



EUROPEAN CENTRAL BANK

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# MONTHLY BULLETIN JULY

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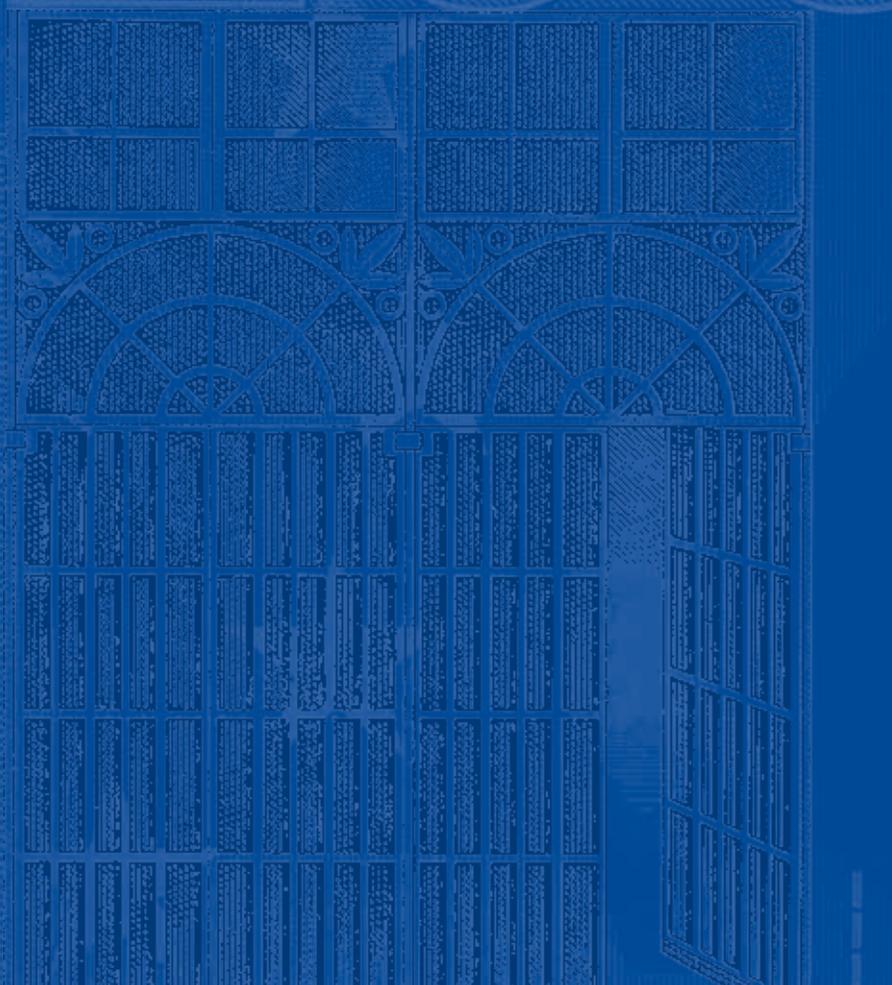
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## ABBREVIATIONS

### 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.**



## EDITORIAL

At its meeting on 2 July 2009, on the basis of its regular economic and monetary analyses, the Governing Council decided to leave the key ECB interest rates unchanged. The current rates remain appropriate taking into account all the information and analyses that have become available since the meeting on 4 June 2009.

The fall of annual inflation rates into negative territory in June is in line with previous expectations and reflects mainly temporary effects. After a return to positive inflation rates, the Governing Council expects price developments to remain dampened over the policy-relevant horizon. Recent data releases and survey information provide further indications that economic activity over the remainder of this year is likely to remain weak but should decline less strongly than was the case in the first quarter of 2009. This assessment incorporates adverse lagged effects, such as a further deterioration in labour markets, which are likely to materialise over the coming months. Looking ahead into next year, after a phase of stabilisation, a gradual recovery with positive quarterly growth rates is expected by mid-2010. Available indicators of inflation expectations over the medium to longer term remain firmly anchored in line with the Governing Council's aim of keeping inflation rates below, but close to, 2% over the medium term. The outcome of the monetary analysis confirms the assessment of low inflationary pressure, as money and credit indicators continue to be weak. Against this background, the Governing Council expects the current episode of extremely low or negative inflation rates to be short-lived and price stability to be maintained over the medium term, thereby continuing to support the purchasing power of euro area households.

The economic data and survey information that have become available since the last meeting of the Governing Council on 4 June have broadly confirmed previous expectations. Economic activity over the remainder of this year is expected to remain weak but should decline less strongly than was the case in the first quarter of 2009. Looking ahead into next year, after a

phase of stabilisation, a gradual recovery with positive quarterly growth rates is expected by mid-2010. The significant policy stimuli in all major economic areas should support growth globally, including in the euro area.

In the view of the Governing Council, the risks to the economic outlook are balanced. On the positive side, there may be stronger than anticipated effects stemming from the extensive macroeconomic stimulus being provided and from other policy measures taken. Confidence may also improve more quickly than currently expected. On the other hand, concerns remain relating to a stronger or more protracted negative feedback loop between the real economy and the turmoil in financial markets, further increases in oil and other commodity prices, the intensification of protectionist pressures, increasingly unfavourable labour markets and, lastly, adverse developments in the world economy stemming from a disorderly correction of global imbalances.

With regard to price developments, annual HICP inflation was, according to Eurostat's flash estimate, -0.1 % in June, compared with 0.0% in May. The further decline in annual rates of inflation was anticipated and reflects primarily base effects resulting from past sharp swings in global commodity prices.

Looking ahead, owing to these base effects, annual inflation rates are projected to remain temporarily in negative territory over the coming months, before turning positive again. Such short-term movements are not relevant from a monetary policy perspective. Consistent with available forecasts and projections, looking further ahead, inflation is expected to remain in positive territory, while price and cost developments are expected to remain dampened in the wake of ongoing sluggish demand in the euro area and elsewhere. In this respect, indicators of inflation expectations over the medium to longer term remain firmly anchored in line with the Governing Council's aim of keeping inflation rates below, but close to, 2% over the medium term.

Risks to the outlook for inflation are broadly balanced. On the downside they relate, in particular, to the outlook for economic activity, while on the upside they relate to higher than expected commodity prices. Furthermore, increases in indirect taxation and administered prices may be stronger than currently expected owing to the need for fiscal consolidation in the coming years.

Turning to the monetary analysis, the latest data confirm a continued deceleration in monetary dynamics. In May, the annual growth rate of M3 declined further to 3.7%, with that of loans to the private sector falling further to 1.8% – the lowest rates since the start of Stage Three of EMU. This concurrent deceleration supports the assessment of a slower underlying pace of monetary expansion and low inflationary pressures over the medium term.

In May, the outstanding amounts of most components of M3 showed a contraction, reflecting, to a large extent, the recent declines in interest rates paid on short-term deposits and marketable instruments and the increased allocation of funds to instruments outside M3 that these may have fostered. Following a substantial strengthening in April, the growth of M1, while having remained strong, also moderated in May. The short-term developments in M3 have been volatile over the past few months. Looking beyond this volatility, the pace of monetary expansion has clearly slowed since the last quarter of 2008.

The flow of bank loans to non-financial corporations and households has remained subdued, reflecting in part the weakening in economic activity and the continued low levels of business and consumer confidence. A moderate monthly contraction in the outstanding amount of loans to non-financial corporations has been observed over recent months. These developments are mostly due to a decline in short-term lending, while the flow of loans with longer maturities has remained slightly positive. In this respect, it is important to note that past reductions in key ECB rates have continued to be passed on through

lending rates to both non-financial corporations and households. The resulting improvement in financing conditions should provide ongoing support for economic activity in the period ahead. However, as stressed by the Governing Council in the past given the challenges that lie ahead, banks should take appropriate measures to strengthen further their capital bases and, where necessary, take full advantage of government measures to support the financial sector, particularly as regards recapitalisation.

To sum up, the current rates remain appropriate taking into account all the information and analyses that have become available since the meeting of the Governing Council on 4 June 2009. The fall of annual inflation rates into negative territory in June is in line with previous expectations and reflects mainly temporary effects. After a return to positive inflation rates, the Governing Council expects price developments to remain dampened over the policy-relevant horizon. Recent data releases and survey information provide further indications that economic activity over the remainder of this year is likely to remain weak but should decline less strongly than was the case in the first quarter of 2009. This assessment incorporates adverse lagged effects, such as a further deterioration in labour markets, which are likely to materialise over the coming months. Looking ahead into next year, after a phase of stabilisation, a gradual recovery with positive quarterly growth rates is expected by mid-2010. Available indicators of inflation expectations over the medium to longer term remain firmly anchored in line with the Governing Council's aim of keeping inflation rates below, but close to, 2% over the medium term. A cross-check of the outcome of the economic analysis with that of the monetary analysis confirms the assessment of low inflationary pressure, as money and credit indicators continue to be weak. Against this background, the Governing Council expects the current episode of extremely low or negative inflation rates to be short-lived and price stability to be maintained over the medium term, thereby continuing to support the purchasing power of euro area households.

As the transmission of monetary policy works with lags, policy action should progressively feed through to the economy in full. Hence, with all the measures taken, monetary policy will provide ongoing support for households and corporations. The Governing Council would like to recall that the Eurosystem provided a significant amount of liquidity to euro area banks at its recent first 12-month longer-term refinancing operation. This operation at a fixed interest rate of 1% is expected to strengthen further the liquidity position of banks and to support the normalisation of money markets and the extension of credit to the economy alongside the other measures of enhanced credit support. Once the macroeconomic environment improves, the Governing Council will ensure that the measures taken are quickly unwound and that the liquidity provided is absorbed. Hence, any threat to price stability over the medium to longer term can be effectively countered in a timely fashion. As has been emphasised many times, the Governing Council will continue to ensure a firm anchoring of medium-term inflation expectations. Such anchoring is indispensable to supporting sustainable growth and employment and contributes to financial stability. Accordingly, the Governing Council will continue to monitor very closely all developments over the period ahead.

As regards fiscal policies, the Governing Council welcomes the spring 2009 orientations for euro area fiscal policies as agreed by the euro area finance ministers in June. A return to sound, sustainable public finances, thus strengthening overall macroeconomic stability, must be ensured. Against this background, euro area governments should prepare and communicate ambitious and realistic fiscal exit and consolidation strategies within the framework of the Stability and Growth Pact. In the view of the Governing Council, the structural adjustment process should start in any case not later than the economic recovery. In 2011 the consolidation efforts should be stepped up. To correct the envisaged large fiscal imbalances of euro area countries, structural consolidation efforts will need to exceed significantly the benchmark of

0.5% of GDP per annum set in the Stability and Growth Pact. In countries with high deficits and/or debt ratios the annual structural adjustment should reach at least 1% of GDP.

Turning to structural policies, there is a need to intensify efforts to support potential growth in the euro area. Given the negative impact of the financial crisis on employment, investment and the capital stock, it is crucial to accelerate the implementation of necessary structural reforms. In particular, product market reforms are required to foster competition and speed up restructuring and productivity growth. Furthermore, labour market reforms need to facilitate appropriate wage-setting and labour mobility across sectors and regions. At the same time, many of the policy measures taken in recent months with a view to supporting specific segments of the economy should be phased out in a timely manner. It is crucial that the focus is now on strengthening the adjustment capacity and flexibility of the euro area economy in line with the principle of an open market economy and free competition.

This issue of the Monthly Bulletin contains three articles. The first article analyses the impact on euro area public finances of government support to the banking sector. The second article reviews the implementation of monetary policy since the start of the financial market turmoil in August 2007. The third article presents the rotation scheme for voting rights in the Governing Council.



# ECONOMIC AND MONETARY DEVELOPMENTS

## I THE EXTERNAL ENVIRONMENT OF THE EURO AREA

*Although the latest indicators point to a slowdown in the pace of the global economic contraction, there is not as yet any concrete evidence of the start of a firm recovery. In parallel, global inflation rates have been diminishing rapidly in recent months, on account of rising spare capacity and negative base effects from last year's commodity price increases. Global economic prospects remain subject to high levels of uncertainty, but the risks to global activity are balanced.*

### I.1 DEVELOPMENTS IN THE WORLD ECONOMY

Although the latest indicators point to a slowdown in the pace of the global economic contraction, there is not as yet any concrete evidence of the start of a firm recovery. In May, the Global Purchasing Managers' Index (PMI) posted its highest reading since last September, indicating a substantial easing of the rates of contraction. However, this indicator remains below the expansion-contraction threshold, suggesting that firms are continuing to scale back their activity somewhat. In the manufacturing sector, some signs of stabilisation in output emerged in June.

Global inflation rates have been diminishing rapidly in recent months. This was due both to rising spare capacity (as a result of the downturn in global economic activity) and to negative base effects from last year's increases in commodity prices. Headline CPI inflation in the OECD countries stood at 0.1% for the year up to May 2009, down from 0.6% in the previous month (see Chart 1). Excluding food and energy, annual CPI inflation was 1.7% in April, which was slightly lower than in the previous month. As indicated by the Global All-Industry Input Prices Index, costs fell further in May. In June, manufacturing input price indicators pointed to a slower decline in costs.

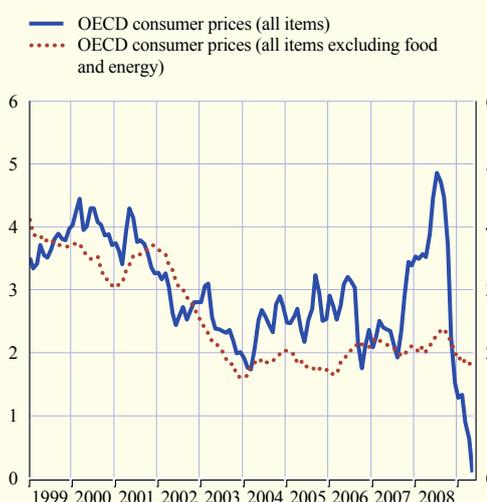
#### UNITED STATES

In the United States, economic activity remained subdued. According to final estimates, real GDP contracted by 5.5% in annualised terms in the first quarter of 2009, after 6.3% in the preceding quarter. Exports and inventories, as well as private fixed investment, continued to be a drag on the economy in the first quarter of 2009, which was only partly compensated for by lower imports and relatively robust consumer spending. While financial and economic indicators remain at weak levels, manufacturing and housing market indicators, as well as consumer confidence and consumer spending levels, point to a decelerating rate of deterioration. Increased government spending will support demand further, partly compensating for persistently weak business investment and exports.

As regards price developments, annual CPI inflation decreased substantially, falling to -1.3% in the year to May 2009, from -0.7% in April. The decline was driven by base effects linked to energy prices. The annual rate of inflation excluding food and energy decreased to 1.8% in May, from 1.9%

Chart 1 International price developments

(monthly data; annual percentage changes)



Source: OECD.

in April. Looking forward, base effects will lead to persistent negative readings of headline inflation in the months to come; thereafter, economic slack should limit upward pressure on prices.

On 24 June, the US Federal Open Market Committee (FOMC) decided to keep the target for the policy rate unchanged at a range of 0% to 0.25%. With the Committee expecting inflation to remain subdued for some time, according to the post-meeting statement, the Federal Reserve System is continuing its use of unconventional measures in an effort to support financial markets and stimulate the economy.

### JAPAN

According to the revised data from Japan's Cabinet Office, real GDP growth fell by 3.8% (quarter on quarter), as compared with the first preliminary release of -4.0%. This is still the biggest contraction on record and marks the fourth consecutive quarter of negative quarterly growth. The weak first-quarter performance was due to the sharp quarter-on-quarter fall in exports (-26%), private investment (-8.9%), housing investment (-5.5%) and consumption (-1.1%). Turning to trade developments, exports and imports continued to contract. Overall, Japan recorded a trade surplus in May 2009, although this corresponded to a decrease of 12.1% in year-on-year terms.

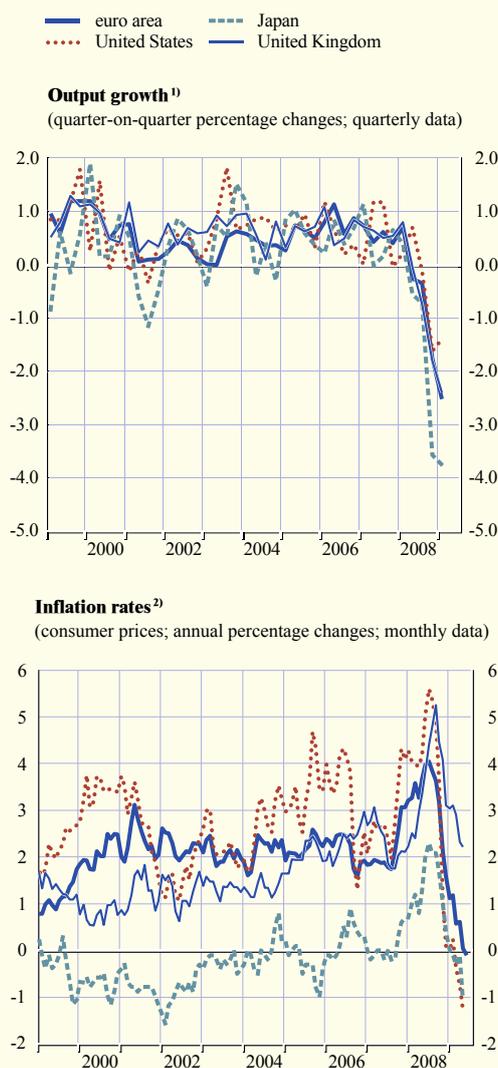
Annual CPI inflation declined sharply to -1.1% in May 2009, compared with -0.1% in April, reflecting base effects related to energy costs and increasing economic slack. CPI inflation excluding food and energy also declined to -0.5% on an annual basis in May, from -0.4% in April.

On 16 June, the Bank of Japan decided to keep its target for the uncollateralised overnight rate at around 0.1%.

### UNITED KINGDOM

In the United Kingdom, recent data suggest a further decline in real GDP and moderating inflation. In the first quarter of 2009, real GDP decreased by 2.4% quarter on quarter, which was revised down from the previous estimate of -1.9%. The decline was broad based among expenditure components. Looking ahead, real GDP is expected to shrink further, as falling employment, lower housing and

**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.

financial wealth, and tight credit conditions are likely to continue to weigh on consumer spending in the near term. Following a slight increase at the beginning of 2009, possibly reflecting a larger-than-expected pass-through of exchange rate depreciation to consumer prices, annual HICP inflation again declined to 2.2% in May, down from 2.3% in April. At the same time the Retail Price Index, which also includes housing goods with a large weight, declined by 1.1% (year on year), after -1.2% in April. House prices have been falling since the start of the financial crisis in mid-2007, and the annual change in the Halifax House Price Index was -16.3% in May 2009. However, the pace of the decline seems to have moderated (in fact, in month-on-month terms, the Halifax index showed an increase of 2.6% in May). Looking ahead, inflation is expected to decline further and to fall below the Bank of England's target of 2%.

Between 5 March 2009 and 11 June 2009, the Bank of England purchased assets in the amount of GBP 86 billion, which consisted mainly of government bonds. On 4 June 2009 the Monetary Policy Committee announced its decision to maintain the official Bank Rate paid on commercial bank reserves at 0.5% and to continue the policy of quantitative easing for two more months, providing for additional purchases to bring the scale of its programme of asset purchases to a total of GBP 125 billion.

#### OTHER EUROPEAN COUNTRIES

In most other non-euro area EU countries, weak economic activity in recent quarters was accompanied by a decrease in inflation. In Sweden, real GDP contracted by 0.9% (quarter on quarter) in the first quarter of 2009, amid weak external demand, tighter financing conditions and declining private consumption. These factors are also dampening economic activity in Denmark, where output contracted by 1.1% (quarter on quarter) in the first quarter of 2009. Short-term indicators (e.g. the steep rise in forced sales of real property and the number of bankruptcies in May) point to continued weakness in economic activity in Denmark. In recent months HICP inflation has decreased in both countries. In May HICP inflation decreased to 1.7% in Sweden and remained unchanged at 1.1% in Denmark. On 4 June 2009 Danmarks Nationalbank decided to lower its main policy rate by 10 basis points to 1.55%.

Turning to the largest central and eastern European EU Member States, in Hungary real GDP contracted by 2.5% (quarter on quarter) in the first quarter of 2009. Real GDP also declined in the Czech Republic and Romania, namely by 3.4% and 2.6% respectively quarter on quarter. Economic activity has held up best in Poland, where quarter-on-quarter growth was still positive at 0.4% in the first quarter of 2009, on account of the fact that domestic demand growth remained strong compared with that in other countries in the region. Short-term indicators point to continued weakness in economic activity in these countries. In May 2009 annual HICP inflation rates decreased in the Czech Republic, Poland and Romania, to 0.9%, 4.2% and 5.9% respectively. In Hungary, by contrast, annual inflation increased to 3.8% in May 2009, reflecting mainly the lagged effect of the currency depreciation. On 24 June 2009 Narodowy Bank Polski decided to reduce its main policy rate by 25 basis points to 3.5%. On 30 June 2009 Banca Națională a României decided to reduce its main policy rate by 50 basis points to 9%.

#### EMERGING ASIA

According to the latest monthly indicators, the pace of decline in economic activity slowed considerably in most emerging Asian economies in the second quarter of 2009. In particular, the most recent trade data point to positive monthly changes in several countries, thus suggesting that the collapse of trade that has affected the region so severely may be coming to an end. Although the lagged negative effects of the global crisis, such as rising unemployment, are holding back



domestic private demand, there are clear signs that a recovery is already in progress in the largest economies. Consumer price inflation has continued to decline, even entering into negative territory in some countries.

In China, monthly indicators show that economic growth was relatively robust in the second quarter of 2009. Although growth is still very much dependent on fiscal stimuli, mainly via public investment, available data suggest that private consumption growth, too, has been surprisingly resilient. The outlook for the real estate market seems to have started to improve slightly, with investment again growing in this sector. CPI inflation remained negative in May at -1.4% year on year, after -1.5% in April. The accommodative monetary policy and the fiscal stimulus have been reflected in very fast credit growth figures. At the end of May, the stock of loans outstanding was 30% larger than a year earlier.

#### LATIN AMERICA

In Latin America, the pace of economic activity remained weak in the first quarter of 2009, while inflationary pressures were easing, albeit only gradually. In Brazil, real GDP contracted by 1.6% on an annual basis in the first quarter of 2009. The contraction was most pronounced in exports and investment. In May annual inflation stood at 5.4%. On 11 June the Banco Central do Brasil lowered its key interest rate by 100 basis points to 9.25%. In Argentina, real GDP expanded by 2.6% on an annual basis in the first quarter of 2009. Consumer price inflation decreased slightly to 5.5% in May. In Mexico, industrial production fell by 9.2% compared with a year earlier, while annual inflation declined to 6.0% in May, compared with 6.2% in April. On 19 June the Banco de México lowered its key interest rate by 50 basis points to 4.75%.

### 1.2 COMMODITY MARKETS

During the second quarter of 2009, oil prices initially traded around USD 50 amid reduced volatility, but posted a strong recovery starting in May. Prices of Brent crude oil stood at USD 70.1 per barrel on 1 July, which was 77% higher than at the beginning of 2009 (in euro terms, the increase was around 75%). Looking ahead, market participants expect higher prices over the medium term, with futures contracts for December 2011 trading at around USD 79 per barrel.

Recently, oil prices have been sustained by less pessimistic market expectations about the global macroeconomic environment. Looking at the underlying fundamentals, OPEC countries indeed showed an unusually high degree of compliance with the agreed cuts (83% in March), and global oil production has fallen massively in recent months, totalling around 3.36 million barrels per day less than

Chart 3 Main developments in commodity markets



Sources: Bloomberg and HWWI.

a year before. On the demand side, the International Energy Agency has continued to revise its projections for 2009 downwards, expecting output per day to be 4.4 million barrels lower than a year ago.

The prices of non-energy commodities have generally increased over the past months. Metal prices rose in June, having been relatively stable over the previous two months. Agricultural commodity prices increased as well, driven by prices of soybeans in particular, which have been influenced by social unrest in Latin America and weather-related effects in India. In aggregate terms, the index for non-energy commodity prices (denominated in US dollars) was approximately 18% higher in mid-June than at the beginning of the year.

### 1.3 OUTLOOK FOR THE EXTERNAL ENVIRONMENT

Following an unprecedented decline at the turn of the year, there have recently been some tentative signs of stabilisation in world trade, albeit at low levels. Looking forward, the prospects for foreign demand for euro area goods and services remain constrained. The OECD's composite leading indicators for April 2009 point to a reduced pace of deterioration in most OECD economies. However, it is still too early to interpret these indicators as a sign that a durable turning point is in sight. In non-OECD countries, several economies still face economic contractions. The main exceptions are China and India.

Although global economic prospects remain subject to exceptionally high uncertainty, risks to global activity are balanced. On the positive side, there may be stronger than anticipated effects stemming from the extensive macroeconomic stimulus being provided and from other policy measures taken. Confidence may also improve more quickly than currently expected. On the other hand, concerns remain relating to a stronger or more protracted negative feedback loop between the real economy and the turmoil in financial markets, further increases in oil and other commodity prices, the intensification of protectionist pressures, increasingly unfavourable labour markets and, lastly, adverse developments in the world economy stemming from a disorderly correction of global imbalances.

Chart 4 OECD composite leading indicator

(monthly data; amplitude-adjusted)



Source: OECD.

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

## 2 MONETARY AND FINANCIAL DEVELOPMENTS

### 2.1 MONEY AND MFI CREDIT

The May data confirm the ongoing deceleration in the dynamics of both M3 and loans, pointing to a slower underlying pace of monetary expansion. The flow of loans to the non-financial private sector remained subdued, but was, by contrast with previous months, slightly positive after correcting for securitisation. To a large extent, the subdued lending to non-financial corporations and households reflects the sharp deterioration in economic activity and the ongoing moderation of house price dynamics. MFIs continued to adjust their balance sheets by reducing their holdings of external assets and claims on other MFIs.

#### THE BROAD MONETARY AGGREGATE M3

Monetary dynamics continued to decelerate in May, with the annual growth rate of M3 declining significantly further to stand at 3.7%, down from 4.9% in April (see Chart 5). The month-on-month growth rate turned negative again, standing at -0.5% in May, following growth rates of 0.8% in April and -0.4% in March. Looking beyond the volatility in short-term dynamics confirms that the pace of monetary expansion is markedly slower than it was prior to the intensification of the financial turmoil in September 2008.

The annual growth rate of MFI loans to the private sector also declined further. Although the monthly flow turned positive in May, this was due mainly to exceptional developments in loans to non-monetary financial intermediaries other than insurance corporations and pension funds (OFIs), while the monthly flow to non-financial corporations and households remained subdued. To a large extent, the subdued lending observed in recent months reflects the sharp deterioration in economic activity, the ongoing moderation of house price dynamics and the fact that there is still a high degree of uncertainty concerning the economic outlook. These factors also have a bearing on banks' assessment of borrowers' creditworthiness.

The data for May confirm the picture observed in previous months as regards credit institutions' leveraging and funding, with MFIs continuing to shed external assets and claims on other MFIs. The net issuance of MFI debt securities was positive in May. While the main purchasers of banks' debt securities were again MFIs themselves, euro area residents also purchased moderate amounts, having refrained from doing so for a couple of months.

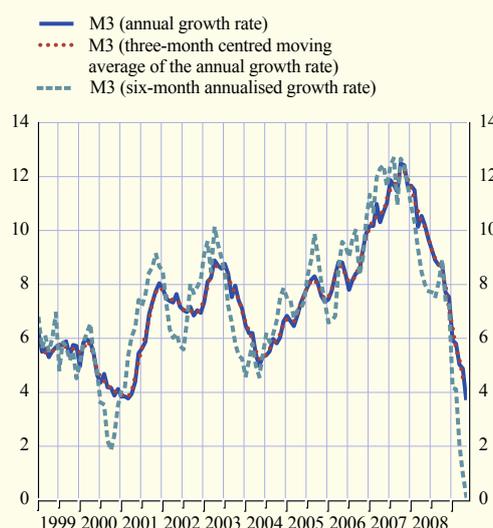
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#### MAIN COMPONENTS OF M3

The significant decline observed in May in the annual growth rate of M3 was broadly spread across its main components, namely: M1 (i.e. currency in circulation and overnight deposits); short-term deposits other than overnight deposits (i.e. M2-M1); and marketable instruments (i.e. M3-M2).

Chart 5 M3 growth

(percentage changes; adjusted for seasonal and calendar effects)



Source: ECB.

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					
		2008 Q2	2008 Q3	2008 Q4	2009 Q1	2009 Apr.	2009 May
<b>M1</b>	<b>44.5</b>	<b>2.3</b>	<b>0.7</b>	<b>2.7</b>	<b>5.3</b>	<b>8.4</b>	<b>7.9</b>
Currency in circulation	7.8	7.7	7.5	12.4	13.6	13.2	13.1
Overnight deposits	36.8	1.3	-0.6	0.8	3.7	7.4	6.9
<b>M2 - M1 (= other short-term deposits)</b>	<b>41.8</b>	<b>19.6</b>	<b>19.1</b>	<b>15.8</b>	<b>9.2</b>	<b>3.4</b>	<b>2.0</b>
Deposits with an agreed maturity of up to two years	24.0	40.5	37.6	29.0	12.8	0.3	-2.8
Deposits redeemable at notice of up to three months	17.8	-2.1	-1.7	-0.5	4.5	8.0	9.3
<b>M2</b>	<b>86.4</b>	<b>10.2</b>	<b>9.2</b>	<b>8.9</b>	<b>7.2</b>	<b>5.9</b>	<b>5.0</b>
<b>M3 - M2 (= marketable instruments)</b>	<b>13.6</b>	<b>10.4</b>	<b>8.9</b>	<b>4.1</b>	<b>-0.7</b>	<b>-1.2</b>	<b>-3.5</b>
<b>M3</b>	<b>100.0</b>	<b>10.2</b>	<b>9.1</b>	<b>8.2</b>	<b>6.0</b>	<b>4.9</b>	<b>3.7</b>
<b>Credit to euro area residents</b>		<b>9.7</b>	<b>9.1</b>	<b>7.4</b>	<b>5.9</b>	<b>4.4</b>	<b>4.0</b>
Credit to general government		-1.3	0.6	1.7	5.7	8.0	8.3
Loans to general government		0.8	2.1	2.9	2.4	1.3	1.4
Credit to the private sector		12.0	10.9	8.6	6.0	3.7	3.1
Loans to the private sector		10.5	9.1	7.4	4.6	2.3	1.8
Loans to the private sector adjusted for sales and securitisation		11.5	10.1	8.5	6.1	3.9	3.4
<b>Longer-term financial liabilities (excluding capital and reserves)</b>		<b>4.4</b>	<b>3.3</b>	<b>1.2</b>	<b>1.8</b>	<b>2.3</b>	<b>2.6</b>

Source: ECB.

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

The annual growth rate of M1, while remaining strong, declined to stand at 7.9% in May. This may, in part, be a natural unwinding of the exceptional strengthening observed in April (when it increased to 8.4%, up from 5.9% in March; see Table 1). More specifically, the decline observed in May reflects developments in overnight deposits, the monthly flow of which turned slightly negative, following an exceptionally strong positive flow in the previous month. The monthly flow and annual growth rate of currency in circulation remained broadly unchanged.

The annual growth rate of short-term deposits other than overnight deposits declined further to stand at 2.0% in May, down from 3.4% in April. Developments in the sub-components of this category of deposit continued to diverge: while the annual growth rate of deposits redeemable at notice of up to three months (i.e. short-term savings deposits) increased further in May, this was more than offset by a decline in the annual growth rate of deposits with an agreed maturity of up to two years (i.e. short-term time deposits), which turned negative for the first time since the end of 2004.

In recent months developments in short-term deposits have been driven largely by remuneration considerations. In particular, available data on MFI interest rates for the period up to April indicate that the remuneration of short-term time deposits continued to decline relative to that of overnight deposits and short-term savings deposits. This explains the outflows from short-term time deposits and the relative resilience of the flows into overnight deposits and short-term savings deposits. In addition, as the remuneration of monetary assets relative to longer-term assets has now declined further, this may foster shifts out of money and into other financial assets.

The annual growth rate of marketable instruments became more negative in May (standing at -3.5% in that month, down from -1.2% in April), reflecting a significant monthly outflow. As regards the sub-components of marketable instruments, the annual growth rates of money market fund

shares/units and repurchase agreements declined further, albeit remaining positive. By contrast, the annual growth rate of the money-holding sectors' holdings of short-term MFI debt securities (i.e. debt securities with a maturity of up to two years) became more negative, standing at -26.5% in May. The decline in the money-holding sectors' holdings of these securities was broadly offset by an increase in the holdings of non-residents.

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 – declined further in May, falling to 4.4%, down from 5.4% in April. This development was relatively broadly based across the various sectors. However, this development masks the fact that, by contrast with non-financial corporations and financial intermediaries, a sizeable inflow was recorded for the M3 deposits of the household sector in May. This is consistent with some rebalancing of portfolio allocations in response to changes in the remuneration of monetary assets. M3 deposits held by non-financial corporations continued to contract in May on an annual basis. This development is in line with the broader pattern observed in recent months, with non-financial corporations drawing down their liquidity buffers in the context of the scaling down of production and, potentially, the reduced availability of funding (see Box 1 below). Finally, the annual growth rate of the M3 deposit holdings of non-monetary financial intermediaries declined further in May.

#### Box 1

### SOME CONSIDERATIONS REGARDING THE DRIVING FORCES BEHIND NON-FINANCIAL CORPORATIONS' M3 DEPOSIT HOLDINGS

The slowdown observed in annual M3 growth in recent months largely reflects developments in the M3 holdings of non-financial corporations. These only account for around 20% of the stock of M3, but as non-financial corporations are typically more active in managing their liquid resources, they can at times play a central role in shaping the dynamics of broad money. This may be particularly relevant in the context of the financial turmoil and the severe economic downturn, with considerable changes being observed in the interest rate cycle. Against this background, this box looks at the possible driving forces behind recent developments in non-financial corporations' M3 deposit holdings (i.e. short-term deposits and repurchase agreements) from a macroeconomic perspective.<sup>1</sup>

#### Non-financial corporations' M3 deposit holdings from a longer-term perspective

The annual growth rate of non-financial corporations' M3 deposit holdings has been negative since February, standing at -1.6% in May. This reflects the relatively strong overall contraction observed in those corporations' deposit holdings since the fourth quarter of 2008. This reduction in M3 deposit holdings is not unprecedented. Indeed, during the major cyclical downturn in the early 1990s the annual growth rate of non-financial corporations' M3 deposit holdings remained negative in real terms for a protracted period of time (see Chart A). To put recent developments into perspective, it should also be noted that the most recent peak in M3 deposit holdings in early 2007 was the highest ever recorded during the period for which data are available. This may point to deposit holdings overshooting somewhat with regard to measures of the sector's turnover or profitability (as illustrated, for instance,

<sup>1</sup> M3 deposit holdings do not include currency in circulation, money market fund shares/units or debt securities with a maturity of up to two years. These are, however, included in M3 holdings. Non-financial corporations' M3 deposit holdings account for 80% of their M3 holdings. In any case, the two series exhibit very similar patterns in terms of their annual growth rates.

by the ratio of M3 deposits to the gross operating surplus; see Chart A), which may, in turn, have warranted unwinding in the form of the shedding of such assets. A look at non-financial corporations' motives for holding liquid assets may help us to better understand these recent developments.<sup>2</sup>

### The role of economic activity in shaping non-financial corporations' M3 deposit holdings

One set of considerations relates to the need to hold liquid assets for transaction purposes. In particular, firms need to maintain liquidity buffers of a certain size in order to cater for any lack of synchronisation between payments for production inputs and receipts from the sale of goods and services. This implies that the growth of non-financial corporations' M3 deposit holdings strengthens and weakens in line with economic activity, an observation which is supported by the fact that the growth of those M3 deposit holdings exhibits a high degree of co-movement with the growth of gross value added in industry and services on the one hand and a composite confidence indicator for these two sectors on the other (see Chart B). In this respect, the rapid deterioration in actual and expected activity at the end of 2008 is consistent with the adjustment of non-financial corporations' liquidity buffers.

### Other factors explaining non-financial corporations' M3 deposit-holding behaviour

A second set of considerations relates to the fact that non-financial corporations are typically active in their management of financial assets and liabilities. To a large extent, their decisions

<sup>2</sup> For a broader discussion of the determinants of money holdings at the sectoral level from a longer-term perspective, see the article entitled "Sectoral money holding: determinants and recent developments" in the August 2006 issue of the Monthly Bulletin. Moreover, non-financial corporations' broader investment and financing behaviour up to the fourth quarter of 2008 is analysed in the box entitled "Integrated euro area accounts for the fourth quarter of 2008" in the May 2009 issue of the Monthly Bulletin.

**Chart A Real M3 deposit holdings and gross operating surplus of non-financial corporations**

(annual percentage changes; percentages; not adjusted for seasonal or calendar effects)

- real M3 deposit holdings (left-hand scale)
- ..... ratio of M3 deposit holdings to gross operating surplus (right-hand scale)



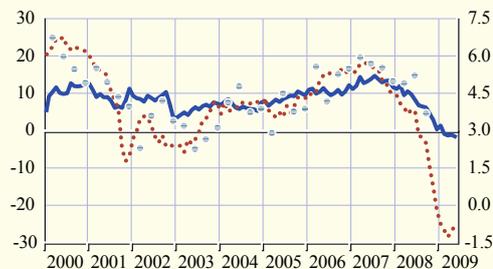
Sources: ECB, ECB estimates and Eurostat.

Notes: Real M3 deposit holdings have been deflated using the HICP inflation rate. The gross operating surplus used for the calculation of the ratio is a four-quarter moving sum. As of the first quarter of 1999, the gross operating surplus is based on the integrated euro area accounts. For the preceding period, it is based on ECB estimates.

**Chart B Non-financial corporations' M3 deposit holdings and economic activity**

(annual percentage changes; percentage balances; not adjusted for seasonal or calendar effects)

- non-financial corporations' M3 deposit holdings (left-hand scale)
- ..... composite confidence indicator for industry and services (left-hand scale)
- gross value added in industry and services (right-hand scale)



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

Notes: The composite confidence indicator is calculated as a weighted average of the industrial confidence indicator and the services confidence indicator, using as weights the gross value added of the respective sub-sectors. Gross value added in industry and services excludes the category "public administration, education, health and other services", which mainly reflects government activities.

regarding portfolio allocation and reallocation are driven by the opportunity costs of holding highly liquid assets relative to either the returns that could be earned by pursuing alternative financial investment opportunities with potentially higher yields or the savings that could be made by repaying their debt and/or buying back their own shares. At the same time, these opportunity costs are weighed against the costs implied by investment or production opportunities that cannot be pursued owing to a lack of immediately available funds.

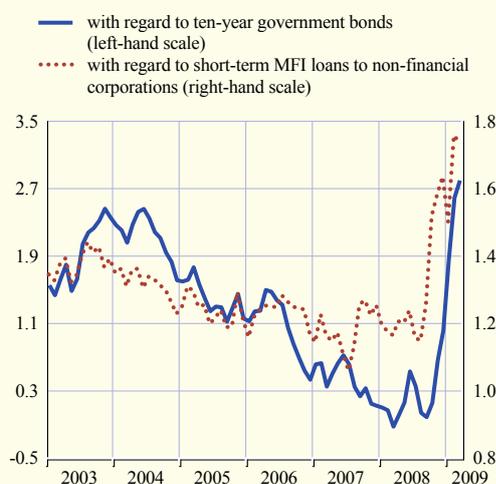
Recent developments in MFI interest rates suggest that opportunity cost considerations have indeed played a role in shaping non-financial corporations' M3 deposit holdings. In particular, the steepening observed in the yield curve since October 2008 has increased the opportunity cost of holding M3 deposits relative to longer-term financial assets, as can be seen in the sharp increase in the spread between interest rates on short-term time deposits and ten-year government bond yields (see Chart C). Moreover, in recent months interest rates on short-term time deposits<sup>3</sup> have reacted faster than interest rates on short-term MFI loans to the decline in short-term money market interest rates, thereby increasing the spread between the two. As a result, some non-financial corporations, having previously found it attractive to use some of their borrowed funds in order to acquire monetary assets, which then served as liquidity buffers,<sup>4</sup> have reacted to the new configuration of interest rates by using these liquidity buffers to reduce their MFI loans. Indeed, this interpretation is compatible with the reduction observed in recent months in MFI lending to non-financial corporations, which has been driven mainly by shorter maturities (i.e. MFI loans with an original maturity of up to one year; see Chart D).

3 This holds for interest rates on deposits with agreed maturities of up to one year and up to two years.

4 This is akin to using a credit line as a buffer against liquidity shocks, for which firms pay a fee.

**Chart C Opportunity cost of holding short-term deposits for non-financial corporations**

(percentages per annum)



Source: ECB.

Notes: "Short-term MFI loans" refers to MFI loans with a variable rate or a rate fixed for a period of up to one year. "Short-term deposits" refers to deposits with an agreed maturity of up to one year.

**Chart D Non-financial corporations' M3 deposits and short-term MFI loans**

(annual flows; EUR billions; not adjusted for seasonal or calendar effects)



Source: ECB.

Note: "Short-term MFI loans" refers to MFI loans with an original maturity of up to one year.

While these considerations suggest that the use of liquidity buffers is the result of a voluntary decision, recent developments in non-financial corporations' M3 deposit holdings may, to some extent, reflect a necessary response to the current financing situation. More specifically, funding through the banking system is reported to have become increasingly difficult to obtain, at least for some firms. Likewise, access to the financial markets has become restricted for some firms. In addition, the reduction in firms' earnings is limiting the amount of internal funding available to them. In such an environment, some firms may have needed to use their liquidity buffers in order to accommodate their funding requirements, thereby reducing non-financial corporations' M3 deposit holdings.

On balance, all of these considerations are probably relevant as regards recent developments in the M3 deposit holdings of the non-financial corporation sector, although there are likely to be differences across individual industries and firms. Overall, non-financial corporations' reduction of both short-term deposits and loans is part of the more general downsizing of their balance sheets and is in line with the impact of the sharp cyclical downturn.

#### MAIN COUNTERPARTS OF M3

Turning to the counterparts of M3, the annual growth rate of total MFI credit to euro area residents declined further to stand at 4.0% in May, down from 4.4% in April (see Table 1). This reflected an ongoing decline in the rate of growth of credit to the private sector, which was only partially offset by a further increase in the annual growth rate of credit to general government (which rose to 8.3% in May, up from 8.0% in April). The inflow observed in May for credit to the government sector mainly reflected an increase in the monthly flow of MFIs' purchases of securities other than shares.

The annual growth rate of MFI credit to the private sector decreased further to stand at 3.1% in May, down from 3.7% in April. The annual growth rate of MFI loans to the private sector, the largest component of credit to the private sector, declined further to stand at 1.8%, down from the 2.3% observed in the previous month. The monthly flow recorded for such loans turned positive in May, but this was due in part to exceptional developments in loans to OFIs resulting from the funding of a transfer of securities to a special-purpose vehicle.

After a period of intense true-sale securitisation activity at the end of 2008 – in which originating credit institutions sold loans, while acquiring the securities issued for use as collateral in Eurosystem credit operations – this type of activity has become more subdued in recent months. This could be explained by an easing of credit institutions' demand for central bank liquidity in the period up to the end of May, with that demand being superseded by demand for other types of liquid asset, such as government bonds and government-guaranteed bank bonds. While the distortionary effect that derecognition in the context of securitisation has on loans to the private sector declined on a monthly basis in May, it remains prevalent in the annual growth rates (with the difference between the corrected and uncorrected annual series standing at 1.6 percentage points in May, broadly unchanged from the previous four months).

The annual growth rate of MFI loans to non-financial corporations declined significantly further to stand at 4.5% in May, down from the 5.3% observed in April (see Table 2), reflecting a further outflow in May. That negative flow was a result of outflows for loans with maturities of up to five years, while inflows continued to be observed for loans with longer maturities. This development points to a decline in short-term financing, which might reflect the weaker economic activity and

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

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

	Outstanding amount as a percentage of the total <sup>1)</sup>	Annual growth rates					
		2008 Q2	2008 Q3	2008 Q4	2009 Q1	2009 Apr.	2009 May
<b>Non-financial corporations</b>	<b>44.7</b>	<b>14.5</b>	<b>12.8</b>	<b>11.3</b>	<b>8.2</b>	<b>5.3</b>	<b>4.4</b>
Up to one year	27.4	12.9	11.0	9.0	4.2	-1.3	-2.3
Over one and up to five years	20.2	20.9	18.6	16.0	12.4	10.0	9.1
Over five years	52.4	13.0	11.8	10.8	8.9	7.2	6.5
<b>Households<sup>2)</sup></b>	<b>45.3</b>	<b>4.9</b>	<b>3.9</b>	<b>2.8</b>	<b>0.9</b>	<b>0.0</b>	<b>-0.2</b>
Consumer credit <sup>3)</sup>	13.0	5.2	4.4	3.2	1.3	-0.4	-0.6
Lending for house purchase <sup>3)</sup>	71.2	5.5	4.1	2.9	0.7	-0.2	-0.5
Other lending	15.8	2.2	2.6	2.2	1.7	1.6	1.8
<b>Insurance corporations and pension funds</b>	<b>0.9</b>	<b>-0.2</b>	<b>-6.6</b>	<b>-6.5</b>	<b>-5.8</b>	<b>-2.0</b>	<b>-3.0</b>
<b>Other non-monetary financial intermediaries</b>	<b>9.1</b>	<b>25.2</b>	<b>22.3</b>	<b>14.5</b>	<b>7.6</b>	<b>0.6</b>	<b>-0.1</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.

stronger recourse to available liquidity buffers, but also greater difficulties experienced by some firms when accessing bank funding.

The annual growth rate of loans to households turned negative in May, standing at -0.2% in that month, down from 0.0% in April. The monthly flow was mildly positive. As securitisation transactions mainly involve mortgage loans, monthly loan flows to households would appear to have overestimated the decline in the financing of households. This notwithstanding, lending to households has continued to moderate in recent months. To a large extent, the subdued lending reflects the sharp deterioration in economic activity, the ongoing moderation of house price dynamics and the fact that there is still a high degree of uncertainty concerning the economic outlook.

Turning to the other counterparts of M3, the annual growth rate of MFI longer-term financial liabilities excluding capital and reserves was 2.5% in May, up from 2.3% in April. Looking at its sub-components, the annual growth rate of deposits with an agreed maturity of over two years increased further to stand at 5.6%, up from 5.4% in April, and that of deposits redeemable at notice of over three months increased to 7.7%, up from 5.1% in the previous month. The annual growth rate of MFI debt securities with a maturity of over two years increased in May as a result of sizeable purchases by the money-holding sectors, following two months of outflows. Thus, credit institutions were again able to obtain long-term funding from non-banks using this instrument. At the same time, credit institutions' net issuance of such long-term debt securities was substantially larger than the purchases of the money-holding sectors, with MFIs themselves further increasing their holdings of these instruments.

The annual growth rate of capital and reserves increased to 12.3% in May, up from 10.4% in April, reflecting a large inflow for these instruments in May.

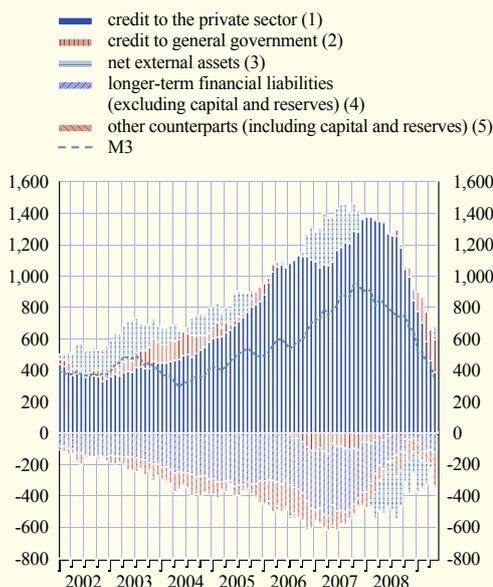
Turning to developments in the external assets and liabilities of the MFI sector, sizeable outflows were recorded in May on both sides of the balance sheet. On the asset side, the strong outflow for loans to non-residents remained an important element in the deleveraging of credit institutions.

At the same time, deposits received from the rest of the world declined even more strongly than assets. As a result, the net external asset position, which is the counterpart of M3, recorded a monthly inflow of €55 billion. For the 12 months to May, an inflow of €78 billion was recorded for MFIs' net external asset position, following an outflow of €26 billion in the 12 months to April (see Chart 6).

To sum up, the May data confirm the decelerating dynamics of both M3 and loans, which are indicative of a decline in the underlying rate of monetary growth. The flow of loans to the non-financial private sector remained subdued, but was, by contrast with previous months, slightly positive after correcting for securitisation. To a large extent, the subdued lending probably reflects the sharp deterioration in economic activity, the ongoing moderation of house price dynamics and the fact that there is still a high degree of uncertainty concerning the economic outlook. MFIs continued to reduce the size of their balance sheets, with this deleveraging being effected through the shedding of external assets and claims on other MFIs.

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

*Issuers continued to take advantage of declining financing costs for market-based debt in the first months of 2009. The annual growth rate of debt securities issued by euro area residents remained at very high levels in April 2009. Issuance by non-financial corporations and the government sector contributed most to the increase in annual growth rates. The annual growth rate of issuance of quoted shares continued to increase moderately.*

### DEBT SECURITIES

The annual growth rate of debt securities issued by euro area residents stabilised at a high level in April 2009, reaching 12.1% compared with 12.0% in March (see Table 3). Compared with March 2009, the annual growth rate of short-term debt securities issued rose by 4.0 percentage points to 27.9% in April. By contrast, the annual growth rate of long-term debt securities issued moderated over the same period by 0.4 percentage point to 10.1% in April. Issuance of longer-term securities is split between securities issued at floating and fixed rates. After a period of strong net issuance of variable rate long-term securities at the end of 2008, market participants have again favoured the issuance of fixed rate long-term securities, for which the annual growth rate increased slightly further from 8.4% in March to 8.5% in April 2009. Fixed rate long-term securities account for 67% of the value of outstanding long-term debt securities. The annual rate of growth of floating rate long-term securities declined to 14.9% in April, down from 16.6% in March 2009.

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

Issuing sector	Amount outstanding (EUR billions) 2009 April	Annual growth rates <sup>1)</sup>					
		2008 Q2	2008 Q3	2008 Q4	2009 Q1	2009 March	2009 April
		<b>Debt securities</b>	<b>13,798</b>	<b>6.9</b>	<b>7.3</b>	<b>7.8</b>	<b>10.7</b>
MFIs	5,419	7.8	8.2	5.7	5.9	6.6	6.4
Non-monetary financial corporations	2,033	21.5	23.3	23.8	29.6	31.1	30.6
Non-financial corporations	728	5.9	4.1	5.0	7.7	8.9	9.9
General government	5,617	2.2	2.4	5.6	10.2	12.1	12.5
<i>of which:</i>							
Central government	5,267	2.3	2.4	5.8	10.5	12.4	12.6
Other general government	350	1.3	3.0	2.9	5.9	7.9	10.5
<b>Quoted shares</b>	<b>3,435</b>	<b>0.9</b>	<b>0.6</b>	<b>0.8</b>	<b>1.2</b>	<b>1.5</b>	<b>1.7</b>
MFIs	414	1.5	2.8	4.9	7.2	8.0	8.2
Non-monetary financial corporations	249	2.4	2.6	2.6	3.2	3.3	3.4
Non-financial corporations	2,772	0.6	0.0	-0.1	0.0	0.4	0.5

Source: ECB.

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

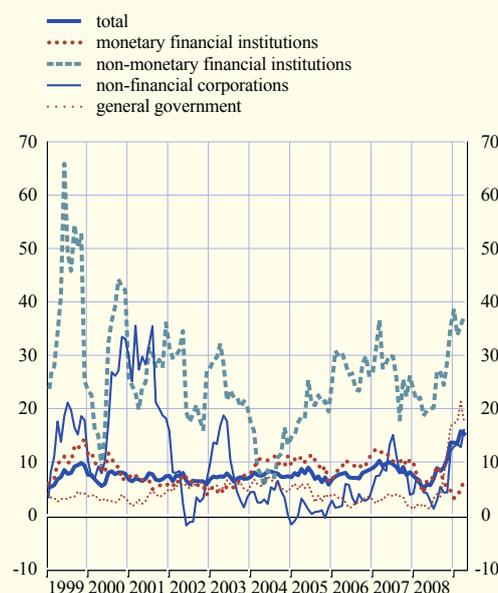
Short-term trends can be better captured with seasonally adjusted six-month annualised growth rates. The latter signal a slight moderation in the ongoing robust growth of overall debt securities issued, standing at 15.4% in April 2009. The decrease by 0.4 percentage point compared with the previous month was caused by a deceleration of debt issuance by the government sector (see Chart 7).

For non-financial corporations, the annual growth rate of debt securities issued increased from 8.9% in March to 9.9% in April. Over the same period the six-month annualised growth rate of debt securities issued jumped from 12.8% to 16.2%, thus reaching levels last seen in the summer of 2003. Net issuance of non-financial corporations continued to be dominated by fixed rate long-term debt securities. Their annual growth rate increased to 19.9% in April 2009, compared with -0.7% for variable rate long-term debt securities and -14.4% for variable rate short-term debt securities in this month. Such a rapid pace for fixed rate long-term debt issuance may reflect substitution effects from bank loans to market-based debt financing in the context of declining credit spreads since the beginning of the year and constraints on funding via the banking system as reported for example in the bank lending survey for the euro area. Recent data point to a broader use of debt securities issuance across rating classes and sectors, notably for lower-rated investment-grade issuers and more cyclical sectors.

As regards the financial sector, the annual growth rate of debt securities issued by MFIs remained broadly unchanged at 6.4% in

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

(six-month annualised growth rates; seasonally adjusted)



Source: ECB.

April 2009, following a rebound in the first months of 2009 in the context of government guarantees for the issuance of bank bonds. A shift from long-term to short-term net debt issuance, in particular at variable rates, was recorded in April. The seasonally adjusted six-month annualised growth rate of short-term debt securities issued by MFIs jumped to 19.4%, up from 11.1% in March 2009, compared with a relatively small monthly increase of 0.3 percentage point to 4.2% in April 2009 for long-term debt securities.

Turning to non-monetary financial corporations, the annual growth rate of debt securities issued moderated to 30.6% in April after 31.1% in March 2009. Nevertheless, the sector remained by far the fastest-growing component of overall debt securities issuance and the six-month annualised growth rate continued to increase, reflecting significant ongoing retained securitisation. In contrast to MFIs, issuance activity continued to focus on longer-term maturities, in particular at variable rates.

The annual growth rate of debt securities issued by the general government sector remained strong, rising to 12.5% in April 2009, well above the average rate of around 4% between 1999 and 2008. The seasonally adjusted six-month annualised growth rate of debt securities issued in this sector moderated to 17.5% in April after 21.3% in March 2009. Overall, the high level of issuance reflects substantial funding needs of euro area governments.

### QUOTED SHARES

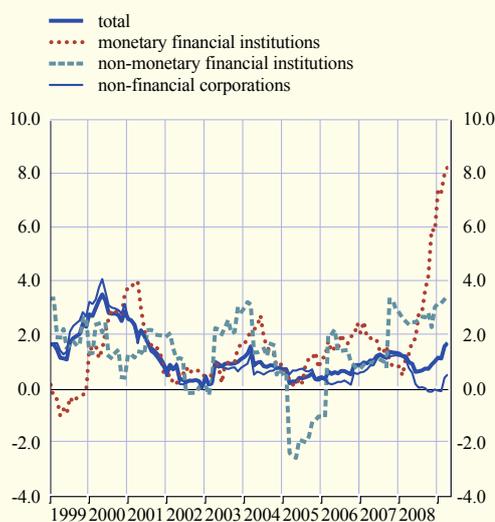
The annual growth rate of quoted shares issued by euro area residents continued to increase moderately overall, reaching 1.7% in April 2009, a level last seen in 2001. While all sectors contributed to this increase, the annual growth rates of equity issuance for monetary and non-monetary financial institutions remained particularly high, at 8.2% and 3.4% respectively, reflecting the use of rights issues by many euro area financial institutions to strengthen their balance sheets. In addition, the annual growth rate of quoted shares issued by non-financial corporations rose to 0.5% in April after six months of negative growth rates until February 2009, fostered by positive stock market developments in this month (see Chart 8).

### 2.3 MONEY MARKET INTEREST RATES

*Unsecured money market interest rates generally declined in June, whereas developments were mixed for secured money market interest rates. As a result, mixed developments were also observed for spreads between unsecured and secured rates, with the spread derived from three-month interest rates increasing slightly in June. The Eurosystem continued to provide the financial system with abundant amounts of liquidity in June by means of fixed rate tender procedures with full allotment in its main and longer-term refinancing operations.*

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.

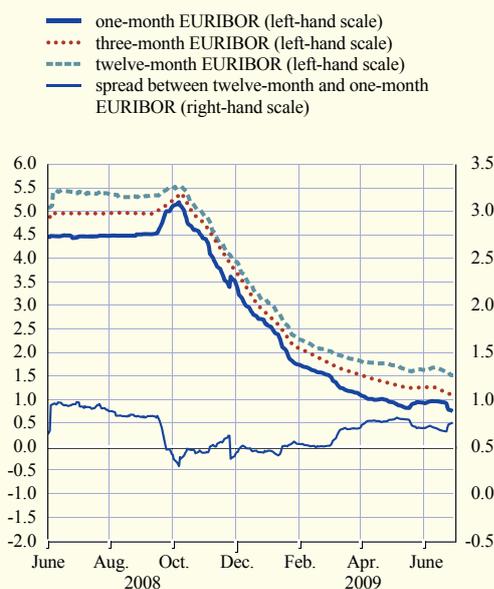
Unsecured money market rates declined in June. On 1 July the one-month, three-month, six-month and twelve-month EURIBOR rates stood at 0.74%, 1.09%, 1.30% and 1.50% respectively – i.e. 19, 18, 16 and 13 basis points below the levels observed on 1 June. The decline was slightly more pronounced for shorter maturities, with the result that the spread between the twelve-month and one-month EURIBOR rates rose slightly to stand at 76 basis points on 1 July, compared with 69 basis points on 1 June (see Chart 9).

Volatile developments were observed for EONIA swap rates over that period, especially for shorter maturities. By contrast with unsecured money market interest rates, EONIA swap rates generally rose until mid-June, before declining to reach relatively low levels towards the end of the month. As a result, spreads between EURIBOR rates and EONIA swap rates were relatively volatile in June, with mixed developments in terms of their levels at the end of the month: spreads derived from shorter maturities were generally higher than they had been at the beginning of June, while spreads for longer maturities were slightly lower. For the three-month segment, this spread rose from 49 basis points on 1 June to 51 basis points on 1 July, a level still close to that observed at the beginning of September 2008 (i.e. prior to the renewed tensions in the euro money market).

The interest rates implied by the prices of three-month EURIBOR futures maturing in September 2009, December 2009 and March 2010 declined slightly to stand at 1.040%, 1.165% and 1.265% respectively on 1 July – 8, 6 and 6 basis points below the rates prevailing on 1 June. These developments in the interest rates implied by three-month EURIBOR futures point to broadly unchanged expectations regarding key ECB interest rates up until the first half of 2010 at least.

**Chart 9 Money market interest rates**

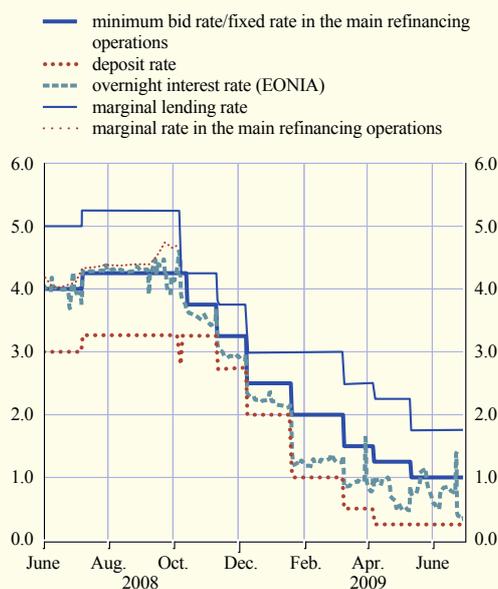
(percentages per annum; spread in percentage points; daily data)



Sources: ECB and Reuters.

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

(percentages per annum; daily data)



Sources: ECB and Reuters.

The EONIA was very volatile during the maintenance period which ended on 9 June, occasionally rising above the rate on the main refinancing operations (MROs) in the period between 22 and 27 May, before falling to levels significantly below that rate in the final days of the period (standing 50 basis points below that rate on 8 June; see Chart 10). While the decision to leave key ECB interest rates unchanged on 4 June was generally expected, volatility in the overnight segment remained somewhat elevated in the following reserve maintenance period, owing to a relatively high level of uncertainty regarding developments in liquidity conditions, particularly ahead of the first one-year longer-term refinancing operation (LTRO) with a fixed rate and full allotment, which was conducted on 24 June. As a result of the sharp reduction in liquidity on 24 June following the weekly MRO conducted the previous day, in which banks scaled down their bids, the EONIA spiked to stand 39 basis points above the rate on the MROs. A sizeable amount of liquidity was then allotted in that one-year LTRO, which largely resulted in very considerable recourse to the deposit facility. This caused the EONIA to fall sharply, reaching levels close to the interest rate on the ECB's deposit facility. On 1 July the EONIA stood at 0.34% – i.e. 66 basis points below the rate on the main refinancing operations and only 9 basis points above the interest rate on the deposit facility.

Owing to the Eurosystem's current liquidity management, the volume of liquidity provided to the market was determined solely by the bidding behaviour of counterparties. Moreover, there was a significant shift in the liquidity term structure as a result of the one-year LTRO conducted on 24 June, as indicated by the fact that the share of total outstanding liquidity accounted for by liquidity with a one-week maturity fell to less than 15% after 24 June, having stood at around 50% prior to that date.

In the main refinancing operations conducted on 2, 9, 16, 23 and 30 June, the ECB allotted €227.6 billion, €302.1 billion, €309.6 billion, €167.9 billion and €105.9 billion respectively. Counterparties generally obtained liquidity in excess of what would have been required in order to fulfil reserve requirements and take account of autonomous factors. This was partially absorbed by recourse to the deposit facility, which was generally more limited than it had been in recent reserve maintenance periods – at least prior to the one-year LTRO. Between 10 and 24 June daily recourse to the deposit facility averaged €11.0 billion, whereas the daily average had been €22.3 billion in the maintenance period ending on 9 June. However, this picture changed completely after 24 June, with daily recourse to the deposit facility rising markedly and reaching €257.1 billion on 1 July.

As regards longer-term operations, the Eurosystem conducted a liquidity-absorbing fine-tuning operation on 9 June (i.e. the last day of the reserve maintenance period), in which it absorbed €57.9 billion in a variable rate tender operation with a maximum rate of 1.00%, a marginal rate of 0.80% and a weighted average rate of 0.77%. In the longer-term refinancing operation on 24 June (which was conducted with full allotment at the fixed rate of 1.00% and a maturity of three months), the allotted amount was €6.4 billion. In other longer-term refinancing operations with various maturities conducted on 10 and 11 June with a fixed rate of 1.00%, the ECB allotted a total of €90 billion. Finally, on 24 June the ECB allotted €442.2 billion in the first of the three one-year LTROs announced in May.

Furthermore, using its reciprocal currency arrangements (swap lines) with the Federal Reserve, the Eurosystem continued to provide US dollar funding against collateral eligible in the Eurosystem, conducting operations on 4, 18 and 25 June with various maturities. The ECB also continued to provide Eurosystem counterparties with US dollar and Swiss franc funding against euro cash via foreign exchange swap operations.

## 2.4 BOND MARKETS

*In June 2009 long-term government bond yields declined in the euro area, while in the United States an initial strong increase was partly reversed in the second half of the month. Renewed downward pressure on yields was associated with some dampening of market sentiment globally. Long-term real yields and long-term break-even inflation rates in the euro area also declined. Implied bond market volatility remained broadly unchanged on both sides of the Atlantic.*

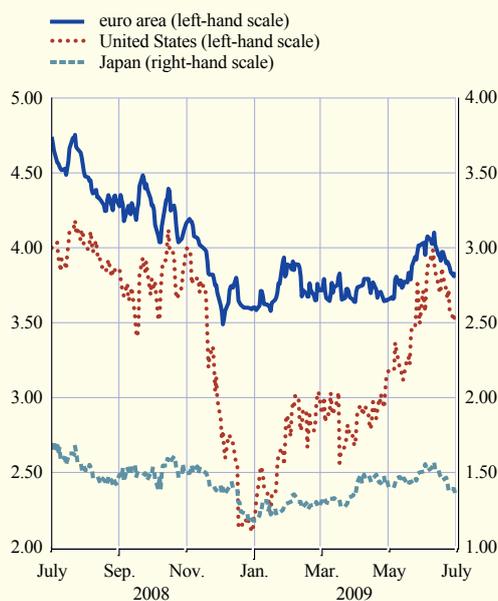
Between end-May and 1 July government bond yields decreased by around 20 basis points in the euro area, while they increased overall by around 10 basis points in the United States. On 1 July ten-year government bond yields stood at around 3.8% in the euro area and at around 3.6% in the United States (see Chart 11). Accordingly, the ten-year nominal interest rate differential between US and euro area government bonds narrowed to around -25 basis points. In Japan, ten-year government bond yields declined by 15 basis points to around 1.3% at the end of the review period. In June bond market volatility on both sides of the Atlantic remained broadly unchanged at levels below those observed at the end of 2008 and beginning of 2009, but still above pre-crisis averages.

In the United States, long-term government bond yields first continued to increase at the beginning of June, by about 50 basis points compared with the end of May, to a seven-month high of 4% on 10 June. In the second half of June this increase was partly reversed, with bond yields falling to 3.6% by the end of the review period. The strong surge in yields at the beginning of June seemed to reflect a combination of factors, including a continued reversal of previous flight-to-safety flows and somewhat strengthened optimism about the economic outlook, but also the strong increase in longer-term Treasury issuance and concerns about the sustainability of the rising public debt. The subsequent decline of US government bond yields in the second half of June seems to be related to the release of some mixed and partly worse than expected economic data affecting the US and global economic outlook. This triggered some renewed portfolio shifts to safe haven assets, which is also reflected in the recent swings in equity prices.

Long-term bond yields in the euro area declined over the period under review, but also exhibited some significant intra-period swings. Ten-year government bond yields first increased to 4.1% in early June before declining by around 30 basis points by the end of the review period. For most euro area countries, the spread of their government bonds vis-à-vis their German counterpart remained broadly stable at still relatively elevated levels, but significantly below the high levels observed during the first

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.

months of 2009. However, for some countries with credit ratings lower than triple-A, spreads widened again. This might reflect continued elevated risk aversion among investors in the bond market and concerns about the fiscal sustainability of increasing government debt (for a longer-term perspective on developments in intra-euro area government bond spreads and their US counterparts, see Box 2).

Yields on euro area long-term inflation-linked government bonds declined somewhat in the course of June. Both at the five- and ten-year maturity, real yields declined by around 10 basis points to 1.0% and 1.8% respectively on 1 July (see Chart 12). The five-year forward real yield five years ahead decreased somewhat compared with end-May, to 2.6%.

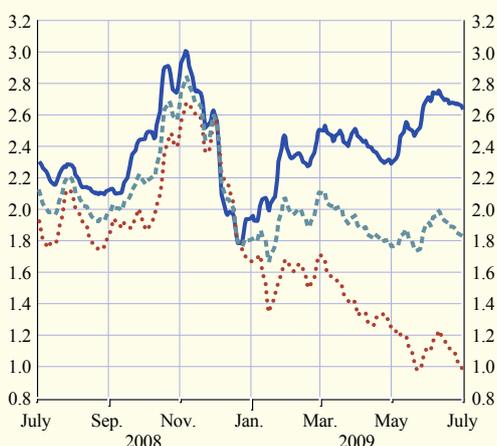
The stronger decline in nominal long-term yields than in real long-term yields is reflected in a decrease of long-term break-even inflation rates. The ten-year spot break-even inflation rate declined by 10 basis points to 2.1% on 1 July, while the five-year spot break-even inflation rate remained close to the 1.8% observed at the end of May (see Chart 13). Hence, the implied five-year forward break-even inflation rate five years ahead fell significantly by almost 20 basis points to around 2.4% on 1 July. By contrast, the five-year forward inflation swap rate five years ahead increased somewhat to 2.6%. Accordingly, the gap between the two indicators of long-term inflation expectations widened, reflecting differences in liquidity premia in the markets for inflation swaps and the bond market, as well as supply and demand imbalances.

The development of the term structure of forward rates in the euro area shows how the overall behaviour of euro area long-term yields can be decomposed into changes in interest rate expectations (and related risk premia) at different horizons (see Chart 14). The implied forward overnight interest rate curve for euro area government bonds flattened moderately in late June compared with

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

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

- five-year forward inflation-linked bond yield five years ahead
- ..... five-year spot inflation-linked bond yield
- ten-year spot inflation-linked bond yield

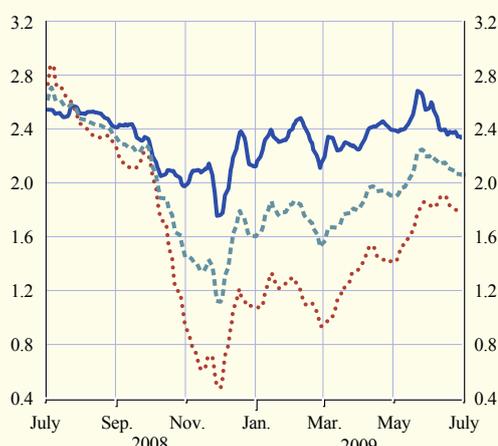


Sources: Reuters and ECB calculations.

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

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

- five-year forward break-even inflation rate five years ahead
- ..... five-year spot break-even inflation rate
- ten-year spot break-even inflation rate



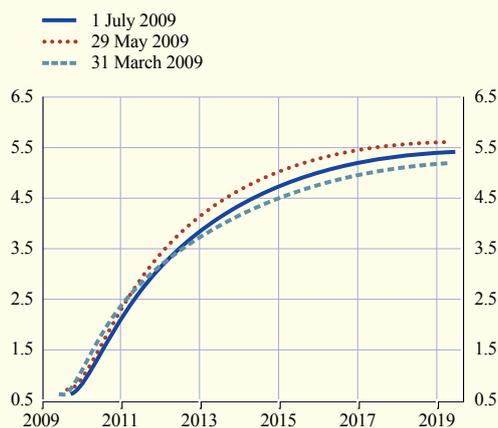
Sources: Reuters and ECB calculations.

end-May. This reflects mainly the downward revision of interest rate expectations at the long end of the forward curve, which seemed to be partly driven by the market response to some worse than expected economic data releases. Decreases at the long end of the curve have also outweighed a moderate decline of implied interest rates at the short end that occurred in response to the Eurosystem's first 12-month refinancing operation conducted on 24 June.

Corporate bond spreads in the euro area broadly continued to decline in June for most rating classes, both for the financial and non-financial sectors. The decrease was most pronounced for lower-rated investment-grade financial bonds and speculative-grade bonds. However, spreads still remained somewhat above pre-crisis averages, reflecting continued market uncertainty about the financial standing of financial and non-financial corporations in the current economic environment.

**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 euro area AAA-rated government bond yields.

**Box 2**

**A COMPARISON OF THE DEVELOPMENTS IN EURO AREA SOVEREIGN BOND SPREADS AND US STATE BOND SPREADS DURING THE FINANCIAL TURMOIL**

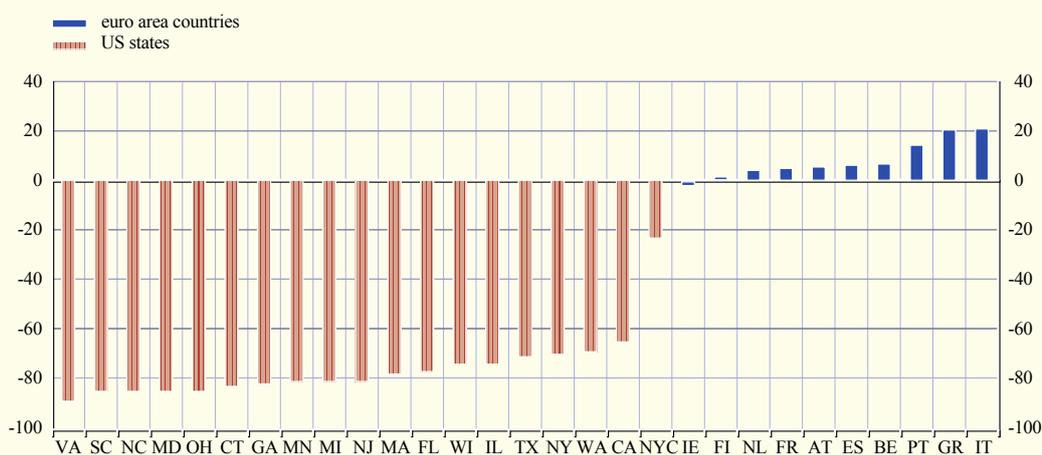
During the financial turmoil, not only have spreads and risk premia of corporate bonds been generally increasing, but also the yield differentials between bonds issued by different governments have been widening. In the euro area, sovereign bond spreads (vis-à-vis German government bonds) widened considerably and only since March 2009 have they been showing signs of narrowing again.<sup>1</sup> However, such a difference between yields on public debt securities in a currency area is by no means exclusively a euro area phenomenon. The yield spreads of US state bonds (vis-à-vis US Treasury bonds) have also showed very marked increases during the financial turmoil. This box looks at the developments in the two sets of spreads and explains why some caution is warranted for such a cross-Atlantic comparison.

At end-June 2007 (i.e. before the start of the turmoil), long-term euro area government bond spreads were moderate, while the bond spreads of the individual US states were all sharply

<sup>1</sup> For an analysis of developments in euro area sovereign bond spreads, see the box entitled "How have governments' bank rescue packages affected investors' perceptions of credit risk?" in the March 2009 issue of the Monthly Bulletin, the box entitled "Recent widening in euro area sovereign bond yield spreads" in the November 2008 issue of the Monthly Bulletin, and in particular the article entitled "The impact of government support to the banking sector on euro area public finances" in this issue of the Monthly Bulletin.

Chart A Levels of selected ten-year euro area sovereign bond spreads and US state bond spreads on 29 June 2007

(basis points)



Sources: Datastream, Bloomberg and ECB calculations.

negative (see Chart A).<sup>2</sup> Before explaining this striking difference in sign, it is important to look at the construction of the two sets of bond spreads. Euro area bond spreads represent the difference between the yields on ten-year bonds issued by the respective member country and ten-year bonds issued by Germany. For the US states, in contrast, the state bond yields are derived from an index of several general obligation bonds issued by the US state and local governments (such as municipalities) with approximately ten-year maturities. All bonds in the index have on average the same credit rating as the state. From the thus-constructed state bond yield, the yield on a ten-year Treasury bond is subtracted. Besides this technical difference, there is an asymmetry between the relative position of the issuer of the respective benchmark bond and the issuers of the other bonds. For the United States, the benchmark bond is issued by the Treasury (i.e. the sovereign issuer), while the state bonds are issued by sub-sovereign entities. In the euro area, by contrast, the issuer of the benchmark bond (Germany) and the issuers of the other bonds are all sovereign states. The benchmark status of Germany among the set of countries arises because German government bonds have both the lowest perceived credit risk and very high liquidity.<sup>3</sup>

A second caveat of the cross-Atlantic comparison is the tax treatment of US state and local government bonds. The payment of interest on such bonds is generally exempt from federal income tax and, if the bonds are held by an investor resident in the state of issuance, also state and local income taxes. As a result, interest paid on bonds issued by US states is usually lower than that paid on fully-taxable bonds. Accordingly, the spreads on US state bonds are usually

2 Due to data availability, the sample for the United States covers 18 states and New York City. The abbreviations of the US states read: California (CA), Connecticut (CT), Florida (FL), Georgia (GA), Illinois (IL), Massachusetts (MA), Maryland (MD), Michigan (MI), Minnesota (MN), North Carolina (NC), New Jersey (NJ), New York (NY), New York City (NYC), Ohio (OH), South Carolina (SC), Texas (TX), Virginia (VA), Washington (WA) and Wisconsin (WI). For the euro area, countries that had adopted the euro by 2006 are considered (excluding Luxembourg).

3 There is no immediate solution for making the comparison more symmetrical. There is no European federal entity issuing bonds which could assume the role that Treasury bonds play in the United States. Alternatively, it would be possible to choose one of the individual US state bonds as a reference entity to increase the symmetry of the comparison. However, such an approach would be rather arbitrary and would require that the respective benchmark state maintain low perceived credit risk for a long period of time.

negative vis-à-vis federal government debt: in the decade before the start of the current turmoil, the median ten-year yield spread on US state debt averaged about -60 basis points against comparable Treasuries. In contrast, such a relevance of differentiated tax treatments does not apply to euro area government bonds. Accordingly, euro area government bond spreads are typically positive.

The latter two points suggest that comparisons of US state bond spreads and euro area government bond spreads should be conducted with some caution. In particular, a cross-Atlantic comparison of turmoil-related spread developments should rather focus on the dynamics of bond spreads than on their levels.

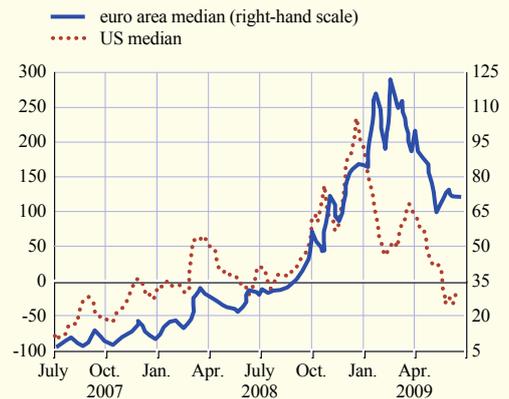
Regarding the dynamics, euro area sovereign and US state bond spreads show a marked co-movement for the period between July 2007 and end-2008 (see Chart B). The correlation of the medians of the two sets of spreads amounts to 0.93 over that period. In fact, since the financial turmoil is taking place globally, it may be expected that both euro area government spreads and US state spreads were being driven by a common “global crisis factor”, capturing a deteriorating global macroeconomic outlook as well as the effect of rising investor risk aversion. This factor appears to have increased both sets of spreads more or less in tandem, while the absolute magnitude of US spread changes was exceeding that of their euro area counterparts. The latter may have partly reflected US-specific events leading to dislocations in the markets for state and local government bonds. These US-specific events include the distress in 2008 of the “monoline” insurance industry that guaranteed a large share of the US municipal bond market and repeated auction failures for municipal auction-rate securities since February 2008.

In the first quarter of 2009 the developments in the two groups of spreads started to diverge markedly. While the US state bond spread levels showed a strong decline overall, euro area spreads edged further upwards. The median spread on US state bonds narrowed by approximately 90 basis points, which resulted from declining yields on state debt and rising yields on Treasuries. Over the same period the median spread in the euro area countries increased slightly further. The decrease in US state bond spreads since the beginning of 2009 has been associated with the impact of President Obama’s announcement and enactment of a large-scale stimulus package containing approximately USD 150 billion of relief to state governments, which covers a substantial share of their projected budget shortfalls over the next few years. As this represents a transfer of funds from the federal authority to the state governments, the recent declines in US state bond spreads may partly reflect a perceived transfer of credit risk between the sovereign and sub-sovereign entities within the US federal structure.<sup>4</sup>

4 Although the improvement in US spreads started somewhat earlier (in late December 2008) than the actual enactment of the stimulus package (on 17 February 2009), the discussion of the stimulus package went through a process spanning several months. As early as the beginning of January 2009, it was increasingly clear that federal aid would be offered to state and local governments as part of the forthcoming package.

**Chart B Median of selected euro area sovereign bond spreads and US state bond spreads**

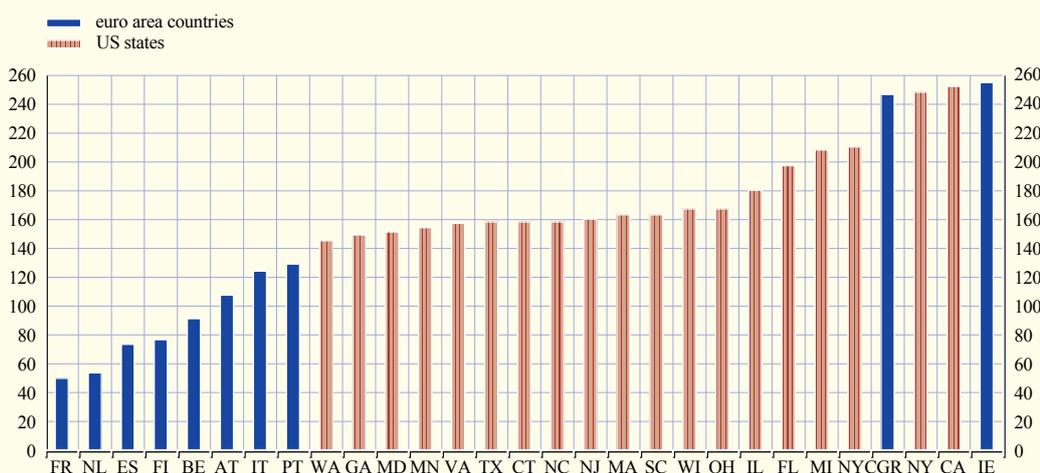
(basis points; five-day averages)



Sources: Datastream and ECB calculations.  
Note: The respective medians are computed for the same two groups of states/countries as in Chart A.

Chart C Changes in selected ten-year euro area sovereign bond spreads and US state bond spreads between 29 June 2007 and 13 March 2009

(basis points)



Sources: Datastream, Bloomberg and ECB calculations.

Taking a snapshot at mid-March 2009 (when euro area sovereign bond spreads were near their crisis peak), it can be observed that US state bond spreads have been generally more strongly affected than euro area government bond yield spreads when compared with end-June 2007 levels (see Chart C). The main exceptions to this are Greece and Ireland. The strong increases of US state bond spreads led them all to stand at positive levels. Overall, the magnitudes of US state spreads observed during the turmoil strongly exceeded any level observed in the last decade. The most substantial increases were observed in areas particularly hard hit by the housing market downturn (California and Florida), but also in areas with a high concentration of economic sectors at the heart of the current recession, such as the automobile industry (in Michigan) and financial services (in New York). These four states had fiscal balances which were weaker than the US average in the fiscal year 2008 and were projected to deteriorate further in the fiscal year 2009.

Finally, since end-March, both euro area sovereign bond spreads and US state bond spreads have shown strong declines amid a general improvement in economic sentiment and globally decreasing risk aversion. These declines came to a halt in mid-May (in the euro area) and early June (in the United States), with spreads on both sides of the Atlantic still exceeding considerably their pre-crisis levels.

Summing up, in the course of the financial turmoil, the spreads between euro area government bond yields vis-à-vis Germany have been widening to levels not seen since the start of EMU. Similar developments have been observed in the United States, where spreads between state bond yields and Treasury bond yields have also been widening. The two sets of spreads showed a close co-movement until end-2008. In the first quarter of 2009 euro area sovereign bond spreads increased further, while US state bond spreads declined, which is probably associated with the announcement of large-scale support packages expected to transfer funds from the federal authority to the state governments. Since end-March 2009 both groups of spreads have shown marked declines amid improving economic sentiment and decreasing risk aversion. Current spread levels, however, still markedly exceed pre-crisis magnitudes. Overall, US state

bond spreads have increased more strongly than their euro area counterparts during the turmoil. This box has also stressed that some caveats apply to any comparison of euro area sovereign bond spreads and US state bond spreads. Differences in the computation of spreads and different tax treatments imply that for cross-Atlantic comparisons the focus should be on the dynamics or changes, rather than on the absolute magnitudes, of bond spreads.

## 2.5 INTEREST RATES ON LOANS AND DEPOSITS

*In April 2009 most MFI interest rates on new loans to and deposits from households and non-financial corporations continued to decrease, pursuing the decline that started in November 2008 in the wake of cuts in key ECB interest rates and subsequent falls in money market rates and bond yields. Spreads of short-term MFI interest rates vis-à-vis money market rates tightened in April and might decline further as policy rate changes are gradually being passed through.*

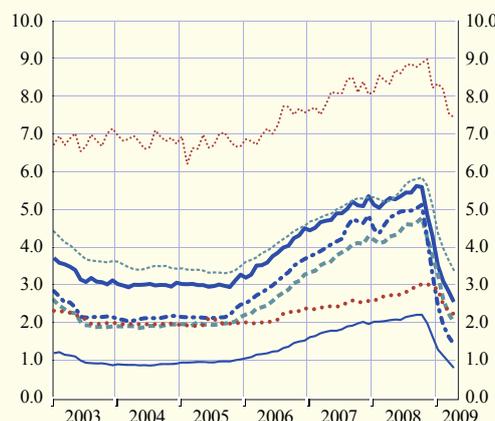
In April 2009 all short-term MFI interest rates on new loans and deposits were substantially lower than in the previous month, reflecting an ongoing response to the substantial decrease of money market rates that started in November 2008 (see Chart 15). All short-term interest rates declined broadly in line with the further decrease of the three-month EURIBOR in April by 21 basis points compared with March 2009. The decrease in interest rates was smaller for rates on very short-term deposits from households and non-financial corporations, as well as on loans to households for consumption, ranging between 12 and 16 basis points. By contrast, the decline in interest rates on large loans to non-financial corporations and to households for house purchase, by 29 and 27 basis points respectively, exceeded the decline in the three-month EURIBOR. As a result, the spreads on short-term MFI interest rates vis-à-vis short-term money market rates tightened somewhat (see Chart 16).

Taking a longer-term perspective, the three-month EURIBOR dropped by 370 basis points between October 2008 and April 2009, compared with decreases of 246 basis points for interest rates charged on loans to households for house purchase with a floating rate and an initial rate fixation period of up to one year and of 270 basis points for rates on large loans to non-financial corporations under similar conditions. Hence, considering the usual inertia in the adjustment of retail bank rates and the elevated credit risk premium related to concerns about the outlook for borrowers' balance sheet conditions, as well

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

(percentages per annum; rates on new business)

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

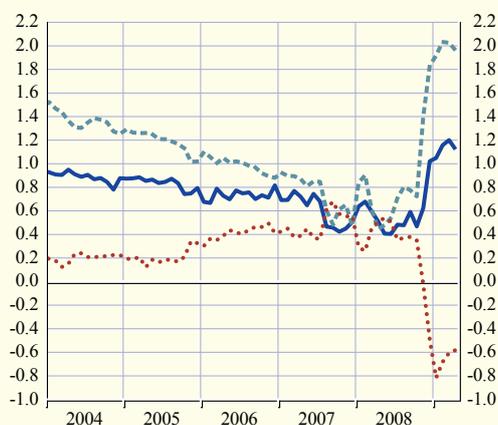


Source: ECB.

**Chart 16 Spreads of short-term MFI interest rates vis-à-vis the three-month money market rate**

(percentage points; rates on new business)

- loans to non-financial corporations of over €1 million with a floating rate and an initial rate fixation of up to one year
- 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



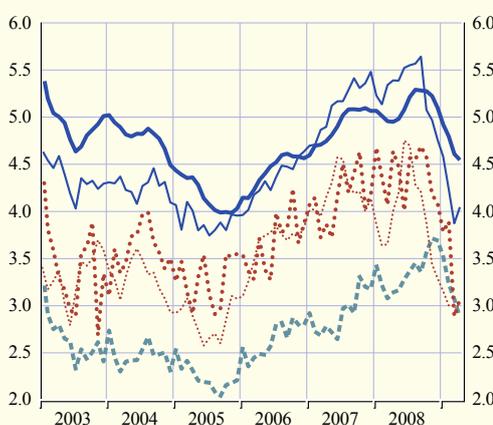
Source: ECB.

Note: For the loans, the spreads are calculated as the lending rate minus the three-month money market rate and for the deposits, the spreads are calculated as the three-month money market rate minus the deposit rate.

**Chart 17 Long-term MFI interest rates and a long-term market rate**

(percentages per annum; rates on new business)

- 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
- loans to non-financial corporations of over €1 million with an initial rate fixation of over five years
- five-year government bond yield



Source: ECB.

as uncertainty about income and debt-servicing capacity, most recent developments tend to confirm that the reductions in policy rates are feeding through to retail lending and deposit rates to a similar degree as in the past. Box 3 looks at recent developments in bank lending rates and the pass-through mechanism both in the euro area and in the United States.

Turning to longer-term maturities, MFI interest rates on lending to households continued to decline in April 2009 (see Chart 17). In particular, long-term interest rates on loans for house purchase decreased by about 5 basis points and interest rates on deposits from households with an agreed maturity of over two years decreased by 20 basis points compared with March 2009. While MFI interest rates on small (i.e. less than €1 million) long-term loans to non-financial corporations decreased by 12 basis points, MFI interest rates on large long-term loans to non-financial corporations increased by 17 basis points over this period. The same holds for MFI interest rates on long-term deposits from non-financial corporations, which increased by broadly the same amount. Between March and April 2009 medium-term government bond yields remained broadly unchanged.

These slight increases in some MFI interest rates in April should be considered from a longer-term perspective. From mid-2007 to April 2009 long-term interest rates for deposits from and large loans to non-financial corporations declined by 109 and 112 basis points, respectively. By contrast, interest rates on small long-term loans to non-financial corporations, as well as on long-term loans to households, have only declined by between 14 and 40 basis points over this period. Over the same period five-year and ten-year government bond yields declined by 158 and 57 basis points, respectively.

Euro area banks' profitability depends inter alia on loan-deposit margins on outstanding amounts and on new business rates. Both measures continued their downward trend in April 2009 and remained substantially below the levels recorded prior to the financial turmoil. While banks have thus broadly passed on reductions in policy rates to retail lending rates despite the financial crisis, increased competition to attract retail deposits to substitute for alternative funding sources has contributed to reducing loan-deposit margins in the retail banking business. At the same time, evidence from corporate reports shows that a number of banks have recently been able to generate income from other businesses in a significant way.

### Box 3

#### A COMPARISON OF RECENT DEVELOPMENTS IN EURO AREA AND US BANK INTEREST RATES

This box compares recent developments in the cost of lending from banks in the euro area and the United States. The analysis focuses on the levels of bank interest rates as well as on their spreads with respect to market rates, both for non-financial corporations and households.<sup>1</sup> In order to enable monetary policy transmission to work effectively, it is important that changes in policy rates influence lending rates charged by banks to households and corporations. This is the so-called interest rate pass-through mechanism. Overall, the empirical evidence suggests that interest rate decisions taken during the recent episode of financial turmoil have been reflected in bank interest rates charged to non-financial corporations both in the euro area and the United States and, albeit to a lesser extent, in those charged to households. Indeed, a weaker pass-through to the household sector has generally been a common feature of the economy.

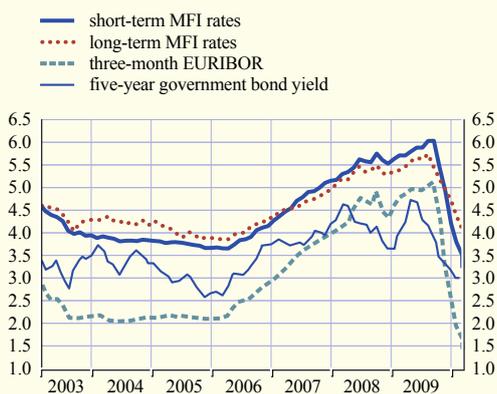
All the charts below depict movements in bank interest rates and market interest rates. Developments in banks' short-term lending rates are generally affected by movements in the three-month EURIBOR in the case of the euro area and the three-month LIBOR in the case of the United States, while banks' long-term lending rates normally reflect movements in government bond yields. Market interest rates since June 2007 have displayed partly different patterns in these economic areas. Between June 2007 and April 2009 (the most recent month for which data on bank interest rates are available), short-term money market rates in the euro area as reflected by the three-month EURIBOR decreased by around 270 basis points, while five-year government bond yields declined by around 160 basis points. The declines observed since October 2008, however, account for most of the overall decrease. In the United States, the three-month LIBOR and the two-year government bond yield declined by approximately 400 basis points (compared with a reduction of 500 basis points in the federal funds rate) since June 2007.

Turning to the components of the cost of bank financing in nominal terms and starting with the euro area, short-term MFI interest rates on loans to non-financial corporations with a floating rate and an initial rate fixation period of up to one year decreased by around 210 basis points between June 2007 and April 2009 (see Chart A). In the same period long-term MFI interest rates on loans to non-financial corporations with an initial rate fixation period of over five years declined

<sup>1</sup> When interpreting the differences in bank interest rates between the euro area and the United States, it is important to keep in mind that the comparison of such data is constrained not only by the differences in the statistical methodology used (such as sampling, definitions and data coverage), but also by the pronounced differences in the financing behaviour of non-financial corporations and households on the two sides of the Atlantic. The euro area has a largely bank-based financial system, with loans to the private sector amounting to 145% of GDP in 2007, while in the United States bank lending to the private sector amounted to 63% of GDP in the same year.

**Chart A MFI interest rates on new loans to non-financial corporations in the euro area and market interest rates**

(percentages per annum; monthly data)

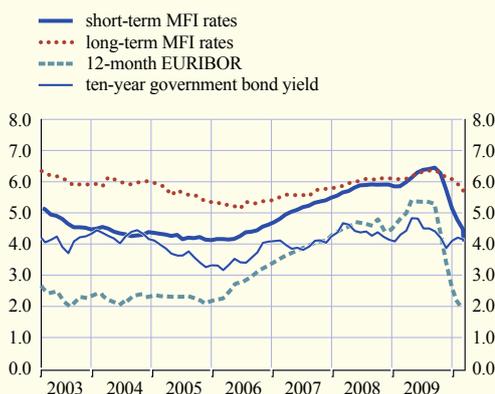


Sources: ECB and Reuters.

Note: The five-year government bond yield is more appropriate for the euro area long-term lending rates.

**Chart B MFI interest rates on new loans to households in the euro area and market interest rates**

(percentages per annum; monthly data)



Sources: ECB and Reuters.

less by 105 basis points. It should be noted, however, that most of this decline was recorded after October 2008 when bank interest rates in the euro area reached their highest level since January 2003. Thus, interest rates on loans declined almost in parallel to the key ECB interest rates.

Most bank interest rates on loans to households for house purchase and consumer credit have also declined albeit to a lesser extent than rates on loans to non-financial corporations. Short-term MFI interest rates on loans to households with a floating rate and an initial rate fixation period of up to one year declined by almost 150 basis points between June 2007 and April 2009 (see Chart B). In the same period long-term MFI interest rates on loans to households with an initial rate fixation period of over five years declined only marginally by 15 basis points.

In the United States, average bank lending rates have declined since the Federal Open Market Committee started reducing its policy rate in September 2007. Since mid-2007 interest rates on commercial and industrial loans have declined by more than 460 basis points for short-term loans<sup>2</sup> and 420 basis points for long-term loans, to stand at around 2% and 3.6% respectively in the first quarter of 2009 (see Chart C).

With regard to mortgage rates in the United States, while the fixed rate on long-term conventional mortgages has declined substantially, interest rates on “jumbo” mortgages (larger loans which are ineligible for a Fannie Mae or Freddie Mac guarantee) have remained at higher levels as investors have retreated from this mortgage market segment since the start of the financial turmoil (see Chart D). Only recently have some declines in jumbo mortgage rates been observed.

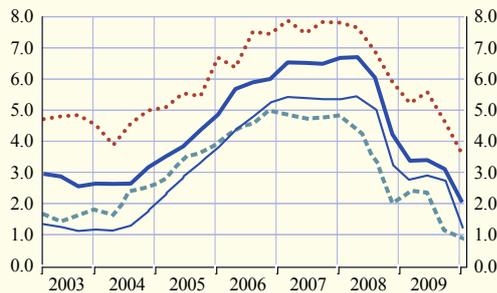
Recent developments in euro area and US bank lending rates and the relative spreads against market rates provide useful evidence on the functioning of the interest rate pass-through mechanism in an environment of low interest rates. The evidence for both economic areas shows a somewhat weaker pass-through for interest rates on loans to households than for those on loans

<sup>2</sup> Short-term interest rates are calculated as the weighted average rate between the following categories: daily, 2 to 30 days, 31 to 365 days.

**Chart C Interest rates on commercial and industrial loans in the United States and market interest rates**

(percentages per annum; quarterly data)

- short-term bank rates
- ... long-term bank rates
- - - two-year government bond yield
- three-month LIBOR

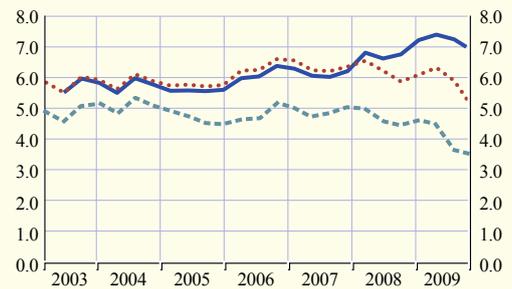


Sources: Federal Reserve Survey of Terms of Business Lending, Haver Analytics and Reuters.  
Notes: Interest rates on commercial and industrial loans made by commercial banks. For the United States, the two-year government bond yield matches better the duration of the loans.

**Chart D Mortgage rates in the United States and market interest rates**

(percentages per annum; quarterly data)

- 30-year jumbo mortgage rates
- ... 30-year fixed conventional mortgage rates
- - - 30-year Treasury bond yield



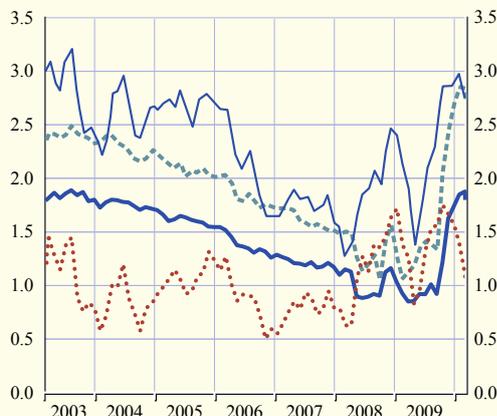
Sources: Primary Mortgage Market Survey, Bankrate.com and Bloomberg.

to non-financial corporations. For example, in the euro area, short-term interest rate spreads for non-financial corporations have increased by around 65 basis points since June 2007, while interest rate spreads for households have increased for both short and long-term lending rates by 125 and 140 basis points respectively (see Chart E).

**Chart E MFI interest rate spreads in the euro area**

(percentages per annum; monthly data)

- short-term, non-financial corporations
- ... long-term, non-financial corporations
- - - short-term, households
- long-term, households



Sources: ECB and Reuters.  
Notes: Short-term spreads are calculated as the difference between bank lending rates and the three-month EURIBOR. Long-term spreads are calculated using the five-year government bond yield.

**Chart F Mortgage and C&I loan interest rate spreads in the United States**

(percentages per annum; quarterly data)

- short-term C&I loans vs. three-month LIBOR
- ... long-term C&I loans vs. two-year government bond yield
- - - 30-year fixed mortgage rate vs. 30-year government bond yield



Sources: Primary Mortgage Market Survey, Federal Reserve and Bloomberg.  
Note: "C&I" stands for "commercial and industrial".

In the United States, spreads between US short-term commercial and industrial loans and the three-month LIBOR have tightened by 50 basis points since June 2007. Long-term interest rate spreads for non-financial corporations have tightened slightly less, by 30 basis points, relative to two-year government bond yields (see Chart F). As regards mortgage lending, the decline in the fixed rate on US conventional mortgages has been evident only since the announcement of the Federal Reserve's purchases of mortgage-related assets in November 2008, while the pass-through to mortgage interest rates was very limited during the early phases of the policy rate reductions (from September 2007 to November 2008). In a market-based financial system, such as the one in the United States, the collapse of securitisation activity has put additional strains on the interest rate pass-through by reducing the availability and raising the cost of financing for loan originators. The degree of pass-through to mortgage rates has also been affected by developments pertaining to the government-sponsored enterprises, which play a crucial role in the US secondary mortgage market.

Overall, it appears that the transmission of policy interest rate changes to bank lending rates has continued to operate during the financial turmoil, both in the euro area and the United States. Vulnerabilities in the banking sector, compounded by aggravated tensions in the money and interbank markets, led to a widening of the spreads between bank lending rates and market rates. In the euro area, most spreads, which had increased more markedly for bank lending rates to households, have fallen back to the levels observed in 2004. A strengthening of banks' balance sheets and an adequate functioning of money markets are necessary conditions for the effective transmission of the monetary policy stance to households' and corporations' financing costs.

## 2.6 EQUITY MARKETS

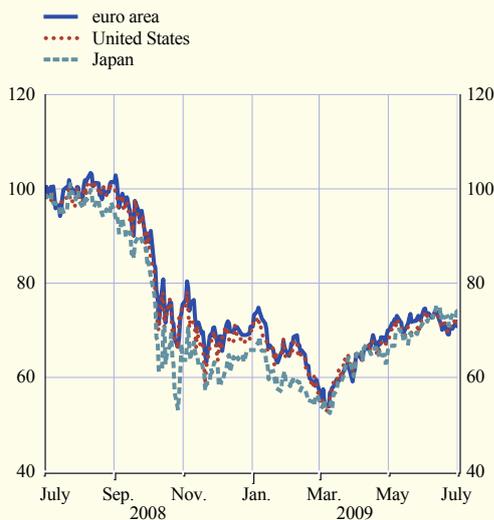
*Global stock prices showed some pronounced swings in the course of June. Market conditions in the second half of June were affected by the release of some mixed and partly worse than expected economic data and, in relation to this, a renewed dampening of market sentiment. On 1 July stock prices in both the euro area and the United States remained overall broadly unchanged compared with end-May. Implied stock market volatility stabilised further.*

Between the end of May and 1 July euro area stock prices, as measured by the broad-based Dow Jones EURO STOXX index, stood close to the levels observed at the end of May (see Chart 18). Over the same period stock prices in the United States, as measured by the Standard and Poor's 500 index, also remained overall broadly unchanged. Stock prices in Japan, as measured by the Nikkei 225 index, increased by around 4%. However, the review period was characterised by some pronounced swings. Some renewed flight by investors from risky to safer assets seemed to be related to the release of some mixed and partly worse than expected economic data, mainly in the second half of June. Nonetheless, short-term implied stock market volatility, an indicator of market uncertainty, declined in the euro area and the United States to levels that have not been observed since the intensification of the financial turmoil in mid-September 2008 (see Chart 19). Furthermore, longer-term implied volatility of stocks included in the Dow Jones EURO STOXX index at one- and two-year horizons remained broadly stable, standing well below previous peaks at the end of 2008 and beginning of 2009.

The initial increases in stock prices at the beginning of the review period seemed to reflect the generally more positive market sentiment towards risky assets seen since March 2009 and

Chart 18 Stock price indices

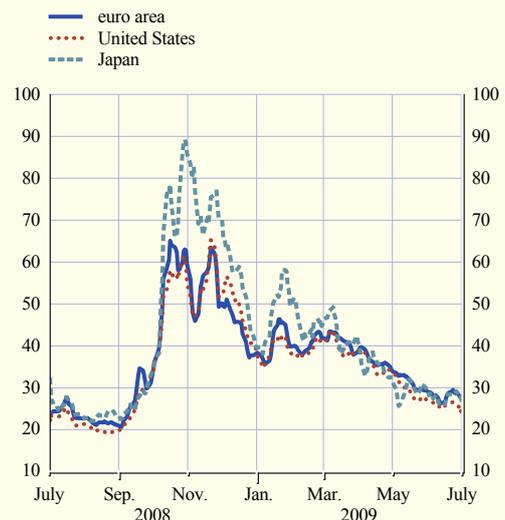
(index: 1 July 2008 = 100; daily data)



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 19 Implied stock market volatility

(percentages per annum; five-day moving averages 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.

further improvement in some economic survey data that had spurred the rebound of equity prices over the previous months. However, in the second half of June, stock prices in global markets declined moderately overall. This seemed to be related to the release of some mixed and partly worse than expected economic data affecting the global outlook. The decline in equity prices might have been perceived by market participants also as a correction of the previous substantial stock market rally, dampening the earlier rebound in investors' confidence. Market sentiment was also dampened by the downgrade of several US banks by the rating agency Standard & Poor's. In line with this, share prices declined overall for the financial sector, by around 2% in the United States and around 1% in the euro area over the review period.

Both actual and expected earnings for euro area listed companies remained depressed in the course of June. Actual earnings-per-share growth for the firms covered by the Dow Jones EURO STOXX index declined further to -35.9%, after -33.4% in May. Earnings developments continue to differ strongly across sectors. In June the annual growth rate in earnings per share of the non-financial sector declined further to around -27.2%, while earnings growth for listed companies from the financial sector decreased to almost -61%. Turning to the earnings outlook, overall earnings-per-share growth 12 months ahead was forecasted to improve, albeit remaining negative at -1.2%, compared with -3% in May.

### 3 PRICES AND COSTS

According to Eurostat's flash estimate, euro area annual HICP inflation dropped from 0.0% in May to -0.1% in June. The further decline in inflation rates primarily reflects base effects resulting from the sharp swings in global commodity prices over the past 12 months.

Owing to these base effects, annual inflation rates are projected to remain temporarily negative over the coming months, before turning positive again. Looking further ahead, inflation is expected to remain positive while price and cost developments are expected to remain dampened in the wake of ongoing sluggish demand in the euro area and elsewhere. Risks to the inflation outlook are broadly balanced.

#### 3.1 CONSUMER PRICES

According to Eurostat's flash estimate, euro area annual HICP inflation dropped from 0.0% in May to -0.1% in June, its first negative value since the start of EMU (see Table 4). A detailed breakdown of this estimate is not yet available, but a fall was expected due to a strong downward base effect in the energy price component related to the rise in oil prices in June 2008.

The detailed breakdown for May indicates that the fall in inflation by 0.6 percentage point from the previous month reflected a decline in the annual rate of change in most HICP components, particularly energy and services. The annual rate of change in the energy component of the HICP fell in May to -11.6% on account of a downward base effect. However, compared with the previous month, energy prices rose by 0.4%, reflecting mainly price increases in transport and liquid fuels, in line with the increase in oil prices observed in May. By contrast, consumer electricity and gas prices continued to decline month on month in May, reflecting the lagged impact of past oil price declines.

The annual rate of change in unprocessed food prices declined to 0.7% in May, from 1.6% in April. All sub-components contributed to this decline, but particularly vegetable prices, which had registered strong increases in the early months of 2009 due to adverse weather effects. The annual rate of change in processed food prices fell to 1.0% in May, from 1.2% in April, with downward movements in all sub-components, particularly those that were more exposed to upward

**Table 4 Price developments**

(annual percentage changes, unless otherwise indicated)

	2007	2008	2009 Jan.	2009 Feb.	2009 Mar.	2009 Apr.	2009 May	2009 June
<b>HICP and its components</b>								
Overall index <sup>1)</sup>	2.1	3.3	1.1	1.2	0.6	0.6	0.0	-0.1
Energy	2.6	10.3	-5.3	-4.9	-8.1	-8.8	-11.6	.
Unprocessed food	3.0	3.5	2.6	3.3	2.4	1.6	0.7	.
Processed food	2.8	6.1	2.7	2.0	1.6	1.2	1.0	.
Non-energy industrial goods	1.0	0.8	0.5	0.7	0.8	0.8	0.8	.
Services	2.5	2.6	2.4	2.4	1.9	2.5	2.1	.
<b>Other price indicators</b>								
Industrial producer prices	2.7	5.9	-0.6	-1.6	-2.9	-4.6	.	.
Oil prices (EUR per barrel)	52.8	65.9	34.3	34.6	36.5	39.0	42.8	49.5
Non-energy commodity prices	9.2	4.4	-20.7	-24.5	-24.9	-19.5	-18.7	.

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

Note: Data on industrial producer prices refer to the euro area including Slovakia.

1) HICP inflation in June 2009 refers to Eurostat's flash estimate.

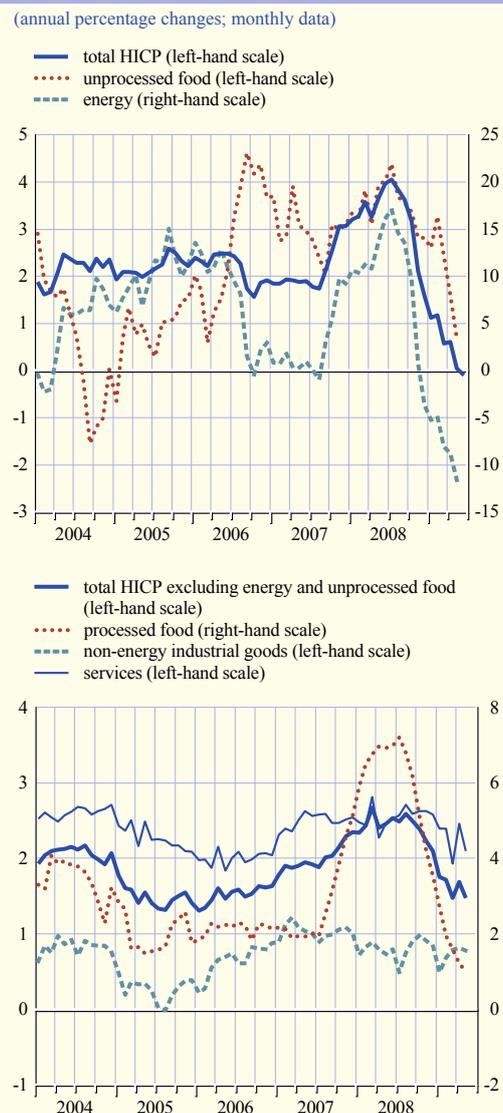
commodity price developments last summer (such as cereals, dairy products, and oils and fats). Short-term dynamics in this component were rather flat in May.

Excluding all food and energy items, or about 30% of the HICP basket, HICP inflation decreased to 1.5% in May, due to the fall in services price inflation. Services price inflation dropped by 0.4 percentage point, to 2.1% in May. Calendar effects, related to the timing of the Easter holiday this year, were the main driving force behind this fall. These effects led to a significant decline in the annual rate of change in holiday-related items in May (package holidays, accommodation and transportation by air). In addition, some decreases in the annual rate of change in restaurant and canteen prices contributed to the fall in services price inflation. The annual rate of change in non-energy industrial goods stood at 0.8% for the third consecutive month. Most items within this category maintained broadly stable annual rates of change in May. Car prices continued to fall in May, but at a slower pace than in the previous month. Overall, it appears that the decline in economic activity and generally weak demand have not yet taken a heavy toll on developments in non-energy industrial goods prices. However, it is worth noting that the price measurement may not take full account of all price discounts and special offers, which could be particularly relevant for the car price item in the HICP.

### 3.2 INDUSTRIAL PRODUCER PRICES

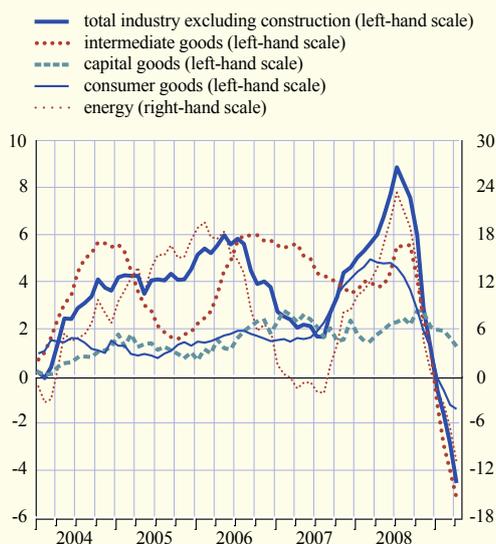
Supply chain price pressures have further abated in recent months. The annual rate of change in industrial producer prices, which had turned negative at the beginning of the year, stood at -4.6% in April. The annual rate of change in the energy component fell to -11.1% in April, from -6.6% in March, on account of a significant month-on-month decline and a downward base effect. Excluding energy and construction, annual producer price inflation dropped to -2.4% in April. Driven by lower input costs and falling demand, this drop reflected developments in all sub-components, but particularly intermediate goods prices, as their annual rate of change fell from -4.0% in March to -5.2% in April. The annual rate of change in capital goods prices and in consumer goods prices also declined in April, to 1.2% and -1.4% respectively (see Chart 21).

**Chart 20 Breakdown of HICP inflation: main components**



**Chart 21 Breakdown of industrial producer prices**

(annual percentage changes; monthly data)



Sources: Eurostat and ECB calculations.  
Note: Data refer to the euro area including Slovakia.

**Chart 22 Producer input and output price surveys**

(diffusion indices; monthly data)



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

Information from surveys on the price-setting behaviour of firms over recent months indicates, however, that the pace at which pipeline price pressures are easing is diminishing (see Chart 22). With regard to the Purchasing Managers' Index (PMI), the June data show that all indices related to prices have increased. In the manufacturing sector, the input price index rose substantially, most likely on account of the month-on-month increases in commodity prices observed in recent months, while the index of prices charged rose to the highest level seen since January 2009. In the services sector, the input price index rose for the first time since June 2008, suggesting that the rate of the decline in the input prices of that sector may have levelled off, while the index of prices charged in that sector posted a new, small increase. Notwithstanding these rises, the PMI price indices still signal a fall in prices compared with the previous month, albeit at a lower rate.

### 3.3 LABOUR COST INDICATORS

The annual rate of growth in negotiated wages eased to 3.2% in the first quarter of 2009, compared with 3.6% in the last quarter of 2008. Annual wage growth has thus remained elevated in the euro area on the back of the sharp increases recorded in 2008. The rather resilient trend maintained by this indicator in the last quarter of 2008 and the first quarter of 2009 can be largely attributed to the length of collective wage agreements (approximately two years) in the euro area. Indeed, a large number of labour contracts were concluded before HICP inflation started to decline and economic activity started to contract in the euro area. However, available information signals that the annual rate of growth in negotiated wages may have further slowed at the beginning of the second quarter of 2009 (see Chart 23 and Table 5).

**Table 5 Labour cost indicators**

(annual percentage changes, unless otherwise indicated)

	2007	2008	2008 Q1	2008 Q2	2008 Q3	2008 Q4	2009 Q1
Negotiated wages	2.1	3.2	2.8	2.9	3.4	3.6	3.2
Total hourly labour costs	2.7	3.3	3.3	2.3	3.4	4.0	3.7
Compensation per employee	2.5	3.1	3.1	3.2	3.5	2.8	1.9
<i>Memo items:</i>							
Labour productivity	0.9	-0.1	0.6	0.3	-0.1	-1.6	-3.6
Unit labour costs	1.6	3.2	2.5	2.9	3.5	4.5	5.7

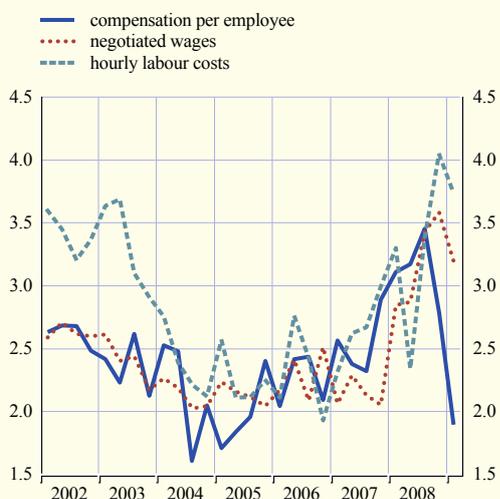
Sources: Eurostat, national data and ECB calculations.

The annual growth rate of compensation per employee fell to 1.9% in the first quarter of 2009, down from 2.8% in the previous quarter. The steep decline in the growth rate of compensation per employee in the first quarter of 2009 was mainly driven by strong downward developments in Germany, Italy, the Netherlands and Belgium, associated with the short-time working schemes in place in these countries, which are extensively used to reduce the numbers of hours worked per employee. The sharp deceleration in compensation per employee is, therefore, mainly a phenomenon of reduced overall compensation on account of fewer hours worked per employee.

The annual growth rate of hourly labour costs in the euro area weakened somewhat, falling to 3.7% in the first quarter of 2009, from 4.0% in

**Chart 23 Selected labour cost indicators**

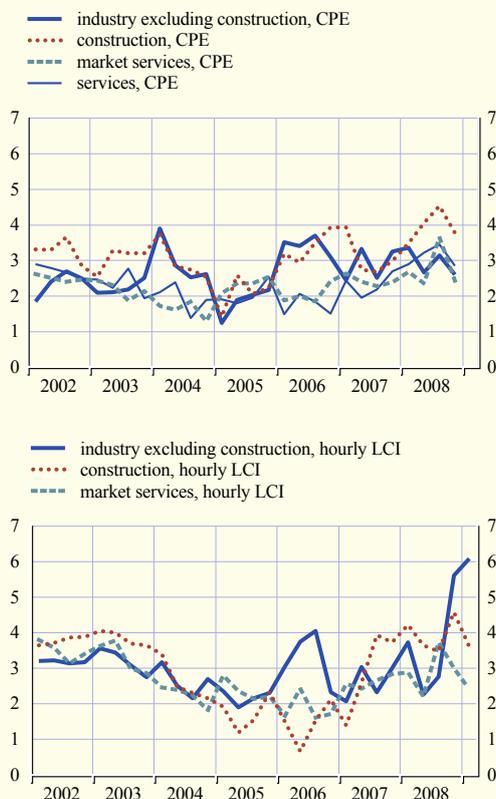
(annual percentage changes; quarterly data)



Sources: Eurostat, national data and ECB calculations.  
 Note: Data refer to the euro area including Slovakia.

**Chart 24 Sectoral labour cost developments**

(annual percentage changes; quarterly data)



Sources: Eurostat and ECB calculations.  
 Notes: Data refer to the euro area including Slovakia. CPE stands for "compensation per employee" and LCI stands for "labour cost index".

the fourth quarter of 2008. The strong growth in hourly labour costs has largely been driven by the impact of various measures taken to reduce the number of hours worked per employee, particularly in Germany, as the reduction in hours worked is often accompanied by a less than proportional decrease in labour remuneration (see the box entitled “Labour market adjustments during the current contraction of economic activity” in the June 2009 issue of the Monthly Bulletin). Due to the fact that the industrial sector is most strongly affected by such measures, hourly labour costs increased more in this sector, rising by 6.1%, compared with 3.6% in the construction sector and 2.4% in the services sector (see Chart 24).

Productivity growth dropped from -1.6% year on year in the last quarter of 2008 to -3.6% in the first quarter of 2009, as employment fell less than GDP. The larger drop in productivity, in turn, has led to a strong surge in unit labour cost growth, which rose from 4.5% in the fourth quarter of 2008 to 5.7% in the first quarter of 2009, a new record high since the start of EMU.

### 3.4 THE OUTLOOK FOR INFLATION

Over the short term, the outlook for annual HICP inflation will continue to be characterised by base effects relating to energy price movements in 2008. For this reason, annual inflation rates are projected to decline further over the coming months, before turning positive again. Looking further ahead, inflation is expected to remain positive while price and cost developments are expected to remain dampened in the wake of ongoing sluggish demand in the euro area and elsewhere. Indicators of inflation expectations over the medium to longer term remain firmly anchored in line with the Governing Council’s aim of keeping inflation rates below, but close to, 2% over the medium term. Risks to the inflation outlook are broadly balanced. These risks relate, in particular, to the outlook for economic activity as well as to higher than expected commodity prices. Furthermore, increases in indirect taxation and administered prices may be stronger than currently expected owing to the need for fiscal consolidation over the coming years.

## 4 OUTPUT, DEMAND AND THE LABOUR MARKET

The pace of euro area economic activity continued to weaken in the course of the first quarter of 2009, in parallel with the ongoing downturn in the world economy. Economic activity over the remainder of this year is expected to remain weak but should decline less sharply than was the case in the first quarter of 2009. Looking ahead into next year, after a phase of stabilisation, a gradual recovery with positive quarterly growth rates is expected by mid-2010. The significant policy stimuli in all major economic areas should support growth globally, including in the euro area. Risks to the economic outlook are balanced.

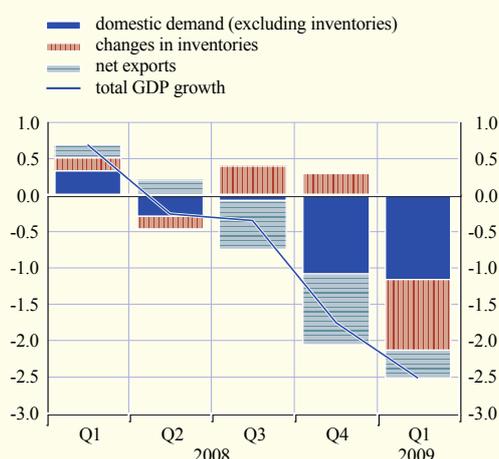
### 4.1 REAL GDP AND DEMAND COMPONENTS

The pace of euro area activity declined markedly in early 2009 following a protracted contraction in both domestic and world demand. According to Eurostat's first estimate, euro area real GDP contracted by 2.5% (quarter on quarter) in the first quarter of 2009, following a 1.8% decline in the last quarter of 2008 (see Chart 25). The prolonged contraction has probably lowered the level of potential output and impaired the economic growth potential of the euro area in the years to come (see Box 4). Looking ahead, euro area growth will most likely continue to contract throughout 2009, but the pace of the contraction is expected to decline gradually. After a phase of stabilisation, economic growth is expected to recover gradually in 2010.

The deterioration in demand was broadly based across all components in the first quarter of 2009. External demand fell at rapid rates, reflecting the collapse in world trade. Domestic demand also softened, with investment registering a significant decline and consumption contracting. Inventories also made a negative contribution to growth.

Chart 25 Real GDP growth and contributions

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



Sources: Eurostat and ECB calculations.  
Note: Data refer to the euro area including Slovakia.

#### Box 4

### POTENTIAL OUTPUT ESTIMATES FOR THE EURO AREA

Measures of potential output growth reflect the rate of growth which can be achieved using available production factors without creating inflationary pressures. The output gap, defined as the percentage deviation of the actual level of output from the potential level, measures the degree of utilisation of production factors in the economy and can be regarded as an indicator of the state of the business cycle and of inflationary pressures. Measures of potential output are also used to derive additional indicators, such as cyclically adjusted government budget balances, to assess the fiscal policy stance.

### Uncertainty in the measurement of potential output

There are different approaches to estimating potential output.<sup>1</sup> Many of them are based on the concept of the macroeconomic production function which allows the growth in potential output to be broken down into contributions from the aggregate input factors, labour and capital, and from the residual item of total factor productivity.

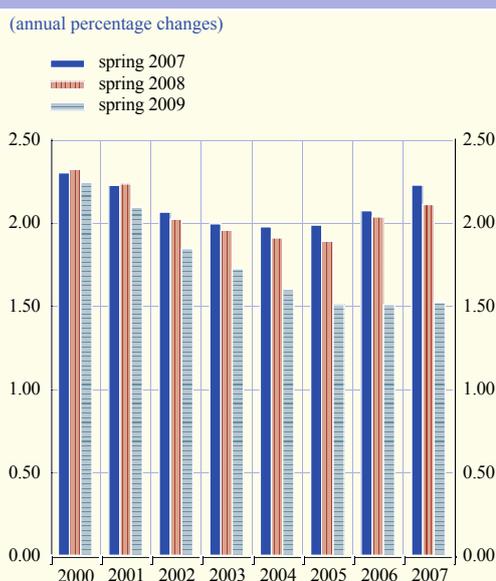
Measures of potential output growth fluctuate substantially from year to year, reflecting, for instance, changes in the rate of capital accumulation over time. Annual data on potential output growth should therefore be distinguished from the long-run trend rate of potential output growth, which has traditionally been estimated for the euro area to amount to around 2%-2.5%.<sup>2</sup>

Since measures of potential output are unobservable, they can only be estimated with uncertainty.<sup>3</sup> Consequently, measures of potential output and potential output growth can be substantially revised ex post. This is shown in Chart A which depicts annual growth rates of potential output in the euro area in the period 2000-07 as estimated by the European Commission in the spring forecasts in 2007, 2008 and 2009. In the forecast of 2007, the available estimates of potential output growth were still in the trend range of 2%-2.5%. In the most recent forecast of spring 2009, however, measures of potential output growth have been significantly revised downwards even for years in the distant past.<sup>4</sup> Thus, while the average rate of growth of potential output over the period 2000-07 has been estimated to amount to 2.1% in past forecasts, this figure fell to 1.7% in the forecast of spring 2009.

### Current estimates of potential output growth and the output gap

The table shows the most recent estimates of international institutions for potential output growth. At the current juncture, annual rates of potential output growth are estimated to be even lower than in recent years and are forecast to fall below 1% in the period 2009-10. This is in line with assumptions of weaker investment activity giving rise to lower contributions from the

Chart A Measures of potential output rates of growth in the euro area



Source: European Commission.

1 For an overview of different approaches of estimating potential output, see the article entitled "Potential output growth and output gaps: concept, uses and estimates" in the October 2000 issue of the ECB's Monthly Bulletin.

2 See European Central Bank (2004), "The monetary policy of the ECB", Frankfurt am Main, and Box 5 entitled "Trends in euro area output growth" in the July 2005 issue of the ECB's Monthly Bulletin.

3 For a more detailed discussion of the uncertainty in measures of potential output and the output gap, see the box entitled "The (un)reliability of output gap estimates in real time" in the February 2005 issue of the ECB's Monthly Bulletin.

4 The production function approach to the computation of potential output essentially provides a smoothed trend of real GDP over an extended period of time, including past years. The downward revision in the real GDP outlook for the period 2009-10 against previous forecasts is so sizeable that not only are current and future rates of growth of potential output dragged down by a significant amount, but historical growth as well. See European Commission (2009), "Economic Forecast Spring 2009", *European Economy* 3/2009, Brussels, p. 31.

## Measures of potential output and the output gap in the euro area

(annual percentage changes; percentage points)

Potential output growth	2007	2008	2009	2010
European Commission	1.6	1.3	0.7	0.7
OECD	1.7	1.9	1.2	0.6
IMF	1.9	1.5	0.8	0.7
<b>Output gap</b>				
European Commission	2.5	2.0	-2.8	-3.6
OECD	1.8	0.4	-5.5	-6.0
IMF	1.4	0.7	-4.3	-5.4

Sources: European Commission, OECD, and IMF.

Note: The output gap is defined as the percentage deviation of the actual level of output from the potential level. Differences in measures of the output gap between institutions derive, inter alia, from differences in estimated levels of potential output.

capital stock to potential output growth. Furthermore, the labour input is estimated to contribute less to potential output growth over the period 2009-10, inter alia owing to higher structural unemployment and lower participation rates.

### Possible effects of the economic downturn on potential output

The estimates shown in the table are based on production function approaches employed by the various institutions. Typically, these models do not incorporate structural breaks but are estimated with unchanged specifications over the forecast horizon. However, there are several reasons why the current crisis may be associated with structural shocks which may lead to a persistent downward shift in the level of potential output or even persistently lower growth rates of potential output.

A downward shift in the level of potential output may come about, for instance, through the abrupt adjustment of excess capacity which accumulated during the period preceding the current financial crisis. In this respect, the capital stock may be affected by the scrapping or stronger discounting of previous investments. In the current downturn, this argument may, for example, be relevant for the construction, automobile and financial sectors. Furthermore, very large increases in unemployment and the downsizing of some sectors may lead to a loss of work-related skills and experience which would shift the level of structural unemployment upward as it impedes successful matches in the labour market.

A shift in the level of potential output can also be accompanied by a change in the future rate of growth of potential output. A longer-term moderation in the rate of growth of potential output may emerge in the current downturn. For instance, real and nominal rigidities in labour markets may hinder the reallocation of labour resources and limit the adjustment of wages, leading to weak labour demand and a persistent pattern of lower employment growth. While a mild recession would not affect the pace of labour force growth in the long run and would leave the rate of potential output growth unaffected, a protracted and deep recession may cut potential labour force growth by discouraging groups in the labour force from participating in the labour market and by reducing immigration flows. With regard to capital accumulation, a lasting increase in credit risk premia<sup>5</sup> and more restrictive lending practices or persistently

5 The impact of higher credit risk premia on potential output has been discussed in more detail in Box 7, entitled "Developments in potential output in the light of changes in oil prices and credit risk premia", in the December 2008 issue of the ECB's Monthly Bulletin.

less efficient operation of the financial system would slow investment and moderate potential output growth. A prolonged recession may also depress total factor productivity drivers, such as investment in research and development. Furthermore, the adjustment of sectors to new demand patterns may lead to a lasting moderation in the rate of potential output growth to the extent that sectors which previously contributed strongly to productivity growth – e.g. the manufacturing sector – are downsized. However, the opposite would be true if low productivity growth sectors, such as construction, shrink.

Finally, the impact on the long-run trend rate of potential output growth will very much depend on policy factors. For example, if the crisis were to lead to a long-run increase in the size of the public sector, taxes would sooner or later have to be raised, and the higher tax burden would dampen potential output growth. Additionally, there is a risk that intensifying protectionist measures would give rise to a less efficient international allocation of capital. Conversely, if the crisis were to trigger more structural reforms, making euro area labour and product markets more flexible and open to competition, this could have the opposite effect of strengthening productivity growth in the long run. Therefore, it is clear that the impact on long-run productivity will depend very much on the policy response to the current crisis.

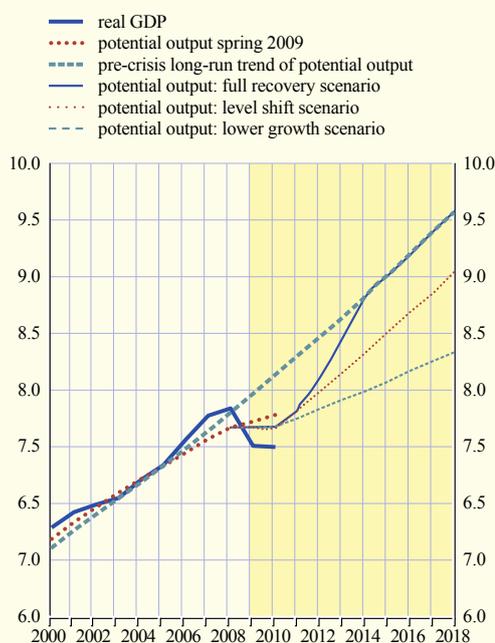
### Possible scenarios for potential output

The implications of such different scenarios are illustrated in Chart B, which depicts real GDP and the European Commission's measure of potential output in the euro area between 2000 and 2010, including the Commission's spring forecasts of real GDP and potential output for the period 2009-10. Furthermore, the chart shows four hypothetical paths of potential output. The pre-crisis long-run trend path assumes that the level of potential output is not affected by the crisis and continues to grow at 2% per year. This path would be broadly in line with potential output growth in many available projections until early 2008.

Furthermore, three possible alternative scenarios of the path of potential output for the years after 2008 are shown.<sup>6</sup> All of them assume that the slump in potential output growth in the period 2009-10 is more pronounced than currently projected, in line with the above arguments for a stronger adverse impact of the crisis on potential output.

Chart B Euro area potential output

(EUR trillions at 1995 market prices)



Sources: European Commission and ECB calculations.  
Note: The shaded area indicates the forecast period.

<sup>6</sup> Similar scenarios have been proposed by the European Commission, see European Commission (2009), "Quarterly report on the euro area", Vol. 8 No 2/2009, p. 28, Brussels, and European Commission (2009), "Impact of the current financial and economic crisis on potential output", European Economy Occasional Papers 49, June 2009, Brussels.

After 2010 the three alternative scenarios diverge: first, the “full recovery scenario” assumes that the decline in potential output is only of a short-term nature and that a post-crisis acceleration in potential growth would quickly realign the level of potential output to its long-term pre-crisis path. This would, of course, require potential output to grow for a number of years at rates significantly above its long-term trend rate. Second, in the “level shift scenario”, potential output will grow at its long-run rate of 2% after the end of the downturn but not return to its long-term path. There have been episodes in history when such a scenario materialised, for instance the period after the banking crisis in Finland in the early 1990s. It should be noted that in order to re-gain the pre-crisis rate of potential growth in these episodes, very strong structural adjustment measures were necessary, aiming at enhancing the flexibility and competitiveness of the economy.<sup>7</sup> Finally, the “lower growth scenario” assumes not only a downward shift in the level but also a persistent slowdown in the rate of growth of potential output. An example of such a scenario is the case of Japan in the 1990s, where potential output was estimated to grow at significantly lower rates after the financial crisis in the mid-1990s than before.<sup>8</sup> As illustrated by the arguments above, it is currently very uncertain which of the scenarios the euro area will experience in the coming years.

### Implications for economic policy

The large degree of uncertainty about potential growth at the current juncture also implies an exceptionally large degree of uncertainty about output gap measures. As shown in Table 1, international institutions currently estimate the output gap to be in the order of -3% to -6% in the period 2009-10. However, to the extent that potential output in the euro area may be subject to a downward shift in the level or to slower growth in the future, output gaps may prove to be less negative than in current estimates.

The uncertainty about measures of potential output and output gaps has significant implications for economic policy. Regarding monetary policy, a sizeable downward shift in the level of potential output would imply significantly less negative estimates of the output gap, which can be understood as an indication of less pronounced downward pressures on prices. Regarding fiscal policy, such a scenario would imply that a larger part of the current fiscal deficit should be regarded as being of a structural nature. This would call for even more forceful consolidation of public finances in order to return to sound fiscal positions.

Overall, in view of the large downward swings in potential output growth at present, but also taking into account the future downward effect on potential output related to demographic developments in the euro area,<sup>9</sup> structural economic reform efforts are needed more than ever in the euro area to support a lasting increase in production and employment. Such efforts should aim at strengthening the adjustment capacity and flexibility in labour and product markets. This can best be achieved by facilitating wage-setting and labour mobility across sectors and regions. Fostering competition and strengthening investment incentives would speed up the process of restructuring and boost productivity.

7 See Haugh, D., P. Ollivaud and D. Turner (2009), “The Macroeconomic Consequences of Banking Crises in OECD Countries”, OECD Economic Department Working Paper No 683, OECD, and European Commission (2009) “Impact of the current financial and economic crisis on potential output”, European Economy Occasional Papers 49, June 2009, Brussels.

8 See references in footnote 6.

9 See Box 7 entitled “The 2009 Ageing Report: updated projections for age-related public expenditure” in the June 2009 issue of the ECB’s Monthly Bulletin.

Private consumption contracted by 0.5% (quarter on quarter) in the first quarter of 2009. Recent indicators suggest continued subdued consumer spending in the second quarter of 2009. However, data on retail trade (which makes up around 45% of consumer spending) showed a marginal improvement in April, when retail sales increased by 0.2% compared with one month earlier. Keeping in mind the volatility of this series, the April increase was the first positive monthly growth rate recorded since September 2008. The April increase in retail sales was broadly based among euro area countries. Despite the fact that consumer confidence rose slightly in May, its persistently low levels are consistent with weak consumer spending in the second quarter of 2009 (see Chart 26).

Looking further ahead, consumption is projected to remain subdued in the second half of 2009 on account of an expected further deterioration in the labour markets. The recent marginal improvements in retail sales and consumer confidence, however, suggest some stabilisation in consumer spending. The substantial falls in commodity prices since last year have supported households' real disposable income and spending. Consumer spending has probably also been supported by the implementation of the fiscal packages adopted in some euro area countries. The extent to which household spending will be stimulated by the fiscal packages is, however, surrounded by great uncertainty. Indeed, the saving ratio in the euro area has risen in recent quarters.

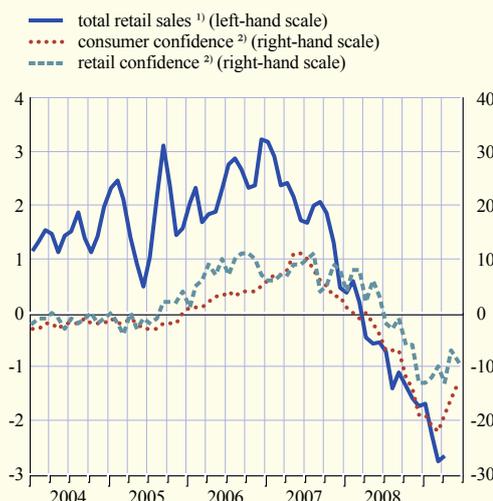
In line with the pattern observed during previous periods of economic recession, gross fixed capital formation has been a main driver of the economic downturn. In the first quarter of 2009 gross fixed capital formation declined by 4.2% (quarter on quarter). Box 5 provides a more detailed description of the current retrenchment in investment.

Investment will probably continue to contribute negatively to economic growth throughout 2009. The continued weak outlook for growth in fixed capital formation reflects the expectation that developments will be subdued in both non-construction investment (mainly assets intended for use in the production of goods and services) and construction investment. The projected contraction in overall domestic and foreign activity, lower profitability for firms and funding constraints are factors that will probably weigh on non-construction investment. The same factors are also expected to dampen construction investment. The ongoing correction of euro area residential and commercial property prices also suggests subdued construction investment in the future.

The outlook for investment is also surrounded by great uncertainty. The higher than usual level of uncertainty mainly results from difficulties in assessing the effects of firms' worsened financing conditions and the subdued final demand expected in the quarters ahead.

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

(monthly data)



Sources: European Commission Business and Consumer Surveys and Eurostat.

Note: Data refer to the euro area including Slovakia.

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

2) Percentage balances; seasonally and mean-adjusted.

Box 5

**EURO AREA INVESTMENT IN THE CURRENT DOWNTURN**

Investment has made a significant contribution to the severe downturn in euro area economic activity since early 2008. In order to shed more light on the outlook for investment and the risks surrounding it, this box analyses the factors which have influenced euro area investment since the beginning of the 1990s. It also focuses on the two previous periods of downturn, at the beginning of the 1990s and in the early 2000s.

Following the difficulties faced by major financial institutions and ultimately the bankruptcy of Lehman Brothers, the negative effects of the financial turmoil on confidence increased in autumn 2008. Companies downgraded expectations of future demand and sharply reduced inventories, while world trade contracted strongly. Investment declined more rapidly, falling at a rate of above 4% on a quarterly basis in both the last quarter of 2008 and the first quarter of 2009.

Given that the decline in investment was larger than the fall in overall activity, the investment share of GDP decreased – a normal feature at this point in the cycle – from 22.3% in the first quarter of 2008 to 21.0% in the first quarter of 2009 (see Chart A). In terms of components, the deceleration was broadly based among the main components (construction, transport equipment, and metal products and machinery) for which data are available at the euro area level (see Chart B).

Taking a longer-term perspective, the current retrenchment in investment appears to be unprecedented since at least the beginning of the 1990s.<sup>1</sup> In addition to the current decline, two other periods can be identified in which there were significant falls in investment. In the first, which lasted from the beginning of 1992 until the end of 1993, investment declined by 10%

1 Some caution is required when analysing euro area series over a relatively long period, as they are subject to several changes, in terms of composition and also in terms of compilation, including the introduction of chain linking in euro area national accounts.

**Chart A Investment share in GDP over the long term**

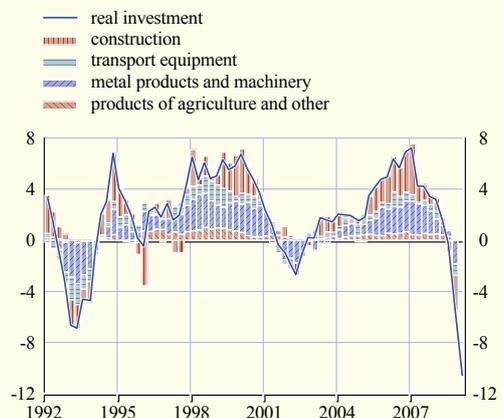
(percentages)



Sources: Eurostat and ECB calculations.

**Chart B Annual growth in euro area real investment and contribution from components**

(annual percentage changes; percentage points)



Source: ECB calculations based on Eurostat.  
Note: The latest observations are for the first quarter of 2009 for the total and the fourth quarter of 2008 for the components.

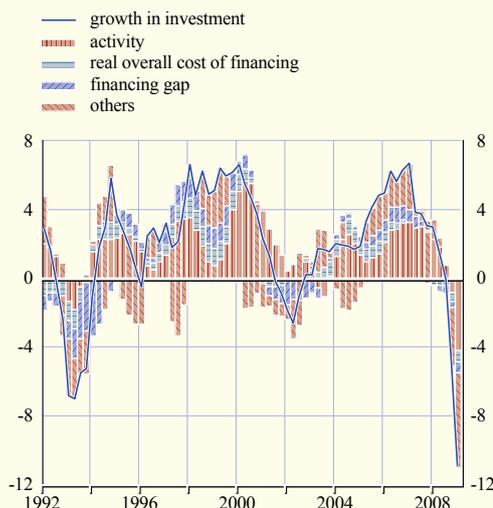
from peak to trough. In the second, from the beginning of 2001 until the beginning of 2002, it declined by 3% from peak to trough. These periods were both characterised by a marked weakening in overall activity in the euro area, albeit of different magnitudes.

As each of these periods had their own unique characteristics, the conclusions that can be drawn from such historical comparisons are rather limited. A simple estimated macroeconomic framework to model investment growth is used to provide a better understanding of these developments. In such a framework, investment can be assumed to constitute a constant share of GDP in the long run, but in the short to medium run, it is affected by overall demand (without investment), changes in the real cost of financing, and the “financing gap”.<sup>2</sup> A proxy for the real cost of financing can be calculated by weighting the cost of different sources of financing (equities, debt securities and MFI loans) on the basis of their amounts outstanding, corrected for valuation effects and deflated by inflation expectations.<sup>3</sup> The financing gap can be measured as the difference between capital expenditure and what is financed by funds generated internally. As an indication of external financing needs, a larger financing gap is expected to weigh on investment in the short run.<sup>4</sup> Such a framework makes it possible to estimate the contribution of each factor to total investment growth, as represented in Chart C.

According to this analysis, a large part of the slowdown in investment is accounted for by the reduction in overall demand. This may not be surprising, given the severity of the current downturn and the tendency for investment to react strongly to changes in activity in the short run.<sup>5</sup> This result is also supported by the European Commission surveys on limits to production, which show that lack of demand is the main factor limiting production. The real overall cost of financing is also estimated to have made a negative contribution since the end of 2007. Indeed, before declining more recently, until the last quarter of 2008, the real overall cost of financing for non-financial corporations had edged up. This was the result of an increase in the cost of market-based financing linked to higher corporate bond yields and to an increase in the premium demanded by investors for investment in equities against the background

Chart C Estimated contribution to annual investment growth

(annual percentage changes; percentage points)



Sources: Eurostat and ECB calculations.

Notes: The component labelled “other” combines a dummy variable for the period 1992-93, the residuals and the lasting impact of initial conditions. The latest observation is for the first quarter of 2009.

2 For more details on the equation underpinning the analysis, see Box 1 in the article entitled “Business investment in the euro area and the role of firms’ financial positions” in the April 2008 issue of the Monthly Bulletin. The equation has been updated to incorporate the latest data. It has been estimated using data from 1991 to 2008.

3 For more details on the indicator of the cost of financing, see Box 4 in the March 2005 issue of the Monthly Bulletin. A certain degree of caution is warranted in using this indicator owing to important caveats related to its construction, such as the implicit assumption that there is no financing at variable rates or the high degree of uncertainty surrounding the measure of cost of equity financing. Given that this indicator has only been available since 1998, long-term government bond yields are used to extend the indicator prior to this date.

4 Several reasons are advanced in the literature to explain this negative relationship. For instance, information asymmetry may result in collateral requirements on the part of the borrower or external funds may imply additional costs.

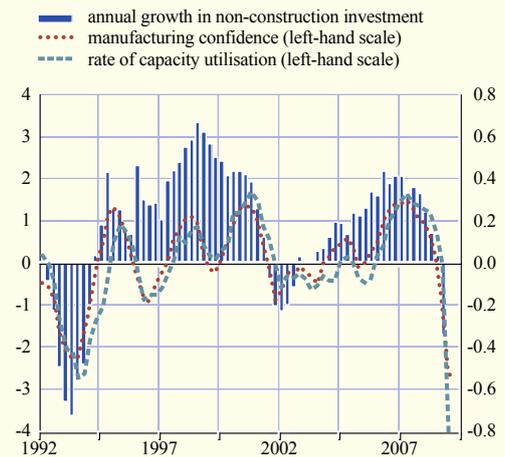
5 As with most reduced form single equations estimated in the literature, the short-term elasticity of investment to activity is above one.

of the financial turmoil. The financing gap has started to play a negative role recently, following the pronounced decline in profits. Based on historical experience, this latter effect is likely to intensify over the coming quarters. Indeed, in the two earlier episodes of downturn, profits declined by more than investment, thereby increasing the financing gap, despite the reduction in capital expenditure. Looking ahead, data on earnings expectations provided by financial market analysts suggest that non-financial firms' earnings per share will remain in negative territory for some time.

Being relatively simple, the analysis is subject to many caveats relating to the specification of the model and the precise definition of the financial variables used. For example, the model neglects the role that shifts in risk aversion, changes in the degree of uncertainty or changes in credit supply conditions can have on investment. These omissions may account for the large unexplained component of investment decline in 1992-93, as well as more recently.

Until the first quarter of 2009, a large part of the decline in euro area investment was driven by the severe downturn in overall activity. Looking ahead, the latest indicators suggest that investment is likely to remain depressed, possibly lagging the economic upturn (see Chart D). This outlook is also reflected in the June 2009 Eurosystem staff macroeconomic projections, where euro area investment is projected to decline by between 10.1% and 12.3% in 2009, well below the projected decline in euro area GDP.

**Chart D Non-construction investment and related indicators**



Sources: European Commission, Eurostat and ECB calculations. Note: Data are de-measured and standardised over the period from the first quarter of 1992 to the fourth quarter of 2008.

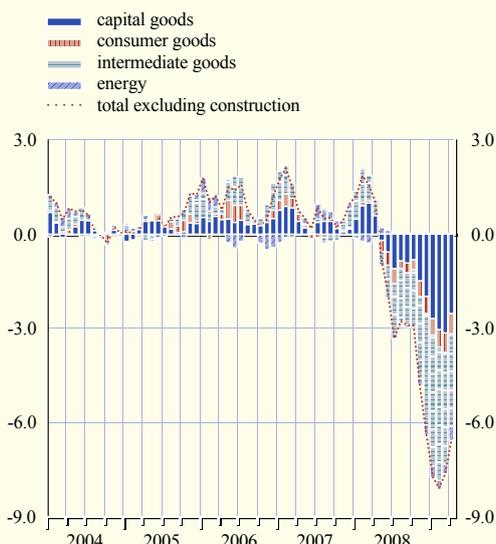
## 4.2 OUTPUT, SUPPLY AND LABOUR MARKET DEVELOPMENTS

The first estimate of real value added in the first quarter of 2009 showed contractions in both the industry and services sectors. Value added in industry (excluding construction) fell by 8.8% (quarter on quarter), while value added in the construction sector dropped by 0.5%. The decline in services value added amounted to 1.1% (quarter on quarter).

Monthly indicators suggest that activity remained weak during the second quarter of 2009. In April euro area industrial production fell by 1.5% month on month and the contraction was broadly based across industrial groups. When analysing the less volatile three-month moving average growth rates, some moderation in the pace of the decline is visible (see Chart 27). Business surveys point to a further moderation in the pace of the decline in the remainder of the quarter (see Chart 28). For instance, the Purchasing Managers' Index (PMI) continued to improve in June (although it was still below 50, indicating that the economy is contracting). Similarly, the European Commission's survey of business confidence rose moderately in June from the record low recorded in March. Overall, industrial production and recent business surveys taken together suggest that the pace of the monthly contraction in activity bottomed out in the latter part of the first quarter.

**Chart 27 Industrial production growth and contributions**

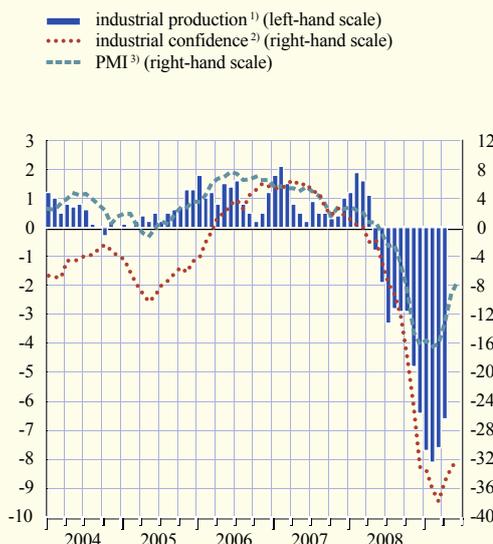
(growth rate and percentage point contributions; monthly data; seasonally adjusted)



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

**Chart 28 Industrial production, industrial confidence and the PMI**

(monthly data; seasonally adjusted)



Sources: Eurostat, European Commission Business and Consumer Surveys, Markit and ECB calculations.  
Notes: All series refer to manufacturing. Data refer to the euro area including Slovakia.  
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.

## LABOUR MARKET

Conditions in euro area labour markets have continued to deteriorate in recent months. According to Eurostat's first estimate, euro area employment decreased by 0.8% quarter on quarter in the first quarter of 2009, marking the third consecutive quarterly decline (see Table 6). The drop in employment in the first quarter reflected a steeper decrease in employment in the industrial sector together with negative employment growth in the services sector.

Looking ahead, the latest business surveys point to a further deterioration in employment in the second quarter of 2009 (see Chart 29). In June the PMI index of employment intentions remained at very low levels for both the industrial and services sectors. The latest surveys on employment intentions by the European Commission suggest a similarly bleak outlook for employment.

As a result of the sharp fall in activity, labour productivity (in terms of output per employee) declined substantially in the first quarter of 2009, falling by 1.7% quarter on quarter (see Chart 30). The sharp decline in labour productivity in the first quarter reflected marked falls in industry (with the exception of construction, where labour productivity rose, following a sharp contraction in employment) and services. It is worth emphasising that this development in labour productivity was partly driven by a strong reduction in hours worked per employee. Several euro area countries have made use of short-time working schemes and other measures to mitigate the effects of the economic contraction (see the box entitled "Labour market adjustments during the current contraction of economic activity" in the June 2009 issue of the Monthly Bulletin). However, productivity also fell

**Table 6 Employment growth**

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

	Annual rates		Quarterly rates				
	2007	2008	2008 Q1	2008 Q2	2008 Q3	2008 Q4	2009 Q1
Whole economy	1.8	0.8	0.4	0.1	-0.2	-0.4	-0.8
<i>of which:</i>							
Agriculture and fishing	-1.4	-1.5	0.7	-1.4	-0.6	0.2	-0.6
Industry	1.4	-0.9	0.1	-0.5	-0.7	-1.4	-1.6
Excluding construction	0.3	-0.2	0.3	-0.2	-0.4	-1.0	-1.4
Construction	4.0	-2.4	-0.4	-1.2	-1.5	-2.3	-2.2
Services	2.1	1.5	0.5	0.3	0.1	0.0	-0.6
Trade and transport	1.9	1.3	0.7	0.1	0.0	-0.4	-1.0
Finance and business	4.0	2.5	1.1	0.2	0.1	-0.6	-1.0
Public administration <sup>1)</sup>	1.3	1.2	0.0	0.6	0.1	0.5	0.0

Sources: Eurostat and ECB calculations.

Note: Data refer to the euro area including Slovakia.

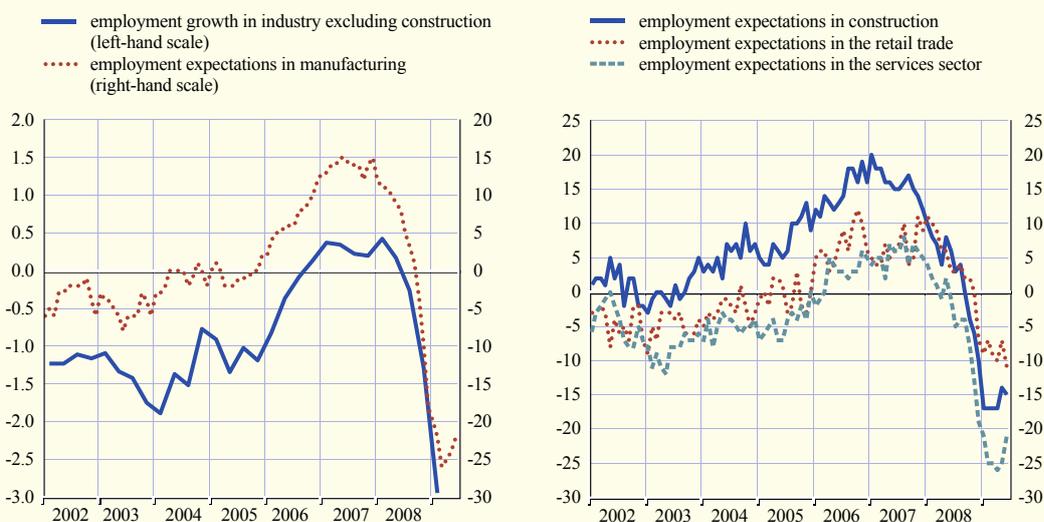
1) Also includes education, health and other services.

when measured in terms of hours worked, in line with the normal sluggish adjustment of the labour market. Looking ahead, productivity is expected to recover in the latter part of 2009, driven by a combination of further contractions in employment and less marked contractions in activity.

The unemployment rate in the euro area rose to 9.2% in April (see Chart 31). The rise was broadly based across all euro area countries. Low levels of economic confidence coupled with high unemployment expectations suggest that there will be further increases in the euro area unemployment rate in the months ahead.

**Chart 29 Employment growth and employment expectations**

(annual percentage changes; percentage balances; seasonally adjusted)

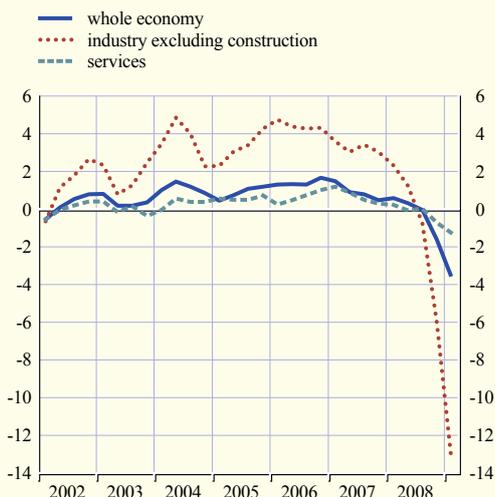


Sources: Eurostat and European Commission Business and Consumer Surveys.

Note: Percentage balances are mean-adjusted. Data refer to the euro area including Slovakia.

Chart 30 Labour productivity

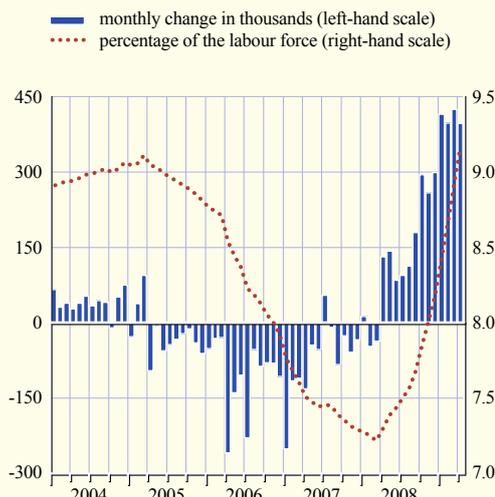
(annual percentage changes)



Sources: Eurostat and ECB calculations.  
Note: Data refer to the euro area including Slovakia.

Chart 31 Unemployment

(monthly data; seasonally adjusted)



Source: Eurostat.  
Note: Data refer to the euro area including Slovakia.

### 4.3 THE OUTLOOK FOR ECONOMIC ACTIVITY

The data and survey information that have recently become available have broadly confirmed previous expectations. Economic activity over the remainder of this year is expected to remain weak but should decline less strongly than was the case in the first quarter of 2009. Looking ahead into next year, after a phase of stabilisation, a gradual recovery with positive quarterly growth rates is expected by mid-2010. The significant policy stimuli in all major economic areas should support growth globally, including in the euro area.

The risks to this economic outlook are balanced. On the positive side, there may be stronger than anticipated effects stemming from the extensive macroeconomic stimulus being provided and from other policy measures taken. Confidence may also improve more quickly than currently expected. On the other hand, concerns remain relating to a stronger or more protracted negative feedback loop between the real economy and the turmoil in financial markets, further increases in oil and other commodity prices, the intensification of protectionist pressures, increasingly unfavourable labour markets and, lastly, adverse developments in the world economy stemming from a disorderly correction of global imbalances.

## 5 EXCHANGE RATE AND BALANCE OF PAYMENTS DEVELOPMENTS

### 5.1 EXCHANGE RATES

The euro has experienced – amid some oscillation – a moderate depreciation in nominal effective terms since the end of March 2009; against the pound sterling it depreciated sharply, while it appreciated against the US dollar and the Japanese yen.

#### EFFECTIVE EXCHANGE RATE OF THE EURO

On 1 July 2009 the nominal effective exchange rate of the euro – as measured against the currencies of 21 of the euro area’s important trading partners – stood 0.4% below the level prevailing at the end of March 2009 and at around 1% above its 2008 average (see Chart 32). The depreciation of the euro since the end of March 2009 reflects mainly a weakening vis-à-vis the pound sterling that was not completely offset by an appreciation against the US dollar and the Japanese yen.

Having been on an appreciating path since mid-April, the nominal effective exchange rate depreciated in June when the support to the euro from an increase in risk appetite, as indicated by a decrease in foreign exchange implied volatilities, faded.

#### US DOLLAR/EURO

The euro remained broadly unchanged against the US dollar in June, some fluctuation notwithstanding. The broad stability of the euro in June and early July followed a phase of sharp appreciation in May, possibly related to an increase in markets’ risk appetite and the resulting shift away from currencies perceived as safe-havens by the markets, such as the US dollar. On 1 July the euro traded at USD 1.41, 5.9% above the level prevailing at the end of March but still 4.2% weaker than its average in 2008 (see Chart 33).

#### JAPANESE YEN/EURO

The behaviour of the euro vis-à-vis the Japanese yen broadly mirrored that of the euro against the US dollar. The broad stability of the euro vis-à-vis the Japanese currency in June followed

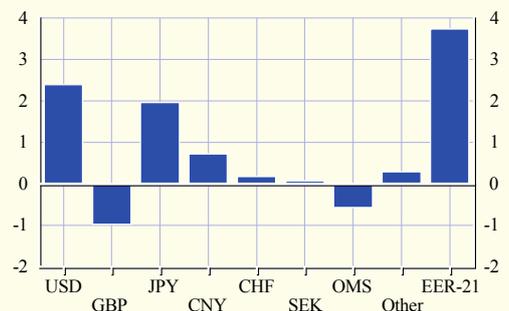
Chart 32 Euro effective exchange rate and its decomposition<sup>1)</sup>

(daily data)



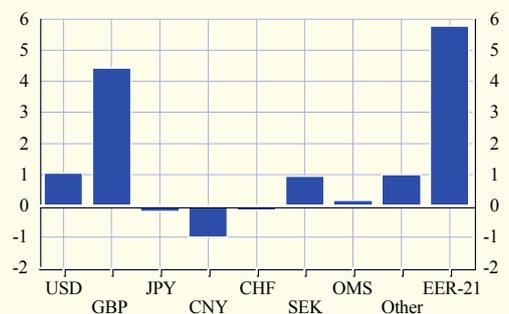
#### Contributions to EER changes<sup>2)</sup>

From 30 January 2009 to 1 July 2009  
(percentage points)



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

From 3 January 2005 to 1 July 2009  
(percentage points)



Source: ECB.

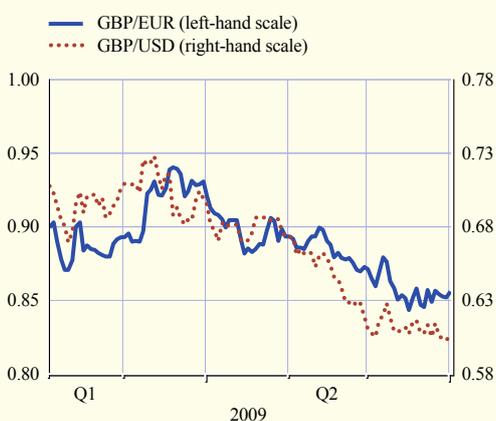
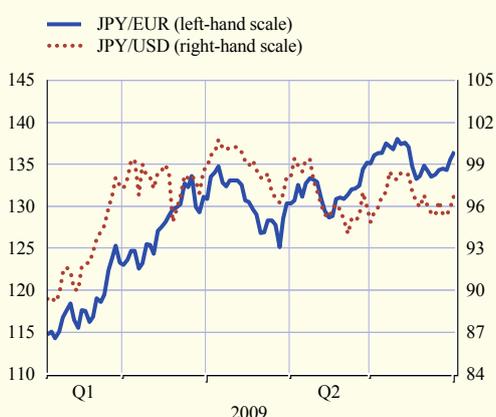
1) An upward movement of the index represents an appreciation of the euro against the currencies of 21 of the most important trading partners of the euro area and all non-euro area EU Member States.

2) Contributions to EER-21 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 pound sterling and the Swedish krona). The category “Other” refers to the aggregate contribution of the remaining six trading partners of the euro area in the EER-21 index. Changes are calculated using the corresponding overall trade weights in the EER-21 index.

a period spanning the second half of April and May in which the euro strengthened considerably. On 1 July, the euro stood at JPY 136.5, around 4.1% higher than its level at the end of March 2009 (see Chart 33) and 10.4% below its average in 2008.

Chart 33 Patterns in exchange rates

(daily data)



Source: ECB.

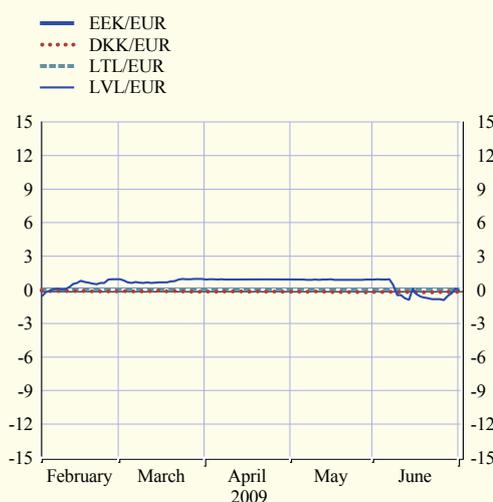
### EU MEMBER STATES' CURRENCIES

Over the past three months, most currencies participating in ERM II remained broadly stable, trading at, or close to, their respective central rates (see Chart 34). Following the approval of an austerity budget in mid-June, the Latvian lats has traded near the lower limit (strong side) of its unilaterally set  $\pm 1\%$  fluctuation band against the euro.

With regard to the currencies of other EU Member States not participating in ERM II, in June the euro continued to weaken against the pound sterling amid improved sentiment concerning the UK financial sector and better than expected economic data. On 1 July the euro traded at GBP 0.86, 8% lower than its end-of-March level but 7.4% higher than its 2008 average.

Chart 34 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. In the case of the Danish krone, the fluctuation band is  $\pm 2.25\%$ ; for all other currencies, the standard fluctuation band of  $\pm 15\%$  applies.

Over the past three months the euro has depreciated against the Czech koruna (5.9%), the Hungarian forint (12%) and the Polish zloty (6.4%).

### OTHER CURRENCIES

Between the end of March and mid-June 2009, some large swings notwithstanding, the euro depreciated slightly against the Swiss franc. Since approximately the third week of June, however, the euro has appreciated sharply. The strengthening of the euro reportedly stemmed from interventions in the foreign exchange markets by the Swiss National Bank. On 1 July the euro traded at around CHF 1.52, 0.6% higher than its end-of-March level but 4% lower than its average in 2008. Between the end of March and 1 July, the euro weakened by 2.8% against the Canadian dollar, while it depreciated sharply, by 9%, against the Australian dollar.

## 5.2 BALANCE OF PAYMENTS

*The euro area current account deficit reached €105.7 billion (or about 1.2% of GDP) in the year to April 2009. However, looking at the most recent trade developments, the significant contraction observed since the deepening of the financial crisis in September 2008 seems to have moderated somewhat on the exports side.*

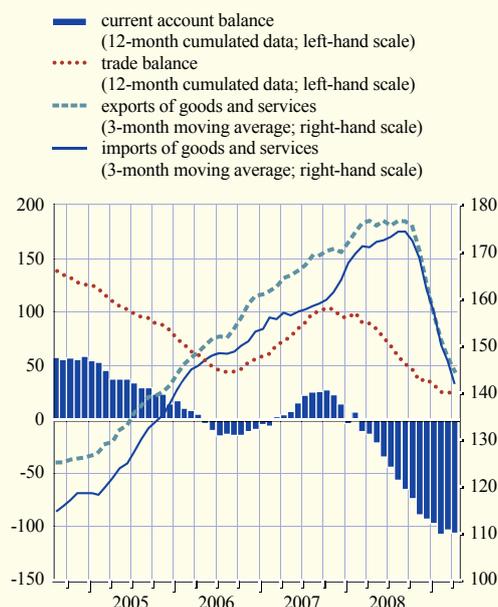
### TRADE AND THE CURRENT ACCOUNT

In the year to April 2009, the euro area current account deficit reached a cumulative €105.7 billion (working day and seasonally adjusted), corresponding to about 1.2% of GDP, compared with a deficit of €13.4 billion for the same period a year earlier. This was largely driven by a shift from surplus to deficit in the goods balance, while a decrease in the surplus for services and an increase in the deficit for income also played a role. The deterioration in goods trade brought the deficit in the goods balance to €11.8 billion in the year to April 2009, compared with a surplus of €37.5 billion a year earlier (see Chart 35).

Looking at the most recent trade developments, the significant contraction observed since the deepening of the financial crisis in September 2008 seems to have moderated somewhat on the exports side. In the three-month period to April 2009, exports of goods and services have declined in value terms by 7.6%, compared with a fall of 10.7% in the previous three-month period. This moderation was entirely due to developments in goods exports, whose decline over the three-month period to April 2009 was equal to 8.3% – almost 3 percentage points less than the decline over the previous three-month period. Meanwhile,

**Chart 35 The euro area current account and trade balances**

(EUR billions; monthly data; seasonally adjusted)



Source: ECB.

developments in services exports partly offset the deceleration in goods exports owing to a particularly severe contraction in the month of February. Imports of goods and services instead continued to register rates of decline similar to those observed since the fourth quarter of 2008, with a contraction of 9.6% in the three months to April 2009 (see Table 7).

The breakdown of goods trade into volumes and prices, available for the first quarter of 2009, shows that the decline in import values was due both to a contraction in import volumes and to falling import prices, particularly the prices of energy and industrial supplies and materials. By contrast, the strong downturn in goods exports stemmed almost entirely from a decline in volumes. While weaker global confidence and demand were the primary causes of the lower levels of exports, the worldwide deterioration in financial conditions since September 2008 and the predominance of internationally fragmented vertical production chains may have acted as important aggravating factors.

**Table 7 Main items of the euro area balance of payments**

(seasonally adjusted, unless otherwise indicated)

	2009		Three-month moving average figures ending				12-month cumulated figures ending	
	Mar.	Apr.	2008 July	2008 Oct.	2009 Jan.	2009 Apr.	2008 Apr.	2009 Apr.
<i>EUR billions</i>								
<b>Current account</b>	-7.0	-5.9	-6.7	-8.1	-13.6	-6.9	-13.4	-105.7
Goods balance	-1.7	2.6	-0.8	0.2	-3.5	0.1	37.5	-11.8
Exports	105.3	104.0	134.1	132.9	115.4	105.8	1555.8	1464.7
Imports	107.0	101.4	134.8	132.7	118.9	105.7	1518.3	1476.5
Services balance	2.3	2.9	3.2	2.7	3.1	2.6	52.0	35.2
Exports	38.6	38.9	41.5	42.4	41.1	38.7	501.9	491.1
Imports	36.3	36.0	38.3	39.6	37.9	36.1	450.0	455.9
Income balance	0.5	-2.7	-1.6	-2.7	-4.5	-1.9	-9.7	-32.5
Current transfers balance	-8.0	-8.8	-7.5	-8.3	-8.7	-7.8	-93.3	-96.6
<b>Financial account<sup>1)</sup></b>	57.8	2.8	34.2	36.8	30.2	19.1	67.5	360.8
Combined net direct and portfolio investment	67.0	-7.3	14.1	60.8	-10.8	34.7	-40.3	296.3
Net direct investment	-18.9	-1.2	-10.7	-15.1	-30.6	-10.6	-171.0	-200.9
Net portfolio investment	85.9	-6.0	24.8	75.9	19.7	45.3	130.7	497.2
Equities	-1.4	-18.8	0.5	-17.1	-11.3	-5.9	86.0	-101.5
Debt instruments	87.3	12.7	24.3	93.0	31.0	51.2	44.6	598.7
Bonds and notes	75.8	-19.2	18.1	19.8	15.7	34.8	117.2	265.2
Money market instruments	11.5	31.9	6.2	73.2	15.3	16.4	-72.6	333.5
<i>Percentage changes over previous period</i>								
<b>Goods and services</b>								
Exports	-2.1	-0.7	-0.6	-0.2	-10.7	-7.6	8.3	-5.0
Imports	-1.1	-4.2	1.3	-0.5	-9.0	-9.6	7.7	-1.8
<b>Goods</b>								
Exports	-2.8	-1.2	-0.1	-0.9	-13.2	-8.3	7.7	-5.9
Imports	-1.6	-5.3	1.4	-1.6	-10.4	-11.1	7.3	-2.8
<b>Services</b>								
Exports	-0.4	0.9	-2.2	2.0	-3.1	-5.7	10.2	-2.2
Imports	0.6	-0.9	0.9	3.5	-4.3	-4.7	9.4	1.3

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.

From the geographical breakdown of euro area goods trade, it emerges that in the first quarter of 2009 exports to Asia and the OPEC countries appear to have rebounded somewhat, while exports to the United Kingdom and the United States seem to have stabilised at low levels. However, these positive developments were overcompensated by the contraction of euro area exports to the rest of Europe. In terms of broad categories of goods, the most significant declines in export volumes in the first quarter of 2009 continued to be for capital and intermediate goods, which fell back to levels not observed since 2004. Import volumes of capital and intermediate goods also experienced particularly severe declines.

Turning to the other components of the current account, the surplus in services decreased to €35.2 billion in the year to April 2009 – from €52.0 billion a year earlier. Over the same period, the deficit in the income account widened from €9.7 billion to €32.5 billion, resulting largely from lower income receipts from non-euro area residents. Finally, the deficit in current transfers also increased somewhat.

#### FINANCIAL ACCOUNT

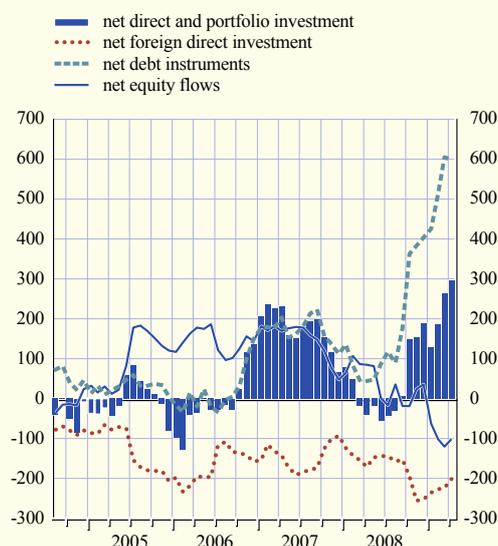
In the three-month period to April 2009, combined direct and portfolio investment recorded average monthly net inflows of €34.7 billion, compared with net outflows of €10.8 billion over the previous three-month period (see Table 7). These developments were primarily due to developments in portfolio investment, where net inflows in bonds and notes increased from €15.7 billion to €34.8 billion. This development was driven mainly by robust net purchases of euro area bonds by non-euro area residents, possibly due in part to an attenuation of investors' preferences for more liquid and shorter-term assets. Indeed, net investment in money market instruments remained largely unchanged, posting a €16.4 billion net inflow in the three-month period ending in April 2009. Meanwhile, equity investment recorded net outflows of €5.9 billion over the same period, as opposed to net outflows of €11.3 over the previous three months.

Turning to net direct investment, both foreign direct investment abroad by euro area residents and foreign direct investment in the euro area by non-residents rebounded in the three-month period to April 2009, possibly signalling global strategies of market consolidation. As foreign direct investment in the euro area by non-residents increased more than foreign direct investment abroad by euro area residents, net outflows of direct investment fell to €10.6 billion over the period, down from €30.6 billion over the previous three-month period.

These developments compare with a sizeable longer-term increase in net inflows in combined direct and portfolio investment, which, in the 12-month period to April 2009, rose to €296.3 billion (compared with net outflows of €40.3 billion in the same period a year earlier), mainly driven by a rise in net inflows in portfolio investment (see Chart 36). The breakdown of portfolio investment by main

**Chart 36 Euro area combined direct and portfolio investment**

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



Source: ECB.

categories of instruments indicates that these developments were mostly driven by net inflows in the money market segment. In greater detail, net inflows in euro area money market instruments surged to €333.5 billion in the 12-month period to April 2009, compared with net outflows of €72.6 billion a year earlier. This is likely to be associated mainly with the unfolding dynamics of the financial crisis. The high level of volatility in the capital markets, the generally exceptionally high degree of uncertainty and the gloomy global economic outlook had tilted investors' preferences not only towards quality and safety, but also towards more liquid and shorter-term assets.

Finally, developments in direct investment over the past year signal increased home bias. Direct investment flows were significantly reduced in the 12-month period to April 2009 on both the asset and liability sides, compared with the previous year. While direct investment moderated both abroad and in the euro area, the decline in net investment by foreigners in the euro area exceeded somewhat the contraction in euro area investment abroad, resulting in net outflows in direct investment of €200.9 billion in the twelve-month period to April 2009, compared with €171 billion in the previous year.

Box 6 briefly presents the main factors that drove developments in the euro area international investment position in 2008.

Box 6

**CHANGES IN THE EURO AREA INTERNATIONAL INVESTMENT POSITION IN 2008**

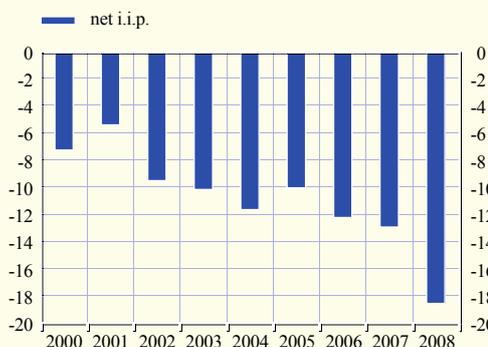
The international investment position (i.i.p.) measures the net creditor or debtor position of a country or group of countries vis-à-vis the rest of the world and is the difference between outstanding financial assets and liabilities valued at market prices at the end of a given period. A change in the i.i.p. can be explained primarily by two factors: (i) net financial flows (“transaction” effect), which in theory are the counterpart of the current and capital account balances<sup>1</sup>, and (ii) revaluations as a result of variations in exchange rates and asset prices and other adjustments (“other changes” effect).

The net liability position of the euro area has been increasing almost continuously since the end of 2000 (see Chart A). According to preliminary estimates, the i.i.p. of the euro area recorded net liabilities of 18.6% of GDP at the end of 2008, compared with 13.0% a year before.

In the period 2000-07, “other changes” was the most important factor in shaping the euro area’s i.i.p. developments, accounting for, on average, about 60% of the annual changes. This was most pronounced in the period 2002-05,

Chart A Net i.i.p. of the euro area

(percentage of GDP)



Source: ECB.

<sup>1</sup> In practice, distortions are reflected in the “errors and omissions” item.

when the effects of “other changes” almost exclusively explained the annual changes in the net i.i.p., with revaluations due to exchange rate movements playing a dominant role. However, more than half of the increase in the euro area’s net international liability position in 2008 was accounted for by financial transactions, as net purchases of euro area financial assets by non-residents largely exceeded net purchases of foreign financial assets by euro area residents. The impact of “other changes” on the i.i.p. was also significant and contributed to the increase in the net liability position.

The breakdown of financial transactions by type of instrument (see Chart B) reveals that the main contribution to the developments in the i.i.p. in 2008 came from increased net inflows of portfolio investment into the euro area (€439 billion, 4.7% of GDP). This reflects the combined outcome of (i) euro area residents repatriating funds from abroad and (ii) non-residents continuing to invest in the euro area. The latter concerned debt instruments only, and money market instruments in particular. At the same time, there were significant net sales of euro area equity securities. The sizeable increase in the purchase of euro area money market instruments by non-residents reflected mainly a global trend in portfolio re-allocation of funds towards more liquid and shorter-maturity assets, as uncertainty increased. There were also net sales of equity securities by both euro area residents and non-residents, which is consistent with the shift in investors’ preferences towards less risky assets in the midst of the financial and confidence crisis. “Other investment” (comprising mostly deposits and loans) also saw positive net inflows of €160 billion (1.7% of GDP), stemming from the strong liquidation activity by resident MFIs, partly as a result of their deleveraging. In contrast, direct investment contributed positively to the i.i.p., recording a net outflow of €251 billion (2.7% of GDP), as euro area firms continued to invest abroad.

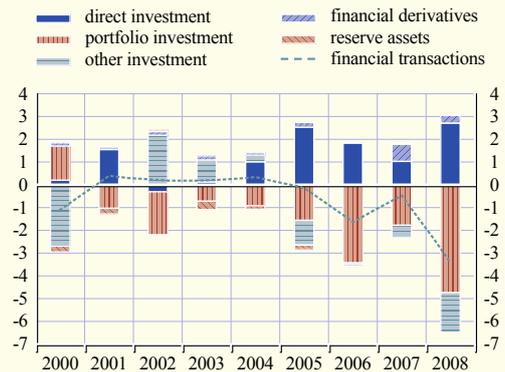
Preliminary estimates of the breakdown of “other changes” show that the appreciation of the euro in nominal effective terms (3% by the end of the year), given the euro area’s currency composition of foreign assets and liabilities, contributed to the increase in the net liability position in 2008. However, revaluations resulting from financial asset price changes partly offset that effect. This can be explained, to some extent, by the fact that the capital losses incurred by euro area residents in foreign stock markets, particularly those in the United Kingdom and the United States, were smaller than the losses incurred by foreigners in the euro area capital markets.

The size of the increase in the euro area’s net liability position in 2008 should be interpreted with caution, as the i.i.p. figures may be revised when more complete data become available in the course of the year.<sup>2</sup>

<sup>2</sup> To illustrate this point, net inflows in securities in 2008 are less pronounced when compiled using the methodology for the euro area accounts.

Chart B Breakdown of financial transactions

(percentage of GDP)



Source: ECB.

## ARTICLES

# THE IMPACT OF GOVERNMENT SUPPORT TO THE BANKING SECTOR ON EURO AREA PUBLIC FINANCES



*In the wake of the financial turmoil, which escalated in September 2008, governments across Europe reacted swiftly to stabilise the financial system. Many governments embarked on bank rescue packages aimed at restoring confidence in the banking system and safeguarding the flow of credit. In addition, governments adopted fiscal stimulus measures aimed at stabilising the economy. This article analyses the impact of government support to the banking sector on euro area public finances and discusses its effects on fiscal sustainability. Against the backdrop of an unfavourable macroeconomic environment, rising deficit and debt ratios and the budgetary risks discussed in this article, it is essential that governments make a strong and credible commitment to a path of fiscal consolidation which fully respects the provisions of the Stability and Growth Pact. This will preserve trust in the sustainability of public finances and will support both the recovery and long-term economic growth.*

### I INTRODUCTION

In the early stages of the financial crisis the implications for Europe were largely perceived as ultimately confined to a limited number of banks,<sup>1</sup> particularly those which were dependent on the wholesale markets for their financing or had either investments in structured finance products or substantial off-balance sheet structures. In September 2008, after the default of Lehman Brothers, the financial crisis intensified and an increasing number of European financial institutions experienced liquidity problems and were forced to undertake massive asset write-downs, with negative implications for their own credit quality. In response to the financial turmoil, at the ECOFIN Council meeting of 7 October 2008, the ministers of finance of the EU Member States agreed on common guiding principles to restore both confidence in and the proper functioning of the financial sector. It was agreed that national measures in support of systemic financial institutions would be adopted in principle for a limited time period and within a coordinated framework, while taking due account of the interests of taxpayers. Following the adoption of a concerted European action plan on 12 October 2008, euro area countries announced (additional) national measures<sup>2</sup> to support their financial systems and ensure appropriate financing conditions for the economy as a prerequisite for growth and employment.

This article analyses the impact of government support to the banking sector on euro area

public finances and the implications for fiscal sustainability. Bank rescue operations have affected public finances through their direct impact on government accounts. In addition to deficit and debt developments, the assessment needs to take account of governments' contingent liabilities arising from the substantial state guarantees that have been provided. At the same time, developments in government bond yields for euro area countries have pointed to changing perceptions among investors with regard to countries' creditworthiness. A comprehensive assessment of the implications of financial sector support for public finances also requires a forward-looking perspective. In particular, the exit strategies that governments will adopt once confidence in and the proper functioning of the financial sector have been restored, their success in recovering the fiscal costs and their determination to return to sound fiscal positions will determine the long-term impact on public finances.

This article is structured as follows: Section 2 briefly reviews the experience of selected past banking crises with a focus on the tools of government intervention and their impact on public finances, taking account of the recovery

- 1 In the second half of 2007, IKB in Germany and Northern Rock in the United Kingdom had to be rescued as a consequence of the US sub-prime mortgage crisis. IKB suffered losses owing to its exposure to the US sub-prime mortgage market, whereas Northern Rock had difficulties in obtaining funding from the interbank market.
- 2 Between end-September and end-October 2008, ten euro area countries announced bank rescue packages.

of initial fiscal costs. Section 3 analyses the impact on government accounts of the interventions by euro area governments since September 2008.<sup>3</sup> Section 4 discusses developments in the government bond yields of euro area countries observed since the financial crisis intensified. Section 5 assesses the possible impact on the sustainability of euro area public finances. Section 6 concludes.

## 2 MEDIUM-TERM FISCAL COSTS OF SELECTED PAST BANKING CRISES

This section provides an overview<sup>4</sup> of the common features of several past banking crises and government reactions in advanced economies. “Systemic banking crises” can be defined as periods in which both the financial and corporate sectors experience a large number of defaults and financial institutions and corporations face great difficulties in fulfilling contractual obligations and repaying debt on time. This determines a sharp increase in non-performing loans and all or most of the aggregate banking system capital is exhausted.

Since the Second World War, systemic banking crises have been relatively rare occurrences in developed countries as compared with developing or emerging economies, where they have often been accompanied by currency or sovereign debt crises. In general, past banking crises tended to be local in nature and to be related to country-specific imbalances. In this respect, the recent period of financial turmoil is unprecedented owing to its global reach, and this limits the scope of comparability with past episodes.

Banking crises frequently occurred in the aftermath of pro-cyclical policies and exceptionally fast credit growth. In some cases, banks took excessive risks (often in the real estate or stock markets) during periods of strong economic growth that materialised when the economy was hit by internal or external shocks. In other cases, crises were related to the excessive dependence of banks on short-term financing.

Government intervention tended to be based on a combination of measures aimed at restoring confidence in the financial system and supporting the flow of credit to the domestic economy in order to prevent a credit crunch. A first line of defence usually consisted of a guarantee fund or a blanket guarantee. The nature of the guarantees varied depending on country-specific conditions. Capital injections were also provided to those institutions facing liquidity or solvency problems and for the purpose of restoring banks’ required capital ratios. In exchange, governments acquired ownership of bank shares or proceeded to outright nationalisation. Non-performing bank assets were, in some cases, removed from bank balance sheets and transferred to asset management companies, which would later sell these assets again. In the case of publicly-owned asset management companies, the proceeds from the sale of assets partially offset the fiscal costs related to government interventions.

The estimated fiscal costs of direct government intervention in the banking sector vary substantially across studies depending on the methodology used for their derivation and the definition of fiscal costs.<sup>5</sup> Some studies recognise only government outlays as fiscal costs, whereas

3 The cut-off date for the data in this article is 29 May 2009.

4 For more detailed analyses, see G. Caprio and D. Klingebiel, “Bank Insolvencies: Cross-Country Experience”, World Bank Policy Research Working Paper No 1620, July 1996; L. Laeven and F. Valencia, “Systemic Banking Crises: A New Database”, IMF Working Paper 08/224, November 2008; F. Eschenbach and L. Schuknecht, “The fiscal costs of financial instability revisited”, ECB Working Paper No 191, November 2002; L. Jonung, J. Kiander and P. Vartia, “The great financial crisis in Finland and Sweden: The dynamics of boom, bust and recovery, 1985-2000”, European Economy Papers No 350, December 2008 and L. Jonung, “The Swedish model for resolving the banking crisis of 1991-93. Seven reasons why it was successful”, European Economy Papers No 360, February 2009; C. Reinhart and K. Rogoff, “The Aftermath of Financial Crises”, NBER Working Paper No 14656, January 2009.

5 Two approaches to estimating fiscal costs can be applied. The bottom-up approach sums up all government measures related to a crisis, although some of these measures are difficult to quantify, especially if they are carried out by institutions classified outside the general government sector. This approach was followed in L. Laeven and F. Valencia (2008) op. cit. The top-down approach starts with the government debt-to-GDP ratio before the crisis and assumes that any changes in the ratio are related to the financial crisis. This approach, which also includes debt changes which are unrelated to the crisis, is followed in C. Reinhart and K. Rogoff (2009) op. cit.

others also take into account the revenue side of government finances. The literature identifies three main channels through which to assess the fiscal costs of financial instability,<sup>6</sup> namely: (i) direct bailout costs (either excluding or including the future sale of financial sector assets acquired by the government); (ii) a loss of tax revenues from lower capital gains, asset turnover and consumption; and (iii) second-round effects from asset price changes on the real economy and the cyclical component of the budget balance and via government debt service costs. These fiscal costs have to be weighed against the economic and social benefits of stabilising the financial sector.

Table 1 shows the estimated gross fiscal costs as well as the recovery rates for selected past systemic banking crises in advanced economies (i.e. Finland, Japan, Norway and Sweden) using available estimates.<sup>7</sup> Gross fiscal costs are estimated over a period of five years following the occurrence of the financial crisis. The highest fiscal costs were recorded in Japan (around 14% of GDP within five years of the start of the crisis), while they were relatively modest in Norway and Sweden (around 3-4% of GDP).

The recovery rates in the last column of Table 1 indicate the portion of gross fiscal costs that governments were able to recover, by way of, for example, revenues from the sale of non-performing bank assets or from bank privatisations. Recovery rates usually vary significantly across countries, depending on country-specific features, such as the modality of government intervention, the quality of

acquired financial sector assets, exchange rate developments and market conditions when the assets are sold by the government. IMF estimates<sup>8</sup> show that Sweden was able to reach a recovery rate of 94.4% of budgetary outlays five years after the 1991 crisis, while Japan had recovered only about 1% of the budgetary outlays five years after the 1997 crisis. However, by 2008 the recovery rate for Japan had increased to 54%.

The medium-term fiscal costs of financial support depended, to a large degree, on the exit strategies governments adopted to reduce their involvement in the financial system once the situation returned to normal and on the recovery rates from the sale of financial assets. The exit strategies can be seen as comprehensive programmes to reverse anti-crisis measures taken during a financial crisis. When deciding on an exit strategy, the key variables are time (i.e. the speed at which the government plans to reverse the measures, for example, by withdrawing government guarantees and other forms of support) and scale (i.e. the degree to which the government wishes to return to pre-crisis conditions, for example, by reducing government ownership in the banking sector). In the past banking crises, concrete exit strategies were rarely specified *ex ante*. If

6 See, for example, F. Eschenbach and L. Schuknecht (2007) *op. cit.*

7 Based on L. Laeven and F. Valencia (2008) *op. cit.*

8 IMF estimates show that average recovery rates for advanced economies are about 55% and are influenced, among other factors, by the soundness of the public financial management framework. For more details, see "The State of Public Finances: Outlook and Medium-Term Policies After the 2008 Crisis", IMF, 6 March 2009, p. 9.

Table 1 The fiscal costs of selected systemic banking crises

Country	Starting date of crisis	Gross fiscal costs (% of GDP)	Recovery rate of fiscal costs (% of GDP)	Recovery rate of fiscal costs (% of gross fiscal costs)
Finland	September 1991	12.8	1.7	13.3
Japan	November 1997	14.0	0.1	0.7
Norway	October 1991	2.7	2.1	77.8
Sweden	September 1991	3.6	3.4	94.4

Source: L. Laeven and F. Valencia (2008).

Notes: The starting date was identified by L. Laeven and F. Valencia (2008) based on their definition of systemic banking crises. The ratios are estimated over a period of five years following the occurrence of the financial crisis.

nationalisation of a substantial part of the banking sector occurred or the government acquired large amounts of assets, government holdings were sold once the crisis was over. As the Swedish experience shows,<sup>9</sup> the key determinants for the successful management of a financial crisis include swift policy action, an adequate legal and institutional framework for the resolution procedures, full disclosure of information by the parties involved, and a differentiated resolution policy that minimises moral hazard by forcing private sector participants to absorb losses before the government intervenes financially.

### 3 THE FISCAL COSTS OF BANK SUPPORT IN THE EURO AREA

The concerted European action plan of the euro area countries adopted on 12 October 2008 paved the way for a broadly coordinated effort at the EU level to stabilise the financial system. Governments provided support in the form of: (i) government guarantees for interbank lending and new debt issued by the banks; (ii) recapitalisation of financial institutions in difficulty; (iii) increased coverage of retail deposit insurance; and (iv) asset relief schemes. These government measures complemented the extensive liquidity support provided by the ECB and have generally been implemented in accordance with specific guidance from the ECB and the European Commission.<sup>10</sup>

#### 3.1 RECORDING PRINCIPLES

The impact of government support to the banking sector on government accounts is assessed on the basis of the statistical recording principles defined in the ESA 95.<sup>11</sup> In order to ensure that the compilation of government deficit and debt statistics is carried out consistently and homogeneously across Member States, Eurostat is developing further methodological guidance on how to record the operations carried out in response to the financial crisis, on the basis of the ESA 95. As part of this process, Eurostat has consulted the Committee on Monetary, Financial

and Balance of Payments Statistics (CMFB)<sup>12</sup> to determine how the accounting rules should be applied.

The CMFB has compiled a typology of interventions and a number of recording principles. While Eurostat has not yet issued a decision on the recording principles to be applied to the interventions, the opinions issued by the CMFB have already served as useful guidance for most Member States in the compilation of the government deficit and debt data reported to Eurostat for the years 2005-08 in the spring 2009 excessive deficit procedure notification. However, it cannot be ruled out that some Member States may need to revise their deficit and debt statistics once Eurostat has issued its decision. The principles for the different types of government intervention are presented below.

#### GENERAL PRINCIPLES

1. Government guarantees represent contingent liabilities and are recorded off-balance sheet in the ESA 95 framework, unless they are called or are very likely to be called. A call on a guarantee will usually result in a deficit-increasing government capital transfer being recorded.
2. Recapitalisations through purchases of new equity at market prices are recorded as “financial transactions” without an (immediate) impact on the government budget balance. If the purchase price indisputably

9 See L. Jonung (2009), *op. cit.*

10 The following recommendations have been issued by the ECB: (i) recommendations on government guarantees for bank debt ([http://www.ecb.int/pub/pdf/other/recommendations\\_on\\_guaranteesen.pdf](http://www.ecb.int/pub/pdf/other/recommendations_on_guaranteesen.pdf)); (ii) recommendations on the pricing of recapitalisations ([www.ecb.int/pub/pdf/other/recommendations\\_on\\_pricing\\_for\\_recapitalisationsen.pdf](http://www.ecb.int/pub/pdf/other/recommendations_on_pricing_for_recapitalisationsen.pdf)) and guiding principles for asset support schemes (<http://www.ecb.int/pub/pdf/other/guidingprinciplesbankassetsupportschemesen.pdf>).

11 The ESA 95 was adopted by Council Regulation (EC) No 2223/96. The ESA 95 is available at <http://circa.europa.eu/irc/dsis/nfaccount/info/data/esa95/en/titelen.htm>.

12 The CMFB is composed of senior management representatives of the national statistical institutes and the national central banks of the EU Member States, the European Commission and the ECB. See also [www.cmfb.org](http://www.cmfb.org).

exceeds the market price, a capital transfer for the difference is recorded, thereby negatively affecting the government budget balance. The purchase of unquoted shares in banks (for instance, preferred shares) is recorded as a financial transaction as long as the transaction is expected to yield a sufficient rate of return under EU state aid rules.

3. Loans are recorded as financial transactions as long as the financial institution has a contractual obligation to pay interest and to repay the loan. If there is documented evidence that the loans are very unlikely to be repaid (in full or in part), a government capital transfer is recorded.
4. Asset purchases involve the acquisition of impaired assets or loans, the market value of which is difficult to determine. Governments may decide to create a defeasance structure in charge of purchasing the impaired assets or loans. If the government has paid more than the market price for the assets, a capital transfer is to be recorded for the difference, at the time of purchase. If no market or auction price can be established, the book value of the assets (based on suitable business accounting principles) close to the time of transaction or an independent valuation (founded on a market-based technique) may be considered an adequate approximation of the market value. If the government sells the asset in the year following the transaction, and if the market can be considered to be operating under similar conditions to those prevailing at the time of the original purchase, a capital transfer may be imputed if the selling price is lower than the original purchase price of the asset.
5. Exchanges (swaps) of assets of equal value and standard securities lending arrangements without cash collateral are, in principle, off-balance sheet operations affecting neither government deficit nor debt.
6. If the government agrees to cancel the debt of a financial institution to which it has made

a loan or if the government assumes the debt of a financial institution, a deficit-increasing capital transfer is recorded.

7. The fees, dividends or interest payments the government receives from the banks as a result of its interventions are recorded as revenues and improve the government balance.

#### **CLASSIFICATION OF UNITS AND POSSIBLE REARRANGEMENT OF TRANSACTIONS**

In some cases, governments have created new units to support the financial sector. It is important to determine the appropriate sector classification of these new units. If a new unit is classified within the government sector, its debt will add to government debt.

When establishing the sector classification of a newly created entity, the first step is to assess whether it should be seen as a separate institutional unit. This requires that the unit has autonomy of decision in respect of its principal function according to the criteria set out in the ESA 95. These criteria are, however, subject to interpretation and the CMFB has not expressed a preference for any specific interpretation. On the other hand, the CMFB has issued an opinion that a new financial body which is deemed to be a separate institutional unit and whose equity stakes are mainly owned by non-government units should nonetheless be classified within general government if the government predetermines its activities and assumes all or most of the risks associated with the body's activity (e.g. by granting a guarantee for all or most of the entity's financing) or if the unit mainly provides non-market goods or services for the benefit of the whole community.

Publicly owned corporations do not belong to the government sector in the ESA 95. However, if an existing public corporation undertakes a rescue operation, this operation may still be recorded in the government accounts. This is the case if the operation is considered to be carried out "on behalf of government". The CMFB considers that such rearrangement of the recorded transactions can only be applied under the conditions

specified in the ESA 95 or if there is irrefutable evidence (such as a written instruction) that the government required the public corporation to carry out the rescue operations. Central bank liquidity operations to preserve financial stability are deemed to fall within the traditional remit of central banks and should, therefore, not affect the government accounts.

### 3.2 THE IMPACT ON GENERAL GOVERNMENT DEFICIT AND DEBT

On the basis of the recording principles explained in Section 3.1, the various measures to support the financial sector are expected to have only a small direct impact on government deficits in the short to medium term. The direct impact on government debt will largely depend on the borrowing requirements of the government to finance the interventions. Table 2 provides an overview of the interventions by euro area governments in 2008 and the interventions that are so far known for 2009.

As a result of these interventions, euro area government debt is expected to increase in total by 3.3% of GDP by the end of 2009. Belgium, Luxembourg and the Netherlands may witness the most noticeable increases in government debt, of 7.4%, 8.3% and 18.2% of GDP respectively.

In addition to the direct impact on deficit and debt, the assessment of the fiscal implications of these interventions needs to take account of governments' contingent liabilities (e.g. guarantees). By the end of 2009, the contingent liabilities related to the interventions are expected to be around 7.5% of GDP for euro area governments (excluding government guarantees on retail deposits). The potential fiscal risks are sizeable for all countries that have provided a guarantee scheme. The government of Ireland has taken on more contingent liabilities than any other euro area government (around 215% of GDP, excluding guarantees on retail deposits).

**Table 2 Cumulated interventions and their fiscal impact in euro area countries**

(2008-09; percentage of 2009 GDP)

	Guarantees	Type of intervention						Fiscal impact		
		Capital injections		Asset purchase	Asset swaps/asset lending	Debt assumptions/cancellations	Other measures	Government debt	Government contingent liabilities	
		Acquisition of shares	Loans						Provided	Ceiling
Belgium	21.0	4.0	2.1	0.0	0.0	0.0	0.0	7.4	21.0	34.6
Germany	6.3	1.3	0.0	1.7	0.0	0.0	0.0	2.9	6.3	18.7
Ireland	214.8	4.2	0.0	0.0	0.0	0.0	0.0	4.2	214.8	242.0
Greece	0.6	1.6	0.0	0.0	1.8	0.0	0.0	1.6	0.6	6.1
Spain	3.1	0.0	0.0	1.8	0.0	0.0	0.0	1.8	3.1	18.9
France	1.1	0.7	2.9	0.0	0.0	0.0	0.0	3.8	1.1	16.8
Italy	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-
Cyprus	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-
Luxembourg	12.8	8.3	0.0	0.0	0.0	0.0	0.0	8.3	12.8	-
Malta	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-
The Netherlands	5.0	6.5	7.6	3.9	0.0	0.0	0.2	18.2	5.0	35.0
Austria	6.6	1.7	0.0	0.0	0.0	0.0	0.0	1.7	6.6	27.8
Portugal	3.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.8	12.4
Slovenia	0.0	0.0	0.0	0.0	0.0	0.0	3.6	3.6	0.0	33.2
Slovakia	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-
Finland	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	28.1
<b>Euro area</b>	<b>7.5</b>	<b>1.3</b>	<b>1.1</b>	<b>0.9</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>3.3</b>	<b>7.5</b>	<b>19.9</b>

Source: Eurosystem.

Notes: Data as at mid-May 2009. Guarantees on retail deposits are not included.

#### 4 THE IMPACT ON GOVERNMENT BOND YIELDS

Government interventions in the banking sector have been successful in safeguarding the stability of the financial system. The price of this success is that the governments have assumed substantial fiscal costs and credit risks. Indeed, the recent developments in government bond yields for euro area countries have pointed to changing investor perceptions of countries' creditworthiness.

Between end-September and end-October 2008, when many governments across the euro area announced substantial bank rescue packages, an adverse shift in market sentiment towards sovereign borrowers occurred. This caused sovereign credit default swap (CDS) premia for euro area countries to increase sharply, whereas the CDS premia for European financial corporations (i.e. those covered by the iTraxx financial index)<sup>13</sup> started to decline. This is illustrated in Chart 1, which depicts the cumulative changes since mid-September 2008 in average five-year sovereign CDS premia for euro area countries and in the CDS premia for European financial institutions covered by the

iTraxx financial index. The vertical bars denote the dates on which bank rescue packages were announced. The chart shows that at the time of announcement of the packages sovereign CDS premia increased, whereas CDS premia for financial institutions declined. This suggests that the broad-based rescue packages have alleviated some credit risk in the banking sector and brought about an immediate transfer of credit risk from the financial to the public sector.<sup>14</sup>

#### GOVERNMENT BOND YIELD SPREADS

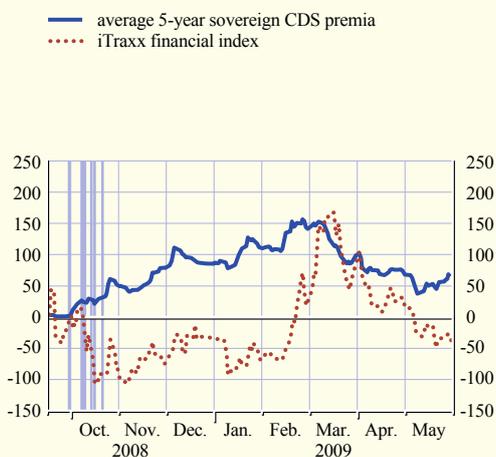
While all euro area countries have faced a rise in sovereign CDS premia, some countries have been affected more than others. This cross-country difference has been mirrored by the trend in government bond yields relative

13 A credit default swap (CDS) is a contract in which a "protection buyer" pays a periodic premium to a "protection seller" and, in exchange, receives a pay-off if the reference entity (a firm or a government issuer) experiences a "credit event", for example, a failure to make scheduled interest or redemption payments on debt instruments (typically bonds or loans). The iTraxx financial index contains the CDS spreads of 25 European financial institutions, including institutions from the United Kingdom and Switzerland.

14 See also the box entitled "How have governments' bank rescue packages affected investors' perceptions of credit risk?" in the March 2009 issue of the Monthly Bulletin.

Chart 1 Cumulative changes in average five-year sovereign CDS premia for euro area countries and the iTraxx financial index

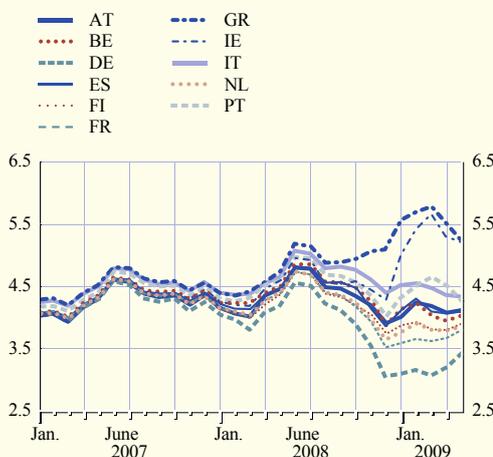
(basis points)



Sources: Datastream and ECB staff calculations.  
Note: The vertical bars indicate the dates on which bank rescue packages were announced in euro area countries.

Chart 2 Ten-year government bond yields of euro area countries

(monthly averages; percentages per annum)



Sources: Bloomberg and ECB staff calculations.

to Germany.<sup>15</sup> Chart 2 depicts ten-year sovereign bond yields for most euro area governments from January 2007 to May 2009. Before the intensification of the financial turmoil in September 2008, government bond yields moved quite closely together. Since then, developments have differed across countries to a great extent and only since March 2009 have government bond spreads started tightening again.

Compared with January 2007, ten-year bond yields have, on balance, fallen for five countries (i.e. Germany, France, the Netherlands, Belgium and Finland), remained broadly stable for four countries (i.e. Austria, Spain, Italy and Portugal) and increased for two countries (i.e. Greece and Ireland). This suggests that, although all countries have announced broad-based bank rescue packages, investors have differentiated between countries mainly on the basis of other, more country-specific factors.<sup>16</sup> In particular, the literature on the determinants of long-term bond yields provides evidence that a country's macroeconomic and fiscal fundamentals affect investors' perceptions of its creditworthiness and that this is likely to influence developments in government bond markets.<sup>17,18</sup>

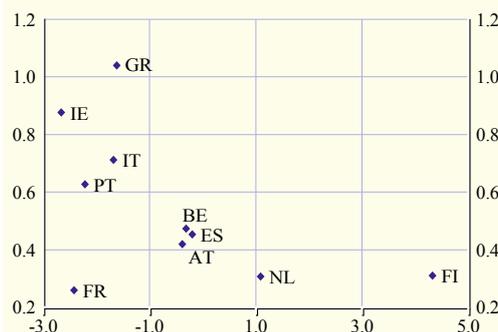
In the fourth quarter of 2008, economic growth prospects deteriorated and, as a result, the budgetary outlook across euro area countries worsened rapidly, reflecting the impact of automatic stabilisers, revenue shortfalls, underlying spending growth and the discretionary fiscal stimulus packages adopted by some countries, as well as rising debt-to-GDP ratios. This resulted in budget deficits above the reference value of 3% of GDP for several euro area countries. The fiscal outlook for the individual countries may thus have caused investors to discriminate more strongly among sovereign borrowers by asking for higher risk premia from countries perceived to be especially vulnerable (see the box).<sup>19</sup>

Chart 3 provides further support for these arguments. The ten-year government bond yield spreads over Germany for the euro area countries under consideration are plotted against their expected budget balance relative to that of

**Chart 3 Ten-year government bond yield spreads of euro area countries over Germany and the expected budget balance relative to Germany**

(percentage points)

x-axis: average expected budget balance (% of GDP) relative to Germany  
y-axis: ten-year government bond spreads relative to Germany



Sources: Bloomberg, European Commission and ECB staff calculations.

Note: For each country, the average expected budget balance for 2007, 2008 and 2009 is computed using vintages of the European Commission forecasts available at each point in time. Data for bond spreads relate to the average between 31/07/2007 and 29/05/2009.

Germany. The chart shows that countries that are expected to have a less favourable budget balance than Germany have experienced larger bond yield differentials. France is an outlier in this respect, as it has experienced only a slight increase in its ten-year government bond

15 Movements in sovereign bond yield spreads reflect two main factors: liquidity risk and credit risk. For an in-depth analysis of the role of these two factors in explaining the widening of sovereign bond yield spreads, see the box entitled "Recent widening in euro area sovereign bond yield spreads" in the November 2008 issue of the Monthly Bulletin.

16 The movement in government bond spreads has not been limited to the euro area countries. The financial turmoil has also led to the widening of bond spreads for individual US states over US Treasury bonds.

17 In addition, the size of the financial sector relative to the size of the economy may affect investors' perceptions of a country's vulnerability to the financial crisis. A large financial sector may point to larger revenue shortfalls from the asset price bust as well as to larger upfront fiscal costs from bank support measures.

18 See, for example, L. Schuknecht, J. von Hagen and G. Wolswijk, "Government risk premiums in the bond market: EMU and Canada", ECB Working Paper No 879, March 2008, and G. Caporale and G. Williams, "Long-term nominal interest rates and domestic fundamentals", *Review of Financial Economics*, Vol. 11, pp. 119-130, 2002.

19 IMF estimates also indicate the importance of fiscal variables in affecting sovereign bond spreads during the current crisis. Since September 2008 changes in sovereign bond spreads are found to be sensitive to a country's projected change in debt, as well as to the expected default frequency of a country's median financial institution. See the IMF's Regional Economic Outlook: Europe, May 2009 "Addressing the Crisis", p. 40.

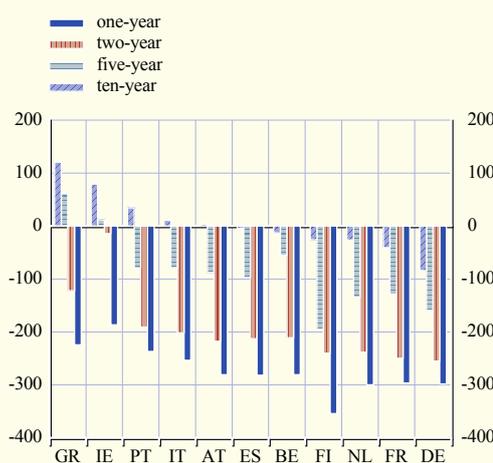
yield differential to Germany despite its less favourable budget balance. This can possibly be explained by the relatively lower liquidity premium which France may face as compared with other countries under consideration.

### IMPACT ON GOVERNMENT BORROWING COSTS

From a public finance point of view, rising long-term government bond yields represent a cause for concern as they may signal a reduced willingness on the part of investors to provide long-term funding and they may translate into higher debt servicing costs, depending on the maturity structure of both outstanding and newly issued debt. Chart 4 depicts the change in the level of sovereign bond yields for maturities of one, two, five and ten years from January 2007 to May 2009, for those euro area governments for which information is available. As the chart shows, one and two-year government bond yields have fallen substantially for all countries, whereas the direction of change in five and ten-year bond yields has not been uniform across countries. The generalised reduction in short-term bond yields may be related partly to the reduction in monetary policy rates. Furthermore, the deterioration in investors' appetite for riskier private financial assets

**Chart 4 Changes in euro area government bond yields**

(May 2009 compared with January 2007; monthly averages; basis points)



Sources: Bloomberg and ECB staff calculations.

may have supported the demand for low-yield but safer government assets of all maturities, while taking account of cross-country differences in creditworthiness. Against the backdrop of lower interest rates, borrowing costs would fall the higher the share of debt that governments can and wish to finance at those rates.

### Box

#### THE DETERMINANTS OF LONG-TERM SOVEREIGN BOND YIELD SPREADS IN THE EURO AREA

Long-term government bond yield spreads over Germany have widened markedly since September 2008 in most euro area countries (see Chart 2 in the main text). This box introduces an empirical model aimed at exploring potential determinants of these developments during the recent period of financial turmoil.

As discussed in the November 2008 issue of the Monthly Bulletin<sup>1</sup> and in the academic literature,<sup>2</sup> euro area long-term government bond yield spreads are likely to depend on factors such as

<sup>1</sup> See the box entitled "Recent widening in euro area sovereign bond yield spreads".

<sup>2</sup> See, for example, L. Codogno, C. Favero and A. Missale, (2003), "Yield Spreads on EMU Government Bonds", *Economic Policy*, October, pp. 505-532; J. Lemmen and C. Goodhart, (1999) "Credit risks and European government bond markets: a panel data econometric analysis", *Eastern Economic Journal* 25, pp. 77-107; A. Geyer, S. Kossmeier, and S. Pichler (2004), "Measuring Systematic Risk in EMU Government Yield Spreads", *Review of Finance*, 8, p. 171; K. Bernoth, J. von Hagen and L. Schuknecht, (2004), "Sovereign Risk Premia in the European Government Bond Market", ECB Working Paper, No 369; L. Schuknecht, J. von Hagen and G. Wolswijk, (2008) "Government risk premiums in the bond market: EMU and Canada", ECB Working Paper No 879; OECD Economic Outlook, March 2009, Box 3.2 entitled "What drives sovereign bond spreads in the euro area?"; IMF's Regional Economic Outlook: Europe May 2009, "Addressing the Crisis" p. 40.

investors' perceptions of countries' credit risk (as captured, in particular, by the relative soundness of expected fiscal positions or other indicators of creditworthiness), market liquidity risk (which may be related to the relative size of sovereign bond markets), and the degree of international risk aversion on the part of investors (which in times of heightened uncertainty could be higher for some euro area countries than for others). In addition, given the particular nature of the period of financial turmoil covered in this analysis, government announcements of substantial bank rescue packages may explain the widening of euro area sovereign bond yield spreads.

The following empirical model is used to explain the ten-year government bond yield spreads of ten euro area countries<sup>3</sup> over Germany (*spread*):

$$spread_{it} = \alpha + \rho spread_{it-1} + \beta_1 ANN_{it} + \beta_2 FISC_{it} + \beta_3 IntlRisk_t + \beta_4 LIQ_{it} + \varepsilon_{it}$$

In this model, *ANN* denotes the announcements of bank rescue packages made by individual euro area governments (this variable takes the value 1 after the date of the announcement and the value 0 before); *FISC* denotes the expected general government budget balance and/or gross debt as a share of GDP, relative to Germany, over the next two years, as released biannually by the European Commission; *IntlRisk* is a proxy for international investor risk aversion, as measured by the difference between the ten-year AAA-rated corporate bond yield in the United States and the US ten-year Treasury bond yield; *LIQ* is a proxy for the degree of liquidity of euro area government bond markets, measured by the size of a government's gross debt issuance relative to Germany;  $\varepsilon_{it}$  is the unexplained residual.

The table below shows the estimation results, using daily data, as well as monthly averages for the dependent variable<sup>4</sup> for the period from 31 July 2007 to 25 March 2009.

According to this model, apart from the high levels of persistence in the daily and monthly government bond yield spreads, higher spreads in the euro area countries are mainly explained by higher expected budget deficit and debt ratios, higher international risk aversion and lower liquidity in the government securities markets relative to Germany. The announcements of bank rescue packages appear to have increased, on average, the risk of long-term government borrowing compared with Germany.

To conclude, this empirical evidence indicates that euro area governments with more favourable expected fiscal positions may benefit from relatively lower borrowing costs in times of crisis. This gives them greater room for manoeuvre in terms of the additional costs of debt issuance and the budgetary risks incurred through the bank rescue operations that have proved to be critical in safeguarding confidence in and the stability of the financial system.

#### Dynamic panel estimation results for the dependent variable *spreads*

Explanatory variables	Daily data	Monthly data
<i>Spread</i> (t-1)	0.9829***	0.9704***
Announcement of bank rescues	0.0046**	0.0582**
Expected budget balance	-0.0007**	-
Expected government debt	0.0001**	0.0008**
International risk aversion	0.0041***	0.0262*
Liquidity proxy	-0.0037***	-0.0233***
Constant	0.0024*	0.0074
No. of observations	4212	196

Sources: European Commission, Bloomberg, ECB and ECB calculations.

Notes: The dependent variable (*spread<sub>it</sub>*) is expressed in percentage points. The table shows the estimated coefficients and their significance level (\*10%, \*\*5%, \*\*\*1%). The estimation technique is feasible generalised least squares, in the presence of AR(1) autocorrelation within panels and heteroskedasticity across panels.

3 Belgium, Ireland, Greece, Spain, France, Italy, the Netherlands, Austria, Portugal and Finland.

4 Where available, explanatory variables are also expressed in daily and monthly frequencies. Data on the expected government balance and expected gross government debt varies according to European Commission releases (mostly biannually); liquidity data are quarterly. The correction of the estimated standard errors (by clustering) to account for various data frequencies does not change the conclusions.

## 5 IMPLICATIONS FOR FISCAL SUSTAINABILITY

Fiscal sustainability is generally defined as the ability of a government to service its debt obligations in the long term.<sup>20</sup> This requires that the current policies of the government satisfy the intertemporal budget constraint, which implies that the discounted present value of future primary balances (i.e. the budget balance excluding net interest payments) should be at least equal to the outstanding stock of government debt.<sup>21</sup>

In principle, the evolution of the government net debt-to-GDP ratio is affected by three main factors: (i) the current debt ratio; which represents the legacy of past fiscal policies; (ii) the primary budget balance ratio; and (iii) the difference between the nominal (implicit) interest rate and nominal GDP growth. If the nominal interest rate is higher than the growth rate of nominal GDP, a primary budget surplus is needed to maintain the government debt ratio at its current level (and a higher one in order to reduce the debt ratio). In addition to these factors, the debt ratio may also increase as a result of transactions which are recorded “below the line”, i.e. financial transactions which do not affect the government deficit (such as the stock-flow adjustment).

Government support to the banking sector in the form of capital injections or asset purchases conducted at market price do not affect the government deficit but would affect the gross debt ratio if the government needed to issue new debt to finance the transaction. However, the net debt ratio would also increase if the value of the financial sector assets acquired by the government were to decline after the purchase. According to Table 2, the cumulated increase over 2008 and 2009 in the euro area government debt ratio on account of capital injections and asset purchases in the banking sector so far amounts to 3.3% of GDP and is substantially higher in a number of euro area countries. Looking ahead, the risk of the debt ratio rising further cannot be ruled out in the light of the possibility that additional support

will be provided to the banking sector or that government guarantees will be called, as well as the uncertainty regarding the future valuation of acquired financial sector assets. The fiscal costs of support to the banking sector may be partially offset by the fees, dividends and interest paid by the banks to the governments in exchange for financial support. In the medium term, the net fiscal costs will also depend on the proceeds from the sale by governments of financial sector assets. As shown in Section 2, experience shows that the recovery rates tend to be considerably below 100%.

Developments in government bond yields may only have a gradual impact on the nominal (implicit) interest rate on outstanding debt, as changes in interest rates only affect the cost of newly issued debt and debt at variable interest rates. As discussed above, most euro area countries have so far enjoyed relatively low interest rates on new government debt issuance, despite facing considerably more difficult market conditions. Looking ahead, as the economy recovers and competition for financing increases, governments may face higher bond yields again.

The financial crisis can also affect the sustainability of public finances owing to its implications for the real economy. The unfavourable macroeconomic environment has contributed to rapidly increasing primary deficits leading to further accumulation of debt. The increase in primary deficits is due to the operation of automatic stabilisers and tax revenue shortfalls arising from falling real GDP growth, underlying spending growth as well as the discretionary fiscal stimulus measures adopted in response to the economic recession. A prolonged period of low real GDP growth could lead to a further increase in the debt-to-GDP ratio. Moreover, given the declining asset values in the funded components of private and

20 See, for example, N. Giammarioli, C. Nickel, P. Rother and J.P. Vidal, “Assessing fiscal soundness – theory and practice”, ECB Occasional Paper No 56, March 2007.

21 See the article entitled “Challenges to fiscal sustainability in the euro area” in the February 2007 issue of the Monthly Bulletin.

public pension systems, there may be increasing pressure on public finances to compensate for these losses, which could reduce primary balances and increase the risks to fiscal sustainability. Finally, sizeable implicit liabilities related to the ageing of the population add significant further risks to fiscal sustainability over the longer term.<sup>22</sup>

The European Commission's spring 2009 forecasts point to a marked deterioration in public finances for the euro area, with the general government balance projected to be -5.3% and -6.5% of GDP in 2009 and 2010 and the debt ratio expected to stand at 77.7% and 83.8% of GDP respectively. In 2009 and 2010, 13 out of 16 euro area countries are expected to have a budget deficit above the 3% of GDP reference value. Government debt ratios for most euro area countries are also expected to increase rapidly.<sup>23</sup>

## 6 CONCLUSION

Based upon the principles of statistical recording of government interventions, the impact of government measures to support the banking sector on the euro area government deficit has so far been limited, whereas the impact on government debt and contingent liabilities has been considerable and differs across euro area countries to a large extent. Since the possibility of further interventions cannot be ruled out and budgetary risks arising from contingent liabilities may still materialise, additional effects on deficits and debt may occur in the future. However, the net fiscal costs also depend on the proceeds from the future sale by governments of the financial sector assets that they have acquired. These net fiscal costs for taxpayers have to be weighed against the economic and social benefits of stabilising the financial sector. In addition, governments face high deficits as a result of the operation of automatic stabilisers and revenue shortfalls related to the unfavourable macroeconomic environment. Furthermore, budgetary positions have deteriorated owing to the built-in momentum of government spending

growth as well as discretionary fiscal stimulus measures aimed at supporting the economy.

The analysis of developments in euro area sovereign bond yields shows that different factors affect investors' perceptions and that there are differences across both countries and maturities. Apart from the impact on government borrowing costs, which so far has been moderate, the most important finding is that during the period of heightened financial turmoil financial markets increasingly discriminated among countries on the basis of their perceived creditworthiness, which is determined, among other factors, by differences in the macroeconomic and fiscal fundamentals.

The full impact of rising government deficits, debt and contingent liabilities on fiscal sustainability will be felt in the medium to long term. Against this backdrop, it is essential that governments make a strong and credible commitment to a path of consolidation in order to return to sound fiscal positions, respecting fully the provisions of the Stability and Growth Pact. This will preserve trust in the sustainability of public finances and will support both the recovery and long-term economic growth. The credibility of fiscal consolidation commitments will be strengthened if they are part of national policy frameworks oriented to the medium term.

<sup>22</sup> According to the "2009 Ageing Report" prepared by the European Commission and the Economic Policy Committee's Ageing Working Group, the total age-related public spending-to-GDP ratio is projected to rise by 5.2 percentage points in the euro area over the period 2007-60.

<sup>23</sup> For a more detailed discussion, see the "Fiscal developments" section of the June 2009 issue of the Monthly Bulletin.

# THE IMPLEMENTATION OF MONETARY POLICY SINCE AUGUST 2007

## ARTICLES

The implementation of monetary policy since August 2007

*The financial market turmoil has been the greatest test so far of the resilience of the Eurosystem's operational framework. This article describes the implementation of monetary policy by the Eurosystem in response to the financial market tensions that started in August 2007. In particular, the changes in tender procedures and in the corridor formed by the rates of the standing facilities and their impact on the money market are analysed in detail. The changes to the collateral framework and the operations conducted in cooperation with other central banks are also presented. Finally, the measures decided most recently – namely to conduct liquidity-providing longer-term refinancing operations with a maturity of 12 months, to purchase euro-denominated covered bonds issued in the euro area and to grant the European Investment Bank the status of an eligible counterparty in the Eurosystem's refinancing operations – are mentioned.*

*The article argues that the design of the operational framework, together with the significant changes that were implemented in October 2008, have played a central role in reducing the impact of market illiquidity on the operation of solvent financial institutions. Furthermore, the article stresses that, during the most severe period of the financial market turmoil, the Eurosystem was a critical source of liquidity for many banks, temporarily assuming a more prominent function as an intermediary in the money market.*

## I INTRODUCTION

The turmoil in financial markets that started in mid-2007 has been the most difficult test of the Eurosystem's operational framework so far. The euro money market has also been affected, at times severely, by the financial market tensions. Turnover declined substantially and spreads between interest rates on secured and unsecured lending rose to unprecedented levels. As a result, banks with liquidity needs could no longer be sure of obtaining funds in the interbank market, while other banks kept large liquidity buffers in their current accounts with the central bank and used the Eurosystem's deposit facility. In all circumstances, the good functioning of the money market is of great importance to the Eurosystem, as the formation of interest rates in the money market constitutes the first step in the transmission of monetary policy to financial markets and the real economy. Without a properly functioning money market, the pass-through of policy interest rate changes to the real sector becomes more erratic and less predictable. Moreover, a breakdown of the money market would endanger financial stability, as solvent institutions could become insolvent due to liquidity shortages.

The Eurosystem's operational framework usually relies on three main elements: (1) refinancing of the banking sector through open market operations; (2) standing facilities; and (3) reserve requirements. In the period up to October 2008, the ECB used this framework for its liquidity management, which aims to steer short-term money market interest rates to a level close to the minimum bid rate that signals the Eurosystem's monetary policy stance. This minimum bid rate was applied to the main refinancing operations (MROs), which were conducted in the form of variable rate tenders with a minimum bid rate. With these operations, the ECB steered the marginal cost of refinancing for banks. To do so, the ECB essentially chose an appropriate level of aggregate liquidity provision to the banking sector, which needs central bank liquidity to fulfil its reserve requirements and to accommodate changes in autonomous factors. The ECB relied on the money market to distribute this liquidity among banks at market interest rates and to achieve a smooth fulfilment of the aggregate reserve requirements during the course of each reserve maintenance period. After August 2007 this approach was adapted to take into account the higher and more variable demand for liquidity from the banking sector, but was not significantly changed.

With the intensification of the financial market turmoil, and particularly in the months around the end of 2008, the malfunctioning of the money market meant that the formation of short-term interest rates depended not only on the net aggregate liquidity situation, but also on the distribution of liquidity among individual banks and thus on the gross injections of liquidity from the central bank. In this environment, the Eurosystem had to also assume the role of an intermediary in the flow of liquid funds from one bank to another, by changing its operational framework in ways that facilitated its intermediation role (see Section 4).

In the Eurosystem framework banks are required to hold a certain level of reserves in their current accounts with the central bank. Because these requirements only have to be fulfilled on average during each maintenance period (which has a length of approximately one month), in pre-turmoil times banks were largely indifferent as to the days on which they actually held reserves with the central bank: liquidity on one day was a quasi-perfect substitute for liquidity on another day. In this way, the aggregate demand for central bank liquidity was smoothed over time, thus achieving an automatic stabilisation of money market interest rates. During the financial market turmoil, however, the malfunctioning of the money market impaired this stabilising function.

Counterparties also have access to the Eurosystem's standing facilities, i.e. they can obtain overnight financing from the marginal lending facility or place overnight liquidity in the deposit facility. These standing facilities provide an upper and lower limit for the overnight interest rate and thus help to constrain the volatility of this rate.

Finally, all Eurosystem credit operations, including open market operations and usage of the marginal lending facility, require adequate collateral. The concept of adequate collateral has two dimensions: first, it implies that the Eurosystem should be protected from incurring losses in its credit operations; second, it requires

that sufficient collateral be available to a wide set of counterparties so that they can obtain the necessary amount of liquidity from the Eurosystem.

The remainder of this article will discuss the changes to the way the Eurosystem conducts its operations that were introduced in response to the financial market turmoil. In Section 2, developments in the euro money market since the outbreak of the tensions in August 2007 are described. Section 3 briefly describes the measures taken by the Eurosystem between August 2007 and September 2008.<sup>1</sup> Section 4 contains an analysis of the measures taken after the failure of Lehman Brothers further unsettled the market and covers the period until May 2009.<sup>2</sup> Section 5 concludes.

## 2 THE EURO MONEY MARKET SINCE AUGUST 2007

The euro money market was strongly affected by the tensions originating in the US sub-prime mortgage market on 9 August 2007, when rumours about large exposures of some European banks affected their ability to obtain liquidity in the US dollar market and subsequently led to a spike in euro money market interest rates. Activity in money markets decreased sharply, especially in the market for loans with maturities of over one week where activity almost came to a complete halt. At the same time, spreads between interest rates on unsecured and secured lending in those markets increased significantly. While the liquidity management measures implemented by the Eurosystem countered the extreme volatility of interest rates at the very short end of the money market yield curve (as discussed in Section 3), interest rates in the unsecured term market remained elevated. At the same time, a marked shift in transactions

<sup>1</sup> Most of the liquidity management-related measures taken in this period are covered in more detail in the article entitled "The Eurosystem's open market operations during the recent period of financial market volatility" in the May 2008 issue of the Monthly Bulletin.

<sup>2</sup> The cut-off date for data is 29 May 2009.

to loans with shorter maturities took place, i.e. instead of lending at long maturities, banks rolled over short-term contracts. Furthermore, a shift in transactions from the unsecured segment of the money market to the secured segment was witnessed.

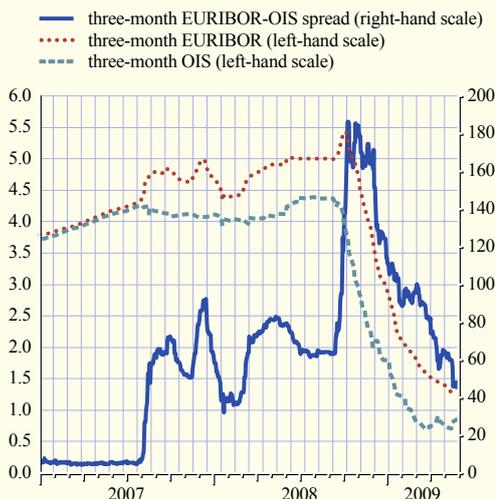
The main reasons why banks were less willing to engage in unsecured lending in the money market seem to stem from liquidity and solvency concerns, which were a result of asymmetric information and uncertainty. On the one hand, in times of high volatility, banks are uncertain both about their own liquidity needs and their ability to obtain refinancing from the market in the future.<sup>3</sup> On the other hand, a high degree of uncertainty about individual banks' exposures, reinforced by market turbulence and the resulting decline in asset values, cast doubt on borrowing banks' solvency and thus their ability to repay a money market loan. While a central bank can, using its operational tools, address the first of these concerns, these tools cannot be used to directly address problems related to credit risk.

A measure of tensions in money markets is the spread between the unsecured interbank deposit rate (e.g. the euro interbank offered rate – EURIBOR) for a given maturity and the overnight indexed swap (OIS) rate (e.g. the euro overnight index average – EONIA – swap rate) with the corresponding maturity. The swap rate is the fixed rate that banks are willing to pay in exchange for receiving the average overnight rate for the duration of the swap contract. It reflects the same credit and liquidity risk premia as the overnight rate, for which these premia are however negligible. The swap rate is therefore relatively immune to changes in liquidity or credit risk. Thus, the spread of the OIS rate against the deposit rate of the same maturity is an indication of perceived credit and funding liquidity risk.<sup>4</sup> Very similar indications are obtained by looking at the spread between unsecured and secured money market rates.

Using this indicator, some periods of particularly severe stress on the euro money

Chart 1 EURIBOR-OIS spread

(percentages per annum; basis points)



Sources: ECB and Bloomberg.

market can be identified (see Chart 1). First, the appearance of the financial market turmoil on the money market can be clearly identified as a level shift in the EURIBOR-OIS spread from around 5 basis points to more than 60 basis points in August 2007. Second, from April 2008 to September 2008 the broadly stable spread reflects a stabilisation of the situation in financial markets, although the spreads remain sizeable. The heightened tensions after the bankruptcy of Lehman Brothers in September 2008 led to an unprecedented level of spreads, with a peak above 180 basis points. In the period immediately after that event, financial markets were in a state of extreme alertness, as the bankruptcy of one important market player increased fears of more bank failures. Serious concerns about the financial health of several other financial institutions, both in the United States and in Europe, raised fears of further bankruptcies. The euro money

<sup>3</sup> The topic of liquidity concerns as a source of liquidity hoarding is analysed in J. Eisenschmidt and J. Tapking (2009), "Liquidity risk premia in unsecured interbank money markets", ECB Working Paper No 1025.

<sup>4</sup> For a more detailed explanation, see the box entitled "Spread between deposit and swap rates as an indicator of money market tensions" in the May 2008 issue of the Monthly Bulletin.

market all but came to a complete standstill in late September 2008, when banks became extremely dependent on obtaining refinancing from the Eurosystem. At this time, the Eurosystem avoided a complete stall of the money market by aggressively changing its liquidity management and the Governing Council initiated a series of cuts in the key ECB interest rates, as visible from the downward trend in rates in Chart 1.

The most important change was the introduction of fixed rate full allotment tenders which gave assurance to banks that they could get from the Eurosystem as much liquidity as they desired at the, fast decreasing, policy interest rate provided they had enough eligible collateral.

The value of the ECB's interventions since October 2008 can be measured, inter alia, by the more important role of the Eurosystem as intermediary in the money market, which is reflected in a strong increase in the use of its deposit facility. Since this time, as will be analysed in detail in Section 4, the ECB has fully satisfied the liquidity demand of the banking sector, which arose in times of great distress.

Almost two years after the beginning of the turmoil, the euro money market was still characterised by an unusually high level of stress. Banks continued to fear that the sector's exposures and losses have still not been fully revealed. While in the first few months of 2009 the tensions have declined, as can be seen both from a reduction in the EURIBOR-OIS spread (see Chart 1) and from a decline in the liquidity provision of the Eurosystem, anecdotal evidence suggests that money market activity in May 2009 was still far below its pre-turmoil level. The term money market and the unsecured segment of the money market remained the most affected. At the same time, it is unclear to what extent activity in the unsecured market will fully recover and a structural trend towards collateralised lending, especially for longer maturities, may develop instead. Indeed, for secured lending transactions there is some evidence of a shift towards longer maturities, i.e. between one and six months, in 2008.<sup>5</sup>

### 3 MEASURES TAKEN BETWEEN AUGUST 2007 AND SEPTEMBER 2008

#### LIQUIDITY MANAGEMENT MEASURES

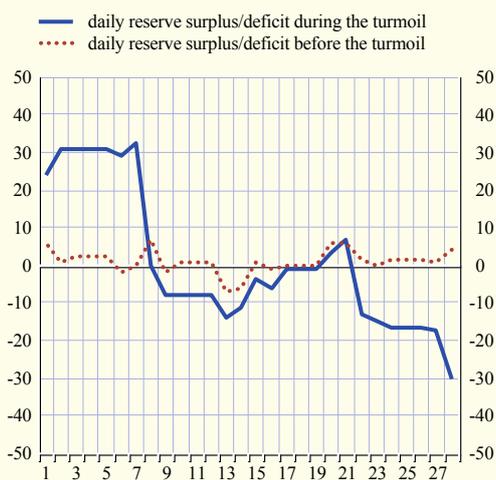
The ECB's immediate response to the tensions in the euro area money market that arose in August 2007 was the temporary supply of additional liquidity with the aim of countering excessive deviations of very short-term rates from the policy rate. This liquidity injection initiated a different pattern in the timing of liquidity supply by the Eurosystem to the banking sector during the course of the reserve maintenance period. The ECB also made more frequent use of fine-tuning operations (FTOs). Prior to August 2007, as already mentioned, the ECB had provided liquidity in a way that allowed the banking sector to smoothly fulfil the minimum reserve requirements over the course of each maintenance period. During the first year of the financial market turmoil, the allotment pattern in MROs was changed. Generally, more ample liquidity was provided at the beginning of each maintenance period, while over the course of the maintenance period the liquidity supply was gradually adjusted downwards so that by the end of each period banks continued to have, as before August 2007, a liquidity surplus of close to zero on average. Chart 2 illustrates the resulting "frontloading" of liquidity by counterparties. In pre-turmoil times, the daily reserve surplus of banks was quite stable and close to its average over the maintenance period. In the first phase of the turmoil between August 2007 and September 2008 it displayed levels above the reserve requirement at the beginning of a typical maintenance period, but levels below that requirement towards the end of such period. The aggregate liquidity supply over time remained unchanged.

With this measure, the ECB managed to avoid excessive deviations of short-term interest rates from the minimum bid rate. Between 7 August 2007 and 12 September 2008 (the last

<sup>5</sup> For a more detailed analysis, see "Euro Money Market Study 2008", February 2009, ECB.

Chart 2 Average daily reserve surplus/deficit

(EUR billions)



Source: ECB.

Note: The series for the daily reserve surplus/deficit during the turmoil shows the average of seven 28-day maintenance periods between August 2007 and September 2008, while the series for the daily reserve surplus/deficit before the turmoil shows the average of four 28-day maintenance periods between April and August 2007.

trading day before the announcement of the bankruptcy of Lehman Brothers) the average EONIA was just 0.7 basis point above the minimum bid rate of the MRO. At the same time, this spread displayed a higher degree of volatility than before: the standard deviation during this period was 12 basis points – double the size in the year to August 2007. This high degree of variability was the result of the unstable financial market environment (which was characterised by successive waves of tensions) and of the resulting difficulties faced by the ECB in estimating the liquidity needs of the banking sector.

As a second measure, in August 2007 the Eurosystem started conducting supplementary longer-term refinancing operations (LTROs) with maturities of three months, and later also six months. By the end of October 2008, both types of operations were being conducted regularly in each maintenance period, and all longer-term operations taken together provided more than €600 billion of refinancing to the banking sector. As a consequence, the share of

all longer-term refinancing (i.e. all refinancing operations with a maturity of three and six months) in total refinancing almost doubled from 33% on average in the first half of 2007 to 61% in the first half of 2008. Thus, the average maturity of refinancing provided to the banking sector rose substantially.

A particularly challenging period proved to be the end of the year 2007. The usual tensions in money markets at a year-end were exacerbated at the end of 2007. In an environment of extreme uncertainty about individual credit risk and the overall market situation, the ECB reassured market participants about its willingness to supply ample liquidity, mainly by conducting a special MRO with a maturity of two weeks covering Christmas and the year-end, in which all bids above a certain rate were satisfied in full.

In the first half of 2008 the situation in money markets improved somewhat. The ECB's frontloading policy proved to be effective in steering money market rates close to the minimum bid rate without increasing the supply of liquidity to the banking sector. This changed in the period following the failure of Lehman Brothers, when the Eurosystem had to employ non-standard liquidity management measures in order to stabilise the money market, as will be discussed in the following section.

#### MEASURES TAKEN IN COOPERATION WITH OTHER CENTRAL BANKS

In response to a significant increase in the difficulties faced by euro area banks in accessing US dollar funding through both the unsecured US dollar market and the foreign exchange (FX) swap market, in December 2007 the ECB launched (in cooperation with the Federal Reserve System and other major central banks) US dollar liquidity-providing operations, against collateral eligible for Eurosystem credit operations, in connection with the Federal Reserve System's US dollar Term Auction Facility (TAF). The US dollars were provided by the Federal Reserve System to the ECB by means of a temporary swap line

and the Eurosystem passed on these US dollars to its counterparties in repo operations. At first, a total amount of USD 20 billion was provided to the euro area banking sector, with a maturity of 28 days, through fixed rate tender auctions with a common pricing scheme applied by all central banks that were drawing from the Federal Reserve System's US dollar swap line. When the tensions eased at the beginning of 2008, the operations were temporarily discontinued, but resumed again in March of the same year, when liquidity pressures in funding markets increased again after the collapse of Bear Stearns. In July 2008 this measure was enhanced to better accommodate euro area banks' US dollar funding needs. The operations with a 28-day maturity were thereby complemented by 84-day operations under the TAF, while leaving the outstanding amount of US dollar refinancing at that time unchanged at USD 50 billion. In September 2008, a period of heightened market tensions, daily overnight variable rate tenders were also introduced and the overall outstanding amounts were further increased.

#### 4 MEASURES TAKEN BETWEEN SEPTEMBER 2008 AND MAY 2009

The sharp deterioration of conditions in the euro money markets that started in September 2008 had important implications for the provision of refinancing by the Eurosystem to the euro area banking sector. First, tender rates in open market operations increased to unprecedented levels. Second, banks significantly increased their usage of both of the ECB's standing facilities. In September and October 2008 the Eurosystem reacted by announcing further operational measures.

#### 29 SEPTEMBER 2008: SPECIAL-TERM REFINANCING OPERATION

On 29 September the introduction of a special-term refinancing operation with a maturity of 38 days was announced. Out of total bids of €141 billion, €120 billion were allotted. Upon maturity, this operation was replaced with

a series of operations with a maturity of the length of one maintenance period.

#### 8 OCTOBER 2008: FIXED RATE TENDER PROCEDURE WITH FULL ALLOTMENT AND NARROWING OF THE CORRIDOR

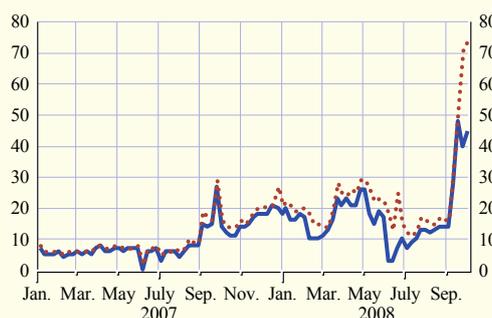
On 8 October the Governing Council decided to change the tender procedure for MROs and LTROs and to symmetrically halve the corridor formed by the rates on the standing facilities.

The gridlock in money markets in late September 2008 had made banks extremely dependent on obtaining refinancing from the Eurosystem. This can be seen from the sharp increase in interest rates that banks were willing to pay in the ECB's open market operations (see Chart 3). In this environment, the Eurosystem considered it essential to ensure that ample liquidity was provided directly to all banks in need, given that the usual mechanism for distributing aggregate liquidity provision via the money market was seriously impaired. Moreover, the Eurosystem aimed to eliminate uncertainty about the amount of liquidity allocated to each bank. Because of the rationing that inevitably occurs in variable rate tenders, a counterparty can ex ante never be entirely sure of the amount of liquidity it will get in the auction.

Chart 3 Tender spreads

(basis points)

— spread between the marginal rate and the minimum bid rate  
 ..... spread between the weighted average rate and the minimum bid rate



Source: ECB.

In pre-turmoil times, such allotment uncertainty and its consequences were limited. The marginal rate of the MRO was predictable, because it tended to be quite stable over time. Moreover, banks bidding at too low a rate could easily obtain any shortfall in funds on the interbank market. During the financial market turmoil, however, these factors changed: first, the marginal rate of the MRO (i.e. the lowest successful bid rate at the tender) displayed a high degree of variability and had become difficult to predict; second, banks faced high uncertainty as to whether they would be able to borrow liquidity in the interbank market, given the general reluctance of banks to lend to each other. This led to a spiral effect where counterparties bid at increasingly high rates in MROs and LTROs. The spread between the marginal rate and the minimum bid rate of the MRO, which in pre-turmoil times had been usually around 7 basis points, began to increase when the turmoil started in August 2007 and fluctuated for one year between 3 basis points and 27 basis points. In mid-September 2008, however, the marginal rate rose above 40 basis points and the average MRO rate even stood at more than 70 basis points above the minimum bid rate.

Against this background, the Governing Council announced on 8 October 2008 the switch, as of 15 October 2008, to a fixed rate tender procedure with full allotment in MROs, in which banks' bids would be satisfied in full at the fixed MRO rate.

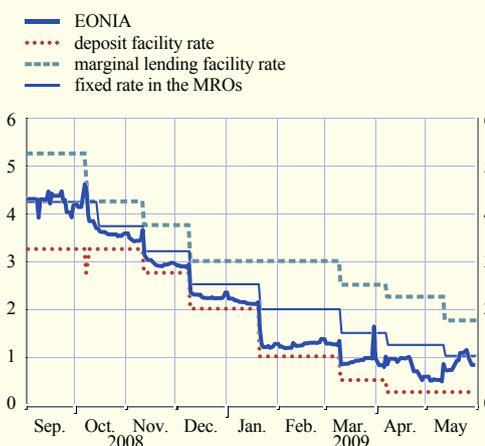
The second measure announced on 8 October 2008 was a narrowing of the corridor formed by the rates on the two standing facilities around the MRO rate. Since early 1999 the corridor had been symmetric around the minimum bid rate, with a width of 200 basis points. Thus, while counterparties could at any time either obtain overnight refinancing or to deposit excess funds overnight with the Eurosystem, they incurred a penalty rate of 100 basis points compared with the MRO rate when doing so. With the intensification of the

turmoil, it was recognised that even solvent banks' ability to obtain funds in the interbank market was impaired, and that recourse to the standing facilities was increasingly important for banks. Indeed, in the first week of October, the average daily recourse to the marginal lending facility was €21 billion, compared with less than €0.5 billion in the period from January to August 2008. Over that period, the average daily recourse to the deposit facility increased from €1.5 billion to €43 billion. While the latter development was mainly a direct result of the ample liquidity situation in early October, the former reflected the increased difficulties for banks to obtain refinancing in the interbank money market.

In order to align banks' cost of refinancing with the MRO rate, the Governing Council decided to narrow the corridor symmetrically to 100 basis points. Consequently, as of 9 October 2008, the rates on the marginal lending facility and the deposit facility were set at 50 basis points above and below the rate on the MRO respectively (see Chart 4).

Chart 4 Key ECB interest rates and the EONIA

(percentages per annum)



Sources: ECB and Bloomberg.

### 13 AND 15 OCTOBER 2008: EXPANSION OF THE LIST OF ASSETS ELIGIBLE AS COLLATERAL AND FURTHER ENHANCEMENT OF THE PROVISION OF LIQUIDITY

On 13 and 15 October 2009 the Governing Council agreed to complement the measures announced one week earlier with another set of measures. These measures affected the list of assets eligible as collateral for Eurosystem operations, the tender modalities of longer-term refinancing operations and operations in US dollars, and further liquidity-providing operations in US dollars and Swiss francs.

As the Eurosystem has always accepted a broad range of assets as collateral, availability of collateral was not a constraint throughout much of 2008. To ensure that collateral did not constitute a constraint after the introduction of the fixed rate procedure with full allotment, the first element of the measures announced on 15 October was a temporary expansion of the list of assets eligible as collateral.

As of 22 October the rating threshold for marketable and non-marketable assets was lowered from “A-” to “BBB-”, with the exception of asset-backed securities, for which the threshold of “A-” remained unchanged. Since that same date the Eurosystem has accepted debt instruments issued by credit institutions which are not listed on a regulated market, but are traded on certain non-regulated markets recognised by the ECB. Furthermore, subordinated marketable debt instruments, which are protected by an acceptable guarantee and fulfil all other eligibility criteria, may also be used as collateral. Since 14 November the Eurosystem has also accepted marketable debt instruments issued in the euro area and denominated in US dollars, pounds sterling and Japanese yen, provided that the issuer is established in the European Economic Area.

In order to fulfil its statutory obligation to ensure that its balance sheet remains protected against financial risk, the ECB applied specific

risk control measures such as additional haircuts to these assets.

The marketable assets added at the end of 2008 to the list of eligible collateral amounted to a volume of around €870 billion, or about 7% of the total amount of eligible marketable assets. They accounted for around 3% of the total marketable collateral posted by counterparties. Moreover, a significant amount of non-marketable assets, mainly credit claims (i.e. bank loans), became eligible when the rating threshold was lowered to “BBB-”.

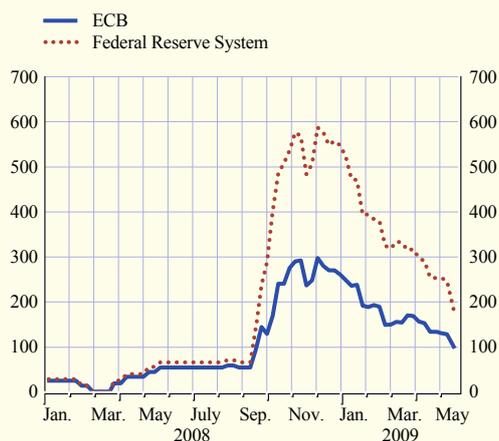
As a second element of the measures announced on 15 October, the fixed rate tender procedure with full allotment, already applicable to MROs, was also applied, with effect from 30 October, to all LTROs, including regular and supplementary operations, as well as the special-term refinancing operations with a maturity of one maintenance period. During the period under review between October 2008 and May 2009, the fixed rate applied to all LTROs was equal to the MRO rate, but the Eurosystem retained the option to apply a spread to this rate at a later stage. The application of the fixed rate tender procedure with full allotment to all open market operations was essential in order to remove any allotment uncertainty as regards the continued provision to the euro area banking sector of longer-term refinancing and to maintain liquidity ratios at a time when the term money market was seriously impaired.

Finally, two other measures announced in mid-October related to the provision of liquidity in foreign currencies and were part of a coordinated effort by major central banks to alleviate interbank funding tensions in those currencies.

On 13 October fixed rate tenders with full allotment were adopted for the US dollar operations. Between December 2007 and May 2009, 114 US dollar liquidity-providing operations were carried out, with varying modalities. As Chart 5 shows, the outstanding

**Chart 5 US dollars provided by the ECB and the Federal Reserve System through central bank swap lines**

(outstanding amounts in USD billions)



Source: ECB and Bloomberg.

amount of US dollars provided by the ECB peaked in early December 2008 at USD 293 billion and declined thereafter to around USD 100 billion in late May 2009. This pattern is in line with the overall supply of US dollars by the Federal Reserve System to central banks around the world through its swap lines (on average the ECB accounted for around 50% of these swap lines) and reflects the easing of US dollar funding tensions after the end of 2008.

On 15 October the ECB and the Swiss National Bank jointly announced that they would start providing Swiss franc liquidity to their counterparties via EUR/CHF foreign exchange swap operations. This measure was intended to counter upward pressure on short-term Swiss franc money market rates and to address the funding needs of euro area banks in that currency. Since then the Eurosystem has offered weekly one-week EUR/CHF FX swaps for amounts that were increased to €25 billion in February 2009 from €20 billion previously. In addition, it conducted four 84-day operations in late 2008 for maximum amounts of €5 billion each. By late May 2009 a total of

36 Swiss franc liquidity-providing operations had been carried out.

### IMPACT OF THE OCTOBER 2008 MEASURES ON THE MONEY MARKET AND THE ROLE OF THE EUROSISTEM

With a fixed rate tender with full allotment in both MROs and LTROs, banks could be certain to obtain all desired liquidity at the ECB's weekly tenders, provided that they had sufficient assets eligible as collateral in Eurosystem liquidity-providing operations. Thus, allotment uncertainty was eliminated. The tender procedure also meant that the aggregate liquidity provided by the Eurosystem to the banking sector was no longer determined by the ECB, but instead was purely demand-driven. This led to a significant increase in the Eurosystem's liquidity provision to the banking sector: on 7 October (the last day of the September-October maintenance period), the total liquidity provision stood at €463 billion. The introduction of the full allotment procedure in MROs and LTROs in the second half of October led to a significant increase in liquidity provision, which rose to €802 billion on average in the period from 30 October to 31 December 2008, with a peak at €860.7 billion at the year-end, as illustrated by Chart 6.

Moreover, the share of longer-term refinancing (i.e. all refinancing operations with a maturity of one to six months) in total refinancing increased further, from 61% in the first half of 2008, to 64% between November and December 2008, and to 70% between January and May 2009.

The ample liquidity provision in refinancing operations caused an aggregate liquidity surplus in the banking sector throughout maintenance periods. Consequently, banks accumulated large liquidity surpluses on their current accounts with the Eurosystem, which they could place on an overnight basis with the deposit facility, at a rate of 50 basis points below the MRO rate (for the period between 9 October 2008

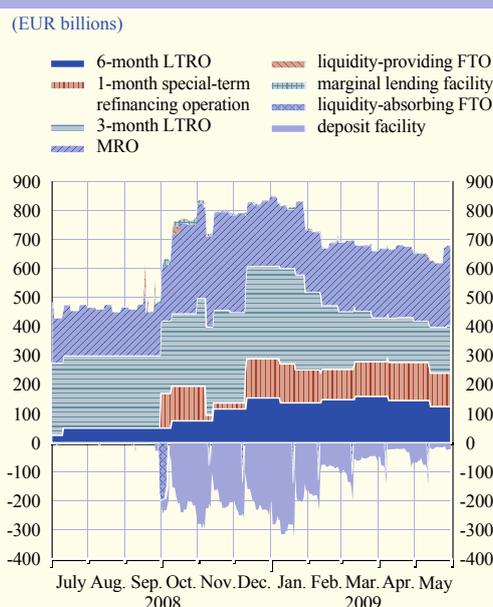
and 20 January 2009). Indeed, a significant increase in the usage of the deposit facility took place, mirroring the increase in liquidity supply (see Chart 6): banks' average recourse to the deposit facility rose to more than €220 billion between 9 October 2008 and 20 January 2009.

The usage of the deposit facility increased towards the end of each maintenance period when increasing numbers of counterparties had met their reserve requirements for the period. On the last day of each maintenance period, by contrast, the aggregate usage was reduced sharply, because the ECB continued throughout the turmoil the practice of absorbing part of the liquidity surplus with an overnight fine-tuning operation.

The recourse to the marginal lending facility also rose, albeit on a much smaller scale, to €6.0 billion per day on average between 9 October 2008 and 20 January 2009. It is noticeable that the use of the marginal lending facility was particularly high between September and early November, when tensions in financial markets were at their greatest, even though, since early October, counterparties had already had unlimited access to refinancing through open market operations. This probably reflects the high level of uncertainty that counterparties faced during this time as regards their own liquidity situation and the inability to raise and dispose of large amounts of liquidity in the interbank market in the week between two Eurosystem operations.

With the introduction of the fixed rate full allotment procedure and the narrowing of the corridor, which were unprecedented in the history of the ECB, the Eurosystem entered a new phase of its liquidity management. The full allotment in open market operations enabled counterparties with liquidity needs to satisfy them directly with the Eurosystem. At the same time, the narrower corridor meant that usage of the deposit facility became much more attractive – compared with the interbank market – for those counterparties with excess liquidity. As a result, the Eurosystem assumed a prominent role as an intermediary for money market transactions, replacing trading on

Chart 6 Provision of refinancing broken down by maturity



Source: ECB.

the money market, which was highly dysfunctional at the time. The extent of this intermediation is directly reflected in the near doubling of its balance sheet, which at its peak on 2 January 2009 stood at €1.763 billion, an increase of €850 billion since June 2007.<sup>6</sup> Banks' demand for the intermediation carried out by the Eurosystem is demonstrated by the 27% increase in the number of counterparties participating in open market operations. In October and November 2008, 128 credit institutions applied for eligibility as counterparties. Participation in open market operations increased markedly during this time. For instance, the number of participants in MROs more than doubled in October and November (to an average participation of 720 counterparties) compared with the period from January to mid-September 2008 (when there were 333 counterparties on average).

The replacement of money market activity with central bank intermediation is also illustrated

<sup>6</sup> These figures refer to a "simplified balance sheet" of the Eurosystem.

in Chart 7, which shows that lending volumes in the unsecured overnight segment by EONIA panel banks declined somewhat after the corridor was narrowed. While during the turmoil, but prior to the narrowing of the corridor, the daily average EONIA volume had stood at €52 billion, it declined to €34 billion after the corridor was narrowed. At the same time, the ample liquidity provision was reflected in a lower level of short-term rates. After the introduction of the full allotment in MROs, the EONIA was quoted consistently below the MRO rate and the EONIA spread decreased to -14 basis points in the period from 9 October 2008 to 20 January 2009.

Finally, the extent of the Eurosystem's intermediation role can also be assessed by analysing the sets of individual counterparties using the different components of the Eurosystem's operational framework. Between 9 October 2008 and 20 January 2009, the proportion of banks using the deposit facility that obtained refinancing in the previous MRO was only 15% on average.<sup>7</sup> Thus, the set of banks obtaining refinancing from the Eurosystem in a given week was largely different from the set of counterparties placing liquidity with it. During the period with a narrower corridor, however, this share has tended to increase slightly. At the same time, the share of deposit facility usage by banks that had previously obtained refinancing in an LTRO has remained quite stable over time, at about 50%. On average, 45% of deposit facility usage was by counterparties that had no outstanding refinancing at all from the Eurosystem. These figures highlight the importance of the intermediation role assumed by the Eurosystem in channelling funds from institutions with excess liquidity that were unwilling to lend directly to those with liquidity needs.

The impact of the measures introduced by the Eurosystem on the broader economy is presented in the box.

#### 18 DECEMBER 2008: ANNOUNCEMENT OF THE WIDENING OF THE CORRIDOR

The ECB's extraordinary measures had a stabilising impact on the euro money market.

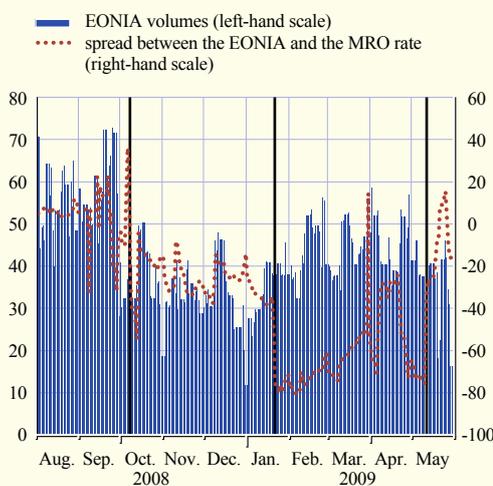
Towards the end of 2008 the worst tensions in the money market seemed to have eased. In addition, the EURIBOR-OIS spread had begun a significant decline from its peak levels, as shown in Chart 1. In this environment, and with the expectation that conditions in the money market would improve further after the turn of the year, the Governing Council announced on 18 December 2008 that, as of the maintenance period starting on 21 January 2009, the corridor formed by the standing facility rates would be widened again to 200 basis points, in line with the desire to avoid crowding out money market activity any more than necessary. With the improving money market conditions, the prominent intermediation role played by the Eurosystem could be reduced to a certain extent.

Chart 6 demonstrates that since late January, when the corridor was re-widened, the degree of intermediation by the Eurosystem started to

7 The figures in this paragraph relate to the largest individual recourse to the deposit facility and cover on average 96% of the total recourse in the period under review.

Chart 7 EONIA spread and volumes

(EUR billions; basis points)



Sources: ECB and Bloomberg.

Note: The vertical lines indicate the narrowing of the corridor on 9 October 2008 and the re-widening of the corridor on 21 January 2009.

decline: the total amount of refinancing stabilised at below €700 billion in the following months, and recourse to the deposit facility, which had become much less attractive, declined to a daily average of €84 billion between 21 January and 12 May 2009. Also, EONIA turnover started to increase again (see Chart 7). In the same period, the average daily EONIA volume stood at €44 billion, up from €34 billion during the period with a narrower corridor. This could be an indication that the wider corridor left more room for the matching of demand and supply in the short-term money market, even in an environment of continuing high credit risk.

At the same time, the wider corridor allowed for a further increase of the spread between the EONIA and the fixed rate in the MRO which was caused by the continued ample liquidity supply. With a narrower corridor between 9 October 2008 and 20 January 2009, the EONIA spread stood at 27 basis points. This spread rose to 62 basis points in the period from 21 January to 12 May 2009. This substantial decoupling of short-term rates from the policy rate illustrates further the segmentation of the money market, since the cost of refinancing for banks with access to the money market (close to the EONIA rate) was substantially below the cost of refinancing for banks that needed to rely on the Eurosystem for refinancing (the MRO rate).

## 7 MAY 2009: ENHANCED CREDIT SUPPORT

More recently, the Eurosystem has decided to further expand its non-standard measures. Specifically, in line with the additional longer-term refinancing operations conducted since October 2008, the Eurosystem decided that, starting on 23 June 2009, it will carry out a series of refinancing operations with a maturity of 12 months, applying a fixed rate tender procedure with full allotment. In addition, it decided to purchase euro-denominated covered bonds issued in the euro area and to grant the European Investment Bank the status of an eligible counterparty in the Eurosystem's refinancing operations. These decisions were taken to promote the decline in money market term rates, to encourage banks to maintain and expand their lending to customers, to help to improve market liquidity in important segments of the private debt security market, and to ease funding conditions for banks and enterprises. In that context and against the background of signs of increasing confidence in the short-term money market, the narrowing of the corridor between the MRO rate and the deposit facility rate from 100 to 75 basis points, that took place in conjunction with the reduction of the MRO rate from 1.25% to 1.00% as of 13 May 2009, was not deemed to entail a significant risk of reducing money market activity.

### Box

#### IMPACT ON THE BROADER ECONOMY OF THE MEASURES IMPLEMENTED SINCE OCTOBER 2008

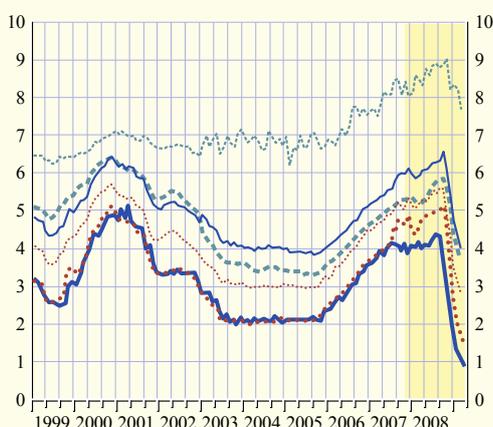
The changes in the operational framework introduced since October 2008, in combination with the easing of the ECB's key interest rates, have helped to lower the cost of financing for the economy at large. As seen in Chart A, the recent and significant drop in the euro overnight index average (EONIA), which mainly resulted from the unprecedented cut in rates in the main refinancing operations (a reduction of 325 basis points between October 2008 and May 2009), but also to some extent from the fixed rate tender procedure with full allotment, was reflected in a variety of short-term money market rates and bank interest rates, which have also posted a marked drop since October.

Moreover, the introduction of the fixed rate tender procedure with full allotment has ensured that some of the necessary conditions for preserving the flow of loans from euro area credit

**Chart A The EONIA, the euro interbank offered rate (EURIBOR) and short-term MFI rates**

(percentages per annum)

- EONIA
- three-month EURIBOR
- - - short-term rate on loans to households for house purchase
- short-term rate on small loans to NFCs
- short-term rate on large loans to NFCs
- - - short-term rate on consumer credit

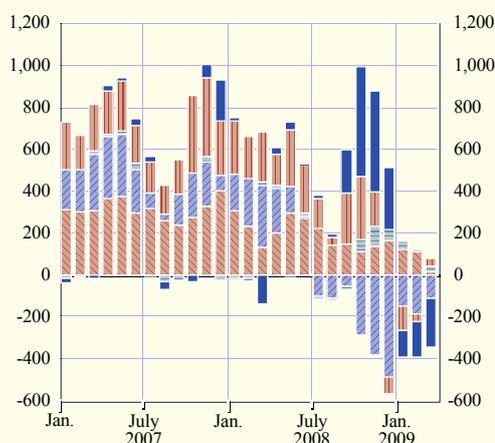


Sources: ECB and Reuters.

**Chart B Funding sources of euro area credit institutions by counterpart sector**

(three-month flows; EUR billions)

- Eurosystem lending operations
- MFIs excluding the Eurosystem
- central government
- external liabilities
- money-holding sector



Source: ECB.

institutions to the private sector have remained in place. In this respect, the Eurosystem alleviated the immediate funding pressure on banks with liquidity needs, thereby substituting market-based borrowing in the interbank market. In essence, these liquidity management measures have contributed to interrupting the “negative feedback loop” from the financial market tensions.

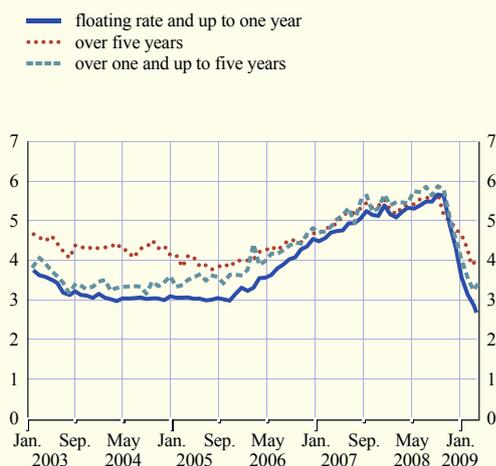
Chart B shows the increased recourse by banks to central bank lending throughout the fourth quarter of 2008, which allowed euro area credit institutions to withstand the shock resulting from the reduction in funding from international financial markets and from other euro area monetary financial institutions (MFIs). In conjunction with retained securitisation activity, this measure has therefore allowed even liquidity-constrained banks to maintain the refinancing of their loan portfolios and thus cover their short-term funding gap. As a result, banks have been able to either maintain the flow of loans or, at least, have faced less pressure to withdraw from lending.

As regards the pass-through of interest rate cuts in the euro area, bank lending rates have declined rapidly since November 2008, in parallel with the fall in money market rates. For example, between October 2008 and April 2009 short-term nominal bank lending rates (i.e. for loans with a maturity of less than one year) for large loans to non-financial corporations (NFCs) declined by around 300 basis points while corresponding long-term rates (i.e. for loans with a maturity of more than five years) declined by around 100 basis points (see Chart C). In real terms, despite the effect of rapidly declining inflation expectations, equivalent bank lending rates (both short and long-term) declined by around 90 basis points.<sup>1</sup> In addition, the widening of spreads on short-term MFI lending rates and deposit rates vis-à-vis short-term market rates have

1 For a comparison of recent developments in banks' interest rates between the euro area and the United States, please refer to Box 3 in this issue of the Monthly Bulletin.

**Chart C Selected nominal bank lending rates for loans over €1 million to NFCs**

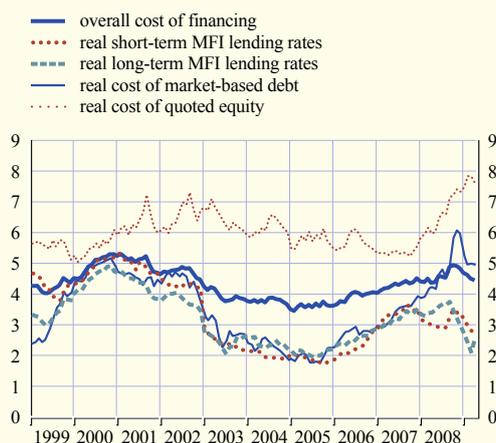
(basis points; January 2003 to April 2009)



Source: ECB.

**Chart D Real cost of external financing of euro area NFCs**

(percentages per annum)



Sources: ECB, Thomson Financial Datastream, Merrill Lynch and Consensus.

stabilised recently and in some cases even reversed in April 2009. All in all, the average nominal cost of external financing has dropped by more than 140 basis points since October 2008. In real terms, as shown in Chart D, the cost of market-based debt has clearly retrenched from its historical peaks in late 2008 and the cost of equity financing, while still elevated, seems to have eased as of late.

All this indicates that the non-standard liquidity measures taken by the Eurosystem since October 2008 have limited a possible hampering of the transmission of monetary policy in the euro area related to the financial market turmoil.

## 5 CONCLUSION

Following the intensification of the financial market tensions in the euro money market in late September and early October 2008, the Eurosystem reacted forcefully by implementing various non-standard measures in its liquidity management. In particular, it has introduced fixed rate tender procedures with full allotment in its open market operations, temporarily narrowed the corridor formed by the rates on its standing facilities, broadened its list of assets eligible as collateral (along with concomitant risk mitigation measures), and provided liquidity in foreign currencies in cooperation with other central banks.

These measures, which have been non-standard in nature, reassured financial market participants that the availability of central bank liquidity was not a reason for concern, and contributed to a return towards stable money market conditions. In this connection, in January 2009 the Eurosystem was able to reduce its intermediation role and it therefore increased the width of the corridor between the standing facility rates.

Most recently, the Eurosystem has decided to enhance its credit support through the conduct of a series of 12-month longer-term refinancing operations (fixed rate tender procedure with full allotment), the purchase of

## ARTICLES

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euro-denominated covered bonds issued in the euro area and granting the European Investment Bank the status of an eligible counterparty in the Eurosystem's refinancing operations. These measures aim to promote the decline in money market term rates, to encourage banks to maintain and expand their lending to customers, to help to improve market liquidity in important segments of the private debt security market, and to ease funding conditions for banks and enterprises.



# ROTATION OF VOTING RIGHTS IN THE GOVERNING COUNCIL OF THE ECB

## ARTICLES

### Rotation of voting rights in the Governing Council of the ECB

*On 19 March 2009 the Governing Council decided on the implementation of the rotation scheme for voting rights in the Governing Council.<sup>1</sup> This followed the Governing Council's earlier decision, taken on 18 December 2008, to continue with the current voting regime in the Governing Council until the number of NCB governors in the Governing Council exceeds 18.<sup>2</sup> This article first recalls the guiding principles underlying the adjustment of the voting modalities and the main elements of the rotation scheme. It then explains the implementing provisions relating to the rotation order, the rotation rate and the rotation period. Finally, it deals with procedural aspects and statistical parameters underlying the allocation of NCB governors to voting groups. The implementation model chosen strikes the appropriate balance between continuity, efficiency and inclusiveness, while preserving the collegial nature of the Governing Council.*

## I BACKGROUND

In order to ensure that the Governing Council is able to take decisions in a timely and efficient manner even in an enlarged euro area, the Council of the European Union adopted a decision in 2003 on the adjustment of voting modalities in the Governing Council on the basis of a recommendation by the ECB.<sup>3</sup> This decision, which introduced a rotation system that would apply to the voting rights of NCB governors (hereafter “governors”) in the Governing Council as its membership expanded, is reflected in Article 10.2 of the Statute of the ESCB and of the ECB (hereafter “the Statute of the ESCB”).<sup>4</sup>

The rotation system is based on a number of fundamental principles. First and foremost, the principle of “one member, one vote”, which is the Governing Council's core decision-making principle, will continue to apply to all Governing Council members who have voting rights.<sup>5</sup> Second, all members of the Governing Council will continue to participate in its meetings in a personal and independent capacity (“ad personam participation”) and will retain the right to speak, irrespective of whether they have the right to vote. Third, to avoid situations in which those governors who have voting rights could be perceived as being insufficiently representative of the euro area economy as a whole, an element of “representativeness” is introduced. This will be achieved by allocating governors to groups in accordance with a ranking based on a composite indicator of the economic and financial weights of their

respective countries (see Section 2.5). However, a governor's country is relevant only for the purpose of determining the frequency with which that governor exercises his/her voting right. This does not, therefore, contravene the principle of “one member, one vote”, which will continue to apply to all members with voting rights. Fourth, the rotation system is robust in the sense that it will be able to automatically accommodate any enlargement of the euro area and thus the inclusion of new governors as members of the Governing Council.<sup>6</sup> Finally, the new voting system has been made as transparent as possible so that its main features and procedures can be communicated with relative ease.

On the basis of these principles, as soon as the number of governors exceeds 18, the number of

- 1 Decision of the European Central Bank of 19 March 2009 amending Decision ECB/2004/2 of 19 February 2004 adopting the Rules of Procedure of the European Central Bank (ECB/2009/5) (2009/328/EC), OJ L 100, 18.4.2009, p. 10.
- 2 Decision of the European Central Bank of 18 December 2008 to postpone the start of the rotation system in the Governing Council of the European Central Bank (ECB/2008/29) (2009/5/EC), OJ L 3, 7.1.2009, p. 4.
- 3 Decision of the Council, meeting in the composition of the Heads of State or Government, of 21 March 2003 on an amendment to Article 10.2 of the Statute of the European System of Central Banks and of the European Central Bank (2003/223/EC), based on ECB Recommendation ECB/2003/1, OJ L 83, 1.4.2003, p. 66.
- 4 For a detailed description of the rotation scheme and its genesis, see the article entitled “The adjustment of voting modalities in the Governing Council” in the May 2003 issue of the Monthly Bulletin.
- 5 With the exception of decisions made under Article 10.3 of the Statute of the ESCB, which foresees weighted voting, whereby the votes of governors are weighted in accordance with their respective NCBs' capital shares and the votes of Executive Board members are weighted at zero.
- 6 This robustness also allows any further enlargement of the EU and the subsequent enlargement of the euro area to be accommodated.

**Table 1 Two-group rotation system (first stage)**

Total number of governors	First group			Second group		
	Governors	Votes	Voting frequency	Governors	Votes	Voting frequency
19	5	4	80%	14	11	79%
20	5	4	80%	15	11	73%
21	5	4	80%	16	11	69%

Governing Council members who have voting rights at any given time will be limited to 21. Thus, the number of governors with voting rights at any one time will not exceed 15. The six Executive Board members are not subject to the rotation scheme and will retain their permanent voting rights.

The voting scheme applies to all decisions taken under the simple majority rule in Article 10.2 of the Statute of the ESCB – i.e. most Governing Council decisions, including those on monetary policy. It does not apply to decisions taken under Article 10.3 of the Statute of the ESCB (i.e. decisions concerning Eurosystem financial matters such as the paying-up of and increases in the ECB's capital, revisions to the ECB's capital key, the transfer of foreign reserve assets to the ECB, the allocation of monetary income and the allocation of the ECB's net profits and losses), for which weighted voting applies (see footnote 5).

As provided for in Article 10.2 of the Statute of the ESCB, the Governing Council decided on 18 December 2008 that the rotation system would begin when the number of governors in

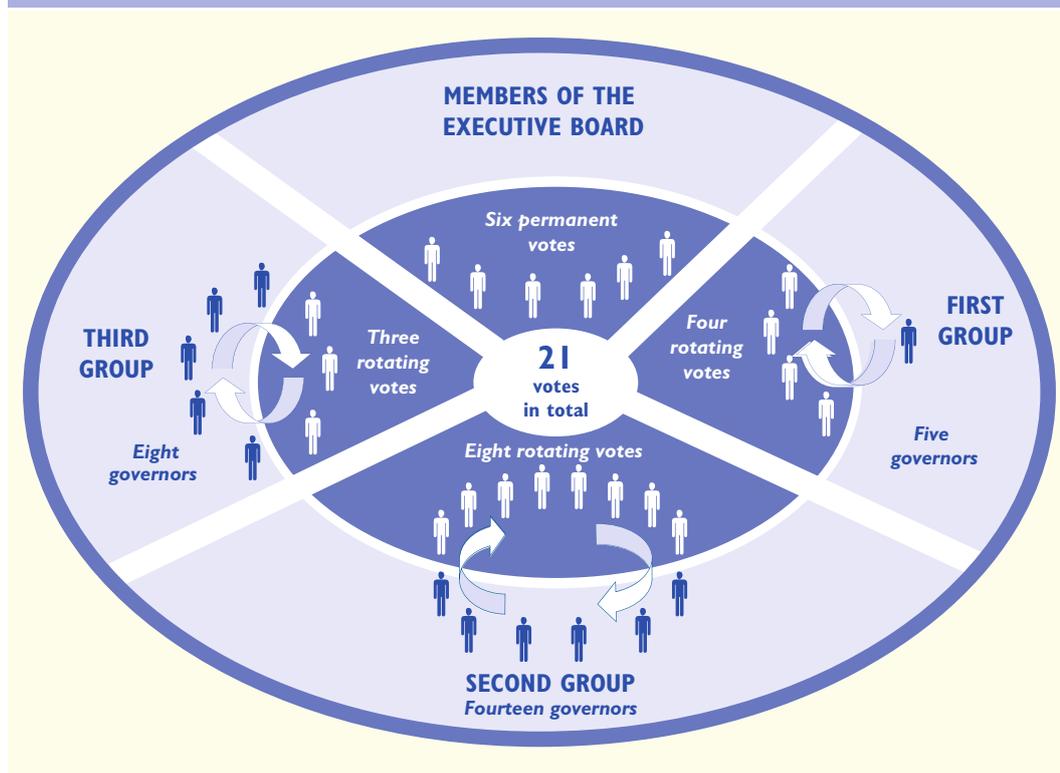
the Governing Council exceeded 18, at which point the governors would be allocated to two groups on the basis of the ranking determined by the composite indicator referred to above. In accordance with Article 10.2 of the Statute of the ESCB, the first group will consist of the first five governors according to that ranking, with the second group comprising all other governors. The five governors in the first group will share four votes, while the governors in the second group will share 11 votes. Within each group, the governors will have the same voting frequency. Table 1 provides a summary, including details of the resulting voting frequencies.

As of the date on which the number of governors exceeds 21, the governors will be allocated to three groups in accordance with that ranking. The number in the first group will remain unchanged, while the second group will consist of half of the total number of governors, rounded up to the nearest full number. The third group will consist of the remaining governors. Four votes will be assigned to the first group, eight to the second and three to the third. Table 2 provides a summary, including details of the resulting voting frequencies.

**Table 2 Three-group rotation system (second stage)**

Total number of governors	First group			Second group			Third group		
	Governors	Votes	Voting frequency	Governors	Votes	Voting frequency	Governors	Votes	Voting frequency
22	5	4	80%	11	8	73%	6	3	50%
23	5	4	80%	12	8	67%	6	3	50%
24	5	4	80%	12	8	67%	7	3	43%
25	5	4	80%	13	8	62%	7	3	43%
26	5	4	80%	13	8	62%	8	3	38%
27	5	4	80%	14	8	57%	8	3	38%

Chart A Three-group rotation system for the Governing Council of the ECB with 27 countries in the euro area



The composition of the groups will be adjusted whenever changes in the ranking<sup>7</sup> lead to the revision of the groups, or whenever the number of governors increases as a consequence of the enlargement of the euro area.

By way of illustration, Chart A above shows the three-group rotation system with 27 countries in the euro area.

## 2 THE IMPLEMENTING DECISION

On 19 March 2009 the Governing Council adopted Decision ECB/2009/5 amending Decision ECB/2004/2 of 19 February 2004 adopting the Rules of Procedure of the European Central Bank (i.e. the implementing decision), which lays down the rules establishing the rotation scheme for voting rights in the Governing Council.

In line with the requirements of Article 10.2 of the Statute of the ESCB, the Governing Council decided on the implementation measures with a two-thirds majority. Changes to those implementation measures, as well as any further measures which become necessary over time, will also have to be approved by a two-thirds majority of all Governing Council members (i.e. members with and without voting rights).

As outlined in the recitals of the implementing decision, the implementation measures are based on three further principles: (i) equal treatment, meaning that the implications of euro area enlargement as regards the exercise of voting rights should, ex ante, be the same

<sup>7</sup> This occurs whenever the data underlying the ranking are revised – i.e. on the occasion of the quinquennial review of the capital key and whenever the capital key has to be adapted to accommodate the accession of new countries to the EU (see also Section 2.5).

for each governor; (ii) transparency; and (iii) simplicity. The main elements of the implementing decision are explained below.

## 2.1 ROTATION ORDER

The governors will be listed in their respective groups in accordance with the EU conventions for the listing of countries.<sup>8</sup> Rotation will start from a randomly chosen point in the list to avoid favouring or disadvantaging a governor as a consequence of the alphabetical positioning of his/her country. When the end of the list is reached, the rotation will continue from the top of the list.

The composition of groups can alter either: (i) because countries enter the euro area; or (ii) because the data underlying the indicator change, causing the governors to be ranked differently (see Section 2.5 for further information). Moreover, when the number of governors exceeds 21, this triggers the establishment of a third group. In all of these cases, the governor joining a group or changing group will be placed in the new group in accordance with the rule detailed above. The rotation will then continue, without interruption, down the list of governors in the group.

## 2.2 ROTATION PERIOD

The rotation period is defined as the period during which the composition of the governors with voting rights in the various groups remains unchanged.

The rotation period is set at one month, with rotation occurring at the beginning of the month. As a rule, two physical Governing Council meetings take place every month. The first is dedicated exclusively to monetary policy decisions, and the second generally deals with all other issues to be decided by the Governing Council.<sup>9</sup> The one-month rotation period allows governors to exercise their voting rights in both types of meeting.

## 2.3 ROTATION RATE

The rotation rate is defined as the number of governors gaining and relinquishing voting

rights at the same time in each group at the start of each new rotation period (i.e. each month).

The rotation rate for the first group is fixed, since the size of the group is not affected by the changing number of governors. It always consists of five governors with four votes, meaning that one governor does not have voting rights in any given month.

The second and third groups require a discretionary rule to decide how many governors gain and relinquish the right to vote at the start of each month. In this respect, the Governing Council has decided that the number of governors gaining voting rights at the start of each month will be equal to the difference between the number of governors allocated to the group and the number of voting rights assigned to it, minus two. This means that not all of the governors without a vote in a given month will regain their voting rights in the subsequent rotation period. A quicker rotation scheme with a larger number of governors gaining and relinquishing the right to vote at the same time could have been applied, but this would have led to greater discontinuity in terms of voting members. The “minus two” option was seen as contributing to greater stability in the composition of the voting members.

For illustrative purposes, Chart B shows voting and non-voting periods for the first and second groups for a Governing Council with 19 governors (i.e. immediately after the start of the rotation scheme). Similarly, Chart C shows voting and non-voting periods for the first, second and third groups for a Governing Council with 27 governors (i.e. indicating the situation were all current EU Member States to join the euro area, including those with an opt-out). The horizontal axis depicts time, while governors are ranked on the vertical axis. The first group always consists of five governors

<sup>8</sup> Countries will be listed in alphabetical order, using the names of those countries in the national language using the Latin alphabet.

<sup>9</sup> As a rule, only one physical Governing Council meeting is scheduled in January and August, that meeting being dedicated to monetary policy decisions. In these months, other decisions are taken by written procedure.

with four votes, meaning that the first governor will not have voting rights in January, June or November in the first year (assuming that the rotation starts with the first governor).

With 19 governors in the Governing Council, the second group comprises 14 governors with 11 votes, meaning that three governors do not have voting rights at any given time. Applying the above-mentioned rule for the rotation rate (i.e. the number of governors without voting rights, minus two) means that at the end of each rotation period (i.e. at the end of each month) one governor passes his/her voting rights to another governor. As Chart B shows, the first, second and third governors do not have voting rights in January. In February, the first governor regains voting rights and the fourth governor relinquishes

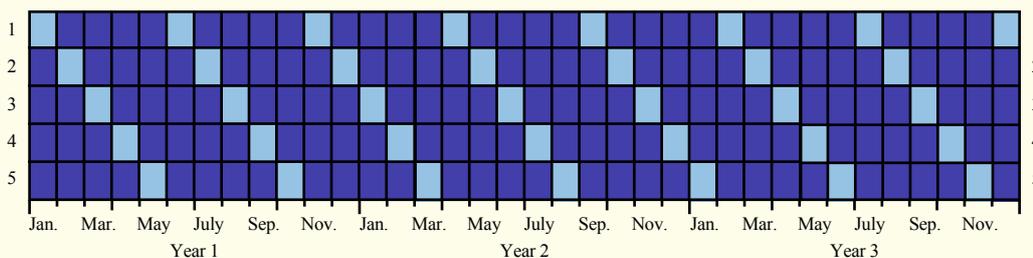
voting rights – i.e. the second, third and fourth governors are now without a vote. Thus, the block of three governors without voting rights moves down the list of governors in that group, falling one position every month.

Chart C illustrates the system for a Governing Council with 27 governors. In this case, the second group consists of 14 governors with eight votes, meaning that six governors are without a vote at any given time. The rotation rate will in this case be four (i.e. six governors without voting rights, minus two), meaning that the block of six governors without voting rights moves down the list of governors in that group, falling four positions at the end of every month in a continuous cycle. The third group comprises eight governors, with three governors having a

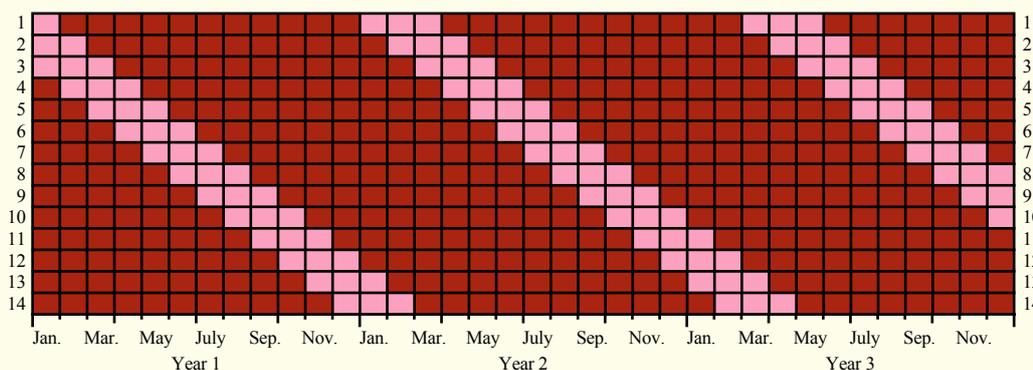
Chart B The two-group rotation system for the Governing Council of the ECB

### 19 governors

#### Group 1: 5 members/4 votes



#### Group 2: 14 members/11 votes



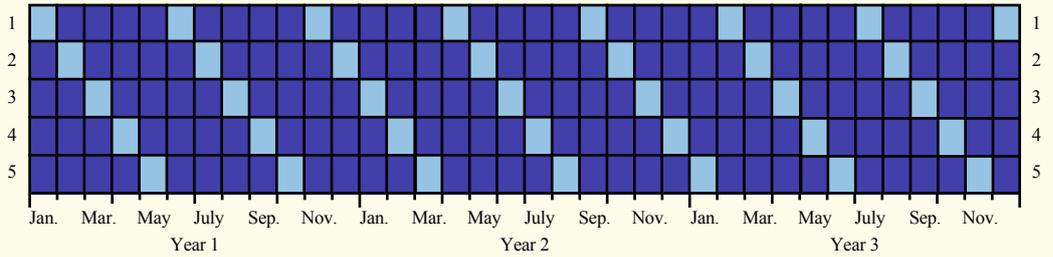
Source: ECB.

Notes: Dark colour for periods with voting rights. Light colour for periods without voting rights.

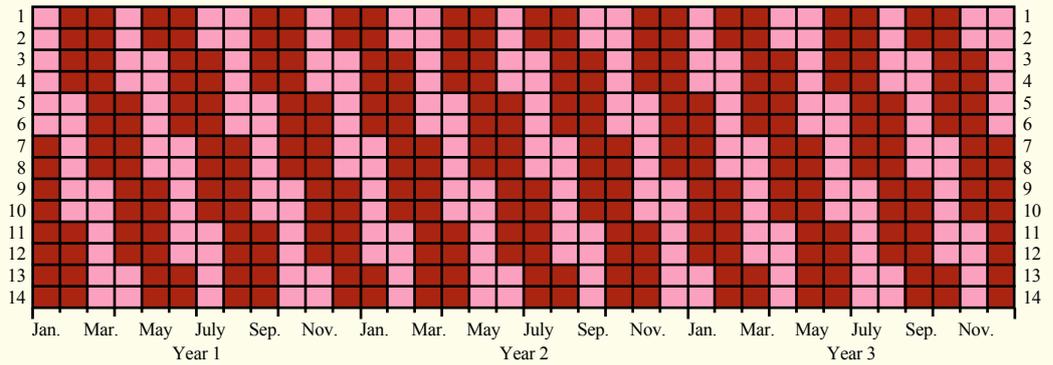
**Chart C The three-group rotation system for the Governing Council of the ECB**

**27 governors**

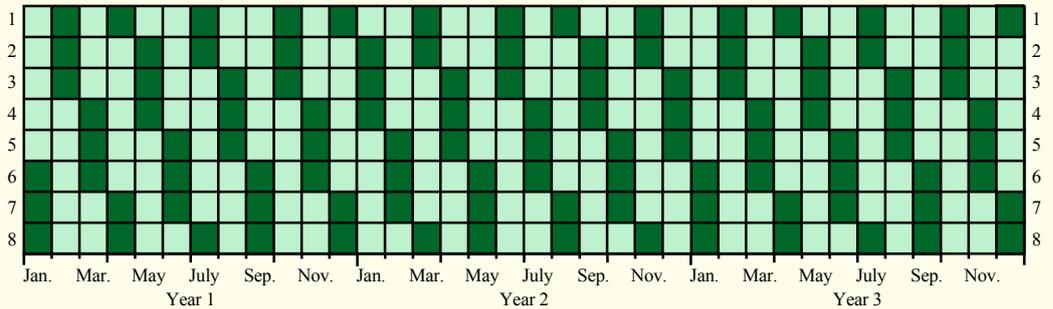
**Group 1: 5 members/4 votes**



**Group 2: 14 members/8 votes**



**Group 3: 8 members/3 votes**



Source: ECB.  
Notes: Dark colour for periods with voting rights. Light colour for periods without voting rights.

vote and five governors without a vote at any given time. In this case, the rotation rate is three (i.e. five governors without voting rights, minus two), meaning that the block of five governors without voting rights moves down the list of governors in that group, falling three positions at the end of every month.<sup>10</sup>

## 2.4 RULES OF PROCEDURE OF THE ECB

The implementing decision provides for the relevant amendments by inserting a new article – Article 3a – in the Rules of Procedure of the ECB. That provision is set out in the box

below. The implementing decision, and thus the amendments to the current Rules of Procedure, will enter into force at the start of the rotation system – i.e. when the number of governors exceeds 18.

<sup>10</sup> It sometimes happens that, at the three-group stage, some governors are systematically with or without a vote at a particular time of the year. Since some issues considered by the Governing Council arise seasonally (e.g. budget issues at the end of the year), this effect will have to be mitigated in order to ensure that governors are treated equally. To this end, Article 1.1 of the implementing decision contains a provision stating: “The Governing Council may decide to change the order of rotation for the second and third groups to avoid the situation that certain governors are always without a voting right at the same periods of the year.”

### Article 3a of the Rules of Procedure of the ECB: Rotation system

1. Governors shall be allocated to groups as set out in the first and second indents of Article 10.2 of the Statute of the ESCB.
2. Governors shall be ordered in each group, following EU convention, in accordance with a list of their national central banks which follows the alphabetical order of the names of the Member States in the national languages. The rotation of voting rights within each group shall follow this order. The rotation shall start at a random point in the list.
3. The voting rights within each group shall rotate every month, starting on the first day of the first month of the implementation of the rotation system.
4. For the first group, the number of voting rights that rotate in each one-month period shall be one; for the second and third groups, the number of voting rights that rotate in each one-month period shall be equal to the difference between the number of governors allocated to the group and the number of voting rights assigned to it, minus two.
5. Whenever the composition of the groups is adjusted in accordance with the fifth indent of Article 10.2 of the Statute of the ESCB, the rotation of voting rights within each group shall continue to follow the list referred to in paragraph 2. From the date on which the number of governors reaches 22, the rotation within the third group shall start at a random point in the list. The Governing Council may decide to change the order of rotation for the second and third groups to avoid the situation that certain governors are always without a voting right at the same periods of the year.
6. The ECB shall publish in advance a list of the members of the Governing Council with a voting right on the ECB’s website.

7. The share of each national central bank's Member State in the total aggregated balance sheet of the monetary financial institutions shall be calculated on the basis of the annual average of monthly average data over the most recent calendar year for which data are available. Whenever the aggregate gross domestic product at market prices is adjusted in accordance with Article 29.3 of the Statute of the ESCB or whenever a country becomes a Member State and its national central bank becomes part of the European System of Central Banks, the total aggregated balance sheet of the monetary financial institutions of the Member States which have adopted the euro shall be recalculated on the basis of the data relating to the most recent calendar year for which data are available.

The implementing decision also provides for some additional changes to the Rules of Procedure of the ECB to take into account the differentiation between voting and non-voting governors. The only provisions amended are those where the exercise of rights is directly linked to decision-making. First, in order for the Governing Council to vote, there must be a quorum of two-thirds of the members *with voting rights*.<sup>11</sup> Second, an item is to be removed from the agenda when requested by at least three of the members of the Governing Council *with voting rights* if the related documents were not submitted to the members of the Governing Council in due time.<sup>12</sup> Third, decisions taken by written procedure are to be approved by *those Governing Council members having a vote at the time of approval*.<sup>13</sup> Fourth, the minutes of the proceedings of the Governing Council are to be approved by *those Governing Council members that had voting rights at the meeting in question*.<sup>14</sup> These amendments relate to Articles 4.1, 5.1, 4.7 and 5.2 of the Rules of Procedure of the ECB respectively.

All other provisions have been left unchanged. As a result, all governors – with or without voting rights – will still be able, for example, to request that a meeting be convened or to object to a meeting being organised as a teleconference or a decision being taken by written procedure. In addition, all governors will retain the right to be accompanied by one person at meetings, to appoint an alternate in the event of a short-term absence or to be replaced as a member of the Governing Council in the event of an absence longer than one month.

It has also been decided that, in the interests of transparency, in addition to publishing the implementation provisions in an ECB decision, details of voting and non-voting members will be made available in advance on the ECB's website, probably in conjunction with the publication of the meeting schedule of the Governing Council. This list will be updated on a regular basis.

## 2.5 STATISTICAL PARAMETERS FOR RANKING

The ranking of governors will be changed only when the ECB's capital key is adjusted (i.e. every five years, or when a new Member State joins the EU, since this involves its NCB being allocated a share in the ECB's capital).<sup>15</sup> The ranking is based on two parameters: (i) the share of a country in aggregate GDP at market prices, which has a weighting of five-sixths; and (ii) the country's share in the total aggregated balance sheet of MFIs, which has a weighting of one-sixth.

The GDP data used are those provided by the European Commission in order to determine the capital key of the ECB. The GDP data used for the ranking are updated whenever the ECB's capital key is adjusted. The enlargement of the euro area does not require the underlying data to be updated, since all EU NCBs become

<sup>11</sup> Article 1.2 of the implementing decision.

<sup>12</sup> Article 1.4 of the implementing decision.

<sup>13</sup> Article 1.3 of the implementing decision.

<sup>14</sup> Article 1.5 of the implementing decision.

<sup>15</sup> However, non-euro area NCBs pay only 7% of their capital share.

shareholders in the ECB on accession to the EU and the GDP data used for this purpose are the same as those used for the ranking.

Data on the total aggregated balance sheet of MFIs are provided by the Eurosystem and are compiled under the ECB's harmonised framework for monetary statistics in accordance with Regulation (EC) No 2423/2001 of the ECB.<sup>16</sup> Article 10.2 of the Statute of the ESCB requires that the total aggregated MFI balance sheet be used – including the balance sheet of the NCB in question, but excluding the ECB's balance sheet.<sup>17</sup> Since final MFI balance sheet statistics are available with a short time lag, and since there is no guarantee that, for new Member States, harmonised data on the total aggregated balance sheet of MFIs will be available for the same historical periods as GDP data, the calculation will be performed using the most recent calendar year for which data are available. To avoid the effects of outliers and seasonality, an annual average of monthly data will be used. Data on the total aggregated balance sheet of MFIs are updated with the same frequency as GDP data (i.e. every five years, or whenever the EU is enlarged).

### 3 CONCLUSION

The implementation of the rotation scheme aims to respect the principles of “one member, one vote”, ad personam participation, “representativeness”, automaticity and robustness, equal treatment, transparency and simplicity.

In designing the rotation scheme, a balance had to be struck between: (i) the difficulty of having to automatically accommodate future euro area enlargement, the timing and size of which are uncertain; (ii) the Eurosystem's unique organisational structure; and (iii) the desire for simplicity. By using parameters which can easily be explained or are tried and tested, the implementation measures will make the provisions of the voting system simple to apply in practice. This also contributes to the stability and predictability of the voting system.

By combining the chosen rotation rate with a short one-month rotation period, the model strikes a balance between achieving continuity in the composition of the voting members and ensuring that no governor spends an inordinate amount of time without voting rights. Both aspects are relevant for the smooth functioning of the decision-making process. The robustness of the rotation system, which automatically accommodates any enlargement of the euro area by simply placing new governors in the groups in the predetermined order, will ensure that it continues to run smoothly over time.

The Governing Council's decisions regarding the implementation rules for the rotation scheme for voting rights mean that all the necessary steps have now been taken to accommodate the future enlargement of the euro area. The necessary amendments to the Rules of Procedure of the ECB are now in place and ready to enter into force when the number of countries in the euro area exceeds 18.

The implementing provisions guarantee that all governors are part of the decision-making process on a regular basis, thereby emphasising the collegial nature of the Governing Council and ensuring its continued cohesion and inclusiveness, while at the same time maintaining its operational efficiency.

<sup>16</sup> This Regulation was recast and updated by Regulation (EC) No 25/2009 of the ECB, which entered into force in February 2009.

<sup>17</sup> Data are calculated on a territorial basis – i.e. including branches and subsidiaries of foreign MFIs established in the Member State and excluding branches and subsidiaries of domestic MFIs established abroad.



# EURO AREA STATISTICS





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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 2009 TO INCLUDE SLOVAKIA

Unless otherwise indicated, all data series covering observations for 2009 relate to the Euro 16 (the euro area including Slovakia) 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 the respective year of entry into the euro area of Greece (2001), Slovenia (2007), Cyprus (2008), Malta (2008) and Slovakia (2009), calculated from bases covering the year prior to the year of entry, use a series in which the impact of these countries' joining the euro area is taken into account. Historical data referring to the euro area before the entry of Slovakia are available on the ECB's website 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<sup>1)</sup>

	M1 <sup>2)</sup>	M2 <sup>2)</sup>	M3 <sup>2),3)</sup>	M3 <sup>2),3)</sup> 3-month moving average (centred)	MFI loans to euro area residents excluding MFIs and general government <sup>2)</sup>	Securities other than shares issued in euro by non-MFI corporations <sup>2)</sup>	3-month interest rate (EURIBOR, % per annum, period averages)	10-year spot rate (% per annum, end-of- period) <sup>4)</sup>
	1	2	3	4	5	6	7	8
2007	6.5	9.9	11.2	-	10.8	18.6	4.28	4.38
2008	2.4	9.7	9.7	-	9.5	18.9	4.64	3.69
2008 Q3	0.7	9.2	9.1	-	9.1	18.5	4.98	4.34
Q4	2.7	8.9	8.2	-	7.4	20.1	4.24	3.69
2009 Q1	5.3	7.2	6.0	-	4.6	25.4	2.01	3.77
Q2	.	.	.	-	.	.	1.31	3.99
2009 Jan.	5.1	7.5	5.9	6.4	5.1	24.6	2.46	4.02
Feb.	6.2	7.0	5.8	5.6	4.3	26.1	1.94	3.85
Mar.	5.9	6.1	5.0	5.2	3.2	27.0	1.64	3.77
Apr.	8.4	5.9	4.9	4.5	2.3	26.9	1.42	3.79
May	7.9	5.0	3.7	.	1.8	.	1.28	4.18
June	.	.	.	.	.	.	1.23	3.99

### 2. Prices, output, demand and labour markets<sup>5)</sup>

	HICP <sup>1)</sup>	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
2007	2.1	2.7	2.7	2.7	3.8	84.1	1.8	7.5
2008	3.3	5.9	3.3	0.7	-1.7	81.8	0.8	7.5
2008 Q4	2.3	3.3	4.0	-1.7	-9.0	78.1	0.0	8.0
2009 Q1	1.0	-1.7	3.7	-4.8	-18.3	72.6	-1.2	8.7
Q2	.	.	.	.	.	.	.	.
2009 Jan.	1.1	-0.6	-	-	-16.5	74.7	-	8.4
Feb.	1.2	-1.6	-	-	-19.2	-	-	8.7
Mar.	0.6	-2.9	-	-	-19.1	-	-	8.9
Apr.	0.6	-4.6	-	-	-20.7	70.5	-	9.2
May	0.0	.	-	-	.	-	-	.
June	-0.1	.	-	-	.	-	-	.

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

(EUR billions, unless otherwise indicated)

	Balance of payments (net transactions)				Reserve assets (end-of-period positions)	Effective exchange rate of the euro: EER-21 <sup>6)</sup> (index, 1999 Q1 = 100)		USD/EUR exchange rate
	Current and capital accounts	Goods	Direct investment	Portfolio investment		Nominal	Real (CPI)	
2007	24.8	46.4	-92.5	159.7	347.2	107.9	109.0	1.3705
2008	-81.2	-6.1	-251.3	439.2	374.2	113.0	113.6	1.4708
2008 Q3	-21.2	-9.0	-35.9	121.5	372.5	114.1	114.3	1.5050
Q4	-20.7	-0.7	-86.7	201.8	374.2	109.1	109.6	1.3180
2009 Q1	-22.9	-6.3	-46.6	134.7	395.7	111.9	112.2	1.3029
Q2	.	.	.	.	.	113.2	113.4	1.3632
2009 Jan.	-19.2	-10.1	-15.9	-7.4	413.0	111.9	112.3	1.3239
Feb.	-1.1	1.0	-11.8	56.1	423.1	110.4	110.6	1.2785
Mar.	-2.6	2.8	-18.9	85.9	395.7	113.3	113.4	1.3050
Apr.	-7.2	4.0	-1.2	-6.0	386.3	112.5	112.8	1.3190
May	.	.	.	.	392.2	113.0	113.3	1.3650
June	.	.	.	.	.	114.0	114.2	1.4016

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) Data refer to the changing composition of the euro area. For further information, see the General notes.
- 2) 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.
- 3) 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.
- 4) Based on AAA-rated euro area central government bond yield curves. For further information, see table 4.7.
- 5) Unless otherwise indicated, data refer to Euro 16.
- 6) 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

	2009 5 June	2009 12 June	2009 19 June	2009 26 June
<b>Gold and gold receivables</b>	240,766	240,746	240,725	240,629
<b>Claims on non-euro area residents in foreign currency</b>	156,586	162,272	161,689	159,737
<b>Claims on euro area residents in foreign currency</b>	99,574	90,851	74,499	75,110
<b>Claims on non-euro area residents in euro</b>	18,757	18,431	17,504	17,801
<b>Lending to euro area credit institutions in euro</b>	632,881	611,020	618,887	896,839
Main refinancing operations	227,576	302,077	309,621	167,902
Longer-term refinancing operations	403,555	308,701	308,703	728,598
Fine-tuning reverse operations	0	0	0	0
Structural reverse operations	0	0	0	0
Marginal lending facility	1,739	241	549	326
Credits related to margin calls	11	0	13	12
<b>Other claims on euro area credit institutions in euro</b>	24,081	23,876	24,031	24,478
<b>Securities of euro area residents in euro</b>	298,168	300,606	300,950	301,585
<b>General government debt in euro</b>	36,788	36,788	36,769	36,769
<b>Other assets</b>	240,238	242,035	244,664	244,372
<b>Total assets</b>	1,747,838	1,726,624	1,719,718	1,997,319

### 2. Liabilities

	2009 5 June	2009 12 June	2009 19 June	2009 26 June
<b>Banknotes in circulation</b>	763,494	762,798	760,817	762,146
<b>Liabilities to euro area credit institutions in euro</b>	235,788	224,940	226,268	504,516
Current accounts (covering the minimum reserve system)	206,936	213,491	213,515	268,244
Deposit facility	28,841	11,334	12,717	236,235
Fixed-term deposits	0	0	0	0
Fine-tuning reverse operations	0	0	0	0
Deposits related to margin calls	11	116	36	37
<b>Other liabilities to euro area credit institutions in euro</b>	235	221	213	224
<b>Debt certificates issued</b>	0	0	0	0
<b>Liabilities to other euro area residents in euro</b>	145,038	152,896	159,802	161,278
<b>Liabilities to non-euro area residents in euro</b>	152,191	131,799	118,705	117,876
<b>Liabilities to euro area residents in foreign currency</b>	5,140	3,204	3,490	5,350
<b>Liabilities to non-euro area residents in foreign currency</b>	8,461	11,237	10,154	7,300
<b>Counterpart of special drawing rights allocated by the IMF</b>	5,551	5,551	5,551	5,551
<b>Other liabilities</b>	156,008	158,052	158,797	157,163
<b>Revaluation accounts</b>	202,952	202,952	202,952	202,952
<b>Capital and reserves</b>	72,981	72,976	72,968	72,963
<b>Total liabilities</b>	1,747,838	1,726,624	1,719,718	1,997,319

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	
				Fixed rate tenders	Variable rate tenders	Change	Level	Change
		Fixed rate	Minimum bid rate	Level	Level			
		1	2	3	4	5	6	7
1999	1 Jan.	2.00	-	3.00	-	-	4.50	-
	4 <sup>2)</sup>	2.75	0.75	3.00	-	...	3.25	-1.25
	22	2.00	-0.75	3.00	-	...	4.50	1.25
	9 Apr.	1.50	-0.50	2.50	-	-0.50	3.50	-1.00
	5 Nov.	2.00	0.50	3.00	-	0.50	4.00	0.50
2000	4 Feb.	2.25	0.25	3.25	-	0.25	4.25	0.25
	17 Mar.	2.50	0.25	3.50	-	0.25	4.50	0.25
	28 Apr.	2.75	0.25	3.75	-	0.25	4.75	0.25
	9 June	3.25	0.50	4.25	-	0.50	5.25	0.50
	28 <sup>3)</sup>	3.25	...	-	4.25	...	5.25	...
	1 Sep.	3.50	0.25	-	4.50	0.25	5.50	0.25
	6 Oct.	3.75	0.25	-	4.75	0.25	5.75	0.25
2001	11 May	3.50	-0.25	-	4.50	-0.25	5.50	-0.25
	31 Aug.	3.25	-0.25	-	4.25	-0.25	5.25	-0.25
	18 Sep.	2.75	-0.50	-	3.75	-0.50	4.75	-0.50
	9 Nov.	2.25	-0.50	-	3.25	-0.50	4.25	-0.50
2002	6 Dec.	1.75	-0.50	-	2.75	-0.50	3.75	-0.50
2003	7 Mar.	1.50	-0.25	-	2.50	-0.25	3.50	-0.25
	6 June	1.00	-0.50	-	2.00	-0.50	3.00	-0.50
2005	6 Dec.	1.25	0.25	-	2.25	0.25	3.25	0.25
2006	8 Mar.	1.50	0.25	-	2.50	0.25	3.50	0.25
	15 June	1.75	0.25	-	2.75	0.25	3.75	0.25
	9 Aug.	2.00	0.25	-	3.00	0.25	4.00	0.25
	11 Oct.	2.25	0.25	-	3.25	0.25	4.25	0.25
	13 Dec.	2.50	0.25	-	3.50	0.25	4.50	0.25
2007	14 Mar.	2.75	0.25	-	3.75	0.25	4.75	0.25
	13 June	3.00	0.25	-	4.00	0.25	5.00	0.25
2008	9 July	3.25	0.25	-	4.25	0.25	5.25	0.25
	8 Oct.	2.75	-0.50	-	-	-	4.75	-0.50
	9 <sup>4)</sup>	3.25	0.50	-	-	-	4.25	-0.50
	15 <sup>5)</sup>	3.25	...	3.75	-	-0.50	4.25	...
	12 Nov.	2.75	-0.50	3.25	-	-0.50	3.75	-0.50
	10 Dec.	2.00	-0.75	2.50	-	-0.75	3.00	-0.75
2009	21 Jan.	1.00	-1.00	2.00	-	-0.50	3.00	...
	11 Mar.	0.50	-0.50	1.50	-	-0.50	2.50	-0.50
	8 Apr.	0.25	-0.25	1.25	-	-0.25	2.25	-0.25
	13 May	0.25	...	1.00	-	-0.25	1.75	-0.50

Source: ECB.

- 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.
- 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.
- 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.
- As of 9 October 2008 the ECB reduced the standing facilities corridor from 200 basis points to 100 basis points around the interest rate on the main refinancing operations. The standing facilities corridor was restored to 200 basis points as of 21 January 2009.
- On 8 October 2008 the ECB announced that, starting from the operation to be settled on 15 October, the weekly main refinancing operations would be carried out through a fixed rate tender procedure with full allotment at the interest rate on the main refinancing operations. This change overrode the previous decision (made on the same day) to cut by 50 basis points the minimum bid rate on the main refinancing operations conducted as variable rate tenders.

### 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), 4)</sup>

Date of settlement	Bids (amount)	Number of participants	Allotment (amount)	Fixed rate tenders				Variable rate tenders			Running for (...) days
				Fixed rate	Minimum bid rate	Marginal rate <sup>5)</sup>	Weighted average rate				
1	2	3	4	5	6	7	8				
Main refinancing operations											
2009 4 Mar.	244,147	481	244,147	2.00	-	-	-	-	7		
11	227,701	503	227,701	1.50	-	-	-	-	7		
18	226,066	537	226,066	1.50	-	-	-	-	7		
25	229,979	538	229,979	1.50	-	-	-	-	7		
1 Apr.	238,071	522	238,071	1.50	-	-	-	-	7		
8	233,234	535	233,234	1.25	-	-	-	-	7		
15	249,411	557	249,411	1.25	-	-	-	-	7		
22	244,126	563	244,126	1.25	-	-	-	-	7		
29	233,157	526	233,157	1.25	-	-	-	-	7		
6 May	234,197	503	234,197	1.25	-	-	-	-	7		
13	229,565	512	229,565	1.00	-	-	-	-	7		
20	221,324	558	221,324	1.00	-	-	-	-	7		
27	276,814	709	276,814	1.00	-	-	-	-	7		
3 June	227,576	620	227,576	1.00	-	-	-	-	7		
10	302,077	604	302,077	1.00	-	-	-	-	7		
17	309,621	670	309,621	1.00	-	-	-	-	7		
24	167,902	530	167,902	1.00	-	-	-	-	7		
1 July	105,905	405	105,905	1.00	-	-	-	-	7		
Longer-term refinancing operations											
2009 8 Apr.	131,839	119	131,839	1.25	-	-	-	-	35		
9	36,087	75	36,087	1.25	-	-	-	-	182		
16	13,152	37	13,152	1.25	-	-	-	-	84		
30	30,170	90	30,170	1.25	-	-	-	-	91		
13 May	116,063	113	116,063	1.00	-	-	-	-	28		
14	33,666	56	33,666	1.00	-	-	-	-	91		
14	20,695	97	20,695	1.00	-	-	-	-	182		
28	27,541	104	27,541	1.00	-	-	-	-	91		
10 June	56,780	147	56,780	1.00	-	-	-	-	28		
11	14,536	44	14,536	1.00	-	-	-	-	91		
11	18,202	110	18,202	1.00	-	-	-	-	182		
25	442,241	1,121	442,241	1.00	-	-	-	-	371		
25	6,432	70	6,432	1.00	-	-	-	-	98		

#### 2. Other tender operations

Date of settlement	Type of operation	Bids (amount)	Number of participants	Allotment (amount)	Fixed rate tenders				Variable rate tenders			Running for (...) days
					Fixed rate	Minimum bid rate	Maximum bid rate	Marginal rate <sup>5)</sup>	Weighted average rate			
1	2	3	4	5	6	7	8	9	10			
2008 24 Sep.	Reverse transaction	50,335	36	40,000	-	4.25	-	4.25	4.35	1		
1 Oct.	Collection of fixed-term deposits	173,047	52	173,047	4.25	-	-	-	-	1		
2	Collection of fixed-term deposits	216,051	65	200,000	4.25	-	-	-	-	1		
3	Collection of fixed-term deposits	193,844	54	193,844	4.25	-	-	-	-	3		
6	Collection of fixed-term deposits	171,947	111	171,947	4.25	-	-	-	-	1		
7	Collection of fixed-term deposits	147,491	97	147,491	4.25	-	-	-	-	1		
9	Reverse transaction	24,682	99	24,682	3.75	-	-	-	-	6		
11 Nov.	Collection of fixed-term deposits	149,656	117	79,940	-	-	3.75	3.60	3.51	1		
9 Dec.	Collection of fixed-term deposits	152,655	95	137,456	-	-	3.25	3.05	2.94	1		
2009 20 Jan.	Collection of fixed-term deposits	143,835	103	140,013	-	-	2.50	2.30	2.15	1		
10 Feb.	Collection of fixed-term deposits	130,435	119	129,135	-	-	2.00	1.80	1.36	1		
10 Mar.	Collection of fixed-term deposits	111,502	119	110,832	-	-	2.00	1.80	1.52	1		
7 Apr.	Collection of fixed-term deposits	105,486	114	103,876	-	-	1.50	1.30	1.12	1		
12 May	Collection of fixed-term deposits	109,091	128	108,056	-	-	1.25	1.05	0.93	1		
9 June	Collection of fixed-term deposits	91,551	101	57,912	-	-	1.00	0.80	0.77	1		

Source: ECB.

- The amounts shown may differ slightly from those in Section 1.1 due to operations allotted but not settled.
- With effect from April 2002, split tender operations, i.e. operations with one-week maturity conducted as standard tenders in parallel with a main refinancing operation, are classified as main refinancing operations. For split tender operations conducted before this month, see Table 2 in Section 1.3.
- On 8 June 2000 the ECB announced that, starting from the operation to be settled on 28 June 2000, the main refinancing operations of the Eurosystem would be conducted as variable rate tenders. The minimum bid rate refers to the minimum interest rate at which counterparties may place their bids.
- On 8 October 2008 the ECB announced that, starting from the operation to be settled on 15 October, the weekly main refinancing operations would be carried out through a fixed rate tender procedure with full allotment at the interest rate on the main refinancing operations.
- 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	
2007	17,394.7	9,438.8	815.0	2,143.1	1,364.0	3,633.9	
2008	18,169.6	10,056.8	848.7	2,376.9	1,243.5	3,643.7	
2008 Q2	17,971.8	9,775.4	916.3	2,172.4	1,439.4	3,668.1	
Q3	18,231.2	9,968.9	917.1	2,186.7	1,457.1	3,701.5	
Q4 <sup>2)</sup>	18,169.6	10,056.8	848.7	2,376.9	1,243.5	3,643.7	
2009 Jan.	18,510.3	10,186.3	879.8	2,424.3	1,315.3	3,704.7	
Feb.	18,466.6	10,142.2	870.3	2,438.4	1,272.4	3,743.2	
Mar.	18,269.2	10,015.6	845.4	2,443.0	1,203.2	3,761.9	
Apr.	18,447.1	10,085.4	846.1	2,452.5	1,253.3	3,809.8	

## 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
2007	195.9	196.8	1.0	0.0	4.17
2008	217.2	218.7	1.5	0.0	3.25
2009 20 Jan. <sup>3)</sup>	220.2	221.5	1.2	0.0	2.50
10 Feb.	221.1	222.1	1.0	0.0	2.00
10 Mar.	217.6	218.6	1.0	0.0	2.00
7 Apr.	220.8	221.6	0.8	0.0	1.50
12 May	219.7	220.8	1.1	0.0	1.25
9 June	216.7	217.9	1.2	0.0	1.00
7 July	218.1	.	.	.	.

## 3. Liquidity

Maintenance period ending on:	Liquidity-providing factors						Liquidity-absorbing factors					Credit institutions' current accounts	Base money
	Monetary policy operations of the Eurosystem												
	Eurosystem's net assets in gold and foreign currency	Main refinancing operations	Longer-term refinancing operations	Marginal lending facility	Other liquidity-providing operations	Deposit facility	Other liquidity-absorbing operations	Banknotes in circulation	Central government deposits with the Eurosystem	Other factors (net) <sup>4)</sup>			
	1	2	3	4	5	6	7	8	9	10	11	12	
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	580.5	337.3	457.2	2.7	0.0	200.9	4.9	731.1	107.8	114.3	218.7	1,150.7	
2009 20 Jan.	581.3	219.2	613.6	2.9	0.0	238.5	3.3	753.1	99.9	100.6	221.5	1,213.1	
10 Feb.	547.4	224.9	551.4	2.1	0.0	175.4	6.1	740.2	102.7	79.3	222.1	1,137.7	
10 Mar.	512.7	224.3	472.4	1.6	0.0	95.5	4.0	741.5	110.1	41.4	218.6	1,055.5	
7 Apr.	508.0	230.5	443.1	1.1	0.0	57.8	3.7	747.3	139.0	13.3	221.6	1,026.6	
12 May	512.4	239.7	426.9	0.7	0.0	42.7	3.1	757.5	141.9	13.7	220.8	1,021.0	
9 June	487.9	238.8	400.6	0.7	0.0	22.3	2.1	759.8	141.7	-15.8	217.9	1,000.0	

Source: ECB.

1) End of period.

2) Includes the reserve bases of credit institutions in Slovakia. On a transitional basis, credit institutions located in the euro area may have decided to deduct from their own reserve bases any liabilities owed to credit institutions located in Slovakia. Starting from the reserve base as at end-January 2009, the standard treatment applies (see Decision of the European Central Bank of 28 October 2008 on transitional provisions for the application of minimum reserves by the European Central Bank following the introduction of the euro in Slovakia (ECB/2008/14)).

3) Owing to the adoption of the euro by Slovakia on 1 January 2009, the reserve requirement is an average - weighted by the number of calendar days - of the reserve requirements for the then 15 countries of the euro area for the period 10-31 December 2008 and the reserve requirements for the 16 countries now in the euro area for the period 1-20 January 2009.

4) Starting from 1 January 2009, includes monetary policy operations which were conducted by the Národná Banka Slovenska before 1 January 2009 and were still outstanding after this date.



# MONEY, BANKING AND INVESTMENT FUNDS

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

(EUR billions; outstanding amounts at end of period)

### 1. Assets

	Total	Loans to euro area residents			Holdings of securities other than shares issued by euro area residents				Money market fund shares/units <sup>2)</sup>	Holdings of shares/other equity issued by euro area residents	External assets	Fixed assets	Remaining assets	
		Total	General government	Other euro area residents	MFIs	Total	General government	Other euro area residents						MFIs
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Eurosysteem														
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 Q3	2,473.4	1,342.5	18.5	0.7	1,323.3	278.9	237.4	2.4	39.1	-	14.7	482.4	16.0	338.9
Q4	2,983.0	1,809.4	18.6	0.6	1,790.1	350.8	307.9	2.4	40.4	-	14.4	479.8	15.7	313.0
2009 Jan.	2,830.2	1,606.0	18.6	0.7	1,586.8	362.5	314.6	2.5	45.4	-	14.2	523.8	16.0	307.7
Feb.	2,772.6	1,537.1	18.6	0.7	1,517.8	366.5	318.3	2.7	45.6	-	13.6	530.5	15.9	309.0
Mar.	2,783.6	1,555.3	18.7	0.7	1,535.9	374.1	322.7	2.5	48.9	-	13.9	491.0	15.7	333.5
Apr.	2,710.2	1,479.4	18.1	0.7	1,460.7	378.1	326.5	2.4	49.2	-	14.7	487.5	15.8	334.7
May <sup>3)</sup>	2,678.1	1,452.0	18.1	0.7	1,433.2	375.8	322.9	2.5	50.4	-	15.0	488.6	15.8	331.0
MFIs excluding the Eurosysteem														
2006	25,944.6	14,881.7	809.0	9,134.7	4,938.0	3,561.5	1,278.8	645.8	1,636.9	83.5	1,171.4	4,336.6	172.6	1,737.4
2007	29,448.1	16,894.2	954.5	10,139.0	5,800.8	3,890.1	1,196.9	952.9	1,740.3	93.5	1,293.8	4,886.1	205.7	2,184.7
2008 Q3	31,534.6	18,134.4	978.8	10,800.1	6,355.5	4,207.8	1,195.4	1,106.8	1,905.6	101.8	1,316.1	5,125.7	203.2	2,445.5
Q4	31,840.7	18,053.5	967.6	10,768.2	6,317.6	4,630.8	1,244.7	1,406.3	1,979.8	98.7	1,199.7	4,756.6	211.6	2,889.8
2009 Jan.	32,297.9	18,205.2	984.5	10,856.9	6,363.8	4,766.3	1,308.3	1,406.8	2,051.2	101.6	1,205.1	4,871.4	210.6	2,937.6
Feb.	32,144.3	18,074.9	981.1	10,833.6	6,260.3	4,846.9	1,342.5	1,427.5	2,076.9	102.8	1,189.0	4,779.2	215.0	2,936.4
Mar.	31,745.3	17,902.4	970.1	10,812.9	6,119.5	4,928.3	1,388.9	1,450.4	2,089.1	104.1	1,186.5	4,545.6	214.0	2,864.4
Apr.	31,857.5	17,898.8	982.2	10,808.5	6,108.1	4,999.5	1,406.6	1,473.6	2,119.2	103.8	1,218.8	4,611.0	212.9	2,812.8
May <sup>3)</sup>	31,534.3	17,854.9	974.6	10,805.2	6,075.1	5,044.7	1,423.1	1,470.7	2,150.8	102.5	1,215.8	4,470.5	213.4	2,632.4

### 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
Eurosysteem											
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 Q3	2,473.4	705.4	932.3	51.3	17.7	863.3	-	0.1	264.4	288.1	283.1
Q4	2,983.0	784.8	1,217.5	68.8	16.6	1,132.1	-	0.1	274.0	383.3	323.4
2009 Jan.	2,830.2	761.9	1,093.1	102.5	19.1	971.6	-	0.1	302.6	329.1	343.3
Feb.	2,772.6	763.8	1,075.8	110.9	22.3	942.6	-	0.1	313.8	301.5	317.7
Mar.	2,783.6	768.9	1,114.9	135.6	23.3	956.0	-	0.1	296.4	301.6	301.8
Apr.	2,710.2	781.0	1,046.9	140.3	21.5	885.1	-	0.1	293.1	274.9	314.1
May <sup>3)</sup>	2,678.1	783.4	1,053.1	137.2	19.0	897.0	-	0.1	291.5	249.0	300.9
MFIs excluding the Eurosysteem											
2006	25,944.6	-	13,265.1	124.1	7,901.8	5,239.3	698.3	4,233.6	1,454.1	3,991.4	2,302.2
2007	29,448.1	-	15,098.2	126.9	8,885.4	6,085.8	754.1	4,631.4	1,683.6	4,533.4	2,747.4
2008 Q3	31,534.6	-	16,234.4	139.9	9,347.6	6,746.8	833.2	4,851.4	1,756.1	4,890.5	2,968.9
Q4	31,840.7	-	16,759.8	190.8	9,710.5	6,858.5	825.4	4,848.3	1,767.5	4,396.0	3,243.8
2009 Jan.	32,297.9	-	16,815.6	222.6	9,755.0	6,838.0	861.9	4,920.9	1,786.3	4,680.4	3,232.8
Feb.	32,144.3	-	16,706.3	228.2	9,760.0	6,718.1	883.1	4,971.3	1,781.9	4,569.1	3,232.5
Mar.	31,745.3	-	16,605.7	216.1	9,785.2	6,604.4	885.2	4,932.3	1,793.2	4,346.5	3,182.3
Apr.	31,857.5	-	16,638.7	197.9	9,868.0	6,572.9	886.1	4,970.6	1,806.6	4,402.0	3,153.5
May <sup>3)</sup>	31,534.3	-	16,598.4	193.9	9,874.7	6,529.7	874.6	4,995.8	1,823.7	4,229.4	3,012.3

Source: ECB.

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

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

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

**1. Assets**

	Total	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	19,710.1	9,964.0	828.7	9,135.3	2,114.5	1,466.3	648.2	811.4	4,687.9	187.3	1,945.0
2007	22,317.5	11,111.9	972.3	10,139.6	2,376.9	1,422.0	954.9	882.2	5,259.8	220.9	2,465.9
2008 Q3	23,777.8	11,798.0	997.3	10,800.7	2,542.0	1,432.8	1,109.2	874.3	5,608.1	219.2	2,736.2
Q4	24,107.5	11,755.1	986.2	10,768.9	2,961.4	1,552.6	1,408.8	786.3	5,236.4	227.3	3,141.1
2009 Jan.	24,499.6	11,860.7	1,003.1	10,857.6	3,032.2	1,622.9	1,409.2	789.3	5,395.2	226.6	3,195.7
Feb.	24,440.2	11,833.9	999.7	10,834.2	3,090.9	1,660.7	1,430.2	777.1	5,309.8	230.9	3,197.6
Mar.	24,155.7	11,802.4	988.8	10,813.5	3,164.5	1,711.6	1,452.9	773.6	5,036.6	229.7	3,149.0
Apr.	24,240.4	11,809.5	1,000.3	10,809.1	3,209.1	1,733.1	1,476.0	798.9	5,098.4	228.7	3,095.8
May <sup>(p)</sup>	23,914.5	11,798.5	992.6	10,805.9	3,219.3	1,746.0	1,473.2	796.4	4,959.2	229.2	2,911.9
Transactions											
2006	1,999.3	874.8	-14.2	889.0	13.0	-94.0	107.1	97.9	805.5	6.4	201.7
2007	2,573.3	1,014.8	-9.9	1,024.7	232.2	-46.3	278.5	55.5	781.3	-0.5	490.0
2008	1,611.0	601.2	12.5	588.7	373.0	58.1	314.9	-56.0	-71.2	-2.1	766.1
2008 Q4	223.2	-43.9	-9.3	-34.6	207.5	52.4	155.1	-70.9	-318.8	0.9	448.3
2009 Q1	-136.0	8.2	1.6	6.6	185.2	143.5	41.7	-0.8	-279.2	0.9	-50.4
2009 Jan.	98.5	41.5	15.4	26.2	49.3	56.0	-6.7	11.1	-34.5	-2.2	33.3
Feb.	-90.2	-25.5	-3.3	-22.2	59.0	37.1	21.9	-7.6	-106.3	4.4	-14.2
Mar.	-144.3	-7.8	-10.4	2.6	76.8	50.4	26.5	-4.3	-138.3	-1.2	-69.5
Apr.	59.3	6.5	11.6	-5.1	45.4	21.3	24.1	21.8	40.6	-1.0	-54.1
May <sup>(p)</sup>	-210.1	6.2	-7.4	13.6	21.9	19.8	2.1	-3.0	-52.0	0.4	-184.6

**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	19,710.1	592.3	157.8	7,917.7	614.6	2,569.8	1,285.5	4,026.7	2,537.7	7.9
2007	22,317.5	638.6	150.8	8,904.5	660.4	2,849.6	1,492.7	4,599.4	3,077.7	-56.5
2008 Q3	23,777.8	657.2	191.2	9,365.3	731.1	2,906.9	1,563.9	5,178.6	3,252.1	-68.7
Q4	24,107.5	723.0	259.6	9,727.1	726.3	2,828.2	1,613.6	4,779.3	3,567.2	-117.1
2009 Jan.	24,499.6	712.3	325.1	9,774.1	759.9	2,824.3	1,658.9	5,009.5	3,576.2	-140.9
Feb.	24,440.2	716.0	339.1	9,782.3	779.9	2,848.9	1,670.3	4,870.6	3,550.1	-117.3
Mar.	24,155.7	720.0	351.7	9,808.5	780.9	2,794.4	1,662.8	4,648.1	3,484.1	-95.0
Apr.	24,240.4	729.2	338.1	9,889.5	782.1	2,802.2	1,665.2	4,676.9	3,467.6	-110.8
May <sup>(p)</sup>	23,914.5	732.0	331.1	9,893.7	771.8	2,794.7	1,680.8	4,478.4	3,313.2	-81.6
Transactions										
2006	1,999.3	59.4	-15.2	681.4	27.6	284.3	59.7	600.6	253.6	48.0
2007	2,573.3	45.8	-13.4	838.8	54.5	270.0	150.1	774.5	465.7	-13.1
2008	1,611.0	83.3	106.1	606.7	29.8	-27.8	142.5	64.8	664.7	-59.2
2008 Q4	223.2	65.8	68.4	204.7	-10.4	-79.7	44.9	-393.8	372.2	-48.9
2009 Q1	-136.0	-4.4	89.2	25.3	55.9	-44.5	36.5	-195.4	-96.2	-2.4
2009 Jan.	98.5	-12.0	62.5	-21.4	34.8	-39.1	21.2	86.1	37.8	-71.3
Feb.	-90.2	3.6	14.0	8.8	20.2	22.4	8.7	-150.9	-36.2	19.1
Mar.	-144.3	4.0	12.7	37.9	1.0	-27.8	6.6	-130.7	-97.9	49.8
Apr.	59.3	9.3	-13.2	77.9	2.5	3.1	5.7	7.8	-14.0	-19.6
May <sup>(p)</sup>	-210.1	2.8	-7.1	14.9	0.5	16.6	18.0	-86.6	-179.7	10.6

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>

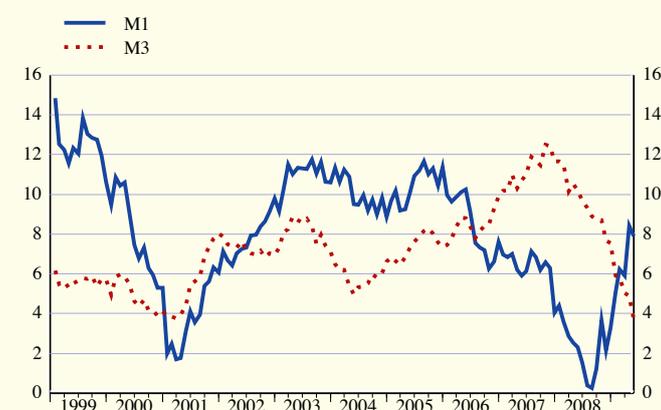
(EUR billions and annual growth rates; seasonally adjusted; outstanding amounts and growth rates at end of period, transactions during period)

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

	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>	
	M2		M3-M2	Loans				Memo item: Loans adjusted for sales and securitisation <sup>4)</sup>				
	M1	M2-M1										
	1	2	3	4	5	6	7	8	9	10	11	12
<b>Outstanding amounts</b>												
2006	3,685.1	2,959.0	6,644.1	1,099.6	7,743.7	-	5,427.8	2,319.8	10,619.0	9,148.3	-	637.3
2007	3,837.7	3,518.3	7,356.1	1,308.5	8,664.6	-	5,968.1	2,416.2	12,003.9	10,156.5	-	634.7
2008 Q3	3,894.3	3,986.1	7,880.4	1,367.3	9,247.7	-	6,123.8	2,443.8	12,801.8	10,793.3	-	434.7
Q4	3,981.9	4,046.2	8,028.2	1,379.0	9,407.2	-	6,294.2	2,562.1	12,985.7	10,784.7	-	430.0
2009 Jan.	4,103.7	3,986.1	8,089.8	1,310.0	9,399.8	-	6,444.1	2,625.6	13,084.3	10,872.0	-	369.6
Feb.	4,137.1	3,980.0	8,117.1	1,325.0	9,442.1	-	6,491.0	2,657.8	13,089.8	10,861.5	-	421.4
Mar.	4,123.3	3,960.5	8,083.8	1,313.0	9,396.8	-	6,457.1	2,688.5	13,041.8	10,811.4	-	388.4
Apr.	4,200.5	3,960.0	8,160.6	1,314.6	9,475.2	-	6,477.5	2,714.2	13,017.4	10,793.8	-	451.1
May <sup>(p)</sup>	4,189.7	3,936.3	8,126.1	1,282.4	9,408.5	-	6,509.0	2,722.8	13,018.6	10,794.7	-	530.7
<b>Transactions</b>												
2006	260.5	308.8	569.2	130.1	699.3	-	428.2	-112.2	1,102.7	896.5	964.5	204.0
2007	148.8	529.7	678.5	224.3	902.8	-	467.1	-59.6	1,362.1	1,028.5	1,119.9	5.0
2008	125.9	487.0	612.9	44.3	657.2	-	174.0	70.6	843.2	587.5	749.3	-137.5
2008 Q4	85.0	57.2	142.3	9.8	152.1	-	9.6	51.5	54.7	-11.3	79.2	42.6
2009 Q1	107.5	-103.9	3.6	-61.9	-58.3	-	130.0	109.9	27.5	-11.3	11.8	-56.8
2009 Jan.	83.3	-84.8	-1.5	-63.8	-65.3	-	78.6	47.6	36.8	24.8	32.5	-109.6
Feb.	33.4	-5.1	28.3	15.2	43.4	-	41.7	31.7	12.4	-9.4	-3.6	42.8
Mar.	-9.2	-14.0	-23.2	-13.3	-36.4	-	9.7	30.6	-21.7	-26.7	-17.1	10.0
Apr.	93.1	-16.2	76.9	2.7	79.6	-	15.9	25.6	-27.5	-18.4	-3.5	62.5
May <sup>(p)</sup>	-7.3	-18.5	-25.8	-23.3	-49.1	-	61.5	15.8	22.5	17.7	23.8	55.0
<b>Growth rates</b>												
2006 Dec.	7.6	11.6	9.4	13.2	9.9	9.8	8.5	-4.6	11.6	10.8	11.6	204.0
2007 Dec.	4.0	17.9	10.2	20.5	11.6	11.9	8.6	-2.6	12.8	11.2	12.1	5.0
2008 Sep.	1.2	17.8	9.0	7.4	8.7	8.8	5.0	0.9	10.1	8.5	9.4	-223.9
Dec.	3.3	13.7	8.3	3.3	7.5	7.0	2.9	2.9	7.0	5.8	7.2	-137.5
2009 Jan.	5.1	10.0	7.5	-2.6	5.9	6.4	3.5	5.1	6.4	5.1	6.6	-238.2
Feb.	6.2	7.7	7.0	-0.7	5.8	5.6	4.5	6.7	5.7	4.3	5.9	-176.6
Mar.	5.9	6.3	6.1	-1.1	5.0	5.2	4.4	7.7	4.7	3.2	4.7	-135.5
Apr.	8.4	3.4	5.9	-1.2	4.9	4.5	4.3	8.0	3.7	2.3	3.9	-25.6
May <sup>(p)</sup>	7.9	2.0	5.0	-3.5	3.7	.	4.9	8.3	3.1	1.8	3.4	78.3

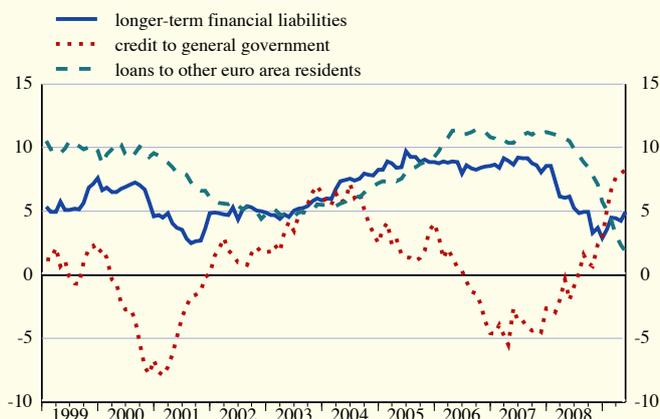
### C1 Monetary aggregates <sup>1)</sup>

(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.

Monthly and other shorter-term growth rates for selected items are available at <http://www.ecb.europa.eu/stats/money/aggregates/aggr/html/index.en.html>

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.

4) Adjustment for the derecognition of loans from the MFI balance sheet on account of their sale or securitisation.

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

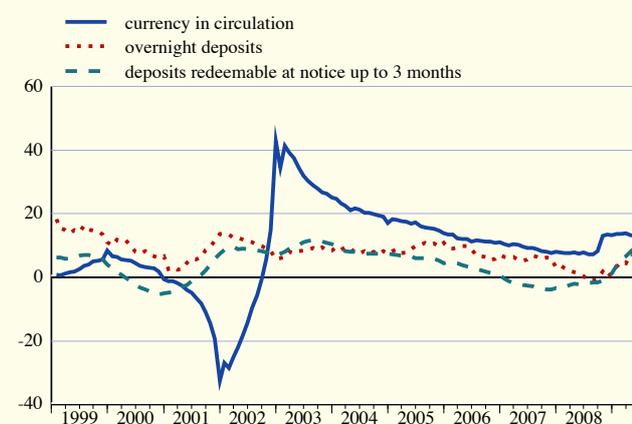
(EUR billions and annual growth rates; seasonally adjusted; outstanding amounts and growth rates at end of period, transactions during period)

### 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	3,106.7	1,404.9	1,554.1	267.1	636.5	196.0	2,385.7	102.0	1,659.9	1,280.2
2007	625.6	3,212.2	1,977.3	1,541.1	307.4	686.2	314.9	2,547.4	119.3	1,814.8	1,486.6
2008 Q3	662.9	3,231.4	2,453.8	1,532.2	342.5	736.5	288.2	2,616.7	114.8	1,833.3	1,558.9
2008 Q4	710.0	3,271.9	2,478.8	1,567.4	354.1	756.2	268.8	2,573.1	121.2	1,992.8	1,607.0
2009 Jan.	716.8	3,386.9	2,387.9	1,598.3	322.8	768.2	219.0	2,627.2	123.7	2,038.2	1,655.0
Feb.	721.8	3,415.3	2,355.6	1,624.4	327.7	779.9	217.3	2,641.7	123.0	2,057.8	1,668.4
Mar.	727.5	3,395.8	2,318.2	1,642.4	337.5	780.5	195.0	2,600.2	124.2	2,075.6	1,657.0
Apr.	729.8	3,470.8	2,292.7	1,667.4	337.1	770.6	206.9	2,594.9	125.9	2,089.4	1,667.2
May <sup>(p)</sup>	730.0	3,459.7	2,257.1	1,679.2	326.1	753.3	203.0	2,584.9	128.2	2,099.9	1,696.0
Transactions											
2006	57.3	203.1	297.9	10.8	30.1	29.9	70.0	216.4	15.3	137.6	58.9
2007	46.7	102.1	582.3	-52.5	42.2	58.7	123.4	147.5	9.7	160.4	149.5
2008	83.4	42.5	467.2	19.8	48.1	33.2	-37.0	10.8	0.6	20.8	141.9
2008 Q4	47.1	37.9	22.2	35.0	13.2	13.7	-17.1	-46.5	6.5	6.4	43.2
2009 Q1	16.1	91.4	-178.5	74.6	-16.7	25.7	-70.8	13.1	2.2	77.3	37.4
2009 Jan.	5.4	77.9	-115.1	30.3	-31.5	13.2	-45.4	14.2	1.7	38.8	23.9
Feb.	5.1	28.4	-31.3	26.1	4.9	11.9	-1.7	12.3	-0.7	19.2	10.8
Mar.	5.6	-14.9	-32.1	18.2	9.9	0.5	-23.7	-13.4	1.2	19.2	2.7
Apr.	2.3	90.7	-41.8	25.6	-0.4	-8.6	11.7	-9.8	1.0	11.3	13.4
May <sup>(p)</sup>	0.2	-7.5	-30.5	11.9	-10.9	-6.8	-5.6	15.9	2.2	12.3	31.1
Growth rates											
2006 Dec.	11.0	7.0	26.8	0.7	12.8	4.8	55.2	9.9	17.7	9.0	4.8
2007 Dec.	8.1	3.3	41.3	-3.4	15.8	9.2	63.6	6.2	9.5	9.7	11.4
2008 Sep.	8.2	-0.1	34.4	-1.7	16.5	4.1	5.4	2.3	-5.6	3.8	12.2
2008 Dec.	13.3	1.3	23.4	1.3	15.6	4.8	-12.2	0.4	0.5	1.1	9.7
2009 Jan.	13.7	3.4	14.6	3.9	5.9	2.8	-25.3	0.2	0.6	2.9	10.4
Feb.	13.6	4.8	9.4	5.6	5.4	3.8	-20.1	1.3	1.3	4.1	10.8
Mar.	13.8	4.4	6.2	6.6	8.5	4.2	-27.1	0.6	3.7	5.0	10.4
Apr.	13.2	7.4	0.3	8.0	3.6	3.2	-20.2	-0.2	5.1	5.4	10.4
May <sup>(p)</sup>	13.1	6.9	-2.8	9.3	1.9	2.7	-26.5	0.0	7.7	5.6	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; seasonally adjusted; outstanding amounts and growth rates at end of period, transactions during period)

### 1. Loans to financial intermediaries, non-financial corporations and households

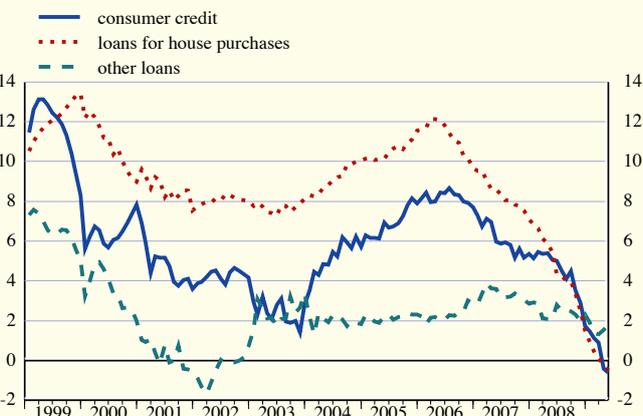
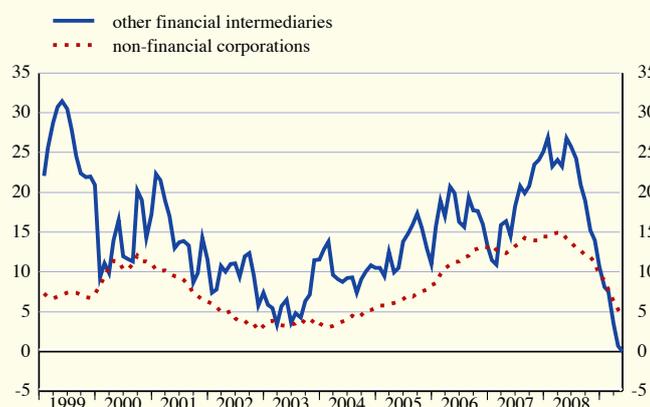
	Insurance corporations and pension funds	Other financial intermediaries <sup>3)</sup>	Non-financial corporations			Households <sup>4)</sup>				
	Total	Total	Total	Up to 1 year	Over 1 year and up to 5 years	Over 5 years	Total	Consumer credit	Loans for house purchase	Other loans
	1	2	3	4	5	6	7	8	9	10
<b>Outstanding amounts</b>										
2006	92.2	703.9	3,836.9	1,141.6	707.0	1,988.3	4,515.3	584.2	3,194.3	736.8
2007	107.4	877.5	4,383.4	1,282.6	859.5	2,241.2	4,788.2	616.1	3,419.9	752.2
2008 Q3	102.0	1,002.9	4,769.5	1,378.5	954.3	2,436.7	4,918.8	636.8	3,514.8	767.1
2008 Q4	103.7	974.6	4,824.2	1,384.0	960.8	2,479.4	4,882.1	630.6	3,482.1	769.4
2009 Jan.	98.2	990.3	4,884.6	1,394.3	978.1	2,512.2	4,898.9	639.6	3,488.9	770.3
Feb.	96.2	986.0	4,880.0	1,374.1	980.7	2,525.2	4,899.2	640.8	3,490.9	767.6
Mar.	103.2	970.4	4,848.3	1,348.1	974.0	2,526.2	4,889.6	640.8	3,482.4	766.3
Apr.	101.6	961.1	4,841.8	1,332.8	979.0	2,530.0	4,889.2	635.5	3,483.8	769.9
May <sup>(p)</sup>	101.6	978.0	4,827.4	1,324.7	974.7	2,527.9	4,887.8	634.0	3,481.9	771.9
<b>Transactions</b>										
2006	20.2	86.9	444.8	100.9	123.0	220.8	344.7	42.3	281.9	20.4
2007	16.8	176.3	555.9	146.1	156.0	253.8	279.5	31.5	227.0	21.0
2008	-4.2	90.0	421.7	88.5	120.1	213.1	80.1	10.7	52.0	17.3
2008 Q4	1.6	-29.4	55.2	-4.0	24.4	34.8	-38.7	-6.6	-34.9	2.8
2009 Q1	-3.9	-11.2	10.9	-39.2	8.6	41.6	-7.1	2.5	-7.6	-2.0
2009 Jan.	-5.7	5.2	28.7	-0.3	9.2	19.8	-3.5	-0.1	-3.3	-0.1
Feb.	-2.0	-5.7	-3.4	-19.3	2.6	13.2	1.7	1.7	2.2	-2.2
Mar.	3.7	-10.7	-14.4	-19.6	-3.2	8.5	-5.4	0.9	-6.5	0.2
Apr.	-1.6	-10.4	-3.6	-14.8	5.5	5.6	-2.9	-5.3	0.5	1.9
May <sup>(p)</sup>	0.1	20.8	-4.7	-5.0	-1.7	2.0	1.6	-1.0	-0.2	2.9
<b>Growth rates</b>										
2006 Dec.	27.9	14.0	13.1	9.7	20.8	12.4	8.2	7.7	9.7	2.9
2007 Dec.	18.2	24.9	14.5	12.8	22.0	12.8	6.2	5.4	7.1	2.9
2008 Sep.	-8.0	18.8	12.1	9.8	17.5	11.4	3.8	4.5	4.0	2.5
2008 Dec.	-3.9	10.3	9.6	6.9	13.9	9.4	1.7	1.7	1.5	2.3
2009 Jan.	-4.7	8.3	9.0	6.1	13.0	9.1	1.2	1.5	0.9	1.9
Feb.	-8.1	7.8	7.8	3.3	12.0	8.7	0.7	1.1	0.4	1.4
Mar.	-5.5	3.5	6.3	0.0	10.5	8.3	0.4	0.9	0.1	1.3
Apr.	-2.0	0.6	5.3	-1.3	10.0	7.2	0.0	-0.4	-0.2	1.6
May <sup>(p)</sup>	-3.0	-0.1	4.4	-2.3	9.1	6.5	-0.2	-0.6	-0.5	1.8

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

(annual growth rates; not seasonally adjusted)

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

(annual growth rates; not seasonally adjusted)



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 investment funds.
- 4) Including non-profit institutions serving households.

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

(EUR billions and annual growth rates; not seasonally adjusted; outstanding amounts and growth rates at end of period, transactions during period)

## 2. Loans to financial intermediaries and non-financial corporations

	Insurance corporations and pension funds				Other financial intermediaries <sup>3)</sup>				Non-financial corporations			
	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
Outstanding amounts												
2007	95.6	71.2	7.5	17.0	862.2	522.5	148.0	191.7	4,386.2	1,278.0	859.2	2,249.1
2008 Q3	101.8	78.0	6.4	17.5	1,011.6	616.3	169.5	225.8	4,761.1	1,374.6	953.5	2,433.0
2008 Q4	92.3	68.5	5.7	18.0	960.8	553.9	168.8	238.0	4,827.0	1,378.3	960.6	2,488.1
2009 Feb.	94.3	70.1	6.5	17.6	982.6	560.0	179.6	243.0	4,869.1	1,367.1	978.8	2,523.2
Mar.	102.0	75.6	6.3	20.2	986.9	569.1	180.0	237.8	4,844.0	1,345.3	974.4	2,524.3
Apr.	103.6	77.1	5.8	20.7	983.9	562.5	180.4	241.0	4,844.7	1,336.9	978.6	2,529.3
May <sup>4)</sup>	105.6	78.8	5.8	21.0	993.4	575.5	179.2	238.8	4,827.0	1,321.3	975.4	2,530.3
Transactions												
2007	15.0	16.7	-5.2	3.5	175.0	113.4	34.1	27.5	555.7	144.9	156.1	254.7
2008	-3.8	-2.9	-1.8	0.9	91.4	27.2	21.5	42.7	421.7	87.7	120.1	213.9
2008 Q4	-9.7	-9.6	-0.6	0.6	-51.9	-60.8	0.1	8.8	66.5	-5.7	25.0	47.2
2009 Q1	6.4	5.7	0.6	0.1	19.1	10.5	11.2	-2.6	3.9	-36.3	9.3	30.9
2009 Feb.	-2.5	-2.6	0.0	0.1	-3.6	-7.6	1.2	2.7	-11.4	-21.8	2.1	8.4
Mar.	4.6	4.3	-0.2	0.5	9.2	12.2	1.2	-4.2	-7.7	-15.4	-0.9	8.5
Apr.	1.6	1.5	-0.5	0.6	-4.1	-7.4	0.1	3.2	3.6	-7.9	4.6	6.9
May <sup>4)</sup>	2.2	1.8	0.0	0.4	13.5	15.2	-0.5	-1.1	-8.0	-12.6	-0.5	5.0
Growth rates												
2007 Dec.	18.2	30.6	-41.1	23.5	25.1	27.2	29.6	16.7	14.5	12.7	22.1	12.8
2008 Sep.	-7.6	-10.6	-26.1	18.7	18.9	15.6	24.5	24.7	12.1	9.8	17.5	11.4
2008 Dec.	-3.9	-4.0	-23.7	5.0	10.7	5.4	14.6	22.2	9.6	6.8	13.9	9.4
2009 Feb.	-8.3	-10.1	-17.1	4.4	7.5	-1.0	19.8	22.7	7.8	3.2	12.0	8.7
Mar.	-5.3	-7.3	-17.2	10.4	3.5	-5.2	19.7	17.4	6.3	0.1	10.5	8.3
Apr.	-2.1	-2.3	-24.1	8.5	0.7	-9.5	19.1	18.4	5.3	-1.3	10.0	7.2
May <sup>4)</sup>	-3.2	-4.6	-21.7	11.2	-0.1	-9.2	16.5	16.1	4.4	-2.3	9.0	6.5

3. Loans to households<sup>4)</sup>

	Total	Consumer credit				Loans for house purchase				Other loans			
		Total	Up to 1 year	Over 1 year and up to 5 years	Over 5 years	Total	Up to 1 year	Over 1 year and up to 5 years	Over 5 years	Total	Up to 1 year	Over 1 year and up to 5 years	Over 5 years
	1	2	3	4	5	6	7	8	9	10	11	12	13
Outstanding amounts													
2007	4,794.9	618.4	137.5	203.9	276.9	3,423.3	15.9	73.7	3,333.7	753.2	147.4	104.0	501.8
2008 Q3	4,925.6	638.3	139.3	201.4	297.6	3,519.9	16.8	71.7	3,431.4	767.3	149.6	100.0	517.8
2008 Q4	4,888.2	632.8	138.8	196.1	298.0	3,484.8	17.2	67.5	3,400.2	770.5	155.0	90.5	524.9
2009 Feb.	4,887.6	635.4	135.9	201.8	297.8	3,485.8	17.1	65.5	3,403.3	766.4	150.4	88.9	527.0
Mar.	4,879.9	637.8	137.5	201.7	298.7	3,477.0	17.3	66.9	3,392.8	765.1	150.7	88.3	526.1
Apr.	4,876.3	633.8	135.7	199.9	298.2	3,475.1	17.1	66.8	3,391.2	767.4	148.2	88.4	530.8
May <sup>4)</sup>	4,879.2	632.7	134.5	199.4	298.8	3,476.8	17.3	66.6	3,392.9	769.7	147.2	88.5	534.1
Transactions													
2007	278.9	31.5	3.8	1.1	26.6	226.4	0.9	2.3	223.2	21.1	1.7	4.4	14.9
2008	79.4	10.7	1.1	-9.1	18.6	51.4	1.1	-3.8	54.1	17.4	2.5	-5.3	20.2
2008 Q4	-39.4	-5.9	-0.3	-5.7	0.1	-37.2	0.3	-2.3	-35.2	3.7	0.8	-1.9	4.7
2009 Q1	-22.8	-2.7	-1.2	-2.1	0.6	-15.8	0.1	-2.0	-13.8	-4.3	-4.2	-2.0	1.9
2009 Feb.	-4.7	-1.8	-1.0	-0.9	0.1	-1.1	-0.2	-0.4	-0.5	-1.8	-1.9	-0.6	0.7
Mar.	-3.4	3.2	1.9	0.0	1.3	-6.9	0.2	0.1	-7.2	0.2	0.7	-0.4	0.0
Apr.	-6.1	-4.1	-1.7	-1.7	-0.7	-2.7	-0.4	-0.2	-2.1	0.7	-2.5	0.2	3.0
May <sup>4)</sup>	5.9	-0.6	-1.1	-0.3	0.8	3.3	0.2	-0.1	3.3	3.2	-0.7	0.1	3.8
Growth rates													
2007 Dec.	6.2	5.4	2.8	0.5	10.7	7.1	6.0	3.2	7.2	2.9	1.2	4.3	3.0
2008 Sep.	3.8	4.5	4.2	-1.3	9.0	4.0	4.8	-1.3	4.1	2.5	2.2	-2.3	3.5
2008 Dec.	1.7	1.7	0.8	-4.4	6.7	1.5	7.0	-5.2	1.6	2.3	1.7	-5.1	4.0
2009 Feb.	0.7	1.1	0.3	-4.3	5.4	0.4	7.5	-7.6	0.6	1.4	0.6	-7.4	3.4
Mar.	0.4	0.9	1.1	-4.5	4.7	0.1	7.1	-7.2	0.2	1.3	-0.2	-7.7	3.6
Apr.	0.0	-0.4	0.1	-6.1	3.4	-0.2	4.6	-7.2	-0.1	1.5	-1.0	-5.5	3.7
May <sup>4)</sup>	-0.1	-0.6	-0.9	-6.0	3.4	-0.5	7.3	-7.4	-0.4	1.8	-0.7	-5.2	3.9

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 investment funds.
- 4) Including non-profit institutions serving households.

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

(EUR billions and annual growth rates; not seasonally adjusted; outstanding amounts and growth rates at end of period, transactions during period)

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

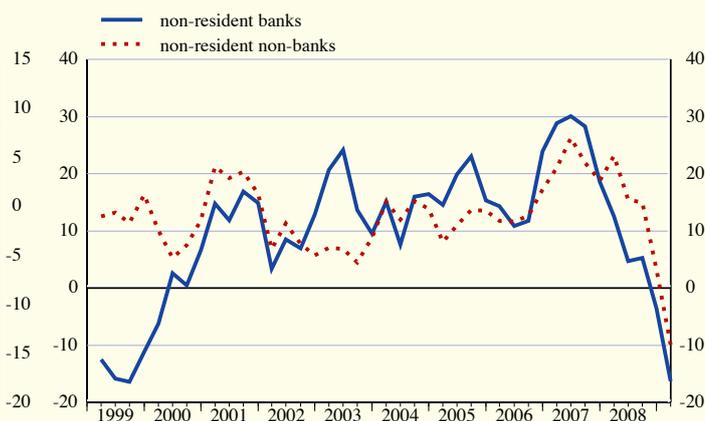
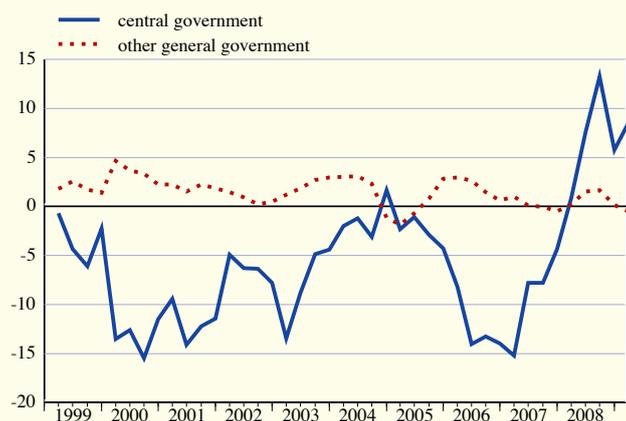
	General government					Non-euro area residents				
	Total	Central government	Other general government			Total	Banks <sup>3)</sup>	Non-banks		
			State government	Local government	Social security funds			Total	General government	Other
	1	2	3	4	5	6	7	8	9	10
Outstanding amounts										
2006	809.0	104.0	232.5	446.6	25.8	2,931.8	2,070.6	861.2	63.1	798.1
2007	954.5	213.4	217.6	494.0	29.4	3,307.6	2,352.4	955.1	59.8	895.3
2008 Q2	974.0	220.4	215.1	496.4	42.0	3,321.2	2,312.5	1,008.8	63.0	945.8
Q3	978.8	225.6	210.0	497.8	45.4	3,525.7	2,461.8	1,063.9	61.8	1,002.0
Q4	967.6	226.9	210.1	508.4	22.2	3,250.1	2,284.6	965.5	57.8	907.7
2009 Q1 <sup>(p)</sup>	970.1	229.4	205.6	512.8	22.3	3,056.5	2,114.5	942.0	57.1	884.9
Transactions										
2006	-13.2	-17.5	-14.3	22.0	-3.4	536.5	408.5	128.0	-0.1	128.1
2007	-8.0	-4.5	-13.0	6.0	3.6	541.6	382.1	159.5	0.3	159.2
2008	13.3	12.3	-8.1	16.3	-7.2	-51.7	-82.8	30.9	0.6	30.3
2008 Q2	17.7	9.7	2.1	1.1	4.8	-98.9	-93.4	-5.4	1.6	-7.0
Q3	4.5	4.9	-5.2	1.4	3.4	90.8	73.5	17.3	-3.2	20.5
Q4	-9.4	1.1	-0.2	12.8	-23.2	-256.3	-182.5	-73.9	-0.7	-73.2
2009 Q1 <sup>(p)</sup>	1.5	2.1	-4.4	3.8	0.1	-236.8	-201.6	-41.4	-1.9	-39.6
Growth rates										
2006 Dec.	-1.6	-14.0	-5.8	5.2	-11.6	21.9	24.0	17.2	-0.1	18.9
2007 Dec.	-1.0	-4.3	-5.6	1.3	13.8	18.6	18.6	18.8	0.5	20.3
2008 June	2.4	7.5	-1.8	2.4	11.7	7.8	4.7	15.4	9.5	15.8
Sep.	3.4	13.2	-1.9	2.7	9.6	8.0	5.2	15.0	1.8	15.9
Dec.	1.4	5.8	-3.7	3.3	-24.4	-1.5	-3.5	3.3	0.9	3.5
2009 Mar. <sup>(p)</sup>	1.5	8.4	-3.6	3.9	-40.0	-14.2	-16.3	-9.9	-6.8	-10.1

### C7 Loans to government <sup>2)</sup>

(annual growth rates; not seasonally adjusted)

### C8 Loans to non-euro area residents <sup>2)</sup>

(annual growth rates; not seasonally adjusted)



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>

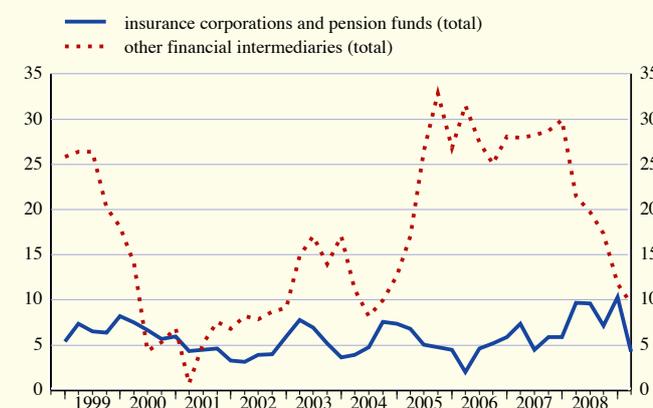
(EUR billions and annual growth rates; outstanding amounts and growth rates at end of period, transactions during period)

### 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	656.2	70.0	59.8	499.1	1.0	1.4	24.9	1,135.6	281.8	249.7	468.2	10.5	0.2	125.1
2007	691.7	70.9	70.5	527.5	0.8	1.1	20.8	1,466.4	312.5	345.7	648.6	12.2	0.3	147.1
2008 Q3	730.4	75.2	91.0	541.1	1.2	1.6	20.4	1,634.5	322.5	443.7	669.1	11.6	0.1	187.5
2008 Q4	765.4	83.8	117.1	538.9	1.1	1.5	23.1	1,804.1	320.9	420.5	853.4	12.3	0.1	197.0
2009 Jan.	766.4	99.8	99.7	544.0	1.2	1.5	20.2	1,802.3	341.9	363.6	878.9	12.9	0.1	204.9
Feb.	759.8	92.3	98.7	544.5	1.4	1.5	21.3	1,819.6	342.3	359.5	891.8	14.1	0.1	212.0
Mar.	763.4	91.7	99.7	546.7	2.3	1.5	21.4	1,839.4	333.4	348.8	908.0	14.4	0.0	234.7
Apr.	765.7	90.0	101.1	550.4	1.8	1.5	20.8	1,867.3	325.9	372.6	914.6	16.1	0.0	238.1
May <sup>6)</sup>	758.9	83.5	100.5	551.8	1.9	1.5	19.7	1,855.0	308.7	364.6	926.6	15.8	0.0	239.2
Transactions														
2006	36.4	2.0	4.9	25.4	-0.3	0.0	4.4	247.4	45.2	67.0	129.8	0.3	0.1	4.9
2007	38.5	0.8	10.5	31.9	-0.3	-0.3	-4.1	339.0	34.0	98.7	180.4	1.7	0.1	24.1
2008	71.7	12.4	44.9	12.4	-0.3	0.1	2.2	172.9	4.6	71.4	46.6	-0.3	-0.3	50.9
2008 Q4	36.7	8.5	26.1	-0.3	-0.1	-0.1	2.7	13.7	-2.3	-23.5	27.8	0.6	0.0	11.1
2009 Q1	-6.9	5.5	-18.9	7.8	0.5	0.0	-1.7	31.4	10.6	-72.2	53.2	2.1	0.0	37.7
2009 Jan.	-1.0	15.4	-18.6	5.1	0.1	0.0	-2.9	-10.4	17.9	-58.7	22.0	0.5	0.0	7.8
Feb.	-6.6	-7.5	-1.0	0.5	0.2	0.0	1.2	16.2	-0.3	-4.2	12.5	1.2	0.0	7.1
Mar.	0.8	-2.4	0.8	2.2	0.2	0.0	0.1	25.7	-7.0	-9.3	18.7	0.5	0.0	22.9
Apr.	2.2	-1.7	1.3	3.7	-0.5	0.0	-0.6	26.5	8.8	8.5	4.2	1.7	0.0	3.4
May <sup>6)</sup>	-6.5	-6.4	-0.5	1.5	0.1	0.0	-1.1	-7.3	-15.7	-6.1	13.6	-0.2	0.0	1.2
Growth rates														
2006 Dec.	5.9	2.9	9.0	5.4	-20.4	-	21.2	28.1	19.4	36.6	38.7	2.6	-	4.0
2007 Dec.	5.9	1.1	17.5	6.4	-25.3	-	-16.4	29.9	12.0	39.7	38.5	16.4	-	19.1
2008 Sep.	7.1	10.8	38.9	3.2	-20.3	-	-3.1	17.3	-3.3	45.3	15.5	-11.7	-	16.1
2008 Dec.	10.3	17.3	62.1	2.4	-23.4	-	10.5	11.8	1.4	20.8	7.2	-2.3	-	34.6
2009 Jan.	6.5	18.5	26.0	3.1	-18.1	-	-20.2	9.2	1.2	6.6	10.0	-2.3	-	25.3
Feb.	6.8	26.0	24.5	2.6	-12.6	-	-13.7	10.0	5.8	-1.5	12.9	14.9	-	28.3
Mar.	4.3	8.8	13.8	2.4	-3.4	-	-2.2	9.6	-1.7	-3.4	13.9	6.4	-	39.4
Apr.	4.7	16.5	10.3	2.7	-13.5	-	-8.1	9.0	7.9	-9.4	13.5	11.7	-	31.9
May <sup>6)</sup>	4.1	16.5	6.6	2.7	-1.0	-	-9.5	7.4	0.5	-9.9	12.6	22.6	-	32.0

### C9 Total deposits by sector <sup>2)</sup>

(annual growth rates)

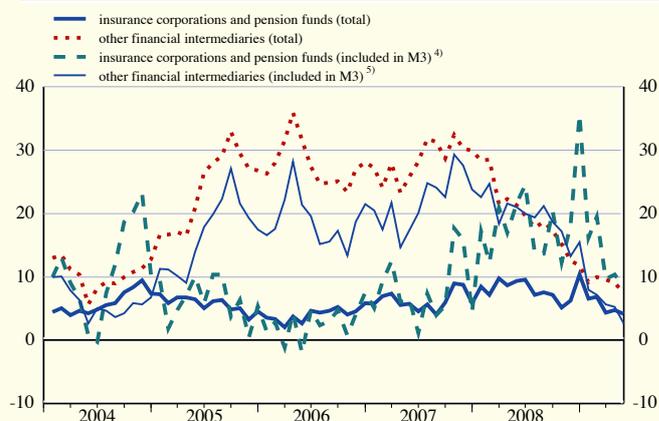


Source: ECB.

- 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.

### C10 Total deposits and deposits included in M3 by sector <sup>2)</sup>

(annual growth rates)



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

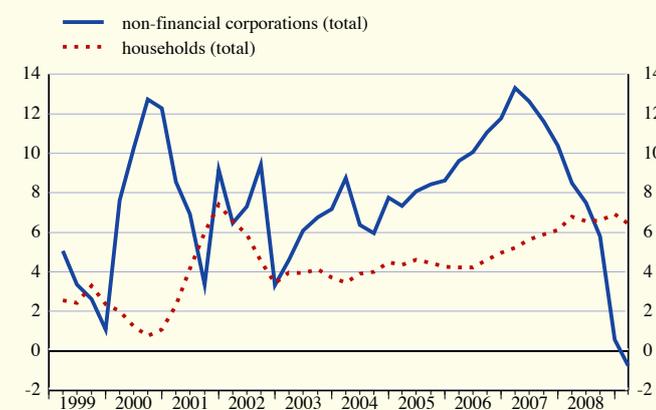
(EUR billions and annual growth rates; outstanding amounts and growth rates at end of period, transactions during period)

### 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	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Outstanding amounts														
2006	1,352.7	855.0	361.3	69.4	40.9	1.3	24.8	4,551.7	1,751.4	668.9	607.4	1,354.3	99.8	70.0
2007	1,488.8	888.9	485.3	59.6	29.9	1.4	23.7	4,990.6	1,778.9	993.3	561.6	1,458.6	111.1	87.1
2008 Q3	1,517.4	879.9	520.8	64.2	26.0	1.4	25.1	5,203.5	1,751.0	1,270.4	525.1	1,446.0	103.0	108.0
Q4	1,516.4	889.9	508.6	64.6	28.3	1.3	23.7	5,370.2	1,814.7	1,350.1	517.9	1,490.2	113.6	83.7
2009 Jan.	1,494.4	884.0	488.2	67.1	32.4	1.3	21.3	5,439.6	1,859.0	1,335.8	522.8	1,530.9	114.4	76.6
Feb.	1,479.3	867.1	483.8	68.6	35.8	1.3	22.7	5,448.9	1,883.3	1,309.4	522.7	1,549.3	114.3	69.9
Mar.	1,487.5	878.2	479.7	70.3	38.7	1.3	19.2	5,447.0	1,900.0	1,280.7	524.5	1,565.4	114.9	61.4
Apr.	1,502.6	881.6	485.3	71.8	42.8	1.4	19.7	5,482.8	1,957.7	1,241.6	528.0	1,582.9	115.8	56.8
May <sup>4)</sup>	1,512.2	897.2	475.0	72.2	46.1	1.4	20.4	5,496.4	1,986.2	1,214.2	531.7	1,592.8	117.3	54.2
Transactions														
2006	143.0	86.8	56.0	3.5	-3.6	0.1	0.1	215.1	65.6	137.5	-23.0	2.4	15.3	17.2
2007	140.2	34.1	126.8	-8.1	-10.8	-0.7	-1.1	282.9	22.4	320.9	-45.4	-43.2	11.2	17.1
2008	8.2	-4.6	13.3	3.3	-3.6	-0.3	0.0	347.6	28.6	335.6	-43.1	28.1	1.7	-3.4
2008 Q4	-2.9	9.0	-13.4	0.7	2.3	-0.1	-1.4	163.1	63.2	76.7	-7.0	44.0	10.6	-24.4
2009 Q1	-39.0	-17.0	-33.0	4.3	11.1	0.0	-4.4	40.3	64.0	-81.0	4.1	75.0	0.5	-22.2
2009 Jan.	-38.6	-15.7	-26.8	2.2	4.1	0.0	-2.4	29.0	22.3	-28.8	2.3	40.3	0.0	-7.1
Feb.	-14.2	-16.4	-4.3	1.6	3.4	0.0	1.4	10.3	24.3	-25.3	-0.3	18.3	-0.1	-6.6
Mar.	13.9	15.1	-1.9	0.6	3.5	0.0	-3.5	1.0	17.4	-26.8	2.0	16.3	0.6	-8.5
Apr.	15.4	4.2	5.2	1.4	4.2	0.0	0.5	34.4	56.5	-39.4	3.5	18.1	0.3	-4.7
May <sup>4)</sup>	12.7	17.1	-8.9	0.6	3.2	0.0	0.6	15.7	28.9	-25.8	3.7	10.0	1.4	-2.6
Growth rates														
2006 Dec.	11.8	11.3	18.2	5.2	-8.1	5.9	0.6	5.0	3.9	25.8	-3.6	0.2	18.1	32.6
2007 Dec.	10.4	4.0	35.1	-11.8	-26.3	-31.6	-4.4	6.1	1.3	47.7	-7.5	-3.3	11.2	24.4
2008 Sep.	5.8	3.0	14.7	-2.7	-23.2	-17.3	3.0	6.6	-0.6	40.8	-7.0	-1.0	-5.2	28.6
Dec.	0.6	-0.5	2.8	5.4	-11.4	-16.2	0.0	6.9	1.6	33.2	-7.7	1.9	1.5	-3.9
2009 Jan.	1.7	2.8	-1.2	9.1	6.3	-17.2	-4.5	6.9	4.1	24.7	-6.5	4.5	1.5	-16.5
Feb.	-0.4	1.6	-6.3	11.0	20.7	-11.0	-2.7	6.9	6.4	19.4	-5.7	5.8	2.2	-27.1
Mar.	-0.7	1.2	-6.8	12.3	31.5	-9.5	-16.0	6.4	6.8	15.1	-4.5	6.6	4.7	-35.8
Apr.	-0.5	2.7	-9.8	13.3	50.9	-3.3	-5.9	6.2	9.1	8.3	-3.1	7.8	6.2	-41.8
May <sup>4)</sup>	-1.0	2.9	-12.2	12.8	64.2	-2.4	-4.3	5.9	10.3	3.7	-1.7	8.6	8.9	-46.8

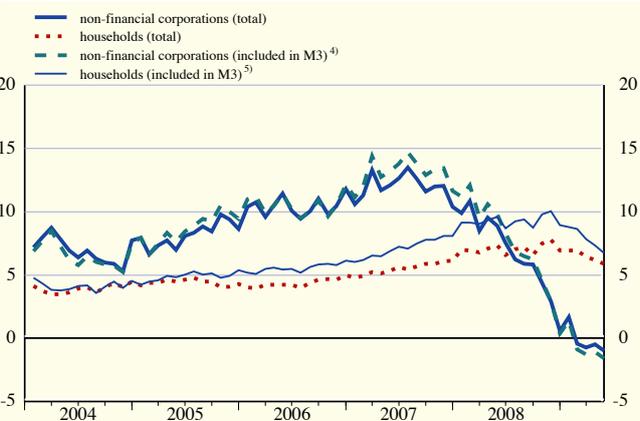
### C11 Total deposits by sector <sup>2)</sup>

(annual growth rates)



### C12 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>**

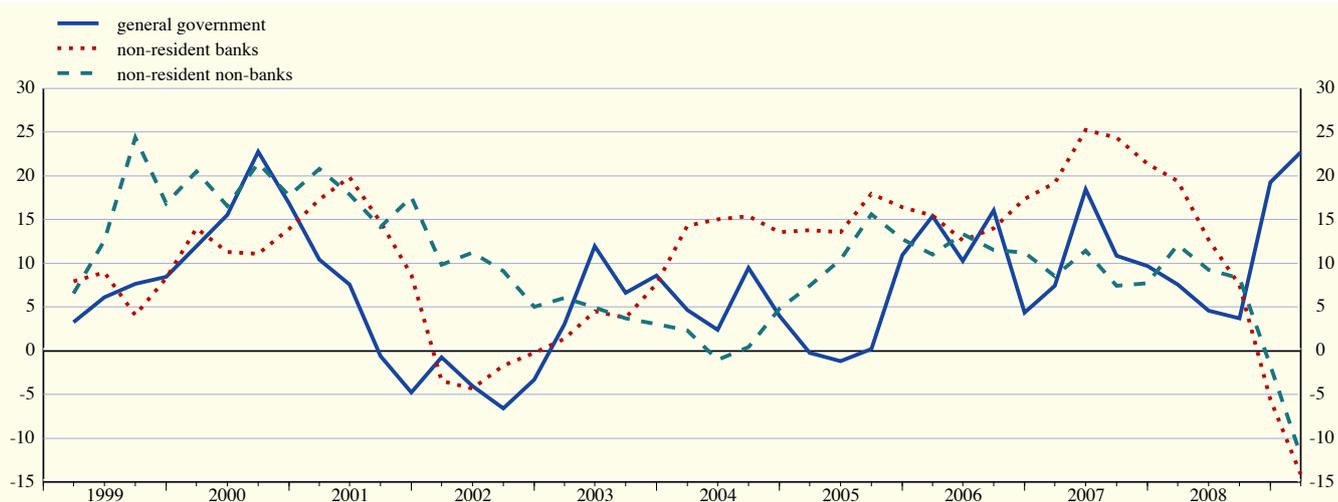
(EUR billions and annual growth rates; outstanding amounts and growth rates at end of period, transactions during period)

**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										
2006	329.6	124.1	45.4	91.4	68.8	3,430.0	2,561.5	868.6	128.5	740.1
2007	374.8	126.9	59.0	108.5	80.4	3,857.3	2,948.5	908.8	143.3	765.5
2008 Q2	412.3	156.0	56.4	113.5	86.4	4,020.6	3,041.2	979.4	129.3	850.1
Q3	401.7	139.9	61.7	114.4	85.7	4,145.6	3,142.2	1,003.4	141.8	861.6
Q4	445.1	190.8	52.3	116.1	85.9	3,707.4	2,809.9	897.5	65.8	831.7
2009 Q1 <sup>(p)</sup>	464.0	216.1	50.6	113.5	83.8	3,662.5	2,793.6	868.8	63.1	805.7
Transactions										
2006	13.6	-24.6	7.0	7.6	23.6	475.9	387.2	88.7	6.6	82.1
2007	31.9	-3.1	13.6	9.8	11.6	610.6	543.5	67.1	20.2	46.8
2008	72.3	63.5	-6.5	8.4	7.0	-181.9	-164.8	-17.1	-36.8	19.6
2008 Q2	35.2	16.1	6.8	4.9	7.4	-16.6	-36.1	19.5	-1.7	21.2
Q3	-10.8	-16.0	5.2	0.8	-0.8	-15.4	-16.8	1.3	8.7	-7.4
Q4	45.9	50.8	-9.2	2.7	1.5	-427.4	-331.5	-95.9	-35.3	-60.6
2009 Q1 <sup>(p)</sup>	15.2	22.4	-1.7	-3.4	-2.2	-104.7	-63.8	-41.7	-3.0	-38.7
Growth rates										
2006 Dec.	4.3	-16.6	18.4	9.3	52.1	15.7	17.3	11.2	5.3	12.4
2007 Dec.	9.7	-2.4	29.9	10.7	16.9	17.9	21.4	7.8	15.8	6.3
2008 June	4.6	-12.1	28.9	10.5	21.0	11.9	12.7	9.2	-0.2	10.8
Sep.	3.7	-6.8	2.9	8.3	18.9	7.7	7.5	8.3	-1.2	10.1
Dec.	19.3	49.9	-11.0	7.7	8.7	-4.6	-5.5	-1.7	-25.5	2.7
2009 Mar. <sup>(p)</sup>	22.7	52.5	2.2	4.6	7.4	-13.5	-14.1	-11.9	-24.5	-9.9

**C13 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.

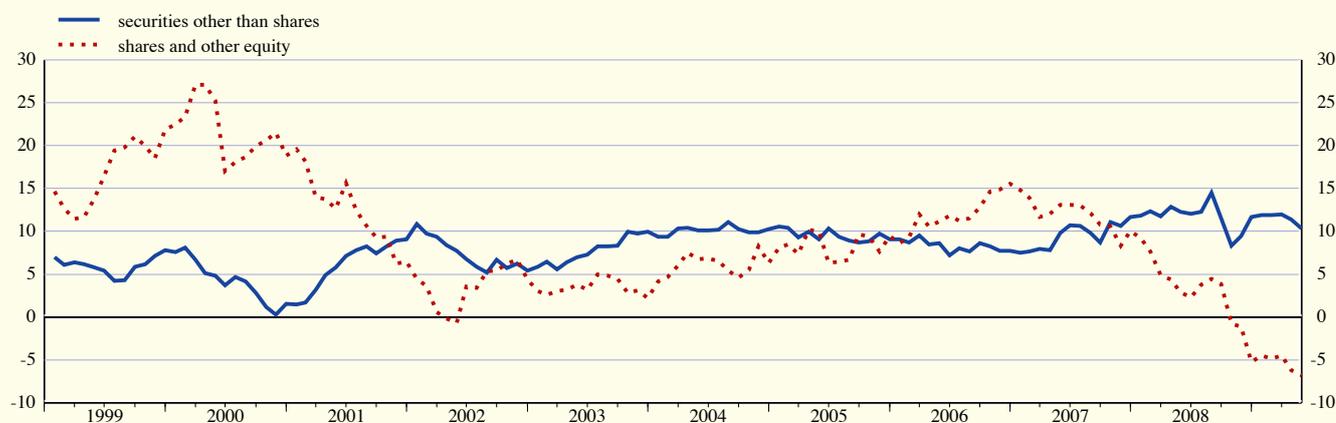
## 2.6 MFI holdings of securities, breakdown <sup>1), 2)</sup>

(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	4,671.3	1,564.7	72.3	1,262.7	16.1	615.7	30.1	1,109.8	1,465.0	372.7	798.7	293.6
2007	5,124.7	1,656.3	84.0	1,180.3	16.6	919.6	33.3	1,234.6	1,636.5	424.5	869.3	342.7
2008 Q3	5,516.3	1,803.6	102.0	1,179.8	15.6	1,057.4	49.4	1,308.5	1,605.7	452.1	864.0	289.5
Q4	5,858.4	1,887.4	92.4	1,225.4	19.3	1,355.2	51.2	1,227.5	1,477.1	423.3	776.4	277.4
2009 Jan.	6,048.8	1,948.2	103.1	1,285.0	23.4	1,351.3	55.4	1,282.4	1,489.8	425.4	779.7	284.7
Feb.	6,134.4	1,969.9	107.0	1,321.5	21.0	1,371.7	55.9	1,287.4	1,463.7	421.0	768.0	274.8
Mar.	6,144.6	1,985.6	103.5	1,368.3	20.6	1,399.7	50.7	1,216.3	1,457.6	421.9	764.5	271.2
Apr.	6,217.6	2,016.4	102.9	1,385.7	20.9	1,422.7	50.9	1,218.1	1,492.7	429.6	789.1	273.9
May <sup>(p)</sup>	6,234.2	2,043.8	107.0	1,403.9	19.2	1,423.1	47.6	1,189.6	1,489.7	429.5	786.3	273.8
<b>Transactions</b>												
2006	340.2	123.6	10.7	-120.1	0.7	100.2	6.5	218.7	197.3	62.5	96.4	38.4
2007	543.8	136.1	18.0	-86.2	1.5	269.5	9.5	195.4	147.8	51.3	55.4	41.0
2008	600.3	212.5	6.0	36.6	1.9	295.3	19.1	28.8	-84.1	22.9	-56.5	-50.5
2008 Q4	217.3	79.5	-8.2	37.6	3.4	152.7	2.4	-50.1	-86.1	-8.7	-71.3	-6.0
2009 Q1	263.2	98.8	8.6	135.3	0.3	44.3	-2.6	-21.4	-3.8	0.5	-0.9	-3.4
2009 Jan.	125.4	59.0	3.8	52.4	2.1	-6.8	0.2	14.8	24.0	4.4	11.0	8.6
Feb.	87.7	24.8	3.7	36.9	-2.4	21.7	0.0	3.1	-17.9	-2.8	-7.6	-7.5
Mar.	50.0	14.9	1.1	46.1	0.6	29.4	-2.8	-39.3	-9.8	-1.0	-4.3	-4.5
Apr.	63.0	30.5	-2.2	17.7	0.2	24.6	-0.3	-7.5	28.7	5.2	21.7	1.7
May <sup>(p)</sup>	53.8	24.8	6.6	22.2	-0.8	3.2	-1.3	-0.9	-4.6	-1.3	-3.1	-0.2
<b>Growth rates</b>												
2006 Dec.	7.7	8.5	16.5	-8.7	4.4	19.2	25.6	24.1	15.5	20.1	13.6	15.1
2007 Dec.	11.7	8.7	25.3	-6.8	10.7	43.3	33.4	17.7	10.0	13.7	6.9	13.9
2008 Sep.	11.5	11.1	24.2	-1.8	6.5	31.6	46.0	10.0	3.9	11.0	7.9	-14.6
Dec.	11.7	12.7	8.2	3.1	9.9	32.2	57.5	2.4	-5.3	5.4	-6.7	-15.3
2009 Jan.	11.9	14.4	4.0	6.2	16.4	30.8	44.1	0.1	-4.5	5.2	-6.5	-12.1
Feb.	11.9	13.9	6.2	9.4	19.0	29.8	45.2	-1.6	-4.9	2.4	-5.3	-13.6
Mar.	12.0	14.6	10.7	12.6	16.0	30.7	3.3	-5.1	-4.5	-0.1	-6.1	-6.4
Apr.	11.3	15.0	3.8	12.9	20.4	28.9	-3.7	-6.9	-6.2	-0.2	-9.1	-6.6
May <sup>(p)</sup>	10.3	13.7	2.8	14.1	18.5	26.1	-6.3	-8.3	-6.8	-2.9	-8.8	-6.7

## C14 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	-2.5	-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	-4.5	-1.1	-1.5	-1.9	-2.7	0.0	-0.2	-2.5	-6.7	-1.2	-2.3	-3.2
2008 Q4	-1.5	-0.3	-0.5	-0.7	-0.6	0.0	-0.1	-0.5	-2.1	-0.4	-0.8	-1.0
2009 Q1	-1.8	-0.5	-0.5	-0.8	-1.2	0.0	-0.1	-1.1	-2.2	-0.7	-0.2	-1.3
2009 Jan.	-0.6	-0.2	-0.2	-0.3	-0.6	0.0	0.0	-0.6	-0.9	-0.5	0.0	-0.4
Feb.	-0.5	0.0	-0.2	-0.3	-0.1	0.0	0.0	-0.1	-0.5	-0.1	-0.1	-0.4
Mar.	-0.7	-0.3	-0.2	-0.3	-0.5	0.0	0.0	-0.4	-0.8	-0.2	-0.1	-0.5
Apr.	-0.6	0.0	-0.2	-0.3	-0.2	0.0	0.0	-0.2	-0.2	0.0	0.0	-0.2
May <sup>4)</sup>	-0.3	-0.1	-0.1	-0.2	-0.3	0.0	0.0	-0.3	-0.3	0.0	0.0	-0.3

**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	-17.7	-4.0	-9.1	-4.5	-6.6	-3.4	-3.2
2008 Q4	-5.5	-1.2	-2.7	-1.6	-2.9	-0.8	-2.1
2009 Q1	-7.1	-3.5	-1.6	-2.0	-2.7	-1.3	-1.3
2009 Jan.	-1.8	-0.8	-0.4	-0.6	-1.3	-0.9	-0.5
Feb.	-1.4	-0.6	-0.3	-0.4	-0.4	-0.1	-0.3
Mar.	-3.9	-2.0	-0.9	-1.0	-1.0	-0.3	-0.6
Apr.	-1.8	-0.7	-0.6	-0.6	0.1	-0.1	0.2
May <sup>4)</sup>	-1.2	-0.2	-0.6	-0.3	-0.2	-0.1	-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	-12.2	0.7	-0.3	-10.6	-0.4	-0.5	-0.2	-0.8	28.9	3.4	17.3	8.2
2007	-14.2	-3.3	0.1	-0.3	-0.2	-3.2	-0.6	-6.7	27.6	3.8	11.7	12.1
2008	-56.4	-8.0	0.0	5.2	0.0	-20.1	-2.2	-31.2	-60.6	-8.2	-44.1	-8.2
2008 Q4	-12.9	-0.8	0.1	7.6	0.1	-10.1	-1.2	-8.6	-28.2	-7.2	-14.8	-6.1
2009 Q1	-15.9	-0.7	-0.1	-3.1	0.0	-4.0	0.4	-8.3	-16.2	-3.5	-11.5	-1.1
2009 Jan.	-9.1	1.1	0.0	-3.6	0.0	-0.9	0.1	-5.9	-11.7	-3.9	-8.2	0.4
Feb.	-5.5	-2.5	0.0	-0.3	0.0	-1.7	0.2	-1.1	-8.2	-1.6	-4.1	-2.4
Mar.	-1.3	0.7	0.0	0.8	0.0	-1.4	0.0	-1.3	3.7	2.0	0.9	0.9
Apr.	-0.1	1.1	0.2	-0.4	0.0	-1.7	0.2	0.6	6.5	2.5	2.9	1.1
May <sup>4)</sup>	-3.3	0.3	-0.1	-1.3	-0.2	-0.8	0.0	-1.2	2.2	1.2	0.9	0.1

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													
2006	5,239.3	90.7	9.3	5.6	0.4	1.5	1.2	8,025.9	96.4	3.6	2.2	0.3	0.1	0.6
2007	6,085.8	92.1	7.9	4.8	0.4	1.1	1.0	9,012.4	96.4	3.6	2.2	0.4	0.1	0.5
2008 Q2	6,284.2	91.6	8.4	5.0	0.4	1.4	1.0	9,399.0	96.4	3.6	2.1	0.5	0.1	0.5
Q3	6,746.8	89.4	10.6	6.9	0.4	1.5	1.0	9,487.6	96.2	3.8	2.2	0.5	0.1	0.6
Q4	6,858.5	89.7	10.3	7.3	0.4	1.2	0.8	9,901.3	96.9	3.1	1.9	0.5	0.1	0.4
2009 Q1 <sup>4)</sup>	6,604.4	90.9	9.1	6.4	0.3	1.1	0.7	10,001.3	96.9	3.1	1.9	0.4	0.1	0.5
	By non-euro area residents													
2006	2,561.5	45.4	54.6	35.0	2.3	2.7	11.5	868.6	50.8	49.2	31.9	1.3	2.0	10.4
2007	2,948.5	46.9	53.1	33.6	2.9	2.4	11.0	908.8	50.1	49.9	32.9	1.6	1.8	9.9
2008 Q2	3,041.2	46.6	53.4	33.8	3.0	2.7	10.6	979.4	51.9	48.1	31.8	1.2	1.7	9.3
Q3	3,142.2	45.8	54.2	35.2	3.2	2.7	9.8	1,003.4	52.6	47.4	30.3	1.3	1.5	10.3
Q4	2,809.9	48.2	51.8	33.4	2.8	2.6	10.2	897.5	54.9	45.1	28.7	1.4	1.9	9.4
2009 Q1 <sup>4)</sup>	2,793.6	47.1	52.9	34.1	2.6	2.5	10.8	868.8	53.2	46.8	30.8	1.3	1.9	8.6

### 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
2006	4,470.8	80.6	19.4	10.0	1.6	3.5
2007	4,933.2	81.5	18.5	9.2	1.7	3.4
2008 Q2	5,133.1	82.1	17.9	8.8	1.7	3.5
Q3	5,168.4	81.9	18.1	8.9	1.9	3.3
Q4	5,111.7	83.3	16.7	8.4	2.0	2.5
2009 Q1 <sup>4)</sup>	5,194.0	83.3	16.7	8.7	1.9	2.5

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.

**2.8 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	USD	JPY	CHF			GBP	Total	USD	JPY	CHF	GBP
1	2	3	4	5	6	7	8	9	10	11	12	13	14	
To euro area residents														
2006	4,938.0	-	-	-	-	-	9,943.7	96.4	3.6	1.6	0.2	1.1	0.5	
2007	5,800.8	-	-	-	-	-	11,093.4	96.2	3.8	1.8	0.2	0.9	0.6	
2008 Q2	6,012.5	-	-	-	-	-	11,613.6	96.0	4.0	1.9	0.2	1.0	0.6	
Q3	6,355.5	-	-	-	-	-	11,778.9	95.8	4.2	2.1	0.2	1.0	0.5	
Q4	6,317.6	-	-	-	-	-	11,735.8	95.9	4.1	2.1	0.3	1.0	0.4	
2009 Q1 <sup>(p)</sup>	6,119.5	-	-	-	-	-	11,783.0	95.9	4.1	2.1	0.3	1.0	0.4	
To non-euro area residents														
2006	2,070.6	50.9	49.1	28.7	2.0	2.3	11.0	861.2	39.3	60.7	43.1	1.1	4.0	8.6
2007	2,352.4	48.3	51.7	28.8	2.3	2.4	12.7	955.1	40.9	59.1	41.2	1.2	3.7	8.2
2008 Q2	2,312.5	46.6	53.4	29.2	2.3	2.9	12.7	1,008.8	43.0	57.0	38.3	1.1	4.0	8.7
Q3	2,461.8	42.7	57.3	33.2	2.9	2.6	12.4	1,063.9	41.4	58.6	40.5	1.5	3.9	8.0
Q4	2,284.6	45.8	54.2	31.8	3.0	2.6	11.3	965.5	40.5	59.5	41.9	1.4	4.3	7.4
2009 Q1 <sup>(p)</sup>	2,114.5	44.7	55.3	31.0	2.9	2.9	13.0	942.0	38.1	61.9	44.4	1.1	4.3	7.7

**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	USD	JPY	CHF			GBP	Total	USD	JPY	CHF	GBP
1	2	3	4	5	6	7	8	9	10	11	12	13	14	
Issued by euro area residents														
2006	1,636.9	95.6	4.4	2.3	0.2	0.3	1.3	1,924.6	97.6	2.4	1.3	0.3	0.1	0.7
2007	1,740.3	95.2	4.8	2.4	0.3	0.3	1.5	2,149.8	97.7	2.3	1.4	0.2	0.1	0.5
2008 Q2	1,897.9	94.8	5.2	2.6	0.4	0.3	1.6	2,310.8	97.3	2.7	1.8	0.3	0.1	0.5
Q3	1,905.6	94.6	5.4	2.9	0.4	0.3	1.5	2,302.2	97.2	2.8	1.9	0.3	0.1	0.4
Q4	1,979.8	95.3	4.7	2.6	0.4	0.2	1.2	2,651.1	97.3	2.7	1.7	0.3	0.1	0.4
2009 Q1 <sup>(p)</sup>	2,089.1	95.0	5.0	2.7	0.1	0.4	1.3	2,839.2	97.5	2.5	1.7	0.2	0.1	0.4
Issued by non-euro area residents														
2006	515.3	52.3	47.7	28.8	0.7	0.4	14.5	594.5	38.9	61.1	36.5	4.9	0.8	14.2
2007	582.3	53.9	46.1	27.3	0.7	0.4	14.4	652.2	35.9	64.1	39.3	4.5	0.8	12.6
2008 Q2	664.8	50.3	49.7	30.6	0.7	0.5	14.8	627.4	38.6	61.4	36.9	5.8	0.8	10.4
Q3	645.1	51.1	48.9	30.7	0.8	0.5	14.2	663.4	37.2	62.8	38.1	6.4	0.9	10.5
Q4	580.8	54.0	46.0	28.6	0.9	0.5	13.3	646.7	39.0	61.0	37.1	6.4	0.8	11.0
2009 Q1 <sup>(p)</sup>	593.6	51.9	48.1	27.6	0.3	1.6	14.0	622.7	34.4	65.6	38.6	5.9	0.8	15.1

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				
2007 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	5,160.6	365.5	1,857.8	164.8	1,693.0	1,670.3	719.8	197.1	350.1
Q2	5,015.2	359.3	1,807.2	157.5	1,649.7	1,624.4	690.7	204.9	328.7
Q3	4,713.2	377.1	1,747.3	148.1	1,599.2	1,411.3	641.3	202.8	333.3
Q4 <sup>(a)</sup>	4,242.6	349.7	1,704.3	132.1	1,572.2	1,133.6	566.0	196.3	292.7

### 2. Liabilities

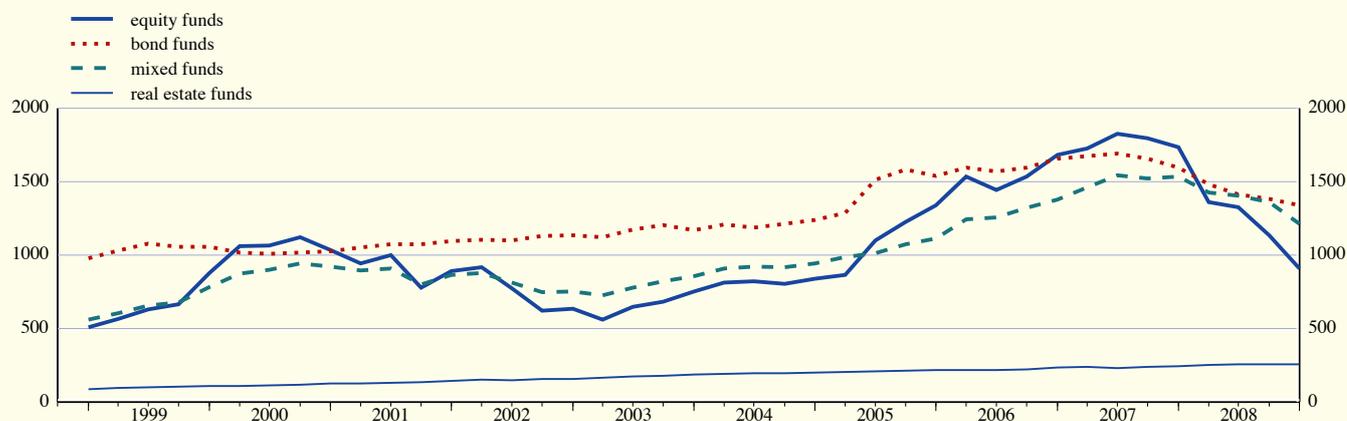
	Total 1	Deposits and loans taken 2	Investment fund shares 3	Other liabilities 4
2007 Q3	5,892.8	78.5	5,496.8	317.5
Q4	5,781.3	76.8	5,411.5	293.0
2008 Q1	5,160.6	76.4	4,846.6	237.6
Q2	5,015.2	74.8	4,720.9	219.5
Q3	4,713.2	71.0	4,413.4	228.7
Q4 <sup>(a)</sup>	4,242.6	63.7	3,993.8	185.1

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

	Total 1	Funds by investment policy					Funds by type of investor		
		Equity funds 2	Bond funds 3	Mixed funds 4	Real estate funds 5	Other funds 6	General public funds 7	Special investors' funds 8	
2007 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	5,160.6	1,362.6	1,483.3	1,427.8	249.6	637.4	3,778.1	1,382.5	
Q2	5,015.2	1,325.3	1,413.4	1,405.2	256.1	615.3	3,647.1	1,368.1	
Q3	4,713.2	1,132.2	1,382.8	1,358.9	253.1	586.2	3,340.9	1,372.3	
Q4 <sup>(a)</sup>	4,242.6	908.7	1,339.2	1,210.7	254.1	529.9	2,961.6	1,281.0	

## C15 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)

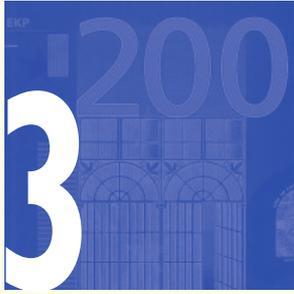
## 1. Funds by investment policy

	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				
<b>Equity funds</b>									
2007 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	1,362.6	51.2	63.0	21.3	41.7	1,130.9	65.7	-	51.7
Q2	1,325.3	54.3	65.0	22.0	43.0	1,088.6	65.7	-	51.6
Q3	1,132.2	48.3	61.3	20.2	41.1	915.2	57.2	-	50.2
Q4 <sup>(p)</sup>	908.7	36.8	65.7	19.4	46.3	715.8	47.2	-	43.3
<b>Bond funds</b>									
2007 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	1,483.3	124.7	1,167.7	80.3	1,087.5	56.8	45.5	-	88.6
Q2	1,413.4	115.9	1,118.4	74.6	1,043.7	57.9	42.7	-	78.5
Q3	1,382.8	128.7	1,073.6	67.9	1,005.6	55.7	41.3	-	83.5
Q4 <sup>(p)</sup>	1,339.2	120.0	1,042.5	61.1	981.4	60.2	36.3	-	80.2
<b>Mixed funds</b>									
2007 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	1,427.8	97.9	528.0	46.4	481.6	339.4	313.9	1.2	147.3
Q2	1,405.2	99.0	519.9	42.6	477.3	341.6	307.9	0.8	135.9
Q3	1,358.9	108.9	512.5	42.2	470.4	312.1	287.3	1.1	137.0
Q4 <sup>(p)</sup>	1,210.7	110.2	495.3	34.0	461.3	244.0	235.7	1.2	124.3
<b>Real estate funds</b>									
2007 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	249.6	19.9	5.3	1.1	4.2	3.1	11.3	195.4	14.6
Q2	256.1	17.9	5.9	1.1	4.8	3.0	10.1	203.5	15.7
Q3	253.1	18.9	4.7	1.3	3.4	3.0	9.3	201.2	15.9
Q4 <sup>(p)</sup>	254.1	14.3	4.8	1.1	3.7	14.5	6.8	194.6	19.1

## 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
2007 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	3,778.1	277.6	1,218.3	1,362.1	514.2	154.1	251.9
Q2	3,647.1	264.5	1,177.3	1,326.8	485.5	155.0	238.0
Q3	3,340.9	265.1	1,104.8	1,140.6	440.8	152.4	237.2
Q4 <sup>(p)</sup>	2,961.6	242.8	1,054.5	934.7	381.4	142.8	205.5
<b>Special investors' funds</b>							
2007 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	1,382.5	88.0	639.6	308.1	205.6	43.0	98.2
Q2	1,368.1	94.8	629.9	297.6	205.2	49.9	90.7
Q3	1,372.3	112.0	642.5	270.7	200.5	50.5	96.1
Q4 <sup>(p)</sup>	1,281.0	106.9	649.8	198.9	184.6	53.5	87.2

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 Q4</b>						
<b>External account</b>						
Exports of goods and services						504.1
<i>Trade balance</i> <sup>1)</sup>						-7.6
<b>Generation of income account</b>						
Gross value added (basic prices)						
Taxes less subsidies on products						
Gross domestic product (market prices)						
Compensation of employees	1,190.9	117.4	755.3	59.6	258.6	
Other taxes less subsidies on production	42.1	8.4	23.3	5.0	5.4	
Consumption of fixed capital	339.2	91.2	193.0	11.2	43.8	
<i>Net operating surplus and mixed income</i> <sup>1)</sup>	538.3	287.8	227.6	26.4	-3.5	
<b>Allocation of primary income account</b>						
Net operating surplus and mixed income						4.6
Compensation of employees						
Taxes less subsidies on production						
Property income	878.3	57.6	298.0	456.1	66.6	135.6
Interest	562.2	54.6	95.0	346.1	66.6	85.2
Other property income	316.1	3.0	203.0	110.0	0.0	50.4
<i>Net national income</i> <sup>1)</sup>	2,010.7	1,679.9	51.1	33.9	245.8	
<b>Secondary distribution of income account</b>						
Net national income						
Current taxes on income, wealth, etc.	318.5	252.3	53.2	12.6	0.4	1.4
Social contributions	447.0	447.0				1.0
Social benefits other than social transfers in kind	438.2	1.4	15.9	28.3	392.5	0.6
Other current transfers	204.9	76.3	26.2	50.3	52.0	8.5
Net non-life insurance premiums	48.1	34.9	11.5	0.9	0.7	1.5
Non-life insurance claims	48.4			48.4		0.6
Other	108.4	41.4	14.7	1.0	51.2	6.4
<i>Net disposable income</i> <sup>1)</sup>	1,980.4	1,435.6	-14.9	38.1	521.7	
<b>Use of income account</b>						
Net disposable income						
Final consumption expenditure	1,836.0	1,315.9			520.1	
Individual consumption expenditure	1,627.3	1,315.9			311.4	
Collective consumption expenditure	208.7				208.7	
Adjustment for the change in net equity of households in pension fund reserves	16.9	0.1	-0.2	17.0	0.0	0.0
<i>Net saving/current external account</i> <sup>1)</sup>	144.4	136.5	-14.7	21.1	1.5	24.4
<b>Capital account</b>						
Net saving / current external account						
Gross capital formation	508.0	156.6	257.3	15.4	78.8	
Gross fixed capital formation	505.4	153.2	258.1	15.3	78.8	
Changes in inventories and acquisitions less disposals of valuables	2.6	3.4	-0.8	0.0	0.0	
Consumption of fixed capital						
Acquisitions less disposals of non-produced non-financial assets	0.0	-1.9	1.9	0.2	-0.2	0.0
Capital transfers	56.7	9.4	2.8	3.3	41.2	6.6
Capital taxes	6.0	5.8	0.2	0.0		0.0
Other capital transfers	50.7	3.6	2.6	3.3	41.2	6.6
<i>Net lending (+)/net borrowing (-) (from capital account)</i> <sup>1)</sup>	-20.6	79.0	-53.9	17.6	-63.2	20.6
Statistical discrepancy	0.0	18.5	-18.5	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 Q4						
<b>External account</b>						
Imports of goods and services						496.5
<i>Trade balance</i>						
<b>Generation of income account</b>						
Gross value added (basic prices)	2,110.5	504.8	1,199.2	102.2	304.4	
Taxes less subsidies on products	241.1					
Gross domestic product (market prices) <sup>2)</sup>	2,351.7					
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	538.3	287.8	227.6	26.4	-3.5	
Compensation of employees	1,192.7	1,192.7				2.8
Taxes less subsidies on production	290.7				290.7	-7.5
Property income	867.3	257.0	121.5	463.6	25.2	146.6
Interest	543.8	81.9	50.6	401.1	10.3	103.6
Other property income	323.4	175.2	70.8	62.5	14.9	43.0
<i>Net national income</i>						
<b>Secondary distribution of income account</b>						
Net national income	2,010.7	1,679.9	51.1	33.9	245.8	
Current taxes on income, wealth, etc.	319.4				319.4	0.4
Social contributions	446.9	1.1	17.8	45.9	382.2	1.1
Social benefits other than social transfers in kind	435.6	435.6				3.2
Other current transfers	176.4	96.0	11.7	49.6	19.1	37.0
Net non-life insurance premiums	48.4			48.4		1.2
Non-life insurance claims	47.4	37.0	9.3	0.7	0.3	1.6
Other	80.6	59.0	2.4	0.5	18.7	34.1
<i>Net disposable income</i>						
<b>Use of income account</b>						
Net disposable income	1,980.4	1,435.6	-14.9	38.1	521.7	
Final consumption expenditure						
Individual consumption expenditure						
Collective consumption expenditure						
Adjustment for the change in net equity of households in pension fund reserves	16.9	16.9				0.0
<i>Net saving/current external account</i>						
<b>Capital account</b>						
Net saving / current external account	144.4	136.5	-14.7	21.1	1.5	24.4
Gross capital formation						
Gross fixed capital formation						
Changes in inventories and acquisitions less disposals of valuables						
Consumption of fixed capital	339.2	91.2	193.0	11.2	43.8	
Acquisitions less disposals of non-produced non-financial assets						
Capital transfers	60.5	15.4	29.8	4.1	11.2	2.8
Capital taxes	6.0				6.0	0.0
Other capital transfers	54.5	15.4	29.8	4.1	5.2	2.8
<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 Q4								
<b>Opening balance sheet, financial assets</b>								
Total financial assets		16,877.0	14,668.4	23,703.7	10,013.8	6,117.4	2,950.0	15,381.0
Monetary gold and special drawing rights (SDRs)				221.5				
Currency and deposits		5,910.6	1,806.9	2,572.0	1,707.6	838.3	572.8	4,491.2
Short-term debt securities		70.7	90.4	139.9	382.2	346.7	26.7	743.8
Long-term debt securities		1,275.6	198.4	3,974.9	1,748.8	2,010.8	281.6	2,924.7
Loans		64.6	2,516.2	12,867.3	1,958.4	357.7	384.1	1,798.9
<i>of which long-term</i>		47.5	1,358.5	9,644.5	1,542.4	290.5	327.0	.
Shares and other equity		4,093.8	6,923.8	1,810.7	3,999.4	2,110.1	1,146.5	4,719.9
Quoted shares		736.3	1,522.8	562.2	1,848.6	535.4	311.4	.
Unquoted shares and other equity		1,935.6	5,056.0	1,009.6	1,543.7	465.6	697.1	.
Mutual fund shares		1,421.9	344.9	238.9	607.1	1,109.1	137.9	.
Insurance technical reserves		5,210.5	141.3	2.1	0.0	141.4	3.4	155.0
Other accounts receivable and financial derivatives		251.2	2,991.4	2,115.4	217.4	312.4	534.9	547.4
<i>Net financial worth</i>								
<b>Financial account, transactions in financial assets</b>								
Total transactions in financial assets		127.8	191.0	90.2	-58.5	70.0	255.7	-313.4
Monetary gold and special drawing rights (SDRs)				-0.8				0.8
Currency and deposits		215.9	13.1	-186.0	37.0	38.0	58.7	-323.1
Short-term debt securities		-10.9	10.3	15.8	-52.4	-4.4	10.5	85.8
Long-term debt securities		-26.7	27.8	165.9	-77.7	-1.6	35.1	-9.3
Loans		-0.6	71.5	-121.8	68.8	5.7	69.6	-8.5
<i>of which long-term</i>		-0.6	20.7	11.5	49.6	-2.2	38.4	.
Shares and other equity		-63.7	89.5	-68.9	-14.1	29.5	42.0	-62.7
Quoted shares		-22.2	14.7	-31.6	15.1	-6.6	3.2	.
Unquoted shares and other equity		7.2	88.3	-24.2	11.9	14.8	45.8	.
Mutual fund shares		-48.7	-13.6	-13.0	-41.1	21.3	-7.0	.
Insurance technical reserves		21.6	-0.3	0.0	0.0	0.7	0.0	-2.3
Other accounts receivable and financial derivatives		-7.9	-20.9	286.0	-20.1	2.1	39.7	5.7
<i>Changes in net financial worth due to transactions</i>								
<b>Other changes account, financial assets</b>								
Total other changes in financial assets		-552.5	-823.1	-109.9	-488.9	-174.0	-21.4	-203.8
Monetary gold and special drawing rights (SDRs)				1.1				
Currency and deposits		4.7	7.4	-7.4	51.5	-1.2	-1.8	-1.2
Short-term debt securities		-1.4	-3.5	-0.1	2.2	0.0	0.0	6.1
Long-term debt securities		-38.0	-9.7	92.3	21.1	25.5	4.4	71.0
Loans		-0.2	-8.5	-14.9	-5.2	2.7	0.0	11.4
<i>of which long-term</i>		-0.2	-3.6	-14.6	2.5	0.7	0.2	.
Shares and other equity		-441.9	-866.5	-118.9	-563.6	-201.7	-22.1	-259.7
Quoted shares		-123.8	-412.1	-54.6	-346.9	-102.2	-51.4	.
Unquoted shares and other equity		-257.7	-427.5	-62.7	-183.0	-31.3	39.3	.
Mutual fund shares		-60.4	-26.9	-1.6	-33.7	-68.1	-10.0	.
Insurance technical reserves		-75.7	-0.2	0.0	0.0	0.1	0.0	-0.8
Other accounts receivable and financial derivatives		0.0	57.7	-62.0	5.1	0.5	-2.0	-30.4
<i>Other changes in net financial worth</i>								
<b>Closing balance sheet, financial assets</b>								
Total financial assets		16,452.2	14,036.3	23,684.0	9,466.5	6,013.4	3,184.3	14,862.9
Monetary gold and special drawing rights (SDRs)				221.8				
Currency and deposits		6,131.2	1,827.4	2,378.7	1,796.1	875.1	629.8	4,166.9
Short-term debt securities		58.4	97.2	155.6	332.0	342.3	37.3	835.7
Long-term debt securities		1,210.9	216.6	4,233.0	1,692.2	2,034.7	321.1	2,986.4
Loans		63.8	2,579.2	12,730.6	2,022.0	366.1	453.7	1,801.8
<i>of which long-term</i>		46.7	1,375.6	9,641.4	1,594.4	289.0	365.6	.
Shares and other equity		3,588.3	6,146.8	1,622.8	3,421.8	1,938.0	1,166.3	4,397.5
Quoted shares		590.3	1,125.4	476.0	1,516.8	426.6	263.2	.
Unquoted shares and other equity		1,685.0	4,716.9	922.6	1,372.7	449.1	782.2	.
Mutual fund shares		1,312.9	304.4	224.3	532.3	1,062.3	121.0	.
Insurance technical reserves		5,156.4	140.9	2.1	0.0	142.2	3.4	151.9
Other accounts receivable and financial derivatives		243.3	3,028.2	2,339.4	202.4	315.0	572.6	522.7
<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	Other financial intermediaries	Insurance corporations and pension funds	General government	Rest of the world
<b>2008 Q4</b>								
<b>Opening balance sheet, liabilities</b>								
Total liabilities		6,235.0	22,913.6	23,253.3	9,841.8	6,302.6	6,992.7	13,950.7
Monetary gold and special drawing rights (SDRs)								
Currency and deposits			25.3	14,749.9	33.7	1.9	233.9	2,854.6
Short-term debt securities			277.5	384.6	128.9	9.4	710.6	289.4
Long-term debt securities			434.4	2,839.5	1,977.6	27.2	4,461.8	2,674.1
Loans		5,572.1	8,018.8		1,867.3	206.6	1,227.5	3,054.7
<i>of which long-term</i>		5,240.8	5,435.2		837.9	74.6	1,031.4	.
Shares and other equity			11,250.0	2,840.9	5,638.5	550.2	5.1	4,519.5
Quoted shares			3,437.6	609.3	176.0	212.9	0.0	.
Unquoted shares and other equity			7,812.4	1,072.6	1,044.2	336.5	5.1	.
Mutual fund shares				1,159.0	4,418.3			.
Insurance technical reserves		33.5	328.8	58.8	0.6	5,231.6	0.5	
Other accounts payable and financial derivatives		629.5	2,578.7	2,379.7	195.2	275.6	353.2	558.3
<i>Net financial worth<sup>1)</sup></i>	-1,208.8	10,642.0	-8,245.1	450.3	171.9	-185.1	-4,042.7	
<b>Financial account, transactions in liabilities</b>								
Total transactions in liabilities		30.3	263.5	97.8	-47.2	33.6	318.9	-334.0
Monetary gold and special drawing rights (SDRs)								
Currency and deposits			0.8	44.4	1.6	0.0	19.8	-212.8
Short-term debt securities			7.0	-58.9	-4.0	1.5	136.7	-27.5
Long-term debt securities			7.4	-93.1	162.5	5.0	89.2	-57.7
Loans		35.8	134.5		-70.0	2.8	26.3	-44.5
<i>of which long-term</i>		34.8	113.8		-28.9	-2.4	38.5	.
Shares and other equity			88.5	-7.9	-136.0	6.4	0.0	0.7
Quoted shares			7.4	10.9	10.4	0.7	0.0	.
Unquoted shares and other equity			81.0	-5.2	43.9	5.6	0.0	.
Mutual fund shares				-13.6	-190.3			.
Insurance technical reserves		0.1	-0.1	3.6	0.0	16.2	0.0	
Other accounts payable and financial derivatives		-5.6	25.4	209.5	-1.2	1.8	47.0	7.7
<i>Changes in net financial worth due to transactions<sup>1)</sup></i>	-20.6	97.5	-72.4	-7.6	-11.2	36.4	-63.2	20.6
<b>Other changes account, liabilities</b>								
Total other changes in liabilities		4.8	-1,152.1	-361.8	-435.2	-177.6	133.3	-385.9
Monetary gold and special drawing rights (SDRs)								
Currency and deposits			0.0	47.5	0.0	0.0	0.0	4.6
Short-term debt securities			-2.4	2.3	-1.0	0.0	-0.9	5.3
Long-term debt securities			8.4	7.4	22.6	0.0	141.1	-12.9
Loans		4.6	14.5		-27.2	3.4	0.0	-9.9
<i>of which long-term</i>		4.6	-0.8		-23.4	-0.2	-0.4	.
Shares and other equity			-1,203.9	-385.9	-441.8	-66.5	-0.8	-375.4
Quoted shares			-601.1	-245.1	-74.6	-48.5	0.0	.
Unquoted shares and other equity			-602.8	-146.9	-69.0	-18.0	-0.8	.
Mutual fund shares				6.1	-298.2			.
Insurance technical reserves		0.0	0.0	0.0	0.0	-76.7	0.0	
Other accounts payable and financial derivatives		0.2	31.3	-33.3	12.3	-37.9	-6.1	2.4
<i>Other changes in net financial worth<sup>1)</sup></i>	-181.0	-557.3	329.0	251.9	-53.7	3.6	-154.6	182.1
<b>Closing balance sheet, liabilities</b>								
Total liabilities		6,270.0	22,024.9	22,989.3	9,359.4	6,158.5	7,444.9	13,230.8
Monetary gold and special drawing rights (SDRs)								
Currency and deposits			26.1	14,841.9	35.3	1.9	253.7	2,646.4
Short-term debt securities			282.1	328.0	123.9	10.9	846.4	267.3
Long-term debt securities			450.3	2,753.9	2,162.7	32.3	4,692.1	2,603.6
Loans		5,612.4	8,167.8		1,770.0	212.8	1,253.9	3,000.3
<i>of which long-term</i>		5,280.2	5,548.2		785.7	72.0	1,069.6	.
Shares and other equity			10,134.5	2,447.1	5,060.7	490.0	4.3	4,144.8
Quoted shares			2,843.9	375.1	111.9	165.2	0.0	.
Unquoted shares and other equity			7,290.6	920.5	1,019.1	324.0	4.3	.
Mutual fund shares				1,151.5	3,929.8			.
Insurance technical reserves		33.6	328.7	62.4	0.6	5,171.1	0.5	
Other accounts payable and financial derivatives		624.0	2,635.4	2,555.9	206.2	239.6	394.0	568.4
<i>Net financial worth<sup>1)</sup></i>	-1,410.3	10,182.2	-7,988.5	694.7	107.0	-145.1	-4,260.6	

Source: ECB.

## 3.2 Euro area non-financial accounts

(EUR billions; four-quarter cumulated flows)

Uses	2004	2005	2006	2007 Q1- 2007 Q4	2007 Q2- 2008 Q1	2007 Q3- 2008 Q2	2007 Q4- 2008 Q3	2008 Q1- 2008 Q4
<b>Generation of income account</b>								
Gross value added (basic prices)								
Taxes less subsidies on products								
Gross domestic product (market prices)								
Compensation of employees	3,777.3	3,891.5	4,050.9	4,231.0	4,279.8	4,328.4	4,373.1	4,407.5
Other taxes less subsidies on production	122.9	130.0	129.3	137.9	137.9	137.4	138.1	136.3
Consumption of fixed capital	1,123.9	1,177.7	1,234.8	1,299.3	1,311.2	1,323.5	1,335.4	1,347.2
<i>Net operating surplus and mixed income</i> <sup>1)</sup>	1,991.4	2,062.1	2,172.7	2,304.2	2,331.8	2,368.8	2,381.0	2,363.6
<b>Allocation of primary income account</b>								
Net operating surplus and mixed income								
Compensation of employees								
Taxes less subsidies on production								
Property income	2,367.1	2,608.5	3,022.3	3,527.0	3,621.2	3,715.3	3,802.4	3,817.3
Interest	1,250.3	1,342.8	1,635.4	2,002.2	2,083.2	2,158.1	2,231.6	2,257.6
Other property income	1,116.8	1,265.6	1,386.9	1,524.8	1,538.0	1,557.2	1,570.8	1,559.7
<i>Net national income</i> <sup>1)</sup>	6,694.2	6,939.1	7,275.5	7,639.6	7,705.1	7,769.7	7,821.9	7,818.1
<b>Secondary distribution of income account</b>								
Net national income								
Current taxes on income, wealth, etc.	883.7	933.3	1,025.2	1,108.5	1,124.7	1,135.8	1,137.3	1,118.9
Social contributions	1,430.0	1,472.4	1,534.7	1,594.4	1,610.2	1,626.4	1,643.6	1,658.6
Social benefits other than social transfers in kind	1,455.9	1,499.8	1,550.2	1,594.3	1,607.4	1,622.3	1,641.2	1,658.1
Other current transfers	685.1	707.3	715.5	741.6	750.5	757.4	759.1	767.0
Net non-life insurance premiums	178.1	178.4	177.4	182.7	183.2	184.6	185.1	185.8
Non-life insurance claims	178.7	179.3	177.5	182.1	182.6	184.2	184.9	186.2
Other	328.4	349.6	360.5	376.7	384.7	388.6	389.2	394.9
<i>Net disposable income</i> <sup>1)</sup>	6,618.4	6,852.2	7,184.1	7,546.2	7,606.7	7,670.2	7,725.2	7,717.2
<b>Use of income account</b>								
Net disposable income								
Final consumption expenditure	6,084.6	6,327.4	6,594.0	6,845.0	6,913.6	6,989.0	7,061.8	7,101.7
Individual consumption expenditure	5,438.4	5,666.3	5,915.1	6,140.8	6,202.9	6,268.2	6,332.6	6,363.9
Collective consumption expenditure	646.2	661.1	678.9	704.2	710.7	720.7	729.2	737.9
Adjustment for the change in net equity of households in pension funds reserves	58.0	60.4	59.0	59.4	60.5	63.2	65.4	66.0
<i>Net saving</i> <sup>1)</sup>	534.0	525.1	590.3	701.4	693.3	681.4	663.5	615.7
<b>Capital account</b>								
Net saving								
Gross capital formation	1,614.4	1,705.0	1,857.5	1,994.0	2,020.0	2,047.7	2,069.2	2,062.7
Gross fixed capital formation	1,603.2	1,699.0	1,844.5	1,974.5	1,995.5	2,021.7	2,038.1	2,022.0
Changes in inventories and acquisitions less disposals of valuables	11.2	6.0	13.0	19.5	24.5	26.0	31.1	40.8
Consumption of fixed capital								
Acquisitions less disposals of non-produced non-financial assets	-1.1	-0.1	0.5	-0.1	0.0	0.3	0.3	0.3
Capital transfers	174.6	181.9	174.7	166.6	166.8	170.6	163.5	162.4
Capital taxes	29.9	24.4	22.5	23.8	23.4	23.6	23.9	23.6
Other capital transfers	144.7	157.5	152.1	142.9	143.4	147.0	139.6	138.8
<i>Net lending (+)/net borrowing (-) (from capital account)</i> <sup>1)</sup>	60.6	11.2	-18.3	21.0	-1.0	-27.8	-56.3	-87.4

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	2007 Q1- 2007 Q4	2007 Q2- 2008 Q1	2007 Q3- 2008 Q2	2007 Q4- 2008 Q3	2008 Q1- 2008 Q4
<b>Generation of income account</b>								
Gross value added (basic prices)	7,015.5	7,261.3	7,587.6	7,972.3	8,060.8	8,158.1	8,227.7	8,254.6
Taxes less subsidies on products	797.4	841.1	910.4	953.8	954.2	951.0	949.7	944.8
Gross domestic product (market prices) <sup>2)</sup>	7,812.9	8,102.4	8,498.0	8,926.1	9,015.0	9,109.1	9,177.4	9,199.4
Compensation of employees								
Other taxes less subsidies on production								
Consumption of fixed capital								
<i>Net operating surplus and mixed income</i>								
<b>Allocation of primary income account</b>								
Net operating surplus and mixed income	1,991.4	2,062.1	2,172.7	2,304.2	2,331.8	2,368.8	2,381.0	2,363.6
Compensation of employees	3,784.8	3,897.9	4,057.4	4,238.0	4,287.2	4,335.7	4,380.4	4,414.6
Taxes less subsidies on production	934.9	983.8	1,050.8	1,098.3	1,097.1	1,093.3	1,093.0	1,085.9
Property income	2,350.3	2,603.7	3,017.0	3,526.1	3,610.1	3,687.2	3,769.9	3,771.3
Interest	1,217.0	1,315.8	1,608.8	1,964.4	2,036.6	2,103.2	2,172.4	2,192.2
Other property income	1,133.3	1,287.9	1,408.1	1,561.7	1,573.5	1,584.0	1,597.5	1,579.1
<i>Net national income</i>								
<b>Secondary distribution of income account</b>								
Net national income	6,694.2	6,939.1	7,275.5	7,639.6	7,705.1	7,769.7	7,821.9	7,818.1
Current taxes on income, wealth, etc.	886.8	937.1	1,030.1	1,116.1	1,132.1	1,143.4	1,144.8	1,126.6
Social contributions	1,429.1	1,471.7	1,533.9	1,593.6	1,609.3	1,625.5	1,642.8	1,657.8
Social benefits other than social transfers in kind	1,448.2	1,492.0	1,541.9	1,584.9	1,597.9	1,612.7	1,631.7	1,648.3
Other current transfers	614.7	625.2	628.1	650.7	655.1	660.8	665.3	669.0
Net non-life insurance premiums	178.7	179.3	177.5	182.1	182.6	184.2	184.9	186.2
Non-life insurance claims	176.0	177.0	174.7	179.8	180.3	181.6	182.0	182.8
Other	260.1	268.9	275.8	288.8	292.2	295.0	298.5	300.0
<i>Net disposable income</i>								
<b>Use of income account</b>								
Net disposable income	6,618.4	6,852.2	7,184.1	7,546.2	7,606.7	7,670.2	7,725.2	7,717.2
Final consumption expenditure								
Individual consumption expenditure								
Collective consumption expenditure								
Adjustment for the change in net equity of households in pension funds reserves	58.2	60.7	59.3	59.6	60.7	63.4	65.6	66.1
<i>Net saving</i>								
<b>Capital account</b>								
Net saving	534.0	525.1	590.3	701.4	693.3	681.4	663.5	615.7
Gross capital formation								
Gross fixed capital formation								
Changes in inventories and acquisitions less disposals of valuables								
Consumption of fixed capital	1,123.9	1,177.7	1,234.8	1,299.3	1,311.2	1,323.5	1,335.4	1,347.2
Acquisitions less disposals of non-produced non-financial assets								
Capital transfers	190.7	195.2	189.3	180.8	181.3	185.9	177.8	175.2
Capital taxes	29.9	24.4	22.5	23.8	23.4	23.6	23.9	23.6
Other capital transfers	160.8	170.8	166.7	157.1	158.0	162.3	153.9	151.6
<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	2007 Q1- 2007 Q4	2007 Q2- 2008 Q1	2007 Q3- 2008 Q2	2007 Q4- 2008 Q3	2008 Q1- 2008 Q4
<b>Income, saving and changes in net worth</b>								
Compensation of employees (+)	3,784.8	3,897.9	4,057.4	4,238.0	4,287.2	4,335.7	4,380.4	4,414.6
Gross operating surplus and mixed income (+)	1,270.5	1,322.0	1,398.3	1,480.4	1,500.5	1,520.4	1,536.4	1,545.2
Interest receivable (+)	233.3	229.8	266.4	302.0	311.0	321.1	330.4	332.2
Interest payable (-)	126.2	130.5	164.5	208.6	215.6	222.4	228.7	227.2
Other property income receivable (+)	667.1	716.3	758.0	797.1	799.3	802.9	807.3	797.3
Other property income payable (-)	9.2	9.5	9.6	9.9	9.9	10.1	9.9	9.8
Current taxes on income and wealth (-)	707.3	739.8	792.7	851.5	865.5	879.0	885.8	887.5
Net social contributions (-)	1,426.3	1,468.4	1,530.6	1,590.2	1,605.9	1,622.3	1,639.4	1,654.5
Net social benefits (+)	1,443.3	1,486.8	1,536.5	1,579.3	1,592.3	1,607.1	1,626.1	1,642.7
Net current transfers receivable (+)	63.4	66.0	66.1	69.1	69.0	72.0	73.5	74.4
<b>= Gross disposable income</b>	5,193.4	5,370.7	5,585.1	5,805.8	5,862.3	5,925.5	5,990.2	6,027.4
Final consumption expenditure (-)	4,489.8	4,669.5	4,869.9	5,053.2	5,105.3	5,155.9	5,208.2	5,226.8
Changes in net worth in pension funds (+)	57.8	60.3	58.9	59.6	60.6	63.2	65.2	65.6
<b>= Gross saving</b>	761.4	761.6	774.2	812.3	817.7	832.8	847.2	866.2
Consumption of fixed capital (-)	301.5	317.2	334.5	352.7	355.7	359.1	361.6	363.5
Net capital transfers receivable (+)	18.4	24.1	22.5	15.5	16.0	17.0	17.3	17.2
Other changes in net worth <sup>1)</sup> (+)	323.8	531.5	556.9	-3.2	-771.6	-1,156.7	-1,382.2	-1,901.1
<b>= Changes in net worth <sup>1)</sup></b>	802.1	999.9	1,019.0	472.0	-293.6	-665.9	-879.4	-1,381.1
<b>Investment, financing and changes in net worth</b>								
Net acquisition of non-financial assets (+)	513.1	543.7	599.0	634.0	637.9	637.9	637.4	632.2
Consumption of fixed capital (-)	301.5	317.2	334.5	352.7	355.7	359.1	361.6	363.5
Main items of financial investment (+)								
Short-term assets	214.3	206.2	305.8	422.1	444.8	422.7	427.8	435.7
Currency and deposits	212.7	246.9	284.1	349.4	385.0	386.4	391.5	436.8
Money market fund shares	-7.1	-20.2	0.9	40.0	34.0	10.5	13.5	-9.6
Debt securities <sup>2)</sup>	8.7	-20.5	20.9	32.7	25.8	25.8	22.8	8.5
Long-term assets	336.5	421.7	347.5	188.1	121.1	129.9	72.7	12.2
Deposits	28.5	-4.8	0.8	-26.5	-35.6	-36.6	-40.2	-30.3
Debt securities	64.8	1.1	74.2	9.0	29.2	63.2	65.5	20.8
Shares and other equity	-9.4	132.5	-38.8	-61.6	-119.4	-122.1	-161.4	-152.5
Quoted, unquoted shares and other equity	-18.9	66.0	-14.0	12.1	-18.2	-7.2	-20.4	-10.0
Mutual fund shares	9.5	66.5	-24.8	-73.7	-101.2	-114.9	-141.0	-142.5
Life insurance and pension fund reserves	252.7	292.9	311.3	267.2	246.9	225.4	208.8	174.2
Main items of financing (-)								
Loans	307.6	390.6	392.8	346.5	313.7	284.8	247.5	196.1
of which from euro area MFIs	277.8	358.5	347.4	281.5	249.1	196.5	181.0	78.9
Other changes in financial assets (+)								
Shares and other equity	281.7	448.4	505.6	-27.9	-694.8	-1,018.9	-1,112.5	-1,498.7
Life insurance and pension fund reserves	48.9	105.5	54.7	-2.0	-79.9	-127.9	-176.4	-244.1
Remaining net flows (+)	16.6	-17.7	-66.3	-43.2	-53.3	-65.8	-119.1	-158.8
<b>= Changes in net worth <sup>1)</sup></b>	802.1	999.9	1,019.0	472.0	-293.6	-665.9	-879.4	-1,381.1
<b>Financial balance sheet</b>								
Financial assets (+)								
Short-term assets	4,271.5	4,486.3	4,748.0	5,208.5	5,362.0	5,483.0	5,539.3	5,712.6
Currency and deposits	3,925.6	4,174.1	4,454.2	4,844.2	4,937.2	5,055.3	5,104.9	5,313.7
Money market fund shares	309.9	296.4	257.6	296.0	347.0	346.5	348.7	327.4
Debt securities <sup>2)</sup>	36.1	15.9	36.2	68.3	77.9	81.2	85.7	71.5
Long-term assets	9,919.9	10,921.0	11,878.2	12,004.2	11,349.8	11,087.5	10,669.2	10,082.4
Deposits	893.9	944.8	945.1	882.5	829.0	818.8	805.6	817.5
Debt securities	1,218.9	1,196.6	1,281.1	1,292.5	1,315.0	1,301.0	1,260.6	1,197.8
Shares and other equity	3,960.4	4,534.5	5,041.0	4,953.2	4,350.3	4,093.0	3,745.2	3,260.8
Quoted, unquoted shares and other equity	2,784.2	3,190.3	3,622.5	3,578.1	3,145.1	2,941.5	2,671.9	2,275.4
Mutual fund shares	1,176.2	1,344.2	1,418.5	1,375.1	1,205.2	1,151.5	1,073.3	985.4
Life insurance and pension fund reserves	3,846.7	4,245.1	4,611.0	4,876.1	4,855.6	4,874.7	4,857.7	4,806.2
Remaining net assets (+)	121.5	87.8	64.1	23.0	6.8	1.8	5.6	-0.4
Liabilities (-)								
Loans	4,293.6	4,692.1	5,081.7	5,415.5	5,458.3	5,521.4	5,572.1	5,612.4
of which from euro area MFIs	3,812.5	4,201.0	4,545.1	4,814.6	4,850.2	4,875.6	4,926.2	4,888.3
<b>= Net financial wealth</b>	10,019.3	10,803.0	11,608.6	11,820.2	11,260.4	11,050.9	10,642.0	10,182.2

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	2007 Q1- 2007 Q4	2007 Q2- 2008 Q1	2007 Q3- 2008 Q2	2007 Q4- 2008 Q3	2008 Q1- 2008 Q4
<b>Income and saving</b>								
Gross value added (basic prices) (+)	4,017.0	4,156.5	4,353.6	4,591.2	4,642.9	4,699.1	4,737.0	4,737.7
Compensation of employees (-)	2,397.6	2,469.6	2,580.2	2,705.0	2,739.5	2,769.2	2,798.2	2,818.3
Other taxes less subsidies on production (-)	65.7	73.1	75.6	81.7	82.6	82.6	83.8	82.5
<b>= Gross operating surplus (+)</b>	<b>1,553.8</b>	<b>1,613.7</b>	<b>1,697.9</b>	<b>1,804.5</b>	<b>1,820.8</b>	<b>1,847.2</b>	<b>1,855.1</b>	<b>1,836.9</b>
Consumption of fixed capital (-)	636.9	667.3	698.0	735.5	742.7	750.0	757.6	765.8
<b>= Net operating surplus (+)</b>	<b>916.9</b>	<b>946.5</b>	<b>999.9</b>	<b>1,069.0</b>	<b>1,078.1</b>	<b>1,097.2</b>	<b>1,097.4</b>	<b>1,071.1</b>
Property income receivable (+)	376.8	440.7	497.3	567.4	571.8	573.2	580.0	579.7
Interest receivable	125.1	136.1	158.3	184.4	190.3	195.7	199.1	201.1
Other property income receivable	251.8	304.6	339.1	382.9	381.5	377.4	380.9	378.5
Interest and rents payable (-)	226.4	236.4	278.8	332.6	347.5	361.3	375.3	386.1
<b>= Net entrepreneurial income (+)</b>	<b>1,067.4</b>	<b>1,150.8</b>	<b>1,218.4</b>	<b>1,303.8</b>	<b>1,302.3</b>	<b>1,309.1</b>	<b>1,302.1</b>	<b>1,264.7</b>
Distributed income (-)	773.7	876.9	945.8	1,007.1	1,015.7	1,022.0	1,030.2	1,012.9
Taxes on income and wealth payable (-)	135.4	148.6	187.6	208.8	210.2	208.4	203.6	185.4
Social contributions receivable (+)	73.5	72.7	77.1	66.8	66.2	66.4	67.0	67.7
Social benefits payable (-)	60.4	60.6	62.5	64.4	64.7	64.3	64.1	63.9
Other net transfers (-)	59.9	61.6	64.4	55.0	55.0	56.7	56.7	56.3
<b>= Net saving</b>	<b>111.4</b>	<b>75.7</b>	<b>35.2</b>	<b>35.3</b>	<b>22.9</b>	<b>24.0</b>	<b>14.5</b>	<b>13.8</b>
<b>Investment, financing and saving</b>								
Net acquisition of non-financial assets (+)	226.3	253.7	304.4	356.3	367.8	381.2	391.8	374.7
Gross fixed capital formation (+)	856.5	913.5	986.2	1,069.7	1,084.4	1,103.0	1,117.1	1,102.1
Consumption of fixed capital (-)	636.9	667.3	698.0	735.5	742.7	750.0	757.6	765.8
Net acquisition of other non-financial assets (+)	6.6	7.4	16.1	22.1	26.1	28.2	32.3	38.3
Main items of financial investment (+)								
Short-term assets	104.0	128.2	164.1	161.8	163.7	124.1	95.4	52.7
Currency and deposits	89.2	113.6	146.2	154.9	127.8	116.4	90.2	17.2
Money market fund shares	16.1	8.3	2.6	-18.1	-10.0	-9.3	7.9	31.5
Debt securities <sup>1)</sup>	-1.3	6.2	15.4	24.9	45.9	16.9	-2.7	3.9
Long-term assets	209.3	378.7	490.2	466.5	504.8	500.2	545.8	657.4
Deposits	-10.0	32.3	29.3	26.1	5.9	-22.4	8.6	16.1
Debt securities	-48.8	-34.2	-4.7	-48.5	-84.4	-103.5	-59.0	-31.5
Shares and other equity	200.2	244.2	259.6	315.8	354.4	370.4	346.6	364.2
Other, mainly intercompany loans	67.9	136.4	206.0	173.1	228.9	255.7	249.6	308.5
Remaining net assets (+)	48.4	85.5	145.0	200.6	110.7	44.8	-30.9	-103.6
Main items of financing (-)								
Debt	207.6	443.8	760.2	801.3	784.5	728.4	716.7	653.5
<i>of which loans from euro area MFIs</i>	164.8	264.5	448.9	558.9	592.1	562.6	515.7	422.0
<i>of which debt securities</i>	9.8	14.0	39.0	40.7	39.7	16.8	36.0	39.6
Shares and other equity	203.3	265.5	236.6	283.0	274.1	231.4	201.9	241.6
Quoted shares	11.7	101.3	39.1	42.0	22.4	-12.2	-28.5	1.7
Unquoted shares and other equity	191.5	164.1	197.5	241.0	251.7	243.6	230.4	239.9
Net capital transfers receivable (-)	65.7	61.1	71.7	66.3	66.3	69.9	71.7	70.2
<b>= Net saving</b>	<b>111.4</b>	<b>75.7</b>	<b>35.2</b>	<b>35.3</b>	<b>22.9</b>	<b>24.0</b>	<b>14.5</b>	<b>13.8</b>
<b>Financial balance sheet</b>								
Financial assets								
Short-term assets	1,379.5	1,517.4	1,675.2	1,820.3	1,841.8	1,848.1	1,853.8	1,874.9
Currency and deposits	1,102.9	1,229.3	1,367.0	1,519.3	1,506.6	1,535.1	1,548.7	1,554.3
Money market fund shares	164.1	176.5	184.9	162.0	183.0	183.2	184.4	189.8
Debt securities <sup>1)</sup>	112.5	111.7	123.3	139.0	152.2	129.8	120.7	130.7
Long-term assets	7,672.1	8,686.4	10,041.2	10,746.8	10,108.8	9,904.8	9,681.9	8,992.3
Deposits	157.0	199.0	222.5	265.8	249.4	235.3	258.2	273.1
Debt securities	328.6	280.9	277.3	229.7	174.1	160.7	168.1	183.0
Shares and other equity	5,433.6	6,308.6	7,451.5	7,968.8	7,288.1	7,036.3	6,739.4	5,956.9
Other, mainly intercompany loans	1,753.0	1,897.9	2,089.9	2,282.6	2,397.2	2,472.5	2,516.2	2,579.2
Remaining net assets	327.8	384.0	449.1	610.5	599.8	564.1	579.4	559.8
Liabilities								
Debt	6,582.9	7,063.4	7,799.9	8,558.9	8,714.2	8,923.5	9,059.6	9,228.9
<i>of which loans from euro area MFIs</i>	3,160.8	3,429.3	3,868.0	4,404.9	4,545.5	4,668.6	4,761.1	4,828.6
<i>of which debt securities</i>	651.5	674.3	691.9	695.4	696.5	702.0	712.0	732.4
Shares and other equity	9,591.1	10,940.8	12,874.9	13,808.7	12,454.3	12,014.5	11,250.0	10,134.5
Quoted shares	2,995.0	3,692.4	4,468.8	4,985.6	4,204.2	3,976.5	3,437.6	2,843.9
Unquoted shares and other equity	6,596.0	7,248.4	8,406.1	8,823.1	8,250.2	8,038.0	7,812.4	7,290.6

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	2007 Q1- 2007 Q4	2007 Q2- 2008 Q1	2007 Q3- 2008 Q2	2007 Q4- 2008 Q3	2008 Q1- 2008 Q4
<b>Financial account, financial transactions</b>								
<b>Main items of financial investment (+)</b>								
Short-term assets	39.5	25.5	64.4	87.4	109.1	102.5	88.6	106.9
Currency and deposits	13.2	7.2	11.0	6.4	32.7	35.8	32.1	59.1
Money market fund shares	2.7	-0.5	3.5	3.1	15.8	14.2	20.9	22.2
Debt securities <sup>1)</sup>	23.5	18.9	49.8	77.8	60.6	52.6	35.7	25.5
Long-term assets	223.7	295.0	313.8	215.9	217.6	178.7	169.3	161.3
Deposits	36.9	17.2	76.7	51.6	27.9	16.0	0.9	-1.7
Debt securities	133.1	132.8	125.2	89.9	83.6	75.2	95.4	88.6
Loans	7.4	-4.1	2.6	-13.6	20.6	17.0	20.8	30.8
Quoted shares	12.7	30.7	-1.5	-4.8	-2.3	-1.1	-8.8	-5.1
Unquoted shares and other equity	2.6	31.1	27.0	27.2	45.2	41.2	45.7	41.1
Mutual fund shares	30.9	87.2	83.9	65.6	42.7	30.4	15.4	7.4
Remaining net assets (+)	11.8	11.4	4.3	-26.1	-23.7	-19.3	-9.6	22.9
<b>Main items of financing (-)</b>								
Debt securities	-1.7	-0.4	5.2	3.2	4.4	5.2	5.4	9.3
Loans	4.3	17.3	35.9	21.7	43.9	18.0	4.1	21.8
Shares and other equity	12.2	13.6	11.4	2.7	4.4	6.9	5.1	18.7
Insurance technical reserves	262.6	334.3	322.0	292.0	273.3	255.8	240.4	197.3
Net equity of households in life insurance and pension fund reserves	231.0	292.1	308.2	282.0	262.4	239.6	219.6	178.0
Prepayments of insurance premiums and reserves for outstanding claims	31.7	42.2	13.9	10.0	10.9	16.1	20.8	19.2
<b>= Changes in net financial worth due to transactions</b>	-2.5	-32.8	7.9	-42.5	-23.0	-23.8	-6.6	44.0
<b>Other changes account</b>								
<b>Other changes in financial assets (+)</b>								
Shares and other equity	110.7	190.7	181.2	-15.4	-226.4	-334.6	-401.6	-536.7
Other net assets	142.3	75.5	-34.4	-45.0	14.1	-3.5	-13.1	40.3
<b>Other changes in liabilities (-)</b>								
Shares and other equity	21.3	118.3	34.5	-32.7	-91.8	-143.2	-137.8	-174.2
Insurance technical reserves	83.8	137.8	52.9	-3.3	-79.6	-128.3	-179.6	-245.5
Net equity of households in life insurance and pension fund reserves	63.9	146.9	56.2	-2.8	-77.8	-125.4	-174.5	-239.6
Prepayments of insurance premiums and reserves for outstanding claims	19.8	-9.1	-3.3	-0.4	-1.8	-2.9	-5.1	-5.8
<b>= Other changes in net financial worth</b>	148.0	10.1	59.4	-24.4	-40.9	-66.6	-97.3	-76.7
<b>Financial balance sheet</b>								
<b>Financial assets (+)</b>								
Short-term assets	403.1	437.2	509.0	603.3	661.2	670.7	675.5	713.1
Currency and deposits	133.6	146.6	157.1	164.6	192.5	182.6	189.5	226.6
Money market fund shares	74.4	75.6	81.5	82.4	95.4	94.8	98.3	102.2
Debt securities <sup>1)</sup>	195.1	215.0	270.3	356.2	373.3	393.3	387.6	384.3
Long-term assets	4,089.5	4,615.9	5,050.6	5,197.8	5,106.1	5,044.2	4,988.2	4,843.1
Deposits	500.4	524.7	602.1	650.5	649.2	653.5	648.7	648.5
Debt securities	1,615.0	1,774.2	1,845.5	1,888.9	1,942.4	1,921.4	1,969.9	1,992.7
Loans	348.5	353.4	351.2	331.8	359.5	355.6	357.7	366.1
Quoted shares	587.2	653.3	724.5	708.1	613.2	594.1	535.4	426.6
Unquoted shares and other equity	349.2	403.1	480.8	511.1	488.7	473.4	465.6	449.1
Mutual fund shares	689.2	907.3	1,046.5	1,107.3	1,053.0	1,046.2	1,010.8	960.1
Remaining net assets (+)	139.4	176.8	204.5	173.8	191.6	177.5	176.2	215.7
<b>Liabilities (-)</b>								
Debt securities	22.3	21.3	35.9	35.2	35.8	36.6	36.7	43.2
Loans	118.5	136.2	167.6	187.1	221.4	211.2	206.6	212.8
Shares and other equity	497.7	629.6	675.5	645.5	595.3	564.2	550.2	490.0
Insurance technical reserves	4,083.5	4,555.6	4,930.5	5,219.3	5,214.5	5,242.5	5,231.6	5,171.1
Net equity of households in life insurance and pension fund reserves	3,451.0	3,890.0	4,254.4	4,533.5	4,520.5	4,543.0	4,529.1	4,471.9
Prepayments of insurance premiums and reserves for outstanding claims	632.5	665.6	676.2	685.8	694.0	699.4	702.5	699.2
<b>= Net financial wealth</b>	-90.0	-112.8	-45.5	-112.3	-108.2	-162.0	-185.1	-145.1

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.

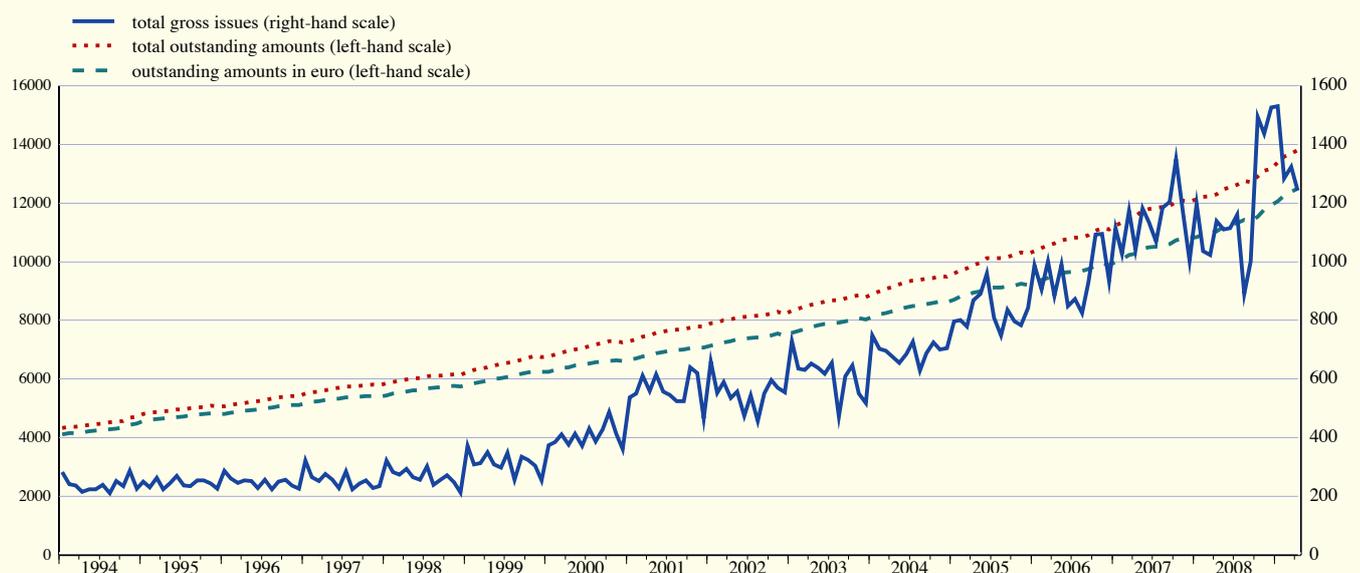
## FINANCIAL MARKETS

### 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	6-month growth rates	
											11	12
Total												
2008 Apr.	13,184.4	1,165.3	55.0	11,042.0	1,073.6	70.3	12,308.6	1,137.9	82.0	7.1	62.9	5.0
May	13,363.5	1,126.3	178.0	11,181.6	1,036.5	138.6	12,471.9	1,110.2	153.4	6.7	98.2	5.8
June	13,499.5	1,155.6	136.3	11,256.5	1,040.3	75.3	12,544.0	1,113.5	82.6	6.8	89.3	5.7
July	13,512.9	1,139.5	12.1	11,315.0	1,073.9	56.7	12,620.4	1,160.6	76.0	7.1	98.3	6.9
Aug.	13,640.6	880.7	124.9	11,424.8	816.0	107.1	12,752.1	889.5	112.4	7.8	163.5	8.9
Sep.	13,644.5	1,022.1	2.3	11,393.2	930.5	-32.9	12,712.9	1,001.3	-42.4	7.1	-13.7	8.3
Oct.	13,742.2	1,454.3	97.4	11,543.8	1,417.3	150.3	12,911.7	1,494.5	145.4	7.0	103.6	9.0
Nov.	13,960.3	1,422.2	218.5	11,771.0	1,369.7	227.9	13,104.7	1,436.8	213.7	8.2	199.5	10.6
Dec.	14,146.2	1,537.4	189.4	11,923.5	1,448.7	156.2	13,177.4	1,526.0	142.8	9.5	274.9	13.6
2009 Jan.	14,249.2	1,503.7	98.8	12,064.2	1,451.3	137.4	13,379.4	1,529.9	146.7	10.1	104.2	13.6
Feb.	14,443.6	1,260.8	191.7	12,250.3	1,199.6	183.8	13,583.1	1,285.1	203.7	11.1	166.2	13.5
Mar.	14,623.0	1,317.7	178.0	12,393.9	1,229.5	142.0	13,692.2	1,322.8	153.0	12.0	121.9	15.8
Apr.	.	.	.	12,489.3	1,160.8	98.1	13,798.1	1,242.8	106.1	12.1	87.4	15.4
Long-term												
2008 Apr.	11,824.3	263.8	91.9	9,827.2	212.7	68.2	10,907.6	230.3	73.2	5.5	69.0	4.4
May	11,978.4	290.8	153.4	9,941.5	235.0	113.6	11,032.4	257.5	122.7	5.1	68.9	4.9
June	12,092.5	283.8	114.3	10,028.9	230.3	87.6	11,120.0	254.6	96.0	5.2	68.9	4.8
July	12,120.2	208.7	26.2	10,061.9	178.5	31.2	11,160.2	196.7	36.7	5.4	61.7	5.7
Aug.	12,211.3	160.0	89.1	10,141.8	133.8	78.0	11,260.7	149.2	78.7	6.2	134.7	7.7
Sep.	12,201.1	183.6	-9.5	10,120.6	145.6	-20.4	11,245.0	158.6	-30.8	5.7	-16.9	7.3
Oct.	12,225.3	199.0	24.8	10,156.2	182.7	36.3	11,337.8	195.4	30.9	5.3	23.1	6.3
Nov.	12,400.6	275.5	174.4	10,331.9	253.9	175.0	11,493.5	262.5	165.9	6.3	145.9	7.7
Dec.	12,579.7	362.8	180.3	10,503.6	328.3	173.1	11,588.2	340.0	153.7	7.4	182.6	9.8
2009 Jan.	12,659.9	294.7	78.4	10,593.9	276.8	89.5	11,723.3	300.2	90.2	8.2	112.2	10.7
Feb.	12,831.7	302.3	170.4	10,755.7	269.3	160.6	11,896.2	296.4	173.1	9.3	149.0	10.8
Mar.	13,019.5	319.5	158.1	10,933.4	279.9	148.0	12,038.3	301.6	149.1	10.5	143.3	13.8
Apr.	.	.	.	10,997.7	251.6	39.3	12,110.4	269.7	43.2	10.1	38.7	14.1

### C16 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	
	Total											
2007	12,069	5,046	1,510	653	4,534	327	1,138	841	59	109	116	12
2008	13,177	5,266	1,925	696	4,950	340	1,177	817	73	100	163	24
2008 Q2	12,544	5,231	1,627	670	4,696	320	1,121	787	70	102	142	20
Q3	12,713	5,267	1,695	680	4,747	324	1,017	691	54	97	148	27
Q4	13,177	5,266	1,925	696	4,950	340	1,486	1,006	132	107	214	28
2009 Q1	13,692	5,395	2,008	718	5,228	343	1,379	922	68	92	261	35
2009 Jan.	13,379	5,340	1,944	710	5,048	337	1,530	1,016	75	105	278	56
Feb.	13,583	5,407	1,988	718	5,133	338	1,285	873	72	81	236	23
Mar.	13,692	5,395	2,008	718	5,228	343	1,323	878	58	90	269	27
Apr.	13,798	5,419	2,033	728	5,267	350	1,243	805	55	90	266	26
	Short-term											
2007	1,287	787	36	100	345	18	946	754	18	101	64	9
2008	1,589	822	61	115	566	25	962	723	26	92	101	19
2008 Q2	1,424	835	51	111	415	11	873	666	21	92	77	17
Q3	1,468	826	62	111	457	13	849	614	25	92	94	24
Q4	1,589	822	61	115	566	25	1,220	911	38	95	152	23
2009 Q1	1,654	838	41	98	659	18	1,080	806	17	74	156	27
2009 Jan.	1,656	862	38	108	630	19	1,230	905	18	82	178	47
Feb.	1,687	884	38	103	643	19	989	748	16	67	140	18
Mar.	1,654	838	41	98	659	18	1,021	764	17	74	149	17
Apr.	1,688	829	42	94	705	17	973	694	16	74	173	16
	Long-term <sup>2)</sup>											
2007	10,782	4,259	1,473	553	4,189	309	191	86	41	8	52	3
2008	11,588	4,445	1,864	581	4,384	315	215	95	47	8	62	4
2008 Q2	11,120	4,397	1,576	558	4,280	309	247	121	48	10	65	3
Q3	11,245	4,442	1,633	570	4,290	311	168	76	29	5	54	3
Q4	11,588	4,445	1,864	581	4,384	315	266	95	93	11	62	5
2009 Q1	12,038	4,556	1,967	621	4,570	324	299	116	51	18	105	8
2009 Jan.	11,723	4,479	1,906	602	4,419	319	300	111	56	23	100	9
Feb.	11,896	4,523	1,949	615	4,490	319	296	125	56	15	95	6
Mar.	12,038	4,556	1,967	621	4,570	324	302	114	42	16	120	10
Apr.	12,110	4,590	1,991	634	4,562	333	270	111	40	16	93	10
	Of which long-term fixed rate											
2007	7,324	2,263	594	419	3,797	250	107	44	10	5	45	3
2008	7,611	2,326	625	445	3,966	250	119	48	8	6	54	3
2008 Q2	7,477	2,347	605	424	3,853	248	145	66	11	9	56	2
Q3	7,535	2,370	619	432	3,865	248	101	42	7	3	47	2
Q4	7,611	2,326	625	445	3,966	250	120	42	9	10	57	2
2009 Q1	7,932	2,397	663	487	4,133	252	207	72	17	18	96	5
2009 Jan.	7,712	2,349	644	467	4,002	251	214	76	18	23	92	6
Feb.	7,839	2,384	661	479	4,065	250	203	76	22	15	86	4
Mar.	7,932	2,397	663	487	4,133	252	205	65	11	15	108	6
Apr.	7,983	2,421	673	500	4,131	258	185	63	15	15	85	7
	Of which long-term variable rate											
2007	3,004	1,621	861	123	342	58	69	31	30	3	4	0
2008	3,489	1,724	1,209	126	365	64	81	36	38	1	5	1
2008 Q2	3,186	1,683	945	124	373	60	90	47	36	1	6	1
Q3	3,238	1,698	987	129	362	61	53	24	21	2	4	1
Q4	3,489	1,724	1,209	126	365	64	129	39	83	1	3	2
2009 Q1	3,603	1,759	1,279	123	371	70	75	32	34	0	5	3
2009 Jan.	3,508	1,724	1,234	125	359	66	63	19	37	0	3	3
Feb.	3,549	1,731	1,261	125	365	68	80	38	34	0	6	2
Mar.	3,603	1,759	1,279	123	371	70	81	40	30	1	7	4
Apr.	3,613	1,762	1,292	124	362	73	66	35	23	1	5	3

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

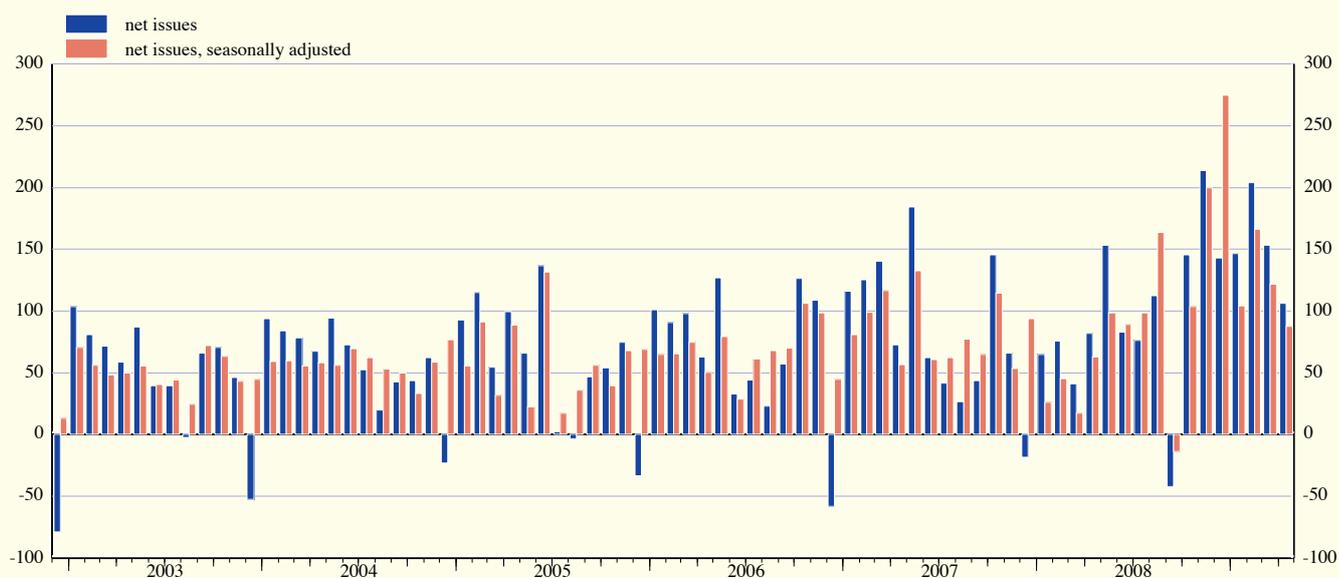
(EUR billions unless otherwise indicated; transactions during the period; nominal values)

## 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											
2007	83.8	40.7	27.8	4.2	9.9	1.2	84.3	41.3	27.3	4.3	10.2	1.2
2008	95.6	23.2	34.6	3.9	32.8	1.1	97.1	23.3	33.9	4.0	34.7	1.1
2008 Q2	106.0	46.7	35.0	4.8	18.7	0.9	83.5	48.6	30.8	0.7	2.8	0.6
Q3	48.7	11.0	19.9	1.9	14.7	1.2	82.7	18.9	33.2	5.2	23.1	2.4
Q4	167.3	11.4	77.4	5.9	67.2	5.3	192.7	21.4	55.6	7.8	103.1	4.8
2009 Q1	167.8	41.5	26.6	7.0	91.8	0.9	130.8	21.9	39.3	6.4	62.6	0.6
2009 Jan.	146.7	40.5	9.1	9.4	90.6	-3.0	104.2	9.9	42.2	6.4	50.3	-4.6
Feb.	203.7	67.7	43.8	7.6	83.8	0.9	166.2	48.4	43.5	7.8	66.2	0.3
Mar.	153.0	16.3	26.8	4.2	100.9	4.9	121.9	7.5	32.2	4.9	71.2	6.1
Apr.	106.1	27.8	23.4	9.6	38.2	7.0	87.4	14.0	26.1	6.7	33.7	6.9
	Long-term											
2007	61.9	23.9	27.2	2.4	7.8	0.7	61.6	24.1	26.7	2.4	7.8	0.7
2008	66.2	16.2	32.6	2.5	14.4	0.5	65.7	16.3	31.9	2.5	14.4	0.5
2008 Q2	97.3	42.6	34.1	4.0	15.8	0.9	68.9	36.2	30.0	0.4	1.5	0.7
Q3	28.2	7.5	16.4	2.5	1.3	0.5	59.8	15.3	29.1	4.1	9.8	1.6
Q4	116.8	2.9	77.6	4.4	30.5	1.5	117.2	11.0	56.9	3.8	45.0	0.5
2009 Q1	137.5	26.8	33.4	12.9	61.4	3.0	134.8	17.5	45.7	15.7	52.9	3.0
2009 Jan.	90.2	9.1	32.5	16.7	28.9	3.1	112.2	-9.7	64.1	20.7	14.9	2.9
Feb.	173.1	45.2	43.6	12.6	71.3	0.5	149.0	25.1	43.6	14.6	65.0	0.6
Mar.	149.1	26.0	24.2	9.4	83.9	5.6	143.3	17.7	29.4	11.8	78.9	5.5
Apr.	43.2	7.7	22.3	12.9	-8.0	8.3	38.7	2.1	25.5	12.4	-10.5	9.1

## C17 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.

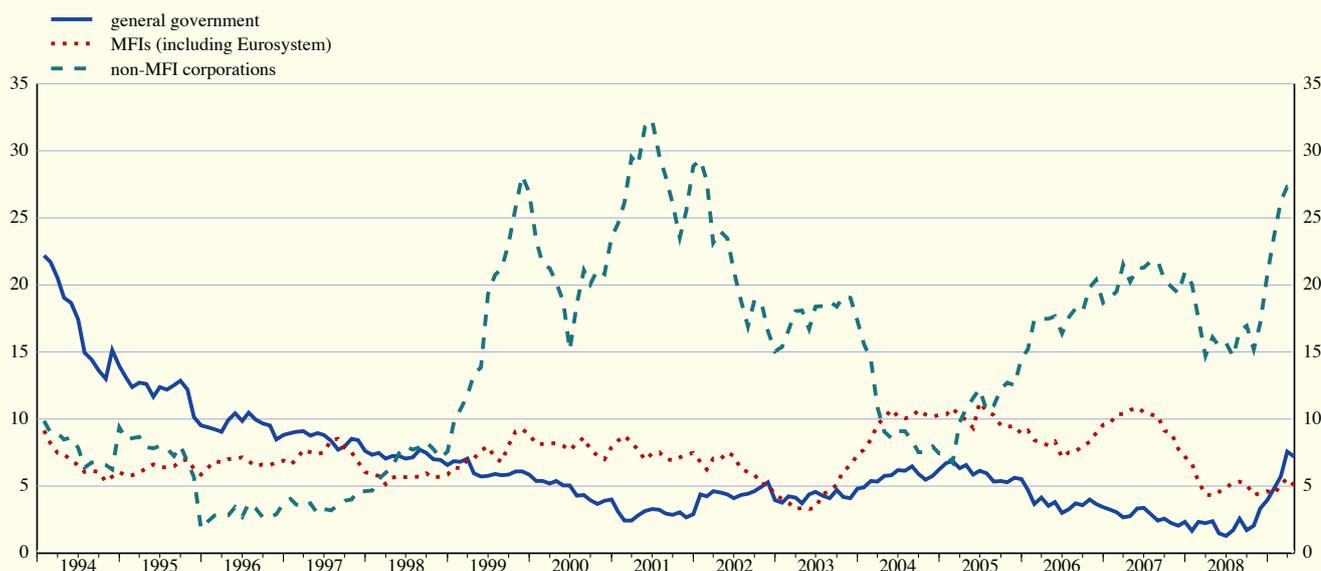
### 4.3 Growth rates of securities, other than shares, issued by euro area residents <sup>1)</sup>

(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												
2008 Apr.	7.1	7.4	22.1	6.1	3.0	0.3	5.0	4.2	18.7	4.3	2.5	-3.3
May	6.7	7.9	21.0	6.2	1.7	1.9	5.8	6.4	19.6	4.2	1.6	-0.9
June	6.8	8.3	22.9	3.4	1.5	2.1	5.7	6.4	19.9	2.7	1.7	-5.2
July	7.1	8.6	21.8	2.7	2.1	3.3	6.9	7.4	20.2	1.2	3.2	2.2
Aug.	7.8	8.4	24.3	4.9	3.0	3.4	8.9	9.2	27.1	2.8	3.9	6.6
Sep.	7.1	6.9	24.3	5.9	2.6	2.3	8.3	8.1	26.8	5.4	3.4	5.8
Oct.	7.0	5.3	21.5	4.3	5.0	2.8	9.0	6.4	24.4	4.3	7.5	9.5
Nov.	8.2	5.7	24.1	4.2	6.8	2.8	10.6	4.9	28.8	4.3	12.2	6.7
Dec.	9.5	5.5	27.5	7.1	8.6	3.9	13.6	4.7	35.4	12.0	16.9	14.1
2009 Jan.	10.1	5.3	29.1	6.9	10.1	5.4	13.6	3.2	38.6	12.9	17.8	8.6
Feb.	11.1	6.3	30.4	8.0	10.8	6.5	13.5	3.5	33.8	13.4	18.4	6.3
Mar.	12.0	6.5	31.1	8.9	12.4	7.9	15.8	5.0	35.6	12.8	22.1	10.2
Apr.	12.1	6.4	30.6	9.9	12.6	10.5	15.4	6.5	37.2	16.2	17.9	11.5
Long-term												
2008 Apr.	5.5	4.3	20.9	4.7	2.5	0.4	4.4	2.8	17.4	4.3	2.3	-1.9
May	5.1	4.6	19.7	5.1	1.4	1.8	4.9	4.6	18.1	4.4	1.4	0.5
June	5.2	4.9	21.3	2.2	1.2	1.9	4.8	5.6	18.1	2.3	0.4	-0.1
July	5.4	5.2	19.8	2.1	1.6	3.1	5.7	6.3	17.5	0.5	2.2	3.0
Aug.	6.2	5.3	22.1	3.1	2.5	3.5	7.7	7.8	25.9	1.7	2.7	6.2
Sep.	5.7	5.1	22.0	4.4	1.7	2.2	7.3	7.4	25.5	5.0	1.6	4.6
Oct.	5.3	4.3	19.7	3.8	2.1	1.4	6.3	5.9	22.0	3.2	1.9	5.0
Nov.	6.3	4.5	22.6	3.2	3.5	1.3	7.7	4.4	27.3	2.0	5.6	2.2
Dec.	7.4	4.6	26.5	5.5	4.1	2.1	9.8	3.6	35.4	8.7	7.9	4.1
2009 Jan.	8.2	4.4	29.7	8.1	5.0	3.3	10.7	2.5	43.2	16.3	7.8	3.5
Feb.	9.3	5.1	32.2	10.5	5.8	3.9	10.8	2.5	38.7	19.9	9.1	1.7
Mar.	10.5	5.6	32.7	12.9	7.7	5.7	13.8	3.9	40.3	21.6	14.2	6.8
Apr.	10.1	5.0	32.0	14.7	7.1	8.6	14.1	4.2	42.7	27.5	12.5	12.4

### C18 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												
2007	5.2	7.2	17.0	4.0	2.5	6.6	15.8	11.1	37.8	18.4	3.8	-1.8
2008	3.0	4.9	5.6	4.2	1.5	1.4	13.0	5.5	34.2	7.0	7.6	3.2
2008 Q2	2.6	4.3	5.0	4.1	1.2	1.4	12.1	5.0	32.0	8.5	8.2	0.4
Q3	3.0	5.5	5.0	3.4	1.3	2.0	12.6	5.3	33.0	3.2	7.7	6.0
Q4	3.2	4.5	4.3	4.5	2.4	-0.8	13.3	5.7	34.8	4.3	3.9	10.2
2009 Q1	6.1	5.0	8.8	12.3	6.0	1.4	16.1	5.4	45.4	0.4	1.4	11.2
2008 Nov.	3.3	4.2	4.1	3.4	3.0	-1.7	13.8	6.0	35.5	4.6	3.9	12.2
Dec.	4.1	4.0	5.0	6.8	4.0	-0.4	15.7	6.1	40.7	1.9	4.5	10.9
2009 Jan.	5.4	4.2	7.6	10.8	5.4	1.2	15.8	5.3	44.8	0.6	0.6	10.0
Feb.	6.7	5.5	10.5	14.0	6.4	2.0	16.3	5.1	47.2	0.1	0.7	9.7
Mar.	8.4	6.6	11.4	17.6	8.4	2.6	16.6	5.1	47.6	-0.9	1.0	16.7
Apr.	8.5	6.8	12.1	19.9	7.9	5.3	14.9	2.8	45.9	-0.7	-0.9	20.3
In euro												
2007	4.6	6.5	13.7	2.2	2.7	6.7	15.1	10.3	35.5	18.2	3.9	-2.4
2008	2.9	4.8	5.9	2.1	1.8	1.3	14.5	6.5	35.8	7.1	8.0	2.0
2008 Q2	2.4	4.0	4.4	2.0	1.4	1.4	13.2	5.7	33.2	8.2	8.6	-1.1
Q3	2.9	5.4	6.0	1.1	1.5	1.8	14.5	6.8	35.0	3.8	8.1	4.6
Q4	3.3	4.7	6.5	2.2	2.6	-1.2	15.6	7.7	37.4	5.0	4.1	9.2
2009 Q1	6.5	6.1	12.4	9.5	6.1	0.8	19.0	7.9	48.4	0.3	1.5	11.0
2008 Nov.	3.5	4.3	6.5	1.2	3.3	-2.3	16.3	8.1	38.4	5.4	4.2	11.4
Dec.	4.4	4.8	7.5	3.8	4.3	-1.0	18.4	8.6	43.4	2.1	4.7	9.7
2009 Jan.	5.8	5.3	10.6	7.9	5.5	0.6	18.8	8.1	47.8	0.8	0.8	9.2
Feb.	7.2	6.7	14.9	11.1	6.4	1.4	19.2	7.5	50.2	0.1	0.9	10.1
Mar.	8.9	8.1	15.8	15.4	8.3	1.9	19.6	7.6	50.8	-1.7	0.9	17.7
Apr.	9.0	8.6	16.5	17.9	7.7	4.6	17.6	4.7	49.0	-1.5	-1.0	22.2

**C19 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)

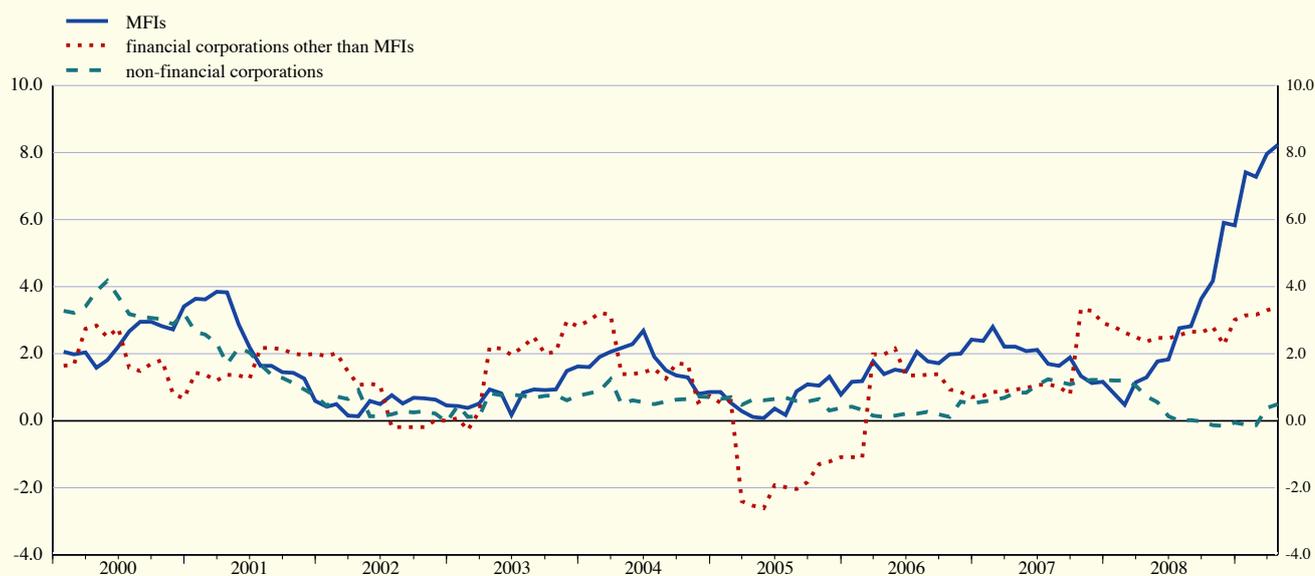
##### 1. Outstanding amounts and annual growth rates

(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
2007 Apr.	6,769.2	103.5	1.1	1,170.5	2.2	675.6	0.9	4,923.2	0.8
May	7,048.9	103.5	1.1	1,176.3	2.1	688.9	1.0	5,183.7	0.8
June	6,970.5	103.8	1.3	1,130.4	2.1	677.2	1.1	5,162.9	1.1
July	6,740.3	104.0	1.3	1,101.6	1.7	608.9	1.1	5,029.8	1.2
Aug.	6,626.8	103.9	1.2	1,062.0	1.6	583.9	1.0	4,981.0	1.2
Sep.	6,690.9	104.0	1.2	1,050.6	1.9	597.3	0.8	5,042.9	1.1
Oct.	6,945.9	104.3	1.4	1,074.6	1.3	629.3	3.3	5,242.0	1.2
Nov.	6,631.8	104.3	1.4	1,034.6	1.1	579.2	3.3	5,018.0	1.2
Dec.	6,588.7	104.4	1.4	1,019.0	1.2	579.0	2.9	4,990.6	1.2
2008 Jan.	5,766.1	104.4	1.3	889.8	0.8	497.4	2.8	4,378.9	1.2
Feb.	5,820.8	104.5	1.2	860.1	0.5	492.4	2.6	4,468.3	1.2
Mar.	5,567.1	104.5	1.2	860.5	1.1	501.4	2.5	4,205.2	1.1
Apr.	5,748.0	104.4	1.0	837.2	1.3	519.5	2.4	4,391.3	0.7
May	5,729.4	104.5	0.9	771.0	1.8	497.1	2.5	4,461.2	0.6
June	5,081.0	104.5	0.6	665.3	1.8	435.8	2.4	3,979.9	0.1
July	4,972.6	104.6	0.6	691.6	2.8	428.3	2.5	3,852.7	0.0
Aug.	4,999.2	104.6	0.6	665.5	2.8	438.5	2.7	3,895.2	0.0
Sep.	4,430.0	104.7	0.7	612.2	3.6	382.2	2.6	3,435.6	0.0
Oct.	3,743.7	105.0	0.7	451.9	4.2	280.3	2.8	3,011.5	-0.1
Nov.	3,489.2	105.2	0.9	394.5	5.9	265.3	2.3	2,829.4	-0.2
Dec.	3,482.5	105.4	1.0	377.0	5.8	269.2	3.0	2,836.2	-0.1
2009 Jan.	3,286.8	105.6	1.1	344.6	7.4	240.0	3.1	2,702.1	-0.1
Feb.	2,922.0	105.6	1.1	276.7	7.3	189.1	3.2	2,456.2	-0.1
Mar.	3,009.8	106.1	1.5	315.8	8.0	204.8	3.3	2,489.2	0.4
Apr.	3,435.5	106.2	1.7	414.4	8.2	249.3	3.4	2,771.8	0.5

##### C20 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>

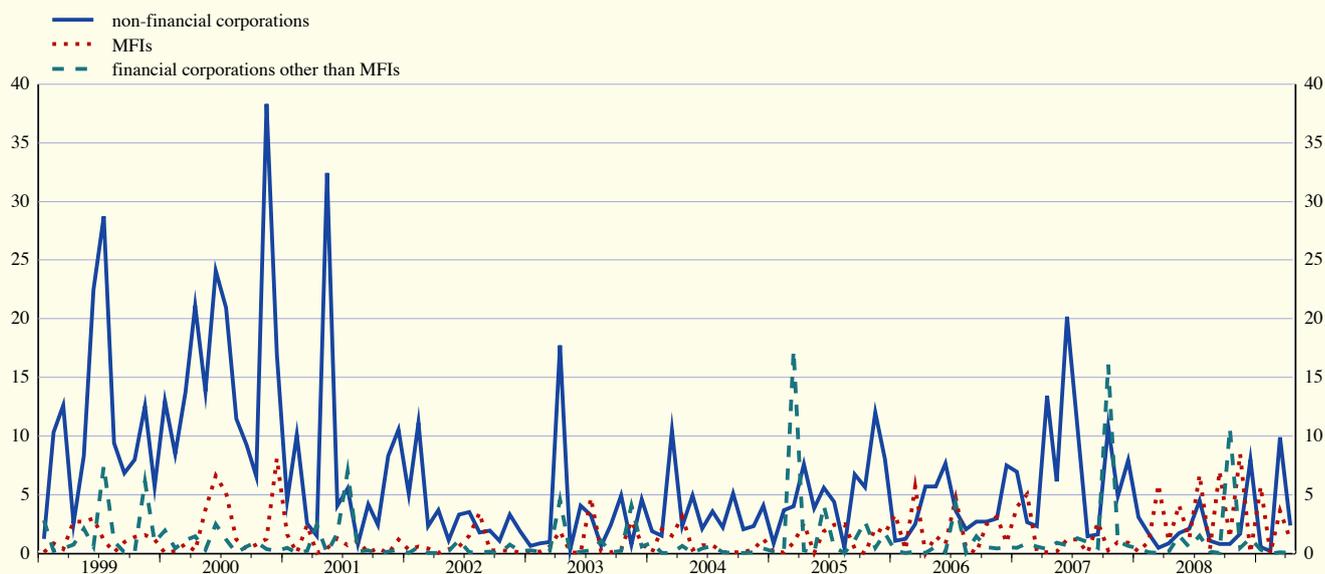
(EUR billions; market values)

### 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
2007 Apr.	13.9	0.4	13.4	0.1	0.3	-0.2	0.3	0.0	0.3	13.4	0.2	13.2
May	7.2	2.0	5.2	0.1	0.0	0.1	0.9	0.0	0.9	6.1	2.0	4.1
June	22.0	1.6	20.5	1.2	0.0	1.1	0.7	0.0	0.7	20.2	1.6	18.6
July	13.3	1.8	11.5	1.2	0.0	1.2	1.3	0.3	1.0	10.9	1.5	9.3
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.	4.7	2.5	2.2	2.6	0.0	2.6	0.4	0.3	0.1	1.6	2.1	-0.5
Oct.	27.2	8.0	19.1	0.2	3.2	-3.0	16.1	0.5	15.6	10.8	4.3	6.5
Nov.	6.8	3.3	3.5	0.9	0.0	0.9	1.0	1.3	-0.3	4.9	2.0	2.9
Dec.	9.5	4.6	4.9	0.9	0.0	0.9	0.7	2.2	-1.5	7.9	2.5	5.5
2008 Jan.	3.6	1.4	2.3	0.1	0.0	0.1	0.4	0.7	-0.2	3.1	0.7	2.4
Feb.	2.8	1.9	0.9	1.0	0.0	1.0	0.1	0.3	-0.2	1.7	1.6	0.1
Mar.	6.4	6.0	0.3	5.9	0.0	5.9	0.0	0.5	-0.4	0.4	5.6	-5.1
Apr.	2.0	3.0	-0.9	1.1	0.0	1.1	0.1	0.5	-0.3	0.8	2.5	-1.7
May	7.3	6.0	1.4	4.1	0.1	4.1	1.5	0.3	1.2	1.7	5.6	-3.9
June	3.9	4.8	-0.9	1.3	0.0	1.3	0.5	0.1	0.4	2.1	4.7	-2.6
July	12.7	3.4	9.4	6.7	0.0	6.7	1.5	0.5	1.0	4.5	2.9	1.6
Aug.	1.5	3.0	-1.4	0.3	0.0	0.3	0.1	0.0	0.1	1.1	3.0	-1.9
Sep.	7.8	2.8	5.0	7.0	0.0	7.0	0.0	0.1	-0.1	0.8	2.7	-1.9
Oct.	12.8	0.6	12.2	1.4	0.0	1.4	10.7	0.0	10.7	0.8	0.6	0.1
Nov.	10.6	2.9	7.7	8.4	0.5	8.0	0.5	2.1	-1.6	1.7	0.3	1.4
Dec.	9.3	2.6	6.8	0.0	0.0	0.0	1.3	0.0	1.2	8.0	2.5	5.5
2009 Jan.	6.5	0.5	6.0	5.7	0.0	5.7	0.3	0.0	0.3	0.5	0.4	0.1
Feb.	0.2	0.9	-0.7	0.0	0.0	0.0	0.0	0.1	-0.1	0.2	0.8	-0.6
Mar.	13.6	0.2	13.4	3.6	0.0	3.6	0.1	0.0	0.1	9.9	0.2	9.7
Apr.	3.7	0.3	3.4	1.2	0.0	1.2	0.1	0.0	0.1	2.4	0.3	2.1

#### C21 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>3),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
2008 May	1.23	4.32	4.27	3.16	2.73	3.84	2.08	4.26	4.68	4.48	4.03
June	1.24	4.43	4.62	3.28	2.74	3.88	2.07	4.28	4.72	4.01	4.11
July	1.26	4.61	4.83	3.37	2.81	3.94	2.15	4.46	5.06	4.56	4.26
Aug.	1.29	4.59	4.87	3.45	2.87	3.98	2.17	4.46	5.34	4.55	4.30
Sep.	1.32	4.65	4.85	3.36	2.97	4.01	2.20	4.52	5.19	4.69	4.27
Oct.	1.34	4.77	4.85	3.57	3.01	4.12	2.20	4.26	5.12	4.57	3.66
Nov.	1.29	4.26	4.67	3.71	3.02	4.20	1.98	3.53	4.58	4.18	3.19
Dec.	1.16	3.75	4.35	3.69	2.95	4.17	1.63	2.87	4.23	4.09	2.63
2009 Jan.	1.02	3.27	3.90	3.52	2.88	4.08	1.28	2.25	3.81	3.78	2.05
Feb.	0.90	2.62	3.40	3.23	2.49	3.98	1.12	1.61	3.21	3.89	1.55
Mar.	0.80	2.24	2.96	3.07	2.31	3.87	0.96	1.36	2.97	2.89	1.23
Apr.	0.66	2.01	2.71	2.87	2.22	3.75	0.80	1.15	2.66	3.07	1.12

### 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
2008 May	10.57	8.69	7.01	8.44	8.63	5.34	4.96	4.98	5.13	5.37	5.99	5.87	5.59
June	10.63	8.61	6.93	8.44	8.57	5.48	5.11	5.08	5.20	5.47	6.04	6.12	5.67
July	10.65	8.82	7.15	8.58	8.80	5.67	5.27	5.21	5.34	5.62	6.09	6.21	5.82
Aug.	10.77	8.85	7.22	8.69	8.95	5.77	5.36	5.29	5.27	5.69	6.05	6.28	5.70
Sep.	10.80	8.77	7.20	8.70	8.85	5.80	5.43	5.28	5.37	5.71	6.24	6.36	5.77
Oct.	10.83	8.88	7.22	8.69	8.92	5.84	5.42	5.28	5.37	5.70	6.37	6.26	5.80
Nov.	10.78	8.98	7.17	8.69	8.92	5.63	5.34	5.22	5.28	5.58	5.84	6.15	5.75
Dec.	10.45	8.22	7.03	8.39	8.50	5.09	5.06	5.10	5.13	5.30	4.99	5.75	5.29
2009 Jan.	10.12	8.33	7.03	8.63	8.67	4.38	4.77	4.92	5.00	4.86	4.41	5.44	5.23
Feb.	10.14	8.18	6.65	8.49	8.39	3.97	4.54	4.80	4.89	4.61	4.08	5.03	5.16
Mar.	9.94	7.55	6.51	8.31	8.07	3.66	4.34	4.61	4.72	4.38	3.83	4.72	5.05
Apr.	9.71	7.44	6.50	8.25	8.05	3.38	4.19	4.55	4.67	4.22	3.54	4.70	4.89

### 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
2008 May		6.57	6.10	5.93	5.25	5.26	5.70	5.39
June		6.67	6.16	6.09	5.43	5.35	5.68	5.52
July		6.74	6.26	6.29	5.53	5.44	5.82	5.55
Aug.		6.76	6.27	6.33	5.49	5.44	5.60	5.57
Sep.		6.91	6.34	6.37	5.64	5.62	5.83	5.64
Oct.		6.89	6.52	6.35	5.57	5.59	5.75	5.08
Nov.		6.66	6.04	6.10	5.41	4.86	5.02	4.97
Dec.		6.26	5.38	5.78	5.32	4.28	4.50	4.76
2009 Jan.		5.68	4.73	5.46	5.24	3.51	3.96	4.58
Feb.		5.40	4.32	5.25	4.96	3.10	3.52	4.23
Mar.		5.10	4.03	5.07	4.75	2.83	3.22	3.87
Apr.		4.77	3.82	4.99	4.63	2.54	3.34	4.05

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>2)</sup>	With agreed maturity		Redeemable at notice <sup>2),3)</sup>		Overnight <sup>2)</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
2008 May	1.23	4.13	3.06	2.73	3.84	2.08	4.43	4.27	4.04
June	1.24	4.20	3.08	2.74	3.88	2.07	4.47	4.31	4.12
July	1.26	4.31	3.07	2.81	3.94	2.15	4.59	4.40	4.24
Aug.	1.29	4.38	3.09	2.87	3.98	2.17	4.65	4.39	4.23
Sep.	1.32	4.45	3.11	2.97	4.01	2.20	4.73	4.45	4.32
Oct.	1.34	4.54	3.08	3.01	4.12	2.20	4.68	4.45	4.06
Nov.	1.29	4.51	3.12	3.02	4.20	1.98	4.44	4.40	3.95
Dec.	1.16	4.41	3.07	2.95	4.17	1.63	4.01	4.30	3.56
2009 Jan.	1.02	4.16	3.10	2.88	4.08	1.28	3.49	4.11	3.08
Feb.	0.90	3.98	3.17	2.49	3.98	1.12	3.19	4.00	2.68
Mar.	0.80	3.78	3.06	2.31	3.87	0.96	2.82	3.87	2.28
Apr.	0.66	3.54	3.11	2.22	3.75	0.80	2.52	3.84	1.95

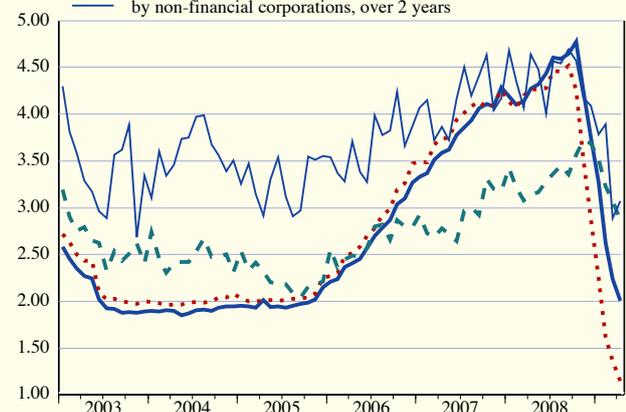
**5. Interest rates on loans (outstanding amounts)**

	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
2008 May	5.61	4.85	5.05	9.08	7.22	6.26	6.08	5.59	5.32
June	5.68	4.89	5.07	9.11	7.29	6.35	6.18	5.68	5.39
July	5.72	4.93	5.11	9.19	7.34	6.37	6.25	5.76	5.44
Aug.	5.78	4.95	5.11	9.26	7.38	6.41	6.28	5.79	5.46
Sep.	5.77	5.03	5.14	9.38	7.47	6.47	6.39	5.90	5.54
Oct.	5.78	5.06	5.17	9.45	7.48	6.48	6.43	5.99	5.58
Nov.	5.71	5.01	5.16	9.24	7.48	6.46	6.16	5.81	5.51
Dec.	5.49	4.90	5.08	9.02	7.38	6.38	5.72	5.42	5.27
2009 Jan.	5.22	4.72	4.93	8.72	7.22	6.22	5.11	4.89	4.89
Feb.	5.14	4.75	4.91	8.61	7.27	6.21	4.77	4.59	4.74
Mar.	4.92	4.62	4.78	8.43	7.09	6.07	4.41	4.28	4.48
Apr.	4.69	4.49	4.64	8.17	7.01	5.90	4.11	3.98	4.23

**C22 New deposits with agreed maturity**

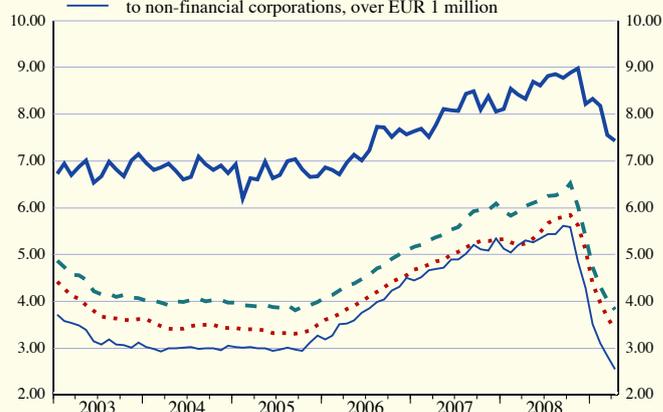
(percentages per annum excluding charges; period averages)

- by households, up to 1 year
- ... by non-financial corporations, up to 1 year
- - - by households, over 2 years
- - - by non-financial corporations, over 2 years

**C23 New loans at floating rate and up to 1 year initial rate fixation**

(percentages per annum excluding charges; period averages)

- to households for consumption
- ... to households for house purchase
- - - to non-financial corporations, up to EUR 1 million
- - - to non-financial corporations, over EUR 1 million



Source: ECB.

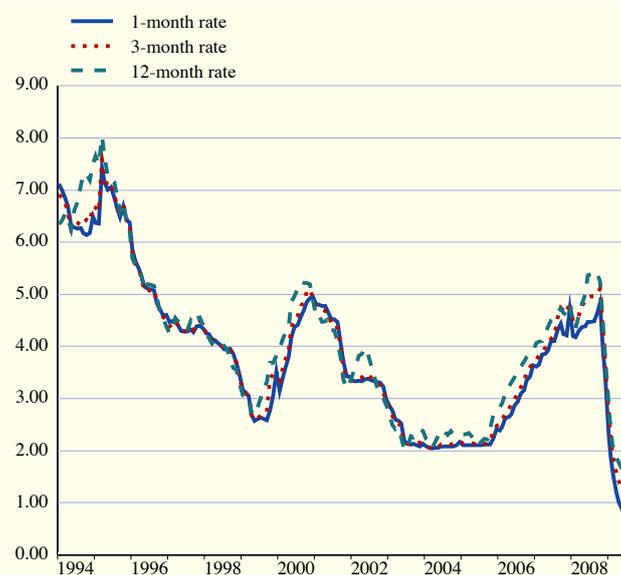
## 4.6 Money market interest rates

(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
2006	2.83	2.94	3.08	3.23	3.44	5.20	0.30
2007	3.87	4.08	4.28	4.35	4.45	5.30	0.79
2008	3.87	4.28	4.64	4.73	4.83	2.93	0.93
2008 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
Q4	3.17	3.92	4.24	4.31	4.38	2.77	0.96
2009 Q1	1.37	1.67	2.01	2.11	2.22	1.24	0.67
Q2	0.77	0.94	1.31	1.51	1.67	0.84	0.53
2008 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
Oct.	3.82	4.83	5.11	5.18	5.25	4.06	1.04
Nov.	3.15	3.84	4.24	4.29	4.35	2.28	0.91
Dec.	2.49	2.99	3.29	3.37	3.45	1.83	0.92
2009 Jan.	1.81	2.14	2.46	2.54	2.62	1.21	0.73
Feb.	1.26	1.63	1.94	2.03	2.14	1.24	0.64
Mar.	1.06	1.27	1.64	1.77	1.91	1.27	0.62
Apr.	0.84	1.01	1.42	1.61	1.77	1.11	0.57
May	0.78	0.88	1.28	1.48	1.64	0.82	0.53
June	0.70	0.91	1.23	1.44	1.61	0.62	0.49

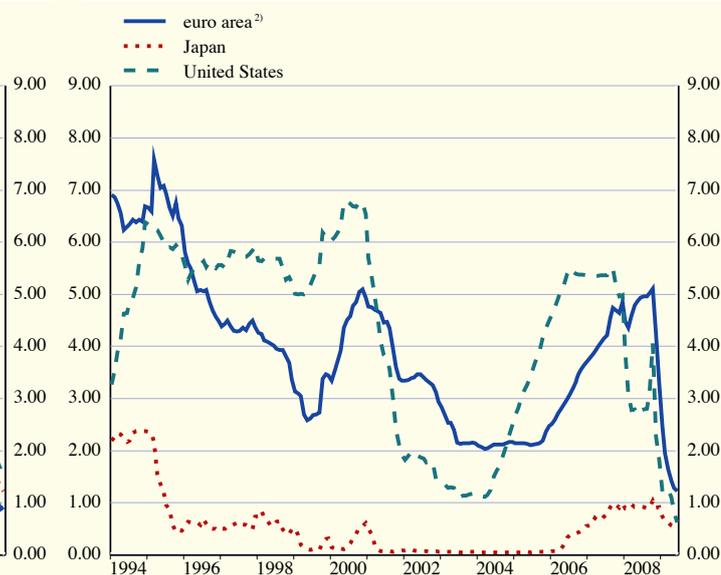
### C24 Euro area money market rates <sup>2)</sup>

(monthly; percentages per annum)



### C25 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.

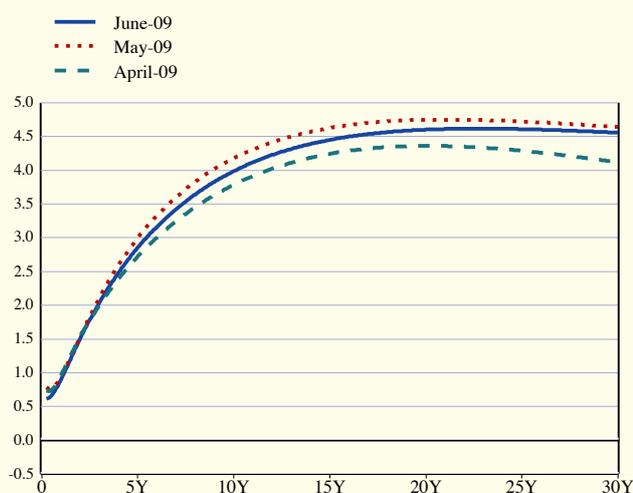
### 4.7 Euro area yield curves <sup>1)</sup>

(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	1 year 2	2 years 3	5 years 4	7 years 5	10 years 6	10 years - 3 months (spread) 7	10 years - 2 years (spread) 8	1 year 9	2 years 10	5 years 11	10 years 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	4.07	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
Oct.	2.52	2.86	2.68	3.58	3.95	4.25	1.74	1.58	2.27	2.99	4.80	4.97
Nov.	2.00	2.10	2.38	3.16	3.49	3.77	1.78	1.40	2.33	2.97	4.16	4.48
Dec.	1.75	1.85	2.14	2.95	3.32	3.69	1.94	1.55	2.09	2.76	4.04	4.60
2009 Jan.	1.19	1.27	1.79	3.02	3.53	4.02	2.83	2.24	1.70	2.85	4.53	5.26
Feb.	0.93	1.01	1.56	2.79	3.31	3.85	2.93	2.30	1.48	2.64	4.32	5.25
Mar.	0.78	0.88	1.46	2.70	3.23	3.77	3.00	2.31	1.41	2.58	4.24	5.19
Apr.	0.74	0.96	1.53	2.72	3.25	3.79	3.05	2.26	1.52	2.58	4.24	5.19
May	0.79	0.93	1.53	3.00	3.60	4.18	3.39	2.65	1.43	2.77	4.81	5.61
June	0.62	0.90	1.50	2.85	3.42	3.99	3.37	2.49	1.47	2.67	4.54	5.42

### C26 Euro area spot yield curves

(percentages per annum; end-of-period)



### C27 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	
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
2008	313.7	3,319.5	480.4	169.3	290.7	380.9	265.0	350.9	282.5	502.0	431.5	411.5	1,220.7	12,151.6
2008 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
Q4	228.7	2,497.7	320.7	136.5	236.9	287.6	169.3	238.1	200.0	384.7	387.0	358.1	910.9	8,700.4
2009 Q1	200.2	2,166.4	293.6	131.6	207.9	272.5	126.3	223.0	175.7	340.6	367.2	345.7	810.1	7,968.8
Q2	220.5	2,376.6	326.9	136.6	229.5	287.3	158.6	251.0	201.1	337.7	351.5	343.8	892.0	9,274.8
2008 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
Oct.	241.5	2,627.3	342.1	135.6	249.1	287.9	195.0	245.1	212.8	392.4	378.2	363.7	968.8	9,080.5
Nov.	225.0	2,452.9	315.2	136.2	237.6	294.8	159.0	229.5	197.7	393.6	386.0	361.7	883.3	8,502.7
Dec.	219.0	2,407.0	304.0	137.8	224.2	281.0	152.5	238.7	189.4	369.2	396.6	349.4	877.2	8,492.1
2009 Jan.	215.5	2,344.9	309.7	136.8	220.8	280.5	143.4	236.4	188.1	376.5	384.1	364.8	866.6	8,402.5
Feb.	200.4	2,159.8	299.2	132.7	208.0	280.9	123.3	226.1	175.7	341.0	361.7	354.1	806.3	7,707.3
Mar.	184.6	1,993.9	272.5	125.3	194.9	256.9	111.8	206.8	163.5	304.2	355.2	319.1	757.1	7,772.8
Apr.	209.3	2,256.3	308.4	134.6	219.0	268.1	145.0	237.9	196.0	323.2	356.8	327.7	848.5	8,755.5
May	225.7	2,426.7	331.6	140.1	233.8	296.0	164.5	259.8	203.1	346.3	348.0	346.7	901.7	9,257.7
June	226.7	2,449.0	341.0	135.3	235.9	298.3	166.8	255.5	204.3	343.8	349.6	357.0	926.1	9,810.3

### C28 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	83.0	58.6	41.4	100.0	11.9	7.5	29.7	9.6	41.4	89.3	10.7
	1	2	3	4	5	6	7	8	9	10	11	12	13
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	2.1
2008	107.8	3.3	2.4	3.8	2.6	-	-	-	-	-	-	3.3	3.0
2008 Q1	106.4	3.4	2.5	3.9	2.6	1.0	2.1	0.6	0.2	3.4	0.8	3.5	2.5
Q2	108.1	3.6	2.5	4.5	2.4	1.1	1.1	1.2	0.2	6.0	0.5	3.7	2.8
Q3	108.4	3.8	2.5	4.7	2.6	0.7	0.8	0.9	0.2	2.1	0.7	3.9	3.3
Q4	108.2	2.3	2.2	2.1	2.6	-0.6	0.2	0.3	0.3	-8.7	0.5	2.1	3.4
2009 Q1	107.4	1.0	1.6	0.1	2.2	-0.3	-0.1	0.4	0.1	-4.9	0.4	0.7	2.9
2009 Jan.	107.0	1.1	1.8	0.2	2.4	0.0	0.0	0.1	-0.1	0.0	0.1	0.9	2.9
Feb.	107.4	1.2	1.7	0.3	2.4	0.2	0.0	0.4	0.1	0.5	0.2	1.0	2.9
Mar.	107.8	0.6	1.5	-0.4	1.9	0.0	0.0	-0.2	0.1	-1.2	0.1	0.3	2.9
Apr.	108.2	0.6	1.7	-0.7	2.5	0.1	0.0	-0.4	0.1	0.2	0.2	0.4	1.9
May	108.3	0.0	1.5	-1.4	2.1	0.0	0.0	-0.4	0.0	0.4	0.0	-0.2	1.6
June <sup>4)</sup>	.	-0.1	.	.	.	.	.	.	.	.	.	.	.

	Goods						Services					
	Food (incl. alcoholic beverages and tobacco)			Industrial goods			Housing	Transport	Communication	Recreation and personal	Miscellaneous	
	Total	Processed food	Unprocessed food	Total	Non-energy industrial goods	Energy						
% of total <sup>3)</sup>	19.3	11.9	7.5	39.3	29.7	9.6	10.1	6.0	6.3	3.2	14.9	6.8
	14	15	16	17	18	19	20	21	22	23	24	25
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
2008	5.1	6.1	3.5	3.1	0.8	10.3	2.3	1.9	3.9	-2.2	3.2	2.5
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
Q3	5.6	6.7	3.9	4.2	0.7	15.1	2.3	1.9	4.4	-2.4	3.4	2.3
Q4	3.8	4.3	3.0	1.2	0.9	2.1	2.2	1.9	4.5	-2.0	3.3	2.2
2009 Q1	2.4	2.1	2.8	-1.1	0.7	-6.1	2.0	1.7	3.6	-1.7	2.7	2.1
2008 Dec.	3.3	3.5	2.8	-0.3	0.8	-3.7	2.2	1.8	4.5	-1.8	3.2	2.1
2009 Jan.	2.7	2.7	2.6	-1.0	0.5	-5.3	2.0	1.7	3.9	-1.9	3.1	2.2
Feb.	2.5	2.0	3.3	-0.7	0.7	-4.9	2.0	1.8	3.9	-1.4	3.0	2.1
Mar.	1.9	1.6	2.4	-1.5	0.8	-8.1	2.0	1.8	3.1	-1.8	2.2	2.0
Apr.	1.4	1.2	1.6	-1.7	0.8	-8.8	2.0	1.8	3.5	-1.6	3.4	2.1
May	0.9	1.0	0.7	-2.5	0.8	-11.6	2.1	1.8	3.1	-1.0	2.4	2.0

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 2009.
- 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 and residential property prices<sup>1)</sup>

	Industrial producer prices excluding construction										Construction <sup>2)</sup>	Residential property prices <sup>3)</sup>
	Total (index 2005 = 100)	Total		Industry excluding construction and energy						Energy		
		Manu- facturing	Total	Intermediate goods	Capital goods	Consumer goods						
						Total	Durable	Non-durable				
% of total <sup>4)</sup>	100.0	100.0	83.0	75.8	30.1	21.9	23.7	2.7	21.0	24.2		
	1	2	3	4	5	6	7	8	9	10	11	12
2005	100.0	4.1	3.3	1.8	2.9	1.2	1.1	1.5	0.9	13.9	2.8	7.6
2006	105.0	5.0	3.5	2.8	4.6	1.6	1.7	1.5	1.5	13.3	4.1	6.5
2007	107.9	2.7	3.0	3.2	4.7	2.2	2.3	2.4	2.1	1.3	4.0	4.4
2008	114.2	5.9	4.8	3.5	4.0	2.1	3.9	2.8	4.0	13.7	4.1	1.7
2008 Q1	111.8	5.3	5.5	3.5	3.9	1.6	4.7	3.1	4.9	11.1	3.1	-
Q2	114.6	6.8	6.3	3.7	4.0	2.0	4.8	2.8	5.1	16.8	4.0	2.8 <sup>5)</sup>
Q3	117.0	8.2	6.6	4.3	5.5	2.3	4.2	2.7	4.4	21.1	5.5	-
Q4	113.5	3.3	0.7	2.4	2.6	2.5	2.0	2.7	1.9	6.3	3.9	0.6 <sup>5)</sup>
2009 Q1	109.9	-1.7	-4.0	-0.9	-2.7	1.8	-0.6	1.9	-1.0	-4.1	-	-
2008 Nov.	113.3	2.9	0.3	2.3	2.4	2.7	1.9	2.6	1.8	4.5	-	-
Dec.	111.6	1.2	-1.6	1.4	1.2	2.1	1.2	2.6	1.0	0.6	-	-
2009 Jan.	110.5	-0.6	-3.0	-0.1	-1.2	2.0	-0.1	2.0	-0.4	-2.1	-	-
Feb.	110.0	-1.6	-3.9	-1.0	-2.9	1.9	-0.6	1.9	-1.0	-3.5	-	-
Mar.	109.2	-2.9	-5.1	-1.7	-4.0	1.6	-1.2	1.8	-1.6	-6.7	-	-
Apr.	108.2	-4.6	-5.8	-2.4	-5.2	1.3	-1.4	1.6	-1.8	-10.9	-	-

### 3. Commodity prices and gross domestic product deflators<sup>1)</sup>

	Oil prices <sup>6)</sup> (EUR per barrel)	Non-energy commodity prices						Total (s.a. index 2000 = 100)	Total	GDP deflators				Exports <sup>9)</sup>	Imports <sup>9)</sup>	
		Import-weighted <sup>7)</sup>			Use-weighted <sup>8)</sup>					Domestic demand						
		Total	Food	Non-food	Total	Food	Non-food			Total	Private consumption	Government consumption	Gross fixed capital formation			
% of total		100.0	35.0	65.0	100.0	44.3	55.7									
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
2005	44.6	11.9	0.9	17.9	9.0	2.5	14.4	111.6	2.0	2.3	2.1	2.4	2.5	2.4	3.3	
2006	52.9	27.5	5.8	37.6	24.4	5.9	38.1	113.8	1.9	2.4	2.2	2.1	2.9	2.7	3.9	
2007	52.8	7.5	14.3	5.0	5.1	9.4	2.7	116.4	2.3	2.2	2.2	1.6	2.7	1.7	1.4	
2008	65.9	2.0	18.2	-4.3	-1.7	9.7	-8.5	119.1	2.3	2.9	2.9	2.8	2.5	2.5	3.8	
2008 Q2	78.5	2.5	32.4	-7.5	-0.3	20.3	-11.1	118.9	2.3	3.2	3.3	3.6	2.5	2.7	4.7	
Q3	77.6	6.8	16.2	2.8	0.6	4.3	-1.9	119.4	2.3	3.3	3.5	2.8	3.0	3.5	5.7	
Q4	43.5	-10.1	-7.7	-11.2	-14.5	-12.9	-15.8	120.2	2.5	2.1	1.9	2.4	2.1	1.4	0.6	
2009 Q1	35.1	-23.5	-14.8	-27.6	-25.0	-17.3	-30.6	119.9	1.7	1.1	0.5	2.8	0.5	-2.9	-4.2	
Q2	43.8	.	.	.	.	.	.	.	.	.	.	.	.	.	.	
2009 Jan.	34.3	-21.0	-10.4	-26.0	-22.3	-13.5	-28.7	-	-	-	-	-	-	-	-	
Feb.	34.6	-24.3	-16.1	-28.2	-26.6	-20.4	-31.4	-	-	-	-	-	-	-	-	
Mar.	36.5	-25.0	-17.7	-28.5	-25.8	-17.8	-31.7	-	-	-	-	-	-	-	-	
Apr.	39.0	-19.8	-11.7	-23.6	-20.1	-10.8	-26.6	-	-	-	-	-	-	-	-	
May	42.8	-19.0	-8.2	-24.1	-18.4	-6.5	-26.6	-	-	-	-	-	-	-	-	
June	49.5	.	.	.	.	.	.	-	-	-	-	-	-	-	-	

Sources: Eurostat, ECB calculations based on Eurostat data (column 7 in Table 2 in Section 5.1 and columns 8-15 in Table 3 in Section 5.1), ECB calculations based on Thomson Financial Datastream data (column 1 in Table 3 in Section 5.1) and ECB calculations (column 12 in Table 2 in Section 5.1 and columns 2-7 in Table 3 in Section 5.1).

1) Data refer to the Euro 16.

2) Input prices for residential buildings.

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

4) In 2005.

5) 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.

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

7) Refers to prices expressed in euro. Weighted according to the structure of euro area imports in the period 2004-06.

8) Refers to prices expressed in euro. Weighted according to euro area domestic demand (domestic production plus imports minus exports) in the period 2004-06. Experimental data (see the ECB website for details).

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

**5.1 HICP, other prices and costs**

(annual percentage changes, unless otherwise indicated)

**4. Unit labour costs, compensation per employee and labour productivity<sup>1)</sup>**

(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>2)</sup>								
2005	109.0	1.2	8.7	-1.1	2.9	1.3	2.1	2.0
2006	110.0	1.0	2.8	-0.7	3.6	0.1	2.6	2.2
2007	111.8	1.6	1.8	-0.3	3.9	1.1	2.6	2.1
2008	115.3	3.2	-0.2	3.5	1.9	3.3	3.0	3.3
2008 Q1	113.5	2.5	1.2	1.0	2.1	1.8	4.0	3.0
Q2	114.8	2.9	-0.9	1.4	2.0	2.5	2.7	4.6
Q3	115.7	3.5	-0.9	3.9	2.6	4.4	3.5	2.8
Q4	117.9	4.5	-0.4	9.1	2.1	5.1	2.1	3.2
2009 Q1	119.9	5.7	.	.	.	.	.	.
Compensation per employee								
2005	112.3	2.0	2.4	1.8	2.0	2.1	2.4	1.9
2006	114.9	2.3	3.3	3.4	3.5	1.5	2.4	1.6
2007	117.8	2.5	3.8	2.9	3.0	2.1	2.3	2.5
2008	121.4	3.1	3.1	2.9	3.9	3.0	2.3	3.5
2008 Q1	120.2	3.1	3.8	3.4	3.5	2.5	2.6	3.3
Q2	121.2	3.2	2.8	2.7	4.1	2.3	2.2	4.4
Q3	121.9	3.5	3.1	3.1	4.5	4.2	2.8	3.2
Q4	122.5	2.8	2.5	2.6	3.8	3.1	1.6	3.3
2009 Q1	122.5	1.9	.	.	.	.	.	.
Labour productivity <sup>3)</sup>								
2005	103.1	0.8	-5.8	2.9	-0.8	0.8	0.3	-0.1
2006	104.4	1.3	0.5	4.2	-0.2	1.4	-0.2	-0.5
2007	105.4	0.9	2.0	3.3	-0.8	1.0	-0.3	0.4
2008	105.3	-0.1	3.2	-0.5	1.9	-0.3	-0.7	0.2
2008 Q1	105.9	0.6	2.5	2.3	1.4	0.7	-1.3	0.4
Q2	105.6	0.3	3.7	1.2	2.0	-0.1	-0.5	-0.2
Q3	105.4	-0.1	4.0	-0.8	1.9	-0.2	-0.7	0.4
Q4	103.9	-1.6	2.9	-6.0	1.6	-2.0	-0.4	0.1
2009 Q1	102.1	-3.6	2.5	-13.2	1.2	-3.7	0.2	-0.1

**5. Hourly labour costs<sup>1), 4)</sup>**

	Total (s.a. index 2000 = 100)	Total	By component		By selected economic activity			Memo: indicator of negotiated wages <sup>5)</sup>
			Wages and salaries	Employers' social contributions	Mining, manufacturing and energy	Construction	Services	
% of total <sup>6)</sup>	100.0	100.0	73.1	26.9	34.6	9.1	56.3	
	1	2	3	4	5	6	7	8
2005	116.5	2.3	2.3	2.1	2.2	1.7	2.4	2.1
2006	119.4	2.3	2.3	2.2	3.3	1.5	1.9	2.3
2007	122.5	2.7	2.9	2.0	2.6	2.9	2.6	2.1
2008	126.8	3.3	3.3	3.1	3.6	4.0	3.0	3.2
2008 Q1	124.8	3.3	3.7	2.5	3.7	4.2	2.9	2.8
Q2	125.9	2.3	2.4	2.2	2.3	3.6	2.2	2.9
Q3	127.4	3.4	3.4	3.3	2.8	3.5	3.7	3.4
Q4	128.9	4.0	3.9	4.4	5.6	4.6	3.0	3.6
2009 Q1	.	3.7	3.6	4.5	6.1	3.6	2.4	3.2

Sources: Eurostat, ECB calculations based on Eurostat data (Table 4 in Section 5.1 and column 7 in Table 5 in Section 5.1) and ECB calculations (column 8 in Table 5 in Section 5.1).

1) Data refer to Euro 16.

2) Compensation (at current prices) per employee divided by value added (volumes) per person employed.

3) Value added (volumes) per person employed.

4) 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.

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

6) In 2000.

## 5.2 Output and demand

### 1. GDP and expenditure components<sup>1)</sup>

	GDP								
	Total	Domestic demand					External balance <sup>2)</sup>		
		Total	Private consumption	Government consumption	Gross fixed capital formation	Changes in inventories <sup>3)</sup>	Total	Exports <sup>2)</sup>	Imports <sup>2)</sup>
1	2	3	4	5	6	7	8	9	
<i>Current prices (EUR billions, seasonally adjusted)</i>									
2005	8,144.1	8,022.7	4,667.9	1,664.9	1,684.5	5.4	121.3	3,113.8	2,992.5
2006	8,557.8	8,456.4	4,872.3	1,732.2	1,834.4	17.5	101.4	3,471.8	3,370.4
2007	8,998.6	8,859.4	5,063.0	1,799.5	1,972.3	24.6	139.2	3,740.7	3,601.6
2008	9,266.2	9,174.2	5,232.3	1,885.8	2,016.3	39.8	92.0	3,871.9	3,779.9
2008 Q1	2,312.1	2,279.5	1,298.5	461.4	511.9	7.7	32.5	982.8	950.3
Q2	2,324.7	2,291.5	1,307.8	472.8	509.9	1.0	33.3	988.0	954.8
Q3	2,328.3	2,313.6	1,319.0	473.4	509.0	12.2	14.7	994.2	979.5
Q4	2,301.1	2,289.5	1,307.0	478.1	485.6	18.8	11.6	906.9	895.3
2009 Q1	2,239.1	2,236.6	1,291.0	482.7	461.2	1.7	2.5	808.0	805.4
<i>percentage of GDP</i>									
2008	100.0	99.0	56.5	20.4	21.8	0.4	1.0	-	-
<i>Chain-linked volumes (prices of the previous year, seasonally adjusted<sup>4)</sup>)</i>									
<i>quarter-on-quarter percentage changes</i>									
2008 Q1	0.7	0.5	0.1	0.4	1.1	-	-	1.6	1.2
Q2	-0.3	-0.5	-0.3	0.8	-1.3	-	-	-0.3	-0.8
Q3	-0.3	0.3	0.1	0.5	-1.0	-	-	-0.6	1.1
Q4	-1.8	-0.8	-0.4	0.4	-4.3	-	-	-7.2	-5.1
2009 Q1	-2.5	-2.1	-0.5	0.0	-4.2	-	-	-8.1	-7.2
<i>annual percentage changes</i>									
2005	1.7	1.9	1.8	1.5	3.3	-	-	5.0	5.7
2006	2.9	2.8	2.0	1.9	5.5	-	-	8.3	8.2
2007	2.7	2.5	1.6	2.2	4.8	-	-	5.9	5.3
2008	0.7	0.7	0.4	1.9	0.0	-	-	1.0	1.0
2008 Q1	2.2	1.6	1.4	1.5	3.1	-	-	5.1	3.9
Q2	1.5	0.9	0.5	2.0	1.6	-	-	3.8	2.4
Q3	0.5	0.5	0.1	2.0	-0.3	-	-	1.4	1.4
Q4	-1.7	-0.4	-0.6	2.1	-5.5	-	-	-6.5	-3.7
2009 Q1	-4.8	-3.1	-1.1	1.7	-10.4	-	-	-15.5	-11.7
<i>contributions to quarter-on-quarter percentage changes of GDP in percentage points</i>									
2008 Q1	0.7	0.5	0.0	0.1	0.2	0.2	0.2	-	-
Q2	-0.3	-0.5	-0.2	0.2	-0.3	-0.2	0.2	-	-
Q3	-0.3	0.3	0.0	0.1	-0.2	0.4	-0.7	-	-
Q4	-1.8	-0.8	-0.2	0.1	-0.9	0.3	-1.0	-	-
2009 Q1	-2.5	-2.1	-0.3	0.0	-0.9	-1.0	-0.4	-	-
<i>contributions to annual percentage changes of GDP in percentage points</i>									
2005	1.7	1.9	1.0	0.3	0.7	-0.2	-0.1	-	-
2006	2.9	2.8	1.2	0.4	1.1	0.1	0.2	-	-
2007	2.7	2.4	0.9	0.5	1.0	0.0	0.3	-	-
2008	0.7	0.7	0.2	0.4	0.0	0.1	0.0	-	-
2008 Q1	2.2	1.6	0.8	0.3	0.7	-0.2	0.6	-	-
Q2	1.5	0.9	0.3	0.4	0.4	-0.2	0.6	-	-
Q3	0.5	0.4	0.0	0.4	-0.1	0.1	0.0	-	-
Q4	-1.7	-0.4	-0.3	0.4	-1.2	0.7	-1.3	-	-
2009 Q1	-4.8	-3.0	-0.6	0.3	-2.3	-0.4	-1.8	-	-

Sources: Eurostat and ECB calculations.

1) Data refer to Euro 16.

2) 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.

3) Including acquisitions less disposals of valuables.

4) 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<sup>1)</sup>

	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>								
2005	7,299.2	144.0	1,482.3	441.7	1,540.5	2,021.2	1,669.4	844.9
2006	7,643.9	142.1	1,557.3	476.8	1,602.7	2,138.0	1,727.1	913.9
2007	8,040.4	151.9	1,643.5	514.7	1,673.0	2,261.7	1,795.6	958.1
2008	8,311.5	147.9	1,672.4	536.9	1,727.8	2,357.2	1,869.4	954.7
2008 Q1	2,070.2	38.6	423.7	135.0	431.4	583.0	458.5	241.9
Q2	2,085.0	37.3	425.6	134.7	431.0	589.1	467.4	239.7
Q3	2,088.6	36.7	422.3	135.0	434.5	592.5	467.6	239.7
Q4	2,067.6	35.4	400.8	132.1	430.9	592.6	475.9	233.4
2009 Q1	2,012.6	36.1	359.3	132.1	420.5	586.7	478.0	226.6
<i>percentage of value added</i>								
2008	100.0	1.8	20.1	6.5	20.8	28.4	22.5	-
<i>Chain-linked volumes (prices of the previous year, seasonally adjusted<sup>2)</sup>)</i>								
<i>quarter-on-quarter percentage changes</i>								
2008 Q1	0.6	1.4	0.4	1.8	0.8	0.6	0.2	1.4
Q2	-0.1	-0.2	-0.6	-2.1	-0.5	0.5	0.4	-1.3
Q3	-0.3	-0.4	-1.4	-1.7	-0.2	-0.1	0.5	-0.4
Q4	-1.7	0.9	-5.7	-1.7	-1.8	-0.6	0.2	-2.0
2009 Q1	-2.5	-0.3	-8.8	-0.5	-2.6	-0.9	0.0	-2.4
<i>annual percentage changes</i>								
2005	1.7	-6.5	1.8	1.8	1.5	2.8	1.3	1.8
2006	2.9	-1.5	3.9	2.6	3.1	3.7	1.3	3.3
2007	3.0	0.5	3.6	3.1	3.0	3.7	1.6	0.7
2008	0.9	1.7	-0.7	-0.5	1.0	1.8	1.4	-0.7
2008 Q1	2.4	1.2	2.7	1.7	3.1	2.7	1.3	0.3
Q2	1.6	1.7	1.4	0.3	1.6	2.4	1.2	0.1
Q3	0.7	2.3	-1.0	-1.2	0.7	1.6	1.5	-1.0
Q4	-1.6	1.8	-7.2	-3.7	-1.7	0.4	1.4	-2.3
2009 Q1	-4.7	0.1	-15.7	-5.8	-5.0	-1.0	1.2	-6.0
<i>contributions to quarter-on-quarter percentage changes of value added in percentage points</i>								
2008 Q1	0.6	0.0	0.1	0.1	0.2	0.2	0.1	-
Q2	-0.1	0.0	-0.1	-0.1	-0.1	0.1	0.1	-
Q3	-0.3	0.0	-0.3	-0.1	0.0	0.0	0.1	-
Q4	-1.7	0.0	-1.1	-0.1	-0.4	-0.2	0.1	-
2009 Q1	-2.5	0.0	-1.7	0.0	-0.5	-0.2	0.0	-
<i>contributions to annual percentage changes of value added in percentage points</i>								
2005	1.7	-0.1	0.4	0.1	0.3	0.8	0.3	-
2006	2.9	0.0	0.8	0.2	0.7	1.0	0.3	-
2007	3.0	0.0	0.7	0.2	0.6	1.0	0.4	-
2008	0.9	0.0	-0.2	0.0	0.2	0.5	0.3	-
2008 Q1	2.4	0.0	0.6	0.1	0.6	0.8	0.3	-
Q2	1.6	0.0	0.3	0.0	0.3	0.7	0.3	-
Q3	0.7	0.0	-0.2	-0.1	0.1	0.4	0.3	-
Q4	-1.6	0.0	-1.5	-0.2	-0.3	0.1	0.3	-
2009 Q1	-4.7	0.0	-3.2	-0.4	-1.0	-0.3	0.3	-

Sources: Eurostat and ECB calculations.

1) Data refer to Euro 16.

2) 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<sup>1)</sup>

	Total		Industry excluding construction								Construction	
	% of total <sup>2)</sup>	Total (s.a. index 2005 = 100)	Total	Industry excluding construction and energy							Energy	
				Manu- facturing	Total	Intermedi- ate goods	Capital goods	Consumer goods				
								Total	Durable	Non-durable		
1	2	3	4	5	6	7	8	9	10	11	12	
2006	4.1	104.3	4.2	4.6	4.7	5.0	5.9	2.9	4.3	2.7	0.6	3.6
2007	3.3	108.2	3.8	4.2	4.3	3.8	6.6	2.3	1.4	2.5	-0.9	1.6
2008	-2.3	106.2	-1.7	-1.9	-1.9	-3.3	-0.3	-1.9	-5.6	-1.2	0.2	-4.6
2008 Q2	-0.1	109.0	1.1	1.0	1.0	0.2	3.5	-1.0	-2.1	-0.8	2.1	-4.0
Q3	-2.3	105.8	-1.5	-1.5	-1.6	-2.0	-0.8	-2.1	-7.3	-1.3	-0.3	-5.1
Q4	-8.9	99.0	-9.0	-9.3	-9.5	-13.4	-8.6	-4.5	-11.7	-3.4	-4.4	-8.3
2009 Q1	-16.8	91.5	-18.3	-20.0	-20.4	-25.2	-23.2	-7.3	-20.5	-5.2	-4.6	-10.5
2008 Nov.	-8.5	99.1	-9.1	-9.3	-9.5	-12.8	-8.8	-4.7	-12.5	-3.3	-5.3	-6.3
Dec.	-12.5	96.1	-12.4	-13.2	-13.5	-21.4	-11.6	-4.6	-14.6	-3.1	-5.0	-13.0
2009 Jan.	-15.4	93.5	-16.5	-18.7	-19.1	-23.7	-22.2	-6.2	-18.3	-4.2	0.0	-10.9
Feb.	-17.9	91.1	-19.2	-21.1	-21.5	-25.8	-25.0	-8.5	-22.2	-6.3	-3.6	-12.6
Mar.	-17.1	89.9	-19.1	-20.2	-20.6	-25.9	-22.4	-7.4	-20.7	-5.2	-10.2	-8.3
Apr.	-18.1	88.7	-20.7	-21.5	-22.3	-27.0	-26.2	-7.3	-20.6	-5.0	-10.5	-5.3
<i>month-on-month percentage changes (s.a.)</i>												
2008 Nov.	-2.7	-	-2.9	-3.0	-3.2	-4.5	-3.1	-0.6	-4.1	-0.1	-2.7	-1.2
Dec.	-3.3	-	-3.0	-3.4	-3.5	-6.6	-3.1	-0.7	-2.8	-0.5	0.4	-2.9
2009 Jan.	-1.8	-	-2.7	-3.5	-3.6	-2.1	-6.9	-0.4	-2.2	-0.1	0.4	1.4
Feb.	-2.3	-	-2.5	-2.5	-2.6	-2.5	-3.2	-1.8	-3.5	-1.5	-2.1	-1.3
Mar.	-0.7	-	-1.3	-1.1	-0.9	-1.7	0.3	-0.4	-0.4	-0.3	-3.9	0.7
Apr.	-1.2	-	-1.3	-1.0	-1.5	-1.7	-2.6	0.0	-0.2	0.0	0.5	0.3

### 4. Industrial new orders and turnover, retail sales and new passenger car registrations<sup>1)</sup>

	Industrial new orders		Industrial turnover		Retail sales (excluding automotive fuel)							New passenger car registrations	
	Manufacturing <sup>3)</sup> (current prices)		Manufacturing (current prices)		Current prices	Constant prices						Total (s.a., thousands) <sup>4)</sup>	Total
	Total (s.a. index 2005 = 100)	Total	Total (s.a. index 2005 = 100)	Total	Total	Total (s.a. index 2005 = 100)	Total	Food, beverages, tobacco	Non-food				
									Textiles, clothing, footwear	Household equipment			
1	2	3	4	5	6	7	8	9	10	11	12	13	
% of total <sup>2)</sup>	100.0	100.0	100.0	100.0	100.0	100.0	100.0	42.9	57.1	9.9	13.9		
2006	110.8	10.4	108.3	8.0	3.4	102.4	2.5	1.1	3.6	3.1	5.4	978	3.3
2007	120.2	8.7	115.1	6.5	2.8	104.1	1.6	0.0	2.7	3.5	2.4	970	-0.9
2008	113.5	-5.3	116.9	1.9	1.7	103.2	-0.8	-1.7	-0.3	-1.7	-2.0	893	-8.0
2008 Q2	119.7	-0.1	120.6	6.6	2.6	103.5	-0.6	-1.6	0.1	-1.9	-1.5	901	-4.7
Q3	114.8	-1.3	118.6	4.3	2.1	103.0	-1.1	-1.7	-0.6	-1.0	-3.1	892	-8.8
Q4	95.1	-22.4	107.3	-7.5	-0.3	102.4	-1.7	-2.2	-1.4	-3.1	-2.7	825	-18.5
2009 Q1	84.3	-31.8	94.9	-21.5	-2.6	101.7	-2.8	-4.0	-1.8	-0.1	-6.1	828	-12.6
2008 Dec.	87.2	-24.7	100.7	-7.8	-0.5	102.3	-1.3	-2.2	-0.7	-4.0	-1.5	816	-23.2
2009 Jan.	84.9	-34.5	95.9	-24.0	-1.3	102.0	-1.9	-2.5	-1.5	1.4	-5.6	777	-20.6
Feb.	84.1	-34.4	94.7	-25.2	-3.9	101.5	-4.1	-5.3	-3.1	-3.9	-6.6	850	-12.7
Mar.	84.0	-26.5	94.1	-15.6	-2.6	101.5	-2.4	-4.3	-1.0	1.3	-6.0	855	-5.8
Apr.	83.1	-35.5	92.2	-27.3	-1.3	101.7	-1.6	-1.2	-2.1	-0.5	.	886	-3.7
May	.	.	.	.	.	.	.	.	.	.	.	948	5.6
<i>month-on-month percentage changes (s.a.)</i>													
2009 Jan.	-	-2.6	-	-4.8	-0.4	-	-0.3	-0.6	-0.2	2.6	-1.6	-	-4.8
Feb.	-	-0.9	-	-1.3	-0.5	-	-0.5	-0.7	-0.5	-2.3	-0.9	-	9.4
Mar.	-	-0.2	-	-0.6	0.1	-	0.1	0.0	0.2	1.1	-0.3	-	0.6
Apr.	-	-1.0	-	-2.0	0.3	-	0.2	1.1	-0.3	-0.9	.	-	3.6
May	-	.	-	.	.	-	.	.	.	.	.	-	6.9

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) Data refer to Euro 16.

2) In 2005.

3) Includes manufacturing industries working mainly on the basis of orders, representing 61.2% of total manufacturing in 2005.

4) 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
2005	98.2	-7	-16	11	6	81.1	-14	-4	-15	28	-9
2006	106.9	2	0	6	13	83.1	-9	-3	-9	15	-9
2007	108.9	4	5	5	13	84.1	-5	-2	-4	5	-8
2008	91.1	-9	-15	11	-2	81.8	-18	-10	-25	23	-14
2008 Q2	97.7	-3	-6	9	7	83.3	-14	-10	-22	10	-14
Q3	89.9	-10	-15	12	-2	82.2	-19	-12	-28	23	-14
Q4	75.6	-25	-36	18	-22	78.1	-27	-11	-34	49	-14
2009 Q1	65.7	-36	-56	20	-31	72.6	-33	-11	-41	64	-14
Q2	70.3	-33	-62	18	-21	.	-28	-9	-34	59	-11
2009 Jan.	67.2	-33	-49	20	-31	74.7	-31	-11	-38	59	-15
Feb.	65.3	-36	-57	20	-32	-	-33	-12	-41	64	-14
Mar.	64.6	-38	-61	21	-32	-	-34	-11	-44	69	-13
Apr.	67.3	-35	-60	20	-25	70.5	-31	-10	-38	63	-11
May	70.2	-33	-61	18	-21	-	-28	-9	-33	58	-13
June	73.3	-32	-63	16	-16	-	-25	-7	-29	55	-9
	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
2005	-7	-12	-2	-7	-12	13	4	11	5	10	18
2006	1	-4	6	1	3	14	13	18	13	18	24
2007	0	-8	7	1	4	15	12	19	16	19	23
2008	-14	-20	-7	-7	-6	16	1	2	-5	4	7
2008 Q2	-10	-17	-3	-3	-1	16	7	8	3	9	13
Q3	-14	-21	-7	-9	-9	17	-1	1	-7	3	6
Q4	-23	-31	-16	-15	-16	17	-13	-12	-20	-9	-6
2009 Q1	-31	-36	-26	-19	-21	15	-20	-24	-33	-21	-18
Q2	-34	-42	-25	-17	-23	9	-19	-22	-29	-23	-15
2009 Jan.	-30	-35	-26	-20	-21	20	-18	-22	-32	-19	-15
Feb.	-32	-37	-26	-19	-21	17	-20	-24	-33	-19	-19
Mar.	-32	-37	-26	-17	-20	9	-22	-25	-34	-23	-19
Apr.	-34	-41	-26	-20	-26	11	-22	-24	-32	-22	-19
May	-34	-44	-23	-14	-18	8	-17	-23	-29	-25	-14
June	-34	-43	-24	-16	-23	8	-17	-20	-26	-22	-11

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 2008.
- 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	85.2	14.8	3.8	17.0	7.5	25.6	16.0	30.0
	1	2	3	4	5	6	7	8	9	10
2005	141.863	1.0	1.1	0.4	-0.7	-1.1	2.7	0.7	2.5	1.5
2006	144.185	1.6	1.8	0.7	-2.0	-0.3	2.7	1.7	3.9	1.8
2007	146.759	1.8	1.9	0.9	-1.4	0.3	4.0	1.9	4.0	1.3
2008	147.929	0.8	1.0	-0.2	-1.5	-0.2	-2.4	1.3	2.5	1.2
2008 Q1	148.117	1.5	1.6	0.8	-1.2	0.3	0.3	2.4	4.0	0.8
Q2	148.204	1.1	1.4	-0.1	-2.0	0.1	-1.6	1.6	3.0	1.4
Q3	147.960	0.6	0.8	-0.9	-1.7	-0.2	-2.9	0.9	2.2	1.1
Q4	147.434	0.0	0.1	-0.8	-1.1	-1.3	-5.3	0.4	0.9	1.4
2009 Q1	146.215	-1.2	-1.1	-2.1	-2.4	-2.9	-7.1	-1.3	-1.2	1.3
	<i>quarter-on-quarter percentage changes (s.a.)</i>									
2008 Q1	0.593	0.4	0.4	0.5	0.7	0.3	-0.4	0.7	1.1	0.0
Q2	0.087	0.1	0.1	-0.4	-1.4	-0.2	-1.2	0.1	0.2	0.6
Q3	-0.243	-0.2	-0.1	-0.4	-0.6	-0.4	-1.5	0.0	0.1	0.1
Q4	-0.526	-0.4	-0.3	-0.7	0.2	-1.0	-2.3	-0.4	-0.6	0.5
2009 Q1	-1.220	-0.8	-0.8	-0.9	-0.6	-1.4	-2.2	-1.0	-1.0	0.0

### 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		77.9		22.1		50.5		49.5	
	1	2	3	4	5	6	7	8	9	10
2005	13.718	9.0	10.674	7.9	3.044	17.5	6.925	8.1	6.793	10.0
2006	12.875	8.3	10.053	7.3	2.822	16.4	6.396	7.5	6.479	9.4
2007	11.651	7.5	9.114	6.6	2.537	14.9	5.734	6.7	5.918	8.5
2008	11.896	7.6	9.284	6.6	2.612	15.4	6.008	6.9	5.888	8.3
2008 Q1	11.388	7.2	8.893	6.4	2.495	14.6	5.614	6.5	5.773	8.2
Q2	11.602	7.4	9.056	6.5	2.546	14.9	5.790	6.7	5.812	8.2
Q3	11.935	7.6	9.316	6.6	2.619	15.5	6.067	7.0	5.868	8.3
Q4	12.659	8.0	9.872	7.0	2.787	16.4	6.560	7.6	6.099	8.6
2009 Q1	13.767	8.7	10.772	7.6	2.995	17.6	7.307	8.4	6.460	9.0
2008 Nov.	12.646	8.0	9.860	7.0	2.786	16.4	6.552	7.5	6.094	8.6
Dec.	12.945	8.2	10.103	7.2	2.841	16.7	6.750	7.8	6.195	8.7
2009 Jan.	13.360	8.4	10.453	7.4	2.907	17.1	7.039	8.1	6.321	8.9
Feb.	13.757	8.7	10.762	7.6	2.995	17.6	7.306	8.4	6.451	9.0
Mar.	14.183	8.9	11.100	7.8	3.083	18.1	7.576	8.7	6.607	9.2
Apr.	14.579	9.2	11.430	8.0	3.149	18.5	7.836	8.9	6.743	9.4

Source: Eurostat.

1) Data refer to Euro 16. 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 2008.

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

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

# GOVERNMENT FINANCE

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

### 1. Euro area – revenue

	Total		Current revenue									Capital revenue		Memo: fiscal burden <sup>2)</sup>
	1	2	Direct taxes		Indirect taxes	Received by EU institutions		Social contributions		Sales	Capital taxes	13		
			Households	Corporations		Employers	Employees							
			3	4	5	6	7	8	9	10	11	12	14	
2000	46.5	46.2	12.6	9.6	3.0	13.9	0.6	15.8	8.2	4.8	2.2	0.3	0.3	42.6
2001	45.7	45.4	12.2	9.4	2.7	13.5	0.5	15.6	8.2	4.7	2.1	0.2	0.3	41.6
2002	45.1	44.8	11.8	9.2	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	9.0	2.3	13.5	0.4	15.7	8.3	4.6	2.1	0.6	0.5	41.1
2004	44.5	44.1	11.3	8.7	2.5	13.5	0.3	15.5	8.2	4.5	2.1	0.5	0.4	40.8
2005	44.8	44.3	11.5	8.8	2.7	13.7	0.3	15.4	8.1	4.5	2.2	0.5	0.3	40.9
2006	45.4	45.0	12.1	8.9	3.0	13.9	0.3	15.3	8.1	4.5	2.1	0.3	0.3	41.5
2007	45.5	45.2	12.4	9.1	3.1	13.8	0.3	15.1	8.0	4.4	2.1	0.3	0.3	41.7
2008	44.8	44.6	12.2	9.3	2.7	13.3	0.3	15.3	8.1	4.4	2.1	0.2	0.3	41.0

### 2. Euro area – expenditure

	Total		Current expenditure							Capital expenditure			Memo: primary expenditure <sup>3)</sup>	
	1	2	Compensation of employees	Intermediate consumption	Interest	Current transfers	Social payments		Subsidies	Paid by EU institutions	Investment	Capital transfers		Paid by EU institutions
							7	8						
			3	4	5	6	7	8	9	10	11	12	13	14
2000	46.6	43.8	10.4	4.8	3.9	24.7	21.6	2.0	0.5	2.8	2.5	1.3	0.0	42.7
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	44.1	10.5	5.0	3.3	25.4	22.5	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	22.3	1.8	0.5	3.9	2.5	1.5	0.1	44.4
2005	47.3	43.4	10.4	5.0	3.0	25.0	22.3	1.7	0.5	3.9	2.5	1.4	0.0	44.3
2006	46.7	42.8	10.2	5.0	2.9	24.8	22.0	1.7	0.5	3.8	2.5	1.4	0.0	43.8
2007	46.1	42.3	10.0	5.0	3.0	24.4	21.6	1.6	0.4	3.9	2.5	1.3	0.0	43.1
2008	46.7	42.9	10.1	5.1	3.0	24.8	21.9	1.6	0.4	3.8	2.5	1.3	0.0	43.8

### 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
2000	-0.1	-0.5	-0.1	0.1	0.5	3.8	19.8	10.4	4.8	4.9	1.9	2.2	8.2	11.6
2001	-1.9	-1.7	-0.4	-0.1	0.3	1.9	19.9	10.3	4.8	4.9	1.8	2.1	8.2	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	8.3	12.0
2003	-3.1	-2.4	-0.5	-0.2	0.0	0.2	20.5	10.5	5.0	5.2	1.9	2.1	8.3	12.2
2004	-3.0	-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	-2.5	-2.2	-0.3	-0.2	0.2	0.4	20.4	10.4	5.0	5.1	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	12.2
2007	-0.7	-1.2	0.0	0.0	0.5	2.3	20.0	10.0	5.0	5.2	1.9	2.1	7.9	12.1
2008	-1.9	-2.0	-0.2	-0.1	0.4	1.1	20.4	10.1	5.1	5.2	1.9	2.1	8.1	12.3

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

	BE	DE	IE	GR	ES	FR	IT	CY	LU	MT	NL	AT	PT	SI	SK	FI
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
2005	-2.7	-3.3	1.7	-5.1	1.0	-2.9	-4.3	-2.4	0.0	-2.9	-0.3	-1.6	-6.1	-1.4	-2.8	2.8
2006	0.3	-1.5	3.0	-2.8	2.0	-2.3	-3.3	-1.2	1.4	-2.6	0.6	-1.6	-3.9	-1.3	-3.5	4.0
2007	-0.2	-0.2	0.2	-3.6	2.2	-2.7	-1.5	3.4	3.6	-2.2	0.3	-0.5	-2.6	0.5	-1.9	5.2
2008	-1.2	-0.1	-7.1	-5.0	-3.8	-3.4	-2.7	0.9	2.6	-4.7	1.0	-0.4	-2.6	-0.9	-2.2	4.2

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

1) The data refer to the Euro 16. 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	
1999	71.9	2.9	14.4	4.3	50.3	48.7	25.4	13.7	9.6	23.2
2000	69.2	2.7	13.2	3.7	49.6	44.1	22.1	12.4	9.7	25.1
2001	68.1	2.8	12.4	4.0	49.0	42.0	20.6	11.1	10.3	26.2
2002	67.9	2.7	11.8	4.6	48.9	40.1	19.4	10.6	10.0	27.9
2003	69.0	2.1	12.4	5.0	49.6	39.4	19.6	11.1	8.7	29.7
2004	69.4	2.2	11.9	5.0	50.4	37.6	18.4	10.8	8.4	31.8
2005	70.0	2.4	11.8	4.7	51.1	35.5	17.1	11.2	7.2	34.5
2006	68.2	2.4	11.4	4.1	50.3	33.8	17.3	9.4	7.1	34.4
2007	66.0	2.2	10.8	4.2	48.8	32.1	16.6	8.6	6.9	33.9
2008	69.3	2.3	10.8	6.7	49.5	32.2	16.9	8.1	7.1	37.1

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

	Total	Issued by <sup>4)</sup>				Original maturity			Residual maturity			Currencies	
		Central gov.	State gov.	Local gov.	Social security funds	Up to 1 year	Over 1 year	Variable interest rate	Up to 1 year	Over 1 year and up to 5 years	Over 5 years	Euro or participating currencies <sup>5)</sup>	Other currencies
1999	71.9	60.4	6.0	5.1	0.4	7.3	64.6	7.0	13.5	27.8	30.6	69.9	2.0
2000	69.2	58.1	5.8	4.9	0.4	6.5	62.7	6.3	13.4	27.8	28.0	67.4	1.8
2001	68.1	57.0	6.0	4.7	0.4	7.0	61.1	5.3	13.7	26.6	27.9	66.6	1.5
2002	67.9	56.6	6.2	4.7	0.4	7.6	60.3	5.2	15.5	25.3	27.2	66.6	1.3
2003	69.0	56.9	6.5	5.0	0.6	7.8	61.2	5.0	14.9	26.0	28.2	68.1	0.9
2004	69.4	57.3	6.6	5.1	0.4	7.8	61.6	4.7	14.8	26.2	28.5	68.6	0.9
2005	70.0	57.6	6.7	5.2	0.5	7.9	62.1	4.6	14.8	25.5	29.6	69.0	1.0
2006	68.2	55.8	6.5	5.4	0.5	7.4	60.8	4.3	14.4	24.0	29.8	67.6	0.6
2007	66.0	54.0	6.2	5.2	0.5	7.4	58.5	4.3	14.1	22.5	29.3	65.6	0.4
2008	69.3	57.2	6.6	5.2	0.4	10.2	59.2	4.4	17.5	22.1	29.7	68.8	0.5

### 3. Euro area countries

	BE	DE	IE	GR	ES	FR	IT	CY	LU	MT	NL	AT	PT	SI	SK	FI
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
2005	92.2	67.8	27.5	98.8	43.0	66.4	105.8	69.1	6.1	69.8	51.8	63.7	63.6	27.0	34.2	41.4
2006	87.9	67.6	24.9	95.9	39.6	63.7	106.5	64.6	6.7	63.7	47.4	62.0	64.7	26.7	30.4	39.2
2007	84.0	65.1	25.0	94.8	36.2	63.8	103.5	59.4	6.9	62.1	45.6	59.4	63.5	23.4	29.4	35.1
2008	89.6	65.9	43.2	97.6	39.5	68.0	105.8	49.1	14.7	64.1	58.2	62.5	66.4	22.8	27.6	33.4

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

- 1) The data refer to the Euro 16. 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>5)</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	
2000	1.0	1.2	0.0	-0.1	0.0	0.0	-0.5	-0.4	1.9	-2.1	-2.0	-0.6	3.1
2001	1.8	1.9	-0.1	0.1	0.0	0.2	-0.3	0.5	1.4	-0.3	-0.5	-0.8	2.1
2002	2.1	2.6	-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	0.5	0.7	0.8	2.6
2004	3.1	3.2	-0.1	0.0	0.0	0.2	0.1	0.1	2.7	-0.2	-0.4	0.1	3.3
2005	3.0	3.0	0.0	0.0	0.0	0.3	0.3	-0.1	2.6	-0.8	-0.6	0.8	3.8
2006	1.5	1.4	0.1	0.0	0.0	0.2	0.2	-0.4	1.5	0.0	1.0	-1.2	1.5
2007	1.1	1.1	0.0	0.0	0.0	-0.1	-0.1	0.3	1.0	-0.1	0.1	-0.4	1.2
2008	5.3	5.2	0.1	0.0	0.0	0.1	0.4	2.6	2.2	1.1	0.8	-0.2	4.2

#### 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	
2000	1.0	-0.1	1.0	1.0	0.7	0.1	0.2	0.0	-0.4	0.2	0.0	0.1	-0.1	0.0
2001	1.8	-1.9	0.0	-0.5	-0.6	0.1	0.1	-0.1	-0.3	0.1	-0.1	0.0	0.1	0.5
2002	2.1	-2.6	-0.5	0.1	0.1	0.0	0.0	-0.1	-0.4	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	-3.0	0.1	0.2	0.2	0.0	0.1	0.0	-0.5	0.2	-0.1	-0.1	0.0	0.1
2005	3.0	-2.5	0.5	0.6	0.3	0.1	0.1	0.1	-0.3	0.2	0.0	0.0	0.0	-0.1
2006	1.5	-1.3	0.2	0.3	0.3	-0.1	0.3	-0.2	0.0	0.1	0.1	0.0	0.0	-0.2
2007	1.1	-0.7	0.4	0.5	0.2	0.0	0.3	0.0	-0.1	0.1	0.0	0.0	0.0	-0.1
2008	5.3	-1.9	3.4	3.1	0.8	0.9	0.7	0.8	0.0	0.7	0.1	0.0	0.0	0.1

Source: ECB.

- The data refer to the Euro 16 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 3	Indirect taxes 4	Social contributions 5	Sales 6	Property income 7	8	Capital taxes 9	
2002 Q4	49.0	48.4	13.4	14.0	16.2	2.9	0.9	0.6	0.3	43.9
2003 Q1	42.0	41.5	9.8	12.9	15.5	1.7	0.7	0.5	0.2	38.5
Q2	45.8	44.3	11.9	12.7	15.7	2.0	1.4	1.4	1.2	41.4
Q3	42.7	42.2	10.8	12.6	15.5	1.9	0.6	0.5	0.2	39.1
Q4	49.2	48.2	13.1	14.1	16.2	2.9	0.8	1.0	0.3	43.8
2004 Q1	41.4	40.9	9.6	12.9	15.3	1.7	0.6	0.4	0.3	38.1
Q2	44.8	44.0	12.0	12.9	15.3	2.0	1.1	0.8	0.6	40.8
Q3	42.7	42.2	10.6	12.8	15.4	1.9	0.7	0.5	0.3	39.1
Q4	49.0	48.0	13.0	14.2	16.2	2.9	0.7	1.0	0.4	43.8
2005 Q1	42.0	41.4	9.9	13.0	15.2	1.7	0.6	0.5	0.3	38.4
Q2	44.4	43.8	11.7	13.2	15.1	2.0	1.1	0.6	0.3	40.2
Q3	43.3	42.6	11.0	13.0	15.2	1.9	0.7	0.7	0.3	39.5
Q4	49.1	48.3	13.4	14.2	16.1	2.9	0.8	0.8	0.3	43.9
2006 Q1	42.4	41.9	10.2	13.4	15.1	1.6	0.8	0.4	0.3	38.9
Q2	45.5	45.0	12.3	13.5	15.1	1.9	1.3	0.5	0.3	41.2
Q3	43.8	43.2	11.5	13.0	15.2	2.0	0.8	0.5	0.3	39.9
Q4	49.4	48.8	14.1	14.3	15.9	2.9	0.9	0.6	0.3	44.5
2007 Q1	42.1	41.8	10.3	13.5	14.8	1.7	0.8	0.4	0.3	38.8
Q2	45.7	45.3	12.8	13.4	15.0	1.9	1.5	0.4	0.3	41.5
Q3	43.7	43.2	12.0	12.8	14.9	1.9	0.8	0.5	0.3	40.1
Q4	49.8	49.2	14.5	14.2	15.8	3.0	0.9	0.5	0.3	44.7
2008 Q1	42.0	41.6	10.6	12.9	14.8	1.7	0.9	0.3	0.2	38.5
Q2	44.9	44.6	12.8	12.8	15.0	1.8	1.5	0.4	0.3	40.8
Q3	43.1	42.7	11.8	12.5	15.0	1.9	0.8	0.3	0.3	39.5
Q4	48.8	48.3	13.6	13.6	16.2	3.0	1.1	0.5	0.3	43.7

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

	Total		Current expenditure						Capital expenditure			Deficit (-)/ surplus (+)	Primary deficit (-)/ surplus (+)
	1	2	Compensation of employees 3	Intermediate consumption 4	Interest 5	Current transfers 6	Social benefits 7	Subsidies 8	Investment 9	Capital transfers 11			
											10		
2002 Q4	50.8	46.3	11.0	5.7	3.3	26.4	22.7	1.6	4.4	2.8	1.7	-1.8	1.5
2003 Q1	46.8	43.3	10.3	4.5	3.5	24.9	21.4	1.3	3.5	1.9	1.6	-4.9	-1.3
Q2	47.1	43.5	10.4	4.7	3.4	25.1	21.6	1.3	3.5	2.3	1.2	-1.3	2.1
Q3	47.1	43.4	10.2	4.8	3.3	25.1	21.6	1.3	3.7	2.5	1.2	-4.4	-1.1
Q4	51.1	46.3	11.1	5.7	3.1	26.5	22.9	1.5	4.8	3.3	1.6	-1.9	1.2
2004 Q1	46.4	43.0	10.3	4.6	3.2	24.9	21.3	1.2	3.4	1.9	1.5	-5.0	-1.8
Q2	46.6	43.2	10.4	4.8	3.3	24.7	21.4	1.3	3.4	2.3	1.1	-1.8	1.5
Q3	46.0	42.6	9.9	4.7	3.1	24.9	21.5	1.3	3.4	2.4	1.0	-3.3	-0.2
Q4	50.9	45.7	11.0	5.7	2.9	26.1	22.6	1.4	5.2	3.1	2.1	-1.9	1.0
2005 Q1	46.8	43.1	10.2	4.6	3.1	25.1	21.3	1.2	3.7	1.9	1.8	-4.8	-1.7
Q2	46.1	42.7	10.2	4.9	3.2	24.4	21.3	1.1	3.4	2.3	1.1	-1.7	1.5
Q3	45.7	42.3	9.9	4.8	3.0	24.7	21.3	1.2	3.4	2.5	1.0	-2.4	0.5
Q4	50.5	45.7	11.1	5.8	2.7	26.1	22.5	1.3	4.8	3.1	1.7	-1.4	1.3
2006 Q1	45.2	42.1	10.0	4.5	2.9	24.6	21.1	1.2	3.1	1.9	1.2	-2.9	0.1
Q2	45.4	42.2	10.2	4.9	3.1	24.0	21.0	1.1	3.2	2.3	1.0	0.1	3.1
Q3	45.3	41.9	9.8	4.7	2.9	24.5	21.1	1.2	3.4	2.5	1.0	-1.6	1.4
Q4	50.3	45.0	10.7	5.8	2.7	25.9	22.2	1.4	5.3	3.2	2.2	-0.9	1.8
2007 Q1	44.2	41.1	9.8	4.5	2.9	23.9	20.4	1.2	3.2	2.0	1.2	-2.1	0.8
Q2	44.6	41.4	9.9	4.8	3.2	23.5	20.5	1.1	3.2	2.3	0.9	1.2	4.3
Q3	45.0	41.2	9.5	4.7	3.0	24.0	20.7	1.2	3.7	2.5	1.2	-1.3	1.7
Q4	50.3	45.1	10.6	5.8	2.8	26.0	22.2	1.5	5.1	3.3	1.8	-0.5	2.3
2008 Q1	44.4	41.3	9.7	4.6	2.9	24.0	20.4	1.2	3.2	2.0	1.2	-2.5	0.4
Q2	45.0	41.7	10.0	4.9	3.2	23.6	20.5	1.1	3.3	2.3	1.0	-0.1	3.1
Q3	45.3	41.9	9.6	4.8	3.1	24.4	21.2	1.2	3.5	2.5	1.0	-2.3	0.8
Q4	51.6	46.5	11.0	6.0	2.8	26.8	22.9	1.4	5.1	3.3	1.8	-2.8	0.0

Source: ECB calculations based on Eurostat and national data.

1) The data refer to the Euro 16. 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>

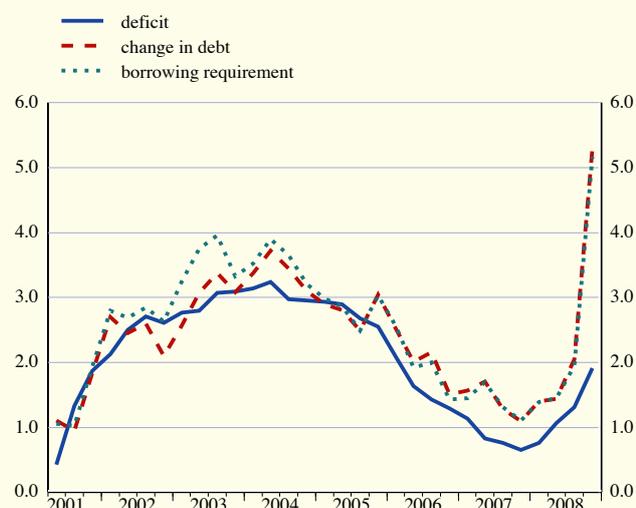
	Total 1	Financial instruments			
		Currency and deposits 2	Loans 3	Short-term securities 4	Long-term securities 5
2006 Q1	70.3	2.5	11.7	4.9	51.2
Q2	70.3	2.5	11.6	4.8	51.4
Q3	69.8	2.5	11.6	4.7	51.0
Q4	68.2	2.4	11.4	4.1	50.3
2007 Q1	68.5	2.4	11.4	4.8	49.9
Q2	68.6	2.2	11.1	5.1	50.3
Q3	67.7	2.1	11.0	5.1	49.4
Q4	66.0	2.2	10.8	4.2	48.8
2008 Q1	66.8	2.1	11.0	5.0	48.8
Q2	67.1	2.1	11.0	4.9	49.1
Q3	67.1	2.1	10.8	5.5	48.6
Q4	69.3	2.3	10.8	6.7	49.5

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

	Change in debt 1	Deficit (-)/ surplus (+) 2	Deficit-debt adjustment								Memo: Borrowing requirement 11
			Total 3	Transactions in main financial assets held by general government				Valuation effects and other changes in volume 9	Other 10		
				Total 4	Currency and deposits 5	Loans 6	Securities 7			Shares and other equity 8	
2006 Q1	4.9	-2.9	2.0	1.3	1.1	0.1	0.6	-0.4	-0.4	1.1	5.2
Q2	3.2	0.1	3.3	3.3	2.6	0.1	0.4	0.1	0.6	-0.6	2.6
Q3	1.2	-1.6	-0.3	-0.9	-0.7	-0.2	0.2	-0.2	0.3	0.3	1.0
Q4	-2.9	-0.9	-3.8	-2.4	-1.5	-0.5	-0.2	-0.2	-0.2	-1.3	-2.8
2007 Q1	4.9	-2.1	2.8	1.9	1.0	0.0	0.7	0.2	-0.2	1.1	5.1
Q2	3.7	1.2	4.9	4.9	4.0	0.0	0.6	0.3	0.2	-0.2	3.5
Q3	-0.5	-1.3	-1.7	-1.7	-2.1	0.1	0.4	-0.1	0.1	-0.1	-0.5
Q4	-3.5	-0.5	-3.9	-2.9	-2.0	-0.1	-0.6	-0.3	-0.1	-0.9	-3.4
2008 Q1	6.0	-2.5	3.5	3.2	2.1	-0.1	0.9	0.4	-0.1	0.4	6.1
Q2	3.7	-0.1	3.7	3.6	2.0	0.2	1.1	0.2	0.1	0.0	3.7
Q3	2.1	-2.3	-0.2	-0.9	-1.6	-0.1	0.1	0.7	0.5	0.2	1.6
Q4	9.3	-2.8	6.5	6.5	0.6	3.4	0.8	1.8	0.0	-0.1	9.3

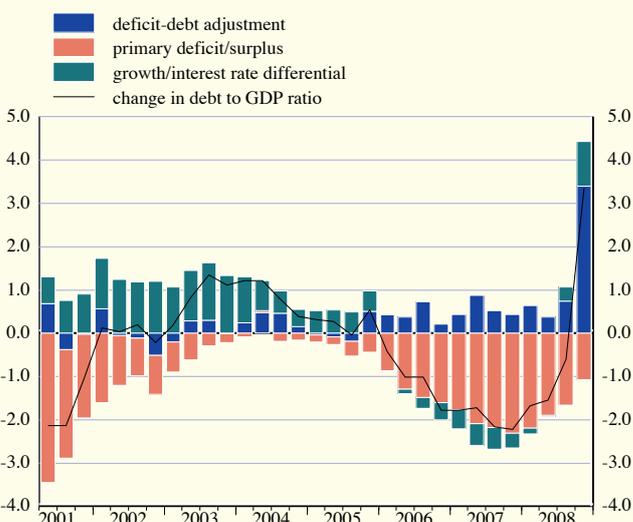
### C29 Deficit, borrowing requirement and change in debt

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



### C30 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 16.

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

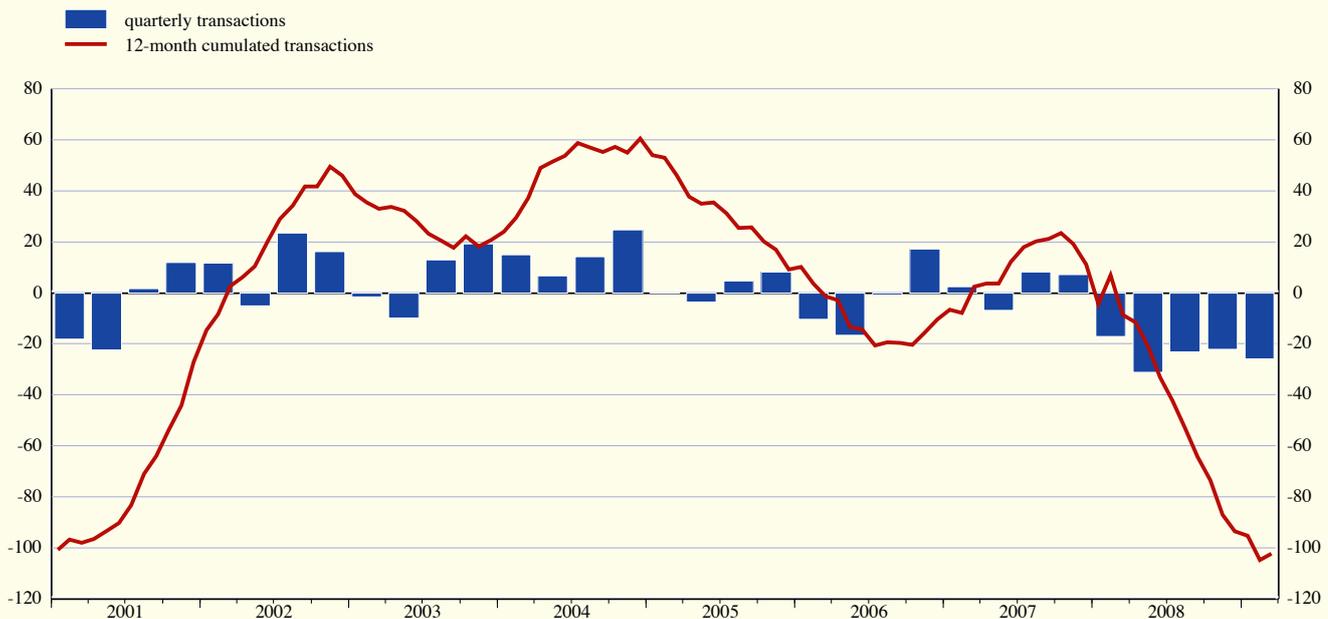
### 7.1 Summary balance of payments <sup>1)</sup>

(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
2006	-10.5	12.3	43.3	13.6	-79.7	9.2	-1.2	141.4	-157.6	293.7	3.3	2.9	-0.9	-140.2
2007	11.1	46.4	49.2	1.4	-85.9	13.7	24.8	41.2	-92.5	159.7	-67.0	46.0	-5.1	-66.0
2008	-93.6	-6.1	41.7	-32.4	-96.8	12.4	-81.2	313.6	-251.3	439.2	-30.9	160.5	-3.9	-232.4
2008 Q1	-17.3	-2.5	10.0	3.4	-28.3	6.0	-11.2	35.5	-75.2	88.6	-22.8	50.0	-5.1	-24.3
Q2	-31.1	6.1	13.1	-32.0	-18.3	3.1	-28.0	79.7	-53.4	27.3	-8.9	114.8	0.0	-51.7
Q3	-23.1	-9.0	13.4	-3.0	-24.6	1.9	-21.2	61.7	-35.9	121.5	-8.4	-17.2	1.6	-40.4
Q4	-22.0	-0.7	5.2	-0.9	-25.7	1.3	-20.7	136.7	-86.7	201.8	9.2	12.8	-0.4	-116.0
2009 Q1	-25.9	-6.3	4.5	1.9	-26.0	3.0	-22.9	105.6	-46.6	134.7	10.0	1.9	5.7	-82.7
2008 Apr.	-7.5	5.1	2.9	-7.4	-8.1	0.7	-6.8	25.7	-23.0	-17.9	-3.1	73.0	-3.3	-18.9
May	-24.0	-1.6	4.1	-21.0	-5.6	1.9	-22.2	39.1	-5.4	1.4	-10.6	50.9	2.7	-16.9
June	0.4	2.6	6.1	-3.6	-4.7	0.6	0.9	14.9	-25.1	43.8	4.8	-9.0	0.5	-15.9
July	-4.1	0.4	4.3	-0.6	-8.2	0.9	-3.2	48.5	-1.6	29.1	-0.1	23.4	-2.3	-45.3
Aug.	-11.5	-7.1	5.0	-1.1	-8.2	0.5	-10.9	0.4	-11.8	19.3	-8.3	-1.1	2.3	10.6
Sep.	-7.5	-2.3	4.1	-1.2	-8.2	0.5	-7.1	12.8	-22.5	73.1	0.1	-39.5	1.6	-5.7
Oct.	-5.1	3.7	1.5	0.6	-10.9	0.0	-5.1	97.3	-10.9	135.3	17.7	-36.8	-8.0	-92.3
Nov.	-13.7	-4.0	0.9	-1.5	-9.2	1.5	-12.2	19.6	-53.3	60.2	-5.7	18.8	-0.4	-7.4
Dec.	-3.3	-0.4	2.8	-0.1	-5.6	-0.2	-3.4	19.7	-22.5	6.4	-2.9	30.8	7.9	-16.3
2009 Jan.	-19.9	-10.1	1.6	-1.7	-9.7	0.7	-19.2	51.2	-15.9	-7.4	5.8	63.3	5.4	-32.0
Feb.	-2.1	1.0	1.5	0.5	-5.1	0.9	-1.1	-3.4	-11.8	56.1	3.6	-52.5	1.1	4.5
Mar.	-4.0	2.8	1.4	3.0	-11.2	1.4	-2.6	57.8	-18.9	85.9	0.6	-8.9	-0.9	-55.3
Apr.	-9.2	4.0	2.3	-6.9	-8.6	2.0	-7.2	2.8	-1.2	-6.0	6.7	3.2	0.1	4.4
	<i>12-month cumulated transactions</i>													
2009 Apr.	-104.0	-11.0	35.6	-33.5	-95.0	10.7	-93.3	360.8	-200.9	497.2	11.6	42.6	10.2	-267.5

### C31 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

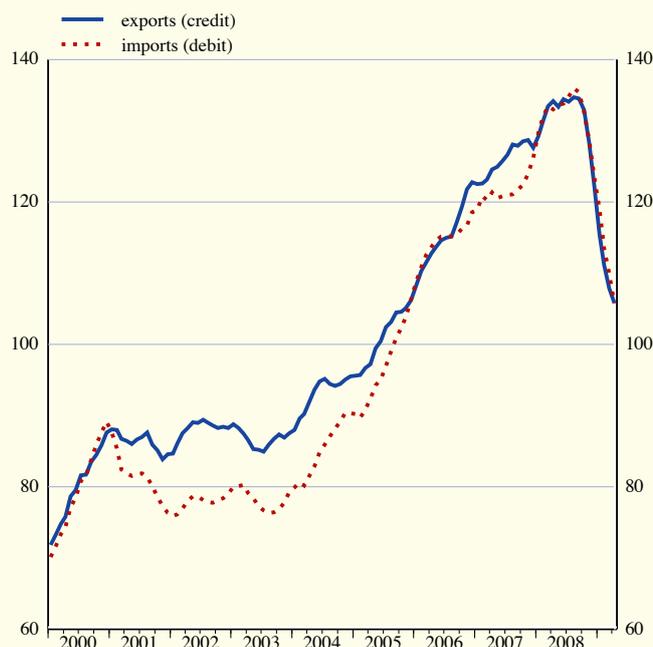
(EUR billions; transactions)

### 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	Workers remittances				
											11	12	13		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
2006	2,423.8	2,434.3	-10.5	1,396.8	1,384.5	440.8	397.5	496.4	482.8	89.8	5.4	169.5	17.4	23.9	14.7
2007	2,686.1	2,675.0	11.1	1,513.7	1,467.3	490.3	441.1	592.3	591.0	89.8	6.4	175.7	20.5	25.9	12.2
2008	2,760.3	2,853.9	-93.6	1,579.3	1,585.4	504.0	462.3	588.8	621.2	88.2	6.6	185.0	21.1	25.7	13.3
2008 Q1	680.4	697.7	-17.3	390.3	392.7	116.9	106.9	147.1	143.7	26.1	1.6	54.3	5.1	8.9	2.9
Q2	709.2	740.4	-31.1	407.8	401.7	126.1	113.0	153.4	185.3	22.0	1.5	40.3	5.3	7.3	4.1
Q3	696.6	719.8	-23.1	403.1	412.1	136.2	122.8	143.8	146.7	13.5	1.8	38.1	5.4	4.8	2.9
Q4	674.0	696.1	-22.0	378.2	378.9	124.7	119.5	144.5	145.5	26.6	1.7	52.2	5.3	4.8	3.4
2009 Q1	570.3	596.2	-25.9	312.3	318.7	108.0	103.5	123.5	121.7	26.5	-	52.4	-	5.4	2.4
2009 Feb.	193.1	195.1	-2.1	102.9	101.9	34.4	32.9	39.8	39.3	16.0	.	21.1	.	1.5	0.6
Mar.	195.8	199.7	-4.0	111.0	108.3	36.6	35.2	43.4	40.4	4.7	.	15.9	.	2.2	0.8
Apr.	185.8	194.9	-9.2	104.0	100.0	36.9	34.6	39.5	46.4	5.4	.	13.9	.	2.8	0.7
	Seasonally adjusted														
2008 Q1	701.6	718.3	-16.7	400.4	400.5	128.1	113.1	151.2	157.5	21.8	.	47.2	.	.	.
Q2	702.1	718.9	-16.8	403.4	401.6	126.4	115.7	148.4	154.5	23.9	.	47.1	.	.	.
Q3	696.4	719.9	-23.5	403.5	406.4	125.8	116.5	147.8	154.9	19.3	.	42.1	.	.	.
Q4	653.4	688.7	-35.3	366.4	370.3	123.3	115.8	141.8	154.0	21.9	.	48.6	.	.	.
2009 Q1	592.4	619.6	-27.2	323.7	329.8	119.1	110.4	127.6	134.3	22.0	.	45.1	.	.	.
2008 Nov.	220.2	235.8	-15.6	120.9	124.9	42.0	40.1	50.2	55.1	7.1	.	15.7	.	.	.
Dec.	205.4	218.2	-12.8	115.1	117.8	39.4	35.7	43.4	48.3	7.5	.	16.4	.	.	.
2009 Jan.	203.4	215.7	-12.3	110.1	114.0	41.8	38.0	44.5	48.1	7.0	.	15.5	.	.	.
Feb.	197.2	205.1	-7.8	108.3	108.7	38.7	36.1	42.1	45.7	8.1	.	14.6	.	.	.
Mar.	191.8	198.8	-7.0	105.3	107.0	38.6	36.3	41.0	40.5	7.0	.	15.0	.	.	.
Apr.	187.6	193.5	-5.9	104.0	101.4	38.9	36.0	38.5	41.2	6.2	.	14.9	.	.	.

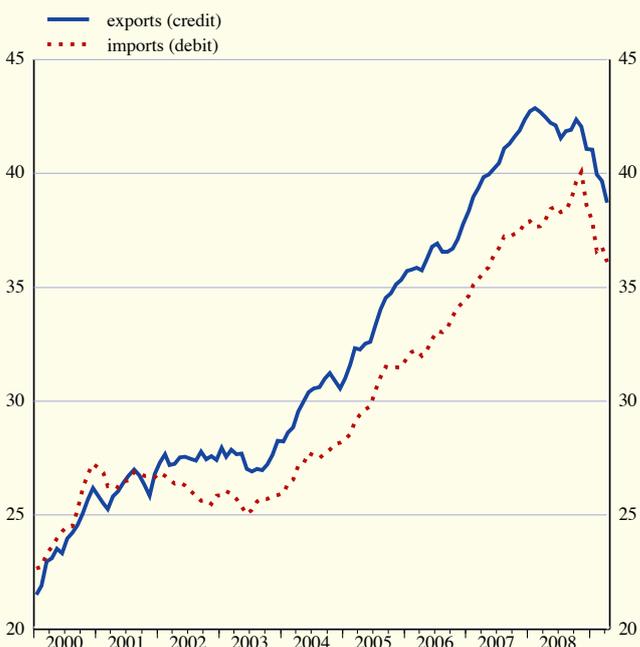
### C32 B.o.p. goods

(EUR billions, seasonally adjusted; three-month moving average)



### C33 B.o.p. services

(EUR billions, seasonally adjusted; three-month moving average)



Source: ECB.

## 7.2 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	Reinv. earnings	Credit	Debit	Credit	Debit	Credit	Debit			
			1	2										3	4	5
2006	17.4	9.8	478.9	472.9	182.7	41.4	111.5	36.6	20.6	20.2	39.2	99.1	103.6	91.5	132.9	150.6
2007	18.7	10.2	573.6	580.7	207.0	75.0	130.5	38.6	26.1	24.4	45.5	116.1	117.5	113.2	177.5	196.5
2008	19.1	10.4	569.7	610.8	192.3	65.8	126.6	43.3	30.0	25.7	42.8	124.4	123.0	129.3	181.6	204.8
2007 Q4	4.9	2.7	147.7	141.4	52.5	13.8	31.2	6.9	7.4	6.5	9.4	20.6	30.7	30.5	47.5	52.5
2008 Q1	4.9	2.0	142.2	141.7	50.1	22.2	31.7	15.9	6.8	6.2	9.7	21.0	30.3	31.4	45.3	51.4
Q2	4.7	2.6	148.7	182.7	52.0	13.3	34.7	4.6	7.5	6.9	14.4	58.5	30.4	31.4	44.4	51.2
Q3	4.6	3.1	139.2	143.6	45.8	18.1	31.9	15.5	7.1	6.1	10.2	23.8	32.0	31.1	44.0	50.7
Q4	4.9	2.7	139.7	142.7	44.4	12.2	28.4	7.3	8.6	6.5	8.5	21.0	30.3	35.3	47.9	51.6

### 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 insti-tutions									
2008 Q1 to 2008 Q4	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Credits																
<b>Current account</b>	2,760.3	999.7	60.5	85.8	518.6	277.7	57.1	41.1	35.9	85.2	31.1	57.2	103.4	185.8	404.8	815.9
Goods	1,579.3	542.5	36.4	54.3	233.6	218.1	0.0	22.5	18.6	65.5	23.5	33.8	79.1	91.8	192.6	509.4
Services	504.0	171.4	12.9	13.7	110.0	29.0	5.7	7.3	6.8	15.2	5.7	11.3	14.2	50.6	79.8	141.8
Income	588.8	222.7	10.4	16.2	162.1	27.4	6.7	11.0	9.8	4.3	1.8	11.8	9.8	36.9	125.4	155.4
Investment income	569.7	216.1	10.3	16.0	160.3	26.6	2.9	11.0	9.7	4.2	1.7	11.7	9.7	29.9	123.6	152.1
Current transfers	88.2	63.2	0.8	1.5	13.0	3.2	44.6	0.2	0.8	0.3	0.1	0.4	0.4	6.5	7.1	9.3
<b>Capital account</b>	25.7	22.3	0.0	0.0	1.1	0.2	21.0	0.0	0.0	0.0	0.0	0.0	0.6	1.4	1.2	
Debits																
<b>Current account</b>	2,853.9	904.0	47.3	85.1	439.4	228.0	104.1	-	31.8	-	-	100.4	-	180.9	391.2	-
Goods	1,585.4	435.9	30.4	51.5	176.2	177.8	0.0	27.9	14.3	179.3	20.9	55.8	111.9	79.2	143.1	517.1
Services	462.3	141.2	8.2	11.7	87.6	33.4	0.2	5.3	6.8	11.2	4.6	8.3	9.4	39.9	95.4	140.2
Income	621.2	212.7	7.7	20.6	163.5	11.9	9.0	-	8.9	-	-	35.7	-	55.8	144.1	-
Investment income	610.8	206.6	7.6	20.5	162.0	7.5	9.0	-	8.8	-	-	35.6	-	55.3	143.1	-
Current transfers	185.0	114.2	1.0	1.3	12.1	4.9	95.0	1.5	1.8	2.5	0.7	0.6	0.5	6.0	8.7	48.6
<b>Capital account</b>	13.3	2.3	0.0	0.1	1.2	0.2	0.8	0.2	1.1	0.1	0.2	0.1	0.1	0.6	1.3	7.6
Net																
<b>Current account</b>	-93.6	95.7	13.2	0.7	79.2	49.7	-47.1	-	4.1	-	-	-43.2	-	4.9	13.6	-
Goods	-6.1	106.6	6.0	2.9	57.3	40.4	0.0	-5.4	4.3	-113.8	2.6	-22.0	-32.8	12.6	49.5	-7.7
Services	41.7	30.1	4.7	2.0	22.4	-4.5	5.5	2.0	0.0	4.0	1.1	3.0	4.8	10.7	-15.6	1.6
Income	-32.4	10.1	2.7	-4.5	-1.4	15.5	-2.3	-	0.8	-	-	-24.0	-	-18.9	-18.7	-
Investment income	-41.1	9.5	2.7	-4.5	-1.8	19.2	-6.1	-	0.9	-	-	-23.9	-	-25.4	-19.5	-
Current transfers	-96.8	-51.1	-0.2	0.3	0.9	-1.6	-50.3	-1.2	-1.1	-2.2	-0.6	-0.2	-0.1	0.6	-1.6	-39.3
<b>Capital account</b>	12.4	20.0	0.0	0.0	-0.1	-0.1	20.2	-0.1	-1.0	-0.1	-0.1	-0.1	0.0	0.0	0.2	-6.3

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>														
2004	8,602.5	9,518.4	-915.9	109.5	121.2	-11.7	2,268.7	2,235.4	3,045.0	4,080.2	-37.4	3,045.2	3,202.9	281.0
2005	10,785.2	11,605.3	-820.2	132.3	142.4	-10.1	2,790.8	2,444.3	3,887.5	5,109.1	-21.4	3,805.8	4,052.0	322.5
2006	12,258.8	13,306.1	-1,047.3	143.3	155.6	-12.2	3,131.7	2,728.7	4,371.5	5,866.5	-20.8	4,448.7	4,711.0	327.7
2007	13,750.6	14,915.4	-1,164.9	152.9	165.8	-13.0	3,526.1	3,091.6	4,653.8	6,340.0	-10.2	5,233.5	5,483.9	347.4
2008 Q3	13,929.1	15,185.3	-1,256.3	150.5	164.1	-13.6	3,777.4	3,198.8	4,281.0	6,029.1	23.2	5,476.5	5,957.5	370.9
Q4	13,126.5	14,847.4	-1,720.9	141.6	160.1	-18.6	3,753.7	3,185.7	3,747.3	5,978.2	19.7	5,222.0	5,683.5	383.9
<b>Changes to outstanding amounts</b>														
2004	740.8	888.6	-147.8	9.4	11.3	-1.9	99.2	151.2	389.4	494.0	-17.3	295.4	243.4	-25.7
2005	2,182.7	2,086.9	95.7	26.8	25.6	1.2	522.1	209.0	842.5	1,028.9	16.0	760.6	849.1	41.5
2006	1,473.6	1,700.8	-227.1	17.2	19.9	-2.7	340.9	284.3	484.0	757.4	0.6	642.9	659.0	5.2
2007	1,491.8	1,609.3	-117.5	16.6	17.9	-1.3	394.4	362.9	282.3	473.5	10.6	784.7	772.9	19.7
2008 Q3	229.7	288.3	-58.6	10.0	12.6	-2.6	112.7	45.7	-151.1	-20.8	27.9	223.2	263.4	17.0
Q4	-802.5	-337.9	-464.6	-34.0	-14.3	-19.7	-23.8	-13.0	-533.8	-50.9	-3.5	-254.5	-274.0	13.0
<b>Transactions</b>														
2005	1,329.2	1,339.4	-10.2	16.3	16.4	-0.1	358.4	152.4	416.2	543.3	17.3	554.9	643.7	-17.7
2006	1,680.0	1,821.4	-141.4	19.6	21.3	-1.7	417.4	259.8	527.6	821.4	-3.3	737.4	740.3	0.9
2007	1,896.7	1,937.9	-41.2	21.1	21.5	-0.5	474.2	381.7	439.5	599.3	67.0	910.9	956.9	5.1
2008	395.2	708.8	-313.6	4.3	7.6	-3.4	351.0	99.7	-14.7	424.5	30.9	24.2	184.7	3.9
2008 Q3	135.6	197.3	-61.7	5.9	8.6	-2.7	88.7	52.8	-60.9	60.7	8.4	101.0	83.8	-1.6
Q4	-373.1	-236.4	-136.7	-15.8	-10.0	-5.8	50.5	-36.2	-155.3	46.5	-9.2	-259.6	-246.8	0.4
2009 Q1	-238.9	-133.3	-105.6	-10.9	-6.1	-4.8	75.0	28.4	-55.0	79.6	-10.0	-243.2	-241.3	-5.7
2008 Dec.	-225.5	-205.8	-19.7	.	.	.	8.0	-14.5	-22.1	-15.7	2.9	-206.4	-175.6	-7.9
2009 Jan.	-14.3	36.9	-51.2	.	.	.	27.2	11.3	20.8	13.5	-5.8	-51.2	12.1	-5.4
Feb.	-110.3	-113.7	3.4	.	.	.	20.4	8.6	-21.0	35.1	-3.6	-104.9	-157.4	-1.1
Mar.	-114.3	-56.4	-57.8	.	.	.	27.4	8.6	-54.8	31.0	-0.6	-87.1	-96.1	0.9
Apr.	77.9	80.6	-2.8	.	.	.	56.6	55.4	0.4	-5.7	-6.7	27.7	30.9	-0.1
<b>Other changes</b>														
2004	-76.9	97.0	-173.9	-1.0	1.2	-2.2	-69.8	61.8	43.6	76.2	-25.8	-11.7	-41.0	-13.3
2005	853.5	747.5	105.9	10.5	9.2	1.3	163.7	56.5	426.3	485.6	-1.4	205.7	205.4	59.2
2006	-206.4	-120.6	-85.7	-2.4	-1.4	-1.0	-76.5	24.5	-43.6	-63.9	3.9	-94.4	-81.3	4.3
2007	-404.9	-328.5	-76.3	-4.5	-3.7	-0.8	-79.7	-18.8	-157.2	-125.8	-56.4	-126.1	-184.0	14.6
<b>Other changes due to exchange rate changes</b>														
2004	-168.8	-96.4	-72.4	-2.1	-1.2	-0.9	-36.0	7.4	-62.3	-50.2	.	-61.2	-53.5	-9.4
2005	369.3	214.4	154.9	4.5	2.6	1.9	86.9	-18.2	136.8	118.1	.	126.9	114.5	18.7
2006	-321.7	-207.9	-113.8	-3.8	-2.4	-1.3	-70.7	11.7	-131.1	-118.0	.	-104.6	-101.5	-15.3
2007	-501.6	-244.1	-257.5	-5.6	-2.7	-2.9	-110.0	27.1	-194.5	-124.1	.	-182.2	-147.1	-14.9
<b>Other changes due to price changes</b>														
2004	102.1	218.6	-116.5	1.3	2.8	-1.5	30.7	25.0	100.3	193.6	-25.8	.	.	-3.1
2005	288.1	327.5	-39.4	3.5	4.0	-0.5	60.7	48.6	186.6	278.9	-1.4	.	.	42.1
2006	297.0	309.5	-12.5	3.5	3.6	-0.1	61.2	39.4	215.7	270.1	3.9	.	.	16.3
2007	156.6	-63.8	220.3	1.7	-0.7	2.4	29.6	12.3	151.7	-76.1	-56.4	.	.	31.6
<b>Other changes due to other adjustments</b>														
2004	-10.3	-25.2	15.0	-0.1	-0.3	0.2	-64.5	29.4	5.6	-67.2	.	49.5	12.5	-0.8
2005	195.5	205.6	-10.2	2.4	2.5	-0.1	16.0	26.1	102.9	88.6	.	78.8	90.9	-2.2
2006	-181.4	-222.3	40.9	-2.1	-2.6	0.5	-67.0	-26.6	-128.2	-216.0	.	10.2	20.3	3.7
2007	-59.5	-20.7	-38.9	-0.7	-0.2	-0.4	0.6	-58.2	-114.3	74.4	.	56.0	-36.8	-1.9
<b>Growth rates of outstanding amounts</b>														
2004	10.3	9.1	-	.	.	.	7.8	4.2	12.8	11.5	.	11.1	9.5	-4.1
2005	14.9	13.7	-	.	.	.	15.2	6.8	13.1	12.8	.	17.6	19.5	-5.8
2006	15.7	15.8	-	.	.	.	15.0	10.6	13.8	16.3	.	19.5	18.4	0.2
2007	15.5	14.5	-	.	.	.	15.2	14.0	10.0	10.1	.	20.5	20.4	1.6
2008 Q3	8.2	8.1	-	.	.	.	12.2	8.9	5.3	6.6	.	7.4	9.6	-0.4
Q4	2.8	4.8	-	.	.	.	10.1	3.2	-0.6	7.1	.	0.4	3.4	1.1
2009 Q1	-3.0	-0.1	-	.	.	.	7.2	1.1	-3.5	5.9	.	-9.4	-6.8	-1.8

Source: ECB.

1) Net financial derivatives are included in assets.

## 7.3 Financial account

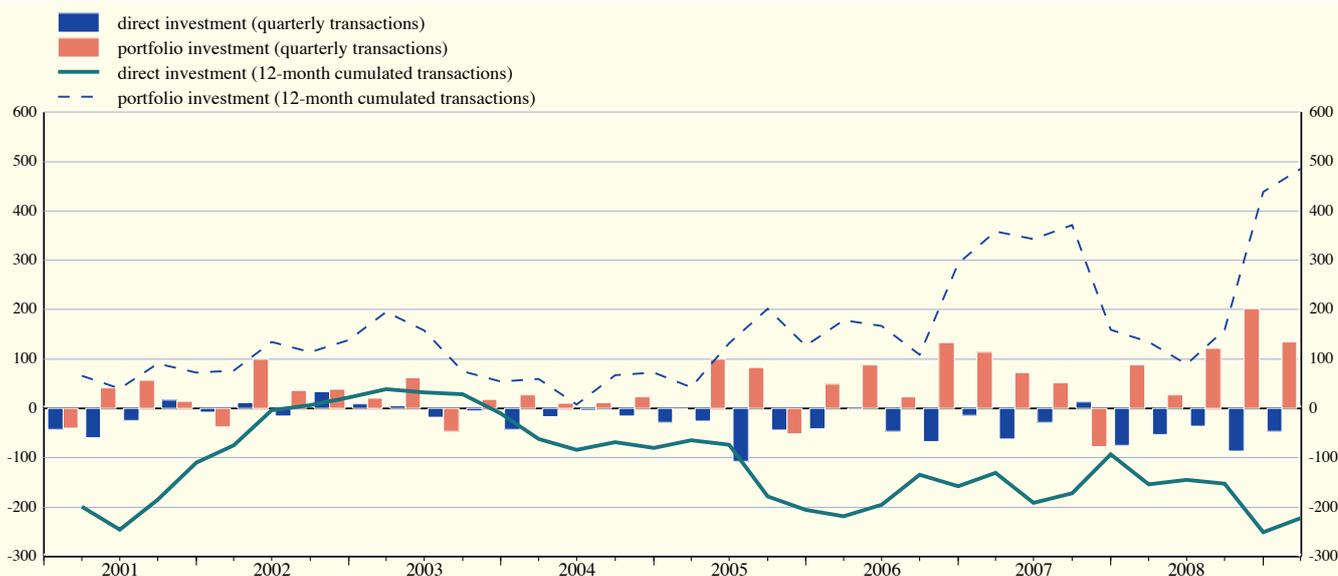
(EUR billions and annual growth rates; outstanding amounts and growth rates at end of period, transactions during period)

### 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 MFIs	into Non-MFIs	Total	to MFIs	to Non-MFIs
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Outstanding amounts (international investment position)														
2006	3,131.7	2,540.4	217.4	2,323.0	591.3	2.2	589.1	2,728.7	2,091.9	65.5	2,026.4	636.8	9.7	627.1
2007	3,526.1	2,844.3	246.4	2,597.9	681.9	6.3	675.6	3,091.6	2,343.9	69.1	2,274.8	747.7	14.9	732.8
2008 Q3	3,777.4	3,007.4	253.2	2,754.2	770.1	6.7	763.4	3,198.8	2,371.8	65.7	2,306.2	826.9	18.3	808.7
Q4	3,753.7	2,970.1	241.2	2,728.8	783.6	6.4	777.2	3,185.7	2,368.9	65.6	2,303.3	816.8	17.1	799.7
Transactions														
2007	474.2	355.5	24.6	330.9	118.7	-0.1	118.8	381.7	267.4	5.2	262.2	114.3	1.4	112.9
2008	351.0	234.6	15.2	219.4	116.4	-0.2	116.6	99.7	69.0	-1.2	70.2	30.7	1.5	29.2
2008 Q3	88.7	65.7	-7.6	73.4	22.9	-0.4	23.3	52.8	30.9	0.8	30.2	21.9	0.5	21.4
Q4	50.5	35.0	7.1	28.0	15.5	-0.3	15.8	-36.2	0.7	0.0	0.7	-36.9	-0.2	-36.7
2009 Q1	75.0	34.8	7.3	27.5	40.2	2.2	38.1	28.4	20.0	-0.2	20.2	8.4	0.1	8.3
2008 Dec.	8.0	7.2	2.2	5.0	0.8	-0.5	1.3	-14.5	2.6	0.5	2.1	-17.1	-0.2	-16.9
2009 Jan.	27.2	15.1	5.6	9.5	12.1	1.6	10.5	11.3	6.3	0.6	5.7	5.0	0.4	4.6
Feb.	20.4	8.6	0.7	7.9	11.8	0.5	11.4	8.6	5.6	0.4	5.3	2.9	0.1	2.8
Mar.	27.4	11.1	1.0	10.1	16.3	0.1	16.2	8.6	8.1	-1.2	9.2	0.5	-0.4	0.9
Apr.	56.6	47.9	6.7	41.2	8.8	1.5	7.2	55.4	47.9	0.3	47.6	7.5	0.1	7.4
Growth rates														
2006	15.0	14.6	20.1	14.1	17.1	-2.9	17.2	10.6	12.3	10.2	12.4	5.5	-1.2	5.6
2007	15.2	14.0	11.1	14.3	20.1	-82.4	20.3	14.0	12.8	8.5	12.9	18.0	9.0	18.2
2008 Q3	12.2	10.2	1.1	11.1	20.6	11.5	20.7	8.9	6.4	1.0	6.5	17.2	15.6	17.2
Q4	10.1	8.3	6.2	8.5	17.1	-4.5	17.3	3.2	3.0	-1.9	3.1	4.1	8.4	4.0
2009 Q1	7.2	5.3	5.9	5.2	14.9	-6.5	15.1	1.1	2.0	-2.3	2.1	-1.3	8.1	-1.5

### C34 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			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)															
2006	4,371.5	1,936.2	127.8	2.8	1,808.4	37.0	2,056.0	875.0	13.0	1,181.0	14.1	379.3	311.6	11.1	67.7	0.2
2007	4,653.8	1,984.7	145.2	2.4	1,839.5	44.6	2,231.5	937.4	15.5	1,294.0	16.9	437.7	350.6	33.9	87.1	0.5
2008 Q3	4,281.0	1,510.5	88.2	2.7	1,422.3	39.0	2,287.9	990.8	23.2	1,297.1	19.4	482.6	390.8	55.1	91.9	0.7
2008 Q4	3,747.3	1,154.7	70.2	2.9	1,084.5	28.1	2,147.3	957.6	19.2	1,189.7	17.0	445.3	376.8	61.6	68.5	1.2
	Transactions															
2007	439.5	79.5	36.0	-0.4	43.6	5.5	282.5	153.6	3.8	128.9	2.0	77.5	68.5	25.0	9.0	0.3
2008	-14.7	-113.0	-55.4	0.6	-57.6	-0.5	91.1	49.7	6.9	41.4	2.4	7.1	24.9	24.5	-17.8	0.3
2008 Q3	-60.9	-51.3	-4.4	0.1	-46.9	0.6	19.9	-0.8	-0.2	20.6	1.1	-29.4	-33.0	-1.2	3.6	-0.2
2008 Q4	-155.3	-49.7	-4.0	0.4	-45.6	-1.3	-59.6	-15.3	-4.5	-44.3	-0.5	-46.1	-19.0	-1.8	-27.1	0.2
2009 Q1	-55.0	-2.7	-8.0	0.0	5.3	-	-34.4	-20.5	-2.6	-13.8	-	-18.0	-19.3	-4.7	1.4	-
2008 Dec.	-22.1	-5.0	-1.7	0.1	-3.3	-	-23.3	-5.2	-1.5	-18.1	-	6.2	9.5	-0.5	-3.3	-
2009 Jan.	20.8	7.8	-0.2	0.0	8.0	-	10.9	7.7	-0.7	3.2	-	2.2	1.7	1.0	0.4	-
Feb.	-21.0	-8.4	-3.5	0.0	-4.9	-	-12.8	-2.3	0.3	-10.5	-	0.1	-0.3	1.5	0.4	-
Mar.	-54.8	-2.1	-4.3	0.0	2.2	-	-32.5	-25.9	-2.2	-6.5	-	-20.2	-20.8	-7.2	0.6	-
Apr.	0.4	-1.5	0.1	-0.1	-1.6	-	6.8	-6.9	0.4	13.7	-	-5.0	0.4	1.3	-5.4	-
	Growth rates															
2006	13.8	9.0	17.5	0.9	8.4	22.1	17.1	24.1	15.8	12.5	9.0	21.3	22.2	220.7	20.4	-27.3
2007	10.0	4.0	29.0	-13.1	2.3	14.4	13.8	17.8	30.1	10.8	14.0	20.8	22.5	225.0	13.0	173.4
2008 Q3	5.3	-2.4	-26.2	6.6	-0.6	4.4	9.8	10.3	65.0	9.4	19.3	16.9	22.7	146.4	-5.8	-94.1
2008 Q4	-0.6	-6.5	-37.8	26.0	-3.9	-1.3	4.1	5.3	26.0	3.3	14.5	1.3	7.0	94.5	-22.7	52.8
2009 Q1	-3.5	-4.6	-23.5	19.0	-3.2	-	0.8	0.0	-10.4	1.4	-	-16.9	-13.1	50.2	-33.0	-

## 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			Total	MFIs
1	2	3	4	5	6	7	8	9	10	11	12			
	Outstanding amounts (international investment position)													
2006	5,866.5	2,910.8	657.6	2,253.2	2,656.9	953.8	1,705.5	1,019.2	298.8	125.7	173.2	138.0		
2007	6,340.0	3,103.1	754.7	2,348.3	2,917.3	1,128.0	1,789.3	1,113.4	319.6	153.4	166.1	142.5		
2008 Q3	6,029.1	2,414.9	715.4	1,699.3	3,152.6	1,150.5	2,001.6	1,253.7	461.6	176.6	285.0	228.4		
2008 Q4	5,978.2	2,126.5	680.8	1,445.7	3,275.8	1,165.8	2,110.1	1,383.1	575.8	171.7	404.1	339.3		
	Transactions													
2007	599.3	127.6	76.7	50.6	433.0	229.7	203.4	148.6	38.6	41.1	-2.6	8.1		
2008	424.5	-77.1	93.4	-170.5	281.6	45.1	237.0	197.4	219.9	-6.7	226.6	198.8		
2008 Q3	60.7	-73.6	-14.9	-58.8	63.9	10.3	53.7	54.8	70.4	-4.2	74.7	52.3		
2008 Q4	46.5	-45.9	17.8	-63.8	-13.0	-42.0	29.0	32.8	105.5	-11.0	116.5	108.7		
2009 Q1	79.6	-54.0	-0.9	-53.1	106.2	12.8	93.4	-	27.4	-32.6	60.1	-		
2008 Dec.	-15.7	-6.1	-	-	-29.0	-	-	-	19.3	-	-	-		
2009 Jan.	13.5	-44.5	-	-	27.8	-	-	-	30.2	-	-	-		
Feb.	35.1	-5.9	-	-	35.1	-	-	-	6.0	-	-	-		
Mar.	31.0	-3.6	-	-	43.3	-	-	-	-8.7	-	-	-		
Apr.	-5.7	-20.2	-	-	-12.4	-	-	-	26.9	-	-	-		
	Growth rates													
2006	16.3	12.1	17.5	10.6	22.9	25.9	21.2	15.2	1.5	21.5	-10.0	-11.2		
2007	10.1	4.4	11.4	2.3	16.3	24.3	11.9	14.6	12.7	33.7	-0.2	6.6		
2008 Q3	6.6	-2.4	5.6	-5.1	13.0	10.9	14.3	17.8	26.0	19.1	34.3	27.6		
2008 Q4	7.1	-3.4	12.8	-8.8	9.9	4.1	13.4	18.1	65.5	-3.7	135.6	144.4		
2009 Q1	5.9	-7.6	2.7	-11.7	10.6	3.5	14.8	-	63.2	-24.5	148.4	-		

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	8	Trade credits 9	Loans/ currency and deposits 10	Currency and deposits 11	12	Trade credits 13	Loans/ currency and deposits 14	Currency and deposits 15	
																Total
Outstanding amounts (international investment position)																
2006	4,448.7	14.1	12.7	1.4	2,937.6	2,874.9	62.8	120.0	14.2	58.2	15.4	1,377.1	187.9	1,062.1	395.6	
2007	5,233.5	39.1	37.7	1.4	3,342.5	3,271.4	71.1	107.1	12.7	48.1	13.5	1,744.8	191.1	1,387.7	441.7	
2008 Q3	5,476.5	34.2	33.2	1.0	3,553.1	3,477.3	75.8	100.8	12.3	39.9	8.7	1,788.5	199.8	1,365.6	371.0	
2008 Q4	5,222.0	33.5	32.5	1.0	3,284.5	3,226.8	57.7	101.4	12.0	41.2	7.0	1,802.6	190.2	1,388.9	379.7	
Transactions																
2007	910.9	22.0	22.0	0.0	548.3	541.0	7.3	-7.6	-1.4	-7.2	-2.0	348.3	13.7	292.7	38.7	
2008	24.2	-4.3	-4.3	0.0	-31.0	-50.0	19.0	-7.0	-1.1	-6.7	-5.9	66.4	13.3	-5.9	-50.7	
2008 Q3	101.0	-1.9	-1.9	0.0	81.3	81.3	0.0	-8.0	-0.1	-8.8	-8.3	29.6	2.7	6.8	-1.5	
2008 Q4	-259.6	-2.2	-2.3	0.0	-227.2	-240.8	13.7	-0.3	-0.3	1.0	-1.9	-29.9	-5.6	-23.6	-9.5	
2009 Q1	-243.2	-8.3	-	-	-229.3	-	-	6.5	-	-	9.0	-12.1	-	-	-6.9	
2008 Dec.	-206.4	-2.3	-	-	-161.5	-	-	-7.3	-	-	-7.2	-35.3	-	-	-26.1	
2009 Jan.	-51.2	-2.4	-	-	-52.6	-	-	13.4	-	-	11.3	-9.7	-	-	-3.6	
2009 Feb.	-104.9	-3.6	-	-	-91.4	-	-	-7.8	-	-	-3.2	-2.2	-	-	-6.3	
2009 Mar.	-87.1	-2.3	-	-	-85.4	-	-	0.8	-	-	0.9	-0.3	-	-	3.0	
2009 Apr.	27.7	1.6	-	-	39.6	-	-	-9.9	-	-	-10.2	-3.7	-	-	-7.2	
Growth rates																
2006	19.5	-37.6	-40.0	1.6	21.1	21.3	10.7	-5.5	-26.1	-4.3	24.5	20.0	3.4	24.5	8.5	
2007	20.5	157.3	173.8	-1.7	18.8	18.9	11.5	-6.4	-9.7	-12.4	-13.1	25.2	7.4	27.3	9.8	
2008 Q3	7.4	2.0	2.3	0.3	7.6	7.5	10.5	-5.1	-8.9	-13.2	-31.4	7.9	12.5	3.7	-12.5	
2008 Q4	0.4	-13.6	-14.0	5.0	-0.9	-1.5	27.0	-6.5	-8.6	-14.1	-45.7	3.8	7.0	-0.5	-12.0	
2009 Q1	-9.4	-47.4	-	-	-13.5	-	-	4.2	-	-	37.8	-1.1	-	-	-16.8	

### 6. Other investment liabilities

	Total		Eurosystem			MFIs (excluding Eurosystem)			General government				Other sectors			
	1	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	
																Total
Outstanding amounts (international investment position)																
2006	4,711.0	116.3	116.1	0.2	3,484.8	3,430.4	54.5	51.6	0.0	47.5	4.1	1,058.2	146.8	819.6	91.7	
2007	5,483.9	201.7	201.4	0.2	3,938.7	3,871.7	67.0	51.8	0.0	46.6	5.2	1,291.7	158.4	1,024.1	109.3	
2008 Q3	5,957.5	371.8	371.4	0.3	4,197.0	4,126.6	70.4	52.3	0.0	48.8	3.4	1,336.5	170.0	1,062.0	104.4	
2008 Q4	5,683.5	481.7	481.5	0.3	3,774.7	3,718.0	56.7	61.3	0.0	57.7	3.6	1,365.8	166.8	1,090.4	108.6	
Transactions																
2007	956.9	91.4	91.4	0.0	635.2	630.4	4.8	-0.9	0.0	-1.8	0.9	231.3	9.9	224.4	-3.0	
2008	184.7	280.0	280.0	0.1	-173.3	-191.3	18.0	9.4	0.0	10.8	-1.4	68.6	6.8	62.8	-1.1	
2008 Q3	83.8	107.8	107.7	0.1	-26.9	-30.9	4.0	2.2	0.0	2.4	-0.1	0.7	1.5	2.8	-3.7	
2008 Q4	-246.8	110.6	110.7	-0.1	-403.6	-416.9	13.4	8.9	0.0	8.5	0.4	37.3	-3.4	34.4	6.2	
2009 Q1	-241.3	-81.5	-	-	-118.6	-	-	-1.6	-	-	-	-39.6	-	-	-	
2008 Dec.	-175.6	11.4	-	-	-173.5	-	-	-0.5	-	-	-	-12.9	-	-	-	
2009 Jan.	12.1	-59.1	-	-	99.2	-	-	2.1	-	-	-	-30.0	-	-	-	
2009 Feb.	-157.4	-28.0	-	-	-106.9	-	-	-4.9	-	-	-	-17.6	-	-	-	
2009 Mar.	-96.1	5.6	-	-	-110.9	-	-	1.3	-	-	-	7.9	-	-	-	
2009 Apr.	30.9	-28.9	-	-	37.8	-	-	-0.6	-	-	-	22.6	-	-	-	
Growth rates																
2006	18.4	22.4	22.4	5.7	16.1	16.1	13.3	3.6	-24.1	4.2	-3.2	27.3	9.8	31.9	17.6	
2007	20.4	79.2	79.4	-6.9	18.3	18.5	8.8	-1.6	29.1	-3.6	18.0	21.4	6.7	27.4	-1.5	
2008 Q3	9.6	126.0	126.3	10.3	7.1	7.1	7.2	-9.6	54.1	-6.0	-42.4	3.0	9.2	4.0	-13.5	
2008 Q4	3.4	140.9	141.1	20.8	-4.4	-4.9	26.8	18.2	-4.8	23.3	-28.1	5.3	4.3	6.1	-13.3	
2009 Q1	-6.8	82.5	-	-	-13.6	-	-	16.2	-	-	-	-1.1	-	-	-	

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	Other foreign currency assets	Predetermined short-term net drains in foreign currency	
		In EUR billions	In fine troy ounces (millions)			Total	Currency and deposits		Securities			Financial derivatives				
							With monetary authorities and the BIS	With banks	Total	Equity	Bonds and notes					Money market instruments
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
<b>Outstanding amounts (international investment position)</b>																
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	347.4	201.0	353.688	4.6	3.6	138.2	7.2	22.0	108.5	0.4	87.8	20.3	0.5	0.0	44.3	-38.5
2008 Q2	353.9	207.9	352.314	4.3	4.0	137.7	7.4	24.0	105.6	0.5	89.9	15.2	0.6	0.0	59.7	-59.3
Q3	370.9	216.8	350.634	4.6	4.0	145.4	11.6	18.1	117.8	0.5	100.0	17.2	-2.1	0.0	187.3	-185.3
Q4	383.9	217.0	349.190	4.7	7.3	154.8	7.6	8.0	129.5	0.6	111.0	17.9	9.7	0.1	262.8	-245.7
2009 Mar.	395.7	240.4	349.059	4.8	8.4	142.1	8.4	3.7	129.9	-	-	-	0.1	0.1	155.4	-141.4
Apr.	386.3	231.4	347.851	4.8	8.4	141.6	8.2	4.7	128.6	-	-	-	0.1	0.0	130.1	-116.6
May	392.2	240.6	347.784	4.6	10.8	136.0	7.9	5.9	121.9	-	-	-	0.4	0.1	103.1	-90.7
<b>Transactions</b>																
2006	0.9	-4.2	-	0.5	-5.2	9.8	-6.1	2.4	13.6	0.0	19.3	-5.7	0.0	0.0	-	-
2007	5.1	-3.2	-	0.3	-0.9	8.8	1.0	1.6	6.2	0.0	14.5	-8.3	0.0	0.0	-	-
2008	3.9	-2.1	-	-0.1	3.7	2.3	4.9	-15.7	11.8	0.1	15.8	-4.1	1.3	0.1	-	-
2008 Q3	-1.6	-0.3	-	0.1	-0.2	-1.3	4.5	-7.7	1.7	0.0	1.8	-0.1	0.3	0.0	-	-
Q4	0.4	-0.9	-	0.0	3.2	-2.0	0.5	-10.7	7.1	0.0	6.2	0.9	1.1	0.1	-	-
2009 Q1	-5.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Growth rates</b>																
2005	-5.8	-2.8	-	4.4	-44.7	-3.8	-2.0	-23.7	1.6	2.2	6.9	-7.9	20.5	-	-	-
2006	0.2	-2.4	-	11.6	-48.8	7.2	-48.4	10.6	13.1	0.0	28.4	-15.3	-73.2	-	-	-
2007	1.6	-1.7	-	7.3	-18.2	6.3	15.0	6.2	5.7	1.1	18.5	-27.5	-59.1	-	-	-
2008 Q3	-0.4	-1.3	-	-1.5	6.1	0.8	51.2	-36.7	6.1	81.6	16.6	-33.3	67.2	-	-	-
Q4	1.1	-1.0	-	-2.6	104.7	1.7	66.0	-69.0	10.8	27.7	18.0	-20.7	-26.2	-	-	-
2009 Q1	-1.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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. organisa-tions	Other countries
	Total	Denmark	Sweden	United Kingdom	Other EU countries	EU institutions									
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
<b>2007</b>	<b>Outstanding amounts (international investment position)</b>														
<b>Direct investment</b>	434.6	-97.4	-4.0	-32.9	-277.8	217.6	-0.3	23.7	27.0	-11.0	112.6	-67.4	-37.4	-0.2	484.6
Abroad	3,526.1	1,285.8	37.1	82.5	916.2	249.9	0.0	91.6	30.7	69.1	350.1	684.4	391.6	0.0	622.8
Equity/reinvested earnings	2,844.3	1,012.7	32.3	55.2	710.0	215.2	0.0	67.8	24.1	57.8	292.5	525.9	366.1	0.0	497.4
Other capital	681.9	273.1	4.9	27.3	206.2	34.7	0.0	23.8	6.6	11.4	57.6	158.6	25.5	0.0	125.3
In the euro area	3,091.6	1,383.2	41.2	115.4	1,194.0	32.3	0.3	67.9	3.7	80.1	237.4	751.9	429.0	0.3	138.2
Equity/reinvested earnings	2,343.9	1,127.8	33.6	93.7	988.2	12.1	0.2	56.6	0.9	65.7	181.6	552.6	267.8	0.1	90.8
Other capital	747.7	255.4	7.6	21.7	205.8	20.2	0.1	11.3	2.7	14.4	55.9	199.3	161.2	0.2	47.4
<b>Portfolio investment assets</b>	4,653.8	1,371.3	68.2	139.3	995.5	97.8	70.6	82.5	42.0	241.9	132.4	1,493.5	630.2	26.8	633.3
Equity	1,984.7	415.3	11.4	45.9	335.4	22.1	0.5	20.3	39.5	141.7	115.7	635.1	285.3	1.0	331.0
Debt instruments	2,669.2	956.0	56.8	93.4	660.1	75.6	70.1	62.3	2.5	100.2	16.6	858.4	344.9	25.9	302.4
Bonds and notes	2,231.5	781.0	52.7	78.2	505.6	75.0	69.4	58.6	2.2	63.5	12.9	713.3	303.1	24.8	272.0
Money market instruments	437.7	174.9	4.0	15.1	154.5	0.6	0.7	3.6	0.3	36.7	3.8	145.1	41.8	1.1	30.4
<b>Other investment</b>	-250.4	-163.9	-155.4	-8.8	122.2	43.5	-165.5	-66.0	-45.3	-31.5	-54.9	-71.1	-91.2	-23.8	297.4
Assets	5,233.5	2,571.9	104.5	72.3	2,242.6	141.7	10.8	23.5	35.0	81.3	266.2	840.1	516.8	57.5	841.1
General government	107.1	21.6	0.8	0.1	10.3	1.2	9.2	0.0	1.8	0.2	0.1	3.1	1.4	38.3	40.7
MFIs	3,381.6	1,916.2	86.7	52.1	1,663.5	113.0	0.8	15.0	15.3	45.0	157.5	411.6	353.5	18.7	448.8
Other sectors	1,744.8	634.1	16.9	20.1	568.8	27.5	0.9	8.5	17.9	36.1	108.6	425.4	162.0	0.5	351.6
Liabilities	5,483.9	2,735.8	259.8	81.0	2,120.5	98.1	176.4	89.5	80.3	112.8	321.1	911.2	608.1	81.3	543.7
General government	51.8	28.9	0.0	0.3	2.4	0.0	26.2	0.0	0.0	0.5	0.8	6.3	0.3	11.9	3.0
MFIs	4,140.4	2,142.4	249.6	58.4	1,660.0	72.6	101.9	81.5	62.2	89.0	247.6	525.1	523.7	66.8	402.1
Other sectors	1,291.7	564.5	10.2	22.4	458.0	25.6	48.3	8.0	18.1	23.3	72.7	379.8	84.1	2.6	138.7
<b>2008 Q1 to 2008 Q4</b>	<b>Cumulated transactions</b>														
<b>Direct investment</b>	251.3	83.4	1.1	3.8	52.7	25.7	0.0	4.1	3.7	4.7	8.7	84.4	31.8	0.0	30.5
Abroad	351.0	72.6	2.9	20.8	26.9	22.0	0.0	9.8	3.6	6.1	21.5	107.3	41.1	0.0	89.0
Equity/reinvested earnings	234.6	41.5	1.9	8.6	19.3	11.6	0.0	9.3	4.0	4.3	23.1	70.8	29.9	0.0	51.8
Other capital	116.4	31.0	0.9	12.2	7.6	10.4	0.0	0.6	-0.4	1.8	-1.5	36.5	11.1	0.0	37.2
In the euro area	99.7	-10.8	1.8	17.1	-25.9	-3.8	0.0	5.8	-0.1	1.4	12.8	22.9	9.2	0.0	58.5
Equity/reinvested earnings	69.0	-3.8	-0.1	10.9	-16.5	1.9	0.0	3.5	0.2	3.0	4.9	23.3	24.6	0.0	13.3
Other capital	30.7	-6.9	1.9	6.2	-9.3	-5.7	0.0	2.3	-0.3	-1.6	7.9	-0.4	-15.4	0.0	45.2
<b>Portfolio investment assets</b>	-14.7	79.9	2.3	-5.7	82.1	0.8	0.5	16.6	0.9	-6.4	-13.1	-54.7	-35.1	-1.8	-0.9
Equity	-113.0	-14.2	0.2	-6.2	-7.5	-0.8	0.1	7.2	0.2	-26.0	-12.8	-36.5	0.7	0.0	-31.6
Debt instruments	98.2	94.1	2.0	0.5	89.5	1.6	0.5	9.4	0.7	19.6	-0.3	-18.2	-35.8	-1.8	30.7
Bonds and notes	91.1	93.6	-0.3	0.2	93.4	1.1	-0.8	8.9	0.3	-3.3	1.2	8.4	-41.3	-1.1	24.5
Money market instruments	7.1	0.6	2.3	0.3	-3.9	0.6	1.3	0.5	0.3	23.0	-1.5	-26.6	5.5	-0.7	6.1
<b>Other investment</b>	-160.5	-303.1	10.7	6.5	-384.1	71.4	-7.6	0.3	14.7	40.9	22.8	-225.8	121.0	24.6	144.1
Assets	24.2	-75.4	-12.5	0.2	-143.4	73.0	7.4	3.6	-3.1	17.8	-6.9	-44.2	27.6	-1.1	105.9
General government	-7.0	-5.8	-0.1	0.3	-6.8	-0.5	1.3	0.0	0.0	0.0	0.0	0.1	0.0	0.7	-1.8
MFIs	-35.3	-79.2	-12.9	0.3	-142.0	69.4	6.0	3.0	-5.0	19.9	-5.4	-29.9	11.9	-1.8	51.4
Other sectors	66.4	9.7	0.5	-0.4	5.4	4.1	0.1	0.6	1.9	-2.1	-1.5	-14.3	15.7	0.0	56.4
Liabilities	184.7	227.7	-23.2	-6.3	240.6	1.6	14.9	3.4	-17.8	-23.1	-29.8	181.6	-93.3	-25.7	-38.2
General government	9.4	3.8	0.0	-0.1	-1.0	0.0	4.8	0.0	0.0	0.0	-0.4	0.2	0.0	5.8	-0.1
MFIs	106.7	197.4	-23.8	-8.3	227.6	-2.0	3.9	2.7	-18.5	-23.3	-34.3	186.0	-108.0	-31.4	-63.8
Other sectors	68.6	26.5	0.6	2.1	14.1	3.6	6.2	0.7	0.7	0.1	4.9	-4.6	14.6	-0.1	25.7

Source: ECB.

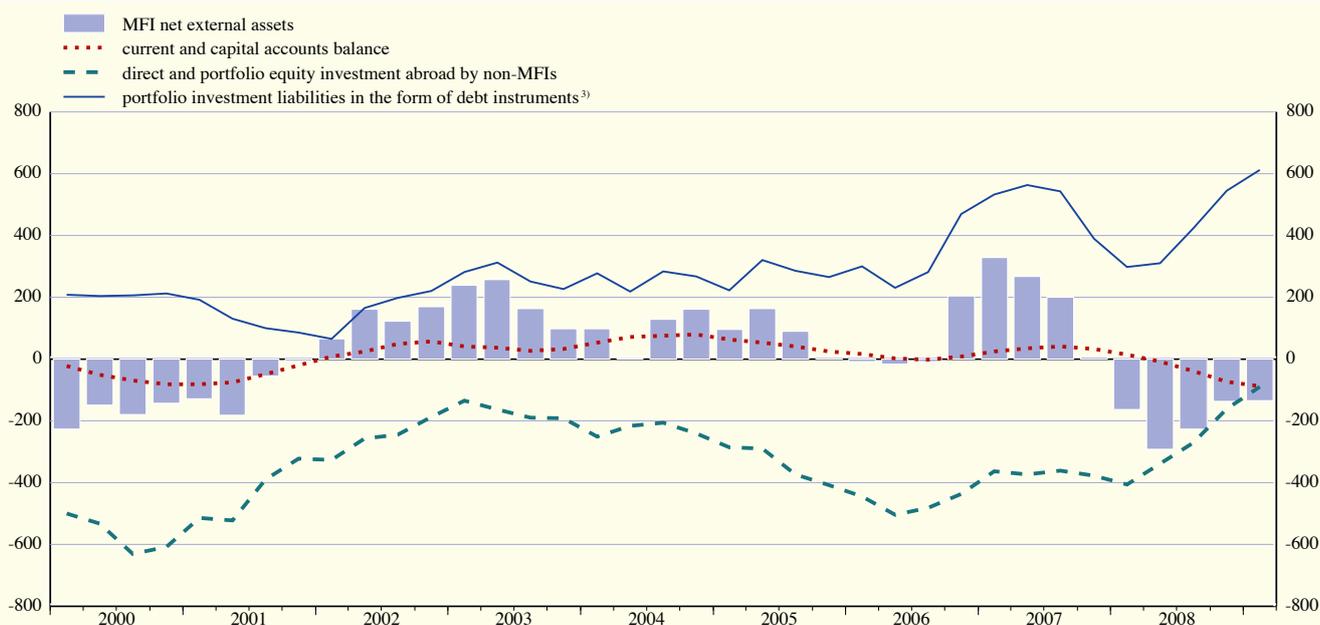
**7.4 Monetary presentation of the balance of payments <sup>1)</sup>**

(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	
2006	7.9	-390.3	264.2	-282.3	237.5	468.9	-225.0	225.8	3.6	-138.5	171.8	204.9
2007	32.4	-451.4	379.2	-182.4	81.9	389.8	-340.9	230.4	-67.3	-64.8	7.0	6.8
2008	-74.1	-336.5	97.5	34.3	-127.6	545.0	-60.3	78.5	-30.8	-231.9	-105.8	-136.0
2008 Q1	-9.8	-156.3	91.6	-20.1	18.8	73.2	-68.8	43.2	-22.8	-23.8	-74.6	-85.9
Q2	-25.8	-39.2	-9.4	-85.4	-33.9	151.6	0.7	-14.2	-8.8	-52.8	-117.3	-127.1
Q3	-19.5	-97.0	52.1	22.8	-69.6	170.1	-21.8	2.9	-8.5	-41.6	-10.2	1.9
Q4	-19.0	-44.0	-36.8	117.0	-42.9	150.2	29.7	46.6	9.3	-113.7	96.3	75.0
2009 Q1	-22.9	-65.6	28.3	7.1	-50.9	139.1	5.7	-41.2	10.0	-82.7	-73.1	-83.8
2008 Apr.	-5.9	9.0	-28.0	-22.2	-44.7	52.9	-3.0	-8.4	-3.0	-20.2	-73.5	-73.9
May	-21.1	-23.8	18.2	-44.2	-1.2	37.4	0.9	-5.2	-10.6	-18.0	-67.5	-69.6
June	1.2	-24.4	0.4	-19.0	12.0	61.2	2.7	-0.6	4.7	-14.6	23.7	16.4
July	-2.5	-38.0	22.9	7.1	-8.2	30.2	-1.7	14.1	-0.1	-44.4	-20.6	-11.8
Aug.	-10.6	-21.5	11.1	-2.2	-17.0	33.3	4.8	-9.1	-8.4	9.5	-10.1	-7.8
Sep.	-6.4	-37.4	18.1	17.9	-44.5	106.6	-25.0	-2.2	0.0	-6.8	20.4	21.6
Oct.	-4.4	-6.7	-2.1	80.0	-60.0	91.9	-18.0	43.9	17.7	-93.0	49.4	42.5
Nov.	-11.8	-30.5	-20.2	12.4	-0.6	69.5	5.3	15.9	-5.8	-6.1	28.0	11.6
Dec.	-2.8	-6.8	-14.5	24.6	17.7	-11.3	42.4	-13.2	-2.6	-14.6	18.9	20.9
2009 Jan.	-19.2	-20.0	10.9	-11.6	-62.8	46.1	-3.8	-27.9	5.8	-32.0	-114.5	-120.7
Feb.	-1.1	-19.3	8.5	14.9	-2.9	54.9	10.0	-22.5	3.6	4.5	50.6	44.6
Mar.	-2.6	-26.3	8.9	3.8	14.8	38.1	-0.5	9.2	0.6	-55.3	-9.3	-7.7
Apr.	-7.2	-48.4	55.3	-6.7	-27.4	29.8	13.6	22.1	6.7	4.4	42.1	32.9
<i>12-month cumulated transactions</i>												
2009 Apr.	-88.5	-303.2	117.5	77.0	-180.0	587.8	30.8	24.5	11.7	-266.3	11.3	-27.2

**C35 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

### 1. Values and volumes by product group<sup>1)</sup>

(seasonally adjusted, unless otherwise indicated)

	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)													
2007	11.4	8.9	1,507.4	738.9	326.3	401.3	1,282.6	1,491.3	914.0	234.4	323.2	1,021.0	227.5
2008	3.8	7.4	1,563.0	769.1	333.8	409.7	1,308.0	1,592.9	1,011.3	228.7	327.5	1,023.6	288.1
2008 Q2	8.5	11.2	398.3	197.5	84.2	104.8	331.4	405.3	258.9	56.2	82.0	257.9	75.9
Q3	5.6	12.5	399.2	198.6	84.2	102.8	331.5	411.4	269.2	58.3	82.3	260.4	85.5
Q4	-4.9	-2.4	367.1	175.9	81.0	95.2	305.6	373.6	228.9	55.9	80.5	242.1	55.2
2009 Q1	-21.2	-20.8	311.0	148.5	65.6	85.2	260.5	320.7	182.0	48.9	77.8	214.8	35.5
2008 Nov.	-11.6	-5.3	119.9	57.4	25.9	31.1	99.1	124.0	75.8	19.0	26.7	80.7	17.4
Dec.	-3.6	-5.8	117.6	54.9	27.0	30.6	98.4	118.0	69.7	18.2	26.4	77.7	14.6
2009 Jan.	-24.8	-22.6	103.3	48.3	21.2	28.8	86.0	108.6	62.5	16.1	26.0	72.8	11.8
Feb.	-23.6	-21.6	103.1	49.5	22.4	28.2	85.9	105.7	60.1	16.4	25.7	70.0	11.2
Mar.	-15.4	-18.3	104.6	50.7	22.1	28.3	88.6	106.4	59.4	16.3	26.1	71.9	12.5
Apr.	-26.8	-27.6	103.2	.	.	.	86.6	103.5	.	.	.	67.6	.
Volume indices (2000 = 100; annual percentage changes for columns 1 and 2)													
2007	8.9	7.3	144.8	141.8	153.2	144.8	142.1	129.3	123.4	143.5	141.9	134.8	107.7
2008	1.6	-0.4	146.9	142.4	156.3	146.3	143.5	128.1	121.6	141.3	141.1	133.6	106.4
2008 Q2	7.1	2.3	150.6	147.2	159.0	150.3	147.0	130.9	123.7	141.7	144.7	137.6	102.4
Q3	2.7	1.3	148.6	144.8	157.9	146.1	145.0	127.0	121.2	146.2	141.6	135.3	106.5
Q4	-7.5	-5.6	136.9	128.9	149.5	135.9	131.8	122.1	114.7	133.8	135.0	122.6	106.6
2009 Q1	-21.3	-14.8	118.0	112.2	120.3	123.5	112.6	113.7	105.5	116.3	129.6	110.1	99.1
2008 Nov.	-14.1	-8.7	134.0	125.9	143.4	133.3	128.1	120.7	113.0	136.2	133.2	121.6	101.7
Dec.	-5.9	-4.7	131.7	121.5	147.7	131.1	126.5	119.5	112.0	126.9	132.1	117.0	109.7
2009 Jan.	-24.8	-16.8	117.9	109.2	116.5	126.8	111.8	115.8	108.8	115.9	129.7	111.9	102.0
Feb.	-23.6	-15.7	116.8	111.6	123.0	121.1	110.8	112.5	104.6	117.7	128.2	107.9	94.3
Mar.	-15.4	-11.8	119.4	115.9	121.5	122.5	115.2	112.9	103.2	115.4	130.7	110.5	101.1
Apr.	.	.	.	.	.	.	.	.	.	.	.	.	.

### 2. Prices<sup>2)</sup>

(annual percentage changes, unless otherwise indicated)

	Industrial producer export prices (f.o.b.) <sup>3)</sup>							Industrial import prices (c.i.f.)						
	Total (index 2005 = 100)	Total					Memo: Manufacturing	Total (index 2005 = 100)	Total					Memo: Manufacturing
		Intermediate goods	Capital goods	Consumer goods	Energy	Intermediate goods			Capital goods	Consumer goods	Energy			
% of total	100.0	100.0	32.2	46.3	17.7	3.8	99.4	100.0	100.0	28.4	27.9	22.1	21.6	81.1
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
2007	101.9	0.5	2.7	-0.5	0.9	2.6	0.5	105.9	0.1	2.3	-3.5	0.5	1.6	-0.3
2008	103.5	1.6	1.5	-0.4	2.4	25.3	1.5	112.7	6.5	0.2	-3.4	2.4	28.2	0.8
2008 Q3	105.0	2.9	2.5	-0.4	2.3	45.7	2.7	117.6	10.5	1.5	-3.5	2.3	42.8	1.9
Q4	102.7	0.8	2.6	1.3	2.8	-15.9	0.6	106.9	-1.7	0.9	-1.5	3.8	-8.5	0.1
2009 Q1	101.4	-1.1	-1.0	1.4	1.5	-31.8	-1.2	101.4	-8.5	-4.0	-0.3	2.7	-28.1	-2.4
2008 Dec.	101.0	-0.9	1.4	1.0	2.1	-34.1	-1.0	102.0	-6.6	-0.8	-1.5	3.0	-24.3	-1.6
2009 Jan.	101.5	-0.7	0.0	1.2	1.4	-29.4	-0.8	101.4	-7.8	-2.9	-1.1	2.5	-26.3	-2.1
Feb.	101.5	-1.0	-1.1	1.4	1.6	-30.9	-1.1	101.7	-8.4	-4.2	-0.1	2.8	-27.9	-2.4
Mar.	101.1	-1.6	-1.9	1.5	1.4	-34.6	-1.7	101.1	-9.2	-5.0	0.3	2.7	-30.0	-2.9
Apr.	101.0	-1.9	-2.7	1.8	1.3	-35.7	-1.9	.	.	.	.	.	.	.
May	102.2	-1.6	.	1.6	.	.	-1.5	.	.	.	.	.	.	.

Source: Eurostat.

- Product groups according to the classification by Broad Economic Categories. Unlike the product groups shown in Table 2, intermediate and consumption product groups include agricultural and energy products.
- Product groups according to the classification of Main Industrial Groupings. Unlike the product groups shown in Table 1, intermediate and consumer goods do not include energy products, and agricultural goods are not covered. Manufacturing has a different composition compared with the data shown in columns 7 and 12 of Table 1. Data shown are price indices which follow the pure price change for a basket of products and are not simple ratios of the value and volume data shown in Table 1, which are affected by changes in the composition and quality of traded goods. These indices differ from the GDP deflators for imports and exports (shown in Table 3 in Section 5.1) mainly because the latter include all goods and services and cover cross-border trade within the euro area.
- Industrial producer export prices refer to direct transactions between domestic producers and non-domestic customers. Contrary to the data shown for values and volumes in Table 1, exports from wholesalers and re-exports are not covered.

**7.5 Trade in goods**

(EUR billions, unless otherwise indicated; seasonally adjusted)

**3. Geographical breakdown**

	Total	European Union 27 (outside the euro area)				Russia	Switzerland	Turkey	United States	Asia			Africa	Latin America	Other countries
		Denmark	Sweden	United Kingdom	Other EU countries					China	Japan				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
<b>Exports (f.o.b.)</b>															
2007	1,507.4	34.1	55.7	230.9	216.3	67.9	82.3	41.5	195.9	296.1	60.6	34.3	87.6	61.8	137.5
2008	1,563.0	35.0	54.2	221.7	231.4	78.5	86.3	42.8	186.9	308.3	65.7	33.7	100.7	68.3	148.8
2007 Q4	384.5	8.6	13.8	58.3	56.1	17.8	20.8	10.9	47.5	76.3	15.9	8.1	22.4	15.7	36.4
2008 Q1	398.4	8.9	14.0	57.3	59.1	19.9	21.3	12.3	49.7	79.3	17.1	8.8	24.2	16.3	36.0
Q2	398.3	9.1	14.5	58.4	59.7	20.1	22.1	11.3	47.3	77.7	16.8	8.6	25.0	16.6	36.5
Q3	399.2	9.1	14.1	56.5	60.3	20.7	21.8	10.8	46.4	76.7	16.0	8.3	26.7	17.9	38.4
Q4	367.1	8.0	11.6	49.6	52.3	17.7	21.1	8.4	43.6	74.6	15.7	8.1	24.8	17.5	37.9
2009 Q1	311.0	7.4	10.0	42.6	44.1	12.8	19.9	7.7	39.4	65.5	15.4	7.0	23.4	12.8	25.6
2008 Nov.	119.9	2.5	3.8	16.0	17.5	5.4	7.0	2.7	14.7	24.7	5.3	2.7	8.2	5.3	12.1
Dec.	117.6	2.6	3.4	15.3	15.5	5.6	6.9	2.6	14.0	24.8	4.9	2.7	8.1	6.0	13.0
2009 Jan.	103.3	2.6	3.3	14.3	14.9	4.2	6.7	2.5	12.9	20.6	4.7	2.4	7.7	4.2	9.4
Feb.	103.1	2.3	3.3	13.9	14.3	4.4	6.6	2.5	12.8	22.1	5.1	2.4	7.8	4.4	8.5
Mar.	104.6	2.5	3.4	14.3	14.9	4.2	6.5	2.7	13.7	22.8	5.6	2.2	7.8	4.2	7.7
Apr.	103.2	.	.	.	.	4.3	6.5	2.7	12.6	23.6	5.6	2.3	7.8	4.2	.
<b>% share of total exports</b>															
2008	100.0	2.2	3.5	14.2	14.8	5.0	5.5	2.7	12.0	19.7	4.2	2.2	6.5	4.4	9.5
<b>Imports (c.i.f.)</b>															
2007	1,491.3	28.8	52.2	169.6	169.6	102.2	67.2	32.3	131.5	455.6	172.6	59.1	113.4	75.2	93.7
2008	1,592.9	30.2	52.4	165.2	185.5	117.7	69.6	32.2	137.0	477.8	184.2	56.8	139.6	81.0	104.7
2007 Q4	385.5	7.1	13.3	42.7	44.1	28.6	16.6	8.2	32.5	114.8	43.5	14.8	31.0	20.3	26.3
2008 Q1	402.6	7.4	13.8	43.8	46.5	29.5	16.8	8.5	34.6	121.2	44.9	14.7	34.8	20.2	25.4
Q2	405.3	7.7	13.6	42.3	47.3	30.6	17.5	8.5	33.7	120.0	45.3	14.6	36.9	19.9	27.2
Q3	411.4	7.9	13.4	42.2	47.9	33.4	17.9	8.1	34.9	123.3	47.5	14.0	37.3	21.1	23.9
Q4	373.6	7.2	11.6	37.0	43.8	24.1	17.4	7.0	33.7	113.3	46.5	13.5	30.6	19.7	28.2
2009 Q1	320.7	6.9	9.4	31.6	39.3	17.3	16.7	6.6	33.1	98.9	42.4	11.4	23.9	14.9	22.2
2008 Nov.	124.0	2.4	3.8	12.1	15.0	7.9	5.8	2.5	11.2	37.7	15.5	4.5	10.1	6.7	9.0
Dec.	118.0	2.4	3.5	11.1	13.2	6.9	5.7	2.1	11.5	36.1	15.1	4.4	9.7	6.3	9.6
2009 Jan.	108.6	2.3	3.2	10.8	12.9	6.2	5.6	2.1	10.3	34.1	14.7	4.3	8.1	4.9	8.1
Feb.	105.7	2.3	3.1	10.4	12.9	5.2	5.5	2.2	10.9	32.2	13.8	3.6	8.3	4.9	7.8
Mar.	106.4	2.3	3.1	10.4	13.6	5.9	5.5	2.3	11.8	32.6	14.0	3.6	7.5	5.0	6.2
Apr.	103.5	.	.	.	.	5.6	5.6	2.0	9.3	31.3	13.7	3.4	8.0	4.8	.
<b>% share of total imports</b>															
2008	100.0	1.9	3.3	10.4	11.6	7.4	4.4	2.0	8.6	30.0	11.6	3.6	8.7	5.1	6.6
<b>Balance</b>															
2007	16.1	5.4	3.5	61.3	46.7	-34.3	15.1	9.1	64.3	-159.6	-112.0	-24.8	-25.8	-13.4	43.8
2008	-29.9	4.8	1.8	56.5	45.9	-39.2	16.6	10.6	49.9	-169.5	-118.6	-23.1	-38.9	-12.7	44.1
2007 Q4	-1.0	1.5	0.5	15.6	12.0	-10.8	4.3	2.6	15.0	-38.5	-27.6	-6.7	-8.6	-4.6	10.1
2008 Q1	-4.2	1.5	0.3	13.5	12.6	-9.6	4.5	3.8	15.1	-41.9	-27.7	-5.9	-10.6	-3.9	10.6
Q2	-7.0	1.4	0.8	16.1	12.4	-10.4	4.5	2.8	13.6	-42.3	-28.5	-6.0	-11.9	-3.3	9.3
Q3	-12.2	1.2	0.7	14.3	12.4	-12.7	3.9	2.7	11.4	-46.6	-31.5	-5.8	-10.7	-3.2	14.5
Q4	-6.5	0.8	0.0	12.6	8.6	-6.5	3.7	1.4	9.9	-38.7	-30.8	-5.4	-5.7	-2.2	9.8
2009 Q1	-9.7	0.5	0.6	10.9	4.7	-4.5	3.2	1.1	6.3	-33.4	-27.1	-4.4	-0.5	-2.1	3.4
2008 Nov.	-4.1	0.1	0.0	4.0	2.5	-2.5	1.2	0.2	3.6	-13.0	-10.2	-1.8	-2.0	-1.4	3.2
Dec.	-0.4	0.2	-0.1	4.2	2.4	-1.3	1.2	0.5	2.5	-11.3	-10.2	-1.7	-1.6	-0.3	3.4
2009 Jan.	-5.3	0.3	0.1	3.5	2.0	-2.0	1.1	0.3	2.6	-13.5	-10.0	-1.9	-0.3	-0.7	1.2
Feb.	-2.7	0.0	0.2	3.5	1.4	-0.8	1.1	0.3	1.9	-10.0	-8.7	-1.1	-0.4	-0.6	0.7
Mar.	-1.8	0.1	0.3	3.8	1.3	-1.7	1.0	0.4	1.9	-9.8	-8.4	-1.4	0.3	-0.8	1.5
Apr.	-0.3	.	.	.	.	-1.4	0.9	0.7	3.3	-7.7	-8.1	-1.1	-0.2	-0.6	.

Source: Eurostat.

## 8.1 Effective exchange rates <sup>1)</sup>

(period averages; index 1999 Q1=100)

	EER-21						EER-41		
	Nominal	Real CPI	Real PPI	Real GDP deflator	Real ULCM	Real ULCT	Nominal	Real CPI	
	1	2	3	4	5	6	7	8	
2006	103.7	105.0	103.9	102.3	101.4	100.9	110.1	103.9	
2007	107.9	109.0	107.8	106.4	104.5	104.4	114.3	107.2	
2008	113.0	113.6	110.8	111.5	111.0	109.9	120.0	111.1	
2008 Q2	116.0	116.7	114.0	114.4	113.6	112.7	122.9	114.1	
Q3	114.1	114.3	111.1	112.5	112.7	110.5	120.8	111.5	
Q4	109.1	109.6	106.2	107.8	107.4	107.0	116.7	107.7	
2009 Q1	111.9	112.2	107.8	108.5	114.0	109.3	120.1	110.5	
Q2	113.2	113.4	108.3	-	-	-	121.1	111.2	
2008 June	115.8	116.4	113.4	-	-	-	122.7	113.8	
July	116.2	116.6	113.3	-	-	-	123.2	113.9	
Aug.	113.9	114.1	111.0	-	-	-	120.3	111.1	
Sep.	112.0	112.1	108.9	-	-	-	118.7	109.4	
Oct.	107.9	108.3	105.2	-	-	-	115.4	106.4	
Nov.	107.1	107.5	104.2	-	-	-	114.5	105.6	
Dec.	112.4	112.8	109.2	-	-	-	120.3	110.9	
2009 Jan.	111.9	112.3	108.1	-	-	-	119.9	110.5	
Feb.	110.4	110.6	106.3	-	-	-	118.6	109.1	
Mar.	113.3	113.4	108.8	-	-	-	121.6	111.7	
Apr.	112.5	112.8	107.8	-	-	-	120.5	110.7	
May	113.0	113.3	108.1	-	-	-	120.9	111.0	
June	114.0	114.2	108.9	-	-	-	122.0	111.9	
	<i>% change versus previous month</i>								
2009 June	0.9	0.8	0.7	-	-	-	0.9	0.8	
	<i>% change versus previous year</i>								
2009 June	-1.6	-1.9	-3.9	-	-	-	-0.6	-1.6	

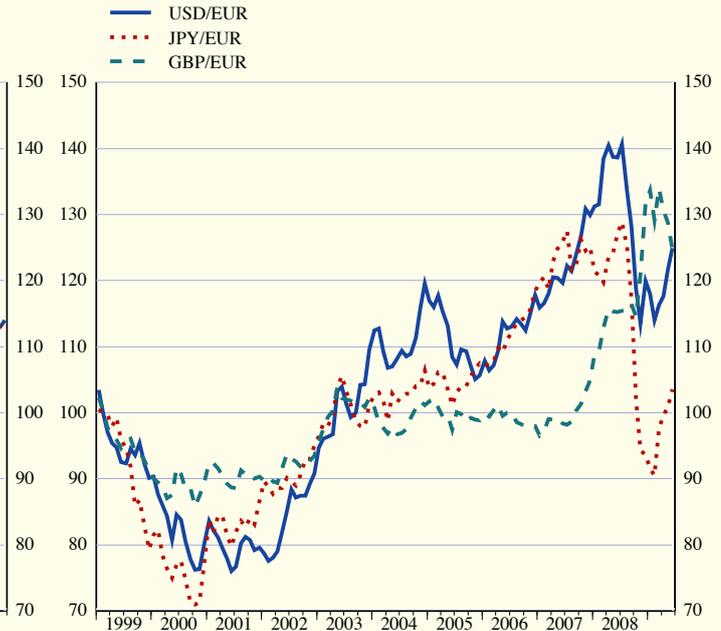
### C36 Effective exchange rates

(monthly averages; index 1999 Q1=100)



### C37 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
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	7.4560	9.6152	0.79628	1.4708	152.45	1.5874	1,606.09	11.4541	2.0762	1.5594	8.2237	1.7416
2008 Q4	7.4512	10.2335	0.83907	1.3180	126.71	1.5249	1,796.44	10.2191	1.9588	1.5916	8.9328	1.9606
2009 Q1	7.4514	10.9410	0.90878	1.3029	122.04	1.4977	1,847.59	10.1016	1.9709	1.6223	8.9472	1.9648
2009 Q2	7.4471	10.7806	0.87883	1.3632	132.59	1.5138	1,747.10	10.5657	2.0050	1.5883	8.8431	1.7917
2008 Dec.	7.4503	10.7538	0.90448	1.3449	122.51	1.5393	1,850.06	10.4240	1.9888	1.6600	9.4228	2.0105
2009 Jan.	7.4519	10.7264	0.91819	1.3239	119.73	1.4935	1,801.97	10.2687	1.9742	1.6233	9.2164	1.9633
Feb.	7.4514	10.9069	0.88691	1.2785	118.30	1.4904	1,843.90	9.9128	1.9411	1.5940	8.7838	1.9723
Mar.	7.4509	11.1767	0.91966	1.3050	127.65	1.5083	1,894.48	10.1138	1.9949	1.6470	8.8388	1.9594
Apr.	7.4491	10.8796	0.89756	1.3190	130.25	1.5147	1,760.14	10.2229	1.9823	1.6188	8.7867	1.8504
May	7.4468	10.5820	0.88445	1.3650	131.85	1.5118	1,710.18	10.5807	1.9939	1.5712	8.7943	1.7831
June	7.4457	10.8713	0.85670	1.4016	135.39	1.5148	1,768.80	10.8638	2.0357	1.5761	8.9388	1.7463
	% change versus previous month											
2009 June	0.0	2.7	-3.1	2.7	2.7	0.2	3.4	2.7	2.1	0.3	1.6	-2.1
	% change versus previous year											
2009 June	-0.2	16.0	8.2	-9.9	-18.6	-6.1	10.2	-10.5	-4.3	-0.3	11.9	6.9
	Czech koruna 13	Estonian kroon 14	Latvian lats 15	Lithuanian litas 16	Hungarian forint 17	Polish zloty 18	Bulgarian lev 19	New Roman- ian leu 20	Croatian kuna 21	New Turkish lira 22		
2006	28.342	15.6466	0.6962	3.4528	264.26	3.8959	1.9558	3.5258	7.3247	1.8090		
2007	27.766	15.6466	0.7001	3.4528	251.35	3.7837	1.9558	3.3353	7.3376	1.7865		
2008	24.946	15.6466	0.7027	3.4528	251.51	3.5121	1.9558	3.6826	7.2239	1.9064		
2008 Q4	25.344	15.6466	0.7090	3.4528	263.36	3.7658	1.9558	3.8165	7.1752	2.0261		
2009 Q1	27.601	15.6466	0.7061	3.4528	294.19	4.4988	1.9558	4.2682	7.4116	2.1635		
2009 Q2	26.679	15.6466	0.7065	3.4528	285.71	4.4523	1.9558	4.1963	7.3528	2.1410		
2008 Dec.	26.120	15.6466	0.7084	3.4528	265.02	4.0044	1.9558	3.9227	7.2245	2.0894		
2009 Jan.	27.169	15.6466	0.7043	3.4528	279.86	4.2300	1.9558	4.2354	7.3603	2.1233		
Feb.	28.461	15.6466	0.7056	3.4528	298.30	4.6467	1.9558	4.2864	7.4309	2.1280		
Mar.	27.231	15.6466	0.7083	3.4528	304.14	4.6210	1.9558	4.2828	7.4430	2.2340		
Apr.	26.774	15.6466	0.7093	3.4528	295.26	4.4326	1.9558	4.2041	7.4172	2.1277		
May	26.731	15.6466	0.7092	3.4528	281.93	4.4103	1.9558	4.1700	7.3515	2.1251		
June	26.545	15.6466	0.7015	3.4528	280.46	4.5084	1.9558	4.2131	7.2954	2.1675		
	% change versus previous month											
2009 June	-0.7	0.0	-1.1	0.0	-0.5	2.2	0.0	1.0	-0.8	2.0		
	% change versus previous year											
2009 June	9.2	0.0	-0.2	0.0	15.7	33.6	0.0	15.3	0.7	12.9		
	Brazilian real <sup>1)</sup> 23	Chinese yuan renminbi 24	Icelandic krona <sup>2)</sup> 25	Indian rupee <sup>3)</sup> 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
2006	2.7333	10.0096	87.76	56.844	11,512.37	4.6044	13.6936	1.9373	64.379	34.1117	8.5312	47.594
2007	2.6594	10.4178	87.63	56.419	12,528.33	4.7076	14.9743	1.8627	63.026	35.0183	9.6596	44.214
2008	2.6737	10.2236	143.83	63.614	14,165.16	4.8893	16.2911	2.0770	65.172	36.4207	12.0590	48.475
2008 Q4	3.0102	9.0155	261.87	64.007	14,469.21	4.6798	17.1856	2.2829	63.653	35.9649	13.0786	45.904
2009 Q1	3.0168	8.9066	-	64.795	15,174.96	4.7259	18.7267	2.4498	62.133	44.4165	12.9740	46.038
2009 Q2	2.8245	9.3107	-	66.398	14,334.53	4.8340	18.1648	2.2565	65.097	43.7716	11.5242	47.294
2008 Dec.	3.2266	9.2205	290.00	65.146	15,276.62	4.7755	18.0764	2.4119	64.505	37.8999	13.4275	47.107
2009 Jan.	3.0596	9.0496	-	64.510	14,802.07	4.7291	18.3762	2.4132	62.354	42.3282	13.1255	46.218
Feb.	2.9685	8.7406	-	62.885	15,233.33	4.6466	18.6536	2.4851	60.832	45.8079	12.8005	45.156
Mar.	3.0198	8.9210	-	66.803	15,477.84	4.7949	19.1278	2.4527	63.105	45.1451	12.9870	46.667
Apr.	2.9197	9.0110	-	66.047	14,552.65	4.7562	17.7645	2.3123	63.462	44.2135	11.8784	46.741
May	2.8232	9.3157	-	66.176	14,137.45	4.8057	17.9969	2.2663	64.600	43.5678	11.4475	47.241
June	2.7391	9.5786	-	66.919	14,315.40	4.9305	18.6813	2.1967	67.036	43.5553	11.2718	47.844
	% change versus previous month											
2009 June	-3.0	2.8	-	1.1	1.3	2.6	3.8	-3.1	3.8	0.0	-1.5	1.3
	% change versus previous year											
2009 June	8.8	-10.7	-	0.5	-0.9	-2.7	16.3	7.6	-2.7	18.4	-8.7	-7.4

Source: ECB.

1) For these currencies the ECB computes and publishes euro reference exchange rates as from 1 January 2008. Previous data are indicative.

2) The most recent rate for the Icelandic krona refers to 3 December 2008.

3) For this currency the ECB computes and publishes euro reference exchange rates as from 1 January 2009. 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	Sweden	United Kingdom
	1	2	3	4	5	6	7	8	9	10	11
<b>HICP</b>											
2007	7.6	3.0	1.7	6.7	10.1	5.8	7.9	2.6	4.9	1.7	2.3
2008	12.0	6.3	3.6	10.6	15.3	11.1	6.0	4.2	7.9	3.3	3.6
2008 Q3	12.5	6.5	4.6	11.0	15.6	12.0	6.3	4.4	8.2	4.0	4.8
Q4	9.0	4.4	3.0	8.7	11.9	9.4	4.2	3.6	6.9	2.7	3.9
2009 Q1	5.1	1.5	1.7	3.7	9.0	8.4	2.7	3.6	6.8	2.1	3.0
2009 Jan.	6.0	1.4	1.7	4.7	9.7	9.5	2.4	3.2	6.8	2.0	3.0
Feb.	5.4	1.3	1.7	3.9	9.4	8.5	2.9	3.6	6.9	2.2	3.2
Mar.	4.0	1.7	1.6	2.5	7.9	7.4	2.8	4.0	6.7	1.9	2.9
Apr.	3.8	1.3	1.1	0.9	5.9	5.9	3.2	4.3	6.5	1.8	2.3
May	3.0	0.9	1.1	0.3	4.4	4.9	3.8	4.2	5.9	1.7	2.2
<b>General government deficit (-)/surplus (+) as a % of GDP</b>											
2006	3.0	-2.6	5.2	2.9	-0.5	-0.4	-9.2	-3.9	-2.2	2.5	-2.7
2007	0.1	-0.6	4.5	2.7	-0.4	-1.0	-4.9	-1.9	-2.5	3.8	-2.7
2008	1.5	-1.5	3.6	-3.0	-4.0	-3.2	-3.4	-3.9	-5.4	2.5	-5.5
<b>General government gross debt as a % of GDP</b>											
2006	22.7	29.6	31.3	4.3	10.7	18.0	65.6	47.7	12.4	45.9	43.4
2007	18.2	28.9	26.8	3.5	9.0	17.0	65.8	44.9	12.7	40.5	44.2
2008	14.1	29.8	33.3	4.8	19.5	15.6	73.0	47.1	13.6	38.0	52.0
<b>Long-term government bond yield as a % per annum, period average</b>											
2008 Dec.	7.76	4.30	3.50	-	9.03	9.00	8.31	5.70	8.38	2.67	3.37
2009 Jan.	7.14	4.21	3.44	-	10.64	13.95	8.76	5.46	9.23	2.80	3.17
Feb.	7.09	4.74	3.55	-	11.50	14.50	10.65	5.97	8.42	2.93	3.23
Mar.	7.73	5.16	3.44	-	11.32	14.50	11.65	6.22	9.38	2.94	3.00
Apr.	7.24	5.25	3.50	-	11.15	14.50	10.63	6.19	9.77	3.18	3.16
May	7.08	5.06	3.62	-	11.09	14.50	10.01	6.31	8.32	3.57	3.41
<b>3-month interest rate as a % per annum, period average</b>											
2008 Dec.	7.74	3.89	5.29	7.84	13.94	9.20	11.18	6.38	14.70	2.75	3.20
2009 Jan.	7.03	3.14	4.44	7.28	11.86	8.67	9.80	5.49	14.48	2.23	2.32
Feb.	6.61	2.50	3.86	6.90	10.65	7.19	-	4.69	14.61	1.52	2.09
Mar.	6.58	2.49	3.28	7.11	12.08	7.11	-	4.30	14.49	1.16	1.83
Apr.	6.05	2.50	2.94	6.51	12.43	6.94	9.56	4.20	13.61	1.00	1.53
May	5.98	2.30	2.67	6.27	13.41	6.81	11.30	4.52	11.23	0.95	1.36
<b>Real GDP</b>											
2007	6.2	6.1	1.6	6.3	10.0	8.9	1.2	6.8	6.2	2.6	2.6
2008	6.0	3.0	-1.2	-3.6	-4.6	3.0	0.6	4.9	7.1	-0.2	0.7
2008 Q3	6.8	3.1	-1.7	-3.5	-5.8	2.0	0.3	4.9	9.2	0.2	0.5
Q4	3.5	-0.1	-3.7	-9.7	-10.7	-1.3	-2.2	2.6	2.9	-5.1	-1.8
2009 Q1	-3.5	-3.4	-4.3	-15.1	-18.6	-11.8	-5.4	1.9	-6.2	-6.4	-4.9
<b>Current and capital accounts balance as a % of GDP</b>											
2007	-27.2	-2.6	0.7	-16.9	-20.6	-12.8	-5.3	-3.6	-12.9	8.5	-2.7
2008	-24.5	-2.2	2.2	-7.7	-11.2	-9.7	-7.6	-4.4	-11.8	7.6	-1.5
2008 Q3	-14.2	-3.0	4.1	-6.5	-11.0	-8.4	-9.5	-4.2	-10.9	9.1	-2.1
Q4	-28.7	-5.2	2.5	-3.4	-7.0	-2.9	-10.0	-4.9	-8.3	5.5	-1.6
2009 Q1	-15.3	4.6	-0.9	1.2	4.1	4.7	1.1	3.2	-3.4	7.3	-3.3
<b>Unit labour costs</b>											
2007	14.2	3.1	4.2	19.8	27.0	10.3	5.2	1.5	.	4.7	1.8
2008	16.2	4.2	6.9	17.5	23.2	10.6	.	5.3	.	2.6	2.6
2008 Q3	13.0	4.1	7.7	19.6	24.5	12.0	-	5.2	-	2.0	2.3
Q4	17.5	7.9	9.1	13.8	18.5	9.3	-	6.9	-	6.0	3.0
2009 Q1	16.1	4.4	.	9.9	3.6	22.5	.	.	-	8.2	.
<b>Standardised unemployment rate as a % of labour force (s.a.)</b>											
2007	6.9	5.3	3.8	4.6	6.0	4.3	7.3	9.6	6.4	6.1	5.3
2008	5.6	4.4	3.4	5.6	7.6	6.0	7.8	7.2	5.8	6.2	5.6
2008 Q3	5.3	4.3	3.3	6.4	7.5	6.3	7.9	6.9	5.7	6.0	5.8
Q4	5.2	4.5	3.8	7.7	10.4	8.4	8.1	6.9	5.8	6.9	6.3
2009 Q1	5.6	5.2	4.7	11.1	14.6	13.4	8.9	7.5	.	7.7	7.0
2009 Jan.	5.3	4.9	4.4	9.8	13.2	11.5	8.5	7.2	.	7.4	6.8
Feb.	5.6	5.2	4.6	11.1	14.6	13.5	8.8	7.5	.	7.7	7.1
Mar.	5.9	5.5	5.1	12.4	16.1	15.2	9.3	7.7	.	8.1	7.2
Apr.	6.2	5.7	5.5	13.9	17.4	16.8	9.6	7.8	.	8.5	.
May	.	.	.	.	.	.	.	.	.	8.9	.

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

## 9.2 In the United States and Japan

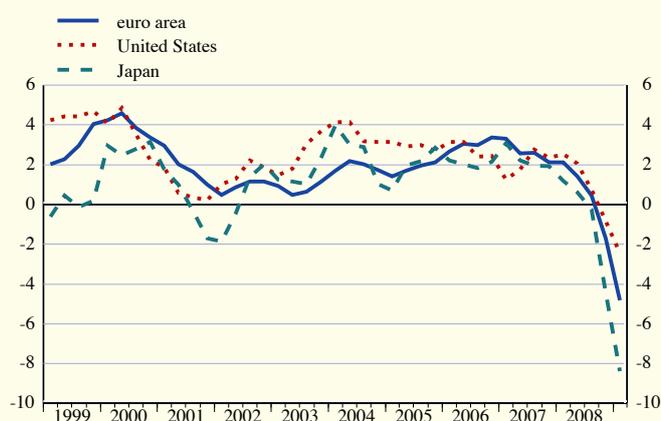
(annual percentage changes, unless otherwise indicated)

### 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											
2005	3.4	2.2	2.9	4.2	5.1	4.3	3.57	4.84	1.2441	-3.3	49.1
2006	3.2	2.8	2.8	2.7	4.6	5.0	5.20	5.41	1.2556	-2.2	48.5
2007	2.9	2.7	2.0	1.6	4.6	5.7	5.30	5.35	1.3705	-2.9	49.3
2008	3.8	0.9	1.1	-3.1	5.8	6.7	2.93	4.39	1.4708	-5.9	56.8
2008 Q2	4.4	0.2	2.1	-0.9	5.4	6.3	2.75	4.66	1.5622	-5.7	49.6
Q3	5.3	1.7	0.7	-3.9	6.1	6.0	2.91	4.69	1.5050	-5.9	52.8
Q4	1.6	1.6	-0.8	-8.7	6.9	8.3	2.77	3.71	1.3180	-8.0	56.8
2009 Q1	0.0	2.2	-2.5	-14.0	8.1	9.6	1.24	3.03	1.3029	.	.
Q2	.	.	.	.	.	.	0.84	3.63	1.3632	.	.
2009 Feb.	0.2	.	.	-13.3	8.1	9.4	1.24	3.20	1.2785	.	.
Mar.	-0.4	.	.	-14.7	8.5	9.4	1.27	3.15	1.3050	.	.
Apr.	-0.7	.	.	-14.4	8.9	8.5	1.11	3.17	1.3190	.	.
May	-1.3	.	.	-15.2	9.4	9.0	0.82	3.54	1.3650	.	.
June	.	.	.	.	.	.	0.62	4.17	1.4016	.	.
Japan											
2005	-0.3	-2.1	1.9	1.4	4.4	1.8	0.06	1.49	136.85	-6.7	163.2
2006	0.2	-0.5	2.0	4.5	4.1	1.0	0.30	1.98	146.02	-1.6	160.0
2007	0.1	-1.1	2.3	2.8	3.8	1.6	0.79	1.89	161.25	-2.5	156.1
2008	1.4	1.7	-0.7	-3.4	4.0	2.1	0.93	1.67	152.45	.	.
2008 Q2	1.4	0.6	0.6	0.8	4.0	2.0	0.92	1.85	163.35	.	.
Q3	2.2	1.3	-0.3	-1.4	4.0	2.2	0.90	1.75	161.83	.	.
Q4	1.0	4.4	-4.4	-14.6	4.0	1.8	0.96	1.46	126.71	.	.
2009 Q1	-0.1	.	-8.4	-34.6	4.5	2.1	0.67	1.24	122.04	.	.
Q2	.	.	.	.	.	.	0.53	1.41	132.59	.	.
2009 Feb.	-0.1	.	.	-38.4	4.4	2.1	0.64	1.20	118.30	.	.
Mar.	-0.3	.	.	-34.2	4.8	2.2	0.62	1.26	127.65	.	.
Apr.	-0.1	.	.	-30.7	.	2.7	0.57	1.41	130.25	.	.
May	-1.1	.	.	-29.5	.	2.7	0.53	1.38	131.85	.	.
June	.	.	.	.	.	.	0.49	1.43	135.39	.	.

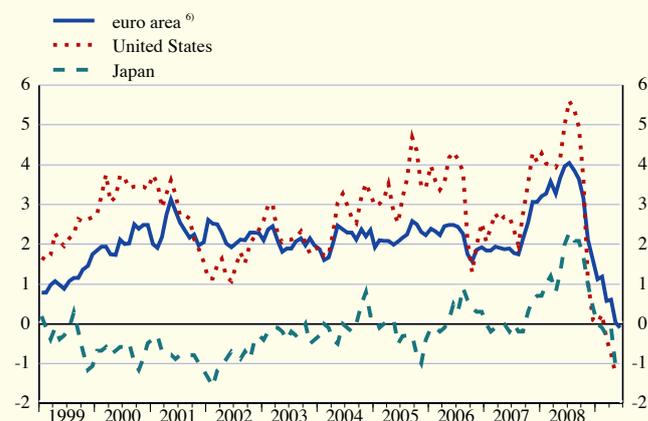
### C38 Real gross domestic product

(annual percentage changes; quarterly)



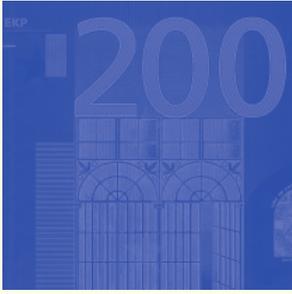
### C39 Consumer price indices

(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.



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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.  $a_t^p$ , 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.

4 For details, see “Seasonal adjustment of monetary aggregates and HICP for the euro area”, ECB (August 2000) and the “Statistics” section of the ECB’s website ([www.ecb.europa.eu](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. 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 1 July 2009.

Unless otherwise indicated, all data series covering observations for 2009 relate to the Euro 16 (the euro area including Slovakia) 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 the respective year of entry into the euro area of Greece (2001), Slovenia (2007), Cyprus (2008), Malta (2008) and Slovakia (2009), calculated from bases covering the year prior to the year of entry, use a series in which the impact of these countries’ joining the euro area is taken into account. Historical data referring to the euro area before the entry of Slovakia 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. Data for 2008 refer to the Euro 15, i.e. the Euro 13 plus Cyprus and Malta, and data as of 2009 refer to the Euro 16, i.e. the Euro 15 plus Slovakia.

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, 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. Maintenance periods for minimum reserve requirements start every month 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, and end on the day preceding the corresponding settlement day in the following month. Annual and quarterly observations refer to averages of the last reserve maintenance period of the year/quarter.

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.

1 OJ L 356, 30.12.1998, p. 7.

2 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 16 (i.e. the Euro 15 plus Slovakia) 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

<sup>3</sup> Svensson, L. E., "Estimating and Interpreting Forward Interest Rates: Sweden 1992-1994", Centre for Economic Policy Research, Discussion Paper No 1051, 1994.

car registrations are adjusted for the variations in the number of working days.

The Harmonised Index of Consumer Prices (HICP) for the euro area (Table 1 in Section 5.1) is available from 1995 onwards. It is based on national HICPs, which follow the same methodology in all euro area countries. The breakdown by goods and services components is derived from the classification of individual consumption by purpose (Coicop/HICP). The HICP covers monetary expenditure by households on final consumption in the economic territory of the euro area. The table includes seasonally adjusted HICP data and experimental HICP-based estimates of administered prices, which are compiled by the ECB.

Industrial producer prices (Table 2 in Section 5.1), industrial production, industrial new orders, industrial turnover and retail sales (Section 5.2) are covered by Council Regulation (EC) No 1165/98 of 19 May 1998 concerning short-term statistics.<sup>4</sup> Since January 2009 the revised classification of economic activities (NACE Revision 2), as covered by Regulation (EC) No 1893/2006 of the European Parliament and of the Council of 20 December 2006 establishing the statistical classification of economic activities NACE Revision 2 and amending Council Regulation (EEC) No 3037/90, as well as certain EC Regulations on specific statistical domains,<sup>5</sup> has been applied in the production of short-term statistics. The breakdown by end-use of products for industrial producer prices and industrial production is the harmonised sub-division of industry excluding construction (NACE Revision 2 sections B to E) into main industrial groupings (MIGs), as defined by Commission Regulation (EC) No 656/2007 of 14 June 2007.<sup>6</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.

The two non-energy commodity price indices shown in Table 3 in Section 5.1 are compiled with the same commodity coverage but using

two different weighting schemes: one based on the respective commodity imports of the euro area (columns 2-4), and the other (columns 5-7) based on estimated euro area domestic demand, or “use”, taking into account information on imports, exports and the domestic production of each commodity (ignoring for simplicity inventories, which are assumed to be relatively stable over the observed period). The import-weighted commodity price index is appropriate for analysing external developments, while the use-weighted index is suitable for the specific purpose of analysing international commodity price pressures on euro area inflation. The use-weighted commodity price indices are experimental data. For more details on compilation of the ECB commodity price indices, refer to Box 1 in the December 2008 issue of the Monthly Bulletin.

The labour cost indices (Table 5 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>7</sup> and in the implementing Commission Regulation (EC) No 1216/2003 of 7 July 2003.<sup>8</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 3 in Section 5.1) and employment statistics (Table 1 in Section 5.3) are results of the ESA 95 quarterly national accounts.

4 OJ L 162, 5.6.1998, p. 1.

5 OJ L 393, 30.12.2006, p. 1

6 OJ L 155, 15.6.2007, p. 3.

7 OJ L 69, 13.3.2003, p. 1.

8 OJ L 169, 8.7.2003, p. 37.

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 automotive fuel. 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 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>9</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>10</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

<sup>9</sup> OJ L 172, 12.7.2000, p. 3.

<sup>10</sup> OJ L 179, 9.7.2002, p. 1.

(ECB/2004/15)<sup>11</sup> and the amending ECB Guideline of 31 May 2007 (ECB/2007/3)<sup>12</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.

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.

11 OJ L 354, 30.11.2004, p. 34.

12 OJ L 159, 20.6.2007, p. 48.

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. 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 3 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.

Industrial import prices and industrial producer export prices (or industrial output prices for the non-domestic market) shown in Table 2 in Section 7.5 were introduced by Regulation (EC) No 1158/2005 of the European Parliament and of the Council of 6 July 2005 amending Council Regulation (EC) No 1165/98, which is the principal legal basis for short-term statistics. The industrial import price index covers industrial products imported from outside the euro area under sections B to E of the Statistical Classification of Products by Activity in the European Economic Community (CPA) and

all institutional sectors of the importers except households, governments and non-profit institutions. It reflects the cost, insurance and freight (c.i.f.) price excluding import duties and taxes, and refers to the actual transactions in euro recorded at the point when ownership of the goods is being transferred. The industrial producer export prices cover all industrial products exported directly by euro area producers to the extra-euro area market under sections B to E of NACE Revision 2. Exports from wholesalers and re-exports are not covered. The indices reflect the free on board (f.o.b.) price expressed in euro and calculated at the euro area frontiers, including any indirect taxes except VAT and other deductible taxes. Industrial import prices and industrial producer export prices are available by Main Industrial Groupings (MIGs) as defined by Commission Regulation (EC) No 656/2007 of 14 June 2007. For more details, refer to Box 11 in the December 2008 issue of the Monthly Bulletin.

## 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-21 group of trading partners is composed of the 11 non-euro area EU Member States plus Australia, Canada, China, Hong Kong, Japan, Norway, Singapore, South Korea, Switzerland and the United States. The EER-41 group includes the EER-21 and the following countries: Algeria, Argentina, Brazil, Chile, Croatia, Iceland, India, Indonesia, Israel, Malaysia, Mexico, Morocco, New Zealand, the Philippines,

Russia, South Africa, Taiwan, Thailand, Turkey and Venezuela. Real EERs are calculated using consumer price indices, producer price indices, gross domestic product deflators, unit labour costs in manufacturing and unit labour costs in the total economy.

For more detailed information on the calculation of the EERs, see Box 8 entitled "The effective exchange rates of the euro following the recent euro area and EU enlargements" in the March 2007 issue of the Monthly Bulletin and the ECB's Occasional Paper No 2 ("The effective exchange rates of the euro" by Luca Buldorini, Stelios Makrydakis and Christian Thimann, February 2002), which can be downloaded from the ECB's website.

The bilateral rates shown in Section 8.2 are monthly averages of those published daily as reference rates for these currencies. The reference rate of the Indian rupee vis-à-vis the euro has been inserted for the first time in column 26. However data prior to 1 January 2009 are to be considered as indicative rates

## 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 EUROSISTEM<sup>1</sup>



### 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.

### 8 OCTOBER 2008

The Governing Council of the ECB decides to decrease the minimum bid rate on the main refinancing operations by 50 basis points to 3.75%, starting from the operations to be settled on 15 October 2008. In addition, it decides to decrease by 50 basis points the interest rates on

<sup>1</sup> The chronology of monetary policy measures taken by the Eurosystem between 1999 and 2006 can be found in the ECB's Annual Report for the respective years.

both the marginal lending facility and the deposit facility, to 4.75% and 2.75% respectively, with immediate effect. Moreover, the Governing Council decides that, 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. Furthermore, 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. 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.

#### **15 OCTOBER 2008**

The Governing Council of the ECB decides to further expand the collateral framework and enhance the provision of liquidity. To do so, the Governing Council decides: (i) to expand the list of assets eligible as collateral in Eurosystem credit operations, with this expansion remaining in force until the end of 2009, (ii) to enhance the provision of longer-term refinancing, with effect from 30 October 2008 and until the end of the first quarter of 2009, and (iii) to provide US dollar liquidity through foreign exchange swaps.

#### **6 NOVEMBER 2008**

The Governing Council of the ECB decides to decrease the interest rate on the main refinancing operations by 50 basis points to 3.25%, starting from the operations to be settled on 12 November 2008. In addition, it decides to decrease by 50 basis points the interest rates on both the marginal lending facility and the deposit facility, to 3.75% and 2.75% respectively, with effect from 12 November 2008.

#### **4 DECEMBER 2008**

The Governing Council of the ECB decides to decrease the interest rate on the main refinancing

operations of the Eurosystem by 75 basis points to 2.50%, starting from the operations to be settled on 10 December 2008. In addition, it decides to decrease by 75 basis points the interest rates on both the marginal lending and the deposit facility to 3.00% and 2.00% respectively, with effect from 10 December 2008.

#### **18 DECEMBER 2008**

The Governing Council of the ECB decides that the main refinancing operations will continue to be carried out through a fixed rate tender procedure with full allotment beyond the maintenance period ending on 20 January 2009. This measure will be in place for as long as needed, and at least until the last allotment of the third maintenance period in 2009 on 31 March. Moreover, as of 21 January 2009, the corridor of standing facility rates, which on 9 October 2008 was reduced to 100 basis points around the prevailing interest rate of the main refinancing operation, will be re-widened symmetrically to 200 basis points.

#### **15 JANUARY 2009**

The Governing Council of the ECB decides to decrease the interest rate on the main refinancing operations by 50 basis points to 2.00%, starting from the operations to be settled on 21 January 2009. In addition, it decides that the interest rates on the marginal lending and the deposit facility will be 3.00% and 1.00% respectively, with effect from 21 January 2009, in line with the decision of 18 December 2008.

#### **5 FEBRUARY 2009**

The Governing Council of the ECB decides that the interest rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 2.00%, 3.00% and 1.00% respectively.

**5 MARCH 2009**

The Governing Council of the ECB decides to decrease the interest rate on the main refinancing operations by 50 basis points to 1.50%, starting from the operations to be settled on 11 March 2009. In addition, it decides that the interest rates on the marginal lending and the deposit facility will be 2.50% and 0.50% respectively, with effect from 11 March 2009.

Moreover, the Governing Council decides to continue the fixed rate tender procedure with full allotment for all main refinancing operations, special-term refinancing operations and supplementary and regular longer-term refinancing operations for as long as needed, and in any case beyond the end of 2009. In addition, the Governing Council decides to continue with the current frequency and maturity profile of supplementary longer-term refinancing operations and special-term refinancing operations for as long as needed, and in any case beyond the end of 2009.

**2 APRIL 2009**

The Governing Council of the ECB decides to decrease the interest rate on the main refinancing operations by 25 basis points to 1.25%, starting from the operations to be settled on 8 April 2009. In addition, it decides that the interest rates on the marginal lending and the deposit facility will be 2.25% and 0.25% respectively, with effect from 8 April 2009.

**7 MAY 2009**

The Governing Council of the ECB decides to decrease the interest rate on the main refinancing operations by 25 basis points to 1.00%, starting from the operation to be settled on 13 May 2009. In addition, it decides to decrease the interest rate on the marginal lending facility by 50 basis points to 1.75% with effect from 13 May 2009, and to leave the interest rate on the deposit facility unchanged at 0.25%.

In addition, the Governing Council of the ECB decides to proceed with its enhanced credit support approach. In particular, it decides that the Eurosystem will conduct liquidity-providing longer-term refinancing operations with a maturity of one year as fixed rate tender procedure with full allotment. In addition, it decides in principle that the Eurosystem will purchase euro-denominated covered bonds issued in the euro area.

**4 JUNE 2009**

The Governing Council of the ECB decides that the interest rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 1.00%, 1.75% and 0.25% respectively. In addition, the Governing Council of the ECB decides upon the technical modalities related to the purchase of euro-denominated covered bonds issued in the euro area decided on 7 May 2009.

**2 JULY 2009**

The Governing Council of the ECB decides that the interest rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 1.00%, 1.75% and 0.25% respectively.





## DOCUMENTS PUBLISHED BY THE EUROPEAN CENTRAL BANK SINCE 2008

This list is designed to inform readers about selected documents published by the European Central Bank since January 2008. For Working Papers, which as of January 2009 (from Working Paper No 989 onwards) are available online only, the list only refers to publications released between April and June 2009. Unless otherwise indicated, hard copies can be obtained or subscribed to free of charge, stock permitting, by contacting [info@ecb.europa.eu](mailto:info@ecb.europa.eu).

For a complete list of documents published by the European Central Bank and by the European Monetary Institute, please visit the ECB's website (<http://www.ecb.europa.eu>).

### ANNUAL REPORT

“Annual Report 2007”, April 2008.

“Annual Report 2008”, April 2009.

### CONVERGENCE REPORT

“Convergence Report May 2008”.

### MONTHLY BULLETIN SPECIAL EDITION

“10th anniversary of the ECB 1998-2008”, May 2008.

### MONTHLY BULLETIN ARTICLES

“Productivity developments and monetary policy”, January 2008.

“Globalisation, trade and the euro area macroeconomy”, January 2008.

“The Eurosystem's experience with forecasting autonomous factors and excess reserves”, January 2008.

“The analysis of the euro money market from a monetary policy perspective”, February 2008.

“Securitisation in the euro area”, February 2008.

“The new euro area yield curves”, February 2008.

“Business investment in the euro area and the role of firms' financial positions”, April 2008.

“Short-term forecasts of economic activity in the euro area”, April 2008.

“Developments in the EU arrangements for financial stability”, April 2008.

“Price stability and growth”, May 2008.

“The Eurosystem's open market operations during the recent period of financial market volatility”, May 2008.

“One monetary policy and many fiscal policies: ensuring a smooth functioning of EMU”, July 2008.

“Euro area trade in services: some key stylised facts”, July 2008.

“The Eurosystem as a provider of technical assistance to EU neighbouring regions”, July 2008.

“The external dimension of monetary analysis”, August 2008.

“The role of banks in the monetary policy transmission mechanism”, August 2008.

“Ten years of the Stability and Growth Pact”, October 2008.

“Cross-border bank mergers & acquisitions and institutional investors”, October 2008.

“Monitoring labour cost developments across euro area countries”, November 2008.

“Valuing stock markets and the equity risk premium”, November 2008.

“Ten years of TARGET and the launch of TARGET2”, November 2008.

“Housing wealth and private consumption in the euro area”, January 2009.

“Foreign asset accumulation by authorities in emerging markets”, January 2009.

“New survey evidence on wage setting in Europe”, February 2009.

- “Assessing global trends in protectionism”, February 2009.
- “The external financing of households and non-financial corporations: a comparison of the euro area and the United States”, April 2009.
- “Revisions to GDP estimates in the euro area”, April 2009.
- “The functional composition of government spending in the European Union”, April 2009.
- “Expectations and the conduct of monetary policy”, May 2009.
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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 the 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.

**Capital accounts:** part of the system of national (or euro area) accounts consisting of the change in net worth that is due to net saving, net capital transfers and net acquisitions of non-financial assets.

**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 or per hour worked:** 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 or by the total number of employees' hours worked.

**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. the 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.

**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 nominal EER indices for the euro are calculated against two groups of trading partners: the EER-21 (comprising the 11 non-euro area EU Member States and 10 trading partners outside the EU) and the EER-41 (composed of the EER-21 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 transactions between residents and non-residents in direct investment, portfolio investment, other investment, financial derivatives and reserve assets.

**Financial accounts:** part of the system of national (or euro area) accounts showing the financial positions (stocks or balance sheets), financial transactions and other changes of the different institutional sectors of an economy by type of financial asset.

**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 the development 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.

**Investment funds (except money market funds):** financial institutions that pool capital raised from the public and invest it in financial and non-financial assets. See also **MFIs**.

**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 recently taken 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 rates at the main refinancing operations, on the marginal lending facility and 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 (volume) 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, i.e. funds that invest in short-term and low-risk instruments usually with a maturity of one year or less.

**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 over a predefined maintenance period. Compliance with the requirement

is determined on the basis of the average of the daily balances in the reserve accounts over the maintenance period.

**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 (volume) 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 sufficiently homogenous debt securities with 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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