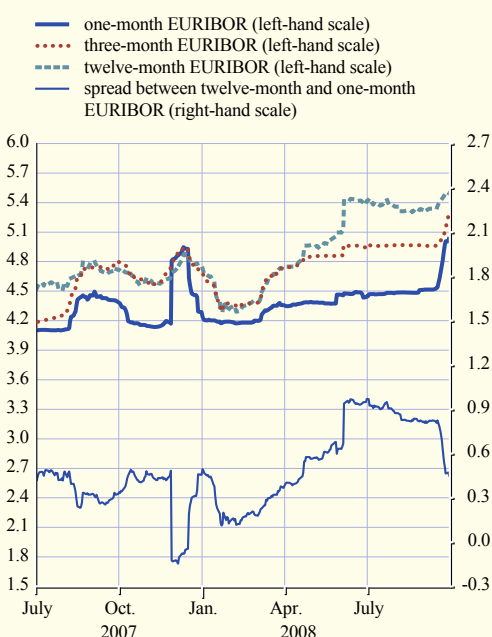
*In September, unsecured money market interest rates increased significantly, reflecting renewed financial tensions. By contrast, secured rates decreased slightly, in line with a downward revision of market expectations of future key ECB interest rates. As a result, spreads between unsecured and secured money market rates rose significantly. A series of overnight fine-tuning operations took place in the second half of September.*

Unsecured money market rates increased significantly between 1 September and 30 September 2008. On 30 September, the one-month, three-month, six-month and twelve-month EURIBOR rates stood at 5.05%, 5.28%, 5.38% and 5.50% respectively, 54, 32, 21, 17 basis points above the levels observed on 1 September (see Chart 9).

As a result of these developments, the spread between the twelve-month and one-month EURIBOR rates decreased to 45 basis points on 30 September, from 81 basis points on 1 September (see Chart 9). At the same time, market expectations of the key ECB interest rates, as reflected by EONIA swap rates, decreased over the course of the month. Consequently, spreads between the unsecured EURIBOR and the EONIA swap index increased significantly, reaching levels not seen for several months and the peaks observed in December 2007 as the year-end approached. More precisely, at the three-month maturity,

Chart 9 Money market interest rates

(percentages per annum; daily data)



Sources: ECB and Reuters.

the spread between the EURIBOR and the EONIA swap index increased from 64 basis points on 1 September to 125 basis points on 30 September.

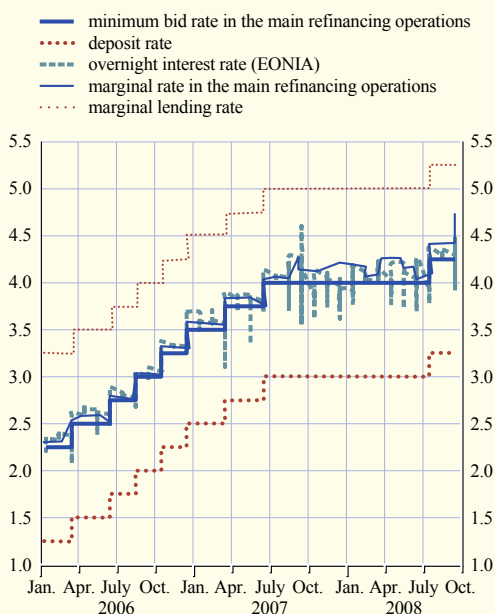
On 30 September, the interest rates implied by the prices of three-month EURIBOR futures maturing in December 2008, March 2009 and June 2009 stood at 5.29%, 4.89% and 4.65% respectively. This represents an increase of 24, 16 and 14 basis points respectively, compared with 1 September, reflecting the anticipated persistence of the renewed money market tensions seen in September.

In the light of the ample liquidity situation anticipated by the ECB in the last few days of the eighth maintenance period of 2008 (ending on 9 September), a liquidity-absorbing fine-tuning operation with an overnight maturity was launched on the last day of the period to re-establish a more neutral liquidity situation. In this operation, the ECB absorbed €20.1 billion. The EONIA stood at 3.916% on that day (see Chart 10).

On 2 September 2008 the Governing Council decided to keep the key ECB interest rates unchanged, with the minimum bid rate in the Eurosystem's main refinancing operations standing at 4.25%. In the first few days of the ninth maintenance period (ending on 7 October), the EONIA was stable at around 4.30%. However, as of 15 September, tensions in the euro money market intensified considerably owing to market participants' concerns about the solvency of financial firms, in particular following the failure or takeover of several leading institutions in the United States. On 15 September the EONIA rose to 4.465%. To contain the impact of tensions on euro overnight interest rates and to accommodate counterparties' wishes to fulfil their reserve requirements early in the maintenance period, the ECB continued its policy of allotting liquidity in excess of the benchmark amount in its main refinancing operations, while still aiming for balanced liquidity conditions at the end of the maintenance period. Specifically, in the Eurosystem's regular weekly main refinancing operations on 9, 16, 23 and 30 September, the ECB allotted €20 billion, €39 billion, €59 billion and €230 billion in excess of the respective benchmark amounts. The resulting marginal tender rates for these four operations were 4.39%, 4.53%, 4.73% and 4.65% respectively. In addition, the Eurosystem provided overnight liquidity in fine-tuning operations on 15, 16, 18 and 24 September, allocating €30 billion, €70 billion, €25 billion and €40 billion at a marginal rate of 4.30%, 4.32%, 4.30% and 4.25% respectively. Furthermore, using the reciprocal currency arrangements (swap lines) with the Federal Reserve, the Eurosystem provided funding in USD against Eurosystem eligible collateral with an overnight maturity on 18, 19, 22, 23, 24, 25, 26, 29 and 30 September, with a maturity of 28 days on 11 and 25 September, and of 84 days on 11 September. Finally, to address funding pressures over the end of the quarter, on 26 September the ECB provided USD 35 billion for one week and on 30 September allotted €120 billion in a special term refinancing operation, maturing on 7 November 2008 (renewable beyond the end of the year).

Chart 10 ECB interest rates and the overnight interest rate

(percentages per annum; daily data)



Sources: ECB and Reuters.

In the Eurosystem's regular longer-term refinancing operation (LTRO) on 11 September (which was conducted with a fixed allotment amount of €50 billion and a maturity of three months), the marginal rate was 4.45% and the weighted average rate was 4.66%. In the LTRO on 25 September (which was conducted with a fixed allotment amount of €50 billion and a maturity also of three months), the marginal rate was 4.98% and the weighted average rate was 5.11%. The marginal rate in this operation was 14 basis points lower than the three-month EURIBOR on 25 September and 43 basis points higher than the marginal rate in the previous three-month LTRO.

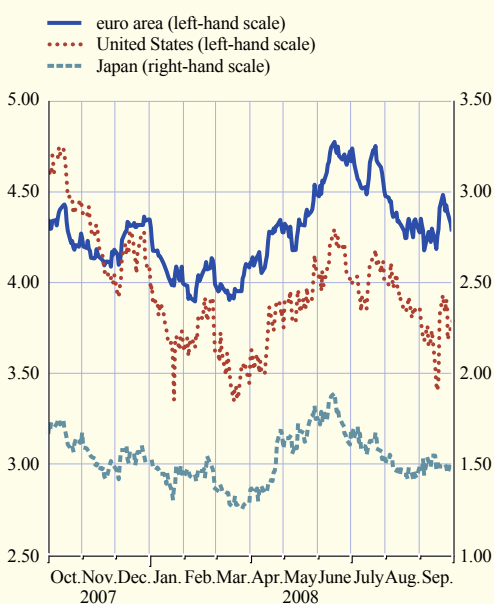
## 2.4 BOND MARKETS

*In September long-term government bond yields remained broadly unchanged in the euro area and Japan and declined in the United States. Market participants' uncertainty regarding short-term developments in bond yields, as measured by implied bond market volatility, increased significantly across the major markets amid the events that have reshaped the financial landscape in recent weeks. As reflected in break-even inflation rates, market participants' medium and long-term euro area inflation expectations (and associated risk premia) declined in September owing to market concerns about the economic outlook. Finally, corporate bond spreads for the euro area widened significantly, reflecting the severe tensions recently witnessed in the markets.*

At the end of September 2008 ten-year government bond yields in the euro area were broadly unchanged from the end of August, standing at about 4.3% on 30 September (see Chart 11). By

Chart 11 Long-term government bond yields

(percentages per annum; daily data)



Sources: Bloomberg and Reuters.

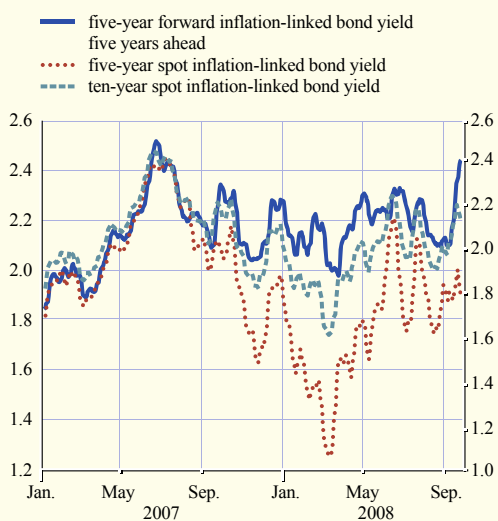
Note: Long-term government bond yields refer to ten-year bonds or to the closest available bond maturity.

contrast, long-term government bond yields in the United States declined by more than 5 basis points, ending the period under review at 3.8%. Accordingly, the ten-year nominal interest rate differential between US and euro area government bond yields narrowed, standing at -50 basis points at the end of September. In Japan, ten-year government bond yields remained unchanged, standing at 1.5% at the end of the period under review. Market participants' uncertainty regarding short-term developments in bond yields, as measured by implied bond market volatility, grew significantly across the major markets in the context of intensifying strains in the global financial markets.

Since the end of August volatility in US yields has been more pronounced than in the corresponding euro area yields: US government bond yields dropped significantly during the first half of September, but recovered thereafter. This development can be attributed to the tumultuous events that hit the financial markets, including the disappearance of the pure broker-dealer business model and the

**Chart 12 Euro area zero coupon inflation-linked bond yields**

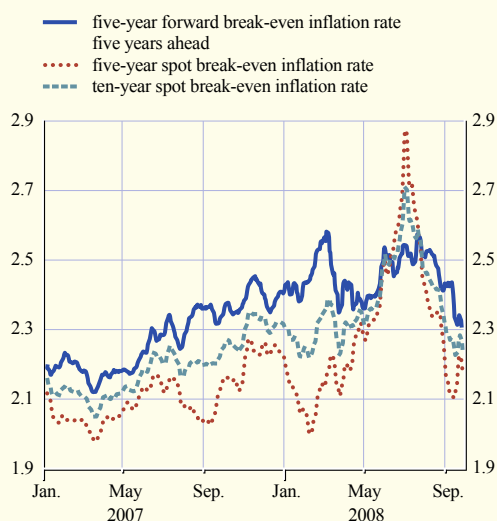
(percentages per annum; five-day moving averages of daily data; seasonally adjusted)



Sources: Reuters and ECB calculations.

**Chart 13 Euro area zero coupon break-even inflation rates**

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



Sources: Reuters and ECB calculations.

rescue of the insurer AIG. At first, these events prompted a flight to safety, with investors seeking to purchase government bonds. This, in turn, pushed yields down. Subsequently, concerns about the rescue plan unveiled by the US Treasury, which involves buying up to USD 700 billion of illiquid mortgage-related assets and possible capital injections for distressed financial institutions, as well as the strain that this will put on the US fiscal budget, may have dampened investors' appetite for government bonds, thus pushing yields up. In September yields on US long-term inflation-linked government bonds remained broadly constant, which may indicate that market participants' inflation expectations did not change significantly during the period under review.

Since the end of August there has been a significant increase in the volatility of euro area long-term nominal bond yields, again amid the turmoil that has impacted the financial markets. Real yields on ten-year inflation-linked bonds increased by 17 basis points in the period under review (see Chart 12). The five-year forward real yield five years ahead surged even further, increasing by 32 basis points in September. These increases probably reflect changes in risk premia.

In September market participants' long-term euro area inflation expectations and associated risk premia – as measured by implied forward break-even inflation rates – declined by about 10 basis points. On 30 September the five-year forward break-even inflation rate five years ahead stood at 2.3%. Over the period under review, the five and ten-year spot break-even inflation rates also decreased by around 10 basis points each (see Chart 13). Investors' concerns that the financial market turbulence could weigh negatively on the real economy may have dampened inflation expectations.

The implied nominal forward overnight interest rate curve for 30 September 2008 crosses the corresponding curve for 29 August 2008 around the four-year horizon, which suggests significantly lower rates at the short end of the curve and higher rates over long-term horizons

(see Chart 14). The short-end reappraisal of interest rate expectations may be in anticipation of a slowdown in economic activity, while the movements at the long end may reflect changes in risk premia.

In September corporate bond spreads for the euro area widened for all rating categories, even AAA-rated corporate bonds. Over the period under review spreads on BBB-rated and high-yield corporate bonds increased by about 85 and 307 basis points respectively. When comparing the financial and non-financial sectors, the spreads on BBB-rated corporate bonds increased by about 180 and 70 basis points respectively over the period under review. The persistently high and increasing spreads for the financial sector reflect the severe tensions recently witnessed in the markets.

## 2.5 INTEREST RATES ON LOANS AND DEPOSITS

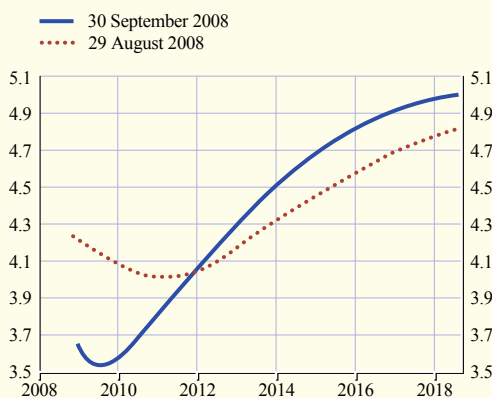
*In July 2008 MFI interest rates on loans to households and non-financial corporations increased somewhat, while market interest rates remained broadly stable. Overall, the increase observed in banks' funding costs since the financial market turmoil began in mid-2007 has not been fully passed on to bank interest rates, with the pass-through being somewhat stronger for households than for non-financial corporations.*

In August 2004 the introduction of weight-adjusted MFI interest rates represented the best way of reducing the impact of the volatility of country weights in the calculation of MFI interest rates (for more detailed information, see Box 3, entitled "Analysing MFI interest rates at the euro area level", in the August 2004 issue of the Monthly Bulletin). However, the difference between these weight-adjusted MFI interest rates and the official MFI interest rate statistics published in the "Euro area statistics" section of the Monthly Bulletin has diminished over time for most rates. In the light of these developments, the text and charts relating to MFI interest rates in this section of the Monthly Bulletin will henceforth be based on the official MFI interest rates.

In July 2008 short-term MFI interest rates on deposits and loans of households and non-financial corporations generally increased. The majority of money market rates remained broadly unchanged in that month (see Table 4 and Chart 15). In July interest rates on short-term deposits (i.e. deposits with an agreed maturity of up to one year) were 18 basis points higher than in June for both non-financial corporations and households. Interest rates on new short-term loans to households for consumption with a floating rate and an initial rate fixation period of up to one year increased by 16 basis points in July, while interest rates on equivalent loans for house purchase increased by 18 basis points. At the same time, short-term MFI interest rates on new loans to non-financial corporations of up to €1 million increased by somewhat less, rising by 10 basis points, while rates on the bank overdrafts of non-financial corporations increased by 7 basis points.

**Chart 14 Implied forward euro area overnight interest rates**

(percentages per annum; daily data)



Sources: ECB, EuroMTS (underlying data) and Fitch Ratings (ratings).

Notes: The implied forward yield curve, which is derived from the term structure of interest rates observed in the market, reflects market expectations of future levels for short-term interest rates. The method used to calculate these implied forward yield curves is outlined in the "Euro area yield curve" section of the ECB's website. The data used in the estimate are for euro area AAA-rated government bond yields.

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

(percentages per annum; basis points)

							Change in basis points up to July 2008 <sup>1)</sup>		
	2007 Q2	2007 Q3	2007 Q4	2008 Q1	2008 June	2008 July	2007 Dec.	2008 Mar.	2008 June
<b>MFI interest rates on deposits</b>									
Deposits from households									
with an agreed maturity of up to one year	3.78	4.07	4.28	4.14	4.43	4.61	33	47	18
with an agreed maturity of over two years redeemable at notice of up to three months	2.64	2.92	3.18	3.08	3.28	3.35	17	27	7
redeemable at notice of over three months	2.42	2.58	2.57	2.69	2.74	2.80	23	11	6
Overnight deposits from non-financial corporations	3.32	3.50	3.68	3.78	3.88	3.94	26	16	6
1.77	1.91	1.95	2.03	2.06	2.13	18	10	7	
Deposits from non-financial corporations									
with an agreed maturity of up to one year	3.94	4.14	4.26	4.20	4.28	4.46	20	26	18
with an agreed maturity of over two years	4.16	4.41	4.03	4.07	4.01	4.57	54	50	56
<b>MFI interest rates on loans</b>									
Loans to households for consumption									
with a floating rate and an initial rate fixation of up to one year	8.08	8.49	8.05	8.43	8.61	8.77	72	34	16
Loans to households for house purchase									
with a floating rate and an initial rate fixation of up to one year	5.00	5.23	5.32	5.20	5.48	5.66	34	46	18
with an initial rate fixation of over five and up to ten years	4.90	5.09	5.07	4.96	5.08	5.21	14	25	13
Bank overdrafts to non-financial corporations	6.17	6.49	6.62	6.56	6.67	6.74	12	18	7
Loans to non-financial corporations									
of up to €1 million									
with a floating rate and an initial rate fixation of up to one year	5.53	5.93	6.08	5.91	6.16	6.26	18	35	10
with an initial rate fixation of over five years	5.03	5.23	5.30	5.23	5.43	5.49	19	26	6
Loans to non-financial corporations of over €1 million									
with a floating rate and an initial rate fixation of up to one year	4.89	5.20	5.35	5.19	5.35	5.44	9	25	9
with an initial rate fixation of over five years	5.17	5.41	5.48	5.34	5.52	5.51	3	17	-1
<b>Memo items</b>									
Three-month money market interest rate	4.15	4.74	4.85	4.60	4.94	4.96	11	36	2
Two-year government bond yield	4.45	4.10	4.06	3.54	4.72	4.61	55	107	-11
Five-year government bond yield	4.57	4.19	4.14	3.65	4.75	4.70	56	105	-5

Source: ECB.

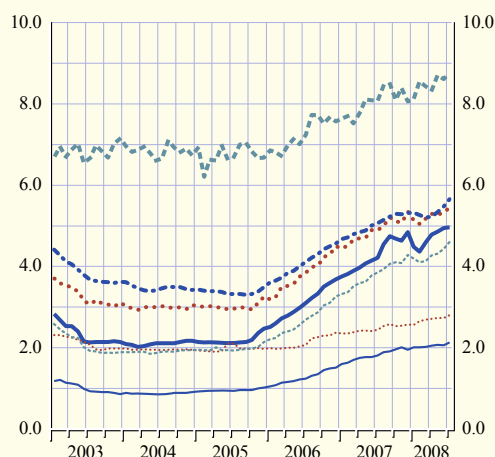
1) Figures may not add up due to rounding.

Taking a longer-term perspective, the three-month money market rate rose by 74 basis points between July 2007 and July 2008, while short-term MFI interest rates on deposits from households and non-financial corporations increased by 75 and 45 basis points respectively. Interest rates on loans to households for consumption with a floating rate and an initial rate fixation period of up to one year increased by 70 basis points, while interest rates on equivalent loans for house purchase increased by 60 basis points. Short-term MFI interest rates on loans to non-financial corporations of up to €1 million increased by 55 basis points over that period. In general, while the increases observed in banks' costs for wholesale and securitised funding as a result of the persistent tightening in the interbank markets have not been fully passed on, there is some evidence to suggest that the pass-through has been somewhat stronger for the household sector than for non-financial corporations. At the same time, households can be seen to have benefited from increased competition among banks in terms of attracting deposits.

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

(percentages per annum; rates on new business)

- 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

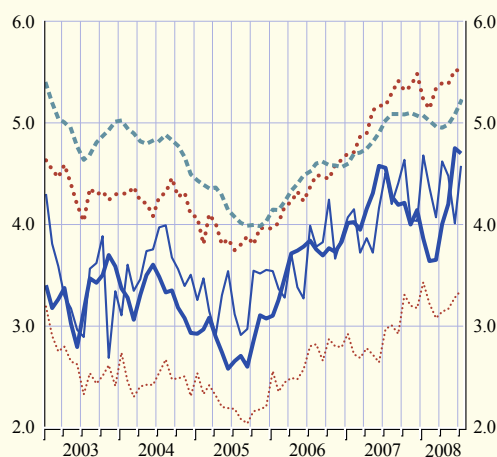


Source: ECB.

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

(percentages per annum; rates on new business)

- 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.

In July 2008 long-term MFI interest rates on deposits with a maturity of over two years increased by 7 and 56 basis points for households and non-financial corporations respectively (see Table 4 and Chart 16). Two-year and five-year government bond yields fell by 11 and 5 basis points respectively in that month. At the same time, long-term MFI interest rates on loans for house purchase increased by 13 basis points, while interest rates on loans to non-financial corporations of over €1 million remained broadly unchanged.

Turning to developments over a longer horizon, long-term MFI deposit and lending rates for households increased moderately between July 2007 and July 2008. 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 19 basis points, while interest rates on deposits from households with an agreed maturity of over two years increased by 38 basis points over the same period. At the same time, interest rates on loans to non-financial corporations of over €1 million with an initial rate fixation period of over five years increased by 34 basis points, while interest rates on deposits from non-financial corporations with an agreed maturity of over two years increased by 6 basis points. Government bond yields increased less than long-term MFI interest rates over that period, with five-year yields increasing by 15 basis points. As a result, the spread between long term MFI lending rates and government bond yields widened moderately, reflecting the increase in banks' funding costs.

## 2.6 EQUITY MARKETS

*In September broad stock price indices declined by more than 11% and 9% in the euro area and the United States respectively amid the events of that month, which have reshaped the financial landscape. Against this background, stock market uncertainty, as measured by implied volatility, grew across the major markets during the period under review.*

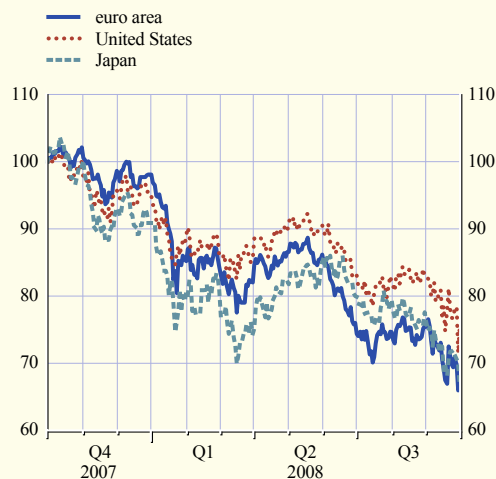
In September the euro area and US broad-based stock price indices, as measured by the Dow Jones EURO STOXX and the Standard and Poor's 500, declined by more than 11% and 9% respectively amid the events that hit the financial markets (see Chart 17). Over the same period stock prices in Japan, as measured by the Nikkei 225 index, also declined, with losses of approximately 12%.

During the period under review there was a high degree of uncertainty on the stock markets, as measured by the implied volatility extracted from stock options (see Chart 18). Equity volatility surged, peaking in mid-September and then again at the end of the month. The increase in implied volatility, together with the widening of spreads for BBB-rated and high-yield corporate bonds, and, above all, the great uncertainty surrounding developments in financial markets, are likely to have sharply reduced investors' appetite for risk. Against this background, equity risk premia may have increased across major equity markets and thus contributed to the fall in equity prices.

Amid the recent reshaping of the financial landscape in the United States, prices of financial equities underwent large swings. In less than one month, the US government-sponsored enterprises Fannie Mae and Freddie Mac were put into public ownership, Lehman Brothers filed for bankruptcy, Merrill Lynch was taken over by Bank of America and the Federal Reserve extended an extraordinary loan to the insurance group AIG in exchange for an 80% stake. Moreover, the two remaining major US

Chart 17 Stock price indices

(index: 1 October 2007 = 100; daily data)

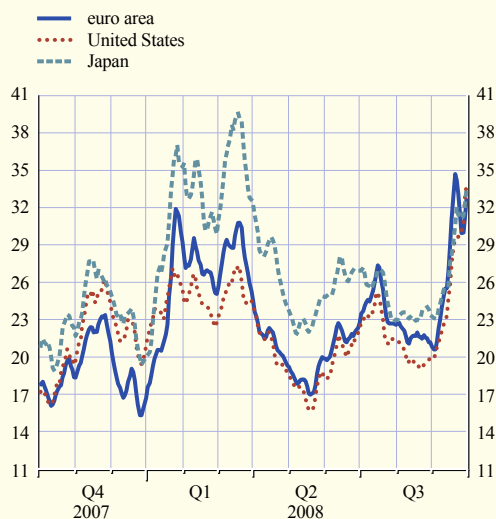


Sources: Reuters and Thomson Financial Datastream.

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

Chart 18 Implied stock market volatility

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



Source: Bloomberg.

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



investment banks, Goldman Sachs and Morgan Stanley, relinquished their investment bank status to become bank holding companies. This means that they will be subject to regulation by the Federal Reserve and will have access to the Federal Reserve's loan facilities both as banks and as brokers. To support the financial system, the US Treasury unveiled a proposal which involves buying up to USD 700 billion of illiquid US mortgage-related assets and possible capital injections for distressed financial institutions. In response to this announcement and to other support measures put forward by the fiscal and monetary authorities, stock prices increased. However, uncertainty surrounding the US Congress's approval of the plan proposed by the Treasury generated considerable volatility in equity markets.

Overall, in the United States, the stock prices of the financial sector decreased by about 4% in September, while those of the non-financial sector declined by around 11.5%. Prima facie, it may seem counterintuitive that the heaviest losses occurred in the non-financial sector rather than in the financial sector. However, this probably reflects investors' increasing concerns about possible spillovers from the financial sector to the real economy.

Developments in equity prices in the euro area partly reflected those in US markets. Moreover, in the euro area, the period under review was also characterised by a number of interventions by national governments and private financial institutions aimed at bringing relief to the banking system. Among other things, there were: capital injections for Fortis; the underwriting of credit guarantees for Hypo Real Estate; a support package for Dexia; and a series of measures to stabilise the Irish banking system. Overall, stock prices in both the non-financial sector and the financial sector in the euro area declined by around 12% in September.

Actual annual earnings growth in September, computed in terms of earnings per share for companies on the Dow Jones EURO STOXX and the Standard and Poor's 500 indices respectively, turned slightly negative in the euro area and remained at around -10% in the United States. However, the forecast growth rate for earnings per share 12 months ahead increased to 9% and 18.5% in the euro area and the United States respectively, while the forecast growth rate over the longer term remained broadly unchanged at around 7% and 12% respectively.

## 3 PRICES AND COSTS

*Euro area HICP inflation reached 3.8% in August 2008 and, according to Eurostat's flash estimate, 3.6% in September. On the basis of current futures prices for commodities, the annual HICP inflation rate is likely to remain well above levels consistent with price stability for some time, moderating gradually during the course of 2009. At the policy-relevant medium-term horizon, taking into account the weakening in demand, upside risks to price stability have diminished somewhat, but they have not disappeared. These risks include the possibility of previous commodity price rises having further and stronger indirect effects on consumer prices, as well as a renewed increase in commodity prices. In particular, there is a very strong concern that the emergence of broad-based second-round effects in price and wage-setting behaviour could add significantly to inflationary pressures. Moreover, the upside risks to price stability could be aggravated by unexpected rises in indirect taxes and administered prices.*

### 3.1 CONSUMER PRICES

According to Eurostat's flash estimate, euro area HICP inflation declined to 3.6% in September 2008, from 3.8% in August (see Table 5). Although official estimates of the breakdown of the HICP for September have not yet been published, available evidence at the country level suggests that the decline is most likely due to the energy component, but also – to a lesser extent – to the food component.

The detailed breakdown for August indicates that the mild slowdown in annual HICP inflation was mainly the result of the growth rates of energy and food prices coming down from their July peaks (see Chart 19). The annual growth rate of energy prices, while remaining elevated, declined in August from the historical peak observed in July. This decline was mainly on account of a sharp fall in oil energy prices, in particular in car and heating fuel. By contrast, the year-on-year rates of change in the non-oil energy components, such as gas and electricity, continued to move upwards, thereby exhibiting the historical pattern of following peaks in oil price developments with a lag.

A marked decrease in the annual rate of change in unprocessed food prices in August resulted mainly from volatility in fruit prices, which offset a further increase in the annual growth rate of meat prices. There was also a decline in the annual rate of change in processed food prices

**Table 5 Price developments**

(annual percentage changes, unless otherwise indicated)

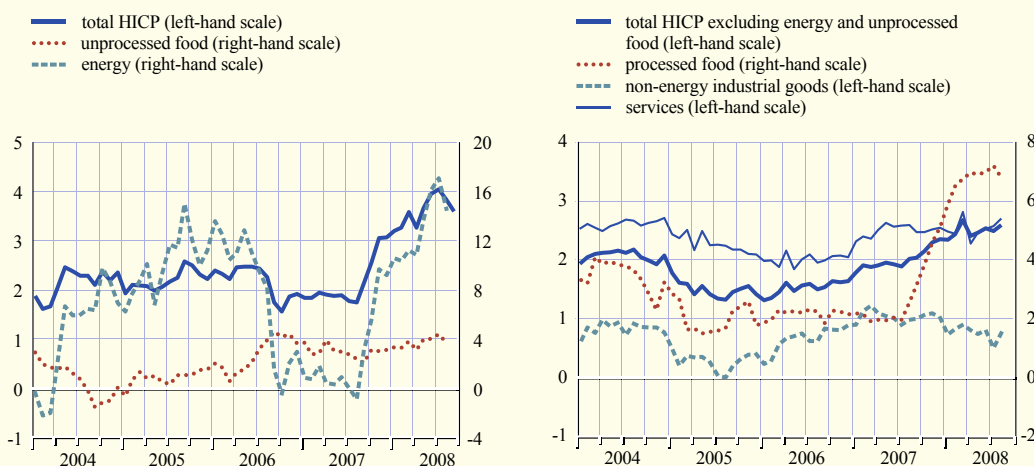
	2006	2007	2008 Apr.	2008 May	2008 June	2008 July	2008 Aug.	2008 Sep.
<b>HICP and its components</b>								
Overall index <sup>1)</sup>	2.2	2.1	3.3	3.7	4.0	4.0	3.8	3.6
Energy	7.7	2.6	10.8	13.7	16.1	17.1	14.6	.
Unprocessed food	2.8	3.0	3.1	3.9	4.0	4.4	3.7	.
Processed food	2.1	2.8	7.0	6.9	7.0	7.2	6.8	.
Non-energy industrial goods	0.6	1.0	0.8	0.7	0.8	0.5	0.7	.
Services	2.0	2.5	2.3	2.5	2.5	2.6	2.7	.
<b>Other price indicators</b>								
Industrial producer prices	5.1	2.8	6.2	7.1	8.1	9.2	.	.
Oil prices (EUR per barrel)	52.9	52.8	69.8	80.1	85.9	85.3	77.0	70.0
Non-energy commodity prices	24.8	9.2	5.8	6.0	9.6	9.8	10.5	.

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

1) HICP inflation in September 2008 refers to Eurostat's flash estimate.

Chart 19 Breakdown of HICP inflation: main components

(annual percentage changes; monthly data)



Source: Eurostat.

in August from the historical peak reached in July. While there has been some easing in food price developments, with seasonally adjusted monthly changes moving back towards historical averages over the first half of 2008, past rises in food commodities imply significant supply chain price pressures.

Annual HICP inflation excluding all food and energy items, which represents an exclusion of 30% of the HICP basket, increased to 1.9% in August, driven by a higher annual rate of growth in both non-energy industrial goods prices and services prices. The increase in non-energy industrial goods price inflation mainly reflected extraordinary seasonal developments in textile prices, which increased on a month-on-month basis in August following strong seasonal discounts in July. Moreover, car prices rose slightly in annual terms, and there were some further year-on-year increases in the prices of certain items (such as furniture, jewellery and spare parts for cars), which could to some extent reflect a further gradual pass-through of past increases in commodity prices. As indicated in Box 2, price dynamics in non-energy industrial goods can be expected to accelerate slightly in the short run, although they are likely to remain moderate. The annual growth rate of services prices recorded a further increase in August compared with the previous month, which is likely to have stemmed from the indirect effects of past surges in energy and food prices at the global level. Confirming the signals previously observed, this increase was mostly due to a further sizeable contribution from transport services prices, almost entirely driven by the prices of passenger transport by air. Perhaps related to this, the contribution of the package holidays sub-component was also significant. Annual inflation in the restaurant and café price component was again strong in August. As in previous months, these increases were partly compensated for by a further drop in the annual rate of change in communication prices and some stabilisation in housing services price inflation.

Box 2

TRENDS IN NON-ENERGY INDUSTRIAL GOODS PRICES

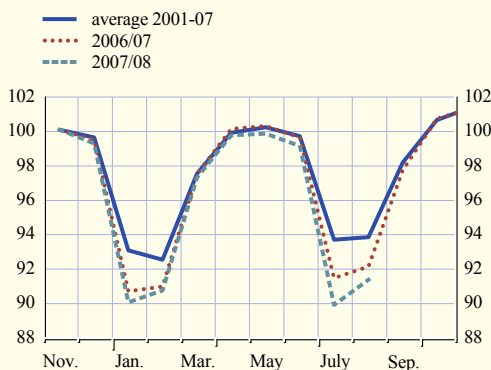
In a context of sustained upward cost pressures from increases in oil and other commodity prices at the global level, which have caused a surge in overall euro area inflation, the annual rate of change in the prices of non-energy industrial goods (NEIG)<sup>1</sup>, one of the biggest HICP components (accounting for almost 30% of the expenditure basket), has remained remarkably stable. From early 2007 the annual NEIG inflation rates hovered around 1%, before declining somewhat in early 2008 and even reaching 0.5% in July 2008 (see Chart 19 and Table 5 in the main text). This box looks at the main determinants of the recent developments in NEIG prices and assesses why the price dynamics in this component have thus far been so moderate and whether this situation can be expected to last.

The most recent movements in annual NEIG price inflation can be attributed to specific temporary factors. The decline in the first half of the year, from an average rate of 1.0% in 2007 to 0.8% in the first half of 2008, is almost fully explained by the fact that the impact of the rise in German VAT in January 2007 dropped out of the calculation of the annual growth rate. Excluding Germany, the annual rate of change in NEIG prices has remained broadly unchanged for almost a year, at a level slightly below 1%. Furthermore, the volatility observed over the summer months (when the annual rate of change fell from 0.8% in June to 0.5% in July, before rising to 0.7% in August) largely reflected seasonal developments in textile goods which went beyond the average seasonal pattern observed over the period 2001-07 (see Chart A). The summer discounting for clothing and footwear items in July 2008 was stronger on a month-on-month basis than in the previous year, as retailers offered larger price cuts to stimulate relatively weak consumer demand. As textile prices tend to rebound to “normal” levels relatively quickly, the downward impact on NEIG inflation is expected to fade away in the next few months.

<sup>1</sup> NEIG consists of three sub-components: (a) non-durable goods (e.g. electronic goods for personal care, pharmaceutical products, newspapers), accounting for 27% of NEIG; (b) semi-durable goods (e.g. clothing and footwear, books, recreational equipment), accounting for 39% of NEIG; and (c) durable goods (e.g. cars, furniture, household appliances, PCs), accounting for 34% of NEIG.

Chart A Seasonal pattern of HICP clothing and footwear prices

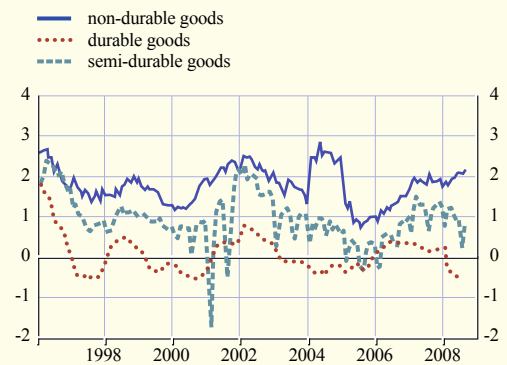
(index: November = 100)



Source: Eurostat.

Chart B Price developments in NEIG sub-components

(annual percentage changes)



Source: Eurostat.

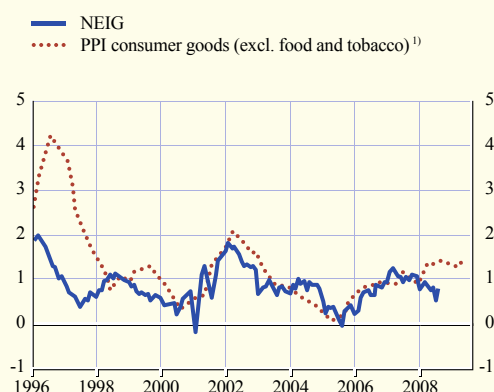
Beyond the short-term impact of seasonal volatility, the relatively stable developments in NEIG prices at the aggregate level can be explained by offsetting developments in the sub-components (see Chart B). Durable goods price inflation has decreased recently, owing mainly to a strong fall in car price inflation. This has contributed significantly to the moderate developments in NEIG price inflation in the recent period by offsetting the ongoing increase in the annual rate of change in non-durable goods prices, which has been mostly driven by developments in the prices of electronic goods for personal care, pharmaceutical products and newspapers. By contrast, the average annual rate of change in semi-durable goods prices has remained broadly stable, as a result of ongoing moderate developments in the annual rate of change in the prices of clothing and footwear, the main component of semi-durable goods.

The increases in the prices of oil and of some raw materials (metals, woods and precious metals such as gold) have exerted input cost pressure on manufactured consumer goods, particularly on certain NEIG items. There is some evidence that these higher costs have been gradually passed on to consumers, and to a notable extent in some cases (furniture, jewellery and spare parts for cars). Despite this, overall developments in NEIG price inflation have remained moderate thus far, owing to a number of mitigating factors. In particular, the significant appreciation of the euro has generally cushioned global commodity price increases and had a dampening impact on developments in the prices of imported consumer goods. The decline in import prices has a direct impact on NEIG inflation, as imported consumer goods for final use represent a notable share of NEIG at the euro area level, especially for some items such as textiles. Furthermore, strong global and domestic competition is exerting downward pressure on prices at both the producer and the retail level. More recently, there seems to have been more specific downward pressure on the consumer prices of industrial goods, as suggested by a wedge between developments in NEIG prices and the prices of domestically produced consumer goods (excluding food and tobacco) (see Chart C). A possible explanation may be the difficulty of passing on higher input costs in an environment of weak consumer demand.

Looking ahead, some upward movement in NEIG inflation might be expected, as the impact of mitigating factors appears to be declining. In particular, in view of recent exchange rate

**Chart C NEIG prices and producer prices for consumer goods (excluding food and tobacco)**

(annual percentage changes)

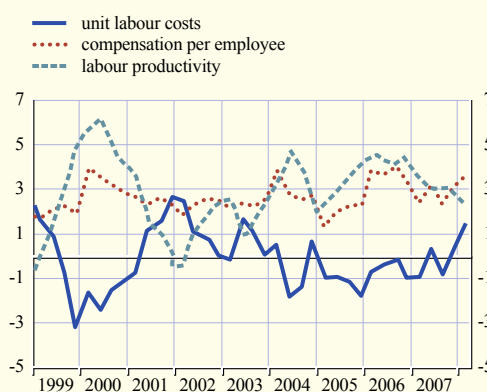


Source: Eurostat.

1) PPI data have been moved forward 12 months.

**Chart D Wages, productivity and unit labour costs in industry (excluding construction)**

(annual percentage changes)



Source: Eurostat.

movements, the downward impact of the euro appreciation on import prices may fade away. Moreover, indirect effects from past increases in commodity prices may strengthen, and inflationary pressures from the labour market have started to emerge. Labour cost developments generally had a moderating impact on NEIG price dynamics between 2004 and late 2007, with more or less constantly negative unit labour cost growth in the overall industrial sector (excluding construction). However, since the turn of the year, an increase in the growth rate of compensation per employee combined with a fall in labour productivity in industry has led to a rise in unit labour cost growth (see Chart D). This trend is expected to continue in the remainder of 2008, suggesting some build-up of upward pressures from labour costs in the consumer goods industry. This additional cost pressure may be passed on to consumers, depending on retailers' pricing power and the cyclical conditions. Available information, notably from the Purchasing Managers' Index survey, suggests that firms operating at the later stages of the production chain have so far accepted a margin compression.

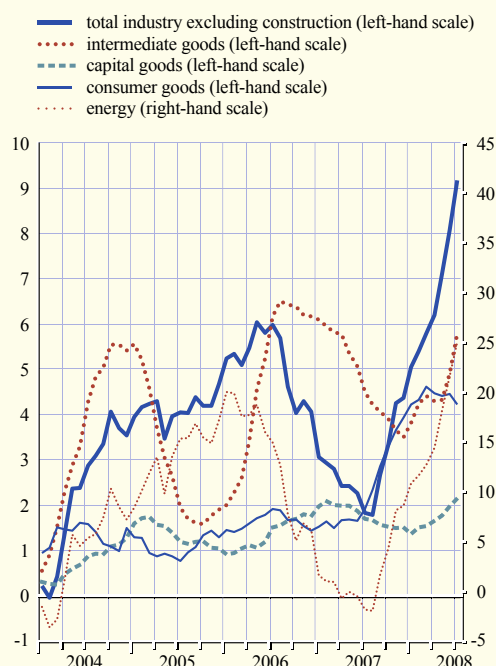
Indirect effects from past increases in commodity prices and strengthening inflationary pressures from labour costs may reinforce the need for firms to restore their margins and may eventually force them to raise their prices. However, at the current juncture, relatively weak private consumption in an environment of sluggish growth and strong competition seems to limit the scope for further strong price increases. Overall, this would suggest that price dynamics in NEIG can be expected to accelerate slightly in the short run, but to remain moderate.

### 3.2 INDUSTRIAL PRODUCER PRICES

In July 2008 the annual rate of change in total industrial producer prices (excluding construction) increased to 9.0%, the highest rate recorded in over 25 years (see Chart 20). This rise was mainly driven by energy and intermediate goods prices. The rate of change in energy prices reached 24.5% on a year-on-year basis in July, its highest rate since the start of the series in 1986. Producer price inflation excluding energy (and construction) increased in July to 4.3%, a level not seen since late 1995, reflecting mostly developments in intermediate goods prices, which jumped to 5.6%. Further down the production chain, the annual rate of change in producer prices for consumer goods decreased somewhat in July to the still elevated level of 4.3%. Excluding tobacco and food, the annual rate of change in the producer prices of consumer goods remained slightly above its 2007 average at 1.4% in July. While the annual rate of change in total industrial producer prices declined in August 2008, it nonetheless remained at a historically high rate of 8.5%.

Chart 20 Breakdown of industrial producer prices

(annual percentage changes; monthly data)



Sources: Eurostat and ECB calculations.

The latest data on firms' price-setting behaviour from the Purchasing Managers' Index signal that ongoing short-term inflationary pressures have been easing, but nevertheless remain elevated (see Chart 21). A marked fall in the input price index in the manufacturing and services sectors was judged to have largely reflected lower oil and other commodity prices. Although both indexes have exhibited significant declines in the past two months, they still signal upward price pressures. The index for prices charged also decreased in both the manufacturing and services sectors in September. The drop in these indicators was attributed to lower growth in input costs as well as the introduction of offers by firms to boost flagging sales. The easing of price pressures notwithstanding, all indicators still stand at high levels and are generally above their long-term average.

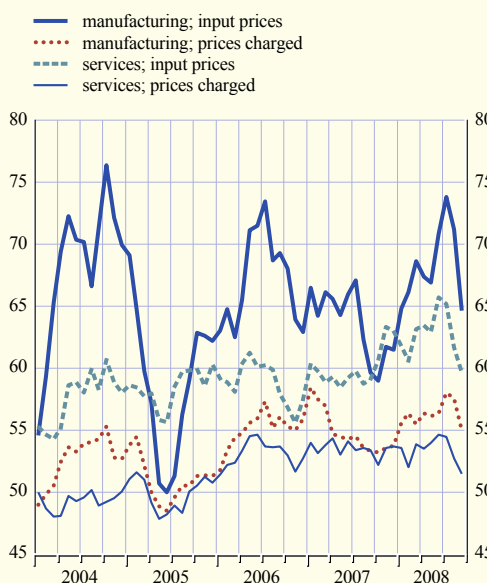
### 3.3 LABOUR COST INDICATORS

Available labour cost indicators suggest that wage growth continued at a fast pace throughout the first half of 2008 which, when combined with weakening productivity growth, corresponded to a significant rise in unit labour cost growth over this period (see Table 6).

The annual growth rates of negotiated wages and compensation per employee have picked up considerably since the last quarter of 2007, while growth in hourly labour costs remained strong in the first half of the year (see Chart 22). The annual growth rate of compensation per employee rose to 3.6% in the second quarter of 2008, a level that has not been witnessed in the euro area since the mid-1990s. In the same period, euro area negotiated wages grew at an annual rate of 2.8%, broadly unchanged from the first quarter of the year. The annual rate of change in hourly labour costs stood at 2.7%, down from an upwardly revised rate of 3.5% in the first quarter of the year, although this decline may to some extent reflect a technical correction

Chart 21 Producer input and output price surveys

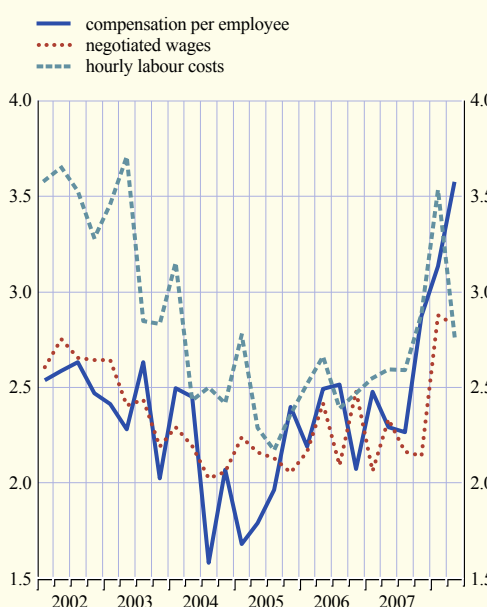
(diffusion indices; monthly data)



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

Chart 22 Selected labour cost indicators

(annual percentage changes; quarterly data)



Sources: Eurostat, national data and ECB calculations.

**Table 6 Labour cost indicators**

(annual percentage changes, unless otherwise indicated)

	2006	2007	2007 Q2	2007 Q3	2007 Q4	2008 Q1	2008 Q2
Negotiated wages	2.3	2.2	2.3	2.2	2.1	2.9	2.8
Total hourly labour costs	2.5	2.6	2.6	2.5	2.9	3.5	2.7
Compensation per employee	2.3	2.5	2.3	2.3	2.9	3.1	3.6
<i>Memo items:</i>							
Labour productivity	1.2	0.9	0.9	0.7	0.4	0.5	0.2
Unit labour costs	1.1	1.6	1.4	1.5	2.5	2.6	3.4

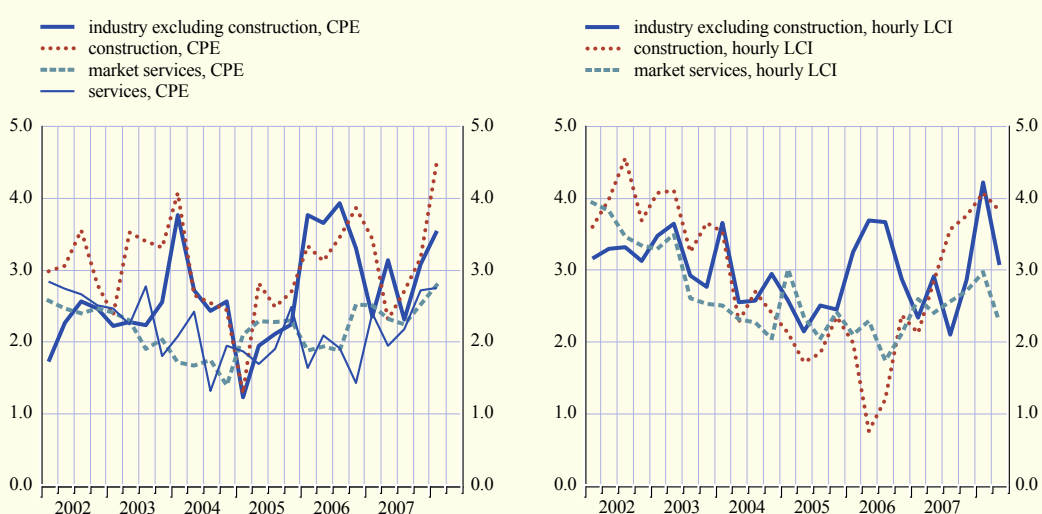
Sources: Eurostat, national data and ECB calculations.

from the boost in the previous quarter stemming from the impact of the early timing of the Easter holiday in 2008 on hours worked. Given slowing productivity growth, wage developments fed directly into a strong acceleration of annual unit labour cost growth to 3.4% in the second quarter, its highest rate in over a decade. In this context, the risk of broader-based second-round effects remains, particularly in those euro area countries where some form of automatic price indexation of wages exists.

Data on sectoral wage developments indicate a strong, broad-based pick-up across the industry, services and construction sectors in the first quarter of 2008. Limited information, available only from hourly labour costs, suggests that some easing of hourly wages took place in the industry (excluding construction) and services sectors in the second quarter of 2008 (see Chart 23). However, as with the overall hourly labour costs, these sectoral developments may have been affected by the early timing of Easter.

**Chart 23 Sectoral labour cost developments**

(annual percentage changes; quarterly data)



Sources: Eurostat and ECB calculations.  
Note: CPE stands for “compensation per employee” and LCI stands for “labour cost index”.



### 3.4 THE OUTLOOK FOR INFLATION

Euro area HICP inflation has now remained considerably above the level consistent with price stability since last autumn, pushed up by the direct and indirect effects of past sharp increases in energy and food prices at the global level. Moreover, wage growth has been picking up strongly in recent quarters, in spite of weaker growth momentum and at a time when labour productivity growth has decelerated, resulting in a sharp increase in the annual growth rate of unit labour costs. Looking ahead, on the basis of current futures prices for commodities, the annual HICP inflation rate is likely to remain well above levels consistent with price stability for some time, moderating gradually in the course of 2009.

At the policy-relevant medium-term horizon, taking into account the weakening in demand, upside risks to price stability have diminished somewhat, but have not disappeared. These risks include the possibility of previous commodity price rises having further and stronger indirect effects on consumer prices, as well as a renewed increase in commodity prices. In particular, there is a very strong concern that the emergence of broad-based second-round effects in price and wage-setting behaviour could add significantly to inflationary pressures. Moreover, the upside risks to price stability could be aggravated by unexpected rises in indirect taxes and administered prices.

## 4 OUTPUT, DEMAND AND THE LABOUR MARKET

Recent data confirm that economic activity in the euro area is weakening, with dampened domestic demand and tighter financing conditions. Available indicators suggest a continuation of weak underlying momentum in euro area growth in the third quarter. The fall in oil prices from their peak in July and ongoing growth in emerging market economies might support a gradual recovery in the course of 2009. The economic outlook is subject to increased downside risks, mainly stemming from a scenario of ongoing financial market tensions affecting the real economy more adversely than currently foreseen. Other downside risks relate to the possibility of renewed increases in highly volatile energy and food prices, disorderly developments owing to global imbalances and rising protectionist pressures.

### 4.1 OUTPUT AND DEMAND DEVELOPMENTS

#### REAL GDP AND DEMAND COMPONENTS

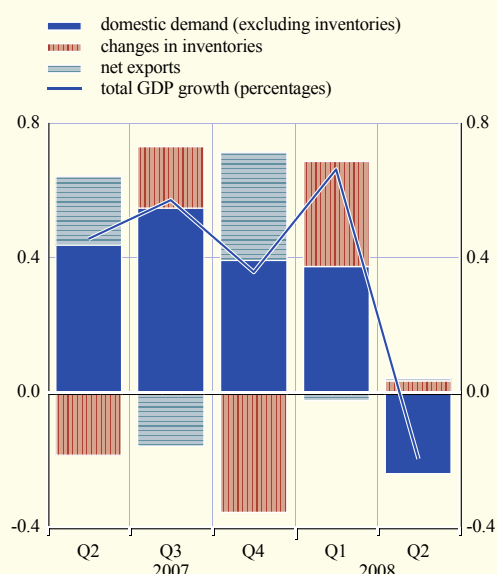
Eurostat estimated that euro area real GDP fell by 0.2% quarter on quarter in the second quarter of 2008, following growth of 0.7% in the first quarter. This volatility in the first half of the year partly reflected temporary factors, notably the mild winter in some parts of Europe which boosted construction activity in the first quarter, while the subsequent weakening of economic activity in the second quarter partly represented a technical reaction to that strong growth early in the year. Nevertheless, the weaker figure for the second quarter also reflected slower growth, as higher commodity prices and the global economic slowdown affected euro area economic activity.

The decline in real GDP in the second quarter was driven by a fall in final domestic demand (i.e. excluding inventories), which contributed -0.2 percentage point to overall growth. The contribution from changes in inventories was zero. Both exports and imports declined by 0.4% in the second quarter, such that the contribution of net trade was also zero (see Chart 24).

A primary factor in the weakness in domestic demand in the second quarter of 2008 was the sharp drop in investment growth, which fell by 1.2% in the second quarter, having risen by 1.5% quarter on quarter in the first quarter. The breakdown of investment has not been released yet, but it appears that much of the volatility in investment reflected developments in construction investment. As discussed in previous issues of the Monthly Bulletin, it is likely that construction investment was boosted by the mild weather conditions in the first few months of the year – a factor that is not properly reflected in seasonal adjustments and which explains the decline observed in the second quarter. However, in line with the tightening of financing conditions, slowing profitability growth and declining capacity pressures, it is likely that

Chart 24 Real GDP growth and contributions

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



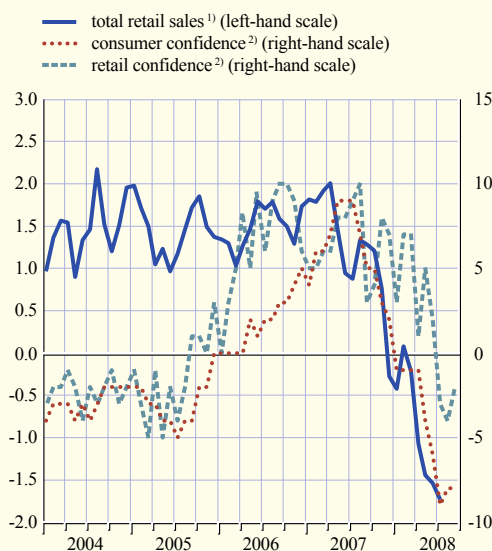
Sources: Eurostat and ECB calculations.

non-construction investment also moderated in the second quarter, compared with the first.

The recent weakness in euro area private consumption continued in the second quarter of 2008, as spending fell by 0.2% quarter on quarter. Consumers have reined back their spending in the light of significant increases in commodity prices, which have dampened real income growth. In addition, households have suffered from a fall in financial wealth, as stock markets have declined. Looking at the third quarter, available information indicates that private consumption remained subdued. The volume of euro area retail sales fell by 0.1% month on month in July – the ninth month in which sales have fallen in the past twelve months. In addition, although the level of new passenger car registrations recovered somewhat in July and August, the prevailing trend has remained weak. Consumer confidence increased slightly in August compared with July, but it remained at a historically low level (see Chart 25).

**Chart 25 Retail sales and confidence in the retail trade and household sectors**

(monthly data)



Sources: European Commission Business and Consumer Surveys and Eurostat.

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

2) Percentage balances; seasonally and mean-adjusted.

## SECTORAL OUTPUT

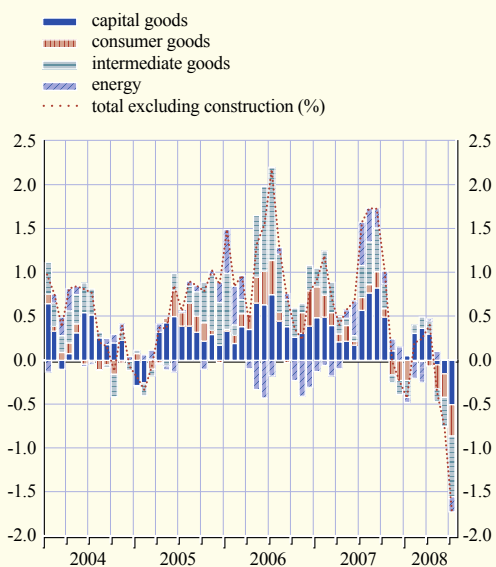
In terms of sectoral activity, the drop in euro area output in the second quarter reflected a sharp decline in both the industrial and construction sectors, where value added contracted by 0.8% and 2.2% quarter on quarter respectively. Activity was supported, however, by more resilient growth in the services sector, where value added increased by 0.4%.

Turning to the third quarter, available indicators of industrial and services sector output suggest that growth remained weak. Industrial production (excluding construction) fell by 0.4% month on month in July, following a small decline in the previous month. On a three-month moving average basis, industrial production fell by 1.7% – the fastest decline in over 15 years (see Chart 26). Construction production rose slightly in July but the overall trend remained very weak.

Surveys of business activity confirm the picture of weak underlying growth in the third quarter of 2008 compared with the previous quarter. The European Commission's September survey showed a further decline in confidence in industry and services. Both indices remain below their long-run averages. The Purchasing Managers' Index (PMI) for manufacturing dropped significantly in September 2008, reaching its lowest level since the end of 2001 (see Chart 27). The PMI for services business activity also declined slightly in September, recording its lowest level since mid-2003. Overall, both the manufacturing and services PMI indices were lower in the third quarter of 2008 than in the second quarter, suggesting weak economic activity in the euro area.

**Chart 26 Industrial production growth and contributions**

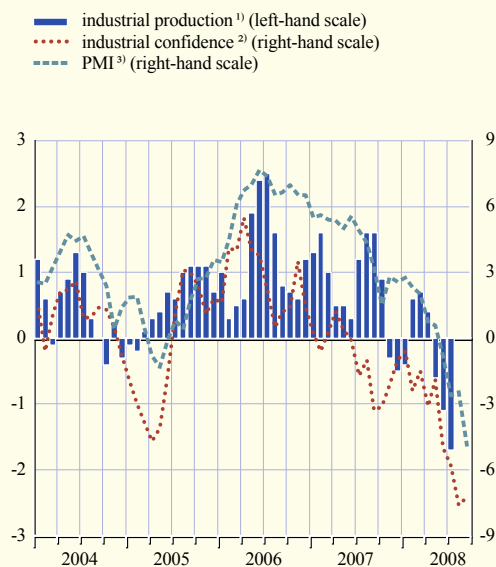
(growth rate and percentage point contributions; monthly data; seasonally adjusted)



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

**Chart 27 Industrial production, industrial confidence and the PMI**

(monthly data; seasonally adjusted)



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

## 4.2 LABOUR MARKET

Having shown significant improvements over the past few years, prospects in the euro area labour market have deteriorated in recent months. The unemployment rate has increased since the start of the year and, according to surveys, employment expectations have moderated recently, suggesting

**Table 7 Employment growth**

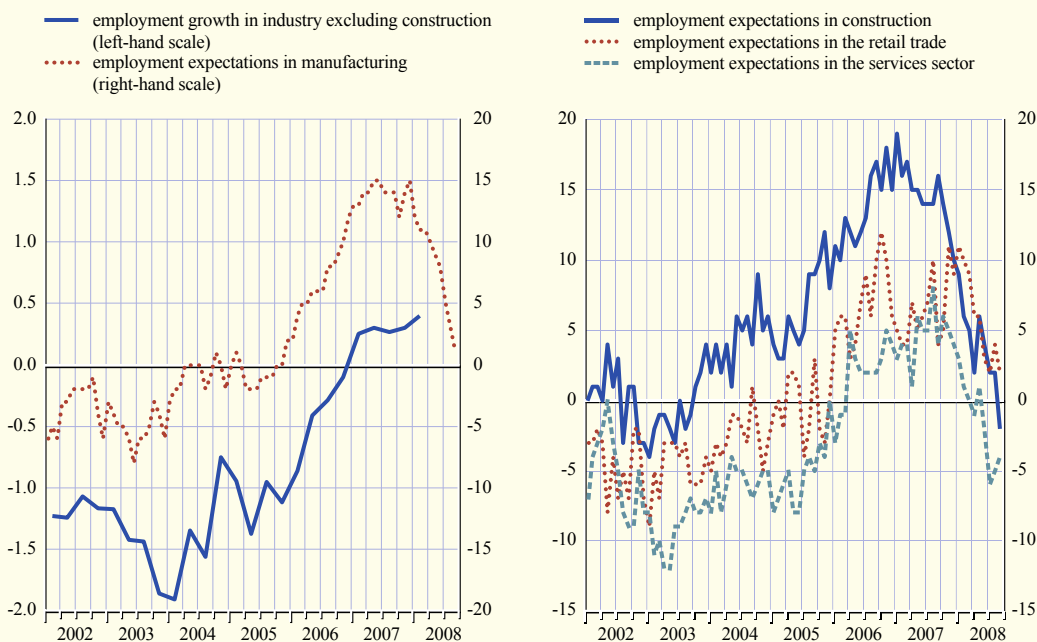
(percentage changes compared with the previous period; seasonally adjusted)

	Annual rates		Quarterly rates				
	2006	2007	2007 Q2	2007 Q3	2007 Q4	2008 Q1	2008 Q2
Whole economy	1.6	1.8	0.5	0.4	0.3	0.3	0.2
<i>of which:</i>							
Agriculture and fishing	-1.9	-1.2	-0.6	-1.0	-0.3	0.3	.
Industry	0.5	1.3	0.3	0.0	0.0	0.1	.
Excluding construction	-0.4	0.3	0.2	0.0	0.1	0.2	.
Construction	2.6	3.7	0.5	-0.1	-0.1	-0.2	.
Services	2.2	2.1	0.7	0.6	0.4	0.4	.
Trade and transport	1.6	1.9	0.9	0.7	0.1	0.5	.
Finance and business	3.9	4.1	1.2	0.7	0.7	0.9	.
Public administration <sup>1)</sup>	1.9	1.3	0.2	0.5	0.4	0.1	.

Sources: Eurostat and ECB calculations.  
1) Also includes education, health and other services.

Chart 28 Employment growth and employment expectations

(annual percentage changes; percentage balances; seasonally adjusted)



Sources: Eurostat and European Commission Business and Consumer Surveys.  
Note: Percentage balances are mean-adjusted.

that employment growth is likely to be more subdued in the months ahead.

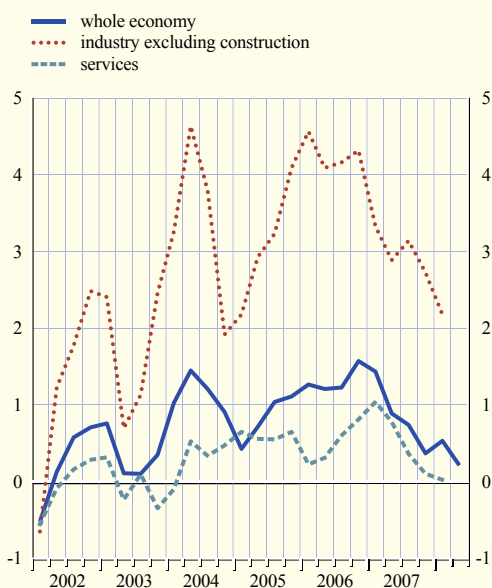
### EMPLOYMENT

According to Eurostat's first estimate, euro area employment rose by 0.2% quarter on quarter in the second quarter of the year, after increasing by 0.3% in the previous period (see Table 7). Turning to the third quarter, the moderation in employment expectations observed across sectors over the past twelve months continued in September. This moderation, together with the expected subdued economic activity, suggests that employment growth is likely to be weaker during the second half of 2008 (see Chart 28).

Reflecting the decline in output and the ongoing increases in employment, labour productivity declined in the second quarter of 2008. Year-on-year growth in labour productivity was estimated at 0.2% in the second quarter of 2008, the lowest rate of growth seen since 2003 (see Chart 29). Recent data from the PMI productivity index suggest that labour

Chart 29 Labour productivity

(annual percentage changes)



Sources: Eurostat and ECB calculations.

productivity has deteriorated further in the last few months.

### UNEMPLOYMENT

Having declined for several years, the unemployment rate has posted a series of increases in 2008. It rose from 7.2% in the first quarter to 7.3% in the second quarter and the first two months of the third quarter saw further increases in the numbers of unemployed persons (see Chart 30). In August the unemployment rate rose to 7.5%, compared with 7.4% in July (which was revised upwards from the previous estimate). The numbers of unemployed persons increased by 90,000 in August. That reflected large increases in France and Spain, which were only partially offset by a fall in the number of unemployed persons in Germany.

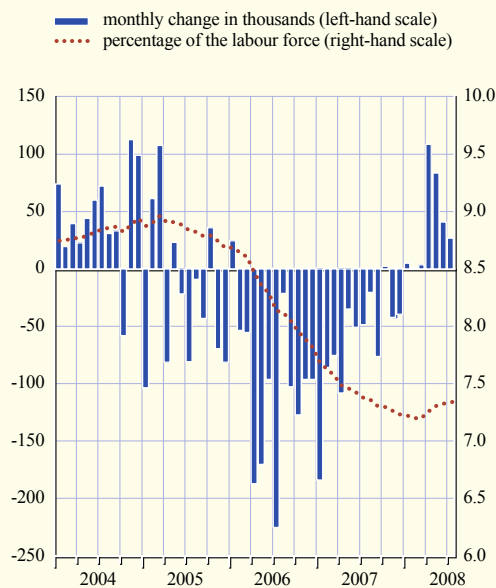
### 4.3 THE OUTLOOK FOR ECONOMIC ACTIVITY

The euro area economy is currently experiencing an episode of weak economic activity. The estimated decline in real GDP in the second quarter of 2008 (-0.2%), partly represents a technical reaction to the strong growth seen in the initial months of the year, when the mild weather conditions in some parts of Europe boosted construction activity. Nevertheless, the weaker figure for the second quarter also reflects slower growth, as higher commodity prices and the global economic slowdown affected euro area economic activity. Available indicators suggest a continuation of weak underlying momentum in euro area growth in the third quarter.

Looking ahead, the fall in oil prices from their peak in July and ongoing growth in emerging market economies might support a gradual recovery in the course of 2009. The economic outlook is subject to increased downside risks, mainly stemming from a scenario of ongoing financial market tensions affecting the real economy more adversely than currently foreseen. Other downside risks relate to the possibility of renewed increases in highly volatile energy and food prices, disorderly developments owing to global imbalances and rising protectionist pressures.

Chart 30 Unemployment

(monthly data; seasonally adjusted)



Source: Eurostat.

## 5 EXCHANGE RATE AND BALANCE OF PAYMENTS DEVELOPMENTS

### 5.1 EXCHANGE RATES

*In the past three months the euro has depreciated vis-à-vis most major currencies amid a significant rise in volatility. On 30 September 2008 it stood about 4% lower, in effective terms, than its level at the end of June, although it remained about 3.4% above its 2007 average.*

#### EFFECTIVE EXCHANGE RATE OF THE EURO

On 30 September 2008 the nominal effective exchange rate of the euro – as measured against the currencies of 22 of the euro area’s important trading partners – stood about 4% below its level at the end of June, although still 3.4% higher than its average level in 2007 (see Chart 31).

The weakening of the euro in effective terms over the past three months has resulted from a broad-based and sizeable depreciation in nominal bilateral terms vis-à-vis the Japanese yen, the Chinese renminbi and the US dollar. These movements were marginally offset by an appreciation of the euro against the Korean won, the Swedish krona, the Norwegian krone, the Australian dollar and the currencies of some of the countries that have joined the EU since 2004.

#### US DOLLAR/EURO

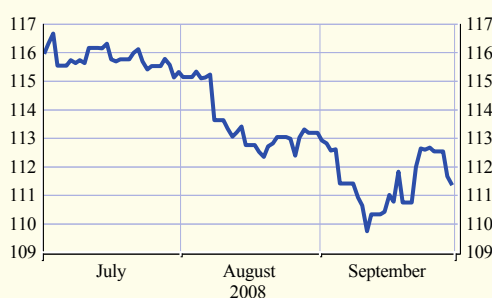
In August and early September 2008 the euro depreciated vis-à-vis the US dollar, against the backdrop of heightened expected volatility of the euro’s main bilateral exchange rates. In the second half of September the euro partially recovered its previous losses, to then lose momentum again. The oscillations of the USD/EUR exchange rate in this period closely mirrored the turbulences in global financial markets. These were associated with strains in a number of financial institutions in the United States and with market participants’ uncertainty regarding the details of the stabilisation plan envisaged by the US authorities.

The quick depreciation of the euro after early August may have been related to macroeconomic data releases suggesting greater resilience of

Chart 31 Euro effective exchange rate and its decomposition <sup>1)</sup>

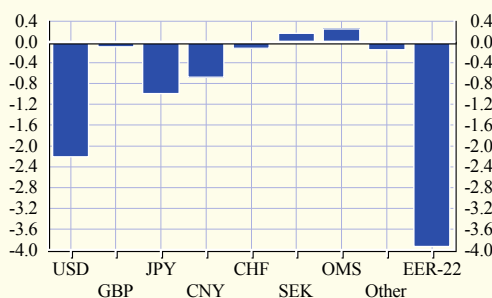
(daily data)

Index: Q1 1999 = 100



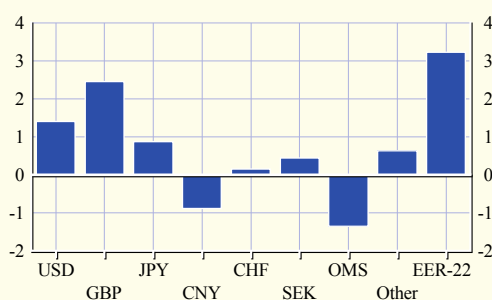
#### Contributions to EER changes <sup>2)</sup>

From 30 June 2008 to 30 September 2008  
(in percentage points)



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

From 3 January 2005 to 30 September 2008  
(in percentage points)



Source: ECB.

1) An upward movement of the index represents an appreciation of the euro against the currencies of 22 of the 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 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.

the US economy than previously expected by market participants. A noteworthy aspect of the developments in the month to mid-August was the temporary breakdown of a clear relationship between the depreciation of the euro and developments in the medium-term interest rate differential between the euro area and the United States. In the preceding six months, this relationship had been a relatively close one. In September, the euro rebounded somewhat against the dollar amid uncertainty concerning the passing of legislation in respect of the plan announced by the US Treasury to stabilise the financial sector in the United States, but in the last days of September it started to weaken again as signs of financial weakness manifested themselves in a number of European institutions. On 30 September 2008 the euro traded at USD 1.43, 9.3% below its level at the end of June and 4.4% stronger than its average level in 2007 (see Chart 32).

#### JAPANESE YEN/EURO

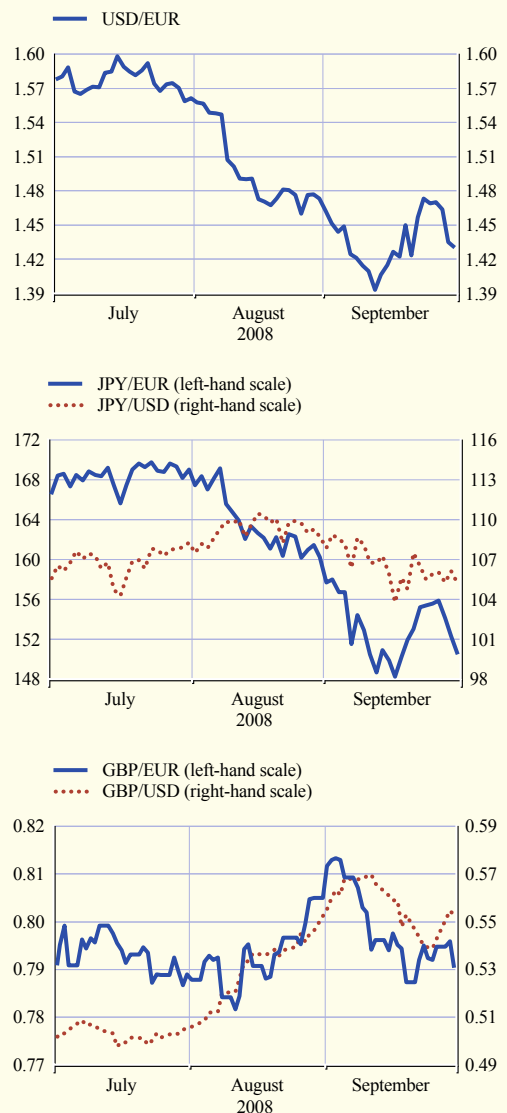
Developments in the JPY/EUR exchange rate in the three months to end-September 2008 broadly mirrored those in the USD/EUR exchange rate, with a sharp depreciation of the euro in the month to mid-September being partially offset by an appreciation thereafter. Overall, the euro weakened by 9.6% vis-à-vis the yen in the review period, and traded at JPY 150.5 on 30 September, 6.7% below its 2007 average (see Chart 32). Expectations of future volatility in the JPY/EUR exchange rate, as captured by indicators based on option prices, again exceeded their historical average, standing at end-September at their highest level since October 1999.

#### EU MEMBER STATES' CURRENCIES

Since the end of June 2008 most currencies participating in ERM II have been stable vis-à-vis the euro and have continued to trade at, or close to, their respective central rates (see Chart 33). Following the revaluation of its central rate within ERM II by 17.6472% with effect from 29 May 2008, the Slovak koruna has consistently traded slightly weaker than its new central rate of SKK 30.1260 to the euro, standing 0.6% below on 30 September. Since the end of June, the Latvian lats has weakened slightly vis-à-vis the euro and traded 0.8% below its central rate on 30 September.

Chart 32 Patterns in exchange rates

(daily data)

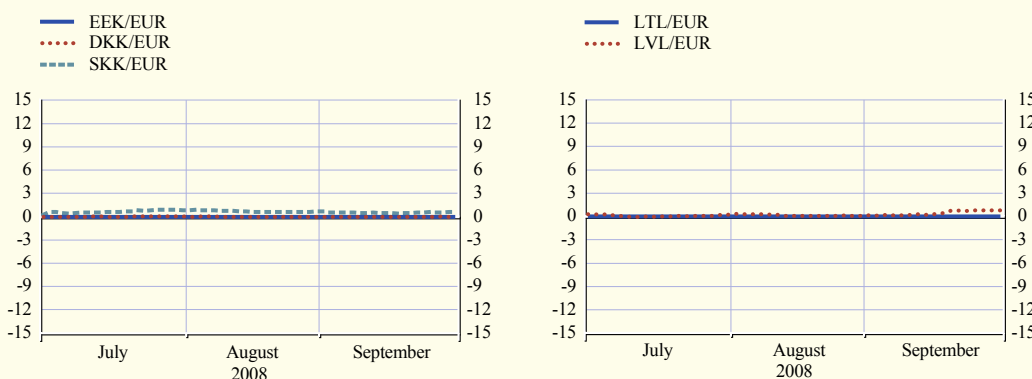


Source: ECB.



Chart 33 Patterns in exchange rates in ERM II

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



Source: ECB.

Note: A positive (negative) deviation from the central rate against the euro implies that the currency is on the weak (strong) side of the band. For the Danish krone, the fluctuation band is  $\pm 2.25\%$ ; for all other currencies, the standard fluctuation band of  $\pm 15\%$  applies. The central rate of the Slovak koruna in ERM II was revalued by 17.6472% with effect from 29 May 2008.

With regard to the currencies of EU Member States not participating in ERM II, the euro was broadly stable vis-à-vis the pound sterling between the end of June and 30 September 2008, notwithstanding some short-term volatility. Over the same period it appreciated vis-à-vis the currencies of some of the countries that have joined the EU since 2004, namely by 3.2% vis-à-vis the Czech koruna, by 3.1% against the Hungarian forint, by 2.7% against the Romanian leu and by 1.4% against the Polish zloty.

#### OTHER CURRENCIES

Between the end of June and 30 September 2008, the euro depreciated by more than 9% vis-à-vis the Hong Kong dollar and the Chinese renminbi, by 6.2% against the Canadian dollar, by 4.7% vis-à-vis the Singapore dollar and by 1.8% against the Swiss franc. It appreciated by 8.4% against the Australian dollar, by 4.5% vis-à-vis the Korean won, by 4% against the Norwegian krone and by 3.4% against the Swedish krona.

#### 5.2 BALANCE OF PAYMENTS

The 12-month cumulated current account to July 2008 recorded a deficit of €23.9 billion (0.3% of GDP), compared with a surplus of €27.4 billion a year earlier. This largely reflected a decrease in the surplus in goods and an increase in the deficit in current transfers. In the financial account, combined direct and portfolio investment registered cumulative net outflows of €97.3 billion in the 12-month period to July 2008, compared with net inflows of €231.8 billion a year earlier. This shift resulted largely from lower net purchases of euro area portfolio securities by non-resident investors.

#### TRADE AND THE CURRENT ACCOUNT

For the third month in a row in July 2008, the 12-month cumulated current account recorded a rising deficit, which reached €23.9 billion (working day and seasonally adjusted data) or 0.3% of GDP. This compared with a surplus of €27.4 billion a year earlier. The shift was largely accounted for by a contraction in the surplus in goods, a widening deficit in current transfers and a shift from

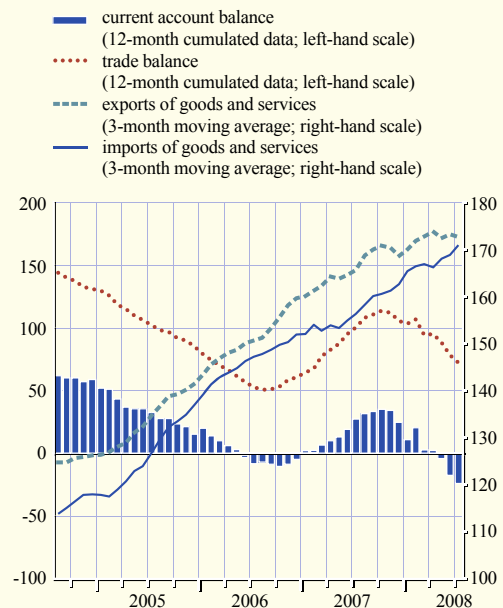
surplus to deficit in the income account, which were only marginally offset by an increase in the surplus in services (see Chart 34).

The 12-month cumulated deficit in current transfers in July 2008 (€94.8 billion), which had almost doubled in size since the beginning of 2003, resulted mainly from deficits vis-à-vis the EU institutions and non-G10 countries outside the European Union and was, to a large extent, driven by outflows of foreign aid and workers' remittances. The decline in the goods surplus (by €34 billion in the 12-month period to July 2008 compared with the same period a year earlier) is a more recent phenomenon, resulting mainly from a combination of weakening exports and robust growth in imports. Against the backdrop of weakening foreign demand, the value of goods exports contracted by 0.2% in the three months to July 2008, compared with an increase of 3.2% in the previous three-month period (see Table 8). Meanwhile, higher oil and non-oil commodity prices seemed to account for the strong growth in the value of imports.

The slowdown in goods exports is mostly explained by developments in global demand as well in the euro exchange rate. Following a temporary rebound in the first quarter of the 2008, euro area exports to the United States and other OECD countries weakened noticeably in the months to July, owing to waning demand for euro area products from these countries. At the same time, although growth in exports to China and countries that have joined the EU since 2004 also slowed somewhat, it remained fairly robust (see Box 3 for additional information on recent changes in the geographical composition of euro area foreign demand).

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

(EUR billions; monthly data; seasonally adjusted)



Source: ECB.

**Box 3**

**RECENT CHANGES IN THE GEOGRAPHICAL COMPOSITION OF EURO AREA FOREIGN DEMAND**

The rapid expansion in global trade over the past decade and the increasing integration of emerging markets in the world economy have been reflected in a substantial increase in extra-euro area exports of goods and a growing contribution of emerging markets to euro area export growth. This box briefly examines recent developments in extra-euro area exports of goods and the resulting changes in the geographical composition of euro area foreign demand.

Since 2005,<sup>1</sup> the value of extra-euro area exports of goods has risen considerably, by an annual average growth rate of more than 9%. Euro area exports to emerging Asia (most notably China) and new EU Member States<sup>2</sup> continued to be particularly buoyant, registering annual average growth rates (in value terms) of more than 11% and 17%, respectively, between 2005 and 2007 (see Chart A). This was translated into a substantial positive contribution by these countries to extra-euro area export growth during this period (see Chart B). Euro area exporters also benefited from strong demand from central and eastern European countries as well as from CIS countries and OPEC members. Meanwhile, export growth to advanced economies was much less dynamic, increasing less strongly than total extra-euro area export values. Since the second half of 2007, however, there has been a general slowdown in extra-euro area export growth. With the notable exception of exports to OPEC members, exports to all destinations have grown less rapidly and exports to the United States and Japan have even declined since the fourth quarter of 2007.

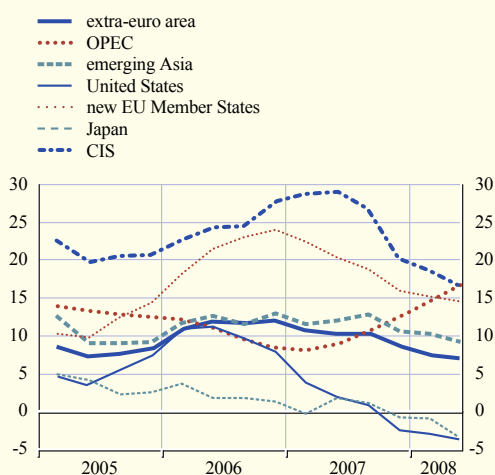
As a result of these developments, the geographical structure of euro area foreign demand (measured as exports from the euro area to each partner region divided by total euro area exports) has changed somewhat over the recent period. The most significant development continues to be the increasing share of new EU Member States in total extra-euro area exports. In the first two quarters of 2008, these countries accounted for 15.3% of total extra-euro area exports, which compares with 11.0% on average over the period 2000-05. At the same time, the share of emerging Asia increased from 16.1% on average over the period 2000-05 to 17.5% in 2008,

1 Developments until 2004 were covered by the box entitled “The geographical composition of euro area foreign demand” in the October 2004 issue of the Monthly Bulletin.

2 New EU Member States comprise non-euro area countries that have joined the EU since 2004. Slovenia, Malta and Cyprus are included in the euro area aggregate.

**Chart A Euro area exports to selected partners (values)**

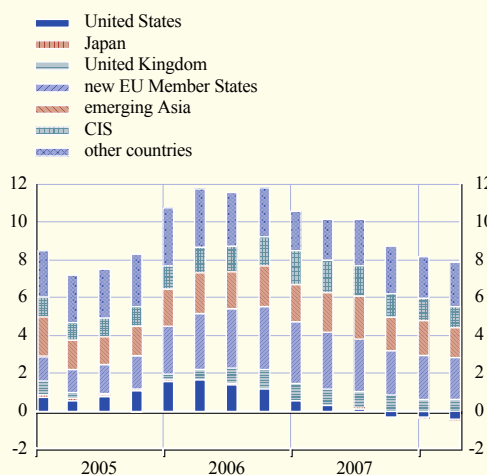
(annual percentage changes)



Sources: Eurostat and ECB staff.  
Note: The annual percentage changes are computed based on 12-month moving sums.

**Chart B Contribution of selected partners to euro area export growth (values)**

(percentage points)



Sources: Eurostat and ECB staff.  
Note: Contributions are calculated by multiplying the annual percentage change of euro area exports to selected partner countries with the share of this country or region in total extra-euro area exports.

and is now one of the euro area's main export markets. This is mainly due to China, which currently absorbs about 4.3% of total extra-euro area exports of goods. Another striking development concerns the rising share of CIS countries (mostly Russia), from an average of 3.7% over the period 2000-05 to 6.6% in 2008, reflecting the increasing integration of these economies in world trade and increased oil revenues. Similarly, OPEC members also registered a significant increase in their share of euro area foreign demand, and currently represent 6.0% of extra-euro area export values.

These developments contrast with the declining share of some advanced economies. In particular, the shares of the United States and the United Kingdom have been decreasing significantly over this period, to about 11.9% and 14.5% in 2008, respectively (compared with 16.2% and 18.3%, on average, between 2000 and 2005). This notwithstanding, these countries remain the two largest individual trading partners of the euro area. The export shares of Japan and Switzerland have also witnessed a slight decline.

Overall, these changes in the euro area export composition reflect the fact that euro area exporters have benefited from increasing demand by emerging markets. The robust growth of emerging economies has been one of the main drivers of the strong euro area export performance over the last few years. Against the background of a recent slowdown in import demand by advanced countries, the prospects for euro area foreign demand will increasingly depend on the outlook for emerging economies.

#### Shares in euro area foreign demand

(percentages)

	2000-05	2006	2007	2008
<b>United States</b>	16.2	14.4	13.0	11.9
<b>Japan</b>	3.1	2.5	2.3	2.1
<b>Switzerland</b>	6.0	5.6	5.5	5.4
<b>Non-euro area EU countries</b>	35.2	35.3	35.8	35.6
UK	18.3	15.7	15.3	14.5
Sweden	3.6	3.6	3.7	3.6
Denmark	2.3	2.3	2.2	2.2
New EU Member States	11.0	13.7	14.7	15.3
<b>Emerging Asia</b>	16.1	17.1	17.4	17.5
China	2.9	3.9	4.0	4.3
ASEAN	3.0	2.7	2.8	2.8
<b>CIS</b>	3.7	5.5	6.0	6.6
Russia	2.7	4.0	4.5	4.9
<b>Latin America</b>	4.1	3.9	4.1	4.1
<b>Other countries</b>	15.7	15.7	15.8	16.7
OPEC	5.0	5.3	5.5	6.0

Sources: Eurostat and ECB staff.

Note: The data for 2008 refer to the first semester.

The sharp rise in the price of oil was an important factor behind the growth in the value of imports in the three-month period to July 2008. Oil price developments are reflected in the breakdown of trade in goods by volumes and prices, available up to the second quarter of 2008, which shows a steady increase in import prices from the fourth quarter of 2007, while import volumes declined somewhat. Meanwhile, euro area export prices rose only moderately in the second quarter of 2008, as cost increases were partly absorbed by producers.

Table 8 Main items of the euro area balance of payments

(seasonally adjusted, unless otherwise indicated)

			Three-month moving average figures ending				12-month cumulated figures ending	
	2008 June	2008 July	2007 Oct.	2008 Jan.	2008 Apr.	2008 July	2007 July	2008 July
<i>EUR billions</i>								
<b>Current account</b>	-6.1	-1.7	2.3	-4.6	-1.2	-4.4	27.4	-23.9
Goods balance	-0.9	-1.6	5.5	0.1	3.1	-1.6	55.8	21.4
Exports	131.2	134.5	128.8	128.3	132.4	132.1	1,469.3	1,564.7
Imports	132.0	136.1	123.2	128.2	129.3	133.7	1,413.5	1,543.2
Services balance	2.3	4.4	4.7	4.4	4.5	3.3	44.6	50.9
Exports	40.2	40.9	42.0	41.7	41.5	40.6	467.2	497.3
Imports	37.8	36.5	37.3	37.3	36.9	37.3	422.6	446.5
Income balance	-1.1	2.3	0.4	-0.3	-0.7	0.2	6.0	-1.4
Current transfers balance	-6.4	-6.8	-8.3	-8.8	-8.1	-6.3	-79.0	-94.8
<b>Financial account<sup>1)</sup></b>	12.7	-4.5	2.8	-5.5	4.8	17.8	128.0	59.8
Combined net direct and portfolio investment	28.9	-19.1	-3.9	-16.6	-19.6	7.7	231.8	-97.3
Net direct investment	-23.1	-14.5	-1.8	-30.5	-25.1	-15.4	-160.5	-218.7
Net portfolio investment	51.9	-4.6	-2.2	13.9	5.5	23.2	392.3	121.4
Equities	4.6	0.3	-8.8	3.2	8.5	3.8	243.7	20.0
Debt instruments	47.4	-5.0	6.7	10.7	-3.0	19.4	148.5	101.4
Bonds and notes	20.0	1.4	1.4	22.0	2.4	19.5	187.8	136.0
Money market instruments	27.4	-6.4	5.3	-11.2	-5.4	-0.2	-39.3	-34.6
<i>Percentage changes over previous period</i>								
<b>Goods and services</b>								
Exports	-0.1	2.3	3.1	-0.5	2.3	-0.7	11.0	6.5
Imports	-0.3	1.6	2.7	3.0	0.5	2.8	8.6	8.4
<b>Goods</b>								
Exports	0.4	2.5	3.0	-0.4	3.2	-0.2	11.7	6.5
Imports	-0.6	3.1	3.3	4.0	0.9	3.4	8.2	9.2
<b>Services</b>								
Exports	-1.5	1.7	3.7	-0.7	-0.6	-2.2	8.9	6.4
Imports	0.8	-3.7	1.1	-0.2	-0.9	0.9	9.8	5.6

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.

Turning to other items of the current account, in 12-month cumulated terms the surplus in services increased to €50.9 billion in July 2008, from €44.6 billion a year earlier. Finally, mainly on account of higher income payments to non-euro area residents, the income balance deteriorated by €7.4 billion in 12-month cumulated terms (from a surplus of €6.0 billion in the 12-month period to July 2007 to a deficit of €1.4 billion in the 12 months to July 2008).

## FINANCIAL ACCOUNT

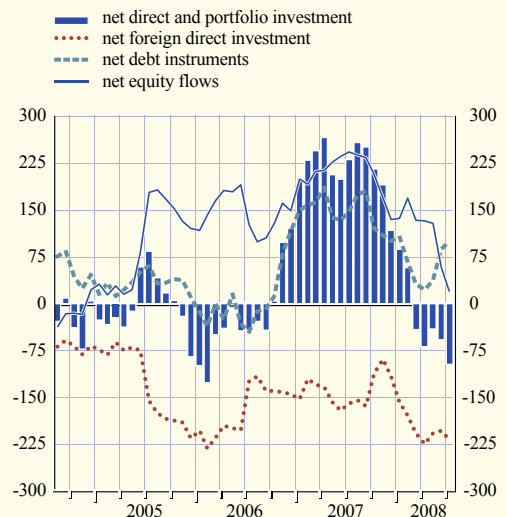
In the three-month period to July 2008, the euro area combined direct and portfolio investment account recorded average monthly net inflows of €7.7 billion, compared with average net outflows of €19.6 billion in the three-month period to April (see Table 8). This development is mostly attributable to the large net inflows in bonds and notes in May and June, a period during which yield differentials between euro area and US long-term bonds widened to about 90-100 basis points. In July, however, cross-border portfolio investment activity was muted, possibly due to the sharp deterioration in the corporate earnings growth outlook in OECD countries.

From a longer-term perspective, combined direct and portfolio investment recorded net outflows of €97.3 billion in the 12-month period to July 2008, compared with net inflows of €231.8 billion a year earlier (see Chart 35 and Table 8), owing to smaller net portfolio investment inflows. The financial turmoil which started in early August 2007 as a result of the US sub-prime mortgage crisis has led to uncertainty in financial markets, with liquidity diminishing in key market segments. Over the last year, global economic activity has been dampened by the economic weakness in the United States, by the global repercussions of the financial turmoil and increasingly by high oil and non-oil commodity prices. The resulting global portfolio allocation decisions have had an impact on euro area cross-border portfolio investment flows, reflecting heightened investor risk aversion. Specifically, both euro area portfolio investment abroad (asset flows) and foreign portfolio investment in the euro area (liability flows) were on an upward trend until July 2007. The outbreak of the financial turmoil interrupted these trends. From July 2007 to July 2008 both assets and liabilities contracted on a 12-month cumulated basis. Net portfolio investment inflows were reduced from around €400 billion in the 12-month period to July 2007 to about €120 billion in the period to July 2008, owing to the reduction of net inflows both in equities and in long-term bonds and notes. However, the main reason for the decrease was a sharp contraction in net purchases of euro area equities by non-resident investors. Global investors moved funds out of euro area equities, possibly because the corporate profit outlook had deteriorated in OECD countries, but also – according to market reports – because market participants expected a depreciation in the euro.

Cumulative net outflows in direct investment increased in the 12-month period to July 2008 compared with a year earlier, to €218.7 billion from €160.5 billion, partly owing to the strong euro exchange rate. This both made it more expensive for foreign investors to invest in euro area equity capital and favoured euro area investment abroad.

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

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



Source: ECB.

## ARTICLES

# TEN YEARS OF THE STABILITY AND GROWTH PACT



*The Stability and Growth Pact, which aims to ensure that EU Member States' fiscal policies support the smooth functioning of EMU, came into operation approximately ten years ago.<sup>1</sup> This article reviews fiscal developments in the euro area and in EU Member States since the Pact entered into force. It argues that the fiscal position of the euro area has improved compared with previous decades and that the trend towards ever higher government indebtedness has been brought to a halt. However, the compliance of individual Member States with the budgetary norms of the Maastricht Treaty and the Stability and Growth Pact has been uneven. Breaches of the 3% of GDP reference value for the government deficit have been repeated and persistent in some countries, leading to the conclusion that at least in these cases the implementation of the Pact has lacked sufficient rigour and political will. To varying degrees across countries, deviations from fiscal plans have been caused by over-optimistic growth forecasts, ex post data revisions, larger than expected revenue fluctuations and persistent expenditure slippages. Fiscal positions in most Member States have improved significantly in the past few years, and in 2007 the euro area government deficit reached its lowest level in decades. However, this development has been aided by favourable economic conditions, and further consolidation towards medium-term budgetary objectives is still needed in many countries. Looking ahead, prudent and stability-oriented fiscal strategies are called for, which, taking account of the lessons of the past ten years, ensure long-term fiscal sustainability and contribute to long-term growth and employment creation.*

### I INTRODUCTION

Sound fiscal policies are essential for the successful functioning of EMU. Excessive borrowing by governments contributes to demand and inflationary pressures, potentially requiring the central bank to keep short-term interest rates at a higher level than would otherwise be necessary in order to maintain price stability.<sup>2</sup> By putting upward pressure on interest rates, high government deficits and debt are liable to crowd out private investment and thereby dampen long-term economic growth. At the same time, the traditional incentives for EU Member States to maintain fiscal discipline may be reduced once they enter the euro area as the elimination of intra-area exchange rate risk and the associated interest rate risk premia weakens the link between government lending behaviour and financial market reactions.<sup>3</sup>

Recognising that unrestricted fiscal policies in EMU could be subject to a deficit bias, the Maastricht Treaty introduced a number of provisions which aim to ensure an appropriate degree of fiscal rectitude. Notably, in Stage Three of EMU, Member States are obliged to avoid “excessive government deficits”, which are assessed against reference values of 3% and

60% of GDP for general government deficit and debt respectively. Not having an excessive deficit in the sense of the Treaty is one of the convergence criteria that Member States are expected to fulfil prior to adopting the euro. Moreover, the Treaty provides for an “excessive deficit procedure” to ensure that excessive deficits are corrected promptly should they occur.

In the run-up to Stage Three of EMU, however, concerns emerged that the provisions of the Treaty alone would be insufficient to ensure fiscal discipline once EMU membership had been achieved. In the light of these concerns, at the European Council meeting in Amsterdam in June 1997, EU Member States signed the Stability and Growth Pact. The Pact consists of

- 1 Council Regulation (EC) No 1466/97 of 7 July 1997 on the strengthening of the surveillance of budgetary positions and the surveillance and coordination of economic policies entered into force on 1 July 1998. Council Regulation (EC) No 1467/97 of 7 July 1997 on speeding up and clarifying the implementation of the excessive deficit procedure came into force on 1 January 1999.
- 2 See the article entitled “One monetary policy and many fiscal policies: ensuring a smooth functioning of EMU” in the July 2008 issue of the Monthly Bulletin.
- 3 See the article entitled “Fiscal policies and financial markets” in the February 2006 issue of the Monthly Bulletin.

two Council regulations and a resolution of the European Council, all of which were amended in 2005.<sup>4</sup> The first Council Regulation “on the strengthening of the surveillance of budgetary positions and the surveillance and coordination of economic policies” is typically referred to as the “preventive arm” of the Pact.<sup>5</sup> It commits Member States to submit stability and convergence programmes and to pursue appropriate medium-term budgetary objectives, which should ensure that public finances are sustainable in the long run and create a sufficient safety margin to prevent excessive deficits occurring in the short run. The second Council Regulation “on speeding up and clarifying the implementation of the excessive deficit procedure” is usually referred to as the Pact’s “corrective arm”, or alternatively as its “deterrent arm”.<sup>6</sup> Its main purpose is to guarantee a strict and timely implementation of the excessive deficit procedure, including the imposition of sanctions if necessary, thereby also acting as a deterrent against excessively loose fiscal policies. In the European Council Resolution, the European Council solemnly invited all parties concerned, namely the Member States, the EU Council and the European Commission, to implement the Treaty and the Pact in a strict and timely manner.<sup>7</sup>

In autumn 1998 EU Member States began submitting their first “stability and convergence programmes” in accordance with the Stability and Growth Pact. This article considers the experience of fiscal policies during the decade since the Pact entered into force. Section 2 presents a longer-term perspective by reviewing euro area aggregate fiscal developments before and after the Maastricht Treaty and the Pact were adopted. Section 3 provides an overview of the implementation of the Pact, focusing on Member States’ compliance with the main provisions of the preventive and corrective arms. Section 4 draws some lessons from observed deviations of fiscal outcomes from the plans presented by euro area countries in their stability programmes. Section 5 provides some concluding remarks, including an examination of the challenges ahead.

## 2 EURO AREA FISCAL DEVELOPMENTS IN A LONGER-TERM PERSPECTIVE

In the decades preceding EMU, fiscal policies in many European countries were characterised by unsustainable rates of spending growth, large deficits and the building-up of large amounts of government debt. For the 15 countries that currently form the euro area, the aggregate government debt-to-GDP ratio rose from well below 40% of GDP in 1980 to over 70% by the mid-1990s (see Chart 1). This increase in borrowing and indebtedness was accompanied by a notable rise in government spending. The ratio of cyclically adjusted total expenditure to potential GDP increased by around 5 percentage points during this period, reaching levels above 50%.<sup>8</sup> This increase was explained partly by higher primary spending, but also, notably, by a significant rise in the interest burden on government debt. Government revenues also increased as a percentage of (potential) GDP, but not by enough to close a persistently large financing gap.

Since the mid-1990s the aggregate fiscal position of the euro area countries has improved markedly. Fiscal consolidation was particularly strong in the run-up to Stage Three of EMU as countries strove to correct excessive deficits and thereby qualify to be among the first wave of countries adopting the euro. Euro area government net borrowing was reduced from over 5% of GDP in the early 1990s to below 3%

4 For an overview of the Pact in its original form, see the article entitled “The implementation of the Stability and Growth Pact” in the May 1999 issue of the Monthly Bulletin. For an overview and assessment of the changes made to the Pact in 2005, see the article entitled “The reform of the Stability and Growth Pact” in the August 2005 issue of the Monthly Bulletin. See also “The reform and implementation of the Stability and Growth Pact” by R. Morris, H. Ongena and L. Schuknecht, ECB Occasional Paper No 47, June 2006.

5 Council Regulation (EC) No 1466/97 of 7 July 1997 as amended by Council Regulation No 1055/2005 of 27 June 2005.

6 Council Regulation (EC) No 1467/97 of 7 July 1997 as amended by Council Regulation No 1056/2005 of 27 June 2005.

7 Resolution of the European Council on the Stability and Growth Pact, Amsterdam, 17 June 1997.

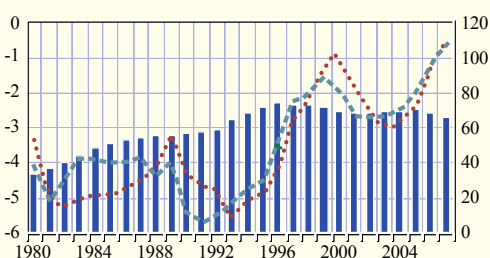
8 Cyclically adjusted revenue and expenditure are expressed here as a percentage of potential GDP because dividing by actual GDP would cause the ratios to change purely because of cyclical fluctuations in output.



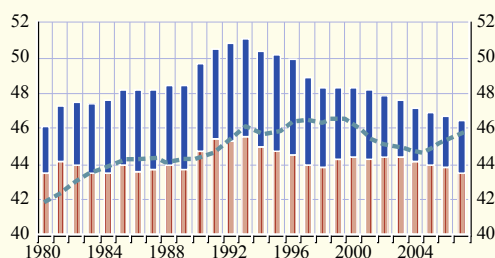
Chart I Euro area fiscal developments

(general government; as a percentage of GDP)

■ consolidated gross debt (right-hand scale)  
 ●●● net lending/borrowing (left-hand scale)  
 - - - cyclically adjusted net lending/borrowing (left-hand scale)

(general government; as a percentage of potential GDP<sup>1)</sup>)

■ interest expenditure  
 ■ cyclically adjusted primary expenditure  
 - - - cyclically adjusted total revenue



Sources: The European Commission's AMECO database and ECB calculations.

Note: Data exclude receipts from the sale of Universal Mobile Telecommunication System (UMTS) licences.

1) Potential GDP as estimated by the European Commission.

in 1997 and to just 1% in 2000, at the peak of the last economic cycle.<sup>9</sup> However, active fiscal consolidation stalled around the turn of the century and the deficit-to-GDP ratio increased again in the context of the subsequent economic slowdown, reaching 3.1% in 2003. Since then, the euro area deficit-to-GDP ratio has declined again amid more favourable macroeconomic conditions to reach a new low of just 0.6% in 2007. The significant increase in the euro area government debt-to-GDP ratio of earlier decades has also been brought to a halt, with a modest reduction to somewhat below 70% having been achieved in recent years.

As regards the composition of budgetary adjustment, cyclically adjusted total expenditure as a percentage of potential GDP has declined by almost 5 percentage points since the early 1990s and now stands at broadly the same level as in 1980. More than half of this reduction can be explained by a decline in the interest spending ratio, which is mainly due to the lower interest rates paid on government debt as a consequence of having a price stability-oriented monetary policy. The decline in the primary spending ratio has been more limited. Cyclically adjusted total revenue as a percentage of potential GDP has fluctuated around a broadly stable level over the past decade, but still remains at a higher level than at the beginning of the 1980s.

### 3 THE IMPLEMENTATION OF THE STABILITY AND GROWTH PACT

#### THE PREVENTIVE ARM

Under the preventive arm of the original Stability and Growth Pact, Member States were obliged to target “close to balance or in surplus” budgetary positions over the medium term. Initially the term “close to balance or in surplus” was not defined further, but was generally considered to mean a budgetary position which at the very least would provide a sufficient safety margin to avoid breaching the 3% of GDP reference value under normal circumstances while allowing for the free operation of the automatic stabilisers. A measure of whether or not such a safety margin is achieved is provided by the “minimum benchmarks” calculated by the European Commission, based on standard OECD budget elasticities and past output developments. Over time, however, the close to balance or in surplus requirement came to be interpreted more strictly as meaning a broadly balanced budget (i.e. a deficit of no more than 0.5% of GDP) in cyclically adjusted or structural terms. Such a strict interpretation was deemed appropriate not least in view of the need for

<sup>9</sup> The deficit ratio of 1% of GDP for 2000 excludes negative capital expenditure stemming from the sale of Universal Mobile Telecommunication System (UMTS) licences. Including these receipts, the euro area posted a small budget surplus in 2000.

Member States to target sufficiently ambitious budgetary positions that guarantee the long-term sustainability of public finances in a context of ageing populations.

Since the reform of the Pact that took place in 2005, Member States have set themselves differentiated medium-term objectives, which may diverge from a close to balance or in surplus position. Specifically, these objectives should (i) provide a safety margin with respect to the 3% of GDP ceiling for the government deficit ratio, (ii) ensure rapid progress towards fiscal sustainability and, taking this into account, (iii) allow budgetary room for manoeuvre,

considering in particular the need for public investment. For countries participating in the euro area and ERM II, medium-term objectives are set within a range of -1% of GDP and “balance or surplus”, and they are defined in terms of the structural budget balance (measured as the cyclically adjusted balance, net of one-off and temporary measures). If the objective is not reached, a Member State is expected to take steps to achieve it over the economic cycle. In this context, euro area and ERM II countries are expected to pursue an annual improvement of the structural budget balance of 0.5% of GDP as a benchmark. The adjustment effort should be higher in economic “good times”, i.e. periods

**Table I Compliance with the preventive arm of the Stability and Growth Pact**

(as a percentage of GDP)

□ indicates a budgetary position close to balance or in surplus prior to 2005 and compliance with medium-term objective thereafter  
 ■ indicates compliance with minimum benchmark only  
 ■ indicates non-compliance with minimum benchmark

	MB	MTO	General government structural net lending (+)/borrowing (-)									
			1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Belgium	-1.3	0.5	-0.6	-0.8	-0.9	0.1	-0.1	-1.1	-0.9	-0.2	-0.6	-0.3
Germany	-1.6	BB	-1.9	-1.3	-1.9	-3.4	-3.6	-3.3	-3.0	-2.4	-1.4	-0.3
Ireland	-1.5	BB	2.0	1.5	3.0	-0.2	-1.7	-0.1	2.1	1.3	2.9	0.2
Greece	-1.4	BB	-3.3	-2.6	-3.3	-4.9	-4.7	-5.9	-8.0	-5.7	-3.7	-3.5
Spain	-1.2	BB	-3.1	-1.7	-1.9	-1.4	-0.9	-0.3	-0.2	1.2	2.0	2.4
France	-1.6	BB	-2.4	-2.1	-2.6	-2.5	-3.5	-4.0	-3.8	-3.6	-2.7	-2.7
Italy	-1.4	BB	-2.5	-1.6	-2.9	-4.1	-3.4	-5.1	-4.7	-4.5	-2.8	-1.5
Cyprus	-1.8	BB	-3.7	-4.5	-3.1	-3.4	-5.1	-8.1	-5.2	-2.8	-0.7	3.5
Luxembourg	-1.0	-0.8	4.3	3.0	4.0	5.3	1.6	1.2	-0.9	0.4	1.4	2.8
Malta	-1.7	BB	-10.3	-8.5	-7.8	-6.5	-5.8	-6.5	-4.2	-4.1	-2.9	-2.4
Netherlands	-1.1	-1 to -0.5	-1.3	-0.8	-0.4	-1.3	-1.9	-2.0	-1.1	0.8	1.1	0.3
Austria	-1.6	BB	-2.5	-2.8	-3.0	-0.3	-0.3	-0.6	-3.1	-0.8	-1.4	-1.0
Portugal	-1.5	-0.5	-3.8	-3.5	-4.5	-5.4	-3.4	-4.7	-4.9	-5.2	-3.2	-2.2
Slovenia	-1.6	-1.0	-2.5	-2.4	-4.1	-4.5	-2.2	-1.9	-1.6	-0.9	-1.3	-0.7
Finland	-1.2	2.0	0.6	0.6	5.2	4.0	4.1	3.3	2.9	3.7	4.2	4.9
<b>Euro area</b>			<b>-2.1</b>	<b>-1.6</b>	<b>-2.0</b>	<b>-2.6</b>	<b>-2.7</b>	<b>-3.1</b>	<b>-2.9</b>	<b>-2.2</b>	<b>-1.2</b>	<b>-0.7</b>
Bulgaria	-1.3	BB	.	.	-0.9	0.6	-0.1	0.0	1.0	1.5	2.5	3.1
Czech Republic	-1.6	-1.0	-4.0	-2.6	-3.2	-5.4	-5.7	-5.5	-1.3	-3.3	-2.9	-2.3
Denmark	-0.5	0.5-1.5	-0.5	0.5	0.7	0.5	0.4	0.9	2.5	5.3	4.1	3.9
Estonia	-1.9	BoS	-0.8	-2.0	0.2	0.1	0.3	1.9	1.6	1.2	1.0	1.3
Latvia	-2.0	-1.0	0.0	-3.2	-2.3	-2.0	-2.0	-1.2	-0.8	-0.5	-1.1	-1.4
Lithuania	-1.9	≥ -1.0	-3.2	-1.5	-2.1	-3.0	-1.6	-1.9	-2.1	-1.1	-1.0	-1.4
Hungary	-1.6	-0.5	-7.5	-4.8	-2.7	-3.7	-8.6	-6.8	-6.9	-8.6	-9.7	-4.7
Poland	-1.5	-1.0	-4.5	-2.5	-3.5	-5.4	-4.3	-5.9	-5.9	-4.2	-4.0	-2.5
Romania	-1.8	-0.9	-1.3	-1.5	-1.6	-1.7	-0.9	-0.8	-1.8	-1.6	-2.7	-3.4
Slovakia	-2.0	-0.8	-4.6	-5.9	-11.0	-5.3	-7.2	-1.4	-1.4	-1.0	-3.1	-2.6
Sweden	-1.0	1.0	1.7	1.0	2.6	1.6	-1.0	-0.2	0.2	1.9	1.5	2.8
United Kingdom	-1.4	GR	-0.3	0.8	0.7	0.3	-1.9	-3.4	-3.7	-3.4	-2.8	-3.0

Sources: European Commission and ECB calculations.

Notes: One-off and temporary measures as defined by the European Commission are only netted out of the structural balance from 2003 onwards. Before then, the structural balance is equated with the cyclically adjusted balance. Cells are unshaded if a country was not an EU Member State at the time. Data exclude receipts from the sale of UMTS licences.

MB: minimum benchmark, MTO: medium-term objective, BB: balanced budget, BoS: balanced budget or surplus, GR: golden rule (surplus on current spending over the economic cycle).

in which output (growth) is above potential, but may be more limited in economic “bad times”.

Bearing these provisions in mind, Table 1 presents a stylised overview of compliance with the preventive arm of the Stability and Growth Pact over the past ten years. For ease of exposition, a Member State is shown as “fully” complying with the preventive arm (see legend) if (i) for the period prior to 2005 the structural balance is equal to or greater than -0.5% of GDP and (ii) for the period 2005 onwards the structural balance is equal to or greater than the country’s stated medium-term objective.<sup>10</sup> In the absence of “full” compliance, a distinction is also made between Member States whose structural deficits are above or below their respective minimum benchmarks, the latter behaviour being described as “partial” compliance (see legend).

On this basis, among the current euro area countries, Ireland, Luxembourg and Finland have fully complied with the provisions of the preventive arm either in every year or in the vast majority of years since 1998. They have been joined by Spain since 2003, by the Netherlands since 2005 and by Cyprus in 2007. Slovenia is also judged to have partially or fully complied with the preventive arm of the Pact since joining the EU in 2004. Belgium is seen as partially complying in most years and has recently maintained a close to balance budgetary position, but has not achieved the targeted medium-term objective of a surplus of 0.5% of GDP. In recent years Austria has respected its minimum benchmark but has run small deficits and made little or no progress towards its medium-term objective. After several years of non-compliance, Germany has recently reduced its structural deficit and reached a close to balance budgetary position in 2007, but has not yet reached its medium-term objective. Malta entered the EU in 2004 with a high structural deficit, which by 2007 was still above its minimum benchmark.

Four euro area countries, however, stand out as generally not having managed to comply with the provisions of the preventive arm over the

past decade, namely Greece, France, Italy and Portugal. In these countries, structural deficits are judged to have been persistently high, either because deficits were revised upwards ex post (see below), or because fiscal adjustment has been regularly postponed. In Italy and Portugal, structural deficits have recently declined to a somewhat lower level, but without yet achieving an adequate safety margin with respect to the 3% deficit limit.

Among the non-euro area countries, Bulgaria, Denmark, Estonia and Sweden have generally maintained structural budget surpluses, while Latvia has respected its minimum benchmark. By contrast, the Czech Republic, Hungary and Poland have recorded high structural deficits, and structural deficits in Lithuania, Romania, Slovakia and the United Kingdom have either increased or improved little in recent years.

#### THE CORRECTIVE ARM

If a government deficit exceeds or is planned to exceed the reference value of 3% of GDP, the European Commission launches an excessive deficit procedure by preparing a report on the budgetary situation of the country concerned. The Commission assesses in particular whether the excess over the reference value is small, exceptional (due to a severe economic downturn) and temporary. If this is not the case and there are no “other relevant factors” that may explain a “small and temporary” breach of the reference value, the conditions are in place for the EU Council to decide that an excessive deficit situation exists.

If a deficit is deemed to be excessive in the sense of the Treaty and the Stability and Growth Pact, the Council issues a recommendation to the Member State concerned to correct the situation. The correction of the excessive deficit should be “completed in the year following its identification, unless there are special

<sup>10</sup> Data for the cyclically adjusted balance net of one-off and temporary measures are only available from 2003 onwards. Before then, the structural balance is equated with the cyclically adjusted balance.

circumstances". In other words, under normal conditions an excessive deficit should not persist for more than two consecutive years. If effective action is not taken to achieve the correction within this period, the Council normally issues a "notice" to the Member State concerned and, in the event of continued non-compliance, the Treaty foresees the imposition of sanctions. However, as a result of the reform of the Pact in 2005, the Council has explicitly been given the option of issuing repeated recommendations and notices in which it may extend deadlines if it considers that unforeseen events with major, negative budgetary consequences occurred after the initial recommendation or notice

was issued. In practice, this means that, in the worst case, an excessive deficit can persist for several years.

Table 2 provides a stylised overview of Member States' compliance with the corrective arm of the Pact on the basis of whether or not the government deficit ratio, as measured ex post, exceeded the 3% of GDP reference value. It can be seen that deficits in the majority of EU Member States have breached the 3% reference value in at least one year since 1998. In many cases, these breaches of the reference value were short-lived. Notably, the Netherlands incurred a deficit above 3% of GDP in 2003

**Table 2 Compliance with the corrective arm of the Stability and Growth Pact**

(as a percentage of GDP)

- indicates a deficit ratio below the 3% reference value (a debt ratio below the 60% reference value)
- indicates a deficit ratio above the 3% reference value which was not recognised as excessive in the following year (usually because the deficit was revised upwards ex post)
- indicates a deficit ratio above 3% of GDP which was recognised as excessive in the following year (a debt ratio above 60%)

**General government:**

	Net lending (+)/borrowing (-)										Gross debt	
	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	1998	2007
Belgium	-0.9	-0.5	0.1	0.4	0.0	0.0	0.0	-2.3	0.3	-0.2	117.1	84.8
Germany	-2.2	-1.5	-1.1	-2.8	-3.7	-4.0	-3.8	-3.4	-1.6	0.0	60.3	65.0
Ireland	2.4	2.7	4.7	0.9	-0.6	0.4	1.4	1.6	3.0	0.3	54.0	25.5
Greece	-3.9	-3.1	-3.7	-5.0	-4.7	-5.6	-7.4	-5.1	-2.6	-2.8	105.8	94.5
Spain	-3.2	-1.4	-1.1	-0.6	-0.5	-0.2	-0.3	1.0	1.8	2.2	64.1	36.2
France	-2.6	-1.8	-1.5	-1.6	-3.2	-4.1	-3.6	-2.9	-2.4	-2.7	59.4	63.9
Italy	-2.8	-1.7	-2.0	-3.1	-2.9	-3.5	-3.5	-4.2	-3.4	-1.9	114.9	104.0
Cyprus	-4.1	-4.3	-2.3	-2.2	-4.4	-6.5	-4.4	-2.4	-1.2	3.3	58.4	59.8
Luxembourg	3.4	3.4	6.0	6.1	2.1	0.5	-1.2	-0.1	1.3	2.9	7.4	6.9
Malta	-9.9	-7.7	-6.2	-6.4	-5.5	-9.8	-4.6	-3.2	-2.5	-1.8	53.4	62.6
Netherlands	-0.9	0.4	1.3	-0.2	-2.1	-3.1	-1.7	-0.3	0.5	0.4	65.7	45.4
Austria	-2.3	-2.2	-2.1	0.0	-0.6	-1.4	-3.7	-1.5	-1.5	-0.5	64.3	59.1
Portugal	-3.4	-2.8	-3.2	-4.3	-2.9	-2.9	-3.4	-6.1	-3.9	-2.6	52.1	63.6
Slovenia	-2.4	-2.0	-3.8	-4.6	-2.5	-2.7	-2.3	-1.5	-1.2	-0.1	23.1	24.1
Finland	1.7	1.6	6.9	5.0	4.1	2.6	2.4	2.9	4.1	5.3	48.2	35.4
<b>Euro area</b>	<b>-2.3</b>	<b>-1.4</b>	<b>-1.0</b>	<b>-1.9</b>	<b>-2.5</b>	<b>-3.1</b>	<b>-2.9</b>	<b>-2.5</b>	<b>-1.3</b>	<b>-0.6</b>	<b>72.8</b>	<b>66.3</b>
Bulgaria	1.7	0.4	-0.5	0.2	-0.1	0.0	1.4	1.8	3.0	3.4	n/a	18.2
Czech Republic	-5.0	-3.7	-3.7	-6.1	-6.8	-6.6	-3.0	-3.6	-2.7	-1.6	15.0	28.7
Denmark	0.0	1.3	2.3	1.3	0.2	0.0	1.9	5.0	4.8	4.4	60.8	26.0
Estonia	-0.7	-3.5	-0.2	-0.1	0.4	1.7	1.6	1.8	3.4	2.8	5.5	3.4
Latvia	0.0	-3.9	-2.8	-2.1	-2.3	-1.6	-1.0	-0.4	-0.2	0.0	9.6	9.7
Lithuania	-3.1	-2.8	-3.2	-3.6	-1.9	-1.3	-1.5	-0.5	-0.5	-1.2	16.6	17.3
Hungary	-8.0	-5.4	-2.9	-4.0	-8.9	-7.2	-6.5	-7.8	-9.2	-5.5	62.0	66.0
Poland	-4.3	-2.3	-3.0	-5.1	-5.0	-6.3	-5.7	-4.3	-3.8	-2.0	38.9	45.2
Romania	-3.2	-4.5	-4.6	-3.3	-2.0	-1.5	-1.2	-1.2	-2.2	-2.5	18.8	13.0
Slovakia	-5.3	-7.1	-12.2	-6.5	-8.2	-2.7	-2.4	-2.8	-3.6	-2.2	34.5	29.4
Sweden	1.1	1.3	3.7	1.6	-1.2	-0.9	0.8	2.2	2.3	3.5	69.1	40.6
United Kingdom	-0.1	0.9	1.2	0.5	-2.0	-3.3	-3.4	-3.4	-2.6	-2.9	46.7	43.8

Sources: European Commission and ECB calculations.

Notes: Data exclude receipts from the sale of UMTS licences. Cells are unshaded if a country was not an EU Member State at the time.

and was made subject to an excessive deficit procedure, but corrected the situation in the following year. According to current data, Spain (in 1998) and Austria (in 2004) also had deficits in excess of 3% of GDP, but these arose following ex post data revisions; the deficits were not identified as being excessive at the time. Cyprus and Malta entered the EU in 2004 with excessive deficits, but these were corrected before the two countries joined the euro area on 1 January 2007. These cases apart, more persistent breaches of the 3% reference value occurred in the three largest euro area countries (Germany, France and Italy), as well as in Greece and Portugal. As a result, in the period 2003-05 no fewer than four to six out of (then) twelve euro area countries had a deficit exceeding 3% of GDP.

Portugal was the first euro area country to be made subject to an excessive deficit procedure. In the summer of 2002, a commission headed by the Banco de Portugal was given a mandate to analyse and update the Portuguese government accounts. The outcome of this audit was an upward revision of the deficit-to-GDP ratio of about 2 percentage points to over 4%, while the deficit ratios for 1998-2000 were also revised significantly upwards. The Portuguese deficit ratio fell below 3% in 2002 and 2003, largely owing to temporary fiscal measures. When these expired, however, the deficit ratio again rose to well above 3% of GDP. Following the launch of a new excessive deficit procedure and the granting of an extended deadline for the deficit correction, the Portuguese deficit ratio was finally brought back below 3% of GDP in 2007.

Germany and France became the subject of excessive deficit procedures after their deficits breached the 3% reference value in 2002. As it became clear that neither country would correct its excessive deficit by the initial deadline of 2004 set by the EU Council, the European Commission proposed moving to the next step of the procedures, namely the issuance of a Council notice. However, the Council failed to act on the Commission's recommendations,

instead issuing Council conclusions which put the procedures in abeyance. The resulting procedural deadlock was followed by a court case and the annulment of the Council conclusions as well as a debate which culminated in the reform of the Stability and Growth Pact in 2005 and the introduction of more flexibility into the excessive deficit procedure. After the reform, new Council recommendations with extended deadlines were issued and the French and German deficits were finally brought back below 3% of GDP (in line with these new deadlines) in 2005 and 2006 respectively.

Greece became the subject of an excessive deficit procedure in 2004 following an initial notification that its deficit had exceeded the 3% reference value in 2003. As a result of a subsequent fiscal audit, however, deficits for the whole 1997-2004 period were revised substantially upwards and are now judged to have been above 3% of GDP on the basis of current methodologies. After the initial failure of Greece to take effective action, as well as further data revisions which pushed the 2004 deficit ratio well above 3%, the Council for the first time took the step of issuing a notice, but in doing so also extended the deadline for Greece to correct its excessive deficit until 2006. The Greek deficit ratio was reduced to below 3% in 2006, allowing the Council to end the excessive deficit procedure the following year.<sup>11</sup>

An excessive deficit procedure was launched against Italy in 2005 on the basis that the deficit ratio exceeded the 3% reference value in 2004. However, subsequent statistical revisions were also made in this country and breaches of the reference value are now deemed to have occurred already in 2001 and 2003. In view of the extent of the breach of the reference value, the Council also granted Italy an extended deadline for the correction of its excessive deficit, which was achieved in 2007.

<sup>11</sup> It should be noted that Eurostat is in the process of reviewing the Greek deficit figures for 2007, which is expected to lead to a further upward revision to above 3% of GDP.

Among the non-euro area countries, the Czech Republic, Hungary, Poland and Slovakia were made subject to excessive deficit procedures after joining the EU. All except Hungary have now corrected their excessive deficits. The United Kingdom breached the deficit criterion in 2004 and 2005. This led to the opening of an excessive deficit procedure which was finally abrogated in 2007. Based on a planned deficit of above 3% of GDP for the financial year 2008/9, the Council again decided on the existence of an excessive deficit in July 2008.<sup>12</sup>

Overall, therefore, compliance with the preventive and corrective arms of the Stability and Growth Pact during its first ten years has been uneven. Some Member States have maintained sound fiscal positions according to the Pact's norms. Moreover, in the more favourable economic environment of the past few years, excessive deficits in the vast majority of countries have been corrected and most Member States have now either reached their medium-term objective or made significant progress towards achieving it. This, however, needs to be set against the fact that a large number of countries incurred excessive deficits in the context of the previous downturn, and it is not yet clear whether Member States as a whole are now in a better position to withstand similar shocks in the future.

The uneven compliance with the Pact over the past decade is also reflected in starkly diverging developments in government debt ratios (see Table 2). By achieving close to balance or in surplus budgetary positions, some countries, notably Spain and the Netherlands, have succeeded in reducing previously high debt-to-GDP ratios to well below 60%, while Belgium's very high debt ratio has also been reduced markedly. On the other hand, debt ratios now stand above 60% of GDP and have risen over the past decade in Germany, France and Portugal. The very high debt ratios of Greece and Italy witnessed only modest and disappointing reductions in the period 1998-2007.

#### 4 OUTCOMES VERSUS PLANS: SOME LESSONS ON THE BASIS OF DEVIATIONS FROM FISCAL TARGETS

Member States' stability (or convergence) programmes are updated annually and normally submitted at the end of the calendar year.<sup>13</sup> The programme presents the government's economic and budgetary strategy, including plans or targets for the main fiscal variables, as well as the macroeconomic forecasts and fiscal assumptions on which these targets are based. The plans typically cover a horizon of three to four years and, at least for the first year, usually reflect the projections and measures adopted in national budgets.

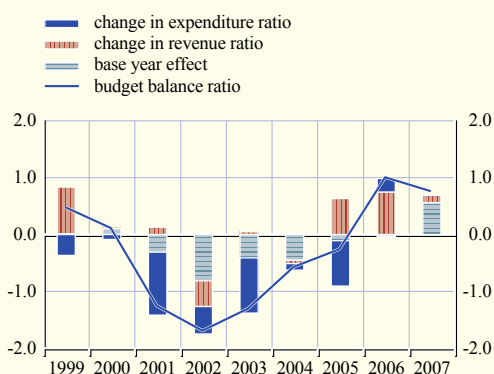
Actual budgetary outcomes can deviate from the plans presented in stability and convergence programmes for many reasons. It may be that the projection for economic growth on which the fiscal plans were based turns out to be overly optimistic. If GDP growth is lower than expected, this will typically result in lower tax revenues (owing to lower wages, profits, consumption, etc.) and may also necessitate higher social expenditure (e.g. unemployment benefits). Apart from the impact of higher or lower economic growth, revenue projections may be incorrect because legislative changes do not have their intended effect or because there are other unexpected developments. On the expenditure side, desired levels (or cuts) of government spending may not be achieved because of unexpected spending pressures or because of a lack of willingness to abide by or enforce spending limits. Conversely, outcomes for the overall budget balance may be in line with targets even in the event of divergences from fiscal plans. For example, it may be that the deficit target is achieved only because of higher than expected output growth, windfall revenue gains, a temporary shortfall in expenditure or subsequent one-off measures.

12 It should be noted that for the United Kingdom it is financial year rather than calendar year data that matters for the implementation of the Stability and Growth Pact, while Table 2 reports calendar year figures.

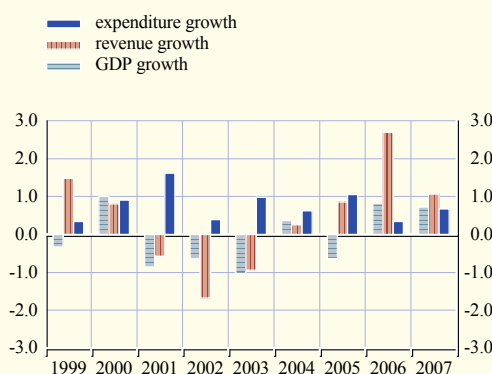
13 Euro area countries submit stability programmes while non-euro area countries submit convergence programmes.

Chart 2 Deviations from stability programme targets (euro area 12 aggregate)

(as a percentage of GDP)



(annual percentage points)



Sources: AMECO, stability programmes and ECB calculations.

Chart 2 and Table 3 present information concerning deviations of actual outcomes from the targets presented by the 12 euro area countries that submitted stability (or convergence) programmes for the period 1999-2007.<sup>14</sup> Chart 2 reports the information for the euro area aggregate (i.e. the weighted average of the 12 countries) for individual years based on deviations from targets for the coming year (i.e. “one-year-ahead” targets). Table 3 reports average deviations for the whole period for individual countries, for both one-year-ahead and three-years-ahead targets.

In Chart 2 and Table 3, the deviations from fiscal plans are broken down to reflect the following factors. First, the budgetary situation may have been different from what was assumed at the time the stability programme was presented. Significant “base year effects” can sometimes be caused by unexpected revenue or expenditure developments towards the end of the budgetary year, i.e. after the finalisation of the programme for the following year. They may also be caused by ex post revisions of fiscal data, which, as already mentioned, have been particularly significant and negative in Greece, Italy and Portugal.<sup>15</sup> The comparison of initial estimates and plans for some countries in the early years of EMU is also complicated by the transition from the ESA 79 to the ESA 95 methodology for compiling government accounts.

Second, abstracting from base year effects, deviations from targeted changes in the budget balance ratio can be attributed to deviations from targeted changes in the revenue ratio and the ratio of (primary and interest) expenditure to GDP. Viewed in isolation, however, developments in revenue and expenditure ratios can be misleading. This is because they may be driven either by deviations of actual revenue and spending from targets or by deviations from the projection for GDP. It is therefore important to take into consideration the effect of deviations of GDP growth from projected levels and also to consider deviations of actual revenue and spending growth from targets. Thus, Chart 2 and Table 3 also report deviations from projected GDP growth (in Table 3 this is also sub-divided into deviations from the projections for the growth of real GDP and the GDP deflator) and deviations from targets for revenue and (primary) spending growth.<sup>16</sup>

<sup>14</sup> Greece submitted convergence programmes prior to its adoption of the euro on 1 January 2001.

<sup>15</sup> The large negative base year effect for Austria reported in Table 3 is essentially due to a very large ex post revision of the deficit for 2004.

<sup>16</sup> As a rule, deviations from projected revenue growth would be expected to be positively correlated with deviations from the projected growth of GDP and the GDP deflator. Deviations from projected expenditure growth would be expected to be positively correlated with deviations from the projected growth of the GDP deflator and (slightly) negatively correlated with deviations from the projected growth of real GDP.

Focusing first on euro area aggregate developments over time (Chart 2), it can be seen that deviations from targets for the budget balance have exhibited a cyclical pattern, being positive or neutral in 1999-2000 and again in 2006-07, but negative in 2001-05. These deviations can largely be explained by errors in the projection for GDP growth and even

larger errors in the projection for tax revenues. Indeed, a notable feature of fiscal developments in the euro area over the past decade has been a tendency for revenues to exhibit short-term fluctuations above and beyond what would normally be expected on the basis of output developments and typically assumed revenue elasticities. This is because tax receipts are

**Table 3 Deviations from stability programme targets/projections (1999-2007)**

	Budget balance-to-GDP ratio	Base year effect	Change in budget balance-to-GDP ratio	Change in revenue-to-GDP ratio	Change in primary spending-to-GDP ratio	Change in interest spending-to-GDP ratio	Nominal GDP growth	of which real GDP growth	of which GDP deflator	Revenue growth	Primary spending growth
	1=2+3	2	3=4-5-6	4	5	6	7=8+9	8	9	10	11
<b>Deviation from one-year-ahead target/forecast</b>											
Belgium	-0.1	-0.1	0.0	0.3	0.3	-0.1	0.2	0.1	0.1	0.9	1.4
Germany	-0.2	0.0	-0.2	0.1	0.3	0.0	-0.7	-0.3	-0.4	-0.4	-0.2
Ireland	0.7	0.3	0.4	0.5	0.2	-0.1	1.1	1.1	0.0	2.7	2.4
Greece	-3.5	-2.6	-0.9	-0.3	0.5	0.1	0.8	0.3	0.5	0.0	1.8
Spain	0.1	-0.3	0.5	0.4	0.1	-0.2	1.6	0.5	1.0	2.6	1.7
France	-0.3	0.0	-0.3	0.2	0.6	-0.1	-0.2	-0.3	0.1	-0.1	1.0
Italy	-1.0	-0.5	-0.5	0.2	0.9	-0.1	-0.3	-0.7	0.3	0.0	1.7
Luxembourg	2.1	1.8	0.2	0.4	0.3	0.0	2.1	1.4	0.7	2.1	2.4
Netherlands <sup>1)</sup>	0.1	0.0	0.1	0.4	0.3	0.0	0.2	0.0	0.2	1.1	0.9
Austria	-0.4	-0.5	0.1	0.2	0.1	0.0	0.2	0.1	0.1	0.5	0.8
Portugal	-1.1	-0.6	-0.4	-0.1	0.4	-0.1	0.0	-0.5	0.4	-0.2	0.8
Finland	1.0	0.5	0.5	0.7	0.2	0.0	0.5	0.3	0.2	1.9	0.9
<b>Euro area</b>	<b>-0.4</b>	<b>-0.2</b>	<b>-0.2</b>	<b>0.2</b>	<b>0.5</b>	<b>-0.1</b>	<b>-0.1</b>	<b>-0.2</b>	<b>0.1</b>	<b>0.4</b>	<b>0.9</b>
<b>Deviation from three-years-ahead target/forecast</b>											
Belgium	-0.5	0.2	-0.7	0.5	1.5	-0.4	0.1	-0.3	0.4	0.6	1.8
Germany	-1.7	-0.1	-1.6	0.3	2.0	-0.1	-1.4	-1.0	-0.4	-1.2	0.1
Ireland	0.3	0.1	0.1	2.3	2.3	-0.2	1.1	0.6	0.5	3.5	4.4
Greece	-5.1	-3.2	-1.9	-1.3	0.7	-0.1	0.8	0.1	0.6	-0.4	1.7
Spain	0.3	-0.5	0.8	1.0	0.7	-0.5	1.9	0.4	1.4	2.8	2.8
France	-1.7	0.0	-1.7	0.6	2.4	-0.1	-0.2	-0.5	0.3	0.0	1.5
Italy	-2.7	-0.8	-1.9	0.6	2.8	-0.3	-0.7	-1.3	0.7	-0.2	1.8
Luxembourg	-0.1	1.6	-1.7	0.4	2.1	0.0	1.4	0.6	0.7	1.2	3.3
Netherlands	-0.4	-0.1	-0.3	n/a	n/a	n/a	0.4	-0.3	0.7	n/a	n/a
Austria	-0.6	-0.6	0.0	0.6	0.6	0.0	-0.2	-0.4	0.2	0.3	0.5
Portugal	-2.8	-0.9	-1.9	0.8	2.7	-0.1	-0.9	-1.4	0.5	-0.2	1.4
Finland	0.7	0.4	0.4	1.3	1.0	-0.1	0.1	0.3	-0.2	1.0	1.1
<b>Euro area</b>	<b>-1.5</b>	<b>-0.3</b>	<b>-1.2</b>	<b>0.5</b>	<b>1.9</b>	<b>-0.2</b>	<b>-0.3</b>	<b>-0.6</b>	<b>0.3</b>	<b>0.1</b>	<b>1.2</b>

Sources: European Commission, stability programmes and ECB calculations.

Notes: For some countries, budgetary targets could not be drawn from the stability programme for individual years. Where a single observation is missing, the respective year was excluded when calculating average deviations for the period 1999-2007.

1) One-year-ahead revenue and expenditure targets for 2002 are taken from the European Commission's assessment of the 2001 stability programme update.

1= difference between the actual outcome and the target for the budget balance-to-GDP ratio set in the stability programme.

2= difference between the actual outcome for the budget balance-to-GDP ratio in the base year and the estimate contained in the stability programme.

3-6= difference between the actual change in the ratio between the base and the target/forecast year and the change targeted in the stability programme.

7-11= difference between the actual (average) annual growth rate and that projected or targeted in the stability programme over the relevant horizon. Planned growth rates have been calculated on the basis of planned revenue and expenditure ratios and the forecast for nominal GDP growth. They should therefore be seen as approximations owing to rounding.

The sample for one-year-ahead targets/forecasts covers the stability programmes from end-1998 to end-2006 and fiscal outcomes from 1999-2007. The sample for three-years-ahead targets/forecasts covers the stability programmes from end-1998 to end-2004 and fiscal outcomes from 2001-2007.



determined by the development of individual tax bases, the growth rate of some of which (e.g. taxable corporate profits, capital gains, the value of property transactions) can be much more volatile than the overall growth rate of GDP. For the euro area, deviations of revenue growth from planned levels have exhibited a more or less cyclical pattern, being positive in the upturn phases of 1999-2000 and 2004-07, while being negative during the downturn of 2001-03 (see Chart 2). These revenue surprises have tended to be correlated with but also larger than the contemporaneous deviations from projected GDP growth.

While in the short run deviations of fiscal outcomes from plans have tended to be driven by revenue fluctuations, Chart 2 also points to persistently higher than targeted expenditure growth (i.e. in every single year) at the euro area level, a feature which is widespread across countries (see below).

Turning to the average deviations from targets for the euro area and for individual countries (Table 3), budgetary plans are seen to have been too optimistic mainly in countries that have incurred excessive deficits for significant periods (Germany, Greece, France, Italy and Portugal). By contrast, outcomes for the budget balance ratio were generally better than targeted in Ireland, Spain, Luxembourg and Finland. For the euro area aggregate, the actual outcome for the budget balance ratio has been on average 0.4% worse than the forecast for the coming year and 1.5% worse than the three-years-ahead forecast. The greater accuracy of the one-year-ahead forecasts compared with those for three years ahead can be attributed to the fact that the targets for the coming year are usually set at the time of the adoption of the budget for that year and are hence based on more reliable forecasts and more concrete measures than the targets for the following years of the programme. Moreover, fiscal adjustment strategies in some countries have tended to be backloaded, with most of the targeted decline in the deficit ratio being focused on the latter years of the programme horizon, by

when fiscal plans may have been changed and the necessary measures postponed.

The main picture that emerges from Table 3 is one of widespread expenditure slippages compared with initial targets.<sup>17</sup> For the euro area as a whole, the growth rate of primary spending has been almost 1 percentage point higher than projected for the subsequent year and 1.2 percentage points higher than projected over the three-year horizon (see column 11). At the country level, expenditure overruns have prevailed on average in almost all euro area countries. Possible exceptions are Germany and Austria, where the average deviation from planned spending growth has been relatively small and, especially in Germany, may be explained at least partly by the less favourable than expected macroeconomic developments (which have put upward pressure on social spending).

In some countries, notably Ireland, Spain and Luxembourg, even large average expenditure overruns have not prevented compliance with overall targets for the budget balance. This is because these countries have also benefited from much higher than expected revenue growth. This can in part be explained by higher than projected GDP growth and, in the cases of Ireland and Spain in particular, the beneficial impact on revenues of strong growth in “tax-rich” activities, such as the boom in property transactions during this period. In these countries, the boom in revenues made the extra spending temporarily “affordable”. However, the data per se cannot distinguish between, on the one hand, unintended expenditure overruns which just happened to be offset by higher revenues and, on the other hand, discretionary decisions by governments (after initial plans were set) to allocate the additional revenues to higher spending. Looking ahead, with revenue growth declining in a less favourable

<sup>17</sup> For an analysis of the contribution of expenditure and revenue slippages to deviations from stability and convergence programme targets, see also European Commission, “Public finances in EMU – 2008”, Box I.3.1, pp. 40-41.

macroeconomic environment, fiscal soundness in these countries will depend crucially on policy-makers' ability to stick to their spending plans.

It is the countries where expenditure overruns have not been compensated for by higher revenues which have struggled most to comply with the provisions of the Stability and Growth Pact. In the cases of France, Italy and Portugal, macroeconomic conditions have generally turned out to be less favourable than projected in their stability programmes. This has, to varying degrees, given rise to revenue shortfalls and may also explain some part of the observed expenditure slippages. In Greece, by contrast, GDP growth has tended to exceed projected levels, and the fact that this has not yielded higher revenues suggests that the underlying revenue projections in this country's stability programmes (e.g. in terms of the revenue yield of specific budget measures) have tended to be on the optimistic side. Only in the case of Germany do large deviations from stability programme targets appear to have their origin mainly in lower than targeted revenue growth. This is largely a reflection of the significantly lower than projected GDP growth in this country over the period under review.

## 5 CONCLUSIONS AND CHALLENGES AHEAD

Ten years after the entry into force of the Stability and Growth Pact, the aggregate euro area deficit ratio, as estimated for 2007, stands at its lowest level in several decades. Almost all EU Member States have deficit ratios below the 3% reference value of the Treaty, and in the majority, medium-term budgetary objectives have been or are relatively close to being reached. The persistent increases in government spending and debt ratios of earlier decades have also been brought to a halt. It is unlikely that this would have been achieved without the fiscal rules of the Treaty and the Stability and Growth Pact.

However, seen from a broader perspective, the overall experience of the last ten years is

less reassuring. Budgetary improvements in recent years have coincided with favourable macroeconomic conditions together with unusual revenue buoyancy, and in some countries, budgetary positions are now deteriorating again in a less favourable environment. Individual countries vary significantly in terms of their compliance with the budgetary norms of the Pact. The effective implementation of the excessive deficit procedure has been complicated by revisions of past data, and deficits above 3% of GDP have been repeated and persistent in some countries. This suggests that at least in these cases the implementation of the Pact has lacked sufficient rigour and political will. Indeed, the corrective arm of the Pact arguably failed its first real test when, in the context of the economic downturn in 2001-03, the excessive deficit procedures against France and Germany were temporarily suspended. After the recent economic "good times", it remains to be seen whether Member States will build on recent consolidation progress and reach or maintain sound fiscal positions or, should this not be the case, if the corrective arm of the revised Pact will be implemented in a sufficiently strict and timely manner.

What lessons should be drawn from the fiscal policy experience of the last ten years? First of all, slippages in government spending compared with initial expenditure targets have been persistent and widespread among euro area countries as all too often targeted expenditure restraint has not materialised. Whether or not these slippages resulted in overall fiscal targets being missed depended on whether or not they were offset by more favourable than expected developments on the revenue side. Since tax receipts can fluctuate considerably in the short term, compliance with the Pact may be achieved more easily when economic conditions are favourable, but it becomes much more difficult in "bad times". Given the downside risks to economic activity, the revised Pact is likely to be put to the test, as structural adjustment efforts in recent economic "good times" have been insufficient in several Member States, and some countries have failed to create sufficient

safety margins with respect to the 3% deficit ceiling. This latter failure reflects – at least to some extent – a lack of political will to comply with European fiscal obligations. It is of utmost importance that all EU countries remain committed to the rules and procedures of the Pact and thereby support its credibility. Fiscal adjustment efforts should be based on well-specified measures, should preferably be frontloaded, and should be backed up by a tight ex post control of expenditure.

Second, at the national level, fiscal institutions should promote compliance with European obligations. The adoption of medium-term fiscal frameworks encompassing well-designed expenditure rules would go a long way towards guaranteeing fiscal discipline. The effective management of government expenditure is especially important so that persistent spending overruns do not put fiscal targets at risk. Moreover, a sound statistical basis is a precondition for credible fiscal rules and analysis. In this regard, repeated large ex post revisions and uncertainty concerning the reliability of data are a cause for serious concern.

Third, it is the responsibility not only of the Member States, but also of the European Commission and the EU Council, to strictly apply the rules and procedures of the Pact and to exercise adequate pressure with regard to the pursuit of prudent fiscal policies.<sup>18</sup> This should be achieved on the basis of robust assessments of stability and convergence programmes. In this context, due attention should be paid to the link between fiscal policy and the broader macroeconomic situation, including internal and external imbalances, such as high inflation, booms in asset markets and current account deficits, which could threaten fiscal sustainability in the medium to long run.<sup>19</sup>

Fourth, securing the sustainability of public finances also calls for more attention to be paid to implicit liabilities stemming from the fiscal costs of ageing populations, in particular by taking into account such liabilities when setting medium-term objectives. Comprehensive

strategies to deal with ageing-related spending pressures are needed and should combine appropriate fiscal structural reforms with a sufficiently frontloaded fiscal adjustment, in countries where this is still necessary.<sup>20</sup>

Finally, increasing attention needs to be paid to the relationship between fiscal policies and long-term (potential) growth and employment creation. Reforms to improve the quality of public finances, by enhancing the efficiency of government spending, channelling expenditure into growth-enhancing activities and reducing distortions in the tax system, could contribute to raising long-term growth prospects.<sup>21</sup> This in turn would also facilitate the maintenance of sound public finances in the euro area and bolster the credibility of the Stability and Growth Pact, which is essential for the smooth functioning of EMU.<sup>22</sup>

18 A number of the points made in this section are also highlighted in the European Commission's report entitled "EMU@10: successes and challenges after 10 years of Economic and Monetary Union", *European Economy*, 2/2008.

19 See the article entitled "Challenges to fiscal sustainability in the euro area" in the February 2007 issue of the *Monthly Bulletin*.

20 See the article entitled "Demographic change in the euro area: projections and consequences" in the October 2006 issue of the *Monthly Bulletin*.

21 See the article entitled "The importance of public expenditure reform for economic growth and stability" in the April 2006 issue of the *Monthly Bulletin* and the article entitled "Fiscal policies and economic growth" in the August 2001 issue of the *Monthly Bulletin*.

22 See the May 2008 special edition of the *Monthly Bulletin* published on the occasion of the 10th anniversary of the ECB.



# CROSS-BORDER BANK MERGERS & ACQUISITIONS AND INSTITUTIONAL INVESTORS

ARTICLES

Cross-border bank mergers & acquisitions and institutional investors

*The last few years have seen significant cross-border bank mergers and acquisitions (M&As) activity in the euro area. At the same time, institutional investors – investment funds, insurance corporations and pension funds – have become the main collectors of households' funds and important shareholders of firms and banks. This article analyses these two phenomena – first separately and then by looking at how they are related, emphasising the possible consequences for financial integration and financial stability. The presence of institutional investors as large shareholders affects corporate governance in general and the occurrence of M&As in particular. In addition, the results of the empirical analysis presented in the article suggest that the presence of foreign institutional investors as shareholders of banks facilitates cross-border M&As.*

## I INTRODUCTION

The integration of the European financial market is important for the conduct of monetary policy, for financial stability and for economic welfare. The integration of certain segments of banking is somewhat less advanced than the integration of other euro area financial markets (for instance, wholesale money and bond markets).<sup>1</sup> Reducing barriers to cross-border banking integration is one of the policy priorities for the completion of the single market for financial services and for enhancing economic growth in the euro area.

Banks with significant cross-border activity play a key role in the process of banking integration. Cross-border banking is very often the result of cross-border M&As. However, there are a number of barriers to cross-border bank M&As. Some have to do with legal and regulatory requirements and others are more related to greater difficulties in acquiring information from different markets and from afar. While in the euro area the former have mostly been eliminated, barriers related to information costs are still present and seem to be particularly significant in the banking sector.

Institutional investors involved in international activities can be pivotal to removing these barriers and thus contributing to the process of financial integration. Institutional investors are, together with banks, the most important financial intermediaries. They are defined as professional asset management institutions with discretionary control over assets that invest funds from small investors in order to achieve a specific objective in terms of acceptable risk, return maximisation

and maturity of claims. The most important institutional investors are mutual funds, pension funds and insurance companies.<sup>2</sup>

Institutional investors are significant shareholders in listed corporations and in banks. Their presence as shareholders, especially if they are large shareholders, may affect corporate governance, i.e. the management of potential conflicts arising within a firm between different shareholders, and between the shareholders and managers of a firm, with significant consequences vis-à-vis the profitability of the firm involved. The presence of institutional investors as shareholders in a company seems to affect corporate governance and, in particular, the occurrence of M&A activity, which puts corporate governance to the test.

Following this reasoning, Section 2 reviews the process of bank M&As in the euro area, highlighting the importance of cross-border activities. Section 3 describes the significance of institutional investors in the euro area. Section 4 analyses how the strengthening of foreign institutional ownership may affect corporate governance in general and the process of

1 ECB (2008), Financial integration in Europe, April.

2 This definition is widely used in the literature: see, for instance, P. Davis and B. Steil (2001), "Institutional investors", MIT Press and ECB (2007), "Corporate finance in the euro area", May. Hedge funds are not included in the category of institutional investors in this article. The first reason is that it focuses on the impact institutional investors have on the corporate governance of listed firms, while the size of corporate shareholdings of hedge funds is small compared with other institutional investors. Moreover hedge funds tend to have a short-term orientation. A second reason is that these intermediaries are unregulated or loosely regulated funds and thus data on their active strategies may be more difficult to obtain.

cross-border M&As in particular. In fact, the empirical evidence presented in this article suggests that institutional ownership may positively affect cross-border bank M&A activity. Finally, Section 5 concludes.

## 2 THE INTEGRATION OF BANKING MARKETS

This section reviews the impact of cross-border banking activity on the economy in order to understand the related benefits and costs. It then describes the recent trends in cross-border bank M&A activity in the euro area.

### BENEFITS OF CROSS-BORDER BANKING

Banking markets encompass interbank (or wholesale) activities, capital market-related activities and retail banking. Data on these activities reveal that while the euro area interbank (or wholesale) market and capital market-related activities show clear signs of increasing integration, retail banking continues to be fragmented.

Cross-border banking is important for financial integration and economic growth. The basic consideration in this regard is that cross-border activities provide a major tool for banks to realise their optimal size, to reap economies of scale and scope, to diversify activities, and to spread risk and increase revenues. This, in turn, enables banks to improve resource allocation and risk management, and also to increase profitability. Through the international expansion of banking groups and interbank competition, these beneficial effects are expected to spread to the euro area banking sector as a whole, fostering closer convergence towards better and more efficient banking practices, deeper integration, and greater breadth, depth and liquidity of markets.

Ultimately, progress in the development and integration of the banking sector will also have a positive effect on macroeconomic performance. Numerous empirical studies have provided evidence for the close link between

more integrated and efficient banking markets and enhanced economic performance.<sup>3</sup> This link is particularly strong in the euro area, given the central role of banks in the financial system.

Cross-border banking also has an impact on financial stability in two important respects. On the one hand, cross-border banking fosters the overall resilience at the euro area level as larger and more diversified banking systems are better equipped to absorb economic shocks. On the other hand, cross-border banking opens up additional channels for the transmission of instabilities across borders, both via ownership links and credit exposures.<sup>4</sup> The potential transmission or spillover of financial risk across jurisdictions is more likely in this context and, as a consequence, systemic risk becomes more complex. This also implies that with a view to safeguarding financial stability in more closely integrated banking markets, it is important to ensure that cross-border risks are adequately monitored and properly managed.

Cross-border banking activity can be enhanced in two different ways, either directly through “greenfield” investment or branches, or indirectly through cross-border M&As – deals where the acquirer and the target banks are located in different countries. Cross-border bank M&As may increase the efficiency of the banks involved as long as they are able to achieve synergies and exploit economies of scale at the group level. However, this can often be challenging, owing, for instance, to obstacles in the standardisation

3 See P. E. Strahan (2003), “The real effects of US banking deregulation”, *The Federal Reserve Bank of St. Louis Review*, 85, pp. 111-28; and P. Hartmann, F. Heider, E. Papaioannou and M. Lo Duca (2007), “The role of financial markets and innovation in productivity and growth in Europe”, *ECB Occasional Paper No 72*.

4 See R. Ferguson, P. Hartmann, F. Panetta and R. Portes (2007), “International financial stability”, *Ninth Geneva Report on the World Economy*, Chapter 6, November. For evidence on contagion based on credit exposures, see R. Iyer and J.-L. Peydró-Alcalde (2008), “Interbank contagion at work: evidence from a natural experiment”, *University of Amsterdam Working Paper*.

of banking products and IT systems across countries.<sup>5</sup> Furthermore, there might be negative externalities for banks' customers if bank M&As reduce banking competition. In the euro area, given the relatively low level of cross-border integration, the overall effect of cross-border M&As is likely to be positive.

There are relatively few cross-border M&As in banking compared with M&A activity in the manufacturing sector, which may reflect the existence of several barriers.<sup>6</sup> These barriers are related to (geographical) distance, language, culture and markets (information costs). In particular, the higher opaqueness of bank assets relative to other sectors implies that there are important information barriers between banks that operate in different countries and markets which further reduce cross-border bank M&As.<sup>7</sup> In addition, other barriers are related to different regulatory and supervisory structures which may impede or make it very difficult to finalise cross-border M&As and, therefore, may offset some of the efficiency gains from banking consolidation.

The improvement of regulation in a domestic banking system has an indirect effect on international merger decisions. For instance, regulation that enhances transparency facilitates the assessment of efficiency gains from international bank mergers. In countries with increased transparency banks become more attractive targets of international bank mergers. Moreover, banks in more developed countries (which are presumably more efficient) tend to take over banks in less developed countries. In more homogeneous countries, for example euro area countries, the relative profitability of banking systems has little explanatory power for bank merger activity.<sup>8</sup> This suggests that differences in profitability are not large enough to outweigh the costs of factors such

as distance, common language, and a common legal and banking system.

Public policies have an important role to play by providing a legal, regulatory and supervisory framework conducive to the efficient operation of cross-border entities, promoting a level playing-field in the European Union (see the box). While barriers to consolidation linked to regulatory and legal requirements can eventually be removed, barriers related to information costs may remain, even in legally integrated markets.<sup>9</sup> In this regard, institutional investors can play an important role, especially those with the scope and resources to overcome information barriers.

- 5 There is empirical evidence that cross-border bank M&A increase the efficiency of the banks involved. See Y. Altunbas and D. Marqués-Ibáñez (2008), "Mergers and acquisitions and bank performance in Europe: the role of strategic similarities", *Journal of Business and Economics* 60, 3, pp. 179-290. See also J. M. Campa and I. Hernando (2004), "Shareholder value creation in European M&As", *European Financial Management*, 10(1), pp. 47-81, J. M. Campa and I. Hernando (2006), "M&A Performance in the European financial industry," *Journal of Banking and Finance* 30(12), December, pp. 3367-92, and F. Pasiouras, S. Tanna and C. Gaganis (2007), "What drives acquisitions in the EU banking industry? The role of bank regulation and supervision framework, bank specific and market specific factors", Coventry University Working Paper.
- 6 See D. Focarelli and A. F. Pozzolo (2001) "The patterns of cross-border bank mergers and shareholdings in OECD countries", *Journal of Banking and Finance* 25, pp. 2305-37. They find that in the 1990s cross-border mergers accounted for only 13% of merger activity within the banking industry compared with 35% within manufacturing and 24% within all sectors on average.
- 7 See D. P. Morgan (2002), "Rating banks: risk and uncertainty in an opaque industry", *American Economic Review*, Vol. 92(4), pp. 874-88, September and M. J. Flannery, H. Simon and M. Nimalendran (2004), "Market evidence on the opaqueness of banking firms' assets", *Journal of Financial Economics*, Vol. 71(3), pp. 419-60, March.
- 8 See C. M. Buch (2003), "Information or regulation: What drives the international activities of commercial banks?", *Journal of Money, Credit and Banking*, Vol. 35, pp. 851-69.
- 9 See A. N. Berger, R. DeYoung, H. Genay and G. F. Udell (2000), "Globalization of financial institutions: Evidence from cross-border banking performance", *Brookings-Wharton Papers on Financial Services* 3, pp. 23-158, and A. N. Berger, R. DeYoung and G. F. Udell (2001), "Efficiency barriers to the consolidation of the European financial services industry", *European Financial Management* 7, pp. 117-30.

### OBSTACLES TO CROSS-BORDER M&As

Cross-border M&As can be challenging, both during the transaction phase and subsequently when delivering the envisaged operational synergies. Several important factors which have an impact on this process lie beyond the remit of public authorities, as obstacles to cross-border M&As include geographical distance, differences in culture, language, markets and consumer preferences. Nevertheless, public authorities have a role to play in enhancing the policy framework for cross-border banking consolidation by reducing prudential, legal and fiscal obstacles that could dissuade prospective acquirers.<sup>1</sup>

Prudential obstacles to cross-border M&As relate to the supervisory approval process for acquisitions as well as to the various prudential rules by which cross-border banks have to abide. Both issues have attracted increased attention at the EU level: in September 2007, Directive 2007/44/EC, aiming to improve legal certainty, clarity and transparency of the supervisory approval process for acquisitions in the financial sector, came into force, and EU Member States must comply with it before 21 March 2009.<sup>2</sup> In addition, enhancing supervisory convergence and cooperation has progressed with the adoption of the revised framework for home/host cooperation under the Capital Requirements Directive and the related work of the Committee of European Banking Supervisors. The enhancement of the Lamfalussy framework currently under way is expected to provide further impetus in this respect.

Legal obstacles pertain to incompatibilities in national company laws that can render cross-border mergers and takeovers problematic or even impossible and insufficient legal harmonisation; the latter has two-pronged effects. Differences in the rules for consumer protection, liability and bankruptcy, for example, inhibit the standardisation of products and related IT systems on a cross-border basis, affecting in particular the provision of retail financial services. Furthermore, insufficient legal harmonisation could affect corporate restructuring and especially the transformation of foreign subsidiaries into branches. Incompatibilities in national company laws are expected to be diminished following the full implementation by Member States of Directive 2005/56/EC on cross-border mergers. Finally, the European Company Statute includes a legal framework for corporate restructuring; however, market participants have suggested that it involves a number of practical difficulties and thus interest to adopt this corporate form has so far been very limited.

Finally, fiscal obstacles involve gaps or lack of clarity in national tax rules regarding the treatment of cross-border M&A operations, the possible application of exit tax on capital gains and the value added tax (VAT) treatment of the transfer of financial assets. In addition, lack of clarity and harmonisation on issues such as VAT charges on intra-group services, transfer pricing and the treatment of cross-border losses impede the operational efficiency of cross-border banks. With regard to VAT, a legislative initiative has been launched by the Commission by adopting a proposal for a Council Directive amending Directive 2006/112/EC on the common system of value added tax, as regards the treatment of insurance and financial

1 For more information, see ECB (2007), "Financial integration in Europe".

2 For more information, see S. Kerjean (2008), "The legal implications of the prudential supervisory assessment of bank mergers and acquisitions under EU law", ECB Legal Working Paper Series No 6.



services<sup>3</sup> and the related Council Regulation laying down implementing measures for Directive 2006/112/EC.<sup>4</sup> This Directive aims at modernising and simplifying the complex VAT rules for financial and insurance services and securing a level playing-field in the pan-EU market for these services as far as VAT is concerned. Reducing the impact of hidden VAT in costs of insurance and financial service providers is one of the objectives of the above proposals.

3 COM (2007) 747.

4 COM (2007) 746 final.

### BANK M&A ACTIVITY IN THE EURO AREA

Since the introduction of the euro there have been many banking M&A deals, although the number of such deals has declined somewhat over the last few years (see Table 1). However, the value of bank M&As has increased,

Table 1 Bank M&As in the euro area

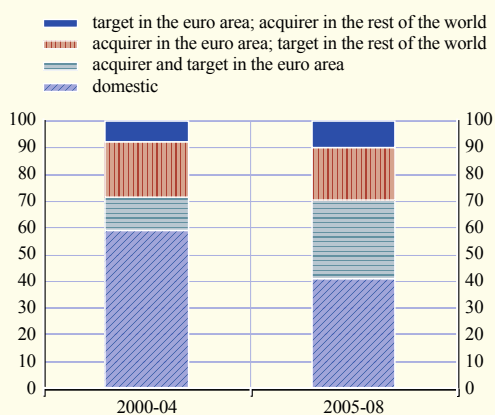
	2000-04	2005-08
Value of deals (EUR billions)	182	269
Number of deals	485	274

Sources: Zephyr, Bureau van Dijk and ECB calculations.

Notes: All acquisition transactions are taken into account provided that the resulting stake in the target bank is above 10% of its capital. 2008 data are related to the first half of the year.

Chart 1 Domestic and cross-border euro area bank M&A activity

(percentages)



Sources: Zephyr, Bureau van Dijk and ECB calculations.

Notes: Domestic deals comprise M&A deals where the acquirer and the target bank are located in the same euro area country. All acquisition transactions are taken into account provided that the resulting stake in the target bank is above 10% of its capital. 2008 data are related to the first half of the year.

reflecting the higher valuation of banks' equity as well as the involvement of larger banks.

Concerning the geographical location of the deals, not only have cross-border deals increased relatively more than domestic transactions, but also the values of cross-border M&A deals have recently been significantly larger than domestic deals (see Chart 1). Moreover, intra-euro area cross-border M&A deals – where both acquirer and target banks are located in different euro area countries – have increased the most, which may also be the result of both the euro and ongoing policies aimed at reducing barriers to banking market integration in the region.

There was also significant cross-border bank M&A activity between euro area banks and banks located outside the euro area. In particular, over the last few years, cross-border bank M&A activity has been significant for outward deals – where a euro area bank acquires a bank located outside the euro area – and, also, for inward cross-border M&A deals, where a euro area bank is targeted by a bank located outside the euro area.

### 3 TRENDS IN OWNERSHIP OF INSTITUTIONAL INVESTORS IN THE EURO AREA

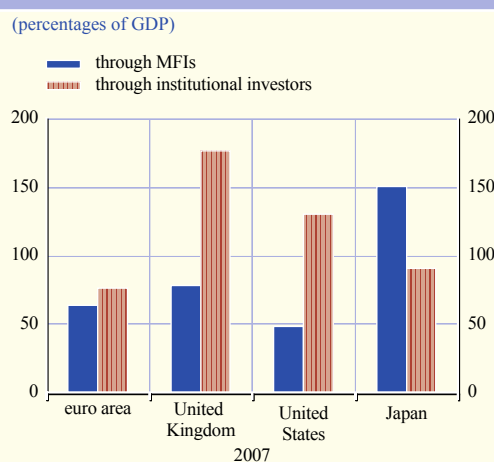
In developed countries, households hold the majority of their financial assets indirectly via financial intermediaries. Indeed, only in the United States does the direct holding of securities, in particular shares, constitute a significant part of households' portfolio. Among the various intermediaries, MFIs (mainly banks)

collect a larger part of these funds, compared with the assets managed by other institutions. Nevertheless, despite differences existing across countries, the funds flowing through institutional investors have been consistently high over the past few years and have grown slightly in the major developed economies as a ratio of GDP. For instance, in terms of magnitude, the value of financial assets held by euro area households through financial intermediaries – both through MFIs and through institutional investors – was around 140% of GDP at the end of 2007, compared with 130% at the end of 1999.

The latest data show that a little under half of the total financial assets in the euro area are invested through MFIs, while the rest go to institutional investors (see Chart 2). In the United States and the United Kingdom, funds flowing through institutional investors as a percentage of GDP are significantly larger, mainly reflecting investment in pension funds, presumably as a consequence of the differences in public pension schemes compared with those in euro area countries. Households in Japan hold many more assets in banks than in other developed countries, although they still invest significant amounts in insurance and pension funds.

Households have also increased the percentage of their assets invested via institutional investors in the developed economies. This is more likely the result of significant developments in global financial markets, with a notable increase in the range of products and services offered to the public. At the same time, global demographic trends – in particular population ageing across the developed economies – have placed a large burden on public social security systems and have triggered pension reforms. The resulting reduction in benefits has supported investment in private pension funds. This has been the case in the euro area, where the overall increase in capital flowing to investment funds has been the result of larger funds being available to the pension fund industry, which nevertheless remains underdeveloped in most countries.<sup>10</sup> By contrast, the percentage of assets invested via mutual funds has declined since 1999 across euro area countries.

**Chart 2 Household holdings of financial assets**



Sources: ECB, Eurostat, Bank of Japan and Federal Reserve Board.

Notes: Financial asset holdings through MFIs include currency and deposits. Financial asset holdings through institutional investors include mutual fund shares (for Japan, investment trust beneficiary certificates and trust beneficiary rights) as well as insurance and pension fund reserves.

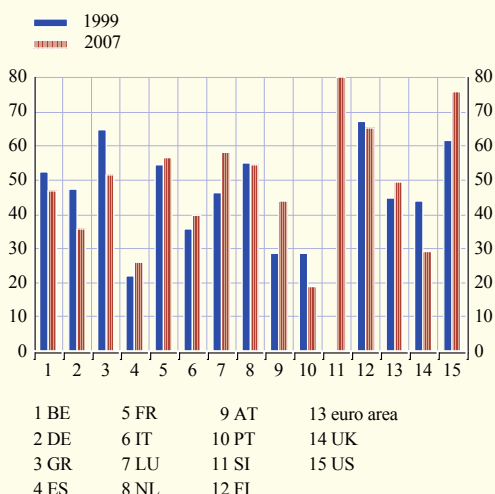
Owing to the large size of assets under management, institutional investors play a key role in global financial markets. They generally hold diversified portfolios, although the various types of institutional investors tend to allocate their portfolios differently, for example to respond to different investment horizons, as is the case for pension and investment funds. At the same time, portfolio allocation strategies differ across countries, partly as a result of regulatory requirements.

In general, institutional investors place a significant share of funds in equity. Investment funds in the euro area have increased the percentage invested in equity over the last few years to reach almost 50% by end-2007. This percentage remains significantly lower than in the United States but higher than in the United Kingdom, where equity investment has decreased substantially since 1999 (see Chart 3). However, there are considerable differences across euro area countries. With the exception

<sup>10</sup> See the article entitled “Demographic change in the euro area: projections and consequences” in the October 2006 issue of the Monthly Bulletin.

**Chart 3 Investment fund holdings of equities**

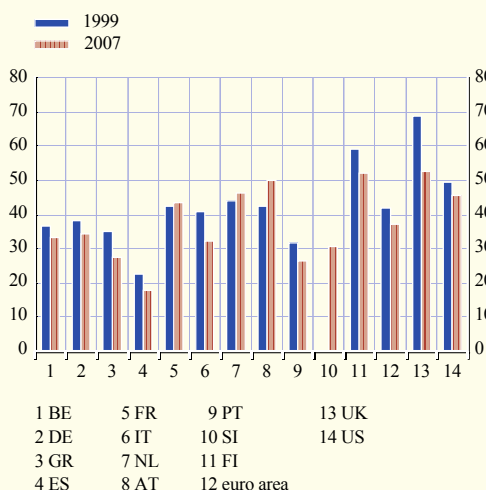
(percentages of total assets)



Sources: ECB, Bank of England and Federal Reserve Board.  
Notes: For the euro area countries and the United Kingdom data refer to holdings of "shares and other equity", which include mutual fund shares; for the United States data refer to "corporate equities".

**Chart 4 Insurance corporations and pension fund holdings of equities**

(percentage of total assets)



Sources: ECB, Bank of England and Federal Reserve Board.  
Notes: For the euro area countries and the United Kingdom data refer to holdings of "shares and other equity", which include mutual fund shares; for the United States data refer to "corporate equities" and mutual fund shares. Latest available data for Finland relate to 2006. Data for Luxembourg are not available.

of Germany, Italy, Spain and Portugal, investment funds in other euro area countries hold more than 40% of their portfolio in equity. The ratio of investment in equity is over 60% in Finland and over 80% in Slovenia.<sup>11</sup>

The differences are somewhat less pronounced for the portfolio allocation of insurance corporations and pension funds (ICPFs), which on average tend to hold less equity, reflecting regulatory constraints. In the euro area, only in Austria, Finland, France and the Netherlands is the percentage of the portfolio invested in shares relatively close to that in the United Kingdom and the United States, while in the other euro area countries pension funds tend to hold a more diversified portfolio by type of instrument (see Chart 4).<sup>12</sup> ICPF investment in equity shows a slight decrease in 2007 compared with 1999.

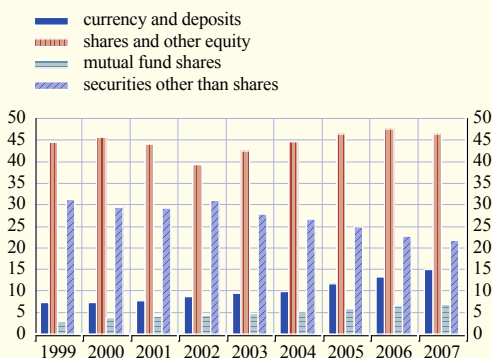
Other financial intermediaries (OFIs), of which investment funds constitute a significant part,<sup>13</sup> have increased the percentage of their portfolios invested in shares over the last few years at the expense of investment in other kinds

of securities (mainly bonds) (see Chart 5). The low levels of bond yields over the same period are likely to have affected this trend, prompting investment fund managers to move towards more aggressive strategies, especially when facing a significant net withdrawal of funds. The investment in equity of ICPF's has decreased slightly since 1999, while investment in securities has increased over the same period (see Chart 6).

- 11 This peculiarity in Slovenia results from the conversion of three investment companies into equity funds, which at the end of 2006 held 23% of the total assets of the country's mutual funds. See Bank of Slovenia, Financial Stability Review, May 2007.
- 12 For some euro area countries, notably Austria, the ICPF's holding of mutual fund shares outweighs that of other categories of shares.
- 13 Other financial intermediaries are defined as corporations or quasi-corporations (other than insurance corporations and pension funds), such as investment funds that are engaged mainly in financial intermediation by incurring liabilities in forms other than currency, deposits and/or close substitutes for deposits from institutional entities other than MFIs. These OFIs also include those entities engaged primarily in long-term financing, such as corporations engaged in financial leasing, financial vehicle corporations created to be holders of securitised assets, financial holding corporations, dealers in securities and derivatives (when dealing for their own account), venture capital corporations and development capital companies. See also [http://www.ecb.europa.eu/stats/pdf/eaa/EAA\\_Glossary.pdf](http://www.ecb.europa.eu/stats/pdf/eaa/EAA_Glossary.pdf).

**Chart 5 Portfolio allocation of euro area OFIs**

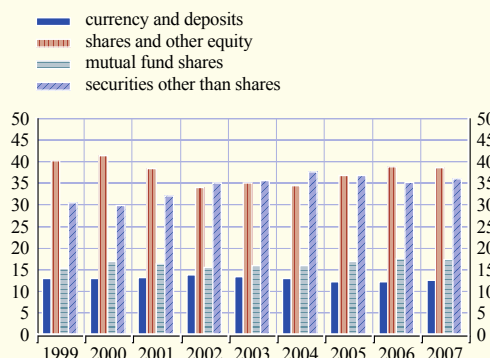
(percentages of total assets)



Source: ECB.  
Notes: The portfolio allocation refers to the balance sheet of OFIs. "Shares and other equity" includes mutual fund shares.

**Chart 6 Portfolio allocation of euro area ICPFs**

(percentages of total assets)



Source: ECB.  
Notes: The portfolio allocation refers to the balance sheet of ICPFs. "Shares and other equity" includes mutual fund shares.

#### 4 INSTITUTIONAL OWNERSHIP, CORPORATE GOVERNANCE AND M&As

The previous sections have described the process of cross-border bank M&A activity and the increasing importance of institutional investors. The aim of the following sub-sections is to analyse the relationship between institutional ownership, corporate governance and cross-border M&As.

##### CORPORATE GOVERNANCE AND OWNERSHIP

The aim of corporate governance is to avoid, and eventually manage, potential conflicts arising between shareholders and firm managers and between different classes of shareholders. Corporate governance is related to the main characteristics of the financial system in place, such as corporate law, but it is also linked to the ownership structure of firms.

One important factor affecting differences in financial structures and corporate governance around the world is the degree of ownership concentration.<sup>14</sup> Corporate governance may be weak if ownership is too dispersed. A small shareholder does not have any incentive to monitor a firm since he or she cannot benefit from the positive externalities of monitoring while bearing

the related costs. As a result, the lack of some degree of ownership concentration in publicly owned companies tends to weaken shareholders' monitoring incentives, thereby leading to agency problems between owners and managers.<sup>15</sup> Large investors, who have more incentives to monitor, and also more power, typically strengthen corporate governance, especially in systems where legal arrangements give relatively less power to minority shareholders. In the euro area, fundamental steps are being adopted to enhance corporate governance mechanisms. The directive on the exercise of shareholders' rights, which Member States are due to implement by July 2009, is of particular relevance in this respect.<sup>16</sup>

Large shareholders often enjoy a close relationship with a company's management

14 See R. La Porta, F. Lopez-de-Silanes, A. Shleifer and R. Vishny (1999), "Corporate ownership around the world", *Journal of Finance* Vol. 54 (2), pp. 471-517.

15 See J. Tirole (2007), "The theory of corporate finance", Princeton University Press.

16 Directive 2007/36/EC. The main features of this Directive are the reduction of the minimum notice period for most general meetings where shareholders can vote also by electronic means from 21 to 14 days; furthermore they must disclose the voting results on their website. The Directive also sets standards granting shareholders the right to ask questions and requiring companies to respond. In addition, it gives shareholders the right to put items on the general meeting agenda and table resolutions. Finally, the Directive bans share blocking and abolishes constraints on the eligibility of people to act as proxy holders.

structure and have an incentive to monitor the firm's activities. However, their interests may not always coincide with those of all the shareholders. This can result in conflicts of interest among different categories of shareholders, which may also affect corporate policies. There is some evidence that ownership concentration and profitability are not always positively linked.<sup>17</sup> For instance, a higher proportion of shares gives a higher incentive to monitor a firm, but if the level is too high, larger shareholders may pursue policies that benefit the person or group in control (like "empire building" through M&As) but which may not be beneficial to the other shareholders.<sup>18</sup>

In this context, the identity of these large shareholders seems to be important as well. Large shareholders may be families, non-financial corporations, banks or even the state, but they can also be institutional investors with possibly conflicting interests and different investment horizons. This may have implications for corporate structures, investment choices, dividend policies and more broadly for corporate governance and the way firms are run. For example, in the case of banks, whether or not the biggest shareholder is a non-financial corporation or an institutional investor may be relevant for corporate governance. A non-financial company may exploit its close relationship with the bank's managers to obtain funds in an economic crisis or may oppose a change in control (e.g. a cross-border M&A) to preserve this close relationship. An institutional investor, on the other hand, would aim to achieve the highest return on equity to retain its investors, which may be good for the general shareholder but may sometimes bring too much "short-termism" to the company, which could have a negative impact on its long-term profitability.

#### THE EFFECT OF INSTITUTIONAL OWNERSHIP ON CORPORATE GOVERNANCE

The significant growth in the role played by institutional investors is one important recent development in the financial structure of Europe. From a corporate finance perspective this has at least two main consequences. First, institutional

investors ease direct financing of non-financial corporations by buying corporate bonds and equity. Second, by having significant corporate ownership participations in the euro area, they can impose market discipline and influence the behaviour of (financial and non-financial) corporations.<sup>19</sup>

As indicated earlier, shareholders with large investment stakes – often institutional investors – are the most likely monitors of publicly traded companies.<sup>20</sup> In such companies, shareholders effectively delegate decision-making responsibility to managers whose interests can diverge from those of their shareholders. The board of directors has a significant role in controlling such agency problems arising from its fiduciary obligation to shareholders, which includes the responsibility to recruit, dismiss, compensate and monitor top management. When the board of directors fails to perform these tasks, shareholder activism may arise in response.

The fact that common stocks are bought and sold in a market place is an initial remedy for suboptimal management by incumbent boards. Precisely because investors can sell their shares to the highest bidder, there is a market for

17 See A. Shleifer and R. W. Vishny (1986), "Large shareholders and corporate control", *Journal of Political Economy* 94, pp. 461-88.

18 A large shareholder with control has the power to appoint directors and managers and to make major corporate decisions that normally require the approval of a certain proportion of shareholders.

19 Note that this disciplining behaviour in corporations is not limited to non-financial corporations but can also be applied to financial corporations (e.g. banks) themselves.

20 See, for instance, M. C. Jensen and W. H. Meckling (1976), "Theory of the firm: Managerial behavior, agency costs, and ownership structure", *Journal of Financial Economics* 3, pp. 305-60. See also J. A. Brickley, R. C. Lease, and C. W. Smith (1988), "Ownership structure and voting on antitakeover amendments", *Journal of Financial Economics* 20, pp. 267-91; G. A. Jarrell and A. B. Poulsen (1987), "Shark repellents and stock prices: The effects of antitakeover amendments since 1980", *Journal of Financial Economics* 19, pp. 127-68; B. Holmstrom and S. N. Kaplan (2001), "Corporate governance and merger activity in the United States: Making sense of the 1980s and 1990s", *Journal of Economic Perspectives* 15, pp. 121-44; G. B. Gorton and M. Kahl (2006), "Blockholder identity, equity ownership structures, and hostile takeovers", NBER Working Paper No W7123; and A. R. Admati, P. Pfleiderer and J. Zechner (1994), "Large shareholder activism, risk sharing, and financial market equilibrium", *Journal of Political Economy* 102, pp. 1097-1130.

corporate takeovers – a “market for corporate control” – that gives competing management teams, as well as active investors, the ability to gain control of companies, thereby circumventing ineffective managers and boards. But even in cases where there appear to be no bidders, the stock market performs an inherent monitoring role, pressuring managers and boards to make decisions increasing equity value.<sup>21</sup>

When investors are dissatisfied with certain aspects of a company’s management or operations, they can try to promote change with or without a change in control, in the former case through a M&A. Through their initial purchases and subsequent decisions to hold or sell, shareholders are expressing their views on the corporation’s performance. In extreme cases investors initiate takeovers and leveraged buyouts aimed at achieving fundamental corporate changes. Between these extremes are intermediate points that include, for example, blockholders who purchase equity minority stakes with the intention of influencing managerial decision-making. Dissatisfied shareholders can also simply “vote with their feet” by selling their shares. Theoretical arguments and empirical evidence show that while having disciplinary effects on companies, the act of selling shares can lead to changes in governance as well.<sup>22</sup>

The role of institutional investors and the way in which they exercise their activism has been the topic of a large empirical literature. First, institutional investors are more likely to collect other shareholders’ votes and push for corporate governance reforms.<sup>23</sup> For example, when institutional investors have larger ownership in a firm, shareholder-sponsored governance proposals tend to obtain more votes. Similarly, pension funds seem to be more successful at monitoring and promoting changes in firms at which they target their activism.<sup>24</sup> Second, there seems to be a relationship between institutional ownership and compensation policy. For instance, empirical evidence suggests that institutional ownership may increase the sensitivity of executive compensation to performance and may also reduce the level of compensation.<sup>25</sup>

Furthermore, institutional ownership may affect the likelihood of M&As. Firms with a higher number of institutional investors as shareholders are less likely to agree or vote for measures aimed at preventing takeovers.<sup>26</sup> In addition, different types of institutions, for example with different investment horizons, may have different implications for the M&A process. Firms with prevailing short-term shareholders have more chances of being targeted to receive a takeover bid.<sup>27</sup>

## INSTITUTIONAL OWNERSHIP OF BANKS

A consequence of the increasing predominance of institutional investors is that they are becoming relevant shareholders of banks (see Chart 7). Therefore, institutional investors can more significantly affect corporate decision-making and governance. The latter aspect may be particularly important in systems where shareholders’ rights are less developed.<sup>28</sup>

21 As B. Holmstrom and J. Tirole (1993), “Market liquidity and performance monitoring,” *Journal of Political Economy* 101, 4, pp. 678-709 have argued, the stock market may be the most reliable monitor of managerial performance because stock prices incorporate a variety of information about future performance and value that cannot be found in financial statements alone. See also E. Fama and M. Jensen (1983), “Separation of ownership and control”, *Journal of Law and Economics* 301-25.

22 For analyses of the effects of selling shares on corporate governance, see A. R. Admati and P. Pfleiderer (2005), “The Wall Street walk as a form of shareholder activism”, Stanford University working paper; and R. Parrino, R. W. Sias and L. T. Starks (2003), “Voting with their feet: Institutional ownership changes around forced CEO turnover”, *Journal of Financial Economics* 68, pp. 3-46. See also A. Hirschman (1971), “Exit, voice and loyalty: responses to decline in firms, organizations, and states”, Harvard University Press, Cambridge, MA.

23 See S. L. Gillan and L. T. Starks (2000), “Corporate governance proposals and shareholder activism: The role of institutional investors”, *Journal of Financial Economics* 57, pp. 275-305.

24 For general evidence see, for example, D. Del Guercio and J. Hawkins (1999), “The motivation and impact of pension fund activism”, *Journal of Financial Economics* 52, pp. 193-340.

25 See, for instance, J. C. Hartzell and L. T. Starks (2003), “Institutional investors and executive compensation”, *The Journal of Finance* 58, pp. 2351-74.

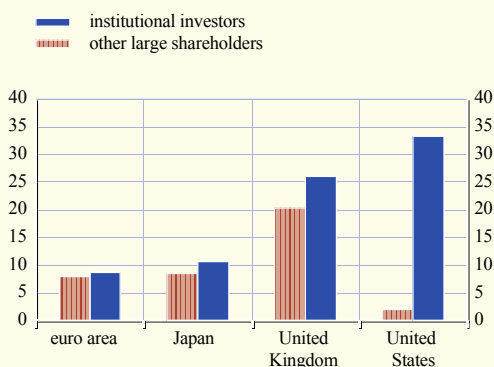
26 See J. A. Brickley, R. C. Lease, and C. W. Smith (1988), “Ownership structure and voting on antitakeover amendments”, *Journal of Financial Economics* 20, pp. 267-91 and G. A. Jarrell and A. B. Poulsen (1987), “Shark repellents and stock prices: the effects of antitakeover amendments since 1980”, *Journal of Financial Economics* 19, pp. 127-68.

27 See P. Matos, J.-M. Gaspar and M. Massa (2005), “Shareholder investment horizon and the market for corporate control”, *Journal of Financial Economics*, Vol. 76 (1), pp. 135-65.

28 See ECB (2007), “Corporate finance in the euro area”, May.

**Chart 7 Institutional investors as large shareholders in major banks**

(percentages of total shares)



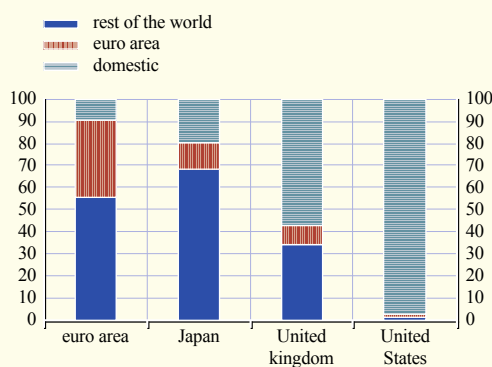
Source: Reuters.

Notes: Data retrieved in 2008. Data refer to the three largest banks in terms of market capitalisation.

Shareholding rights are the cumulated sum of rights held by the largest investors in each bank. Data are provided for the largest 20 stockholders in the pension fund and insurance corporations sector and for the largest 30 stockholders in the mutual funds sector; non-institutional investors are represented by the largest five shareholders in this category. For each geographical area, the indicator is calculated as an average of the shareholding rights by type of investor across banks, weighted by the market value of the banks concerned.

**Chart 8 Domestic versus foreign institutional investors as shareholders in major banks**

(percentages)



Source: Reuters.

Notes: Data retrieved in 2008. Data refer to the three largest banks in terms of market capitalisation.

Shareholding rights are the cumulated sum of the largest investors for each bank. For each geographical area, the indicator is calculated as the average of the domestic versus foreign residency of the largest 20 stockholders in the bank and insurance corporations sectors and the largest 30 stockholders in the mutual funds sector.

The effect of institutional ownership on the corporate governance of banks can be more important than in other industries since bank debt holders (very often including many small depositors) may not have strong incentives to monitor banks. Conversely, institutional investors have the incentives and the power to strengthen the corporate governance of banks.<sup>29</sup>

Foreign institutional investors are also becoming important shareholders in euro area banks with the largest market capitalisation (see Chart 8). In fact, the institutional ownership of these banks is, by and large, foreign, with an important presence from other euro area countries. This picture is similar in Japan, where non-resident investors represent the majority of the largest institutional stakeholders. On the contrary, in the United Kingdom domestic institutional investors in the major banks are predominant compared with non-resident investors. Finally, the major banks of the United States also attract almost exclusively domestic institutional investors, reflecting their importance and their size in the US financial system.

Investors' nationalities also affect the monitoring of banks' activities. Foreign investors (i) may not benefit so much from (domestic) public policies (e.g. a bailout when there is excessive bank risk-taking), or (ii) may have a more distant relationship with local corporations, thereby implying that domestic institutional money managers are more likely than foreign money managers to have business ties to local firms and be more sympathetic to the incumbent.<sup>30</sup> Furthermore, when

29 C. Hadlock, J. Houston and M. Ryngaert (1999), "The role of managerial incentives in bank acquisitions", *Journal of Banking and Finance* 23, pp. 221-49, confirm that banks with higher levels of managerial ownership are less likely to be acquired while Y. Brook, R. Hendershott, and D. Lee (2000), find in "Corporate governance and recent consolidation in the banking industry", *Journal of Corporate Finance* 6, pp. 141-64, that higher levels of outside block-holder ownership and a more independent board increase the probability that a bank will be acquired.

30 See L. S. Gillan and L. T. Starks (2000), "Corporate governance proposals and shareholder activism: The role of institutional investors", *Journal of Financial Economics* 57, pp. 275-305; G. F. Davis, and E. H. Kim (2007), "Business ties and proxy voting by mutual funds", *Journal of Financial Economics*, pp. 552-70; and M. Ferreira and P. Matos (2008), "The colors of investors' money: The role of institutional investors around the world", *Journal of Financial Economics* 88, pp. 499-533.

institutional investors own significant equity in their associated banks, they will not act independently from the management of the bank, thus weakening its corporate governance. On the contrary, foreign institutional investors are likely to be more independent shareholders and may, therefore, enhance corporate governance.

#### **INSTITUTIONAL OWNERSHIP AND CROSS-BORDER M&As**

Foreign institutional ownership and cross-border M&As are important mechanisms for financial integration. An important way of improving risk-sharing, and hence welfare, is to invest a proportion of the wealth overseas in assets with different risk characteristics. Consumers normally achieve this through institutional money managers (i.e. foreign institutional ownership). As explained before, the reduction of home bias and the growing importance of institutional investors go hand in hand.<sup>31</sup> The process of reducing the home bias and the increase of overseas portfolio investment improve financial integration.

Foreign institutional ownership and cross-border M&As can, in principle, complement or substitute each other as important mechanisms for financial integration. The presence of foreign investors as shareholders of corporations could, on the one hand, make it less necessary for corporations to make acquisitions overseas since a firm can access global finance even in the home markets. This argument would suggest that investors' international portfolio diversification may substitute for corporate internationalisation. On the other hand, a greater presence of foreign investors with a better knowledge of foreign markets can increase cross-border M&As by reducing information barriers between firms in different countries and markets.

Institutional investors – especially if active at an international level – may promote cross-border bank M&As by building bridges between banks, owing to their

knowledge of foreign markets. Foreign institutional investors are generally very active internationally and, therefore, have a better knowledge of the different banking markets. As outlined above, the information barriers in banking markets are high, given the greater opaqueness of banks compared with other sectors. Hence, cross-border bank M&As may be more difficult, which could explain why there have been fewer cross-border M&As in the banking sector than in non-financial sectors. Institutional investors that operate in international markets can help to reduce these information barriers thanks to their monitoring ability and their knowledge as global investors.

Another reason why foreign institutional investors may be important for influencing cross-border deals is that domestic investors may be more reluctant to support cross-border M&As. For example, if cross-border M&As were to result in higher banking competition, domestic institutional investors associated with the domestic banks could try to oppose such cross-border deals in case their profits were eroded by the increased competition. Similarly, domestic non-financial large shareholders could also try to block such operations because of the potential loss of connection with the bank.

Indeed, a simple econometric analysis of bank M&As involving euro area banks over the 2002-06 period suggests that the degree of foreign institutional ownership in banks affects the likelihood of cross-border bank M&As (see Table 2). In particular, both target and acquirer banks with a higher proportion of foreign institutional ownership have a higher probability of being involved in a cross-border M&A than in a domestic M&A. By contrast, domestic institutional

<sup>31</sup> The home bias literature suggests that informational constraints or information asymmetries cause investors to allocate too much of their portfolios to domestic stocks and too little to international stocks. See, for example, R. Stulz, M. Dahlquist, L. Pinkowitz and R. Williamson (2003), "Corporate governance, investor protection, and the home bias", *Journal of Financial and Quantitative Analysis*, Vol. 38(1), pp. 87-110.



**Table 2 Cross-border bank M&A and institutional ownership**

Size of target bank	-0.210
Size of acquirer bank	-0.010
% of domestic institutional investors in target bank	-0.240
% of foreign institutional investors in target bank	0.130**
% of domestic institutional investors in acquirer bank	0.039
% of foreign institutional investors in acquirer bank	0.100***
Adjusted R-Square	0.320
Number of observations	22

Sources: Zephyr, Osiris and Bankscope, from Bureau van Dijk; ECB calculations.

Notes: This table presents the results of an econometric analysis in which the choice of a cross-border versus a domestic bank M&A is analysed. In particular, a Probit model is used and the choice variable takes the value of 1 if the merger and acquisition is cross-border, and 0 if domestic. This choice variable is explained with a measure of institutional ownership and bank size indicators. The institutional ownership measure is the total percentage of institutional ownership in the target or the acquirer bank, disaggregated between domestic and foreign institutional ownership. The sample includes bank M&A deals between 2002 and 2006 in which both the target and the acquirer banks belong to the euro area. M&A deals are selected following the criteria: (i) the transaction involves the majority of the shares of the target bank (the ownership percentage sought after the deal is above 50%); and (ii) the deal is completed by the end of the sample period. Leveraged buyouts, spin-offs, recapitalisations, self-tender offers, exchange offers, repurchases, minority stake purchases and privatisations are excluded from the analysis. A positive coefficient in the table implies a higher probability that a merger and acquisition is cross-border, whereas a negative coefficient means that a domestic merger and acquisition is more likely. \*\*\* and \*\* imply statistical significance at 1% and 5% respectively.

ownership does not seem to affect the decision as to whether the M&A is cross-border or not.<sup>32</sup>

These findings have some implications for financial integration and regulation. An environment favouring foreign institutional ownership (both in terms of holding shares and being “activist” investors) could promote financial integration through cross-border M&As. This is all the more important as the legal barriers among euro area countries have been reduced substantially and mostly only information barriers remain present. In addition, more cross-border banking and more foreign institutional ownership increase the scope for cross-border and cross-sector contagion and systemic risk. Thus, it is important that the cooperation among the authorities responsible for banking supervision and regulation in Europe follows a clear set of common principles on crisis management, procedures and practical arrangements, which would ensure a timely and effective response.<sup>33</sup>

## 5 CONCLUSION

Cross-border bank M&A activity in the euro area has been significant over the last few years. At the same time, institutional investors – investment funds, insurance corporations and pension funds – have become the main collectors of households’ funds and important shareholders of firms and banks. These two phenomena appear to be linked, since institutional ownership affects the occurrence of M&As.

The results of the empirical analysis reported in the last part of the article suggest that institutional ownership is important and that the presence of foreign institutional investors as shareholders of banks facilitates cross-border bank M&As.

Financial integration is a highly dynamic process, in which market developments and policy action are intricately linked. While market forces have the primary role of shaping the single market for financial services, policy-makers can further support these efforts by

32 These results are not affected by the inclusion of different types of control variables, such as bank characteristics (e.g. bank size, capital, liquidity, risk, profitability or presence in foreign markets), specialised banks such as commercial, investment and mortgage banks, dispersed ownership variables, country and time-fixed effects, and country variables related to the legal system and banking regulation. Only evidence for M&A deals in which all banks belong to the euro area is presented. However, the results are very similar when the sample refers to the OECD countries. Other research provides evidence that foreign institutional ownership may increase cross-border non-financial firm M&A deals, whereas other variables, like the corporate law environment, play an important but smaller role in M&As (M. Ferreira, M. Massa and P. Matos (2007), “Shareholders at the gate? Cross-country evidence on the role of institutional investors in mergers and acquisitions”, INSEAD Working Paper). There is also evidence, however, to suggest that target firms are located, on average, in countries with poorer investor protection than their acquirer firms’ countries, suggesting a convergence in governance standards (see S. Rossi and P. Volpin (2004), “Cross-country determinants of mergers and acquisitions”, *Journal of Financial Economics* 74, pp. 277-304; and A. Bris and C. Cabolis (2008), “The value of investor protection: Firm evidence from cross border mergers”, *Review of Financial Studies*, pp. 605-48).

33 See Memorandum of Understanding on Cooperation between the Financial Supervisory Authorities, Central Banks and Finance Ministries of the European Union on Cross-Border Financial Stability, June 2008.

providing an adequate framework for the cross-border expansion of financial institutions and activities.

This article has analysed the barriers to cross-border bank M&As. Barriers related to the legal and regulatory environments have been significantly reduced in the euro area over the last few years. However, other kinds of barrier, linked to information costs, remain significant and affect the probability of the occurrence of M&As. The presence of institutional investors, especially those which are active internationally, can have a beneficial impact, since these may reduce information barriers and act as bridges between countries and firms. In this context, public policy can play an active role in helping to remove the obstacles to cross-border ownership of banks, which are nowadays mainly linked to the presence of information barriers. Cross-border bank M&A activity is likely to remain high, which, in turn, will require the strengthening of cooperation among financial supervision authorities in Europe.

# EURO AREA STATISTICS





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## 2 MONEY, BANKING AND INVESTMENT FUNDS

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

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#### ENLARGEMENT OF THE EURO AREA ON 1 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

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



# EURO AREA OVERVIEW

## Summary of economic indicators for the euro area

(annual percentage changes, unless otherwise indicated)

### 1. Monetary developments and interest rates

	M1 <sup>1)</sup>	M2 <sup>1)</sup>	M3 <sup>1),2)</sup>	M3 <sup>1),2)</sup> 3-month moving average (centred)	MFI loans to euro area residents excluding MFIs and general government <sup>1)</sup>	Securities other than shares issued in euro by non-MFI corporations <sup>1)</sup>	3-month interest rate (EURIBOR, % per annum, period averages)	10-year spot rate (% per annum, end-of- period) <sup>3)</sup>
	1	2	3	4	5	6	7	8
2006	8.6	8.7	8.4	-	10.9	15.2	3.08	3.91
2007	6.4	9.9	11.1	-	10.8	18.6	4.28	4.38
2007 Q4	5.9	10.7	12.0	-	11.1	19.5	4.72	4.38
2008 Q1	3.8	10.3	11.2	-	11.1	20.4	4.48	4.13
Q2	2.3	10.0	10.0	-	10.5	17.7	4.86	4.73
Q3	.	.	.	-	.	.	4.98	4.34
2008 Apr.	2.4	10.3	10.3	10.1	10.7	18.4	4.78	4.32
May	2.3	10.1	10.0	10.0	10.5	17.4	4.86	4.52
June	1.5	9.5	9.5	9.6	9.9	17.6	4.94	4.73
July	0.2	9.1	9.1	9.2	9.4	16.7	4.96	4.53
Aug.	0.2	8.9	8.8	.	8.8	.	4.97	4.34
Sep.	.	.	.	.	.	.	5.02	4.34

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

	HICP	Industrial producer prices	Hourly labour costs	Real GDP	Industrial production excluding construction	Capacity utilisation in manufacturing (percentages)	Employment	Unemployment (% of labour force)
	1	2	3	4	5	6	7	8
2006	2.2	5.1	2.5	2.8	4.0	83.2	1.6	8.3
2007	2.1	2.8	2.6	2.6	3.4	84.2	1.8	7.4
2008 Q1	3.4	5.4	3.5	2.1	2.5	83.9	1.6	7.2
Q2	3.6	7.1	2.7	1.4	0.9	83.3	1.2	7.3
Q3	.	.	.	.	.	.	.	.
2008 Apr.	3.3	6.2	-	-	4.0	83.8	-	7.3
May	3.7	7.1	-	-	-0.4	-	-	7.3
June	4.0	8.1	-	-	-0.7	-	-	7.3
July	4.0	9.2	-	-	-1.8	82.7	-	7.3
Aug.	3.8	.	-	-	.	.	-	.
Sep.	3.6	.	-	-	.	.	-	.

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

(EUR billions, unless otherwise indicated)

	Balance of payments (net transactions)				Reserve assets (end-of-period positions)	Effective exchange rate of the euro; EER-22 <sup>4)</sup> (index, 1999 Q1 = 100)		USD/EUR exchange rate
	Current and capital accounts	Goods	Direct investment	Portfolio investment		Nominal	Real (CPI)	
2006	7.9	19.2	-144.7	266.3	325.8	103.6	104.6	1.2556
2007	40.5	55.6	-117.3	235.7	347.4	107.7	108.3	1.3705
2007 Q4	16.7	9.7	-4.3	-62.3	347.4	110.5	111.2	1.4486
2008 Q1	-9.6	-2.9	-104.8	73.4	356.3	112.7	113.1	1.4976
Q2	-23.8	4.1	-54.3	70.5	353.9	115.7	115.7	1.5622
Q3	.	.	.	.	.	113.7	113.3	1.5050
2008 Apr.	-6.8	4.2	-22.4	-3.7	348.7	116.0	116.1	1.5751
May	-17.8	-3.3	-8.8	22.2	349.2	115.5	115.5	1.5557
June	0.9	3.1	-23.1	51.9	353.9	115.4	115.4	1.5553
July	-0.2	0.9	-14.5	-4.6	355.6	115.8	115.5	1.5770
Aug.	.	.	.	.	350.8	113.5	113.2	1.4975
Sep.	.	.	.	.	.	111.6	111.3	1.4370

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) Based on AAA-rated euro area central government bond yield curves. For further information, see table 4.7.
- 4) 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

	2008 5 September	2008 12 September	2008 19 September	2008 26 September
<b>Gold and gold receivables</b>	208,221	208,180	208,125	208,111
<b>Claims on non-euro area residents in foreign currency</b>	135,220	134,731	131,150	134,408
<b>Claims on euro area residents in foreign currency</b>	55,545	55,552	85,500	103,153
<b>Claims on non-euro area residents in euro</b>	15,043	15,500	16,078	15,042
<b>Lending to euro area credit institutions in euro</b>	460,002	476,501	450,269	487,311
Main refinancing operations	160,000	176,501	150,001	180,001
Longer-term refinancing operations	300,000	299,998	299,005	300,516
Fine-tuning reverse operations	0	0	0	0
Structural reverse operations	0	0	0	0
Marginal lending facility	1	0	1,260	6,788
Credits related to margin calls	1	2	3	6
<b>Other claims on euro area credit institutions in euro</b>	37,582	40,638	43,475	46,408
<b>Securities of euro area residents in euro</b>	109,728	110,010	110,310	111,284
<b>General government debt in euro</b>	37,457	37,457	37,474	37,474
<b>Other assets</b>	382,221	379,157	378,204	375,357
<b>Total assets</b>	<b>1,441,019</b>	<b>1,457,726</b>	<b>1,460,585</b>	<b>1,518,548</b>

### 2. Liabilities

	2008 5 September	2008 12 September	2008 19 September	2008 26 September
<b>Banknotes in circulation</b>	684,637	682,677	681,310	681,659
<b>Liabilities to euro area credit institutions in euro</b>	210,822	229,770	215,097	243,461
Current accounts (covering the minimum reserve system)	210,738	229,709	213,293	215,393
Deposit facility	81	55	1,801	28,059
Fixed-term deposits	0	0	0	0
Fine-tuning reverse operations	0	0	0	0
Deposits related to margin calls	3	6	3	9
<b>Other liabilities to euro area credit institutions in euro</b>	140	141	142	318
<b>Debt certificates issued</b>	0	0	0	0
<b>Liabilities to other euro area residents in euro</b>	68,458	67,450	54,424	62,326
<b>Liabilities to non-euro area residents in euro</b>	78,980	78,334	108,386	127,464
<b>Liabilities to euro area residents in foreign currency</b>	1,335	1,037	1,528	2,136
<b>Liabilities to non-euro area residents in foreign currency</b>	17,329	17,237	15,261	16,068
<b>Counterpart of special drawing rights allocated by the IMF</b>	5,120	5,120	5,120	5,120
<b>Other liabilities</b>	150,158	151,918	155,271	155,952
<b>Revaluation accounts</b>	152,364	152,364	152,364	152,364
<b>Capital and reserves</b>	71,676	71,678	71,682	71,680
<b>Total liabilities</b>	<b>1,441,019</b>	<b>1,457,726</b>	<b>1,460,585</b>	<b>1,518,548</b>

Source: ECB.



## 1.2 Key ECB interest rates

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

With effect from <sup>1)</sup>	Deposit facility		Main refinancing operations			Marginal lending facility	
	Level	Change	Fixed rate tenders	Variable rate tenders	Change	Level	Change
			Fixed rate	Minimum bid rate			
	1	2	3	4	5	6	7
1999 1 Jan.	2.00	-	3.00	-	-	4.50	-
4 <sup>2)</sup>	2.75	0.75	3.00	-	...	3.25	-1.25
22	2.00	-0.75	3.00	-	...	4.50	1.25
9 Apr.	1.50	-0.50	2.50	-	-0.50	3.50	-1.00
5 Nov.	2.00	0.50	3.00	-	0.50	4.00	0.50
2000 4 Feb.	2.25	0.25	3.25	-	0.25	4.25	0.25
17 Mar.	2.50	0.25	3.50	-	0.25	4.50	0.25
28 Apr.	2.75	0.25	3.75	-	0.25	4.75	0.25
9 June	3.25	0.50	4.25	-	0.50	5.25	0.50
28 <sup>3)</sup>	3.25	...	-	4.25	...	5.25	...
1 Sep.	3.50	0.25	-	4.50	0.25	5.50	0.25
6 Oct.	3.75	0.25	-	4.75	0.25	5.75	0.25
2001 11 May	3.50	-0.25	-	4.50	-0.25	5.50	-0.25
31 Aug.	3.25	-0.25	-	4.25	-0.25	5.25	-0.25
18 Sep.	2.75	-0.50	-	3.75	-0.50	4.75	-0.50
9 Nov.	2.25	-0.50	-	3.25	-0.50	4.25	-0.50
2002 6 Dec.	1.75	-0.50	-	2.75	-0.50	3.75	-0.50
2003 7 Mar.	1.50	-0.25	-	2.50	-0.25	3.50	-0.25
6 June	1.00	-0.50	-	2.00	-0.50	3.00	-0.50
2005 6 Dec.	1.25	0.25	-	2.25	0.25	3.25	0.25
2006 8 Mar.	1.50	0.25	-	2.50	0.25	3.50	0.25
15 June	1.75	0.25	-	2.75	0.25	3.75	0.25
9 Aug.	2.00	0.25	-	3.00	0.25	4.00	0.25
11 Oct.	2.25	0.25	-	3.25	0.25	4.25	0.25
13 Dec.	2.50	0.25	-	3.50	0.25	4.50	0.25
2007 14 Mar.	2.75	0.25	-	3.75	0.25	4.75	0.25
13 June	3.00	0.25	-	4.00	0.25	5.00	0.25
2008 9 July	3.25	0.25	-	4.25	0.25	5.25	0.25

Source: ECB.

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

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

(EUR millions; interest rates in percentages per annum)

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

Date of settlement	Bids (amount)	Number of participants	Allotment (amount)	Variable rate tenders			Running for (...) days
				Minimum bid rate	Marginal rate <sup>4)</sup>	Weighted average rate	
1	2	3	4	5	6	7	
Main refinancing operations							
2008 4 June	210,100	336	153,000	4.00	4.17	4.22	7
11	202,780	343	191,000	4.00	4.03	4.18	7
18	224,290	425	188,000	4.00	4.03	4.13	7
25	243,286	439	208,000	4.00	4.07	4.25	7
2 July	254,664	433	154,500	4.00	4.10	4.15	7
9	263,642	400	175,000	4.25	4.32	4.37	7
16	265,931	440	155,000	4.25	4.34	4.36	7
23	268,193	461	175,500	4.25	4.35	4.38	7
30	247,409	430	166,000	4.25	4.38	4.42	7
6 Aug.	241,886	424	160,000	4.25	4.38	4.41	7
13	233,394	430	176,000	4.25	4.37	4.40	7
20	228,735	454	151,000	4.25	4.38	4.40	7
27	226,453	424	167,000	4.25	4.39	4.42	7
3 Sep.	226,254	411	160,000	4.25	4.39	4.41	7
10	223,273	422	176,500	4.25	4.39	4.41	7
17	328,662	533	150,000	4.25	4.53	4.58	7
24	334,044	506	180,000	4.25	4.73	4.78	7
1 Oct.	228,012	419	190,000	4.25	4.65	4.96	7
Longer-term refinancing operations							
2008 3 Apr.	103,109	177	25,000	-	4.55	4.61	189
2 May	101,175	177	50,000	-	4.67	4.75	90
22	86,628	138	50,000	-	4.50	4.68	84
29	97,744	171	50,000	-	4.51	4.62	91
12 June	99,781	128	50,000	-	4.60	4.72	91
26	89,836	174	50,000	-	4.50	4.67	91
10 July	74,579	141	25,000	-	4.93	5.03	182
31	107,684	189	50,000	-	4.70	4.76	91
14 Aug.	78,920	124	50,000	-	4.61	4.74	91
28	77,216	191	50,000	-	4.60	4.74	91
11 Sep.	69,500	114	50,000	-	4.45	4.66	91
25	154,577	246	50,000	-	4.98	5.11	84
30	141,683	210	120,000	-	4.36	4.88	38

#### 2. Other tender operations

Date of settlement	Type of operation	Bids (amount)	Number of participants	Allotment (amount)	Fixed rate tenders	Variable rate tenders			Running for (...) days
					Fixed rate	Minimum bid rate	Marginal rate <sup>4)</sup>	Weighted average rate	
1	2	3	4	5	6	7	8	9	
2008 15 Jan.	Collection of fixed-term deposits	45,712	28	20,000	4.00	-	-	-	1
12 Feb.	Collection of fixed-term deposits	29,155	22	16,000	4.00	-	-	-	1
11 Mar.	Reverse transaction	45,085	32	9,000	-	4.00	4.13	4.14	1
20	Reverse transaction	65,810	44	15,000	-	4.00	4.13	4.20	5
31	Reverse transaction	30,720	25	15,000	-	4.00	4.06	4.13	1
15 Apr.	Collection of fixed-term deposits	14,880	7	14,880	4.00	-	-	-	1
13 May	Collection of fixed-term deposits	32,465	29	23,500	4.00	-	-	-	1
10 June	Collection of fixed-term deposits	18,505	15	14,000	4.00	-	-	-	1
8 July	Collection of fixed-term deposits	14,585	12	14,585	4.00	-	-	-	1
12 Aug.	Collection of fixed-term deposits	22,630	10	21,000	4.25	-	-	-	1
9 Sep.	Collection of fixed-term deposits	20,145	17	20,145	4.25	-	-	-	1
15	Reverse transaction	90,270	51	30,000	-	4.25	4.30	4.39	1
16	Reverse transaction	102,480	56	70,000	-	4.25	4.32	4.40	1
18	Reverse transaction	49,330	43	25,000	-	4.25	4.30	4.39	1
24	Reverse transaction	50,335	36	40,000	-	4.25	4.25	4.35	1

Source: ECB.

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

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

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

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

## 1.4 Minimum reserve and liquidity statistics

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

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

Reserve base as at <sup>1)</sup>	Total	Liabilities to which a 2% reserve coefficient is applied			Liabilities to which a 0% reserve coefficient is applied		
		Deposits (overnight, up to 2 years' agreed maturity and notice period)	Debt securities up to 2 years' agreed maturity	Deposits (over 2 years' agreed maturity and notice period)	Repos	Debt securities over 2 years' agreed maturity	
	1	2	3	4	5	6	
2006	15,648.3	8,411.7	601.9	1,968.4	1,180.3	3,486.1	
2007	17,394.7	9,438.8	815.0	2,143.1	1,364.0	3,633.9	
2008 Q1	17,703.3	9,551.7	840.2	2,126.0	1,558.4	3,627.1	
2008 Apr.	17,956.0	9,762.0	856.2	2,135.6	1,562.3	3,640.0	
May	18,092.7	9,817.8	910.6	2,156.1	1,548.9	3,659.3	
June	17,971.8	9,775.4	916.3	2,172.4	1,439.4	3,668.1	
July	18,037.4	9,827.2	938.2	2,175.7	1,407.4	3,688.9	

## 2. Reserve maintenance

Maintenance period ending on:	Required reserves	Credit institutions' current accounts	Excess reserves	Deficiencies	Interest rate on minimum reserves
	1	2	3	4	5
2006	172.5	173.2	0.7	0.0	3.30
2007	195.9	196.8	1.0	0.0	4.17
2008 15 Jan. <sup>3)</sup>	199.8	200.9	1.1	0.0	4.20
12 Feb.	201.6	202.4	0.8	0.0	4.17
11 Mar.	204.6	205.3	0.7	0.0	4.10
15 Apr.	206.9	207.5	0.6	0.0	4.19
13 May	207.8	208.6	0.8	0.0	4.24
10 June	207.3	208.1	0.8	0.0	4.17
8 July	211.9	212.7	0.8	0.0	4.06
12 Aug.	214.1	214.8	0.7	0.0	4.35
9 Sep.	213.3	214.0	0.7	0.0	4.38
7 Oct.	214.8	.	.	.	.

## 3. Liquidity

Maintenance period ending on:	Liquidity-providing factors						Liquidity-absorbing factors				Credit institutions' current accounts	Base money
	Eurosystem's net assets in gold and foreign currency	Monetary policy operations of the Eurosystem					Other liquidity-absorbing operations <sup>3)</sup>	Banknotes in circulation	Central government deposits with the Eurosystem	Other factors (net)		
		Main refinancing operations	Longer-term refinancing operations	Marginal lending facility	Other liquidity-providing operations	Deposit facility						
	1	2	3	4	5	6	7	8	9	10	11	12
2006	327.0	313.1	120.0	0.1	0.1	0.1	0.0	598.6	54.9	-66.4	173.2	771.8
2007	327.5	173.0	278.6	0.3	0.0	0.4	2.2	644.6	61.9	-126.6	196.8	841.9
2008 15 Jan.	343.8	255.7	268.8	0.3	0.0	1.1	68.4	668.2	46.4	-116.4	200.9	870.2
12 Feb.	353.6	173.8	268.5	0.2	0.0	0.4	0.6	651.7	51.7	-110.7	202.4	854.5
11 Mar.	343.3	181.3	268.5	0.1	0.3	0.3	0.0	653.2	59.7	-125.0	205.3	858.7
15 Apr.	349.4	181.5	278.6	0.1	2.6	0.6	0.4	662.1	66.4	-124.8	207.5	870.3
13 May	364.5	174.4	295.0	0.1	0.0	0.3	0.8	667.6	68.8	-112.2	208.6	876.6
10 June	375.0	172.8	287.9	0.3	0.0	0.2	0.5	671.4	67.3	-111.5	208.1	879.7
8 July	376.4	185.4	275.4	0.1	0.0	0.4	0.5	677.2	64.9	-118.3	212.7	890.3
12 Aug.	374.5	166.3	299.3	0.1	0.0	0.3	0.6	686.1	61.3	-123.0	214.8	901.2
9 Sep.	376.6	163.5	300.0	0.1	0.0	0.6	0.7	685.0	61.1	-121.2	214.0	899.5

Source: ECB.

1) End of period.

2) Starting from 1 January 2008, includes monetary policy operations in the form of collection of fixed-term deposits which were conducted by the Central Bank of Malta and the Central Bank of Cyprus before 1 January 2008 and were still outstanding after this date.

3) 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 <sup>1)</sup>

(EUR billions; outstanding amounts at end of period)

### 1. Assets

	Total	Loans to euro area residents			Holdings of securities other than shares issued by euro area residents				Money market fund shares/units <sup>2)</sup>	Holdings of shares/other equity issued by euro area residents	External assets	Fixed assets	Remaining assets	
		Total	General government	Other euro area residents	MFIs	Total	General government	Other euro area residents						MFIs
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
<b>Eurosystem</b>														
2006	1,558.2	695.7	19.7	0.6	675.3	217.0	187.5	2.5	27.0	-	17.2	351.4	14.7	262.4
2007	2,046.1	1,031.7	17.8	0.6	1,013.3	268.6	225.1	1.9	41.6	-	17.4	373.7	15.2	339.6
2008 Q1	2,017.8	965.9	19.4	0.7	945.9	278.5	235.9	2.3	40.3	-	16.2	383.3	15.2	358.6
2008 Apr.	2,012.4	951.4	18.8	0.7	931.9	278.9	235.1	2.5	41.3	-	16.6	375.3	16.0	374.3
May	2,009.4	934.9	18.8	0.7	915.4	280.0	236.3	2.4	41.3	-	16.5	376.6	16.0	385.4
June	2,098.6	1,010.6	18.5	0.7	991.5	277.5	234.7	2.4	40.4	-	15.7	381.5	15.9	397.3
July	2,098.8	1,004.4	18.4	0.7	985.4	277.1	234.9	2.5	39.8	-	15.4	385.6	16.1	400.1
Aug. <sup>(p)</sup>	2,147.1	1,048.3	18.4	0.7	1,029.2	279.0	236.8	2.4	39.8	-	15.5	456.5	16.1	331.8
<b>MFIs excluding the Eurosystem</b>														
2006	25,950.2	14,904.3	810.5	9,160.3	4,933.5	3,555.4	1,276.5	645.9	1,632.9	83.5	1,171.4	4,329.0	172.6	1,733.9
2007	29,446.8	16,904.9	956.1	10,159.8	5,789.0	3,880.9	1,194.1	949.8	1,737.0	93.5	1,296.2	4,872.9	206.0	2,192.4
2008 Q1	30,229.2	17,251.6	958.0	10,456.3	5,837.3	4,035.2	1,215.7	1,004.0	1,815.4	100.5	1,312.3	4,974.2	198.4	2,357.0
2008 Apr.	30,533.1	17,439.2	971.0	10,533.1	5,935.2	4,096.1	1,224.2	1,032.0	1,839.9	99.8	1,371.9	5,075.5	199.1	2,251.4
May	30,897.6	17,618.7	963.3	10,598.0	6,057.4	4,172.7	1,227.4	1,056.2	1,889.1	98.7	1,384.2	5,059.8	199.7	2,363.7
June	30,739.7	17,633.5	975.7	10,659.0	5,998.7	4,181.5	1,217.4	1,075.2	1,888.9	98.3	1,308.3	4,894.0	201.4	2,422.8
July	30,754.7	17,691.1	972.2	10,718.9	6,000.0	4,239.0	1,222.0	1,098.5	1,918.5	97.8	1,328.9	4,931.3	201.6	2,265.0
Aug. <sup>(p)</sup>	31,009.7	17,734.6	970.3	10,720.3	6,044.1	4,284.4	1,227.3	1,126.6	1,930.6	98.3	1,325.1	5,038.1	202.0	2,327.1

### 2. Liabilities

	Total	Currency in circulation	Deposits of euro area residents			Money market fund shares/units <sup>3)</sup>	Debt securities issued <sup>4)</sup>	Capital and reserves	External liabilities	Remaining liabilities	
			Total	Central government	Other general government/other euro area residents						MFIs
	1	2	3	4	5	6	7	8	9	10	11
<b>Eurosystem</b>											
2006	1,558.2	647.0	431.6	33.7	15.9	382.0	-	0.1	208.6	35.3	235.6
2007	2,046.1	697.0	714.7	23.9	19.1	671.8	-	0.1	238.0	66.0	330.3
2008 Q1	2,017.8	681.9	703.2	60.4	20.8	622.0	-	0.1	246.5	70.3	315.9
2008 Apr.	2,012.4	690.5	682.9	66.9	23.1	592.9	-	0.1	237.9	81.4	319.7
May	2,009.4	692.8	656.3	44.4	25.0	586.9	-	0.1	239.1	95.6	325.5
June	2,098.6	699.7	733.2	55.2	24.6	653.3	-	0.1	240.7	98.7	326.2
July	2,098.8	707.8	720.9	61.3	17.5	642.1	-	0.1	242.5	102.1	325.5
Aug. <sup>(p)</sup>	2,147.1	704.8	766.9	67.5	14.8	684.7	-	0.1	243.8	178.8	252.7
<b>MFIs excluding the Eurosystem</b>											
2006	25,950.2	-	13,257.2	124.2	7,890.6	5,242.4	698.3	4,247.6	1,449.7	3,991.1	2,306.2
2007	29,446.8	-	15,082.4	127.1	8,865.9	6,089.4	754.1	4,645.2	1,678.9	4,533.2	2,753.0
2008 Q1	30,229.2	-	15,299.2	139.6	9,010.7	6,148.8	843.0	4,683.6	1,713.7	4,763.7	2,926.1
2008 Apr.	30,533.1	-	15,479.2	130.8	9,100.4	6,248.0	852.1	4,711.9	1,721.5	4,929.4	2,839.0
May	30,897.6	-	15,653.5	129.7	9,171.8	6,352.1	854.8	4,793.6	1,727.8	4,967.2	2,900.6
June	30,739.7	-	15,654.3	155.9	9,216.2	6,282.2	831.7	4,806.0	1,727.1	4,790.3	2,930.4
July	30,754.7	-	15,644.6	119.6	9,232.4	6,292.6	840.7	4,852.5	1,748.5	4,829.8	2,838.5
Aug. <sup>(p)</sup>	31,009.7	-	15,724.3	119.3	9,255.5	6,349.6	855.5	4,877.1	1,753.2	4,935.7	2,863.9

Source: ECB.

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

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

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

**1. Assets**

	Total	Loans to euro area residents			Holdings of securities other than shares issued by euro area residents			Holdings of shares/ other equity issued by other euro area residents	External assets	Fixed assets	Remaining assets
		Total	General government	Other euro area residents	Total	General government	Other euro area residents				
	1	2	3	4	5	6	7	8	9	10	11
Outstanding amounts											
2006	19,723.8	9,991.1	830.2	9,161.0	2,112.4	1,464.0	648.4	811.2	4,680.4	187.3	1,941.4
2007	22,330.8	11,134.3	973.9	10,160.4	2,371.0	1,419.2	951.8	884.3	5,246.5	221.1	2,473.5
2008 Q1	23,000.9	11,434.3	977.4	10,457.0	2,457.9	1,451.7	1,006.3	870.8	5,357.5	213.6	2,666.7
2008 Apr.	23,185.5	11,523.5	989.8	10,533.7	2,493.8	1,459.3	1,034.5	925.7	5,450.8	215.1	2,576.6
May	23,375.8	11,580.7	982.1	10,598.6	2,522.3	1,463.6	1,058.7	918.7	5,436.4	215.7	2,702.0
June	23,310.0	11,653.9	994.2	10,659.7	2,529.8	1,452.1	1,077.7	861.0	5,275.4	217.3	2,772.6
July	23,297.6	11,710.2	990.7	10,719.5	2,557.9	1,456.9	1,101.0	878.9	5,316.9	217.7	2,616.0
Aug. <sup>(p)</sup>	23,506.3	11,709.7	988.7	10,721.0	2,593.1	1,464.0	1,129.0	880.6	5,494.6	218.1	2,610.2
Transactions											
2006	1,997.5	877.3	-14.4	891.6	10.7	-96.8	107.5	97.7	801.9	6.4	203.5
2007	2,593.8	1,016.7	-9.7	1,026.4	229.5	-46.8	276.3	60.1	792.5	-0.5	495.4
2008 Q1	763.8	264.1	0.7	263.5	80.1	24.0	56.1	-9.3	261.3	-8.7	176.3
Q2	346.9	231.4	16.7	214.6	88.7	14.0	74.7	-3.0	-72.8	3.6	99.0
2008 Apr.	179.6	93.1	12.2	80.9	40.0	11.3	28.7	53.9	82.6	1.5	-91.4
May	188.6	59.2	-7.7	66.9	32.4	8.6	23.8	-6.3	-21.0	0.6	123.8
June	-21.4	79.0	12.2	66.9	16.3	-5.9	22.2	-50.5	-134.4	1.6	66.6
July	-23.6	59.0	-3.5	62.6	23.5	1.0	22.5	19.2	31.8	0.4	-157.6
Aug. <sup>(p)</sup>	106.4	-13.1	-2.2	-10.8	27.3	3.0	24.3	1.1	18.9	0.4	71.7

**2. Liabilities**

	Total	Currency in circulation	Deposits of central government	Deposits of other general government/ other euro area residents	Money market fund shares/ units <sup>2)</sup>	Debt securities issued <sup>3)</sup>	Capital and reserves	External liabilities	Remaining liabilities	Excess of inter-MFI liabilities
Outstanding amounts										
2006	19,723.8	592.2	158.0	7,906.5	614.6	2,587.8	1,280.8	4,026.5	2,541.8	15.6
2007	22,330.8	638.5	151.0	8,885.0	660.4	2,866.8	1,487.6	4,599.2	3,083.3	-41.2
2008 Q1	23,000.9	632.9	200.0	9,031.5	742.2	2,828.0	1,502.5	4,834.0	3,242.0	-12.3
2008 Apr.	23,185.5	641.3	197.7	9,123.5	752.0	2,830.9	1,496.6	5,010.7	3,158.7	-26.2
May	23,375.8	645.7	174.1	9,196.8	755.8	2,863.2	1,484.9	5,062.8	3,226.2	-33.9
June	23,310.0	652.1	211.1	9,240.8	733.1	2,876.8	1,504.8	4,889.0	3,256.6	-54.7
July	23,297.6	658.7	180.9	9,249.9	742.6	2,894.3	1,525.6	4,931.9	3,164.0	-50.7
Aug. <sup>(p)</sup>	23,506.3	656.1	186.8	9,270.3	756.9	2,906.8	1,537.1	5,114.5	3,116.6	-39.0
Transactions										
2006	1,997.5	59.4	-15.2	683.7	27.6	285.5	57.4	601.6	252.2	45.3
2007	2,593.8	45.8	-13.3	835.1	54.5	270.2	163.1	778.8	467.6	-8.1
2008 Q1	763.8	-6.7	46.6	116.8	53.3	-12.2	22.3	344.6	137.6	61.5
Q2	346.9	19.2	10.8	208.0	-8.7	53.3	22.3	56.0	23.2	-37.4
2008 Apr.	179.6	8.5	-2.3	88.7	10.4	1.7	6.1	155.9	-73.7	-15.8
May	188.6	4.4	-24.0	71.3	3.9	31.7	-7.6	48.8	66.0	-5.9
June	-21.4	6.4	37.1	48.0	-23.1	19.9	23.8	-148.8	30.9	-15.7
July	-23.6	6.6	-30.2	3.8	8.1	17.8	20.9	35.3	-90.8	4.8
Aug. <sup>(p)</sup>	106.4	-2.7	5.8	7.8	14.2	-6.8	11.0	23.0	62.4	-8.5

Source: ECB.

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

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

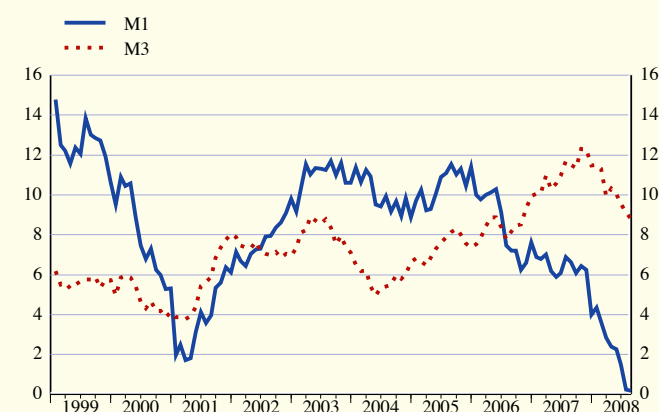
(EUR billions and annual growth rates; seasonally adjusted; outstanding amounts and growth rates at end of period, transactions during period)

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

	M1		M2	M3-M2	M3	M3 3-month moving average (centred)	Longer-term financial liabilities	Credit to general government	Credit to other euro area residents		Net external assets <sup>3)</sup>
	1	2	3	4	5	6	7	8	Loans		11
<b>Outstanding amounts</b>											
2006	3,686.1	2,953.0	6,639.1	1,101.5	7,740.6	-	5,434.1	2,321.3	10,644.4	9,171.5	634.3
2007	3,835.4	3,504.0	7,339.4	1,310.2	8,649.6	-	5,977.8	2,417.2	12,027.2	10,176.4	627.1
2008 Q1	3,853.1	3,666.1	7,519.2	1,337.7	8,856.9	-	5,972.2	2,420.6	12,335.5	10,460.4	541.5
2008 Apr.	3,839.1	3,767.9	7,607.0	1,335.7	8,942.8	-	6,002.6	2,434.6	12,424.5	10,524.0	473.2
May	3,856.2	3,793.1	7,649.3	1,346.5	8,995.8	-	6,011.4	2,434.5	12,521.3	10,596.6	413.0
June	3,841.6	3,828.7	7,670.4	1,356.8	9,027.1	-	6,024.2	2,430.3	12,558.6	10,630.6	377.8
July	3,817.0	3,913.1	7,730.1	1,361.2	9,091.3	-	6,061.9	2,441.0	12,666.4	10,685.2	370.7
Aug. <sup>(p)</sup>	3,831.3	3,956.2	7,787.5	1,361.2	9,148.7	-	6,114.6	2,465.6	12,792.6	10,751.9	386.6
<b>Transactions</b>											
2006	261.2	309.8	571.0	130.9	701.9	-	427.7	-114.7	1,105.8	898.6	200.6
2007	147.4	523.4	670.8	219.9	890.7	-	489.5	-60.1	1,369.9	1,031.7	13.1
2008 Q1	12.1	137.1	149.2	0.5	149.8	-	26.7	-7.9	281.0	251.0	-45.0
Q2	-12.7	164.0	151.3	21.7	173.0	-	72.8	22.9	245.0	182.0	-155.4
2008 Apr.	-14.7	101.0	86.3	-1.4	84.9	-	39.4	17.4	92.5	67.7	-58.2
May	15.4	25.0	40.4	10.0	50.5	-	13.0	4.3	99.0	74.6	-63.5
June	-13.4	38.0	24.5	13.0	37.5	-	20.3	1.2	53.4	39.7	-33.7
July	-26.3	81.2	54.8	4.5	59.3	-	36.3	7.0	111.1	57.3	-9.3
Aug. <sup>(p)</sup>	10.2	37.1	47.3	0.8	48.1	-	29.8	20.2	109.5	54.4	16.7
<b>Growth rates</b>											
2006 Dec.	7.6	11.7	9.4	13.3	9.9	9.8	8.5	-4.7	11.6	10.8	200.6
2007 Dec.	4.0	17.7	10.1	20.0	11.5	11.8	9.0	-2.6	12.8	11.2	13.1
2008 Mar.	2.8	18.1	9.7	11.0	9.9	10.5	6.4	-1.9	12.3	10.9	-157.4
2008 Apr.	2.4	19.8	10.3	10.5	10.3	10.1	6.4	-0.3	12.1	10.7	-186.1
May	2.3	19.4	10.1	9.8	10.0	10.0	6.4	-1.9	12.0	10.5	-244.6
June	1.5	19.0	9.5	9.8	9.5	9.6	5.7	-0.9	11.1	9.9	-288.1
July	0.2	19.5	9.1	9.3	9.1	9.2	5.4	-0.1	11.0	9.4	-301.2
Aug. <sup>(p)</sup>	0.2	19.0	8.9	8.3	8.8	.	5.5	1.5	10.8	8.8	-250.0

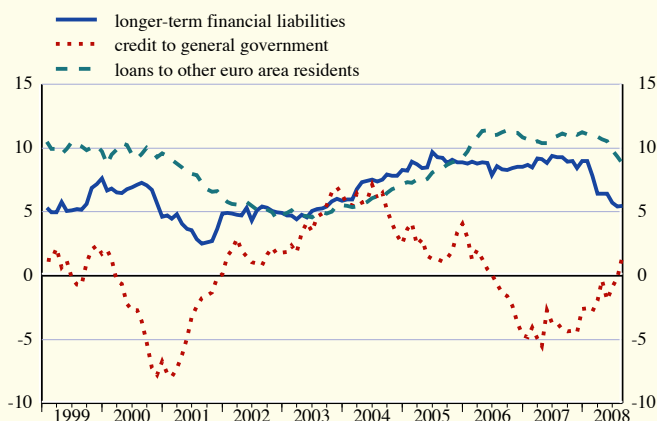
### C1 Monetary aggregates <sup>1)</sup>

(annual growth rates; seasonally adjusted)



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

(annual growth rates; seasonally adjusted)



Source: ECB.

- 1) Data refer to the changing composition of the euro area. For further information, see the General notes.
- 2) Monetary liabilities of MFIs and central government (post office, treasury) vis-à-vis non-MFI euro area residents excluding central government (M1, M2, M3: see glossary).
- 3) Values in the section "growth rates" are sums of the transactions during the 12 months ending in the period indicated.

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

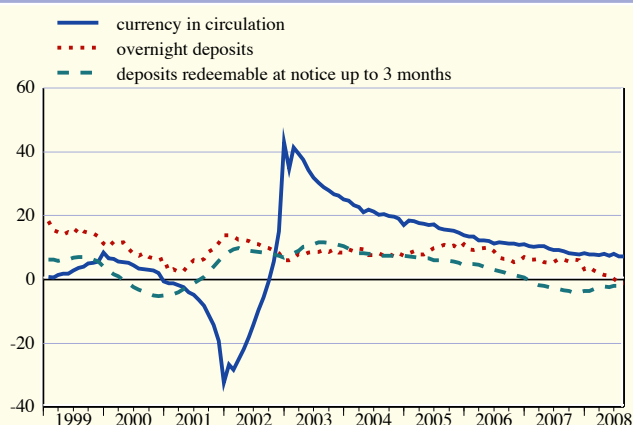
(EUR billions and annual growth rates; seasonally adjusted; outstanding amounts and growth rates at end of period, transactions during period)

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

	Currency in circulation	Overnight deposits	Deposits with agreed maturity up to 2 years	Deposits redeemable at notice up to 3 months	Repos	Money market fund shares/units	Debt securities up to 2 years	Debt securities over 2 years	Deposits redeemable at notice over 3 months	Deposits with agreed maturity over 2 years	Capital and reserves
	1	2	3	4	5	6	7	8	9	10	11
Outstanding amounts											
2006	578.4	3,107.7	1,401.0	1,552.0	266.1	636.9	198.5	2,399.6	102.2	1,655.0	1,277.3
2007	625.8	3,209.6	1,968.7	1,535.3	307.4	686.6	316.2	2,561.0	119.6	1,813.5	1,483.7
2008 Q1	638.0	3,215.0	2,124.6	1,541.5	308.7	746.6	282.4	2,545.9	119.4	1,813.7	1,493.1
2008 Apr.	644.8	3,194.4	2,224.8	1,543.1	323.7	743.8	268.2	2,562.8	118.7	1,817.9	1,503.1
May	643.7	3,212.5	2,256.5	1,536.6	316.8	739.5	290.2	2,566.7	117.6	1,829.7	1,497.4
June	649.7	3,191.9	2,292.0	1,536.7	340.6	728.1	288.1	2,572.3	116.9	1,832.7	1,502.1
July	649.7	3,167.3	2,383.0	1,530.1	346.4	726.8	288.0	2,593.3	116.4	1,833.5	1,518.7
Aug. <sup>(p)</sup>	653.8	3,177.5	2,428.3	1,527.9	336.5	744.7	280.1	2,620.5	115.4	1,841.2	1,537.5
Transactions											
2006	57.3	203.9	300.5	9.3	30.9	30.0	70.0	217.2	15.4	138.1	57.0
2007	46.9	100.4	579.4	-55.9	43.3	58.6	118.0	152.3	9.9	164.5	162.8
2008 Q1	11.2	1.0	136.4	0.7	1.3	31.2	-31.9	9.7	-1.5	1.8	16.7
Q2	11.7	-24.3	168.8	-4.8	31.9	-18.1	7.9	28.6	-2.5	17.6	29.0
2008 Apr.	6.8	-21.4	99.5	1.5	15.0	-2.2	-14.1	15.7	-0.7	2.5	22.0
May	-1.0	16.5	31.5	-6.5	-6.9	-4.2	21.1	4.1	-1.2	11.6	-1.6
June	6.0	-19.4	37.8	0.1	23.8	-11.7	0.9	8.9	-0.7	3.5	8.6
July	0.0	-26.3	88.3	-7.2	5.7	-2.7	1.5	19.7	-0.5	0.3	16.7
Aug. <sup>(p)</sup>	4.1	6.1	39.4	-2.4	-10.0	17.8	-7.0	7.1	-1.1	5.5	18.3
Growth rates											
2006 Dec.	11.0	7.0	27.2	0.6	13.2	4.9	54.4	9.9	17.8	9.1	4.7
2007 Dec.	8.1	3.2	41.3	-3.6	16.3	9.2	59.4	6.3	9.6	9.9	12.5
2008 Mar.	7.7	1.9	39.2	-2.5	11.4	8.1	18.0	3.9	3.5	7.1	10.5
2008 Apr.	8.0	1.3	41.6	-2.2	17.8	6.8	11.8	3.8	1.9	6.5	11.5
May	7.5	1.3	40.5	-2.4	17.1	4.8	15.1	3.3	0.5	6.2	12.9
June	8.0	0.3	38.7	-2.0	18.4	2.1	21.6	2.8	-0.8	5.5	12.0
July	7.1	-1.1	39.0	-2.1	17.2	1.0	23.7	3.1	-2.2	4.6	11.5
Aug. <sup>(p)</sup>	7.2	-1.2	37.2	-1.8	16.7	4.1	9.6	2.8	-3.4	4.6	12.3

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

(annual growth rates; seasonally adjusted)



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

(annual growth rates; seasonally adjusted)



Source: ECB.

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

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

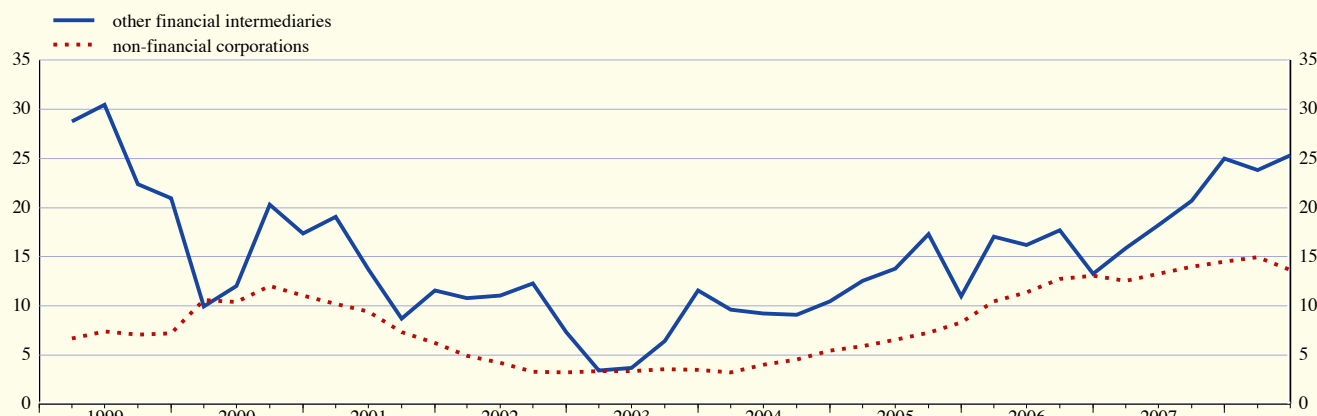
(EUR billions and annual growth rates; outstanding amounts and growth rates at end of period, transactions during period)

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

	Insurance corporations and pension funds		Other financial intermediaries <sup>4)</sup>		Non-financial corporations			
	Total		Total		Total	Up to 1 year	Over 1 year and up to 5 years	Over 5 years
	1	2	3	4	5	6	7	8
<b>Outstanding amounts</b>								
2006	82.8	55.2	696.0	420.6	3,844.5	1,137.9	707.1	1,999.5
2007	95.1	70.6	867.9	526.3	4,388.7	1,276.5	858.9	2,253.3
2008 Q1	102.8	79.0	943.3	595.0	4,547.6	1,328.9	898.3	2,320.4
2008 Apr.	101.0	76.4	968.7	618.2	4,590.8	1,337.8	904.2	2,348.8
May	104.4	80.2	988.9	632.7	4,618.6	1,338.3	910.9	2,369.5
June	103.5	79.3	995.8	623.7	4,670.1	1,365.3	925.5	2,379.3
July	101.4	78.0	998.6	611.2	4,713.7	1,376.8	935.1	2,401.9
Aug. <sup>(p)</sup>	100.2	76.0	984.8	594.1	4,721.3	1,360.4	941.8	2,419.1
<b>Transactions</b>								
2006	18.1	13.9	81.9	57.7	446.2	100.5	123.1	222.6
2007	14.0	15.8	175.4	113.5	556.3	144.9	155.7	255.7
2008 Q1	7.9	8.6	77.7	69.8	139.1	50.0	36.2	52.9
Q2	0.7	0.3	51.4	27.3	130.5	39.1	30.9	60.5
2008 Apr.	-1.9	-2.7	23.0	21.0	47.6	10.6	8.5	28.6
May	3.4	3.8	20.1	14.4	28.6	0.8	7.0	20.9
June	-0.8	-0.9	8.3	-8.1	54.2	27.8	15.4	11.1
July	-2.2	-1.3	1.2	-13.2	46.8	11.8	10.2	24.8
Aug. <sup>(p)</sup>	-1.6	-2.3	-17.1	-19.7	0.2	-18.6	5.6	13.2
<b>Growth rates</b>								
2006 Dec.	28.0	33.3	13.3	15.6	13.1	9.7	20.8	12.4
2007 Dec.	16.8	28.5	25.0	27.0	14.5	12.7	22.0	12.8
2008 Mar.	6.3	10.8	23.8	24.0	15.0	14.0	22.3	12.9
2008 Apr.	-2.7	-3.4	23.1	24.5	14.9	13.1	21.8	13.4
May	-2.5	-2.2	26.6	30.0	14.2	12.5	19.9	13.1
June	-4.6	-4.6	25.3	25.6	13.6	12.0	19.9	12.3
July	-7.5	-7.4	23.8	22.0	13.1	11.2	19.0	11.9
Aug. <sup>(p)</sup>	-8.2	-10.9	20.4	17.8	12.6	10.7	18.0	11.7

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

(annual growth rates)



Source: ECB.

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

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

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

4) This category includes investment funds.



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

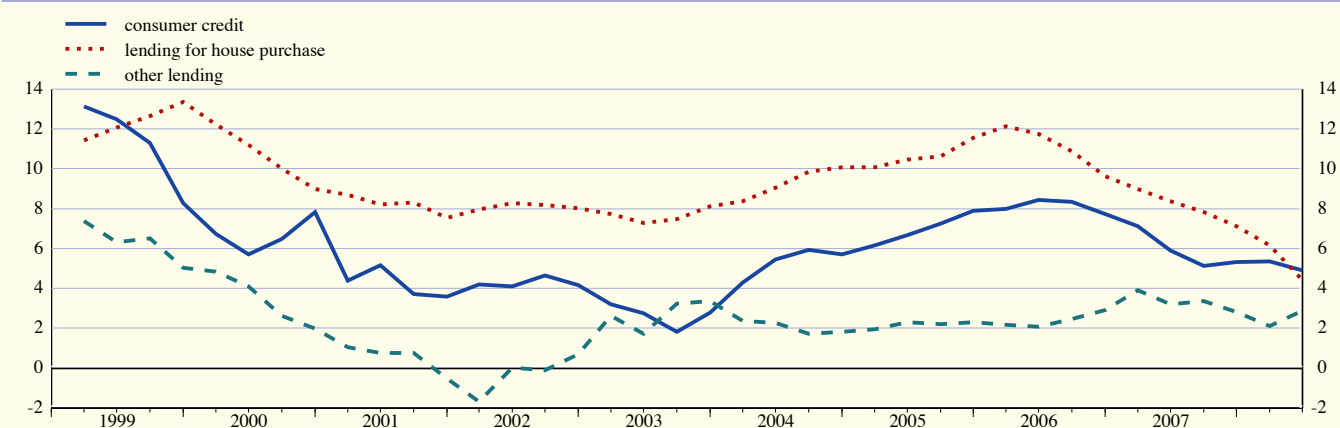
(EUR billions and annual growth rates; outstanding amounts and growth rates at end of period, transactions during period)

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

	Total	Consumer credit				Lending for house purchase				Other lending			
		Total	Up to 1 year	Over 1 year and up to 5 years	Over 5 years	Total	Up to 1 year	Over 1 year and up to 5 years	Over 5 years	Total	Up to 1 year	Over 1 year and up to 5 years	Over 5 years
	1	2	3	4	5	6	7	8	9	10	11	12	13
<b>Outstanding amounts</b>													
2006	4,537.0	586.5	135.3	202.7	248.5	3,212.1	15.6	72.1	3,124.5	738.4	146.2	101.5	490.7
2007	4,808.1	617.9	137.6	203.7	276.6	3,436.9	15.9	73.8	3,347.2	753.4	147.5	104.0	501.8
2008 Q1	4,862.7	623.9	136.5	203.0	284.4	3,478.0	16.1	73.3	3,388.7	760.7	147.0	105.3	508.5
2008 Apr.	4,872.6	627.9	136.1	204.6	287.2	3,486.3	16.1	73.1	3,397.1	758.4	145.6	102.6	510.3
May	4,886.0	628.5	136.3	204.0	288.2	3,498.8	15.8	73.1	3,409.9	758.6	144.3	102.1	512.2
June	4,889.5	635.4	139.3	205.4	290.7	3,484.8	16.0	73.4	3,395.4	769.3	152.9	102.5	513.9
July	4,905.1	636.0	138.7	204.6	292.7	3,503.8	16.0	73.5	3,414.3	765.3	147.0	102.3	516.1
Aug. <sup>(p)</sup>	4,914.1	633.1	136.9	203.7	292.6	3,515.8	16.1	73.3	3,426.5	765.1	147.0	100.8	517.3
<b>Transactions</b>													
2006	345.3	42.6	8.2	4.8	29.5	281.8	1.5	4.6	275.8	20.9	1.4	3.8	15.7
2007	280.6	31.3	3.6	1.1	26.7	228.5	0.9	2.3	225.3	20.8	1.7	4.4	14.7
2008 Q1	38.7	2.3	-1.7	-1.9	5.9	33.1	0.0	-0.7	33.7	3.3	-1.4	0.6	4.0
Q2	31.9	11.6	2.9	2.7	6.0	8.7	-0.1	0.2	8.6	11.7	6.3	-1.8	7.1
2008 Apr.	12.1	4.3	-0.3	1.7	3.0	8.9	0.0	-0.2	9.1	-1.1	-1.3	-2.1	2.3
May	14.7	0.4	0.3	-0.6	0.7	13.1	-0.2	0.0	13.3	1.1	-1.2	-0.2	2.5
June	5.1	6.8	3.0	1.5	2.4	-13.4	0.2	0.3	-13.9	11.7	8.8	0.6	2.3
July	16.8	0.9	-0.5	-0.6	2.1	19.5	0.0	0.1	19.4	-3.7	-5.8	-0.3	2.4
Aug. <sup>(p)</sup>	7.6	-2.8	-1.9	-0.9	-0.1	10.9	0.1	-0.2	11.0	-0.5	-0.1	-1.5	1.2
<b>Growth rates</b>													
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
2007 Dec.	6.2	5.3	2.7	0.5	10.7	7.1	6.1	3.2	7.2	2.8	1.2	4.4	3.0
2008 Mar.	5.4	5.4	3.9	-0.1	10.4	6.2	2.5	2.0	6.3	2.1	-0.2	4.3	2.3
2008 Apr.	5.2	5.4	2.6	0.8	10.3	6.0	4.9	1.7	6.1	2.1	-0.2	1.9	2.8
May	4.9	5.0	2.9	-0.1	10.1	5.6	2.3	1.4	5.7	2.0	-0.4	1.3	2.9
June	4.2	4.9	3.7	0.0	9.3	4.4	0.1	1.2	4.5	2.9	2.1	0.8	3.5
July	4.0	4.3	2.4	-0.5	9.1	4.3	1.1	0.8	4.4	2.6	0.7	-0.1	3.7
Aug. <sup>(p)</sup>	3.9	3.9	1.7	-0.6	8.5	4.1	1.4	0.4	4.2	2.6	2.3	-1.7	3.5

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

(annual growth rates)



Source: ECB.

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

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

3) Including non-profit institutions serving households. Before January 2003 data were collected in March, June, September and December each year. Monthly data prior to January 2003 are derived from quarterly data.

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

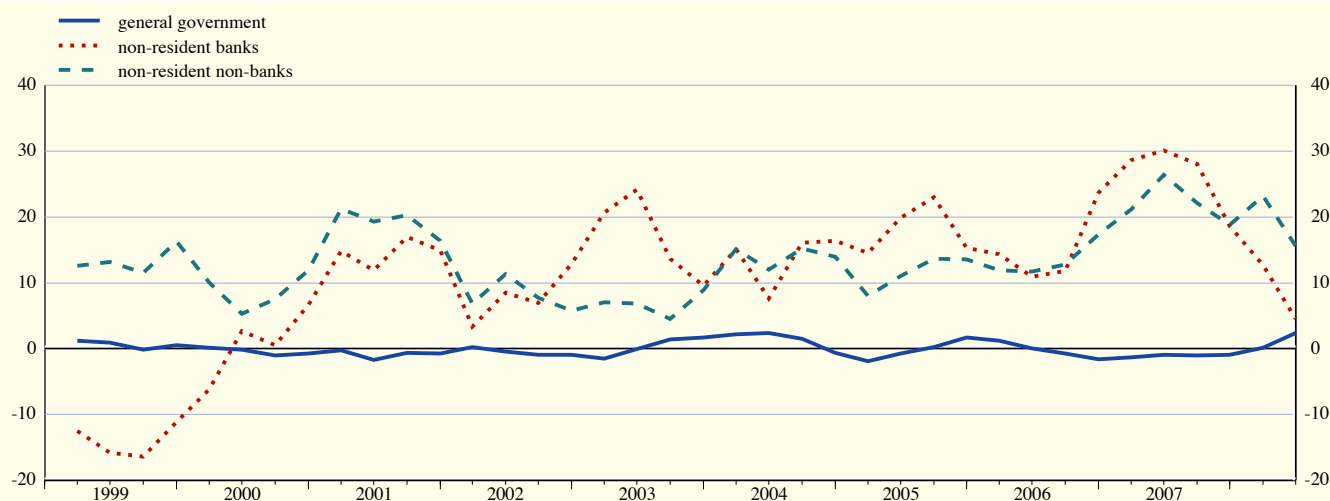
(EUR billions and annual growth rates; outstanding amounts and growth rates at end of period, transactions during period)

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

	General government					Non-euro area residents				
	Total	Central government	Other general government			Total	Banks <sup>3)</sup>	Non-banks		
			State government	Local government	Social security funds			Total	General government	Other
	1	2	3	4	5	6	7	8	9	10
Outstanding amounts										
2005	826.9	125.1	246.8	425.8	29.2	2,485.2	1,722.1	763.1	66.0	697.1
2006	810.5	104.1	232.5	448.1	25.8	2,924.3	2,061.0	863.4	63.2	800.2
2007 Q3	794.0	92.7	213.9	446.0	41.4	3,302.8	2,354.1	948.7	61.3	887.4
Q4	956.1	213.4	217.6	495.7	29.4	3,295.2	2,337.8	957.4	59.8	897.5
2008 Q1	958.0	210.6	212.8	497.3	37.2	3,413.5	2,394.8	1,018.7	61.6	957.1
Q2 <sup>(p)</sup>	975.7	218.9	215.2	501.9	39.7	3,310.3	2,296.8	1,013.5	60.3	953.2
Transactions										
2006	-13.4	-17.6	-14.3	21.9	-3.4	532.5	402.9	129.5	-0.1	129.6
2007	-7.7	-4.5	-13.0	6.2	3.5	542.0	382.0	160.1	0.3	159.8
2007 Q3	-4.2	-2.8	-5.0	-0.2	3.8	77.5	57.5	20.0	1.2	18.7
Q4	8.0	7.1	3.8	9.2	-12.0	56.8	23.2	33.7	-0.1	33.8
2008 Q1	0.7	-3.3	-4.8	1.0	7.8	215.4	121.6	93.6	3.0	90.6
Q2 <sup>(p)</sup>	17.7	8.2	2.1	4.8	2.5	-100.3	-96.6	-3.6	-1.3	-2.3
Growth rates										
2005 Dec.	1.7	-4.3	-3.2	5.4	22.9	14.8	15.3	13.6	2.0	14.9
2006 Dec.	-1.6	-14.0	-5.8	5.1	-11.6	21.8	23.7	17.4	-0.1	19.1
2007 Sep.	-1.0	-7.8	-6.3	1.9	16.0	26.3	28.0	22.1	-2.0	24.2
Dec.	-1.0	-4.3	-5.6	1.4	13.7	18.7	18.6	18.8	0.5	20.3
2008 Mar.	0.1	0.9	-5.1	1.6	19.5	15.6	12.7	23.2	10.2	24.1
June <sup>(p)</sup>	2.4	6.8	-1.8	3.2	5.6	7.7	4.5	15.7	4.7	16.4

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

(annual growth rates)



Source: ECB.

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

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

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

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

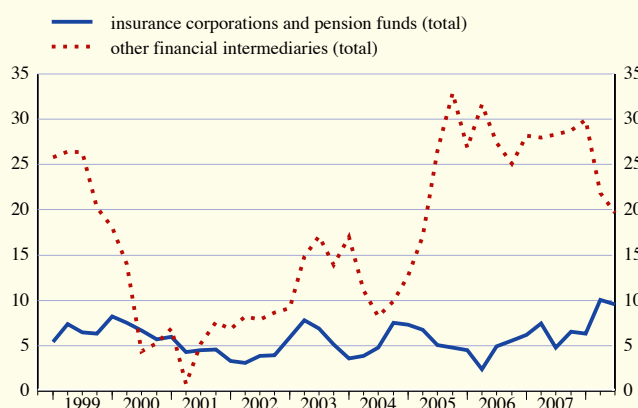
(EUR billions and annual growth rates; outstanding amounts and growth rates at end of period, transactions during period)

### 1. Deposits by financial intermediaries

	Insurance corporations and pension funds							Other financial intermediaries <sup>3)</sup>						
	Total	Overnight	With agreed maturity		Redeemable at notice		Repos	Total	Overnight	With agreed maturity		Redeemable at notice		Repos
			Up to 2 years	Over 2 years	Up to 3 months	Over 3 months				Up to 2 years	Over 2 years	Up to 3 months	Over 3 months	
Outstanding amounts														
2006	650.0	70.2	57.1	495.4	1.0	1.4	24.9	1,140.3	283.1	251.8	469.4	10.6	0.2	125.1
2007	687.8	71.1	68.9	525.1	0.8	1.1	20.9	1,472.7	312.3	348.0	652.8	12.2	0.3	147.1
2008 Q1	723.3	81.8	83.9	532.6	1.6	1.6	21.9	1,526.2	333.2	361.1	648.8	13.2	0.2	169.6
2008 Apr.	722.4	74.9	87.7	534.2	1.4	1.6	22.6	1,560.4	312.4	395.6	656.3	14.1	0.2	181.8
May	718.7	69.6	88.8	535.6	1.3	1.6	21.7	1,580.1	321.4	391.2	672.0	12.7	0.2	182.6
June	717.4	73.6	83.6	537.5	1.4	1.6	19.8	1,599.5	335.2	386.5	682.4	12.0	0.2	183.2
July	716.7	69.6	86.0	538.3	1.3	1.6	20.1	1,604.3	299.7	428.8	683.1	14.1	0.2	178.4
Aug. <sup>4)</sup>	713.1	66.6	85.5	538.7	1.2	1.6	19.5	1,616.3	288.8	448.2	681.9	12.9	0.1	184.3
Transactions														
2006	37.9	2.7	5.5	25.6	-0.2	0.0	4.4	249.2	45.5	67.8	130.5	0.3	0.1	4.9
2007	41.4	0.8	11.7	33.4	-0.2	-0.3	-4.1	341.1	32.7	98.9	183.7	1.7	0.1	24.1
2008 Q1	33.2	10.5	13.9	7.4	0.2	0.2	1.0	59.9	23.0	14.6	-0.7	1.0	-0.1	22.1
Q2	-5.8	-8.2	-0.2	4.9	-0.2	0.0	-2.1	70.3	0.2	25.2	32.5	-1.2	0.0	13.6
2008 Apr.	-1.0	-6.9	3.8	1.6	-0.2	0.0	0.7	31.8	-21.1	34.1	5.8	0.8	0.0	12.2
May	-3.7	-5.3	1.1	1.5	-0.1	0.0	-0.9	17.5	7.1	-4.4	15.5	-1.4	0.0	0.8
June	-1.1	4.0	-5.1	1.9	0.1	0.0	-1.9	21.0	14.3	-4.5	11.2	-0.6	0.0	0.7
July	-0.8	-4.0	2.3	0.8	-0.1	0.0	0.3	2.7	-36.1	41.3	0.3	2.1	0.0	-4.8
Aug. <sup>4)</sup>	-4.1	-3.1	-0.8	0.4	-0.1	0.0	-0.6	6.2	-12.6	17.5	-3.2	-1.3	0.0	5.8
Growth rates														
2006 Dec.	6.2	4.0	10.7	5.4	-16.3	-	21.2	28.2	19.5	36.8	38.9	2.9	-	4.0
2007 Dec.	6.4	1.1	20.5	6.8	-22.5	-	-16.3	30.0	11.5	39.5	39.1	16.0	-	19.0
2008 Mar.	10.0	12.6	41.8	6.6	-17.7	-	-4.3	21.9	6.3	36.5	26.5	17.6	-	13.4
2008 Apr.	8.7	6.6	37.5	6.3	-20.6	-	-7.3	22.9	2.6	44.4	23.9	24.2	-	20.8
May	9.3	6.5	45.5	6.0	-17.9	-	-5.3	21.9	2.6	44.0	22.2	11.5	-	21.5
June	9.6	13.4	42.2	5.7	-10.2	-	3.4	19.7	5.3	35.4	19.7	5.6	-	20.8
July	7.1	-4.1	38.3	5.5	-20.6	-	-3.2	17.9	-6.4	48.4	16.1	5.8	-	18.4
Aug. <sup>4)</sup>	7.3	8.4	23.4	5.6	-15.4	-	-5.9	18.8	-4.3	48.2	15.7	8.7	-	18.4

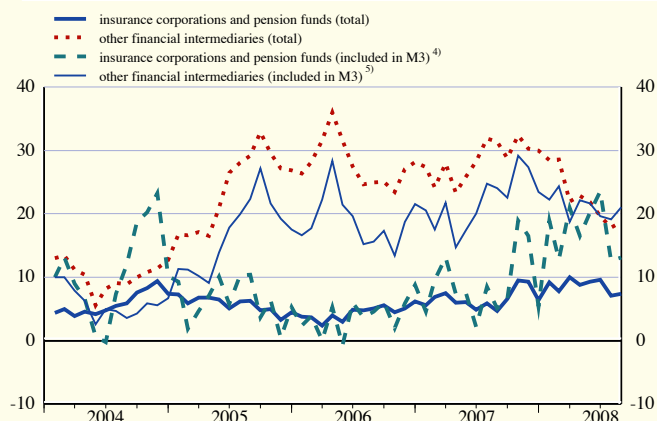
### C8 Total deposits by sector <sup>2)</sup>

(annual growth rates)



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

(annual growth rates)



Source: ECB.

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

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

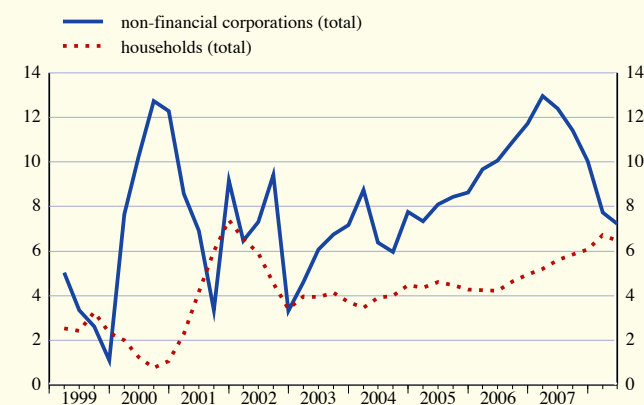
(EUR billions and annual growth rates; outstanding amounts and growth rates at end of period, transactions during period)

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

	Non-financial corporations							Households <sup>3)</sup>						
	Total	Overnight	With agreed maturity		Redeemable at notice		Repos	Total	Overnight	With agreed maturity		Redeemable at notice		Repos
			Up to 2 years	Over 2 years	Up to 3 months	Over 3 months				Up to 2 years	Over 2 years	Up to 3 months	Over 3 months	
Outstanding amounts														
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	1,470.6	882.1	474.6	59.6	29.2	1.4	23.7	4,989.0	1,777.7	994.5	561.1	1,457.6	111.1	87.1
2008 Q1	1,448.4	847.0	488.4	59.8	28.9	1.5	22.9	5,076.5	1,757.2	1,100.4	548.4	1,465.9	109.1	95.6
2008 Apr.	1,458.7	837.9	510.2	60.4	27.8	1.4	21.0	5,119.4	1,771.5	1,133.9	543.9	1,464.9	107.8	97.5
May	1,477.1	853.3	512.5	61.2	27.5	1.4	21.3	5,148.2	1,777.9	1,159.3	539.8	1,463.0	106.4	101.8
June	1,481.7	866.1	502.3	61.7	27.3	1.4	22.9	5,162.8	1,783.7	1,179.5	534.9	1,460.4	105.7	98.6
July	1,469.3	842.8	512.2	63.2	26.2	1.4	23.4	5,186.8	1,768.9	1,224.6	531.3	1,449.7	105.2	107.2
Aug. <sup>(p)</sup>	1,471.9	838.2	519.1	63.6	25.9	1.4	23.6	5,194.3	1,744.6	1,255.6	530.0	1,449.4	104.1	110.7
Transactions														
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	134.5	31.8	123.3	-8.0	-11.0	-0.7	-1.1	280.9	21.7	321.9	-45.4	-45.6	11.2	17.1
2008 Q1	-27.5	-35.5	10.6	0.1	-1.9	-0.1	-0.8	59.2	-26.5	89.2	-14.2	5.1	-2.9	8.5
Q2	34.0	19.4	14.6	1.6	-1.5	-0.1	0.1	87.0	26.4	79.9	-13.4	-5.5	-3.3	3.0
2008 Apr.	9.9	-9.2	21.5	0.6	-1.0	-0.1	-1.9	42.6	13.9	33.5	-4.5	-1.0	-1.3	1.9
May	18.3	15.4	2.2	0.8	-0.3	0.0	0.3	28.7	6.4	25.4	-4.1	-1.8	-1.4	4.2
June	5.8	13.2	-9.1	0.2	-0.2	0.0	1.7	15.6	6.0	21.0	-4.8	-2.6	-0.6	-3.2
July	-15.5	-24.3	8.4	1.5	-1.5	0.0	0.5	24.0	-14.9	45.1	-3.7	-10.7	-0.5	8.6
Aug. <sup>(p)</sup>	-1.1	-6.2	5.0	0.1	-0.3	0.0	0.2	4.9	-24.8	29.0	-1.3	-0.4	-1.1	3.5
Growth rates														
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 Dec.	10.0	3.7	34.8	-11.7	-26.9	-31.6	-4.3	6.1	1.2	47.8	-7.5	-3.5	11.2	24.4
2008 Mar.	7.7	2.0	29.3	-10.8	-29.0	-1.3	-15.3	6.7	1.4	45.5	-7.6	-2.1	2.7	25.2
2008 Apr.	8.6	0.6	34.7	-9.9	-28.5	-5.9	-14.2	7.0	1.1	45.9	-7.4	-1.8	1.2	28.4
May	8.0	1.3	30.9	-8.4	-29.2	-6.9	-21.0	7.2	1.3	45.7	-7.1	-1.7	0.1	29.3
June	7.2	0.8	28.5	-7.6	-26.5	-7.2	-13.0	6.5	-0.4	44.8	-7.3	-1.6	-1.1	26.8
July	6.1	0.4	23.3	-4.9	-28.0	-16.5	-8.4	6.9	-0.2	44.8	-7.2	-1.5	-2.2	29.8
Aug. <sup>(p)</sup>	5.8	1.4	18.9	-4.9	-22.3	-17.4	-11.1	7.1	-0.1	43.5	-6.8	-1.3	-3.6	27.2

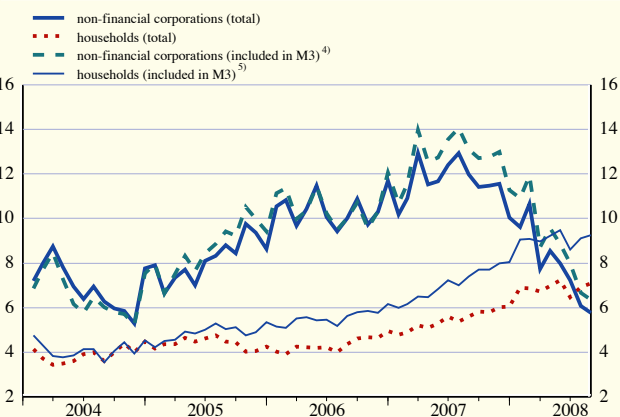
### C10 Total deposits by sector <sup>2)</sup>

(annual growth rates)



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

(annual growth rates)



Source: ECB.

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

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

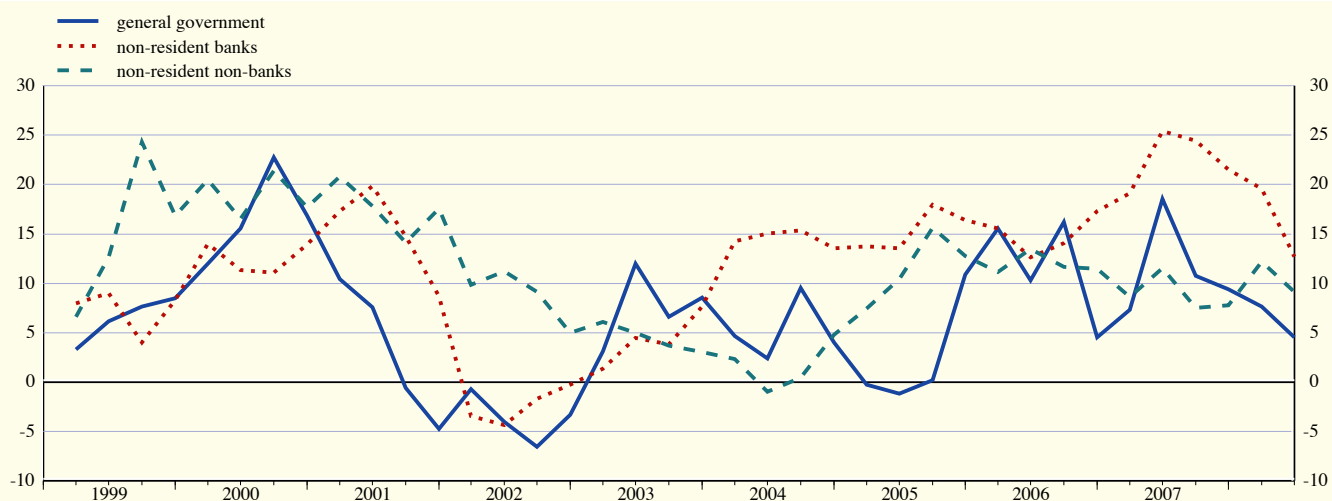
(EUR billions and annual growth rates; outstanding amounts and growth rates at end of period, transactions during period)

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

	General government					Non-euro area residents				
	Total	Central government	Other general government			Total	Banks <sup>3)</sup>	Non-banks		
			State government	Local government	Social security funds			Total	General government	Other
	1	2	3	4	5	6	7	8	9	10
Outstanding amounts										
2005	313.1	149.2	38.3	80.9	44.7	3,050.5	2,250.5	800.0	125.8	674.2
2006	329.0	124.2	45.4	90.8	68.6	3,429.0	2,557.1	871.9	128.6	743.3
2007 Q3	373.5	144.3	60.0	97.2	72.0	3,877.0	2,963.4	913.6	145.9	767.7
Q4	372.9	127.1	59.0	106.8	80.1	3,856.2	2,944.2	912.0	143.4	768.6
2008 Q1	375.9	139.6	49.6	107.6	79.1	4,039.8	3,075.7	964.2	131.1	833.0
Q2 <sup>(p)</sup>	410.7	155.9	56.5	112.4	85.9	4,019.8	3,038.6	981.2	132.0	849.2
Transactions										
2006	14.2	-24.5	7.0	7.8	23.9	476.6	385.8	90.8	6.6	84.2
2007	30.9	-3.1	13.6	8.9	11.5	614.6	547.2	67.4	20.2	47.2
2007 Q3	-7.3	-26.1	16.1	2.0	0.6	130.2	120.7	9.4	10.8	-1.4
Q4	-12.0	-21.9	-1.0	2.8	8.1	50.2	53.2	-3.0	-0.5	-2.5
2008 Q1	2.8	12.4	-9.3	0.6	-1.0	279.1	220.4	58.7	-8.4	67.1
Q2 <sup>(p)</sup>	34.8	16.0	6.8	4.8	7.1	-17.8	-35.1	17.4	0.9	16.5
Growth rates										
2005 Dec.	10.9	8.1	25.4	16.6	0.6	15.4	16.4	12.7	16.8	12.0
2006 Dec.	4.5	-16.5	18.4	9.6	53.5	15.8	17.3	11.5	5.3	12.6
2007 Sep.	10.7	-3.5	44.0	13.3	19.4	20.0	24.5	7.5	13.2	6.5
Dec.	9.4	-2.3	29.9	9.8	16.7	18.0	21.5	7.8	15.8	6.4
2008 Mar.	7.7	-3.7	18.1	13.3	16.5	17.8	19.6	12.2	5.5	13.3
June <sup>(p)</sup>	4.5	-12.2	29.0	10.5	20.8	11.8	12.7	9.1	1.8	10.3

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

(annual growth rates)



Source: ECB.

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

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

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

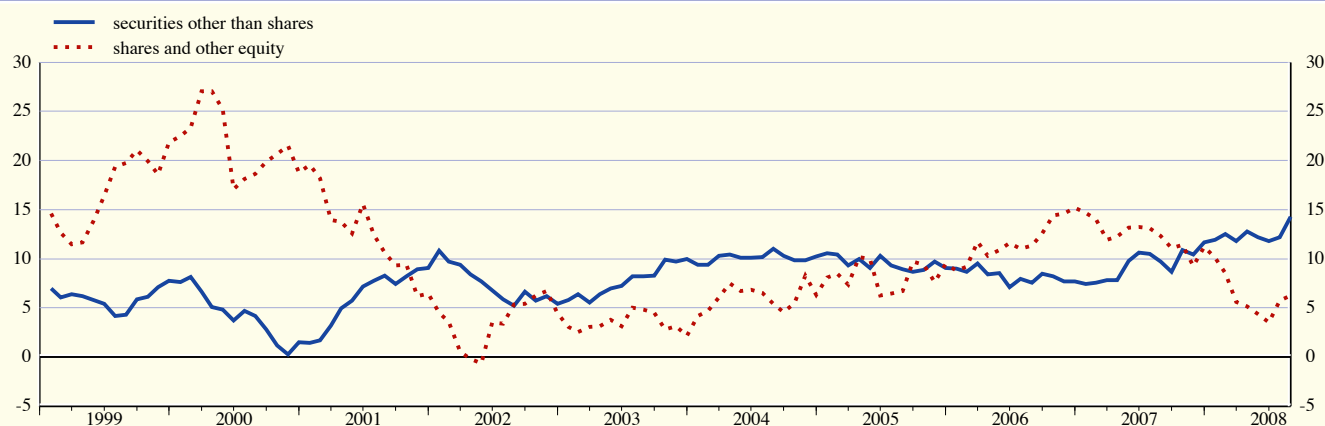
## 2.6 MFI holdings of securities, breakdown <sup>1), 2)</sup>

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

	Securities other than shares							Shares and other equity				
	Total	MFIs		General government		Other euro area residents		Non-euro area residents	Total	MFIs	Non-MFIs	Non-euro area residents
		Euro	Non-euro	Euro	Non-euro	Euro	Non-euro					
	1	2	3	4	5	6	7	8	9	10	11	12
<b>Outstanding amounts</b>												
2006	4,664.3	1,560.6	72.3	1,260.4	16.2	615.8	30.1	1,108.9	1,465.9	373.0	798.5	294.4
2007	5,113.7	1,652.9	84.0	1,177.5	16.6	916.5	33.4	1,232.8	1,639.9	424.8	871.4	343.7
2008 Q1	5,300.0	1,728.0	87.5	1,200.4	15.4	958.2	45.8	1,264.8	1,606.3	453.2	859.1	294.0
2008 Apr.	5,382.3	1,748.0	91.9	1,208.1	16.0	983.0	49.0	1,286.2	1,670.7	458.3	913.7	298.7
May	5,477.8	1,790.0	99.1	1,212.7	14.7	1,007.1	49.1	1,305.1	1,682.9	477.5	906.7	298.7
June	5,471.4	1,790.5	98.4	1,202.3	15.2	1,027.2	48.0	1,289.8	1,600.1	458.4	849.9	291.8
July	5,544.8	1,815.4	103.1	1,206.9	15.0	1,049.9	48.6	1,305.7	1,622.6	460.8	868.0	293.8
Aug. <sup>(p)</sup>	5,632.5	1,825.1	105.5	1,212.5	14.7	1,075.6	51.0	1,348.1	1,618.7	455.4	869.6	293.6
<b>Transactions</b>												
2006	337.4	122.8	10.6	-122.7	0.5	100.6	6.5	219.0	193.3	58.6	96.2	38.5
2007	541.2	136.6	18.2	-86.7	1.5	267.3	9.5	194.7	164.5	52.0	60.0	52.5
2008 Q1	214.6	58.8	5.5	19.4	-0.6	41.0	14.8	75.8	-19.3	25.4	-9.5	-35.2
Q2	190.7	64.0	11.3	10.8	0.0	71.7	2.8	30.1	7.2	13.8	-3.0	-3.7
2008 Apr.	80.1	19.5	3.8	10.5	0.6	25.3	3.2	17.2	62.8	6.0	53.8	3.0
May	97.3	42.3	7.1	7.3	-1.3	23.8	0.0	18.0	14.1	21.0	-6.2	-0.6
June	13.3	2.2	0.4	-7.0	0.7	22.6	-0.4	-5.2	-69.7	-13.1	-50.5	-6.1
July	66.7	25.1	4.2	2.3	-0.2	22.1	0.4	12.7	24.8	3.6	19.2	2.0
Aug. <sup>(p)</sup>	52.4	9.5	-0.6	2.9	-1.0	24.4	-0.1	17.2	-3.8	-5.1	1.1	0.1
<b>Growth rates</b>												
2006 Dec.	7.7	8.5	16.5	-8.9	3.0	19.3	25.7	24.2	15.2	18.6	13.6	15.2
2007 Dec.	11.7	8.8	25.6	-6.9	10.5	42.9	33.4	17.7	11.2	13.9	7.5	17.8
2008 Mar.	11.8	8.7	24.7	-5.5	12.2	40.7	52.7	16.3	5.6	15.0	4.2	-2.8
2008 Apr.	12.8	9.0	28.5	-2.8	16.1	40.1	59.4	16.0	5.2	13.8	3.9	-2.8
May	12.2	10.6	36.8	-4.8	4.3	38.7	59.6	14.0	4.3	12.7	4.1	-6.3
June	11.8	10.9	36.4	-4.7	9.9	35.7	61.3	12.4	3.5	17.0	2.5	-10.3
July	12.2	11.6	26.1	-2.7	9.7	35.9	53.4	11.2	5.7	18.3	6.0	-10.0
Aug. <sup>(p)</sup>	14.3	12.4	33.2	0.1	4.3	37.9	62.2	13.6	6.3	16.0	7.2	-8.1

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

(annual growth rates)



Source: ECB.

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

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

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

(EUR billions)

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

	Consumer credit				Lending for house purchase				Other lending			
	Total	Up to 1 year	Over 1 year and up to 5 years	Over 5 years	Total	Up to 1 year	Over 1 year and up to 5 years	Over 5 years	Total	Up to 1 year	Over 1 year and up to 5 years	Over 5 years
	1	2	3	4	5	6	7	8	9	10	11	12
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	-4.2	-1.2	-1.4	-1.6	-2.7	-0.2	-0.2	-2.3	-6.9	-0.8	-2.3	-3.7
2008 Q1	-1.1	-0.4	-0.3	-0.4	-1.2	0.0	-0.1	-1.2	-1.3	-0.4	-0.2	-0.8
2008 Q2	-0.9	-0.2	-0.4	-0.4	-0.4	0.0	0.0	-0.4	-2.0	-0.2	-0.9	-0.8
2008 Apr.	-0.3	0.0	-0.1	-0.1	0.0	0.0	0.0	0.0	-0.9	-0.1	-0.6	-0.3
2008 May	-0.3	-0.1	-0.1	-0.1	-0.1	0.0	0.0	-0.1	-0.5	0.0	-0.3	-0.2
2008 June	-0.3	0.0	-0.1	-0.1	-0.3	0.0	0.0	-0.3	-0.6	-0.1	-0.1	-0.4
2008 July	-0.3	-0.1	-0.1	-0.1	0.0	0.0	0.0	0.0	-0.2	0.0	0.0	-0.2
2008 Aug. <sup>(p)</sup>	-0.3	-0.1	-0.1	-0.1	-0.1	0.0	0.0	-0.1	-0.3	0.0	0.0	-0.2

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

	Non-financial corporations				Non-euro area residents		
	Total	Up to 1 year	Over 1 year and up to 5 years	Over 5 years	Total	Up to 1 year	Over 1 year
	1	2	3	4	5	6	7
2006	-13.2	-3.5	-4.6	-5.1	-0.8	-0.1	-0.7
2007	-12.5	-2.1	-5.4	-4.9	-5.2	-3.4	-1.8
2008 Q1	-3.0	-1.2	-0.8	-1.0	-2.4	-1.8	-0.6
2008 Q2	-5.4	-0.9	-3.4	-1.1	0.0	-0.1	0.0
2008 Apr.	-3.3	-0.5	-2.7	-0.2	0.0	0.0	0.1
2008 May	-0.8	-0.2	-0.4	-0.3	-0.1	-0.1	0.0
2008 June	-1.3	-0.3	-0.4	-0.6	0.0	0.0	0.0
2008 July	-0.5	-0.2	-0.2	-0.2	-0.5	-0.4	-0.1
2008 Aug. <sup>(p)</sup>	-0.7	-0.1	-0.4	-0.2	-0.1	0.0	-0.1

## 3. Revaluation of securities held by MFIs

	Securities other than shares							Shares and other equity				
	Total	MFIs		General government		Other euro area residents		Non-euro area residents	Total	MFIs	Non-MFIs	Non-euro area residents
		Euro	Non-euro	Euro	Non-euro	Euro	Non-euro					
	1	2	3	4	5	6	7	8	9	10	11	12
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	-11.8	-2.7	0.0	0.6	-0.2	-2.5	-0.5	-6.5	12.6	3.0	8.8	0.8
2008 Q1	-22.1	-4.7	-0.2	0.4	-0.2	-4.8	-0.6	-11.9	-20.6	-1.1	-11.6	-7.9
2008 Q2	-18.3	-1.4	-0.1	-8.7	-0.1	-2.5	-0.5	-5.0	-8.0	-2.9	-6.6	1.5
2008 Apr.	-4.7	0.9	0.0	-2.6	0.0	-0.4	-0.4	-2.0	2.5	0.4	0.4	1.7
2008 May	-3.5	-0.2	0.0	-2.8	0.0	0.4	0.0	-0.8	-1.9	-1.7	-0.7	0.6
2008 June	-10.1	-2.1	-0.1	-3.3	0.0	-2.4	-0.1	-2.2	-8.7	-1.6	-6.3	-0.8
2008 July	2.3	0.1	0.1	2.4	0.0	0.6	0.0	-0.9	-1.6	-0.5	-1.0	0.0
2008 Aug. <sup>(p)</sup>	5.6	0.6	0.2	2.7	0.1	0.9	0.3	0.8	-0.1	-0.3	0.5	-0.3

Source: ECB.

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

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

3) Including non-profit institutions serving households.

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

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

### 1. Deposits

	MFIs <sup>3)</sup>							Non-MFIs						
	All currencies (outstanding amount)	Euro <sup>4)</sup>	Non-euro currencies				All currencies (outstanding amount)	Euro <sup>4)</sup>	Non-euro currencies					
			Total						Total					
			USD	JPY	CHF	GBP			USD	JPY	CHF	GBP		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	
	By euro area residents													
2005	4,851.2	90.9	9.1	5.6	0.4	1.5	1.0	7,361.0	96.8	3.2	1.9	0.3	0.1	0.5
2006	5,242.4	90.7	9.3	5.6	0.4	1.5	1.2	8,014.8	96.4	3.6	2.2	0.3	0.1	0.6
2007 Q3	5,700.7	91.2	8.8	5.3	0.4	1.3	1.0	8,554.3	96.1	3.9	2.4	0.3	0.1	0.6
Q4	6,089.4	92.1	7.9	4.8	0.4	1.1	1.0	8,993.0	96.4	3.6	2.2	0.4	0.1	0.5
2008 Q1	6,148.8	91.8	8.2	4.7	0.5	1.3	1.0	9,150.3	96.4	3.6	2.1	0.4	0.1	0.6
Q2 <sup>4)</sup>	6,282.2	91.6	8.4	5.0	0.4	1.3	1.0	9,372.1	96.4	3.6	2.1	0.5	0.1	0.5
	By non-euro area residents													
2005	2,250.5	46.2	53.8	35.4	2.7	2.8	10.0	800.0	51.8	48.2	32.1	1.7	2.2	9.2
2006	2,557.1	45.3	54.7	35.1	2.3	2.7	11.5	871.9	50.7	49.3	32.0	1.3	2.0	10.4
2007 Q3	2,963.4	46.2	53.8	33.6	2.6	2.3	11.9	913.6	49.5	50.5	33.8	1.1	1.9	9.6
Q4	2,944.2	46.8	53.2	33.6	2.9	2.4	11.1	912.0	50.0	50.0	32.9	1.6	1.8	9.9
2008 Q1	3,075.7	48.1	51.9	33.1	3.0	2.6	10.3	964.2	52.3	47.7	32.0	1.4	1.7	8.7
Q2 <sup>4)</sup>	3,038.6	46.6	53.4	33.7	3.1	2.7	10.6	981.2	51.4	48.6	32.2	1.2	1.8	9.3

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

	All currencies (outstanding amount)	Euro <sup>4)</sup>	Non-euro currencies			
			Total			
			USD	JPY	CHF	GBP
1	2	3	4	5	6	7
2005	4,051.7	81.2	18.8	9.6	1.8	3.2
2006	4,485.5	80.5	19.5	10.0	1.6	3.5
2007 Q3	4,862.4	80.8	19.2	9.7	1.7	3.6
Q4	4,948.0	81.4	18.6	9.3	1.7	3.4
2008 Q1	4,993.3	82.1	17.9	8.8	1.8	3.2
Q2 <sup>4)</sup>	5,144.7	82.0	18.0	8.9	1.7	3.4

Source: ECB.

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



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

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

**3. Loans**

	MFIs <sup>3)</sup>							Non-MFIs						
	All currencies (outstanding amount)	Euro <sup>4)</sup>	Non-euro currencies				All currencies (outstanding amount)	Euro <sup>4)</sup>	Non-euro currencies					
			Total						Total					
			USD	JPY	CHF	GBP			USD	JPY	CHF	GBP		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	
To euro area residents														
2005	4,569.7	-	-	-	-	-	9,112.0	96.3	3.7	1.6	0.2	1.3	0.5	
2006	4,933.5	-	-	-	-	-	9,970.8	96.4	3.6	1.6	0.2	1.1	0.5	
2007 Q3	5,433.3	-	-	-	-	-	10,742.0	96.1	3.9	1.9	0.2	1.0	0.5	
Q4	5,789.0	-	-	-	-	-	11,115.9	96.2	3.8	1.8	0.2	0.9	0.6	
2008 Q1	5,837.3	-	-	-	-	-	11,414.3	96.1	3.9	1.8	0.2	1.0	0.5	
Q2 <sup>(p)</sup>	5,998.7	-	-	-	-	-	11,634.8	96.0	4.0	1.9	0.2	1.0	0.6	
To non-euro area residents														
2005	1,722.1	48.5	51.5	30.5	4.3	2.0	10.1	763.1	38.2	61.8	43.7	1.8	4.1	8.6
2006	2,061.0	50.7	49.3	28.9	2.0	2.3	11.0	863.4	39.3	60.7	43.2	1.1	4.0	8.6
2007 Q3	2,354.1	48.8	51.2	28.3	2.1	2.5	12.9	948.7	39.2	60.8	43.3	1.1	3.9	8.2
Q4	2,337.8	48.0	52.0	28.9	2.3	2.4	12.7	957.4	40.9	59.1	41.3	1.2	3.7	8.2
2008 Q1	2,394.8	48.2	51.8	28.1	2.9	2.8	12.2	1,018.7	43.0	57.0	39.3	1.3	4.2	7.5
Q2 <sup>(p)</sup>	2,296.8	46.3	53.7	28.9	2.7	3.0	12.8	1,013.5	43.2	56.8	38.6	1.2	3.9	8.4

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

	Issued by MFIs <sup>3)</sup>							Issued by non-MFIs						
	All currencies (outstanding amount)	Euro <sup>4)</sup>	Non-euro currencies				All currencies (outstanding amount)	Euro <sup>4)</sup>	Non-euro currencies					
			Total						Total					
			USD	JPY	CHF	GBP			USD	JPY	CHF	GBP		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	
Issued by euro area residents														
2005	1,517.7	95.6	4.4	2.0	0.3	0.4	1.4	1,980.9	97.8	2.2	1.1	0.3	0.1	0.5
2006	1,632.9	95.6	4.4	2.3	0.2	0.3	1.3	1,922.5	97.6	2.4	1.3	0.3	0.1	0.7
2007 Q3	1,727.6	95.2	4.8	2.4	0.3	0.2	1.5	2,020.7	97.5	2.5	1.4	0.3	0.1	0.7
Q4	1,737.0	95.2	4.8	2.4	0.3	0.3	1.5	2,144.0	97.7	2.3	1.4	0.2	0.1	0.5
2008 Q1	1,815.4	95.2	4.8	2.5	0.3	0.3	1.4	2,219.7	97.2	2.8	1.9	0.3	0.1	0.4
Q2 <sup>(p)</sup>	1,888.9	94.8	5.2	2.6	0.3	0.3	1.7	2,292.6	97.2	2.8	1.9	0.3	0.1	0.4
Issued by non-euro area residents														
2005	397.5	51.0	49.0	28.5	0.8	0.5	15.7	522.8	38.3	61.7	35.0	7.8	0.8	12.6
2006	514.5	52.2	47.8	28.8	0.7	0.4	14.5	594.4	38.9	61.1	36.5	4.9	0.8	14.2
2007 Q3	573.8	53.9	46.1	26.7	0.7	0.4	15.0	650.7	35.3	64.7	38.9	4.1	0.7	14.5
Q4	580.5	53.8	46.2	27.4	0.7	0.4	14.4	652.3	35.8	64.2	39.4	4.5	0.8	12.6
2008 Q1	635.8	50.8	49.2	30.3	0.8	0.5	14.4	629.0	38.1	61.9	36.8	5.8	0.8	11.4
Q2 <sup>(p)</sup>	659.8	50.2	49.8	30.7	0.7	0.5	14.7	630.0	38.4	61.6	36.9	5.9	0.9	10.5

Source: ECB.

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

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

(EUR billions; outstanding amounts at end of period)

### 1. Assets

	Total 1	Deposits 2	Holdings of securities other than shares			Holdings of shares/ other equity 6	Holdings of investment fund shares 7	Fixed assets 8	Other assets 9
			Total 3	Up to 1 year 4	Over 1 year 5				
2006 Q4	5,552.3	320.9	2,005.6	170.7	1,834.9	2,024.9	670.9	185.8	344.3
2007 Q1	5,714.1	332.6	2,031.4	181.0	1,850.4	2,071.8	719.1	186.6	372.7
Q2	5,989.4	346.5	2,043.5	192.9	1,850.7	2,219.0	784.4	179.7	416.4
Q3	5,892.8	358.3	2,015.0	187.0	1,828.0	2,168.5	773.6	180.6	396.6
Q4	5,781.3	353.4	1,993.4	184.1	1,809.3	2,077.4	784.0	189.1	384.0
2008 Q1 <sup>(a)</sup>	5,150.8	367.0	1,855.5	164.5	1,690.9	1,664.1	716.2	197.1	350.8

### 2. Liabilities

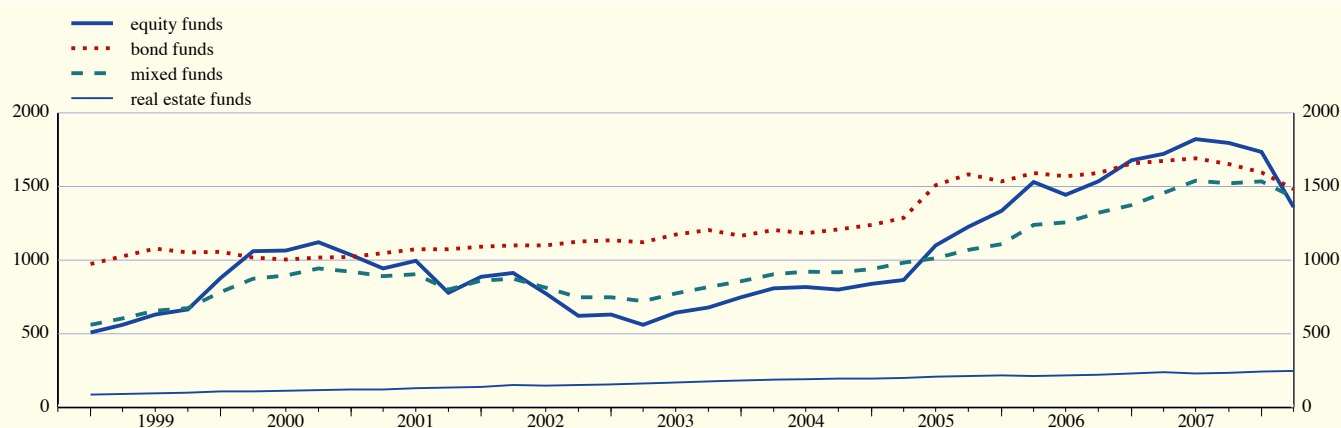
	Total 1	Deposits and loans taken 2	Investment fund shares 3	Other liabilities 4
2006 Q4	5,552.3	76.6	5,218.7	257.1
2007 Q1	5,714.1	80.9	5,350.8	282.5
Q2	5,989.4	84.3	5,587.7	317.4
Q3	5,892.8	78.5	5,496.8	317.5
Q4	5,781.3	76.8	5,411.5	293.0
2008 Q1 <sup>(a)</sup>	5,150.8	76.2	4,835.6	238.9

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

	Total 1	Funds by investment policy				Funds by type of investor		
		Equity funds 2	Bond funds 3	Mixed funds 4	Real estate funds 5	Other funds 6	General public funds 7	Special investors' funds 8
2006 Q4	5,552.3	1,681.6	1,656.3	1,376.5	231.8	606.2	4,252.7	1,299.6
2007 Q1	5,714.1	1,724.1	1,674.1	1,459.8	238.5	617.7	4,373.2	1,341.0
Q2	5,989.4	1,825.7	1,692.2	1,539.7	230.8	701.0	4,577.1	1,412.4
Q3	5,892.8	1,797.1	1,654.6	1,523.2	236.1	681.7	4,468.3	1,424.5
Q4	5,781.3	1,735.5	1,596.8	1,535.4	244.2	669.4	4,344.6	1,436.7
2008 Q1 <sup>(a)</sup>	5,150.8	1,361.3	1,483.5	1,427.7	249.6	628.7	3,779.1	1,371.6

### CI4 Total assets of investment funds

(EUR billions)



Source: ECB.

1) Other than money market funds. For further details, see the General notes.

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

(EUR billions; outstanding amounts at end of period)

## 1. Funds by investment policy

	Total 1	Deposits 2	Holdings of securities other than shares			Holdings of shares/ other equity 6	Holdings of investment fund shares 7	Fixed assets 8	Other assets 9
			Total 3	Up to 1 year 4	Over 1 year 5				
Equity funds									
2006 Q4	1,681.6	56.2	66.0	22.7	43.3	1,429.9	74.5	-	54.9
2007 Q1	1,724.1	59.4	65.8	25.7	40.0	1,461.7	78.6	-	58.6
Q2	1,825.7	61.1	67.9	27.4	40.5	1,546.6	84.2	-	65.9
Q3	1,797.1	72.0	68.7	26.7	41.9	1,505.5	82.4	-	68.5
Q4	1,735.5	58.1	71.8	26.5	45.2	1,464.2	79.5	-	61.9
2008 Q1 <sup>(p)</sup>	1,361.3	51.0	63.0	21.3	41.7	1,129.9	65.7	-	51.6
Bond funds									
2006 Q4	1,656.3	108.3	1,342.9	91.1	1,251.8	45.4	49.8	-	109.9
2007 Q1	1,674.1	112.3	1,355.7	95.1	1,260.6	44.5	52.5	-	109.0
Q2	1,692.2	114.9	1,345.5	99.5	1,246.0	62.8	55.8	-	113.2
Q3	1,654.6	109.9	1,318.4	97.0	1,221.5	62.6	53.3	-	110.4
Q4	1,596.8	116.1	1,273.1	92.7	1,180.4	58.0	49.8	-	99.8
2008 Q1 <sup>(p)</sup>	1,483.5	124.8	1,167.8	80.2	1,087.6	56.8	45.4	-	88.6
Mixed funds									
2006 Q4	1,376.5	71.0	519.8	43.5	476.3	364.3	292.9	0.4	128.2
2007 Q1	1,459.8	73.8	530.9	45.5	485.4	380.9	322.3	0.3	151.5
Q2	1,539.7	84.0	529.5	50.2	479.3	399.0	346.5	0.9	179.8
Q3	1,523.2	86.2	522.6	46.3	476.3	405.4	345.1	0.5	163.3
Q4	1,535.4	89.7	547.0	47.3	499.7	393.1	343.6	0.7	161.4
2008 Q1 <sup>(p)</sup>	1,427.7	97.8	527.8	46.5	481.3	338.8	313.9	1.2	148.1
Real estate funds									
2006 Q4	231.8	17.6	6.1	1.7	4.4	4.3	7.0	184.9	11.9
2007 Q1	238.5	18.9	6.7	1.9	4.8	4.6	9.6	186.1	12.6
Q2	230.8	18.8	6.6	1.9	4.7	4.3	10.0	178.1	12.9
Q3	236.1	20.7	6.4	1.6	4.8	3.9	13.1	179.2	12.8
Q4	244.2	19.7	6.0	1.5	4.5	3.4	12.5	187.9	14.7
2008 Q1 <sup>(p)</sup>	249.6	19.9	5.3	1.1	4.2	3.1	11.3	195.4	14.6

## 2. Funds by type of investor

	Total 1	Deposits 2	Holdings of securities other than shares 3	Holdings of shares/ other equity 4	Holdings of investment fund shares 5	Fixed assets 6	Other assets 7
2006 Q4	4,252.7	265.6	1,402.2	1,653.0	498.4	153.1	280.6
2007 Q1	4,373.2	274.4	1,420.5	1,696.3	529.1	153.3	299.5
Q2	4,577.1	281.1	1,431.2	1,819.5	576.6	145.0	323.7
Q3	4,468.3	287.9	1,375.7	1,791.2	564.1	142.9	306.4
Q4	4,344.6	279.9	1,336.9	1,717.4	569.6	149.1	291.8
2008 Q1 <sup>(p)</sup>	3,779.1	279.1	1,218.4	1,360.8	513.6	154.1	253.2
Special investors' funds							
2006 Q4	1,299.6	55.3	603.4	371.9	172.6	32.7	63.7
2007 Q1	1,341.0	58.2	610.9	375.5	189.9	33.3	73.2
Q2	1,412.4	65.4	612.4	399.5	207.8	34.7	92.7
Q3	1,424.5	70.4	639.3	377.3	209.5	37.7	90.2
Q4	1,436.7	73.4	656.6	360.0	214.5	40.0	92.2
2008 Q1 <sup>(p)</sup>	1,371.6	87.9	637.1	303.3	202.6	43.0	97.6

Source: ECB.



## EURO AREA ACCOUNTS

### 3.1 Integrated economic and financial accounts by institutional sector

(EUR billions)

Uses	Euro area	Households	Non-financial corporations	Financial corporations	General government	Rest of the world
<b>2008 Q1</b>						
<b>External account</b>						
Exports of goods and services						500.7
<i>Trade balance</i> <sup>1)</sup>						-4.4
<b>Generation of income account</b>						
Gross value added (basic prices)						
Taxes less subsidies on products						
Gross domestic product (market prices)						
Compensation of employees	1,038.7	105.0	659.7	55.0	219.0	
Other taxes less subsidies on production	23.4	3.2	12.9	3.7	3.6	
Consumption of fixed capital	328.1	89.9	184.3	11.1	42.8	
<i>Net operating surplus and mixed income</i> <sup>1)</sup>	604.7	297.4	281.4	27.1	-1.2	
<b>Allocation of primary income account</b>						
Net operating surplus and mixed income						4.5
Compensation of employees						
Taxes less subsidies on production						
Property income	800.5	52.8	280.4	401.4	65.9	144.1
Interest	514.2	50.7	86.0	311.7	65.8	85.7
Other property income	286.2	2.1	194.4	89.6	0.1	58.3
<i>Net national income</i> <sup>1)</sup>	1,914.9	1,547.7	107.3	41.2	218.6	
<b>Secondary distribution of income account</b>						
Net national income						
Current taxes on income, wealth, etc.	235.9	200.8	26.8	8.1	0.3	1.3
Social contributions	393.7	393.7				0.7
Social benefits other than social transfers in kind	395.6	1.4	16.0	26.5	351.7	0.7
Other current transfers	192.9	70.1	25.6	47.0	50.2	9.7
Net non-life insurance premiums	44.8	32.6	10.5	1.0	0.7	1.4
Non-life insurance claims	45.0			45.0		0.7
Other	103.0	37.4	15.0	1.1	49.5	7.6
<i>Net disposable income</i> <sup>1)</sup>	1,884.1	1,364.7	69.0	44.8	405.6	
<b>Use of income account</b>						
Net disposable income						
Final consumption expenditure	1,718.8	1,282.5			436.4	
Individual consumption expenditure	1,549.2	1,282.5			266.7	
Collective consumption expenditure	169.6				169.6	
Adjustment for the change in net equity of households in pension fund reserves	14.7	0.0	1.9	12.8	0.0	0.1
<i>Net saving/current external account</i> <sup>1)</sup>	165.3	97.0	67.1	31.9	-30.7	22.9
<b>Capital account</b>						
Net saving / current external account						
Gross capital formation	516.3	162.4	296.4	12.0	45.5	
Gross fixed capital formation	483.0	160.0	265.9	12.0	45.0	
Changes in inventories and acquisitions less disposals of valuables	33.3	2.4	30.4	0.0	0.4	
Consumption of fixed capital						
Acquisitions less disposals of non-produced non-financial assets	0.0	-0.5	0.5	0.1	-0.1	0.0
Capital transfers	35.4	7.4	1.6	1.3	25.2	9.1
Capital taxes	5.5	5.3	0.2	0.0		0.0
Other capital transfers	29.9	2.1	1.3	1.3	25.2	9.1
<i>Net lending (+)/net borrowing (-) (from capital account)</i> <sup>1)</sup>	-16.7	33.1	-31.0	30.5	-49.3	16.7
Statistical discrepancy	0.0	8.3	-8.3	0.0	0.0	0.0

Sources: ECB and Eurostat.

1) For the calculation of the balancing items, see the Technical notes.

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

(EUR billions)

Resources	Euro area	Households	Non-financial corporations	Financial corporations	General government	Rest of the world
2008 Q1						
<b>External account</b>						
Imports of goods and services						496.3
<i>Trade balance</i>						
<b>Generation of income account</b>						
Gross value added (basic prices)	1,995.0	495.6	1,138.3	96.9	264.2	
Taxes less subsidies on products	244.5					
Gross domestic product (market prices) <sup>2)</sup>	2,239.5					
Compensation of employees						
Other taxes less subsidies on production						
Consumption of fixed capital						
<i>Net operating surplus and mixed income</i>						
<b>Allocation of primary income account</b>						
Net operating surplus and mixed income	604.7	297.4	281.4	27.1	-1.2	
Compensation of employees	1,041.2	1,041.2				2.1
Taxes less subsidies on production	267.2				267.2	0.7
Property income	802.2	261.9	106.4	415.5	18.5	142.4
Interest	499.0	78.2	46.7	367.1	7.1	100.9
Other property income	303.2	183.7	59.6	48.4	11.4	41.4
<i>Net national income</i>						
<b>Secondary distribution of income account</b>						
Net national income	1,914.9	1,547.7	107.3	41.2	218.6	
Current taxes on income, wealth, etc.	236.7				236.7	0.5
Social contributions	393.3	1.0	18.0	39.1	335.1	1.1
Social benefits other than social transfers in kind	393.2	393.2				3.2
Other current transfers	164.2	88.8	12.0	46.1	17.4	38.4
Net non-life insurance premiums	45.0			45.0		1.2
Non-life insurance claims	44.2	35.1	8.2	0.7	0.3	1.5
Other	74.9	53.7	3.8	0.4	17.1	35.7
<i>Net disposable income</i>						
<b>Use of income account</b>						
Net disposable income	1,884.1	1,364.7	69.0	44.8	405.6	
Final consumption expenditure						
Individual consumption expenditure						
Collective consumption expenditure						
Adjustment for the change in net equity of households in pension fund reserves	14.8	14.8				0.0
<i>Net saving/current external account</i>						
<b>Capital account</b>						
Net saving / current external account	165.3	97.0	67.1	31.9	-30.7	22.9
Gross capital formation						
Gross fixed capital formation						
Changes in inventories and acquisitions less disposals of valuables						
Consumption of fixed capital	328.1	89.9	184.3	11.1	42.8	
Acquisitions less disposals of non-produced non-financial assets						
Capital transfers	41.5	15.5	16.1	0.9	9.1	2.9
Capital taxes	5.5				5.5	0.0
Other capital transfers	36.0	15.5	16.1	0.9	3.6	2.9
<i>Net lending (+)/net borrowing (-) (from capital account)</i>						
Statistical discrepancy						

Sources: ECB and Eurostat.

2) Gross domestic product is equal to gross value added of all domestic sectors plus net taxes (taxes less subsidies) on products.

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

(EUR billions)

Assets	Euro area	Households	Non-financial corporations	MFIs	Other financial inter- mediaries	Insurance corporations and pension funds	General govern- ment	Rest of the world
2008 Q1								
<b>Opening balance sheet, financial assets</b>								
Total financial assets		17,664.5	14,877.4	22,398.3	10,217.1	6,229.4	2,911.7	15,161.4
Monetary gold and special drawing rights (SDRs)				205.6				
Currency and deposits		5,695.7	1,767.4	2,478.4	1,533.3	799.4	534.2	4,008.9
Short-term debt securities		48.9	130.7	117.8	297.4	260.7	40.2	771.1
Long-term debt securities		1,300.7	211.9	3,671.0	1,919.4	1,960.6	225.7	2,458.4
Loans		40.3	2,113.1	12,173.6	1,490.0	337.8	379.4	1,677.8
<i>of which long-term</i>		23.9	1,201.2	9,239.0	1,166.0	295.0	329.5	.
Shares and other equity		5,064.4	7,774.3	1,897.5	4,779.0	2,397.2	1,175.3	5,429.8
Quoted shares		1,137.1	1,939.6	725.1	2,509.0	846.2	441.7	.
Unquoted shares and other equity		2,320.2	5,474.7	909.5	1,562.4	467.3	585.0	.
Mutual fund shares		1,607.0	360.0	262.8	707.6	1,083.6	148.6	.
Insurance technical reserves		5,212.4	134.2	2.0	0.0	148.0	3.3	230.9
Other accounts receivable and financial derivatives		302.2	2,745.7	1,852.5	198.0	325.7	553.6	584.6
<i>Net financial worth</i>								
<b>Financial account, transactions in financial assets</b>								
Total transactions in financial assets		114.8	144.6	759.1	-10.0	107.6	15.1	489.3
Monetary gold and special drawing rights (SDRs)				-0.9				0.9
Currency and deposits		53.5	-29.3	119.7	74.8	29.0	31.3	286.3
Short-term debt securities		12.5	23.8	12.3	52.4	4.4	-11.9	6.4
Long-term debt securities		32.1	-34.3	157.1	-100.3	25.6	-4.1	67.8
Loans		-0.3	18.2	354.4	24.3	24.6	-13.1	33.9
<i>of which long-term</i>		-0.4	18.3	159.7	14.9	2.3	-0.3	.
Shares and other equity		-61.9	127.5	-22.9	-69.5	23.1	6.9	81.2
Quoted shares		-22.8	51.2	-16.8	-76.5	8.3	-0.1	.
Unquoted shares and other equity		-4.3	74.5	7.0	13.7	2.9	0.1	.
Mutual fund shares		-34.8	1.9	-13.0	-6.8	11.9	6.9	.
Insurance technical reserves		57.2	3.0	0.0	0.0	-1.4	0.0	5.7
Other accounts receivable and financial derivatives		21.8	35.6	139.5	8.3	2.3	6.0	7.2
<i>Changes in net financial worth due to transactions</i>								
<b>Other changes account, financial assets</b>								
Total other changes in financial assets		-551.1	-712.3	-399.7	-494.8	-143.8	-98.6	-615.3
Monetary gold and special drawing rights (SDRs)				8.0				
Currency and deposits		1.6	-2.2	-89.7	-23.4	1.4	-5.2	-116.3
Short-term debt securities		-3.6	-12.0	0.3	-8.9	3.1	0.0	-12.4
Long-term debt securities		-1.4	24.8	-67.3	-20.2	3.6	1.2	-16.8
Loans		0.6	-4.1	-73.0	19.9	-5.1	0.2	-9.3
<i>of which long-term</i>		0.4	-1.6	-43.6	22.3	0.9	0.1	.
Shares and other equity		-506.4	-737.0	-74.3	-455.2	-147.7	-89.1	-431.1
Quoted shares		-191.7	-224.1	-71.4	-323.1	-75.6	-81.0	.
Unquoted shares and other equity		-228.9	-498.2	1.4	-77.2	-30.4	2.8	.
Mutual fund shares		-85.8	-14.8	-4.4	-54.9	-41.8	-10.8	.
Insurance technical reserves		-44.8	0.0	0.0	0.0	-0.1	0.0	0.3
Other accounts receivable and financial derivatives		3.0	18.2	-103.7	-7.1	1.1	-5.7	-29.9
<i>Other changes in net financial worth</i>								
<b>Closing balance sheet, financial assets</b>								
Total financial assets		17,228.2	14,309.7	22,757.7	9,712.3	6,193.2	2,828.3	15,034.5
Monetary gold and special drawing rights (SDRs)				212.8				
Currency and deposits		5,750.8	1,735.9	2,508.4	1,584.7	829.8	560.4	4,178.9
Short-term debt securities		57.8	142.5	130.3	340.9	268.1	28.2	765.1
Long-term debt securities		1,331.4	202.4	3,760.8	1,799.0	1,989.8	222.9	2,509.4
Loans		40.5	2,127.3	12,454.9	1,534.3	357.3	366.5	1,702.4
<i>of which long-term</i>		23.9	1,217.9	9,355.1	1,203.2	298.2	329.3	.
Shares and other equity		4,496.0	7,164.8	1,800.2	4,254.3	2,272.5	1,093.1	5,079.9
Quoted shares		922.6	1,766.7	636.9	2,109.5	779.0	360.6	.
Unquoted shares and other equity		2,087.0	5,051.0	918.0	1,498.9	439.9	587.9	.
Mutual fund shares		1,486.5	347.1	245.4	645.9	1,053.7	144.7	.
Insurance technical reserves		5,224.8	137.2	2.0	0.0	146.5	3.3	236.9
Other accounts receivable and financial derivatives		326.9	2,799.5	1,888.3	199.1	329.2	553.8	561.9
<i>Net financial worth</i>								

Source: ECB.

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

(EUR billions)

Liabilities	Euro area	Households	Non-financial corporations	MFI's	Other financial intermediaries	Insurance corporations and pension funds	General government	Rest of the world
<b>2008 Q1</b>								
<b>Opening balance sheet, liabilities</b>								
Total liabilities		5,919.1	24,006.2	22,379.7	10,119.9	6,431.2	6,798.0	13,600.0
Monetary gold and special drawing rights (SDRs)								
Currency and deposits			24.9	13,780.5	88.7	4.5	253.0	2,665.6
Short-term debt securities			277.4	448.9	87.4	0.6	611.3	241.1
Long-term debt securities			451.8	2,729.3	1,624.2	26.8	4,344.7	2,571.1
Loans		5,345.7	7,175.1		1,570.2	166.1	1,180.3	2,774.6
<i>of which long-term</i>		5,028.5	4,930.2		782.9	65.8	1,039.9	.
Shares and other equity			13,261.9	3,141.4	6,564.7	666.4	3.6	4,879.4
Quoted shares			4,972.8	1,009.5	263.6	277.3	0.0	.
Unquoted shares and other equity			8,289.1	1,097.1	975.9	388.4	3.6	.
Mutual fund shares				1,034.9	5,325.2			.
Insurance technical reserves		33.1	334.8	53.7	0.6	5,308.2	0.5	
Other accounts payable and financial derivatives		540.3	2,480.3	2,226.0	184.1	258.6	404.5	468.3
<i>Net financial worth<sup>1)</sup></i>	-1,355.8	11,745.4	-9,128.8	18.6	97.1	-201.9	-3,886.3	
<b>Financial account, transactions in liabilities</b>								
Total transactions in liabilities		73.5	183.8	735.6	-4.9	95.5	64.4	472.7
Monetary gold and special drawing rights (SDRs)								
Currency and deposits			0.0	443.9	1.9	-0.1	-15.3	134.9
Short-term debt securities			12.3	-19.5	-1.7	0.0	47.5	61.5
Long-term debt securities			-0.2	28.8	34.8	-0.1	47.3	33.4
Loans		38.8	136.0		73.7	12.6	5.9	175.0
<i>of which long-term</i>		41.4	87.3		14.6	0.2	-17.1	.
Shares and other equity			41.3	96.8	-99.5	3.3	0.0	42.4
Quoted shares			-1.8	6.6	-1.3	0.1	0.0	.
Unquoted shares and other equity			43.2	-2.8	-9.2	3.2	0.0	.
Mutual fund shares				93.0	-89.0			.
Insurance technical reserves		0.0	2.1	0.5	0.0	61.9	0.0	
Other accounts payable and financial derivatives		34.7	-7.7	185.2	-14.1	18.0	-21.0	25.6
<i>Changes in net financial worth due to transactions<sup>1)</sup></i>	-16.7	41.4	-39.3	23.5	-5.1	12.1	-49.3	16.7
<b>Other changes account, liabilities</b>								
Total other changes in liabilities		8.1	-1,332.5	-525.3	-513.5	-102.9	32.5	-590.0
Monetary gold and special drawing rights (SDRs)								
Currency and deposits			0.1	-175.2	-3.5	0.0	0.0	-55.0
Short-term debt securities			-0.6	-18.6	10.1	0.0	-0.5	-24.0
Long-term debt securities			-1.2	-31.2	-15.8	-0.8	50.8	-77.9
Loans		0.6	15.7		-22.3	0.0	0.0	-64.8
<i>of which long-term</i>		1.7	19.5		-14.7	0.3	0.0	.
Shares and other equity			-1,363.4	-208.4	-477.6	-58.4	-0.6	-332.5
Quoted shares			-772.7	-159.2	-33.6	-33.2	0.0	.
Unquoted shares and other equity			-590.7	-77.9	-21.2	-25.2	-0.6	.
Mutual fund shares				28.7	-422.8			.
Insurance technical reserves		0.0	0.6	0.4	0.0	-45.6	0.0	
Other accounts payable and financial derivatives		7.4	16.3	-92.4	-4.4	1.9	-17.2	-35.8
<i>Other changes in net financial worth<sup>1)</sup></i>	33.4	-559.1	620.3	125.6	18.7	-40.9	-131.1	-25.4
<b>Closing balance sheet, liabilities</b>								
Total liabilities		6,000.6	22,857.5	22,590.0	9,601.6	6,423.9	6,894.9	13,482.7
Monetary gold and special drawing rights (SDRs)								
Currency and deposits			25.0	14,049.2	87.1	4.4	237.7	2,745.5
Short-term debt securities			289.1	410.7	95.9	0.6	658.2	278.5
Long-term debt securities			450.4	2,727.0	1,643.2	25.9	4,442.8	2,526.6
Loans		5,385.1	7,326.7		1,621.6	178.7	1,186.3	2,884.8
<i>of which long-term</i>		5,071.5	5,037.0		782.7	66.3	1,022.9	.
Shares and other equity			11,939.9	3,029.8	5,987.6	611.3	3.0	4,589.3
Quoted shares			4,198.3	856.9	228.6	244.2	0.0	.
Unquoted shares and other equity			7,741.5	1,016.3	945.6	366.4	3.0	.
Mutual fund shares				1,156.6	4,813.4			.
Insurance technical reserves		33.1	337.4	54.6	0.6	5,324.5	0.5	
Other accounts payable and financial derivatives		582.4	2,489.0	2,318.8	165.5	278.5	366.4	458.0
<i>Net financial worth<sup>1)</sup></i>	-1,339.1	11,227.6	-8,547.9	167.7	110.7	-230.6	-4,066.6	

Source: ECB.

## 3.2 Euro area non-financial accounts

(EUR billions; four-quarter cumulated flows)

Uses	2004	2005	2006	2006 Q2- 2007 Q1	2006 Q3- 2007 Q2	2006 Q4- 2007 Q3	2007 Q1- 2007 Q4	2007 Q2- 2008 Q1
<b>Generation of income account</b>								
Gross value added (basic prices)								
Taxes less subsidies on products								
Gross domestic product (market prices)								
Compensation of employees	3,779.8	3,889.7	4,046.4	4,089.8	4,132.2	4,172.5	4,222.4	4,267.7
Other taxes less subsidies on production	121.4	129.5	128.8	131.2	133.4	134.1	135.5	135.2
Consumption of fixed capital	1,121.3	1,174.4	1,228.2	1,242.0	1,255.4	1,268.3	1,281.9	1,294.1
<i>Net operating surplus and mixed income</i> <sup>1)</sup>	1,996.7	2,068.8	2,172.1	2,207.1	2,243.1	2,284.5	2,311.2	2,332.1
<b>Allocation of primary income account</b>								
Net operating surplus and mixed income								
Compensation of employees								
Taxes less subsidies on production								
Property income	2,343.5	2,565.1	2,958.2	3,058.1	3,186.4	3,274.8	3,364.5	3,432.6
Interest	1,246.1	1,336.9	1,618.5	1,699.7	1,781.6	1,857.9	1,937.7	1,999.1
Other property income	1,097.4	1,228.1	1,339.7	1,358.4	1,404.9	1,416.9	1,426.8	1,433.5
<i>Net national income</i> <sup>1)</sup>	6,693.0	6,939.9	7,269.4	7,364.4	7,451.9	7,545.2	7,634.4	7,702.1
<b>Secondary distribution of income account</b>								
Net national income								
Current taxes on income, wealth, etc.	883.7	933.5	1,024.5	1,037.7	1,060.2	1,084.9	1,108.3	1,122.2
Social contributions	1,429.6	1,472.1	1,536.6	1,549.5	1,563.2	1,575.2	1,590.8	1,606.9
Social benefits other than social transfers in kind	1,455.9	1,499.3	1,548.4	1,556.6	1,565.4	1,575.3	1,591.4	1,602.7
Other current transfers	685.2	707.7	714.1	718.8	725.6	729.2	737.0	744.8
Net non-life insurance premiums	175.8	175.8	175.5	176.7	178.1	178.8	179.8	180.0
Non-life insurance claims	176.4	176.9	175.6	177.1	178.4	178.9	179.7	179.8
Other	333.0	355.0	363.0	365.0	369.1	371.5	377.5	385.0
<i>Net disposable income</i> <sup>1)</sup>	6,614.8	6,851.5	7,177.8	7,273.4	7,361.9	7,455.0	7,542.6	7,605.1
<b>Use of income account</b>								
Net disposable income								
Final consumption expenditure	6,091.0	6,329.2	6,588.9	6,645.6	6,700.6	6,759.8	6,825.9	6,893.2
Individual consumption expenditure	5,440.7	5,661.1	5,906.1	5,957.3	6,008.1	6,061.1	6,120.6	6,181.9
Collective consumption expenditure	650.3	668.2	682.8	688.3	692.5	698.7	705.3	711.3
Adjustment for the change in net equity of households in pension funds reserves	57.3	60.1	62.1	62.1	60.2	60.5	60.9	61.9
<i>Net saving</i> <sup>1)</sup>	524.0	522.5	589.3	628.2	661.6	695.5	717.0	712.1
<b>Capital account</b>								
Net saving								
Gross capital formation	1,611.4	1,707.9	1,849.7	1,891.9	1,923.1	1,952.9	1,986.0	2,006.8
Gross fixed capital formation	1,602.1	1,696.5	1,826.2	1,871.2	1,904.5	1,932.8	1,960.7	1,978.8
Changes in inventories and acquisitions less disposals of valuables	9.3	11.4	23.4	20.6	18.6	20.0	25.3	28.0
Consumption of fixed capital								
Acquisitions less disposals of non-produced non-financial assets	-1.2	-0.1	0.5	0.1	0.0	-0.2	-0.3	-0.2
Capital transfers	172.9	180.6	174.3	173.2	170.7	169.6	160.3	159.6
Capital taxes	29.9	24.4	22.3	22.9	23.4	24.1	24.0	23.7
Other capital transfers	143.0	156.2	152.0	150.2	147.3	145.5	136.3	136.0
<i>Net lending (+)/net borrowing (-) (from capital account)</i> <sup>1)</sup>	51.8	2.8	-17.4	-3.8	11.2	27.6	29.9	17.0

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	2004	2005	2006	2006 Q2- 2007 Q1	2006 Q3- 2007 Q2	2006 Q4- 2007 Q3	2007 Q1- 2007 Q4	2007 Q2- 2008 Q1
<b>Generation of income account</b>								
Gross value added (basic prices)	7,019.3	7,262.4	7,575.5	7,670.1	7,764.2	7,859.3	7,951.0	8,029.2
Taxes less subsidies on products	799.8	842.5	910.1	926.4	937.0	947.1	953.7	955.9
Gross domestic product (market prices) <sup>2)</sup>	7,819.1	8,104.9	8,485.6	8,596.5	8,701.2	8,806.4	8,904.7	8,985.1
Compensation of employees								
Other taxes less subsidies on production								
Consumption of fixed capital								
<i>Net operating surplus and mixed income</i>								
<b>Allocation of primary income account</b>								
Net operating surplus and mixed income	1,996.7	2,068.8	2,172.1	2,207.1	2,243.1	2,284.5	2,311.2	2,332.1
Compensation of employees	3,786.8	3,895.3	4,052.4	4,095.8	4,138.3	4,178.6	4,228.7	4,274.4
Taxes less subsidies on production	934.9	983.7	1,050.2	1,067.2	1,079.9	1,090.0	1,098.0	1,098.9
Property income	2,318.0	2,557.2	2,952.9	3,052.4	3,176.9	3,266.9	3,361.0	3,429.4
Interest	1,215.0	1,309.4	1,587.3	1,667.5	1,751.3	1,825.6	1,903.2	1,957.9
Other property income	1,102.9	1,247.8	1,365.6	1,384.9	1,425.6	1,441.3	1,457.9	1,471.5
<i>Net national income</i>								
<b>Secondary distribution of income account</b>								
Net national income	6,693.0	6,939.9	7,269.4	7,364.4	7,451.9	7,545.2	7,634.4	7,702.1
Current taxes on income, wealth, etc.	886.8	937.1	1,029.2	1,042.8	1,067.0	1,092.3	1,115.6	1,129.2
Social contributions	1,428.8	1,471.5	1,536.0	1,549.0	1,562.5	1,574.5	1,590.2	1,606.1
Social benefits other than social transfers in kind	1,448.4	1,491.7	1,540.5	1,548.4	1,557.0	1,566.6	1,582.7	1,593.7
Other current transfers	612.4	623.9	626.4	631.5	637.9	641.2	647.2	650.7
Net non-life insurance premiums	176.4	176.9	175.6	177.1	178.4	178.9	179.7	179.8
Non-life insurance claims	173.6	174.5	173.0	174.3	175.9	176.6	177.5	177.6
Other	262.3	272.5	277.7	280.1	283.6	285.7	290.1	293.3
<i>Net disposable income</i>								
<b>Use of income account</b>								
Net disposable income	6,614.8	6,851.5	7,177.8	7,273.4	7,361.9	7,455.0	7,542.6	7,605.1
Final consumption expenditure								
Individual consumption expenditure								
Collective consumption expenditure								
Adjustment for the change in net equity of households in pension funds reserves	57.5	60.4	62.4	62.4	60.5	60.7	61.2	62.1
<i>Net saving</i>								
<b>Capital account</b>								
Net saving	524.0	522.5	589.3	628.2	661.6	695.5	717.0	712.1
Gross capital formation								
Gross fixed capital formation								
Changes in inventories and acquisitions less disposals of valuables								
Consumption of fixed capital	1,121.3	1,174.4	1,228.2	1,242.0	1,255.4	1,268.3	1,281.9	1,294.1
Acquisitions less disposals of non-produced non-financial assets								
Capital transfers	189.5	194.3	189.6	191.0	187.9	185.9	177.1	176.9
Capital taxes	29.9	24.4	22.3	22.9	23.4	24.1	24.0	23.7
Other capital transfers	159.6	169.9	167.3	168.1	164.5	161.9	153.1	153.3
<i>Net lending (+)/net borrowing (-) (from capital account)</i>								

Sources: ECB and Eurostat.

2) Gross domestic product is equal to gross value added of all domestic sectors plus net taxes (taxes less subsidies) on products.

### 3.3 Households

(EUR billions; four-quarter cumulated flows; outstanding amounts at end-of-period)

	2004	2005	2006	2006 Q2- 2007 Q1	2006 Q3- 2007 Q2	2006 Q4- 2007 Q3	2007 Q1- 2007 Q4	2007 Q2- 2008 Q1
<b>Income, saving and changes in net worth</b>								
Compensation of employees (+)	3,786.8	3,895.3	4,052.4	4,095.8	4,138.3	4,178.6	4,228.7	4,274.4
Gross operating surplus and mixed income (+)	1,285.1	1,334.4	1,408.7	1,431.2	1,454.6	1,477.1	1,494.6	1,513.8
Interest receivable (+)	230.7	228.3	263.7	272.8	281.3	289.9	300.2	307.5
Interest payable (-)	125.3	129.8	162.3	172.1	182.4	190.6	199.2	204.0
Other property income receivable (+)	651.5	697.9	740.5	745.8	758.3	761.6	766.4	767.2
Other property income payable (-)	9.2	9.5	9.7	9.7	9.8	9.7	9.8	9.7
Current taxes on income and wealth (-)	706.5	739.2	791.8	800.1	813.9	830.7	850.4	863.1
Net social contributions (-)	1,425.9	1,468.1	1,532.5	1,545.3	1,559.0	1,570.9	1,586.6	1,602.6
Net social benefits (+)	1,443.5	1,486.5	1,535.0	1,542.9	1,551.4	1,560.9	1,577.0	1,588.1
Net current transfers receivable (+)	65.1	67.6	65.3	67.3	67.9	68.2	69.3	69.2
<b>= Gross disposable income</b>	5,195.7	5,363.3	5,569.2	5,628.6	5,686.8	5,734.4	5,790.1	5,840.7
Final consumption expenditure (-)	4,496.8	4,670.2	4,864.9	4,904.7	4,946.7	4,989.1	5,036.4	5,089.2
Changes in net worth in pension funds (+)	57.1	60.0	62.0	62.0	60.3	60.6	61.2	62.2
<b>= Gross saving</b>	756.0	753.1	766.3	785.9	800.4	805.9	814.9	813.8
Consumption of fixed capital (-)	304.1	319.5	336.5	340.6	344.5	347.5	350.6	353.9
Net capital transfers receivable (+)	18.5	24.4	26.2	25.4	22.7	19.9	14.3	12.7
Other changes in net worth <sup>1)</sup> (+)	301.6	542.9	508.7	420.1	643.6	259.2	-38.2	-776.6
<b>= Changes in net worth <sup>1)</sup></b>	771.9	1,000.9	964.7	890.8	1,122.2	737.4	440.4	-304.1
<b>Investment, financing and changes in net worth</b>								
Net acquisition of non-financial assets (+)	525.7	559.3	614.6	630.5	641.5	648.1	652.7	654.4
Consumption of fixed capital (-)	304.1	319.5	336.5	340.6	344.5	347.5	350.6	353.9
Main items of financial investment (+)								
Short-term assets	214.8	207.4	306.3	347.8	379.8	394.5	420.3	447.0
Currency and deposits	213.0	247.9	283.8	293.2	316.9	328.3	348.0	381.9
Money market fund shares	-6.4	-20.2	0.7	25.7	44.7	44.4	43.5	41.3
Debt securities <sup>2)</sup>	8.2	-20.3	21.8	28.9	18.2	21.9	28.8	23.7
Long-term assets	343.6	432.8	328.7	281.8	237.8	194.5	178.8	107.9
Deposits	29.8	-8.4	5.1	-10.9	-22.7	-31.5	-34.6	-31.6
Debt securities	64.0	7.8	71.6	54.9	41.9	14.2	32.7	49.9
Shares and other equity	-2.6	139.4	-39.0	-44.3	-63.2	-59.1	-75.0	-143.6
Quoted, unquoted shares and other equity	-10.5	67.3	-8.8	16.8	9.3	22.3	9.4	-26.9
Mutual fund shares	7.9	72.2	-30.2	-61.1	-72.5	-81.4	-84.4	-116.7
Life insurance and pension fund reserves	252.5	294.0	291.0	282.1	281.8	270.8	255.8	233.2
Main items of financing (-)								
Loans	309.1	393.1	391.2	384.8	366.0	361.9	343.8	303.8
<i>of which from euro area MFIs</i>	280.8	372.8	348.3	340.1	317.4	303.2	283.1	249.7
Other changes in financial assets (+)								
Shares and other equity	255.9	478.0	475.2	383.2	599.7	232.9	-56.9	-723.9
Life insurance and pension fund reserves	49.2	102.9	56.8	39.2	65.9	32.1	14.8	-32.4
Remaining net flows (+)	-4.2	-66.9	-89.3	-66.3	-92.0	-55.3	-74.9	-99.5
<b>= Changes in net worth <sup>1)</sup></b>	771.9	1,000.9	964.7	890.8	1,122.2	737.4	440.4	-304.1
<b>Financial balance sheet</b>								
Financial assets (+)								
Short-term assets	4,275.6	4,493.6	4,754.1	4,831.2	4,970.9	5,017.6	5,206.7	5,363.6
Currency and deposits	3,926.0	4,176.7	4,456.5	4,497.3	4,613.3	4,653.9	4,844.7	4,935.1
Money market fund shares	313.9	300.5	261.7	281.0	305.0	304.3	303.7	359.3
Debt securities <sup>2)</sup>	35.6	16.4	35.8	52.9	52.6	59.4	58.2	69.1
Long-term assets	9,775.0	10,800.9	11,690.6	11,903.1	12,016.4	11,842.3	11,771.6	11,148.2
Deposits	865.9	910.7	918.4	893.1	882.9	880.3	851.0	815.7
Debt securities	1,251.0	1,224.4	1,283.0	1,293.8	1,258.9	1,263.3	1,291.3	1,320.0
Shares and other equity	3,804.6	4,415.3	4,891.0	5,041.1	5,110.4	4,886.8	4,760.7	4,136.7
Quoted, unquoted shares and other equity	2,644.4	3,105.4	3,520.7	3,673.7	3,733.5	3,547.9	3,457.3	3,009.6
Mutual fund shares	1,160.3	1,309.9	1,370.3	1,367.4	1,377.0	1,338.9	1,303.3	1,127.1
Life insurance and pension fund reserves	3,853.5	4,250.4	4,598.1	4,675.0	4,764.2	4,811.9	4,868.7	4,875.8
Remaining net assets (+)	249.1	187.0	142.0	153.1	158.1	155.8	112.8	100.9
Liabilities (-)								
Loans	4,245.8	4,651.9	5,037.4	5,100.4	5,190.8	5,265.5	5,345.7	5,385.1
<i>of which from euro area MFIs</i>	3,812.5	4,210.4	4,559.5	4,629.0	4,708.9	4,769.8	4,827.8	4,861.6
<b>= Net financial wealth</b>	10,053.9	10,829.6	11,549.3	11,787.0	11,954.6	11,750.2	11,745.4	11,227.6

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) Securities issued by MFIs with a maturity of less than two years and by other sectors with a maturity of less than one year.

## 3.4 Non-financial corporations

(EUR billions; four-quarter cumulated flows; outstanding amounts at end-of-period)

	2004	2005	2006	2006 Q2- 2007 Q1	2006 Q3- 2007 Q2	2006 Q4- 2007 Q3	2007 Q1- 2007 Q4	2007 Q2- 2008 Q1
<b>Income and saving</b>								
Gross value added (basic prices) (+)	3,996.0	4,136.2	4,318.5	4,377.4	4,436.7	4,494.3	4,546.8	4,589.4
Compensation of employees (-)	2,386.2	2,456.3	2,558.6	2,587.0	2,617.9	2,646.2	2,678.6	2,710.1
Other taxes less subsidies on production (-)	64.5	72.4	74.8	77.3	79.5	80.4	80.7	80.8
<b>= Gross operating surplus (+)</b>	<b>1,545.3</b>	<b>1,607.6</b>	<b>1,685.1</b>	<b>1,713.0</b>	<b>1,739.3</b>	<b>1,767.7</b>	<b>1,787.5</b>	<b>1,798.4</b>
Consumption of fixed capital (-)	632.3	661.9	689.6	697.1	704.4	712.0	720.1	727.3
<b>= Net operating surplus (+)</b>	<b>913.0</b>	<b>945.7</b>	<b>995.5</b>	<b>1,015.9</b>	<b>1,034.9</b>	<b>1,055.7</b>	<b>1,067.4</b>	<b>1,071.1</b>
Property income receivable (+)	363.8	430.4	482.4	491.3	513.3	522.4	534.6	546.5
Interest receivable	122.7	134.2	158.4	164.4	170.7	176.2	181.2	185.1
Other property income receivable	241.1	296.2	324.0	326.9	342.6	346.2	353.4	361.4
Interest and rents payable (-)	227.6	235.4	281.1	295.5	309.3	320.7	333.0	342.2
<b>= Net entrepreneurial income (+)</b>	<b>1,049.2</b>	<b>1,140.7</b>	<b>1,196.8</b>	<b>1,211.7</b>	<b>1,238.9</b>	<b>1,257.4</b>	<b>1,269.0</b>	<b>1,275.5</b>
Distributed income (-)	753.2	843.5	913.8	918.4	938.8	943.4	945.2	952.6
Taxes on income and wealth payable (-)	136.1	148.8	183.5	187.4	194.1	201.5	205.3	206.3
Social contributions receivable (+)	73.6	72.6	77.3	77.0	73.8	72.1	71.3	70.5
Social benefits payable (-)	60.5	60.5	62.7	63.0	62.9	63.2	63.3	63.6
Other net transfers (-)	63.3	63.9	63.3	63.1	60.9	59.5	60.1	59.8
<b>= Net saving</b>	<b>109.7</b>	<b>96.6</b>	<b>50.8</b>	<b>56.8</b>	<b>55.9</b>	<b>61.9</b>	<b>66.4</b>	<b>63.7</b>
<b>Investment, financing and saving</b>								
Net acquisition of non-financial assets (+)	215.9	246.6	290.6	304.4	315.3	326.6	344.1	352.2
Gross fixed capital formation (+)	842.8	896.9	959.7	984.7	1,005.5	1,023.3	1,043.0	1,054.3
Consumption of fixed capital (-)	632.3	661.9	689.6	697.1	704.4	712.0	720.1	727.3
Net acquisition of other non-financial assets (+)	5.3	11.6	20.6	16.7	14.2	15.3	21.2	25.2
Main items of financial investment (+)								
Short-term assets	103.1	127.1	153.8	186.1	202.9	176.4	174.3	161.6
Currency and deposits	88.9	112.9	144.5	163.1	163.4	157.6	148.3	116.2
Money market fund shares	16.5	8.6	3.7	19.7	23.5	-9.2	-18.8	-10.8
Debt securities <sup>1)</sup>	-2.3	5.6	5.6	3.4	16.0	28.0	44.9	56.1
Long-term assets	210.6	382.9	383.1	388.7	417.8	450.0	442.5	424.0
Deposits	3.1	35.5	23.2	28.0	38.8	24.0	21.2	-5.7
Debt securities	-52.9	-32.1	-22.1	-29.2	-44.0	-46.1	-70.7	-85.7
Shares and other equity	179.7	239.0	201.5	195.1	210.4	242.7	290.0	347.3
Other, mainly intercompany loans	80.6	140.6	180.5	194.8	212.5	229.4	202.2	168.0
Remaining net assets (+)	75.7	89.4	207.3	176.2	162.8	207.6	205.2	185.4
Main items of financing (-)								
Debt	230.2	422.6	688.7	677.0	709.9	764.1	792.0	787.6
of which loans from euro area MFIs	172.4	278.0	449.8	444.8	484.2	522.4	559.5	591.3
of which debt securities	7.1	11.5	39.2	38.7	54.1	37.9	48.4	51.6
Shares and other equity	201.4	266.7	225.5	248.1	257.3	258.3	235.3	197.4
Quoted shares	11.7	100.6	39.6	58.9	77.0	82.7	45.0	23.7
Unquoted shares and other equity	189.7	166.1	185.9	189.2	180.3	175.6	190.3	173.7
Net capital transfers receivable (-)	64.1	60.1	69.9	73.4	73.4	74.0	73.3	75.4
<b>= Net saving</b>	<b>109.7</b>	<b>96.6</b>	<b>50.8</b>	<b>56.8</b>	<b>55.9</b>	<b>61.9</b>	<b>66.4</b>	<b>63.7</b>
<b>Financial balance sheet</b>								
Financial assets								
Short-term assets	1,376.1	1,508.2	1,651.1	1,689.5	1,741.6	1,756.8	1,823.8	1,839.5
Currency and deposits	1,102.6	1,220.7	1,356.8	1,364.7	1,405.0	1,429.0	1,499.7	1,478.9
Money market fund shares	163.7	176.3	185.9	204.2	205.2	185.8	162.3	183.7
Debt securities <sup>1)</sup>	109.8	111.3	108.4	120.7	131.4	142.0	161.8	177.0
Long-term assets	7,219.6	8,214.4	9,430.4	9,791.3	10,165.3	10,087.0	10,173.7	9,533.4
Deposits	141.0	191.1	216.5	268.1	277.5	268.2	267.7	257.0
Debt securities	330.7	282.9	260.2	237.6	228.4	197.1	180.9	168.0
Shares and other equity	5,209.7	6,061.2	7,078.4	7,325.4	7,641.7	7,557.5	7,612.0	6,981.2
Other, mainly intercompany loans	1,538.1	1,679.1	1,875.3	1,960.1	2,017.6	2,064.2	2,113.1	2,127.3
Remaining net assets	209.7	256.6	353.4	423.0	405.3	413.7	424.5	472.7
Liabilities								
Debt	6,340.0	6,809.0	7,472.3	7,634.4	7,890.6	8,047.1	8,239.0	8,403.7
of which loans from euro area MFIs	3,160.8	3,433.0	3,872.5	3,971.7	4,122.6	4,247.9	4,407.7	4,545.8
of which debt securities	650.5	669.3	690.2	695.8	731.9	719.5	729.2	739.5
Shares and other equity	9,249.0	10,586.4	12,273.8	12,728.8	13,359.1	13,191.7	13,261.9	11,939.9
Quoted shares	2,988.6	3,682.9	4,454.4	4,689.0	5,065.4	4,982.9	4,972.8	4,198.3
Unquoted shares and other equity	6,260.4	6,903.5	7,819.4	8,039.8	8,293.8	8,208.8	8,289.1	7,741.5

Sources: ECB and Eurostat.

1) Securities issued by MFIs with a maturity of less than two years and by other sectors with a maturity of less than one year.

### 3.5 Insurance corporations and pension funds

(EUR billions; four-quarter cumulated flows; outstanding amounts at end-of-period)

	2004	2005	2006	2006 Q2- 2007 Q1	2006 Q3- 2007 Q2	2006 Q4- 2007 Q3	2007 Q1- 2007 Q4	2007 Q2- 2008 Q1
<b>Financial account, financial transactions</b>								
<b>Main items of financial investment (+)</b>								
Short-term assets	39.8	26.1	51.5	69.8	56.6	49.6	41.8	61.4
Currency and deposits	13.2	7.2	12.4	18.0	2.4	8.9	7.8	32.5
Money market fund shares	2.7	0.4	3.7	7.1	3.6	0.3	0.0	9.8
Debt securities <sup>1)</sup>	23.8	18.5	35.4	44.7	50.6	40.4	34.1	19.1
Long-term assets	220.6	285.5	321.4	289.0	282.8	264.1	240.5	231.0
Deposits	37.5	17.4	66.0	71.7	68.5	67.1	53.5	30.9
Debt securities	131.6	131.0	121.4	141.4	154.8	156.8	137.4	113.1
Loans	6.3	-2.5	-1.0	-18.1	-16.6	-22.5	-16.9	17.5
Quoted shares	12.8	32.2	22.0	15.7	7.0	5.7	6.7	16.8
Unquoted shares and other equity	2.0	21.2	29.0	18.3	18.3	21.6	20.9	30.5
Mutual fund shares	30.5	86.2	83.9	60.0	50.7	35.2	38.8	22.3
Remaining net assets (+)	9.0	15.1	21.4	28.2	27.5	33.1	1.2	-29.1
<b>Main items of financing (-)</b>								
Debt securities	-1.7	-0.4	5.2	5.0	3.9	3.3	1.4	1.2
Loans	4.7	19.2	31.1	18.0	23.3	20.7	8.0	12.6
Shares and other equity	13.6	9.4	8.1	10.8	12.4	10.5	11.7	11.5
Insurance technical reserves	262.6	336.5	337.6	334.8	338.6	323.7	302.6	273.2
Net equity of households in life insurance and pension fund reserves	231.0	293.6	288.2	279.8	282.9	277.6	266.1	243.7
Prepayments of insurance premiums and reserves for outstanding claims	31.6	42.9	49.4	55.0	55.7	46.1	36.5	29.4
<b>= Changes in net financial worth due to transactions</b>	-9.8	-38.0	12.3	18.3	-11.3	-11.4	-40.3	-35.3
<b>Other changes account</b>								
<b>Other changes in financial assets (+)</b>								
Shares and other equity	110.0	179.7	164.4	119.1	238.0	129.6	14.0	-166.2
Other net assets	141.8	72.0	-40.0	-50.3	-71.0	-107.9	-51.7	-15.8
<b>Other changes in liabilities (-)</b>								
Shares and other equity	21.2	122.0	45.9	32.9	96.7	14.8	-22.5	-93.0
Insurance technical reserves	84.3	135.7	57.4	44.2	71.6	35.6	27.5	-24.5
Net equity of households in life insurance and pension fund reserves	64.4	144.1	58.2	42.8	69.3	35.1	13.4	-36.8
Prepayments of insurance premiums and reserves for outstanding claims	19.9	-8.4	-0.8	1.4	2.2	0.5	14.1	12.3
<b>= Other changes in net financial worth</b>	146.3	-6.1	21.1	-8.3	-1.3	-28.6	-42.7	-64.6
<b>Financial balance sheet</b>								
<b>Financial assets (+)</b>								
Short-term assets	401.8	432.6	485.1	508.5	514.6	519.1	523.0	569.1
Currency and deposits	133.6	142.7	154.6	155.9	144.4	154.0	163.2	190.9
Money market fund shares	72.2	74.3	80.4	82.8	84.3	81.0	78.2	87.2
Debt securities <sup>1)</sup>	195.9	215.6	250.1	269.9	285.9	284.1	281.6	291.0
Long-term assets	4,106.9	4,604.8	5,030.2	5,115.3	5,211.9	5,236.3	5,232.7	5,148.4
Deposits	499.6	520.3	586.8	612.1	626.4	638.4	636.2	639.0
Debt securities	1,622.0	1,778.7	1,846.3	1,881.6	1,889.4	1,929.5	1,939.7	1,966.9
Loans	363.6	366.5	360.8	344.9	346.6	342.9	337.8	357.3
Quoted shares	595.4	727.8	831.3	850.5	877.0	864.2	846.2	779.0
Unquoted shares and other equity	334.9	375.9	443.3	443.7	461.8	454.3	467.3	439.9
Mutual fund shares	691.4	835.7	961.8	982.4	1,010.9	1,007.0	1,005.4	966.5
Remaining net assets (+)	128.2	170.7	208.6	208.4	206.0	204.1	210.6	192.8
<b>Liabilities (-)</b>								
Debt securities	22.3	21.3	26.7	27.3	26.6	26.4	27.4	26.5
Loans	120.2	132.9	160.7	167.0	177.8	183.3	166.1	178.7
Shares and other equity	491.7	623.1	677.2	692.9	720.1	685.9	666.4	611.3
Insurance technical reserves	4,110.9	4,583.1	4,978.1	5,075.9	5,175.5	5,234.4	5,308.2	5,324.5
Net equity of households in life insurance and pension fund reserves	3,478.5	3,916.1	4,262.5	4,342.0	4,434.0	4,487.3	4,542.0	4,548.9
Prepayments of insurance premiums and reserves for outstanding claims	632.5	667.0	715.7	733.8	741.5	747.1	766.2	775.6
<b>= Net financial wealth</b>	-108.2	-152.3	-118.9	-130.8	-167.5	-170.6	-201.9	-230.6

Source: ECB.

1) Securities issued by MFIs with a maturity of less than two years and by other sectors with a maturity of less than one year.



## FINANCIAL MARKETS

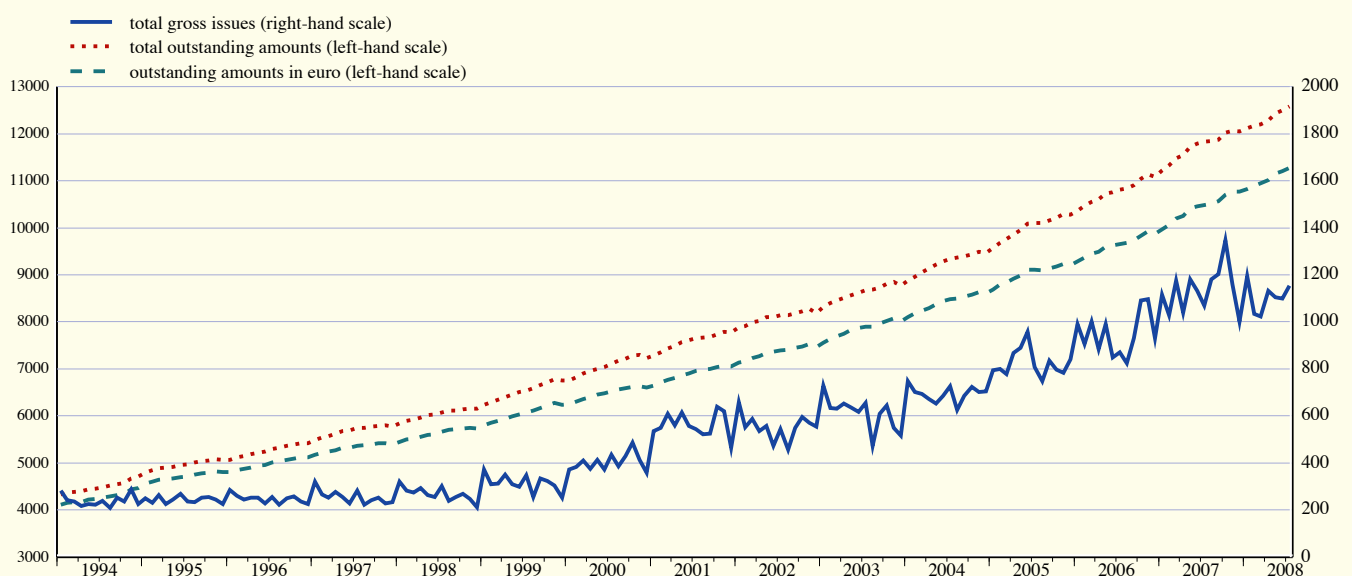
### 4.1 Securities, other than shares, by original maturity, residency of the issuer and currency

(EUR billions and period growth rates; seasonally adjusted; transactions during the month and end-of-period outstanding amounts; nominal values)

	Total in euro <sup>1)</sup>			By euro area residents								
	Outstanding amounts	Gross issues	Net issues	In euro			In all currencies					
				Outstanding amounts	Gross issues	Net issues	Outstanding amounts	Gross issues	Net issues	Annual growth rates	Seasonally adjusted <sup>2)</sup>	
1	2	3	4	5	6	7	8	9	10	Net issues 11	6-month growth rates 12	
<b>Total</b>												
2007 July	12,538.8	1,076.7	1.5	10,488.3	1,004.8	26.7	11,828.4	1,068.8	44.5	9.1	65.0	9.5
Aug.	12,566.8	1,184.1	28.2	10,514.1	1,131.9	26.1	11,848.6	1,181.8	26.1	9.1	76.6	9.0
Sep.	12,657.1	1,243.6	88.6	10,569.4	1,154.0	53.6	11,876.0	1,201.8	43.9	9.0	64.1	8.0
Oct.	12,767.0	1,350.4	108.7	10,700.2	1,278.9	129.8	12,022.6	1,348.0	147.3	9.1	115.4	9.0
Nov.	12,856.3	1,176.4	87.4	10,771.7	1,108.1	69.6	12,067.9	1,160.3	64.4	8.6	52.4	7.6
Dec.	12,882.0	1,039.6	28.7	10,768.5	958.1	-0.2	12,048.8	1,001.1	-17.6	9.0	97.9	8.2
2008 Jan.	12,916.1	1,199.6	38.0	10,823.2	1,130.0	58.8	12,117.2	1,195.5	68.2	8.5	27.8	7.5
Feb.	12,998.6	1,024.7	82.6	10,895.8	966.2	72.7	12,178.1	1,034.1	75.8	8.0	45.1	6.9
Mar.	13,104.3	1,070.6	105.7	10,942.8	966.4	46.9	12,195.2	1,021.7	44.5	7.0	20.0	6.1
Apr.	13,155.2	1,158.9	51.1	11,009.1	1,067.3	66.4	12,274.4	1,132.2	78.4	7.1	59.3	5.1
May	13,329.2	1,120.4	174.0	11,143.7	1,030.6	134.6	12,432.5	1,104.4	149.3	6.7	93.6	5.8
June	13,455.1	1,140.3	124.2	11,208.1	1,025.1	62.8	12,493.0	1,098.1	68.8	6.8	76.4	5.4
July	.	.	.	11,272.4	1,068.6	55.7	12,575.6	1,154.3	74.3	7.0	96.5	6.5
<b>Long-term</b>												
2007 July	11,395.5	199.1	24.7	9,483.5	162.9	9.7	10,636.7	189.0	23.8	8.8	47.1	8.3
Aug.	11,389.5	103.2	-6.6	9,476.5	87.3	-7.6	10,634.5	104.5	-2.7	8.5	48.8	7.5
Sep.	11,412.5	157.5	21.7	9,491.6	132.2	13.8	10,622.9	146.6	12.6	7.9	20.8	6.1
Oct.	11,489.8	236.9	78.4	9,555.9	200.7	65.6	10,685.7	225.1	72.6	7.7	69.9	6.6
Nov.	11,570.8	175.4	79.4	9,616.6	141.8	59.0	10,728.3	156.7	55.9	7.1	38.7	5.4
Dec.	11,627.3	197.9	57.1	9,664.2	164.0	48.2	10,762.8	175.2	36.9	7.3	72.8	5.7
2008 Jan.	11,626.5	194.4	2.6	9,657.4	166.1	-3.5	10,760.1	189.7	1.6	6.7	16.0	5.1
Feb.	11,673.6	181.7	47.0	9,706.6	162.4	49.2	10,802.3	186.5	51.3	6.1	28.9	4.7
Mar.	11,709.2	178.6	35.8	9,732.0	144.0	25.5	10,800.6	158.9	22.1	5.3	12.5	4.5
Apr.	11,796.4	258.2	87.4	9,795.6	207.0	63.7	10,874.1	224.8	69.0	5.5	64.7	4.4
May	11,945.6	286.1	149.4	9,905.0	230.4	109.7	10,991.4	251.9	116.3	5.1	62.7	4.9
June	12,049.6	270.2	104.2	9,982.0	216.8	77.3	11,069.3	240.6	86.7	5.2	59.9	4.6
July	.	.	.	10,020.2	174.9	30.5	11,117.2	192.9	35.9	5.3	60.8	5.4

### 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 <sup>1)</sup>					
	Total	MFIs (including Eurosystem)	Non-MFI corporations		General government		Total	MFIs (including Eurosystem)	Non-MFI corporations		General government	
			Financial corporations other than MFIs	Non-financial corporations	Central government	Other general government			Financial corporations other than MFIs	Non-financial corporations	Central government	Other general government
1	2	3	4	5	6	7	8	9	10	11	12	
<b>Total</b>												
2006	11,088	4,573	1,166	625	4,419	304	947	700	36	93	112	7
2007	12,049	5,054	1,475	674	4,531	315	1,136	841	46	121	121	7
2007 Q3	11,876	4,960	1,345	664	4,597	310	1,151	868	30	131	115	6
Q4	12,049	5,054	1,475	674	4,531	315	1,170	888	65	109	101	7
2008 Q1	12,195	5,095	1,493	678	4,616	313	1,084	786	24	105	159	9
Q2	12,493	5,231	1,588	692	4,666	317	1,112	785	47	119	153	7
2008 Apr.	12,274	5,126	1,519	681	4,636	313	1,132	782	43	121	181	6
May	12,432	5,227	1,544	695	4,650	317	1,104	800	39	120	135	9
June	12,493	5,231	1,588	692	4,666	317	1,098	772	60	117	143	7
July	12,576	5,288	1,606	693	4,671	318	1,154	812	31	113	189	9
<b>Short-term</b>												
2006	1,014	575	16	89	330	4	766	616	5	85	57	3
2007	1,286	787	19	117	357	6	946	754	5	113	69	3
2007 Q3	1,253	715	10	112	410	6	1,004	802	4	126	69	4
Q4	1,286	787	19	117	357	6	984	809	7	101	64	3
2008 Q1	1,395	817	32	128	411	6	905	700	7	102	93	4
Q2	1,424	833	36	129	418	8	872	665	4	109	89	5
2008 Apr.	1,400	817	32	128	417	7	907	680	3	113	107	4
May	1,441	856	32	130	414	8	852	667	4	103	74	6
June	1,424	833	36	129	418	8	858	650	7	109	88	4
July	1,458	845	43	131	432	7	961	719	11	109	119	3
<b>Long-term<sup>2)</sup></b>												
2006	10,074	3,998	1,150	536	4,089	301	181	84	30	8	54	5
2007	10,763	4,267	1,456	557	4,174	309	190	86	41	8	52	3
2007 Q3	10,623	4,245	1,335	552	4,188	304	147	66	27	5	46	3
Q4	10,763	4,267	1,456	557	4,174	309	186	79	58	9	37	4
2008 Q1	10,801	4,278	1,462	550	4,205	306	178	86	17	4	67	5
Q2	11,069	4,398	1,552	563	4,247	309	239	119	43	11	64	3
2008 Apr.	10,874	4,309	1,488	553	4,219	306	225	102	39	8	74	2
May	10,991	4,370	1,512	564	4,236	308	252	134	36	17	62	4
June	11,069	4,398	1,552	563	4,247	309	241	122	53	7	55	3
July	11,117	4,442	1,562	562	4,239	311	193	92	20	4	71	5
<b>Of which long-term fixed rate</b>												
2006	7,058	2,136	545	410	3,731	237	108	40	12	5	48	3
2007	7,323	2,274	589	422	3,788	250	107	44	10	5	45	3
2007 Q3	7,313	2,254	591	416	3,806	246	88	33	8	3	41	2
Q4	7,323	2,274	589	422	3,788	250	93	43	8	6	33	3
2008 Q1	7,301	2,271	583	413	3,789	246	110	43	4	3	56	3
Q2	7,465	2,355	599	427	3,836	248	143	65	10	9	56	2
2008 Apr.	7,345	2,290	588	416	3,805	245	143	58	10	7	67	1
May	7,418	2,321	591	427	3,832	247	143	63	8	15	54	3
June	7,465	2,355	599	427	3,836	248	145	76	13	6	48	2
July	7,480	2,385	597	426	3,822	249	124	52	2	3	64	3
<b>Of which long-term variable rate</b>												
2006	2,595	1,512	595	113	312	64	60	34	18	3	4	1
2007	2,984	1,615	848	125	338	58	69	31	30	3	4	0
2007 Q3	2,855	1,610	727	125	336	57	46	24	17	2	3	0
Q4	2,984	1,615	848	125	338	58	80	25	49	2	3	1
2008 Q1	3,027	1,627	857	126	357	60	53	32	11	1	7	2
Q2	3,148	1,674	928	126	359	60	83	46	31	1	4	1
2008 Apr.	3,057	1,642	878	126	350	60	70	37	28	1	3	1
May	3,109	1,671	897	127	355	60	95	62	26	1	5	1
June	3,148	1,674	928	126	359	60	84	39	39	2	5	0
July	3,170	1,680	939	127	363	61	51	26	17	2	4	2

Source: ECB.

1) Monthly averages of/monthly data for the transactions during this period.

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

**4.2 Securities, other than shares, issued by euro area residents, by sector of the issuer and instrument type**

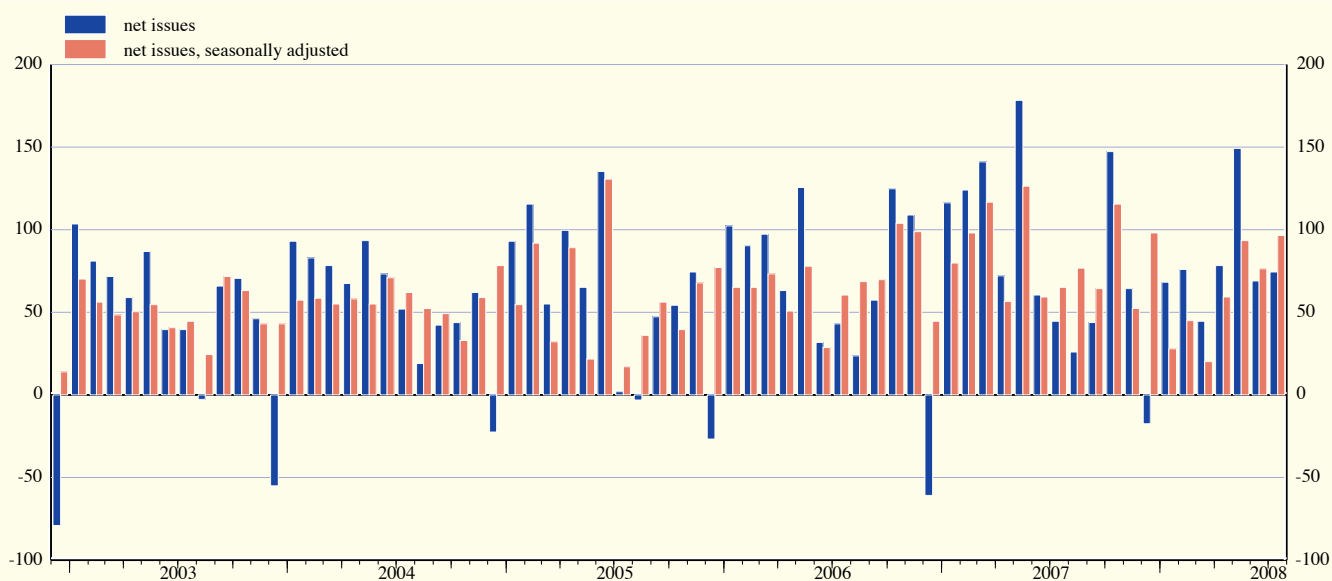
(EUR billions unless otherwise indicated; transactions during the period; nominal values)

**2. Net issues**

	Non-seasonally adjusted <sup>1)</sup>						Seasonally adjusted <sup>1)</sup>					
	Total	MFIs (including Eurosystem)	Non-MFI corporations		General government		Total	MFIs (including Eurosystem)	Non-MFI corporations		General government	
			Financial corporations other than MFIs	Non-financial corporations	Central government	Other general government			Financial corporations other than MFIs	Non-financial corporations	Central government	Other general government
1	2	3	4	5	6	7	8	9	10	11	12	
	Total											
2006	67.3	35.2	20.3	2.4	7.5	1.9	67.2	35.5	19.9	2.5	7.5	1.9
2007	83.4	40.4	27.5	4.6	10.0	0.9	84.0	41.0	27.0	4.7	10.4	0.9
2007 Q3	38.1	31.7	12.0	-2.6	-3.8	0.7	68.6	39.7	22.3	0.5	4.1	1.9
Q4	64.7	31.9	48.0	4.2	-21.0	1.6	88.6	42.5	31.8	6.2	7.1	0.9
2008 Q1	62.8	23.0	8.3	2.5	29.6	-0.6	31.0	3.8	17.8	1.4	8.7	-0.8
Q2	98.8	44.9	31.4	4.8	16.4	1.3	76.4	46.8	27.4	0.5	0.7	1.0
2008 Apr.	78.4	32.3	24.9	2.4	18.9	-0.2	59.3	18.3	27.1	-1.5	15.1	0.2
May	149.3	92.8	24.5	13.8	14.3	3.8	93.6	76.8	19.8	6.0	-12.8	3.9
June	68.8	9.6	44.9	-2.0	16.1	0.2	76.4	45.2	35.3	-2.8	-0.3	-0.9
July	74.3	48.9	17.4	1.4	4.9	1.7	96.5	47.4	18.9	1.2	26.3	2.7
	Long-term											
2006	63.0	28.9	19.7	2.2	10.1	1.9	62.9	29.1	19.4	2.2	10.2	1.9
2007	61.6	23.8	27.2	2.3	7.7	0.7	61.3	23.9	26.7	2.3	7.7	0.7
2007 Q3	11.2	4.7	12.6	-1.5	-4.7	0.1	38.9	11.6	22.8	0.0	3.3	1.2
Q4	55.2	9.5	45.0	2.7	-3.7	1.6	60.4	17.6	29.1	2.2	10.7	0.8
2008 Q1	25.0	11.5	4.1	-1.3	11.4	-0.7	19.1	2.4	13.5	1.1	2.9	-0.8
Q2	90.7	41.3	30.1	4.5	14.0	0.8	62.4	34.9	26.1	0.9	-0.2	0.7
2008 Apr.	69.0	28.6	25.1	2.8	13.0	-0.5	64.7	23.9	27.8	2.4	10.4	0.2
May	116.3	61.1	24.1	11.3	17.4	2.4	62.7	42.9	18.5	6.2	-7.6	2.6
June	86.7	34.0	41.2	-0.8	11.7	0.6	59.9	37.9	32.1	-5.9	-3.4	-0.7
July	35.9	32.5	9.8	-0.2	-8.2	2.1	60.8	33.0	10.8	-0.3	13.7	3.6

**C16 Net issues of securities, other than shares, seasonally adjusted and non-seasonally adjusted**

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



Source: ECB.

1) Monthly averages of/monthly data for the transactions during this period.

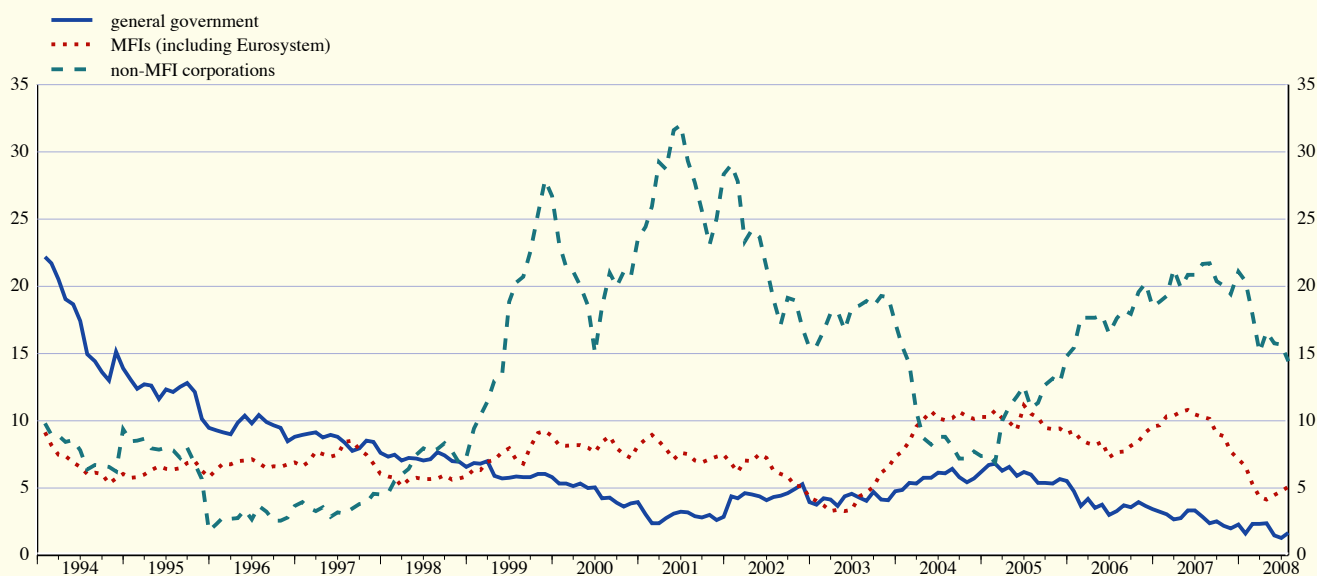
### 4.3 Growth rates of securities, other than shares, issued by euro area residents <sup>1)</sup>

(percentage changes)

	Annual growth rates (non-seasonally adjusted)						6-month seasonally adjusted growth rates					
	Total	MFIs (including Eurosystem)	Non-MFI corporations		General government		Total	MFIs (including Eurosystem)	Non-MFI corporations		General government	
			Financial corporations other than MFIs	Non-financial corporations	Central government	Other general government			Financial corporations other than MFIs	Non-financial corporations	Central government	Other general government
1	2	3	4	5	6	7	8	9	10	11	12	
	Total											
2007 July	9.1	10.8	28.4	10.0	3.3	2.5	9.5	10.0	30.0	15.4	3.6	1.3
Aug.	9.1	11.0	28.5	9.5	3.1	2.5	9.0	9.7	26.4	11.5	3.8	3.1
Sep.	9.0	10.9	27.0	8.0	3.2	4.2	8.0	9.7	18.6	8.5	3.5	3.2
Oct.	9.1	11.0	26.8	8.8	3.0	5.4	9.0	10.4	25.9	9.0	3.4	4.5
Nov.	8.6	10.4	25.6	8.9	2.7	4.2	7.6	9.3	22.8	9.0	1.6	5.2
Dec.	9.0	10.6	28.4	8.8	2.7	3.6	8.2	10.4	26.6	6.1	1.5	5.5
2008 Jan.	8.5	10.0	27.0	10.6	2.2	3.1	7.5	9.8	24.1	6.2	0.9	4.8
Feb.	8.0	8.7	24.4	9.9	2.9	2.8	6.9	7.5	22.3	8.2	2.1	2.4
Mar.	7.0	7.7	20.9	7.8	2.8	1.7	6.1	5.7	23.1	7.0	2.1	0.2
Apr.	7.1	7.2	23.1	6.6	2.9	1.1	5.1	4.1	20.3	4.1	2.4	-2.2
May	6.7	7.8	21.7	6.6	1.6	3.0	5.8	6.3	20.4	4.0	1.6	0.8
June	6.8	8.1	23.0	4.0	1.4	2.9	5.4	6.1	19.6	1.7	1.2	0.5
July	7.0	8.4	21.9	2.9	2.0	3.8	6.5	7.2	19.8	-0.3	3.0	2.8
	Long-term											
2007 July	8.8	10.3	29.2	7.0	2.9	2.7	8.3	9.1	31.3	7.6	2.1	1.2
Aug.	8.5	10.1	29.3	6.6	2.4	2.7	7.5	7.6	27.5	6.8	2.3	2.9
Sep.	7.9	9.0	27.8	5.6	2.4	3.5	6.1	5.8	19.6	4.8	2.9	1.7
Oct.	7.7	8.8	27.0	5.6	2.0	4.6	6.6	5.6	25.6	4.7	2.7	2.8
Nov.	7.1	7.7	25.8	6.0	1.9	3.1	5.4	4.6	22.0	5.7	1.4	3.2
Dec.	7.3	7.1	28.5	5.1	2.3	2.7	5.7	4.2	25.7	2.4	2.0	4.0
2008 Jan.	6.7	6.6	27.1	5.8	1.6	2.2	5.1	4.1	23.1	4.1	1.0	3.1
Feb.	6.1	5.3	23.3	5.7	2.3	1.9	4.7	2.9	19.3	4.6	2.3	0.9
Mar.	5.3	4.3	19.8	4.2	2.4	0.9	4.5	2.8	19.9	3.7	2.0	0.0
Apr.	5.5	4.1	22.0	4.3	2.5	0.4	4.4	2.7	18.4	3.9	2.3	-1.9
May	5.1	4.5	20.3	5.1	1.4	1.8	4.9	4.3	18.4	4.5	1.4	0.5
June	5.2	4.8	21.4	2.4	1.2	1.9	4.6	5.3	17.4	2.2	0.4	-0.1
July	5.3	5.1	19.6	2.1	1.5	3.0	5.4	6.1	16.3	0.3	2.1	2.9

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

(annual percentage changes)



Source: ECB.

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



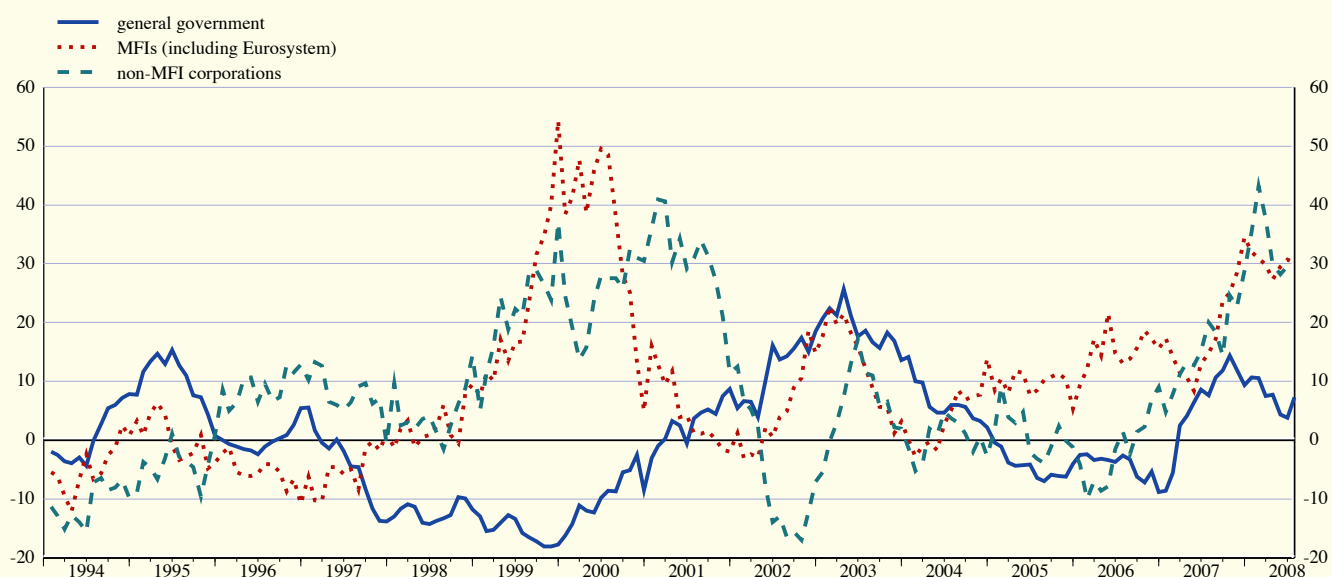
### 4.3 Growth rates of securities, other than shares, issued by euro area residents <sup>1)</sup> (cont'd)

(percentage changes)

	Long-term fixed rate						Long-term variable rate					
	Total	MFIs (including Eurosystem)	Non-MFI corporations		General government		Total	MFIs (including Eurosystem)	Non-MFI corporations		General government	
			Financial corporations other than MFIs	Non-financial corporations	Central government	Other general government			Financial corporations other than MFIs	Non-financial corporations	Central government	Other general government
13	14	15	16	17	18	19	20	21	22	23	24	
In all currencies combined												
2006	4.5	4.7	14.0	0.4	3.2	13.5	16.1	11.9	40.1	25.7	5.0	4.3
2007	5.1	7.1	17.4	3.5	2.4	6.6	15.7	11.1	37.8	18.5	3.8	-1.8
2007 Q3	5.3	8.0	17.1	4.3	2.3	5.0	16.2	11.1	39.8	19.8	4.4	-4.8
Q4	4.5	6.7	13.1	4.4	1.8	6.3	15.1	9.0	39.4	14.5	4.8	-6.5
2008 Q1	3.3	5.3	8.4	4.2	1.3	3.3	14.3	6.0	38.7	12.6	11.4	-3.2
Q2	2.6	4.2	5.0	3.8	1.3	1.4	12.2	4.9	33.4	8.2	7.6	0.4
2008 Feb.	3.1	4.8	6.7	4.4	1.5	2.4	13.8	5.3	37.4	12.9	12.2	-0.1
Mar.	2.5	3.5	5.6	2.8	1.5	1.4	12.2	4.8	30.9	12.3	12.3	-1.1
Apr.	2.7	3.7	5.0	3.6	1.7	0.8	12.4	4.6	35.9	9.4	7.2	-1.0
May	2.6	4.6	4.3	5.1	1.0	1.7	12.2	5.4	32.5	8.1	6.9	2.0
June	2.8	5.2	5.9	2.9	0.9	1.9	11.7	4.9	32.9	2.3	5.4	1.6
July	3.0	5.6	4.5	3.1	1.2	2.0	11.4	5.1	30.5	1.4	5.7	6.6
In euro												
2006	3.8	3.1	11.5	-0.4	3.2	13.7	14.9	10.1	36.6	28.0	5.2	3.5
2007	4.5	6.4	14.1	1.9	2.7	6.7	15.0	10.2	35.5	18.3	3.9	-2.4
2007 Q3	4.6	7.1	14.0	2.9	2.5	5.1	15.7	10.3	38.0	19.0	4.5	-5.7
Q4	4.0	6.2	10.9	3.0	2.1	6.6	14.9	8.7	37.9	13.3	4.9	-7.1
2008 Q1	2.9	4.9	7.1	2.9	1.5	3.5	14.9	5.8	39.1	11.7	11.7	-4.0
Q2	2.4	3.9	4.4	2.0	1.5	1.4	13.4	5.5	34.7	7.9	8.0	-1.2
2008 Feb.	2.8	4.5	5.8	3.2	1.7	2.5	14.5	5.2	38.1	12.0	12.5	-1.3
Mar.	2.3	3.1	4.5	1.0	1.7	1.4	12.8	4.4	32.0	11.8	12.9	-2.7
Apr.	2.4	3.4	4.0	1.8	1.9	0.8	13.5	4.9	37.6	8.8	7.6	-2.6
May	2.3	4.3	3.8	3.5	1.1	1.8	13.6	6.4	33.8	7.8	7.3	0.5
June	2.5	4.9	6.2	0.6	1.1	1.9	13.2	6.2	34.0	2.7	5.8	0.1
July	2.8	5.4	4.9	1.0	1.5	2.0	13.2	6.5	32.4	2.0	6.1	5.2

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

(annual percentage changes)



Source: ECB.

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

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

(EUR billions, unless otherwise indicated; market values)

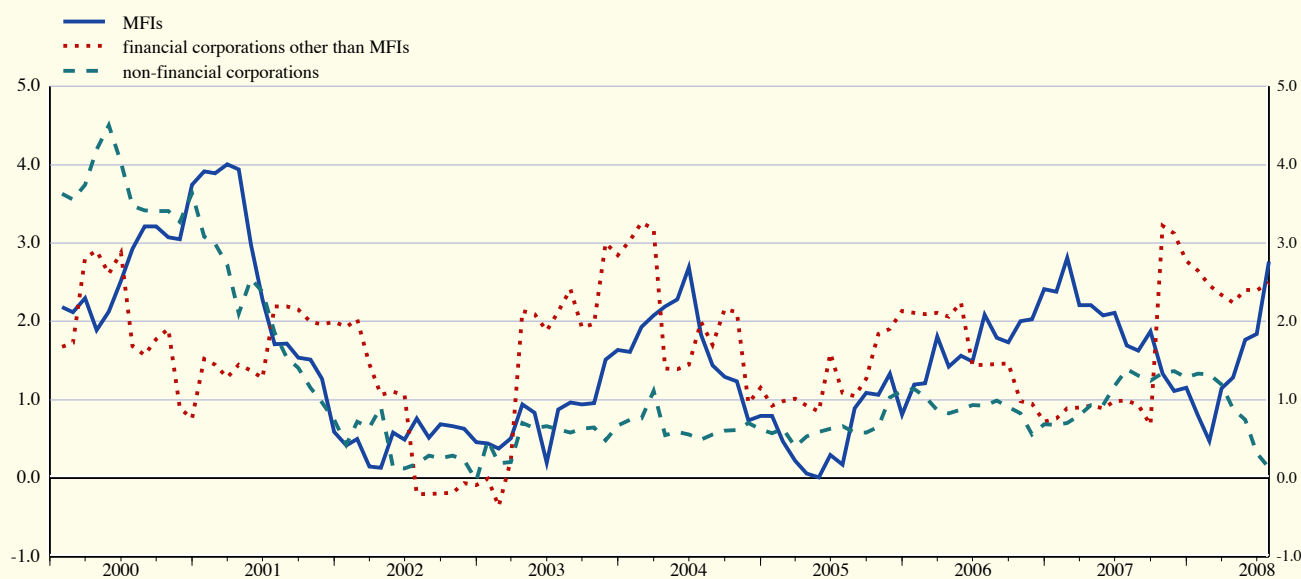
##### 1. Outstanding amounts and annual growth rates

(outstanding amounts as end-of-period)

	Total			MFIs		Financial corporations other than MFIs		Non-financial corporations	
	Total	Index Dec. 01 = 100	Annual growth rates (%)	Total	Annual growth rates (%)	Total	Annual growth rates (%)	Total	Annual growth rates (%)
	1	2	3	4	5	6	7	8	9
2006 July	5,405.1	103.5	1.2	923.0	2.1	553.7	1.4	3,928.3	0.9
Aug.	5,586.9	103.5	1.2	963.8	1.8	604.6	1.5	4,018.5	1.0
Sep.	5,728.5	103.6	1.1	991.8	1.7	616.7	1.5	4,120.0	0.9
Oct.	5,917.6	103.6	1.1	1,022.4	2.0	623.8	1.0	4,271.4	0.8
Nov.	5,972.2	103.7	0.9	1,031.8	2.0	613.6	0.9	4,326.8	0.6
Dec.	6,190.9	103.9	1.0	1,063.9	2.4	633.2	0.7	4,493.7	0.7
2007 Jan.	6,369.9	104.0	1.0	1,123.5	2.4	646.2	0.8	4,600.2	0.7
Feb.	6,283.9	104.1	1.1	1,092.8	2.8	637.8	0.9	4,553.3	0.7
Mar.	6,510.1	104.1	1.1	1,111.4	2.2	649.3	0.9	4,749.4	0.8
Apr.	6,760.5	104.3	1.2	1,168.6	2.2	675.5	0.9	4,916.3	0.9
May	7,040.4	104.4	1.1	1,174.5	2.1	688.8	0.9	5,177.0	0.9
June	6,961.9	104.7	1.3	1,128.6	2.1	677.1	1.0	5,156.1	1.2
July	6,731.4	104.9	1.4	1,099.8	1.7	608.8	1.0	5,022.7	1.4
Aug.	6,618.1	104.9	1.3	1,060.2	1.6	583.8	0.9	4,974.1	1.3
Sep.	6,682.2	104.9	1.3	1,048.8	1.9	597.2	0.7	5,036.1	1.2
Oct.	6,936.7	105.2	1.5	1,072.8	1.3	629.2	3.2	5,234.7	1.3
Nov.	6,622.4	105.3	1.5	1,032.7	1.1	579.2	3.1	5,010.5	1.4
Dec.	6,578.8	105.4	1.4	1,017.2	1.2	579.0	2.8	4,982.7	1.3
2008 Jan.	5,756.8	105.4	1.4	887.9	0.8	497.3	2.6	4,371.5	1.3
Feb.	5,811.0	105.5	1.3	858.2	0.5	492.4	2.5	4,460.5	1.3
Mar.	5,557.5	105.5	1.3	858.5	1.1	501.3	2.3	4,197.7	1.2
Apr.	5,738.4	105.5	1.1	835.2	1.3	519.4	2.2	4,383.7	0.9
May	5,712.3	105.5	1.0	768.9	1.8	497.1	2.4	4,446.3	0.7
June	5,069.5	105.5	0.7	663.2	1.8	435.8	2.4	3,970.6	0.3
July	4,962.2	105.7	0.7	689.5	2.8	428.2	2.5	3,844.5	0.1

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

(annual percentage changes)



Source: ECB.

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

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

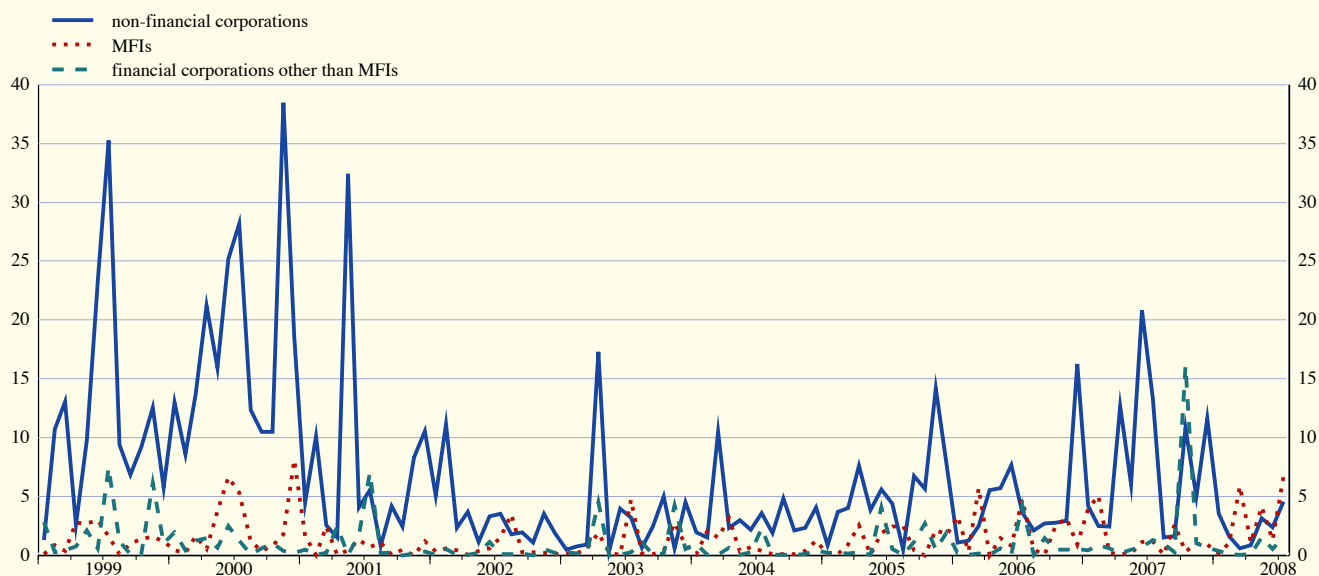
(EUR billions; market values)

### 2. Transactions during the month

	Total			MFIs			Financial corporations other than MFIs			Non-financial corporations		
	Gross issues	Redemptions	Net issues	Gross issues	Redemptions	Net issues	Gross issues	Redemptions	Net issues	Gross issues	Redemptions	Net issues
	1	2	3	4	5	6	7	8	9	10	11	12
2006 July	12.6	6.6	6.0	4.7	0.0	4.7	4.2	3.5	0.7	3.6	3.1	0.6
Aug.	2.6	1.8	0.8	0.5	0.0	0.5	0.0	0.1	-0.1	2.1	1.6	0.5
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.	5.7	1.2	4.5	2.5	0.0	2.5	0.5	0.0	0.5	2.7	1.2	1.5
Nov.	6.5	2.0	4.5	3.1	0.0	3.1	0.5	0.2	0.3	2.9	1.8	1.1
Dec.	17.7	5.1	12.6	0.9	0.3	0.6	0.5	0.0	0.5	16.3	4.7	11.6
2007 Jan.	8.5	3.9	4.6	4.0	0.1	3.8	0.4	0.0	0.4	4.1	3.8	0.3
Feb.	8.4	2.0	6.3	5.0	0.0	5.0	0.9	0.0	0.9	2.5	2.0	0.5
Mar.	3.2	1.7	1.5	0.2	0.0	0.2	0.6	0.4	0.2	2.4	1.4	1.0
Apr.	12.9	0.4	12.5	0.1	0.3	-0.2	0.2	0.0	0.1	12.7	0.2	12.5
May	6.6	1.9	4.7	0.1	0.0	0.1	0.5	0.0	0.5	6.0	1.9	4.2
June	22.6	1.6	21.0	1.1	0.0	1.1	0.7	0.0	0.7	20.8	1.6	19.3
July	15.8	1.8	13.9	1.2	0.0	1.2	1.3	0.3	1.0	13.3	1.5	11.8
Aug.	2.5	6.6	-4.2	0.0	0.1	-0.1	1.0	1.4	-0.5	1.5	5.1	-3.6
Sep.	4.5	2.5	2.0	2.6	0.0	2.6	0.3	0.3	-0.1	1.6	2.1	-0.5
Oct.	27.2	8.0	19.1	0.3	3.2	-2.9	16.1	0.5	15.5	10.8	4.3	6.5
Nov.	7.0	3.3	3.6	0.9	0.0	0.9	1.0	1.3	-0.3	5.0	2.0	3.0
Dec.	13.2	4.6	8.6	0.9	0.0	0.9	0.7	2.2	-1.5	11.6	2.5	9.2
2008 Jan.	4.0	1.4	2.7	0.1	0.0	0.1	0.4	0.7	-0.3	3.5	0.7	2.8
Feb.	2.7	1.9	0.9	1.0	0.0	1.0	0.1	0.3	-0.2	1.6	1.6	0.1
Mar.	6.5	5.8	0.6	5.9	0.0	5.9	0.0	0.5	-0.4	0.6	5.4	-4.8
Apr.	2.1	3.0	-0.9	1.1	0.0	1.1	0.1	0.5	-0.3	0.9	2.5	-1.7
May	8.7	5.9	2.8	4.1	0.1	4.1	1.5	0.3	1.2	3.1	5.6	-2.5
June	4.2	4.8	-0.6	1.3	0.0	1.3	0.5	0.1	0.4	2.4	4.7	-2.3
July	12.8	3.4	9.4	6.7	0.0	6.7	1.5	0.5	1.0	4.5	2.9	1.7

#### C20 Gross issues of quoted shares by sector of the issuer

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



Source: ECB.

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

## 4.5 MFI interest rates on euro-denominated deposits and loans by euro area residents <sup>1)</sup>

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

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

	Deposits from households						Deposits from non-financial corporations				Repos
	Overnight <sup>2)</sup>	With agreed maturity			Redeemable at notice <sup>2),3)</sup>		Overnight <sup>2)</sup>	With agreed maturity			
		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
2007 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	3.31	2.53	3.57	1.97	4.07	4.37	4.63	3.93
Nov.	1.18	4.08	4.22	3.20	2.54	3.64	2.01	4.10	4.41	4.04	3.98
Dec.	1.18	4.28	4.14	3.18	2.57	3.68	1.95	4.26	4.40	4.03	3.95
2008 Jan.	1.20	4.19	4.32	3.43	2.57	3.75	2.01	4.13	4.38	4.68	3.95
Feb.	1.21	4.10	4.18	3.22	2.65	3.77	2.01	4.07	4.18	4.36	3.93
Mar.	1.22	4.14	3.97	3.08	2.69	3.78	2.03	4.20	4.23	4.07	3.96
Apr.	1.22	4.28	4.16	3.14	2.72	3.81	2.05	4.27	4.56	4.62	4.00
May	1.23	4.32	4.27	3.17	2.73	3.84	2.07	4.26	4.68	4.48	4.03
June	1.24	4.43	4.62	3.28	2.74	3.88	2.06	4.28	4.72	4.01	4.11
July	1.26	4.61	4.84	3.35	2.80	3.94	2.13	4.46	5.08	4.57	4.26

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

	Bank overdrafts <sup>2)</sup>	Consumer credit				Lending for house purchase					Other lending by initial rate fixation		
		By initial rate fixation			Annual percentage rate of charge <sup>4)</sup>	By initial rate fixation				Annual percentage rate of charge <sup>4)</sup>	Floating rate and up to 1 year	Over 1 and up to 5 years	Over 5 years
		Floating rate and up to 1 year	Over 1 and up to 5 years	Over 5 years		Floating rate and up to 1 year	Over 1 and up to 5 years	Over 5 and up to 10 years	Over 10 years				
	1	2	3	4	5	6	7	8	9	10	11	12	13
2007 Aug.	10.55	8.44	6.85	8.31	8.49	5.15	4.98	5.08	4.90	5.24	5.36	5.93	5.47
Sep.	10.53	8.49	6.83	8.39	8.54	5.23	5.04	5.09	5.02	5.31	5.46	5.87	5.51
Oct.	10.64	8.10	6.88	8.40	8.38	5.29	5.07	5.08	5.11	5.38	5.63	6.05	5.59
Nov.	10.50	8.39	6.90	8.36	8.47	5.28	5.03	5.10	5.11	5.38	5.60	5.95	5.49
Dec.	10.46	8.05	6.93	8.17	8.26	5.32	5.03	5.07	5.18	5.40	5.67	5.83	5.43
2008 Jan.	10.46	8.12	7.00	8.47	8.48	5.32	5.02	5.07	5.14	5.37	5.59	5.93	5.49
Feb.	10.45	8.55	7.24	8.44	8.70	5.26	4.97	5.02	5.11	5.35	5.55	5.87	5.55
Mar.	10.52	8.43	7.05	8.42	8.56	5.20	4.89	4.96	5.11	5.28	5.65	5.79	5.46
Apr.	10.53	8.33	7.02	8.46	8.55	5.23	4.91	4.95	5.12	5.29	5.83	5.80	5.45
May	10.57	8.70	7.01	8.44	8.64	5.34	4.96	4.98	5.13	5.36	5.99	5.87	5.59
June	10.63	8.61	6.94	8.44	8.57	5.48	5.11	5.08	5.20	5.46	6.03	6.12	5.67
July	10.64	8.77	7.15	8.57	8.81	5.66	5.25	5.21	5.31	5.67	6.08	6.20	5.77

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

	Bank overdrafts <sup>2)</sup>	Other loans up to EUR 1 million by initial rate fixation			Other loans over EUR 1 million by initial rate fixation		
		Floating rate and up to 1 year	Over 1 and up to 5 years	Over 5 years	Floating rate and up to 1 year	Over 1 and up to 5 years	Over 5 years
		1	2	3	4	5	6
2007 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	5.96	6.00	5.26	5.11	5.19	5.31
Nov.	6.50	5.96	5.90	5.29	5.08	5.28	5.36
Dec.	6.62	6.08	5.96	5.30	5.35	5.62	5.48
2008 Jan.	6.62	5.93	5.92	5.27	5.12	5.35	5.23
Feb.	6.56	5.84	5.86	5.24	5.04	5.43	5.14
Mar.	6.56	5.91	5.77	5.23	5.19	5.44	5.34
Apr.	6.54	6.03	5.77	5.20	5.30	5.42	5.39
May	6.57	6.10	5.93	5.25	5.27	5.70	5.38
June	6.67	6.16	6.09	5.43	5.35	5.68	5.52
July	6.74	6.26	6.27	5.49	5.44	5.77	5.51

Source: ECB.

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

2) For this instrument category, new business and outstanding amounts coincide. End-of-period.

3) For this instrument category, households and non-financial corporations are merged and allocated to the household sector, since the outstanding amounts of non-financial corporations are negligible compared with those of the household sector in all participating Member States combined.

4) The annual percentage rate of charge covers the total cost of a loan. The total cost comprises an interest rate component and a component of other (related) charges, such as the cost of inquiries, administration, preparation of documents, guarantees, etc.

**4.5 MFI interest rates on euro-denominated deposits and loans by euro area residents (cont'd)**

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

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

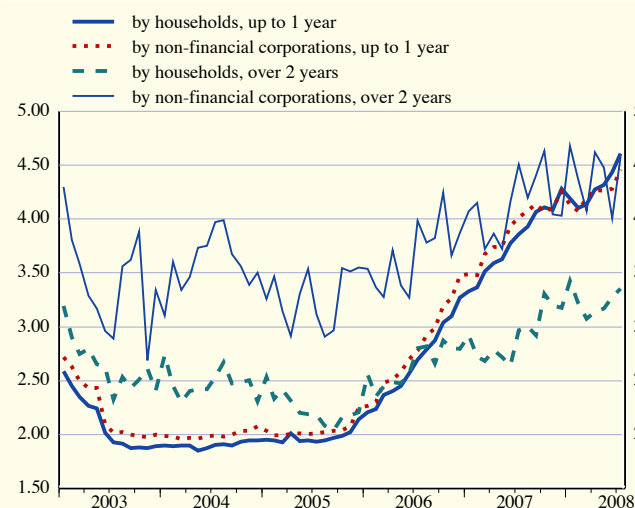
	Deposits from households					Deposits from non-financial corporations			Repos
	Overnight <sup>1)</sup>	With agreed maturity		Redeemable at notice <sup>1)2)</sup>		Overnight <sup>1)</sup>	With agreed maturity		
		Up to 2 years	Over 2 years	Up to 3 months	Over 3 months		Up to 2 years	Over 2 years	
	1	2	3	4	5	6	7	8	9
2007 Aug.	1.14	3.58	3.03	2.53	3.46	1.89	4.03	4.07	3.89
Sep.	1.16	3.68	3.06	2.58	3.50	1.91	4.13	4.09	3.93
Oct.	1.17	3.79	3.04	2.53	3.57	1.97	4.18	4.11	3.93
Nov.	1.18	3.85	3.06	2.54	3.64	2.01	4.21	4.18	3.97
Dec.	1.18	3.95	3.03	2.57	3.68	1.95	4.33	4.17	4.01
2008 Jan.	1.20	3.98	3.06	2.57	3.75	2.01	4.27	4.21	4.01
Feb.	1.21	3.99	3.11	2.65	3.77	2.01	4.23	4.24	3.97
Mar.	1.22	4.01	3.07	2.69	3.78	2.03	4.29	4.24	3.96
Apr.	1.22	4.07	3.07	2.72	3.81	2.05	4.37	4.29	3.91
May	1.23	4.13	3.06	2.73	3.84	2.07	4.43	4.26	4.04
June	1.24	4.20	3.08	2.74	3.88	2.06	4.47	4.31	4.12
July	1.26	4.31	3.06	2.80	3.94	2.13	4.58	4.36	4.24

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

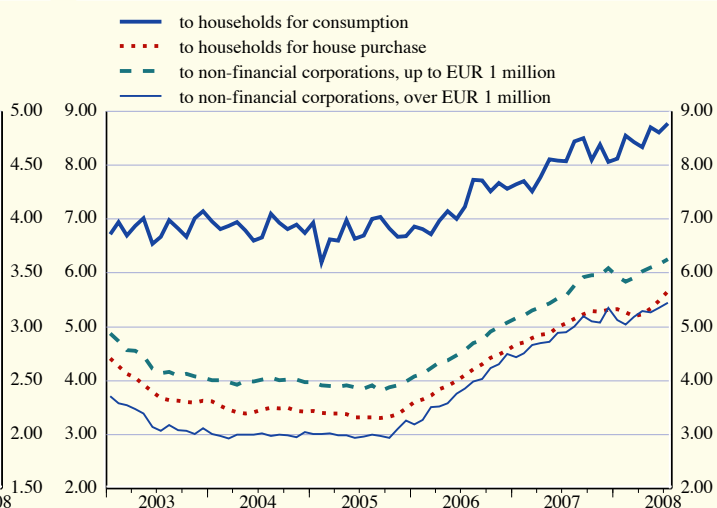
	Loans to households						Loans to non-financial corporations		
	Lending for house purchase, with maturity			Consumer credit and other loans, with maturity			With maturity		
	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Up to 1 year	Over 1 and up to 5 years	Over 5 years
	1	2	3	4	5	6	7	8	9
2007 Aug.	5.35	4.58	4.90	8.85	6.97	6.08	5.76	5.24	5.05
Sep.	5.44	4.64	4.94	8.99	7.00	6.13	5.91	5.35	5.14
Oct.	5.49	4.68	4.98	9.02	7.10	6.16	5.96	5.44	5.22
Nov.	5.48	4.72	4.99	8.86	7.12	6.21	5.96	5.49	5.22
Dec.	5.54	4.75	5.00	8.97	7.13	6.22	6.08	5.57	5.28
2008 Jan.	5.62	4.75	5.01	8.99	7.15	6.24	6.06	5.55	5.27
Feb.	5.60	4.82	5.03	9.05	7.21	6.26	5.99	5.52	5.30
Mar.	5.61	4.80	5.02	9.06	7.19	6.25	5.99	5.51	5.27
Apr.	5.59	4.85	5.03	9.07	7.22	6.28	6.04	5.54	5.29
May	5.62	4.85	5.05	9.08	7.22	6.27	6.09	5.59	5.32
June	5.66	4.89	5.07	9.11	7.29	6.35	6.18	5.68	5.39
July	5.77	4.93	5.11	9.22	7.31	6.40	6.26	5.77	5.44

**C21 New deposits with agreed maturity**

(percentages per annum excluding charges; period averages)

**C22 New loans at floating rate and up to 1 year initial rate fixation**

(percentages per annum excluding charges; period averages)



Source: ECB.

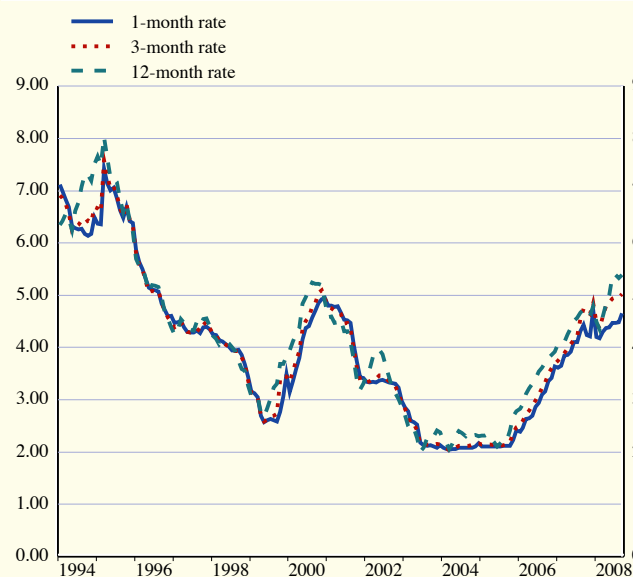
## 4.6 Money market interest rates

(percentages per annum; period averages)

	Euro area <sup>1,2)</sup>					United States	Japan
	Overnight deposits (EONIA)	1-month deposits (EURIBOR)	3-month deposits (EURIBOR)	6-month deposits (EURIBOR)	12-month deposits (EURIBOR)	3-month deposits (LIBOR)	3-month deposits (LIBOR)
	1	2	3	4	5	6	7
2005	2.09	2.14	2.18	2.23	2.33	3.56	0.06
2006	2.83	2.94	3.08	3.23	3.44	5.19	0.30
2007	3.87	4.08	4.28	4.35	4.45	5.30	0.79
2007 Q3	4.05	4.28	4.49	4.56	4.65	5.45	0.89
Q4	3.95	4.37	4.72	4.70	4.68	5.02	0.96
2008 Q1	4.05	4.23	4.48	4.48	4.48	3.26	0.92
Q2	4.00	4.41	4.86	4.93	5.05	2.75	0.92
Q3	4.25	4.54	4.98	5.18	5.37	2.91	0.90
2007 Sep.	4.03	4.43	4.74	4.75	4.72	5.49	0.99
Oct.	3.94	4.24	4.69	4.66	4.65	5.15	0.97
Nov.	4.02	4.22	4.64	4.63	4.61	4.96	0.91
Dec.	3.88	4.71	4.85	4.82	4.79	4.97	0.99
2008 Jan.	4.02	4.20	4.48	4.50	4.50	3.92	0.89
Feb.	4.03	4.18	4.36	4.36	4.35	3.09	0.90
Mar.	4.09	4.30	4.60	4.59	4.59	2.78	0.97
Apr.	3.99	4.37	4.78	4.80	4.82	2.79	0.92
May	4.01	4.39	4.86	4.90	4.99	2.69	0.92
June	4.01	4.47	4.94	5.09	5.36	2.77	0.92
July	4.19	4.47	4.96	5.15	5.39	2.79	0.92
Aug.	4.30	4.49	4.97	5.16	5.32	2.81	0.89
Sep.	4.27	4.66	5.02	5.22	5.38	3.12	0.91

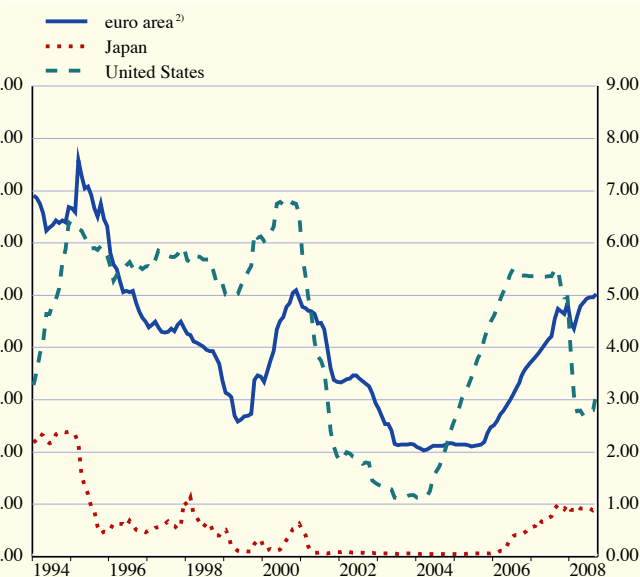
### C23 Euro area money market rates <sup>2)</sup>

(monthly; percentages per annum)



### C24 3-month money market rates

(monthly; percentages per annum)



Source: ECB.

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

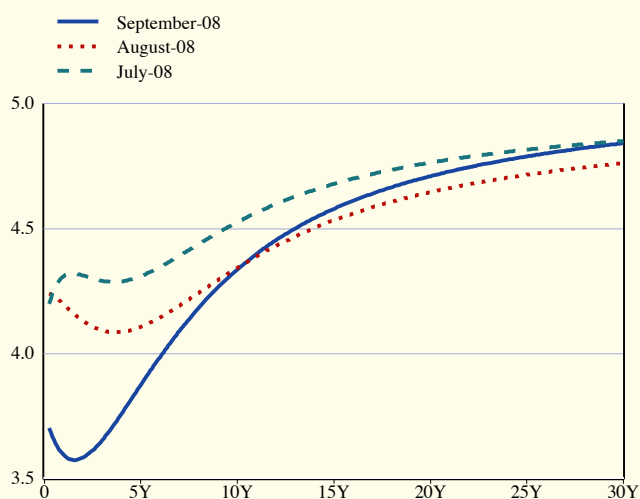
### 4.7 Euro area yield curves <sup>1)</sup>

(AAA-rated euro area central government bonds; end-of-period; rates in percentages per annum; spreads in percentage points)

	Spot rates								Instantaneous forward rates			
	3 months	1 year	2 years	5 years	7 years	10 years	10 years - 3 months (spread)	10 years - 2 years (spread)	1 year	2 years	5 years	10 years
	1	2	3	4	5	6	7	8	9	10	11	12
2006 Dec.	3.44	3.76	3.82	3.83	3.86	3.91	0.47	0.09	3.92	3.85	3.88	4.08
2007 Jan.	3.54	3.84	3.92	3.96	4.00	4.06	0.53	0.15	4.01	3.97	4.05	4.25
Feb.	3.63	3.79	3.80	3.81	3.85	3.92	0.29	0.12	3.85	3.77	3.90	4.13
Mar.	3.70	3.92	3.95	3.93	3.96	4.02	0.33	0.08	4.03	3.93	3.97	4.25
Apr.	3.81	4.01	4.06	4.06	4.08	4.13	0.32	0.07	4.14	4.08	4.08	4.33
May	3.86	4.21	4.31	4.32	4.33	4.37	0.51	0.06	4.44	4.37	4.33	4.51
June	3.90	4.26	4.38	4.43	4.46	4.51	0.61	0.13	4.51	4.48	4.49	4.68
July	3.98	4.23	4.28	4.28	4.30	4.36	0.38	0.08	4.36	4.28	4.32	4.53
Aug.	3.86	3.98	4.03	4.12	4.20	4.32	0.47	0.29	4.07	4.09	4.32	4.67
Sep.	3.80	3.96	4.03	4.15	4.25	4.38	0.57	0.35	4.08	4.13	4.39	4.75
Oct.	3.87	4.01	4.06	4.10	4.17	4.29	0.42	0.23	4.11	4.08	4.25	4.63
Nov.	3.86	3.84	3.82	3.91	4.03	4.21	0.35	0.39	3.81	3.80	4.19	4.76
Dec.	3.85	4.00	4.01	4.11	4.23	4.38	0.52	0.36	4.06	4.02	4.40	4.78
2008 Jan.	3.81	3.55	3.42	3.59	3.79	4.05	0.24	0.62	3.32	3.34	4.08	4.80
Feb.	3.83	3.42	3.20	3.43	3.72	4.06	0.23	0.86	3.04	3.03	4.16	4.99
Mar.	3.87	3.70	3.60	3.70	3.87	4.13	0.26	0.54	3.53	3.49	4.10	4.91
Apr.	3.90	3.89	3.86	3.95	4.10	4.32	0.42	0.46	3.86	3.81	4.29	4.95
May	3.88	4.20	4.28	4.27	4.35	4.52	0.64	0.24	4.41	4.29	4.40	5.03
June	4.21	4.49	4.62	4.63	4.65	4.73	0.52	0.11	4.73	4.72	4.64	5.00
July	4.20	4.31	4.31	4.31	4.39	4.53	0.33	0.21	4.36	4.27	4.46	4.93
Aug.	4.24	4.20	4.13	4.11	4.19	4.34	0.10	0.21	4.13	4.02	4.26	4.82
Sep.	3.71	3.60	3.59	3.88	4.09	4.34	0.63	0.75	3.52	3.67	4.45	5.00

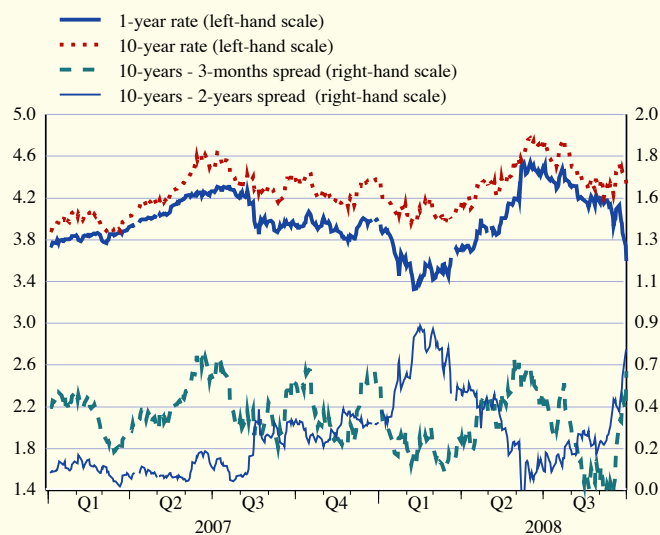
### C25 Euro area spot yield curves

(percentages per annum; end-of-period)



### C26 Euro area spot rates and spreads

(daily data; rates in percentages per annum; spreads in percentage points)



Source: ECB, underlying data provided by EuroMTS, ratings provided by Fitch Ratings.

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

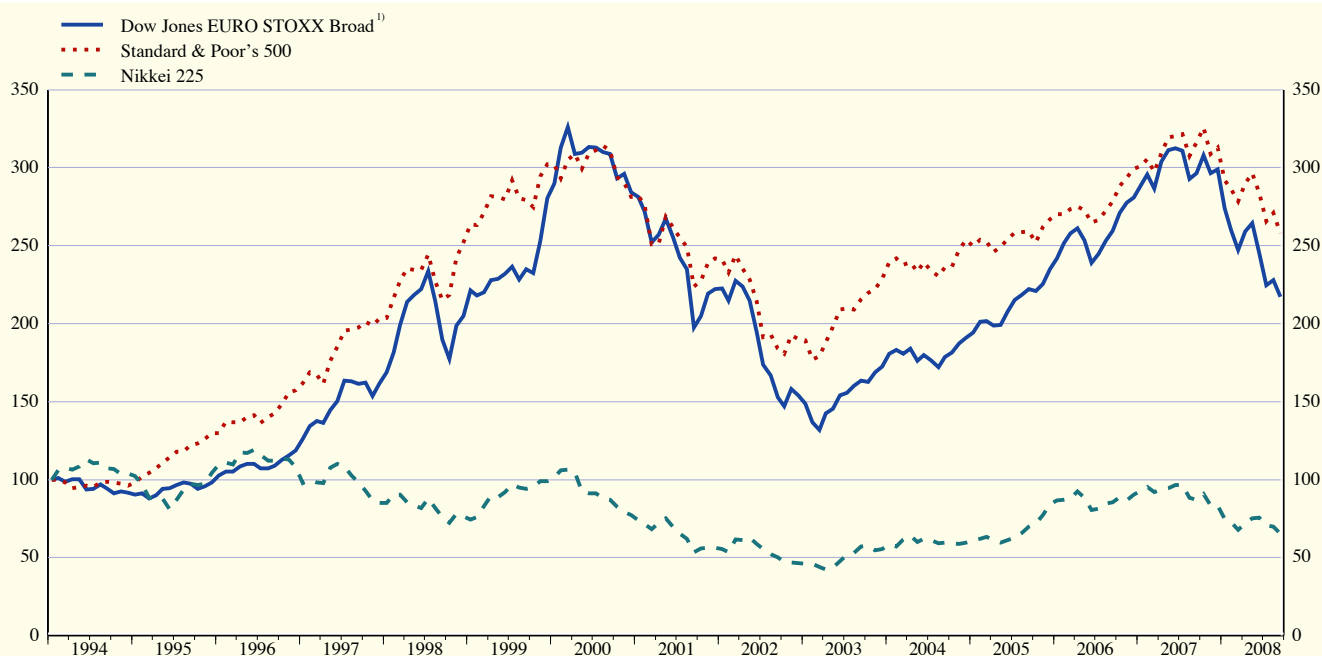
## 4.8 Stock market indices

(index levels in points; period averages)

	Dow Jones EURO STOXX indices <sup>1)</sup>												United States	Japan
	Benchmark		Main industry indices										Standard & Poor's 500	Nikkei 225
	Broad	50	Basic materials	Consumer services	Consumer goods	Oil & gas	Financials	Industrials	Technology	Utilities	Telecom.	Health care		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	
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
2007 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
2008 Q1	361.8	3,809.4	520.9	194.0	327.1	412.0	318.1	413.3	339.2	573.3	490.1	454.4	1,351.7	13,372.7
Q2	355.9	3,705.6	576.2	185.0	317.8	442.8	313.7	408.2	306.5	557.1	437.7	427.1	1,371.7	13,818.3
Q3	309.7	3,278.8	506.0	162.2	282.2	382.8	260.5	345.7	285.6	494.8	412.4	407.4	1,252.7	12,758.7
2007 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
2008 Jan.	380.2	4,042.1	529.7	202.3	338.7	431.4	339.7	426.3	351.2	602.9	528.4	492.9	1,380.3	13,953.4
Feb.	360.6	3,776.6	520.7	194.0	323.8	407.6	311.9	417.7	356.2	573.9	493.2	452.6	1,354.6	13,522.6
Mar.	342.9	3,587.3	511.4	184.7	317.6	395.2	300.8	394.7	308.9	540.2	444.9	414.1	1,317.5	12,586.6
Apr.	359.6	3,768.1	553.9	189.3	324.6	423.2	326.5	406.2	312.8	550.2	449.3	429.6	1,370.5	13,382.1
May	367.1	3,812.8	588.9	189.2	328.2	462.5	325.8	424.3	313.2	567.2	447.5	436.3	1,402.0	14,000.2
June	340.2	3,527.8	586.2	176.1	299.6	442.6	287.6	393.5	292.8	553.8	415.3	414.7	1,341.3	14,084.6
July	311.9	3,298.7	529.0	158.2	272.7	401.5	260.0	348.6	281.7	513.7	412.7	418.1	1,257.6	13,153.0
Aug.	316.1	3,346.0	513.7	167.1	287.0	388.1	266.0	356.6	304.4	504.4	411.2	403.0	1,281.5	12,989.4
Sep.	301.3	3,193.7	474.6	161.8	287.4	358.2	255.8	332.2	271.8	465.8	413.2	400.6	1,220.0	12,126.2

### C27 Dow Jones EURO STOXX Broad, Standard & Poor's 500 and Nikkei 225

(January 1994 = 100; monthly averages)



Source: ECB.

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



# PRICES, OUTPUT, DEMAND AND LABOUR MARKETS



## 5.1 HICP, other prices and costs

(annual percentage changes, unless otherwise indicated)

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

	Total					Total (s.a., percentage change on previous period)						Memo item: Administered prices <sup>2)</sup>		
	Index 2005 = 100	Total			Goods	Services	Total	Processed food	Unprocessed food	Non-energy industrial goods	Energy (n.s.a.)	Services	Total HICP excluding administered prices	Administered prices
		Total excl. unprocessed food and energy												
% of total <sup>3)</sup>	100.0	100.0	82.6	59.1	40.9	100.0	11.9	7.6	29.8	9.8	40.9	88.8	11.2	
	1	2	3	4	5	6	7	8	9	10	11	12	13	
2004	97.9	2.1	2.1	1.8	2.6	-	-	-	-	-	-	1.9	3.6	
2005	100.0	2.2	1.5	2.1	2.3	-	-	-	-	-	-	2.1	2.5	
2006	102.2	2.2	1.5	2.3	2.0	-	-	-	-	-	-	2.1	2.7	
2007	104.4	2.1	2.0	1.9	2.5	-	-	-	-	-	-	2.1	2.0	
2007 Q2	104.4	1.9	1.9	1.5	2.6	0.8	0.5	0.8	0.2	3.3	0.7	1.8	2.1	
Q3	104.4	1.9	2.0	1.5	2.5	0.5	1.1	0.9	0.2	0.7	0.5	1.9	1.8	
Q4	105.7	2.9	2.3	3.2	2.5	1.0	2.6	1.2	0.3	2.9	0.6	3.0	1.9	
2008 Q1	106.4	3.4	2.5	3.9	2.6	1.0	2.0	0.5	0.2	3.4	0.7	3.5	2.5	
Q2	108.1	3.6	2.5	4.5	2.4	1.1	1.1	1.1	0.2	6.0	0.6	3.8	2.7	
2008 Apr.	107.6	3.3	2.4	4.0	2.3	0.1	0.4	0.2	0.0	1.0	-0.1	3.4	2.6	
May	108.2	3.7	2.5	4.5	2.5	0.6	0.2	0.6	0.0	3.6	0.3	3.8	2.8	
June	108.6	4.0	2.5	5.0	2.5	0.5	0.3	0.4	0.1	2.6	0.2	4.1	2.9	
July	108.5	4.0	2.5	5.1	2.6	0.3	0.3	0.7	-0.2	1.3	0.2	4.2	3.2	
Aug.	108.3	3.8	2.6	4.6	2.7	-0.1	0.3	-0.4	0.3	-3.0	0.3	3.9	3.3	
Sep. <sup>4)</sup>	.	3.6	.	.	.	.	.	.	.	.	.	.	.	

	Goods						Services					
	Food (incl. alcoholic beverages and tobacco)			Industrial goods			Housing	Transport	Communication	Recreation and personal	Miscellaneous	
	Total	Processed food	Unprocessed food	Total	Non-energy industrial goods	Energy						
% of total <sup>3)</sup>	19.5	11.9	7.6	39.6	29.8	9.8	10.1	6.0	6.1	3.3	14.7	6.8
	14	15	16	17	18	19	20	21	22	23	24	25
2004	2.3	3.4	0.6	1.6	0.8	4.5	2.4	1.9	2.8	-2.0	2.4	5.1
2005	1.6	2.0	0.8	2.4	0.3	10.1	2.6	2.0	2.7	-2.2	2.3	3.1
2006	2.4	2.1	2.8	2.3	0.6	7.7	2.5	2.1	2.5	-3.3	2.3	2.3
2007	2.8	2.8	3.0	1.4	1.0	2.6	2.7	2.0	2.6	-1.9	2.9	3.2
2007 Q2	2.5	2.0	3.3	1.0	1.0	0.5	2.7	2.0	2.6	-1.9	2.9	3.6
Q3	2.5	2.5	2.4	0.9	1.0	0.7	2.7	2.0	2.4	-1.5	3.0	3.4
Q4	3.9	4.5	3.1	2.8	1.0	8.1	2.7	2.0	2.6	-2.1	3.0	3.2
2008 Q1	5.2	6.4	3.5	3.2	0.8	10.7	2.5	1.9	3.1	-2.5	3.2	3.2
Q2	5.7	6.9	3.7	3.9	0.8	13.6	2.3	1.9	3.6	-1.8	3.0	2.2
2008 Mar.	5.6	6.8	3.8	3.4	0.9	11.2	2.5	1.9	3.3	-1.5	3.7	3.1
Apr.	5.4	7.0	3.1	3.2	0.8	10.8	2.4	1.8	3.2	-1.6	2.7	2.1
May	5.8	6.9	3.9	3.9	0.7	13.7	2.3	1.9	3.8	-1.7	3.1	2.2
June	5.8	7.0	4.0	4.5	0.8	16.1	2.3	1.9	4.0	-1.9	3.2	2.2
July	6.1	7.2	4.4	4.6	0.5	17.1	2.3	1.9	4.1	-2.2	3.4	2.2
Aug.	5.6	6.8	3.7	4.2	0.7	14.6	2.2	1.9	4.8	-2.5	3.5	2.3

Sources: Eurostat and ECB calculations.

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

2) ECB estimates based on Eurostat data; these experimental statistics can only provide an approximate measure of price administration since changes in administered prices cannot be fully isolated from other influences. Please refer to <http://www.ecb.europa.eu/stats/prices/hicp/html/index.en.html> for a note explaining the methodology used in the compilation of this indicator.

3) Referring to the index period 2008.

4) Estimate based on provisional national releases usually covering around 95% of the euro area, as well as on early information on energy prices.

## 5.1 HICP, other prices and costs

(annual percentage changes, unless otherwise indicated)

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

	Industrial producer prices excluding construction										Construction <sup>1)</sup>	Residential property prices <sup>2)</sup>	World market prices of raw materials <sup>3)</sup>	Oil prices <sup>4)</sup> (EUR per barrel)		
	Total (index 2000 = 100)	Total	Industry excluding construction and energy							Energy					Total	Total excluding energy
			Manu- facturing	Total	Intermediate goods	Capital goods	Consumer goods									
							Total	Durable	Non-durable							
% of total <sup>5)</sup>	100.0	100.0	89.5	82.4	31.6	21.2	29.6	4.0	25.6	17.6	100.0	32.8				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
2004	105.8	2.3	2.6	2.0	3.5	0.7	1.3	0.7	1.4	4.0	4.1	7.1	18.4	10.8	30.5	
2005	110.1	4.1	3.2	1.9	2.9	1.4	1.1	1.3	1.1	13.6	2.8	7.6	28.5	9.4	44.6	
2006	115.8	5.1	3.4	2.8	4.8	1.4	1.6	1.6	1.7	13.3	4.1	6.4	19.7	24.8	52.9	
2007	119.1	2.8	3.1	3.2	4.8	1.8	2.3	1.9	2.4	1.7	4.0	4.3	3.9	9.2	52.8	
2007 Q3	119.3	2.1	2.7	3.0	4.3	1.6	2.4	1.8	2.5	-0.7	3.7	-	2.0	6.7	54.2	
Q4	121.2	4.0	4.5	3.2	3.7	1.5	3.6	1.9	3.9	7.0	3.3	3.9 <sup>6)</sup>	23.5	1.6	61.0	
2008 Q1	123.6	5.4	5.4	3.6	4.2	1.5	4.4	2.3	4.8	11.7	3.1	-	36.5	11.9	64.2	
Q2	127.0	7.1	6.3	3.8	4.5	1.8	4.4	2.3	4.8	18.1	3.8	-	44.0	7.1	78.5	
Q3	.	.	.	.	.	.	.	.	.	.	.	.	.	.	77.6	
2008 Apr.	125.5	6.2	5.5	3.7	4.3	1.7	4.5	2.4	4.9	14.4	-	-	32.7	5.8	69.8	
May	127.1	7.1	6.4	3.8	4.3	1.8	4.4	2.3	4.8	18.2	-	-	47.7	6.0	80.1	
June	128.3	8.1	6.9	4.0	4.9	2.0	4.5	2.3	4.8	21.6	-	-	51.2	9.6	85.9	
July	130.0	9.2	7.3	4.4	5.8	2.1	4.2	2.5	4.5	25.0	-	-	46.8	9.8	85.3	
Aug.	.	.	.	.	.	.	.	.	.	.	-	-	40.5	10.5	77.0	
Sep.	.	.	.	.	.	.	.	.	.	.	-	-	.	.	70.0	

### 3. Hourly labour costs<sup>7)</sup>

	Total (s.a. index 2000 = 100)	Total	By component		By selected economic activity			Memo: indicator of negotiated wages <sup>8)</sup>
			Wages and salaries	Employers' social contributions	Mining, manufacturing and energy	Construction	Services	
% of total <sup>5)</sup>	100.0	100.0	73.1	26.9	34.6	9.1	56.3	
	1	2	3	4	5	6	7	8
2004	113.7	2.6	2.4	3.2	2.9	2.7	2.3	2.1
2005	116.4	2.4	2.5	2.2	2.4	2.0	2.5	2.1
2006	119.2	2.5	2.6	2.1	3.4	1.6	2.0	2.3
2007	122.3	2.6	2.8	2.2	2.6	3.1	2.6	2.2
2007 Q2	121.9	2.6	2.7	2.3	2.9	2.9	2.4	2.3
Q3	122.7	2.5	2.6	2.3	2.1	3.5	2.6	2.2
Q4	123.7	2.9	3.2	2.0	2.9	3.8	2.7	2.1
2008 Q1	124.7	3.5	3.7	2.7	4.3	4.1	2.9	2.9
Q2	125.4	2.7	2.8	2.2	3.0	3.8	2.3	2.8

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.

2) Experimental data based on non-harmonised national sources (see the ECB website for further details).

3) Refers to the prices expressed in euro.

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

5) In 2000.

6) The quarterly data for the second (fourth) quarter refer to semi-annual averages of the first (second) half of the year, respectively. Since some national data are only available at annual frequency, the semi-annual estimate is partially derived from annual results; therefore, the accuracy of semi-annual data is lower than the accuracy of annual data.

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

8) Experimental data (see the ECB website for further details).

**5.1 HICP, other prices and costs**

(annual percentage changes, unless otherwise indicated)

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

(seasonally adjusted)

	Total (index 2000 = 100)	Total	By economic activity					Public administration, education, health and other services
			Agriculture, hunting, forestry and fishing	Mining, manufacturing and energy	Construction	Trade, repairs, hotels and restaurants, transport and communication	Financial, real estate, renting and business services	
	1	2	3	4	5	6	7	8
Unit labour costs <sup>1)</sup>								
2004	107.6	0.8	-12.2	-1.2	3.2	0.1	2.3	2.1
2005	108.9	1.2	8.9	-0.9	3.5	0.9	2.1	2.0
2006	110.1	1.1	2.4	-0.4	3.0	0.4	2.6	2.3
2007	111.8	1.6	0.2	-0.3	3.3	1.3	3.0	1.9
2007 Q2	111.6	1.4	0.7	0.2	4.0	0.8	3.2	0.9
Q3	111.9	1.5	0.5	-0.9	4.4	1.8	2.8	1.8
Q4	113.0	2.5	0.5	0.3	3.7	2.5	3.6	2.6
2008 Q1	113.7	2.6	2.5	1.3	1.9	2.3	4.1	2.7
Q2	115.4	3.4	.	.	.	.	.	.
Compensation per employee								
2004	110.0	2.1	1.3	2.9	2.9	1.5	1.7	2.4
2005	112.2	2.0	2.3	1.9	2.3	1.9	2.5	1.8
2006	114.8	2.3	3.3	3.6	3.5	1.6	2.3	1.7
2007	117.6	2.5	2.8	2.8	2.9	2.1	2.2	2.5
2007 Q2	117.3	2.3	3.6	3.1	2.3	2.1	2.1	1.8
Q3	117.7	2.3	2.7	2.3	2.7	2.2	2.0	2.3
Q4	119.0	2.9	2.5	3.1	3.2	2.1	2.7	3.2
2008 Q1	120.2	3.1	4.6	3.5	4.5	2.4	3.1	2.9
Q2	121.5	3.6	.	.	.	.	.	.
Labour productivity <sup>2)</sup>								
2004	102.3	1.4	15.4	4.1	-0.3	1.4	-0.6	0.2
2005	103.0	0.7	-6.0	2.8	-1.2	0.9	0.4	-0.2
2006	104.3	1.2	0.8	4.1	0.5	1.2	-0.2	-0.6
2007	105.2	0.9	2.6	3.1	-0.5	0.8	-0.8	0.6
2007 Q2	105.1	0.9	2.9	2.9	-1.6	1.3	-1.1	0.9
Q3	105.2	0.7	2.2	3.2	-1.6	0.4	-0.8	0.5
Q4	105.3	0.4	2.0	2.8	-0.5	-0.4	-0.9	0.5
2008 Q1	105.7	0.5	2.0	2.2	2.6	0.1	-1.0	0.2
Q2	105.3	0.2	.	.	.	.	.	.

**5. Gross domestic product deflators**

	Total (s.a. index 2000 = 100)	Total	Domestic demand			Exports <sup>3)</sup>	Imports <sup>3)</sup>	
			Total	Private consumption	Government consumption			Gross fixed capital formation
	1	2	3	4	5	6	7	8
2004	109.4	1.9	2.1	2.0	2.0	2.5	1.0	1.5
2005	111.6	2.0	2.3	2.1	2.4	2.6	2.4	3.4
2006	113.7	1.9	2.3	2.2	2.0	2.8	2.7	3.9
2007	116.2	2.2	2.2	2.1	1.6	2.7	1.4	1.2
2007 Q2	116.0	2.2	1.9	1.9	0.9	2.9	1.6	0.7
Q3	116.6	2.3	2.2	2.0	1.5	2.5	1.2	1.0
Q4	117.0	2.3	2.8	2.8	2.3	2.6	1.4	2.7
2008 Q1	117.8	2.2	2.8	3.1	1.8	2.3	2.2	3.8
Q2	118.7	2.3	2.9	3.3	1.4	2.3	2.9	4.3

Sources: ECB calculations based on Eurostat data.

- 1) Compensation (at current prices) per employee divided by value added (volumes) per person employed.
- 2) Value added (volumes) per person employed.
- 3) Deflators for exports and imports refer to goods and services and include cross-border trade within the euro area.

## 5.2 Output and demand

### 1. GDP and expenditure components

	GDP								
	Total	Domestic demand					External balance <sup>1)</sup>		
		Total	Private consumption	Government consumption	Gross fixed capital formation	Changes in inventories <sup>2)</sup>	Total	Exports <sup>1)</sup>	Imports <sup>1)</sup>
	1	2	3	4	5	6	7	8	9
<i>Current prices (EUR billions, seasonally adjusted)</i>									
2004	7,806.4	7,655.3	4,470.9	1,594.8	1,580.7	8.9	151.1	2,861.7	2,710.6
2005	8,103.5	7,986.4	4,644.8	1,657.8	1,675.6	8.2	117.0	3,082.0	2,965.0
2006	8,503.0	8,404.1	4,840.7	1,723.8	1,824.4	15.2	98.9	3,422.5	3,323.7
2007	8,923.5	8,791.2	5,021.9	1,792.4	1,954.0	22.9	132.3	3,682.4	3,550.1
2007 Q2	2,220.6	2,183.7	1,249.0	445.6	484.3	4.8	36.8	913.4	876.6
Q3	2,244.0	2,212.4	1,262.8	449.9	490.5	9.3	31.6	932.3	900.8
Q4	2,261.1	2,230.8	1,276.6	454.2	498.7	1.3	30.3	939.4	909.1
2008 Q1	2,291.7	2,264.2	1,286.7	456.8	509.7	11.0	27.5	965.8	938.3
Q2	2,304.3	2,276.2	1,295.7	459.1	507.0	14.4	28.1	973.7	945.6
<i>percentage of GDP</i>									
2007	100.0	98.5	56.3	20.1	21.9	0.3	1.5	-	-
<i>Chain-linked volumes (prices of the previous year, seasonally adjusted<sup>3)</sup>)</i>									
<i>quarter-on-quarter percentage changes</i>									
2007 Q2	0.5	0.3	0.7	0.2	0.1	-	-	1.3	0.8
Q3	0.6	0.7	0.4	0.5	0.9	-	-	1.8	2.2
Q4	0.4	0.0	0.2	0.3	1.1	-	-	0.4	-0.4
2008 Q1	0.7	0.7	0.0	0.3	1.5	-	-	1.8	1.9
Q2	-0.2	-0.2	-0.2	0.5	-1.2	-	-	-0.4	-0.4
<i>annual percentage changes</i>									
2004	2.1	2.0	1.6	1.6	2.3	-	-	7.3	7.1
2005	1.7	1.9	1.7	1.6	3.2	-	-	4.9	5.6
2006	2.8	2.7	1.9	1.9	5.6	-	-	8.0	7.8
2007	2.6	2.4	1.6	2.4	4.3	-	-	6.1	5.5
2007 Q2	2.6	2.3	1.8	2.4	3.5	-	-	6.1	5.4
Q3	2.6	2.2	1.8	2.5	3.7	-	-	7.3	6.5
Q4	2.1	2.1	1.2	2.1	3.2	-	-	4.1	4.0
2008 Q1	2.1	1.7	1.2	1.3	3.7	-	-	5.4	4.7
Q2	1.4	1.3	0.4	1.7	2.4	-	-	3.6	3.4
<i>contributions to quarter-on-quarter percentage changes of GDP in percentage points</i>									
2007 Q2	0.5	0.3	0.4	0.0	0.0	-0.2	0.2	-	-
Q3	0.6	0.7	0.2	0.1	0.2	0.2	-0.2	-	-
Q4	0.4	0.0	0.1	0.1	0.2	-0.4	0.3	-	-
2008 Q1	0.7	0.7	0.0	0.1	0.3	0.3	0.0	-	-
Q2	-0.2	-0.2	-0.1	0.1	-0.3	0.0	0.0	-	-
<i>contributions to annual percentage changes of GDP in percentage points</i>									
2004	2.1	1.9	0.9	0.3	0.5	0.2	0.2	-	-
2005	1.7	1.8	1.0	0.3	0.6	-0.1	-0.1	-	-
2006	2.8	2.7	1.1	0.4	1.2	0.0	0.2	-	-
2007	2.6	2.4	0.9	0.5	0.9	0.1	0.3	-	-
2007 Q2	2.6	2.2	1.0	0.5	0.8	0.0	0.3	-	-
Q3	2.6	2.2	1.0	0.5	0.8	-0.1	0.4	-	-
Q4	2.1	2.0	0.7	0.4	0.7	0.2	0.1	-	-
2008 Q1	2.1	1.7	0.7	0.3	0.8	0.0	0.3	-	-
Q2	1.4	1.3	0.2	0.3	0.5	0.2	0.1	-	-

Sources: Eurostat and ECB calculations.

1) Exports and imports cover goods and services and include cross-border intra-euro area trade. They are not fully consistent with Tables 7.1.2 and 7.3.1.

2) Including acquisitions less disposals of valuables.

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

## 5.2 Output and demand

## 2. Value added by economic activity

	Gross value added (basic prices)							Taxes less subsidies on products
	Total	Agriculture, hunting, forestry and fishing activities	Mining, manufacturing and energy	Construction	Trade, repairs, hotels and restaurants, transport and communication	Financial, real estate, renting and business activities	Public administration, education, health and other services	
	1	2	3	4	5	6	7	8
<i>Current prices (EUR billions, seasonally adjusted)</i>								
2004	7,008.7	153.6	1,437.7	413.1	1,488.4	1,912.8	1,603.1	797.7
2005	7,262.6	141.5	1,478.4	439.1	1,528.1	2,010.1	1,665.4	840.8
2006	7,594.0	139.3	1,548.3	477.1	1,585.6	2,123.0	1,720.6	909.0
2007	7,966.6	150.2	1,625.5	516.9	1,652.7	2,234.3	1,787.0	956.9
2007 Q2	1,982.0	36.9	404.7	128.1	411.8	555.5	445.0	238.6
Q3	2,004.3	38.2	409.7	129.6	416.3	562.3	448.2	239.7
Q4	2,023.1	38.8	411.8	132.4	418.3	568.2	453.6	238.0
2008 Q1	2,049.6	39.8	418.5	136.6	423.2	575.6	455.8	242.1
Q2	2,065.7	40.3	418.0	135.4	424.2	583.4	464.4	238.6
<i>percentage of value added</i>								
2007	100.0	1.9	20.4	6.5	20.7	28.0	22.4	-
<i>Chain-linked volumes (prices of the previous year, seasonally adjusted<sup>1)</sup>)</i>								
<i>quarter-on-quarter percentage changes</i>								
2007 Q2	0.6	-0.8	0.8	-0.7	1.0	0.8	0.5	-1.0
Q3	0.6	-1.1	0.9	-0.1	0.5	0.7	0.4	0.7
Q4	0.5	1.0	0.5	1.0	0.2	0.6	0.4	-0.5
2008 Q1	0.6	1.2	0.4	2.5	0.7	0.5	0.2	1.3
Q2	-0.1	-0.1	-0.8	-2.2	-0.4	0.7	0.6	-1.4
<i>annual percentage changes</i>								
2004	2.3	12.1	2.7	1.0	2.6	1.7	1.5	1.0
2005	1.7	-6.9	1.7	1.5	1.7	2.8	1.3	1.7
2006	2.8	-1.1	3.6	3.2	2.9	3.6	1.2	3.1
2007	2.8	1.4	3.4	3.3	2.7	3.3	1.8	1.2
2007 Q2	2.8	1.2	3.3	2.8	2.9	3.2	1.9	0.9
Q3	2.7	0.8	3.5	2.1	2.7	3.2	1.8	1.8
Q4	2.4	0.6	3.1	1.6	1.8	3.1	1.9	-0.3
2008 Q1	2.3	0.3	2.6	2.7	2.4	2.6	1.4	0.5
Q2	1.6	1.0	1.0	1.2	1.0	2.5	1.5	0.1
<i>contributions to quarter-on-quarter percentage changes of value added in percentage points</i>								
2007 Q2	0.6	0.0	0.2	0.0	0.2	0.2	0.1	-
Q3	0.6	0.0	0.2	0.0	0.1	0.2	0.1	-
Q4	0.5	0.0	0.1	0.1	0.0	0.2	0.1	-
2008 Q1	0.6	0.0	0.1	0.2	0.1	0.1	0.0	-
Q2	-0.1	0.0	-0.2	-0.1	-0.1	0.2	0.1	-
<i>contributions to annual percentage changes of value added in percentage points</i>								
2004	2.3	0.3	0.6	0.1	0.6	0.5	0.4	-
2005	1.7	-0.2	0.3	0.1	0.4	0.8	0.3	-
2006	2.8	0.0	0.7	0.2	0.6	1.0	0.3	-
2007	2.8	0.0	0.7	0.2	0.6	0.9	0.4	-
2007 Q2	2.8	0.0	0.7	0.2	0.6	0.9	0.4	-
Q3	2.7	0.0	0.7	0.1	0.6	0.9	0.4	-
Q4	2.4	0.0	0.6	0.1	0.4	0.9	0.4	-
2008 Q1	2.3	0.0	0.5	0.2	0.5	0.7	0.3	-
Q2	1.6	0.0	0.2	0.1	0.2	0.7	0.3	-

Sources: Eurostat and ECB calculations.

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

## 5.2 Output and demand

(annual percentage changes, unless otherwise indicated)

### 3. Industrial production

	Total		Industry excluding construction									Construction
	Total (s.a. index 2000 = 100)	Total	Industry excluding construction and energy							Energy		
			Manu- facturing	Total	Intermediate goods	Capital goods	Consumer goods					
							Total	Durable	Non-durable			
% of total <sup>1)</sup>	100.0	82.8	82.8	74.8	73.7	29.9	22.2	21.6	3.6	18.0	9.0	17.2
	1	2	3	4	5	6	7	8	9	10	11	12
2005	1.4	104.0	1.4	1.5	1.2	0.9	3.0	0.5	-0.7	0.7	1.4	0.7
2006	4.0	108.2	4.0	4.4	4.4	4.9	5.9	2.5	4.4	2.2	0.8	3.9
2007	3.4	111.8	3.4	3.9	3.7	3.8	5.9	2.3	1.2	2.5	-0.6	3.3
2007 Q3	3.7	113.0	3.9	4.2	4.0	3.5	6.6	3.0	2.1	3.2	1.1	1.7
Q4	2.5	112.8	2.9	2.6	2.0	1.8	5.2	0.6	-2.7	1.2	5.5	-0.5
2008 Q1	2.4	113.0	2.5	1.9	1.8	1.5	5.2	0.3	-1.9	0.7	4.4	1.4
Q2	0.5	112.2	0.9	1.1	0.7	0.2	3.8	-1.4	-2.9	-1.2	1.6	-2.3
2008 Feb.	3.3	113.3	3.1	2.9	3.4	1.9	6.5	0.9	-1.1	1.2	4.4	4.4
Mar.	0.9	112.6	1.4	-0.2	-0.8	0.6	2.9	-1.4	-3.8	-1.0	6.1	-2.6
Apr.	3.1	113.7	4.0	4.4	4.4	2.6	7.6	0.7	1.1	0.6	6.3	-2.1
May	-0.6	111.5	-0.4	-0.5	-1.1	-0.7	2.6	-3.5	-5.3	-3.2	-0.7	-1.7
June	-1.0	111.4	-0.7	-0.6	-1.0	-1.2	1.5	-1.5	-4.3	-1.0	-0.9	-3.0
July	-2.1	110.9	-1.8	-1.9	-2.0	-2.3	-1.1	-2.2	-5.5	-1.6	-0.2	-3.4
<i>month-on-month percentage changes (s.a.)</i>												
2008 Feb.	0.3	-	0.2	0.0	0.3	0.2	0.4	-0.4	-0.1	-0.4	1.6	1.0
Mar.	-1.1	-	-0.6	-0.7	-1.9	-0.6	-1.8	-0.8	-1.9	-0.6	2.9	-2.8
Apr.	0.7	-	0.9	0.4	2.0	0.3	2.1	0.5	2.0	0.2	-1.1	-0.7
May	-1.6	-	-1.9	-1.5	-2.4	-1.5	-2.1	-1.7	-3.4	-1.5	-2.3	0.0
June	-0.3	-	-0.2	-0.2	-0.1	-0.3	-0.4	0.7	0.6	0.7	0.6	-0.9
July	-0.3	-	-0.4	-0.5	-0.5	-0.4	-0.8	-0.4	-0.9	-0.4	0.3	0.1

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

	Industrial new orders		Industrial turnover		Retail sales							New passenger car registrations	
	Manufacturing <sup>2)</sup> (current prices)		Manufacturing (current prices)		Current prices	Constant prices						Total (s.a., thousands) <sup>3)</sup>	Total
	Total (s.a. index 2000 = 100)	Total	Total (s.a. index 2000 = 100)	Total	Total	Total (s.a. index 2000 = 100)	Total	Food, beverages, tobacco	Non-food				
									Textiles, clothing, footwear	Household equipment			
% of total <sup>1)</sup>	100.0	100.0	100.0	100.0	100.0	100.0	43.7	56.3	10.6	14.8	12	13	
	1	2	3	4	5	6	7	8	9	10	11	12	13
2005	109.1	3.9	110.8	3.6	2.3	106.8	1.4	0.8	1.8	2.5	1.4	939	0.9
2006	119.3	9.3	118.9	7.3	2.9	108.5	1.6	0.3	2.5	2.7	4.4	968	3.0
2007	128.9	8.3	126.1	6.3	2.4	109.6	0.9	-0.3	1.8	3.3	2.4	964	-0.4
2007 Q3	129.5	6.4	127.5	6.3	2.6	110.1	1.3	-0.8	2.8	5.6	3.0	970	2.3
Q4	131.3	8.2	127.0	5.2	2.2	109.1	-0.3	-0.8	0.2	0.3	-0.9	977	0.3
2008 Q1	130.6	3.7	131.2	4.3	3.1	108.9	-0.2	-1.5	0.7	0.1	-1.4	945	-0.6
Q2	128.6	-0.3	132.1	6.2	1.9	108.0	-1.5	-2.3	-0.9	-2.3	-2.2	905	-5.0
2008 Mar.	129.9	-4.0	129.8	-3.3	1.0	108.0	-2.9	-3.3	-2.7	-6.8	-4.2	913	-4.8
Apr.	131.9	12.5	132.6	14.3	1.1	107.9	-1.7	-2.1	-1.1	-8.7	-1.2	937	2.2
May	127.2	-4.7	131.0	0.9	3.9	108.5	0.3	-0.8	0.8	5.4	-0.8	892	-9.9
June	126.6	-7.2	132.7	3.9	0.9	107.6	-3.2	-4.1	-2.5	-3.1	-4.7	887	-6.6
July	127.9	1.8	131.1	5.7	1.4	107.4	-2.3	-3.2	-1.6	0.1	-3.2	890	-8.7
Aug.	.	.	.	.	.	.	.	.	.	.	.	907	-8.6
<i>month-on-month percentage changes (s.a.)</i>													
2008 Mar.	-	-0.8	-	-1.4	-0.9	-	-1.1	-0.5	-1.5	-6.3	-2.1	-	-6.0
Apr.	-	1.5	-	2.2	0.4	-	-0.2	-0.4	0.1	-0.6	0.9	-	2.5
May	-	-3.5	-	-1.2	0.8	-	0.6	0.0	1.0	6.2	0.2	-	-4.8
June	-	-0.5	-	1.3	-0.6	-	-0.9	-0.7	-0.9	-2.7	-1.7	-	-0.5
July	-	1.0	-	-1.2	0.2	-	-0.1	-0.8	0.3	2.3	1.0	-	0.3
Aug.	-	.	-	.	.	-	.	.	.	.	.	-	1.9

Sources: Eurostat, except columns 12 and 13 in Table 4 in Section 5.2 (ECB calculations based on data from the ACEA, European Automobile Manufacturers' Association).

1) In 2000.

2) Includes manufacturing industries working mainly on the basis of orders, representing 62.6% of total manufacturing in 2000.

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

## 5.2 Output and demand

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

## 5. Business and Consumer Surveys

	Economic sentiment indicator <sup>2)</sup> (long-term average = 100)	Manufacturing industry					Consumer confidence indicator				
		Industrial confidence indicator				Capacity utilisation <sup>3)</sup> (percentages)	Total <sup>4)</sup>	Financial situation over next 12 months	Economic situation over next 12 months	Unemployment situation over next 12 months	Savings over next 12 months
		Total <sup>4)</sup>	Order books	Stocks of finished products	Production expectations						
	1	2	3	4	5	6	7	8	9	10	11
2004	98.7	-5	-15	8	10	81.4	-14	-4	-14	30	-9
2005	97.4	-7	-17	11	6	81.2	-14	-4	-15	28	-9
2006	106.3	2	0	6	13	83.2	-9	-3	-9	15	-9
2007	108.4	4	5	5	13	84.2	-5	-2	-4	5	-8
2007 Q3	108.7	4	5	6	13	84.0	-4	-2	-3	3	-7
Q4	104.3	2	1	7	11	84.0	-8	-4	-10	7	-10
2008 Q1	100.5	0	-1	7	10	83.9	-12	-7	-17	11	-12
Q2	96.5	-3	-6	9	7	83.3	-15	-10	-22	13	-14
Q3	88.6	-10	-15	12	-2	.	-19	-12	-28	23	-15
2008 Apr.	97.1	-2	-5	9	8	83.8	-12	-8	-19	11	-12
May	97.6	-2	-5	8	7	-	-15	-10	-21	13	-15
June	94.8	-5	-9	10	5	-	-17	-12	-25	14	-16
July	89.5	-8	-13	11	1	82.7	-20	-13	-30	20	-16
Aug.	88.5	-9	-13	12	-3	-	-19	-12	-28	23	-14
Sep.	87.7	-12	-20	13	-4	-	-19	-11	-26	24	-15
	Construction confidence indicator			Retail trade confidence indicator				Services confidence indicator			
	Total <sup>4)</sup>	Order books	Employment expectations	Total <sup>4)</sup>	Present business situation	Volume of stocks	Expected business situation	Total <sup>4)</sup>	Business climate	Demand in recent months	Demand in the months ahead
	12	13	14	15	16	17	18	19	20	21	22
2004	-12	-19	-4	-8	-12	14	2	11	6	8	18
2005	-7	-11	-2	-7	-12	13	4	11	5	10	18
2006	1	-4	5	1	3	14	13	18	13	18	24
2007	-1	-8	7	1	4	15	12	19	16	19	23
2007 Q3	0	-8	7	1	7	14	11	20	16	20	24
Q4	-3	-11	4	0	4	16	13	15	11	14	20
2008 Q1	-7	-14	-1	-1	2	16	12	10	4	12	15
Q2	-11	-17	-4	-3	-1	16	7	8	3	9	13
Q3	-14	-21	-7	-9	-10	17	-1	1	-7	3	6
2008 Apr.	-12	-18	-6	-5	-4	18	6	7	1	7	12
May	-9	-16	-2	-1	3	14	8	8	4	9	13
June	-11	-19	-4	-4	-3	17	7	9	4	10	14
July	-14	-23	-6	-9	-10	17	1	1	-8	4	7
Aug.	-13	-20	-6	-10	-8	19	-4	1	-7	4	5
Sep.	-16	-22	-10	-8	-11	14	0	0	-7	2	6

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

- 1) Difference between the percentages of respondents giving positive and negative replies.
- 2) The economic sentiment indicator is composed of the industrial, services, consumer, construction and retail trade confidence indicators; the industrial confidence indicator has a weight of 40%, the services confidence indicator a weight of 30%, the consumer confidence indicator a weight of 20% and the two other indicators a weight of 5% each. Values of the economic sentiment indicator above (below) 100 indicate above-average (below-average) economic sentiment, calculated for the period 1990 to 2007.
- 3) 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.
- 4) The confidence indicators are calculated as simple averages of the components shown; the assessments of stocks (columns 4 and 17) and unemployment (column 10) are used with inverted signs for the calculation of confidence indicators.

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

(annual percentage changes, unless otherwise indicated)

### 1. Employment

	Whole economy		By employment status		By economic activity					
	Millions (s.a.)		Employees	Self-employed	Agriculture, hunting, forestry and fishing	Mining, manufacturing and energy	Construction	Trade, repairs, hotels and restaurants, transport and communication	Financial, real estate, renting and business services	Public administration, education, health and other services
% of total <sup>2)</sup>	100.0	100.0	85.0	15.0	3.9	17.1	7.7	25.4	15.8	30.0
	1	2	3	4	5	6	7	8	9	10
2004	138.375	0.7	0.7	0.9	-2.9	-1.4	1.3	1.2	2.4	1.3
2005	139.700	1.0	1.1	0.4	-0.9	-1.1	2.7	0.8	2.4	1.5
2006	141.968	1.6	1.8	0.9	-1.9	-0.4	2.6	1.6	3.9	1.9
2007	144.479	1.8	1.9	0.8	-1.2	0.3	3.7	1.9	4.1	1.3
2007 Q2	144.281	1.7	1.8	0.8	-1.5	0.4	4.5	1.5	4.4	0.9
Q3	144.852	1.9	1.9	1.4	-1.4	0.2	3.5	2.3	4.0	1.4
Q4	145.256	1.8	2.0	0.4	-1.5	0.2	2.2	2.3	3.9	1.4
2008 Q1	145.710	1.6	1.7	0.6	-1.5	0.5	0.4	2.3	3.7	1.2
Q2	145.993	1.2	1.4	0.1	.	.	.	.	.	.
	<i>quarter-on-quarter percentage changes (s.a.)</i>									
2007 Q2	0.754	0.5	0.5	0.4	-0.6	0.2	0.5	0.9	1.2	0.2
Q3	0.571	0.4	0.4	0.3	-1.0	0.0	-0.1	0.7	0.7	0.5
Q4	0.404	0.3	0.5	-0.7	-0.3	0.1	-0.1	0.1	0.7	0.4
2008 Q1	0.454	0.3	0.3	0.6	0.3	0.2	-0.2	0.5	0.9	0.1
Q2	0.283	0.2	0.2	-0.1	.	.	.	.	.	.

### 2. Unemployment

(seasonally adjusted)

	Total		By age <sup>3)</sup>				By gender <sup>4)</sup>			
	Millions	% of labour force	Adult		Youth		Male		Female	
			Millions	% of labour force	Millions	% of labour force	Millions	% of labour force	Millions	% of labour force
% of total <sup>2)</sup>	100.0		78.1		21.9		49.7		50.3	
	1	2	3	4	5	6	7	8	9	10
2004	13.100	8.8	10.159	7.7	2.941	17.1	6.557	7.9	6.543	10.0
2005	13.286	8.8	10.341	7.8	2.945	17.2	6.697	8.0	6.589	9.9
2006	12.514	8.3	9.774	7.3	2.740	16.2	6.215	7.4	6.299	9.3
2007	11.372	7.4	8.894	6.5	2.478	14.8	5.592	6.6	5.780	8.4
2007 Q2	11.406	7.5	8.932	6.6	2.474	14.8	5.583	6.6	5.823	8.5
Q3	11.273	7.3	8.825	6.5	2.448	14.6	5.561	6.6	5.712	8.3
Q4	11.176	7.3	8.719	6.4	2.457	14.6	5.517	6.5	5.659	8.2
2008 Q1	11.123	7.2	8.687	6.3	2.436	14.5	5.503	6.5	5.620	8.1
Q2	11.293	7.3	8.804	6.4	2.489	14.8	5.661	6.6	5.632	8.1
2008 Feb.	11.112	7.2	8.679	6.3	2.433	14.5	5.495	6.5	5.617	8.1
Mar.	11.116	7.2	8.678	6.3	2.438	14.5	5.515	6.5	5.601	8.1
Apr.	11.224	7.3	8.752	6.3	2.473	14.7	5.596	6.6	5.629	8.1
May	11.308	7.3	8.810	6.4	2.497	14.8	5.671	6.6	5.636	8.1
June	11.348	7.3	8.850	6.4	2.498	14.9	5.717	6.7	5.631	8.1
July	11.375	7.3	8.894	6.4	2.481	14.7	5.756	6.7	5.619	8.1

Source: Eurostat.

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

2) In 2006.

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

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





# GOVERNMENT FINANCE

## 6.1 Revenue, expenditure and deficit/surplus<sup>1)</sup> (as a percentage of GDP)

### 1. Euro area – revenue

	Current revenue											Capital revenue		Memo: fiscal burden <sup>2)</sup>
	Total	Direct taxes					Indirect taxes	Social contributions			Sales	Capital taxes		
		Households	Corporations	Received by EU institutions	Employers	Employees								
1	2	3	4	5	6	7	8	9	10	11	12	13	14	
1999	47.0	46.7	12.5	9.3	2.9	14.1	0.6	16.1	8.3	4.9	2.3	0.3	0.3	43.0
2000	46.5	46.2	12.7	9.4	3.0	13.9	0.6	15.8	8.2	4.8	2.2	0.3	0.3	42.6
2001	45.7	45.5	12.3	9.2	2.7	13.5	0.5	15.6	8.1	4.7	2.2	0.2	0.3	41.7
2002	45.2	44.8	11.8	9.1	2.5	13.5	0.4	15.6	8.2	4.6	2.1	0.3	0.3	41.2
2003	45.0	44.4	11.4	8.8	2.3	13.5	0.4	15.7	8.2	4.6	2.1	0.6	0.5	41.1
2004	44.6	44.1	11.3	8.5	2.5	13.5	0.3	15.6	8.1	4.5	2.1	0.5	0.4	40.8
2005	44.9	44.4	11.6	8.6	2.6	13.7	0.3	15.4	8.1	4.5	2.2	0.5	0.3	41.0
2006	45.5	45.2	12.1	8.8	3.0	13.9	0.3	15.4	8.1	4.5	2.1	0.3	0.3	41.6
2007	45.6	45.4	12.5	9.0	3.2	13.9	0.3	15.2	8.0	4.4	2.1	0.3	0.3	41.9

### 2. Euro area – expenditure

	Current expenditure									Capital expenditure			Memo: primary expenditure <sup>3)</sup>	
	Total	Compensation of employees	Intermediate consumption	Interest	Current transfers	Social payments		Subsidies	Paid by EU institutions	Investment	Capital transfers	Paid by EU institutions		
						7	8							9
1	2	3	4	5	6	7	8	9	10	11	12	13	14	
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	44.3
2000	46.5	43.8	10.4	4.8	3.9	24.7	21.7	2.0	0.5	2.8	2.5	1.3	0.0	42.6
2001	47.6	43.7	10.3	4.8	3.8	24.8	21.7	1.9	0.5	3.9	2.5	1.4	0.0	43.8
2002	47.7	43.9	10.4	4.9	3.5	25.1	22.2	1.9	0.5	3.8	2.4	1.4	0.0	44.2
2003	48.1	44.2	10.5	4.9	3.3	25.4	22.6	1.9	0.5	3.9	2.5	1.4	0.1	44.8
2004	47.5	43.6	10.4	5.0	3.1	25.1	22.4	1.8	0.5	3.9	2.5	1.4	0.0	44.4
2005	47.4	43.5	10.4	5.1	3.0	25.1	22.3	1.7	0.5	3.9	2.5	1.4	0.0	44.4
2006	46.8	43.0	10.2	5.0	2.9	24.9	22.1	1.7	0.5	3.9	2.5	1.4	0.0	43.9
2007	46.2	42.5	10.1	5.0	3.0	24.5	21.7	1.6	0.4	3.8	2.5	1.3	0.0	43.3

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

	Deficit (-)/surplus (+)					Primary deficit (-)/surplus (+)	Government consumption <sup>4)</sup>							
	Total	Central gov.	State gov.	Local gov.	Social security funds		Total	Compensation of employees	Intermediate consumption	Transfers in kind via market producers	Consumption of fixed capital	Sales (minus)	Collective consumption	Individual consumption
1999	-1.4	-1.7	-0.1	0.1	0.4	2.7	19.9	10.6	4.8	4.9	1.8	2.3	8.3	11.6
2000	0.0	-0.4	-0.1	0.1	0.5	3.9	19.7	10.4	4.8	4.9	1.8	2.2	8.2	11.6
2001	-1.8	-1.7	-0.4	-0.1	0.3	2.0	19.8	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	20.2	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	1.8	2.1	8.3	12.2
2004	-2.9	-2.5	-0.4	-0.3	0.2	0.2	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	-1.3	-1.4	-0.1	-0.2	0.4	1.6	20.3	10.2	5.0	5.2	1.9	2.1	8.0	12.3
2007	-0.6	-1.1	0.0	0.0	0.5	2.4	20.1	10.1	5.0	5.2	1.9	2.1	7.9	12.2

### 4. Euro area countries – deficit (-)/surplus (+)<sup>5)</sup>

	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
2004	0.0	-3.8	1.4	-7.4	-0.3	-3.6	-3.5	-4.1	-1.2	-4.6	-1.7	-3.7	-3.4	-2.3	2.4
2005	-2.3	-3.4	1.6	-5.1	1.0	-2.9	-4.2	-2.4	-0.1	-3.0	-0.3	-1.5	-6.1	-1.5	2.9
2006	0.3	-1.6	3.0	-2.6	1.8	-2.4	-3.4	-1.2	1.3	-2.5	0.5	-1.5	-3.9	-1.2	4.1
2007	-0.2	0.0	0.3	-2.8	2.2	-2.7	-1.9	3.3	2.9	-1.8	0.4	-0.5	-2.6	-0.1	5.3

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

1) The data refer to the Euro 15. Revenue, expenditure and deficit/surplus are based on the ESA 95. Transactions involving the EU budget are included and consolidated.

Transactions among Member States' governments are not consolidated.

2) The fiscal burden comprises taxes and social contributions.

3) Comprises total expenditure minus interest expenditure.

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

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

## 6.2 Debt <sup>1)</sup>

(as a percentage of GDP)

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

	Total	Financial instruments				Holders				
		Currency and deposits	Loans	Short-term securities	Long-term securities	Domestic creditors <sup>2)</sup>				Other creditors <sup>3)</sup>
						Total	MFIs	Other financial corporations	Other sectors	
1	2	3	4	5	6	7	8	9	10	
1998	72.8	2.8	15.2	5.3	49.6	52.5	26.5	14.5	11.5	20.4
1999	72.0	2.9	14.4	4.3	50.5	48.8	25.3	13.8	9.7	23.2
2000	69.3	2.7	13.1	3.7	49.7	44.2	22.0	12.4	9.8	25.1
2001	68.2	2.8	12.4	4.0	49.0	42.0	20.6	11.1	10.4	26.2
2002	68.0	2.7	11.8	4.5	49.0	40.2	19.3	10.7	10.1	27.9
2003	69.2	2.1	12.4	5.0	49.7	39.4	19.5	11.2	8.7	29.7
2004	69.6	2.2	11.9	5.0	50.5	37.6	18.4	10.8	8.3	32.0
2005	70.2	2.4	11.8	4.7	51.3	35.5	17.2	11.1	7.2	34.7
2006	68.5	2.5	11.4	4.1	50.5	33.8	17.5	9.4	6.9	34.6
2007	66.3	2.2	10.8	4.3	49.1	32.3	17.0	8.5	6.9	34.0

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

	Total	Issued by <sup>4)</sup>				Original maturity			Residual maturity			Currencies	
		Central gov.	State gov.	Local gov.	Social security funds	Up to 1 year	Over 1 year	Variable interest rate	Up to 1 year	Over 1 year and up to 5 years	Over 5 years	Euro or participating currencies <sup>5)</sup>	Other currencies
1998	72.8	61.2	6.1	5.2	0.4	8.2	64.6	7.8	15.5	26.4	30.9	71.0	1.8
1999	72.0	60.5	6.0	5.1	0.4	7.3	64.7	6.8	13.6	27.9	30.6	69.9	2.1
2000	69.3	58.1	5.9	4.9	0.4	6.5	62.7	6.1	13.4	27.8	28.0	67.3	1.9
2001	68.2	57.0	6.1	4.7	0.4	7.0	61.2	5.2	13.7	26.5	28.0	66.5	1.7
2002	68.0	56.6	6.3	4.7	0.4	7.6	60.4	5.1	15.3	25.0	27.7	66.6	1.5
2003	69.2	57.0	6.5	5.1	0.6	7.8	61.4	5.0	14.8	25.8	28.6	68.0	1.1
2004	69.6	57.4	6.6	5.1	0.4	7.8	61.7	4.7	14.7	26.2	28.7	68.5	1.1
2005	70.2	57.7	6.7	5.3	0.5	7.9	62.3	4.6	14.9	25.7	29.6	68.9	1.2
2006	68.5	56.0	6.5	5.4	0.5	7.5	61.0	4.5	14.4	24.5	29.6	67.5	1.0
2007	66.3	54.2	6.3	5.3	0.5	7.5	58.9	4.2	14.2	23.4	28.8	65.5	0.8

### 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
2004	94.2	65.6	29.5	98.6	46.2	64.9	103.8	70.2	6.3	72.6	52.4	63.8	58.3	27.6	44.1
2005	92.1	67.8	27.4	98.0	43.0	66.4	105.8	69.1	6.1	70.4	52.3	63.5	63.6	27.5	41.3
2006	88.2	67.6	25.1	95.3	39.7	63.6	106.5	64.8	6.6	64.2	47.9	61.8	64.7	27.2	39.2
2007	84.9	65.0	25.4	94.5	36.2	64.2	104.0	59.8	6.8	62.6	45.4	59.1	63.6	24.1	35.4

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

- 1) The data refer to the Euro 15. Gross general government debt at nominal value and consolidated between sub-sectors of government. Holdings by non-resident governments are not consolidated. Data are partially estimated.
- 2) Holders resident in the country whose government has issued the debt.
- 3) Includes residents of euro area countries other than the country whose government has issued the debt.
- 4) Excludes debt held by general government in the country whose government has issued it.
- 5) Before 1999, this comprises debt in ECU, in domestic currency and in the currencies of other Member States which have adopted the euro.

### 6.3 Change in debt <sup>1)</sup>

(as a percentage of GDP)

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

	Total	Source of change				Financial instruments				Holders			Other creditors <sup>7)</sup>
		Borrowing requirement <sup>2)</sup>	Valuation effects <sup>3)</sup>	Other changes in volume <sup>4)</sup>	Aggregation effect <sup>5)</sup>	Currency and deposits	Loans	Short-term securities	Long-term securities	Domestic creditors <sup>6)</sup>	MFIs	Other financial corporations	
	1	2	3	4	5	6	7	8	9	10	11	12	13
1999	2.0	1.6	0.4	0.0	-0.1	0.2	-0.2	-0.9	2.8	-1.6	-0.2	-0.2	3.6
2000	1.0	1.1	0.0	-0.1	0.0	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	0.7	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	0.0	0.0	0.0	0.3	0.3	-0.1	2.6	-0.8	-0.6	0.7	3.9
2006	1.5	1.4	0.1	0.0	0.0	0.2	0.1	-0.4	1.5	0.0	1.1	-1.2	1.5
2007	1.1	1.1	0.0	0.0	0.0	-0.1	-0.1	0.4	0.9	0.1	0.3	-0.5	1.0

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

	Change in debt	Deficit (-) / surplus (+) <sup>8)</sup>	Deficit-debt adjustment <sup>9)</sup>											Other <sup>10)</sup>
			Total	Transactions in main financial assets held by general government							Valuation effects	Exchange rate effects	Other changes in volume	
				Total	Currency and deposits	Loans	Securities <sup>11)</sup>	Shares and other equity	Privatisations	Equity injections				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
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	-0.1	0.1
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	-0.1
2003	3.1	-3.1	0.0	0.1	0.1	0.0	0.0	0.1	-0.2	0.1	-0.2	-0.1	0.0	0.1
2004	3.1	-2.9	0.2	0.3	0.2	0.0	0.1	0.0	-0.5	0.2	-0.1	-0.1	0.0	0.0
2005	3.1	-2.6	0.5	0.7	0.4	0.1	0.1	0.1	-0.3	0.2	0.0	0.0	0.0	-0.2
2006	1.5	-1.3	0.1	0.4	0.4	-0.1	0.3	-0.1	-0.3	0.1	0.1	0.0	0.0	-0.3
2007	1.1	-0.6	0.5	0.5	0.2	0.0	0.2	0.1	-0.3	0.2	0.0	0.0	0.0	0.0

Source: ECB.

- The data refer to the Euro 15 and are partially estimated. Annual change in gross nominal consolidated debt is expressed as a percentage of GDP, i.e.  $[\text{debt}(t) - \text{debt}(t-1)] \div \text{GDP}(t)$ .
- The borrowing requirement is by definition equal to transactions in debt.
- Includes, in addition to the impact of foreign exchange movements, effects arising from measurement at nominal value (e.g. premia or discounts on securities 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.
- Holder's 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.
- Mainly composed of transactions in other assets and liabilities (trade credits, other receivables/payables and financial derivatives).
- Excluding financial derivatives.

## 6.4 Quarterly revenue, expenditure and deficit/surplus <sup>1)</sup>

(as a percentage of GDP)

### 1. Euro area – quarterly revenue

	Total		Current revenue					Capital revenue		Memo: fiscal burden <sup>2)</sup>
	1	2	Direct taxes	Indirect taxes	Social contributions	Sales	Property income	8	Capital taxes	
2002 Q1	41.8	41.4	10.1	12.7	15.4	1.7	0.7	0.4	0.2	38.4
Q2	45.5	45.0	12.4	12.7	15.4	1.9	1.7	0.5	0.3	40.9
Q3	43.5	43.0	11.2	12.8	15.4	1.9	0.7	0.4	0.3	39.7
Q4	49.0	48.4	13.4	14.0	16.2	2.9	0.9	0.6	0.3	44.0
2003 Q1	41.9	41.4	9.8	12.8	15.5	1.7	0.7	0.5	0.2	38.3
Q2	46.0	44.6	12.0	12.9	15.7	2.0	1.4	1.5	1.2	41.7
Q3	42.6	42.2	10.8	12.5	15.5	1.9	0.6	0.5	0.2	39.1
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	9.6	12.8	15.3	1.7	0.6	0.4	0.3	38.0
Q2	45.0	44.2	12.1	13.0	15.3	2.0	1.0	0.8	0.6	41.0
Q3	42.7	42.2	10.6	12.7	15.4	1.9	0.6	0.5	0.3	39.0
Q4	49.1	48.1	12.9	14.3	16.2	2.9	0.7	1.0	0.4	43.8
2005 Q1	42.0	41.5	9.9	13.0	15.3	1.7	0.6	0.5	0.3	38.4
Q2	44.6	44.0	11.8	13.2	15.1	2.0	1.1	0.6	0.3	40.4
Q3	43.3	42.6	11.0	12.9	15.2	1.9	0.7	0.7	0.3	39.5
Q4	49.2	48.4	13.4	14.3	16.1	2.9	0.8	0.8	0.3	44.1
2006 Q1	42.5	42.0	10.2	13.3	15.1	1.7	0.8	0.5	0.3	39.0
Q2	45.8	45.3	12.5	13.6	15.2	2.0	1.3	0.4	0.3	41.5
Q3	43.7	43.2	11.5	12.9	15.2	1.9	0.7	0.5	0.3	40.0
Q4	49.6	48.9	14.1	14.3	15.9	2.9	0.8	0.6	0.3	44.6
2007 Q1	42.3	41.9	10.3	13.5	14.8	1.7	0.8	0.4	0.3	38.9
Q2	46.3	45.8	13.0	13.6	15.1	2.0	1.4	0.4	0.3	41.9
Q3	43.8	43.3	12.1	12.8	15.0	1.9	0.7	0.4	0.3	40.2
Q4	49.8	49.2	14.5	14.2	15.9	2.9	0.9	0.6	0.3	44.9
2008 Q1	42.3	41.9	10.6	13.1	14.9	1.7	0.8	0.4	0.2	38.8

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

	Total		Current expenditure						Capital expenditure			Deficit (-)/ surplus (+)	Primary deficit (-)/ surplus (+)
	1	2	Compensation of employees	Intermediate consumption	Interest	Current transfers	Social benefits	Subsidies	Investment	Capital transfers			
											3		
2002 Q1	46.1	42.7	10.2	4.4	3.7	24.4	21.1	1.4	3.4	2.0	1.5	-4.3	-0.7
Q2	46.4	43.0	10.3	4.8	3.5	24.3	21.1	1.3	3.4	2.3	1.1	-0.9	2.6
Q3	46.9	43.2	10.1	4.7	3.5	24.9	21.4	1.4	3.7	2.5	1.2	-3.4	0.1
Q4	50.8	46.3	11.1	5.6	3.3	26.4	22.7	1.6	4.4	2.8	1.6	-1.8	1.5
2003 Q1	46.8	43.3	10.3	4.6	3.5	25.0	21.4	1.3	3.5	1.9	1.6	-4.9	-1.4
Q2	47.1	43.6	10.4	4.8	3.4	25.1	21.7	1.3	3.5	2.3	1.2	-1.1	2.3
Q3	47.1	43.4	10.3	4.8	3.3	25.1	21.6	1.3	3.7	2.5	1.2	-4.5	-1.2
Q4	51.1	46.3	11.0	5.6	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	3.1	25.0	21.4	1.2	3.4	1.9	1.5	-5.0	-1.9
Q2	46.6	43.2	10.4	4.8	3.3	24.8	21.4	1.3	3.3	2.3	1.0	-1.6	1.7
Q3	46.1	42.7	10.0	4.7	3.1	24.9	21.5	1.3	3.4	2.4	1.0	-3.4	-0.3
Q4	50.9	45.7	11.0	5.7	2.9	26.1	22.6	1.4	5.2	3.1	2.1	-1.8	1.1
2005 Q1	46.9	43.1	10.2	4.7	3.1	25.2	21.4	1.2	3.7	1.9	1.8	-4.9	-1.8
Q2	46.2	42.8	10.2	4.9	3.2	24.5	21.3	1.1	3.4	2.3	1.1	-1.5	1.6
Q3	45.8	42.4	9.9	4.8	2.9	24.7	21.3	1.2	3.4	2.5	1.0	-2.5	0.4
Q4	50.6	45.8	11.1	5.8	2.8	26.1	22.6	1.4	4.8	3.1	1.6	-1.4	1.3
2006 Q1	45.4	42.2	10.0	4.5	2.9	24.7	21.2	1.2	3.1	1.9	1.2	-2.9	0.0
Q2	45.6	42.3	10.3	4.8	3.1	24.2	21.2	1.1	3.2	2.3	0.9	0.2	3.3
Q3	45.4	42.0	9.9	4.7	2.9	24.5	21.1	1.2	3.5	2.5	1.0	-1.8	1.1
Q4	50.5	45.2	10.7	5.8	2.7	25.9	22.3	1.3	5.4	3.2	2.2	-1.0	1.7
2007 Q1	44.5	41.3	9.8	4.5	3.0	24.0	20.6	1.1	3.1	2.0	1.2	-2.2	0.8
Q2	44.8	41.7	10.0	4.8	3.2	23.7	20.7	1.1	3.2	2.3	0.8	1.5	4.6
Q3	44.8	41.4	9.7	4.7	3.0	24.0	20.8	1.2	3.4	2.5	0.9	-1.0	2.0
Q4	50.5	45.2	10.7	5.8	2.8	25.9	22.2	1.4	5.3	3.3	1.9	-0.7	2.1
2008 Q1	44.5	41.4	9.8	4.6	2.9	24.1	20.5	1.2	3.1	2.0	1.1	-2.2	0.7

Source: ECB calculations based on Eurostat and national data.

1) The data refer to the Euro 15. 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 <sup>1)</sup>

(as a percentage of GDP)

### 1. Euro area – Maastricht debt by financial instrument <sup>2)</sup>

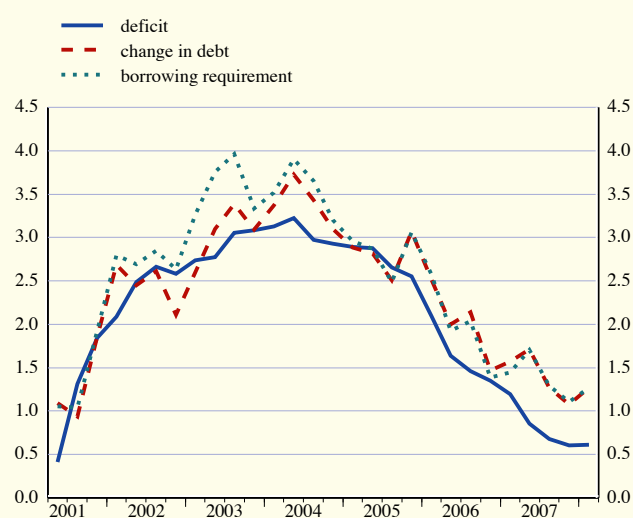
	Total 1	Financial instruments			
		Currency and deposits 2	Loans 3	Short-term securities 4	Long-term securities 5
2005 Q2	71.5	2.3	11.7	5.2	52.3
Q3	71.0	2.4	11.8	5.2	51.8
Q4	70.2	2.4	11.8	4.7	51.3
2006 Q1	70.5	2.5	11.7	4.9	51.4
Q2	70.6	2.5	11.6	4.9	51.6
Q3	70.1	2.5	11.6	4.7	51.3
Q4	68.5	2.5	11.4	4.1	50.5
2007 Q1	68.8	2.4	11.4	4.8	50.2
Q2	69.0	2.2	11.2	5.1	50.5
Q3	68.0	2.1	11.0	5.2	49.7
Q4	66.3	2.2	10.8	4.3	49.1
2008 Q1	67.1	2.2	10.9	5.1	49.1

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

	Change in debt 1	Deficit (-)/ surplus (+) 2	Deficit-debt adjustment							Memo: Borrowing requirement 11	
			Total 3	Transactions in main financial assets held by general government				Valuation effects and other changes in volume 9	Other 10		
				Total 4	Currency and deposits 5	Loans 6	Securities 7				Shares and other equity 8
2005 Q2	5.4	-1.5	3.9	3.3	2.5	0.0	0.3	0.5	0.1	0.4	5.3
Q3	0.6	-2.5	-2.0	-2.4	-2.3	0.0	0.3	-0.4	0.1	0.4	0.5
Q4	-0.6	-1.4	-2.1	-0.4	0.0	0.0	-0.3	-0.1	0.0	-1.6	-0.6
2006 Q1	4.8	-2.9	1.9	1.3	1.0	0.1	0.6	-0.5	-0.4	1.0	5.2
Q2	3.3	0.2	3.5	3.2	2.5	0.1	0.4	0.2	0.6	-0.4	2.6
Q3	1.2	-1.8	-0.6	-0.8	-0.7	-0.1	0.2	-0.2	0.2	0.0	1.0
Q4	-3.1	-1.0	-4.1	-2.1	-1.2	-0.6	-0.2	-0.2	-0.1	-1.9	-3.0
2007 Q1	5.1	-2.2	2.9	2.0	1.1	0.1	0.6	0.2	-0.2	1.0	5.2
Q2	3.7	1.5	5.2	4.7	4.1	0.0	0.5	0.1	0.1	0.3	3.6
Q3	-0.6	-1.0	-1.6	-1.6	-2.2	0.0	0.4	0.2	0.0	-0.1	-0.6
Q4	-3.6	-0.7	-4.3	-2.9	-2.1	-0.1	-0.6	-0.1	-0.1	-1.3	-3.5
2008 Q1	5.7	-2.2	3.5	2.3	1.9	0.0	0.1	0.3	-0.1	1.2	5.7

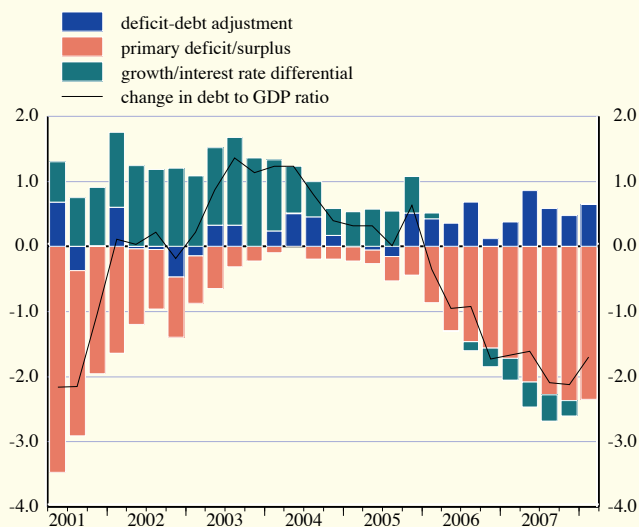
### C28 Deficit, borrowing requirement and change in debt

(four-quarter moving sum as a percentage of GDP)



### C29 Maastricht debt

(annual change in the debt to GDP ratio and underlying factors)



Source: ECB calculations based on Eurostat and national data.

1) The data refer to the Euro 15.

2) 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

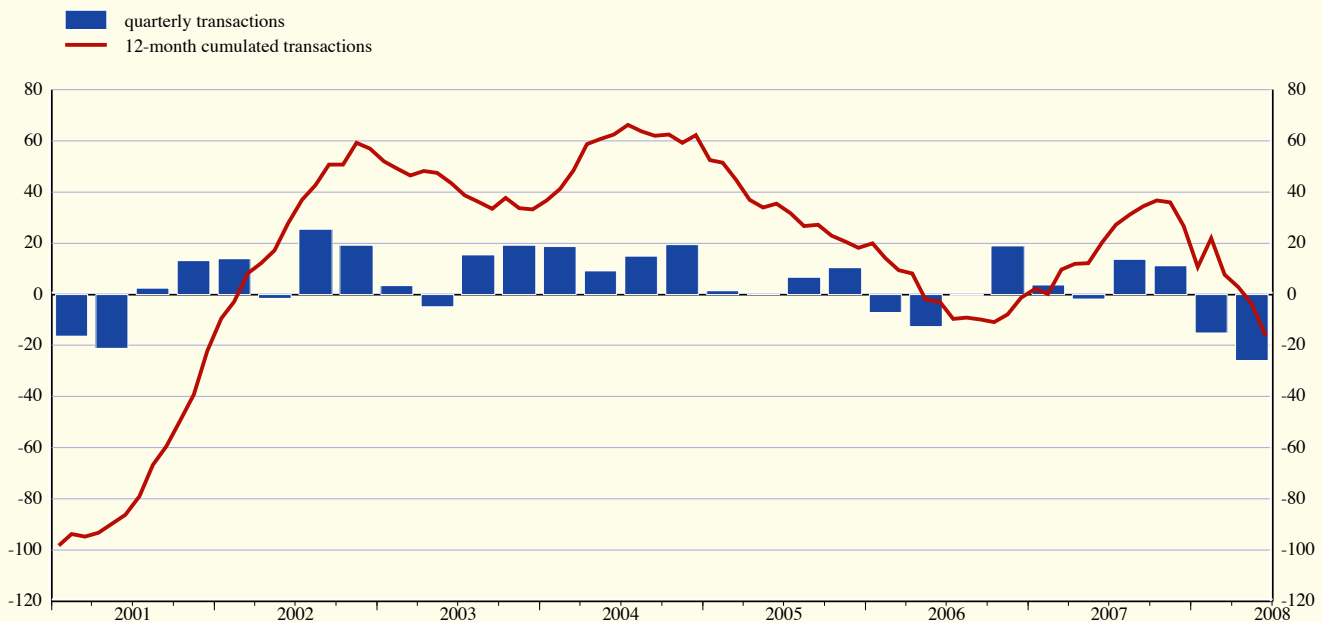
## 7.1 Summary balance of payments <sup>1)</sup>

(EUR billions; net transactions)

	Current account					Capital account	Net lending/borrowing to/from rest of the world (columns 1-6)	Financial account						Errors and omissions
	Total	Goods	Services	Income	Current transfers			Total	Direct investment	Portfolio investment	Financial derivatives	Other investment	Reserve assets	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
2005	18.1	48.3	37.3	5.4	-72.9	11.4	29.6	9.2	-216.4	131.4	-18.2	94.5	18.0	-38.8
2006	-1.3	19.2	42.3	15.1	-77.9	9.2	7.9	112.4	-144.7	266.3	2.4	-10.3	-1.3	-120.3
2007	26.6	55.6	50.9	4.2	-84.1	13.9	40.5	96.2	-117.3	235.7	-90.5	73.7	-5.3	-136.7
2007 Q2	-2.0	20.1	14.0	-19.4	-16.7	2.1	0.1	49.8	-57.9	90.4	-19.7	41.2	-4.2	-50.0
Q3	13.6	17.1	17.2	5.0	-25.6	1.6	15.2	97.5	-40.9	65.1	-26.8	104.4	-4.4	-112.7
Q4	11.1	9.7	10.3	11.6	-20.5	5.6	16.7	-80.5	-4.3	-62.3	-28.8	10.0	4.9	63.8
2008 Q1	-15.2	-2.9	10.7	6.1	-29.0	5.6	-9.6	19.2	-104.8	73.4	-14.9	70.7	-5.1	-9.6
Q2	-25.9	4.1	12.1	-24.2	-17.9	2.1	-23.8	76.2	-54.3	70.5	-39.2	99.3	-0.1	-52.4
2007 July	6.3	7.8	5.6	0.7	-7.7	0.9	7.2	48.0	-0.1	20.6	-12.9	43.4	-3.0	-55.3
Aug.	1.1	3.6	4.3	1.6	-8.5	0.2	1.3	66.5	0.5	3.8	-5.2	66.4	1.0	-67.8
Sep.	6.2	5.7	7.2	2.8	-9.4	0.4	6.7	-17.0	-41.2	40.7	-8.8	-5.3	-2.3	10.3
Oct.	4.2	7.2	4.0	3.3	-10.3	1.4	5.6	-41.0	35.4	-50.9	1.5	-27.0	0.1	35.5
Nov.	2.9	4.8	3.1	1.7	-6.7	1.1	3.9	12.6	9.6	9.9	-22.7	15.5	0.3	-16.5
Dec.	4.1	-2.2	3.1	6.6	-3.4	3.2	7.3	-52.1	-49.2	-21.2	-7.6	21.4	4.6	44.9
2008 Jan.	-18.0	-9.1	3.1	-1.3	-10.8	2.4	-15.6	22.9	-51.9	53.0	-19.2	47.4	-6.4	-7.2
Feb.	7.6	4.7	4.3	4.4	-5.8	2.2	9.8	-8.4	-22.4	14.7	1.7	-7.0	4.6	-1.4
Mar.	-4.8	1.4	3.2	3.0	-12.4	1.0	-3.8	4.7	-30.5	5.7	2.6	30.2	-3.3	-0.9
Apr.	-7.4	4.2	3.0	-7.0	-7.7	0.5	-6.8	18.2	-22.4	-3.7	-14.2	61.9	-3.4	-11.4
May	-19.6	-3.3	4.1	-15.6	-4.8	1.8	-17.8	45.3	-8.8	22.2	-29.6	58.7	2.8	-27.5
June	1.1	3.1	5.0	-1.7	-5.3	-0.2	0.9	12.7	-23.1	51.9	4.6	-21.3	0.5	-13.5
July	-1.1	0.9	5.9	-0.4	-7.6	0.9	-0.2	-4.5	-14.5	-4.6	2.2	14.1	-1.7	4.7
	<i>12-month cumulated transactions</i>													
2008 July	-23.7	21.1	50.6	-2.5	-92.8	14.8	-8.8	59.8	-218.7	121.4	-94.7	255.0	-3.3	-50.9

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

(EUR billions)



Source: ECB.

1) The sign convention is explained in the general notes.

## 7.2 Current and capital accounts

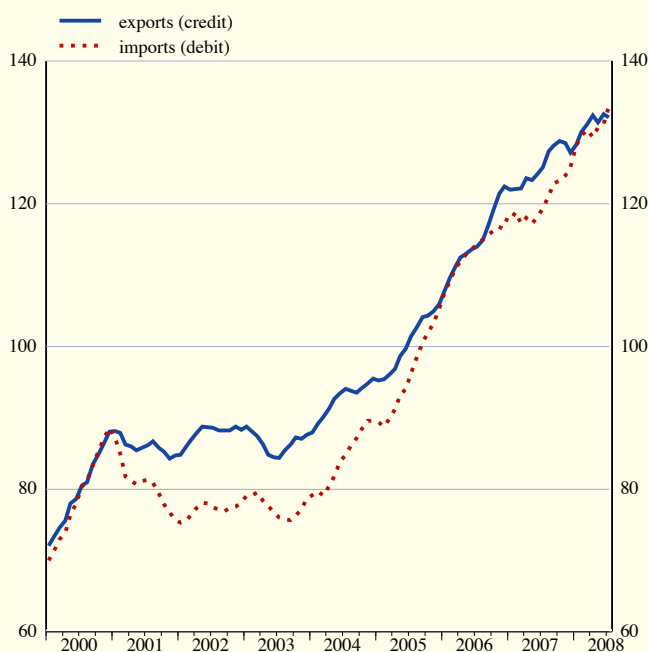
(EUR billions; transactions)

### 1. Summary current and capital accounts

	Current account											Capital account			
	Total			Goods		Services		Income		Current transfers			Credit	Debit	
	Credit	Debit	Net	Credit	Debit	Credit	Debit	Credit	Debit	Credit	Debit				
											Workers remittances	Workers remittances			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
2005	2,090.7	2,072.6	18.1	1,220.3	1,172.0	405.9	368.5	378.7	373.3	85.8	5.3	158.8	14.6	24.3	12.9
2006	2,401.1	2,402.4	-1.3	1,391.2	1,372.0	437.0	394.8	483.7	468.6	89.2	5.4	167.0	16.9	23.7	14.5
2007	2,643.9	2,617.3	26.6	1,504.4	1,448.8	492.2	441.3	557.2	553.0	90.1	6.1	174.2	20.3	25.6	11.7
2007 Q2	656.0	658.0	-2.0	373.6	353.5	120.2	106.2	142.7	162.0	19.5	1.6	36.2	4.9	4.6	2.5
Q3	665.5	651.9	13.6	376.1	359.0	135.4	118.2	137.6	132.6	16.4	1.7	42.1	5.2	4.3	2.8
Q4	694.9	683.7	11.1	393.2	383.4	125.2	114.9	149.4	137.8	27.1	1.4	47.6	5.5	8.9	3.4
2008 Q1	675.5	690.7	-15.2	387.1	390.1	114.9	104.2	147.6	141.5	25.9	1.5	54.9	5.0	8.9	3.3
Q2	695.6	721.4	-25.9	402.1	398.0	122.2	110.1	150.8	175.0	20.5	-	38.4	-	6.2	4.1
2008 May	225.5	245.1	-19.6	128.4	131.7	40.0	36.0	50.2	65.8	6.8	.	11.7	.	2.7	0.9
June	234.6	233.5	1.1	135.7	132.6	42.2	37.2	50.5	52.2	6.2	.	11.5	.	2.0	2.2
July	239.7	240.8	-1.1	141.0	140.1	46.7	40.8	47.3	47.7	4.6	.	12.2	.	1.8	0.9
	Seasonally adjusted														
2007 Q2	652.2	642.0	10.1	372.7	354.5	121.1	110.1	136.1	136.9	22.3	.	40.5	.	.	.
Q3	675.5	665.7	9.8	384.4	368.7	125.7	111.6	144.0	141.7	21.5	.	43.8	.	.	.
Q4	674.0	678.3	-4.3	381.5	375.4	124.5	112.6	146.5	144.0	21.4	.	46.3	.	.	.
2008 Q1	691.2	704.0	-12.8	393.3	391.2	125.0	109.5	152.1	154.4	20.8	.	49.0	.	.	.
Q2	687.7	697.8	-10.1	397.6	393.5	122.3	113.2	144.2	148.1	23.7	.	43.1	.	.	.
2008 Feb.	238.9	231.6	7.3	133.7	128.7	42.0	36.2	52.6	51.0	10.7	.	15.7	.	.	.
Mar.	223.1	235.6	-12.5	127.8	130.6	41.0	36.9	49.2	51.0	5.0	.	17.2	.	.	.
Apr.	235.0	233.5	1.5	135.7	128.6	41.4	37.8	47.9	50.0	10.0	.	17.1	.	.	.
May	228.0	233.5	-5.5	130.7	132.9	40.7	37.5	49.5	50.2	7.1	.	12.9	.	.	.
June	224.7	230.8	-6.1	131.2	132.0	40.2	37.8	46.7	47.8	6.6	.	13.1	.	.	.
July	231.4	233.1	-1.7	134.5	136.1	40.9	36.5	49.8	47.5	6.2	.	13.0	.	.	.

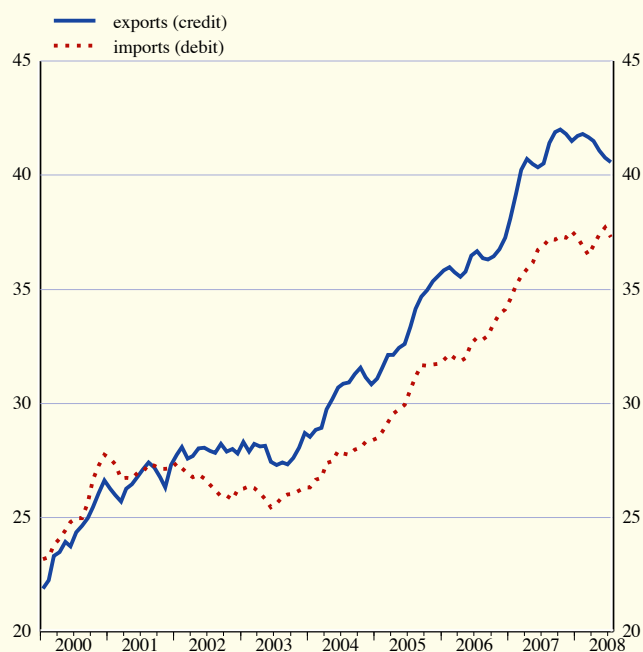
### C31 B.o.p. goods

(EUR billions, seasonally adjusted; three-month moving average)



### C32 B.o.p. services

(EUR billions, seasonally adjusted; three-month moving average)



Source: ECB.

## 7.2 Current and capital accounts

(EUR billions)

### 2. Income account

(transactions)

	Compensation of employees		Investment income													
	Credit	Debit	Total		Direct investment				Portfolio investment				Other investment			
			Credit	Debit	Equity		Debt		Equity		Debt		Credit	Debit		
	Credit	Debit			Reinv. earnings	Debit	Credit	Debit	Credit	Debit	Credit	Debit				
			1	2									3	4	5	6
2005	15.7	9.3	363.1	364.0	140.2	38.5	97.6	-14.3	15.4	14.4	31.5	69.4	82.2	81.1	93.8	101.5
2006	16.5	10.0	467.2	458.6	171.4	36.8	106.0	39.0	19.7	17.3	39.1	99.2	102.2	85.6	134.7	150.5
2007	17.2	10.6	540.0	542.4	173.1	54.7	104.1	24.9	24.7	20.7	45.1	115.5	119.6	107.8	177.5	194.4
2007 Q1	4.2	2.0	123.4	118.6	39.7	18.4	27.0	6.5	5.5	4.8	9.8	18.3	27.9	24.1	40.4	44.4
Q2	4.2	2.6	138.5	159.4	44.4	6.2	27.7	1.0	6.3	5.4	15.2	52.5	28.9	26.4	43.7	47.5
Q3	4.3	3.2	133.3	129.4	40.4	16.4	23.5	10.7	5.9	5.0	10.9	23.9	30.4	26.7	45.7	50.2
Q4	4.6	2.7	144.7	135.0	48.6	13.6	25.9	6.7	6.9	5.5	9.1	20.9	32.4	30.6	47.7	52.2
2008 Q1	4.6	2.0	143.1	139.6	48.8	24.0	27.3	13.5	6.3	5.3	9.4	21.2	31.2	34.2	47.4	51.5

### 3. Geographical breakdown

(cumulated transactions)

	Total	European Union 27 (outside the euro area)						Brazil	Canada	China	India	Japan	Russia	Switzer-land	United States	Other
		Total	Den-mark	Sweden	United Kingdom	Other EU countries	EU institutions									
2007 Q2 to 2008 Q1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Credits																
<b>Current account</b>	2,691.9	1,022.0	56.1	85.3	536.0	285.5	59.1	34.9	35.1	79.2	30.9	56.3	90.5	175.5	410.5	757.1
Goods	1,530.0	554.7	34.9	55.1	238.1	226.6	0.0	19.1	18.4	62.4	23.6	33.8	70.2	85.7	194.4	467.7
Services	495.7	175.9	10.8	13.2	116.6	29.2	6.0	5.6	6.9	13.5	5.5	10.7	11.3	48.3	83.3	134.9
Income	577.3	226.5	9.8	15.5	167.8	26.8	6.6	10.0	9.1	3.0	1.7	11.3	8.8	35.4	125.6	145.6
Investment income	559.6	220.3	9.7	15.4	165.6	26.6	3.0	10.0	9.0	3.0	1.7	11.3	8.7	28.8	124.0	142.8
Current transfers	89.0	64.9	0.7	1.4	13.5	2.9	46.4	0.2	0.7	0.3	0.1	0.4	0.2	6.1	7.3	8.9
<b>Capital account</b>	26.7	23.1	0.0	0.1	0.9	0.1	21.9	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.8	2.3
Debits																
<b>Current account</b>	2,684.3	889.9	44.5	81.7	435.5	222.9	105.3	-	29.5	-	-	97.6	-	170.2	362.5	-
Goods	1,486.0	435.5	28.3	51.4	177.0	178.8	0.0	25.7	12.9	165.8	18.9	56.0	95.7	74.8	136.7	464.1
Services	443.5	140.8	9.1	10.9	90.5	30.1	0.2	4.4	6.9	10.7	4.0	8.0	8.5	35.8	90.2	134.2
Income	573.9	198.7	6.4	17.9	156.8	9.8	7.8	-	7.6	-	-	33.2	-	53.8	128.6	-
Investment income	563.4	192.4	6.3	17.9	155.4	5.1	7.8	-	7.5	-	-	33.1	-	53.3	127.7	-
Current transfers	180.8	114.8	0.7	1.4	11.1	4.2	97.3	1.5	2.0	2.6	0.7	0.4	0.6	5.8	6.9	45.4
<b>Capital account</b>	11.9	2.3	0.0	0.1	1.3	0.3	0.6	0.2	0.1	0.1	0.2	0.1	0.1	0.6	0.9	7.5
Net																
<b>Current account</b>	7.6	132.1	11.6	3.6	100.5	62.6	-46.2	-	5.6	-	-	-41.4	-	5.3	48.0	-
Goods	44.0	119.2	6.5	3.7	61.1	47.8	0.0	-6.6	5.5	-103.3	4.7	-22.2	-25.5	10.9	57.7	3.7
Services	52.1	35.0	1.7	2.3	26.1	-0.8	5.8	1.2	0.0	2.8	1.6	2.7	2.8	12.5	-6.9	0.6
Income	3.4	27.8	3.4	-2.4	11.0	16.9	-1.1	-	1.5	-	-	-21.9	-	-18.4	-3.0	-
Investment income	-3.8	27.9	3.4	-2.4	10.2	21.5	-4.8	-	1.5	-	-	-21.8	-	-24.5	-3.7	-
Current transfers	-91.8	-49.9	0.0	0.0	2.4	-1.4	-50.9	-1.3	-1.3	-2.4	-0.6	0.0	-0.3	0.2	0.3	-36.5
<b>Capital account</b>	14.8	20.7	0.0	0.0	-0.4	-0.2	21.3	-0.1	-0.1	0.0	-0.2	-0.1	0.0	-0.1	-0.1	-5.1

Source: ECB.



## 7.3 Financial account

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

## 1. Summary financial account

	Total <sup>1)</sup>			Total as a % of GDP			Direct investment		Portfolio investment		Net financial derivatives	Other investment		Reserve assets
	Assets	Liabilities	Net	Assets	Liabilities	Net	Assets	Liabilities	Assets	Liabilities		Assets	Liabilities	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
<b>Outstanding amounts (international investment position)</b>														
2003	7,817.7	8,608.3	-790.7	104.0	114.6	-10.5	2,169.3	2,084.2	2,655.4	3,585.9	-19.8	2,706.1	2,938.3	306.7
2004	8,609.8	9,497.9	-888.1	110.1	121.5	-11.4	2,314.6	2,242.0	3,042.9	4,076.4	-37.3	3,008.7	3,179.5	281.0
2005	10,737.9	11,575.7	-837.8	132.4	142.7	-10.3	2,796.4	2,444.5	3,887.8	5,105.7	-46.2	3,779.7	4,025.5	320.1
2006	12,195.1	13,226.4	-1,031.3	143.5	155.6	-12.1	3,050.2	2,654.1	4,459.3	5,960.7	-43.6	4,403.4	4,611.5	325.8
2007 Q4	13,754.8	15,049.5	-1,294.7	154.2	168.7	-14.5	3,472.3	2,988.8	4,710.3	6,715.2	46.5	5,178.5	5,345.5	347.3
2008 Q1	13,635.8	14,914.8	-1,279.0	151.5	165.7	-14.2	3,535.6	2,990.3	4,393.3	6,387.8	30.4	5,320.1	5,536.7	356.3
<b>Changes to outstanding amounts</b>														
2003	509.9	593.8	-83.9	6.8	7.9	-1.1	162.6	257.7	363.5	341.4	-7.2	50.4	-5.2	-59.4
2004	792.2	889.6	-97.4	10.1	11.4	-1.2	145.3	157.8	387.5	490.6	-17.6	302.6	241.2	-25.7
2005	2,128.0	2,077.8	50.3	26.2	25.6	0.6	481.8	202.5	844.9	1,029.3	-8.8	771.1	846.0	39.1
2006	1,457.3	1,650.7	-193.5	17.1	19.4	-2.3	253.8	209.6	571.5	855.1	2.6	623.7	586.1	5.7
2007 Q4	108.6	101.5	7.2	4.7	4.4	0.3	86.4	92.4	-74.8	7.4	46.9	43.2	1.7	6.8
2008 Q1	-119.0	-134.7	15.6	-5.3	-6.0	0.7	63.3	1.5	-317.0	-327.4	-16.0	141.6	191.2	9.0
<b>Transactions</b>														
2004	812.4	798.3	14.2	10.4	10.2	0.2	161.5	93.9	345.6	416.5	8.3	309.4	287.8	-12.5
2005	1,326.1	1,335.3	-9.2	16.4	16.5	-0.1	364.7	148.3	412.6	544.0	18.2	548.6	643.0	-18.0
2006	1,598.4	1,710.8	-112.4	18.8	20.1	-1.3	346.0	201.3	535.9	802.2	-2.4	717.7	707.3	1.3
2007	1,790.2	1,886.4	-96.2	20.1	21.2	-1.1	402.4	285.1	426.8	662.4	90.5	865.2	938.9	5.3
2007 Q4	293.8	213.3	80.5	12.6	9.2	3.5	78.9	74.7	98.7	36.4	28.8	92.2	102.2	-4.9
2008 Q1	482.4	501.6	-19.2	21.5	22.3	-0.9	143.2	38.4	46.5	119.8	14.9	272.8	343.4	5.1
Q2	48.3	124.5	-76.2	2.1	5.4	-3.3	22.6	-31.7	91.9	162.3	39.2	-105.4	-6.1	0.1
2008 Mar.	25.2	29.9	-4.7	.	.	.	26.0	-4.5	-0.5	5.2	-2.6	-1.0	29.2	3.3
Apr.	83.8	102.0	-18.2	.	.	.	-18.8	-41.2	31.1	27.4	14.2	53.9	115.8	3.4
May	59.2	104.5	-45.3	.	.	.	10.1	1.3	53.7	76.0	29.6	-31.4	27.2	-2.8
June	-94.7	-82.1	-12.7	.	.	.	31.3	8.2	7.0	59.0	-4.6	-128.0	-149.2	-0.5
July	50.1	45.6	4.5	.	.	.	25.7	11.2	14.2	9.6	-2.2	10.8	24.8	1.7
<b>Other changes</b>														
2003	-154.8	-55.6	-99.2	-2.1	-0.7	-1.3	15.7	121.2	82.0	4.1	-21.0	-200.0	-180.9	-31.6
2004	-20.2	91.3	-111.6	-0.3	1.2	-1.4	-16.2	63.9	41.9	74.1	-25.9	-6.8	-46.7	-13.3
2005	802.0	742.5	59.5	9.9	9.2	0.7	117.1	54.3	432.3	485.2	-27.0	222.5	203.0	57.1
2006	-141.1	-60.0	-81.1	-1.7	-0.7	-1.0	-92.2	8.3	35.6	52.9	5.0	-94.0	-121.3	4.4
2007 Q4	-185.2	-111.8	-73.4	-8.0	-4.8	-3.2	7.4	17.7	-173.5	-29.1	18.2	-49.0	-100.5	11.7
2008 Q1	-601.5	-636.3	34.8	-26.8	-28.3	1.5	-79.8	-36.9	-363.5	-447.2	-30.9	-131.1	-152.2	3.9
<b>Other changes due to exchange rate changes</b>														
2003	-433.3	-179.7	-253.6	-5.8	-2.4	-3.4	-101.9	26.9	-103.8	-49.8	.	-195.5	-156.9	-32.1
2004	-182.4	-138.3	-44.0	-2.3	-1.8	-0.6	-34.5	8.2	-67.5	-92.0	.	-70.9	-54.5	-9.4
2005	371.9	221.6	150.3	4.6	2.7	1.9	83.2	-21.0	120.7	125.3	.	149.4	117.2	18.7
2006	-292.6	-140.6	-151.9	-3.4	-1.7	-1.8	-66.0	14.5	-85.0	-51.0	.	-126.4	-104.0	-15.2
<b>Other changes due to price changes</b>														
2003	218.9	158.4	60.5	2.9	2.1	0.8	74.1	32.5	165.4	125.8	-21.0	.	.	0.4
2004	119.1	243.0	-123.9	1.5	3.1	-1.6	37.7	28.2	110.4	214.8	-25.9	.	.	-3.1
2005	285.2	351.1	-65.9	3.5	4.3	-0.8	73.5	55.8	196.5	295.3	-27.0	.	.	42.2
2006	317.1	272.2	44.9	3.7	3.2	0.5	74.8	46.1	220.8	226.0	5.0	.	.	16.4
<b>Other changes due to other adjustments</b>														
2003	59.6	-34.3	93.9	0.8	-0.5	1.2	43.5	61.7	20.5	-72.0	.	-4.5	-24.0	0.2
2004	43.0	-13.4	56.4	0.6	-0.2	0.7	-19.3	27.5	-1.0	-48.7	.	64.1	7.8	-0.7
2005	144.9	169.8	-24.9	1.8	2.1	-0.3	-39.6	19.4	115.1	64.6	.	73.1	85.8	-3.7
2006	-165.7	-191.6	25.9	-1.9	-2.3	0.3	-101.0	-52.3	-100.3	-122.1	.	32.4	-17.2	3.3
<b>Growth rates of outstanding amounts</b>														
2003	9.2	8.2	-	.	.	.	7.4	7.4	12.4	10.5	.	9.5	6.1	-7.9
2004	10.3	9.2	-	.	.	.	7.4	4.4	12.8	11.4	.	11.3	9.7	-4.1
2005	14.9	13.7	-	.	.	.	15.4	6.6	13.0	12.8	.	17.7	19.7	-5.9
2006	15.1	14.9	-	.	.	.	12.6	8.3	13.9	15.8	.	19.3	17.7	0.3
2007 Q4	14.7	14.2	-	.	.	.	13.1	10.7	9.6	11.1	.	19.6	20.5	1.7
2008 Q1	12.9	12.5	-	.	.	.	14.3	8.9	7.2	7.8	.	16.3	20.7	2.6
Q2	9.2	9.2	-	.	.	.	11.0	5.5	6.0	6.5	.	9.5	15.0	1.4

Source: ECB.

1) Net financial derivatives are included in assets.

## 7.3 Financial account

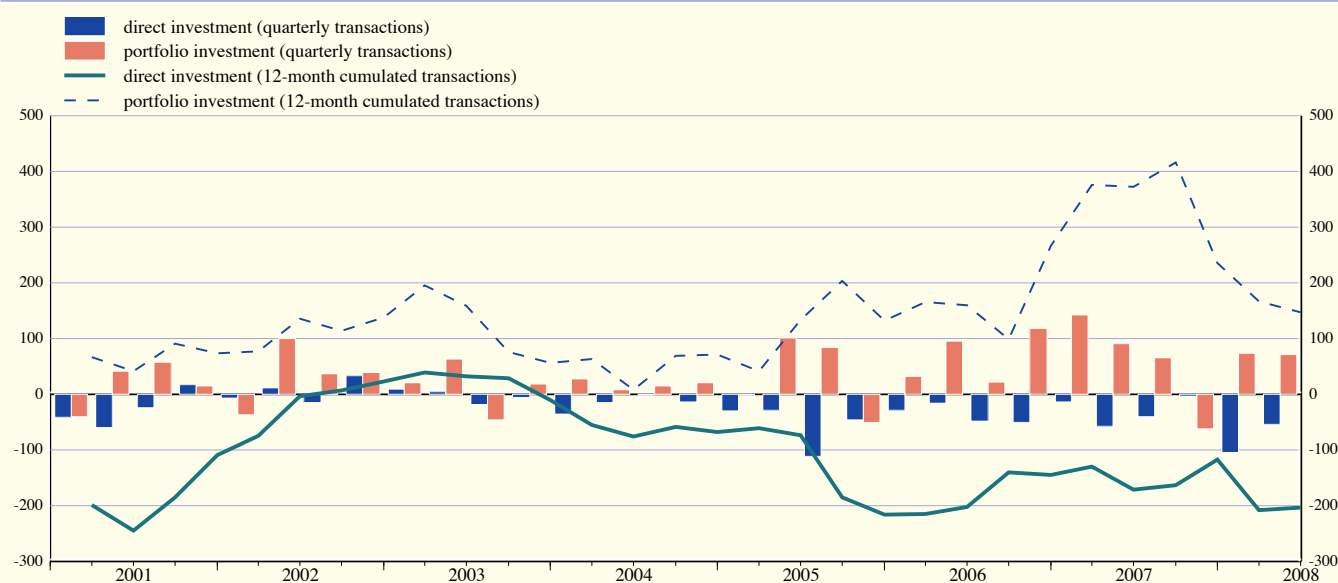
(EUR billions and annual growth rates; outstanding amounts and growth rates at end of period, transactions during period)

### 2. Direct investment

	By resident units abroad							By non-resident units in the euro area						
	Total	Equity capital and reinvested earnings			Other capital (mostly inter-company loans)			Total	Equity capital and reinvested earnings			Other capital (mostly inter-company loans)		
		Total	MFI	Non-MFI	Total	MFI	Non-MFI		Total	into MFI	into Non-MFI	Total	to MFI	to Non-MFI
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Outstanding amounts (international investment position)														
2005	2,796.4	2,278.8	176.0	2,102.8	517.6	4.0	513.5	2,444.5	1,839.6	56.2	1,783.4	605.0	8.5	596.4
2006	3,050.2	2,484.8	203.3	2,281.6	565.3	3.7	561.7	2,654.1	2,037.8	61.7	1,976.0	616.4	7.9	608.4
2007 Q4	3,472.3	2,818.3	237.0	2,581.3	654.0	8.4	645.6	2,988.8	2,259.1	61.7	2,197.3	729.8	13.7	716.0
2008 Q1	3,535.6	2,847.1	237.3	2,609.8	688.6	10.4	678.2	2,990.3	2,271.6	61.5	2,210.2	718.7	13.4	705.2
Transactions														
2006	346.0	271.5	38.6	232.9	74.5	0.0	74.5	201.3	171.7	5.8	165.9	29.5	0.1	29.5
2007	402.4	310.0	28.3	281.6	92.4	-0.5	92.9	285.1	185.8	1.9	183.9	99.3	1.3	98.0
2007 Q4	78.9	65.3	-4.6	69.8	13.7	0.6	13.0	74.7	29.1	1.9	27.2	45.6	0.7	44.9
2008 Q1	143.2	89.7	10.3	79.4	53.5	2.3	51.2	38.4	37.6	-0.1	37.8	0.7	0.1	0.6
2008 Q2	22.6	2.1	8.9	-6.8	20.5	-1.8	22.3	-31.7	-29.4	-1.7	-27.7	-2.3	0.2	-2.5
2008 Mar.	26.0	18.7	-0.1	18.8	7.3	2.6	4.7	-4.5	9.6	-0.8	10.4	-14.1	-0.9	-13.2
Apr.	-18.8	-25.0	4.4	-29.4	6.2	-0.1	6.3	-41.2	-31.9	1.0	-32.9	-9.3	0.0	-9.3
May	10.1	11.0	2.2	8.9	-0.9	-1.7	0.8	1.3	3.7	-2.0	5.7	-2.4	0.4	-2.8
June	31.3	16.1	2.3	13.8	15.2	0.0	15.2	8.2	-1.2	-0.7	-0.5	9.4	-0.2	9.5
July	25.7	23.1	-14.1	37.1	2.6	1.6	1.0	11.2	7.3	0.7	6.7	3.8	0.9	3.0
Growth rates														
2005	15.4	15.8	13.4	16.0	13.4	-1.1	13.5	6.6	7.0	1.7	7.2	5.2	-4.4	5.3
2006	12.6	12.1	23.2	11.2	14.7	-2.2	14.8	8.3	9.3	10.4	9.3	5.0	-0.2	5.0
2007 Q4	13.1	12.4	13.6	12.3	16.0	-43.5	16.3	10.7	9.1	3.1	9.3	15.8	8.1	15.8
2008 Q1	14.3	13.1	14.8	12.9	19.4	67.9	18.9	8.9	8.3	1.5	8.5	10.7	18.1	10.6
2008 Q2	11.0	9.1	14.6	8.6	19.1	6.1	19.2	5.5	4.1	0.8	4.2	10.1	10.7	10.1

### C33 B.o.p. net direct and portfolio investment

(EUR billions)



Source: ECB.

## 7.3 Financial account

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

## 3. Portfolio investment assets

	3. Portfolio investment assets															
	Total	Equity					Debt instruments									
		Total	MFIs		Non-MFIs		Bonds and notes					Money market instruments				
				Euro-system	General government			Total	MFIs	Non-MFIs		General government	Total	MFIs	Non-MFIs	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Outstanding amounts (international investment position)																
2005	3,887.8	1,726.5	102.5	3.0	1,624.0	27.2	1,845.3	710.9	9.0	1,134.4	11.6	316.0	263.0	0.8	53.0	0.4
2006	4,459.3	2,014.1	122.0	2.8	1,892.1	37.0	2,067.8	846.3	11.3	1,221.5	13.4	377.4	310.4	8.7	67.0	0.3
2007 Q4	4,710.3	2,046.3	144.4	2.8	1,901.9	41.7	2,260.5	929.2	11.7	1,331.2	15.2	403.5	323.7	8.2	79.8	0.4
2008 Q1	4,393.3	1,729.0	94.0	2.6	1,635.0	36.2	2,218.7	921.3	10.5	1,297.4	15.7	445.6	360.4	8.8	85.2	0.5
Transactions																
2006	535.9	153.0	18.3	0.0	134.7	6.1	314.5	173.2	2.6	141.3	1.1	68.4	56.2	8.0	12.2	-0.1
2007	426.8	53.0	34.3	-0.1	18.7	5.3	319.5	161.0	2.3	158.5	2.4	54.3	50.8	6.1	3.5	0.3
2007 Q4	98.7	17.6	18.8	-0.1	-1.2	0.9	70.0	31.5	0.7	38.5	0.5	11.1	29.1	6.7	-18.0	-9.1
2008 Q1	46.5	-47.3	-40.9	0.1	-6.4	-0.6	27.1	25.1	-1.2	2.0	0.5	66.6	53.6	-0.1	13.0	0.1
Q2	91.9	15.9	-4.3	0.1	20.2	-	71.6	37.2	0.9	34.5	-	4.3	-3.3	0.5	7.6	-
2008 Mar.	-0.5	-18.4	-27.3	0.1	8.9	.	-1.2	-6.9	-0.6	5.8	.	19.0	12.6	-0.1	6.4	.
Apr.	31.1	1.3	1.1	-0.1	0.2	.	26.7	17.9	0.4	8.8	.	3.1	1.6	0.3	1.5	.
May	53.7	12.0	3.7	0.1	8.3	.	35.4	10.7	0.7	24.7	.	6.3	3.2	0.2	3.2	.
June	7.0	2.6	-9.1	0.0	11.7	.	9.5	8.5	-0.2	1.0	.	-5.1	-8.0	0.1	2.9	.
July	14.2	5.9	3.6	0.1	2.3	.	-2.4	-7.5	0.2	5.1	.	10.7	14.6	0.1	-4.0	.
Growth rates																
2005	13.0	9.8	18.2	5.9	9.3	19.7	17.0	20.9	9.7	14.7	8.0	5.9	6.2	-6.6	3.5	-8.3
2006	13.9	8.9	18.3	0.9	8.3	21.7	17.4	24.9	29.7	12.7	10.6	21.9	22.3	1,022.8	22.1	-20.8
2007 Q4	9.6	2.6	28.1	-3.0	0.9	13.8	15.6	19.4	20.8	13.1	18.1	14.6	16.8	69.3	4.9	70.1
2008 Q1	7.2	-0.6	-20.5	1.9	0.7	9.6	12.0	15.5	1.1	9.6	14.2	22.0	27.0	80.9	2.0	-90.4
Q2	6.0	-0.2	-26.6	3.8	1.6	-	9.8	11.9	6.1	8.3	-	16.4	20.8	89.5	-1.8	-

## 4. Portfolio investment liabilities

	4. Portfolio investment liabilities															
	Total	Equity			Debt instruments											
		Total	MFIs		Non-MFIs		Bonds and notes					Money market instruments				
					General government			Total	MFIs	Non-MFIs		General government	Total	MFIs	Non-MFIs	
1	2	3	4	5	6	7	8	9	10	11	12					
Outstanding amounts (international investment position)																
2005	5,105.7	2,433.7	533.5	1,900.1	2,365.6	723.0	1,642.6	1,175.6	306.4	108.5	198.0	158.5				
2006	5,960.7	2,931.4	671.0	2,260.4	2,732.3	845.3	1,887.0	1,253.7	297.0	127.6	169.4	138.6				
2007 Q4	6,715.2	3,263.2	744.6	2,521.0	3,111.3	1,053.4	2,052.6	1,305.2	340.7	179.1	162.3	143.1				
2008 Q1	6,387.8	2,896.7	760.5	2,136.6	3,148.9	1,041.1	2,108.3	1,377.4	342.1	164.2	177.9	169.7				
Transactions																
2006	802.2	302.4	95.1	207.3	498.1	212.9	285.1	149.1	1.6	28.2	-26.5	-20.1				
2007	662.4	188.2	60.0	128.1	421.1	194.2	225.2	144.1	53.1	48.4	5.2	12.0				
2007 Q4	36.4	-30.6	-33.0	2.6	92.9	35.9	55.4	37.3	-25.8	22.3	-47.8	-45.3				
2008 Q1	119.8	45.5	73.3	-27.8	68.0	23.1	45.0	60.4	6.3	-1.9	8.2	24.3				
Q2	162.3	4.6	30.2	-25.6	130.7	61.3	69.4	-	27.1	0.1	26.9	-				
2008 Mar.	5.2	-5.8	.	.	4.5	.	.	.	6.4	.	.	.				
Apr.	27.4	-21.1	.	.	28.5	.	.	.	20.0	.	.	.				
May	76.0	18.5	.	.	72.6	.	.	.	-15.2	.	.	.				
June	59.0	7.2	.	.	29.5	.	.	.	22.2	.	.	.				
July	9.6	6.3	.	.	-1.0	.	.	.	4.3	.	.	.				
Growth rates																
2005	12.8	13.0	.	.	11.2	.	.	.	23.6	.	.	.				
2006	15.8	12.3	17.7	10.8	21.8	31.4	17.7	13.1	0.5	26.7	-13.1	-12.5				
2007 Q4	11.1	6.4	8.8	5.6	15.5	23.1	12.0	11.8	17.8	37.6	3.4	8.9				
2008 Q1	7.8	4.0	10.4	2.0	11.7	15.8	9.7	13.8	11.3	29.4	-1.0	9.8				
Q2	6.5	1.6	12.4	-1.7	11.5	15.2	9.7	-	6.7	17.0	0.0	-				

Source: ECB.

## 7.3 Financial account

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

### 5. Other investment assets

	Total	Eurosystem			MFIs (excluding Eurosystem)			General government				Other sectors			
	1	2	Loans/ currency and deposits 3	Other assets 4	Total 5	Loans/ currency and deposits 6	Other assets 7	Trade credits 8	Loans/currency and deposits 9	10	Currency and deposits 11	12	Trade credits 13	Loans/currency and deposits 14	Currency and deposits 15
Outstanding amounts (international investment position)															
2005	3,779.7	7.9	7.2	0.7	2,522.1	2,466.0	56.2	127.6	19.7	60.8	11.8	1,122.1	188.9	802.7	347.9
2006	4,403.4	11.3	10.6	0.7	2,946.2	2,887.1	59.1	117.1	14.2	57.8	15.4	1,328.7	187.2	990.3	377.7
2007 Q4	5,178.5	23.3	22.7	0.7	3,354.7	3,282.9	71.9	107.1	13.4	47.8	13.5	1,693.3	196.8	1,366.3	437.2
2008 Q1	5,320.1	33.2	32.9	0.3	3,462.3	3,392.7	69.6	99.8	13.3	41.9	11.2	1,724.9	199.3	1,394.4	445.4
Transactions															
2006	717.7	3.3	3.3	0.0	521.4	517.2	4.2	-2.0	0.0	-2.7	3.1	194.9	5.2	176.2	25.0
2007	865.2	13.3	13.3	0.0	560.3	548.9	11.4	-6.9	-0.5	-7.1	-2.0	298.5	10.2	274.2	17.7
2007 Q4	92.2	3.4	3.4	0.0	57.1	55.4	1.8	1.3	-0.4	1.7	-0.1	30.4	3.3	27.5	-19.8
2008 Q1	272.8	9.3	9.3	0.0	217.8	213.7	4.1	-5.3	-0.1	-5.0	-1.3	51.0	6.4	42.6	14.3
Q2	-105.4	1.8	-	-	-106.3	-	-	7.0	-	-	6.3	-7.9	-	-	-46.4
2008 Mar.	-1.0	3.8	-	-	-33.4	-	-	-1.7	-	-	-1.4	30.4	-	-	15.4
Apr.	53.9	2.2	-	-	50.3	-	-	1.9	-	-	1.4	-0.5	-	-	-16.4
May	-31.4	-0.7	-	-	-33.8	-	-	3.9	-	-	3.8	-0.8	-	-	-9.9
June	-128.0	0.3	-	-	-122.9	-	-	1.3	-	-	1.1	-6.6	-	-	-20.1
July	10.8	-0.6	-	-	7.1	-	-	-8.9	-	-	-9.3	13.2	-	-	4.8
Growth rates															
2005	17.7	21.0	23.1	3.3	19.3	19.7	6.0	-3.5	0.2	-9.1	12.7	17.1	5.2	20.3	1.3
2006	19.3	41.9	45.7	3.1	21.1	21.3	7.6	-1.6	0.0	-4.5	26.1	17.5	2.8	22.3	7.0
2007 Q4	19.6	117.9	125.5	-3.9	19.1	19.1	18.9	-6.0	-3.8	-12.4	-13.3	22.0	5.4	26.5	5.0
2008 Q1	16.3	119.0	124.2	-5.3	15.4	15.5	10.2	-4.4	-4.3	-9.9	17.5	18.7	7.0	22.2	-0.5
Q2	9.5	86.6	-	-	7.4	-	-	-11.7	-	-	-32.0	15.0	-	-	-10.5

### 6. Other investment liabilities

	Total	Eurosystem			MFIs (excluding Eurosystem)			General government				Other sectors			
	1	Total 2	Loans/ currency and deposits 3	Other liabilities 4	Total 5	Loans/ currency and deposits 6	Other liabilities 7	Total 8	Trade credits 9	Loans 10	Other liabilities 11	Total 12	Trade credits 13	Loans 14	Other liabilities 15
Outstanding amounts (international investment position)															
2005	4,025.5	82.4	82.2	0.2	3,114.2	3,061.8	52.4	44.9	0.0	41.1	3.8	784.0	133.1	581.0	70.0
2006	4,611.5	100.2	100.0	0.2	3,487.0	3,433.1	53.9	48.3	0.0	44.4	3.8	976.1	144.5	744.1	87.5
2007 Q4	5,345.5	138.2	137.9	0.2	3,943.6	3,874.8	68.9	51.8	0.0	46.2	5.6	1,211.9	156.9	945.2	109.8
2008 Q1	5,536.7	158.2	157.8	0.4	4,073.8	4,032.5	41.3	51.0	0.0	46.9	4.1	1,253.8	160.5	980.1	113.1
Transactions															
2006	707.3	18.6	18.5	0.0	496.1	492.8	3.2	2.0	0.0	2.1	-0.1	190.8	11.7	167.2	11.9
2007	938.9	52.5	52.5	0.0	639.2	634.0	5.2	2.9	0.0	3.1	-0.1	244.3	10.8	240.9	-7.5
2007 Q4	102.2	37.5	37.5	-0.1	50.8	50.5	0.3	-1.7	0.0	-0.7	-0.9	15.6	3.7	20.2	-8.3
2008 Q1	343.4	21.3	21.2	0.2	283.9	281.3	2.7	-0.3	0.0	1.4	-1.7	38.4	3.2	31.6	3.6
Q2	-6.1	30.5	-	-	-24.6	-	-	-1.9	-	-	-	-10.2	-	-	-
2008 Mar.	29.2	19.2	-	-	-22.9	-	-	-0.3	-	-	-	33.2	-	-	-
Apr.	115.8	8.7	-	-	116.8	-	-	-0.3	-	-	-	-9.4	-	-	-
May	27.2	19.1	-	-	1.7	-	-	-1.6	-	-	-	8.0	-	-	-
June	-149.2	2.7	-	-	-143.1	-	-	0.0	-	-	-	-8.8	-	-	-
July	24.8	-0.5	-	-	15.1	-	-	2.6	-	-	-	7.6	-	-	-
Growth rates															
2005	19.7	8.9	8.9	4.3	19.2	19.5	4.3	-4.6	10.3	-4.4	-7.2	24.9	11.5	30.2	13.1
2006	17.7	22.6	22.6	6.6	16.2	16.3	6.1	4.2	-24.1	5.0	-3.2	24.0	8.7	28.3	16.8
2007 Q4	20.5	52.7	52.8	-3.3	18.5	18.6	9.6	5.9	53.8	6.8	-8.2	24.8	7.3	32.4	-5.7
2008 Q1	20.7	67.3	67.4	17.6	17.9	18.0	9.9	3.9	24.6	6.2	-13.8	27.5	10.9	35.7	-8.3
Q2	15.0	80.9	-	-	11.8	-	-	-0.3	-	-	-	20.8	-	-	-

Source: ECB.

## 7.3 Financial account

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

## 7. Reserve assets

	Reserve assets													Memo		
	Total	Monetary gold		Special drawing rights	Reserve position in the IMF	Foreign exchange							Other claims	Assets	Liabilities	
		In EUR billions	In fine troy ounces (millions)			Total	Currency and deposits		Securities			Financial derivatives		Claims on euro area residents in foreign currency	Predetermined short-term net drains in foreign currency	
							With monetary authorities and the BIS	With banks	Total	Equity	Bonds and notes					Money market instruments
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Outstanding amounts (international investment position)																
2004	281.0	125.4	389.998	3.9	18.6	133.0	12.5	25.5	94.7	0.5	56.6	37.6	0.4	0.0	19.1	-12.8
2005	320.1	163.4	375.861	4.3	10.6	141.7	12.6	21.4	107.9	0.6	69.4	38.0	-0.2	0.0	25.6	-17.9
2006	325.8	176.3	365.213	4.6	5.2	139.7	6.3	22.5	110.7	0.5	79.3	30.8	0.3	0.0	24.6	-21.5
2007 Q3	340.5	187.0	356.925	4.7	3.8	144.9	7.5	27.5	109.6	0.3	85.8	23.5	0.4	0.0	26.2	-26.8
2007 Q4	347.3	201.0	353.688	4.6	3.6	138.2	7.2	22.0	108.5	0.4	87.7	20.4	0.5	0.0	44.1	-38.5
2008 Q1	356.3	208.4	353.060	4.3	3.4	140.1	6.6	26.8	105.9	0.5	89.8	15.6	0.9	0.1	36.7	-37.3
2008 June	353.9	207.9	352.314	4.3	4.0	137.7	7.4	24.0	105.6	-	-	-	0.6	0.0	59.4	-59.2
2008 July	355.6	206.5	351.082	4.4	3.9	140.8	7.2	25.8	108.0	-	-	-	-0.1	0.0	59.8	-61.9
2008 Aug.	350.8	198.4	350.916	4.5	3.9	143.9	6.7	25.8	112.2	-	-	-	-0.8	0.0	62.0	-64.3
Transactions																
2005	-18.0	-3.9	-	0.2	-8.6	-5.7	-0.2	-7.2	1.6	0.0	4.8	-3.2	0.0	0.0	-	-
2006	1.3	-4.2	-	0.5	-5.2	10.2	-6.1	2.7	13.7	0.0	19.4	-5.7	0.0	0.0	-	-
2007	5.3	-2.9	-	0.3	-0.9	8.8	0.9	1.8	6.0	0.0	14.3	-8.3	0.0	0.0	-	-
2007 Q4	-4.9	-1.5	-	0.1	-0.2	-3.3	-0.4	-4.4	1.5	0.1	4.0	-2.6	0.1	0.0	-	-
2008 Q1	5.1	-0.6	-	-0.3	0.0	5.9	-0.7	5.7	0.9	0.1	6.1	-5.3	0.1	0.1	-	-
2008 Q2	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Growth rates																
2004	-4.1	-0.9	-	-10.4	-17.0	-4.6	30.2	-10.7	-6.1	-46.6	-22.4	45.1	-55.8	-	-	-
2005	-5.9	-2.8	-	4.4	-44.6	-4.1	-2.0	-25.3	1.5	2.2	7.1	-7.9	20.5	-	-	-
2006	0.3	-2.4	-	11.6	-49.0	7.7	-48.4	12.7	13.4	0.0	29.2	-15.4	-73.2	-	-	-
2007 Q4	1.7	-1.6	-	7.3	-18.0	6.2	14.1	7.3	5.6	1.1	18.4	-27.4	-59.1	-	-	-
2008 Q1	2.6	-1.6	-	0.4	-2.9	8.5	32.2	10.2	7.1	407.6	18.0	-33.1	-46.5	-	-	-
2008 Q2	1.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Source: ECB.

## 7.3 Financial account

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

### 8. Geographical breakdown

	Total		European Union 27 (outside the euro area)					Canada	China	Japan	Switzer-land	United States	Offshore financial centres	Internat. organisations	Other countries
	Total	Denmark	Sweden	United Kingdom	Other EU countries	EU institutions									
	1	2	3	4	5	6	7								
<b>2006</b>	<b>Outstanding amounts (international investment position)</b>														
<b>Direct investment</b>	396.0	-63.7	-7.2	-21.0	-219.6	184.4	-0.3	37.0	22.1	-6.2	77.4	-24.8	-6.1	-0.2	360.5
Abroad	3,050.2	1,120.0	35.1	83.4	804.4	197.0	0.0	90.2	24.9	68.2	300.3	608.0	329.7	0.0	508.9
Equity/reinvested earnings	2,484.8	906.9	32.0	58.1	644.9	171.8	0.0	71.0	20.1	63.5	250.4	453.1	307.4	0.0	412.4
Other capital	565.3	213.1	3.1	25.3	159.4	25.3	0.0	19.2	4.8	4.7	49.9	154.9	22.3	0.0	96.5
In the euro area	2,654.1	1,183.7	42.3	104.5	1,024.0	12.7	0.3	53.1	2.7	74.4	222.9	632.8	335.8	0.3	148.4
Equity/reinvested earnings	2,037.8	951.9	36.8	86.3	826.7	1.8	0.2	47.3	0.3	60.7	164.8	477.1	209.6	0.0	126.1
Other capital	616.4	231.8	5.5	18.2	197.2	10.9	0.1	5.9	2.5	13.7	58.0	155.7	126.2	0.3	22.3
<b>Portfolio investment assets</b>	4,459.3	1,375.3	65.7	141.4	1,006.1	93.5	68.6	85.1	37.6	262.8	141.2	1,455.5	529.2	32.2	540.3
Equity	2,014.1	486.5	12.3	58.4	393.2	22.4	0.1	22.6	35.2	181.0	128.7	671.0	216.6	1.4	271.1
Debt instruments	2,445.2	888.9	53.4	83.0	612.9	71.2	68.4	62.4	2.4	81.8	12.5	784.5	312.6	30.8	269.3
Bonds and notes	2,067.8	732.6	48.6	71.1	474.4	70.4	68.2	60.2	2.3	62.3	8.5	660.3	273.0	29.8	238.8
Money market instruments	377.4	156.3	4.9	11.9	138.5	0.8	0.2	2.3	0.0	19.6	4.0	124.2	39.5	1.0	30.5
<b>Other investment</b>	-208.2	92.8	86.4	13.5	116.3	25.2	-148.6	-1.6	3.9	-37.5	-50.2	-5.1	-215.7	-20.0	25.2
Assets	4,403.4	2,291.6	111.4	69.2	1,988.1	113.3	9.5	19.5	25.3	73.7	263.5	586.7	438.6	45.7	659.0
General government	117.1	25.2	2.1	0.1	14.2	1.5	7.4	0.0	1.9	0.2	0.1	3.1	1.4	38.5	46.7
MFIs	2,957.5	1,718.0	95.7	47.9	1,490.9	82.8	0.8	11.0	12.0	38.9	162.7	344.7	274.7	6.6	389.0
Other sectors	1,328.7	548.3	13.6	21.2	483.0	29.1	1.4	8.4	11.4	34.7	100.7	238.9	162.5	0.6	223.3
Liabilities	4,611.5	2,198.8	25.0	55.7	1,871.8	88.1	158.1	21.0	21.3	111.2	313.6	591.8	654.3	65.7	633.8
General government	48.3	24.1	0.0	0.3	2.4	0.0	21.4	0.0	0.0	0.7	0.0	6.2	0.2	2.7	14.3
MFIs	3,587.2	1,659.8	19.5	35.0	1,440.4	67.9	97.0	14.2	8.5	60.3	253.7	416.6	583.6	60.4	530.2
Other sectors	976.1	514.9	5.5	20.4	429.0	20.2	39.8	6.8	12.8	50.3	59.9	169.0	70.5	2.6	89.3
<b>2007 Q2 to 2008 Q1</b>	<b>Cumulated transactions</b>														
<b>Direct investment</b>	207.9	90.7	2.0	-2.1	66.5	24.3	0.0	17.9	2.9	2.1	22.3	-35.3	40.7	-0.2	66.8
Abroad	451.8	129.5	1.3	5.4	90.9	32.0	0.0	19.7	2.7	10.3	40.6	76.1	73.3	-0.1	99.7
Equity/reinvested earnings	334.9	99.5	0.6	3.5	70.0	25.4	0.0	12.4	0.7	3.8	26.1	60.6	62.4	0.0	69.5
Other capital	116.9	30.1	0.7	1.9	20.9	6.5	0.0	7.3	2.0	6.5	14.5	15.5	10.9	-0.1	30.2
In the euro area	244.0	38.8	-0.7	7.4	24.4	7.7	0.0	1.8	-0.2	8.3	18.3	111.4	32.6	0.1	32.9
Equity/reinvested earnings	172.8	44.4	-1.8	8.6	36.8	0.8	0.0	-0.3	0.1	8.8	9.3	74.7	22.2	0.0	13.6
Other capital	71.2	-5.6	1.1	-1.2	-12.4	6.9	0.0	2.1	-0.3	-0.6	9.0	36.8	10.4	0.1	19.2
<b>Portfolio investment assets</b>	328.5	92.7	0.2	7.0	75.7	2.8	6.9	4.8	1.4	-15.9	-15.7	127.6	20.2	-3.3	116.7
Equity	-10.7	-17.5	0.2	1.1	-20.0	1.1	0.1	-1.6	0.6	-28.2	-19.6	4.2	29.9	-0.1	21.5
Debt instruments	339.2	110.2	0.1	5.9	95.7	1.7	6.8	6.5	0.8	12.3	3.9	123.4	-9.8	-3.2	95.1
Bonds and notes	253.9	64.0	0.8	2.1	53.1	1.7	6.3	7.0	0.4	4.7	2.3	86.5	6.1	-2.8	85.6
Money market instruments	85.3	46.2	-0.7	3.8	42.6	0.0	0.5	-0.6	0.5	7.6	1.5	36.9	-15.9	-0.4	9.5
<b>Other investment</b>	-226.3	-251.8	52.9	-1.2	-338.5	49.0	-14.0	1.0	16.5	4.2	-74.4	-93.1	42.6	29.4	99.5
Assets	770.8	199.4	23.9	2.2	99.6	67.3	6.5	3.6	9.7	16.0	-38.8	314.4	121.8	14.2	130.6
General government	-4.6	-1.4	1.0	0.2	-3.0	-0.3	0.6	0.0	-0.1	0.0	0.0	0.0	0.0	0.5	-3.7
MFIs	504.3	139.2	20.6	3.4	42.1	67.6	5.5	2.6	6.2	24.9	-37.7	133.9	98.6	13.7	122.9
Other sectors	271.1	61.7	2.3	-1.4	60.5	0.0	0.3	1.0	3.5	-8.9	-1.2	180.4	23.2	0.0	11.4
Liabilities	997.1	451.2	-29.0	3.4	438.1	18.3	20.5	2.6	-6.8	11.8	35.5	407.5	79.3	-15.2	31.1
General government	2.0	3.9	-0.1	0.1	-3.9	0.0	7.8	0.0	0.0	0.0	0.0	-0.3	0.1	-0.8	-0.9
MFIs	722.0	407.3	-28.6	0.5	414.2	13.1	8.1	2.0	-8.0	11.2	22.9	203.5	66.5	-14.3	31.0
Other sectors	273.0	40.1	-0.3	2.8	27.8	5.2	4.6	0.6	1.1	0.7	12.6	204.3	12.7	-0.1	1.0

Source: ECB.

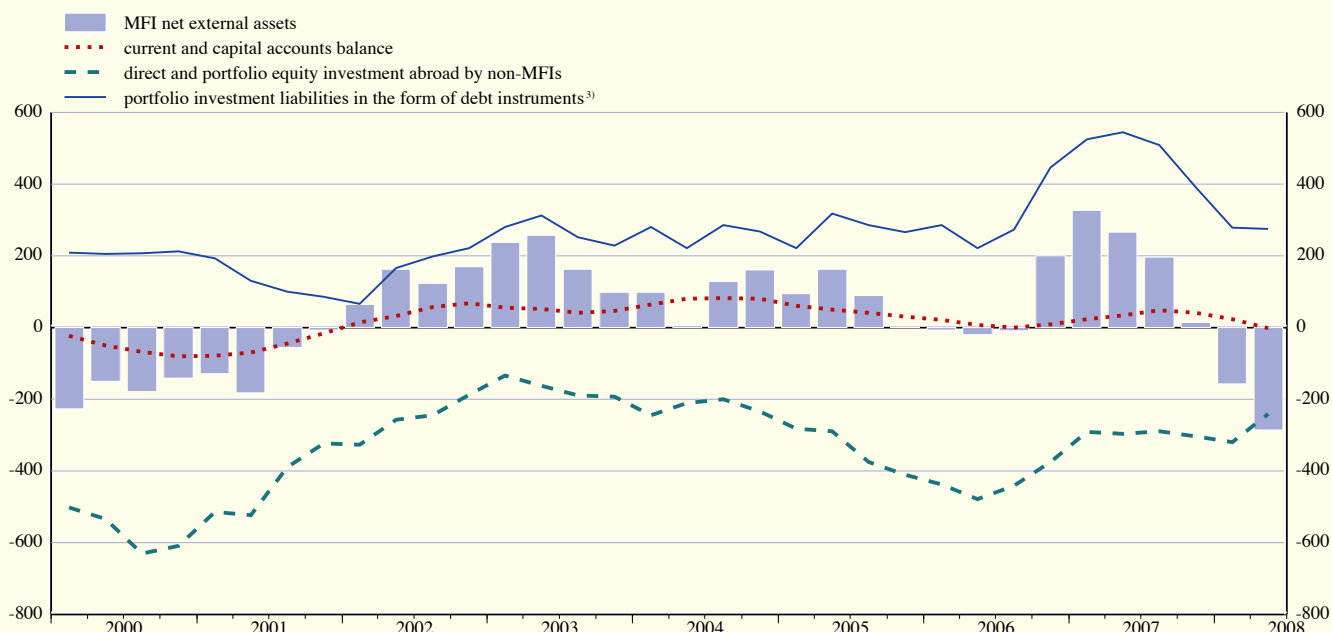
**7.4 Monetary presentation of the balance of payments <sup>1)</sup>**

(EUR billions; transactions)

	B.o.p. items balancing transactions in the external counterpart of M3											Memo: Transactions in the external counterpart of M3
	Current and capital accounts balance	Direct investment		Portfolio investment			Other investment		Financial derivatives	Errors and omissions	Total of columns 1 to 10	
		By resident units abroad (non-MFIs)	By non- resident units in the euro area	Assets Non-MFIs	Liabilities		Assets Non-MFIs	Liabilities Non-MFIs				
					Equity <sup>2)</sup>	Debt instruments <sup>3)</sup>						
1	2	3	4	5	6	7	8	9	10	11	12	
2005	29.9	-349.1	149.6	-264.8	212.4	266.2	-150.8	148.2	-18.2	-33.9	-10.6	-0.1
2006	9.7	-313.5	206.6	-288.3	242.1	445.2	-192.9	192.8	2.4	-114.8	189.4	200.3
2007	41.4	-375.3	283.8	-182.0	142.4	390.1	-291.6	247.3	-90.7	-129.7	35.8	13.7
2007 Q2	-0.1	-101.3	53.8	-67.4	65.6	134.1	-56.8	46.7	-19.8	-56.7	-2.0	-0.2
Q3	14.9	-99.5	76.1	-42.9	25.3	48.0	-132.1	176.7	-26.8	-104.8	-65.3	-67.3
Q4	17.9	-84.3	74.1	-19.3	-39.8	42.6	-31.8	13.4	-28.8	68.0	12.0	-7.0
2008 Q1	-9.8	-130.6	38.2	-8.7	5.8	53.0	-45.7	38.1	-14.9	-9.4	-83.9	-83.3
Q2	-24.0	-15.5	-31.9	-62.3	-13.0	130.5	0.9	-12.1	-39.2	-52.1	-118.9	-128.8
2007 July	7.0	-25.5	26.7	-22.3	33.1	19.5	32.2	4.9	-12.9	-53.7	9.0	8.2
Aug.	1.2	-28.5	33.3	-11.1	-14.7	23.6	-12.6	31.8	-5.1	-66.9	-48.9	-51.1
Sep.	6.6	-45.5	16.0	-9.5	7.0	4.8	-151.7	139.9	-8.8	15.8	-25.3	-24.4
Oct.	5.8	-34.9	59.2	-12.7	-24.2	4.3	-26.4	3.9	1.4	36.9	13.3	11.9
Nov.	4.3	-28.4	41.5	-2.4	-7.3	64.9	-12.6	10.7	-22.7	-14.5	33.5	28.6
Dec.	7.8	-21.0	-26.6	-4.2	-8.3	-26.6	7.3	-1.1	-7.6	45.6	-34.8	-47.5
2008 Jan.	-15.8	-75.9	30.0	17.4	-9.8	33.7	-6.5	36.1	-19.2	-7.1	-17.1	-18.5
Feb.	9.8	-31.1	11.9	-5.0	19.9	15.9	-10.5	-30.8	1.7	-1.4	-19.7	-13.8
Mar.	-3.9	-23.5	-3.6	-21.1	-4.3	3.3	-28.7	32.8	2.6	-0.9	-47.1	-51.0
Apr.	-6.9	23.1	-41.2	-10.5	-37.2	43.4	-1.4	-9.6	-14.2	-11.3	-65.7	-73.4
May	-17.9	-9.7	0.9	-36.2	3.5	38.8	-3.1	6.4	-29.6	-27.4	-74.2	-69.8
June	0.8	-29.0	8.4	-15.6	20.6	48.3	5.4	-8.9	4.6	-13.5	21.0	14.4
July	-0.3	-38.2	10.3	-3.5	-8.5	3.0	-4.3	10.2	2.2	4.8	-24.2	-3.5
	<i>12-month cumulated transactions</i>											
2008 July	-8.3	-342.5	140.0	-114.3	-63.3	257.6	-245.1	221.4	-94.7	-39.8	-289.2	-298.1

**C34 Main b.o.p. transactions underlying the developments in MFI net external assets <sup>1)</sup>**

(EUR billions; 12-month cumulated transactions)



Source: ECB.

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

2) Excluding money market fund shares/units.

3) Excluding debt securities with a maturity of up to two years issued by euro area MFIs.

## 7.5 Trade in goods

(seasonally adjusted, unless otherwise indicated)

### 1. Values, volumes and unit values by product group

	Total (n.s.a.)		Exports (f.o.b.)					Imports (c.i.f.)					
	Exports	Imports	Total			Memo: Manufactures	Total			Memo:			
			Intermediate	Capital	Consumption		Intermediate	Capital	Consumption	Manufactures	Oil		
	1	2	3	4	5	6	7	8	9	10	11	12	13
Values (EUR billions; annual percentage changes for columns 1 and 2)													
2004	9.0	9.3	1,144.4	543.7	246.3	313.6	995.0	1,075.8	604.8	184.3	256.8	770.5	130.0
2005	7.8	13.4	1,238.2	589.8	269.0	333.7	1,068.7	1,227.4	706.0	208.3	277.0	846.0	187.0
2006	11.6	13.7	1,384.9	686.4	296.4	365.2	1,182.9	1,397.5	856.7	216.5	304.6	943.0	224.6
2007	8.4	5.7	1,501.0	737.0	324.5	393.6	1,275.7	1,475.1	898.5	225.3	323.9	1,009.5	223.3
2007 Q1	9.0	5.3	367.7	180.5	79.6	96.6	311.4	359.7	216.8	56.9	79.8	250.4	48.1
Q2	9.4	3.7	370.8	181.8	80.7	97.2	316.7	361.5	221.8	54.3	79.5	249.8	53.0
Q3	10.2	6.4	381.0	187.1	81.9	100.2	326.3	374.0	225.9	57.9	82.4	259.6	57.5
Q4	5.4	7.3	381.5	187.5	82.3	99.7	321.3	379.8	234.0	56.3	82.2	249.8	64.7
2008 Q1	6.8	9.3	395.5	194.1	84.0	104.2	331.3	396.2	247.3	57.2	81.7	255.9	70.0
Q2	7.5	11.1	396.7	196.3	83.1	102.6	331.1	401.0	255.0	53.9	80.8	253.1	75.0
2008 Feb.	13.0	10.1	134.2	65.9	28.6	35.5	112.9	132.1	82.0	19.1	27.3	86.2	21.5
Mar.	-1.7	5.3	128.9	62.9	27.1	33.3	107.7	130.5	82.4	18.6	26.5	83.7	23.9
Apr.	16.2	15.8	136.2	67.5	28.5	35.7	112.6	135.2	85.0	18.5	27.5	84.6	23.9
May	2.9	7.0	129.8	64.1	27.0	33.3	108.4	131.4	83.9	17.8	26.6	83.6	24.2
June	4.1	10.7	130.8	64.7	27.5	33.6	110.1	134.3	86.1	17.6	26.8	84.9	26.9
July	10.2	16.6	135.7	.	.	.	109.7	142.1	.	.	.	85.4	.
Volume indices (2000 = 100; annual percentage changes for columns 1 and 2)													
2004	9.0	6.4	117.5	114.9	120.2	118.6	118.6	108.0	104.1	108.8	117.6	109.0	106.2
2005	4.7	5.0	123.5	119.7	129.8	123.6	124.6	114.0	107.5	123.5	123.6	117.1	110.6
2006	7.8	6.0	133.5	133.6	140.2	131.2	134.4	121.0	117.8	128.5	131.3	126.1	110.0
2007	6.0	4.2	141.5	138.8	151.4	139.5	142.1	125.9	120.0	137.4	138.5	133.8	107.6
2007 Q1	7.1	6.4	139.8	137.3	149.1	137.0	139.1	126.4	121.5	137.3	137.1	132.6	109.4
Q2	6.4	3.5	139.5	136.6	149.9	138.0	140.5	124.8	120.3	133.0	137.4	132.5	106.6
Q3	7.4	5.4	143.1	140.4	152.5	141.6	144.9	126.3	118.9	141.4	139.2	136.8	106.6
Q4	3.4	1.6	143.5	141.0	153.9	141.5	143.6	126.2	119.3	137.9	140.2	133.3	108.0
2008 Q1	3.9	-1.1	146.3	142.7	154.4	146.1	146.9	126.1	119.7	138.9	137.6	134.7	109.4
Q2	5.0	-1.1	145.7	142.1	153.3	143.6	146.7	123.2	116.5	132.4	138.2	133.5	102.8
2008 Feb.	9.8	-0.1	148.8	145.3	158.5	148.8	149.8	126.4	119.6	138.1	137.7	135.7	101.8
Mar.	-4.1	-4.8	142.7	138.1	148.9	140.2	142.9	123.6	117.8	136.0	135.2	132.5	109.2
Apr.	13.7	5.3	150.9	147.6	158.2	150.1	149.7	127.9	121.0	136.8	140.7	134.5	106.9
May	1.0	-4.9	143.6	139.5	149.6	141.3	144.9	121.7	115.5	131.7	137.3	132.6	100.3
June	0.7	-3.6	142.6	139.1	152.0	139.4	145.4	120.0	113.0	128.7	136.6	133.5	101.2
July	.	.	.	.	.	.	.	.	.	.	.	.	.
Unit value indices (n.s.a.; 2000 = 100; annual percentage changes for columns 1 and 2)													
2004	-0.1	2.7	97.6	96.6	95.7	101.2	97.3	97.4	98.3	92.3	99.0	96.3	99.6
2005	2.9	8.0	100.4	100.6	96.8	103.3	99.4	105.2	111.1	91.8	101.5	98.5	137.7
2006	3.6	7.4	104.0	104.9	98.7	106.5	102.0	113.0	123.1	91.9	105.1	101.9	166.5
2007	2.2	1.4	106.3	108.4	100.1	107.9	104.1	114.6	126.8	89.4	106.0	102.8	169.3
2007 Q1	1.7	-1.0	105.4	107.5	99.7	107.9	103.8	111.3	120.9	90.3	105.5	102.9	143.5
Q2	2.8	0.2	106.6	108.8	100.5	107.8	104.5	113.3	124.9	89.0	104.9	102.8	162.1
Q3	2.5	0.9	106.7	108.9	100.3	108.3	104.4	115.8	128.7	89.3	107.2	103.4	176.2
Q4	2.0	5.6	106.6	108.7	100.0	107.8	103.7	117.7	132.8	89.0	106.3	102.2	195.5
2008 Q1	2.8	10.4	108.4	111.2	101.6	109.1	104.6	123.0	140.0	89.8	107.6	103.6	208.8
Q2	2.4	12.4	109.2	112.9	101.2	109.4	104.6	127.4	148.3	88.7	106.0	103.3	238.4
2008 Feb.	2.9	10.3	108.5	111.2	101.1	109.7	104.8	122.6	139.3	90.3	107.7	103.8	206.4
Mar.	2.5	10.6	108.6	111.7	102.2	109.2	104.8	123.9	142.1	89.4	106.5	103.3	214.3
Apr.	2.2	10.0	108.5	112.1	101.1	109.2	104.6	124.1	142.6	88.5	106.1	102.9	218.8
May	1.9	12.5	108.7	112.6	101.1	108.3	104.0	126.8	147.6	88.5	105.3	103.1	236.1
June	3.3	14.8	110.3	114.1	101.5	110.6	105.3	131.3	154.8	89.2	106.6	104.0	260.2
July	.	.	.	.	.	.	.	.	.	.	.	.	.

Source: Eurostat.



## 7.5 Trade in goods

(EUR billions, unless otherwise indicated; seasonally adjusted)

## 2. Geographical breakdown

	Total	European Union 27 (outside the euro area)				Russia	Switzer-land	Turkey	United States	Asia			Africa	Latin America	Other countries
	1	Denmark	Sweden	United Kingdom	Other EU countries	6	7	8	9	China	Japan	13	14	15	
<b>Exports (f.o.b.)</b>															
2004	1,144.4	25.8	42.1	204.5	133.9	35.9	66.6	31.8	172.7	225.7	40.4	33.3	64.6	40.7	100.2
2005	1,238.2	29.0	45.2	203.3	153.2	43.7	70.8	34.7	185.3	244.2	43.3	34.1	73.4	46.9	108.6
2006	1,384.9	31.7	49.9	216.8	189.8	55.2	77.2	38.8	199.9	271.7	53.7	34.5	77.7	54.4	121.7
2007	1,501.0	33.7	55.3	229.0	220.0	67.0	81.9	40.9	195.0	296.1	60.2	34.3	87.2	61.3	133.4
2007 Q1	367.7	8.3	13.5	56.8	52.3	15.6	20.5	10.2	49.6	71.9	14.3	8.7	21.4	14.8	32.8
Q2	370.8	8.4	13.9	56.0	53.9	16.7	20.0	9.9	48.6	73.2	14.9	8.8	21.4	15.4	33.3
Q3	381.0	8.5	14.2	58.8	56.5	17.2	20.6	10.3	49.5	75.1	15.3	8.5	22.2	15.5	32.6
Q4	381.5	8.5	13.7	57.4	57.4	17.5	20.8	10.5	47.3	75.9	15.6	8.2	22.3	15.5	34.7
2008 Q1	395.5	8.8	13.9	57.4	60.4	19.2	20.8	11.7	48.4	78.3	16.7	8.5	23.8	16.0	36.7
Q2	396.7	8.9	14.2	57.5	61.2	19.5	21.8	11.0	46.2	77.4	17.0	8.4	24.5	16.2	38.3
2008 Feb.	134.2	3.0	4.7	19.2	20.4	6.5	6.9	4.0	16.7	26.4	5.5	2.9	8.1	5.4	13.0
Mar.	128.9	2.9	4.6	18.5	19.9	6.5	7.0	3.8	15.2	25.8	5.5	2.8	7.9	5.3	11.5
Apr.	136.2	3.0	4.7	20.1	20.9	6.5	7.3	3.8	16.3	26.1	5.9	2.8	8.1	5.3	14.1
May	129.8	3.0	4.7	18.7	20.0	6.4	7.2	3.6	14.7	25.5	5.5	2.8	8.1	5.4	12.6
June	130.8	3.0	4.8	18.7	20.3	6.6	7.3	3.6	15.2	25.8	5.6	2.8	8.4	5.5	11.6
July	135.7	.	.	.	.	6.8	7.2	3.7	14.9	26.0	5.7	2.8	8.6	5.9	.
<i>% share of total exports</i>															
2007	100.0	2.2	3.7	15.3	14.7	4.5	5.5	2.7	13.0	19.7	4.0	2.3	5.8	4.1	8.9
<b>Imports (c.i.f.)</b>															
2004	1,075.8	25.4	40.0	144.8	115.5	56.6	53.3	23.2	113.4	309.2	92.3	54.1	72.9	45.2	76.3
2005	1,227.4	26.4	42.4	153.2	127.8	76.3	58.1	25.5	120.2	363.5	118.1	53.2	96.0	53.8	84.3
2006	1,397.5	28.5	48.0	167.2	152.3	95.6	62.3	29.4	125.9	418.5	144.5	57.0	110.5	66.2	93.1
2007	1,475.1	28.1	51.7	167.8	174.4	97.7	67.1	32.2	131.1	445.6	170.2	58.5	112.7	74.8	92.0
2007 Q1	359.7	7.0	12.9	40.7	41.4	22.8	17.0	7.9	33.5	111.0	42.5	14.9	26.5	18.1	20.9
Q2	361.5	7.0	12.8	41.8	42.6	23.9	16.5	7.9	32.3	108.5	40.2	14.3	26.9	18.3	23.1
Q3	374.0	7.3	12.9	42.8	44.9	23.6	17.1	8.1	33.0	113.7	44.3	14.9	28.1	18.9	23.4
Q4	379.8	6.7	13.2	42.5	45.5	27.4	16.5	8.3	32.3	112.4	43.2	14.4	31.2	19.4	24.5
2008 Q1	396.2	7.2	14.1	43.5	47.9	28.0	16.9	8.3	34.0	116.5	43.5	14.6	34.0	19.4	26.4
Q2	401.0	7.6	13.2	41.4	48.5	29.0	17.1	8.5	33.4	116.2	43.5	13.9	36.3	20.2	29.5
2008 Feb.	132.1	2.6	4.7	14.5	16.0	9.2	5.8	2.7	11.2	38.4	14.5	5.0	11.3	6.4	9.2
Mar.	130.5	2.3	4.6	14.2	16.1	9.3	5.6	2.8	11.3	38.6	14.1	4.8	11.1	6.4	8.2
Apr.	135.2	2.7	4.5	14.1	16.6	9.9	5.8	2.9	11.1	39.0	14.6	4.9	12.3	6.8	9.5
May	131.4	2.6	4.4	13.5	15.9	9.7	5.6	2.8	10.9	38.0	14.4	4.5	11.6	6.8	9.7
June	134.3	2.4	4.3	13.8	16.0	9.3	5.8	2.8	11.3	39.2	14.5	4.6	12.4	6.6	10.3
July	142.1	.	.	.	.	11.4	6.0	2.8	11.9	41.0	15.5	4.5	12.4	6.7	.
<i>% share of total imports</i>															
2007	100.0	1.9	3.5	11.4	11.8	6.6	4.5	2.2	8.9	30.2	11.5	4.0	7.6	5.1	6.2
<b>Balance</b>															
2004	68.6	0.4	2.2	59.6	18.4	-20.7	13.3	8.6	59.3	-83.5	-52.0	-20.8	-8.3	-4.5	23.9
2005	10.8	2.6	2.8	50.1	25.4	-32.5	12.7	9.2	65.1	-119.3	-74.8	-19.1	-22.6	-6.9	24.3
2006	-12.7	3.2	1.9	49.7	37.6	-40.4	15.0	9.4	73.9	-146.8	-90.8	-22.4	-32.8	-11.9	28.6
2007	25.9	5.6	3.6	61.2	45.7	-30.6	14.9	8.7	63.9	-149.6	-110.0	-24.3	-25.5	-13.4	41.5
2007 Q1	8.0	1.3	0.6	16.1	10.9	-7.2	3.5	2.3	16.1	-39.1	-28.2	-6.2	-5.1	-3.3	11.8
Q2	9.3	1.4	1.1	14.2	11.3	-7.2	3.5	2.0	16.3	-35.3	-25.3	-5.5	-5.5	-2.9	10.2
Q3	7.0	1.2	1.3	15.9	11.5	-6.4	3.5	2.2	16.4	-38.7	-29.0	-6.3	-6.0	-3.3	9.2
Q4	1.7	1.8	0.6	14.9	11.9	-9.9	4.3	2.2	15.1	-36.5	-27.5	-6.2	-8.9	-3.9	10.2
2008 Q1	-0.7	1.6	-0.2	13.9	12.5	-8.8	3.9	3.4	14.4	-38.2	-26.7	-6.1	-10.1	-3.4	10.3
Q2	-4.3	1.2	0.9	16.2	12.7	-9.5	4.6	2.5	12.8	-38.7	-26.5	-5.5	-11.8	-4.0	8.8
2008 Feb.	2.2	0.4	0.0	4.7	4.3	-2.7	1.2	1.3	5.5	-12.0	-9.0	-2.1	-3.3	-1.0	3.8
Mar.	-1.6	0.6	0.0	4.4	3.8	-2.8	1.4	1.0	3.9	-12.8	-8.6	-2.0	-3.2	-1.2	3.3
Apr.	0.9	0.3	0.2	6.0	4.3	-3.4	1.5	1.0	5.1	-12.9	-8.7	-2.0	-4.3	-1.5	4.6
May	-1.7	0.4	0.3	5.2	4.1	-3.3	1.6	0.8	3.8	-12.4	-8.9	-1.7	-3.5	-1.4	2.8
June	-3.5	0.6	0.5	5.0	4.3	-2.8	1.4	0.8	3.9	-13.4	-8.9	-1.8	-4.1	-1.1	1.4
July	-6.4	.	.	.	.	-4.6	1.2	0.9	2.9	-15.0	-9.8	-1.7	-3.8	-0.8	.

Source: Eurostat.



## EXCHANGE RATES

### 8.1 Effective exchange rates <sup>1)</sup>

(period averages; index 1999 Q1=100)

	EER-22					EER-42			
	Nominal	Real CPI	Real PPI	Real GDP deflator	Real ULCM	Real ULCT	Nominal	Real CPI	
	1	2	3	4	5	6	7	8	
2005	103.3	104.2	102.5	102.0	102.3	101.3	109.7	103.7	
2006	103.6	104.6	103.0	101.8	102.4	100.7	110.0	103.4	
2007	107.7	108.3	106.8	105.4	105.6	103.6	114.2	106.6	
2007 Q3	107.6	108.2	106.8	105.4	105.5	103.5	114.1	106.4	
Q4	110.5	111.2	109.5	107.8	107.4	105.9	117.0	109.0	
2008 Q1	112.7	113.1	111.2	110.1	110.4	108.4	119.4	110.8	
Q2	115.7	115.7	113.0	112.9	112.7	110.8	122.6	113.2	
Q3	113.7	113.3	110.8	.	.	.	120.4	110.7	
2007 Sep.	108.2	108.8	107.5	-	-	-	114.8	107.0	
Oct.	109.4	110.1	108.7	-	-	-	115.8	108.0	
Nov.	111.0	111.7	109.9	-	-	-	117.6	109.6	
Dec.	111.2	111.7	110.0	-	-	-	117.6	109.4	
2008 Jan.	112.0	112.3	110.4	-	-	-	118.3	109.9	
Feb.	111.8	111.9	110.4	-	-	-	118.2	109.5	
Mar.	114.6	115.0	112.8	-	-	-	121.5	112.8	
Apr.	116.0	116.1	113.8	-	-	-	123.1	113.8	
May	115.5	115.5	112.9	-	-	-	122.4	113.0	
June	115.4	115.4	112.2	-	-	-	122.4	112.9	
July	115.8	115.5	112.2	-	-	-	122.8	113.0	
Aug.	113.5	113.2	111.0	-	-	-	120.0	110.3	
Sep.	111.6	111.3	109.3	-	-	-	118.3	108.6	
	<i>% change versus previous month</i>								
2008 Sep.	-1.7	-1.7	-1.5	-	-	-	-1.4	-1.5	
	<i>% change versus previous year</i>								
2008 Sep.	3.1	2.3	1.7	-	-	-	3.1	1.5	

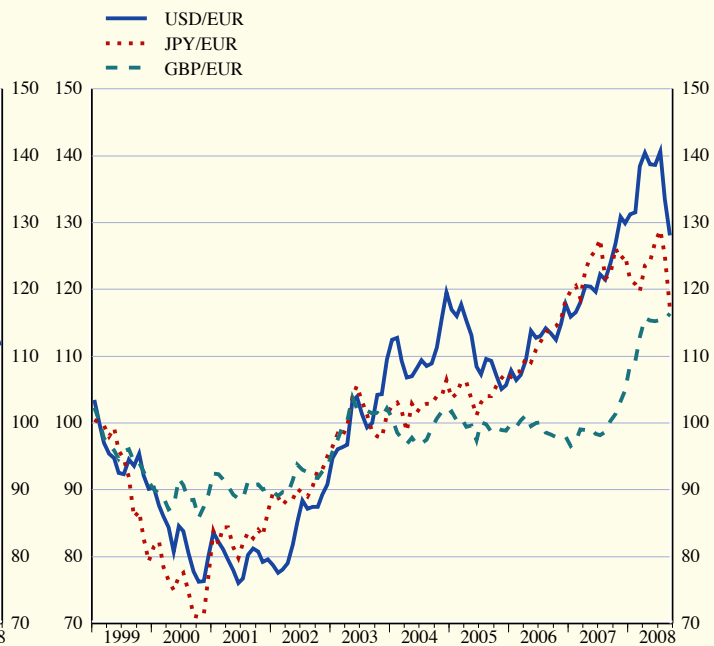
### C35 Effective exchange rates

(monthly averages; index 1999 Q1=100)



### C36 Bilateral exchange rates

(monthly averages; index 1999 Q1=100)



Source: ECB.

1) For the definition of the trading partner groups and other information, please refer to the General notes.

## 8.2 Bilateral exchange rates

(period averages; units of national currency per euro)

	Danish kroner 1	Swedish krona 2	Pound sterling 3	US dollar 4	Japanese yen 5	Swiss franc 6	South Korean won 7	Hong Kong dollar 8	Singapore dollar 9	Canadian dollar 10	Norwegian kroner 11	Australian dollar 12
2005	7.4518	9.2822	0.68380	1.2441	136.85	1.5483	1,273.61	9.6768	2.0702	1.5087	8.0092	1.6320
2006	7.4591	9.2544	0.68173	1.2556	146.02	1.5729	1,198.58	9.7545	1.9941	1.4237	8.0472	1.6668
2007	7.4506	9.2501	0.68434	1.3705	161.25	1.6427	1,272.99	10.6912	2.0636	1.4678	8.0165	1.6348
2008 Q1	7.4534	9.3996	0.75698	1.4976	157.80	1.6014	1,430.84	11.6737	2.1107	1.5022	7.9583	1.6533
Q2	7.4599	9.3517	0.79286	1.5622	163.35	1.6114	1,590.82	12.1845	2.1346	1.5769	7.9401	1.6559
Q3	7.4592	9.4738	0.79504	1.5050	161.83	1.6115	1,600.93	11.7372	2.1010	1.5650	8.0604	1.6955
2008 Mar.	7.4561	9.4020	0.77494	1.5527	156.59	1.5720	1,523.14	12.0832	2.1489	1.5519	7.9717	1.6763
Apr.	7.4603	9.3699	0.79487	1.5751	161.56	1.5964	1,555.98	12.2728	2.1493	1.5965	7.9629	1.6933
May	7.4609	9.3106	0.79209	1.5557	162.31	1.6247	1,613.18	12.1341	2.1259	1.5530	7.8648	1.6382
June	7.4586	9.3739	0.79152	1.5553	166.26	1.6139	1,604.95	12.1425	2.1278	1.5803	7.9915	1.6343
July	7.4599	9.4566	0.79308	1.5770	168.45	1.6193	1,604.58	12.3004	2.1438	1.5974	8.0487	1.6386
Aug.	7.4595	9.3984	0.79279	1.4975	163.63	1.6212	1,566.23	11.6932	2.1024	1.5765	7.9723	1.6961
Sep.	7.4583	9.5637	0.79924	1.4370	153.20	1.5942	1,630.26	11.1905	2.0549	1.5201	8.1566	1.7543
	% change versus previous month											
2008 Sep.	0.0	1.8	0.8	-4.0	-6.4	-1.7	4.1	-4.3	-2.3	-3.6	2.3	3.4
	% change versus previous year											
2008 Sep.	0.1	3.0	16.0	3.4	-4.1	-3.2	26.2	3.5	-2.2	6.5	4.2	6.7
	Czech koruna 13	Estonian kroon 14	Latvian lats 15	Lithuanian litas 16	Hungarian forint 17	Polish zloty 18	Slovak koruna 19	Bulgarian lev 20	New Roma- nian leu 21	Croatian kuna 22	New Turkish lira 23	
2005	29.782	15.6466	0.6962	3.4528	248.05	4.0230	38.599	1.9558	3.6209	7.4008	1.6771	
2006	28.342	15.6466	0.6962	3.4528	264.26	3.8959	37.234	1.9558	3.5258	7.3247	1.8090	
2007	27.766	15.6466	0.7001	3.4528	251.35	3.7837	33.775	1.9558	3.3353	7.3376	1.7865	
2008 Q1	25.564	15.6466	0.6973	3.4528	259.30	3.5759	33.069	1.9558	3.6887	7.2852	1.8036	
Q2	24.830	15.6466	0.6997	3.4528	248.04	3.4070	31.403	1.9558	3.6521	7.2556	1.9717	
Q3	24.093	15.6466	0.7045	3.4528	236.07	3.3081	30.312	1.9558	3.5768	7.1827	1.8235	
2008 Mar.	25.208	15.6466	0.6970	3.4528	259.94	3.5363	32.499	1.9558	3.7194	7.2662	1.9309	
Apr.	25.064	15.6466	0.6974	3.4528	253.75	3.4421	32.374	1.9558	3.6428	7.2654	2.0500	
May	25.100	15.6466	0.6987	3.4528	247.69	3.4038	31.466	1.9558	3.6583	7.2539	1.9408	
June	24.316	15.6466	0.7032	3.4528	242.42	3.3736	30.322	1.9558	3.6556	7.2469	1.9206	
July	23.528	15.6466	0.7035	3.4528	231.82	3.2591	30.319	1.9558	3.5764	7.2297	1.9128	
Aug.	24.287	15.6466	0.7039	3.4528	235.88	3.2920	30.334	1.9558	3.5271	7.1947	1.7669	
Sep.	24.497	15.6466	0.7060	3.4528	240.68	3.3747	30.283	1.9558	3.6248	7.1223	1.7843	
	% change versus previous month											
2008 Sep.	0.9	0.0	0.3	0.0	2.0	2.5	-0.2	0.0	2.8	-1.0	1.0	
	% change versus previous year											
2008 Sep.	-11.2	0.0	0.6	0.0	-5.0	-10.9	-10.5	0.0	8.3	-2.6	1.7	
	Brazilian real <sup>1)</sup> 24	Chinese yuan renminbi 25	Icelandic krona 26	Indonesian rupiah 27	Malaysian ringgit 28	Mexican peso <sup>1)</sup> 29	New Zealand dollar 30	Philippine peso 31	Russian rouble 32	South African rand 33	Thai baht 34	
2005	3.0360	10.1955	78.23	12,072.83	4.7119	13.5643	1.7660	68.494	35.1884	7.9183	50.068	
2006	2.7333	10.0096	87.76	11,512.37	4.6044	13.6936	1.9373	64.379	34.1117	8.5312	47.594	
2007	2.6594	10.4178	87.63	12,528.33	4.7076	14.9743	1.8627	63.026	35.0183	9.6596	44.214	
2008 Q1	2.6012	10.7268	101.09	13,861.78	4.8325	16.1862	1.8960	61.211	36.3097	11.2736	46.461	
Q2	2.5882	10.8687	119.09	14,460.45	5.0183	16.2919	2.0129	67.174	36.9108	12.1648	50.437	
Q3	2.4986	10.2969	125.69	13,868.99	5.0209	15.5214	2.1094	68.422	36.4917	11.7055	50.959	
2008 Mar.	2.6445	10.9833	112.08	14,241.09	4.9455	16.6678	1.9344	64.031	36.8259	12.3712	48.848	
Apr.	2.6602	11.0237	116.65	14,497.21	4.9819	16.5608	1.9960	65.790	37.0494	12.2729	49.752	
May	2.5824	10.8462	117.46	14,436.99	5.0081	16.2402	2.0011	66.895	36.9042	11.8696	49.942	
June	2.5185	10.7287	123.28	14,445.41	5.0666	16.0617	2.0424	68.903	36.7723	12.3467	51.649	
July	2.5097	10.7809	123.61	14,442.77	5.1258	16.1119	2.0900	70.694	36.8261	12.0328	52.821	
Aug.	2.4103	10.2609	122.07	13,700.21	4.9843	15.1269	2.1097	67.307	36.2502	11.4680	50.697	
Sep.	2.5712	9.8252	131.33	13,430.23	4.9461	15.2805	2.1293	67.113	36.3727	11.5899	49.264	
	% change versus previous month											
2008 Sep.	6.7	-4.2	7.6	-2.0	-0.8	1.0	0.9	-0.3	0.3	1.1	-2.8	
	% change versus previous year											
2008 Sep.	-2.8	-6.0	48.2	3.9	2.5	-0.3	10.0	5.0	3.4	17.2	10.5	

Source: ECB.

1) For these currencies the ECB computes and publishes euro reference exchange rates as from 1 January 2008. Previous data are indicative.



## DEVELOPMENTS OUTSIDE THE EURO AREA

### 9.1 In other EU Member States

(annual percentage changes, unless otherwise indicated)

#### 1. Economic and financial developments

	Bulgaria	Czech Republic	Denmark	Estonia	Latvia	Lithuania	Hungary	Poland	Romania	Slovakia	Sweden	United Kingdom
	1	2	3	4	5	6	7	8	9	10	11	12
HICP												
2006	7.4	2.1	1.9	4.4	6.6	3.8	4.0	1.3	6.6	4.3	1.5	2.3
2007	7.6	3.0	1.7	6.7	10.1	5.8	7.9	2.6	4.9	1.9	1.7	2.3
2007 Q4	11.2	4.9	2.2	9.2	13.7	7.9	7.1	3.7	6.8	2.4	2.3	2.1
2008 Q1	12.4	7.6	3.2	11.3	16.3	10.8	6.9	4.5	8.0	3.4	3.1	2.4
Q2	14.0	6.7	3.7	11.5	17.5	12.3	6.8	4.3	8.6	4.0	3.6	3.4
2008 Apr.	13.4	6.7	3.4	11.6	17.4	11.9	6.8	4.3	8.7	3.7	3.2	3.0
May	14.0	6.8	3.6	11.4	17.7	12.3	6.9	4.3	8.5	4.0	3.7	3.3
June	14.7	6.6	4.2	11.5	17.5	12.7	6.6	4.3	8.7	4.3	4.0	3.8
July	14.4	6.8	4.4	11.2	16.5	12.4	7.0	4.5	9.1	4.4	3.8	4.4
Aug.	11.8	6.2	4.8	11.1	15.6	12.2	6.4	4.4	8.1	4.4	4.1	4.7
General government deficit (-)/surplus (+) as a % of GDP												
2005	1.8	-3.6	5.0	1.8	-0.4	-0.5	-7.8	-4.3	-1.2	-2.8	2.2	-3.4
2006	3.0	-2.7	4.8	3.4	-0.2	-0.5	-9.2	-3.8	-2.2	-3.6	2.3	-2.6
2007	3.4	-1.6	4.4	2.8	0.0	-1.2	-5.5	-2.0	-2.5	-2.2	3.5	-2.9
General government gross debt as a % of GDP												
2005	29.2	29.7	36.4	4.5	12.4	18.6	61.6	47.1	15.8	34.2	50.9	42.1
2006	22.7	29.4	30.4	4.2	10.7	18.2	65.6	47.6	12.4	30.4	45.9	43.1
2007	18.2	28.7	26.0	3.4	9.7	17.3	66.0	45.2	13.0	29.4	40.6	43.8
Long-term government bond yield as a % per annum, period average												
2008 Mar.	4.85	4.68	4.04	-	5.25	4.36	8.41	5.99	7.34	4.34	3.92	4.42
Apr.	4.80	4.72	4.29	-	5.93	4.59	8.02	5.99	7.35	4.46	4.06	4.62
May	4.95	4.84	4.42	-	5.93	4.80	8.08	6.10	7.26	4.52	4.18	4.84
June	5.17	5.13	4.82	-	6.25	5.33	8.50	6.42	7.15	4.94	4.43	5.16
July	5.17	4.90	4.78	-	6.57	5.49	8.11	6.45	7.28	5.06	4.37	5.00
Aug.	5.17	4.47	4.49	-	6.60	5.47	7.77	6.11	8.20	4.95	4.11	4.67
3-month interest rate as a % per annum, period average												
2008 Mar.	6.68	4.04	4.81	6.35	6.49	4.82	8.21	6.03	10.54	4.29	4.84	5.89
Apr.	6.77	4.11	5.00	6.33	5.96	5.05	8.54	6.29	11.59	4.28	4.86	5.92
May	6.88	4.14	5.14	6.39	5.74	5.17	8.40	6.41	10.87	4.32	4.96	5.83
June	7.02	4.21	5.32	6.41	6.15	5.45	8.87	6.58	11.29	4.34	5.02	5.93
July	7.19	4.11	5.38	6.37	6.23	5.77	8.99	6.62	11.41	4.33	5.09	5.83
Aug.	7.31	3.81	5.38	6.35	6.26	5.75	8.33	6.52	12.11	4.31	5.12	5.77
Real GDP												
2006	6.3	6.8	3.9	10.4	12.2	7.7	3.9	6.2	7.9	8.5	4.1	2.9
2007	6.2	6.6	1.7	6.3	10.3	8.8	1.3	6.6	6.0	10.4	2.7	3.1
2007 Q4	6.9	6.3	1.5	4.4	8.1	8.5	0.7	6.6	6.6	14.3	2.4	2.8
2008 Q1	7.0	5.4	-0.7	0.2	3.3	6.8	1.2	6.2	8.2	8.7	1.8	2.3
Q2	7.1	4.6	1.3	-1.1	0.1	5.5	1.7	6.1	9.3	7.6	0.9	1.4
Current and capital accounts balance as a % of GDP												
2006	-17.1	-2.3	2.9	-14.6	-21.3	-9.6	-7.1	-2.1	-10.5	-7.1	7.8	-3.8
2007	-20.6	-1.2	1.1	-16.9	-21.8	-13.0	-5.1	-3.6	-13.5	-4.7	8.3	-4.1
2007 Q4	-26.1	-1.3	1.8	-14.6	-14.7	-11.7	-3.8	-3.3	-13.5	-6.8	9.0	-2.5
2008 Q1	-25.1	4.0	-2.5	-11.2	-17.2	-15.3	-3.2	-3.6	-13.5	-0.5	10.0	-2.2
Q2	-27.0	-5.0	2.7	-9.3	-12.5	-15.3	-6.1	-3.4	-14.7	-7.6	4.6	.
Unit labour costs												
2006	4.4	1.2	1.7	8.7	15.3	8.8	1.4	0.1	12.3	1.7	-0.2	2.6
2007	14.2	2.3	3.7	19.8	24.9	7.0	6.8	3.1	14.9	0.2	4.5	1.3
2007 Q4	14.5	1.1	3.5	19.5	-	7.9	-	-	-	-1.6	5.3	1.4
2008 Q1	16.8	5.2	6.8	19.4	-	13.1	-	-	-	5.5	1.8	2.4
Q2	17.7	3.7	3.0	13.8	-	14.4	-	-	-	6.2	0.7	.
Standardised unemployment rate as a % of labour force (s.a.)												
2006	9.0	7.2	3.9	5.9	6.8	5.6	7.5	13.9	7.3	13.4	7.0	5.4
2007	6.9	5.3	3.8	4.6	6.0	4.3	7.4	9.6	6.4	11.2	6.1	5.3
2007 Q4	6.1	4.9	3.3	4.2	5.6	4.2	7.8	8.5	6.2	10.6	6.0	5.1
2008 Q1	6.1	4.5	3.0	4.2	6.1	4.6	7.6	7.8	6.0	10.4	5.8	5.2
Q2	5.6	4.4	2.7	3.9	5.6	4.5	7.6	7.5	.	10.4	5.5	5.3
2008 Mar.	6.0	4.4	2.9	4.2	6.0	4.7	7.6	7.5	6.0	10.3	5.8	5.2
Apr.	5.6	4.4	2.7	4.1	5.6	4.5	7.5	7.6	.	10.4	5.6	5.2
May	5.6	4.4	2.7	3.9	5.6	4.5	7.6	7.5	.	10.4	5.4	5.3
June	5.5	4.4	2.6	3.9	5.7	4.4	7.6	7.3	.	10.4	5.3	5.4
July	5.3	4.3	2.3	4.0	5.7	4.6	7.6	6.8	.	10.3	5.3	.

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

## 9.2 In the United States and Japan

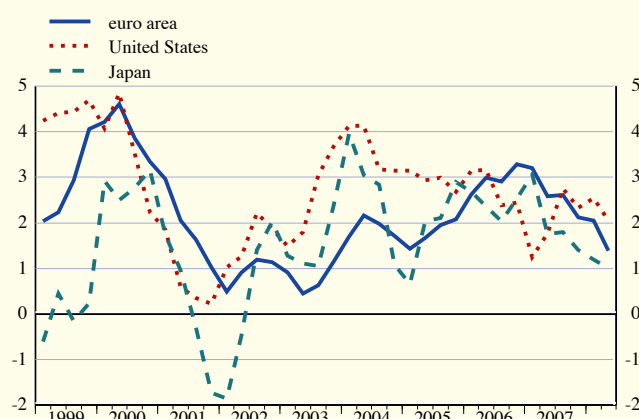
(annual percentage changes, unless otherwise indicated)

### 1. Economic and financial developments

	Consumer price index	Unit labour costs <sup>1)</sup>	Real GDP	Industrial production index (manufacturing)	Unemployment rate as a % of labour force (s.a.)	Broad money <sup>2)</sup>	3-month interbank deposit rate <sup>3)</sup>	10-year zero coupon government bond yield <sup>3)</sup> end-of-period	Exchange rate <sup>4)</sup> as national currency per euro	Fiscal deficit (-)/surplus (+) as a % of GDP	Gross public debt <sup>5)</sup> as a % of GDP
	1	2	3	4	5	6	7	8	9	10	11
United States											
2004	2.7	0.8	3.6	3.1	5.5	4.7	1.62	4.80	1.2439	-4.4	48.9
2005	3.4	2.2	2.9	4.2	5.1	4.4	3.56	5.05	1.2441	-3.3	49.2
2006	3.2	2.8	2.8	2.8	4.6	4.8	5.19	5.26	1.2556	-2.2	48.7
2007	2.9	2.7	2.0	1.8	4.6	5.9	5.30	4.81	1.3705	-2.9	49.3
2007 Q3	2.4	2.0	2.8	2.2	4.7	6.3	5.45	5.34	1.3738	-3.0	48.8
Q4	4.0	0.9	2.3	2.5	4.8	5.8	5.02	4.81	1.4486	-3.2	49.3
2008 Q1	4.1	0.0	2.5	2.0	4.9	6.5	3.26	4.24	1.4976	-4.0	50.4
Q2	4.4	0.6	2.1	-0.1	5.3	6.3	2.75	4.81	1.5622	-5.7	49.6
Q3	.	.	.	.	.	.	2.91	4.58	1.5050	.	.
2008 May	4.2	.	.	0.0	5.5	6.4	2.69	4.82	1.5557	.	.
June	5.0	.	.	-0.4	5.5	6.1	2.77	4.81	1.5553	.	.
July	5.6	.	.	-1.1	5.7	6.3	2.79	4.80	1.5770	.	.
Aug.	5.4	.	.	-1.7	6.1	5.4	2.81	4.63	1.4975	.	.
Sep.	.	.	.	.	.	.	3.12	4.58	1.4370	.	.
Japan											
2004	0.0	-3.2	2.7	4.8	4.7	.	0.05	1.53	134.44	-6.2	156.8
2005	-0.3	-2.1	1.9	1.4	4.4	1.8	0.06	1.66	136.85	-6.7	163.2
2006	0.2	-0.6	2.4	4.5	4.1	1.0	0.30	1.85	146.02	-1.4	159.5
2007	0.1	-1.6	2.0	2.8	3.8	1.6	0.79	1.70	161.25	.	.
2007 Q3	-0.1	-1.5	1.8	2.6	3.8	1.9	0.89	1.88	161.90	.	.
Q4	0.5	-1.5	1.4	3.4	3.8	2.0	0.96	1.70	163.83	.	.
2008 Q1	1.0	-0.1	1.2	2.3	3.9	2.2	0.92	1.48	157.80	.	.
Q2	1.4	.	0.8	1.0	4.0	2.0	0.92	1.88	163.35	.	.
Q3	.	.	.	.	.	.	0.90	1.72	161.83	.	.
2008 May	1.3	.	.	1.1	4.0	2.0	0.92	2.00	162.31	.	.
June	2.0	.	.	0.1	4.1	2.2	0.92	1.88	166.26	.	.
July	2.3	.	.	2.4	.	2.1	0.92	1.77	168.45	.	.
Aug.	2.1	.	.	-6.9	.	2.4	0.89	1.70	163.63	.	.
Sep.	.	.	.	.	.	.	0.91	1.72	153.20	.	.

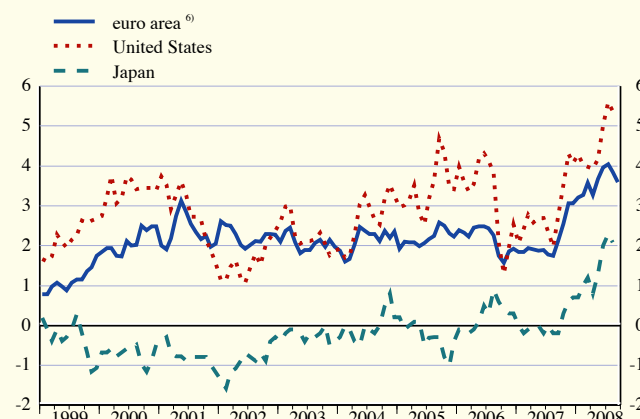
### C37 Real gross domestic product

(annual percentage changes; quarterly)



### C38 Consumer price indices

(annual percentage changes; monthly)



Sources: National data (columns 1, 2 (United States), 3, 4, 5 (United States), 6, 9 and 10); OECD (column 2 (Japan)); Eurostat (column 5 (Japan), euro area chart data); Reuters (columns 7 and 8); ECB calculations (column 11).

- 1) Seasonally adjusted. The data for the United States refer to the private non-agricultural business sector.
- 2) Average-of-period values; M2 for US, M2+CDs for Japan.
- 3) Percentages per annum. For further information on 3-month interbank deposit rate, see Section 4.6.
- 4) For more information, see Section 8.2.
- 5) Gross consolidated general government debt (end of period).
- 6) Data refer to the changing composition of the euro area. For further information, see the General notes.



## LIST OF CHARTS

C1	Monetary aggregates	S12
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## TECHNICAL NOTES

### RELATING TO THE EURO AREA OVERVIEW

#### CALCULATION OF GROWTH RATES FOR MONETARY DEVELOPMENTS

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

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

where  $I_t$  is the index of adjusted outstanding amounts as at month  $t$  (see also below). Likewise, for the year ending in month  $t$ , the average growth rate is calculated as:

$$b) \left( \frac{0.5I_t + \sum_{i=1}^{11} I_{t-i} + 0.5I_{t-12}}{0.5I_{t-12} + \sum_{i=1}^{11} I_{t-i-12} + 0.5I_{t-24}} - 1 \right) \times 100$$

### RELATING TO SECTIONS 2.1 TO 2.6

#### CALCULATION OF TRANSACTIONS

Monthly transactions are calculated from monthly differences in outstanding amounts adjusted for reclassifications, other revaluations, exchange rate variations and any other changes which do not arise from transactions.

If  $L_t$  represents the outstanding amount at the end of month  $t$ ,  $C_t^M$  the reclassification adjustment in month  $t$ ,  $E_t^M$  the exchange rate adjustment and  $V_t^M$  the other revaluation adjustments, the transactions  $F_t^M$  in month  $t$  are defined as:

$$c) F_t^M = (L_t - L_{t-1}) - C_t^M - E_t^M - V_t^M$$

Similarly, the quarterly transactions  $F_t^Q$  for the quarter ending in month  $t$  are defined as:

$$d) F_t^Q = (L_t - L_{t-3}) - C_t^Q - E_t^Q - V_t^Q$$

where  $L_{t-3}$  is the amount outstanding at the end of month  $t-3$  (the end of the previous quarter)

and, for example,  $C_t^Q$  is the reclassification adjustment in the quarter ending in month  $t$ .

For those quarterly series for which monthly observations are now available (see below), the quarterly transactions can be derived as the sum of the three monthly transactions in the quarter.

#### CALCULATION OF GROWTH RATES FOR MONTHLY SERIES

Growth rates may be calculated from transactions or from the index of adjusted outstanding amounts. If  $F_t^M$  and  $L_t$  are defined as above, the index  $I_t$  of adjusted outstanding amounts in month  $t$  is defined as:

$$e) I_t = I_{t-1} \times \left( 1 + \frac{F_t^M}{L_{t-1}} \right)$$

The base of the index (of the non-seasonally adjusted series) is currently set as December 2006 = 100. Time series of the index of adjusted outstanding amounts are available on the ECB's website ([www.ecb.europa.eu](http://www.ecb.europa.eu)) under the "Money, banking and financial markets" sub-section of the "Statistics" section.

The annual growth rate  $a_t$  for month  $t$  – i.e. the change in the 12 months ending in month  $t$  – may be calculated using either of the following two formulae:

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

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

Unless otherwise indicated, the annual growth rates refer to the end of the indicated period. For example, the annual percentage change for the year 2002 is calculated in g) by dividing the index of December 2002 by the index of December 2001.

Growth rates for intra-annual periods may be derived by adapting formula g). For example, the month-on-month growth rate  $a_t^M$  may be calculated as:

$$h) \quad a_t^M = \left( \frac{I_t}{I_{t-1}} - 1 \right) \times 100$$

Finally, the three-month moving average (centred) for the annual growth rate of M3 is obtained as  $(a_{t+1} + a_t + a_{t-1})/3$ , where  $a_t$  is defined as in f) or g) above.

#### CALCULATION OF GROWTH RATES FOR QUARTERLY SERIES

If  $F_t^Q$  and  $L_{t-3}$  are defined as above, the index  $I_t$  of adjusted outstanding amounts for the quarter ending in month  $t$  is defined as:

$$i) \quad I_t = I_{t-3} \times \left( 1 + \frac{F_t^Q}{L_{t-3}} \right)$$

The annual growth rate in the four quarters ending in month  $t$ , i.e.  $a_t$ , may be calculated using formula g).

#### SEASONAL ADJUSTMENT OF THE EURO AREA MONETARY STATISTICS<sup>1</sup>

The approach used relies on a multiplicative decomposition through X-12-ARIMA.<sup>2</sup> The seasonal adjustment may include a day-of-the-week adjustment, and for some series is carried out indirectly by means of a linear combination of components. In particular, this is the case for M3, derived by aggregating the seasonally adjusted series for M1, M2 less M1, and M3 less M2.

The seasonal adjustment procedures are first applied to the index of adjusted outstanding amounts.<sup>3</sup> The resulting estimates of the seasonal factors are then applied to the levels and to the adjustments arising from reclassifications and

revaluations, in turn yielding seasonally adjusted transactions. Seasonal (and trading day) factors are revised at annual intervals or as required.

#### RELATING TO SECTIONS 3.1 TO 3.5

#### EQUALITY OF USES AND RESOURCES

In Table 3.1 the data conform to a basic accounting identity. As regards non-financial transactions, total uses equal total resources for each transaction category. Likewise in the financial account, this accounting identity is also reflected, i.e. for each financial instrument category, total transactions in financial assets equal total transactions in liabilities. In the other changes in assets account and the financial balance sheets, total financial assets equal total liabilities for each financial instrument category, with the exception of monetary gold and special drawing rights, which are by definition not a liability of any sector.

#### CALCULATION OF BALANCING ITEMS

The balancing items at the end of each account in Tables 3.1 and 3.2 are computed as follows:

The trade balance equals imports minus exports of goods and services vis-à-vis the euro area rest of the world.

1 For details, see "Seasonal adjustment of monetary aggregates and HICP for the euro area", ECB (August 2000) and the "Statistics" section of the ECB's website ([www.ecb.europa.eu](http://www.ecb.europa.eu)), under the "Money, banking and financial markets" sub-section.

2 For details, see Findley, D., Monsell, B., Bell, W., Otto, M., and Chen, B. C. (1998), "New Capabilities and Methods of the X-12-ARIMA Seasonal Adjustment Program", *Journal of Business and Economic Statistics*, 16, 2, pp.127-152, or "X-12-ARIMA Reference Manual", Time Series Staff, Bureau of the Census, Washington, D.C.

For internal purposes, the model-based approach of TRAMO-SEATS is also used. For details on TRAMO-SEATS, see Gomez, V. and Maravall, A. (1996), "Programs TRAMO and SEATS: Instructions for the User", Banco de España, Working Paper No. 9628, Madrid.

3 It follows that for the seasonally adjusted series, the level of the index for the base period, i.e. December 2001, generally differs from 100, reflecting the seasonality of that month.



Net operating surplus and mixed income is defined for resident sectors only and is calculated as gross value added (gross domestic product at market prices for the euro area) minus compensation of employees (uses) minus other taxes less subsidies on production (uses) minus consumption of fixed capital (uses).

Net national income is defined for resident sectors only and is computed as net operating surplus and mixed income plus compensation of employees (resources) plus taxes less subsidies on production (resources) plus net property income (resources minus uses).

Net disposable income is also only defined for resident sectors and equals net national income plus net current taxes on income and wealth (resources minus uses) plus net social contributions (resources minus uses) plus net social benefits other than social transfers in kind (resources minus uses) plus net other current transfers (resources minus uses).

Net saving is defined for resident sectors and is calculated as net disposable income plus the net adjustment for the change in net equity of households in pension funds reserves (resources minus uses) minus final consumption expenditure (uses). For the rest of the world, current external account is compiled as the trade balance plus all net income (resources minus uses).

Net lending/net borrowing is computed from the capital account as net saving plus net capital transfers (resources minus uses) minus gross capital formation (uses) minus acquisitions less disposals of non-produced non-financial assets (uses) plus consumption of fixed capital (resources). It can also be calculated in the financial account as total transactions in financial assets minus total transactions in liabilities (also known as changes in net financial worth (wealth) due to transactions). For the household and non-financial corporation sectors, there is a statistical discrepancy between these balancing items computed from the capital account and the financial account, respectively.

Changes in net worth (wealth) are calculated as changes in net worth (wealth) due to savings and capital transfers plus other changes in net financial worth (wealth). It currently excludes other changes in non-financial assets due to unavailability of data.

Net financial worth (wealth) is calculated as total financial assets minus total liabilities, whereas changes in net financial worth (wealth) are equal to the sum of changes in net financial worth (wealth) due to transactions (lending/ net borrowing from the financial account) and other changes in net financial worth (wealth).

Finally, changes in net financial worth (wealth) due to transactions are computed as total transactions in financial assets minus total transactions in liabilities and other changes in net financial worth (wealth) are calculated as total other changes in financial assets minus total other changes in liabilities.

#### RELATING TO SECTION 4.3 AND 4.4

#### CALCULATION OF GROWTH RATES FOR DEBT SECURITIES AND QUOTED SHARES

Growth rates are calculated on the basis of financial transactions and therefore exclude reclassifications, revaluations, exchange rate variations and any other changes which do not arise from transactions. They may be calculated from transactions or from the index of notional stocks. If  $N_t^M$  represents the transactions (net issues) in month  $t$  and  $L_t$  the level outstanding at the end of the month  $t$ , the index  $I_t$  of notional stocks in month  $t$  is defined as:

$$j) \quad I_t = I_{t-1} \times \left( 1 + \frac{N_t^M}{L_{t-1}} \right)$$

As a base, the index is set equal to 100 on December 2001. The growth rate  $a_t$  for month  $t$  corresponding to the change in the 12 months ending in month  $t$ , may be calculated using either of the following two formulae:

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

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

The method used to calculate the growth rates for securities other than shares is the same as that used for the monetary aggregates, the only difference being that an “N” is used rather than an “F”. The reason for this is to distinguish between the different ways of obtaining “net issues” for securities issues statistics and the equivalent “transactions” calculated used for the monetary aggregates.

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

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

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:

$$n) \quad \left( \frac{0.5I_t + \sum_{i=1}^{11} I_{t-i} + 0.5I_{t-12}}{0.5I_{t-12} + \sum_{i=1}^{11} I_{t-i-12} + 0.5I_{t-24}} - 1 \right) \times 100$$

The calculation formula used for Section 4.3 is also used for Section 4.4 and is likewise based on that used for the monetary aggregates. Section 4.4 is based on market values and the basis for the calculation are financial transactions, which exclude reclassifications, revaluations or any other changes that do not arise from transactions. Exchange rate variations are not included as all quoted shares covered are denominated in euro.

#### SEASONAL ADJUSTMENT OF SECURITIES ISSUES STATISTICS<sup>4</sup>

The approach used relies on a multiplicative decomposition through X-12-ARIMA. The

seasonal adjustment for the securities issues total is carried out indirectly by means of a linear combination of sector and maturity component breakdowns.

The seasonal adjustment procedures are applied to the index of notional stocks. The resulting estimates of the seasonal factors are then applied to the outstanding amounts, from which seasonally adjusted net issues are derived. Seasonal factors are revised at annual intervals or as required.

Similar as depicted in formula l) and m), the growth rate  $a_t$  for month t corresponding to the change in the 6 months ending in month t, may be calculated using either of the following two formulae:

$$o) \quad a_t = \left[ \prod_{i=0}^5 \left( 1 + \frac{N_{t-i}^M}{L_{t-1-i}} \right) - 1 \right] \times 100$$

$$p) \quad a_t = \left( \frac{I_t}{I_{t-6}} - 1 \right) \times 100$$

#### RELATING TO TABLE I IN SECTION 5.1

#### SEASONAL ADJUSTMENT OF THE HICP<sup>4</sup>

The approach used relies on multiplicative decomposition through X-12-ARIMA (see footnote 2 on page S78). The seasonal adjustment of the overall HICP for the euro area is carried out indirectly by aggregating the seasonally adjusted euro area series for processed food, unprocessed food, industrial goods excluding energy, and services. Energy is added without adjustment since there is no statistical evidence of seasonality. Seasonal factors are revised at annual intervals or as required.

<sup>4</sup> For details, see “Seasonal adjustment of monetary aggregates and HICP for the euro area”, ECB (August 2000) and the “Statistics” section of the ECB’s website ([www.ecb.europa.eu](http://www.ecb.europa.eu)), under the “Money, banking and financial markets” sub-section.

**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.

**RELATING TO SECTION 7.3****CALCULATION OF GROWTH RATES FOR THE  
QUARTERLY AND ANNUAL SERIES**

The annual growth rate for quarter  $t$  is calculated on the basis of quarterly transactions ( $F_t$ ) and positions ( $L_t$ ), as follows:

$$a_t = \left( \prod_{i=t-3}^t \left( 1 + \frac{F_i}{L_{i-1}} \right) - 1 \right) \times 100$$

The growth rate for the annual series is equal to the growth rate in the last quarter of the year.





## GENERAL NOTES

The “Euro area statistics” section of the Monthly Bulletin focuses on statistics for the euro area as a whole. More detailed and longer runs of data, with further explanatory notes, are available in the “Statistics” section of the ECB’s website ([www.ecb.europa.eu](http://www.ecb.europa.eu)). This allows user-friendly access to data via the ECB’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](mailto:statistics@ecb.europa.eu).

In general, the cut-off date for the statistics included in the Monthly Bulletin is the day preceding the first meeting in the month of the ECB’s Governing Council. For this issue, the cut-off date was 30 September 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 vis-à-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 15 (i.e. the Euro 13 plus Cyprus and Malta) 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 3.4 (financial balance sheet, quoted shares).

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 issues or redeems shares for cash excluding investments in the issuers' own shares. 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-à-vis households and non-financial corporations resident in the euro area. Euro area MFI interest rates are calculated as a weighted average (by corresponding business volume) of the euro area countries' interest rates for each category.

MFI interest rate statistics are broken down by type of business coverage, sector, instrument category and maturity, period of notice or initial period of interest rate fixation. The new MFI interest rate statistics replace the ten transitional statistical series on euro area retail interest rates that have been published in the 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.

Table 4.7 shows end-of-period rates estimated from nominal spot yield curves based on AAA-rated euro-denominated bonds issued by euro area central governments. The yield curves are estimated using the Svensson model<sup>3</sup>. Spreads between the ten-year rates and the three-month and two-year rates are also released. Additional yield curves (daily releases, including charts and tables) and the corresponding methodological information are available at <http://www.ecb.europa.eu/stats/money/yc/html/index.en.html>. Daily data may also be downloaded.

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.

3 Svensson, L. E., 1994, "Estimating and Interpreting Forward Interest Rates: Sweden 1992-1994", Centre for Economic Policy Research, Discussion Paper No 1051.

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>4</sup>. The breakdown by end-use of products for industrial producer prices and industrial production is the harmonised sub-division of industry excluding construction (NACE sections C to E) into main industrial groupings (MIGs), as defined by Commission Regulation (EC) No 586/2001 of 26 March 2001<sup>5</sup>. Industrial producer prices reflect the ex-factory gate prices of producers. They include indirect taxes except VAT and other deductible taxes. Industrial production reflects the value added of the industries concerned.

World market prices of raw materials (Table 2 in Section 5.1) measures price changes of euro-denominated euro area imports compared with the base period.

The labour cost indices (Table 3 in Section 5.1) measure the 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>6</sup> and in the implementing Commission Regulation (EC) No 1216/2003 of 7 July 2003<sup>7</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. The series for the euro area excludes Cyprus and Malta.

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

4 OJ L 162, 5.6.1998, p. 1.

5 OJ L 86, 27.3.2001, p. 11.

6 OJ L 69, 13.3.2003, p. 1.

7 OJ L 169, 8.7.2003, p. 37.

unemployment rate are different from the sum of the employment and unemployment levels published in Section 5.3.

## GOVERNMENT FINANCE

Sections 6.1 to 6.5 show the general government fiscal position in the euro area. The data are mainly consolidated and are based on the ESA 95 methodology. The annual euro area aggregates in Sections 6.1 to 6.3 are compiled by the ECB 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>8</sup> amending the ESA 95. Section 6.2 shows details of general government gross consolidated debt at nominal value in line with the Treaty provisions on the excessive deficit procedure. Sections 6.1 and 6.2 include summary data for the individual euro area countries owing to their importance in the framework of the Stability and Growth Pact. The deficits/surpluses presented for the individual euro area countries correspond to excessive deficit procedure B.9, as defined by Commission Regulation (EC) No 351/2002 of 25 February 2002 amending Council Regulation (EC) No 3605/93 as regards references to the ESA 95. Section 6.3 presents changes in general government debt. The difference between the change in the government debt and the government deficit – the deficit-debt adjustment – is mainly explained by government transactions in financial assets and by foreign exchange valuation effects. Section 6.4 presents quarterly figures on general government revenue and expenditure on the basis of definitions laid down in Regulation (EC) No 1221/2002 of

the European Parliament and of the Council of 10 June 2002 on quarterly non-financial accounts for general government<sup>9</sup>. 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)<sup>10</sup> and the amending ECB Guideline of 31 May 2007 (ECB/2007/3)<sup>11</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](http://www.cmfb.org)). The annual quality report on the euro area b.o.p./i.i.p., which is based on the Task Force’s recommendations, is available on the ECB’s website.

<sup>8</sup> OJ L 172, 12.7.2000, p. 3.

<sup>9</sup> OJ L 179, 9.7.2002, p. 1.

<sup>10</sup> OJ L 354, 30.11.2004, p. 34.

<sup>11</sup> OJ L 159, 20.6.2007, p. 48.

The tables in Sections 7.1 and 7.4 follow the sign convention in the IMF Balance of Payments Manual, i.e. surpluses in the current account and in the capital account have a plus sign, while in the financial account a plus sign denotes an increase in liabilities or a decrease in assets. In the tables in Section 7.2, both credit and debit transactions are presented with a plus sign. Furthermore, starting with the February 2008 issue of the Monthly Bulletin, the tables in Section 7.3 have been restructured in order to allow the data on balance of payments, the international investment position and related growth rates to be presented together; in the new tables, transactions in assets and liabilities that correspond to increases in positions are shown 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 7.2, Table 1 also contains seasonally adjusted data for the current account. Where appropriate, the adjustment also covers working-day, leap-year and/or Easter effects. Table 3 in Section 7.2 and Table 8 in Section 7.3 present a breakdown of the euro area b.o.p. and i.i.p. 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. The breakdown does not cover transactions or positions in portfolio investment liabilities, financial derivatives and international reserves. In addition, separate data are not provided for investment income payable to Brazil, mainland China, India and Russia. 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 b.o.p. financial account and i.i.p. in Section 7.3 are based on transactions and 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, Box 5 in the January 2007 issue of the Monthly Bulletin and Box 6 in the January 2008 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 for unquoted shares, and other investments (e.g. loans and deposits). 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, asset prices and foreign exchange developments.

Table 1 in Section 7.3 summarises the i.i.p. and financial transactions in the euro area b.o.p. The breakdown of the change in the annual i.i.p. is obtained by applying a statistical model to the i.i.p. changes other than transactions with information from the geographical breakdown and currency composition of assets and liabilities, as well as price indices for different financial assets. In this table, Columns 5 and 6 refer to direct investment by resident units abroad and direct investment by non-resident units in the euro area.

In Table 5 in Section 7.3, the breakdown into “loans” and “currency and deposits” is based on the sector of the non-resident counterpart, i.e. assets vis-à-vis non-resident banks are classified as deposits, whereas assets vis-à-vis other non-resident sectors are classified as loans. This breakdown follows the distinction made in other statistics, such as the MFI consolidated balance sheet, and conforms to the IMF Balance of Payments Manual.

The outstanding amounts of the Eurosystem's international reserves and related assets and liabilities are shown in Section 7.3, Table 7. 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 7 are in line with the recommendations for the template on international reserves and foreign currency liquidity. Changes in the gold holdings of the Eurosystem (column 3) are due to transactions in gold within the terms of the Central Bank Gold Agreement of 26 September 1999, which was updated on 8 March 2004. More information on the statistical treatment of the Eurosystem's international reserves can be found in a publication entitled "Statistical treatment of the Eurosystem's international reserves" (October 2000), which can be downloaded from the ECB's website. The website also contains more comprehensive data in accordance with the template on international reserves and foreign currency liquidity.

Section 7.4 contains a monetary presentation of the euro area balance of payments, in which the balance of payments transactions mirror the transactions in the external counterpart to M3. In portfolio investment liabilities (Columns 5 and 6), the transactions include sales and purchases of equity and debt securities issued by MFIs in the euro area, excluding 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 balance of payments 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 7.5 shows data on euro area external trade in goods. The source is Eurostat. Unit value indices are shown without any adjustment, while value data and volume indices are seasonally and working day-adjusted. 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

and corresponds to the basic classes of goods in the System of National Accounts. Manufactured goods (columns 7 and 12) and oil (column 13) are in line with the SITC Rev. 4 definition. The geographical breakdown (Table 2 in Section 7.5) shows main trading partners individually or in regional groups. 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 and 7.2). Part of the difference arises from the inclusion of insurance and freight services in the recording of goods imported in external trade data.

## EXCHANGE RATES

Section 8.1 shows nominal and real effective exchange rate (EER) indices for the euro, calculated by the ECB on the basis of weighted averages of bilateral exchange rates of the euro against the currencies of the euro area's trading partners. A positive change denotes an appreciation of the euro. Weights are based on trade in manufactured goods with the trading partners in the periods 1995-1997 and 1999-2001, and are calculated to account for third-market effects. The EER indices result from the linking at the beginning of 1999 of the indices based on 1995-1997 weights to those based on 1999-2001 weights. The EER-22 group of trading partners is composed of the 12 non-euro area EU Member States plus Australia, Canada, China, Hong Kong, Japan, Norway, Singapore, South Korea, Switzerland and the United States. The EER-42 group includes the EER-22 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 real EERs of the euro deflated by unit labour costs, in both the total economy and the manufacturing sector, have been enhanced through the use of more consistent sources of unit labour costs data for a number of important trading partners, notably the United States.

The bilateral rates shown in Section 8.2 are monthly averages of those published daily as reference rates for these currencies.

#### **DEVELOPMENTS OUTSIDE THE EURO AREA**

Statistics on other EU Member States (Section 9.1) follow the same principles as those for data relating to the euro area. 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<sup>1</sup>



### 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

<sup>1</sup> 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 allotment amount again at the beginning of 2008.

## **11 JANUARY AND 8 FEBRUARY 2007**

The Governing Council of the ECB decides that the minimum bid rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 3.50%, 4.50% and 2.50% respectively.

## **8 MARCH 2007**

The Governing Council of the ECB decides to increase the minimum bid rate on the main refinancing operations by 25 basis points to 3.75%, starting from the operation to be settled on 14 March 2007. In addition, it decides to increase the interest rates on both the marginal lending facility and the deposit facility by 25 basis points, to 4.75% and 2.75%, both with effect from 14 March 2007.

## **12 APRIL AND 10 MAY 2007**

The Governing Council of the ECB decides that the minimum bid rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 3.75%, 4.75% and 2.75% respectively.

## **6 JUNE 2007**

The Governing Council of the ECB decides to increase the minimum bid rate on the main refinancing operations by 25 basis points to 4%, starting from the operation to be settled on 13 June 2007. In addition, it decides to increase by 25 basis points the interest rates on both the marginal lending facility and the deposit facility, to 5% and 3% respectively, with effect from 13 June 2007.

**5 JULY, 2 AUGUST, 6 SEPTEMBER, 4 OCTOBER,  
8 NOVEMBER AND 6 DECEMBER 2007, AND  
10 JANUARY, 7 FEBRUARY, 6 MARCH, 10 APRIL,  
8 MAY AND 5 JUNE 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.

**3 JULY 2008**

The Governing Council of the ECB decides to increase the minimum bid rate on the main refinancing operations by 25 basis points to 4.25%, starting from the operation to be settled on 9 July 2008. In addition, it decides to increase by 25 basis points the interest rates on both the marginal lending facility and the deposit facility, to 5.25% and 3.25% respectively, with effect from 9 July 2008.

**7 AUGUST, 4 SEPTEMBER AND  
2 OCTOBER 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 4.25%, 5.25% and 3.25% respectively.





# THE TARGET (TRANS-EUROPEAN AUTOMATED REAL-TIME GROSS SETTLEMENT EXPRESS TRANSFER) SYSTEM



## PAYMENT FLOWS IN TARGET

In the second quarter of 2008 TARGET processed a daily average of 377,263 payments, with a total daily average value of €2,606 billion. Compared with the previous quarter, this represents a decrease of 1% in terms of both volume and value. Compared with the same period of the previous year, it is an increase of 2% in volume and 8% in value. TARGET's overall market share in terms of value remained stable at 90%, and its market share in terms of volume reached 59%. The highest level of TARGET traffic during this quarter was recorded on 30 June, the last day of the quarter, when 565,117 payments were processed. During the second quarter the migration to the Single Shared Platform (SSP) was successfully completed on 19 May 2008. It is noteworthy that the whole migration to the SSP did not have an impact on TARGET's overall availability or stability.

## INTRA-MEMBER STATE PAYMENTS

TARGET processed a daily average of 275,448 intra-Member State payments with a total average value of €1,753 billion per business day in the second quarter of 2008. This represents a decrease of 4% in volume as compared with the previous quarter, while the value remained stable. In comparison with the corresponding period in 2007, the volume decreased by 4% but the value increased by 13%. Intra-Member State traffic accounted for 73% of the total volume and 67% of the total value of TARGET payments. The average value of an intra-Member State payment increased to €6.3 million. At the intra-Member State level, 64% of payments were below €50,000, while 10% were above €1 million. On average, there were 167 intra-Member State payments with a value above €1 billion per day. The highest level of intra-Member State traffic during this quarter was recorded on 30 June, when a total of 409,834 payments were processed.

## INTER-MEMBER STATE PAYMENTS

At the inter-Member State level, TARGET processed a daily average of 101,814 payments with a total daily average value of €853 billion in the second quarter of 2008. Compared with the previous quarter, this represents an increase of 9% in terms of volume but a decrease of 6% in terms of value. In comparison with the corresponding period in 2007, it is an increase of 23% in volume but a decrease of 2% in value. The average proportion of interbank payments in daily inter-Member State traffic was 44% in terms of volume and 93% in terms of value. The average value of an interbank payment decreased from €19.0 million to €13.2 million, while that of a customer payment increased from €0.8 million to €1.4 million. 66% of the inter-Member State payments had a value below €50,000, while 13% had a value above €1 million. On average, there were 72 inter-Member State payments with a value above €1 billion per day. The highest level of inter-Member State traffic during this quarter was recorded on 30 June, when a total of 155,283 payments were processed.

## TARGET AVAILABILITY AND BUSINESS PERFORMANCE

In the second quarter of 2008 TARGET achieved an overall availability of 99.97%, compared with 99.46% in the previous quarter. During this quarter only one incident had an effect on TARGET's availability. Incidents considered in the calculation of TARGET's availability are those that prevent the processing of payments for ten minutes or more. During the second quarter of 2008 no incident lasted more than two hours. Table 3 shows the availability figures for each national TARGET component, the SSP and the ECB payment mechanism. In the quarter under review 99.70% of inter-Member State payments were processed in less than 5 minutes, 0.23% needed between 5 minutes and 15 minutes, and 0.06% required between 15 minutes and 30 minutes. On average, the

**Table 1 Payment instructions processed by TARGET and other selected interbank funds transfer systems: volume of transactions**

(number of payments)

	2007 Q2	2007 Q3	2007 Q4	2008 Q1	2008 Q2
<b>TARGET</b>					
All TARGET payments					
Total volume	22,882,111	23,473,483	24,951,015	23,519,667	24,144,809
Daily average	369,066	361,130	389,859	379,349	377,263
Intra-Member State TARGET payments					
Total volume	17,746,830	18,261,887	19,493,777	17,750,292	17,628,682
Daily average	286,239	280,952	304,590	286,295	275,448
Inter-Member State TARGET payments					
Total volume	5,135,281	5,211,596	5,457,238	5,799,637	6,516,127
Daily average	82,827	80,178	85,269	93,543	101,814
<b>Other systems</b>					
EURO1 (EBA)					
Total volume	13,252,906	13,210,577	14,856,086	15,718,422	16,594,531
Daily average	213,757	203,240	232,126	253,523	259,290
Paris Net Settlement (PNS) <sup>1)</sup>					
Total volume	1,659,684	1,636,102	1,454,570	398,081	
Daily average	26,769	25,171	22,728	12,063	
Pankkien On-line Pikasiirrot ja Sekit-järjestelmä (POPS)					
Total volume	173,124	150,046	141,813	136,266	193,593
Daily average	2,792	2,308	2,216	2,194	3,025

1) The PNS system ceased operations on 15 February 2008.

**Table 2 Payment instructions processed by TARGET and other selected interbank funds transfer systems: value of transactions**

(EUR billions)

	2007 Q2	2007 Q3	2007 Q4	2008 Q1	2008 Q2
<b>TARGET</b>					
All TARGET payments					
Total value	150,143	158,305	164,686	163,420	166,793
Daily average	2,422	2,436	2,573	2,636	2,606
Intra-Member State TARGET payments					
Total value	95,905	99,826	105,905	108,340	112,221
Daily average	1,547	1,536	1,655	1,747	1,753
Inter-Member State TARGET payments					
Total value	54,237	58,478	58,782	55,998	54,573
Daily average	875	900	918	903	853
<b>Other systems</b>					
EURO1 (EBA)					
Total value	13,876	15,112	15,766	16,541	17,944
Daily average	224	233	246	267	280
Paris Net Settlement (PNS) <sup>1)</sup>					
Total value	4,459	4,571	3,352	746	
Daily average	72	70	52	23	
Pankkien On-line Pikasiirrot ja Sekit-järjestelmä (POPS)					
Total value	115	111	114	108	107
Daily average	2	2	2	2	2

1) The PNS system ceased operations on 15 February 2008.

**Table 3 TARGET availability for each national component, the Single Shared Platform and the ECB payment mechanism (EPM)**

National TARGET component	Availability Q2 2008
Denmark <sup>1)</sup>	100.00%
Estonia <sup>1)</sup>	100.00%
Italy <sup>1)</sup>	100.00%
Poland <sup>1)</sup>	100.00%
United Kingdom <sup>2)</sup>	100.00%
ECB payment mechanism <sup>1)</sup>	99.35%
Single Shared Platform <sup>3)</sup>	100.00%
Overall TARGET availability	99.97%

1) These national components ceased to operate on 19 May 2008.

2) The United Kingdom ceased to operate in TARGET from 19 May 2008.

3) The TARGET2 system started operating on 19 November 2007, when a first group of countries (Germany, Cyprus, Latvia, Lithuania, Luxembourg, Malta, Austria and Slovenia) migrated their operations to the Single Shared Platform.

processing time exceeded 30 minutes for 10 payments per day, which should be seen in the context of the 101,814 inter-Member State payments processed on average every day.







## DOCUMENTS PUBLISHED BY THE EUROPEAN CENTRAL BANK SINCE 2007

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- "Annual Report 2007", April 2008.

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### MONTHLY BULLETIN SPECIAL EDITION

- "10th anniversary of the ECB 1998-2008", May 2008.

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- "The enlarged EU and euro area economies", January 2007.
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## GLOSSARY

This glossary contains selected items that are frequently used in the Monthly Bulletin. A more comprehensive and detailed glossary can be found on the ECB's website ([www.ecb.europa.eu/home/glossary/html/index.en.html](http://www.ecb.europa.eu/home/glossary/html/index.en.html)).

**Autonomous liquidity factors:** liquidity factors that do not normally stem from the use of monetary policy instruments. Such factors are, for example, banknotes in circulation, government deposits with the central bank and the net foreign assets of the central bank.

**Balance of payments (b.o.p.):** a statistical statement that summarises, for a specific period of time, the economic transactions of an economy with the rest of the world.

**Bank lending survey (BLS):** a quarterly survey on lending policies that has been conducted by the Eurosystem since January 2003. It addresses qualitative questions on developments in credit standards, terms and conditions of loans and loan demand for both enterprises and households to a predefined sample group of banks in the euro area.

**Borrowing requirement (general government):** net incurrence of debt by general government.

**Capital account:** a b.o.p. account that covers all capital transfers and acquisitions/disposals of non-produced, non-financial assets between residents and non-residents.

**Central parity (or central rate):** the exchange rate of each ERM II member currency vis-à-vis the euro, around which the ERM II fluctuation margins are defined.

**Compensation per employee:** the total remuneration, in cash or in kind, that is payable by employers to employees, i.e. gross wages and salaries, as well as bonuses, overtime payments and employers' social security contributions, divided by the total number of employees.

**Consolidated balance sheet of the MFI sector:** a balance sheet obtained by netting out inter-MFI positions (e.g. inter-MFI loans and deposits) in the aggregated MFI balance sheet. It provides statistical information on the MFI sector's assets and liabilities vis-à-vis residents of the euro area not belonging to this sector (i.e. general government and other euro area residents) and vis-à-vis non-euro area residents. It is the main statistical source for the calculation of monetary aggregates, and it provides the basis for the regular analysis of the counterparts of M3.

**Current account:** a b.o.p. account that covers all transactions in goods and services, income and current transfers between residents and non-residents.

**Debt (financial accounts):** loans, deposit liabilities, debt securities issued and pension fund reserves of non-financial corporations (resulting from employers' direct pension commitments on behalf of their employees), valued at market value at the end of the period. However, due to data limitations, the debt given in the quarterly financial accounts does not include loans granted by non-financial sectors (e.g. inter-company loans) or by banks outside the euro area, whereas these components are included in the annual financial accounts.

**Debt (general government):** the gross debt (deposits, loans and debt securities excluding financial derivatives) at nominal value outstanding at the end of the year and consolidated between and within the sectors of general government.

**Debt security:** a promise on the part of the issuer (i.e. the borrower) to make one or more payment(s) to the holder (the lender) on a specified future date or dates. Such securities usually carry a specific rate of interest (the coupon) and/or are sold at a discount to the amount that will be repaid at maturity. Debt securities issued with an original maturity of more than one year are classified as long-term.

**Debt-to-GDP ratio (general government):** the ratio of general government debt to GDP at current market prices. It is the subject of one of the fiscal criteria laid down in Article 104(2) of the Treaty establishing the European Community to define the existence of an excessive deficit.

**Deficit (general government):** the general government's net borrowing, i.e. the difference between total government revenue and total government expenditure.

**Deficit-debt adjustment (general government):** the difference between the general government deficit and the change in general government debt.

**Deficit ratio (general government):** the ratio of the general government deficit to GDP at current market prices. It is the subject of one of the fiscal criteria laid down in Article 104(2) of the Treaty establishing the European Community to define the existence of an excessive deficit. It is also referred to as the budget deficit ratio or the fiscal deficit ratio.

**Deflation:** a decline in the general price level, e.g. in the consumer price index.

**Deposit facility:** a standing facility of the Eurosystem which counterparties may use to make overnight deposits, remunerated at a pre-specified interest rate, at an NCB.

**Direct investment:** cross-border investment for the purpose of obtaining a lasting interest in an enterprise resident in another economy (assumed, in practice, for ownership of at least 10% of the ordinary shares or voting power). Included are equity capital, reinvested earnings and other capital associated with inter-company operations. The direct investment account records net transactions/positions in assets abroad by euro area residents (as "direct investment abroad") and net transactions/positions in euro area assets by non-residents (as "direct investment in the euro area").

**Effective exchange rates (EERs) of the euro (nominal/real):** weighted averages of bilateral euro exchange rates against the currencies of the euro area's main trading partners. The ECB publishes nominal EER indices for the euro against two groups of trading partners: the EER-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 4½%.

**Reserve requirement:** the minimum amount of reserves a credit institution is required to hold with the Eurosystem. Compliance is determined on the basis of the average of the daily balances over a maintenance period of around one month.

**Survey of Professional Forecasters (SPF):** a quarterly survey that has been conducted by the ECB since 1999 to collect macroeconomic forecasts on euro area inflation, real GDP growth and unemployment from a panel of experts affiliated to financial and non-financial organisations based in the EU.

**Unit labour costs:** a measure of total labour costs per unit of output calculated for the euro area as the ratio of total compensation per employee to labour productivity (defined as GDP at constant prices per person employed).

**Variable rate tender:** a tender procedure where the counterparties bid both the amount of money they wish to transact with the central bank and the interest rate at which they wish to enter into the transaction.

**Write-down:** a downward adjustment to the value of loans recorded in the balance sheets of MFIs when it is recognised that the loans have become partly unrecoverable.

**Write-off:** the removal of the value of loans from the balance sheets of MFIs when the loans are considered to be totally unrecoverable.

**Yield curve:** a graphical representation of the relationship between the interest rate or yield and the residual maturity at a given point in time for debt securities with the same credit risk but different maturity dates. The slope of the yield curve can be measured as the difference between the interest rates or yield at two selected maturities.









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