



EUROPEAN CENTRAL BANK

EUROSYSTEM

08 | 2009

MONTHLY BULLETIN

01 | 2009

02 | 2009

03 | 2009

04 | 2009

05 | 2009

06 | 2009

07 | 2009

**08 | 2009**

09 | 2009

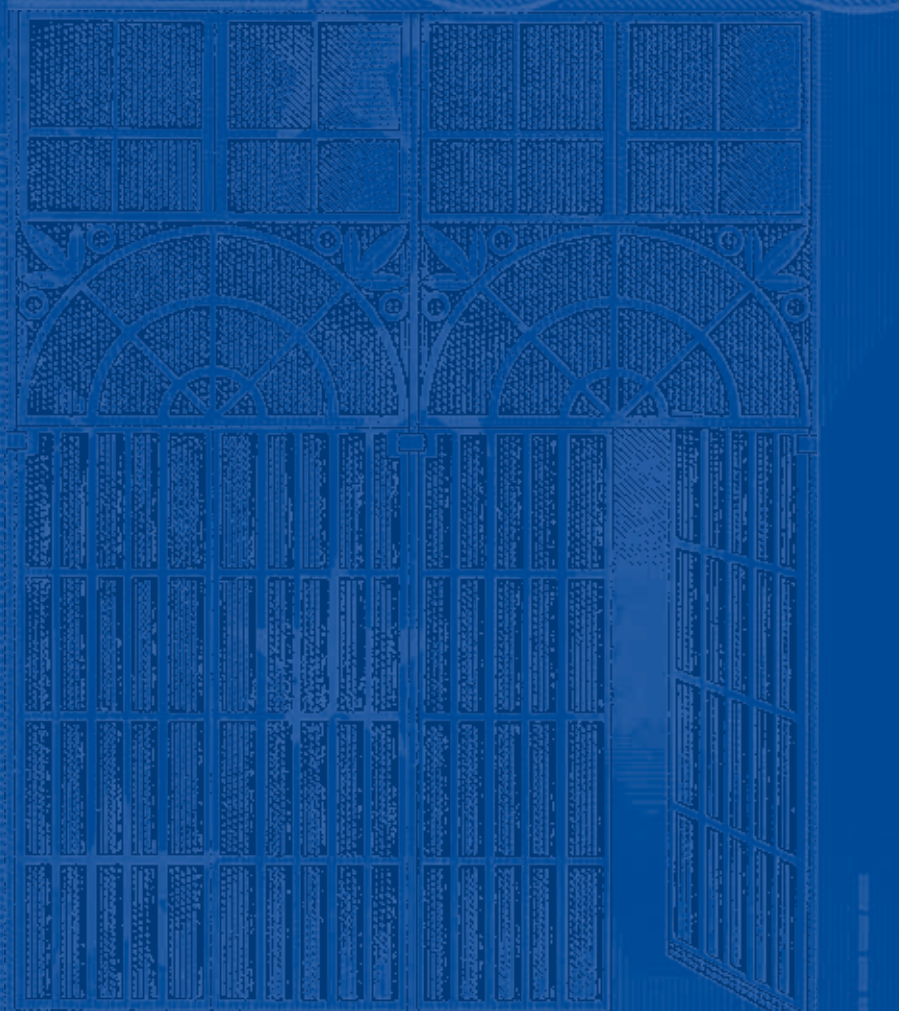
10 | 2009

11 | 2009

12 | 2009

MONTHLY BULLETIN  
AUGUST

2009



EUROPEAN CENTRAL BANK



EUROPEAN CENTRAL BANK

EUROSYSTEM



## MONTHLY BULLETIN AUGUST 2009

In 2009 all ECB publications feature a motif taken from the €200 banknote.

© European Central Bank 2009

**Address**

Kaiserstrasse 29  
60311 Frankfurt am Main  
Germany

**Postal address**

Postfach 16 03 19  
60066 Frankfurt am Main  
Germany

**Telephone**

+49 69 1344 0

**Website**

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

**Fax**

+49 69 1344 6000

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

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

*The cut-off date for the statistics included in this issue was 5 August 2009.*

ISSN 1561-0136 (print)

ISSN 1725-2822 (online)



## CONTENTS

<b>EDITORIAL</b>	<b>5</b>
<b>ECONOMIC AND MONETARY DEVELOPMENTS</b>	
The external environment of the euro area	9
Monetary and financial developments	14
Prices and costs	47
Output, demand and the labour market	57
Exchange rate and balance of payments developments	70
Boxes:	
1 Institutional differences between mortgage markets in the euro area and the United States	17
2 The results of the July 2009 bank lending survey for the euro area	22
3 The impact of the first one-year longer-term refinancing operation	34
4 Integrated euro area accounts for the first quarter of 2009	42
5 Results of the ECB Survey of Professional Forecasters for the third quarter of 2009	52
6 Uncertainty and the economic prospects for the euro area	58
7 Seasonal adjustment of short-term economic indicators for the euro area in the current recession	63
<b>ARTICLES</b>	
Housing finance in the euro area	77
Recent developments in the retail bank interest rate pass-through in the euro area	93
<b>EURO AREA STATISTICS</b>	<b>SI</b>
<b>ANNEXES</b>	
Chronology of monetary policy measures of the Eurosystem	I
Documents published by the European Central Bank since 2008	V
Glossary	XIII

## 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

On the basis of its regular economic and monetary analyses, the Governing Council decided at its meeting on 6 August to leave the key ECB interest rates unchanged. The information and analyses that have become available since the Governing Council's meeting on 2 July 2009 confirm the view that the current rates remain appropriate.

As anticipated, annual HICP inflation in July fell further into negative territory, reflecting mainly temporary effects. After a return to positive inflation rates during the second half of the year, the Governing Council continues to expect price developments to remain subdued over the policy-relevant horizon. Recent data releases and survey information still suggest that economic activity over the remainder of this year is likely to remain weak, although the pace of contraction is clearly slowing down. This assessment takes into account 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. 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 expansion continues to decelerate. 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 Governing Council's meeting on 2 July 2009 have broadly confirmed previous expectations. While uncertainty is still high, there are increasingly signs that the global recession is bottoming out. As regards the euro area, recent surveys suggest

that the pace of contraction is clearly slowing down. However, economic activity over the remainder of this year is expected to remain weak. Looking ahead into next year, after a phase of stabilisation, a gradual recovery with positive quarterly growth rates is expected. 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, uncertainty remains high and ongoing volatility in incoming data is very likely. Overall, the risks to this outlook remain balanced. On the upside, 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 downside, concerns remain relating to a stronger or more protracted negative feedback loop between the real economy and the turmoil in financial markets, renewed increases in oil and other commodity prices, the intensification of protectionist pressures, more unfavourable than expected labour market conditions 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, -0.6 % in July, compared with -0.1% in June. This further decline in annual rates of inflation was anticipated by the Governing Council and reflects primarily base effects resulting from the peaks observed in global commodity prices a year ago.

Looking ahead, owing to these base effects, annual inflation rates are projected to remain temporarily in negative territory, before turning positive again later this year. However, 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 subdued 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. They relate, in particular, to the outlook for economic activity and 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 the ongoing deceleration in broad money and credit growth. The annual growth rates of M3 and of loans to the private sector recorded in June – 3.5% and 1.5% respectively – are the lowest since the start of Stage Three of EMU. These developments support the assessment of a slower underlying pace of monetary expansion and low inflationary pressures over the medium term.

The declining pace of monetary expansion since the last quarter of 2008 continues to be accompanied by volatility in the short-term developments of M3 and its components. This reflects to a large extent the impact that absolute and relative changes in interest rates have had on the allocation of funds between financial investments inside and outside M3 and between the different deposit categories within M3. In this respect, the shift in allocation from short-term time deposits to overnight deposits within M3 has led to a further substantial strengthening of annual M1 growth in June.

The flow of bank loans to the non-financial private sector remained subdued in June, albeit with differences across borrowing sectors. The flow of loans to non-financial corporations turned substantially more negative owing to a sharp contraction in short-term lending.

At the same time, the flow of loans to households was slightly more positive than last month. The ongoing uncertainty seems to have dampened borrowers' demand for financing. However, according to the latest euro area bank lending survey, lenders tightened their credit standards to a significantly lesser extent. 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 information and analyses that have become available since the meeting of the Governing Council on 2 July 2009 confirm its view that the current key ECB interest rates remain appropriate. As anticipated, annual HICP inflation in July fell further into negative territory, reflecting mainly temporary effects. After a return to positive inflation rates during the second half of the year, the Governing Council continues to expect price developments to remain subdued over the policy-relevant horizon. Recent data releases and survey information still suggest that economic activity over the remainder of this year is likely to remain weak, although the pace of contraction is clearly slowing down. This assessment takes into account 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. 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 expansion continues to decelerate. 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, the Governing Council's policy action should progressively feed through to the economy in full. Hence, with all the measures taken, including the covered bond purchases, monetary policy will provide ongoing support for households and corporations. Once the macroeconomic environment improves, the Governing Council will take care that the measures taken are quickly unwound and that the ample liquidity provided is absorbed. Hence, any threat to price stability over the medium to longer term will be effectively countered in a timely fashion. 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.

Regarding fiscal policy, the Governing Council welcomes the position of the Eurogroup that, given the current economic outlook and projected public deficit and debt developments, further fiscal stimulus is not warranted. Budget plans for 2010, which are currently being finalised in a number of countries, and medium-term consolidation strategies must reflect a commitment to a swift return to sound and sustainable public finances. Accordingly, governments should prepare and communicate ambitious and realistic fiscal exit and consolidation strategies within the framework of the Stability and Growth Pact. The structural adjustment process should start, in any case, not later than the economic recovery and in 2011 the consolidation efforts should be stepped up. 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. Given the risks of lower potential economic growth in the euro

area for a prolonged period of time, governments should adjust public expenditures appropriately to the new macroeconomic conditions and reverse the sharp rises in public expenditure ratios as soon as possible. This is necessary also to prepare government budgets for future ageing-induced expenditure burdens.

Turning to structural policies, there is a need to intensify structural reform efforts in order to support sustainable growth in the euro area. Appropriate wage-setting and sufficient flexibility to get the unemployed back into work are crucial to prevent the crisis from having a lasting negative impact on labour markets. It is therefore essential to create appropriate incentives to work. At the same time, policies to speed up restructuring and investment, in line with the principle of an open market economy and free competition, will create the business opportunities and productivity gains needed to spark a sustained recovery.

This issue of the Monthly Bulletin contains two articles. The first article presents an overview of developments in housing finance since 1999. The second article discusses the determinants of banks' interest rate-setting behaviour and evaluates the impact of the recent financial market tensions on the monetary policy transmission mechanism.





# ECONOMIC AND MONETARY DEVELOPMENTS

## I THE EXTERNAL ENVIRONMENT OF THE EURO AREA

While uncertainty is still high, global indicators are increasingly suggesting that the current recession is bottoming out, supported by the strong global stimulus measures and improving financing conditions in key market segments. At the same time, the prevailing weakness of the global economy and negative base effects from last year's increases in commodity prices have continued to exert downward pressure on global headline inflation rates. Looking ahead, there is an increasing likelihood of a return to positive global economic growth rates later this year.

### I.1 DEVELOPMENTS IN THE WORLD ECONOMY

While uncertainty is still high, global indicators are increasingly suggesting that the current recession is bottoming out, supported by the strong global stimulus measures and improving financing conditions in key market segments. Although the overall Global Purchasing Managers' Index (PMI) increased only slightly in July, remaining below the expansion/contraction threshold, it stood at the highest level since August 2008. In the manufacturing sector, the PMI has risen over the course of the past two months to above the threshold value of 50, suggesting that firms have started to step up activity again. Firms in the services sector, however, continue to scale back activity.

The prevailing weakness of the global economy and negative base effects from last year's increases in commodity prices have continued to exert downward pressure on annual headline

inflation rates in recent months. In the OECD countries, headline CPI inflation fell in the year to June, entering negative territory for the first time and standing at -0.1%, compared with 0.1% in the previous month. Excluding food and energy, annual CPI inflation was 1.7% in June, i.e. slightly lower than in the previous month. In July the Global All-Industry Input Prices Index also continued to fall, mainly on account of declining services sector costs.

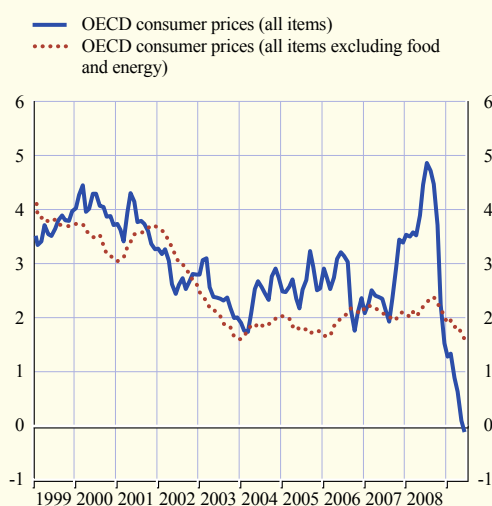
### UNITED STATES

In the United States, the pace of the decline in economic activity is moderating. According to advance estimates by the Bureau of Economic Analysis, real GDP contracted by a relatively modest 1% in annualised terms in the second quarter of 2009, following a substantial decrease of 6.4% in the first quarter. Investment and exports continued to be a drag on the economy in the second quarter of 2009. The downturn in consumption also weighed on aggregate economic activity. However, the decline in real GDP was comparably contained as increasing government expenditure boosted demand and imports weakened.

As regards price developments, annual CPI inflation moved further into negative territory, to -1.4% in June 2009, from -1.3% in May. The decline was driven largely by the drop in energy prices. Meanwhile, the annual rate of inflation excluding food and energy fell to 1.7% in June, from 1.8% in May. Looking ahead, negative base effects from energy prices will gradually fade over the months to come, eventually turning positive. Economic slack should, however, limit upward pressure on prices.

Chart I International price developments

(monthly data; annual percentage changes)



Source: OECD.

The projections of members of the Federal Open Market Committee (published with the minutes of the Committee's meeting of 23-24 June 2009) expect output to expand sluggishly over the remainder of the year. The central tendency of the projections for real GDP growth (measured as fourth-quarter year-on-year growth rates) lies in the range of -1.5% to -1.0% for 2009, a modest upward revision from the April projections. The recovery is expected to be gradual in 2010, with the central tendency of the projections for year-on-year GDP growth lying between 2.1% and 3.3% in the fourth quarter.

### JAPAN

Following the severe contraction in economic activity in previous quarters, there are now some signs of stabilisation. After a record contraction in real GDP of 3.8% quarter on quarter in the first quarter of 2009, business conditions appear to have improved somewhat. The Bank of Japan's second-quarter Tankan survey showed that business sentiment among large manufacturers had risen significantly from the previous quarter's record low. The business sentiment index for large non-manufacturers also registered its first improvement in two and a half years. Furthermore, some higher-frequency indicators, including industrial output and real consumption expenditure, provide some evidence of improvement.

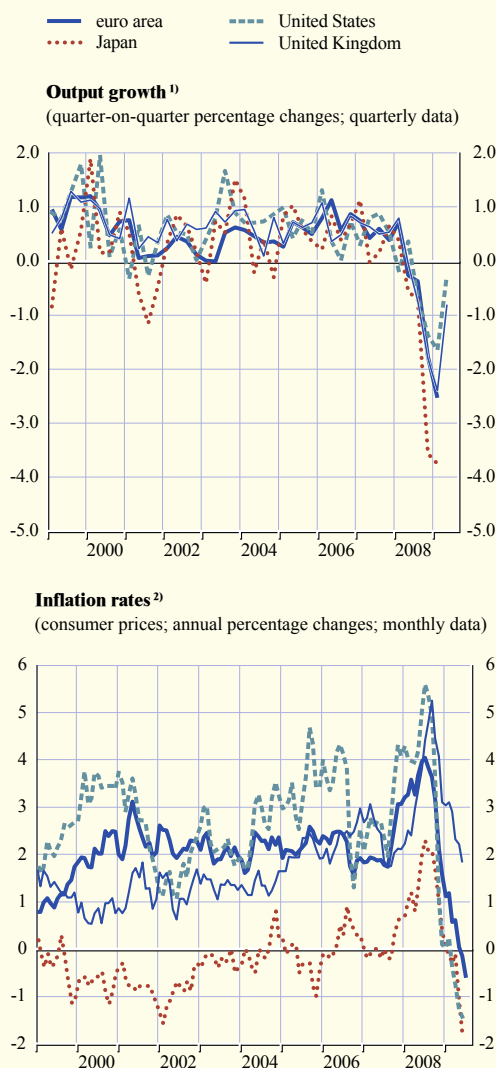
In Japan, overall annual CPI inflation moved significantly further into negative territory, to -1.8% in June 2009, compared with -1.1% in May. This decrease reflected base effects related to energy costs and greater economic slack. CPI inflation excluding food and energy also fell, to -0.7% on an annual basis in June, from -0.5% in May.

On 15 July the Bank of Japan decided to keep its target for the uncollateralised overnight call rate at around 0.1%.

### UNITED KINGDOM

In the United Kingdom, there has been a further decline in real GDP and a moderation in inflation in recent quarters. Real GDP decreased by 2.4% quarter on quarter in the first quarter of 2009 (revised down from the preliminary estimate of 1.9%). This decline was broad-based among expenditure components. In the second quarter of 2009, according to preliminary estimates, real

**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.

GDP declined by 0.8% quarter on quarter. Looking ahead, real GDP is expected to shrink further, albeit at a slower pace, as falling employment, lower housing and financial wealth, and tight credit conditions are likely to continue to weigh on consumer spending in the near term. Recent survey data point to a possible stabilisation in activity towards the end of 2009. Following a slight increase at the beginning of 2009, annual HICP inflation has started to decline again, standing at 1.8% in June 2009, down from 2.2% in May. House prices have been falling since the beginning of the financial crisis in mid-2007, but the underlying pace of the decline has been moderating recently. In June 2009 the annual change in the Halifax House Price Index was -15.0%, after -16.3% in May. Looking ahead, inflation is expected to decline further and remain below the 2% target in the near term. Between 5 March and 30 July 2009, the Bank of England purchased assets in the amount of GBP 125 billion through its Asset Purchase Facility, GBP 122 billion of which were government bonds. On 6 August the Monetary Policy Committee announced its decision to maintain the official Bank rate paid on reserves at 0.5%. The Committee also voted to increase the size of its programme of asset purchases by GBP 50 billion to GBP 175 billion.

#### OTHER EUROPEAN COUNTRIES

In most other non-euro area EU countries, weak economic activity in recent quarters has been accompanied by a decrease in inflation. In Sweden, real GDP contracted by 0.9% quarter on quarter in the first quarter of 2009. In the second quarter of 2009 real GDP was unchanged compared with the previous quarter (in seasonally and working day-adjusted terms). The rate of decline in the majority of GDP components is decelerating markedly. In Denmark, output contracted by 1.1% in the first quarter amid weak external demand, tighter financing conditions and declining private consumption. In recent months HICP inflation has decreased to fairly low levels in both countries. In June HICP inflation fell to 1.6% in Sweden and 0.9% in Denmark. On 2 July 2009 Sveriges Riksbank decided to decrease its main policy rate by 25 basis points to 0.25%.

The largest central and eastern European EU Member States, with the exception of Poland, experienced a decline in real GDP in the first quarter of 2009. Quarter-on-quarter real GDP growth contracted by 2.5% in Hungary, 3.4% in the Czech Republic and 4.6% in Romania. Economic activity held up best in Poland, where quarter-on-quarter growth was still positive in the first quarter of 2009, at 0.4%, 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 June 2009 annual HICP inflation rates decreased to 0.8% and 3.7% in the Czech Republic and Hungary respectively, and remained unchanged at 4.2% and 5.9% in Poland and Romania respectively. On 27 July 2009 the Magyar Nemzeti Bank decided to decrease its main policy rate by 100 basis points to 8.5%.

#### EMERGING ASIA

According to the latest data releases, most emerging Asian economies started to recover in the second quarter of 2009. After the dramatic drop in foreign trade during the last quarter of 2008 and the first quarter of 2009, recent data point to positive monthly changes in trade in several countries. Preliminary indicators show that domestic demand has also rebounded, driven largely by expansionary macroeconomic policies. However, the negative lagged effects of the global financial crisis, such as rising unemployment, are still holding back domestic private consumption. Consumer price inflation has continued to decline and has even entered negative territory in a number of countries.



In China, annual real GDP growth increased to 7.9% in the second quarter of 2009, from 6.1% in the first quarter. External demand remained relatively weak, while very rapid investment growth accounted for the bulk of GDP growth. In the first six months of the year, fixed asset investment in urban areas increased by 34% year on year, owing mainly to soaring public investment in infrastructure. Consumption growth has remained relatively robust, and the most recent data show that the situation is also improving in the real estate sector. While fast investment growth has boosted demand for imported commodities and other primary goods, exports appear to have stabilised at a low level. Consequently, the trade surplus decreased significantly in the second quarter of 2009, although it nevertheless stood at USD 8.2 billion in June. In the same month, annual CPI inflation stood at -1.7%, compared with -1.4% in May.

### LATIN AMERICA

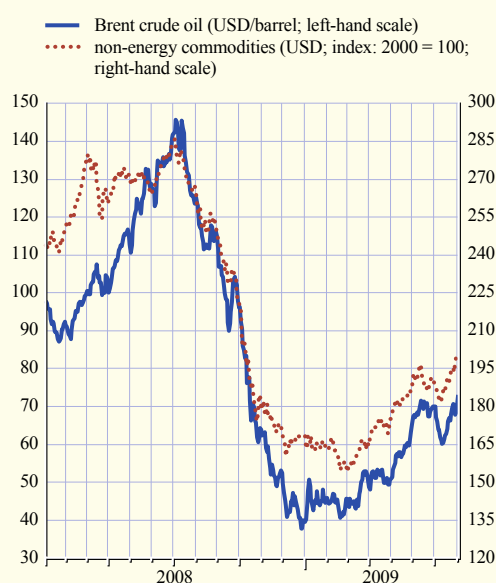
In Latin America, economic activity has been showing tentative signs of recovery, albeit from a low level, while inflationary pressures are abating gradually. In Brazil, industrial production fell by 10.9% year on year in June, having fallen by 11.2% in May. In June annual consumer price inflation reached 4.9%, down from 5.4% a month earlier. In response to the continued weakness in economic activity, the Banco Central do Brasil cut its key interest rate by 50 basis points to 8.75% on 23 July. In Argentina, industrial production in May fell by 1.7% on an annual basis. Annual consumer price inflation continued to decline, to stand at 5.3% in June. Finally, economic activity weakened further in Mexico, with industrial production in June falling by 10.6% on an annual basis, having fallen by 8.8% in May. Inflationary pressures nevertheless persisted, with headline inflation reaching 5.7% in June. On 17 July the Banco de México cut its overnight rate by 25 basis points to 4.5%.

## 1.2 COMMODITY MARKETS

In July oil prices fluctuated between USD 60 and USD 70 per barrel. Brent crude oil prices stood at USD 73.4 on 5 August, which was 86% higher than at the beginning of 2009 (in euro terms the increase is around 80%). Looking ahead, market participants expect higher prices in the medium term, with futures contracts for December 2011 trading at around USD 84.

The rally that drove up prices to USD 70 per barrel in June was fuelled by more optimistic expectations regarding the global economy and related prospects for oil demand. As it became apparent that fundamentals did not substantiate this optimism – with still buoyant OECD stocks and no signals of a robust pick-up in demand in emerging economies – there was a downward correction of prices in early July. In late July and early August, however, prices increased again, mainly on the back of indications of stronger demand from China.

Chart 3 Main developments in commodity markets



Sources: Bloomberg and HWWI.

The prices of non-energy commodities have moderated somewhat over the last month. The rally in metal prices observed during recent months came to a halt, but fundamentals remain supportive for future increases. The prices of food commodities, in particular soybeans and maize, decreased after the rally observed in June owing to destocking by the Chinese authorities. By contrast, sugar prices posted sharp increases owing to weather-related concerns about the crops in India. In aggregate terms, the price index for non-energy commodities (denominated in US dollars) was approximately 19% higher in July than at the beginning of the year.

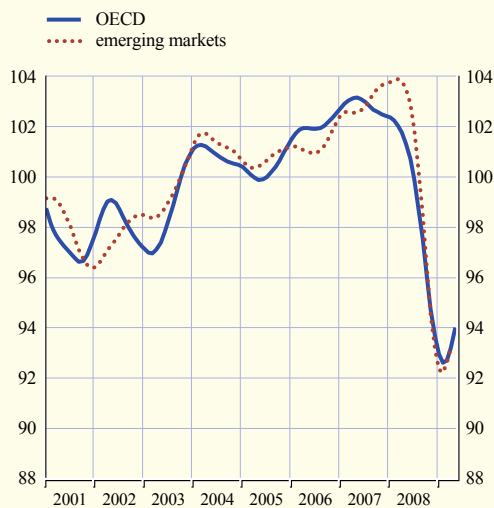
### 1.3 OUTLOOK FOR THE EXTERNAL ENVIRONMENT

Following an unprecedented decline at the turn of the year, there have recently been signs of a stabilisation in world trade. Looking ahead, while uncertainty is still high, there are increasing signs that the global recession is bottoming out. The OECD's composite leading indicators for May 2009 show tangible signs of improvement for most OECD and non-OECD countries. Overall, the most visible signs of an improvement in economic activity have appeared in emerging economies, but signs of a bottoming-out in some major advanced economies are also becoming more evident.

Although global economic prospects remain subject to exceptionally high uncertainty, risks to global activity remain balanced. On the positive side, the effects stemming both from the macroeconomic stimuli under way and from other policy measures taken may be stronger than anticipated. Confidence may also improve more quickly than currently expected. On the other hand, there are still concerns about a stronger or more protracted negative feedback loop between the real economy and financial market turmoil, renewed increases in oil and other commodity prices, the intensification of protectionist pressures, more unfavourable than expected labour market conditions and, lastly, adverse developments in the world economy as a result of 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 monetary data for June confirm the ongoing deceleration in the growth of both M3 and loans, pointing to a decline in the underlying rate of monetary growth. The flow of loans to the non-financial private sector remained subdued, especially with regard to short-term lending to non-financial corporations. To a large extent, the weak lending to non-financial corporations and households reflects the fact that a high degree of uncertainty continues to surround business, income and housing market prospects. The downward adjustment of the total asset holdings of MFIs lost momentum in June, with increases observed in external assets in particular following four months of negative flows.

#### THE BROAD MONETARY AGGREGATE M3

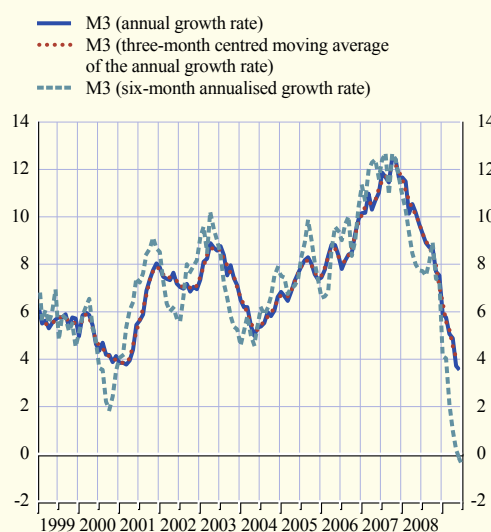
Monetary growth continued to decelerate in June, with the annual growth rate of M3 standing at 3.5%, down from 3.7% in May (see Chart 5). The month-on-month growth rate was 0.2% in June (having stood at -0.5% in May and 0.8% in April), thereby continuing the pattern of alternating negative and positive rates observed since the end of 2008. Looking beyond this volatility in short-term growth rates 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 continued to decline in June. The monthly flow was significantly positive, but this was again related mainly to developments in loans to non-monetary financial intermediaries other than insurance corporations and pension funds. By contrast, lending to the non-financial private sector remained subdued, largely reflecting the fact that a high degree of uncertainty continues to surround business, income and housing market prospects. These factors dampen demand for loans and also have a bearing on banks' assessment of borrowers' creditworthiness.

With regard to credit institutions' funding, the June MFI data indicate that while there were some net sales of longer-term debt securities to non-MFIs, there were again large net redemptions of short-term MFI debt securities. Overall, net issuance of MFI debt securities was negative – a development that masks some gross issuance of bonds covered by government guarantees and even larger redemptions of non-guaranteed bonds. Turning to deposits, inflows were recorded from both the money-holding sector and the rest of the world. The decline in the total asset holdings of the banking sector lost momentum in June following four months of outflows, as MFIs resumed their accumulation of asset holdings vis-à-vis the rest of the world and increased their lending to euro area residents (particularly through the purchase of securities).

Chart 5 M3 growth

(percentage changes; adjusted for seasonal and calendar effects)



Source: ECB.

**MAIN COMPONENTS OF M3**

The decline observed in June in the annual growth rate of M3 was driven by a fall in the contribution of short-term deposits other than overnight deposits (i.e. M2-M1). This was, however, partly offset by an increase in the overall contribution of M1 (i.e. currency in circulation and overnight deposits).

The annual growth rate of M1 resumed the strengthening observed since the third quarter of 2008, increasing to 9.3% in June, up from 7.9% in May (see Table 1). This increase mainly reflected a strong monthly inflow for overnight deposits.

The annual growth rate of short-term deposits other than overnight deposits declined further to stand at 0.4% in June, down from 2.1% in May. 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 June, 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 fell significantly further to stand at -6.1%, down from -2.7% in May.

Remuneration considerations appear to remain the principal factor influencing developments in the various types of short-term deposit. The available data on MFI interest rates for the period up to May 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. There may also have been an increase in the allocation of funds to financial assets outside M3 as the remuneration of short-term deposits and marketable instruments declined further relative to the returns available on longer-term assets.

**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 Q3	2008 Q4	2009 Q1	2009 Q2	2009 May	2009 June
<b>M1</b>	<b>45.0</b>	<b>0.7</b>	<b>2.7</b>	<b>5.3</b>	<b>7.9</b>	<b>7.9</b>	<b>9.3</b>
Currency in circulation	7.8	7.5	12.4	13.6	13.2	13.1	12.8
Overnight deposits	37.2	-0.6	0.8	3.6	6.9	6.8	8.6
<b>M2 - M1 (= other short-term deposits)</b>	<b>41.4</b>	<b>19.1</b>	<b>15.8</b>	<b>9.3</b>	<b>3.0</b>	<b>2.1</b>	<b>0.4</b>
Deposits with an agreed maturity of up to two years	23.4	37.6	29.0	12.9	-0.8	-2.7	-6.1
Deposits redeemable at notice of up to three months	18.0	-1.7	-0.5	4.5	8.6	9.4	10.3
<b>M2</b>	<b>86.4</b>	<b>9.2</b>	<b>8.9</b>	<b>7.2</b>	<b>5.5</b>	<b>5.0</b>	<b>4.8</b>
<b>M3 - M2 (= marketable instruments)</b>	<b>13.6</b>	<b>8.9</b>	<b>4.1</b>	<b>-0.8</b>	<b>-2.5</b>	<b>-3.7</b>	<b>-4.0</b>
<b>M3</b>	<b>100.0</b>	<b>9.1</b>	<b>8.2</b>	<b>6.0</b>	<b>4.3</b>	<b>3.7</b>	<b>3.5</b>
<b>Credit to euro area residents</b>		<b>9.1</b>	<b>7.4</b>	<b>5.9</b>	<b>4.3</b>	<b>3.9</b>	<b>4.2</b>
Credit to general government		0.6	1.7	5.6	8.4	8.2	10.8
Loans to general government		2.1	2.9	2.3	1.5	1.4	2.5
Credit to the private sector		10.9	8.6	6.0	3.5	3.1	3.0
Loans to the private sector		9.1	7.4	4.6	2.2	1.8	1.5
Loans to the private sector adjusted for sales and securitisation		10.1	8.5	6.1	3.6	3.3	2.8
<b>Longer-term financial liabilities (excluding capital and reserves)</b>		<b>3.3</b>	<b>1.2</b>	<b>1.8</b>	<b>2.7</b>	<b>2.8</b>	<b>3.0</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 marketable instruments declined further to stand at -4.0% in June, down from -3.7% in May. As regards the sub-components of marketable instruments, the annual growth rate of repurchase agreements increased strongly, while that of money market fund shares/units remained broadly unchanged in positive territory. 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 -33.6% in June. The money-holding sectors reduced their holdings of these securities in June, with similar reductions being observed in the holdings of non-residents and the MFI sector itself.

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 – remained broadly unchanged at 4.4% in June. Households account for almost all of this annual growth, but their contribution has gradually declined in recent months. By contrast, the contribution made by non-financial corporations has remained broadly stable, following a relatively sharp decline to around zero at the turn of the year. A small monthly outflow was recorded in June for the M3 deposits of the household sector – the first since December 2004. This reflects the lower levels of remuneration currently available for these deposits relative to other types of financial investment or the repayment of outstanding debt. At the same time, both non-financial corporations and non-monetary financial intermediaries increased their M3 deposit holdings in June.

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

Turning to the counterparts of M3, the annual growth rate of total MFI credit to euro area residents increased to 4.2% in June, up from 3.9% in May (see Table 1). This reflects an increase in the annual growth rate of credit to general government (which rose to 10.8% in June, up from 8.2% in May), while the annual growth rate of credit to the private sector remained broadly unchanged at 3.0%. In both cases, June saw very strong monthly flows related to MFIs' purchases of public and private sector debt securities.

By contrast, 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 1.5% in June, down from 1.8% in the previous month. The monthly flow was positive, but this was due mainly to strong short-term borrowing by non-monetary financial intermediaries, as indicated above.

Following a period of intense true-sale securitisation activity at the end of 2008 – in which originating credit institutions sold loans and acquired the securities issued for use as collateral in Eurosystem credit operations – this type of activity has been more subdued in recent months. While the distortionary effect that derecognition in the context of securitisation has on loans to the private sector was thus relatively small in the month-on-month growth rates, it remained prevalent in the annual growth rates (with the difference between the corrected and uncorrected annual series standing at 1.3 percentage points in June, somewhat lower than in the previous month). The role played by securitisation activity in the funding of credit institutions' lending has been more limited in the euro area than in the United States (see Box 1).

## Box 1

**INSTITUTIONAL DIFFERENCES BETWEEN MORTGAGE MARKETS IN THE EURO AREA  
AND THE UNITED STATES**

There are several institutional differences between mortgage markets in the euro area and the United States, including differences in mortgage characteristics and in mortgage financing structures. Such differences may contribute to explaining differences in household indebtedness and the importance of securitisation. Against this background, this box investigates the role of government-sponsored enterprises in mortgage funding in the United States and compares it with mortgage funding practices in the euro area. It also discusses differences in foreclosure procedures, which may have an impact on household borrowing behaviour.<sup>1</sup>

**The role of government support in mortgage financing in the United States compared with the euro area**

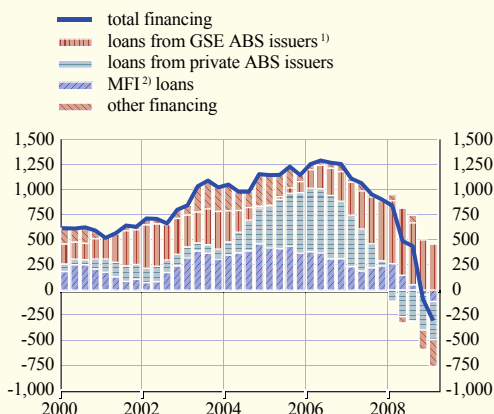
A specific feature of the US mortgage market is the key role played by government-sponsored enterprises (GSEs), which has its origin in the Great Depression, when a government agency called the Federal National Mortgage Association (FNMA) was founded. The latter was then privatised in 1968 and became known as Fannie Mae. In addition, a second private GSE operating in the US mortgage market – i.e. the Federal Home Loan Mortgage Corporation (or Freddie Mac) – was founded in 1968. Both GSEs acquired their current central role following the savings and loan crisis in the 1980s, which led to major structural changes in the US mortgage markets. Up to the late-1970s, savings and loan (S&L) institutions funded long-term fixed rate mortgage loans on the basis of mostly short-term deposits in an environment of stable interest rates. However, the rise in nominal interest rates due to inflation, in combination with ceilings on deposit rates, led to withdrawals of funds by customers who placed their savings in higher-remunerated assets (disintermediation). This development led to capital shortages at S&L institutions which were further aggravated in the 1980s as a consequence of risky investments that these institutions undertook following their deregulation. The removal of mortgage loans from the balance sheet of S&L institutions, by selling them to the two GSEs, enabled S&L institutions to grant mortgage loans despite lower deposit-to-loan ratios than in the past. In addition, after selling a fixed-rate mortgage loan (the type generally preferred by US homebuyers), the S&L institution does not bear the risk of rising interest rates.

As a consequence of such historical developments, fixed rate mortgages in the United States are typically sold by mortgage banks to the GSEs, provided that they meet certain quality standards, or to private issuers of asset-backed securities (ABSs), which either hold them on their balance sheet or securitise them. In recent decades, the two GSEs enjoyed lower funding costs compared with private banks when issuing mortgage-backed securities (MBSs) owing to an implicit government guarantee. This guarantee was turned into an explicit guarantee in September 2008 given that Fannie Mae and Freddie Mac were put under conservatorship. Under this arrangement, GSEs and ultimately the US government support the provision of mortgage credit in the United States. Moreover, by pooling mortgages and issuing relatively standardised mortgage-backed securities,

<sup>1</sup> The evidence presented in this box relies mainly on R. K. Green and S. M. Wachter, “The American Mortgage in Historical and International Context”, *Journal of Economic Perspectives*, Vol. 19, No. 4, Fall 2005, pages 93-114; A. Coles and J. Hardt, “Mortgage markets: why US and EU markets are so different”, International Union for Housing Finance, December 2001; and European Central Bank, “Housing finance in the euro area”, Occasional Paper Series No. 101, March 2009.

**Chart A Financing of US households**

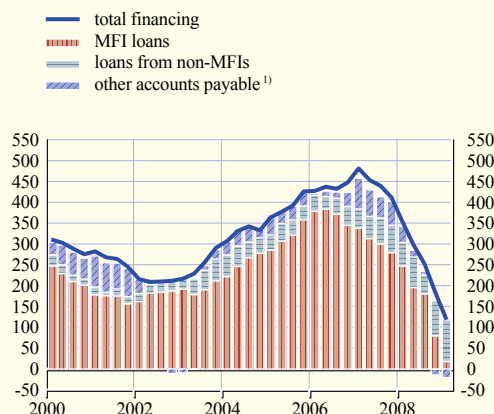
(four-quarter cumulated transactions in USD billions)



Sources: Board of Governors of the Federal Reserve System and ECB calculations.  
 1) Loans from GSEs and from agency and GSE-backed mortgage pools.  
 2) Commercial banks, savings institutions and credit unions.

**Chart B Financing of euro area households**

(four-quarter cumulated transactions in EUR billions)



Source: ECB.  
 1) Also includes trade credit and net liabilities of financial derivatives.

Fannie Mae and Freddie Mac promoted the liquidity in the US secondary mortgage market. In terms of amounts outstanding, the GSEs are the main holders of mortgage debt. At the same time, private ABS issuers, typically unregulated non-depository institutions, had considerably increased their market share from 2004 up to the financial turmoil, in parallel with the imposition of regulatory limits on the activity of GSEs (see Chart A).<sup>2</sup>

By contrast with the United States, in the euro area, there is no comparable government support for the provision of mortgage credit to euro area residents, i.e. euro area governments do not act to reduce banks' funding costs of mortgage loans or to favour the removal of loans from banks' balance sheets. This picture has been altered somewhat by the financial turmoil and the specific government support measures which have been introduced at the country level. In addition, there are considerable differences in accounting rules across euro area countries. Accounting rules in some euro area countries only allow a full removal of true-sale securitised loans from banks' balance sheets (i.e. a derecognition) when the securitisation transaction meets certain strict criteria.<sup>3</sup> By contrast, accounting rules in the United States make it generally easier to derecognise loans from banks' balance sheets and, hence, to move associated risks to third parties. These reasons may explain to a large extent why the securitisation of mortgage loans by GSEs or private ABS issuers has been so much more advanced in the United States compared with the euro area.

In the euro area, mortgage loans remain to a large extent on banks' balance sheets (see Chart B). In addition to deposits, which are generally the most important funding source of euro area banks, housing loans are financed directly via the issuance of mortgage covered bonds and residential mortgage-backed securities (RMBSs), which are collateralised by mortgages (see Section 3 of the

<sup>2</sup> According to the consolidated banking statistics from the Bank for International Settlements, 6% of the total foreign claims of euro area banks were vis-à-vis the United States at the end of March 2009.

<sup>3</sup> See Box 3 entitled "The importance of accounting standards for interpreting MFI loan statistics" in the March 2008 issue of the Monthly Bulletin.

article entitled “Housing finance in the euro area” in this issue of the Monthly Bulletin on the funding of mortgage loans in the euro area). The collateralisation of the bond issuance generally lowers banks’ funding costs. However, unlike the (implicit) government guarantee in the United States, there is no comparable government support in mortgage funding costs in the euro area. In the case of covered bond issuance, mortgage loans remain on banks’ balance sheets in the euro area, and in the case of RMBSs, mortgage loans are only partly removed from banks’ balance sheets, depending on the national accounting rules for derecognising true-sale securitised loans. Hence, also the default risk associated with mortgage loans remains to a large extent on banks’ balance sheets. Secured market-based funding of mortgage loans accounted for 21% (9% for mortgage covered bonds and 12% for RMBSs) of the amount outstanding of housing loans in the euro area at the end of 2007. In the United States, the share of securitised mortgage loans was approximately 50% of the amount of mortgages outstanding.<sup>4</sup>

#### **Implications of the structure of mortgage funding for mortgage loan characteristics**

The importance of mortgage securitisation in the United States, including the role of GSEs and private ABS issuers, led to the dominance of fixed rate mortgage loans, which are traditionally preferred by US homebuyers. An important reason for the willingness of banks to grant fixed rate mortgage loans is that banks did not need to bear the risk of financing long-term assets with short-term funds, as they could generally remove long-term mortgage loans from their balance sheet. By contrast, in the euro area, there is a large number of countries in which variable rate housing loans dominate and a minority of countries in which fixed rate mortgage loan contracts are dominant, related to demand, supply and institutional factors (see Section 2 of the article entitled “Housing finance in the euro area” in this issue of the Monthly Bulletin).

In addition, during recent years and up to the financial turmoil, new atypical contracts have been introduced in the United States with so-called “teaser rates”, negative amortisation rates and loan-to-value ratios of close to or above 100%, especially in the sub-prime segment. The higher default risk of such sub-prime mortgage loans was to a large extent removed from banks’ balance sheets, and was possibly mostly transferred to private ABS issuers which were less regulated than GSEs. Such atypical contracts were used to a lower extent in the euro area, probably related to accounting rules making it less easy to derecognise loans.

Furthermore, in the United States prepayment fees are generally minor or non-existent. By contrast, while partial or total early repayments are allowed in all euro area countries, fees are generally charged for the early repayment of fixed rate housing loans, whereas early repayment is free of charge in the case of variable rate housing loans in several euro area countries.

#### **Insolvency and foreclosure procedures**

With respect to further institutional differences between mortgage markets in the euro area and the United States, there are also some key differences between insolvency and foreclosure procedures in the euro area countries and the United States, which may contribute to explaining differences in household indebtedness. Due to the limited availability of data and owing to the heterogeneous situation among euro area countries, only a broad assessment based on predominantly qualitative information is possible.

<sup>4</sup> Referring to off-balance-sheet true-sale securitisation.

While the number of personal bankruptcies has increased in the euro area and the United States during recent years, personal insolvencies are still less common in the euro area than in the United States. This is related to important differences in the legal framework between countries governed by common law (e.g. the United States) and countries where legislation is based on civil law, which is the case in most euro area countries. In the United States, the system in the majority of US states tends, in practice, to work as if loans are non-recourse debt, i.e. debt that is secured by collateral, but for which the borrower is not personally liable. By contrast, in countries with civil law, borrowers are less easily released from the obligation to repay their debt and remain personally liable for any difference between the value of the property and the amount of the loan. In addition, judiciary procedures tend to be rather long in some euro area countries, whereas countries governed by common law tend to prefer non-judiciary settlements. Such differences in insolvency and foreclosure procedures may have an impact on the lending conditions and thereafter the indebtedness of households. Moreover, in relation to the financial turmoil which had its origin in the US sub-prime market, the increase of personal insolvencies was much stronger in the United States than in the euro area (based on limited information on a few euro area countries) in 2007.

### Conclusions

The specific features of the US mortgage market, with a dominant role for GSEs and private ABS issuers and a relatively low proportion of mortgage loans remaining on banks' balance sheets, are advantageous in terms of lower funding costs and the pooling of risks through the securitisation of mortgage loans. At the same time, banks' ability to remove mortgage loans relatively easily from their balance sheet has fuelled household mortgage indebtedness during recent years up to the start of the financial turmoil in mid-2007. In addition, structured transactions and the growth of relatively lightly regulated private ABS issuers up to the financial turmoil have led to an opaque distribution and underestimation of risks in the financial system. In the end, this triggered the outbreak of the financial turmoil.

By contrast, in the euro area, housing loans remain to a large extent on banks' balance sheets as they are mostly financed via bank deposits or, to some extent, via the issuance of covered bonds. Moreover, the importance of RMBS issuance in the euro area is relatively low. Generally, while accounting rules differ across euro area countries, loans can be less easily removed from banks' balance sheets than in the United States. The fact that loans remain to a large extent on the balance sheet of regulated institutions, i.e. banks, tends to support a more cautious behaviour of lenders with respect to the loans originated. At the same time, the heterogeneous legislation with respect to covered bond and RMBS issuance as well as non-standardised mortgage loans have resulted in lower securitisation of mortgage loans in the euro area. Generally, higher loan securitisation would enhance the liquidity of the secondary market and may reduce funding costs, which would be beneficial for borrowers. This notwithstanding, as the financial turmoil has shown, for the stability of the financial system, it is important to keep risks transparent and, to a significant extent, on the balance sheets of well-regulated institutions.

The annual growth rate of MFI loans to non-financial corporations declined significantly further to stand at 2.8% in June, down from the 4.4% observed in May (see Table 2). Outstanding amounts declined for all maturities, but particularly for loans with a maturity of up to one year. When assessing this development, it should be borne in mind that owing to the differences in inflation expectations over the various maturities, the real cost of financing is currently higher for short-term

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 Q3	2008 Q4	2009 Q1	2009 Q2	2009 May	2009 June
<b>Non-financial corporations</b>	<b>44.3</b>	<b>12.8</b>	<b>11.3</b>	<b>8.2</b>	<b>4.7</b>	<b>4.4</b>	<b>2.8</b>
Up to one year	26.8	11.0	9.0	4.2	-2.4	-2.6	-5.4
Over one and up to five years	20.4	18.6	16.0	12.5	9.8	9.7	7.3
Over five years	52.8	11.8	10.8	8.9	6.8	6.4	5.7
<b>Households<sup>2)</sup></b>	<b>45.3</b>	<b>3.9</b>	<b>2.8</b>	<b>0.9</b>	<b>0.1</b>	<b>-0.2</b>	<b>0.2</b>
Consumer credit <sup>3)</sup>	13.0	4.4	3.2	1.3	-0.3	-0.7	-0.7
Lending for house purchase <sup>3)</sup>	71.3	4.1	2.9	0.7	-0.2	-0.5	0.0
Other lending	15.7	2.6	2.2	1.7	1.7	1.9	1.6
<b>Insurance corporations and pension funds</b>	<b>1.0</b>	<b>-6.6</b>	<b>-6.5</b>	<b>-5.8</b>	<b>-2.7</b>	<b>-3.0</b>	<b>-0.5</b>
<b>Other non-monetary financial intermediaries</b>	<b>9.5</b>	<b>22.3</b>	<b>14.5</b>	<b>7.6</b>	<b>1.1</b>	<b>-0.0</b>	<b>2.0</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.

loans than for longer-term loans, which may affect the maturity breakdown of firms' borrowing. Overall, the subdued dynamics of loans to the non-financial corporation sector are likely to reflect the weak economic activity and the substantial uncertainty regarding the economic outlook. This may also be hampering some firms' ability to access bank funding. (For further information, see Box 2.)

The annual growth rate of loans to households increased to 0.2% in June, up from -0.2% in May, with a positive monthly flow observed in that month. This reflected an increase in the annual growth rate of loans for house purchase, the principal source of financing for households, which rose from -0.5% in May to 0.0% in June. Given the uncertainty currently surrounding income and housing market prospects, households are likely to remain cautious about taking out new loans, but the data for recent months do not point to loans to households continuing to decline.

Turning to the other counterparts of M3, the annual growth rate of MFI longer-term financial liabilities excluding capital and reserves increased to 3.0% in June, up from 2.8% in May. Looking at its sub-components, the annual growth rates of longer-term deposits (i.e. those with an agreed maturity of over two years and those redeemable at notice of over three months) increased strongly further, largely reflecting their higher levels of remuneration relative to short-term deposits. The annual growth rate of longer-term MFI debt securities (i.e. those with a maturity of over two years) remained broadly unchanged in June. By contrast with shorter-term MFI debt securities, the money-holding sectors have generally continued to purchase these longer-term securities in recent months, and in June, too, credit institutions were 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 exceeded the purchases of the money-holding sectors, as MFIs also increased their holdings of these instruments.

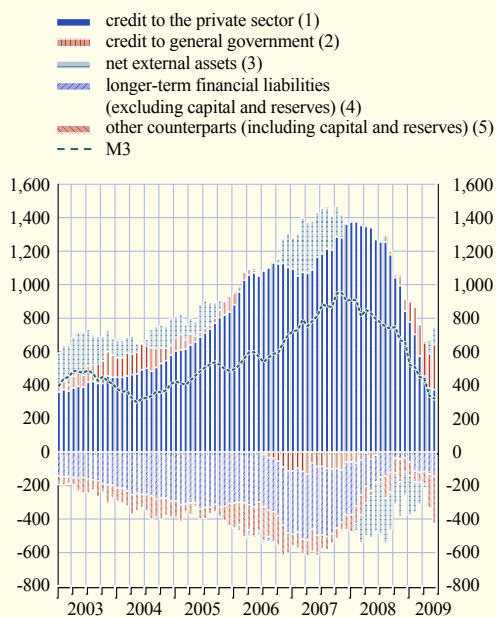
The annual growth rate of capital and reserves increased to 11.1% in June, up from 10.8% in May, reflecting a further inflow for these instruments in June.

Turning to developments in the MFI sector's external assets and liabilities vis-à-vis non-residents, sizeable inflows were recorded on both sides of the balance sheet in June. On the asset side there were strong increases in loans, while on the liability side there was an even stronger increase in deposits. As a result, the net external asset position, which is the counterpart of M3, recorded a small monthly outflow. On an annual basis, the inflow for the net external asset position increased further to stand at €104 billion in June, up from €81 billion in the 12 months to May.

To sum up, the monetary data for June confirm the decelerating dynamics of both M3 and loans, which are indicative of a decline in the underlying rate of monetary growth. The continued subdued lending to the non-financial private sector probably reflects the fact that a high degree of uncertainty continues to surround business, income and housing market prospects. The MFI data also suggest that there has been no further deleveraging in June. Indeed, the total assets held by MFIs increased in June following four months of negative flows, reflecting increases in all major asset categories.

**Chart 6 Counterparts of M3**

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



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

**Box 2**

**THE RESULTS OF THE JULY 2009 BANK LENDING SURVEY FOR THE EURO AREA**

This box describes the main results of the July 2009 bank lending survey for the euro area. This survey is conducted on a quarterly basis by the Eurosystem.<sup>1</sup> It shows that in the second quarter of 2009 the net percentage of banks reporting a tightening of credit standards applied to loans and credit lines to enterprises broadly halved, falling to 21% from 43% in the first quarter of 2009. Notably, this was below the high level of tightening seen in the third and fourth quarters of 2008.<sup>2</sup> This development confirms a turning-point in the tightening cycle observed in the April survey round. Nevertheless, the cumulated net tightening during the past quarters still constitutes a significant degree of net tightening of credit standards in a context where net flows of credit are subdued and partly negative. All factors contributed to the decline in the net tightening of credit standards, but particularly supply-side factors, such as banks' access to market financing and

1 The cut-off date for the receipt of data from the responding banks was 3 July 2009. A comprehensive assessment of the results of the July 2009 bank lending survey for the euro area was published on 29 July 2009 on the ECB's website.  
2 The reported net percentage refers to the difference between the proportion of banks reporting that credit standards have been tightened and the proportion of banks reporting that they have been eased. A positive net percentage indicates that banks have tended to tighten credit standards ("net tightening"), whereas a negative net percentage indicates that banks have tended to ease credit standards ("net easing").

banks' liquidity position. Respondent banks also reported a decline in the net tightening of credit standards for loans to households for house purchase and for consumer credit to 22% (from 28% in the first quarter) and to 21% (from 26% in the first quarter), respectively, in the second quarter of 2009, and down from their historical peaks in the fourth quarter of 2008. For the third quarter of 2009, banks expected a further decline in net tightening for all three loan categories. Regarding loan demand, banks noted that net demand for loans to enterprises still declined, but to a lower extent than in the first quarter, whereas net demand for housing loans turned slightly positive in the second quarter.<sup>3</sup>

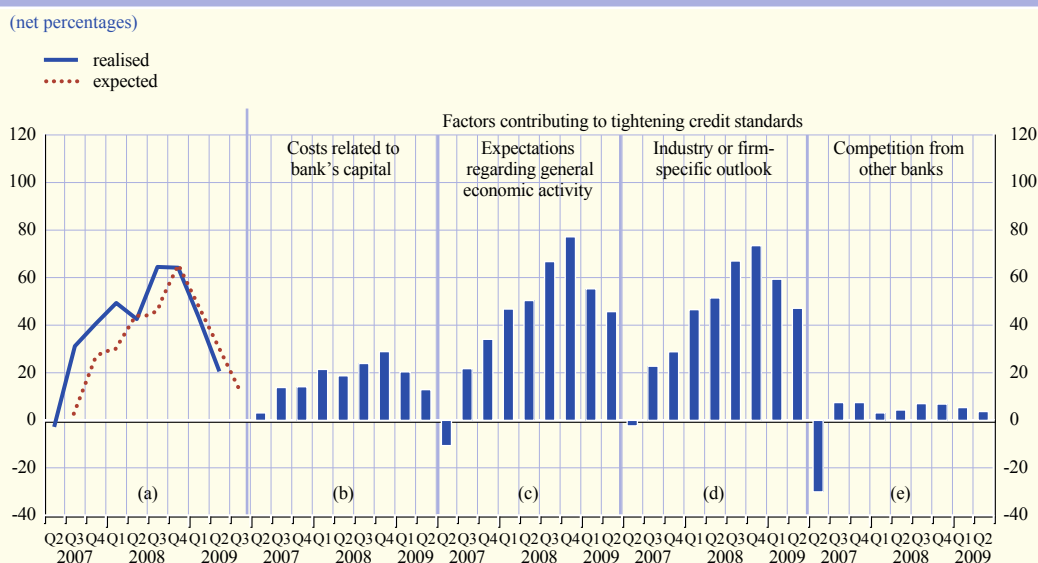
As in recent survey rounds, the July 2009 survey likewise contained a set of ad hoc questions, mainly addressing the effect of the financial turmoil on credit standards and lending (see the last section of this box).

### Loans or credit lines to enterprises

**Credit standards:** In the second quarter of 2009, the net percentage of banks reporting a tightening of credit standards for loans to enterprises broadly halved, falling to 21% from 43% in the first quarter of 2009 (see Chart A) and down from the high level seen in the third and fourth quarters of 2008 (64%). This development confirms a turning-point in the tightening cycle observed in the April survey round, although the cumulated net tightening during the past quarters still represents a significant degree of net tightening of credit standards. All factors contributed to the decline in the net tightening of credit standards, but particularly supply-side factors, such as banks' access

3 The term "net demand" refers to the difference between the proportion of banks reporting an increase in loan demand and the proportion of banks reporting a decline.

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



Notes: In panel (a), the net percentages refer to the difference between the sum of the percentages for "tightened considerably" and "tightened somewhat" and the sum of the percentages for "eased somewhat" and "eased considerably". The net percentages for the questions related to the factors are the difference between the percentage of banks reporting that the given factor contributed to tightening and the percentage reporting that it contributed to easing. "Realised" values refer to the period in which the survey was conducted. "Expected" values refer to the expected changes over the next three months.



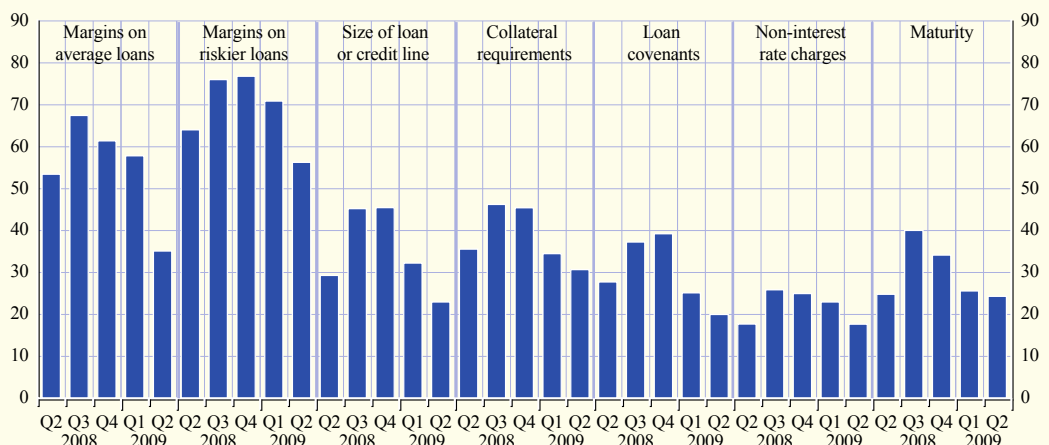
to market financing (7%, after 19% in the first quarter) and banks' liquidity position (-2%, after 14% in the first quarter). The most important forces driving the net tightening of credit standards on loans to enterprises continued to be expectations regarding general economic activity (46%, after 55%) and the industry or firm-specific outlook (47%, after 59%), for which however the net tightening also declined considerably in the second quarter of 2009.

Regarding the terms and conditions applied to loans to enterprises, banks continued to report a net tightening in the second quarter of 2009, which however declined. In particular, the net tightening of the margins on average loans was reduced significantly, to 35%, from 58% in the first quarter of 2009, reaching its lowest level since the third quarter of 2007 (see Chart B). Overall, the degree of net tightening was lower for the non-price terms and conditions than for the price terms and conditions.

The decline in the net tightening of credit standards on loans to enterprises was reflected in both loans to large enterprises and loans to small and medium-sized enterprises (SMEs). As in most of the previous survey rounds, the net tightening of credit standards was somewhat stronger in the second quarter of 2009 for loans to large enterprises (25%, after 48% in the first quarter of 2009) than for loans to SMEs (21%, after 42% in the previous quarter). Both the cost of funds and balance sheet constraints factor and the risk perception factor (i.e. mainly expectations regarding general economic activity and the industry or firm-specific outlook) contributed considerably to the more moderate net tightening of loans to large enterprises and SMEs. At the same time, expectations regarding general economic activity and the industry or firm-specific outlook continued to be the most important factors in explaining the degree of net tightening of credit standards on loans to both large firms and SMEs. Costs related to the banks' capital position still played a somewhat more important role in the net tightening for large firms than for SMEs. At the same time, large firms have profited somewhat more than SMEs from banks' improved liquidity position (in the sense that banks' liquidity position contributed to an easing of credit standards for large firms). The lower net tightening for loans to enterprises in the second quarter of 2009 was also reflected in the terms and conditions for both loans to large enterprises and

**Chart B Changes in terms and conditions for approving loans or credit lines to enterprises**

(net percentages of banks reporting tightening terms and conditions)



Note: The net percentages refer to the difference between the sum of the percentages for "tightened considerably" and "tightened somewhat" and the sum of the percentages for "eased somewhat" and "eased considerably".

to SMEs. Overall, the degree of net tightening of terms and conditions was mostly higher for large firms than for SMEs.

Expectations regarding credit standards applied to loans and credit lines to enterprises for the third quarter of 2009 point to a further lessening of the net tightening (12%; see Chart A).

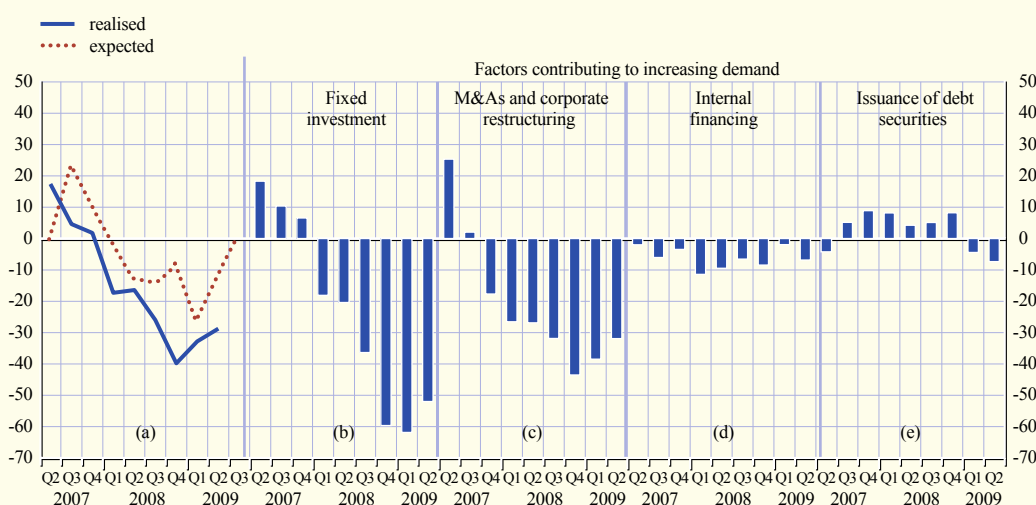
**Loan demand:** According to respondent banks, net demand for loans by enterprises continued to decline in the second quarter of 2009, reaching a net percentage level of -29% (after -33% in the first quarter; see Chart C). The fall in net demand was driven by a strong decrease in the financing needs for fixed investment (-52%, after -62% in the first quarter) and mergers and acquisitions (M&As) and corporate restructuring (-32%, after -39% in the previous quarter). With respect to the use of alternative finance, while loans from other banks or non-banks supported the net demand for corporate loans, internal finance contributed moderately negatively to enterprises' net demand for loans. The issuance of debt securities and equity also contributed negatively to the net demand for loans, to a somewhat larger extent than in the first quarter. This may reflect improved market conditions for issuing debt securities and equity in the second quarter of 2009.

In terms of borrower size, based on the diffusion index<sup>4</sup>, the somewhat less negative net loan demand was driven by both large firms and SMEs. Regarding the maturity spectrum, net demand for long-term corporate loans was considerably less negative in the second quarter, whereas net demand for short-term corporate loans continued to decline.

4 The diffusion index is defined as the net percentage weighted according to the intensity of the response, giving lenders who have answered "considerably" a weight twice as high (score of 1) as lenders having answered "somewhat" (score of 0.5).

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

(net percentages)



Notes: In panel (a), the net percentages refer to the difference between the sum of the percentages for "increased considerably" and "increased somewhat" and the sum of the percentages for "decreased somewhat" and "decreased considerably". The net percentages for the questions related to the factors are the difference between the percentage of banks reporting that the given factor contributed to an increase in demand and the percentage reporting that it contributed to a decline. "Realised" values refer to the period in which the survey was conducted. "Expected" values refer to the expected changes over the next three months.

For the third quarter of 2009, net demand for loans by enterprises is expected to turn positive (1%), which would be the case for the first time since the fourth quarter of 2007 (see Chart C).

### Loans to households for house purchase

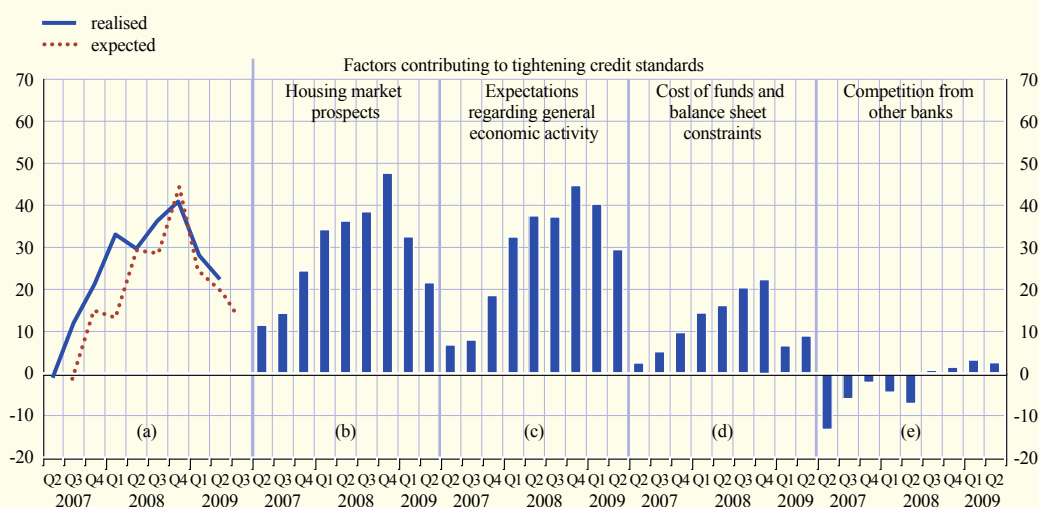
**Credit standards:** In the second quarter of 2009, the net percentage of banks reporting a tightening of credit standards for loans to households for house purchase decreased further to 22% (see Chart D), after 28% in the first quarter of 2009 and down from its historical peak in the fourth quarter of 2008 (at 41%). Expectations regarding general economic activity (29%, after 40% in the first quarter) and housing market prospects (22%, after 33% in the previous quarter) remained the main factors contributing to the net tightening of credit standards. By contrast with loans to enterprises, banks' cost of funds and balance sheet constraints contributed to a slight further tightening of credit standards for housing loans in the second quarter of 2009 (9%, after 7% in the previous quarter).

As regards the terms and conditions for loans for house purchase, the net tightening of margins was reduced considerably in the second quarter, in particular for average loans (10%, after 38%), but also for riskier loans (35%, after 52% in the first quarter). By contrast, for non-price terms and conditions, the net tightening was hardly reduced in the second quarter. In particular, the net tightening of loan-to-value ratios remained constant at a still relatively high level by historical standards of 25%. In addition, the net tightening of collateral requirements remained broadly unchanged at 18% (after 19% in the previous quarter).

Looking ahead to the third quarter of 2009, credit standards for loans for house purchase are expected to tighten somewhat less (12%; see Chart D).

**Chart D Changes in credit standards applied to the approval of loans to households for house purchase**

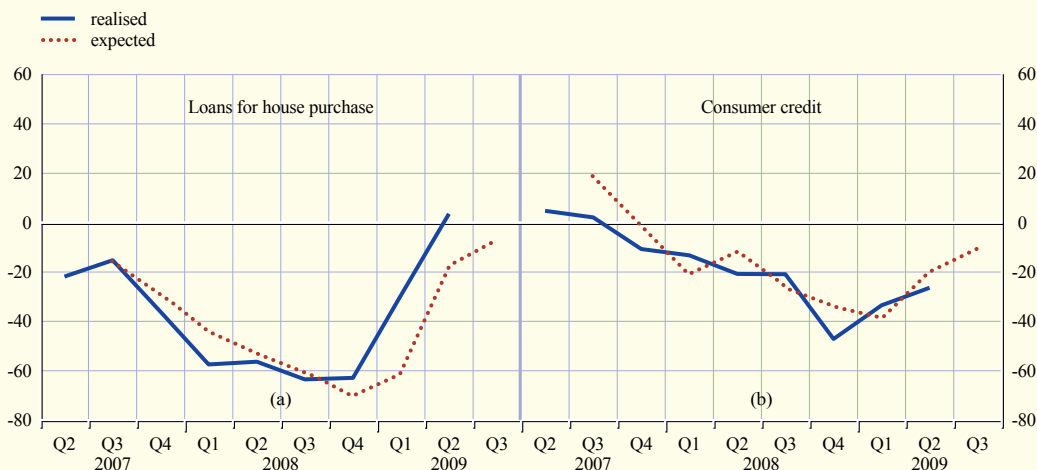
(net percentages)



Note: See notes to Chart A.

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

(net percentages)



Notes: The net percentages refer to the difference between the sum of the percentages for “increased considerably” and “increased somewhat” and the sum of the percentages for “decreased somewhat” and “decreased considerably”. “Realised” values refer to the period in which the survey was conducted. “Expected” values refer to the expected changes over the next three months.

**Loan demand:** The net demand for housing loans turned positive in the second quarter of 2009 (4%, after -30% in the first quarter; see Chart E) for the first time since the second quarter of 2006 when the moderation of the annual rate of growth of housing loans started. The increase in the net demand for housing loans was driven in particular by a considerably less negative assessment of housing market prospects and of consumer confidence compared with the first quarter. For the third quarter of 2009, net demand for housing loans is expected to decline (-7%).

#### Consumer credit and other lending to households

**Credit standards:** In the second quarter of 2009, the net percentage of banks reporting a tightening of credit standards for consumer credit and other lending to households declined further to 21% (see Chart F), from 26% in the first quarter and down from its historical peak of 42% observed in the fourth quarter of 2008. The main factor behind the net tightening was banks’ perception of risk, mainly related to expectations regarding general economic activity and the creditworthiness of consumers. As regards the terms and conditions on consumer credit and other lending to households, banks continued to increase the margins on both average and riskier loans, but to a considerably lower extent than in the first quarter.

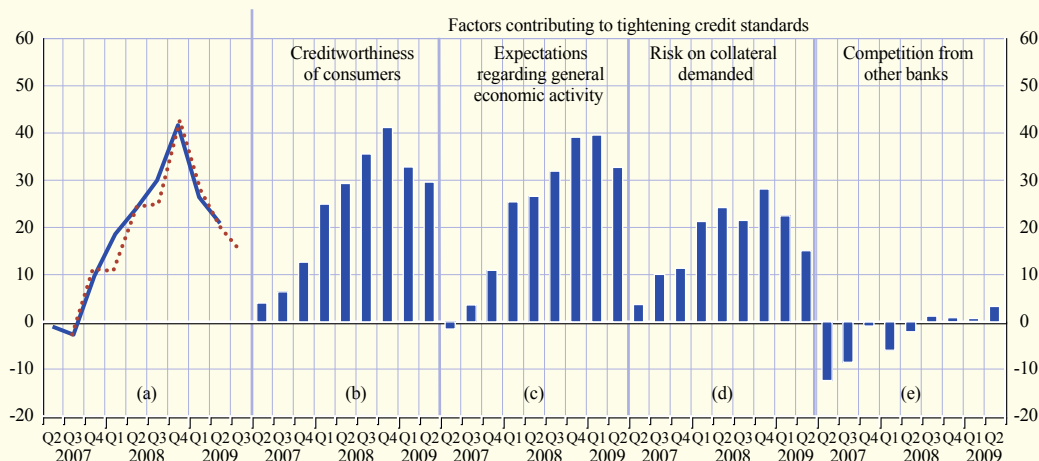
For the third quarter of 2009, the net tightening of credit standards for consumer credit and other lending to households is expected to decline further to 15% (see Chart F).

**Loan demand:** In the second quarter of 2009, net demand for consumer credit and other lending to households remained negative, although somewhat less so compared with the previous quarter (-26%, from -34% in the previous quarter; see Chart E). The two main factors dampening demand continued to be consumer confidence as well as lower spending on durable consumer goods.

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

(net percentages)

— realised  
 ..... expected



Note: See notes to Chart A.

For the third quarter of 2009, net demand for consumer credit and other lending to households is expected to become less negative (-10%).

### Ad hoc questions on the financial turmoil

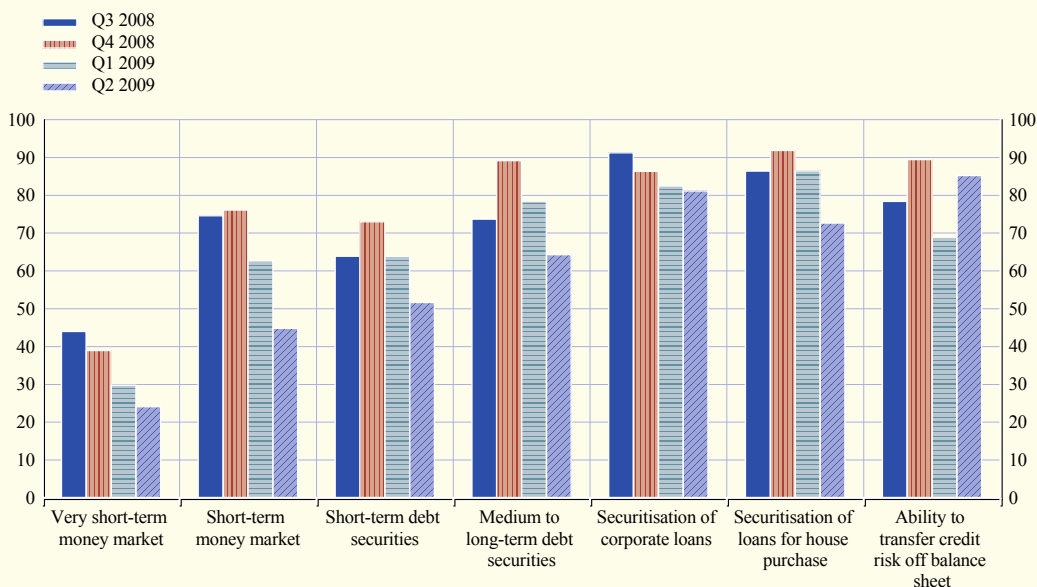
In line with the ad hoc questions included in the previous survey rounds, the July 2009 survey contained a set of ad hoc questions addressing the impact of the financial market tensions experienced since the second half of 2007. It was supplemented by a new ad hoc question on the impact of the introduction of the Basel II capital adequacy framework on bank credit standards.

In the second quarter of 2009, banks reported that their access to wholesale funding was less impaired compared with the first quarter in most markets and categories shown in Chart G. For the access to funding in the money market, less than 50% of the responding banks indicated that market access, in particular to the very short-term money market, was hampered as a result of the financial turmoil. While the percentage of banks reporting a hampered access to short-term and medium to long-term debt securities markets (52% and 64% respectively) was more elevated, this percentage was considerably lower than in the first quarter. With respect to true-sale securitisation, there was some improvement in market access with respect to housing loans, whereas this was hardly the case for corporate loans. Access to securitisation continued to be hampered according to 70-85% of the responding banks. Over the next three months, banks expect a further improvement in the access to money and debt securities markets, but a broadly unchanged hampered access to securitisation markets compared with the second quarter of 2009.

According to responding banks, access to wholesale funding has improved partly owing to governments' announcements and introduction of recapitalisation support and state guarantees for debt securities issued by banks. 60% of the responding banks (up from around 50% in the

Chart G Access to wholesale funding

(percentages)



Notes: Figures indicate the percentage of banks reporting that access to particular sources of wholesale funding have been hampered. The figure for each column is calculated as the number of banks indicating that particular source as a percentage of the number of banks not replying “not applicable” in response to this question. These totals are weighted averages of country results.

first quarter) reported “some” or a “considerable” impact from the government support schemes on their access to funding in the second quarter of 2009. For the next three months, they expect a broadly stable support by such government schemes for their access to wholesale funding.

In line with the improved access to money markets and debt securities markets, banks reported that the impact on bank lending, as regards margins and in particular as regards quantities, resulting from hampered market access declined in the second quarter of 2009. The impact continued to be stronger for the margins than for the amount of loans granted to borrowers. With respect to the next three months, banks reported that they expect a similar impact on their willingness to lend and on margins resulting from the still hampered access to funding from money markets, debt securities markets and securitisation compared with the impact over the past three months.

Finally, a new ad hoc question addressed the extent to which the introduction of the more risk-sensitive Basel II capital adequacy framework (Capital Requirements Directive; CRD) has affected, via its potential impact on banks’ capital position, banks’ lending policies since the first quarter of 2008. The CRD was implemented from January 2007 onwards and EU banks started reporting CRD-based capital ratios as from January 2008. According to the majority of responding banks, the transition to the CRD has had basically no impact on credit standards for loans to enterprises and households since the first quarter of 2008. Nonetheless, the impact has been somewhat higher for loans to enterprises than for loans to households. With regard to loans to enterprises, large enterprises were somewhat more affected than SMEs.

## 2.2 SECURITIES ISSUANCE

As in previous months, the annual growth rate of debt securities issued by euro area residents remained at a high level in May 2009. The growth of debt securities issuance by non-financial corporations and the government sector continued the strong momentum observed since early 2009. The annual growth rate of issuance of quoted shares increased moderately further, primarily driven by euro area MFIs' efforts to raise new equity capital and supported by improving stock market developments.

### DEBT SECURITIES

The annual growth rate of debt securities issued by euro area residents remained at a high level in May 2009, standing at 12.0% compared with 12.1% in April 2009 (see Table 3). Whereas the annual growth rate of short-term debt securities issued decreased by 3.1 percentage points to 22.7% in May 2009 compared with the previous month, the annual growth rate of long-term debt securities issued increased moderately over the same period by 0.3 percentage point to 10.6%. The issuance of long-term fixed rate debt securities predominates the issuance of long-term variable rate debt securities, although the latter type of securities has become more popular in recent years. Nevertheless, following a period of strong net issuance of long-term variable rate debt securities at the end of 2008, market participants have again favoured the issuance of long-term fixed rate debt securities, possibly reflecting a steepening of the yield curve. Thus, the annual growth rate of issuance of long-term fixed rate securities increased from 8.4% in April 2009 to 9.2% in May 2009, whereas that of long-term variable rate securities declined to 14.2% in May 2009, down from 15.7% in the previous month.

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 13.5% in May 2009, down by around 2 percentage points compared with the month before. The decrease was mainly caused by a deceleration of growth in debt securities issued at short-term maturities (see Chart 7).

Table 3 Securities issued by euro area residents

Issuing sector	Amount outstanding (EUR billions) 2009 May	Annual growth rates <sup>1)</sup>					
		2008 Q2	2008 Q3	2008 Q4	2009 Q1	2009 April	2009 May
<b>Debt securities</b>	<b>13,927</b>	<b>6.9</b>	<b>7.3</b>	<b>7.8</b>	<b>10.6</b>	<b>12.1</b>	<b>12.0</b>
MFIs	5,455	7.8	8.2	5.7	5.9	6.4	5.5
Non-monetary financial corporations	2,043	21.4	22.9	23.5	29.3	30.4	29.4
Non-financial corporations	741	5.9	4.1	5.0	7.6	9.9	9.9
General government	5,687	2.2	2.4	5.6	10.2	12.5	13.6
<i>of which:</i>							
Central government	5,338	2.3	2.4	5.8	10.5	12.6	13.9
Other general government	349	1.3	3.0	2.9	5.9	10.6	9.4
<b>Quoted shares</b>	<b>3,580</b>	<b>0.9</b>	<b>0.6</b>	<b>0.8</b>	<b>1.2</b>	<b>1.7</b>	<b>2.0</b>
MFIs	455	1.5	2.8	4.9	7.2	8.2	8.9
Non-monetary financial corporations	255	2.4	2.6	2.6	3.2	3.4	3.2
Non-financial corporations	2,871	0.6	0.0	-0.1	0.0	0.5	0.8

Source: ECB.

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

For non-financial corporations, the annual growth rate of debt securities issued remained unchanged at 9.9% in May 2009. Likewise, the six-month annualised growth rate of debt securities issued remained at 16.3%, the highest level since the summer of 2003. The debt securities issuance of non-financial corporations continued to be dominated by long-term fixed rate debt securities, for which the annual growth rate increased to 21.9% in May 2009, up from 19.9% in the previous month. This compares with annual growth rates of -2.1% for long-term variable rate debt securities and -21.3% for short-term variable rate debt securities in May 2009. Such a rapid pace for long-term fixed rate debt issuance may reflect some degree of substitution of market-based debt financing for bank loans 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 Eurosystem bank lending survey. The fact that M&A activity, one of the traditional main determinants of debt securities issuance by the corporate sector, remains subdued also lends some support to the notion of substitution of market-based debt financing for bank financing, at least as regards larger companies that are able to tap the bond markets for financing. Moreover, 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.

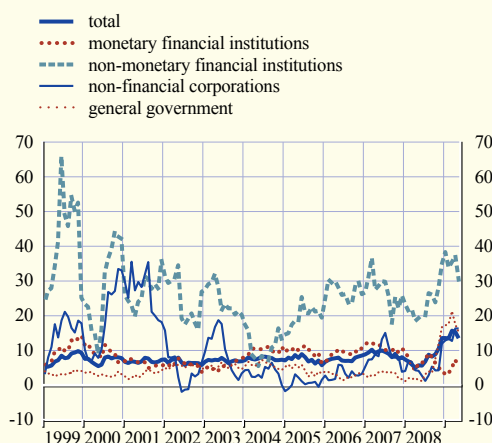
As regards the financial sector, in May 2009 the annual growth rate of debt securities issued by MFIs declined somewhat to 5.5%, following a rebound in the first months of 2009 in the context of government guarantees for the issuance of bank bonds. Whereas long-term fixed rate debt securities issuance by MFIs remained robust in May 2009, notable declines were recorded in the growth rates of both short-term debt securities and long-term variable rate debt securities. The seasonally adjusted six-month annualised growth rate of debt securities issued by MFIs declined by 0.4 percentage point to 6.0% in May 2009, which masked, on the one hand, a strong decrease in short-term debt securities issued (to 6.3% from 11.7% in the previous month) and, on the other hand, an increase in long-term debt securities issued (to 5.9% from 5.3% in the month before).

Turning to non-monetary financial corporations, the annual growth rate of debt securities issued moderated to 29.4% in May 2009 compared with 30.4% in April 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. The issuance activity of non-monetary financial institutions 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 13.6% in May 2009, well above the average rate of around 4% since 1999. However, the seasonally adjusted six-month annualised growth rate of debt securities issued by the government sector moderated by 2.2 percentage points to 15.3% in May 2009. Overall, the high level of issuance reflects the continued substantial funding needs of euro area governments.

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

(six-month annualised growth rates; seasonally adjusted)



Source: ECB.



## QUOTED SHARES

The annual growth rate of quoted shares issued by euro area residents continued to increase moderately overall, reaching 2.0% in May 2009 (see Chart 8). While almost all sectors contributed to this increase, the annual growth rate of equity issuance by MFIs remained particularly high at 8.9%, reflecting the efforts of many euro area banks to strengthen their balance sheets by bolstering their capital bases. In addition, the annual growth rate of quoted shares issued by non-financial corporations rose to 0.8% in May 2009, possibly fostered by positive stock market developments in recent months.

## 2.3 MONEY MARKET INTEREST RATES

*Both unsecured and secured money market interest rates generally declined in July 2009. The spread between unsecured and secured interest rates at the three-month maturity also declined during that period, as unsecured rates fell faster than secured rates. The Eurosystem continued to provide the financial system with abundant amounts of liquidity in July by means of fixed rate tender procedures with full allotment in its main and longer-term refinancing operations. In addition, in July the Eurosystem began conducting outright purchases of covered bonds in the context of the covered bond purchase programme decided in June.*

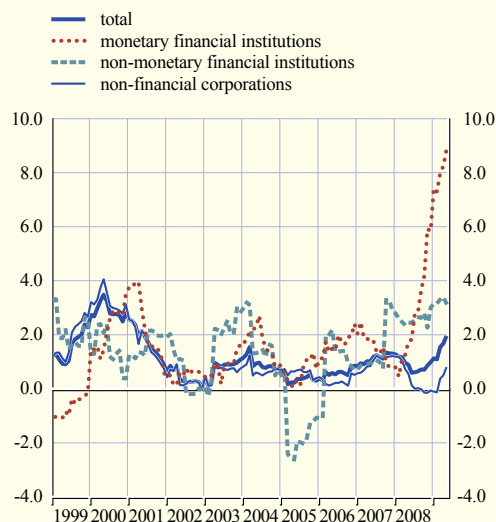
Unsecured money market rates declined in July 2009. On 5 August the one-month, three-month, six-month and twelve-month EURIBOR rates stood at 0.523%, 0.884%, 1.133% and 1.345% respectively – i.e. 22, 20, 17 and 15 basis points below the levels observed on 1 July. The decline was slightly more pronounced for shorter maturities, with the result that the spread between the twelve-month and one-month EURIBOR rates rose slightly to stand at 82 basis points on 5 August, compared with 76 basis points on 1 July (see Chart 9).

EONIA swap rates broadly declined in July, albeit at a slower pace than unsecured money market interest rates. As a result, spreads between EURIBOR rates and EONIA swap rates also declined in that month. For the three-month segment, this spread declined slightly, falling from 49 basis points on 1 July to 42 basis points on 5 August, a level last seen in March 2008. It thereby reached levels significantly below those observed in the period following the intensification of the financial turmoil in September 2008.

The interest rates implied by the prices of three-month EURIBOR futures maturing in September 2009, December 2009 and March 2010 also declined slightly to stand at 0.875%, 1.060% and 1.285% respectively on 5 August – i.e. 16 and 10 basis points below and 1 basis point above the rates prevailing on 1 July.

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

(annual growth rates)



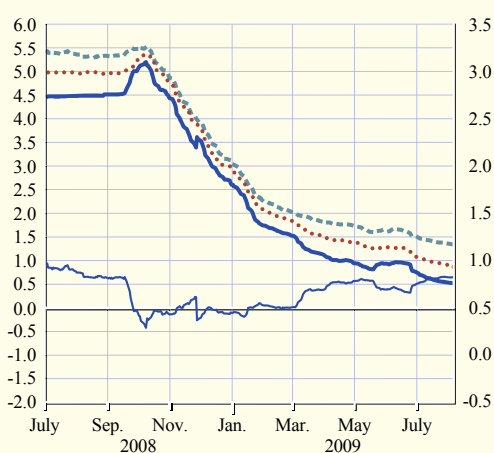
Source: ECB.

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

Chart 9 Money market interest rates

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

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

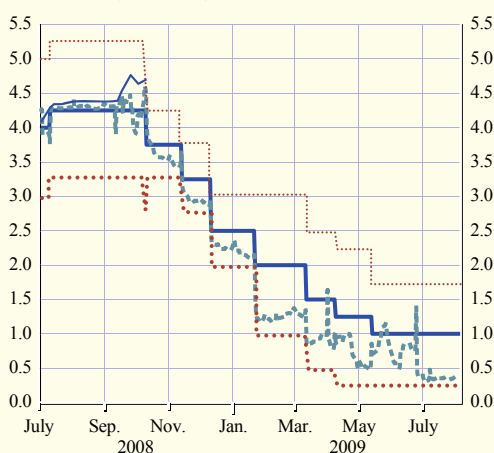


Sources: ECB and Reuters.

Chart 10 ECB interest rates and the overnight interest rate

(percentages per annum; daily data)

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



Sources: ECB and Reuters.

The EONIA was relatively stable in July, standing at levels slightly below 0.4%. The only exception was on 7 July, the final day of the sixth reserve maintenance period of the year, when the EONIA rose to 0.476% as a result of the Eurosystem conducting a liquidity-absorbing fine-tuning operation, absorbing €276 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 0.64%. The behaviour of the EONIA is consistent with the existence of very considerable excess liquidity following the very large amount of liquidity allotted on 24 June in the first one-year longer-term refinancing operation (LTRO) with a fixed rate and full allotment (for details, see Box 3). It also reflects the Governing Council's decision to leave the key ECB interest rates unchanged at its meeting on 2 July. On 5 August the EONIA stood at 0.343% – i.e. 66 basis points below the rate on the main refinancing operations (MROs) 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 counterparties chose not to roll over significant amounts of refinancing with the Eurosystem at the one-week, one-month, three-month and six-month maturities. On 5 August the main refinancing operations accounted for only 9% of total outstanding liquidity, compared with 50% on 23 June.

In the main refinancing operations conducted on 7, 14, 21 and 28 July, the ECB allotted €106.4 billion, €100.3 billion, €88.3 billion and €97.8 billion respectively. It thereby allotted €165.2 billion, €286 billion, €285.3 billion and €269.1 billion in excess of the respective benchmark amounts.

As regards longer-term operations, the ECB conducted three special LTROs with maturities of one, three and six months, as well as a regular three-month LTRO. The ECB allotted €38.3 billion in the special LTRO with a maturity of one month on 7 July, and €3 billion and €9 billion respectively in the special LTROs with maturities of three and six months on 8 July. In the regular LTRO on 29 July the ECB allotted €9.5 billion. The net liquidity drain from the decline in the refinancing volumes of LTROs in the maintenance period starting on 8 July was around €48 billion.

As a result of the significant decline in MRO allotment amounts, the amount of excess liquidity in the euro area money markets declined gradually in the course of the month. Nevertheless, counterparties generally obtained liquidity in excess of what would have been required in order to fulfil their reserve requirements and accommodate autonomous factors. Excess liquidity was mainly absorbed by recourse to the deposit facility, which reached a record high of €316 billion per day towards the end of the maintenance period ending on 7 July, marginally above its previous peak in January. Daily recourse to the deposit facility stood at €133.4 billion at the beginning of the maintenance period starting on 8 July, before rising fairly steadily thereafter. On 5 August daily recourse to the deposit facility stood at €225.9 billion.

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 2, 9, 16, 23 and 30 July 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.

Finally, between 6 July and 5 August the central banks of the Eurosystem purchased eligible covered bonds with an outstanding nominal value of €5.0 billion.

### Box 3

#### THE IMPACT OF THE FIRST ONE-YEAR LONGER-TERM REFINANCING OPERATION

On 24 June 2009, in the context of its enhanced credit support, the Eurosystem conducted its first liquidity-providing longer-term refinancing operation with a maturity of one year. This measure is designed to improve banks' liquidity positions on a longer-term basis, further promoting the reduction of term spreads in the money market while encouraging banks to maintain and increase their provision of credit to the real economy. This measure is fully in line with those undertaken since October 2008, which have focused primarily on banks as the main source of credit in the euro area economy. That first one-year LTRO resulted in a record €442 billion being allotted to the euro area banking system at a fixed rate of 1%. This exceptional amount represents around 1.4% of the total assets of euro area credit institutions as at June 2009 and mainly reflects banks' current demand for liquidity available at longer horizons. This one-year operation, by further alleviating the liquidity risk faced by banks, fulfils one of the conditions necessary in order for banks to increase their provision of credit.

The one-year operation created a large liquidity surplus at the time of its allotment, which should, in turn, encourage the expansion of credit by reducing the liquidity risks faced by banks. Having peaked in January 2009, banks' liquidity surplus – i.e. the difference between total outstanding

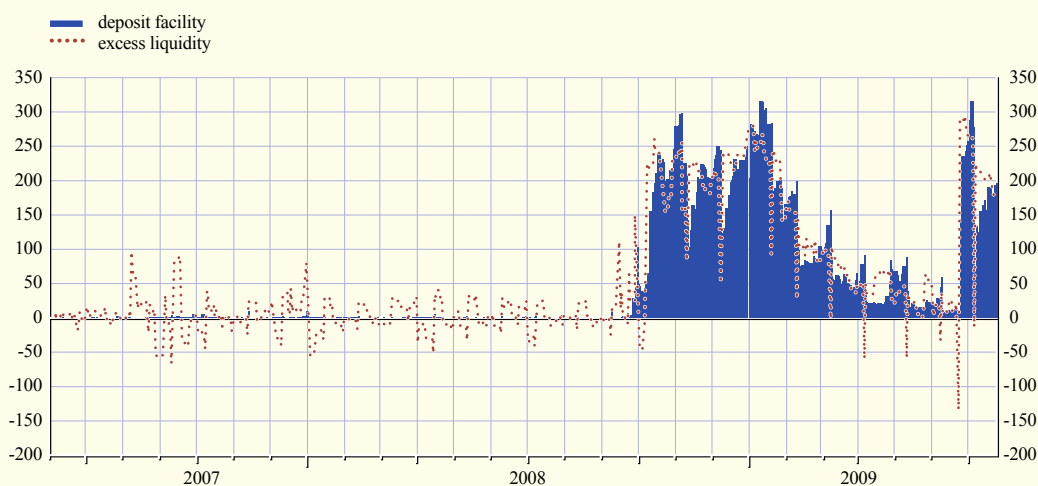
liquidity and the actual liquidity needs of the system (calculated as the sum of net autonomous factors and reserve requirements) – almost disappeared in the first half of this year, before increasing again to stand at a new record high following the one-year operation on 24 June. Providing banks with large amounts of liquidity for one year at a favourable rate allows them to build up liquidity buffers in case negative liquidity shocks occur over the maturity of the operation. This, in turn, helps to enhance confidence, thereby increasing banks' willingness to lend to the real economy.

The fact that this liquidity buffer is largely held in the deposit facility does not affect its confidence-enhancing impact in the presence of heightened liquidity risks. Recourse to the deposit facility is mechanically linked to the liquidity surplus, as long as the deposit facility is remunerated at more than 0%.<sup>1</sup> Directly after the operation, given the duration of credit approval processes and the lagged nature of reserve requirements, credit institutions deposited the surplus liquidity in the deposit facility. The use of the deposit facility to accommodate variations in surplus liquidity is naturally much more immediate than the process of initiating credit expansion. Even if banks use these extra funds to increase credit to the real economy promptly, as long as those funds end up in banks somewhere within the euro area banking system, surplus liquidity will remain and the funds will still need to be deposited with the Eurosystem on a daily basis. In the longer term, by contrast, banks can be expected to grant credit to the economy and, at the same time, create deposits that are subject to reserve requirements. Thus, the reserve base will gradually increase and lead to a decline in the liquidity surplus, all other things being equal. However, this hinges on a broad set of economic determinants, as well as banks' business considerations. Just as an increase in lending does not necessarily imply a reduction in the use of

1 Instead of having recourse to the deposit facility, banks could place these funds in their current accounts, thereby either fulfilling their reserve requirements or increasing their excess reserves. Funds placed in the deposit facility are currently remunerated at a rate of 0.25%, and funds used for the fulfilment of minimum reserve requirements are remunerated at the rate on the main refinancing operations (currently 1%). By contrast, excess reserves on banks' current accounts are not remunerated at all.

### Recourse to the deposit facility and excess liquidity

(EUR billions)



Sources: ECB and ECB calculations.

Note: Excess liquidity is calculated as the difference between outstanding liquidity provided through Eurosystem operations and liquidity needs (measured as the sum of autonomous factors and reserve requirements).

the deposit facility, conversely, a reduction in recourse to the deposit facility does not necessarily imply increased lending to firms and households, as it may reflect other adjustments to banks' liquidity positions.

Thus, banks' balance sheet developments need to be monitored carefully in order to obtain indications as to the utilisation of the liquidity provided by the Eurosystem. What has been observed so far is that the amounts deposited with the Eurosystem through the deposit facility have developed in line with the size of the liquidity surplus in the period following Lehman Brothers' collapse and have increased markedly following the one-year operation carried out in June (see chart).

To summarise, banks' propensity to lend to the real economy does not follow from the amount of surplus liquidity; rather, it depends on the extent to which there is an associated reduction in liquidity risk, with markets assured that liquidity will be available in abundance over the maturity of the operation in question. In this sense, the one-year operation conducted on 24 June should help banks to increase their loans to the real economy, despite the fact that, at an aggregate level, the excess liquidity generated by means of this operation is, for the time being, apparently being absorbed by the deposit facility on a daily basis.

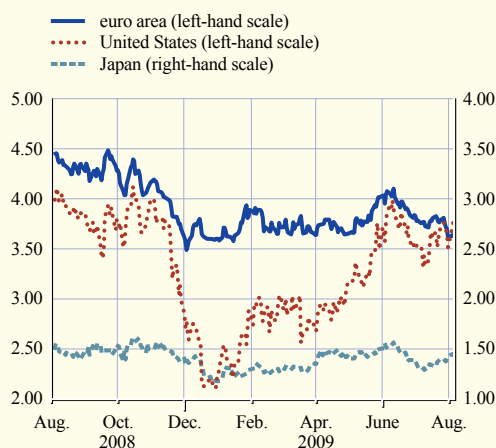
## 2.4 BOND MARKETS

*Bond markets showed mixed developments in July. At the same time, an increase in investor confidence was also visible in the spreads of euro area government bonds versus German government bonds. Implied bond market volatility declined further in the euro area, although it increased somewhat in the United States.*

Between end-June and 5 August, ten-year government bond yields in the euro area declined by 20 basis points, standing at 3.7% on 5 August. In the United States meanwhile, ten-year government bond yields increased by about 20 basis points to stand at 3.8% (see Chart 11). Accordingly, the ten-year nominal interest rate differential between US and euro area government bonds narrowed to around -10 basis points. Developments in bond markets during most of July were primarily related to lower risk aversion and a more positive assessment of the economic outlook. At the same time, improvements in the euro area bond market are also reflected in the option-implied volatility, which continued to decline further, reaching levels last observed in the summer of 2008. This is in contrast with the US bond market implied volatility, which increased during July, reversing the declines registered in June.

**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.

In the first two weeks of July euro area long-term government bond yields declined, while at the same time equity markets came under downward pressure. In mid-July, investor confidence improved as consensus among market participants emerged that the worst of the economic downturn and the financial crisis may be over. Towards the end of the month, however, the release of some euro area data, including the flash HICP, M3 and capacity utilisation rates, put some downward pressure on yields.

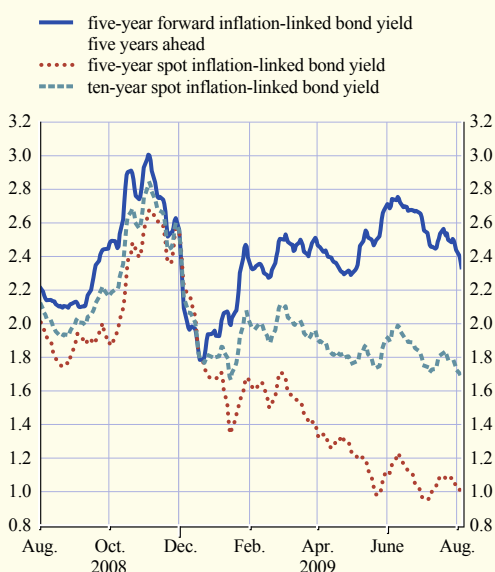
The intra-monthly pattern of government bond yields in the United States in July was broadly similar to that in the euro area. The last week of July, however, saw the rising risk appetite observed before in the US market dampened by mixed US economic data and the sharp fall in Chinese equity markets (see Section 2.6). These developments towards the end of the month, however, were quickly reversed in the first days of August, with yields finally standing 20 basis points higher than at the end of June.

Increased risk appetite also supported lower-rated euro area sovereign issuers, boosting for example the demand for Italian and Greek bonds. As a result, ten-year government bond yield spreads vis-à-vis Germany narrowed considerably in the course of July. The government bond yields of Ireland, Greece and Portugal performed best, narrowing by 70, 60 and 40 basis points respectively between end-June and 5 August. The spreads of French and Dutch ten-year government bonds versus Germany came back to close to the levels before the failure of Lehman Brothers in September 2008.

Yields on euro area long-term inflation-linked government bonds at the five-year maturity remained broadly unchanged at 1.0% in July, while ten-year real yields declined by 10 basis points to 1.7% (see Chart 12) on 5 August. As a consequence, the five-year forward real yield five years ahead declined by 30 basis points to 2.3% on 5 August.

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

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



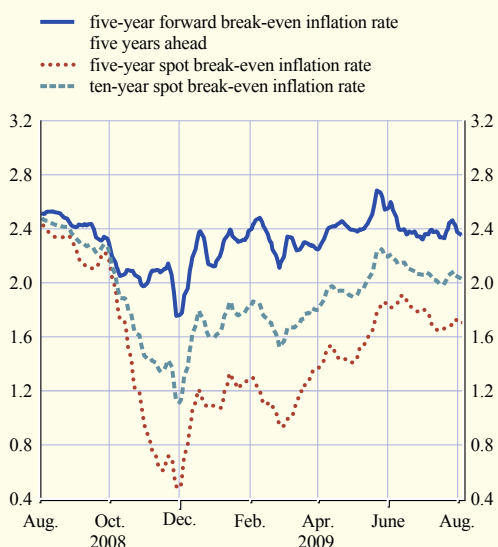
Sources: Reuters and ECB calculations.

Regarding inflation expectations extracted from financial market data, the ten-year spot break-even inflation rate in the euro area remained unchanged at 2.0%. The five-year spot break-even inflation rate, however, decreased by around 10 basis points to 1.7% (see Chart 13). Thereby, the implied five-year forward break-even inflation rate five years ahead remained unchanged at 2.3% on 5 August. At the same time, the respective five-year forward inflation swap rate five years ahead remained stable overall at about 2.6%.

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 slightly in late July compared with end-June. This followed the release of some economic indicators which came out slightly worse than expected.

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

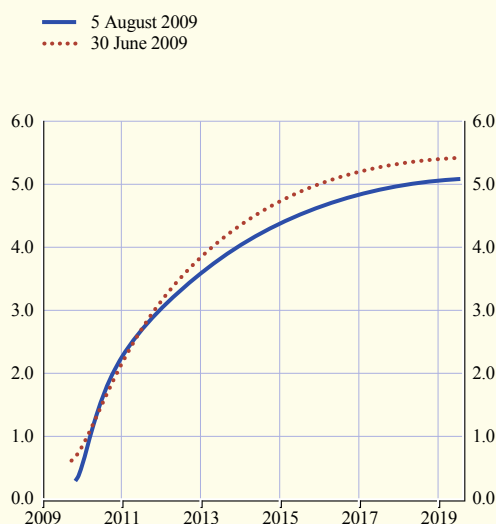
(percentages per annum; five-day moving averages of daily data; seasonally adjusted)



Sources: Reuters and ECB calculations.

**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.

Corporate bond spreads in the euro area continued to decline in July, falling in some cases back to the levels that prevailed before the bankruptcy of Lehman Brothers. The observed trend towards lower risk aversion, coupled with the more benign expectations about the economic outlook which characterised the second quarter of 2009, continued in July. Once more, this is reflected in particular in the narrowing of corporate bond spreads for lower-investment-grade financial bonds and speculative-grade bonds.

## 2.5 INTEREST RATES ON LOANS AND DEPOSITS

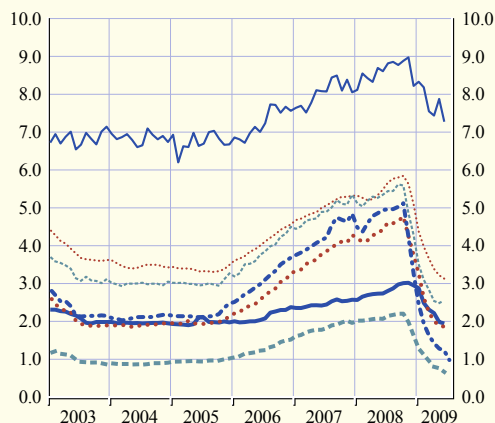
*In June 2009 most MFI interest rates on new loans to and deposits from households and non-financial corporations decreased somewhat further. The downward trend in MFI interest rates that started in November 2008 is consistent with the reductions in key ECB interest rates and falls in money market rates and bond yields over this period, showing a degree of pass-through broadly in line with past patterns.*

In June 2009 most short-term MFI interest rates on new loans and deposits were lower than in the previous month, reflecting a continued pass-through of the substantial decrease of money market rates recorded since November 2008 (see Chart 15). Whereas in June 2009 most of the short-term deposit rates declined slightly less than the three-month EURIBOR, with the exception of rates

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

(percentages per annum; rates on new business)

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

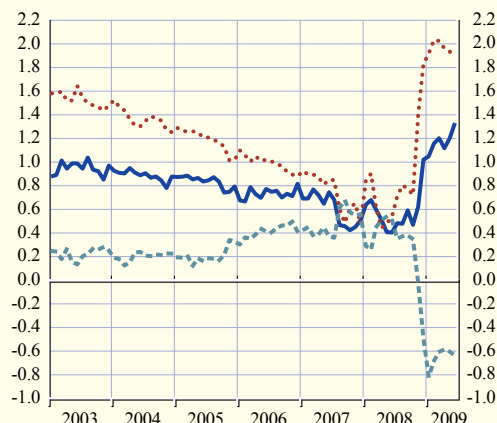


Source: ECB.

**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
- ..... loans to households for house purchase 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



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.

on large short-term loans to non-financial corporations which on average slightly increased, most short-term lending rates fell by somewhat more than the three-month EURIBOR. Overall, the spreads on short-term MFI interest rates vis-à-vis short-term money market rates remained wide, but can be expected to tighten as changes in market rates are eventually being passed on (see Chart 16).

Taking a longer-term perspective, the three-month EURIBOR dropped by 389 basis points between October 2008 and June 2009, compared with decreases of 271 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 between 290 and 300 basis points for rates on 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 as uncertainty about income and debt-servicing capacity, this confirms that the reductions in policy rates are feeding through to retail lending and deposit rates to a broadly similar degree as in the past. The article entitled "Recent developments in the retail bank interest rate pass-through in the euro area" in this issue of the Monthly Bulletin provides a more in-depth discussion of the adjustment of MFI interest rates in the current circumstances.

Turning to longer-term maturities, the rates on long-term time deposits from households declined by 13 basis points in June 2009, whereas longer-term rates on loans to households for house purchase



and on small loans to non-financial corporations remained broadly unchanged in the same month. By contrast, in June 2009 large long-term loans declined by some 30 basis points. This compares with a slight increase in five-year government bond yields in June 2009.

From a longer-term perspective, the continued downward trend in most long-term MFI interest rates recorded since mid-2008 should be viewed against the background of the substantial declines in long-term market rates. For example, by June 2009 the five-year government bond yield stood 161 basis points lower than the level observed in June 2008, whereas over the same period MFI interest rates on long-term deposits from non-financial corporations and from households fell by 193 and 99 basis points respectively. Between mid-2008 and June 2009 long-term interest rates on small and large loans to non-financial corporations declined by 94 and 184 basis points, respectively. By contrast, long-term loans to households for house purchase (with over five and up to ten years' initial rate fixation) only declined by 57 basis points over the same period, indicating a substantial widening of the lending spread for this category. Overall, these developments might reflect, on the one hand, the typical sluggish adjustment of retail bank interest rates to changes in market rates and, on the other hand, some widening of credit risk premia in light of the ongoing economic slowdown.

Euro area banks' profitability depends inter alia on loan-deposit margins on outstanding amounts and on new business rates. Between February and June 2009 both measures remained broadly unchanged. This reflects the fact that banks have passed on the recent reductions in policy rates to their retail lending and deposit rates to a similar degree. Nonetheless, loan-deposit margins are currently well below the levels recorded prior to the financial turmoil. This reduction in loan-deposit margins may, in particular, reflect banks' tendency during the crisis to offer higher deposit rates in order to attract retail deposits to substitute for wholesale funding. At the same time, evidence from corporate reports shows that a number of banks have recently been able to generate significant income from other businesses.

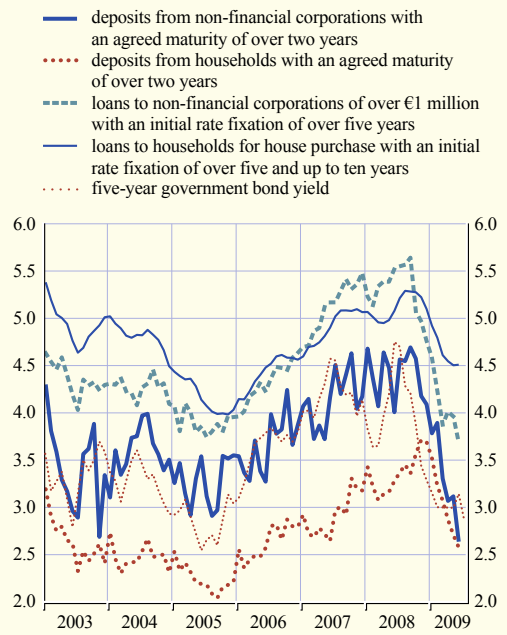
Euro area banks' profitability depends inter alia on loan-deposit margins on outstanding amounts and on new business rates. Between February and June 2009 both measures remained broadly unchanged. This reflects the fact that banks have passed on the recent reductions in policy rates to their retail lending and deposit rates to a similar degree. Nonetheless, loan-deposit margins are currently well below the levels recorded prior to the financial turmoil. This reduction in loan-deposit margins may, in particular, reflect banks' tendency during the crisis to offer higher deposit rates in order to attract retail deposits to substitute for wholesale funding. At the same time, evidence from corporate reports shows that a number of banks have recently been able to generate significant income from other businesses.

## 2.6 EQUITY MARKETS

*Global stock prices increased in the course of July, reaching the highest values of the year. Favourable earnings announcements and a more positive market assessment of the economic outlook underlie these developments. Stock price increases have been broadly based across all sectors. Implied stock market volatility continued to decline on both sides of the Atlantic.*

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

(percentages per annum; rates on new business)



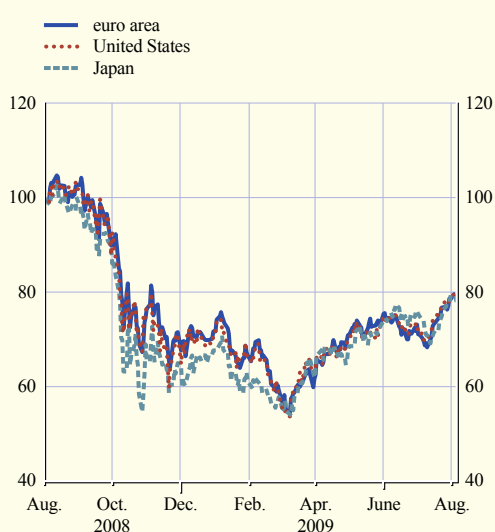
Between the end of June and 5 August, euro area stock prices, as measured by the broad-based Dow Jones EURO STOXX index, increased by around 11% (see Chart 18). Over the same period, stock prices in the United States, as measured by the Standard & Poor's 500 index, increased by around 9%, while in Japan stock prices, as measured by the Nikkei 225 index, rose by around 4%. Favourable earnings announcements for the second quarter of 2009 in the United States, together with the more positive assessment of the US economic outlook by the Federal Open Market Committee, and higher than expected GDP growth figures for China in the second quarter of 2009 have been the major drivers of recent developments in world stock markets. Short-term market uncertainty, as measured by option-implied volatility, continued to decline on both sides of the Atlantic, reaching levels last seen in the summer of 2008 (see Chart 19).

Following a disappointing performance at the beginning of the month, positive macroeconomic news, coupled with improvements in expectations about economic activity, helped equity prices to pick up steadily from the second week of July. This upward trend was only briefly interrupted towards the end of the month, following the release of some economic data and the sharp fall in Chinese equity markets. Improvements in share prices were broadly based across sectors. In the euro area, share prices for the financial sector increased by 14% compared with 8% for the non-financial sector. This is in line with developments in the United States where share prices increased by 17% and 8% for the financial and non-financial sector respectively.

Actual and expected earnings growth for euro area listed companies remained depressed in July. Actual annual earnings-per-share growth for the firms covered by the Dow Jones EURO STOXX

Chart 18 Stock price indices

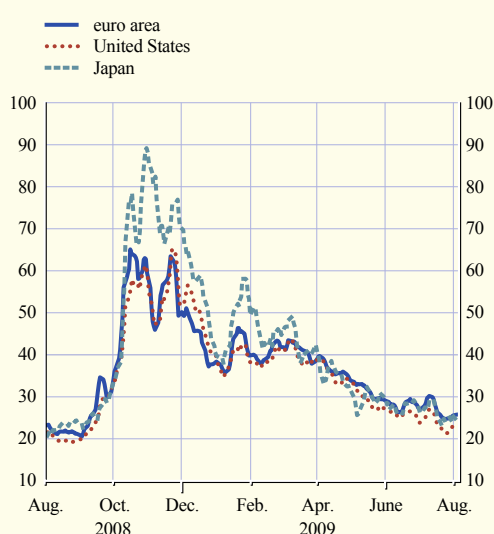
(index: 1 August 2008 = 100; daily data)



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 average of daily data)



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

index came to -36.9% in July, after -35.9% in June. However, the expected growth of earnings per share 12 months ahead was forecasted to improve to 2.2%, compared with -1.2% in June. For the first time since the summer of 2008, a positive trend in expected growth of earnings per share 12 months ahead has been recorded for both the non-financial and financial sectors. At the same time, the euro area price/earnings ratio remains slightly below its historical average.

#### Box 4

### INTEGRATED EURO AREA ACCOUNTS FOR THE FIRST QUARTER OF 2009

The integrated euro area accounts released on 30 July 2009 offer comprehensive and consistent information on the income, spending, financing and portfolio decisions of all sectors of the euro area economy up to the first quarter of 2009,<sup>1</sup> and show how economic agents have reacted to the acute contraction of activity brought about by the intensification of the financial crisis and the associated rise in uncertainty since September 2008. Relative to other data sources, the euro area accounts offer three main benefits. First, they include some new information not previously reported, in particular on the non-financial private sectors (households and non-financial corporations). Second, they contain consistent information on each institutional sector taken as a whole, integrating the financial and non-financial sides of the accounts. Third, they bring together the data within a unified framework, thus enhancing the scope for analysing interactions between financial and real economy variables, as well as interrelations across institutional sectors.<sup>2</sup>

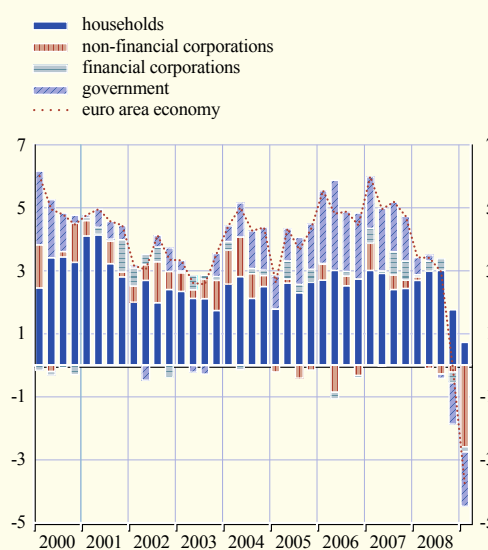
Following a moderate cyclical slowdown in production and income up to the summer of 2008, the euro area economy recorded an exceptionally large contraction of activity in the fourth quarter of 2008 and in the first quarter of 2009, when disposable income of the euro area as a whole experienced the largest annual nominal decline on record, impacting all sectors, with the non-financial corporations sector the most severely affected (see Chart A).

#### Behaviour of institutional sectors

In the first quarter of 2009, the growth of *households'* nominal income declined again, continuing along the path of rapid slowdown that had started in the last quarter of 2008. The pronounced deceleration in the growth

Chart A Euro area gross disposable income-contribution by sectors

(annual percentage changes; percentage point contributions)



Sources: Eurostat and ECB.

1 These data can be found on the ECB's website at <http://sdw.ecb.europa.eu/browse.do?node=2019181>.

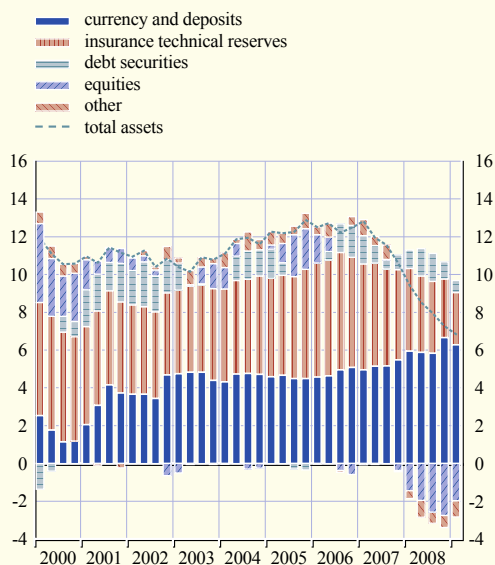
2 For an introduction to the euro area accounts, see the article entitled "The introduction of quarterly sectoral accounts statistics for the euro area" in the November 2007 issue of the Monthly Bulletin.

of compensation of employees (and self-employment income) was somewhat mitigated by a large positive net impact of social transfers and a substantial increase in net interest received (reflecting a larger decrease in interest paid than in interest received). Although a renewed and sizeable deceleration in the consumption deflator supported real disposable income growth, worsening employment prospects, as well as adverse confidence effects associated with weaker housing markets and another steep drop in household net financial worth (mainly as a result of losses on shares), prompted a deeper retrenchment of real consumption (which fell by 1.3%, year on year, in the first quarter of 2009) and a further marked increase in savings (whose composition is structurally dominated by wealthier households). Thus, the household saving ratio again increased rapidly to 14.8% in the first quarter of 2009 (on a four-quarter moving sum basis), 1 percentage point up on the year before, thereby returning to the peak seen in 2002-03. Coupled with falling household capital investment (mainly housing), this resulted in a further large rise in households' net lending,<sup>3</sup> and in reduced loan borrowing. On the financial assets side, the heightened uncertainty continued, resulting in a preference for liquidity, namely currency and deposits, a reduction in holdings of riskier assets (shares) and a slower accumulation of less liquid assets (insurance technical reserves) – see Chart B.

As a result of both the sharp contraction in activity and the rapid decline in inflation in the first quarter of 2009, the nominal value added of *non-financial corporations* (NFCs) fell markedly, namely by 5%, year on year. Their gross operating surplus also decreased sharply as compensation of employees was not adjusted as rapidly as activity, despite considerable further efforts to keep labour costs contained. Savings by NFCs, which had been resilient in the fourth quarter of 2008, shrank abruptly. Against the background of falling global demand, dropping capacity utilisation and persistently tight financial conditions, the annual growth of NFCs' capital formation contracted sharply (by 15.6%, compared with an increase of 6.5% in the third quarter of 2008). Even so, NFCs' net borrowing increased further in the first quarter of 2009 (on a four-quarter moving sum basis) as the adverse impact of the recession on profit margins outweighed investment cutbacks. The annual growth rate of NFCs' external financing slowed further and its composition changed. Net incurrence of loans dropped to very low levels in the first quarter of 2009 (to €31 billion in the quarter, compared with €156 billion a year earlier), largely reflecting the impact of net redemptions of short-term loans on the back of a reduced need for working capital, in particular on account of reduced inventories. Issuance of debt securities,

Chart B Households' financial investment

(four-quarter moving sum; percentage of gross disposable income)



Source: ECB.

<sup>3</sup> The net lending/net borrowing of a sector is the balance of its capital account, i.e. measuring the excess of saving and net capital transfers received over capital investments (net lending) or the reverse (net borrowing). It is also the balance of the financial accounts, measuring the difference between transactions in financial assets and transactions in liabilities. Chart C depicts the net lending/net borrowing by sector, as a percentage of GDP.

by contrast, picked up further in the first quarter of 2009, rebounding strongly after the complete freeze observed in the securities market in the wake of the bankruptcy of Lehman Brothers. The reopening of this market, albeit at high yields, offered an attractive substitute for bank financing, with banks arranging issuance for a fee, instead of carrying assets on their balance sheets. The dynamic issuing activity probably also reflected a growing need for finance by firms that had postponed issuance in the first part of 2008, or attempts to lock in more favourable financing conditions in the corporate bond market. Similarly, issuance of quoted shares picked up as well. At the same time, NFCs again reduced their net purchases of quoted equity in the first quarter of 2009, and continued to draw down their liquidity buffers, as their accumulation of deposits decelerated further, while the pace of net disposals of securities and mutual fund shares slowed down.

The further and rapid deterioration of the *general government* accounts largely reflected the impact of automatic stabilisers, with an increase in the growth of social benefit expenditure, a sharp decline in the growth of social contributions, falling indirect taxes and declining direct taxes on households and NFCs. Treasuries continued to step up their debt issuance considerably in the first quarter of 2009, in order to finance not only existing deficits, but also the large-scale purchases of assets (loans, debt securities and unquoted equity) carried out in the context of financial rescue packages (around €190 billion in the fourth quarter alone) and massive accumulation of cash. This increasing net debt issuance was absorbed by accelerated MFI purchases, seeking safe placements, rather than directly by households, while non-residents likewise remained large-scale purchasers thereof.

The disposable income of *financial corporations* contracted, albeit less rapidly than in the fourth quarter of 2008, but remained at a high level. This decline was due mainly to reduced net interest earned, while the gross operating surplus grew solidly, the latter reflecting increased bank margins on deposits and loans (which, according to national accounts conventions, are not recorded under “interest” – but rather as “output”, thus entering value added) and falling compensation of employees. In the context of ongoing pressures for deleveraging, additions to their balance sheets decreased markedly (at less than €100 billion per quarter in the fourth quarter of 2008 and the first quarter of 2009, compared with up to €1 trillion per quarter during the preceding leverage boom) and entailed a shift towards safer assets, with massive acquisitions of government securities and a general reduction of cross-border exposures.

#### **Euro area income and net lending/net borrowing**

Gross disposable income in the euro area fell by 3.8%, year on year, in nominal terms in the first quarter of 2009 (after -0.1% in the fourth quarter of 2008 and +3.0% in the third quarter of 2008), on the back of the sharp contraction in nominal GDP. The disposable income of NFCs, which had hitherto held up well, shrank by 22.9%, year on year, in the first quarter of 2009 (after -2.9% in the fourth quarter of 2008). Household income growth continued to decelerate, with year-on-year growth standing at 1.1% (after 2.7% in the fourth quarter of 2008 and 4.7% in the third quarter). Government gross disposable income again dropped sharply, namely by 8.6%, year on year, in the first quarter of 2009, after -5.2% in the fourth quarter of 2008. The net disposable income of financial corporations also fell in year-on-year terms in the first quarter of 2009 (see Chart A).

The decline in gross saving for the euro area as a whole accelerated dramatically in the first quarter of 2009 (to -18.8%, year on year, after -7.6% in the fourth quarter of 2008), with the sharp reduction in saving by the government and NFCs (in roughly equal measure) more than compensating for increased household saving. Gross fixed capital formation in the euro area, which had started abruptly to fall on a year-on-year basis in the fourth quarter of 2008, contracted more rapidly in the first quarter of 2009, namely by 10.6%. Nominal capital investment was retrenched in the case of both households (residential investment and capital formation by unincorporated businesses, -11.6% in the year to the first quarter of 2009) and NFCs (-12.8%, after -4.9% in the fourth quarter of 2008 and +5.8% in the third quarter of 2008).

As saving contracted more than capital investment, net lending/net borrowing in the euro area deteriorated yet again, to a deficit of 1.4% of GDP in the first quarter of 2009 on a four-quarter moving sum basis. This development over one-and-a-half years was due, in about equal measure, to a deterioration of the trade balance and to reduced net property income received. From a sectoral point of view, the negative trend in euro area net lending/net borrowing reflects the sharp increase in net borrowing by the government sector, which was higher than the increase in net lending by households (see Chart D).

The euro area thus again had a net financing requirement. The protracted financial turbulence led to a considerable slowdown in gross cross-border transactions in both the fourth quarter of 2008 and the first quarter of 2009. As interbank cross-border relationships were seriously affected by the insolvency of Lehman Brothers, substantial redemptions of interbank deposits were reported, after elevated “net inflows” (i.e. inflows net of outflows) in the three previous quarters. Accelerated net inflows in debt securities compensated for these significantly reduced net inflows in deposits. Furthermore, the euro area recorded net annual outflows in equity securities (notably quoted shares) and loans.

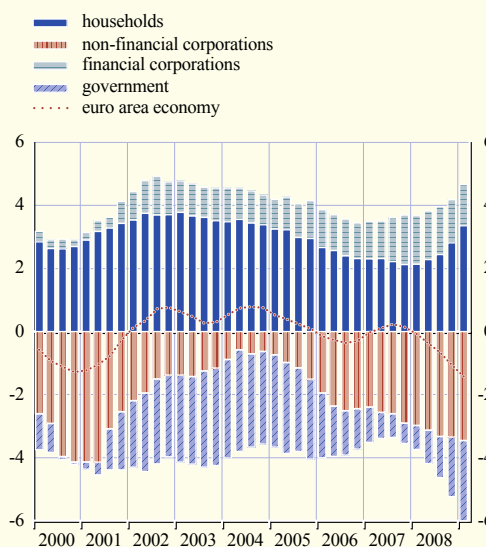
### Non-financial sectors financing and the financial markets

After the rebound observed in the fourth quarter of 2008, caused by very active government debt issuance, the annual rate of growth in the total financing of the non-financial sectors resumed its course of gradual moderation, as non-government financing continued to slow down.<sup>4</sup> On the financial investment side, net acquisitions of financial assets by the non-financial sectors slowed down as well, after a government-driven rebound in the fourth quarter of 2008.

<sup>4</sup> The annual growth rate of total financing available from the euro area accounts is more subdued than the growth rate of the financing components available from both the ECB’s money and banking statistics and its securities statistics, owing to a broader coverage and other methodological differences.

Chart C Euro area net lending/net borrowing

(as a percent of GDP; four-quarter moving sum)

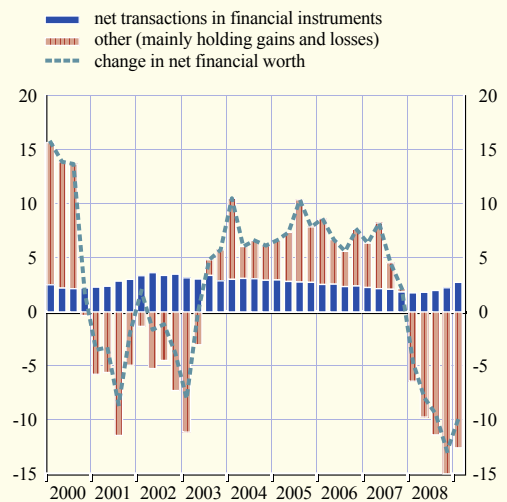


Sources: Eurostat and ECB.

Viewed in terms of individual instruments, the market for *debt securities* saw a further massive increase in net issuance by the government. MFIs were large net purchasers of debt securities (notably government debt securities), while their net issuance remained negative for the second consecutive quarter. NFCs, too, increased their net issuance. The rest of the world expanded its net purchases, while purchases by both households and insurance corporations and pension funds declined. In the market for *mutual funds*, net redemptions accelerated (with considerable redemptions in non-money market mutual fund shares). In the market for *quoted shares*, there was a resumption of net issuance by NFCs and financial corporations. NFCs diminished their purchases, and households and the rest of the world suspended their massive selling, while MFIs continued to sell holdings of quoted shares.

**Chart D Change in net financial worth of households**

(four-quarter moving sum; percentage of gross disposable income)



Source: ECB.

### Balance sheet dynamics dominated by holding losses

Balance sheet movements were often dominated by valuation changes, i.e. holding gains or losses, during recent quarters. In particular, falling global equity prices had a negative impact on the net financial worth<sup>5</sup> of households, in the order of a cumulated €1.1 trillion in the year up to the first quarter of 2009. Chart D shows the contributions of financial transactions (i.e. the net lending/net borrowing) and other economic flows (mostly holding gains or losses) to the change in the net financial worth of households. Valuation changes (and other flows) constitute the most volatile component of the change in their net financial worth. At the same time, in the bond market, increases in the prices of government bonds (and exchange rate effects) over the three most recent quarters translated into substantial holding gains, which offset the large holding losses on the “toxic assets” held by financial corporations.<sup>6</sup>

<sup>5</sup> Defined as the difference between financial assets and liabilities.

<sup>6</sup> It should be noted that, where loans are concerned, which are valued at nominal value in the ESA 95, impairment only has an impact on the financial wealth of creditors when they are actually written off, so that there is generally a noticeable delay.

### 3 PRICES AND COSTS

According to Eurostat's flash estimate, euro area annual HICP inflation dropped from -0.1% in June to -0.6% in July. The further decline in inflation rates primarily reflects base effects resulting from the peaks observed in global commodity prices a year ago.

Owing to these base effects, annual inflation rates are projected to remain temporarily negative over the coming months, before turning positive again later this year. Looking further ahead, inflation is expected to remain positive, while price and cost developments are expected to remain subdued 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 -0.1% in June to -0.6% in July (see Table 4). A detailed breakdown of this estimate is not yet available, but the further decline in the inflation rate primarily reflects a downward base effect in the energy price component, related to the strong rise in oil prices in mid-2008.

The detailed breakdown for June indicates that the fall in annual inflation from the previous month reflected declines in the annual rate of change in most HICP components. The annual rate of change in the energy component of the HICP fell in June to -11.8% on account of a downward base effect. However, compared with the previous month, energy prices rose notably by 2.4%, reflecting mainly price increases in transport and liquid fuels, in line with the increase in oil prices observed in May and June. By contrast, consumer electricity and, in particular, gas prices continued to decline between May and June, reflecting the lagged impact of past oil price declines.

The annual rate of change in unprocessed food prices declined to 0.3% in June, from 0.7% in May, partly stemming from a base effect. While most sub-components contributed to this decline, the annual rate of change of fruit prices rose in June. The annual rate of change in processed food prices edged up to 1.1% in June, from 1.0% in May, despite a downward base effect. The latest rise is attributable to an increase in tobacco prices. Excluding tobacco, the annual rate of change in processed food prices declined further.

Table 4 Price developments

(annual percentage changes, unless otherwise indicated)

	2007	2008	2009 Feb.	2009 Mar.	2009 Apr.	2009 May	2009 June	2009 July
<b>HICP and its components</b>								
Overall index <sup>1)</sup>	2.1	3.3	1.2	0.6	0.6	0.0	-0.1	-0.6
Energy	2.6	10.3	-4.9	-8.1	-8.8	-11.6	-11.8	.
Unprocessed food	3.0	3.5	3.3	2.4	1.6	0.7	0.3	.
Processed food	2.8	6.1	2.0	1.6	1.2	1.0	1.1	.
Non-energy industrial goods	1.0	0.8	0.7	0.8	0.8	0.8	0.6	.
Services	2.5	2.6	2.4	1.9	2.5	2.1	1.9	.
<b>Other price indicators</b>								
Industrial producer prices	2.7	6.1	-1.9	-3.2	-4.8	-5.9	-6.6	.
Oil prices (EUR per barrel)	52.8	65.9	34.6	36.5	39.0	42.8	49.5	46.5
Non-energy commodity prices	9.2	4.4	-28.8	-29.1	-23.8	-22.8	-22.7	-22.9

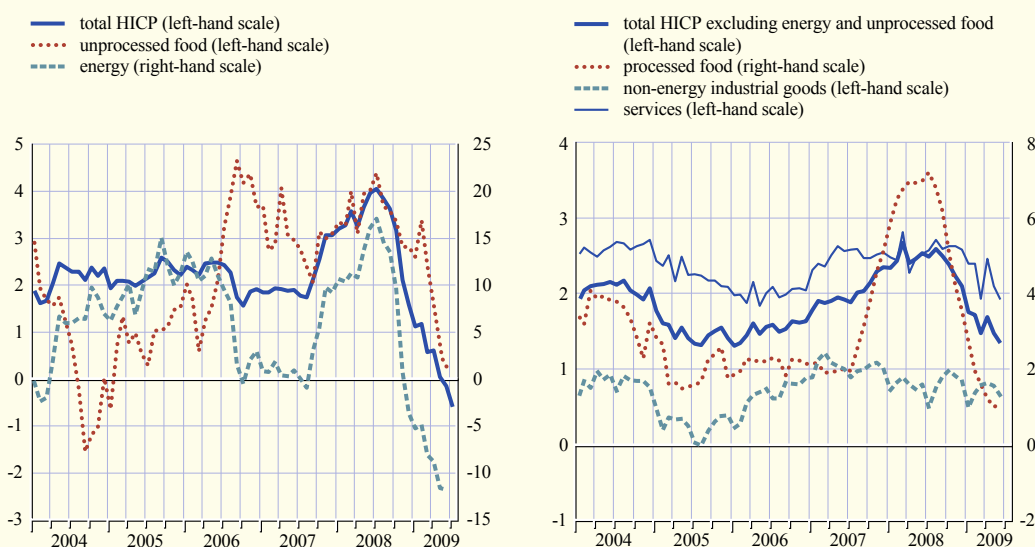
Sources: Eurostat, HWWI and ECB calculations based on Thomson Financial Datastream data.

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



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

(annual percentage changes; monthly data)



Source: Eurostat.

Excluding all food and energy items, or about 30% of the HICP basket, HICP inflation decreased by 0.1 percentage point to 1.4% in June, reflecting declines in non-energy industrial goods and services price inflation.

The annual rate of change in non-energy industrial goods stood at 0.6% in June, down from 0.8% in May. Two sub-items contributed chiefly to this development: textiles and cars, which both account for a relatively high weight in the non-energy industrial goods component. The fall in the annual rate of change for clothing and footwear is related to exceptionally strong early price discounts in the context of the summer sales period. Car prices have been on a downward path since late 2008, likely reflecting aggressive discounting to spur consumer demand. The annual rate of change in car prices declined to -0.6% in June, from -0.2% in May.

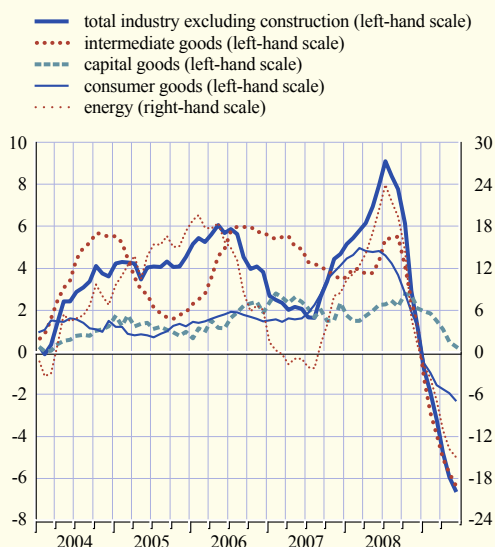
Services price inflation continued to follow its downward path, falling to 1.9% in June compared with 2.1% in May. The annual rates of change of holiday related items (package holidays, accommodation and transportation by air) as well as restaurant and café prices further declined. A combination of strong downward pressure due to weak consumer demand and a lagged pass-through of the past declines in oil and agricultural commodity prices were the main factors behind these developments.

### 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 -6.6% in June, from -5.9% in May. The annual rate of change in the energy component dropped to -15.0% in June, from -13.8% in May, on account of a strong downward base effect. On a monthly basis energy prices increased in June, reflecting higher oil prices. Excluding energy (and construction),

**Chart 21 Breakdown of industrial producer prices**

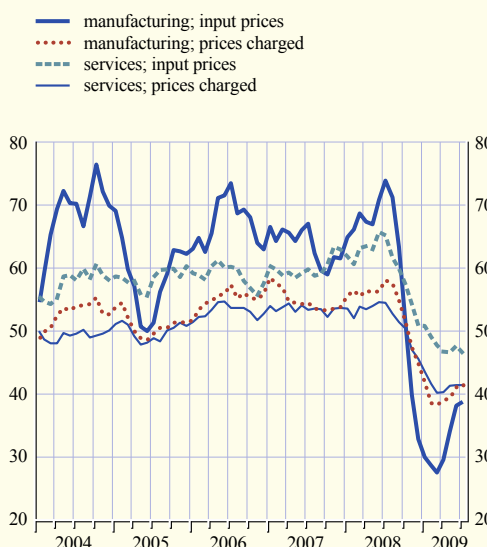
(annual percentage changes; monthly data)



Sources: Eurostat and ECB calculations.

**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.

annual producer prices inflation fell to -3.5% in June, with all components contributing to this further decline. The annual rate of change in intermediate goods prices dropped to -6.4% in June, from -5.7% in May, mainly due to a base effect. At the later stages of the production chain, the annual rates of changes of capital goods prices slowed further to 0.3% in June, while that of consumer goods prices declined to -2.3% (see Chart 21).

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 in the manufacturing sector and price pressures in the services sector seem to be stabilising (see Chart 22). Bearing in mind its volatility, the Purchasing Managers' input price index for the manufacturing sector continued to edge up in July, which indicates a further moderation in the pace of downward pipeline price pressures, most likely on account of the month-on-month increases in commodity prices observed in recent months. For the services sector, the July data was broadly in line with the past few months' observations, thereby confirming that downward pipeline pressures in the sector are stabilising. At the same time, the indices of producer prices charged remained broadly unchanged in July, both for the manufacturing and services sectors. The overall low levels of producer input and output prices evidenced in the surveys still signal that prices are, on average, declining, but at a lower rate compared with the previous month.

### 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

**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	3.4	2.8	1.8
<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	2.8	3.5	4.5	5.6

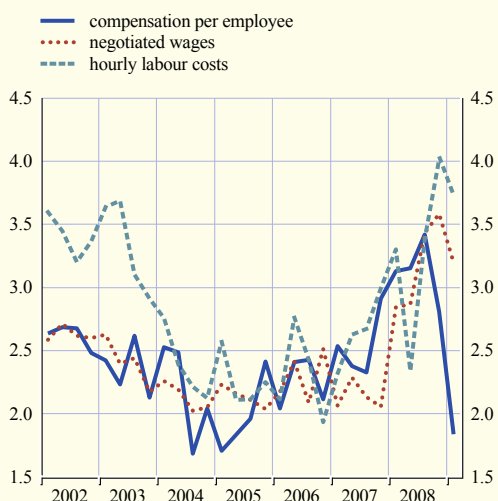
Sources: Eurostat, national data and ECB calculations.

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 shrink in the euro area. However, available information signals that the annual rate of growth in negotiated wages may have slowed down further in the second quarter of 2009 (see Chart 23 and Table 5).

The annual growth rate of compensation per employee fell to 1.8% in the first quarter of 2009, down from 2.8% in the fourth quarter of 2008. The steep decline in the growth rate in compensation per employee in the first quarter of 2009 was mainly driven by strong downward movements in Germany, Italy, the Netherlands and Belgium, in parallel with the

**Chart 23 Selected labour cost indicators**

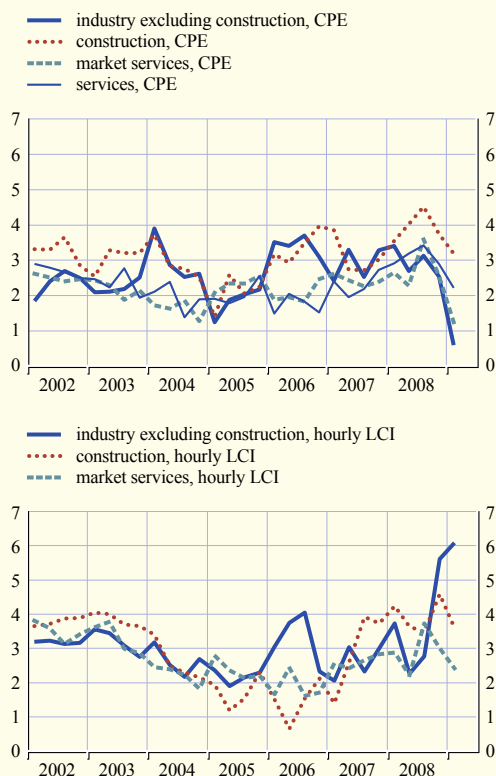
(annual percentage changes; quarterly data)



Sources: Eurostat, national data and ECB calculations.

**Chart 24 Sectoral labour cost developments**

(annual percentage changes; quarterly data)



Sources: Eurostat and ECB calculations.

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

short-time working schemes in place in these countries, which are extensively used to reduce the numbers of hours worked per employee. The strong deceleration in compensation per employee is, therefore, mainly a phenomenon of reduced overall compensation on account of fewer hours worked per employee, as well as cuts in other flexible pay elements, such as bonuses. The sectoral decomposition indicates that the slowdown in compensation per employee growth in the first quarter was primarily driven by developments in market related services (including trade, transport, communications, financial and business services) and industry (excluding construction). More muted declines were observed in the construction and non-market services sectors.

The annual growth rate of hourly labour costs in the euro area weakened somewhat to 3.7% in the first quarter of 2009, from 4.0% in the fourth quarter of 2008. The still strong growth in hourly labour costs is largely due to past wage agreements as well as to 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 impacted by such measures, hourly labour costs increased more in this sector, by 6.1%, compared with 3.6% in the construction sector and 2.4% in the services sector (see Chart 24).

Productivity dropped more rapidly 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 sharply than the contraction in economic activity. The accelerated drop in productivity, in turn, led to a strong surge in unit labour cost growth, from 4.5% in the fourth quarter of 2008 to 5.6% 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 remain negative over the coming months, before turning positive again later this year. Looking further ahead, inflation is expected to remain positive, while price and cost developments are expected to remain subdued 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.

The latest ECB Survey of Professional Forecasters (SPF) shows that short-term inflation expectations have been further revised downwards for 2009 and 2010 and lie within the ranges published in the June Eurosystem staff macroeconomic projections for the euro area (see Box 5). The SPF long-term inflation expectations have been marginally revised upwards, to 1.98%, from 1.93% in the previous survey round. However, the dispersion of long-term inflation forecasts has fallen significantly in the latest survey.

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.

## Box 5

### RESULTS OF THE ECB SURVEY OF PROFESSIONAL FORECASTERS FOR THE THIRD QUARTER OF 2009

This box reports the results of the ECB Survey of Professional Forecasters (SPF) for the third quarter of 2009. The survey was conducted between 15 and 20 July 2009. There were 54 responses from forecasters. The SPF collects information on expectations for euro area inflation, GDP growth and unemployment from experts affiliated with financial or non-financial institutions that are based in the EU.<sup>1</sup>

#### Inflation expectations for 2009, 2010 and 2011

SPF participants revised their inflation expectations downwards by 0.1 percentage point to 0.4% for 2009 and by 0.2 percentage point to 1.1% for 2010 compared with the previous round conducted in April (see the table below).<sup>2</sup> Inflation is expected to increase to 1.6% in 2011. Most respondents mentioned strong base effects stemming from low oil and commodity prices characterising their negative inflation profile till the third quarter of 2009. They expect inflation to reach its trough within the time period from July to September 2009 and then to move back into positive territory by the end of the year or the beginning of 2010, albeit remaining at levels below 2.0%. Increasing unemployment is expected to have a negative effect on wages and thereby limit a recovery in consumer spending. In general, weak demand, capacity underutilisation and low pricing power of firms are supposed to more than offset any upward risks deriving from potential increases in oil or other commodity prices.

1 Given the diversity of the panel of participants, aggregate SPF results can reflect a relatively heterogeneous set of subjective views and assumptions.

2 Additional data are available on the ECB's website at [www.ecb.europa.eu/stats/prices/indic/forecast/html/index.en.html](http://www.ecb.europa.eu/stats/prices/indic/forecast/html/index.en.html).

#### Results of the SPF, Eurosystem staff macroeconomic projections, Consensus Economics and Euro Zone Barometer

(annual percentage changes, unless otherwise indicated)

	Survey horizon					
	2009	June 2010	2010	June 2011	2011	Longer term <sup>2)</sup>
<b>HICP inflation</b>						
SPF Q3 2009	0.4	1.2	1.1	1.6	1.6	2.0
<i>Previous SPF (Q2 2009)</i>	0.5	-	1.3	-	-	1.9
Eurosystem staff macroeconomic projections	0.1 - 0.5	-	0.6 - 1.4	-	-	-
Consensus Economics (July 2009)	0.4	-	1.2	-	1.6	2.0
Euro Zone Barometer (July 2009)	0.4	-	1.2	-	1.7	2.1
<b>Real GDP growth</b>						
SPF Q3 2009	-4.5	-0.4	0.3	1.3	1.5	1.9
<i>Previous SPF (Q2 2009)</i>	-3.4	-	0.2	-	-	1.9
Eurosystem staff macroeconomic projections	-5.1 - -4.1	-	-1.0 - 0.4	-	-	-
Consensus Economics (July 2009)	-4.4	-	0.4	-	1.5	2.0
Euro Zone Barometer (July 2009)	-4.5	-	0.4	-	1.6	2.1
<b>Unemployment rate<sup>1)</sup></b>						
SPF Q3 2009	9.7	10.9	10.9	10.7	10.6	8.5
<i>Previous SPF (Q2 2009)</i>	9.3	-	10.5	-	-	8.4
Consensus Economics (July 2009)	9.7	-	11.1	-	-	-
Euro Zone Barometer (July 2009)	9.7	-	11.0	-	10.6	9.0

1) As a percentage of the labour force.

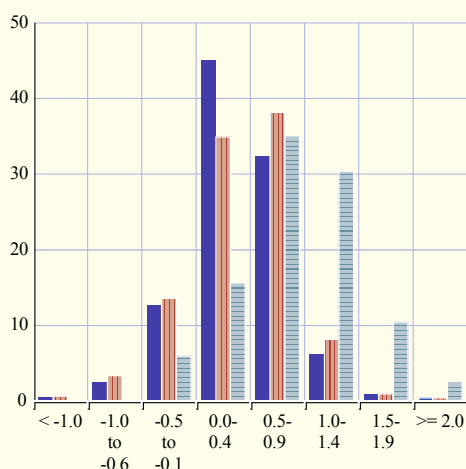
2) Longer-term expectations refer to 2014 in the SPF and Consensus Economics and to 2013 in the Euro Zone Barometer. The Consensus Economics forecasts for the years 2011 and 2014 were published in the April 2009 issue of Consensus Economics.

Chart A Probability distribution for average annual inflation in 2009 and 2010 in the latest SPF rounds <sup>1)</sup>

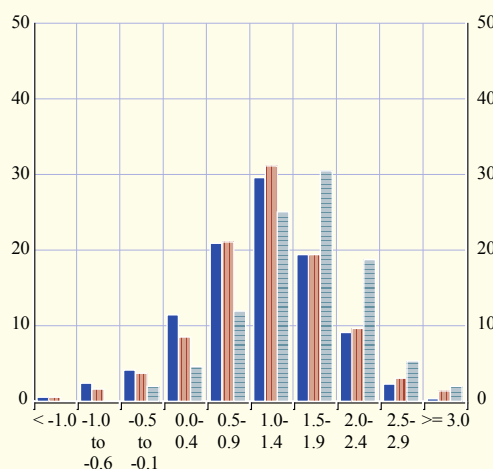
(probability in percentages)

■ 2009 Q3 SPF  
■ 2009 Q2 SPF  
■ 2009 Q1 SPF

a) 2009



b) 2010



Source: ECB.

1) Corresponds to the average of individual probability distributions provided by SPF forecasters.

The SPF inflation expectations for 2009 and 2010 are within the ranges reported in the June 2009 Eurosystem staff macroeconomic projections for the euro area. They are broadly in line with the projections of the issues of Consensus Economics and the Euro Zone Barometer published in July 2009 for the years 2009, 2010 and 2011.

SPF participants were also asked to assess the probability of the future outcome for inflation falling within specific intervals. The aggregate probability distribution for 2009 is concentrated more clearly within the 0.0% to 0.4% interval compared with the previous SPF round, whereas the probability distribution for 2010 remained broadly similar to that seen in the previous SPF round (see Chart A). Forecasters assigned a low probability to inflation being negative in 2009 and 2010 (15% and 7% respectively). Based on the individual probability distributions, the balance of risks across all forecast horizons appears to be on the downside (there are more respondents with a point estimate above the mean of their probability distribution than respondents with the point estimate below the mean).

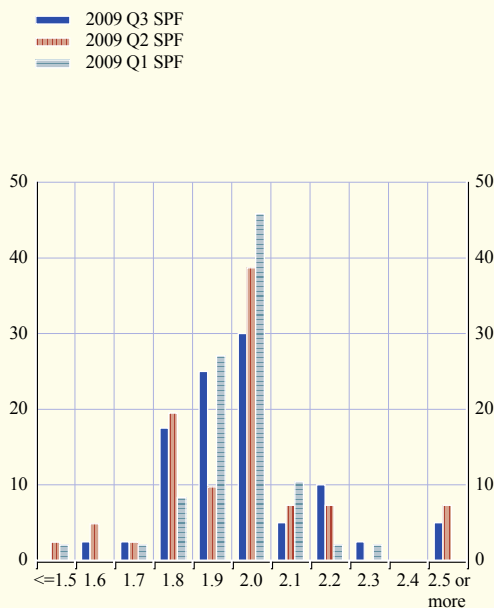
#### Indicators of longer-term inflation expectations

Longer-term inflation expectations (for the year 2014) have been marginally revised upwards to 1.98%, from 1.93% in the previous SPF round. The average point estimate is in line with the long-term inflation projections provided by Consensus Economics (at 2.0%) in April 2009 and it is below those of the Euro Zone Barometer (at 2.1%) published in July 2009.

The upward revision of the average point estimate to 1.98% in this SPF round is combined with a decrease in the disagreement in the longer-term inflation expectations, as measured by

**Chart B Cross-sectional distribution of longer-term (2014) inflation expectations among SPF respondents**

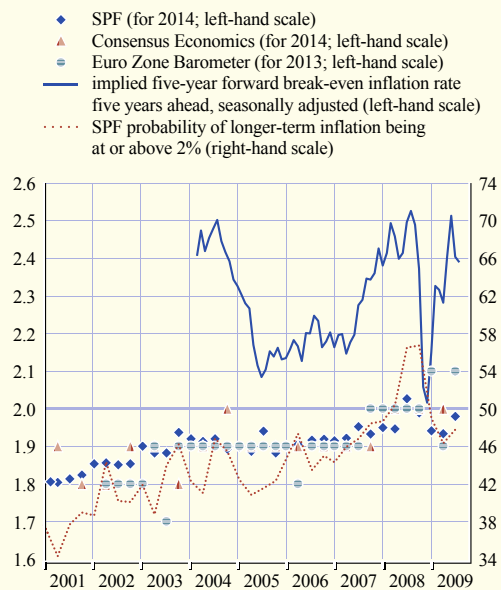
(percentage of respondents)



Source: ECB.

**Chart C Longer-term inflation expectations from surveys and break-even inflation rates**

(average annual percentage changes; percentage probability)



Sources: Consensus Economics, Euro Zone Barometer, Reuters and ECB calculations.

the standard deviation of the point estimates. Overall, the disagreement remains at a slightly elevated level compared with the average level over the last five years, as reflected by a flatter cross-sectional distribution of the longer-term inflation expectations (see Chart B). Finally, the probability of longer-term inflation standing at 2% or above increased to 48%, from 46% in the previous SPF round (see Chart C).

These survey results can be compared with the break-even inflation rate, an indicator of longer-term inflation expectations among financial market participants, calculated as the yield spread between nominal and inflation-linked bonds.<sup>3</sup> Until September 2008, movements in the probability assigned to an outcome that inflation will stand at 2% or above in the next five years were, on average, broadly in line with developments in financial market-based indicators of inflation expectations (e.g. the seasonally adjusted, implied five-year forward break-even inflation rate five years ahead).<sup>4</sup> However, since then, and against the background of an intensification of financial market turbulences, financial market-based inflation expectations have been somewhat erratic and may have been distorted by investors' efforts to reduce risk and leverage and their strong preference for more secure and liquid assets.<sup>5</sup>

3 See also the article entitled "Measures of inflation expectations in the euro area" in the July 2006 issue of the Monthly Bulletin.

4 Break-even inflation rates should not be interpreted as direct measures of inflation expectations, since they may also incorporate various risk premia (such as inflation uncertainty and liquidity premia).

5 For a further discussion of the impact of the current financial market turmoil on market-based measures of inflation expectations, see the box entitled "Recent increases in real yields and their implications for the analysis of inflation expectations" in the November 2008 issue of the Monthly Bulletin.

## Real GDP growth expectations

SPF respondents have revised their growth expectations for 2009 further downwards since the last survey, by 1.1 percentage points, and now expect euro area real GDP to contract by 4.5% in 2009. Real GDP is then expected to grow by 0.3% in 2010, which is an upward revision by 0.1 percentage point, and by 1.5% in 2011. In their comments, the respondents referred to weakness in domestic and external demand, as well as ongoing tensions in the financial markets and tight financing conditions as the main factors characterising the short to medium-term outlook for real GDP growth.

The SPF growth expectations for 2009 are well within the range reported in the June 2009 Eurosystem staff macroeconomic projections for the euro area, while those for 2010 are close to the upper limit of the range. The SPF growth expectations are broadly in line with the Euro Zone Barometer and Consensus Economics forecasts for 2009 and 2010, but slightly below these forecasts for 2011.

In line with the downward revision of expected real GDP growth, the aggregate probability distribution for 2009 shifted towards lower outcomes. The aggregate probability distribution for 2010 remained quite flat and was concentrated in the range of the outcomes between 0.0% and 0.9%. The SPF respondents assign a 32% probability to annual real GDP growth being negative in 2010 compared with a 37% probability in the previous SPF round (see Chart D).

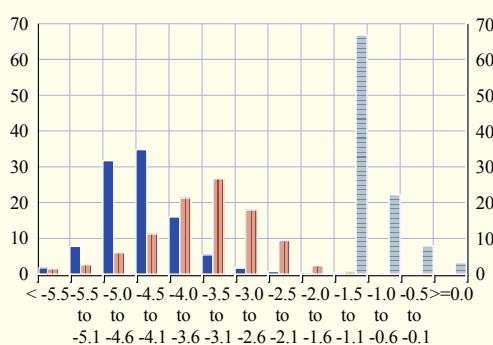
Uncertainty derived from the aggregate probability distribution for one-year-ahead and two-years-ahead real GDP forecasts has declined, but continues to remain at an elevated level (see Box 6 in Section 4). According to the comments provided by several respondents, most of them expect a moderate recovery to take place in 2010, with a few respondents expecting euro area real GDP growth to return to full potential only by 2011 and beyond. As the main factors helping the recovery, respondents mentioned an improvement in the euro area exports markets

**Chart D Probability distribution for average annual real GDP growth in 2009 and 2010 in the latest SPF rounds<sup>1)</sup>**

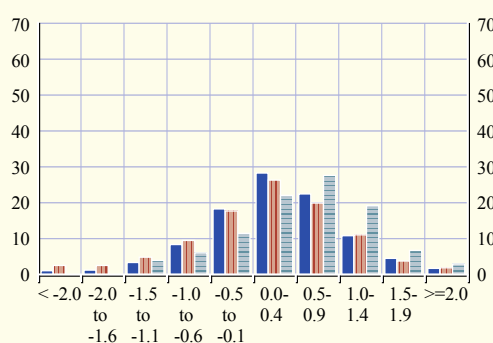
(probability in percentages)

■ 2009 Q3 SPF  
■ 2009 Q2 SPF  
■ 2009 Q1 SPF

**a) 2009**



**b) 2010**



Source: ECB.

1) Corresponds to the average of individual probability distributions provided by SPF forecasters.



and world trade, as well as the impact of fiscal and monetary policy measures. However, the respondents also emphasised that the timing and strength of the recovery is highly uncertain. More specifically, the uncertainty is related to the outlook for trade and labour market developments, with the latter posing major downside risks to consumer spending on account of rising unemployment.

Longer-term growth expectations (for 2014) have remained unchanged at 1.9%, as in the previous round, and are slightly below those provided by Consensus Economics in April and the Euro Zone Barometer in July. Overall, respondents assess the balance of risks as being on the downside.

### **Expectations for the euro area unemployment rate**

SPF respondents revised their unemployment rate expectations upwards for both 2009 and 2010 by 0.4 percentage point. On average, the unemployment rate is now expected to reach 9.7% in 2009, to further increase to 10.9% in 2010 and then ease slightly to 10.6% in 2011. Longer-term unemployment rate expectations were also revised upwards, by 0.1 percentage point, and now stand at 8.5%.

## 4 OUTPUT, DEMAND AND THE LABOUR MARKET

Recent surveys of economic activity in the euro area suggest that the pace of contraction is clearly slowing down. However, economic activity is expected to remain weak throughout the remainder of this year. Looking ahead into next year, after a phase of stabilisation, a gradual recovery with positive quarterly growth rates is expected. The significant policy stimuli in all major economic areas should support growth globally, including in the euro area. The risks to this outlook for economic activity remain balanced.

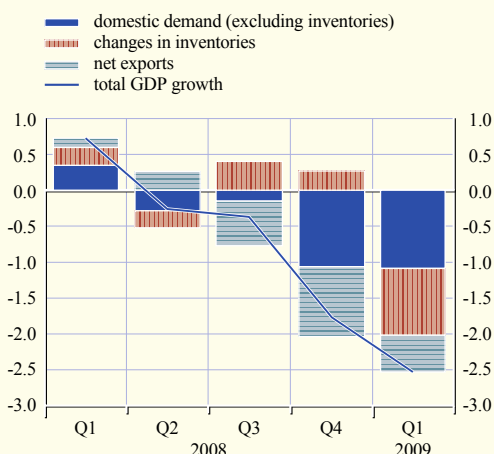
### 4.1 REAL GDP AND DEMAND COMPONENTS

The pace of euro area activity declined markedly in early 2009, following a continued contraction of both domestic and global demand. According to Eurostat's second estimate, real GDP in the euro area contracted by 2.5% (quarter on quarter) in the first quarter of 2009, after a decline of 1.8% in the last quarter of 2008 (see Chart 25). Euro area real GDP probably continued to shrink in the second quarter, albeit at a slower pace than in the first quarter. The contraction is expected to moderate further throughout the rest of 2009, and economic growth is projected, after a phase of stabilisation, to recover gradually in 2010. The uncertainty surrounding this outlook remains high. Indeed measures derived from various forecasters' projections indicate that uncertainty about the economic outlook has rarely been higher (see Box 6). At the same time, the results of the ECB Survey of Professional Forecasters for the third quarter of 2009 show that the uncertainty for one-year-ahead and two-years-ahead real GDP forecasts has slightly declined compared to the previous round (see Box 5).

Eurostat's second estimate confirmed that the deterioration in demand was broadly based across all components in the first quarter of 2009. External demand fell rapidly, reflecting the collapse in world trade. Domestic demand weakened as well, with investment registering a significant decline and consumption contracting. Inventories also made a negative contribution to growth.

Chart 25 Real GDP growth and contributions

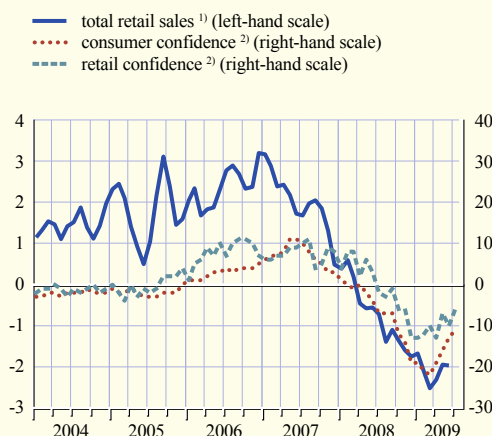
(quarter-on-quarter growth rate and quarterly percentage point contributions; seasonally adjusted)



Sources: Eurostat and ECB calculations.

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

(monthly data)



Sources: European Commission Business and Consumer Surveys and Eurostat.

1) Annual percentage changes; three-month moving averages; working day-adjusted. Also excludes fuel.  
2) Percentage balances; seasonally and mean-adjusted.

Private consumption contracted by 0.5% (quarter on quarter) in the first quarter of 2009. Recent developments in indicators of consumption demand suggest a less negative reading of the quarterly rate of growth in consumer spending in the second quarter of 2009. Three key factors support this assessment. First, keeping in mind the volatility of the series, although retail sales continued to fall in the second quarter, the decline was somewhat smaller than in the previous quarter. Thus, recent dynamics in retail trade point to a bottoming-out of the downward trend observed since mid-2008. Second, relatively strong data on new car registrations suggest that the recent introduction of government-sponsored subsidies for consumers to scrap old cars and buy new ones have provided support for household spending in the second quarter. Third, the index of consumer confidence rose in quarterly terms in the second quarter of 2009, thus reversing the downward trend observed since mid-2007. However, despite the fact that consumer confidence has risen over the past few months, its persistently low level is consistent with weak consumer spending in the second quarter of 2009 (see Chart 26).

#### Box 6

### UNCERTAINTY AND THE ECONOMIC PROSPECTS FOR THE EURO AREA

Since the autumn of 2008, renewed financial turbulence and a sharp deterioration in global and domestic demand have heightened uncertainty about the euro area's economic outlook. That uncertainty has been evident in the widening dispersion of forecasters' projections for euro area growth. This box examines some indicators of the dispersion of forecasters' projections for growth and discusses what the current uncertainty about the outlook might imply for the evolution of demand in the near term.

Uncertainty matters because it can have a major influence on current demand. Business investment, for example, may be affected because decisions on capital expenditure are typically irreversible, so that it may, in an uncertain environment, induce firms to delay investment decisions until the outlook for demand becomes clearer. Uncertainty can influence household decisions in a similar way. Greater uncertainty about the economic outlook – in particular about job prospects – may induce households to reduce their current consumption and, instead, build up precautionary savings against possible fluctuations in future income.

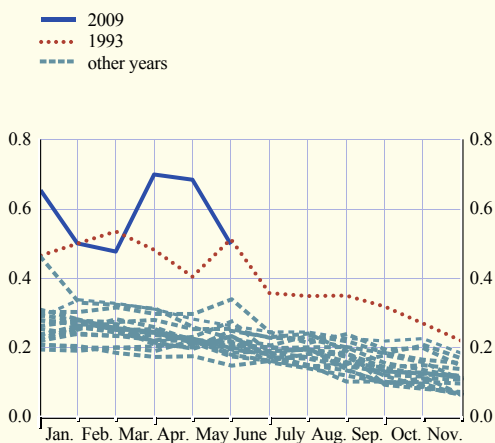
Various approaches are available for assessing the degree of uncertainty. A common method is to look at the volatility of economic or financial indicators. For example, the variation of equity indices provides one indication of current volatility in financial markets, while implied volatilities from option contracts provide an insight into market participants' views on future volatility.<sup>1</sup> For the real economy, it is also possible to look at recent volatility in macro series – for example, the evolution of recent changes in GDP or industrial production.

Another possible measure of the uncertainty about the outlook is the dispersion of projections for growth among forecasters. Charts A and B show the standard deviation of GDP growth forecasts by Consensus Economics, which collects projections for major economies from a number of forecasters. In the Consensus Economics survey, contributors are asked for their

<sup>1</sup> For a discussion of volatility in stock market indices, see Box 4, entitled "Abnormal volatility in global stock markets", in the November 2008 issue of the Monthly Bulletin.

**Chart A Dispersion of projections for GDP growth in the current calendar year**

(standard deviation of point estimates of growth among forecasters)

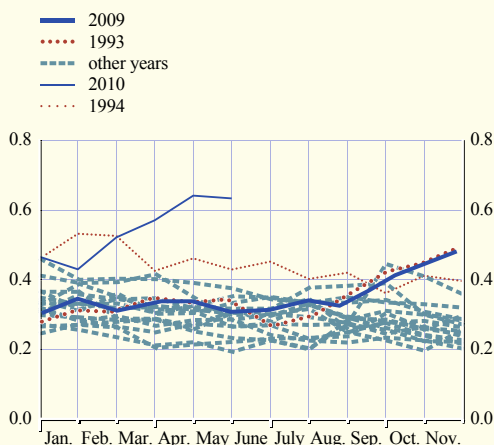


Source: Consensus Economics.

Notes: The euro area measure is derived by averaging the standard deviations of projections for Germany, France and Italy. Each line shows the standard deviation of GDP growth forecasts by Consensus Economics for the current calendar year. "Other years" represent standard deviations from 1990 to 2008.

**Chart B Dispersion of projections for GDP growth in the next calendar year**

(standard deviation of point estimates of growth among forecasters)



Source: Consensus Economics.

Notes: The euro area measure is derived by averaging the standard deviations of projections for Germany, France and Italy. Each line shows the standard deviation of GDP growth forecasts by Consensus Economics for the next calendar year. "Other years" represent standard deviations from 1990 to 2008.

views of growth prospects in the current calendar year and the next calendar year (i.e. they are currently being asked for projections for 2009 and 2010). Disparities among projections tend to display a seasonal pattern – as information accumulates in the course of the year (and forecasters learn more about current and prospective annual growth), forecasters tend to converge in their assessments of growth prospects – so that the range of projections submitted to Consensus Economics in January and February is typically slightly higher than in November and December. Given that, the charts compare the evolution of the dispersion of projections throughout the year, from January to December, over successive calendar years.<sup>2</sup>

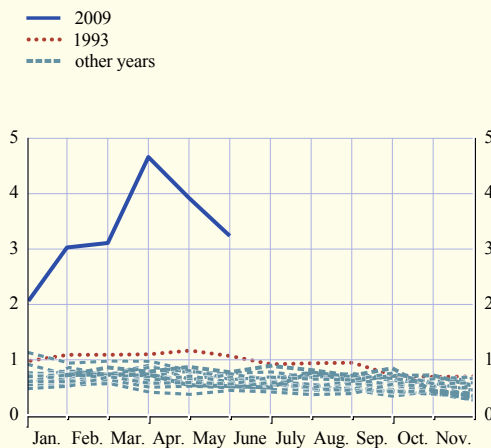
The dispersion of GDP projections has tended to be far higher in periods of recession or weak growth. Compared with other years, the range of disagreement among forecasters with regard to current and subsequent annual growth was large in the recession of the early 1990s (see Charts A and B). More recently, the dispersion of views on economic prospects has widened considerably, reaching the highest level since data first became available in 1990. The disparity of views on the current calendar year (i.e. 2009) is as high as it was during the previous euro area recession in 1993, while disagreement about growth one year ahead is the highest ever recorded. The increase in uncertainty is even more marked in the case of the industrial sector – see Charts C and D, which show the same measure of dispersion for projections of growth in industrial production. The recent sudden downturn in production has led to a significant widening of the dispersion of views on the outlook for a recovery in the industrial sector.

One possible problem with the measures shown in Charts A to D is that they only capture disagreement among forecasters about the likely overall outcome or expected profile. This may

<sup>2</sup> In Charts A to D, each line shows the standard deviation of forecasts from Consensus Economics during a calendar year. The evolution of the standard deviation for forecasts for specific years (1993, 1994, 2009 and 2010) is highlighted. The "other years" shown in the charts represent standard deviations from 1990 onwards (excluding those already highlighted).

**Chart C Dispersion of projections for industrial production growth in the current calendar year**

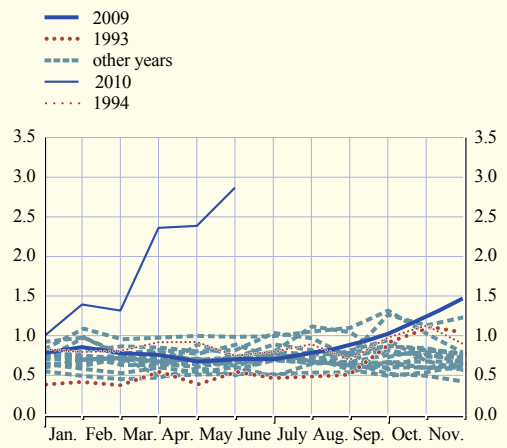
(standard deviation of point estimates of growth among forecasters)



Source: Consensus Economics.  
Notes: the euro area measure is derived by averaging the standard deviations of projections for Germany, France and Italy. Each line shows the standard deviation of industrial production growth forecasts by Consensus Economics for the current calendar year. "Other years" represent standard deviations from 1990 to 2008.

**Chart D Dispersion of projections for industrial production growth in the next calendar year**

(standard deviation of point estimates of growth among forecasters)

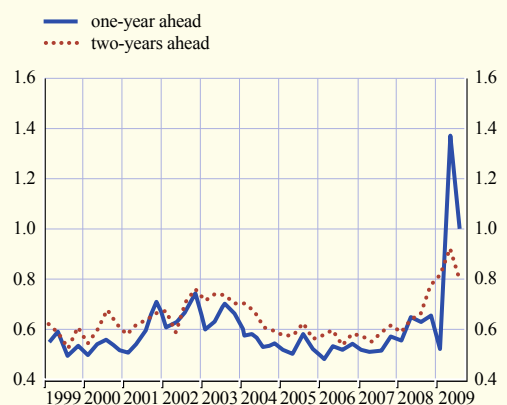


Source: Consensus Economics.  
Notes: the euro area measure is derived by averaging the standard deviations of projections for Germany, France and Italy. Each line shows the standard deviation of industrial production growth forecasts by Consensus Economics for the next calendar year. "Other years" represent standard deviations from 1990 to 2008.

cause important information about expectations regarding the distribution of potential projected outcomes to be missed. For example, it is possible that forecasters might agree with each other about the most likely outcome, even though the overall level of uncertainty is high. An ideal measure of uncertainty would, instead, thus capture forecasters' subjective assessments of uncertainty about the economic outlook. In this respect, the ECB's Survey of Professional Forecasters (SPF) is valuable because it not only captures respondents' subjective assessments of the expected value of growth (and inflation), but also obtains quantitative information regarding the uncertainty surrounding these central expectations. More specifically, SPF participants are also asked to assign a probability distribution to their forecasts. Chart E shows the standard deviation of the distribution for GDP growth derived by aggregating individual forecasters' responses.<sup>3</sup>

**Chart E Uncertainty measure for real GDP as derived from the Survey of Professional Forecasters**

(standard deviation of the aggregated probability distribution)



Source: ECB Survey of Professional Forecasters.  
Note: The scale of the downward revision to growth projections in the survey for the first quarter of 2009 resulted in the outcomes of probability distributions for one-year ahead forecasts located mainly in the lowest, open-ended intervals; thus the value for the first quarter of 2009 is an underestimation of uncertainty for the first quarter of 2009.

<sup>3</sup> For a description of the measure of aggregate forecasting uncertainty in the SPF, see Carlos Bowles, Roberta Friz, Véronique Genre, Geoff Kenny, Aidan Meyler and Tuomas Rautanen, "The ECB survey of professional forecasters (SPF): a review after eight years' experience", *Occasional Paper series*, No 59, ECB, April 2007. The aggregate distribution is constructed simply by adding up the individual probabilities reported in the SPF and dividing the sum total by the number of respondents.

Currently, it provides a picture that is broadly similar to that of the previous measures, confirming that uncertainty about the economic outlook is exceptionally high – although it has come down somewhat in the latest SPF, based on forecasts collected in July.

To sum up, since the autumn of 2008, renewed financial turbulence, together with a sharp deterioration in global and domestic demand, has increased the uncertainty about the euro area's economic prospects. Indeed, measures derived from forecasters' projections indicate that uncertainty about the economic outlook has rarely been higher. This heightened uncertainty is likely to be one of the factors that currently dampen demand. Anecdotal evidence suggests that it has been a prominent factor in shaping firms' investment expenditure in recent months. Looking ahead, the fiscal stimulus packages, combined with the monetary loosening and significant efforts to restore the functioning of the financial system, are expected to contribute to the lessening of uncertainty about the economic outlook. In addition, the projected improvement in global and domestic conditions as financial markets normalise should gradually improve confidence and reduce uncertainty in the months ahead. Indeed, as could be seen in the latest SPF, there are already signs that uncertainty among forecasters is declining again.

Looking further ahead, in the second half of 2009, consumption is projected to remain relatively subdued on account of an expected further deterioration in the labour markets. The substantial decline in commodity prices since last year has supported households' real disposable income and should continue to support spending. At the same time, there are some risks that households may decide to increase their savings in anticipation of a more restrictive fiscal policy in the future. Finally, there are uncertainties about the extent to which private consumption will be affected when the current schemes for scrapping old cars are abolished.

In line with the pattern observed in previous periods of economic recession, gross fixed capital formation has been a main driver of the current slowdown in economic activity. In the first quarter of 2009, gross fixed capital formation declined by 4.2%, quarter on quarter. Eurostat's second estimate confirmed that non-construction investment (mainly assets intended for use in the production of goods and services) contributed to the bulk of the drop in aggregate investment, while the fall in construction investment was less pronounced.

Investment will probably continue to contribute negatively to economic growth throughout 2009. The projected contraction in overall domestic and foreign activity, and the low expected profitability of firms, will probably weigh on both construction and non-construction investment. The ongoing correction of residential and commercial property prices in the euro area also suggests subdued construction investment in the future.

#### 4.2 OUTPUT, SUPPLY AND LABOUR MARKET DEVELOPMENTS

Eurostat's second estimate of the real value added in the first quarter of 2009 showed contractions in both the industry and the services sectors. The value added in industry (excluding construction) fell by 8.5% (quarter on quarter), while that in the construction sector dropped by 1%. The decline in value added in services amounted to 1.1% (quarter on quarter).

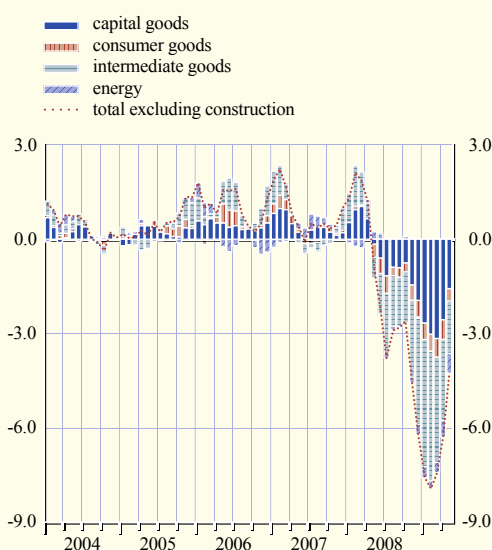
Monthly indicators suggest that activity remained weak in the second quarter of 2009, but that the pace of contraction is declining. Euro area industrial production (excluding construction) was up 0.6% (month on month) in May. This was the first monthly increase of production after eight months of consecutive and, in most cases, extremely sharp falls. Overall, the small increase in May, together with the deceleration in the pace of decline in March and April in comparison with the large monthly contraction rates in the months since September 2008, indicate a clear moderation of the downward trend of industrial production (see Chart 27). Averaging-out monthly volatility, it appears that there has also been a minor easing of the pace of decline in construction activity over recent months, despite the deterioration observed in May.

It is important to note that indicators of short-term developments – for example, the monthly rates of change in seasonally adjusted series such as industrial production – should currently be interpreted even more cautiously than in more normal times. As explained in Box 7, recent economic developments have probably increased the uncertainty of seasonally adjusted macroeconomic series.

Business surveys also point towards a further moderation in the pace of decline in economic activity in the second quarter (see Chart 28). The Purchasing Managers' index (PMI), for instance, continued to improve in July (although it remained below 50, indicating that the economy is still contracting). Similarly, the European Commission's business surveys generally confirm the less pessimistic reading from the PMI.

**Chart 27 Industrial production growth and contributions**

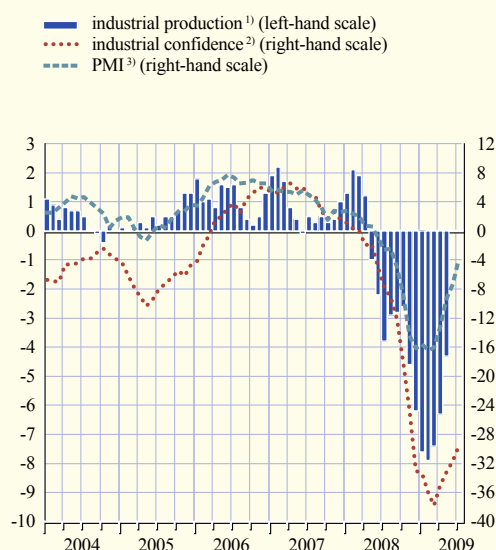
(growth rate and percentage point contributions; monthly data; seasonally adjusted)



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

**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.  
1) Three-month-on-three-month percentage changes.  
2) Percentage balances.  
3) Purchasing Managers' index; deviations from an index value of 50.

## Box 7

**SEASONAL ADJUSTMENT OF SHORT-TERM ECONOMIC INDICATORS FOR THE EURO AREA IN THE CURRENT RECESSION**

Many short-term economic indicators are significantly affected by events that recur regularly at the same time each year. Summer holidays, for instance, lead to a sharp decline in industrial production every August, and Christmas shopping boosts retail trade turnover every December. Such seasonal effects make the assessment of short-term economic developments more difficult. Therefore, in order to meaningfully interpret the data in conjunctural analysis, the time series of short-term economic indicators are adjusted for seasonal variations. Certain economic developments like the current sharp recession, however, pose additional challenges for seasonal adjustment procedures as they make it harder to identify the part of the movement of the series that is due to recurring seasonal developments.

This box initially outlines the basic concept of seasonal adjustment. It continues with an explanation of how the seasonal adjustment of short-term economic indicators is conducted in the euro area. Using euro area industrial production as an example, it illustrates how seasonal adjustment works in general and how recent economic developments may have increased the uncertainty surrounding seasonally adjusted data.

**Basic concept of seasonal adjustment**

Seasonal adjustment procedures are aimed at identifying and extracting the seasonal pattern from e.g. a monthly or quarterly economic indicator, i.e. at eliminating those effects that occur year after year in the same month or quarter and impact on the series by approximately the same amount each time.<sup>1</sup> The most widely used seasonal adjustment methods rely on the decomposition of an economic time series into non-observable components, i.e. a trend-cycle component, a seasonal component and an irregular component. After seasonal adjustment, the series reflects the trend-cycle component, which is typically the focus of conjunctural analysis, but also irregular movements, including outliers.

While stable seasonal patterns can be estimated and extracted in a straightforward manner, modelling seasonality in practice usually requires allowing for gradual changes in the seasonal component over time. Time-varying seasonality may, however, significantly increase the uncertainty in estimating a seasonally adjusted series. Unusual developments in the most recent data of a series may imply additional uncertainty, since it is hard to isolate the movement in the seasonal component from the overall dynamics of the series. Sharp upturns or downturns, for instance, can significantly increase the uncertainties involved in identifying and estimating the seasonal pattern of a time series.

A number of different methods are available for seasonal adjustment; the most frequently used are TRAMO-SEATS, which extracts the seasonal pattern from a time series by finding a suitable

1 A related issue is calendar adjustment, which is conducted in addition to seasonal adjustment. It is aimed at eliminating calendar effects, i.e. effects that are specific to the situation in a given calendar year, e.g. on whether 1 May falls on a weekend or within a week, or on whether Easter is in March or April. However, calendar effects related to the “average” calendar situation in a given month or quarter, e.g. on the fact that 1 May falls on weekdays more often than on weekends and that Easter is more often in April than in March, are eliminated by the seasonal adjustment process.



mathematical decomposition of an ARIMA model into seasonal and non-seasonal components, and X-12-ARIMA, which – in essence – estimates the impact of seasonal movements on the basis of moving averages applied to seasonal periods.

### Seasonal adjustment of short-term economic indicators in the euro area

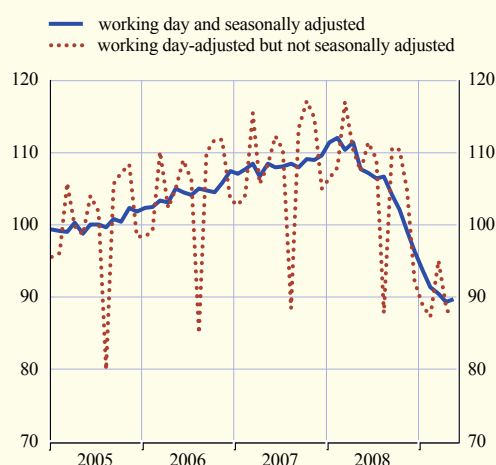
For the euro area as a whole, Eurostat, the Statistical Office of the European Communities, estimates seasonally adjusted short-term economic indicators (e.g. industrial production, new orders and retail sales) by aggregating non-seasonally adjusted country data and then directly adjusting the euro area aggregate (thus using the so-called “direct approach” to seasonal adjustment). Another approach to obtaining seasonally adjusted data for the euro area is the aggregation of the seasonally adjusted national series. This “indirect approach” to seasonal adjustment is often applied by market analysts, who use already released seasonally adjusted national data to compute a first estimate for the euro area as a whole, prior to its official release by Eurostat.<sup>2</sup> Since seasonal adjustment normally implies non-linear transformations, the outcome of the direct adjustment of euro area aggregates usually differs from that of the aggregation of adjusted national results. The production of reliable euro area results through indirect adjustment requires that all countries adjust on the basis of the same program and apply the same adjustment policy with respect to e.g. the criteria used not only for selecting and adapting models and functions, but also for revising back data. This is not yet the case for short-term economic indicators in the euro area as an only limited degree of harmonisation has been reached across national statistical institutes, so that the aggregated nationally adjusted data might reflect spurious effects.<sup>3</sup>

### Seasonal adjustment of euro area industrial production data

The effect of seasonal adjustment can be illustrated by comparing the seasonally adjusted and unadjusted time series of euro area industrial production, as compiled by Eurostat. Chart A highlights the extreme volatility of the seasonally unadjusted series of industrial production (excluding construction) with its strong, but very regular seasonal pattern. The most striking effect of seasonal adjustment is recorded in August every year when production regularly falls by about 20%, month on month, in unadjusted terms and rebounds sharply thereafter, which compares with a typical order of magnitude of close to or below 1% in absolute terms for the monthly rates of change in the seasonally adjusted series

Chart A Euro area industrial production (excluding construction)

(index: 2005 = 100)



Source: Eurostat.

2 The release dates of national data on short-term economic indicators are not synchronised.

3 In order to foster the harmonisation of seasonal adjustment procedures, the European Statistical System and central banks have recently developed comprehensive guidelines on seasonal adjustment, in which the use of either TRAMO-SEATS or X-12 is recommended. See [http://epp.eurostat.ec.europa.eu/cache/ITY\\_OFFPUB/KS-RA-09-006/EN/KS-RA-09-006-EN.PDF](http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS-RA-09-006/EN/KS-RA-09-006-EN.PDF).

(see Chart B). This illustrates that, in practice, unadjusted production data are not very informative for conjunctural analysis.

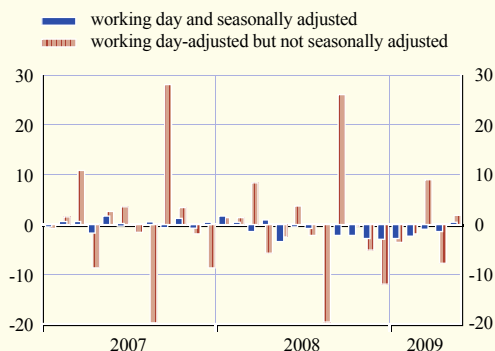
### Uncertainty in seasonally adjusted industrial production data in the context of the current recession

As mentioned earlier, uncertainty in seasonally adjusted series can be much higher in times of unusual developments such as during the current sharp recession. Chart C illustrates the outcome based on different seasonal adjustment approaches and methods. Chart C, panel (a), shows the differences between the monthly rates of change in Eurostat's official industrial production figures for the euro area, based on TRAMO-SEATS, and the aggregate of seasonally adjusted national data. Chart C, panel (b), depicts the differences between Eurostat's figures and an X-12 test calculation applied directly to the euro area figures.<sup>4</sup> While larger deviations between Eurostat's official euro area figures and the aggregation of national results are occasionally also observed for the period prior to the recession, Chart C, panel (a), highlights that the magnitude of these deviations has increased during the current recession, in particular since its intensification in September 2008. There has also been an accumulation of consecutive deviations in the same direction. Moreover, Chart C,

4 X-12 was applied by keeping the seasonal pattern reasonably stable and not allowing the detection of outliers at the most recent end of the series.

**Chart B Euro area industrial production (excluding construction)**

(monthly percentage changes)



Sources: Eurostat and ECB computations.

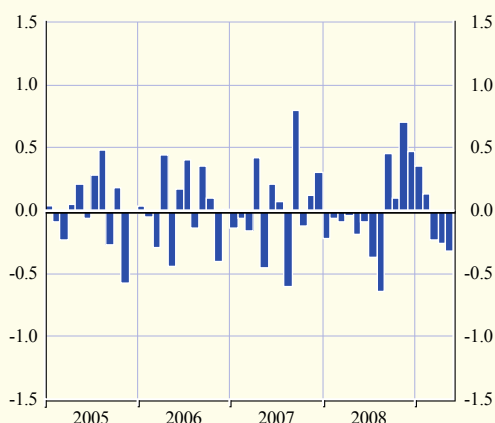
**Chart C Euro area industrial production (excluding construction) – differences between the monthly rates of change in Eurostat's seasonally adjusted data and alternative calculations**

(percentage points)

**(a) Aggregate of national data**



**(b) Data adjusted with X-12**



Sources: Eurostat and ECB computations.

panel (b), shows a rather unusual clustering of consecutive differences in the same direction between Eurostat's official euro area data and those of direct adjustment with X-12 during the sharpest part of the recession, but the magnitude of these discrepancies appears to be within the normal margin of statistical uncertainty.

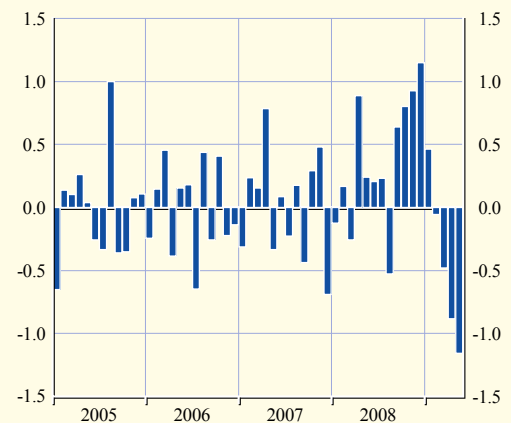
While the larger or more protracted discrepancies observed between the outcomes of different seasonal adjustment approaches and methods provide indications of larger uncertainties in the seasonally adjusted figures, it is important to note that, as of January 2009, the data have also been significantly affected by the introduction of the new classification of economic activities (NACE Rev2) and by the use of updated weights that refer to the base year 2005. These methodological changes have also led to exceptional revisions to adjusted and unadjusted data during, in particular, the first quarter of 2009.<sup>5</sup> More generally, the most recent data in Chart C, panels (a) and (b), may imply somewhat larger discrepancies, given that Eurostat's first euro area data release includes estimates for some countries.<sup>6</sup> Moreover, due consideration must be given to the fact that any estimation of the movement in the seasonal pattern over time is generally prone to higher statistical uncertainties at the recent end of a time series. These uncertainties are amplified by the sharp drop recorded as a consequence of the current recession.

Chart D shows the differences between the Eurostat figures and the aggregate of seasonally adjusted country data on the basis of real time data (i.e. unrevised data reflecting the respective information at the time of the first release of the Eurostat data), which takes account of the generally higher statistical uncertainties at the recent end of a time series. It shows that deviations in earlier years based on real time data have in fact been somewhat larger, on average, than those reflected in current data (as depicted in Chart C, panel (a)), and occasionally also very large. It also highlights very clearly, however, that the recent deviations, as shown in Chart C, panel (a), were initially even more exceptional in terms of both their magnitude and their persistence, and have led to a more protracted divergence than usual between the estimates obtained on the basis of the different approaches.

The increased discrepancies between Eurostat's production figures and the aggregate of country data also entail increased uncertainties for conjunctural analysis. Although seasonally adjusted country data are compiled in a non-harmonised manner, the aggregate of these national data has often been used to derive early signals concerning Eurostat's seasonally adjusted euro area

Chart D Difference between Eurostat's figures on seasonally adjusted industrial production (excluding construction) and the aggregate of the corresponding national figures, based on real time data

(percentage points)



Sources: Eurostat and ECB computations.

5 For further details, see the box entitled "Recent changes in short-term statistics" in the April 2009 issue of the Monthly Bulletin.

6 Certain countries may not provide data for the most recent month at the time of the first release of Eurostat data. In such cases, Eurostat estimates the data for the missing countries and integrates these estimates in the calculation of the euro area aggregates; the individual estimates (at country level) are not published. These country data have likewise not been included in the country aggregations in Chart D.

figures. While it is evident from occasionally larger past deviations that the country aggregation does not necessarily – not even in normal times – provide a good estimate of the Eurostat figure, it is clear from Chart D that such approximations have become even more uncertain in recent times. Overall, given the increased uncertainties in seasonally adjusted figures, users should avoid extracting strong signals from short-term developments, such as monthly rates of change, in the current circumstances even more than in less exceptional times.

## LABOUR MARKET

Conditions in euro area labour markets have continued to deteriorate in recent months. Eurostat's second estimate confirmed a clear acceleration in the pace of employment losses in the first quarter of the year. Euro area employment decreased by 0.9% (quarter on quarter) in the first quarter of 2009, marking the third consecutive quarterly decline (see Table 6). The strong acceleration of the contraction of employment in the first quarter was largely due to the sharp decline in both the industrial and the construction sector. After several quarters of a gradual slowdown, and virtual stagnation in the second half of 2008, employment in the services sector likewise began to decline in the first quarter of 2009.

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

As a result of the strong fall in activity, labour productivity (measured in terms of output per employee) declined substantially in the first quarter of 2009, namely by 1.7%, quarter on quarter (see Chart 30). The bulk of the decline in labour productivity was accounted for by the industrial sector (excluding construction), where it fell by 7.4% (quarter on quarter) in the first quarter of 2009. 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.

**Table 6 Employment growth**

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

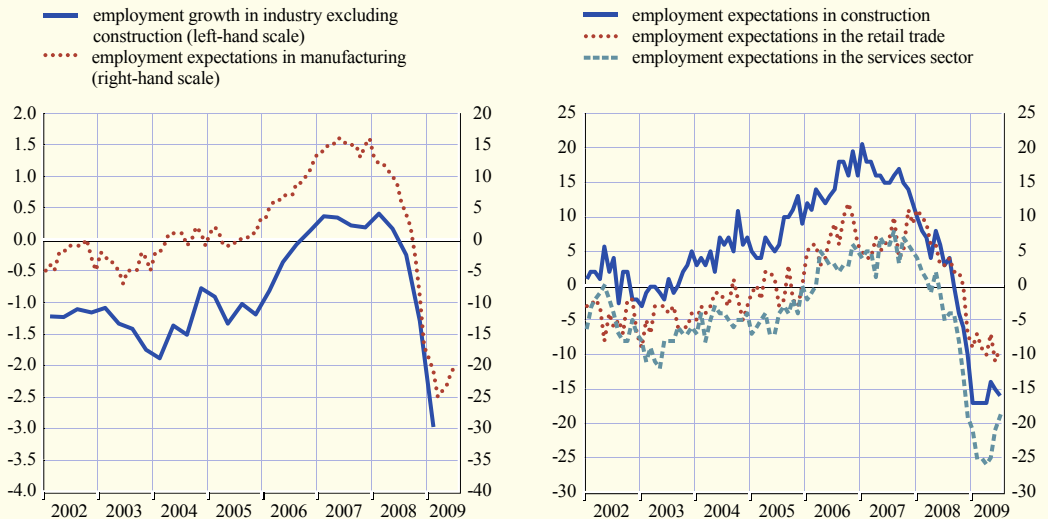
	Annual rates		Quarterly rates				
	2007	2008	2008 Q1	2008 Q2	2008 Q3	2008 Q4	2009 Q1
Whole economy	1.8	0.8	0.4	0.1	-0.2	-0.4	-0.9
<i>of which:</i>							
Agriculture and fishing	-1.4	-1.5	0.7	-1.4	-0.6	0.3	-1.0
Industry	1.4	-0.9	0.1	-0.5	-0.8	-1.4	-1.7
Excluding construction	0.3	-0.2	0.3	-0.2	-0.4	-1.0	-1.4
Construction	4.0	-2.4	-0.4	-1.2	-1.5	-2.2	-2.6
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	1.2	0.2	0.1	-0.6	-1.0
Public administration <sup>1)</sup>	1.3	1.2	0.0	0.6	0.1	0.6	0.0

Sources: Eurostat and ECB calculations.

1) Also includes education, health and other services.

### Chart 29 Employment growth and employment expectations

(annual percentage changes; percentage balances; seasonally adjusted)

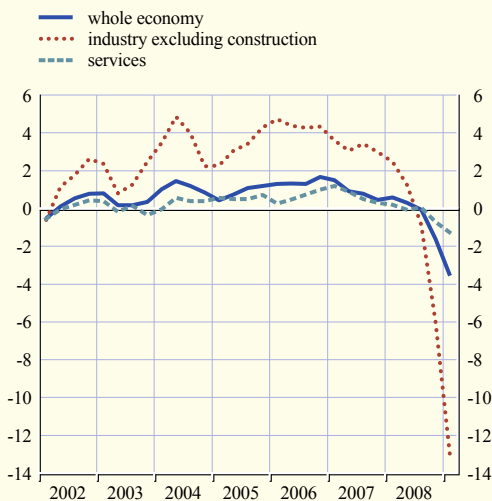


Sources: Eurostat and European Commission Business and Consumer Surveys.  
Note: Percentage balances are mean-adjusted.

The unemployment rate in the euro area rose to 9.4% in June (see Chart 31), up by 0.1 percentage point on the previous month. The rise was broadly based across all euro area countries. Looking ahead, low levels of economic confidence and lagged effects of the decline in economic activity suggest further increases in unemployment.

### Chart 30 Labour productivity

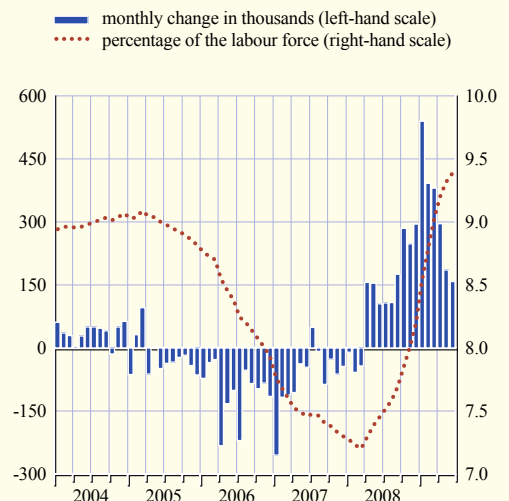
(annual percentage changes)



Sources: Eurostat and ECB calculations.

### Chart 31 Unemployment

(monthly data; seasonally adjusted)



Source: Eurostat.

### 4.3 THE OUTLOOK FOR ECONOMIC ACTIVITY

Recent surveys of economic activity in the euro area suggest that the pace of contraction is clearly slowing down. However, economic activity is expected to remain weak over the remainder of this year. Looking ahead into next year, after a phase of stabilisation, a gradual recovery with positive quarterly growth rates is expected. The significant policy stimuli in all major economic areas should support growth globally, including in the euro area.

The risks to this outlook for economic activity remain balanced. On the upside, 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 downside, there remain concerns relating to a stronger or more protracted negative feedback loop between the real economy and the turmoil in financial markets, renewed increases in oil and other commodity prices, the intensification of protectionist pressures, more unfavourable than expected labour market conditions 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

Notwithstanding some fluctuation, the euro has appreciated moderately in nominal effective terms since the end of April 2009, mainly due to a strengthening against the US dollar and the Japanese yen that was partly offset by a depreciation vis-à-vis the pound sterling.

#### EFFECTIVE EXCHANGE RATE OF THE EURO

On 5 August 2009 the nominal effective exchange rate of the euro – as measured against the currencies of 21 of the euro area’s most important trading partners – stood 1.7% above the level prevailing at the end of April 2009 and close to its 2008 average (see Chart 32). The appreciation of the euro since the end of April 2009 reflects mainly a strengthening vis-à-vis the US dollar and the Japanese yen that was partly offset by a weakening against the pound sterling.

After appreciating sharply in May, possibly reflecting diminished safe-haven demand for the US dollar, the euro depreciated in the first part of June, remaining broadly unchanged thereafter.

#### US DOLLAR/EURO

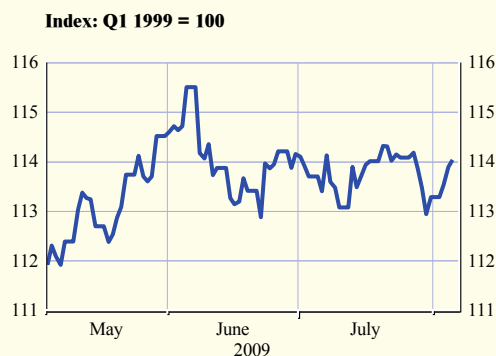
The broad stability of the euro against the US dollar between early June and the end of July followed a phase of sharp appreciation in May, possibly related to the further decline in implied volatility and rising equity prices, which have increased investors’ risk appetite. In early August the euro resumed its appreciation vis-à-vis the US dollar. On 5 August the euro traded at USD 1.44, 8.5% above the level prevailing at the end of April but still 2% weaker than its average level 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 since June followed a period spanning the second half

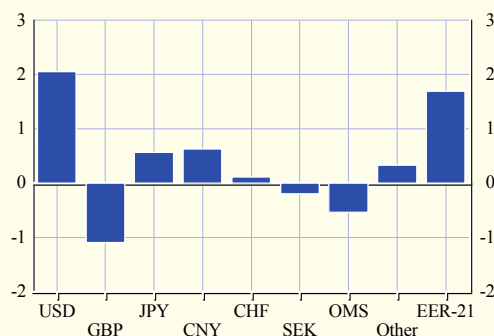
Chart 32 Euro effective exchange rate and its decomposition<sup>1)</sup>

(daily data)



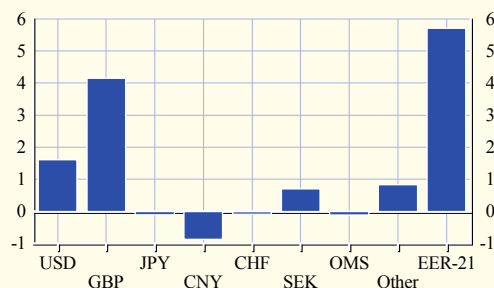
#### Contributions to EER changes<sup>2)</sup>

From 30 April 2009 to 5 August 2009  
(percentage points)



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

From 3 January 2005 to 5 August 2009  
(percentage points)

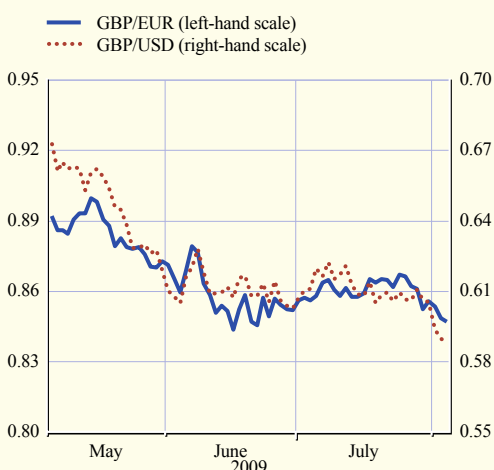
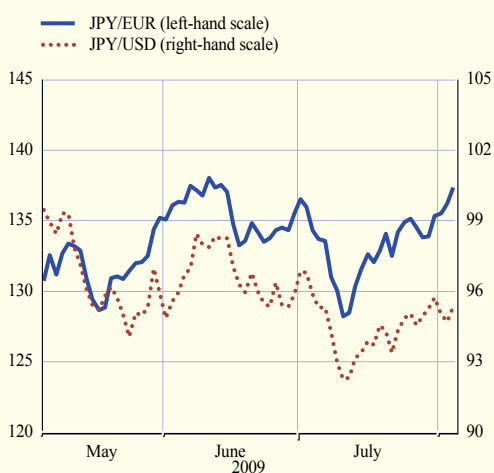
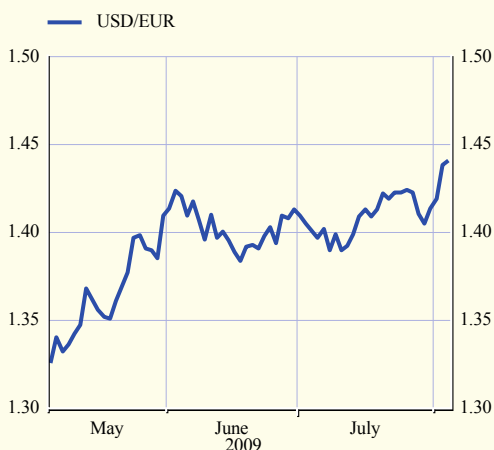


Source: ECB.

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.

Chart 33 Patterns in exchange rates

(daily data)



Source: ECB.

of April and May during which the euro strengthened considerably. On 5 August the euro stood at JPY 137.4, around 5.4% higher than its level at the end of April 2009 (see Chart 33) and about 10% below its average in 2008.

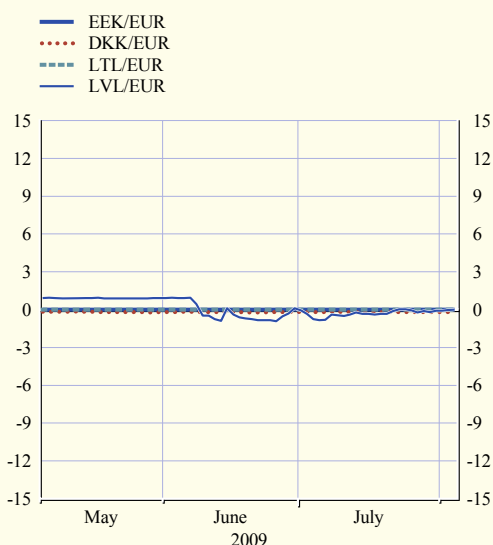
#### EU MEMBER STATES' CURRENCIES

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 in the lower half (strong side) of its unilaterally set  $\pm 1\%$  fluctuation band against the euro. On 5 August the Latvian lats stood close to its ERM II central parity.

With regard to the currencies of other EU Member States not participating in ERM II, in July the depreciation of the euro against the pound sterling came to a halt, possibly owing to data releases on output that were worse than anticipated by markets. On 5 August the euro

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.



traded at GBP 0.85, 5.2% lower than its level at the end of April but 6.4% higher than its 2008 average. Over the past three months the euro has depreciated against the Czech koruna (2.8%), the Hungarian forint (7.8%) and the Polish zloty (6.8%).

#### **OTHER CURRENCIES**

Between the end of April and 5 August 2009, some large swings notwithstanding, the euro appreciated slightly against the Swiss franc. Most of this appreciation took place at the end of June (around 2% in three days) and followed reported interventions in the foreign exchange markets by the Swiss National Bank. On 5 August the euro traded at around CHF 1.53, 1.7% higher than its level at the end of April but 3.5% lower than its average in 2008. Between the end of April and 5 August, the euro weakened by 1.8% against the Canadian dollar and by 5.9% against the Australian dollar.

### **5.2 BALANCE OF PAYMENTS**

*In the year to May 2009, the euro area current account deficit reached €125.1 billion in working day and seasonally adjusted terms (or about 1.4% of GDP). Looking at the most recent trade developments, the significant contraction in trade observed since the deepening of the financial crisis in September 2008 seems to have moderated, particularly on the exports side. In the financial account, combined direct and portfolio investment recorded net inflows of €418.1 billion in the year to May 2009, as net inflows in portfolio investment exceeded net outflows in direct investment.*

#### **TRADE AND THE CURRENT ACCOUNT**

In the three months to May 2009, the euro area current account recorded an average monthly deficit of €5.7 billion (working day and seasonally adjusted), compared with a deficit of €16.4 billion in the previous three-month period to February 2009. This reduction was driven mostly by a shift from deficit to surplus in the goods balance and by a decrease in the deficit for income (see Table 7).

The significant contraction in trade that has been observed since the deepening of the financial crisis in September 2008 seems to have moderated somewhat. In the three-month period to May 2009, exports of goods and services declined in value terms by 4.8%, compared with a fall of 12.2% in the previous three-month period. This milder contraction was due mainly to developments in goods exports, which over the three-month period to May 2009 declined by 5.0% – almost 10 percentage points less than the decline over the previous three-month period. Meanwhile, services exports declined by 4.3%. The contraction of imports of goods and services also decelerated in the three months to May 2009, but the deceleration was less pronounced than for exports: imports fell by 7.9%, down from the 10.4% decline in the three months to February 2009.

The breakdown of euro area goods trade into volumes and prices, available up to April 2009, shows that the deceleration of the decline in import and export values was due to developments in both the volumes and prices of traded goods. From a geographical perspective, it appears that exports to China, other emerging Asian economies and OPEC countries have recently shown some signs of rebounding, both in value and volume terms. At the same time, exports to central and eastern EU Member States have stabilised in volume terms. Nevertheless, total extra-euro area exports remain subdued owing primarily to the weaker performance of exports to developed countries. In terms of broad categories of goods, significant declines in export volumes continued for capital

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	
	2009 Apr.	2009 May	2008 Aug.	2008 Nov.	2009 Feb.	2009 May	2008 May	2009 May
<i>EUR billions</i>								
<b>Current account</b>	-6.1	-1.2	-7.6	-11.9	-16.4	-5.7	-21.7	-125.1
Goods balance	2.5	2.9	-1.2	-0.3	-4.0	1.4	32.4	-12.5
Exports	104.1	103.1	134.7	128.4	109.7	104.1	1,564.2	1,430.6
Imports	101.7	100.2	135.9	128.7	113.7	102.7	1,531.7	1,443.1
Services balance	3.0	2.2	3.5	2.2	2.7	2.0	51.9	31.1
Exports	38.7	38.3	41.9	42.5	40.4	38.7	504.2	490.6
Imports	35.7	36.0	38.4	40.4	37.7	36.7	452.3	459.5
Income balance	-3.0	1.6	-2.0	-5.5	-6.4	-0.4	-12.3	-42.8
Current transfers balance	-8.6	-7.9	-7.9	-8.2	-8.7	-8.8	-93.8	-101.0
<b>Financial account<sup>1)</sup></b>	-2.5	24.7	21.3	34.3	38.7	30.1	115.6	373.0
Combined net direct and portfolio investment	-13.4	59.9	17.9	61.0	20.0	40.5	-17.9	418.1
Net direct investment	-4.5	6.1	-12.8	-28.8	-10.6	-6.3	-147.5	-175.5
Net portfolio investment	-9.0	53.8	30.7	89.8	30.5	46.8	129.6	593.6
Equities	-19.5	7.9	5.9	-13.7	-6.8	10.4	81.1	-12.7
Debt instruments	10.5	45.8	24.9	103.5	37.3	36.4	48.4	606.3
Bonds and notes	-22.3	52.3	16.2	24.6	26.2	28.0	147.2	285.1
Money market instruments	32.8	-6.5	8.6	78.9	11.2	8.4	-98.7	321.3
<i>Percentage changes over previous period</i>								
<b>Goods and services</b>								
Exports	-1.0	-1.0	0.6	-3.2	-12.2	-4.8	8.2	-7.1
Imports	-5.0	-0.8	1.3	-3.0	-10.4	-7.9	8.2	-4.1
<b>Goods</b>								
Exports	-1.0	-1.0	1.0	-4.7	-14.6	-5.0	7.6	-8.5
Imports	-4.4	-1.4	1.8	-5.4	-11.6	-9.7	7.9	-5.8
<b>Services</b>								
Exports	-1.2	-1.1	-0.9	1.7	-5.0	-4.3	10.1	-2.7
Imports	-6.9	1.0	-0.2	5.2	-6.6	-2.8	9.1	1.6

Source: ECB.

Note: Figures may not add up due to rounding.

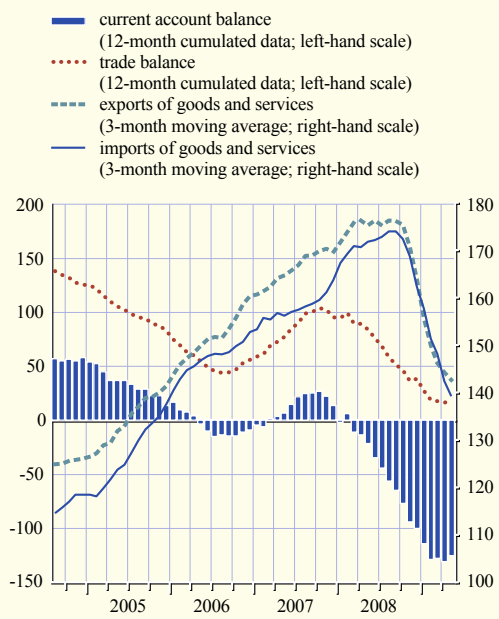
1) Figures refer to balances (net flows). A positive (negative) sign indicates a net inflow (outflow). Not seasonally adjusted.

goods, which fell back to levels not observed since 2004. By contrast, exports of consumer and intermediate goods appear to have stabilised. Meanwhile, imports continued to post high rates of decline, especially in the case of intermediate and capital goods.

From a longer-term perspective, the 12-month cumulated current account deficit reached €125.1 billion in May 2009 (working day and seasonally adjusted), corresponding to about 1.4% of GDP. This figure compares with a deficit of €21.7 billion for the same period a year earlier. The deterioration was driven by a shift from surplus to deficit in the goods balance, as well as a decrease in the surplus for services and increases in the deficits for income and current transfers. The shift in the goods trade balance, which stems mainly from the high energy import prices observed in the summer of 2008, brought the deficit in the goods balance to €12.5 billion in the year to May 2009. This compares with a surplus of €32.4 billion a year earlier. The surplus in services decreased to €31.1 billion in the year to May 2009 – from €51.9 billion a year earlier. Over the same period, the deficit in the income account widened from €12.3 billion to €42.8 billion, resulting largely from lower income receipts from non-euro area residents. Finally, the deficit in current transfers increased only slightly – from €93.8 to €101.0 billion (see Chart 35).

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

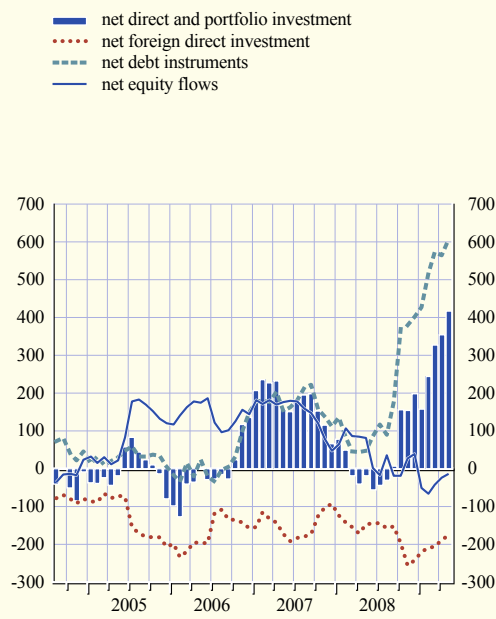
(EUR billions; monthly data; seasonally adjusted)



Source: ECB.

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

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



Source: ECB.

## FINANCIAL ACCOUNT

In the three-month period to May 2009, combined direct and portfolio investment recorded average monthly net inflows of €40.5 billion, compared with net inflows of €20.0 billion over the previous three months (see Table 7 and Chart 36). These developments were due primarily to a shift to net inflows of equity securities, which in the three months to May 2009 amounted to an average of €10.4 billion, compared with an outflow of €6.8 billion over the period to February 2009. This development, driven by a return to positive net purchases of euro area equities by non-residents, was due mainly to investments by non-MFIs and possibly supported by an attenuation of investors' preferences for more liquid and shorter-term assets. Meanwhile, net investment in debt instruments remained largely unchanged in the three-month period ending in May 2009, posting net inflows of €36.4 billion, of which €28 billion originated from bonds and notes. The geographical breakdown of portfolio investment, available up to the first quarter of 2009, indicates that net sales of foreign securities by euro area investors comprised primarily securities issues in offshore financial centres, the United Kingdom and Japan. At the same time, net purchases were recorded primarily in securities issued by EU institutions and emerging countries.

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 May 2009, possibly signalling global strategies of market consolidation. While foreign direct investment in the euro area recorded somewhat stronger inflows, it was still outpaced by direct investment abroad by euro area residents, resulting in net outflows of direct investment amounting to €6.3 billion over the three months to May 2009 – down from €10.6 billion over the previous three months. The geographical breakdown of direct investment, available up to the first quarter of 2009, indicates that the largest outflows in direct investment were directed to the United States,

the United Kingdom and emerging economies. By contrast, net inflows were mainly recorded from offshore financial centres and Canada.

Overall, net inflows in combined direct and portfolio investment in the 12-month period to May 2009 rose to €418.1 billion (compared with net outflows of €17.9 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 categories of instruments indicates that these developments were driven mostly by net inflows in the money market segment. In particular, net inflows in euro area money market instruments soared to €321.3 billion in the 12-month period to May 2009, compared with net outflows of €98.7 billion for the previous year. These developments are likely to be associated mainly with the unfolding dynamics of the financial crisis, where the high level of volatility in the capital markets, as well as the exceptionally high degree of uncertainty and the gloomy global economic outlook, have tilted investors' preferences not only towards quality and safety but also towards more liquid and shorter-term assets. Meanwhile, developments in direct investment over the past year seem to signal an overall increase in home bias. Despite their recent rebound, direct investment flows were significantly lower in the 12-month period to May 2009 compared with the previous year, in terms of both assets and liabilities. However, as the decline in net direct investment by non-residents in the euro area exceeded the contraction in euro area net direct investment abroad, net outflows reached €175.5 billion in the 12-month period to May 2009, up from €147.5 billion in the previous year.

Finally, turning to the euro area international investment position, data for the first quarter of 2009 indicate an increase in the net liability position, to 21.6% of GDP, reflecting mainly further net inflows of portfolio investment into the euro area.



## ARTICLES

# HOUSING FINANCE IN THE EURO AREA



*Developments in housing finance play an important role in the analyses carried out by the ECB, notably the analysis of the transmission of monetary policy, the monetary analysis and the monitoring of the integration of financial markets. This article presents an overview of relevant developments in housing finance since 1999, as regards both the granting of loans for house purchase to households and the way in which banks have funded these loans. The growth of housing loans was strong in the period 1999-2007, causing an increase in household indebtedness, but has been moderating since 2006 and became very slow in 2008. While the characteristics of housing loans continue to differ across euro area countries, an increase in market-based funding, including securitisation, was witnessed in most countries in the period 1999-2007. However, the recent financial turmoil has caused some reversal of this development in favour of more traditional deposit-based funding. The increase in households' interest burden owing to higher indebtedness tends to strengthen the transmission of monetary policy, whereas a rise in market-based funding for MFIs tends to work in the opposite direction. Finally, despite a process of deregulation and liberalisation of financial markets over the past two decades, which has led to a greater availability of mortgage products, differences in mortgage loan characteristics across euro area countries indicate some potential for further mortgage market integration.*

### I INTRODUCTION

The monitoring and assessment of developments in housing finance plays an important role in the analyses carried out in the ECB and the Eurosystem. This reflects the fact that financing the purchase of a home is typically the largest financial transaction a household conducts over its lifetime, and the loans taken out for that purpose constitute by far the largest liability of the household sector.<sup>1</sup> In the euro area, most housing loans are provided by banks, and in aggregate they account for about one-third of total lending by MFIs.<sup>2</sup> Broadly speaking, there are at least three main areas from which the ECB's interest in housing finance issues arises.

First, mortgage financing plays a direct role in transmitting changes in monetary policy to aggregate spending, via residential investment and private consumption. Its importance to some extent depends on whether loans for house purchase have fixed or variable interest rates, as the monetary policy transmission will in principle be quicker in the latter case.

Second, understanding developments in housing finance is important for assessing the nature of monetary trends as part of a broad-based monetary analysis. In this respect, it is for instance relevant whether strong growth

in loans and indebtedness reflects business cycle-related or structural influences, and/or whether it reflects fundamental determinants.

Third, cross-country differences in mortgage financing terms, mortgage practices and relevant institutions have an effect on the level of integration in the euro area financial system. From a monetary policy point of view, closer integration of housing finance markets, as regards both housing loan characteristics and the funding of such loans, in principle fosters convergence in the speed and strength with which monetary policy affects the real economy and prices in the various national economies.

All three areas of interest have come to the foreground with the housing crisis that started in the United States and has led to a global financial crisis. Substantial price decreases in some housing markets, unfavourable household income prospects and increasing difficulties for banks in accessing bond markets to finance mortgage loans have characterised

1 The data in this article are taken to a large extent from the ECB Occasional Paper entitled "Housing finance in the euro area", No 101, 2009, which was prepared by a task force of the Monetary Policy Committee of the ESCB.

2 This article uses the terms "housing loans", "loans for house purchase" and "mortgages" interchangeably. As the analysis underlying the article refers to the period from 1999 to 2008, it excludes Slovakia.

developments in the euro area and raised questions as to the current strength of this channel of monetary policy transmission, as well as to the sustainability of current debt levels.

The analysis and assessment of developments in housing finance require an in-depth knowledge of such developments over time as well as of differences between countries. This article describes the evolution of housing finance, looking at housing loans granted to households and the way in which banks have funded these loans. Section 2 reviews the dynamics of mortgage indebtedness and loans for house purchase over the period since the start of EMU (1999-2007) and their main characteristics. Section 3 then focuses on developments in the way banks have funded the growth in mortgage lending, and Section 4 draws some conclusions. To the extent possible, the article also analyses developments in housing finance after 2007.

## 2 DEVELOPMENTS IN LOANS FOR HOUSE PURCHASE AND UNDERLYING FACTORS

Lending to households in euro area countries is predominantly provided by MFIs, reflecting the bank-oriented structure of the financial system. This is also true for loans for house purchase, more than 90% of the stock of which was originated by euro area MFIs. In those euro area countries where historically non-MFIs, most notably insurance corporations, have played a significant role as providers of housing loans (Belgium, Germany and the Netherlands), their market share has shrunk over the course of the past decade. In view of this, the remainder of this article will focus on loans for house purchase granted by MFIs.<sup>3</sup> This section outlines developments in MFI lending to households for house purchase in the euro area since 1999, focusing initially on the period from 1999 to 2007 and then on more recent developments in 2008. The factors that have contributed to the trends observed over this period are subsequently discussed, and the section concludes with a description of the main features of loans for house purchase in euro area countries.

## 2.1 DEVELOPMENTS IN LOANS FOR HOUSE PURCHASE SINCE 1999

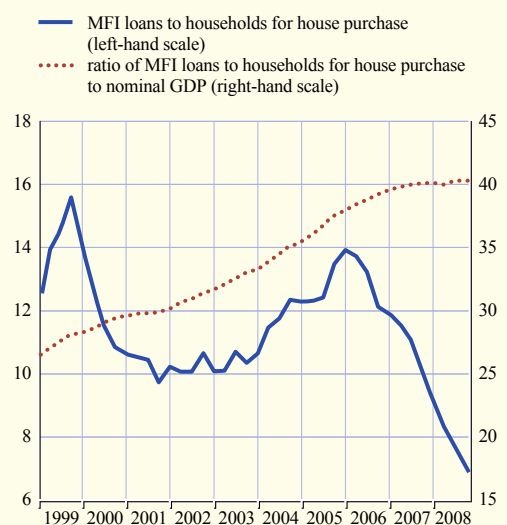
Mortgage debt is clearly the largest liability of euro area households, accounting for approximately 70% of their total financial liabilities at the end of 2008. Moreover, focusing in particular on MFI loans to households, the share of loans for house purchase in total household debt has been on an increasing trend, rising by approximately 20 percentage points since the early 1990s, to reach 72% in 2008.

The annual growth rate of MFI lending to households for house purchase in the euro area remained at double-digit levels throughout the 1999-2007 period, with the average annual growth rate standing at 11½% (see Chart 1). Over this period two cyclical peaks are discernible: the first occurred in the fourth quarter of 1999,

3 It should be noted that cross-border provision of mortgages in the euro area is very limited, representing only a small percentage of total mortgage lending.

**Chart 1 Growth and level of MFI loans to households for house purchase in the euro area**

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



Sources: ECB and Eurostat.

Notes: MFI loans to households for house purchase have been adjusted for the derecognition of loans from the statistical MFI balance sheet as a result of their sale or securitisation. Owing to the absence of data on derecognised loans by sector and purpose of the loan, all derecognised loans are assumed to relate to loans to households for house purchase.

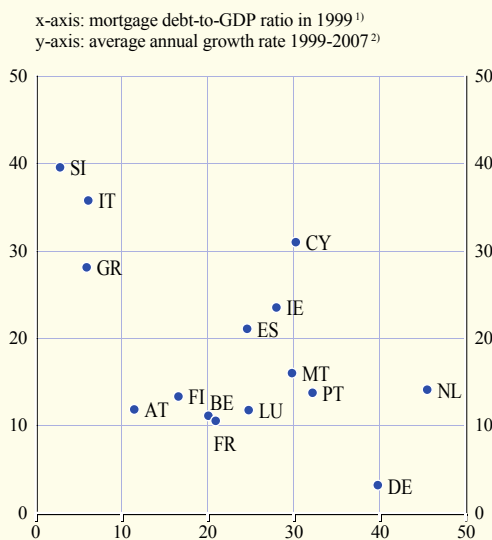
underpinned by the “new economy” boom and favourable financing conditions. The second peak, in the first quarter of 2006, was followed by a gradual tightening of financing conditions and the moderation – and in some euro area countries the reversal – of house price growth. Looking through the cyclical developments, the strong dynamics of mortgage lending during this period led to a significant rise in the indebtedness of euro area households as regards loans for house purchase, from approximately 25% of nominal GDP at the beginning of 1999 to 40% in the last quarter of 2007.

While the increase in mortgage debt is a feature shared among all euro area countries, the size of this increase has varied quite considerably. To some extent, this reflects the different initial levels of indebtedness, with some of the countries where indebtedness was low at the beginning of the period, such as Slovenia and Greece, witnessing very high average annual growth rates of MFI lending to households for house purchase (more than 25%; see Chart 2). This catching-up tendency is an adjustment process towards a new equilibrium level of indebtedness, although overshooting can occur along the adjustment path. While it is difficult to identify the level of such an equilibrium concept empirically, it is one of the aspects of the broad-based monetary analysis conducted by the ECB. In this respect, the exceptionally high growth rates of MFI lending for house purchase in some euro area countries in an environment of buoyant monetary growth in the 2005-07 period pointed to an accumulation of imbalances. These imbalances did not necessarily manifest themselves in consumer prices. They were, however, reflected in higher asset prices and housing prices in particular.

Increased household indebtedness – even if it can be viewed as a justified reaction on the part of households to a relaxation of credit constraints and to a lasting decline in inflation as well as in nominal and real financing costs – can have significant macroeconomic implications. Importantly, it implies that changes to interest rates, such as those engineered by monetary

**Chart 2 Growth and initial level of MFI loans to households for house purchase in the euro area countries**

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



Sources: ECB and Eurostat.

Note: See notes to Chart 1.

1) The ratio of MFI loans to households for house purchase to GDP is calculated for the first quarter of 1999, other than for Cyprus (fourth quarter of 2005), Malta (first quarter of 2005) and Slovenia (first quarter of 2004). Data on the outstanding amounts of derecognised loans in the first quarter of 1999 are not available for all countries; however, securitisation activity in euro area countries at the time was very limited, suggesting that any distortion owing to the unavailability of this information will be relatively minor. The ratio for Luxembourg overstates the indebtedness of households resident in this country owing to the considerable amount of loans to households resident in other euro area countries.

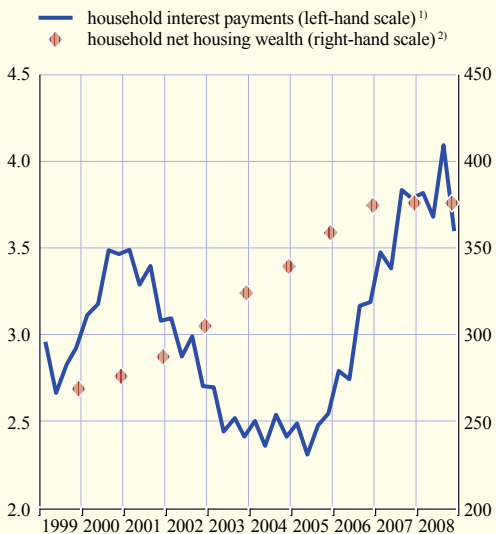
2) The average annual growth rate is calculated over the period 1999-2007, other than for Cyprus (2006-07), Malta (2005-07) and Slovenia (2004-07). The average annual growth rate for Italy is upwardly distorted owing to the unavailability of data on the redemptions of derecognised loans. If no adjustment were to be made for derecognised loans, the average growth rate for Italy over the 1999-2007 period would be 18%.

policy, will have a larger impact on households' discretionary spending. This suggests a strengthening of the channel of monetary policy transmission that operates through changes in interest rates. However, it also implies that the impact on consumption spending of changes in interest rates not initiated by monetary policy – such as those triggered by tensions in the financial markets – as well as in current and expected income is amplified. Chart 3 shows that while the interest payment burden of households in the euro area increased from 2.9% of their gross disposable income in the first quarter of 1999 to 3.6% in the fourth quarter of 2008, the rise was considerably more moderate than the



**Chart 3 Household interest payments and net housing wealth in the euro area**

(percentages of gross disposable household income; not adjusted for seasonal and calendar effects)



Sources: ECB and Eurostat.

1) Interest payments refer to all payments of interest made by households, regardless of the purpose of the underlying loan.

2) Household net housing wealth is calculated as household housing wealth (net of depreciation) less MFI loans to households for house purchase adjusted for the derecognition of loans (see notes to Chart 1).

rise in indebtedness. Moreover, the increase was not continuous throughout the period, as the interest payment burden decreased between 2001 and mid-2005 in the context of falling and then stable interest rates. From late 2005, by contrast, the gradual removal of monetary policy accommodation was reflected in a renewed rise in the interest payment burden, which was interrupted by the steep decline in key policy rates in the last quarter of 2008.

The increase in household indebtedness related to loans for house purchase is mirrored in the acquisition of housing wealth by households. Despite the strong rise in household indebtedness since 1999, net housing wealth (i.e. housing wealth net of loans for house purchase) has increased. This reflects both a valuation effect stemming from the robust house price dynamics throughout most of this period as well as the fact that households in euro area countries typically need to complement the funds borrowed with

own resources in order to acquire housing (in other words, loan-to-value ratios are typically well below 100%).<sup>4</sup>

The monitoring of developments in household indebtedness, interest payment burden and net wealth is crucial not only in view of the macroeconomic considerations outlined above but also for assessing the vulnerability of the household sector.<sup>5</sup> This, in turn, has implications for the stability of the MFI sector, which is the largest lender to households. At the same time, aggregate developments for the household sector as a whole can mask risk concentrations arising from a skewed distribution of debt across individual households and mismatches between the levels of assets and liabilities among households, suggesting that this analysis needs to be complemented by an examination of household-level data provided by surveys.<sup>6</sup>

When tensions erupted in the financial markets in the summer of 2007, the dynamics of MFI lending to households for house purchase were already on a moderating path, as house price growth was losing steam and lending rates were rising in response to the gradual tightening of monetary policy after December 2005. The rapid deterioration in the macroeconomic environment and the sharp increase in uncertainty that ensued further weakened demand for mortgage loans. Developments in the housing market and the macroeconomic environment also affected credit institutions' attitudes towards lending, leading to a marked tightening of their credit standards. Moreover, factors relating to the condition of the banking sector, such as balance sheet constraints as

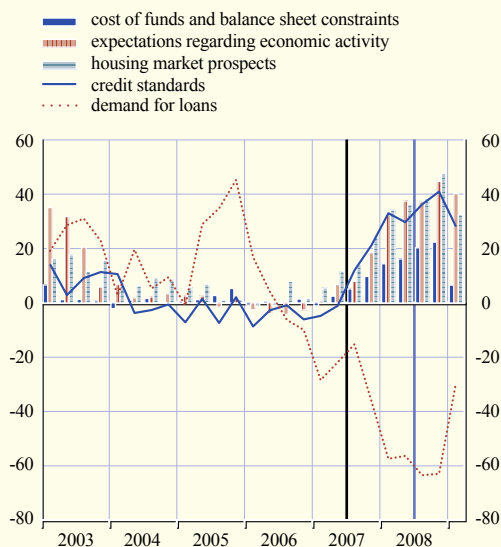
4 For a review of developments in housing wealth in the euro area and their link with private consumption, see the article entitled "Housing wealth and private consumption in the euro area" in the January 2009 issue of the Monthly Bulletin.

5 An assessment of the vulnerability of the household sector on the basis of, among other things, these indicators is made regularly in the ECB's Financial Stability Review.

6 An analysis of the available survey data from euro area countries is presented in the box entitled "Distribution of mortgage debt across the population: indications from national household surveys" in "Housing finance in the euro area", ECB Occasional Paper No 101, 2009.

**Chart 4 Changes in credit standards applied to loans to households for house purchase, contributing factors and changes in perceptions of loan demand**

(net percentages)



Source: ECB.

Notes: Vertical lines denote the start of the financial market turmoil (black line) and its intensification following the collapse of Lehman Brothers (blue line). The series shown refer to net percentages of answers to the relevant questions as reported in the respective bank lending surveys for the euro area.

well as funding and liquidity considerations, reinforced this tightening (see Chart 4). As a result, the moderation in MFI lending dynamics continued unabated, resulting in annual growth rates that were lower than those observed during the trough of the previous cycle at the end of 2001. Indeed, in nominal terms the growth rate observed in the first quarter of 2009 for MFI loans to households for house purchase was the lowest since the series began in 1980. However, in real terms (using the GDP deflator) the annual growth rate of MFI loans to households for house purchase has not dropped to the levels observed in 1982 and 1991. In any case, the weak dynamics in such lending over the most recent quarters should be put into perspective against the unprecedented level of household indebtedness and the exceptionally high growth rates witnessed in some euro area countries in the preceding years. In this respect, the current weakness of mortgage lending could be viewed as part of a warranted unwinding of past imbalances.

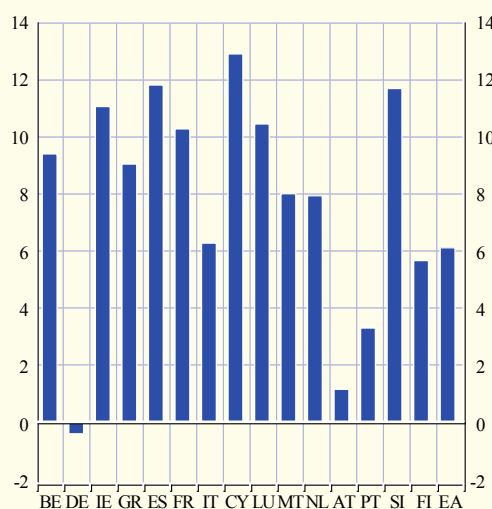
## 2.2 DETERMINANTS OF TRENDS IN LOANS FOR HOUSE PURCHASE

Besides the level of household indebtedness, other factors have clearly been instrumental in shaping the dynamics of mortgage lending in the euro area. These factors relate to, among other things, housing market developments, the macroeconomic environment (as reflected in the level and volatility of income growth and inflation as well as in the level of interest rates), demographic developments and the characteristics of the financial systems in terms of their degree of liberalisation and efficiency. Moreover, cross-country heterogeneity in these factors is crucial for understanding the disparity in the average rate of increase of household indebtedness across euro area countries.

The evolution of household borrowing for house purchase is closely linked to housing market developments. Between 1999 and 2007 residential property prices increased at an average annual rate of 6.1% in the euro area, which implies a cumulated increase of around 70% (see Chart 5). Considerable heterogeneity was observed among euro area countries, however, with particularly high average annual growth in housing prices in Ireland and Spain, countries where household borrowing for house purchase also increased very markedly. In Germany, housing prices declined at an average annual rate of 0.4% during the period under consideration, which is consistent with the very weak loan growth dynamics also observed. In principle, higher property prices tend to lead to higher funding needs and therefore increased borrowing. In addition, the amount of borrowing that households can obtain is typically constrained by the value of the collateral they can offer. Increased property prices raise the value of borrowers' collateral and therefore their borrowing capacity. At the same time, the increased availability of credit can also exert an upward influence on house prices, particularly in the short run when the supply of housing cannot fully adjust. A bi-directional causal relationship is most plausible; however, this is ultimately an empirical question.

**Chart 5 Residential property prices**

(average annual percentage changes)

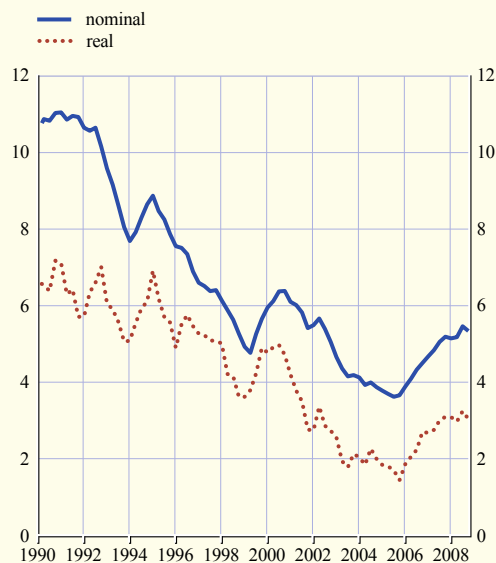


Source: ECB.

Notes: Average annual growth rates are calculated over the period 1999-2007, other than for Cyprus (2003-07), Luxembourg (1999-2006), Slovenia (2005-07) and Finland (2001-07). EA denotes the euro area.

**Chart 6 Interest rates on loans to households for house purchase**

(percentages per annum)



Sources: ECB and ECB estimates.

Notes: The interest rate is a composite lending rate for loans for house purchase, using new business volumes to weight the individual series. The real series has been calculated using the GDP deflator.

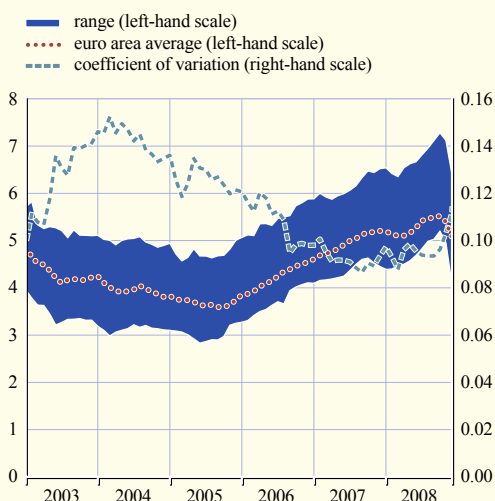
Macroeconomic conditions in euro area countries have also been conducive to a further increase in household borrowing. The volatility of real GDP growth was relatively low during the period under review, thereby reducing the income uncertainty of households. This, combined with the fact that the level and volatility of inflation had declined markedly in the run-up to Stage Three of EMU and remained modest throughout the period under consideration, shaped a stable macroeconomic environment that was supportive of debt accumulation. In addition, real disposable income of households rose relatively rapidly between 1999 and 2008, particularly in some of the euro area countries where household borrowing for house purchase increased at exceptionally high rates, such as Ireland, Greece and Spain. Higher household disposable income implies improved living standards, which in turn generate increased housing needs in terms of both quantity and quality. Moreover, higher incomes can support a larger

debt repayment burden, thus increasing the borrowing capacity of households.

Importantly, the low level and volatility of inflation contributed greatly to the reduction of nominal as well as real interest rates. Chart 6 shows that from 1999 the cost of household borrowing for house purchase was particularly low from a historical perspective, in both nominal and real terms, despite a reversal of the overall downward trend from late 2005 in the context of the gradual rise in policy rates. The low level of interest rates raised households' willingness and capacity to increase their indebtedness as it improved the affordability of borrowing. The impact of this factor is particularly visible in euro area countries such as Greece, Italy and Portugal, which in the context of entry into the euro area experienced a switch to a regime of permanently lower interest rates. However, despite the broad trend of convergence in lending rates across euro area countries, dispersion remains, as shown in

**Chart 7 Dispersion of interest rates on loans to households for house purchase across euro area countries**

(percentages per annum)



Source: ECB.

Notes: The coefficient of variation is calculated as the standard deviation of interest rates across countries divided by the average interest rate for the euro area. Owing to limited data availability, Cyprus, Luxembourg and Malta are not included in the calculations.

Chart 7.<sup>7</sup> Interestingly, the dispersion of lending rates across countries, as measured for instance by their coefficient of variation, decreased during the period when policy rates were broadly stable, while it has tended to increase following changes to these rates, particularly when such changes were rapid. This suggests the existence of cross-country differences in the speed with which changes in policy rates are passed through to lending rates, which may have been exacerbated by the recent turmoil in financial markets.<sup>8</sup>

Demographic factors such as the growth of the population and its composition in terms of age affect developments in household borrowing through the demand for housing. An increase in the demand for housing owing to population growth will lead, to some extent, to increased demand for loans for house purchase, thereby impacting on the level of household debt. Between 1999 and 2008 the population of the euro area expanded at an average annual rate of just above 0.4%. In addition, the share of the 35 to 44 age group in the population – which

is typically associated with first-time house purchases – increased to 24% in 2008 from 22% at the beginning of this period. In some euro area countries, such as Ireland, Spain, Cyprus and Luxembourg, annual population growth exceeded 1% on average, partly owing to strong immigration flows. In the first two countries in particular, demographic factors are viewed as having played a significant role in determining the brisk pace of household borrowing for house purchase.

The process of deregulation and liberalisation of financial markets has changed housing finance in euro area countries over the past two decades. While this process was for the most part completed in the majority of the euro area countries by the early 1990s, its effects were still shaping developments in the period from 1999 to 2007, as the adjustment involved for market participants meant that the full impact of the process only came about with some lag. The process involved the lifting of a number of restrictions that had previously limited the capacity of the market for housing finance to meet household demand for borrowing and had resulted in a number of households being rationed out of the market.<sup>9</sup> As a consequence, household participation in the mortgage market increased and borrowers were allowed to expand their indebtedness to levels commensurate with income and affordability factors. In addition, the entry of new mortgage providers increased competition in the mortgage markets. As a result, better financing

<sup>7</sup> The differences between MFI interest rates in euro area countries and the factors that explain them are discussed in “Differences in MFI interest rates across euro area countries”, ECB, 2006.

<sup>8</sup> The heterogeneity in the interest rate pass-through in euro area countries is confirmed by formal empirical analyses, see for instance C. Kok Sørensen and T. Werner, “Bank interest rate pass-through in the euro area – a cross country comparison”, ECB Working Paper No 580, 2006.

<sup>9</sup> Such restrictions related, for instance, to interest rate ceilings, limits on the size and maturity of mortgage loans, regulatory barriers to entry to the market for housing finance and limitations on the portfolio allocation of credit institutions such as a requirement to hold significant amounts of government bonds. The deregulation of mortgage markets in OECD countries is discussed in N. Girouard and S. Blöndal, “House prices and economic activity”, OECD Economics Department Working Paper No 279, 2001.

conditions were offered to households, in terms of pricing as well as other aspects. As regards pricing in particular, this is illustrated by the reduction in the spreads between the rates on typical housing loans and the respective indexation rates – or opportunity costs – in nearly all euro area countries since 2003, when the relevant interest rate series begin.<sup>10</sup> The results of the bank lending survey for the euro area also confirm the relevance of competitive pressure for the relaxation of lenders' credit standards during this period. Increased competitive pressure also led to greater innovativeness on the part of mortgage providers, resulting in a more varied range of mortgage products (see next sub-section). The result was that households were better able to match their borrowing needs, again leading to greater mortgage market participation and higher indebtedness.

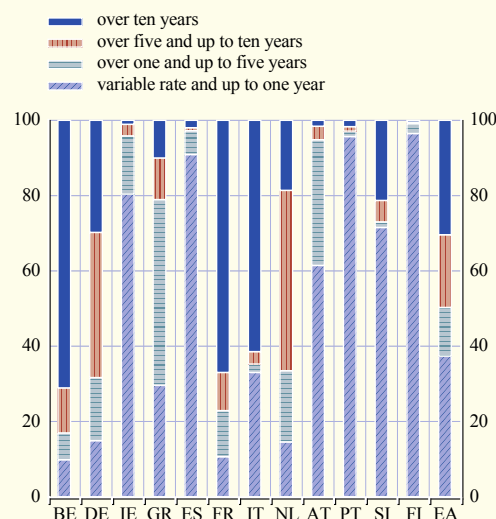
### 2.3 FEATURES OF LOANS FOR HOUSE PURCHASE

The prevailing features of loans for house purchase are often linked to long-established market practices that for historical reasons have differed across euro area countries. However, as discussed above, developments in the market for housing loans over the past two decades have in general resulted in a greater availability of mortgage products. Nevertheless, there remains considerable cross-country heterogeneity in mortgage loan characteristics. This sub-section outlines the current landscape in terms of the features of loans for house purchase in euro area countries, focusing on the aspects that are particularly relevant from a monetary policy perspective.

Perhaps the most pertinent characteristic of mortgage loans for monetary policy is whether their interest rate is variable or fixed and, if fixed, over what period. Under variable interest rates, changes in policy rates affect the interest payment burden – and therefore the income available for spending – of not only new but also existing borrowers, thus having a larger and more immediate impact on consumption.<sup>11</sup> This implies a quicker and stronger monetary

**Chart 8 New business volume of loans to households for house purchase by period of initial rate fixation**

(percentages of total)



Source: ECB.

Notes: The shares are calculated on the basis of new business volume in 2008. Owing to limited data availability, Cyprus, Luxembourg and Malta are not included. EA denotes the euro area.

policy transmission but also suggests that the interest rate risk is borne by households rather than mortgage lenders, which are typically better placed to mitigate it. In the euro area, loans for house purchase carrying a floating rate or a rate fixed for a period of at most one year accounted in 2008 for 38% of all new loans for house purchase granted (see Chart 8). This share had declined from a peak of nearly 60% at the end of 2004 and has been increasing again more recently, indicating that the direction of changes in policy rates is having an impact on the choice of interest rate fixation period, although this is not the only relevant factor.

Looking at individual euro area countries, in Ireland, Spain, Portugal, Slovenia and Finland, variable rates are dominant. In another group of countries – Belgium, Germany, France and the

<sup>10</sup> See Chapter 5 of "Housing finance in the euro area", ECB Occasional Paper No 101, 2009.

<sup>11</sup> This effect is reduced in the case of loans with rates which are variable but capped. Similarly, it is neutralised where loans have a varying maturity in order to maintain a fixed monthly amortisation payment in the face of interest rate changes; see below.

Netherlands – loans with an initial rate fixation period of more than five years account for well above 60% of all new loans for house purchase granted. While the breakdown for this country grouping has remained relatively stable over time, in Italy and particularly Greece the share of loans with a floating rate or a rate fixed for a period of up to one year has decreased sharply since 2007. The reference rate used for adjusting variable rates is in most cases the EURIBOR (at the three, six and twelve-month maturities), although in some countries other reference rates are also used, notably the rate on the main refinancing operations of the Eurosystem. While under normally functioning money markets the choice of reference rate is not of great importance, since the onset of the financial market turmoil it has become a matter of some consequence as the unprecedented increase in the spread between market and policy rates, which was not priced in, has implied a relatively lower interest rate for borrowers with loans indexed to the rate on the main refinancing operations of the Eurosystem.

From a monetary policy perspective, fixation of interest rates on loans for house purchase needs to be considered in conjunction with the existence and cost of the option of early repayment. This is because even borrowers with loans carrying a fixed interest rate can benefit directly from a reduction in interest rates if they are able to refinance their loans. In addition, these borrowers are shielded from upward movements in interest rates, which implies that the effects of monetary policy in tightening and loosening phases can be asymmetric. The ability of borrowers to refinance depends on whether early repayment of their existing loan is possible and at what cost. Partial and total early repayments are in principle possible in all euro area countries. Whereas in several countries early repayment is free of charge in the case of variable rate loans, the repayment of fixed rate loans typically carries a fee, the size of which depends on factors such as the amount to be repaid and the remaining maturity of the loan. While in some countries such fees are capped

by law, in others they are too high to make early repayment attractive to borrowers. Finally, in some cases no fee is charged upon repayment but the inclusion of the option to repay in the mortgage contract implies an increase in the interest rate of about 50 basis points.

The typical maturity of loans for house purchase in euro area countries ranges between 20 and 30 years and has increased on average since 1999, reflecting the impact of higher house prices, increased life expectancy and greater availability – at least before the emergence of the financial market turmoil – of longer-term funding sources for mortgage lenders. An interesting development has been the introduction of loans with variable maturity, i.e. a maturity that is extended or reduced so as to maintain a constant monthly instalment in the face of changes in interest rates. These loans allow households to smooth the effect that changes in interest rates have on their discretionary spending.

The gradual increase in the typical maturity of loans for house purchase since 1999 is also related to a rise in the loan-to-value (LTV) ratios that has been observed in most euro area countries during this period, as extended maturities allow larger amounts to be borrowed while maintaining the affordability of monthly amortisation payments. In 2007 the average LTV of new loans for house purchase<sup>12</sup> in the euro area was around 80%, with the typical ratios in individual countries ranging from 63% (in Malta) to 101% (in the Netherlands). Higher LTV ratios imply that house purchases become more attainable for first-time buyers, given that they are less constrained by the amount that they can offer as a downpayment. At the same time, higher LTV ratios entail an increased risk that adverse house price movements will push borrowers into negative equity on their property. This can be a particularly challenging situation when, for instance, the period for which the rate on the loan has been agreed is expiring and the pricing of the loan needs to be renegotiated.

12 This refers to the LTV ratio for a first-time buyer.

### 3 HOUSING FINANCE AND MFI FUNDING

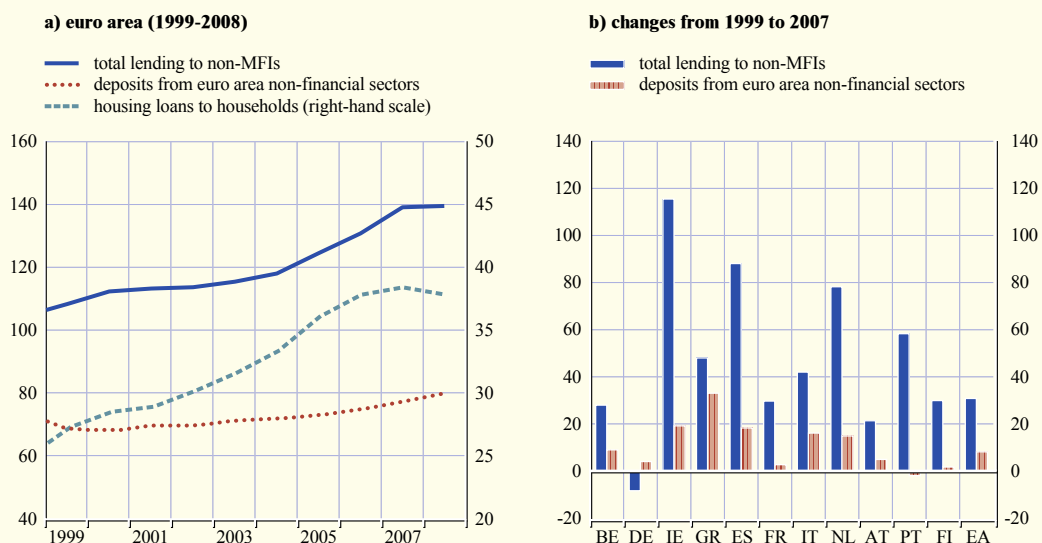
Turning to the funding of loans for house purchase, the last decade has seen a general trend towards the universal banking model, whereas banks specialised in mortgage finance have lost importance. In addition, the importance of non-bank financial institutions as a source of housing loans has declined (see Section 2). The increasing dominance of MFIs in the origination of housing loans is generally understated in statistics owing to the removal (derecognition) of mortgage loans from bank balance sheets in the context of securitisation activities. Against this background, this section provides estimates of derecognised loans in order to present a more complete picture of housing loan origination by MFIs. Apart from a small number of financing instruments which are directly linked to mortgage loans, MFIs rely on their general sources of funds to finance housing loans. For this reason, this section focuses on the overall funding of MFIs. It covers first the period from 1999 to 2007, before

discussing changes in the funding of MFIs in the context of the financial turmoil in 2008.

In the period from 1999 to 2007, MFIs increasingly used market-based funding. Both demand and supply effects can explain this development. With respect to loan demand effects, the strong growth in lending up to 2007 was not matched by corresponding growth of deposits on the liabilities side of MFIs' balance sheets (see Chart 9, panel a). The growing gap between loans and deposits was therefore financed by an increased use of market-based funding. As regards supply effects, financial market and institutional developments, including the introduction of legislation for the issuance of covered bonds in some euro area countries, as well as securitisation, helped to increase the role of market-based funding for euro area MFIs. The existence of alternative financing instruments alongside the traditional funding of MFIs via deposits made it possible for loans to grow rapidly over the past decade. As can be seen from Chart 9,

**Chart 9 Loan-to-deposit gap of MFIs in the euro area**

(percentages of GDP)



Source: ECB.

Notes: Data include estimates of derecognised loans. Luxembourg is omitted from panel b of the chart because, over the period under review, GDP rose more strongly than both loans to non-MFIs and retail deposits, so that the two ratios dropped sharply. EA denotes the euro area.

panel b, euro area countries with the highest growth in total loans (including derecognised loans) to non-MFIs in relation to GDP over the period from 1999 to 2007 (Ireland, Spain, the Netherlands and Portugal) were those that experienced the strongest increases in loan-to-deposit gaps. It was only in Germany that the growth of deposits from the euro area non-financial sectors slightly exceeded that of total loans, which was negative in relation to GDP in the period under review.

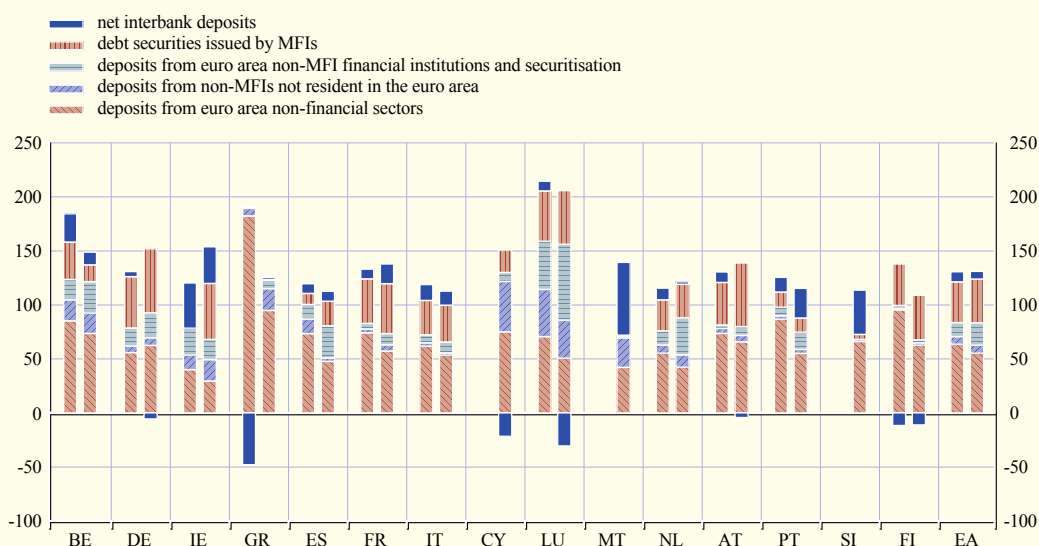
### 3.1 SOURCES OF FUNDING OF MFIs

To analyse MFIs' funding, bank liabilities have been classified into several categories (see Chart 10). Deposits from the euro area non-financial sectors can be seen as a proxy for retail deposits and represent a relatively stable source of funding for MFIs, but their maturity is on average much shorter than the maturity of housing loans. Retail deposits are generally less sensitive to changes in risk perceptions, and their remuneration is typically lower, compared with

wholesale deposits. At the same time, heightened competition from internet banks and mutual funds has helped to increase the remuneration of retail deposits in recent years. Deposits from non-MFIs not resident in the euro area, which can be characterised as wholesale deposits, are somewhat less stable, owing to foreign exchange risks and a greater dependence on economic sentiment. With few exceptions, they are placed by large firms or financial companies. Sources of funding such as interbank financing, the issuance of debt securities and securitisation are even less stable sources of funding, as they are either of a very short-term nature or are strongly dependent on market conditions, as has been experienced in the context of the recent financial turmoil. For the MFI sector as a whole, net interbank lending, which is the difference between inter-MFI deposits and inter-MFI loans, is generally of relatively limited importance, as it disregards the lending and borrowing positions within the MFI sector. The issuance of debt securities by MFIs, in the form of secured or unsecured bonds, is more

Chart 10 Alternative sources of funding

(Q4 1999 and Q4 2007; percentages of total MFI loan financing provided to non-MFIs)



Source: ECB.

Notes: For each country, the first bar refers to the fourth quarter of 1999 and the second bar to the fourth quarter of 2007. For Cyprus, Malta and Slovenia, data are not available for the fourth quarter of 1999. "Deposits from euro area non-MFI financial institutions and securitisation" includes deposits from OFIs and ICPFs and estimates of derecognised loans and represents an estimate of true-sale securitisation. EA denotes the euro area.



sensitive than deposits to market conditions. However, it helps to reduce the maturity mismatch between assets and liabilities as debt securities mostly have a longer-term maturity than deposits. Finally, true-sale securitisation is a source of funding for MFIs, one which is highly sensitive to market conditions. As a result of heterogeneous regulatory requirements across euro area countries, true-sale securitised loans are not always derecognised from banks' balance sheets but are booked as deposits from "other financial institutions" (OFIs). In order to take this into account, deposits from OFIs and, for the sake of simplicity, insurance corporations and pension funds (ICPFs) are added to the estimate of derecognised loans in order to obtain an estimate for true-sale securitisation.

From 1999 to 2007 there were remarkable changes in the composition of the funding of MFIs across euro area countries. In all euro area countries with the exception of Germany, the ratio of retail deposits to total bank loan financing provided to non-MFIs declined (see Chart 10).<sup>13</sup> For the euro area, the ratio fell from 63% in 1999 to 55% in 2007. However, retail deposits remained the most important funding source for MFIs, followed by debt securities, the ratio of which increased by 3 percentage points from 1999 to 2007. Securitisation, measured as described above, increased by 8 percentage points over the period under review. Hence, taking these two funding sources together, the importance of market-based funding increased by 11 percentage points in relation to total bank loan financing provided to non-MFIs from 1999 to 2007. Such developments have tended to weaken the transmission of monetary policy.

The importance of the funding alternatives varies considerably across euro area countries. For instance, the share of debt securities ranged from 1% in Greece to nearly 60% in Germany in 2007. Securitisation, measured as described above, was of significant importance particularly in Spain and the Netherlands in the period under review. In Greece and Finland, retail deposit-to-loan ratios were elevated in 1999, so these

countries did not have to resort extensively to market-based funding sources. In Germany, Ireland, Spain and Austria, the importance of debt securities increased considerably in the funding of MFI loans from 1999 to 2007. In Germany, this development was mainly due to weak loan growth and took place despite the fact that the amount outstanding of mortgage covered bonds declined from 2005 to 2007. In Spain, the increased importance of debt securities was accompanied by an increase in the importance of securitisation, linked to the need for greater market-based funding in view of the strongly rising loan-to-deposit ratio. In Belgium, Luxembourg and Portugal, securitisation also gained importance in the funding of the growing loan-to-deposit ratio over the period.

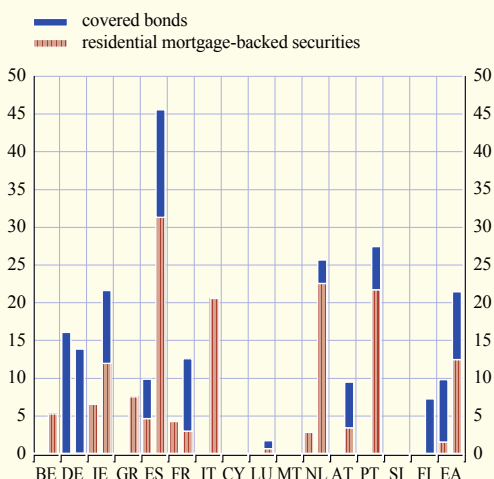
### 3.2 THE ROLE OF COLLATERALISED DEBT SECURITIES

The growing importance of debt securities issuance and securitisation in the funding of housing loans originated by MFIs becomes particularly visible in an analysis of debt securities collateralised by mortgage loans (see Chart 11). These collateralised debt securities, which are directly linked to the funding of housing loans, encompass both mortgage covered bonds and residential mortgage-backed securities (RMBSs). The two funding alternatives differ in that, in the case of covered bonds, which are among the debt securities issued by MFIs, the covered asset remains on the originator's balance sheet; in the case of RMBSs, the pooled collateral is transferred to a special purpose vehicle, which then issues the securities. RMBSs reflect the amount of true-sale securitisation of housing loans. Depending on accounting rules, RMBSs may allow the originator to remove loans from its balance sheet and thus obtain capital relief,

<sup>13</sup> Total bank loan financing includes an estimate of derecognised loans. Since total bank loan financing provided to non-MFIs does not include all bank assets, total funding may exceed total lending, the difference being other assets held by banks, which are mainly debt securities.

Chart II Secured funding

(Q4 1999 and Q4 2007; percentages of total loans to households for house purchase)



Sources: ECB, NCBS, European Securitisation Forum, European Covered Bond Council and Moody's.

Notes: For each country, the first bar refers to the fourth quarter of 1999 and the second bar to the fourth quarter of 2007. Data include estimates of derecognised loans. In the case of Spain and Portugal, the overwhelming majority of securitisation does not entail derecognition. EA denotes the euro area.

whereas covered bonds are used mainly to raise funding in a cost-efficient manner.<sup>14</sup> Together, the two funding instruments represented about 21% of the amount outstanding of housing loans in the euro area at the end of 2007, up from 10% at the end of 1999.

The importance of the two types of collateralised debt security varies considerably across euro area countries. At the end of 2007, mortgage covered bonds were particularly important in relation to total housing loans in Germany and Spain (both at 14%) and Ireland and France (both at 10%), whereas they were of lesser importance in the other euro area countries. By contrast, RMBSs were of no importance in Germany but of considerable importance in Spain (31%), Italy, the Netherlands and Portugal (between 20% and 25% in these three countries) and Ireland (12%) in relation to total housing loans.

The increase in the share of RMBSs over the period under review, compared with a relatively stable share of mortgage covered bonds, shows

the growing importance of securitisation of housing loans in the euro area, although it remained at a low level compared with that in the United States (see the box entitled “Institutional differences between mortgage markets in the euro area and the United States” in this issue of the Monthly Bulletin). In addition, it shows that mortgage covered bonds already played a relevant role in the financing of housing loans in 1999, particularly in Germany, where covered bonds have long been used as a funding instrument for MFIs. The share of covered bonds in the funding of housing loans did not change considerably over this period, mainly as a result of equally strong growth in housing loans. This notwithstanding, there has been significant growth of this market in a number of euro area countries, helped by the introduction of a legislative framework for the issuance of covered bonds and by housing market developments.

### 3.3 IMPACT OF THE FINANCIAL TURMOIL ON MFI FUNDING

The financial turmoil which started in mid-2007 had a severe impact on banks' funding as the raising of new funds in financial markets was seriously hampered by investors' increased risk aversion and uncertainty about banks' exposure to distressed assets.

To some extent, the stronger market orientation of banks in their funding up to 2007 was reversed in the context of the financial turmoil in favour of the more traditional funding based mainly on deposits, for which banks competed intensively. The growing importance of deposits in MFIs' funding was supported by investors' reluctance to invest in debt securities and by the enhanced deposit guarantees provided by most euro area governments when the financial turmoil intensified after the Lehman Brothers bankruptcy in September 2008. The ratio of retail deposits to total MFI lending to non-MFIs increased by around 2 percentage

<sup>14</sup> For a detailed explanation of the institutional characteristics of covered bonds and securitisation, see Section 4.4 of “Housing finance in the euro area”, ECB Occasional Paper No 101, 2009.

points, to 57%, in the euro area in 2008 compared with 2007. By contrast, market-based funding of MFIs declined considerably in 2008. The annual volume of debt securities issued by MFIs fell by around 40% in 2008 compared with 2007, when it had been relatively strong. At the same time, however, securitisation continued in the form of private placements of collateralised debt securities, issued by OFIs on the basis of loans originated by MFIs. MFIs bought back such debt securities (retained securitisation), to use them as collateral in central bank open market operations in order to gain liquidity. This is reflected in the slightly larger share of estimated securitisation in the total loan funding of MFIs in 2008. By contrast, the relative importance of funding via deposits from non-MFIs not resident in the euro area (wholesale deposits) declined, in line with their greater sensitivity to the economic environment.

Overall, during the financial turmoil, euro area banks have shifted away from market-based financing, owing to the difficulty of raising funds in financial markets. Consequently, the move up to 2007 towards the originate-to-distribute model, i.e. the repackaging and selling of credit which banks have originated to other market participants, has been to some extent reversed in favour of a more traditional banking model, where deposits play a major role in the funding. While the effects of the removal of loans from banks' balance sheets vary across euro area countries owing to different regulatory frameworks, the adoption of this model has been, overall, limited in the euro area, in part owing to accounting rules which make it more difficult to derecognise loans than in other major industrialised countries (see the box entitled "Institutional differences between mortgage markets in the euro area and the United States" in this issue of the Monthly Bulletin). A review of the rules governing the derecognition of loans, with a view to improving transparency and the incentives for credit monitoring, will be important for the normalisation of securitisation markets. At the same time, the experience during the financial turmoil may result in greater

recourse to alternative – existing or new – market-based types of bank funding. In this respect, on-balance sheet funding through the issuance of covered bonds is likely to play an increasing role in the funding of MFIs in the future.

#### 4 CONCLUSION

This article has presented an overview of the main developments in housing loans granted to households and their determinants, as well as in the funding of housing loans by MFIs, over the period from 1999 to 2007, and in 2008 where possible.

The strong growth in household mortgage debt during the past decade was supported by favourable financing conditions, rising house prices, increases in households' real disposable income and, in some countries, demographic factors. At the same time, differences in such factors resulted in considerable heterogeneity of housing finance developments across euro area countries. Differences in prevailing mortgage characteristics across euro area countries also remain, for instance as regards the dominance of variable or fixed rate mortgage contracts.

Funding developments over the past decade reflect the strong growth in lending. In most euro area countries housing lending was typically provided by banks, which increasingly used market-based funding, including securitisation. This, in turn, contributed to the easing of credit standards and the strong growth in housing loans.

Taken together, these developments seem to have had a limited effect on the transmission of monetary policy. It needs to be kept in mind that the euro area remains a predominantly bank-based financial system, where, in particular compared with the United States, non-bank financing plays a limited role. While higher household indebtedness points in the direction of a stronger effect of policy rates on spending, other developments, such as the increased role of

securitisation, are likely to have weakened the transmission.

The financial turmoil has changed the environment for housing finance considerably, strengthening the decline in the annual growth of housing loans that was already under way. The deterioration in macroeconomic conditions and, in some euro area countries, declining house prices have put strains on households' net wealth. At the same time, monetary policy has helped to lower households' interest payment burden, supporting consumer spending. With respect to banks' funding, the stronger market orientation of banks in their funding has to some extent been reversed in favour of more traditional deposit-based funding.

Overall, some of the features of the market for housing finance in the euro area, for instance the overall level of household indebtedness, the dominant mortgage contract characteristics and the funding practices of mortgage lenders, create a structure that makes households, banks and the economy as a whole more resilient to shocks than in economies where mortgage markets are more flexible. At the same time, further integration of mortgage markets across euro area countries would tend to increase the range of products available to households and promote competition in the supply of mortgages, with beneficial effects for borrowers as well as, from a broader perspective, the effectiveness of the monetary policy transmission mechanism.



# RECENT DEVELOPMENTS IN THE RETAIL BANK INTEREST RATE PASS-THROUGH IN THE EURO AREA

ARTICLES

Recent developments in the retail bank interest rate pass-through in the euro area

*The adjustment of retail bank interest rates in response to changes in policy rates is a fundamental element of the monetary policy transmission mechanism. This is especially true for the euro area, given the relative importance of banks in collecting savings from and providing financing to the non-financial sectors of the economy. Therefore, the regular monitoring and assessment of the pass-through of changes in monetary policy rates to retail bank interest rates is essential. Against this background, this article discusses the determinants of banks' interest rate-setting behaviour, provides empirical evidence on the pass-through process in the euro area and evaluates the impact of the recent financial market tensions. In general terms, how rapidly and extensively changes in policy rates are passed on (via their effect on market interest rates) to retail bank interest rates hinges on a number of structural and cyclical factors. For this reason, retail bank interest rates are typically found to adjust to changes in policy and market rates with some lag.*

*Overall, in recent years the bank interest rate pass-through seems to have worked relatively well in the sense that the degree of inertia in retail bank interest rates to changes in monetary policy rates has not differed markedly from past patterns. Even during the current financial crisis, the bank interest rate pass-through has worked relatively well in terms of responding to developments in the euro interbank offered rate (EURIBOR) and longer-term market rates, although less well in terms of responding to developments in the euro overnight index average (EONIA – which in normal times is the closest market-based proxy for policy rates). At the same time, bank credit standards have been tightened significantly in recent quarters, countering, to some extent, the smooth pass-through to retail bank lending rates. As the economy gradually improves, banks' capital bases are reinforced and their risk-taking behaviour normalises, it will be essential for banks to increase their lending activity.*

## I INTRODUCTION

The transmission of policy rate changes to retail bank loan and deposit rates is a crucial part of the monetary policy transmission mechanism. This is especially true in the euro area which has a predominantly bank-based financial system.<sup>1</sup>

The financial crisis, which has had severe repercussions on financial markets and the banking sector, has raised questions about euro area banks' ability and willingness to pass on to their retail customers, in an effective manner, the changes in the monetary policy stance since October 2008. Since then the Governing Council of the ECB has, among other measures, lowered the main refinancing rate by 325 basis points, to stand at a level of 1% in July 2009.

Against this background, this article reviews the available evidence concerning the bank interest rate pass-through process in the euro area as a whole. Section 2 discusses banks' price-setting behaviour. Section 3 presents the stylised facts

regarding the pass-through to bank interest rates in the euro area based on new empirical evidence. In Section 4, the findings are put into the context of the financial crisis that erupted in mid-2007 and the extent to which recent policy rate reductions have been effectively passed on to retail customers is also examined.

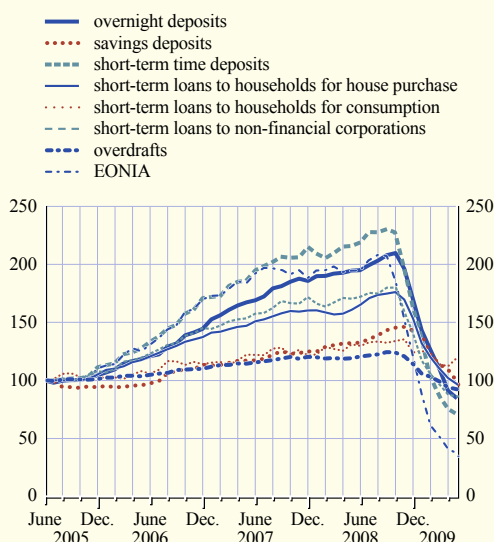
## 2 RETAIL BANKS' PRICE-SETTING BEHAVIOUR

Historically, retail bank interest rates have tended to move fairly closely in line with market interest rates with a similar maturity.

<sup>1</sup> See M. Ehrmann, L. Gambacorta, J. Martínez Pagés, P. Sevestre and A. Worms, "Financial systems and the role of banks in monetary policy transmission in the euro area", in I. Angeloni, A.K. Kashyap and B. Mojon (eds.), *Monetary Policy Transmission in the Euro Area*, Cambridge University Press, 2003, for an assessment of the various monetary policy transmission channels in the euro area during the early years of EMU. See also the article entitled "The external financing of households and non-financial corporations: a comparison of the euro area and the United States" in the April 2009 issue of the Monthly Bulletin.

**Chart 1 Monthly changes in short-term MFI interest rates and the EONIA**

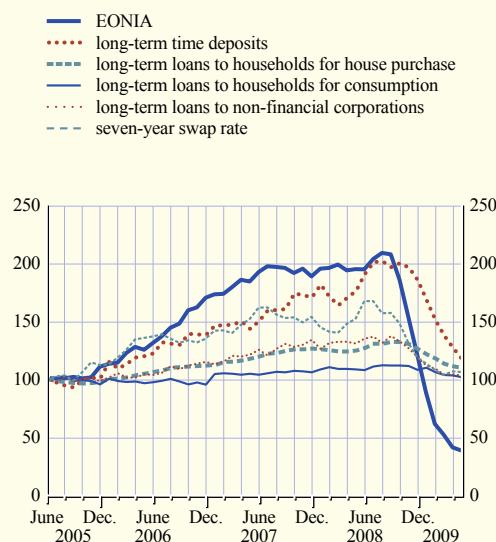
(monthly data; index: June 2005 = 100)



Sources: ECB and Reuters.

**Chart 2 Monthly changes in long-term MFI interest rates, the EONIA and the seven-year swap rate**

(monthly data; index: June 2005 = 100)



Sources: ECB and Reuters.

This is illustrated in Charts 1 and 2, which show the (indexed) monthly changes in selected retail bank lending and deposit rates against monthly changes in the EONIA and the seven-year swap rate over the past four and a half years. In response to the tightening of monetary policy that started in December 2005, market rates increased markedly until around mid-2008. Since October 2008, reflecting the sharp reversal in risks to price stability over the medium term in the context of the financial crisis and the economic downturn, key ECB interest rates have been sharply reduced. This has been mirrored by a sharp decline in market rates for products with various maturities. As observed, retail bank interest rates have broadly followed the movements in market rates in recent years, increasing until the fourth quarter of 2008 and, in most cases, declining sharply thereafter. However, it is also evident that, with few exceptions, retail bank lending and deposit rates tend to react rather sluggishly to changes in the corresponding market rates, in that they tend to only adjust with a lag and, even over long periods, may not adjust completely to movements in market rates. Hence, while monetary policy

strongly influences the financing conditions as set by banks, this influence operates with a certain lag.

The observed sluggishness of the response of retail bank interest rates may reflect a number of factors underlying banks' price-setting behaviour. From a theoretical viewpoint, the relationship between bank interest rates and corresponding market rates is typically considered in the economic literature using models of oligopolistic bank competition, where banks act as price-setters (under the assumption that banks have some market power<sup>2</sup>) in the retail loan and deposit markets, hence setting their interest rates while taking into account demand for loans and deposits. At the same time,

2 This may arise due to the "specialness" of banks in their function as "delegated monitors" and ultimately derives from the existence of asymmetric information between banks and their customers, which leads to problems of moral hazard and adverse selection (see, for example, D. Diamond and P. Dybvig, "Bank runs, deposit insurance, and liquidity", *Journal of Political Economy*, 91(3), 1983, pp. 401-419; and D. Diamond, "Financial intermediation and delegated monitoring", *Review of Economic Studies*, 51(3), 1984, pp. 393-414, for some early seminal contributions).

banks are usually assumed to be price takers in the interbank market and the capital markets where they seek additional funds (i.e. non-retail deposit funding) or place surplus liquidity.<sup>3</sup>

Given the market power of banks, market rates are normally expected to stand between bank lending rates and bank deposit rates (representing the funding costs of loans and the opportunity costs of deposits respectively). However, bank loans and deposits are not necessarily priced independently of each other, as banks may engage in cross-selling and cross-subsidising activities (e.g. by offering high deposit rates in order to obtain loan business).<sup>4</sup> In general, banks' interest rate-setting behaviour, as measured by the spread between retail bank rates and market rates, can be expected to depend on the degree of competition (or bank market power) and on factors related to the cost of intermediation, such as interest

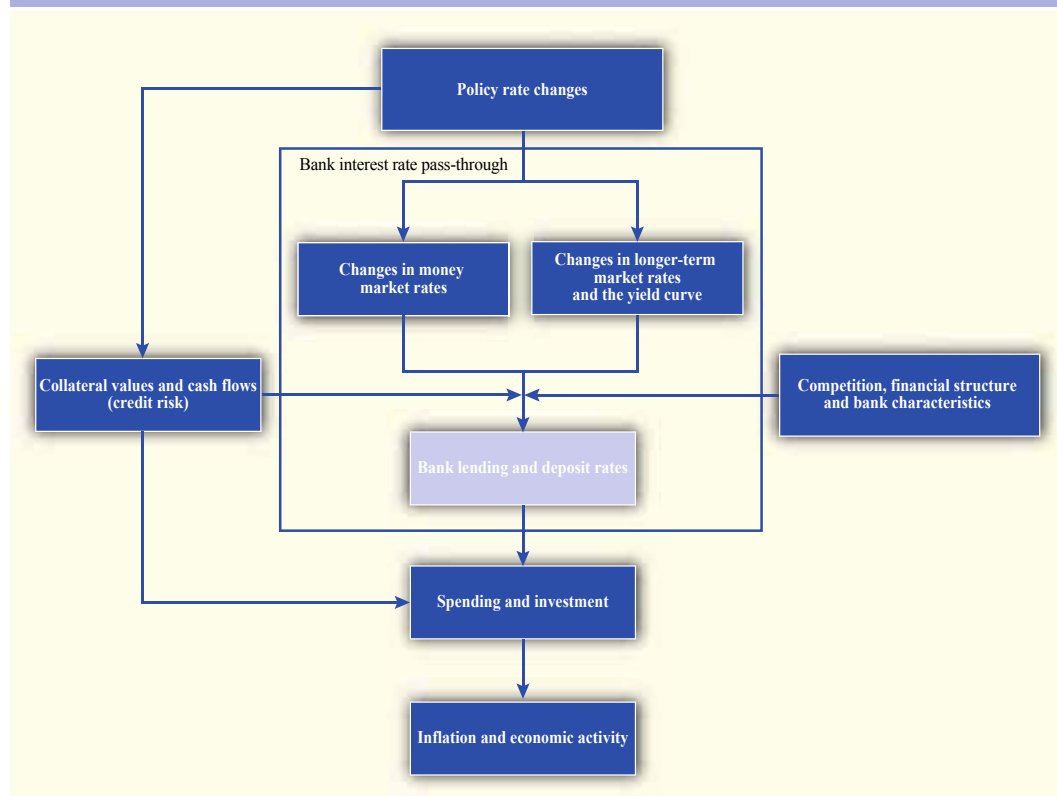
rate risk, credit risk, the banks' degree of risk aversion, unit operating costs, bank liquidity and product diversification.

Against this background, Chart 3 presents a stylised picture of the transmission of monetary policy rate changes to retail bank interest rates, via their impact on market rates, and highlights the various factors affecting bank spreads, both structural and related to the credit cycle. These factors influence banks' interest rate-setting behaviour and help to explain some of the apparent inertia in the reaction of bank interest rates to policy changes.

3 See X. Freixas and J.-C. Rochet, *Microeconomics of Banking*, The MIT Press, Cambridge (Massachusetts), second edition, 2008.

4 P.A. Chiappori, D. Perez-Castrillo and T. Verdier, "Spatial competition in the banking system, localization, cross-subsidies and the regulation of deposit rates", *European Economic Review*, 39(5), 1995, pp. 889-919.

Chart 3 Transmission of policy rate changes to retail bank interest rates





Nonetheless, the most direct determinants of retail bank lending and deposit rates for households and firms are policy (and hence market) rate changes. Indeed, market rates are important components of bank marginal costs and are directly affected by changes in monetary policy rates. As a result, in the literature on the interest rate channel for monetary policy transmission, particular focus has usually been put on how rapidly and extensively changes in policy rates are passed on, via changes in market rates, to retail bank loan and deposit rates – particularly given that retail bank interest rates are often priced against, and sometimes even indexed to, a market rate.<sup>5</sup>

The sluggishness observed in the response of bank interest rates is generally assumed to stem from the fact that banks may not find it profitable to adjust their retail interest rates frequently. For example, as a result of customer switching costs for many retail bank products, demand may be relatively inelastic to market rate changes, at least in the short run.<sup>6</sup> Furthermore, there may be nominal rigidities when banks set their interest rates (i.e. fixed adjustment costs of changing their retail rates). Such “menu costs” may, for example, become a deterrent when banks are uncertain about the permanence of market rate changes or if such changes are only minor.<sup>7</sup>

Likewise, the importance of relationship banking, which, in the predominantly bank-based euro area financial system, may be particularly pertinent, is likely to induce banks to smooth movements in retail interest rates over the cycle. This stems from the impetus to share the risk with bank retail customers in order to sustain a viable long-term bank/customer relationship, with the bank seeking to shield its customers from volatile market rate developments by keeping retail bank rates relatively stable over time.<sup>8</sup> Moreover, the market power of banks to set their retail rates, and hence the banks’ incentive to adjust them when market conditions change, also hinges on the bargaining position of borrowers. Thus, for example, corporate lending rates may be expected to adjust relatively quickly compared with rates on loans to households for consumer credit, simply because companies have better access to substitute sources

of non-bank financing (such as debt securities and equity issuance, trade credit, etc.) than the typical household. Hence, the pass-through to bank interest rates may differ considerably across different types of retail bank product, being quicker in those segments where banks face more competition from other banks and non-bank financing sources.

Heterogeneity across products in terms of pass-through can also be caused by cross-country differences in retail bank regulation and taxation, which may provide banks with different constraints and incentives when pricing their retail products.<sup>9</sup> More generally, a higher degree of competition from banks and non-banks,<sup>10</sup> as well as financial development and more efficient financial structures, for example triggered by financial innovations such as securitisation and derivatives,<sup>11</sup>

5 Other components influencing bank rates and margins are of a more structural nature (competition and efficiency) or less volatile, at least in the short run (credit risk and funding gaps). Hence, identifying the importance of such factors on a continuous basis when assessing the impact of monetary policy changes on bank interest rates offered to households and firms is less straightforward; see, for example, L.M. Ausubel, “The failure of competition in the credit card market”, *American Economic Review*, 81, March 1991, pp. 50-81.

6 See, for example, P.S. Calem, M.B. Gordy and L.J. Mester, “Switching costs and adverse selection in the market for credit cards: New evidence”, *Journal of Banking & Finance*, 30, 2006, pp. 1653-1685, who argue that information barriers between banks and their customers create non-negligible switching costs.

7 See, for example, T.H. Hannan and A.N. Berger, “The rigidity of prices: Evidence from the banking industry”, *American Economic Review*, 81, September 1991, pp. 938-945, as well as B. Hofmann and P. Mizen, “Interest rate pass-through and monetary transmission: Evidence from individual financial institutions’ retail rates”, *Economica*, 71, 2004, pp. 99-123.

8 See, for example, A.N. Berger and G.F. Udell, “Some evidence on the empirical significance of credit rationing”, *Journal of Political Economy*, 100, October 1992, pp. 1047-1077.

9 For a survey of the factors contributing to the cross-country dispersion of the level of MFI interest rates, see ECB, *Differences in MFI interest rates across euro area countries*, September 2006.

10 See, among others, H. Sander and S. Kleimeier, “Convergence in euro-zone retail banking? What interest rate pass-through tells us about monetary policy transmission, competition, and integration”, *Journal of International Money and Finance*, 23(3), 2004, pp. 461-492; and M. Van Leuvensteijn, C. Kok Sørensen, J.A. Bikker and A. Van Rixtel, “Impact of bank competition on the interest rate pass-through in the euro area”, ECB Working Paper No 885, 2008.

11 See, for example, A. Estrella, “Securitization and the efficacy of monetary policy”, *Economic Policy Review*, Vol. 8, No 1, Federal Reserve Bank of New York, May 2002, pp. 243-255; and R. Gropp, C. Kok Sørensen and J.-D. Lichtenberger, “The dynamics of bank spreads and financial structure”, ECB Working Paper No 714, 2007.

is expected to exert a positive impact on the speed and degree of the pass-through. Finally, to the extent that banks in a given situation do not want to fully satisfy demand (as, for example, in a situation of credit rationing), they may decide to hold retail rates relatively stable in order to avoid a “lemons problem” in the sense of attracting a large number of non-creditworthy borrowers.<sup>12</sup>

### 3 BANK INTEREST RATE PASS-THROUGH IN THE EURO AREA – EMPIRICAL EVIDENCE

This section presents recent empirical evidence on the bank interest rate pass-through for the euro area for a selection of representative loan and deposit categories.

Monetary policy typically has a significant and fairly immediate effect on market rates at various maturities. In particular, changes in policy rates in normal circumstances will spill over more or less one-to-one to unsecured short-term money market rates, such as the EONIA and, to a somewhat lesser extent, the term EURIBOR rates. Through its influence on expectations about future policy actions, changes in the monetary policy stance will often also have a strong impact on longer-term market rates, such as long-term government bond yields and swap rates, by moving the yield curve.<sup>13</sup> However, as mentioned in the previous section, the extent to which the policy-induced changes in market rates are eventually passed on to retail bank interest rates offered to borrowers and depositors hinges on a number of structural and cyclical factors.

There is a wealth of empirical literature on the retail bank interest rate pass-through process. Largely independently of the estimation method, sample period or geographical area involved, most empirical studies tend to confirm that retail bank interest rates respond sluggishly to changes in policy and market rates. Typically, banks are found to only pass a small part of the immediate change in market rates on to their retail rates and, even long after, bank retail rates are not always adjusted to the full extent.<sup>14</sup> At the same

time, how rapidly and extensively banks adjust their retail rates is typically found to differ substantially across different types of bank loan and deposit product, as well as across euro area countries.<sup>15</sup> This cross-country heterogeneity can, to some extent, be explained by differences in bank characteristics and financial structures. Moreover, a number of studies find evidence of some asymmetry in the pass-through over the interest rate cycle, with loan rates tending to be stickier when market rates decline, whereas deposit rates are typically found to react more sluggishly when market rates increase. This phenomenon, it is argued, depends on the degree of demand elasticity and bank competition.<sup>16</sup>

12 In the spirit of J.E. Stiglitz and A. Weiss, “Credit rationing in markets with imperfect information”, *American Economic Review*, 71, 1981, pp. 393-410. A number of US-based empirical studies found, however, only mixed support for this hypothesis; see, for example, S.R. King, “Monetary transmission: through bank loans or bank liabilities?”, *Journal of Money, Credit and Banking*, 18, 1986, pp. 290-303 and A.N. Berger and G.F. Udell (op. cit.).

13 See also G.J. de Bondt, B. Mojon and N. Valla, “Term structure and the sluggishness of retail bank interest rates in euro area countries”, ECB Working Paper No 518, 2005.

14 See T.H. Hannan and A.N. Berger (op. cit.); A.N. Berger and G.F. Udell (op. cit.); C. Borio and W. Fritz, “The response of short-term bank lending rates to policy rates: A cross-country perspective”, BIS Working Paper No 27, 1995; and M. Berlin and L.J. Mester, “Deposits and relationship lending”, *Review of Financial Studies*, 12(3), 1999, pp. 579-607, for some early contributions at the individual country level. For more recent evidence covering euro area countries, see, for example, B. Mojon, “Financial structure and the interest rate channel of ECB monetary policy”, *Economie et Provision*, 147(1), 2001, pp. 89-115; G.J. de Bondt, “Interest rate pass-through: Empirical results for the euro area”, *German Economic Review*, 6(1), 2005, pp. 37-78; L. Gambacorta, “How do banks set interest rates?”, *European Economic Review*, 52(5), 2005, pp. 792-819; and Gropp et al. (op. cit.).

15 For some recent studies, see, for example, C. Kok Sørensen and T. Werner, “Bank interest rate pass-through in the euro area: A cross-country comparison”, ECB Working Paper No 580, 2006; and J. Nakajima and Y. Teranashi, “The evolution of loan rate stickiness across the euro area”, Bank of Japan IMES Discussion Paper No 09-E-010, 2009.

16 See, for example, T.H. Hannan and A.N. Berger (op. cit.); and L.J. Mester and A. Saunders, “When does the prime rate change?”, *Journal of Banking & Finance*, 19(5), 1995, pp. 743-764, for US-based evidence; and B. Mojon (op. cit.); and Gropp et al. (op. cit.) for evidence based on the euro area. Furthermore, H. Sander and S. Kleimeier, “Expected versus unexpected monetary policy impulses and interest rate pass-through in euro-zone retail banking markets”, *Journal of Banking & Finance*, 30, 2006, pp. 1839-1870, point to the importance of predictable monetary policy in smoothing the pass-through process.

In the light of these “stylised” facts, using an updated sample of euro area retail bank interest rates, Box 1 presents evidence on the pass-through process at the aggregate euro area level, which indeed points to a wide dispersion in the (estimated) “stickiness” of bank lending and deposit rates in the euro area across product type. Thus, whereas rates on loans to households for house purchase, rates on loans to non-financial corporations and, to a somewhat lesser extent, time deposit rates eventually fully adjust to the changes in market rates with a corresponding rate fixation period, the retail bank rate adjustment is largely incomplete as regards overnight and savings deposits and rates on loans to households for consumer credit.

As mentioned above, the product differences possibly reflect inter alia the market (and bargaining) power of banks vis-à-vis different categories of customer. This may arise in the context of competitive pressures from other banks, as well as from non-banks (e.g. capital markets, trade credit and other financial intermediaries). Likewise, the size and time-varying nature of the credit risk premium is likely to differ across loan products, which may, for example, help explain the generally weaker pass-through of (typically non-collateralised) consumer credit rates compared with (collateralised) mortgage rates.

#### Box 1

#### RESULTS OF THE PASS-THROUGH TO EURO AREA RETAIL BANK INTEREST RATES USING AN ERROR CORRECTION MODELLING APPROACH

According to the bank interest rate pass-through literature, the transmission of monetary policy rates, via changes in market rates, to bank interest rates can be modelled using an error correction modelling framework, where changes in a specific bank interest rate,  $\Delta BR_t$ , are regressed on simultaneous (and lagged) changes in a relevant market rate,  $\Delta MR_t$ , and (possibly) lagged changes in the bank interest rate itself with an error correction term reflecting the extent to which the bank rate had diverged from its long-run equilibrium relationship with the market rate in the previous period.<sup>1</sup> This is illustrated in the equation below:<sup>2</sup>

$$\Delta BR_t = \varphi + \gamma (BR_{t-1} - \beta MR_{t-1} - \kappa) + \alpha_1 \Delta MR_t + \alpha_2 \Delta MR_{t-1} + \eta \Delta BR_{t-1} + \varepsilon_t$$

The results of running this model for each of the 11 broad categories of retail lending and deposit rates offered by euro area MFIs for the period January 1997 to June 2007 (see the table) point to notable differences in terms of the pass-through of changes in market rates across the different types of product and are not affected by the financial crisis that erupted in August 2007.<sup>3</sup>

1 This specification hinges on whether bank and market rates are non-stationary (i.e. do not tend to return to their past values) and whether they are cointegrated (i.e. whether a stable long-run relationship between the variables can be estimated) – see S. Johansen and K. Juselius, “Maximum likelihood estimation and inference on cointegration – with applications to the demand for money”, *Oxford Bulletin of Economics and Statistics*, 52, 1990, pp. 169-210; and S. Johansen, “Estimation and hypothesis testing of cointegration vectors in Gaussian Vector Autoregressive Models”, *Econometrica*, 59, 1991, pp. 1551-1580. Standard unit root and cointegration tests confirmed that for the bank and market interest rates the conditions for using the error correction model were satisfied. Only in the case of short-term rates on loans for consumer credit could a cointegration relationship not be easily detected.

2  $\kappa$  can be interpreted as representing all other factors, apart from the market rate, that determine the level of the bank rate, such as bank market power and efficiency, credit and interest rate risk, cross-subsidisation effects, etc. Although this model specification may not entirely correct for potential “omitted variable” bias, residual tests do not point to significant misspecification problems. However, an alternative model specification could have directly incorporated factors, such as the level of banking competition, business cycle indicators, etc., as was the case in some of the studies mentioned in footnotes 10 and 11.

3 The data used in these regressions are based on the MFI interest rate statistics compiled by the ECB. Official statistics are available from January 2003, whereas, for the period prior to January 2003, the series have been “backcast” using consistent methods across the euro area countries. The “backdata” are not publicly available.

Bank interest rates are generally found to be relatively sticky. The immediate adjustment coefficient to changes in market rates ranges from around zero for consumer credit rates and savings deposit rates to 0.7 for short-term loans to non-financial corporations. Likewise, the speed of adjustment to the long-run equilibrium varies from 0.02 for rates on short-term loans for house purchase to close to 0.20 for rates on long-term loans for consumer credit and rates on non-financial corporate loans. In terms of the long-run adjustment of retail rates to changes in market rates, the results point to a less than complete pass-through for consumer credit rates, overnight deposit rates and savings deposit rates (ranging from around 0.1 to around 0.4); whereas time deposit rates, rates on loans to households for house purchase and non-financial corporate loan rates more or less fully adjust (ranging from around 0.8 to around 1.0).

#### MFI interest rate pass-through estimates based on an error correction model

(January 1997 – June 2007)

	Immediate pass-through ( $\alpha_1$ )	Final pass-through ( $\beta$ )	Speed of adjustment ( $\gamma$ )	R <sup>2</sup> (adjusted)	Corresponding market rate
Overnight deposits	0.14***	0.36***	-0.05**	0.45	EONIA
Savings deposits	0.06***	0.32***	-0.09***	0.30	three-month EURIBOR
Short-term time deposits	0.50***	0.83***	-0.12***	0.82	three-month EURIBOR
Long-term time deposits	0.15***	0.80***	-0.15***	0.45	three-year swap rate
Overdrafts	0.26***	0.72***	-0.06***	0.58	EONIA
Short-term loans for consumer credit	0.26***	0.11***	-0.09*	0.05	six-month EURIBOR
Long-term loans for consumer credit	-0.06	0.38***	-0.19***	0.21	seven-year swap rate
Short-term loans for house purchase	0.36***	1.05***	-0.02	0.63	three-month EURIBOR
Long-term loans for house purchase	0.17***	1.07***	-0.12***	0.77	seven-year swap rate
Short-term loans to non-financial corporations	0.72***	0.89***	-0.18***	0.76	three-month EURIBOR
Long-term loans to non-financial corporations	0.30***	1.03***	-0.17***	0.45	seven-year swap rate

Sources: ECB, Reuters and ECB calculations.

Notes: “\*”, “\*\*” and “\*\*\*” indicate significance at the 90%, 95% and 99% level respectively. The Schwarz information criterion has been used to select the optimal lag length of the explanatory variables. Corrected for White heteroscedasticity-consistent standard errors and covariance.

#### 4 THE IMPACT OF THE FINANCIAL CRISIS ON THE TRANSMISSION OF POLICY RATE CHANGES TO RETAIL BANK INTEREST RATES

The financial market turbulence that erupted in August 2007 was triggered by a deterioration in the value of US sub-prime mortgages, but soon spilled over into other financial market segments. The ensuing crisis, which intensified in the second half of 2008, led to massive write-downs and losses by euro area banks, which in turn put substantial pressure on banks' solvency ratios and gave rise to a general loss of confidence in the banking sector and among banks themselves. One of the consequences of these developments was disruption in the functioning of the euro

area money market, which was reflected in a pronounced and persistent widening of the spreads between EURIBOR and overnight interest swap (OIS) rates. As many bank loan and deposit rates are fixed against money market rates, the disruption of the normally close relationship between term unsecured market rates (EURIBOR) and overnight rates (which are close proxies for policy rates) potentially impaired the transmission of monetary policy rate changes to retail bank lending and deposit rates.<sup>17</sup> Moreover, as the severity of the financial crisis eventually contributed to a marked

<sup>17</sup> Likewise, banks largely obtain their funds in the interbank market and the market for short-term debt securities, hence much of their funding is likely priced against money market rates.

slowdown in euro area economic activity, it may have led many banks to increase their credit risk premia and tighten their standards for providing loans.<sup>18</sup> This, in turn, could have hampered the transmission to bank lending rates of cuts in monetary policy rates since October 2008.

#### CUMULATED CHANGES IN MFI INTEREST RATES SINCE MID-2007

In order to assess the impact of the financial crisis and the extent to which the easing of the ECB's monetary policy since the fourth quarter of 2008 has been passed on to MFI interest rates, an out-of-sample forecast of MFI loan and deposit rates based on market rate developments since mid-2007 is compared with the actual changes in MFI interest rates over the same period. The forecast values are based on the model specification described in Box 1. The cumulated changes in actual and forecast MFI interest rates are shown in the table. Notably, the actual changes in most MFI interest rates are considerably smaller than the substantial declines in comparable market rates over this period, thus reflecting the typical sluggish adjustment of retail bank interest rates to market rate developments. Nevertheless, the differences between actual MFI interest rates and the forecast rates based on developments

in comparable market rates, and taking into account the typical sluggish pass-through, are found to be relatively modest (in most cases).

Overall, this points to a fairly normal pass-through to retail bank interest rates since the start of the turmoil. However, some dispersion across bank products has been evident in terms of the response during the turmoil and, more recently, since the easing of monetary policy began. In particular, whereas most short-term MFI interest rates have declined markedly since June 2007, developments in longer-term MFI interest rates have been much more muted. Apart from the somewhat smaller decline in long-term market rates (especially in recent months), this could also reflect the fact that banks have tightened their credit standards for long-term loans more than for short-term loans.<sup>19</sup>

18 Indeed, the results of the Eurosystem bank lending survey point to a significant net tightening of credit standards by euro area banks since the third quarter of 2007, which, in particular, has been due to a sharp deterioration in banks' risk perceptions; see, for example, the box detailing the results of the July 2009 bank lending survey in this issue of the Monthly Bulletin.

19 This is consistent with evidence from the July 2009 bank lending survey, in which banks reported that the net tightening of credit standards since the third quarter of 2007 has partly been accommodated via more stringent requirements regarding the maturity of loans.

Cumulated changes in actual and forecast MFI interest rates for the period July 2007-May 2009

(basis points)			
	Actual	Forecast	Difference
<b>Short-term rates:</b>			
Overnight deposits	-65	-64	-1
Savings deposits	-39	-23	-16
Short-term time deposits	-246	-251	5
Overdrafts	-143	-153	10
Short-term loans for consumer credit	-21	-74	53
Short-term loans for house purchase	-178	-178	0
Short-term loans to non-financial corporations	-229	-236	7
EONIA	-317		
Three-month EURIBOR	-287		
<b>Long-term rates:</b>			
Long-term time deposits	-72	-63	-9
Long-term loans for consumer credit	-15	-12	-3
Long-term loans for house purchase	-41	-50	9
Long-term loans to non-financial corporations	-91	-96	5
Three-year swap rate	-247		
Seven-year swap rate	-165		
Ten-year swap rate	-136		

Sources: ECB, Reuters and ECB calculations.

Note: Based on a one-step-ahead (static) forecast for the period July 2007-May 2009.

Furthermore, the cumulated changes in actual deposit rates between July 2007 and May 2009 generally resulted in somewhat lower deposit rates than forecast. This seems to suggest that banks have, overall, offered lower deposit rates to their retail customers during the turmoil than in the past, which could reflect the fact that euro area banks have tried to mitigate the losses incurred during this period somewhat by increasing their spreads on deposits and thereby enhancing their profitability. Efforts to increase profitability in order to alleviate the negative impact of the financial crisis may also have contributed to the positive difference observed between the cumulated changes in actual MFI lending rates and the forecast lending rates. At the same time, MFI lending rates have been forecast based on past pass-through behaviour (implicitly assuming a constant long-term credit risk premium). Therefore, they may somewhat underestimate the increase in banks' risk perceptions as regards the creditworthiness of their borrowers, which should give rise to tighter credit standards than in the past, inter alia via a widening of lending spreads.

### THE IMPACT OF THE FINANCIAL CRISIS ON SHORT-TERM MFI INTEREST RATES

Looking in more detail at the pattern of actual developments in MFI interest rates since the financial tensions emerged in mid-2007, and comparing them with what would have been expected based on past pass-through behavioural patterns and the actual market rate developments up to May 2009, an assessment of the impact of the financial market turmoil on euro area banks' pricing of retail products can be made. The most immediately notable impact of the turmoil on the bank interest rate pass-through has been observed in short-term bank rates. This is owing to the fact that in the period since mid-2007 the normally close relationship between overnight money market rates – over which monetary policy has some control – and term money market rates broke down. This disruption in the money market had implications for the pass-through of policy rate changes to short-term retail bank rates, since the latter are often priced against – and sometimes even indexed to –

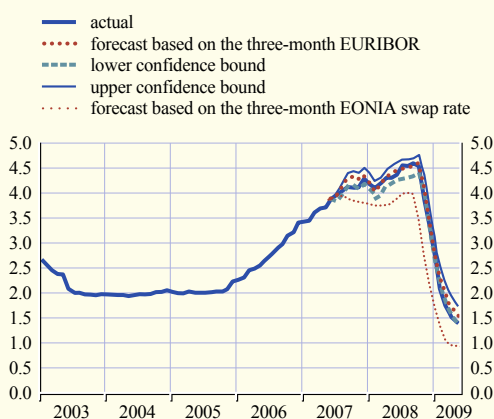
unsecured EURIBOR rates. After the outbreak of the financial market turbulence, banks continued to track EURIBOR rates closely when setting their short-term retail interest rates. However, given that, for an extended period, EURIBOR rates did not track developments in overnight (or policy) rates closely, the transmission of monetary policy rate changes to short-term retail bank rates seemed to be somewhat impaired.<sup>20</sup>

Turning first to developments in short-term time deposit rates, it is observed that, between June 2007 and May 2009, banks passed on changes in the three-month EURIBOR to a broadly similar degree as observed in the past (as indicated in Chart 4 by the almost identical developments in the actual rate on short-term time deposits and the forecast rate based on the three-month EURIBOR). In particular, the sharp decline in EURIBOR rates since October 2008, induced by the reduction in key ECB interest rates, was mirrored by a notable decrease in short-term deposit rates, which,

20 See also the box entitled “The implications of the money market tensions for the pass-through of MFI interest rates” in the December 2008 issue of the Monthly Bulletin.

Chart 4 Actual and forecast short-term time deposit rates

(percentages per annum; monthly data; January 2003 – May 2009)



Sources: ECB, Reuters and ECB calculations.

Notes: N-step ahead (dynamic) forecast for the period July 2007–May 2009 based on actual market rate developments and the estimated coefficients of the model described in Box 1. The lower and upper confidence bounds refer to the forecast based on the three-month EURIBOR.

in very recent months, was even sharper than the forecast based on the three-month EURIBOR. At the same time, the actual level of short-term time deposit rates during this period was substantially higher (on average by about 56 basis points) than the forecast pattern of short-term time deposit rates based on developments in the three-month EONIA swap rate (as shown in Chart 4). This indicates that, during the turmoil, owing to the persistent wide spread between EURIBOR and OIS rates, retail deposit rates have exceeded the level normally implied by the monetary policy stance.<sup>21</sup>

Focusing instead on short-term lending rates, Chart 5 displays the actual and forecast (based on the EONIA) rates on overdrafts. While in the period June 2007-May 2009 overdraft rates tended to track the expected path (based on past experience) rather well, in the second half of 2008 they increased somewhat more than expected (and in the fourth quarter of 2008 they even rose slightly above the 95% confidence interval). This could reflect a heightened perception of risk on the part of banks during a period of extremely high uncertainty, which

may have triggered a tightening of credit standards on these typically non-collateralised loans and credit lines.<sup>22</sup> Such concerns, however, seemed to become less acute at the beginning of 2009, as overdraft rates fell substantially in parallel with the easing of the monetary policy stance.

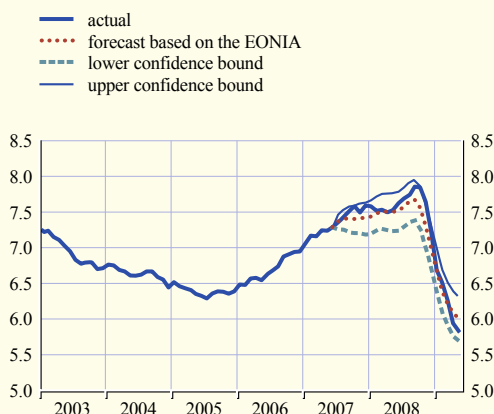
Developments in short-term rates on loans to non-financial corporations and on loans to households for house purchase are broadly similar (see Charts 6 and 7 respectively). Whereas the rates on both types of loan tended to develop broadly in line with the forecast based on past experience and recent developments in the three-month EURIBOR, there was a marked difference in the actual level of these rates compared with the level predicted based on developments in the overnight swap rate (on average 40-50 basis points between June 2007 and May 2009). Hence, in the market for short-term loans, the monetary policy

21 A similar pattern is found for other types of retail deposit rates, such as overnight rates and savings deposit rates.

22 This corresponds with the record level of net tightening of credit standards in the fourth quarter of 2008, as reported by euro area banks in the January 2009 bank lending survey.

**Chart 5 Actual and forecast rates on overdrafts**

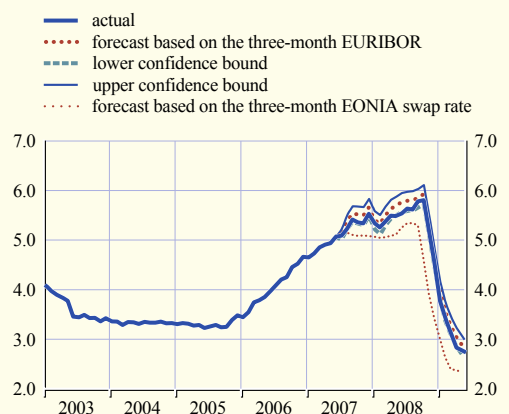
(percentages per annum; monthly data; January 2003 – May 2009)



Sources: ECB, Reuters and ECB calculations.  
 Notes: N-step ahead (dynamic) forecast for the period July 2007-May 2009 based on actual market rate developments and the estimated coefficients of the model described in Box 1. The "overdraft rate" is the weighted average of rates on overdrafts to households and non-financial corporations, using new business volumes as weights.

**Chart 6 Actual and forecast short-term rates on loans to non-financial corporations**

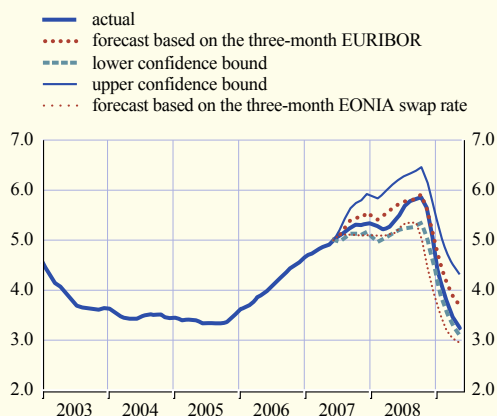
(percentages per annum; monthly data; January 2003 – May 2009)



Sources: ECB, Reuters and ECB calculations.  
 Notes: N-step ahead (dynamic) forecast for the period July 2007-May 2009 based on actual market rate developments and the estimated coefficients of the model described in Box 1. The lower and upper confidence bounds refer to the forecast based on the three-month EURIBOR.

**Chart 7 Actual and forecast short-term rates on loans to households for house purchase**

(percentages per annum; monthly data; January 2003 – May 2009)



Sources: ECB, Reuters and ECB calculations.

Notes: N-step ahead (dynamic) forecast for the period July 2007–May 2009 based on actual market rate developments and the estimated coefficients of the model described in Box 1. The lower and upper confidence bounds refer to the forecast based on the three-month EURIBOR.

transmission mechanism was likewise somewhat impaired, especially in the period from mid-2007 to late 2008. Nonetheless, short-term lending rates to both households and non-financial corporations have been lowered

dramatically since November 2008, reflecting the reductions in key ECB interest rates – along with other measures taken by the ECB to foster a gradual normalisation of money market conditions.<sup>23</sup> In May 2009 they stood substantially lower (at 180-230 basis points) than the level immediately before the turmoil erupted. However, the possibility that part of the reduction in short-term lending rates in recent months has been driven by a lack of demand for loans on the part of firms and households in the context of a weakening economy cannot be ruled out.<sup>24</sup>

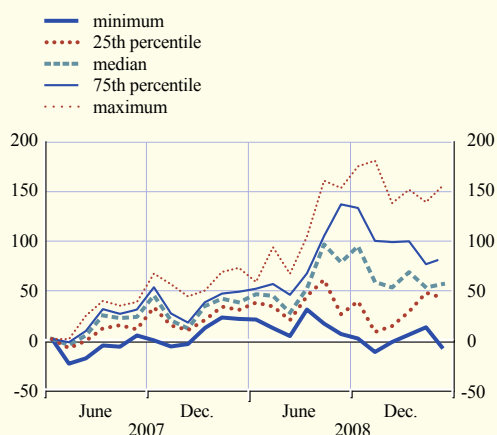
The divergence between the EURIBOR and OIS rates during the financial crisis affected the extent to which banks passed on changes in policy rates in almost all euro area countries. This is illustrated in Charts 8 and 9 which show the cross-country dispersion of differences

<sup>23</sup> Such as the decision of 18 December 2008 to restore the corridor of standing facility rates and the launch of various supplementary longer-term refinancing operations with full allotment and, following the Governing Council's decision of 7 May 2009, with maturities of up to one year.

<sup>24</sup> This is, for example, reflected in the strongly negative net loan demand reported in the July 2009 bank lending survey.

**Chart 8 Cross-country dispersion of differences between actual short-term rates on large loans to non-financial corporations and forecast rates based on the three-month EONIA swap rate**

(basis points; monthly data; June 2007 – April 2009)

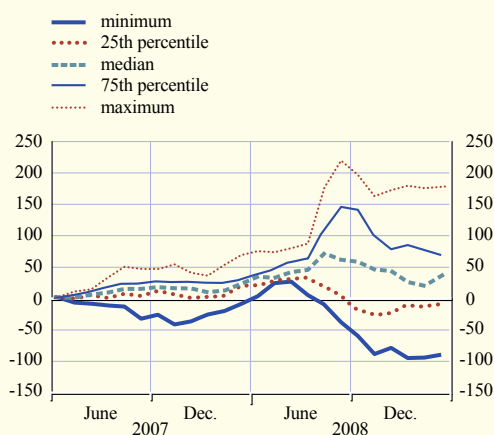


Sources: ECB, Reuters and ECB calculations.

Note: N-step ahead (dynamic) forecast for the period July 2007–April 2009 based on actual market rate developments and the estimated coefficients of a country-specific error correction model.

**Chart 9 Cross-country dispersion of differences between actual short-term rates on loans to households for house purchase and forecast rates based on the three-month EONIA swap rate**

(basis points; monthly data; June 2007 – April 2009)



Sources: ECB, Reuters and ECB calculations.

Note: N-step ahead (dynamic) forecast for the period July 2007–April 2009 based on actual market rate developments and the estimated coefficients of a country-specific error correction model.



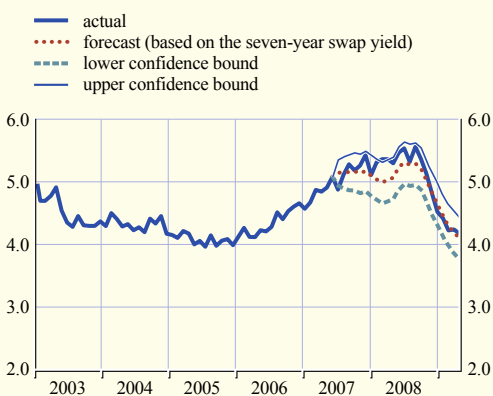
between actual rates on short-term loans to non-financial corporations and households for house purchase respectively and forecast rates based on the three-month EONIA swap rate. Nonetheless, throughout the period a wide dispersion was observed across banks in different countries in terms of the impact of the money market malfunctioning on the pass-through process. In addition, whereas the median difference between the level of actual short-term lending rates and the OIS-based forecast has declined somewhat since autumn 2008, the cross-country dispersion has widened notably. This dispersion could reflect the fact that banks in some euro area countries are more prone to pricing their loan rates against EURIBOR rates. It may also reflect the fact that the bank balance sheet position and the credit risk outlook in these countries are somewhat less benign and hence force banks to operate with higher spreads vis-à-vis market rates. It is likewise possible that competitive forces in some countries have induced banks to start indexing their rates against the EONIA rather than the EURIBOR and hence to re-establish the close link between monetary policy rates and short-term retail interest rates.

## THE IMPACT OF THE FINANCIAL CRISIS ON LONG-TERM MFI INTEREST RATES

Finally, turning to the pass-through evidence regarding longer-term loan rates since the start of the financial crisis in mid-2007, Charts 10 and 11 show the actual long-term rates on loans to non-financial corporations and households for house purchase respectively, against forecast rates based on the error correction model described in Box 1 and the seven-year swap rate. Overall, based on market rate developments between June 2007 and May 2009, changes in monetary policy rates were passed on to long-term rates on both types of loan in a manner which was broadly consistent with past behaviour. In the second half of 2007 and most of 2008 the (rather volatile) long-term non-financial corporate loan rate hovered somewhat above the level predicted by the pass-through model, which may reflect banks' practice of setting relatively high interest rates in the context of continued high loan demand during this period of high uncertainty. Furthermore, like short-term MFI interest rates, long-term lending rates have also declined markedly in recent months and, despite the problems facing banks in terms of their profitability and balance

**Chart 10 Actual and forecast long-term rates on loans to non-financial corporations**

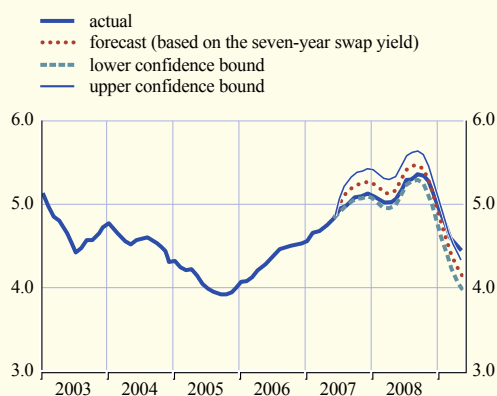
(percentages per annum; monthly data; January 2003 – May 2009)



Sources: ECB, Reuters and ECB calculations.  
Note: N-step ahead (dynamic) forecast for the period July 2007–May 2009 based on actual market rate developments and the estimated coefficients of the model described in Box 1.

**Chart 11 Actual and forecast long-term rates on loans to households for house purchase**

(percentages per annum; monthly data; January 2003 – May 2009)



Sources: ECB, Reuters and ECB calculations.  
Note: N-step ahead (dynamic) forecast for the period July 2007–May 2009 based on actual market rate developments and the estimated coefficients of the model described in Box 1.

sheet position, euro area banks appear to have passed on the policy rate reductions to a broadly similar extent as in the past, although in very recent months the actual rates on loans for house purchase have been somewhat higher than the forecast based on the seven-year swap rate.

All in all, the pass-through to long-term lending rates does not seem to have been notably more sluggish than in the past. This development should, however, also be seen in the context of weaker loan demand on the part of firms and households, as reported in the latest rounds of the bank lending survey, which may have put downward pressure on bank lending rates. Owing to the many countervailing factors currently affecting bank lending rates in the context of continued high uncertainty, close monitoring of developments in the coming months will be essential.

## 5 CONCLUSION

As the euro area has a bank-based financial system, the extent to which monetary policy rates are transmitted to the interest rates offered to euro area banks' retail customers is a crucial aspect of the monetary policy transmission process. This article has discussed the main factors affecting the bank interest rate pass-through. It has also examined the available empirical evidence for the euro area and considered the functioning of the pass-through process during the recent period of financial market tensions. Overall, notwithstanding some underlying disparities across euro area countries, in recent years the bank interest rate pass-through seems to have worked satisfactorily in the sense that the co-movement between retail bank interest rates and market rates has not seemed to differ markedly from past patterns. Even during the current financial crisis, the bank interest rate pass-through has worked relatively well in terms of responding to developments in EURIBOR rates and longer-term market rates, although less well in terms of responding to developments in the EONIA in the context of continued stress in the interbank money market

over this period. At the same time, bank credit standards have been tightened significantly in recent quarters, countering, to some extent, the smooth pass-through to retail bank lending rates. As the economy gradually improves, banks' capital bases are reinforced and their risk-taking behaviour normalises, it will be essential for banks to increase their lending activity.



# EURO AREA STATISTICS





# CONTENTS <sup>1</sup>

## EURO AREA OVERVIEW

Summary of economic indicators for the euro area S 5

## I MONETARY POLICY STATISTICS

1.1 Consolidated financial statement of the Eurosystem S 6  
 1.2 Key ECB interest rates S 7  
 1.3 Eurosystem monetary policy operations allotted through tenders S 8  
 1.4 Minimum reserve and liquidity statistics S 9

## 2 MONEY, BANKING AND INVESTMENT FUNDS

2.1 Aggregated balance sheet of euro area MFIs S 10  
 2.2 Consolidated balance sheet of euro area MFIs S 11  
 2.3 Monetary statistics S 12  
 2.4 MFI loans, breakdown S 14  
 2.5 Deposits held with MFIs, breakdown S 17  
 2.6 MFI holdings of securities, breakdown S 20  
 2.7 Revaluation of selected MFI balance sheet items S 21  
 2.8 Currency breakdown of selected MFI balance sheet items S 22  
 2.9 Aggregated balance sheet of euro area investment funds S 24  
 2.10 Assets of euro area investment funds broken down by investment policy and type of investor S 25

## 3 EURO AREA ACCOUNTS

3.1 Integrated economic and financial accounts by institutional sector S 26  
 3.2 Euro area non-financial accounts S 30  
 3.3 Households S 32  
 3.4 Non-financial corporations S 33  
 3.5 Insurance corporations and pension funds S 34

## 4 FINANCIAL MARKETS

4.1 Securities, other than shares, by original maturity, residency of the issuer and currency S 35  
 4.2 Securities, other than shares, issued by euro area residents, by sector of the issuer and instrument type S 36  
 4.3 Growth rates of securities, other than shares, issued by euro area residents S 38  
 4.4 Quoted shares issued by euro area residents S 40  
 4.5 MFI interest rates on euro-denominated deposits and loans by euro area residents S 42  
 4.6 Money market interest rates S 44  
 4.7 Euro area yield curves S 45  
 4.8 Stock market indices S 46

## 5 PRICES, OUTPUT, DEMAND AND LABOUR MARKETS

5.1 HICP, other prices and costs S 47  
 5.2 Output and demand S 50  
 5.3 Labour markets S 54

## 6 GOVERNMENT FINANCE

6.1 Revenue, expenditure and deficit/surplus S 55  
 6.2 Debt S 56

<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.

6.3	Change in debt	S57
6.4	Quarterly revenue, expenditure and deficit/surplus	S58
6.5	Quarterly debt and change in debt	S59
<b>7</b>	<b>EXTERNAL TRANSACTIONS AND POSITIONS</b>	
7.1	Summary balance of payments	S60
7.2	Current and capital accounts	S61
7.3	Financial account	S63
7.4	Monetary presentation of the balance of payments	S69
7.5	Trade in goods	S70
<b>8</b>	<b>EXCHANGE RATES</b>	
8.1	Effective exchange rates	S72
8.2	Bilateral exchange rates	S73
<b>9</b>	<b>DEVELOPMENTS OUTSIDE THE EURO AREA</b>	
9.1	In other EU Member States	S74
9.2	In the United States and Japan	S75
	<b>LIST OF CHARTS</b>	S76
	<b>TECHNICAL NOTES</b>	S77
	<b>GENERAL NOTES</b>	S83

#### ENLARGEMENT OF THE EURO AREA ON 1 JANUARY 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	18.7	4.64	3.69
2008 Q3	0.7	9.2	9.1	-	9.1	18.2	4.98	4.34
Q4	2.7	8.9	8.2	-	7.4	19.8	4.24	3.69
2009 Q1	5.3	7.2	6.0	-	4.6	25.1	2.01	3.77
Q2	7.9	5.5	4.3	-	2.2	.	1.31	3.99
2009 Feb.	6.1	6.9	5.8	5.6	4.3	25.9	1.94	3.85
Mar.	5.9	6.2	5.1	5.2	3.1	26.7	1.64	3.77
Apr.	8.3	5.9	4.9	4.6	2.3	26.8	1.42	3.79
May	7.9	5.0	3.7	4.1	1.8	26.0	1.28	4.18
June	9.3	4.8	3.5	.	1.5	.	1.23	3.99
July	.	.	.	.	.	.	0.97	3.74

### 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	3.7	84.1	1.8	7.5
2008	3.3	6.1	3.3	0.7	-1.8	81.8	0.8	7.5
2008 Q4	2.3	3.4	4.0	-1.7	-8.9	78.1	0.0	8.0
2009 Q1	1.0	-2.0	3.7	-4.9	-18.2	72.5	-1.3	8.8
Q2	0.2	-5.8	.	.	.	69.9	.	9.3
2009 Feb.	1.2	-1.9	-	-	-19.2	-	-	8.8
Mar.	0.6	-3.2	-	-	-18.7	-	-	9.0
Apr.	0.6	-4.8	-	-	-20.6	70.3	-	9.2
May	0.0	-5.9	-	-	-17.0	-	-	9.3
June	-0.1	-6.6	-	-	.	-	-	9.4
July	-0.6	.	-	-	.	69.5	-	.

### 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	-89.0	-6.0	-242.3	441.5	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	-28.5	-0.6	-77.7	204.2	374.2	109.1	109.6	1.3180
2009 Q1	-40.8	-10.3	-38.5	179.4	395.7	111.9	112.2	1.3029
Q2	.	.	.	.	381.5	113.2	113.4	1.3632
2009 Feb.	-6.5	0.3	-8.5	81.4	423.1	110.4	110.7	1.2785
Mar.	-6.1	3.3	-20.6	95.7	395.7	113.3	113.5	1.3050
Apr.	-7.4	3.9	-4.5	-9.0	386.3	112.5	112.8	1.3190
May	-12.7	2.2	6.1	53.8	392.2	113.0	113.2	1.3650
June	.	.	.	.	381.5	114.0	114.2	1.4016
July	.	.	.	.	.	113.8	114.0	1.4088

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

## I.1 Consolidated financial statement of the Eurosystem (EUR millions)

### 1. Assets

	2009 10 July	2009 17 July	2009 24 July	2009 31 July
<b>Gold and gold receivables</b>	232,126	232,127	232,126	232,120
<b>Claims on non-euro area residents in foreign currency</b>	160,365	159,624	159,626	159,614
<b>Claims on euro area residents in foreign currency</b>	68,964	62,878	62,639	61,226
<b>Claims on non-euro area residents in euro</b>	19,511	20,628	19,947	18,712
<b>Lending to euro area credit institutions in euro</b>	808,008	801,888	789,848	775,730
Main refinancing operations	106,406	100,294	88,273	94,780
Longer-term refinancing operations	701,453	701,456	701,456	680,780
Fine-tuning reverse operations	0	0	0	0
Structural reverse operations	0	0	0	0
Marginal lending facility	135	94	96	151
Credits related to margin calls	14	44	23	19
<b>Other claims on euro area credit institutions in euro</b>	23,017	22,761	23,989	24,301
<b>Securities of euro area residents in euro</b>	301,718	301,197	305,619	306,611
Securities held for monetary policy purposes	66	1,079	2,901	4,232
Other securities	301,652	300,118	302,719	302,379
<b>General government debt in euro</b>	36,230	36,230	36,230	36,230
<b>Other assets</b>	238,970	238,380	237,824	239,548
<b>Total assets</b>	1,888,909	1,875,712	1,867,848	1,854,093

### 2. Liabilities

	2009 10 July	2009 17 July	2009 24 July	2009 31 July
<b>Banknotes in circulation</b>	770,275	770,379	768,445	772,801
<b>Liabilities to euro area credit institutions in euro</b>	427,353	419,415	389,811	394,844
Current accounts (covering the minimum reserve system)	271,815	229,528	194,492	186,105
Deposit facility	155,535	189,873	195,315	208,737
Fixed-term deposits	0	0	0	0
Fine-tuning reverse operations	0	0	0	0
Deposits related to margin calls	2	13	3	3
<b>Other liabilities to euro area credit institutions in euro</b>	279	278	260	298
<b>Debt certificates issued</b>	0	0	0	0
<b>Liabilities to other euro area residents in euro</b>	132,581	142,772	167,243	151,699
<b>Liabilities to non-euro area residents in euro</b>	123,226	109,496	107,028	98,261
<b>Liabilities to euro area residents in foreign currency</b>	4,831	3,706	4,425	3,207
<b>Liabilities to non-euro area residents in foreign currency</b>	10,346	11,874	12,387	13,993
<b>Counterpart of special drawing rights allocated by the IMF</b>	5,436	5,436	5,436	5,436
<b>Other liabilities</b>	153,826	151,598	152,057	152,799
<b>Revaluation accounts</b>	187,797	187,797	187,797	187,797
<b>Capital and reserves</b>	72,960	72,961	72,960	72,958
<b>Total liabilities</b>	1,888,909	1,875,712	1,867,848	1,854,093

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			
	Level	Change	Fixed rate	Minimum bid rate	Change	Level	Change
			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 8 Apr.	237,634	536	237,634	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		
8	106,406	397	106,406	1.00	-	-	-	-	7		
15	100,294	389	100,294	1.00	-	-	-	-	7		
22	88,272	396	88,272	1.00	-	-	-	-	7		
29	94,780	382	94,780	1.00	-	-	-	-	7		
5 Aug.	80,785	348	80,785	1.00	-	-	-	-	7		
Longer-term refinancing operations											
2009 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		
8 July	38,285	86	38,285	1.00	-	-	-	-	35		
9	2,996	28	2,996	1.00	-	-	-	-	91		
9	9,067	56	9,067	1.00	-	-	-	-	189		
30	9,492	68	9,492	1.00	-	-	-	-	91		

#### 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 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		
7 July	Collection of fixed-term deposits	279,477	165	275,986	-	-	1.00	0.80	0.64	1		

Source: ECB.

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

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

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

4) 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.

5) 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
2009 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
May	18,490.5	9,973.6	854.6	2,404.8	1,225.6	4,031.9

## 2. Reserve maintenance

Maintenance period ending on:	Required reserves	Credit institutions' current accounts	Excess reserves	Deficiencies	Interest rate on minimum reserves
	1	2	3	4	5
2007	195.9	196.8	1.0	0.0	4.17
2008	217.2	218.7	1.5	0.0	3.25
2009 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	219.2	1.1	0.0	1.00
11 Aug.	216.0	.	.	.	.

## 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>2)</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 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
7 July	457.1	221.4	504.9	1.3	0.0	119.7	9.9	763.1	137.9	-65.1	219.2	1,102.0

Source: ECB.

1) End of period.

2) 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
<b>Eurosystem</b>														
2006	1,558.2	695.7	19.7	0.6	675.3	217.0	187.5	2.5	27.0	-	17.2	351.4	14.7	262.4
2007	2,046.1	1,031.7	17.8	0.6	1,013.3	268.6	225.1	1.9	41.6	-	17.4	373.7	15.2	339.6
2008 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	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
June <sup>3)</sup>	2,893.3	1,671.5	17.7	0.7	1,653.1	381.0	327.0	2.7	51.3	-	15.0	486.1	16.4	323.4
<b>MFIs excluding the Eurosystem</b>														
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	18,053.4	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	2,889.9
2009 Jan.	32,287.8	18,203.0	983.2	10,854.8	6,364.9	4,769.0	1,308.3	1,409.5	2,051.1	101.6	1,205.1	4,861.4	210.6	2,937.0
Feb.	32,133.5	18,071.0	979.8	10,831.8	6,259.4	4,849.5	1,342.4	1,430.3	2,076.8	102.8	1,189.0	4,770.4	215.0	2,935.7
Mar.	31,747.4	17,907.7	970.7	10,810.5	6,126.6	4,920.7	1,387.3	1,447.5	2,085.9	104.1	1,185.7	4,545.4	215.1	2,868.7
Apr.	31,862.8	17,907.6	982.4	10,806.9	6,118.3	4,993.6	1,405.1	1,472.9	2,115.6	103.8	1,217.8	4,611.3	214.0	2,814.7
May	31,525.3	17,863.1	974.7	10,804.1	6,084.2	5,034.7	1,421.9	1,469.7	2,143.1	102.6	1,214.5	4,475.6	214.5	2,620.4
June <sup>3)</sup>	31,815.3	18,051.5	998.5	10,834.6	6,218.4	5,079.9	1,468.2	1,488.1	2,123.6	94.8	1,198.2	4,428.7	215.1	2,747.2

### 2. Liabilities

	Total	Currency in circulation	Deposits of euro area residents			Money market fund shares/units <sup>3)</sup>	Debt securities issued <sup>4)</sup>	Capital and reserves	External liabilities	Remaining liabilities	
			Total	Central government	Other general government/other euro area residents						MFIs
	1	2	3	4	5	6	7	8	9	10	11
<b>Eurosystem</b>											
2006	1,558.2	647.0	431.6	33.7	15.9	382.0	-	0.1	208.6	35.3	235.6
2007	2,046.1	697.0	714.7	23.9	19.1	671.8	-	0.1	238.0	66.0	330.3
2008 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	317.6
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	293.2	274.9	314.1
May	2,678.1	783.4	1,053.1	137.2	19.0	897.0	-	0.1	291.5	249.0	300.9
June <sup>3)</sup>	2,893.3	785.9	1,257.5	125.1	23.6	1,108.7	-	0.1	283.3	208.0	358.5
<b>MFIs excluding the Eurosystem</b>											
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.	32,287.8	-	16,816.0	222.6	9,753.5	6,839.9	861.9	4,920.9	1,786.0	4,670.8	3,232.1
Feb.	32,133.5	-	16,704.9	228.2	9,758.6	6,718.1	883.1	4,971.3	1,781.9	4,560.5	3,231.8
Mar.	31,747.4	-	16,609.3	216.2	9,786.1	6,607.0	885.2	4,936.2	1,778.7	4,343.8	3,194.2
Apr.	31,862.8	-	16,646.7	198.0	9,870.6	6,578.2	886.1	4,975.9	1,790.6	4,399.8	3,163.7
May	31,525.3	-	16,572.1	194.4	9,877.2	6,500.5	874.5	5,000.3	1,804.3	4,264.1	3,010.0
June <sup>3)</sup>	31,815.3	-	16,797.2	227.5	9,935.0	6,634.7	844.1	4,979.7	1,827.2	4,221.0	3,146.1

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
2008 Q4	24,107.5	11,755.1	986.2	10,768.8	2,961.4	1,552.6	1,408.8	786.3	5,236.4	227.3	3,141.2
2009 Jan.	24,488.5	11,857.3	1,001.8	10,855.5	3,034.9	1,622.9	1,412.0	789.3	5,385.2	226.6	3,195.1
Feb.	24,430.4	11,830.9	998.4	10,832.4	3,093.7	1,660.7	1,433.0	777.1	5,300.9	230.9	3,196.9
Mar.	24,151.3	11,800.5	989.4	10,811.1	3,160.1	1,710.1	1,450.0	770.3	5,036.4	230.9	3,153.2
Apr.	24,236.7	11,808.1	1,000.5	10,807.6	3,206.8	1,731.6	1,475.2	795.6	5,098.8	229.8	3,097.7
May	23,901.7	11,797.6	992.8	10,804.8	3,217.0	1,744.8	1,472.2	792.7	4,964.2	230.2	2,899.9
June <sup>(p)</sup>	24,082.1	11,851.5	1,016.2	10,835.2	3,286.0	1,795.2	1,490.9	778.8	4,914.8	231.4	3,019.6
Transactions											
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	766.2
2009 Q1	-140.4	6.5	2.1	4.4	180.8	142.0	38.7	-4.1	-279.3	2.1	-46.3
2009 Q2 <sup>(p)</sup>	15.5	72.5	27.4	45.0	137.5	90.4	47.2	5.8	-63.6	0.5	-138.2
2009 Jan.	87.4	38.3	14.1	24.2	52.1	56.0	-3.9	11.1	-44.3	-2.2	32.6
Feb.	-89.0	-25.2	-3.3	-21.9	58.9	37.1	21.8	-7.6	-105.2	4.4	-14.3
Mar.	-138.9	-6.6	-8.6	2.0	69.7	48.9	20.8	-7.6	-129.8	0.0	-64.6
Apr.	59.9	7.0	11.3	-4.3	47.6	21.4	26.2	21.7	41.2	-1.1	-56.4
May	-224.2	6.7	-7.5	14.1	21.6	19.8	1.8	-3.1	-52.4	0.4	-198.4
June <sup>(p)</sup>	179.8	58.8	23.6	35.1	68.3	49.2	19.2	-12.8	-52.4	1.2	116.7

**2. Liabilities**

	Total	Currency in circulation	Deposits of central government	Deposits of other general government/other euro area residents	Money market fund shares/units <sup>2)</sup>	Debt securities issued <sup>3)</sup>	Capital and reserves	External liabilities	Remaining liabilities	Excess of inter-MFI liabilities
Outstanding amounts										
2006	19,710.1	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
2008 Q4	24,107.5	723.0	259.6	9,727.2	726.3	2,828.2	1,613.6	4,779.3	3,567.1	-117.1
2009 Jan.	24,488.5	712.3	325.1	9,772.6	759.9	2,824.4	1,658.6	4,999.9	3,575.4	-140.2
Feb.	24,430.4	716.0	339.1	9,780.9	779.9	2,849.0	1,670.3	4,861.9	3,549.4	-116.5
Mar.	24,151.3	719.9	351.8	9,809.4	780.8	2,801.4	1,645.8	4,645.3	3,496.0	-99.5
Apr.	24,236.7	729.2	338.2	9,892.1	782.0	2,811.1	1,646.9	4,674.7	3,477.8	-115.7
May	23,901.7	732.0	331.5	9,896.2	771.6	2,806.9	1,659.1	4,513.1	3,310.9	-120.0
June <sup>(p)</sup>	24,082.1	735.0	352.7	9,958.6	749.0	2,804.9	1,676.2	4,429.1	3,504.6	-128.2
Transactions										
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	606.8	29.8	-27.8	142.4	64.8	664.7	-59.2
2009 Q1	-140.4	-4.4	89.3	26.2	55.8	-37.5	19.4	-198.1	-84.2	-6.9
2009 Q2 <sup>(p)</sup>	15.5	15.0	0.9	158.0	-19.8	17.6	35.7	-170.5	-8.4	-13.0
2009 Jan.	87.4	-12.0	62.5	-23.0	34.8	-39.0	20.8	76.7	37.1	-70.5
Feb.	-89.0	3.6	14.0	8.9	20.2	22.3	8.9	-149.9	-36.2	19.1
Mar.	-138.9	4.0	12.7	40.3	0.9	-20.8	-10.3	-124.9	-85.2	44.5
Apr.	59.9	9.3	-13.3	79.6	2.5	4.9	4.3	8.3	-15.7	-20.0
May	-224.2	2.8	-6.7	16.2	0.4	15.5	14.2	-86.9	-192.2	12.4
June <sup>(p)</sup>	179.8	3.0	20.8	62.2	-22.7	-2.9	17.2	-91.9	199.6	-5.4

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>

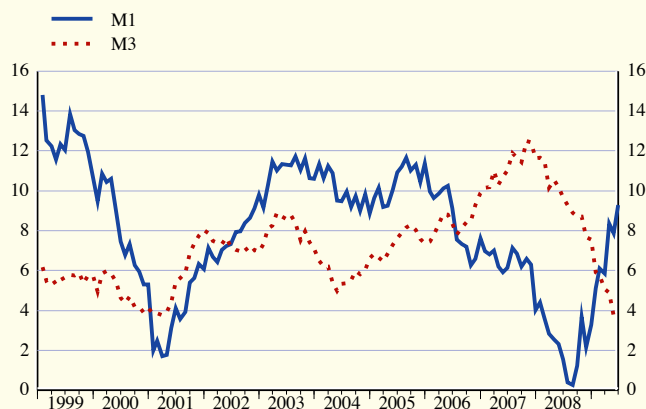
(EUR billions and annual growth rates; seasonally adjusted; outstanding amounts and growth rates at end of period, transactions during period)

### 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
2008 Q4	3,982.0	4,046.2	8,028.2	1,379.0	9,407.3	-	6,294.2	2,562.1	12,985.7	10,784.6	-	430.0
2009 Jan.	4,103.7	3,986.1	8,089.8	1,308.5	9,398.3	-	6,443.9	2,624.3	13,085.0	10,869.9	-	369.3
Feb.	4,133.5	3,981.1	8,114.6	1,323.6	9,438.2	-	6,490.0	2,656.5	13,090.8	10,859.7	-	421.2
Mar.	4,122.6	3,964.2	8,086.8	1,313.3	9,400.1	-	6,444.2	2,687.5	13,033.2	10,809.0	-	391.0
Apr.	4,199.9	3,961.6	8,161.6	1,315.1	9,476.6	-	6,468.0	2,712.9	13,011.9	10,792.2	-	453.6
May	4,190.2	3,938.3	8,128.4	1,279.8	9,408.3	-	6,501.8	2,721.8	13,013.0	10,793.6	-	501.0
June <sup>(p)</sup>	4,239.9	3,905.4	8,145.2	1,284.8	9,430.0	-	6,533.0	2,794.7	13,066.5	10,808.6	-	487.1
<b>Transactions</b>												
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	126.0	487.0	613.0	44.3	657.3	-	174.0	70.6	843.2	587.4	749.3	-137.5
2009 Q1	105.1	-98.5	6.6	-62.3	-55.7	-	117.6	108.9	18.9	-13.6	7.9	-54.3
2009 Q2 <sup>(p)</sup>	136.7	-67.7	68.9	-18.4	50.5	-	108.2	113.0	57.9	20.4	45.6	108.5
2009 Jan.	83.2	-84.8	-1.6	-65.3	-66.9	-	78.3	46.3	37.5	22.7	29.9	-110.0
Feb.	28.1	-2.3	25.7	15.3	41.1	-	40.6	31.7	12.6	-9.0	-3.8	43.0
Mar.	-6.2	-11.4	-17.6	-12.3	-29.9	-	-1.4	30.9	-31.2	-27.3	-18.2	12.8
Apr.	93.1	-18.2	74.9	2.8	77.7	-	19.4	25.3	-24.4	-17.5	-2.7	62.5
May	-6.3	-16.7	-22.9	-26.4	-49.3	-	59.0	15.7	22.6	18.3	22.6	54.9
June <sup>(p)</sup>	49.8	-32.8	17.0	5.1	22.1	-	29.8	72.0	59.8	19.7	25.6	-8.9
<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
2008 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	-2.7	5.9	6.4	3.5	5.0	6.4	5.1	6.6	-238.6
Feb.	6.1	7.8	6.9	-0.8	5.8	5.6	4.5	6.7	5.7	4.3	5.8	-176.9
Mar.	5.9	6.4	6.2	-1.1	5.1	5.2	4.2	7.6	4.7	3.1	4.7	-133.0
Apr.	8.3	3.5	5.9	-1.2	4.9	4.6	4.1	7.9	3.7	2.3	3.9	-23.1
May	7.9	2.1	5.0	-3.7	3.7	4.1	4.8	8.2	3.1	1.8	3.3	80.6
June <sup>(p)</sup>	9.3	0.4	4.8	-4.0	3.5	.	5.0	10.8	3.0	1.5	2.8	103.5

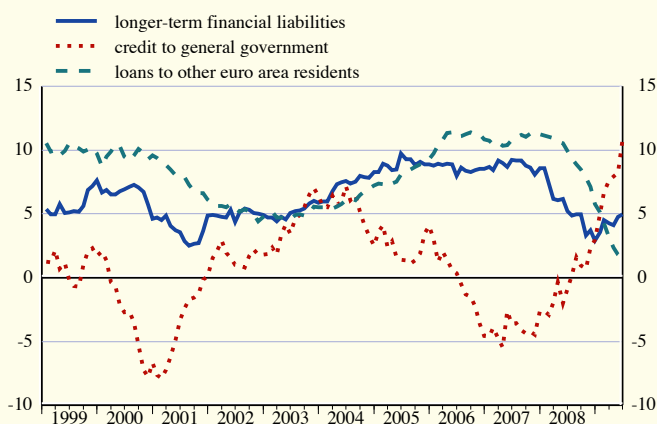
### C1 Monetary aggregates <sup>1)</sup>

(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>

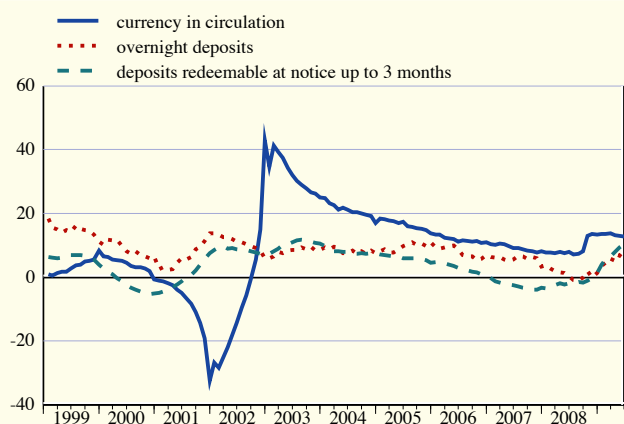
(EUR billions and annual growth rates; seasonally adjusted; outstanding amounts and growth rates at end of period, transactions during period)

### 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	3,272.0	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	321.3	768.2	219.0	2,627.3	123.7	2,038.2	1,654.7
Feb.	721.8	3,411.6	2,356.8	1,624.4	326.4	779.9	217.3	2,641.9	123.0	2,056.7	1,668.4
Mar.	727.5	3,395.2	2,321.7	1,642.5	336.1	780.4	196.7	2,605.5	124.2	2,074.3	1,640.1
Apr.	729.8	3,470.2	2,294.1	1,667.5	337.1	770.5	207.4	2,603.3	125.9	2,090.0	1,648.9
May	730.0	3,460.1	2,257.6	1,680.7	326.1	753.1	200.6	2,599.5	128.2	2,100.1	1,674.1
June <sup>(p)</sup>	734.2	3,505.6	2,209.2	1,696.2	355.1	745.6	184.0	2,604.8	129.4	2,117.5	1,681.3
Transactions											
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	42.6	467.2	19.8	48.1	33.2	-37.0	10.8	0.6	20.8	141.9
2009 Q1	16.1	89.0	-173.3	74.8	-18.0	25.6	-69.8	19.1	2.2	75.9	20.3
Q2 <sup>(p)</sup>	6.8	129.9	-122.2	54.5	19.1	-23.1	-14.5	15.3	4.5	42.0	46.5
2009 Jan.	5.4	77.9	-115.1	30.3	-33.0	13.2	-45.5	14.3	1.7	38.8	23.5
Feb.	5.1	23.0	-28.4	26.1	5.0	11.9	-1.7	12.3	-0.7	18.1	10.9
Mar.	5.6	-11.8	-29.7	18.3	9.9	0.4	-22.7	-7.5	1.2	19.1	-14.1
Apr.	2.3	90.8	-43.9	25.7	0.9	-8.6	10.4	-6.7	1.0	13.1	11.9
May	0.2	-6.5	-30.0	13.3	-10.8	-6.9	-8.7	17.8	2.2	11.9	27.2
June <sup>(p)</sup>	4.2	45.6	-48.3	15.5	29.0	-7.6	-16.3	4.2	1.2	17.0	7.4
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
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	5.4	2.8	-25.3	0.2	0.6	2.9	10.4
Feb.	13.6	4.6	9.5	5.6	5.0	3.8	-20.1	1.3	1.3	4.1	10.7
Mar.	13.8	4.3	6.4	6.6	8.0	4.1	-26.7	0.8	3.7	5.0	9.3
Apr.	13.2	7.4	0.5	8.0	3.6	3.2	-20.3	0.1	5.1	5.5	9.2
May	13.1	6.8	-2.7	9.4	1.9	2.7	-27.7	0.4	7.7	5.6	10.8
June <sup>(p)</sup>	12.8	8.6	-6.1	10.3	5.4	2.8	-33.6	0.3	9.3	6.2	11.1

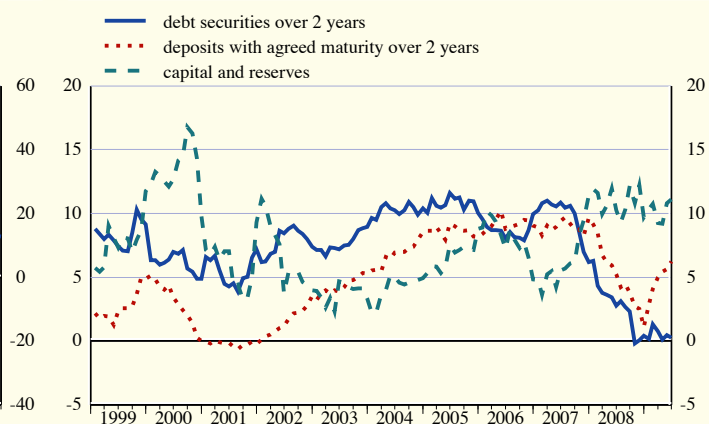
### C3 Components of monetary aggregates <sup>1)</sup>

(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

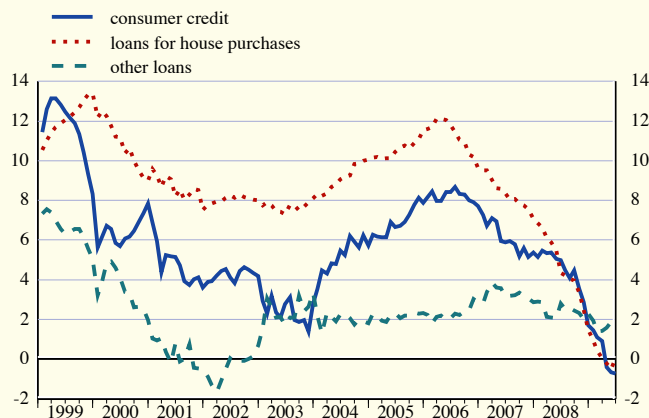
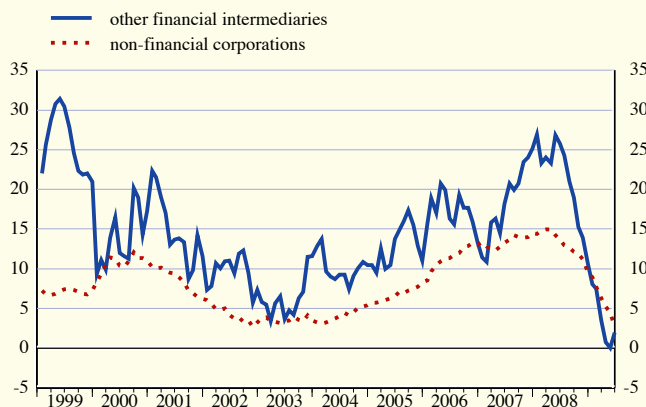
	Insurance corporations and pension funds	Other financial intermediaries <sup>3)</sup>	Non-financial corporations			Households <sup>4)</sup>				
	Total	Total	Total	Up to 1 year	Over 1 year and up to 5 years	Over 5 years	Total	Consumer credit	Loans for house purchase	Other loans
	1	2	3	4	5	6	7	8	9	10
Outstanding amounts										
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
Q4	103.7	974.6	4,824.2	1,383.9	960.8	2,479.4	4,882.1	630.6	3,482.1	769.4
2009 Jan.	98.2	990.0	4,882.9	1,394.2	977.7	2,510.9	4,898.9	639.6	3,488.9	770.3
Feb.	96.2	985.6	4,878.6	1,374.1	980.6	2,523.9	4,899.2	640.8	3,490.9	767.6
Mar.	103.2	970.0	4,847.3	1,339.0	980.8	2,527.5	4,888.6	640.8	3,480.6	767.2
Apr.	101.7	961.2	4,841.1	1,324.1	986.1	2,531.0	4,888.2	635.5	3,482.5	770.2
May	101.6	978.2	4,826.8	1,315.9	982.0	2,528.8	4,887.0	633.7	3,481.0	772.4
June <sup>4)</sup>	105.1	1,023.5	4,787.8	1,285.3	976.5	2,526.0	4,892.2	635.8	3,487.0	769.4
Transactions										
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	421.6	88.5	120.1	213.1	80.1	10.7	52.0	17.3
2009 Q1	-3.9	-11.6	9.4	-44.0	13.8	39.5	-7.5	2.5	-8.8	-1.2
Q2 <sup>4)</sup>	2.0	57.0	-43.3	-49.4	0.5	5.5	4.8	-4.6	2.6	6.8
2009 Jan.	-5.7	4.9	27.0	-0.4	8.8	18.6	-3.5	-0.1	-3.3	-0.1
Feb.	-2.0	-5.7	-3.1	-19.2	2.9	13.3	1.7	1.7	2.2	-2.2
Mar.	3.8	-10.7	-14.6	-24.4	2.1	7.7	-5.7	0.9	-7.7	1.1
Apr.	-1.5	-9.9	-3.3	-14.4	5.8	5.3	-2.9	-5.3	1.1	1.4
May	0.1	21.2	-4.8	-5.3	-1.3	1.7	1.8	-1.3	0.1	3.0
June <sup>4)</sup>	3.4	45.6	-35.2	-29.7	-4.0	-1.6	5.8	2.0	1.4	2.4
Growth rates										
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
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	7.7	3.3	12.0	8.7	0.7	1.1	0.4	1.4
Mar.	-5.5	3.5	6.2	-0.3	11.1	8.2	0.4	0.9	0.0	1.4
Apr.	-2.0	0.6	5.2	-1.7	10.6	7.1	0.0	-0.4	-0.2	1.6
May	-3.0	0.0	4.4	-2.6	9.7	6.4	-0.2	-0.7	-0.5	1.9
June <sup>4)</sup>	-0.5	2.0	2.8	-5.4	7.3	5.7	0.2	-0.7	0.0	1.6

### 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 Mar.	102.1	75.7	6.2	20.2	986.5	568.6	179.9	238.0	4,843.0	1,336.2	981.2	2,525.6
2009 Apr.	103.7	77.3	5.7	20.7	984.0	562.6	180.4	241.0	4,844.0	1,328.1	985.6	2,530.3
2009 May	105.7	78.9	5.7	21.0	993.6	575.6	179.4	238.6	4,826.5	1,312.5	982.8	2,531.2
2009 June <sup>4)</sup>	107.8	82.6	7.5	17.7	1,023.2	597.8	183.3	242.1	4,803.4	1,300.3	976.6	2,526.5
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	87.6	120.1	213.9
2009 Q1	6.5	5.8	0.6	0.1	18.7	10.0	11.1	-2.4	2.3	-41.1	14.6	28.9
2009 Q2 <sup>4)</sup>	5.9	7.0	1.3	-2.5	40.2	31.9	3.1	5.2	-23.4	-31.6	0.2	8.0
2009 Mar.	4.7	4.4	-0.3	0.5	9.1	11.7	1.1	-3.7	-7.9	-20.1	4.5	7.8
2009 Apr.	1.6	1.6	-0.5	0.5	-3.6	-6.8	0.1	3.1	3.9	-7.6	4.8	6.6
2009 May	2.2	1.8	0.0	0.4	13.9	15.4	-0.2	-1.2	-8.0	-12.8	-0.1	4.8
2009 June <sup>4)</sup>	2.1	3.6	1.9	-3.4	29.9	23.3	3.2	3.3	-19.3	-11.2	-4.6	-3.4
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 Mar.	-5.2	-7.2	-18.0	10.4	3.5	-5.3	19.6	17.5	6.3	-0.3	11.1	8.2
2009 Apr.	-2.0	-2.0	-25.1	8.3	0.7	-9.5	19.1	18.4	5.2	-1.7	10.6	7.1
2009 May	-3.1	-4.4	-22.7	11.2	0.0	-9.2	16.7	16.0	4.4	-2.6	9.7	6.4
2009 June <sup>4)</sup>	-0.3	0.9	-1.1	-4.2	2.0	-4.6	14.2	12.2	2.8	-5.4	7.4	5.7

**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 Mar.	4,878.9	637.8	136.2	199.9	301.7	3,475.2	16.3	65.6	3,393.2	765.9	150.7	88.4	526.8
2009 Apr.	4,875.3	633.8	134.5	198.1	301.2	3,473.8	16.2	65.5	3,392.2	767.7	148.2	88.6	530.9
2009 May	4,878.4	632.4	133.3	197.6	301.4	3,475.9	16.3	65.4	3,394.2	770.2	147.2	88.6	534.4
2009 June <sup>4)</sup>	4,900.1	639.2	136.0	199.1	304.1	3,486.9	16.1	65.8	3,404.9	774.1	155.2	88.5	530.4
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
2009 Q1	-23.2	-2.7	-2.4	-2.1	1.8	-17.0	-0.9	-3.3	-12.7	-3.5	-4.2	-1.8	2.6
2009 Q2 <sup>4)</sup>	22.4	1.8	0.1	-0.4	2.2	7.9	-0.5	0.2	8.1	12.7	4.8	0.4	7.6
2009 Mar.	-3.8	3.3	0.7	0.0	2.6	-8.1	-0.8	-1.2	-6.1	1.0	0.7	-0.3	0.7
2009 Apr.	-6.1	-4.1	-1.7	-1.7	-0.7	-2.2	-0.4	-0.1	-1.6	0.1	-2.5	0.2	2.4
2009 May	6.1	-0.9	-1.1	-0.3	0.5	3.7	0.2	-0.1	3.6	3.3	-0.7	0.1	4.0
2009 June <sup>4)</sup>	22.4	6.8	2.9	1.6	2.3	6.3	-0.2	0.4	6.1	9.3	8.1	0.1	1.1
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 Mar.	0.4	0.9	0.2	-4.5	5.1	0.0	1.0	-9.0	0.2	1.4	-0.2	-7.5	3.7
2009 Apr.	0.0	-0.4	-0.8	-6.1	3.8	-0.2	-1.5	-9.0	0.0	1.6	-1.0	-5.4	3.7
2009 May	-0.2	-0.6	-1.8	-6.0	3.7	-0.5	1.1	-9.2	-0.3	1.9	-0.7	-5.1	4.0
2009 June <sup>4)</sup>	0.2	-0.7	-2.1	-5.2	3.1	0.1	-0.2	-8.8	0.2	1.6	-1.1	-5.5	3.8

Source: ECB.

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

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

3) Including 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

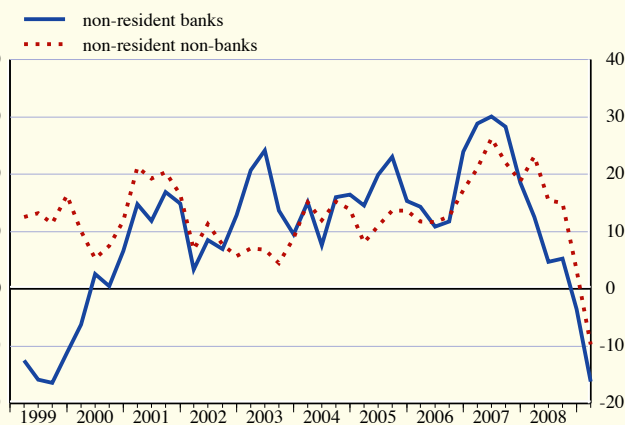
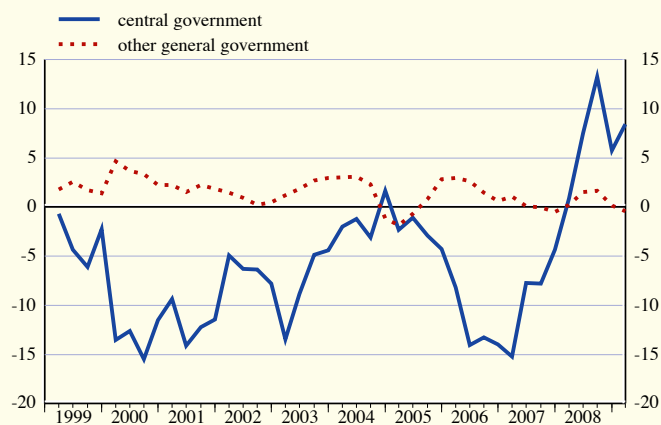
	General government					Non-euro area residents				
	Total	Central government	Other general government			Total	Banks <sup>3)</sup>	Non-banks		
			State government	Local government	Social security funds			Total	General government	Other
1	2	3	4	5	6	7	8	9	10	
Outstanding amounts										
2006	809.0	104.0	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>	970.7	229.4	205.6	512.8	22.3	3,056.6	2,114.5	942.0	57.1	884.9
Transactions										
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>	2.0	2.1	-4.4	3.8	0.1	-236.8	-197.7	-39.3	-1.9	-37.5
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	-16.1	-9.7	-6.8	-9.9

### 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>

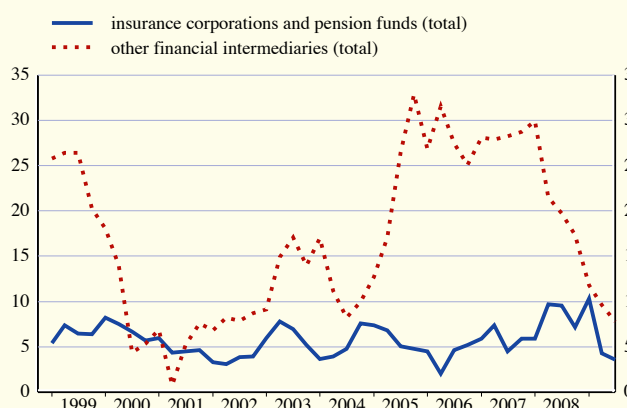
(EUR billions and annual growth rates; outstanding amounts and growth rates at end of period, transactions during period)

### 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
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	360.6	890.6	14.1	0.1	212.0
Mar.	763.6	91.7	99.8	546.8	2.3	1.5	21.4	1,839.5	333.3	350.8	906.1	14.4	0.0	234.7
Apr.	765.9	90.1	101.2	550.5	1.8	1.5	20.8	1,867.8	326.2	372.7	914.6	16.1	0.0	238.1
May	759.0	83.6	100.5	551.8	1.9	1.5	19.7	1,855.3	309.0	364.7	926.5	15.8	0.0	239.2
June <sup>4)</sup>	753.3	85.3	93.7	551.9	1.7	1.5	19.0	1,894.8	335.0	343.5	946.0	15.2	0.0	255.0
Transactions														
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
2009 Q1	-6.7	5.5	-18.8	7.8	0.5	0.0	-1.7	31.5	8.8	-68.5	51.3	2.1	0.0	37.7
Q2 <sup>5)</sup>	-10.2	-6.3	-6.1	5.1	-0.5	0.0	-2.4	60.0	19.4	-19.1	38.5	0.9	0.0	20.3
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	-2.0	-1.4	11.3	1.2	0.0	7.1
Mar.	1.0	-2.4	0.9	2.2	0.2	0.0	0.1	25.7	-7.1	-8.4	17.9	0.5	0.0	22.9
Apr.	2.2	-1.7	1.3	3.6	-0.5	0.0	-0.6	27.0	9.3	6.6	6.1	1.7	0.0	3.4
May	-6.6	-6.4	-0.6	1.4	0.1	0.0	-1.1	-6.0	-15.8	-4.6	13.4	-0.2	0.0	1.2
June <sup>5)</sup>	-5.8	1.7	-6.8	0.1	-0.1	0.0	-0.7	39.1	26.0	-21.1	19.0	-0.6	0.0	15.8
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
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	5.2	-0.7	12.7	14.9	-	28.3
Mar.	4.3	8.9	13.9	2.4	-3.4	-	-2.2	9.6	-2.2	-2.3	13.7	6.4	-	39.4
Apr.	4.7	16.6	10.4	2.8	-13.5	-	-8.1	9.0	7.5	-8.9	13.4	11.7	-	31.9
May	4.1	16.6	6.7	2.7	-1.0	-	-9.5	7.5	0.1	-9.0	12.5	22.7	-	32.0
June <sup>5)</sup>	3.6	12.7	6.1	2.4	-13.3	-	-4.1	7.8	2.9	-14.2	12.9	24.6	-	39.9

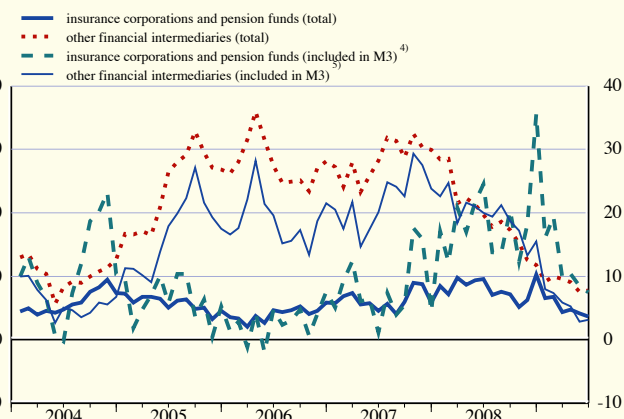
### C9 Total deposits by sector <sup>2)</sup>

(annual growth rates)



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

(annual growth rates)



Source: ECB.

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

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

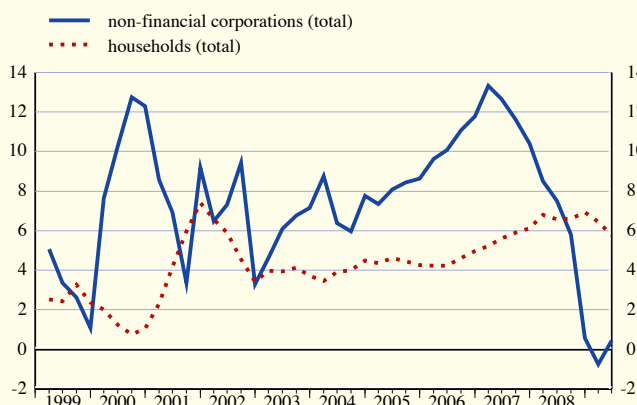
(EUR billions and annual growth rates; outstanding amounts and growth rates at end of period, transactions during period)

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

	Non-financial corporations							Households <sup>3)</sup>						
	Total	Overnight	With agreed maturity		Redeemable at notice		Repos	Total	Overnight	With agreed maturity		Redeemable at notice		Repos
			Up to 2 years	Over 2 years	Up to 3 months	Over 3 months				Up to 2 years	Over 2 years	Up to 3 months	Over 3 months	
	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	1,516.5	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.	1,492.8	884.0	488.2	67.1	32.4	1.3	19.8	5,439.6	1,859.0	1,335.8	522.8	1,530.9	114.4	76.6
Feb.	1,477.9	867.1	483.8	68.6	35.8	1.3	21.3	5,448.9	1,883.3	1,309.4	522.7	1,549.3	114.3	69.9
Mar.	1,487.2	877.8	480.5	71.0	38.7	1.3	17.9	5,447.9	1,900.3	1,281.3	524.4	1,565.5	114.9	61.4
Apr.	1,503.3	881.3	485.9	72.3	42.7	1.4	19.7	5,484.0	1,958.1	1,242.2	527.9	1,583.2	115.8	56.8
May	1,513.2	897.0	475.6	72.7	46.2	1.4	20.4	5,498.6	1,986.5	1,214.9	531.6	1,594.2	117.3	54.2
June <sup>6)</sup>	1,529.5	923.1	464.1	72.2	48.9	1.5	19.6	5,507.1	2,011.8	1,186.9	535.4	1,603.8	118.3	50.9
Transactions														
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	-4.5	13.3	3.3	-3.6	-0.3	0.0	347.6	28.6	335.6	-43.1	28.1	1.7	-3.4
2009 Q1	-39.3	-17.4	-32.2	5.0	11.1	0.0	-5.8	41.2	64.3	-80.3	3.9	75.1	0.5	-22.2
Q2 <sup>6)</sup>	46.0	47.9	-15.3	1.4	10.2	0.1	1.7	59.9	110.8	-93.1	11.0	39.0	2.7	-10.6
2009 Jan.	-40.2	-15.7	-26.8	2.1	4.1	0.0	-3.9	29.0	22.3	-28.8	2.3	40.3	0.0	-7.1
Feb.	-14.1	-16.4	-4.3	1.6	3.4	0.0	1.6	10.3	24.3	-25.3	-0.3	18.3	-0.1	-6.6
Mar.	15.0	14.7	-1.1	1.2	3.5	0.0	-3.5	1.9	17.7	-26.2	1.9	16.4	0.6	-8.5
Apr.	16.4	4.2	5.1	1.3	4.0	0.0	1.9	34.7	56.7	-39.4	3.5	18.3	0.3	-4.7
May	13.0	17.3	-8.9	0.5	3.5	0.0	0.6	16.7	28.8	-25.7	3.7	11.1	1.4	-2.6
June <sup>6)</sup>	16.6	26.3	-11.4	-0.4	2.8	0.1	-0.8	8.5	25.3	-28.0	3.8	9.6	1.0	-3.3
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.	1.5	2.8	-1.2	9.1	6.3	-17.2	-11.2	6.9	4.1	24.7	-6.5	4.5	1.5	-16.5
Feb.	-0.5	1.6	-6.3	10.9	20.7	-11.0	-8.5	6.9	6.4	19.4	-5.7	5.8	2.2	-27.1
Mar.	-0.8	1.2	-6.6	13.4	31.5	-9.5	-21.9	6.5	6.8	15.2	-4.6	6.6	4.7	-35.8
Apr.	-0.5	2.6	-9.6	14.2	50.3	-3.3	-5.9	6.2	9.1	8.3	-3.2	7.9	6.2	-41.8
May	-0.9	2.9	-12.0	13.5	64.5	-2.4	-4.3	5.9	10.3	3.7	-1.7	8.7	8.9	-46.8
June <sup>6)</sup>	0.4	4.8	-11.7	12.4	75.6	1.0	-13.0	5.8	11.3	-0.5	-0.1	9.5	10.5	-48.4

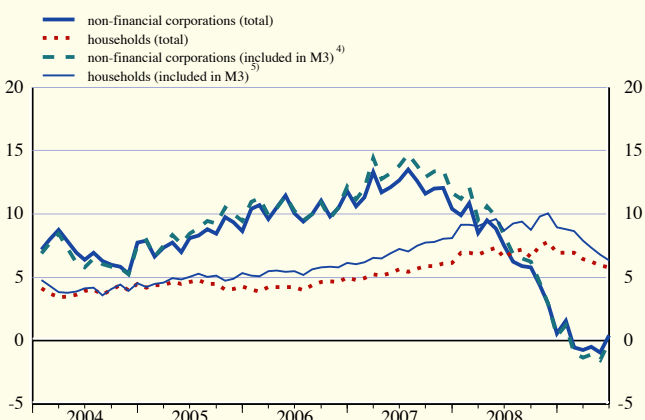
### C11 Total deposits by sector <sup>2)</sup>

(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>**

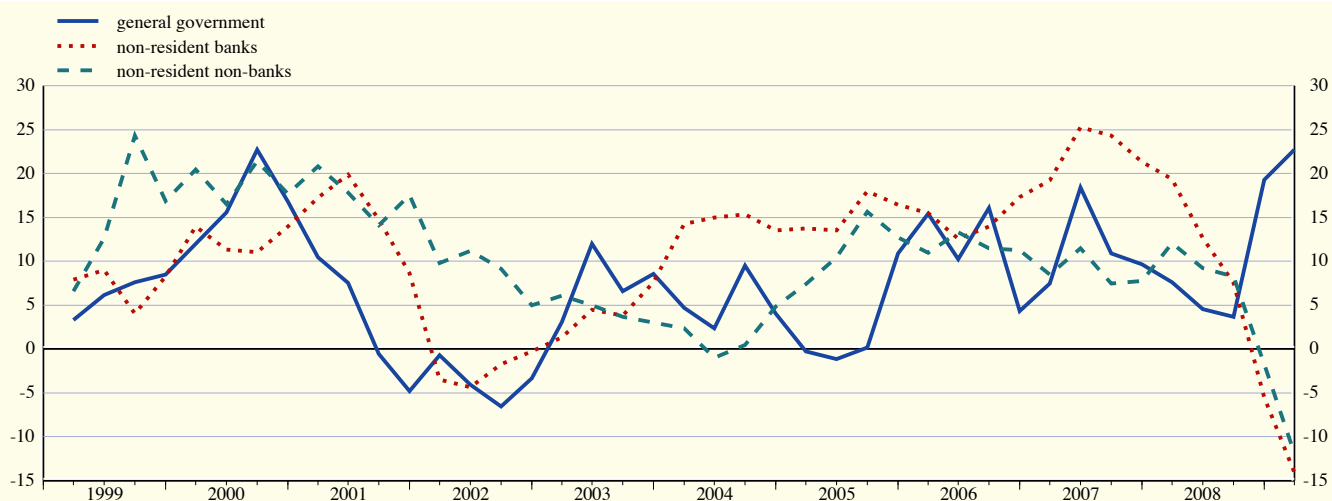
(EUR billions and annual growth rates; outstanding amounts and growth rates at end of period, transactions during period)

**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>	464.2	216.2	50.6	113.5	83.8	3,659.8	2,793.6	868.8	63.1	805.7
Transactions										
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>	15.4	22.5	-1.7	-3.4	-2.2	-107.4	-63.8	-41.7	-3.0	-38.6
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	52.6	2.2	4.6	7.4	-13.6	-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.

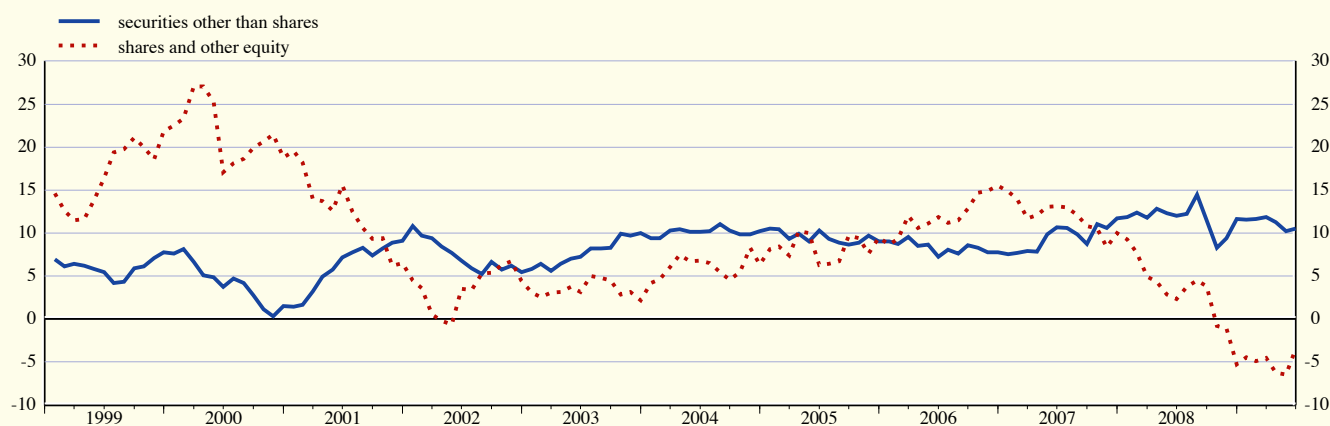
## 2.6 MFI holdings of securities, breakdown <sup>1), 2)</sup>

(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.	6,033.5	1,948.2	102.9	1,285.0	23.4	1,354.2	55.4	1,264.5	1,490.5	425.4	779.7	285.4
Feb.	6,121.0	1,969.9	106.9	1,321.5	21.0	1,374.5	55.8	1,271.4	1,463.7	421.0	768.0	274.8
Mar.	6,136.4	1,982.3	103.5	1,366.7	20.6	1,396.9	50.6	1,215.7	1,457.1	424.5	761.2	271.5
Apr.	6,211.2	2,012.8	102.9	1,384.2	20.9	1,421.9	50.9	1,217.6	1,491.9	432.1	785.7	274.1
May	6,228.3	2,036.5	106.7	1,402.7	19.2	1,422.2	47.5	1,193.6	1,488.6	431.9	782.6	274.1
June <sup>(p)</sup>	6,278.7	2,017.2	106.4	1,447.9	20.3	1,440.8	47.4	1,198.9	1,473.7	429.5	768.7	275.6
<b>Transactions</b>												
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
2009 Q1	255.1	95.6	8.6	133.7	0.4	41.4	-2.7	-21.9	-4.4	3.0	-4.2	-3.2
Q2 <sup>(p)</sup>	165.5	36.4	3.7	84.8	0.3	48.8	-1.9	-6.7	15.8	7.8	5.6	2.4
2009 Jan.	110.4	59.1	3.7	52.4	2.1	-4.1	0.1	-2.8	24.6	4.4	11.0	9.3
Feb.	89.7	24.8	3.7	36.9	-2.4	21.6	-0.1	-5.1	-18.8	-2.9	-7.6	-8.3
Mar.	54.9	11.7	1.3	44.5	0.6	23.8	-2.8	-24.2	-10.3	1.5	-7.6	-4.2
Apr.	64.7	30.1	-2.2	17.8	0.1	26.6	-0.3	-7.5	28.3	5.1	21.7	1.6
May	53.7	24.9	6.7	22.2	-0.8	3.1	-1.4	-1.0	1.2	4.6	-3.2	-0.2
June <sup>(p)</sup>	47.0	-18.7	-0.8	44.8	1.0	19.1	-0.2	1.8	-13.8	-2.0	-12.9	1.1
<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.	11.6	14.4	3.8	6.2	16.4	31.1	43.9	-1.3	-4.5	5.2	-6.5	-11.9
Feb.	11.7	13.9	6.1	9.3	19.0	30.0	45.0	-2.8	-4.9	2.4	-5.4	-13.6
Mar.	11.8	14.4	10.7	12.5	16.4	30.4	3.1	-5.2	-4.5	0.5	-6.5	-6.4
Apr.	11.2	14.8	3.8	12.8	20.3	28.8	-3.7	-7.0	-6.3	0.4	-9.5	-6.6
May	10.2	13.5	2.8	14.0	18.4	26.0	-6.5	-8.3	-6.5	-1.1	-9.2	-6.6
June <sup>(p)</sup>	10.5	12.0	1.4	18.1	19.3	24.5	-6.0	-8.0	-3.5	0.8	-5.5	-4.3

## 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
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	-0.3	-0.1	-0.1	-0.2	-0.3	0.0	0.0	-0.3	-0.3	0.0	0.0	-0.3
June <sup>6)</sup>	-0.6	-0.2	-0.2	-0.2	-0.5	0.0	0.0	-0.4	-0.5	-0.1	-0.1	-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
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	-1.2	-0.2	-0.6	-0.3	-0.2	-0.1	-0.1
June <sup>6)</sup>	-2.7	-0.7	-1.2	-0.8	-0.9	-0.2	-0.7

## 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
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	-15.8	-0.8	-0.1	-3.2	0.0	-3.9	0.4	-8.3	-16.0	-3.5	-11.4	-1.1
2009 Jan.	-9.1	1.1	0.0	-3.6	0.0	-0.9	0.2	-5.9	-11.7	-3.9	-8.2	0.4
Feb.	-5.4	-2.6	0.0	-0.3	0.0	-1.7	0.2	-1.1	-8.0	-1.6	-4.1	-2.3
Mar.	-1.3	0.7	0.0	0.8	0.0	-1.4	0.0	-1.3	3.7	2.0	0.8	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	-2.8	0.5	-0.1	-1.1	-0.2	-0.8	0.0	-1.2	2.0	1.1	0.7	0.2
June <sup>6)</sup>	-0.3	-0.7	0.0	0.4	0.0	-0.6	0.0	0.5	-1.1	-0.4	-1.0	0.4

Source: ECB.

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

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

3) 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>	6,607.0	90.9	9.1	6.4	0.3	1.1	0.7	10,002.3	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>	5,197.8	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>	6,126.6	-	-	-	-	-	11,781.1	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>	2,085.9	95.0	5.0	2.7	0.2	0.4	1.3	2,834.9	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 Q4	5,783.4	353.7	1,994.3	184.2	1,810.1	2,077.7	784.6	189.1	384.1
2008 Q1	5,162.7	365.9	1,858.8	164.8	1,693.9	1,670.4	720.3	197.1	350.2
Q2	5,017.4	359.6	1,808.2	157.5	1,650.7	1,624.6	691.2	204.9	328.8
Q3	4,715.2	377.4	1,748.3	148.1	1,600.1	1,411.5	641.9	202.8	333.4
Q4	4,232.3	352.1	1,687.9	132.4	1,555.5	1,132.7	566.7	200.2	292.7
2009 Q1 <sup>(a)</sup>	4,095.6	344.6	1,699.3	121.7	1,577.6	1,044.4	529.7	202.3	275.3

### 2. Liabilities

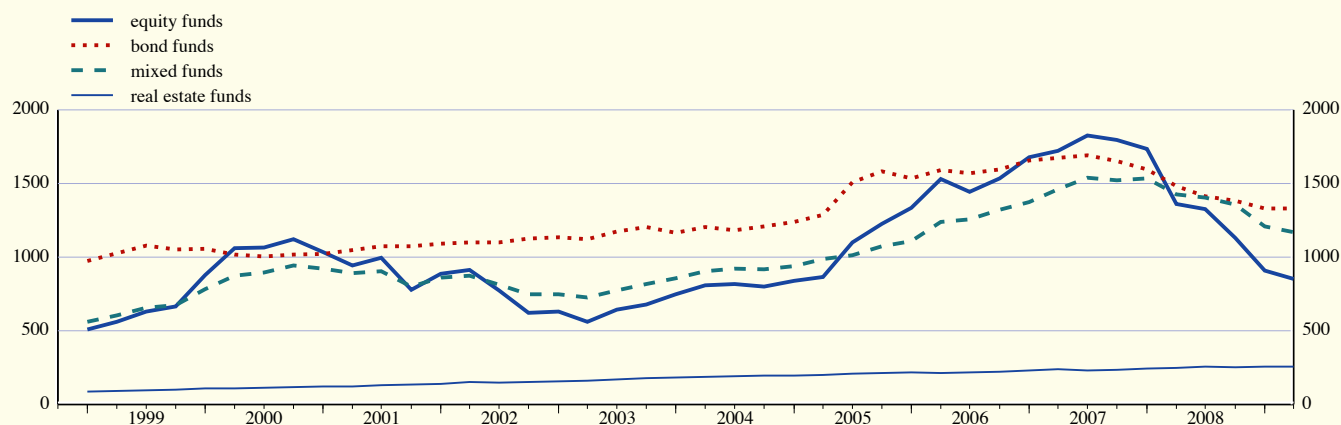
	Total 1	Deposits and loans taken 2	Investment fund shares 3	Other liabilities 4
2007 Q4	5,783.4	76.8	5,413.5	293.1
2008 Q1	5,162.7	76.4	4,848.6	237.7
Q2	5,017.4	74.8	4,723.1	219.5
Q3	4,715.2	71.0	4,415.4	228.8
Q4	4,232.3	64.7	3,983.1	184.5
2009 Q1 <sup>(a)</sup>	4,095.6	74.6	3,836.6	184.4

### 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 Q4	5,783.4	1,735.7	1,597.4	1,535.8	244.3	670.2	4,346.8	1,436.7
2008 Q1	5,162.7	1,362.8	1,483.8	1,428.1	249.7	638.3	3,780.2	1,382.5
Q2	5,017.4	1,325.4	1,413.9	1,405.6	256.3	616.2	3,649.3	1,368.1
Q3	4,715.2	1,132.4	1,383.2	1,359.3	253.2	587.1	3,343.0	1,372.3
Q4	4,232.3	908.4	1,330.8	1,210.8	257.1	525.2	2,950.7	1,281.6
2009 Q1 <sup>(a)</sup>	4,095.6	854.6	1,330.8	1,170.6	257.4	482.2	2,825.4	1,270.2

### CI5 Total assets of investment funds

(EUR billions)



Source: ECB.

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

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

(EUR billions; outstanding amounts at end of period)

## 1. Funds by investment policy

	Total 1	Deposits 2	Holdings of securities other than shares			Holdings of shares/ other equity 6	Holdings of investment fund shares 7	Fixed assets 8	Other assets 9
			Total 3	Up to 1 year 4	Over 1 year 5				
Equity funds									
2007 Q4	1,735.7	58.1	71.8	26.5	45.2	1,464.4	79.5	-	61.9
2008 Q1	1,362.8	51.3	63.1	21.3	41.8	1,131.0	65.7	-	51.7
Q2	1,325.4	54.3	65.1	22.0	43.1	1,088.7	65.7	-	51.6
Q3	1,132.4	48.3	61.3	20.2	41.1	915.3	57.2	-	50.2
Q4	908.4	37.3	65.2	19.4	45.8	715.4	47.2	-	43.3
2009 Q1 <sup>(p)</sup>	854.6	38.8	63.8	16.5	47.3	660.7	45.2	-	46.1
Bond funds									
2007 Q4	1,597.4	116.1	1,273.6	92.8	1,180.8	58.0	49.8	-	99.8
2008 Q1	1,483.8	124.7	1,168.2	80.3	1,087.9	56.8	45.5	-	88.6
Q2	1,413.9	115.9	1,118.8	74.6	1,044.2	57.9	42.7	-	78.6
Q3	1,383.2	128.7	1,074.0	67.9	1,006.1	55.7	41.3	-	83.5
Q4	1,330.8	122.2	1,034.2	62.2	971.9	57.5	36.4	-	80.5
2009 Q1 <sup>(p)</sup>	1,330.8	117.5	1,044.6	62.1	982.5	49.1	38.6	-	80.9
Mixed funds									
2007 Q4	1,535.8	89.8	547.2	47.3	499.8	393.2	343.7	0.7	161.4
2008 Q1	1,428.1	97.9	528.1	46.4	481.8	339.5	314.0	1.2	147.3
Q2	1,405.6	99.1	520.1	42.6	477.5	341.7	308.0	0.8	135.9
Q3	1,359.3	109.0	512.8	42.2	470.6	312.1	287.4	1.1	137.0
Q4	1,210.8	110.3	494.9	34.3	460.6	245.2	235.8	1.2	123.4
2009 Q1 <sup>(p)</sup>	1,170.6	109.4	498.5	28.2	470.3	227.2	224.0	1.8	109.6
Real estate funds									
2007 Q4	244.3	19.7	6.0	1.5	4.5	3.4	12.5	187.9	14.7
2008 Q1	249.7	19.9	5.3	1.1	4.2	3.1	11.3	195.4	14.6
Q2	256.3	18.0	5.9	1.1	4.8	3.0	10.1	203.5	15.8
Q3	253.2	19.0	4.7	1.3	3.4	3.1	9.3	201.2	16.0
Q4	257.1	14.4	4.8	1.1	3.7	12.7	6.8	198.5	19.8
2009 Q1 <sup>(p)</sup>	257.4	14.4	5.1	1.1	4.0	12.3	7.5	200.1	18.1

## 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 Q4	4,346.8	280.2	1,337.7	1,717.7	570.2	149.1	291.8
2008 Q1	3,780.2	278.0	1,219.2	1,362.3	514.7	154.1	252.0
Q2	3,649.3	264.9	1,178.3	1,327.0	486.0	155.0	238.1
Q3	3,343.0	265.4	1,105.7	1,140.8	441.4	152.4	237.3
Q4	2,950.7	244.6	1,037.6	933.0	382.6	146.7	206.2
2009 Q1 <sup>(p)</sup>	2,825.4	243.5	1,029.9	864.7	342.8	144.5	199.9
Special investors' funds							
2007 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	1,281.6	107.5	650.2	199.7	184.1	53.5	86.5
2009 Q1 <sup>(p)</sup>	1,270.2	101.1	669.4	179.7	186.9	57.8	75.3

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>2009 Q1</b>						
<b>External account</b>						
Exports of goods and services						421.2
<i>Trade balance</i> <sup>1)</sup>						11.0
<b>Generation of income account</b>						
Gross value added (basic prices)						
Taxes less subsidies on products						
Gross domestic product (market prices)						
Compensation of employees	1,047.9	102.7	663.6	52.0	229.7	
Other taxes less subsidies on production	24.2	2.7	14.2	3.6	3.8	
Consumption of fixed capital	351.0	94.5	199.1	11.6	45.7	
<i>Net operating surplus and mixed income</i> <sup>1)</sup>	540.7	279.4	226.5	35.8	-0.9	
<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	777.7	42.7	288.7	380.7	65.6	109.5
Interest	481.8	40.4	83.1	292.7	65.6	66.7
Other property income	295.8	2.3	205.6	87.9	0.0	42.8
<i>Net national income</i> <sup>1)</sup>	1,824.2	1,549.3	33.8	39.0	202.0	
<b>Secondary distribution of income account</b>						
Net national income						
Current taxes on income, wealth, etc.	231.0	201.3	23.9	5.6	0.2	1.3
Social contributions	403.2	403.2				0.6
Social benefits other than social transfers in kind	422.2	1.4	15.6	31.7	373.6	0.7
Other current transfers	192.5	71.3	25.2	45.9	50.1	8.1
Net non-life insurance premiums	43.7	31.8	10.3	0.9	0.7	1.4
Non-life insurance claims	43.8			43.8		0.6
Other	105.0	39.5	14.9	1.2	49.4	6.1
<i>Net disposable income</i> <sup>1)</sup>	1,793.4	1,384.1	-4.7	48.2	365.8	
<b>Use of income account</b>						
Net disposable income						
Final consumption expenditure	1,743.6	1,279.3			464.2	
Individual consumption expenditure	1,562.6	1,279.3			283.3	
Collective consumption expenditure	181.0				181.0	
Adjustment for the change in net equity of households in pension fund reserves	15.3	0.1	0.2	15.0	0.0	0.0
<i>Net saving/current external account</i> <sup>1)</sup>	49.9	120.0	-4.9	33.2	-98.4	55.2
<b>Capital account</b>						
Net saving / current external account						
Gross capital formation	456.1	140.8	256.2	12.9	46.3	
Gross fixed capital formation	438.3	138.2	241.3	12.7	46.1	
Changes in inventories and acquisitions less disposals of valuables	17.9	2.6	14.9	0.2	0.2	
Consumption of fixed capital						
Acquisitions less disposals of non-produced non-financial assets	0.6	-1.4	1.3	0.1	0.6	-0.6
Capital transfers	34.4	6.1	-0.2	1.2	27.3	3.7
Capital taxes	5.0	4.8	0.2	0.0		0.0
Other capital transfers	29.4	1.3	-0.3	1.2	27.3	3.7
<i>Net lending (+)/net borrowing (-) (from capital account)</i> <sup>1)</sup>	-54.3	83.8	-47.0	31.4	-122.5	54.3
Statistical discrepancy	0.0	13.1	-13.1	0.0	0.0	0.0

Sources: ECB and Eurostat.

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

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

(EUR billions)

Resources	Euro area	Households	Non-financial corporations	Financial corporations	General government	Rest of the world
<b>2009 Q1</b>						
<b>External account</b>						
Imports of goods and services						432.1
<i>Trade balance</i>						
<b>Generation of income account</b>						
Gross value added (basic prices)	1,963.9	479.2	1,103.4	103.0	278.3	
Taxes less subsidies on products	224.8					
Gross domestic product (market prices) <sup>2)</sup>	2,188.7					
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	540.7	279.4	226.5	35.8	-0.9	
Compensation of employees	1,050.4	1,050.4				2.1
Taxes less subsidies on production	247.2				247.2	1.9
Property income	763.5	262.2	96.0	383.9	21.3	123.6
Interest	463.4	72.4	48.3	334.9	7.9	85.1
Other property income	300.1	189.9	47.8	49.1	13.4	38.5
<i>Net national income</i>						
<b>Secondary distribution of income account</b>						
Net national income	1,824.2	1,549.3	33.8	39.0	202.0	
Current taxes on income, wealth, etc.	231.9				231.9	0.4
Social contributions	402.7	1.1	15.6	47.4	338.6	1.1
Social benefits other than social transfers in kind	419.6	419.6				3.4
Other current transfers	163.9	91.4	10.4	45.0	17.2	36.7
Net non-life insurance premiums	43.8			43.8		1.3
Non-life insurance claims	42.8	34.2	7.7	0.7	0.3	1.6
Other	77.3	57.2	2.8	0.5	16.9	33.8
<i>Net disposable income</i>						
<b>Use of income account</b>						
Net disposable income	1,793.4	1,384.1	-4.7	48.2	365.8	
Final consumption expenditure						
Individual consumption expenditure						
Collective consumption expenditure						
Adjustment for the change in net equity of households in pension fund reserves	15.3	15.3				0.0
<i>Net saving/current external account</i>						
<b>Capital account</b>						
Net saving / current external account	49.9	120.0	-4.9	33.2	-98.4	55.2
Gross capital formation						
Gross fixed capital formation						
Changes in inventories and acquisitions less disposals of valuables						
Consumption of fixed capital	351.0	94.5	199.1	11.6	45.7	
Acquisitions less disposals of non-produced non-financial assets						
Capital transfers	35.9	14.8	16.0	0.7	4.4	2.2
Capital taxes	5.0				5.0	0.0
Other capital transfers	30.9	14.8	16.0	0.7	-0.6	2.2
<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
2009 Q1								
<b>Opening balance sheet, financial assets</b>								
Total financial assets		16,629.4	14,160.4	23,728.5	9,484.6	5,963.5	3,159.6	14,898.2
Monetary gold and special drawing rights (SDRs)				221.8				
Currency and deposits		6,120.0	1,835.6	2,393.9	1,800.1	874.8	641.5	4,206.6
Short-term debt securities		60.3	94.3	154.5	327.8	331.2	37.6	855.6
Long-term debt securities		1,256.5	213.8	4,253.6	1,631.7	2,017.2	322.8	2,942.3
Loans		65.7	2,531.9	12,755.1	2,112.2	364.8	442.6	1,775.9
<i>of which long-term</i>		47.7	1,404.8	9,679.5	1,684.7	287.6	354.5	.
Shares and other equity		3,750.4	6,067.4	1,599.1	3,413.1	1,919.6	1,136.0	4,434.8
Quoted shares		611.6	1,106.3	470.7	1,505.7	426.0	263.2	.
Unquoted shares and other equity		1,820.0	4,652.7	915.5	1,374.8	433.0	751.9	.
Mutual fund shares		1,318.9	308.5	212.9	532.6	1,060.6	120.9	.
Insurance technical reserves		5,148.6	136.9	1.8	0.0	142.3	3.1	149.3
Other accounts receivable and financial derivatives		227.9	3,280.4	2,348.6	199.6	313.5	575.9	533.8
<i>Net financial worth</i>								
<b>Financial account, transactions in financial assets</b>								
Total transactions in financial assets		101.5	-5.9	-116.1	118.4	54.8	94.6	-131.3
Monetary gold and special drawing rights (SDRs)				-0.9				0.9
Currency and deposits		27.3	-41.6	-223.9	59.4	-1.4	92.8	-188.2
Short-term debt securities		-14.8	-7.9	-9.1	3.2	7.4	-11.6	45.9
Long-term debt securities		37.3	-18.0	161.2	9.7	32.3	-4.6	67.3
Loans		-1.1	80.9	-31.1	75.0	2.8	4.3	-31.9
<i>of which long-term</i>		-1.1	62.4	19.9	76.9	10.6	4.4	.
Shares and other equity		12.4	77.2	-5.5	-35.3	2.8	10.5	21.6
Quoted shares		3.0	26.7	-3.1	-30.7	-0.2	2.3	.
Unquoted shares and other equity		6.4	38.2	16.1	27.3	4.4	7.9	.
Mutual fund shares		3.0	12.3	-18.4	-31.8	-1.3	0.2	.
Insurance technical reserves		42.6	1.2	0.0	0.0	3.7	0.0	-10.5
Other accounts receivable and financial derivatives		-2.3	-97.8	-6.9	6.4	7.2	3.3	-36.4
<i>Changes in net financial worth due to transactions</i>								
<b>Other changes account, financial assets</b>								
Total other changes in financial assets		-264.6	-348.9	58.5	-91.9	-71.2	-44.1	-41.5
Monetary gold and special drawing rights (SDRs)				24.4				
Currency and deposits		14.4	-3.4	25.4	5.8	4.2	0.0	47.2
Short-term debt securities		-0.5	-0.2	-1.3	7.7	0.3	-0.5	0.9
Long-term debt securities		-2.0	-8.7	13.6	-5.2	1.8	-1.1	0.0
Loans		0.0	8.3	23.1	6.1	-4.3	0.0	-1.3
<i>of which long-term</i>		0.0	5.6	15.6	4.1	-2.5	-0.1	.
Shares and other equity		-247.1	-389.9	-61.6	-107.5	-75.8	-40.1	-98.6
Quoted shares		-89.5	-151.6	-50.4	-75.9	-33.1	-42.0	.
Unquoted shares and other equity		-120.8	-225.0	-33.3	-54.5	-23.2	5.3	.
Mutual fund shares		-36.8	-13.3	22.1	22.9	-19.5	-3.4	.
Insurance technical reserves		-36.6	0.0	0.0	0.0	0.1	0.0	2.6
Other accounts receivable and financial derivatives		7.2	45.1	34.8	1.2	2.6	-2.5	7.8
<i>Other changes in net financial worth</i>								
<b>Closing balance sheet, financial assets</b>								
Total financial assets		16,466.3	13,805.6	23,670.9	9,511.0	5,947.1	3,210.0	14,724.6
Monetary gold and special drawing rights (SDRs)				245.2				
Currency and deposits		6,161.7	1,790.6	2,195.4	1,865.3	877.7	734.4	4,065.6
Short-term debt securities		45.0	86.2	144.2	338.6	338.9	25.6	902.4
Long-term debt securities		1,291.9	187.1	4,428.4	1,636.2	2,051.2	317.1	3,009.5
Loans		64.6	2,621.1	12,747.2	2,193.4	363.3	446.8	1,742.7
<i>of which long-term</i>		46.7	1,472.8	9,715.0	1,765.7	295.8	358.8	.
Shares and other equity		3,515.8	5,754.8	1,532.0	3,270.3	1,846.6	1,106.4	4,357.8
Quoted shares		525.1	981.4	417.1	1,399.1	392.7	223.5	.
Unquoted shares and other equity		1,705.5	4,465.9	898.3	1,347.6	414.2	765.1	.
Mutual fund shares		1,285.1	307.5	216.6	523.6	1,039.7	117.8	.
Insurance technical reserves		5,154.6	138.1	1.9	0.0	146.1	3.1	141.4
Other accounts receivable and financial derivatives		232.8	3,227.6	2,376.6	207.2	323.2	576.6	505.2
<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>2009 Q1</b>								
<b>Opening balance sheet, liabilities</b>								
Total liabilities		6,357.4	22,408.4	23,111.9	9,233.0	6,114.7	7,468.4	13,108.5
Monetary gold and special drawing rights (SDRs)								
Currency and deposits			26.0	14,889.7	23.5	1.9	254.6	2,676.9
Short-term debt securities			281.6	327.3	125.8	10.9	847.7	268.0
Long-term debt securities			453.9	2,767.8	2,084.2	32.3	4,704.3	2,595.5
Loans		5,688.0	8,207.0		1,735.4	212.8	1,257.4	2,947.5
<i>of which long-term</i>		5,354.4	5,600.8		805.1	72.1	1,071.6	.
Shares and other equity			10,273.1	2,445.9	5,057.2	459.6	4.3	4,080.3
Quoted shares			2,866.1	375.2	111.7	165.2	0.0	.
Unquoted shares and other equity			7,407.0	917.7	1,015.7	293.6	4.3	.
Mutual fund shares				1,153.0	3,929.8			.
Insurance technical reserves		33.6	328.7	61.9	0.6	5,156.8	0.5	
Other accounts payable and financial derivatives		635.7	2,838.0	2,619.3	206.2	240.4	399.6	540.3
<i>Net financial worth<sup>1)</sup></i>	-1,568.0	10,272.0	-8,248.0	616.6	251.5	-151.2	-4,308.9	
<b>Financial account, transactions in liabilities</b>								
Total transactions in liabilities		4.6	54.2	-163.1	114.5	74.3	217.1	-185.6
Monetary gold and special drawing rights (SDRs)								
Currency and deposits			0.3	-92.4	-2.0	0.2	-8.9	-172.6
Short-term debt securities			0.7	-74.7	-20.9	-0.2	95.4	12.7
Long-term debt securities			17.6	31.7	130.4	2.1	154.2	-50.9
Loans		-10.2	30.4		55.3	2.9	-1.8	22.2
<i>of which long-term</i>		-2.6	79.1		18.6	0.6	-7.3	.
Shares and other equity			58.9	68.3	-49.3	1.3	0.0	4.5
Quoted shares			9.6	9.6	0.1	0.0	0.0	.
Unquoted shares and other equity			49.2	6.0	20.0	1.3	0.0	.
Mutual fund shares				52.7	-69.4			.
Insurance technical reserves		0.1	0.2	1.7	0.2	34.8	0.0	
Other accounts payable and financial derivatives		14.7	-53.9	-97.8	0.8	33.1	-21.8	-1.6
<i>Changes in net financial worth due to transactions<sup>1)</sup></i>	-54.3	96.9	-60.1	47.0	3.8	-19.4	-122.5	54.3
<b>Other changes account, liabilities</b>								
Total other changes in liabilities		1.6	-636.1	87.1	-100.5	-115.5	8.5	-73.1
Monetary gold and special drawing rights (SDRs)								
Currency and deposits			0.0	67.4	0.0	0.0	-0.1	26.3
Short-term debt securities			2.1	5.1	0.4	0.0	-0.7	-0.5
Long-term debt securities			1.0	5.9	-12.1	-3.7	6.9	0.3
Loans		0.6	12.5		17.3	3.4	0.3	-2.3
<i>of which long-term</i>		1.8	12.3		12.7	2.8	0.3	.
Shares and other equity			-695.0	-69.1	-114.0	-58.2	-0.1	-84.1
Quoted shares			-358.6	-66.9	-21.6	-42.8	0.0	.
Unquoted shares and other equity			-336.4	0.4	-25.0	-15.3	-0.1	.
Mutual fund shares				-2.6	-67.3			.
Insurance technical reserves		0.0	0.0	0.0	0.0	-33.9	0.0	
Other accounts payable and financial derivatives		1.0	43.3	77.7	7.9	-23.1	2.3	-12.9
<i>Other changes in net financial worth<sup>1)</sup></i>	-7.3	-266.2	287.3	-28.6	8.6	44.3	-52.7	31.7
<b>Closing balance sheet, liabilities</b>								
Total liabilities		6,363.6	21,826.5	23,035.8	9,247.1	6,073.5	7,694.1	12,849.8
Monetary gold and special drawing rights (SDRs)								
Currency and deposits			26.3	14,864.8	21.5	2.1	245.6	2,530.6
Short-term debt securities			284.4	257.7	105.3	10.7	942.4	280.3
Long-term debt securities			472.5	2,805.4	2,202.5	30.7	4,865.5	2,544.9
Loans		5,678.5	8,249.9		1,808.1	219.1	1,256.0	2,967.5
<i>of which long-term</i>		5,353.6	5,692.2		836.5	75.5	1,064.7	.
Shares and other equity			9,637.0	2,445.1	4,894.0	402.8	4.2	4,000.7
Quoted shares			2,517.1	318.0	90.1	122.4	0.0	.
Unquoted shares and other equity			7,119.9	924.0	1,010.7	279.6	4.2	.
Mutual fund shares				1,203.1	3,793.2			.
Insurance technical reserves		33.7	328.9	63.6	0.8	5,157.7	0.5	
Other accounts payable and financial derivatives		651.4	2,827.4	2,599.2	215.0	250.4	380.0	525.8
<i>Net financial worth<sup>1)</sup></i>	-1,629.6	10,102.7	-8,020.9	635.1	263.9	-126.4	-4,484.0	

Source: ECB.



## 3.2 Euro area non-financial accounts

(EUR billions; four-quarter cumulated flows)

Uses	2005	2006	2007	2007 Q2- 2008 Q1	2007 Q3- 2008 Q2	2007 Q4- 2008 Q3	2008 Q1- 2008 Q4	2008 Q2- 2009 Q1
<b>Generation of income account</b>								
Gross value added (basic prices)								
Taxes less subsidies on products								
Gross domestic product (market prices)								
Compensation of employees	3,905.8	4,068.0	4,252.2	4,300.7	4,350.5	4,395.5	4,429.5	4,435.0
Other taxes less subsidies on production	129.9	129.6	137.6	137.2	137.6	138.6	135.2	133.7
Consumption of fixed capital	1,185.2	1,243.6	1,310.3	1,324.9	1,340.7	1,356.1	1,370.3	1,384.4
<i>Net operating surplus and mixed income</i> <sup>1)</sup>	2,075.9	2,190.4	2,332.4	2,358.9	2,390.5	2,397.9	2,380.1	2,307.8
<b>Allocation of primary income account</b>								
Net operating surplus and mixed income								
Compensation of employees								
Taxes less subsidies on production								
Property income	2,616.1	3,039.9	3,562.1	3,667.3	3,774.7	3,862.4	3,890.9	3,805.8
Interest	1,346.6	1,644.5	2,033.5	2,123.1	2,203.2	2,275.5	2,299.4	2,225.5
Other property income	1,269.5	1,395.4	1,528.6	1,544.2	1,571.5	1,586.9	1,591.5	1,580.4
<i>Net national income</i> <sup>1)</sup>	6,969.8	7,312.0	7,689.2	7,753.4	7,814.6	7,862.1	7,848.9	7,750.6
<b>Secondary distribution of income account</b>								
Net national income								
Current taxes on income, wealth, etc.	935.6	1,027.8	1,111.6	1,128.3	1,140.0	1,142.1	1,124.9	1,116.1
Social contributions	1,477.8	1,539.7	1,598.3	1,613.9	1,630.2	1,648.0	1,662.8	1,671.7
Social benefits other than social transfers in kind	1,504.8	1,554.6	1,598.3	1,611.3	1,626.5	1,645.7	1,663.0	1,686.3
Other current transfers	710.3	718.4	746.2	756.6	764.9	768.2	776.2	772.2
Net non-life insurance premiums	178.8	177.7	181.5	182.1	183.5	184.2	184.9	183.0
Non-life insurance claims	179.6	177.9	181.0	181.6	183.3	184.1	185.4	183.4
Other	351.9	362.8	383.7	393.0	398.1	399.9	405.8	405.7
<i>Net disposable income</i> <sup>1)</sup>	6,882.9	7,220.6	7,594.3	7,653.6	7,713.4	7,763.4	7,746.8	7,649.1
<b>Use of income account</b>								
Net disposable income								
Final consumption expenditure	6,358.5	6,632.0	6,888.9	6,960.7	7,038.3	7,110.9	7,148.4	7,157.6
Individual consumption expenditure	5,693.0	5,947.5	6,177.7	6,241.6	6,309.1	6,373.0	6,402.6	6,402.6
Collective consumption expenditure	665.5	684.6	711.1	719.1	729.2	737.9	745.8	754.9
Adjustment for the change in net equity of households in pension funds reserves	60.8	59.3	60.1	61.3	64.1	66.1	66.8	67.8
<i>Net saving</i> <sup>1)</sup>	524.7	588.8	705.7	693.1	675.3	652.6	598.5	491.7
<b>Capital account</b>								
Net saving								
Gross capital formation	1,715.7	1,872.0	2,017.6	2,039.5	2,064.8	2,084.7	2,079.5	2,016.3
Gross fixed capital formation	1,710.1	1,855.9	1,995.9	2,016.6	2,044.3	2,061.1	2,043.7	1,992.0
Changes in inventories and acquisitions less disposals of valuables	5.6	16.0	21.7	23.0	20.5	23.6	35.8	24.4
Consumption of fixed capital								
Acquisitions less disposals of non-produced non-financial assets	-0.1	0.5	-0.1	0.1	0.4	0.4	0.5	0.9
Capital transfers	182.6	175.5	163.1	163.4	167.8	161.7	162.3	160.8
Capital taxes	24.4	22.5	23.7	23.3	23.6	23.9	23.6	23.3
Other capital transfers	158.1	152.9	139.3	140.1	144.2	137.8	138.7	137.5
<i>Net lending (+)/net borrowing (-) (from capital account)</i> <sup>1)</sup>	7.9	-25.6	12.2	-6.6	-33.7	-62.1	-98.4	-131.0

Sources: ECB and Eurostat.

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

## 3.2 Euro area non-financial accounts (cont'd)

(EUR billions; four-quarter cumulated flows)

Resources	2005	2006	2007	2007 Q2- 2008 Q1	2007 Q3- 2008 Q2	2007 Q4- 2008 Q3	2008 Q1- 2008 Q4	2008 Q2- 2009 Q1
<b>Generation of income account</b>								
Gross value added (basic prices)	7,296.8	7,631.6	8,032.4	8,121.7	8,219.3	8,288.2	8,315.0	8,260.9
Taxes less subsidies on products	845.4	914.2	958.9	958.2	954.3	952.3	945.4	928.6
Gross domestic product (market prices) <sup>2)</sup>	8,142.1	8,545.8	8,991.3	9,079.8	9,173.6	9,240.4	9,260.4	9,189.4
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	2,075.9	2,190.4	2,332.4	2,358.9	2,390.5	2,397.9	2,380.1	2,307.8
Compensation of employees	3,912.8	4,075.3	4,260.0	4,308.8	4,358.6	4,403.7	4,437.5	4,442.8
Taxes less subsidies on production	988.1	1,055.0	1,103.1	1,100.3	1,096.7	1,095.9	1,085.3	1,066.9
Property income	2,609.0	3,031.2	3,555.9	3,652.7	3,743.5	3,827.1	3,836.8	3,738.9
Interest	1,319.4	1,618.2	1,993.6	2,075.0	2,148.1	2,217.6	2,239.1	2,163.2
Other property income	1,289.7	1,413.1	1,562.4	1,577.7	1,595.4	1,609.5	1,597.7	1,575.7
<i>Net national income</i>								
<b>Secondary distribution of income account</b>								
Net national income	6,969.8	7,312.0	7,689.2	7,753.4	7,814.6	7,862.1	7,848.9	7,750.6
Current taxes on income, wealth, etc.	939.4	1,032.8	1,119.1	1,135.7	1,147.8	1,149.7	1,132.8	1,123.9
Social contributions	1,477.1	1,538.9	1,597.6	1,613.1	1,629.4	1,647.2	1,661.9	1,670.8
Social benefits other than social transfers in kind	1,497.0	1,546.3	1,589.0	1,601.9	1,616.8	1,636.1	1,653.0	1,676.1
Other current transfers	628.2	631.2	653.8	659.7	666.4	672.2	677.0	674.0
Net non-life insurance premiums	179.6	177.9	181.0	181.6	183.3	184.1	185.4	183.4
Non-life insurance claims	177.3	175.1	178.7	179.3	180.6	181.2	182.0	179.8
Other	271.3	278.2	294.1	298.8	302.6	307.0	309.6	310.8
<i>Net disposable income</i>								
<b>Use of income account</b>								
Net disposable income	6,882.9	7,220.6	7,594.3	7,653.6	7,713.4	7,763.4	7,746.8	7,649.1
Final consumption expenditure								
Individual consumption expenditure								
Collective consumption expenditure								
Adjustment for the change in net equity of households in pension funds reserves	61.0	59.6	60.3	61.5	64.3	66.3	67.0	67.9
<i>Net saving</i>								
<b>Capital account</b>								
Net saving	524.7	588.8	705.7	693.1	675.3	652.6	598.5	491.7
Gross capital formation								
Gross fixed capital formation								
Changes in inventories and acquisitions less disposals of valuables								
Consumption of fixed capital	1,185.2	1,243.6	1,310.3	1,324.9	1,340.7	1,356.1	1,370.3	1,384.4
Acquisitions less disposals of non-produced non-financial assets								
Capital transfers	196.2	189.9	176.9	178.6	183.3	176.0	175.2	170.9
Capital taxes	24.4	22.5	23.7	23.3	23.6	23.9	23.6	23.3
Other capital transfers	171.8	167.4	153.1	155.2	159.7	152.0	151.6	147.7
<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)

	2005	2006	2007	2007 Q2- 2008 Q1	2007 Q3- 2008 Q2	2007 Q4- 2008 Q3	2008 Q1- 2008 Q4	2008 Q2- 2009 Q1
<b>Income, saving and changes in net worth</b>								
Compensation of employees (+)	3,912.8	4,075.3	4,260.0	4,308.8	4,358.6	4,403.7	4,437.5	4,442.8
Gross operating surplus and mixed income (+)	1,331.0	1,407.3	1,486.6	1,506.2	1,525.8	1,541.9	1,550.8	1,540.2
Interest receivable (+)	230.6	269.1	306.1	316.9	328.9	339.5	342.1	332.2
Interest payable (-)	130.8	165.5	209.4	217.6	226.0	233.1	231.9	216.0
Other property income receivable (+)	717.8	761.2	802.5	806.5	813.7	819.6	812.8	811.1
Other property income payable (-)	9.5	9.7	9.8	9.7	9.8	9.7	9.7	9.8
Current taxes on income and wealth (-)	741.0	793.4	851.9	866.7	882.4	889.7	892.3	889.8
Net social contributions (-)	1,473.9	1,535.6	1,594.0	1,609.6	1,625.9	1,643.6	1,658.4	1,667.3
Net social benefits (+)	1,491.8	1,540.9	1,583.3	1,596.2	1,611.1	1,630.3	1,647.2	1,670.3
Net current transfers receivable (+)	66.8	67.4	70.7	71.2	74.2	75.6	77.3	77.9
<b>= Gross disposable income</b>	5,395.6	5,616.9	5,844.1	5,902.0	5,968.2	6,034.4	6,075.5	6,091.7
Final consumption expenditure (-)	4,693.4	4,899.7	5,088.5	5,141.3	5,193.7	5,246.2	5,262.1	5,249.2
Changes in net worth in pension funds (+)	60.6	59.2	59.8	61.1	63.8	65.8	66.5	67.5
<b>= Gross saving</b>	762.8	776.4	815.4	821.8	838.3	854.0	880.0	910.0
Consumption of fixed capital (-)	318.7	336.4	354.6	358.3	362.7	366.3	368.8	372.3
Net capital transfers receivable (+)	24.1	22.3	15.0	15.9	16.4	16.6	16.4	16.0
Other changes in net worth <sup>1)</sup> (+)	510.6	563.9	37.3	-760.9	-1,167.5	-1,346.4	-1,785.1	-1,417.9
<b>= Changes in net worth <sup>1)</sup></b>	978.9	1,026.3	513.1	-281.5	-675.5	-842.1	-1,257.6	-864.2
<b>Investment, financing and changes in net worth</b>								
Net acquisition of non-financial assets (+)	546.6	600.4	639.4	643.8	645.3	644.3	635.1	617.2
Consumption of fixed capital (-)	318.7	336.4	354.6	358.3	362.7	366.3	368.8	372.3
Main items of financial investment (+)								
Short-term assets	206.4	305.7	421.0	443.8	421.5	427.5	438.0	386.0
Currency and deposits	246.9	284.1	349.4	385.0	386.4	391.5	436.8	400.4
Money market fund shares	-20.2	0.9	40.0	34.0	10.5	13.5	-9.6	2.1
Debt securities <sup>2)</sup>	-20.3	20.8	31.6	24.8	24.6	22.5	10.8	-16.5
Long-term assets	426.0	350.1	186.9	122.4	123.6	71.4	33.1	78.7
Deposits	-4.7	0.8	-29.5	-34.8	-35.9	-39.7	-32.4	-18.3
Debt securities	0.5	69.9	9.7	29.6	60.5	69.1	49.0	59.6
Shares and other equity	136.6	-33.7	-61.8	-119.2	-127.5	-169.2	-158.2	-122.1
Quoted, unquoted shares and other equity	70.3	-11.1	8.8	-20.2	-13.6	-31.6	-17.0	0.1
Mutual fund shares	66.2	-22.5	-70.5	-99.0	-113.9	-137.6	-141.2	-122.2
Life insurance and pension fund reserves	293.7	313.1	268.5	246.7	226.5	211.1	174.6	159.6
Main items of financing (-)								
Loans	397.7	396.8	351.1	318.1	288.1	251.2	200.6	141.7
of which from euro area MFIs	358.5	347.4	281.5	249.1	196.5	181.0	78.9	17.2
Other changes in financial assets (+)								
Shares and other equity	446.5	509.9	10.9	-681.4	-1,024.3	-1,065.1	-1,394.2	-1,111.6
Life insurance and pension fund reserves	105.5	54.7	-2.0	-80.2	-129.9	-182.7	-250.7	-210.6
Remaining net flows (+)	-35.7	-61.3	-37.4	-53.3	-60.9	-120.0	-149.5	-109.9
<b>= Changes in net worth <sup>1)</sup></b>	978.9	1,026.3	513.1	-281.5	-675.5	-842.1	-1,257.6	-864.2
<b>Financial balance sheet</b>								
Financial assets (+)								
Short-term assets	4,486.5	4,747.9	5,209.4	5,362.3	5,482.8	5,540.0	5,714.6	5,787.8
Currency and deposits	4,174.1	4,454.2	4,844.2	4,937.1	5,055.3	5,104.9	5,313.7	5,377.7
Money market fund shares	296.4	257.6	296.0	347.0	346.5	348.7	327.4	352.0
Debt securities <sup>2)</sup>	16.1	36.1	69.2	78.1	81.1	86.4	73.5	58.1
Long-term assets	10,933.2	11,902.7	12,066.4	11,401.5	11,125.1	10,760.6	10,278.0	10,034.6
Deposits	936.9	942.2	875.6	832.3	821.9	803.5	806.3	784.1
Debt securities	1,199.5	1,280.0	1,293.0	1,309.9	1,294.8	1,258.7	1,243.3	1,278.8
Shares and other equity	4,549.8	5,065.7	5,016.4	4,400.4	4,130.1	3,839.6	3,423.0	3,163.8
Quoted, unquoted shares and other equity	3,203.3	3,643.8	3,637.8	3,189.2	2,970.6	2,756.7	2,431.6	2,230.7
Mutual fund shares	1,346.5	1,421.8	1,378.7	1,211.1	1,159.5	1,083.0	991.4	933.1
Life insurance and pension fund reserves	4,247.1	4,614.8	4,881.3	4,859.0	4,878.3	4,858.7	4,805.3	4,808.0
Remaining net assets (+)	77.7	60.8	16.6	-3.5	-4.4	5.6	-32.5	-41.2
Liabilities (-)								
Loans	4,763.2	5,159.6	5,494.9	5,542.0	5,607.0	5,655.1	5,688.0	5,678.5
of which from euro area MFIs	4,201.0	4,553.0	4,824.7	4,860.8	4,887.0	4,938.3	4,901.4	4,879.6
<b>= Net financial wealth</b>	10,734.3	11,551.8	11,797.4	11,218.3	10,996.5	10,651.1	10,272.0	10,102.7

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)

	2005	2006	2007	2007 Q2- 2008 Q1	2007 Q3- 2008 Q2	2007 Q4- 2008 Q3	2008 Q1- 2008 Q4	2008 Q2- 2009 Q1
<b>Income and saving</b>								
Gross value added (basic prices) (+)	4,175.6	4,380.6	4,631.9	4,683.7	4,740.1	4,777.8	4,780.5	4,722.8
Compensation of employees (-)	2,478.4	2,591.8	2,719.7	2,754.1	2,784.9	2,814.5	2,835.3	2,831.5
Other taxes less subsidies on production (-)	73.0	75.9	81.3	81.7	82.4	83.5	80.4	79.0
<b>= Gross operating surplus (+)</b>	<b>1,624.1</b>	<b>1,712.9</b>	<b>1,830.8</b>	<b>1,848.0</b>	<b>1,872.8</b>	<b>1,879.8</b>	<b>1,864.8</b>	<b>1,812.2</b>
Consumption of fixed capital (-)	672.1	703.2	741.3	749.8	759.0	768.3	777.6	786.1
<b>= Net operating surplus (+)</b>	<b>952.0</b>	<b>1,009.7</b>	<b>1,089.5</b>	<b>1,098.2</b>	<b>1,113.9</b>	<b>1,111.5</b>	<b>1,087.2</b>	<b>1,026.2</b>
Property income receivable (+)	437.3	496.1	574.4	587.1	602.3	610.7	614.1	593.8
Interest receivable	136.7	162.5	197.6	207.3	215.9	221.2	223.7	217.0
Other property income receivable	300.6	333.6	376.8	379.8	386.4	389.5	390.4	376.8
Interest and rents payable (-)	236.3	282.1	339.0	357.7	375.7	392.2	403.0	392.9
<b>= Net entrepreneurial income (+)</b>	<b>1,153.1</b>	<b>1,223.7</b>	<b>1,324.9</b>	<b>1,327.5</b>	<b>1,340.5</b>	<b>1,329.9</b>	<b>1,298.2</b>	<b>1,227.0</b>
Distributed income (-)	882.6	953.2	1,021.3	1,025.1	1,048.7	1,057.9	1,058.5	1,059.0
Taxes on income and wealth payable (-)	149.6	189.2	211.8	213.8	213.9	210.0	192.4	187.4
Social contributions receivable (+)	72.8	74.7	64.9	63.8	63.3	63.2	62.9	63.0
Social benefits payable (-)	60.7	60.5	62.4	62.7	62.5	62.4	62.3	62.2
Other net transfers (-)	61.9	65.9	57.3	57.2	58.2	57.9	57.1	56.8
<b>= Net saving</b>	<b>71.0</b>	<b>29.6</b>	<b>37.2</b>	<b>32.5</b>	<b>20.5</b>	<b>5.0</b>	<b>-9.2</b>	<b>-75.4</b>
<b>Investment, financing and saving</b>								
Net acquisition of non-financial assets (+)	255.6	311.1	366.6	372.5	380.5	388.5	376.0	320.0
Gross fixed capital formation (+)	920.5	994.0	1,084.1	1,098.6	1,118.5	1,133.6	1,119.9	1,084.5
Consumption of fixed capital (-)	672.1	703.2	741.3	749.8	759.0	768.3	777.6	786.1
Net acquisition of other non-financial assets (+)	7.2	20.2	23.9	23.8	21.0	23.2	33.6	21.6
Main items of financial investment (+)								
Short-term assets	128.3	164.1	161.9	164.2	121.4	94.3	47.8	-26.8
Currency and deposits	113.6	146.1	154.9	127.7	115.9	90.2	16.5	-11.2
Money market fund shares	8.3	2.6	-18.1	-10.0	-9.3	7.9	31.5	19.4
Debt securities <sup>1)</sup>	6.3	15.4	25.2	46.5	14.8	-3.8	-0.2	-35.1
Long-term assets	370.2	475.2	474.1	497.9	500.7	538.1	641.2	640.0
Deposits	28.0	28.5	24.3	5.3	-25.6	2.8	10.7	17.1
Debt securities	-34.9	1.2	-48.2	-88.2	-105.7	-60.2	-36.6	3.5
Shares and other equity	242.8	261.8	328.0	367.5	389.0	353.7	354.1	325.5
Other, mainly intercompany loans	134.4	183.7	169.9	213.3	242.9	241.8	313.0	293.9
Remaining net assets (+)	105.6	165.2	208.9	137.5	62.9	-9.1	-78.2	-149.2
Main items of financing (-)								
Debt	447.0	757.4	802.5	778.6	733.6	734.4	668.8	553.3
<i>of which loans from euro area MFIs</i>	264.5	448.9	558.9	592.1	562.6	515.7	422.0	284.9
<i>of which debt securities</i>	13.6	40.1	40.2	37.4	15.9	38.2	42.6	52.4
Shares and other equity	279.7	256.1	304.3	292.4	241.5	199.4	249.7	225.7
Quoted shares	104.1	42.0	42.2	23.5	-12.6	-29.2	1.8	9.9
Unquoted shares and other equity	175.6	214.1	262.1	269.0	254.1	228.6	247.9	215.7
Net capital transfers receivable (-)	62.0	72.5	68.4	69.6	73.6	75.7	75.5	77.9
<b>= Net saving</b>	<b>71.0</b>	<b>29.6</b>	<b>37.2</b>	<b>32.5</b>	<b>20.5</b>	<b>5.0</b>	<b>-9.2</b>	<b>-75.4</b>
<b>Financial balance sheet</b>								
Financial assets								
Short-term assets	1,517.5	1,675.2	1,820.4	1,842.2	1,845.0	1,855.2	1,871.4	1,841.0
Currency and deposits	1,229.3	1,367.0	1,519.3	1,506.6	1,534.6	1,548.7	1,553.5	1,517.0
Money market fund shares	176.5	184.9	162.0	183.0	183.2	184.4	189.8	204.1
Debt securities <sup>1)</sup>	111.8	123.3	139.1	152.6	127.2	122.1	128.1	119.9
Long-term assets	8,667.0	10,024.9	10,750.3	10,098.1	9,897.4	9,630.1	8,871.7	8,598.8
Deposits	191.2	223.6	266.8	256.8	243.3	268.7	282.1	273.6
Debt securities	281.5	282.9	236.3	170.6	160.9	167.8	180.1	153.5
Shares and other equity	6,328.5	7,486.0	8,025.8	7,355.1	7,112.3	6,755.7	5,877.6	5,550.7
Other, mainly intercompany loans	1,865.9	2,032.4	2,221.5	2,315.7	2,380.9	2,437.9	2,531.9	2,621.1
Remaining net assets	386.5	457.0	638.9	642.0	599.6	608.6	605.3	564.6
Liabilities								
Debt	7,097.8	7,834.6	8,593.8	8,749.4	8,957.7	9,117.0	9,271.2	9,335.8
<i>of which loans from euro area MFIs</i>	3,429.3	3,878.8	4,418.2	4,559.5	4,683.3	4,775.9	4,841.9	4,843.0
<i>of which debt securities</i>	675.7	694.5	695.1	696.0	701.3	716.1	735.5	757.0
Shares and other equity	10,974.7	12,938.0	13,932.0	12,581.4	12,141.1	11,377.0	10,273.1	9,637.0
Quoted shares	3,712.2	4,491.5	5,008.5	4,229.2	3,999.5	3,459.8	2,866.1	2,517.1
Unquoted shares and other equity	7,262.5	8,446.5	8,923.5	8,352.2	8,141.7	7,917.2	7,407.0	7,119.9

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)

	2005	2006	2007	2007 Q2- 2008 Q1	2007 Q3- 2008 Q2	2007 Q4- 2008 Q3	2008 Q1- 2008 Q4	2008 Q2- 2009 Q1
<b>Financial account, financial transactions</b>								
Main items of financial investment (+)								
Short-term assets	25.6	64.8	87.8	110.0	102.8	88.8	106.7	50.7
Currency and deposits	7.2	11.0	6.4	32.7	35.7	32.1	59.1	18.7
Money market fund shares	-0.5	3.5	3.1	15.8	14.2	20.9	22.2	13.6
Debt securities <sup>1)</sup>	18.9	50.2	78.3	61.6	52.9	35.8	25.3	18.4
Long-term assets	284.3	317.1	220.4	214.1	172.9	156.3	131.9	111.6
Deposits	17.2	76.8	51.5	27.8	15.8	0.6	-1.2	9.9
Debt securities	133.1	126.7	92.9	83.0	74.1	90.4	70.1	72.6
Loans	-4.1	2.5	-13.6	20.2	16.3	20.0	30.3	6.3
Quoted shares	30.8	-1.4	-5.8	-2.9	-1.7	-9.4	-6.0	-4.4
Unquoted shares and other equity	19.9	28.6	29.6	44.7	39.7	41.7	34.3	26.0
Mutual fund shares	87.4	84.1	65.8	41.3	28.5	12.8	4.5	1.2
Remaining net assets (+)	12.2	3.2	-26.7	-20.9	-17.4	-7.8	23.7	-5.2
Main items of financing (-)								
Debt securities	-0.4	5.7	3.9	4.4	5.1	5.4	9.3	9.8
Loans	17.3	35.9	21.7	44.0	18.1	4.1	21.7	-9.9
Shares and other equity	10.6	11.5	1.7	-0.9	-1.9	-7.1	3.6	4.5
Insurance technical reserves	335.5	323.9	287.0	269.6	252.2	237.8	193.1	160.2
Net equity of households in life insurance and pension fund reserves	292.8	310.0	283.3	264.3	242.1	222.5	179.0	152.1
Prepayments of insurance premiums and reserves for outstanding claims	42.6	14.0	3.6	5.4	10.2	15.3	14.2	8.1
<b>= Changes in net financial worth due to transactions</b>	<b>-40.9</b>	<b>8.1</b>	<b>-32.8</b>	<b>-13.8</b>	<b>-15.3</b>	<b>-3.0</b>	<b>34.6</b>	<b>-7.4</b>
<b>Other changes account</b>								
Other changes in financial assets (+)								
Shares and other equity	190.7	180.5	-12.0	-218.4	-327.5	-399.1	-540.5	-437.6
Other net assets	76.1	-34.5	-58.7	-1.9	-19.1	-27.8	35.0	27.1
Other changes in liabilities (-)								
Shares and other equity	118.4	35.0	-31.4	-92.7	-148.2	-146.7	-187.7	-188.4
Insurance technical reserves	137.8	52.9	-3.3	-80.8	-132.3	-188.5	-255.5	-215.5
Net equity of households in life insurance and pension fund reserves	146.9	56.2	-2.8	-78.1	-127.6	-180.8	-246.2	-208.6
Prepayments of insurance premiums and reserves for outstanding claims	-9.1	-3.3	-0.4	-2.7	-4.7	-7.7	-9.3	-6.9
<b>= Other changes in net financial worth</b>	<b>10.6</b>	<b>58.2</b>	<b>-36.0</b>	<b>-46.8</b>	<b>-66.1</b>	<b>-91.6</b>	<b>-62.3</b>	<b>-6.6</b>
<b>Financial balance sheet</b>								
Financial assets (+)								
Short-term assets	437.2	509.4	591.2	650.1	659.3	664.1	702.3	707.8
Currency and deposits	146.6	157.1	164.6	192.5	182.6	189.5	226.6	216.8
Money market fund shares	75.6	81.5	82.4	95.4	94.8	98.3	102.2	109.9
Debt securities <sup>1)</sup>	215.0	270.8	344.1	362.2	381.9	376.3	373.5	381.1
Long-term assets	4,608.2	5,045.0	5,198.6	5,102.6	5,039.0	4,974.1	4,805.3	4,770.0
Deposits	524.7	602.4	650.6	649.3	653.4	648.7	648.2	660.8
Debt securities	1,776.4	1,848.5	1,893.5	1,941.7	1,921.2	1,966.9	1,974.9	2,009.1
Loans	353.5	351.2	331.8	359.1	355.0	356.9	364.8	363.3
Quoted shares	653.3	725.1	708.3	613.9	595.1	536.3	426.0	392.7
Unquoted shares and other equity	392.8	471.0	506.5	485.5	468.7	455.7	433.0	414.2
Mutual fund shares	907.5	1,046.9	1,107.9	1,053.1	1,045.7	1,009.6	958.4	929.8
Remaining net assets (+)	176.9	203.3	171.9	192.0	176.9	175.5	213.5	216.9
Liabilities (-)								
Debt securities	21.3	35.9	35.2	35.8	36.5	36.7	43.2	41.5
Loans	136.4	167.7	187.2	221.6	211.4	206.7	212.8	219.1
Shares and other equity	626.9	673.4	643.6	586.6	548.3	527.1	459.6	402.8
Insurance technical reserves	4,558.7	4,935.5	5,219.2	5,213.0	5,237.5	5,221.3	5,156.8	5,157.7
Net equity of households in life insurance and pension fund reserves	3,892.0	4,258.2	4,538.7	4,526.1	4,547.7	4,530.5	4,471.5	4,469.6
Prepayments of insurance premiums and reserves for outstanding claims	666.7	677.3	680.5	686.9	689.8	690.8	685.4	688.1
<b>= Net financial wealth</b>	<b>-121.0</b>	<b>-54.7</b>	<b>-123.5</b>	<b>-112.3</b>	<b>-158.5</b>	<b>-178.0</b>	<b>-151.2</b>	<b>-126.4</b>

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.

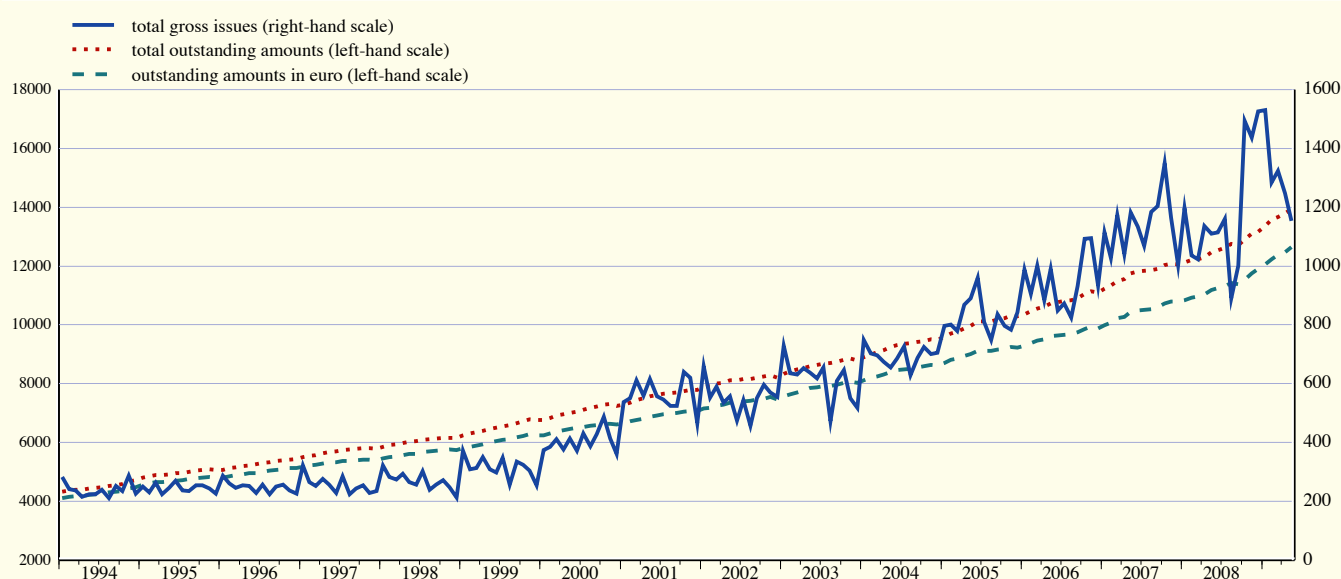
## FINANCIAL MARKETS

### 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			Annual growth rates	Seasonally adjusted <sup>2)</sup>	
				Outstanding amounts	Gross issues	Net issues	Outstanding amounts	Gross issues	Net issues		Net issues	6-month growth rates
	1	2	3	4	5	6	7	8	9	10	11	12
<b>Total</b>												
2008 May	13,359.1	1,126.3	177.9	11,177.2	1,036.5	138.4	12,467.5	1,110.2	153.2	6.7	98.0	5.7
June	13,494.6	1,155.6	135.8	11,251.6	1,040.3	74.8	12,539.1	1,113.5	82.1	6.8	88.9	5.6
July	13,506.9	1,139.5	11.1	11,309.0	1,073.9	55.6	12,614.4	1,160.6	74.9	7.1	97.2	6.8
Aug.	13,632.7	880.7	123.0	11,416.8	816.0	105.2	12,744.1	889.5	110.5	7.8	161.5	8.8
Sep.	13,635.6	1,022.0	1.4	11,384.4	930.3	-33.9	12,704.1	1,001.2	-43.3	7.0	-14.7	8.2
Oct.	13,733.7	1,454.3	97.4	11,535.3	1,417.3	150.3	12,903.1	1,494.5	145.4	6.9	103.7	8.9
Nov.	13,951.8	1,422.3	218.5	11,762.5	1,369.7	228.0	13,096.1	1,436.9	213.7	8.1	199.6	10.5
Dec.	14,137.3	1,537.4	189.1	11,914.6	1,448.7	155.9	13,168.5	1,526.0	142.4	9.5	274.7	13.6
2009 Jan.	14,240.2	1,503.8	98.7	12,055.1	1,451.4	137.2	13,370.4	1,530.0	146.5	10.1	103.9	13.6
Feb.	14,434.6	1,261.0	191.8	12,241.4	1,199.7	183.8	13,574.1	1,285.2	203.4	11.1	165.9	13.5
Mar.	14,609.7	1,317.5	173.5	12,380.5	1,229.3	137.6	13,678.8	1,322.6	148.6	11.9	117.4	15.7
Apr.	.	.	.	12,478.5	1,163.8	100.8	13,790.1	1,246.9	108.9	12.1	90.7	15.4
May	.	.	.	12,650.0	1,067.2	171.5	13,926.7	1,153.6	166.7	12.0	100.9	13.5
<b>Long-term</b>												
2008 May	11,974.0	290.8	153.2	9,937.1	235.0	113.4	11,028.0	257.5	122.5	5.1	68.7	4.9
June	12,087.6	283.9	113.8	10,024.0	230.3	87.2	11,115.1	254.5	95.5	5.2	68.4	4.8
July	12,114.2	208.7	25.1	10,055.9	178.5	30.1	11,154.1	196.7	35.6	5.3	60.7	5.7
Aug.	12,203.4	160.0	87.2	10,133.9	133.8	76.1	11,252.7	149.2	76.8	6.1	132.6	7.7
Sep.	12,192.3	183.4	-10.4	10,111.7	145.4	-21.3	11,236.1	158.4	-31.8	5.7	-17.9	7.1
Oct.	12,216.8	199.0	24.8	10,147.7	182.7	36.4	11,329.2	195.4	30.9	5.3	23.2	6.2
Nov.	12,392.1	275.5	174.4	10,323.4	253.9	175.0	11,484.9	262.5	165.9	6.2	145.9	7.6
Dec.	12,570.8	362.8	179.9	10,494.7	328.3	172.7	11,579.3	340.0	153.3	7.3	182.4	9.7
2009 Jan.	12,650.8	294.8	78.3	10,584.9	276.9	89.3	11,714.2	300.3	90.1	8.2	111.9	10.6
Feb.	12,822.7	302.4	170.4	10,746.7	269.4	160.6	11,887.1	296.5	172.8	9.2	148.7	10.8
Mar.	13,006.1	319.3	153.7	10,920.0	279.7	143.6	12,024.9	301.4	144.7	10.4	138.8	13.7
Apr.	.	.	.	10,986.4	254.0	69.7	12,101.3	272.9	73.3	10.3	68.7	14.6
May	.	.	.	11,153.7	277.9	168.5	12,249.2	298.2	172.6	10.6	110.5	13.7

### 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	12,066	5,046	1,506	653	4,534	327	1,138	841	59	109	116	12
2008	13,169	5,266	1,916	696	4,950	340	1,177	817	73	100	163	24
2008 Q2	12,539	5,231	1,622	670	4,696	320	1,120	786	69	102	142	20
Q3	12,704	5,267	1,686	680	4,747	324	1,017	691	54	97	148	27
Q4	13,169	5,266	1,916	696	4,950	340	1,486	1,006	132	107	214	28
2009 Q1	13,679	5,392	1,997	718	5,228	343	1,379	922	68	92	261	35
2009 Feb.	13,574	5,407	1,979	718	5,133	338	1,285	873	72	82	236	23
Mar.	13,679	5,392	1,997	718	5,228	343	1,323	878	58	90	269	27
Apr.	13,790	5,419	2,024	730	5,268	350	1,247	806	58	90	266	26
May	13,927	5,455	2,043	741	5,338	349	1,154	744	56	88	249	17
	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 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.	1,689	829	42	95	705	17	974	694	16	74	173	16
May	1,678	832	40	89	701	15	855	626	13	64	142	10
	Long-term <sup>2)</sup>											
2007	10,779	4,259	1,470	553	4,189	309	191	86	41	8	52	3
2008	11,579	4,445	1,855	581	4,384	315	215	95	47	8	62	4
2008 Q2	11,115	4,397	1,571	559	4,280	309	247	121	48	10	65	3
Q3	11,236	4,441	1,625	570	4,290	311	168	76	29	5	54	3
Q4	11,579	4,445	1,855	581	4,384	315	266	95	93	11	62	5
2009 Q1	12,025	4,554	1,957	621	4,570	324	299	116	51	18	105	8
2009 Feb.	11,887	4,523	1,940	615	4,490	319	296	125	56	15	95	6
Mar.	12,025	4,554	1,957	621	4,570	324	301	114	42	16	120	10
Apr.	12,101	4,589	1,982	635	4,562	333	273	112	42	16	93	10
May	12,249	4,622	2,003	652	4,637	335	298	118	43	24	106	6
	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	7,478	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	7,931	2,396	663	487	4,133	252	207	72	17	18	96	5
2009 Feb.	7,839	2,384	661	479	4,065	250	203	76	22	15	86	4
Mar.	7,931	2,396	663	487	4,133	252	205	65	11	15	108	6
Apr.	7,981	2,418	672	501	4,131	258	183	61	14	15	85	7
May	8,104	2,458	672	519	4,195	260	208	77	9	23	94	5
	Of which long-term variable rate											
2007	3,001	1,621	857	123	342	58	69	31	30	3	4	0
2008	3,480	1,724	1,200	126	365	64	81	36	38	1	5	1
2008 Q2	3,181	1,683	940	124	373	60	90	47	35	1	6	1
Q3	3,229	1,698	979	129	362	61	53	24	21	2	4	1
Q4	3,480	1,724	1,200	126	365	64	129	39	83	1	3	2
2009 Q1	3,590	1,757	1,268	123	371	70	75	32	34	0	5	3
2009 Feb.	3,540	1,731	1,252	125	365	68	80	38	34	0	6	2
Mar.	3,590	1,757	1,268	123	371	70	81	39	30	1	7	4
Apr.	3,606	1,763	1,284	124	362	73	72	37	27	1	5	3
May	3,619	1,749	1,305	123	369	73	70	25	33	1	9	1

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

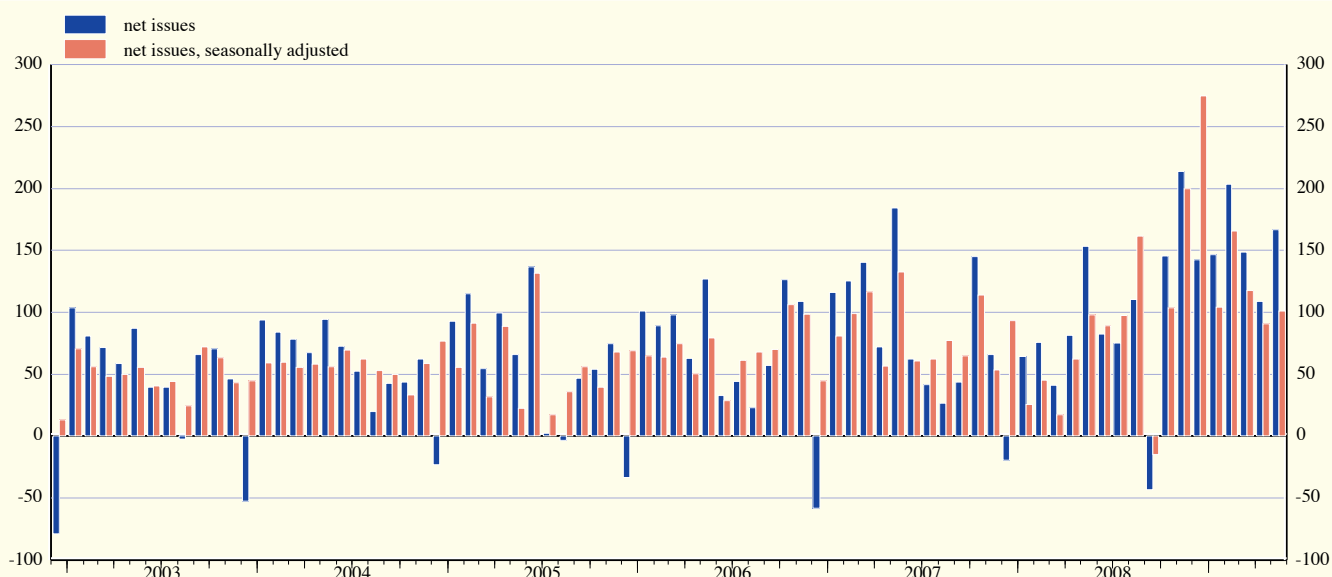
(EUR billions unless otherwise indicated; transactions during the period; nominal values)

## 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	83.6	40.7	27.7	4.2	9.9	1.2	84.2	41.3	27.2	4.3	10.2	1.2
2008	95.1	23.2	34.2	3.9	32.8	1.1	96.6	23.3	33.5	4.0	34.7	1.1
2008 Q2	105.5	46.7	34.5	4.8	18.7	0.9	83.0	48.6	30.4	0.7	2.8	0.6
Q3	47.3	10.9	18.7	1.9	14.7	1.2	81.3	18.8	31.9	5.2	23.1	2.4
Q4	167.2	11.4	77.3	5.9	67.2	5.3	192.7	21.4	55.6	7.8	103.1	4.8
2009 Q1	166.2	40.6	25.9	7.0	91.8	0.9	129.1	21.0	38.6	6.3	62.6	0.6
2009 Feb.	203.4	67.4	43.7	7.6	83.8	0.9	165.9	48.1	43.5	7.8	66.2	0.3
Mar.	148.6	13.9	24.8	4.1	100.9	4.9	117.4	5.1	30.2	4.9	71.2	6.1
Apr.	108.9	27.9	25.1	10.2	38.6	7.2	90.7	14.7	27.7	7.3	34.0	7.0
May	166.7	54.4	23.0	13.6	76.0	-0.3	100.9	34.5	16.1	5.9	45.1	-0.6
	Long-term											
2007	61.8	23.9	27.0	2.4	7.8	0.7	61.4	24.1	26.5	2.4	7.8	0.7
2008	65.7	16.2	32.1	2.5	14.4	0.5	65.2	16.3	31.5	2.5	14.4	0.5
2008 Q2	96.8	42.6	33.6	3.9	15.8	0.9	68.5	36.2	29.6	0.4	1.5	0.7
Q3	26.9	7.4	15.2	2.5	1.3	0.5	58.5	15.2	27.8	4.1	9.8	1.6
Q4	116.7	2.9	77.5	4.4	30.5	1.5	117.2	11.0	56.8	3.8	45.0	0.5
2009 Q1	135.9	25.8	32.7	12.9	61.4	3.0	133.2	16.6	45.0	15.7	52.9	3.0
2009 Feb.	172.8	44.9	43.5	12.6	71.3	0.5	148.7	24.9	43.5	14.7	65.0	0.6
Mar.	144.7	23.6	22.1	9.4	83.9	5.6	138.8	15.3	27.4	11.8	78.9	5.5
Apr.	73.3	36.0	23.9	13.2	-8.0	8.3	68.7	30.3	27.1	12.7	-10.5	9.2
May	172.6	47.4	25.0	19.1	78.9	2.1	110.5	27.2	17.0	13.2	50.8	2.2

## 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.



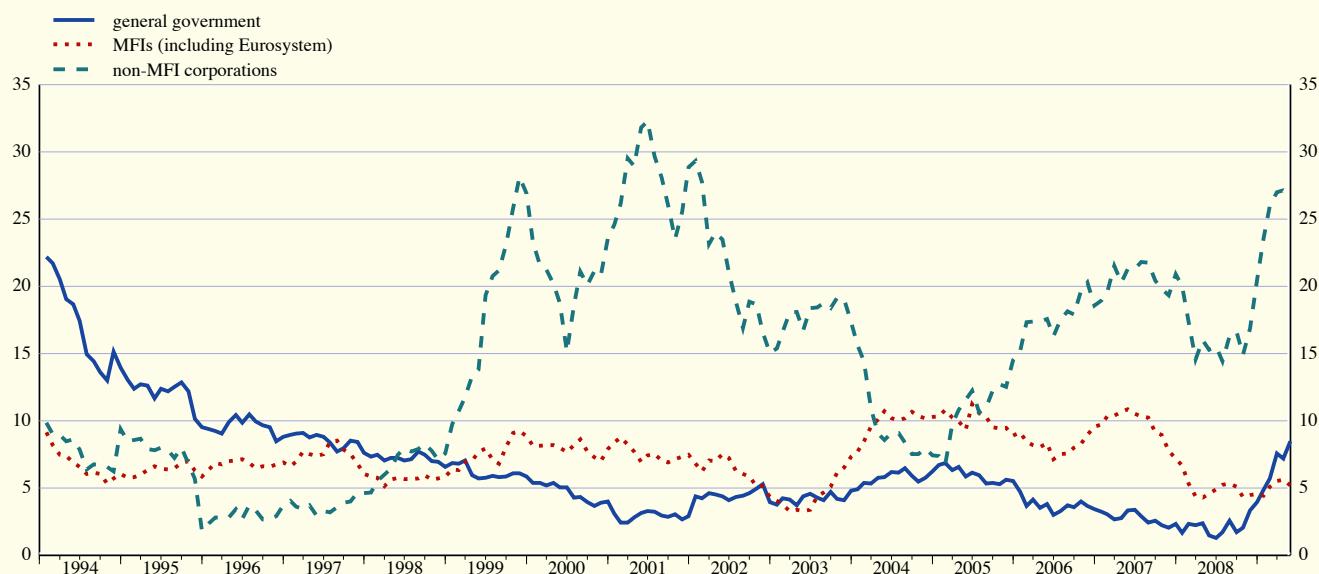
### 4.3 Growth rates of securities, other than shares, issued by euro area residents <sup>1)</sup>

(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 May	6.7	7.9	20.8	6.2	1.7	1.9	5.7	6.4	19.3	4.2	1.6	-0.9
June	6.8	8.3	22.7	3.4	1.5	2.1	5.6	6.4	19.7	2.7	1.7	-5.2
July	7.1	8.6	21.5	2.7	2.1	3.3	6.8	7.4	19.9	1.2	3.2	2.2
Aug.	7.8	8.4	23.9	4.9	3.0	3.4	8.8	9.2	26.5	2.8	3.9	6.6
Sep.	7.0	6.9	23.8	5.9	2.6	2.3	8.2	8.1	26.1	5.4	3.4	5.8
Oct.	6.9	5.3	21.1	4.3	5.0	2.8	8.9	6.4	23.8	4.3	7.5	9.5
Nov.	8.1	5.7	23.7	4.2	6.8	2.8	10.5	4.9	28.3	4.3	12.2	6.7
Dec.	9.5	5.5	27.2	7.1	8.6	3.9	13.6	4.6	35.0	12.0	16.9	14.1
2009 Jan.	10.1	5.3	28.8	6.9	10.1	5.4	13.6	3.2	38.3	12.9	17.8	8.6
Feb.	11.1	6.3	30.1	8.0	10.8	6.5	13.5	3.5	33.8	13.4	18.4	6.3
Mar.	11.9	6.5	30.7	8.9	12.4	7.9	15.7	4.9	35.5	12.7	22.1	10.2
Apr.	12.1	6.3	30.4	9.9	12.6	10.6	15.4	6.4	37.4	16.3	17.9	11.6
May	12.0	5.5	29.4	9.9	13.9	9.4	13.5	6.0	30.4	16.3	15.5	12.0
Long-term												
2008 May	5.1	4.6	19.6	5.1	1.4	1.8	4.9	4.6	17.8	4.4	1.4	0.5
June	5.2	4.9	21.1	2.2	1.2	1.9	4.8	5.6	17.9	2.3	0.4	-0.1
July	5.3	5.2	19.5	2.1	1.6	3.1	5.7	6.3	17.2	0.5	2.2	3.0
Aug.	6.1	5.3	21.7	3.1	2.5	3.5	7.7	7.8	25.3	1.7	2.7	6.2
Sep.	5.7	5.1	21.6	4.4	1.7	2.2	7.1	7.4	24.8	5.0	1.6	4.6
Oct.	5.3	4.3	19.3	3.7	2.1	1.4	6.2	5.9	21.5	3.2	1.9	5.0
Nov.	6.2	4.5	22.3	3.2	3.5	1.3	7.6	4.4	26.8	2.0	5.6	2.2
Dec.	7.3	4.6	26.2	5.5	4.1	2.1	9.7	3.6	34.9	8.7	7.9	4.1
2009 Jan.	8.2	4.4	29.4	8.1	5.0	3.3	10.6	2.5	43.0	16.2	7.8	3.5
Feb.	9.2	5.1	31.9	10.4	5.8	3.9	10.8	2.4	38.8	19.9	9.1	1.7
Mar.	10.4	5.5	32.2	12.9	7.7	5.7	13.7	3.7	40.2	21.5	14.2	6.8
Apr.	10.3	5.6	31.7	14.7	7.1	8.6	14.6	5.3	42.8	27.6	12.5	12.4
May	10.6	5.2	30.8	16.1	8.5	8.5	13.7	5.9	34.8	32.2	11.4	15.1

### 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.

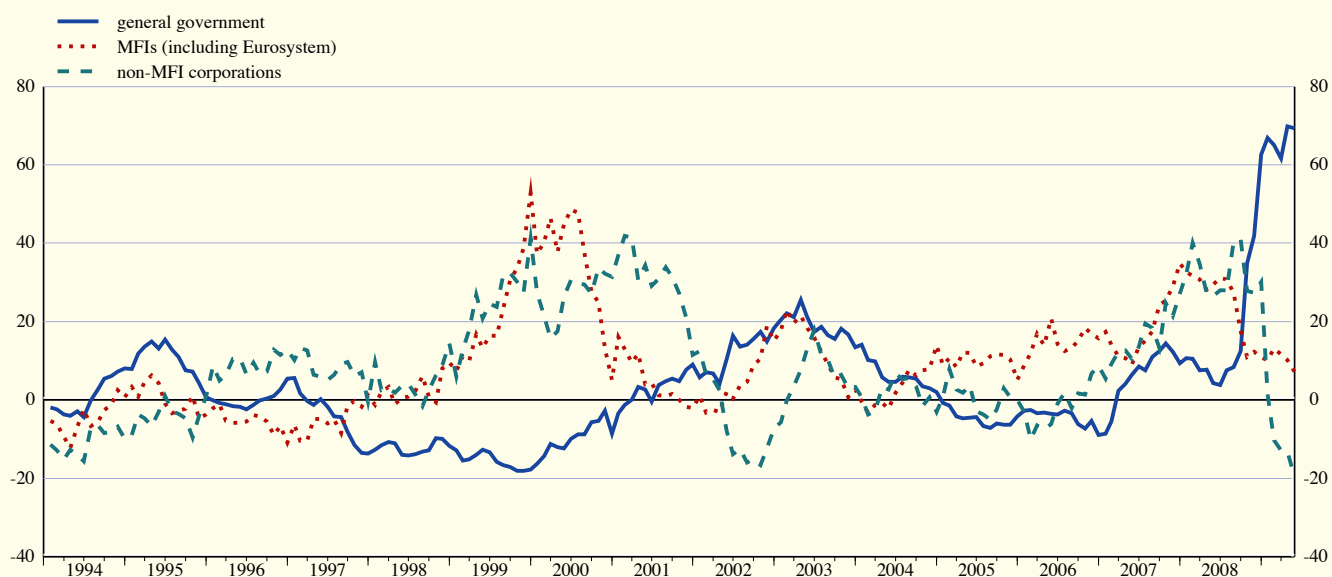
4.3 Growth rates of securities, other than shares, issued by euro area residents <sup>1)</sup> (cont'd)

(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	18.5	3.8	-1.8
2008	3.0	4.9	5.6	4.2	1.5	1.4	12.9	5.5	33.7	7.0	7.6	3.2
2008 Q2	2.6	4.3	5.0	4.1	1.2	1.4	12.0	5.0	31.7	8.5	8.2	0.4
Q3	3.0	5.5	5.0	3.4	1.3	2.0	12.4	5.3	32.4	3.2	7.7	6.0
Q4	3.2	4.5	4.3	4.5	2.4	-0.8	13.1	5.7	34.1	4.3	3.9	10.2
2009 Q1	6.1	5.0	8.8	12.3	6.0	1.4	15.9	5.3	44.9	0.4	1.4	11.2
2008 Dec.	4.1	4.0	5.0	6.8	4.0	-0.4	15.5	6.1	40.2	1.9	4.5	10.9
2009 Jan.	5.4	4.2	7.6	10.8	5.4	1.2	15.6	5.3	44.3	0.5	0.6	10.0
Feb.	6.7	5.5	10.6	14.0	6.4	2.0	16.2	5.1	46.7	0.0	0.7	9.7
Mar.	8.4	6.6	11.4	17.6	8.4	2.6	16.4	5.0	47.0	-0.9	1.0	16.7
Apr.	8.4	6.7	11.9	19.9	7.9	5.3	15.7	4.5	45.7	-0.8	-0.9	20.3
May	9.2	7.2	11.5	21.9	8.9	5.0	14.2	2.2	44.4	-2.1	0.1	20.8
In euro												
2007	4.6	6.5	13.7	2.2	2.7	6.7	15.1	10.3	35.4	18.2	3.9	-2.4
2008	2.9	4.8	5.9	2.1	1.8	1.3	14.3	6.5	35.3	7.1	8.0	2.0
2008 Q2	2.4	4.0	4.4	2.0	1.4	1.4	13.1	5.7	32.8	8.2	8.6	-1.1
Q3	2.9	5.4	6.0	1.1	1.5	1.8	14.3	6.8	34.3	3.8	8.1	4.6
Q4	3.3	4.7	6.5	2.2	2.6	-1.2	15.4	7.6	36.8	5.0	4.1	9.2
2009 Q1	6.5	6.1	12.4	9.5	6.1	0.8	18.8	7.9	47.9	0.3	1.5	11.0
2008 Dec.	4.4	4.8	7.5	3.8	4.3	-1.0	18.2	8.6	42.9	2.1	4.7	9.7
2009 Jan.	5.8	5.3	10.6	7.9	5.5	0.6	18.6	8.1	47.3	0.7	0.8	9.2
Feb.	7.2	6.6	14.9	11.1	6.4	1.4	19.0	7.5	49.8	0.0	0.9	10.1
Mar.	8.9	8.1	15.8	15.4	8.3	1.9	19.3	7.5	50.1	-1.8	0.9	17.7
Apr.	9.0	8.6	16.2	18.0	7.7	4.6	18.4	6.6	48.8	-1.6	-1.0	22.2
May	9.8	9.5	16.0	20.2	8.6	4.4	17.0	4.2	47.4	-3.1	0.0	22.8

C19 Annual growth rates of short-term debt securities, by sector of the issuer, in all currencies combined

(annual percentage changes)



Source: ECB.

1) Annual percentage changes of monthly data refer to the end of the month, whereas those of quarterly and yearly data refer to the annual change in the period average of the series. See the Technical notes for details.

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

(EUR billions, unless otherwise indicated; market values)

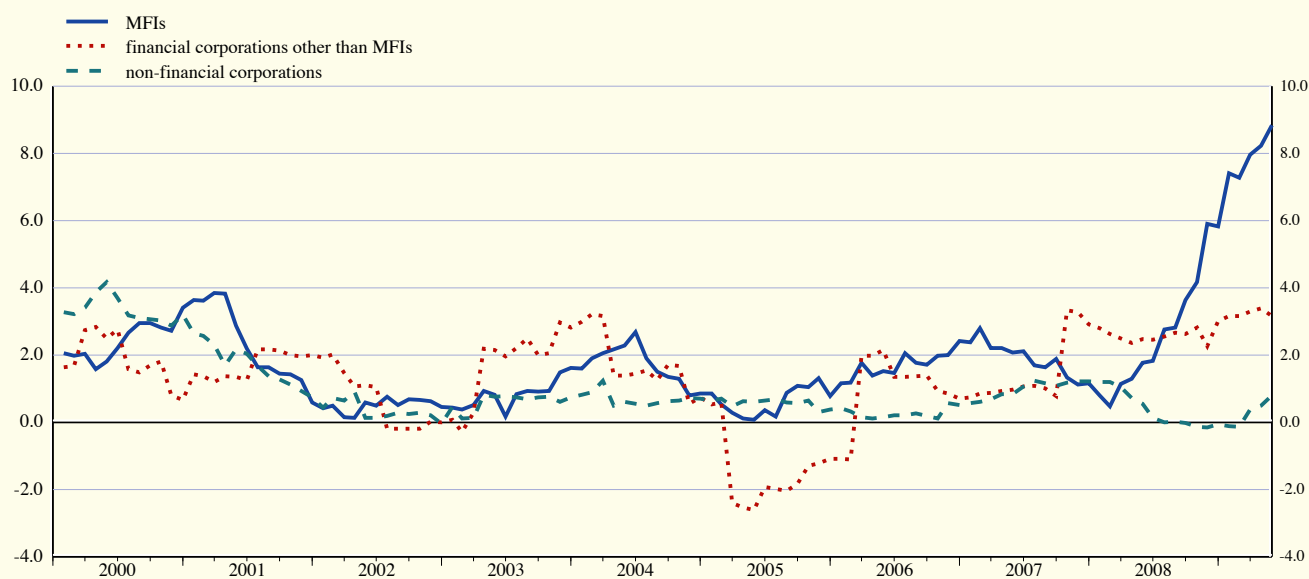
##### 1. Outstanding amounts and annual growth rates

(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 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	628.2	3.3	5,243.1	1.2
Nov.	6,631.8	104.3	1.4	1,034.6	1.1	578.6	3.3	5,018.6	1.2
Dec.	6,588.7	104.4	1.4	1,019.0	1.2	578.4	2.9	4,991.2	1.2
2008 Jan.	5,766.1	104.4	1.3	889.8	0.8	497.0	2.8	4,379.3	1.2
Feb.	5,820.8	104.5	1.2	860.1	0.5	492.0	2.6	4,468.7	1.2
Mar.	5,567.1	104.5	1.2	860.5	1.1	501.0	2.5	4,205.6	1.1
Apr.	5,748.0	104.4	1.0	837.2	1.3	519.1	2.4	4,391.6	0.7
May	5,729.4	104.5	0.9	771.0	1.8	496.7	2.5	4,461.7	0.6
June	5,081.0	104.5	0.6	665.3	1.8	435.5	2.4	3,980.2	0.1
July	4,972.6	104.6	0.6	691.6	2.8	427.9	2.5	3,853.1	0.0
Aug.	4,999.2	104.6	0.6	665.5	2.8	438.0	2.7	3,895.6	0.0
Sep.	4,430.0	104.7	0.7	612.2	3.6	381.8	2.6	3,436.0	0.0
Oct.	3,743.7	105.0	0.7	451.9	4.2	280.1	2.8	3,011.8	-0.1
Nov.	3,489.2	105.2	0.9	394.5	5.9	265.1	2.3	2,829.6	-0.2
Dec.	3,482.5	105.4	1.0	377.0	5.8	269.0	3.0	2,836.4	-0.1
2009 Jan.	3,286.8	105.6	1.1	344.6	7.4	239.9	3.2	2,702.3	-0.1
Feb.	2,922.0	105.6	1.1	276.7	7.3	189.0	3.2	2,456.3	-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	249.9	3.4	2,771.3	0.5
May	3,580.5	106.5	2.0	455.2	8.8	254.8	3.2	2,870.5	0.8

#### 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>

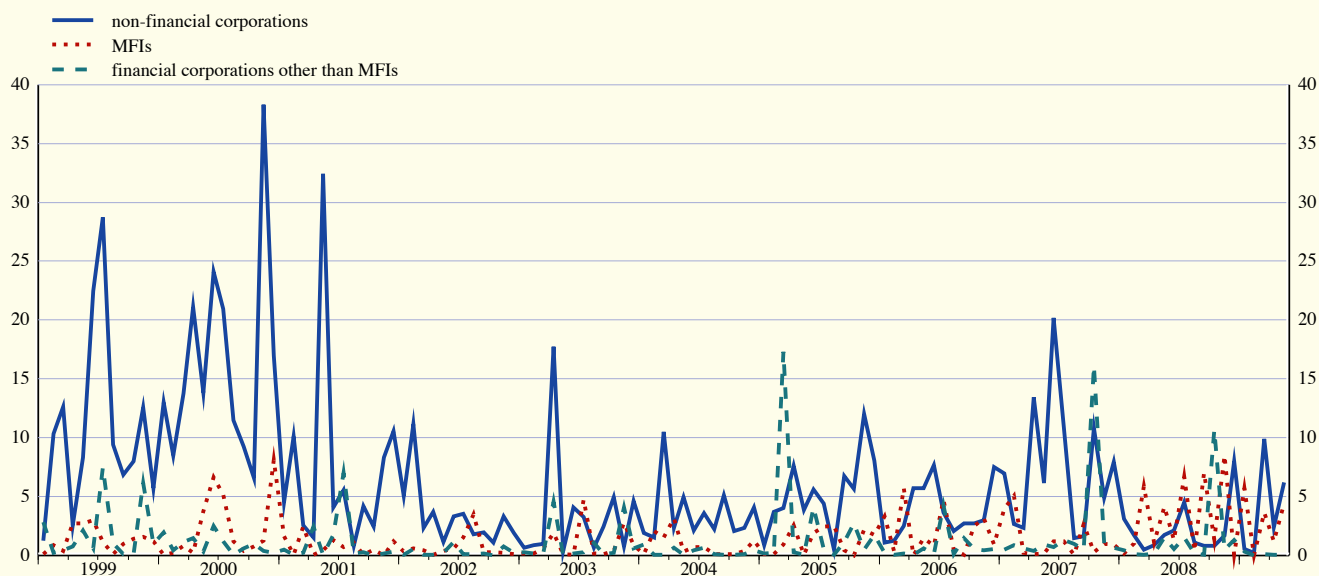
(EUR billions; market values)

### 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 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
May	10.6	0.3	10.3	4.4	0.0	4.4	0.0	0.0	0.0	6.2	0.2	6.0

#### 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 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	3.30	1.23
Apr.	0.66	2.01	2.70	2.87	2.22	3.75	0.80	1.15	2.64	3.07	1.12
May	0.61	1.89	2.42	2.71	1.98	3.62	0.76	1.08	2.39	3.12	1.02
June	0.56	1.86	2.39	2.58	1.94	3.52	0.66	1.04	2.19	2.64	0.93

### 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 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.	10.46	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.	10.13	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	4.33	4.61	4.72	4.38	3.83	4.72	5.05
Apr.	9.71	7.44	6.50	8.27	8.05	3.39	4.19	4.55	4.67	4.22	3.54	4.69	4.90
May	9.62	7.88	6.44	8.17	8.08	3.22	4.13	4.50	4.58	4.11	3.60	4.71	4.90
June	9.56	7.27	6.37	8.03	7.81	3.13	4.05	4.51	4.57	4.09	3.54	4.75	4.93

### 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 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.		4.76	3.82	5.02	4.60	2.54	3.34	4.01
May		4.67	3.73	5.01	4.52	2.48	3.22	3.96
June		4.58	3.64	4.86	4.50	2.56	3.08	3.69

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)

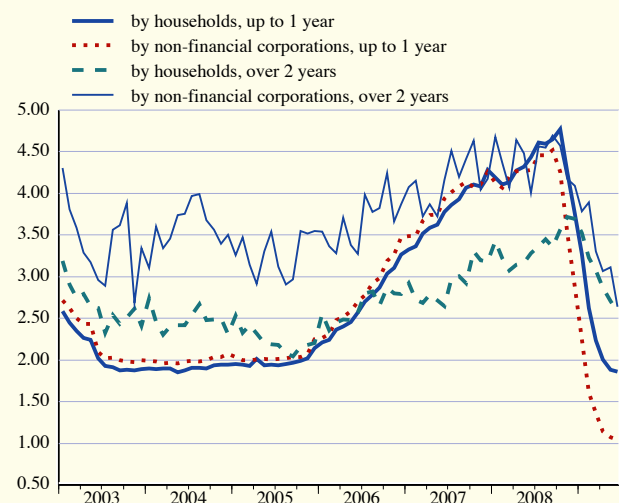
	Deposits from households					Deposits from non-financial corporations			Repos
	Overnight <sup>2)</sup>	With agreed maturity		Redeemable at notice <sup>2),3)</sup>		Overnight <sup>2)</sup>	With agreed maturity		
		Up to 2 years	Over 2 years	Up to 3 months	Over 3 months		Up to 2 years	Over 2 years	
	1	2	3	4	5	6	7	8	
2008 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	3.09
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	2.29
Apr.	0.66	3.54	3.11	2.22	3.75	0.80	2.52	3.84	1.95
May	0.61	3.38	3.04	1.98	3.62	0.76	2.41	3.70	1.79
June	0.56	3.25	3.06	1.94	3.52	0.66	2.20	3.65	1.63

#### 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 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	4.63	4.78	8.43	7.09	6.07	4.41	4.28	4.48
Apr.	4.70	4.49	4.65	8.19	7.00	5.92	4.12	3.97	4.25
May	4.59	4.45	4.56	8.08	6.92	5.84	4.01	3.84	4.12
June	4.51	4.41	4.46	7.96	6.93	5.79	3.93	3.72	4.00

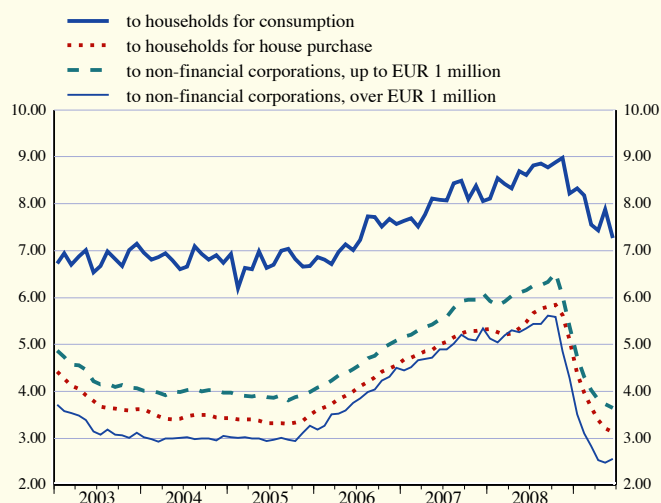
#### C22 New deposits with agreed maturity

(percentages per annum excluding charges; period averages)



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

(percentages per annum excluding charges; period averages)



Source: ECB.

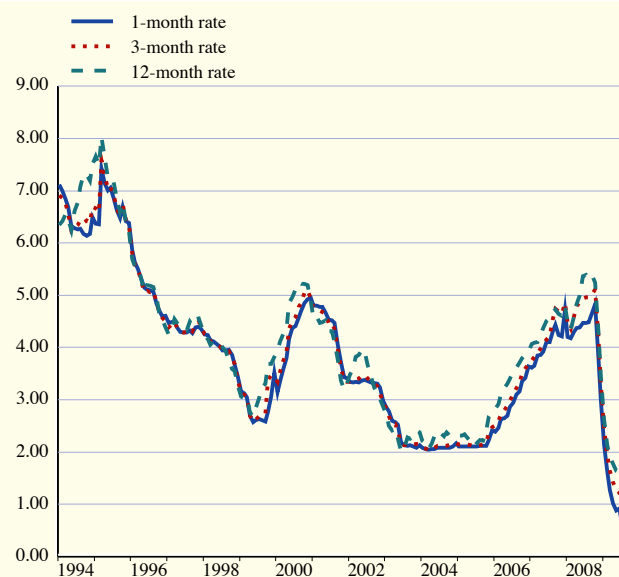
## 4.6 Money market interest rates

(percentages per annum; period averages)

	Euro area <sup>1,2)</sup>					United States	Japan
	Overnight deposits (EONIA)	1-month deposits (EURIBOR)	3-month deposits (EURIBOR)	6-month deposits (EURIBOR)	12-month deposits (EURIBOR)	3-month deposits (LIBOR)	3-month deposits (LIBOR)
	1	2	3	4	5	6	7
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 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
July	0.36	0.61	0.97	1.21	1.41	0.52	0.43

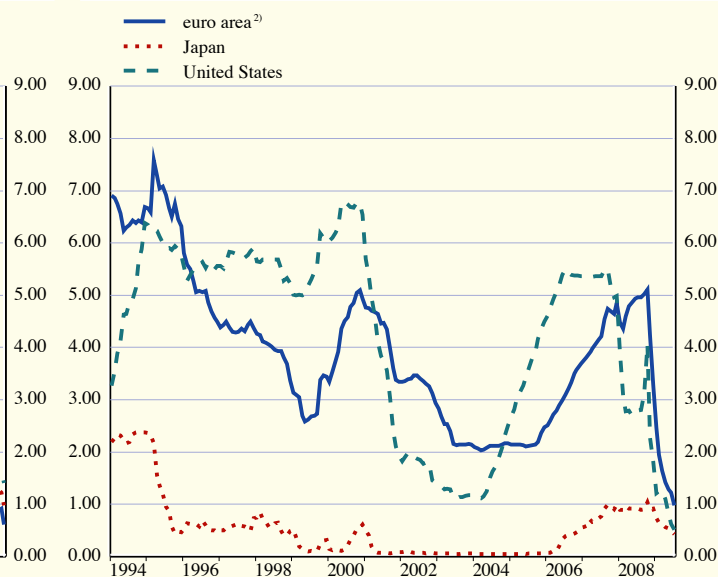
### C24 Euro area money market rates <sup>2)</sup>

(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.

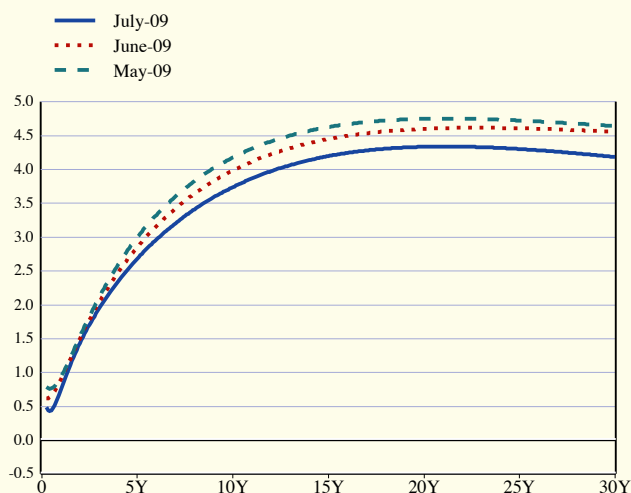
### 4.7 Euro area yield curves <sup>1)</sup>

(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	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	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	1.75	1.85	2.14	2.95	3.32	3.69	1.94	1.55	2.09	2.76	4.04	4.60
2008 Q2	4.21	4.49	4.62	4.63	4.65	4.73	0.52	0.11	4.73	4.72	4.64	5.00
Q3	3.71	3.60	3.59	3.88	4.09	4.34	0.63	0.75	3.52	3.67	4.45	5.00
Q4	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 Q1	0.78	0.88	1.46	2.70	3.23	3.77	3.00	2.31	1.41	2.58	4.24	5.19
Q2	0.62	0.90	1.50	2.85	3.42	3.99	3.37	2.49	1.47	2.67	4.54	5.42
2008 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
July	0.49	0.74	1.43	2.68	3.21	3.74	3.26	2.31	1.49	2.62	4.21	5.13

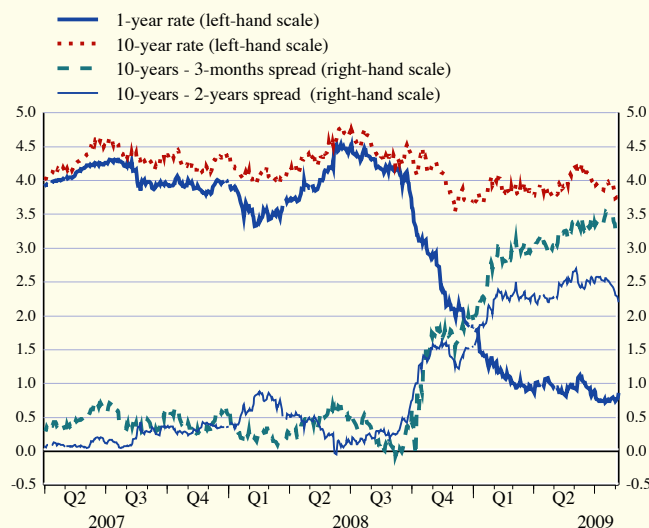
### C26 Euro area spot yield curves

(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.



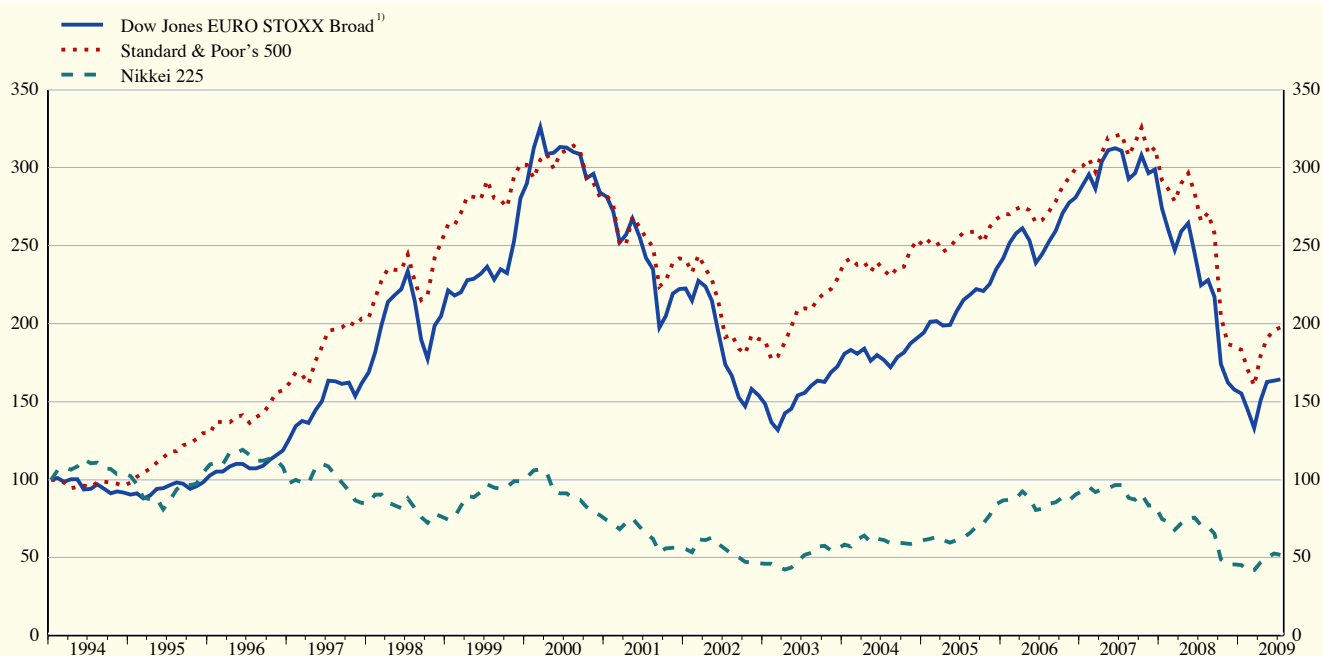
## 4.8 Stock market indices

(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 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
July	228.0	2,462.1	337.9	134.8	243.7	288.6	170.6	256.8	198.8	334.7	364.8	352.9	934.1	9,678.3

### 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 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	
Q2	108.3	0.2	1.5	-1.2	2.2	0.3	0.1	-0.6	0.2	0.7	0.4	0.0	1.7	
2009 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	108.5	-0.1	1.3	-1.5	1.9	0.3	0.4	0.0	-0.1	2.4	0.0	-0.4	1.6	
July <sup>4)</sup>	.	-0.6	.	.	.	.	.	.	.	.	.	.	.	

	Goods						Services					
	Food (incl. alcoholic beverages and tobacco)			Industrial goods			Housing	Transport	Communication	Recreation and personal	Miscellaneous	
	Total	Processed food	Unprocessed food	Total	Non-energy industrial goods	Energy						
% of total <sup>3)</sup>	19.3	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 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
Q2	1.0	1.1	0.9	-2.3	0.7	-10.7	2.1	1.8	3.1	-1.2	2.7	2.0
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
June	0.8	1.1	0.3	-2.7	0.6	-11.8	2.1	1.8	2.7	-1.0	2.1	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	Intermedi- ate 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	1.0	1.5	0.9	13.9	2.8	7.6
2006	105.1	5.1	3.5	2.8	4.6	1.6	1.7	1.4	1.5	13.4	4.1	6.5
2007	107.9	2.7	3.0	3.2	4.6	2.2	2.3	2.4	2.1	1.2	4.0	4.4
2008	114.4	6.1	4.8	3.5	4.0	2.1	3.9	2.8	4.1	14.1	4.1	1.7
2008 Q2	114.9	7.0	6.4	3.7	4.0	2.0	4.8	2.8	5.1	17.2	4.0	2.8 <sup>5)</sup>
Q3	117.2	8.4	6.7	4.2	5.4	2.3	4.2	2.7	4.4	21.6	5.5	-
Q4	113.7	3.4	0.7	2.4	2.6	2.5	2.0	2.6	1.9	6.7	3.9	0.6 <sup>5)</sup>
2009 Q1	109.8	-2.0	-4.3	-1.1	-2.7	1.8	-1.0	1.9	-1.4	-4.2	.	-
Q2	108.2	-5.8	-6.8	-3.0	-5.7	0.6	-2.0	1.5	-2.5	-13.3	.	-
2009 Jan.	110.4	-0.8	-3.3	-0.3	-1.2	1.9	-0.5	1.9	-0.9	-1.9	-	-
Feb.	109.9	-1.9	-4.2	-1.2	-2.9	1.8	-1.0	1.9	-1.4	-3.6	-	-
Mar.	109.1	-3.2	-5.4	-1.9	-3.9	1.5	-1.6	1.8	-2.0	-6.9	-	-
Apr.	108.1	-4.8	-5.9	-2.5	-5.0	1.1	-1.8	1.6	-2.2	-11.1	-	-
May	108.1	-5.9	-7.1	-3.0	-5.7	0.5	-2.0	1.4	-2.5	-13.8	-	-
June	108.4	-6.6	-7.3	-3.5	-6.4	0.3	-2.3	1.5	-2.9	-15.0	-	-

### 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)	GDP deflators					Exports <sup>9)</sup>	Imports <sup>9)</sup>	
		Import-weighted <sup>7)</sup>			Use-weighted <sup>8)</sup>				Total	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	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	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	1.4
2008	65.9	2.0	18.2	-4.3	-1.7	9.7	-8.5	119.1	2.3	2.8	2.9	2.7	2.5	2.5	3.8	3.8
2008 Q2	78.5	2.5	32.4	-7.5	-0.3	20.3	-11.1	118.9	2.3	3.1	3.4	3.4	2.5	2.8	4.8	4.8
Q3	77.6	6.8	16.2	2.8	0.6	4.3	-1.9	119.5	2.4	3.3	3.5	2.8	3.1	3.5	5.8	5.8
Q4	43.5	-10.1	-7.7	-11.2	-14.5	-12.9	-15.8	120.2	2.5	2.1	2.0	2.3	1.9	1.3	0.5	0.5
2009 Q1	35.1	-29.1	-14.8	-36.0	-28.5	-17.3	-36.8	120.1	1.8	1.2	0.4	2.8	0.1	-2.8	-4.4	-4.4
Q2	43.8	-24.5	-11.1	-31.0	-22.5	-9.9	-31.4	.	.	.	.	.	.	.	.	.
2009 Feb.	34.6	-29.9	-16.1	-36.6	-30.1	-20.4	-37.5	.	.	.	.	.	.	.	.	.
Mar.	36.5	-30.6	-17.7	-36.8	-29.3	-17.8	-37.7	.	.	.	.	.	.	.	.	.
Apr.	39.0	-25.4	-11.7	-31.9	-23.7	-10.8	-32.8	.	.	.	.	.	.	.	.	.
May	42.8	-24.5	-8.3	-32.1	-22.0	-6.7	-32.6	.	.	.	.	.	.	.	.	.
June	49.5	-23.5	-13.1	-28.8	-21.7	-12.0	-28.9	.	.	.	.	.	.	.	.	.
July	46.5	-22.6	-14.6	-26.6	-21.3	-13.6	-26.8	.	.	.	.	.	.	.	.	.

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	0.9	2.1	1.9	4.0	3.0
Q2	114.7	2.8	-1.0	1.4	2.0	2.5	2.6	4.5
Q3	115.7	3.5	-1.0	4.0	2.6	4.4	3.3	2.7
Q4	118.1	4.5	-0.6	9.2	2.2	5.1	2.3	3.2
2009 Q1	119.8	5.6	1.1	15.8	2.2	6.4	-0.1	3.1
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	3.9	3.4	3.5	2.4	2.6	3.4
Q2	121.1	3.2	2.8	2.7	4.0	2.4	2.0	4.4
Q3	121.9	3.4	3.2	3.1	4.5	4.2	2.7	3.2
Q4	122.6	2.8	2.4	2.5	3.7	3.1	1.9	3.2
2009 Q1	122.4	1.8	4.0	0.6	3.2	2.2	0.2	3.1
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	1.9	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	2.6	2.5	1.4	0.5	-1.4	0.4
Q2	105.6	0.3	3.8	1.3	2.0	-0.1	-0.6	-0.1
Q3	105.4	-0.1	4.2	-0.9	1.9	-0.2	-0.6	0.5
Q4	103.9	-1.6	3.0	-6.1	1.5	-2.0	-0.4	0.1
2009 Q1	102.1	-3.6	2.9	-13.1	0.9	-3.9	0.3	0.0

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	
	1	2	3	4	5	6	7	8
% of total <sup>6)</sup>	100.0	100.0	73.1	26.9	34.6	9.1	56.3	
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	8,022.4	4,668.0	1,664.9	1,684.5	5.1	121.7	3,114.1	2,992.4
2006	8,557.6	8,455.8	4,872.3	1,732.3	1,834.4	16.8	101.8	3,472.0	3,370.2
2007	8,998.3	8,858.8	5,063.0	1,799.5	1,972.3	24.1	139.5	3,741.3	3,601.9
2008	9,266.0	9,169.7	5,230.1	1,886.5	2,015.5	37.5	96.3	3,874.8	3,778.5
2008 Q1	2,312.5	2,278.5	1,298.6	461.4	512.0	6.5	34.0	985.7	951.7
Q2	2,324.8	2,290.4	1,308.0	472.8	510.0	-0.4	34.4	990.1	955.6
Q3	2,328.2	2,313.2	1,318.0	474.0	508.4	12.9	15.0	993.8	978.8
Q4	2,300.6	2,287.6	1,305.5	478.4	485.2	18.5	13.0	905.3	892.4
2009 Q1	2,241.1	2,235.5	1,288.7	483.9	461.0	2.0	5.6	803.2	797.6
<i>percentage of GDP</i>									
2008	100.0	99.0	56.4	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	0.6	0.1	0.4	1.0	-	-	1.7	1.5
Q2	-0.3	-0.5	-0.3	0.9	-1.3	-	-	-0.3	-1.0
Q3	-0.4	0.3	0.0	0.5	-1.1	-	-	-0.6	0.9
Q4	-1.8	-0.8	-0.4	0.4	-4.1	-	-	-7.3	-5.2
2009 Q1	-2.5	-2.0	-0.5	0.2	-4.1	-	-	-8.8	-7.6
<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	2.0	0.0	-	-	1.0	1.0
2008 Q1	2.2	1.6	1.4	1.5	3.1	-	-	5.2	4.0
Q2	1.5	0.9	0.5	2.1	1.6	-	-	3.8	2.4
Q3	0.5	0.4	0.0	2.2	-0.4	-	-	1.5	1.3
Q4	-1.7	-0.5	-0.7	2.2	-5.4	-	-	-6.6	-3.9
2009 Q1	-4.9	-3.1	-1.2	1.9	-10.2	-	-	-16.3	-12.4
<i>contributions to quarter-on-quarter percentage changes of GDP in percentage points</i>									
2008 Q1	0.7	0.6	0.0	0.1	0.2	0.2	0.1	-	-
Q2	-0.3	-0.5	-0.2	0.2	-0.3	-0.2	0.3	-	-
Q3	-0.4	0.3	0.0	0.1	-0.2	0.4	-0.6	-	-
Q4	-1.8	-0.8	-0.2	0.1	-0.9	0.3	-1.0	-	-
2009 Q1	-2.5	-2.0	-0.3	0.0	-0.9	-0.9	-0.5	-	-
<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	-0.1	0.5	-	-
Q2	1.5	0.8	0.3	0.4	0.4	-0.2	0.6	-	-
Q3	0.5	0.4	0.0	0.4	-0.1	0.0	0.1	-	-
Q4	-1.7	-0.5	-0.4	0.4	-1.2	0.7	-1.2	-	-
2009 Q1	-4.9	-3.1	-0.7	0.4	-2.2	-0.5	-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	144.1	1,482.4	441.7	1,540.5	2,021.2	1,669.4	844.9
2006	7,643.6	142.0	1,557.3	476.7	1,602.6	2,137.9	1,727.1	914.0
2007	8,040.2	151.9	1,643.5	514.7	1,672.9	2,261.6	1,795.6	958.1
2008	8,311.7	148.1	1,672.4	536.8	1,727.2	2,357.3	1,869.9	954.3
2008 Q1	2,070.6	38.7	424.0	135.2	431.3	583.0	458.4	241.9
Q2	2,085.3	37.2	425.8	134.8	431.0	589.0	467.5	239.6
Q3	2,088.7	36.6	422.2	135.0	434.5	592.5	467.9	239.5
Q4	2,067.2	35.6	400.4	131.8	430.5	592.8	476.2	233.4
2009 Q1	2,014.1	36.2	361.6	130.8	418.4	587.3	479.8	227.0
<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	1.6	0.6	1.8	0.7	0.6	0.2	1.5
Q2	-0.1	-0.4	-0.7	-2.1	-0.4	0.5	0.4	-1.3
Q3	-0.4	-0.3	-1.6	-1.8	-0.2	0.0	0.6	-0.4
Q4	-1.7	1.1	-5.7	-1.6	-1.8	-0.6	0.2	-2.1
2009 Q1	-2.5	-0.2	-8.5	-1.0	-2.9	-0.8	0.1	-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	3.5	3.1	3.0	3.7	1.6	0.7
2008	0.9	1.7	-0.8	-0.5	1.0	1.8	1.4	-0.7
2008 Q1	2.4	1.3	2.9	1.7	3.0	2.6	1.3	0.3
Q2	1.6	1.7	1.4	0.3	1.6	2.4	1.3	0.1
Q3	0.7	2.5	-1.1	-1.2	0.7	1.6	1.5	-1.0
Q4	-1.6	2.0	-7.3	-3.7	-1.7	0.5	1.4	-2.3
2009 Q1	-4.7	0.2	-15.7	-6.4	-5.2	-1.0	1.3	-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	0.1	0.2	0.0	-
Q2	-0.1	0.0	-0.1	-0.1	-0.1	0.1	0.1	-
Q3	-0.4	0.0	-0.3	-0.1	0.0	0.0	0.1	-
Q4	-1.7	0.0	-1.2	-0.1	-0.4	-0.2	0.0	-
2009 Q1	-2.5	0.0	-1.6	-0.1	-0.6	-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	0.7	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	0.5	0.3	-
Q4	-1.6	0.0	-1.5	-0.2	-0.4	0.1	0.3	-
2009 Q1	-4.7	0.0	-3.2	-0.4	-1.1	-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	4.8	4.9	6.0	2.9	4.4	2.7	0.6	3.4
2007	3.2	108.1	3.7	4.2	4.4	3.8	6.8	2.3	1.3	2.5	-0.9	1.4
2008	-2.4	106.2	-1.8	-1.9	-2.0	-3.4	-0.2	-2.0	-5.6	-1.4	0.3	-4.6
2008 Q2	-0.1	108.7	1.0	1.0	0.9	0.1	3.5	-1.2	-2.0	-1.1	2.1	-4.1
Q3	-2.3	105.6	-1.5	-1.5	-1.7	-2.2	-0.6	-2.2	-7.2	-1.5	-0.2	-5.2
Q4	-8.8	99.1	-8.9	-9.3	-9.5	-13.4	-8.6	-4.8	-11.9	-3.6	-4.3	-8.3
2009 Q1	-16.7	91.7	-18.2	-20.0	-20.5	-25.2	-23.4	-7.5	-20.6	-5.4	-4.6	-10.2
2008 Dec.	-12.4	96.2	-12.2	-13.2	-13.6	-21.5	-11.4	-4.8	-14.7	-3.4	-4.9	-13.1
2009 Jan.	-15.4	93.5	-16.6	-18.7	-19.1	-23.8	-22.4	-6.3	-18.5	-4.3	0.0	-10.4
Feb.	-17.9	91.3	-19.2	-21.1	-21.5	-25.7	-25.1	-8.6	-22.3	-6.5	-3.6	-12.1
Mar.	-16.7	90.4	-18.7	-20.2	-20.7	-25.9	-22.8	-7.5	-20.9	-5.3	-10.2	-8.2
Apr.	-17.9	89.1	-20.6	-21.8	-22.5	-27.0	-26.8	-7.5	-21.2	-5.1	-12.4	-4.9
May	-15.4	89.6	-17.0	-18.4	-18.5	-23.2	-22.3	-5.0	-19.8	-2.3	-9.0	-7.8
<i>month-on-month percentage changes (s.a.)</i>												
2008 Dec.	-3.3	-	-3.0	-3.3	-3.4	-6.4	-2.7	-0.6	-2.7	-0.4	0.4	-3.0
2009 Jan.	-1.7	-	-2.7	-3.5	-3.6	-2.1	-7.3	-0.4	-2.3	-0.1	0.4	1.6
Feb.	-2.3	-	-2.4	-2.4	-2.5	-2.3	-3.1	-1.8	-3.5	-1.5	-2.2	-1.4
Mar.	-0.5	-	-1.0	-1.0	-0.8	-1.7	0.2	-0.3	-0.4	-0.2	-3.9	0.5
Apr.	-1.3	-	-1.5	-1.0	-1.5	-1.6	-2.8	-0.1	-0.6	0.0	-1.3	0.3
May	0.1	-	0.6	0.3	0.9	0.4	1.2	0.5	-1.7	0.8	0.3	-2.0

### 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	115.0	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	103.3	-0.8	-1.7	-0.3	-1.7	-2.0	893	-8.0
2008 Q3	115.0	-1.3	118.5	4.3	2.1	103.1	-1.1	-1.7	-0.6	-1.0	-3.0	892	-8.8
Q4	94.9	-22.4	107.3	-7.5	-0.3	102.4	-1.8	-2.2	-1.4	-3.1	-2.8	826	-18.5
2009 Q1	84.3	-31.7	95.1	-21.6	-2.6	101.8	-2.5	-3.6	-1.8	-0.2	-6.1	832	-12.6
Q2	.	.	.	.	-2.6	101.4	-2.0	-1.3	-2.4	.	.	934	4.0
2009 Jan.	84.7	-34.5	96.1	-24.0	-1.3	102.0	-1.8	-2.5	-1.4	1.4	-5.5	781	-20.6
Feb.	84.0	-34.3	94.9	-25.2	-3.9	101.6	-3.7	-4.4	-3.1	-4.0	-6.5	853	-12.7
Mar.	84.0	-26.4	94.2	-15.8	-2.7	101.6	-2.1	-3.8	-0.9	1.3	-6.2	862	-5.8
Apr.	83.6	-35.1	93.9	-25.9	-1.8	101.8	-1.2	-0.8	-1.8	0.0	-5.4	895	-3.7
May	83.3	-30.1	94.3	-23.3	-3.6	101.3	-2.5	-2.0	-2.8	-4.5	-5.8	943	5.7
June	.	.	.	.	-2.3	101.1	-2.2	-1.3	-2.5	.	.	965	10.0
<i>month-on-month percentage changes (s.a.)</i>													
2009 Feb.	-	-0.9	-	-1.2	-0.6	-	-0.4	-0.3	-0.6	-2.4	-0.9	-	9.2
Mar.	-	0.0	-	-0.8	0.0	-	0.0	-0.2	0.3	1.1	-0.4	-	1.1
Apr.	-	-0.5	-	-0.3	0.1	-	0.2	1.1	-0.3	-0.7	0.1	-	3.9
May	-	-0.3	-	0.4	-0.6	-	-0.5	-0.5	-0.5	-0.6	-0.5	-	5.3
June	-	.	-	.	0.1	-	-0.2	-0.2	-0.2	.	.	-	2.4

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	72.5	-33	-11	-41	64	-14
Q2	70.2	-33	-62	18	-21	69.9	-28	-9	-34	59	-11
2009 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	70.3	-31	-10	-38	63	-11
May	70.2	-33	-61	18	-21	-	-28	-9	-33	58	-13
June	73.2	-32	-63	16	-16	-	-25	-7	-29	55	-9
July	76.0	-30	-61	14	-13	69.5	-23	-6	-23	53	-10
	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 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	-33	-42	-24	-17	-24	9	-17	-20	-26	-22	-11
July	-33	-41	-25	-13	-16	10	-14	-18	-25	-19	-10

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	148.118	1.5	1.6	0.8	-1.3	0.3	0.3	2.4	4.0	0.8
Q2	148.207	1.1	1.4	-0.1	-2.0	0.1	-1.6	1.6	3.0	1.4
Q3	147.960	0.6	0.9	-0.9	-1.8	-0.1	-2.9	0.9	2.2	1.1
Q4	147.430	0.0	0.1	-0.8	-1.0	-1.3	-5.3	0.3	0.9	1.4
2009 Q1	146.129	-1.3	-1.2	-2.2	-2.7	-3.0	-7.6	-1.4	-1.2	1.3
	<i>quarter-on-quarter percentage changes (s.a.)</i>									
2008 Q1	0.599	0.4	0.4	0.5	0.7	0.3	-0.4	0.7	1.2	0.0
Q2	0.090	0.1	0.1	-0.4	-1.4	-0.2	-1.2	0.1	0.2	0.6
Q3	-0.247	-0.2	-0.1	-0.4	-0.6	-0.4	-1.5	0.0	0.1	0.1
Q4	-0.531	-0.4	-0.3	-0.7	0.3	-1.0	-2.2	-0.4	-0.6	0.6
2009 Q1	-1.301	-0.9	-0.9	-1.0	-1.0	-1.4	-2.6	-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		50.4		49.6	
	1	2	3	4	5	6	7	8	9	10
2005	13.714	9.0	10.673	7.9	3.040	17.5	6.913	8.1	6.800	10.0
2006	12.877	8.3	10.053	7.3	2.824	16.4	6.386	7.5	6.490	9.4
2007	11.660	7.5	9.114	6.6	2.546	14.9	5.730	6.7	5.929	8.5
2008	11.897	7.6	9.270	6.6	2.627	15.4	6.001	6.9	5.896	8.3
2008 Q2	11.604	7.4	9.047	6.5	2.557	15.0	5.788	6.7	5.816	8.2
Q3	11.963	7.6	9.313	6.6	2.650	15.6	6.071	7.0	5.892	8.3
Q4	12.664	8.0	9.847	7.0	2.817	16.6	6.548	7.6	6.115	8.6
2009 Q1	13.872	8.8	10.774	7.6	3.097	18.3	7.338	8.5	6.534	9.2
Q2	14.729	9.3	11.464	8.1	3.265	19.4	7.883	9.1	6.846	9.6
2009 Jan.	13.483	8.5	10.475	7.4	3.009	17.8	7.084	8.2	6.400	9.0
Feb.	13.875	8.8	10.776	7.6	3.099	18.4	7.347	8.5	6.529	9.1
Mar.	14.257	9.0	11.072	7.8	3.185	18.8	7.584	8.8	6.673	9.3
Apr.	14.552	9.2	11.308	8.0	3.244	19.2	7.768	9.0	6.784	9.5
May	14.738	9.3	11.462	8.1	3.276	19.4	7.893	9.1	6.845	9.6
June	14.896	9.4	11.621	8.2	3.276	19.5	7.987	9.2	6.909	9.7

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

	Current revenue														Capital revenue	Memo: fiscal burden <sup>2)</sup>
	Total		Direct taxes		Indirect taxes		Social contributions		Sales		Capital taxes					
	1	2	3	4	5	6	7	8	9	10	11	12	13	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	45.5	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

	Current expenditure														Capital expenditure	Memo: primary expenditure <sup>3)</sup>
	Total		Compensation of employees	Intermediate consumption	Interest	Current transfers	Social payments		Subsidies	Paid by EU institutions	Investment	Capital transfers	Paid by EU institutions			
	1	2					7	8						9		
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	22.4	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	43.7		
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	1.8	2.2	8.2	11.6
2001	-1.9	-1.7	-0.4	-0.1	0.3	1.9	19.9	10.3	4.8	5.0	1.8	2.1	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	50.4	48.7	25.4	13.7	9.7	23.2
2000	69.2	2.7	13.2	3.7	49.6	44.1	22.1	12.4	9.7	25.1
2001	68.2	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	69.1	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	18.5	10.8	8.3	31.8
2005	70.0	2.4	11.8	4.7	51.1	35.5	17.2	11.2	7.1	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	68.2	57.0	6.0	4.7	0.4	7.0	61.2	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	66.7	1.3
2003	69.1	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	4.5	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			
		Borrowing requirement <sup>2)</sup>	Valuation effects <sup>3)</sup>	Other changes in volume <sup>4)</sup>	Currency and deposits	Loans	Short-term securities	Long-term securities	Domestic creditors <sup>5)</sup>	MFIs	Other financial corporations	Other creditors <sup>6)</sup>
	1	2	3	4	5	6	7	8	9	10	11	12
2000	1.1	1.1	0.0	-0.1	0.0	-0.5	-0.3	1.9	-2.1	-2.0	-0.6	3.1
2001	1.9	1.9	-0.1	0.1	0.2	-0.3	0.5	1.5	-0.3	-0.5	-0.8	2.2
2002	2.1	2.7	-0.5	-0.1	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	-0.6	0.9	0.6	2.1	0.5	0.7	0.8	2.6
2004	3.1	3.2	-0.1	0.0	0.2	0.1	0.1	2.7	-0.2	-0.3	0.1	3.3
2005	3.0	3.0	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	0.2	0.2	-0.4	1.5	0.0	0.9	-1.2	1.5
2007	1.1	1.1	0.0	0.0	-0.1	-0.1	0.3	1.0	-0.1	0.2	-0.4	1.2
2008	5.3	5.2	0.1	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>7)</sup>	Deficit-debt adjustment <sup>8)</sup>											
			Total	Transactions in main financial assets held by general government							Valuation effects	Exchange rate effects	Other changes in volume	Other <sup>9)</sup>
				Total	Currency and deposits	Loans	Securities <sup>10)</sup>	Shares and other equity	Privatisations	Equity injections				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	
2000	1.1	-0.1	1.0	1.0	0.7	0.1	0.2	0.0	-0.4	0.2	0.0	0.1	-0.1	0.1
2001	1.9	-1.9	0.0	-0.5	-0.6	0.1	0.1	-0.1	-0.3	0.1	-0.1	0.0	0.1	0.6
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	-0.1	0.0
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	0.2	0.2	0.2	0.0	0.1	0.0	-0.5	0.2	-0.1	0.0	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	-0.4	0.1	0.1	0.0	0.0	-0.1
2007	1.1	-0.7	0.4	0.5	0.2	0.0	0.3	0.0	-0.3	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	-0.1	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.
- Holders resident in the country whose government has issued the debt.
- Includes residents of euro area countries other than the country whose government has issued the debt.
- Including proceeds from sales of UMTS licences.
- The difference between the annual change in gross nominal consolidated debt and the deficit as a percentage of GDP.
- 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	
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	44.4	11.9	12.8	15.7	2.0	1.4	1.4	1.2	41.5
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	13.2	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	38.0
Q2	44.8	44.0	12.0	12.9	15.3	2.0	1.1	0.8	0.6	40.8
Q3	42.8	42.3	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	41.9	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	43.4	42.7	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	14.0	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	1.8	1.5	0.4	0.3	41.5
Q3	43.7	43.2	12.1	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	41.9	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	40.7
Q3	43.1	42.8	11.8	12.5	15.1	1.9	0.8	0.3	0.3	39.5
Q4	48.8	48.4	13.6	13.6	16.2	3.0	1.1	0.5	0.3	43.7
2009 Q1	42.3	42.1	10.6	12.5	15.4	1.8	1.0	0.2	0.2	38.8

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

	Total		Current expenditure						Capital expenditure			Deficit (-)/ surplus (+)	Primary deficit (-)/ surplus (+)
	1	Total 2	Compensation of employees 3	Intermediate consumption 4	Interest 5	Current transfers 6	Social benefits 7	Subsidies 8	Investment 9	Capital transfers 11			
											10		
2003 Q1	46.8	43.3	10.3	4.6	3.5	24.9	21.3	1.3	3.5	1.9	1.6	-4.9	-1.3
Q2	47.1	43.6	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	5.6	3.1	26.6	23.0	1.5	4.8	3.3	1.6	-1.9	1.2
2004 Q1	46.3	43.0	10.3	4.7	3.2	24.8	21.3	1.2	3.4	1.9	1.5	-5.0	-1.8
Q2	46.6	43.2	10.4	4.7	3.3	24.8	21.5	1.3	3.4	2.3	1.1	-1.8	1.5
Q3	46.1	42.7	9.9	4.8	3.1	24.8	21.4	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	43.0	10.2	4.6	3.1	25.1	21.3	1.2	3.7	1.9	1.8	-4.9	-1.8
Q2	46.1	42.7	10.2	4.8	3.2	24.5	21.4	1.1	3.4	2.3	1.1	-1.7	1.5
Q3	45.8	42.3	9.9	4.9	3.0	24.6	21.2	1.2	3.4	2.5	1.0	-2.4	0.6
Q4	50.5	45.7	11.1	5.8	2.7	26.0	22.5	1.3	4.8	3.1	1.7	-1.4	1.3
2006 Q1	45.2	42.1	10.0	4.6	2.9	24.5	21.0	1.2	3.1	1.9	1.2	-2.8	0.1
Q2	45.4	42.2	10.2	4.8	3.1	24.1	21.1	1.1	3.2	2.3	1.0	0.1	3.1
Q3	45.3	41.9	9.8	4.8	2.9	24.4	21.1	1.2	3.4	2.5	1.0	-1.6	1.4
Q4	50.3	45.0	10.7	5.7	2.7	25.9	22.3	1.4	5.3	3.2	2.2	-0.9	1.8
2007 Q1	44.2	41.1	9.8	4.6	2.9	23.7	20.3	1.2	3.2	2.0	1.2	-2.1	0.8
Q2	44.5	41.4	9.9	4.7	3.2	23.6	20.6	1.1	3.2	2.3	0.9	1.2	4.3
Q3	45.0	41.2	9.5	4.8	3.0	23.9	20.7	1.2	3.7	2.5	1.2	-1.3	1.7
Q4	50.3	45.1	10.6	5.7	2.8	26.0	22.3	1.5	5.1	3.3	1.8	-0.5	2.3
2008 Q1	44.5	41.3	9.7	4.6	2.9	24.1	20.4	1.2	3.2	2.0	1.2	-2.5	0.4
Q2	45.0	41.7	10.0	4.8	3.1	23.7	20.6	1.1	3.3	2.3	1.0	-0.1	3.1
Q3	45.3	41.8	9.6	4.9	3.0	24.3	21.1	1.2	3.5	2.5	1.0	-2.2	0.8
Q4	51.7	46.5	11.0	5.9	2.8	26.9	22.9	1.4	5.1	3.3	1.8	-2.8	0.0
2009 Q1	47.9	44.5	10.5	5.0	3.0	26.0	22.2	1.3	3.4	2.1	1.2	-5.6	-2.6

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>

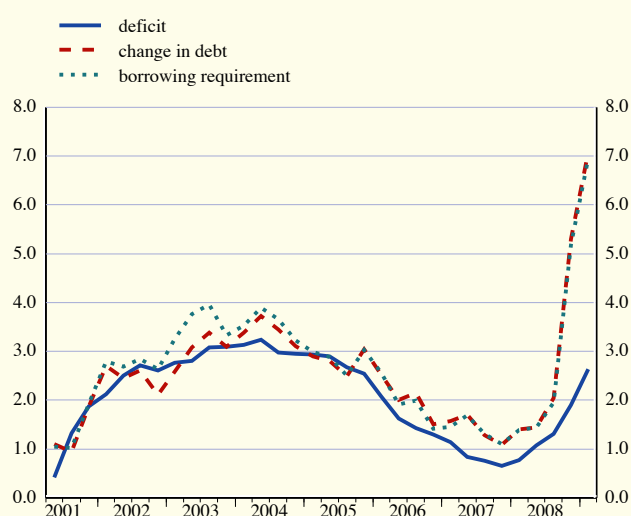
	Total 1	Financial instruments			
		Currency and deposits 2	Loans 3	Short-term securities 4	Long-term securities 5
2006 Q2	70.4	2.5	11.6	4.9	51.4
Q3	69.8	2.5	11.6	4.7	51.0
Q4	68.2	2.4	11.4	4.1	50.3
2007 Q1	68.5	2.4	11.4	4.8	49.9
Q2	68.6	2.2	11.1	5.1	50.2
Q3	67.7	2.1	11.0	5.1	49.4
Q4	66.0	2.2	10.8	4.2	48.8
2008 Q1	66.8	2.1	11.0	5.0	48.8
Q2	67.1	2.1	11.0	4.9	49.0
Q3	67.1	2.1	10.8	5.5	48.6
Q4	69.3	2.3	10.8	6.7	49.5
2009 Q1	73.1	2.3	10.9	7.9	52.0

### 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 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	-0.4	-0.9	-0.7	-0.2	0.2	-0.2	0.3	0.3	0.9
Q4	-2.9	-0.9	-3.9	-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	-0.6
Q4	-3.5	-0.5	-4.0	-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	2.0	-0.1	0.9	0.4	-0.1	0.4	6.2
Q2	3.7	-0.1	3.6	3.6	2.0	0.2	1.1	0.2	0.1	0.0	3.6
Q3	2.0	-2.2	-0.2	-1.0	-1.6	-0.1	0.1	0.7	0.5	0.3	1.5
Q4	9.3	-2.8	6.5	6.7	0.7	3.4	0.8	1.8	0.0	-0.2	9.3
2009 Q1	13.5	-5.6	8.0	6.9	4.9	1.5	-0.2	0.7	-0.1	1.1	13.6

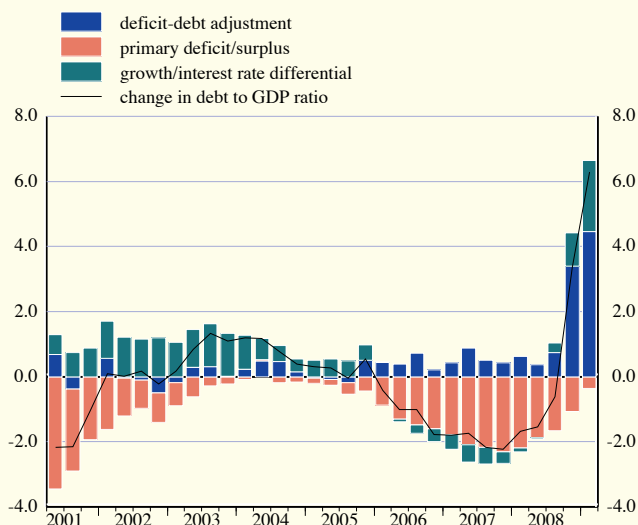
### C29 Deficit, borrowing requirement and change in debt

(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

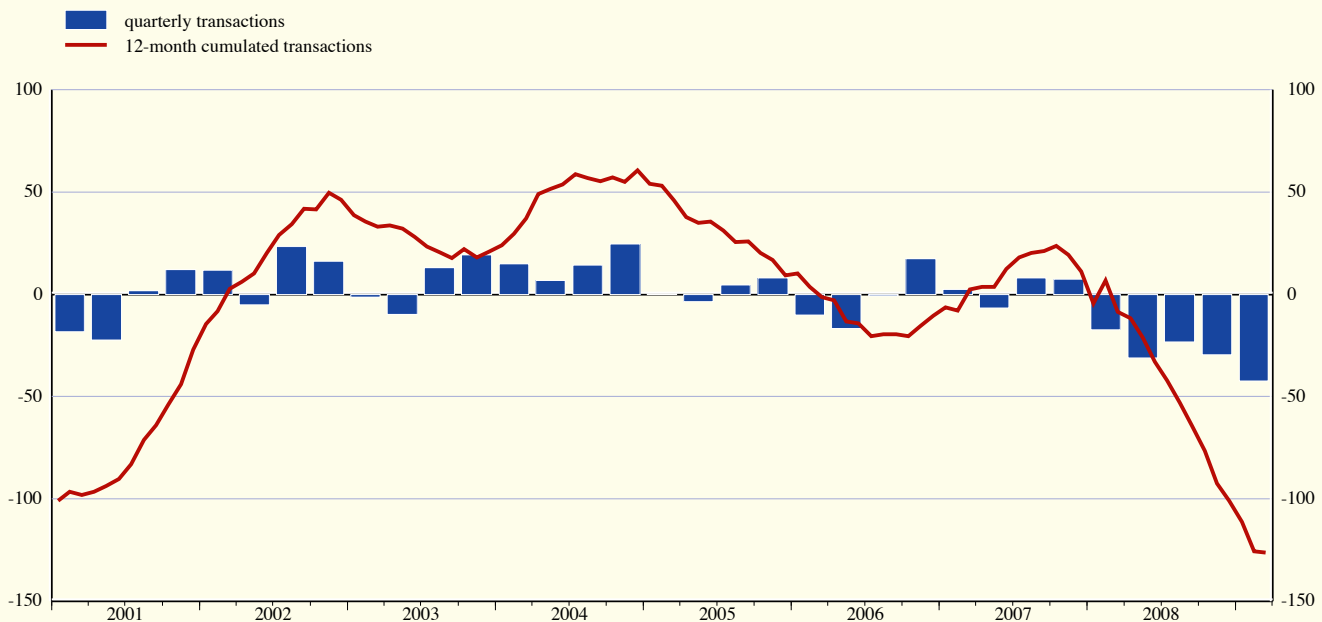
### 7.1 Summary balance of payments <sup>1)</sup>

(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	-101.0	-6.0	42.8	-41.3	-96.4	12.0	-89.0	303.3	-242.3	441.5	-56.7	164.6	-3.9	-214.3
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	-29.5	-0.6	6.2	-9.8	-25.3	1.0	-28.5	126.3	-77.7	204.2	-16.7	17.0	-0.4	-97.9
2009 Q1	-42.4	-10.3	0.8	-2.6	-30.2	1.5	-40.8	147.9	-38.5	179.4	14.3	-13.0	5.7	-107.0
2008 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.	-8.1	3.9	1.5	-2.7	-10.9	-0.1	-8.2	75.0	-12.0	142.6	-3.2	-44.5	-7.9	-66.7
Nov.	-16.0	-4.0	1.4	-4.2	-9.2	1.3	-14.6	15.1	-51.9	53.7	-9.5	23.2	-0.4	-0.5
Dec.	-5.3	-0.5	3.3	-2.9	-5.2	-0.3	-5.6	36.3	-13.9	7.9	-4.0	38.3	7.9	-30.7
2009 Jan.	-28.4	-13.9	0.2	-3.5	-11.2	0.2	-28.3	45.4	-9.4	2.3	7.2	39.9	5.3	-17.2
Feb.	-7.0	0.3	0.5	-1.7	-6.2	0.5	-6.5	34.5	-8.5	81.4	2.9	-42.5	1.2	-28.0
Mar.	-7.0	3.3	0.0	2.6	-12.9	0.9	-6.1	68.0	-20.6	95.7	4.2	-10.4	-0.8	-61.9
Apr.	-9.4	3.9	2.3	-7.2	-8.4	2.0	-7.4	-2.5	-4.5	-9.0	7.7	3.1	0.1	9.9
May	-13.0	2.2	2.9	-11.8	-6.2	0.2	-12.7	24.7	6.1	53.8	10.3	-43.3	-2.3	-12.0
	<i>12-month cumulated transactions</i>													
2009 May	-116.9	-11.2	31.7	-38.0	-99.4	7.2	-109.7	373.0	-175.5	593.6	12.0	-62.4	5.3	-263.3

### 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

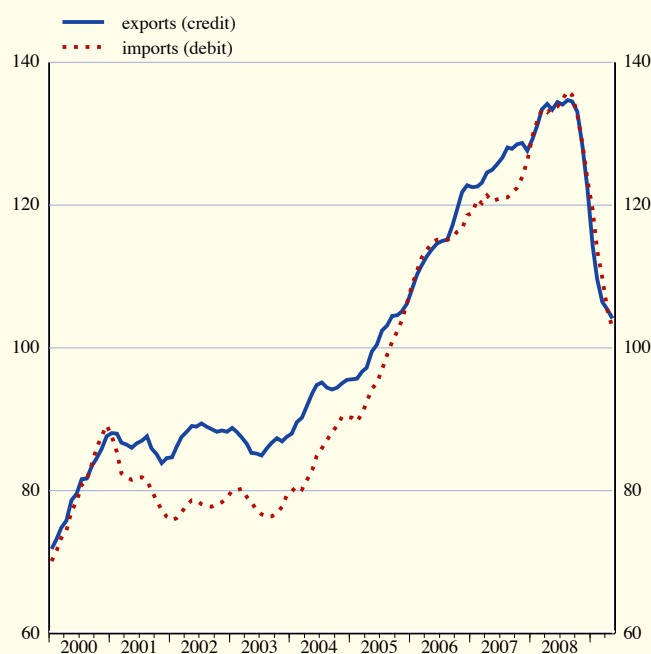
(EUR billions; transactions)

### 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	Debit				
											Workers remittances	Workers remittances			
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	2,761.1	2,862.0	-101.0	1,579.5	1,585.5	506.5	463.8	586.0	627.3	89.0	6.7	185.5	21.3	25.7	13.7
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	674.8	704.2	-29.5	378.4	379.0	127.3	121.0	141.7	151.5	27.4	1.8	52.7	5.5	4.7	3.8
2009 Q1	560.0	602.4	-42.4	308.3	318.6	108.9	108.1	117.7	120.3	25.1	1.4	55.4	4.9	4.2	2.6
2009 Mar.	194.1	201.0	-7.0	110.9	107.6	37.1	37.1	41.6	39.0	4.4	.	17.3	.	1.9	1.1
Apr.	185.8	195.2	-9.4	104.1	100.2	36.7	34.3	39.6	46.8	5.4	.	13.8	.	2.7	0.7
May	183.7	196.6	-13.0	98.9	96.7	37.0	34.1	42.0	53.8	5.8	.	12.1	.	0.9	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	653.8	697.1	-43.2	366.6	370.4	125.8	117.3	139.0	160.3	22.5	.	49.0	.	.	.
2009 Q1	581.4	625.7	-44.3	319.3	329.7	120.0	115.3	121.6	133.0	20.5	.	47.7	.	.	.
2008 Dec.	206.0	221.0	-15.0	114.8	117.7	40.4	36.2	43.0	50.5	7.7	.	16.5	.	.	.
2009 Jan.	197.1	218.8	-21.7	107.3	115.4	41.5	39.2	42.3	47.9	6.0	.	16.2	.	.	.
Feb.	194.2	206.9	-12.7	106.9	108.0	39.4	37.8	40.0	45.9	7.9	.	15.1	.	.	.
Mar.	190.1	200.1	-10.0	105.2	106.3	39.2	38.3	39.3	39.1	6.6	.	16.4	.	.	.
Apr.	187.6	193.7	-6.1	104.1	101.7	38.7	35.7	38.6	41.5	6.2	.	14.8	.	.	.
May	189.4	190.6	-1.2	103.1	100.2	38.3	36.0	41.6	40.0	6.4	.	14.4	.	.	.

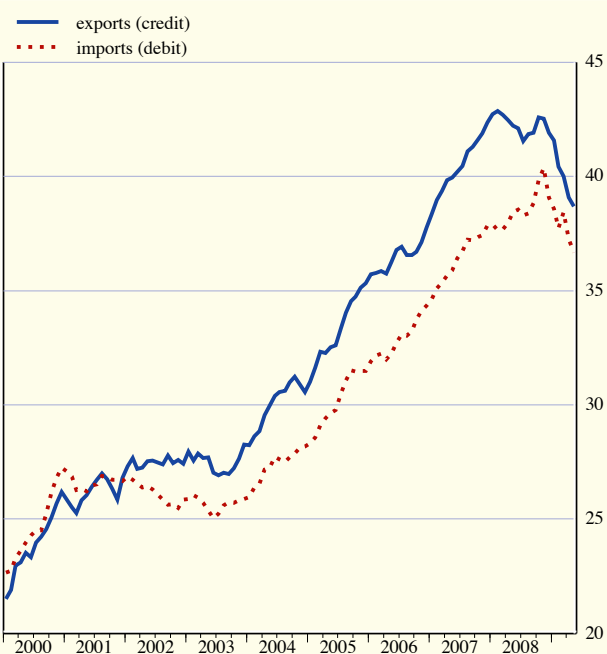
### C32 B.o.p. goods

(EUR billions, seasonally adjusted; three-month moving average)



### C33 B.o.p. services

(EUR billions, seasonally adjusted; three-month moving average)



Source: ECB.



## 7.2 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	566.9	616.8	189.4	61.9	134.5	47.4	29.8	25.5	42.7	124.4	123.7	128.1	181.3	204.3
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	136.8	148.8	41.5	8.3	36.3	11.4	8.4	6.3	8.4	21.0	31.0	34.1	47.5	51.0
2009 Q1	4.6	2.1	113.1	118.3	38.9	12.9	28.5	17.1	5.2	5.4	7.3	13.5	25.8	33.1	35.8	37.7

### 3. Geographical breakdown

(cumulated transactions)

	Total	European Union 27 (outside the euro area)						Brazil	Canada	China	India	Japan	Russia	Switzerland	United States	Other
		Total	Denmark	Sweden	United Kingdom	Other EU countries	EU institutions									
2008 Q2 to 2009 Q1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Credits																
<b>Current account</b>	2,640.6	949.6	57.8	80.4	487.6	267.2	56.5	39.1	34.2	83.1	29.8	54.9	96.1	183.3	383.7	786.8
Goods	1,497.5	509.5	34.7	50.4	217.4	206.9	0.0	21.8	18.0	64.0	22.4	32.3	73.0	90.9	183.2	482.5
Services	498.5	166.8	12.5	13.1	107.1	28.6	5.6	7.5	6.7	14.7	5.6	11.1	13.5	49.3	77.7	145.5
Income	556.6	210.6	9.8	15.4	150.1	28.5	6.7	9.6	8.8	4.0	1.7	11.2	9.2	36.3	115.9	149.3
Investment income	537.8	204.1	9.7	15.2	148.5	27.8	2.9	9.5	8.7	4.0	1.7	11.2	9.1	29.3	114.1	146.0
Current transfers	88.1	62.7	0.8	1.6	12.9	3.2	44.2	0.2	0.7	0.3	0.1	0.4	0.4	6.8	6.9	9.5
<b>Capital account</b>	21.0	17.7	0.1	0.0	1.2	0.2	16.2	0.0	0.0	0.0	0.0	0.0	0.1	0.5	1.4	1.1
Debits																
<b>Current account</b>	2,766.8	870.3	46.6	80.3	419.8	221.2	102.4	-	31.2	-	-	96.7	-	178.2	388.9	-
Goods	1,511.3	412.0	29.7	47.1	164.1	171.1	0.0	26.6	14.0	177.7	20.7	52.7	101.1	79.1	141.9	485.4
Services	465.0	140.6	8.3	11.3	87.7	33.1	0.2	5.6	6.8	11.3	4.6	8.3	9.0	39.6	97.0	142.4
Income	603.9	204.7	7.6	20.7	155.7	12.1	8.6	-	8.6	-	-	35.2	-	53.5	142.0	-
Investment income	593.4	198.6	7.5	20.6	154.2	7.7	8.6	-	8.6	-	-	35.1	-	53.0	141.0	-
Current transfers	186.5	112.9	1.0	1.2	12.4	4.8	93.6	1.5	1.8	2.5	0.7	0.6	0.5	6.0	8.0	52.0
<b>Capital account</b>	13.4	2.5	0.0	0.1	1.2	0.2	1.0	0.2	1.1	0.1	0.2	0.1	0.1	0.6	1.4	7.3
Net																
<b>Current account</b>	-126.1	79.3	11.3	0.1	67.7	46.1	-45.9	-	3.0	-	-	-41.8	-	5.1	-5.1	-
Goods	-13.8	97.4	5.0	3.3	53.4	35.8	0.0	-4.8	3.9	-113.7	1.7	-20.4	-28.1	11.8	41.3	-2.9
Services	33.5	26.2	4.2	1.8	19.4	-4.5	5.3	1.9	0.0	3.4	1.0	2.8	4.5	9.8	-19.3	3.1
Income	-47.4	5.9	2.3	-5.3	-5.6	16.4	-1.9	-	0.2	-	-	-24.0	-	-17.2	-26.1	-
Investment income	-55.7	5.5	2.2	-5.4	-5.7	20.1	-5.7	-	0.2	-	-	-23.9	-	-23.7	-26.9	-
Current transfers	-98.4	-50.2	-0.2	0.4	0.6	-1.6	-49.4	-1.2	-1.1	-2.2	-0.6	-0.2	-0.1	0.7	-1.1	-42.5
<b>Capital account</b>	7.5	15.2	0.1	-0.1	0.0	0.0	15.2	-0.1	-1.0	-0.1	-0.2	-0.1	0.0	-0.1	0.0	-6.2

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 Q4	13,069.7	14,873.5	-1,803.9	141.0	160.4	-19.5	3,742.5	3,223.1	3,723.6	5,985.8	1.2	5,228.2	5,664.6	374.2
2009 Q1	12,776.8	14,762.3	-1,985.5	138.9	160.5	-21.6	3,771.7	3,229.1	3,609.5	6,029.9	-44.8	5,044.7	5,503.3	395.7
<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 Q4	-859.4	-311.8	-547.6	-36.4	-13.2	-23.2	-34.9	24.4	-557.5	-43.2	-22.0	-248.3	-292.9	3.3
2009 Q1	-292.8	-111.2	-181.6	-13.3	-5.1	-8.3	29.2	6.0	-114.0	44.0	-46.0	-183.6	-161.3	21.6
<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	698.5	-303.3	4.3	7.5	-3.3	348.1	105.8	-20.2	421.4	56.7	6.7	171.4	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	-246.8	-126.3	-15.8	-10.4	-5.3	47.6	-30.1	-160.7	43.4	16.7	-277.1	-260.1	0.4
2009 Q1	-246.1	-98.2	-147.9	-11.2	-4.5	-6.7	79.3	40.8	-72.2	107.2	-14.3	-233.2	-246.2	-5.7
2009 Jan.	8.8	54.2	-45.4	.	.	.	24.9	15.5	31.7	34.1	-7.2	-35.2	4.6	-5.3
Feb.	-132.4	-97.9	-34.5	.	.	.	21.0	12.5	-40.9	40.5	-2.9	-108.4	-150.9	-1.2
Mar.	-122.5	-54.6	-68.0	.	.	.	33.4	12.8	-63.1	32.6	-4.2	-89.6	-100.0	0.8
Apr.	78.7	76.2	2.5	.	.	.	59.2	54.7	-0.6	-9.6	-7.7	28.0	31.1	-0.1
May	-140.2	-115.5	-24.7	.	.	.	11.9	18.0	10.3	64.0	-10.3	-154.2	-197.5	2.3
<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	4.7	-	.	.	.	10.0	3.4	-0.7	7.0	.	0.1	3.2	1.1
2009 Q1	-3.0	0.1	-	.	.	.	7.2	1.7	-4.0	6.3	.	-9.5	-7.1	-1.9

Source: ECB.

1) Net financial derivatives are included in assets.

## 7.3 Financial account

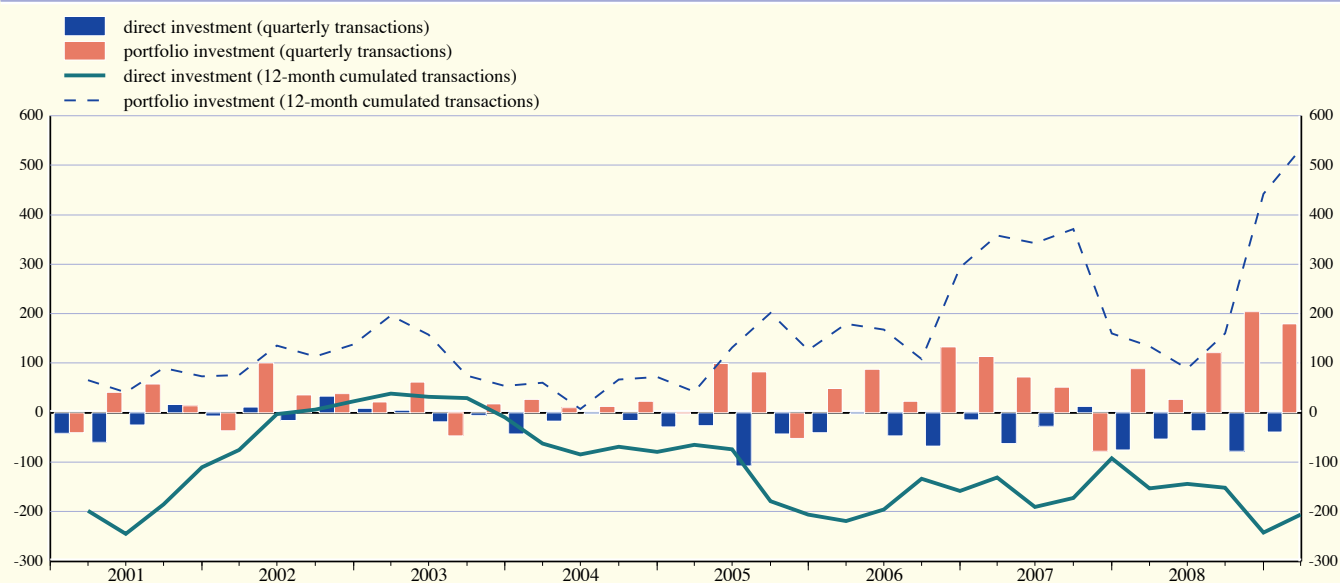
(EUR billions and annual growth rates; outstanding amounts and growth rates at end of period, transactions during period)

### 2. Direct investment

	By resident units abroad							By non-resident units in the euro area						
	Total	Equity capital and reinvested earnings			Other capital (mostly inter-company loans)			Total	Equity capital and reinvested earnings			Other capital (mostly inter-company loans)		
		Total	MFI	Non-MFI	Total	MFI	Non-MFI		Total	into MFI	into Non-MFI	Total	to MFI	to Non-MFI
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Outstanding amounts (international investment position)														
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 Q4	3,742.5	2,951.6	248.7	2,703.0	790.9	6.1	784.7	3,223.1	2,394.4	75.8	2,318.6	828.7	17.1	811.6
2009 Q1	3,771.7	2,953.9	254.8	2,699.0	817.8	12.0	805.8	3,229.1	2,403.7	77.7	2,325.9	825.5	17.3	808.2
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	348.1	227.5	14.0	213.5	120.6	-0.2	120.8	105.8	76.9	-1.3	78.2	28.9	1.5	27.4
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	47.6	27.9	5.8	22.1	19.7	-0.3	20.0	-30.1	8.6	0.0	8.6	-38.7	-0.2	-38.6
2009 Q1	79.3	36.2	9.1	27.1	43.1	0.9	42.2	40.8	34.7	1.0	33.7	6.1	0.1	5.9
2009 Jan.	24.9	14.5	4.2	10.3	10.4	1.4	9.0	15.5	12.0	2.2	9.8	3.6	0.3	3.3
Feb.	21.0	8.7	0.9	7.8	12.3	0.7	11.6	12.5	8.8	0.5	8.3	3.6	0.1	3.6
Mar.	33.4	13.1	4.0	9.0	20.4	-1.2	21.6	12.8	13.9	-1.7	15.7	-1.1	-0.2	-1.0
Apr.	59.2	49.7	6.7	43.0	9.5	1.5	7.9	54.7	47.8	0.3	47.5	6.9	0.1	6.8
May	11.9	6.8	-0.1	6.9	5.1	0.1	5.1	18.0	4.9	-0.1	5.0	13.1	0.1	13.0
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	10.0	8.1	5.7	8.3	17.8	-4.5	18.0	3.4	3.3	-1.9	3.5	3.9	8.4	3.8
2009 Q1	7.2	5.1	6.0	5.0	15.8	-19.9	16.2	1.7	2.9	-0.7	3.0	-1.8	8.3	-2.0

### 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

	Total		Equity				Debt instruments									
	1	2	Total		Non-MFIs		Bonds and notes			Money market instruments			15	16		
			3	4	5	6	7	8	9	10	11	12			13	14
Euro-system	General government	Euro-system	General government	Euro-system	General government	Euro-system	General government	Euro-system	General government							
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 Q4	3,723.6	1,144.8	70.6	3.0	1,074.1	28.0	2,134.3	955.1	19.9	1,179.2	17.0	444.5	376.9	61.6	67.6	1.2
2009 Q1	3,609.5	1,053.7	62.2	2.9	991.4	27.9	2,089.4	913.5	17.1	1,175.9	16.1	466.5	389.1	58.9	77.4	1.7
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	-20.2	-113.2	-55.4	0.6	-57.8	-0.5	88.6	48.2	10.3	40.4	2.4	4.4	21.8	21.2	-17.4	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	-160.7	-49.9	-4.0	0.4	-45.8	-1.3	-62.1	-16.7	-1.1	-45.4	-0.5	-48.8	-22.1	-5.1	-26.7	0.2
2009 Q1	-72.2	-34.4	-7.9	0.0	-26.6	0.2	-57.4	-40.5	-2.4	-16.9	-1.2	19.7	13.4	-0.5	6.3	0.4
2009 Jan.	31.7	12.9	2.8	0.0	10.1	.	-2.3	-2.4	-1.1	0.1	.	21.2	17.5	-0.3	3.7	.
Feb.	-40.9	-28.9	-5.4	0.0	-23.5	.	-16.2	-5.3	0.1	-10.9	.	4.2	2.6	0.0	1.6	.
Mar.	-63.1	-18.4	-5.3	0.0	-13.2	.	-38.9	-32.8	-1.4	-6.1	.	-5.7	-6.6	-0.1	0.9	.
Apr.	-0.6	-2.5	0.1	-0.1	-2.6	.	6.9	-6.6	0.6	13.5	.	-5.1	0.3	1.3	-5.4	.
May	10.3	3.0	1.2	0.0	1.9	.	1.2	-9.8	-0.2	11.1	.	6.0	2.1	-1.9	3.8	.
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	-0.7	-6.6	-37.8	26.0	-3.9	-1.3	4.0	5.1	48.9	3.2	14.6	0.7	6.1	82.5	-22.2	52.8
2009 Q1	-4.0	-7.3	-23.2	19.1	-6.1	0.8	-0.4	-2.3	7.9	1.1	4.3	-10.1	-5.9	51.3	-27.8	74.6

## 4. Portfolio investment liabilities

	Total		Equity				Debt instruments								
	1	2	Total		Non-MFIs		Bonds and notes			Money market instruments			11	12	
			3	4	5	6	7	8	9	10					
											MFIs	Non-MFIs			MFIs
General government	General government	General government	General government	General government	General government	General government	General government	General government							
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 Q4	5,985.8	2,135.2	574.2	1,561.0	3,255.2	1,148.8	2,106.4	1,374.1	595.4	172.4	423.0	355.9			
2009 Q1	6,029.9	2,065.0	593.5	1,471.5	3,337.3	1,139.0	2,198.3	1,437.6	627.6	169.8	457.9	405.3			
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	421.4	-73.5	94.8	-168.6	274.7	42.3	232.6	205.5	220.2	-6.3	226.4	199.2			
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	43.4	-42.4	19.2	-61.9	-20.0	-44.8	24.7	40.8	105.8	-10.5	116.3	109.1			
2009 Q1	107.2	-10.9	4.3	-15.3	82.1	-13.7	95.8	65.4	36.0	1.2	34.8	51.1			
2009 Jan.	34.1	-32.1	.	.	27.4	.	.	.	38.8	.	.	.			
Feb.	40.5	-3.2	.	.	39.6	.	.	.	4.1	.	.	.			
Mar.	32.6	24.3	.	.	15.2	.	.	.	-6.9	.	.	.			
Apr.	-9.6	-21.9	.	.	-15.4	.	.	.	27.7	.	.	.			
May	64.0	11.0	.	.	53.5	.	.	.	-0.5	.	.	.			
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	7.0	-3.2	13.0	-8.7	9.6	3.8	13.1	18.9	65.6	-3.5	135.5	144.6			
2009 Q1	6.3	-5.6	3.8	-9.1	9.6	0.9	14.6	17.6	65.3	-5.9	133.9	135.0			

Source: ECB.

## 7.3 Financial account

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

### 5. Other investment assets

	Total	Eurosystem			MFIs (excluding Eurosystem)			General government				Other sectors			
		Total	Loans/ currency and deposits	Other assets	Total	Loans/ currency and deposits	Other assets	Trade credits	Loans/currency and deposits		Trade credits	Loans/currency and deposits			
									Currency and deposits	Currency and deposits		Currency and deposits	Currency and deposits		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
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 Q4	5,228.2	28.8	27.7	1.0	3,273.9	3,214.9	59.0	101.2	12.0	41.2	7.2	1,824.3	189.2	1,409.7	443.7
2009 Q1	5,044.7	21.7	21.4	0.3	3,093.8	3,037.2	56.6	106.7	12.0	45.4	14.5	1,822.5	176.9	1,416.2	446.2
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	6.7	-9.0	-9.0	0.0	-44.7	-60.0	15.3	-6.6	-1.1	-6.7	-5.9	67.0	9.3	-1.2	-44.8
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
Q4	-277.1	-6.9	-7.0	0.0	-240.9	-250.8	10.0	0.0	-0.3	1.0	-1.9	-29.3	-9.5	-19.0	-3.7
2009 Q1	-233.2	-8.2	-8.2	0.0	-222.1	-220.3	-1.8	6.5	0.0	5.8	9.1	-9.4	-8.6	-1.1	-1.7
2009 Jan.	-35.2	-2.3	.	.	-39.6	.	.	13.5	.	.	12.7	-6.8	.	.	4.2
Feb.	-108.4	-3.6	.	.	-92.5	.	.	-7.8	.	.	-4.5	-4.4	.	.	-9.8
Mar.	-89.6	-2.2	.	.	-90.0	.	.	0.8	.	.	0.8	1.9	.	.	4.0
Apr.	28.0	1.6	.	.	39.6	.	.	-9.9	.	.	-10.2	-3.4	.	.	-7.3
May	-154.2	0.0	.	.	-65.2	.	.	3.8	.	.	3.7	-92.8	.	.	-21.4
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
Q4	0.1	-26.4	-27.1	5.0	-1.3	-1.8	21.7	-6.2	-8.6	-14.1	-45.7	3.8	4.8	-0.1	-10.6
2009 Q1	-9.5	-57.3	-58.7	6.0	-13.6	-14.1	11.2	4.6	-6.4	9.0	35.9	-0.9	-2.9	-3.1	-14.2

### 6. Other investment liabilities

	Total	Eurosystem			MFIs (excluding Eurosystem)			General government				Other sectors			
		Total	Loans/ currency and deposits	Other liabilities	Total	Loans/ currency and deposits	Other liabilities	Total	Trade credits	Loans	Other liabilities	Total	Trade credits	Loans	Other liabilities
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 Q4	5,664.6	481.5	481.2	0.3	3,762.9	3,704.2	58.6	61.7	0.0	57.7	3.9	1,358.6	166.4	1,076.7	115.5
2009 Q1	5,503.3	404.0	400.9	3.2	3,708.6	3,650.0	58.6	58.6	0.0	55.2	3.4	1,332.1	161.0	1,057.1	114.0
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	171.4	280.0	280.0	0.1	-181.4	-192.3	10.9	9.5	0.0	10.9	-1.4	63.2	6.3	57.5	-0.5
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
Q4	-260.1	110.6	110.7	-0.1	-411.7	-418.0	6.3	9.0	0.0	8.6	0.4	32.0	-3.9	29.0	6.8
2009 Q1	-246.2	-81.5	-84.4	2.9	-112.1	-110.8	-1.3	-2.1	0.0	-0.9	-1.2	-50.5	-8.8	-37.1	-4.7
2009 Jan.	4.6	-59.1	.	.	107.8	.	.	2.0	.	.	.	-46.1	.	.	.
Feb.	-150.9	-28.1	.	.	-105.7	.	.	-5.2	.	.	.	-11.9	.	.	.
Mar.	-100.0	5.6	.	.	-114.2	.	.	1.1	.	.	.	7.5	.	.	.
Apr.	31.1	-28.9	.	.	37.8	.	.	-0.6	.	.	.	22.8	.	.	.
May	-197.5	-20.2	.	.	-67.3	.	.	0.1	.	.	.	-110.2	.	.	.
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
Q4	3.2	140.9	141.1	20.8	-4.6	-4.9	16.1	18.3	-4.8	23.5	-28.3	4.9	4.0	5.6	-0.8
2009 Q1	-7.1	82.4	81.3	709.6	-13.6	-14.0	9.2	15.5	0.9	17.9	-19.4	-2.3	-3.5	-1.6	-7.5

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	
Outstanding amounts (international investment position)																
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 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
2008 Q4	374.2	217.0	349.190	4.7	7.3	145.1	7.6	8.0	129.5	0.6	111.0	17.9	0.0	0.1	262.8	-245.7
2009 Q1	395.7	240.4	349.059	4.8	8.4	142.1	8.4	3.7	129.9	0.6	108.2	21.1	0.1	0.1	155.4	-141.4
2009 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
2009 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
2009 June	381.5	229.8	347.546	4.2	11.3	136.1	9.5	6.5	119.9	-	-	-	0.2	0.1	77.6	-65.6
Transactions																
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	-	-
2008 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	-0.9	-	0.0	0.9	-5.7	2.2	-4.9	-3.7	0.0	-6.6	2.9	0.6	0.0	-	-
Growth rates																
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	-	-	-
2008 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	-1.9	-1.1	-	4.6	131.3	-6.3	139.6	-90.4	6.7	2.6	3.8	24.9	1,001.7	-	-	-

Source: ECB.

## 7.3 Financial account

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

### 8. Geographical breakdown

	Total		European Union 27 (outside the euro area)					Canada	China	Japan	Switzer-land	United States	Offshore financial centres	Internat. organisations	Other countries
	Total	Denmark	Sweden	United Kingdom	Other EU countries	EU institutions									
	1	2	3	4	5	6	7								
<b>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 Q2 to 2009 Q1</b>	<b>Cumulated transactions</b>														
<b>Direct investment</b>	205.6	86.5	-0.4	7.1	54.4	25.4	0.0	-7.4	3.1	-1.2	-34.7	91.9	18.2	0.0	49.4
Abroad	260.6	82.1	1.7	19.3	40.2	20.9	0.0	2.3	3.3	3.8	-20.2	98.1	35.5	0.0	55.7
Equity/reinvested earnings	146.2	33.7	0.9	7.9	11.7	13.1	0.0	4.4	4.1	3.5	-18.5	63.7	18.0	0.0	37.3
Other capital	114.4	48.4	0.8	11.4	28.4	7.8	0.0	-2.1	-0.7	0.3	-1.7	34.3	17.5	0.0	18.5
In the euro area	55.0	-4.5	2.1	12.2	-14.3	-4.5	0.0	9.7	0.3	5.0	14.6	6.2	17.3	0.0	6.3
Equity/reinvested earnings	69.1	-8.6	0.1	6.8	-17.5	2.0	0.0	7.8	0.2	2.8	7.7	23.2	22.8	0.0	13.1
Other capital	-14.1	4.1	2.0	5.4	3.2	-6.5	0.0	1.9	0.0	2.2	6.9	-17.0	-5.5	0.0	-6.8
<b>Portfolio investment assets</b>	-159.3	30.2	7.2	-3.1	24.4	-2.8	4.6	13.0	-1.3	-16.0	-0.4	-86.9	-77.4	2.7	-23.4
Equity	-103.2	-16.6	0.9	-4.1	-12.8	-0.5	0.1	9.0	-1.1	-13.8	2.3	-37.4	-28.6	0.0	-17.0
Debt instruments	-56.1	46.8	6.3	1.0	37.2	-2.3	4.5	4.0	-0.2	-2.2	-2.6	-49.5	-48.8	2.7	-6.4
Bonds and notes	-5.8	61.8	3.4	4.2	54.5	-3.5	3.3	3.6	-0.1	-13.1	0.4	-20.2	-53.1	3.1	11.8
Money market instruments	-50.2	-15.0	3.0	-3.2	-17.3	1.2	1.3	0.5	-0.1	10.9	-3.1	-29.3	4.3	-0.3	-18.2
<b>Other investment</b>	-101.6	-240.2	-12.6	-5.8	-265.0	59.3	-16.1	-5.1	-9.3	44.5	19.7	-123.2	118.6	12.2	81.0
Assets	-521.8	-325.7	-23.6	-13.6	-341.1	52.7	-0.1	1.4	-9.3	-17.5	-51.7	-134.5	8.1	-9.4	16.8
General government	4.7	4.5	-1.3	-0.2	6.1	-0.5	0.4	0.0	0.0	0.0	0.0	0.1	0.0	1.2	-1.2
MFIs	-510.4	-294.6	-18.5	-11.4	-313.6	49.2	-0.4	0.2	-10.6	-8.0	-48.9	-94.9	-16.0	-10.5	-27.0
Other sectors	-16.1	-35.6	-3.8	-2.0	-33.6	3.9	-0.2	1.2	1.3	-9.5	-2.8	-39.7	24.1	0.0	45.0
Liabilities	-420.1	-85.5	-11.0	-7.7	-76.1	-6.6	16.0	6.5	-0.1	-62.0	-71.4	-11.4	-110.5	-21.6	-64.1
General government	7.9	2.8	0.0	-0.1	1.5	0.0	1.4	0.0	0.0	-0.1	0.0	0.1	0.1	5.0	0.1
MFIs	-397.1	-88.4	-11.1	-6.8	-73.8	-4.4	7.6	5.2	0.1	-59.7	-69.2	45.9	-121.4	-26.4	-83.2
Other sectors	-30.9	0.1	0.1	-0.9	-3.8	-2.3	7.0	1.3	-0.2	-2.2	-2.2	-57.3	10.8	-0.2	19.0

Source: ECB.

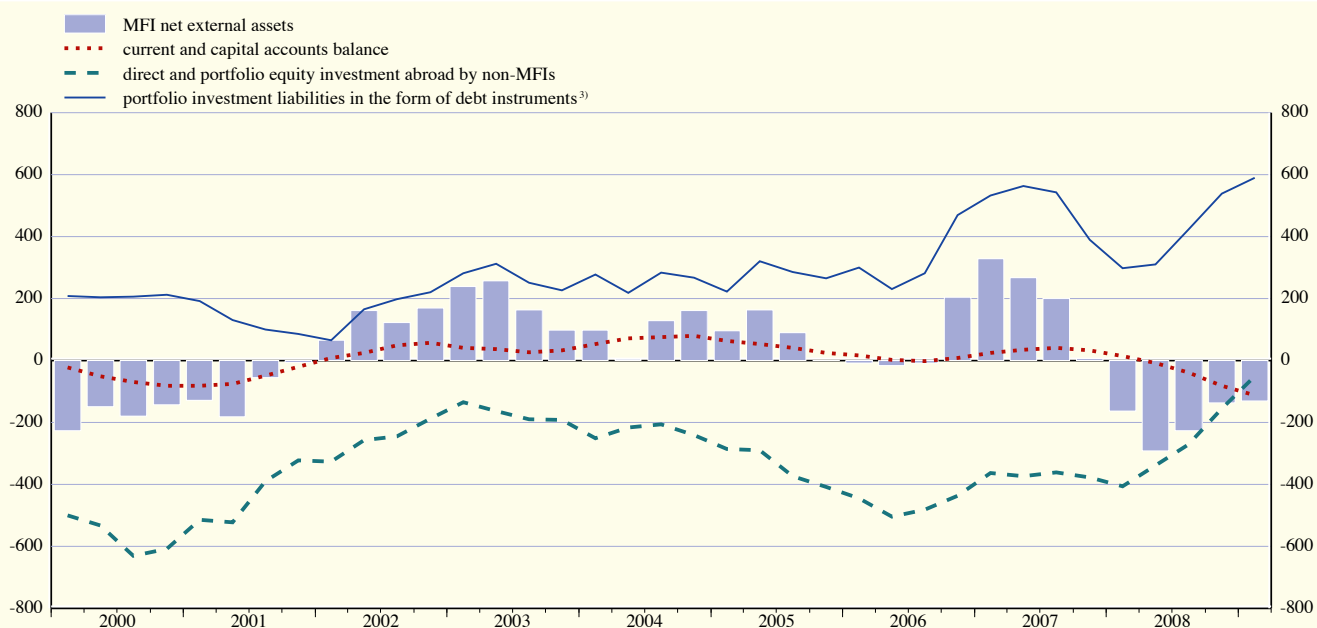
7.4 Monetary presentation of the balance of payments <sup>1)</sup>

(EUR billions; transactions)

	B.o.p. items balancing transactions in the external counterpart of M3										Memo: Transactions in the external counterpart of M3	
	Current and capital accounts balance	Direct investment		Portfolio investment			Other investment		Financial derivatives	Errors and omissions		Total of columns 1 to 10
		By resident units abroad (non-MFIs)	By non- resident units in the euro area	Assets Non-MFIs	Liabilities		Assets Non-MFIs	Liabilities Non-MFIs				
					Equity <sup>2)</sup>	Debt instruments <sup>3)</sup>						
1	2	3	4	5	6	7	8	9	10	11	12	
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	-81.9	-334.8	103.6	35.2	-124.0	538.3	-61.2	73.3	-56.6	-213.8	-122.0	-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	-26.8	-42.3	-30.7	117.9	-39.4	143.5	28.8	41.3	-16.5	-95.6	80.2	75.0
2009 Q1	-40.8	-69.3	40.6	37.2	-7.8	123.6	2.9	-52.6	14.3	-107.0	-58.9	-81.2
2008 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.	-7.6	-8.0	-2.0	75.6	-58.0	92.0	-17.3	41.2	-3.2	-67.4	45.2	42.5
Nov.	-14.2	-28.3	-21.0	12.9	3.0	60.7	3.0	19.2	-9.6	0.8	26.5	11.6
Dec.	-4.9	-6.0	-7.7	29.4	15.7	-9.3	43.1	-19.0	-3.7	-29.0	8.5	20.9
2009 Jan.	-28.3	-19.2	15.3	-13.9	-50.4	54.9	-6.7	-44.1	7.2	-17.2	-102.3	-121.0
Feb.	-6.5	-19.4	12.4	32.8	-0.2	57.5	12.3	-17.1	2.9	-28.0	46.7	44.7
Mar.	-6.1	-30.7	13.0	18.4	42.7	11.2	-2.7	8.6	4.2	-61.9	-3.3	-4.9
Apr.	-7.4	-51.0	54.6	-5.5	-29.1	27.6	13.3	22.2	7.7	9.9	42.3	32.8
May	-12.7	-11.9	17.9	-16.8	19.5	50.2	89.0	-110.1	10.3	-12.0	23.4	34.5
<i>12-month cumulated transactions</i>												
2009 May	-106.0	-295.9	135.0	136.6	-114.4	576.1	114.9	-96.8	12.1	-260.9	100.5	79.4

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	11.0	8.4	1,508.0	739.5	326.3	401.3	1,282.7	1,491.2	914.0	234.4	323.1	1,019.8	227.5	
2008	3.8	7.4	1,563.4	770.1	333.9	409.8	1,307.9	1,592.9	1,011.4	228.7	327.5	1,021.9	288.1	
2008 Q2	8.5	11.1	398.8	197.7	84.4	104.9	331.9	406.1	258.9	56.2	82.2	258.4	75.9	
Q3	5.6	12.6	399.5	199.0	84.2	102.8	331.4	411.5	269.6	58.3	82.4	258.5	85.5	
Q4	-4.9	-2.3	366.6	176.4	81.0	95.2	305.7	372.4	229.3	55.8	80.4	241.4	55.2	
2009 Q1	-21.3	-20.8	310.7	148.3	65.4	85.3	260.0	320.1	181.6	49.3	77.4	215.0	35.5	
2008 Dec.	-3.7	-5.7	117.1	55.1	27.0	30.6	98.5	117.4	69.9	18.2	26.4	77.9	14.6	
2009 Jan.	-24.9	-22.6	103.5	48.6	21.1	28.7	85.8	108.1	62.4	16.1	26.0	72.9	11.8	
Feb.	-23.6	-21.6	103.0	49.4	22.3	28.2	85.7	106.3	60.0	16.5	25.6	70.4	11.2	
Mar.	-15.4	-18.2	104.2	50.3	22.0	28.4	88.4	105.7	59.2	16.7	25.8	71.7	12.5	
Apr.	-26.4	-27.2	103.5	50.6	21.2	28.0	86.8	102.8	57.2	16.1	25.2	68.4	12.9	
May	-23.9	-27.5	100.7	.	.	.	84.2	99.9	.	.	.	66.7	.	
Volume indices (2000 = 100; annual percentage changes for columns 1 and 2)														
2007	8.6	6.8	144.4	141.3	153.1	144.5	142.1	129.1	123.1	143.3	141.5	134.8	107.7	
2008	1.6	-0.4	146.5	141.9	156.2	146.1	143.5	127.9	121.3	141.1	140.8	133.5	106.4	
2008 Q2	7.1	2.3	150.4	146.8	159.3	150.1	147.2	130.8	123.4	141.5	144.6	138.0	102.4	
Q3	2.7	1.3	148.4	144.5	157.9	145.8	145.0	126.8	121.0	146.1	141.3	134.5	106.6	
Q4	-7.5	-5.5	136.3	128.7	149.5	135.7	131.8	121.4	114.7	133.4	134.5	122.3	106.7	
2009 Q1	-21.3	-14.8	117.6	111.6	119.9	123.3	112.4	113.3	105.0	117.2	128.5	110.3	99.1	
2008 Dec.	-5.9	-4.5	130.7	121.5	148.0	130.8	126.7	118.7	112.1	126.2	131.9	117.4	109.8	
2009 Jan.	-24.9	-16.8	117.8	109.3	116.1	126.2	111.6	115.0	108.4	115.8	129.1	112.1	102.1	
Feb.	-23.7	-15.7	116.4	110.9	122.8	120.9	110.6	112.9	104.0	118.0	127.6	108.5	94.5	
Mar.	-15.4	-11.7	118.7	114.6	120.8	122.9	115.1	111.9	102.4	117.9	128.8	110.2	100.9	
Apr.	-25.4	-20.4	119.1	115.7	118.0	122.8	114.3	110.7	100.1	115.7	129.9	107.7	99.3	
May	.	.	.	.	.	.	.	.	.	.	.	.	.	

### 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	101.8	0.4	2.7	-0.5	0.9	1.8	0.4	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	25.2	1.5	112.7	6.5	0.2	-3.4	2.4	28.2	0.8
2008 Q4	102.7	0.7	2.6	1.3	2.7	-16.0	0.6	106.9	-1.7	0.9	-1.5	3.8	-8.5	0.1
2009 Q1	101.2	-1.3	-1.1	1.3	1.4	-32.3	-1.4	101.4	-8.4	-4.1	-0.3	2.7	-28.0	-2.4
Q2	100.9	-2.8	-3.9	1.5	0.9	-36.8	-2.8	.	.	.	.	.	.	.
2009 Jan.	101.3	-0.9	-0.2	1.2	1.3	-30.1	-1.0	101.5	-7.7	-2.9	-1.0	2.6	-26.2	-2.1
Feb.	101.4	-1.2	-1.3	1.4	1.5	-31.3	-1.3	101.6	-8.4	-4.3	-0.1	2.8	-27.9	-2.4
Mar.	100.9	-1.8	-2.0	1.5	1.3	-35.1	-1.9	101.1	-9.2	-5.0	0.3	2.7	-29.9	-2.8
Apr.	100.8	-2.1	-2.9	1.8	1.2	-36.1	-2.1	100.5	-10.8	-5.4	0.5	2.3	-33.8	-3.2
May	100.9	-2.9	-4.0	1.5	1.0	-37.8	-2.8	101.1	-13.1	-6.8	0.1	1.3	-37.2	-4.6
June	100.9	-3.5	-4.9	1.3	0.5	-36.4	-3.4	.	.	.	.	.	.	.

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	1,508.0	34.2	55.7	230.9	216.3	67.9	82.3	41.5	195.9	296.1	60.6	34.3	87.6	61.7	137.9
2008	1,563.4	35.0	54.2	221.7	231.5	78.5	86.3	42.8	186.9	308.3	65.7	33.7	100.7	68.3	149.3
2007 Q4	384.4	8.6	13.8	58.3	56.1	17.9	20.8	10.8	47.5	76.2	15.9	8.1	22.4	15.7	36.3
2008 Q1	398.5	8.9	14.0	57.3	59.1	19.7	21.3	12.3	49.6	79.2	17.2	8.8	24.2	16.2	36.7
Q2	398.8	9.1	14.5	58.3	59.9	20.3	22.1	11.3	47.4	77.9	16.8	8.5	25.0	16.7	36.4
Q3	399.5	9.0	14.1	56.5	60.3	20.8	21.8	10.8	46.3	76.7	16.0	8.3	26.7	17.9	38.5
Q4	366.6	8.0	11.6	49.6	52.3	17.7	21.1	8.4	43.6	74.5	15.7	8.1	24.8	17.5	37.6
2009 Q1	310.7	7.3	10.0	42.3	43.9	12.6	19.8	7.7	39.5	65.4	15.4	7.0	23.4	12.7	25.9
2008 Dec.	117.1	2.6	3.4	15.3	15.5	5.6	6.9	2.6	14.0	24.6	4.9	2.7	8.1	6.0	12.7
2009 Jan.	103.5	2.7	3.3	14.2	14.9	4.2	6.7	2.5	12.9	20.6	4.7	2.4	7.7	4.2	9.6
Feb.	103.0	2.3	3.4	13.9	14.2	4.3	6.7	2.5	12.8	22.2	5.1	2.4	7.9	4.3	8.5
Mar.	104.2	2.4	3.4	14.2	14.8	4.1	6.5	2.7	13.8	22.6	5.6	2.2	7.7	4.2	7.9
Apr.	103.5	2.3	3.2	14.2	14.6	4.2	6.4	2.7	12.6	23.2	5.6	2.3	7.7	4.2	8.3
May	100.7	.	.	.	.	3.8	6.3	2.8	12.4	23.3	5.6	2.2	7.5	4.1	.
<i>% share of total exports</i>															
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	6.4	4.4	9.6
<b>Imports (c.i.f.)</b>															
2007	1,491.2	28.8	52.2	169.6	169.6	102.2	67.2	32.4	131.4	455.6	172.6	59.1	113.4	75.2	93.6
2008	1,592.9	30.2	52.4	165.3	185.6	117.8	69.6	32.3	136.8	477.8	184.3	56.5	139.6	81.0	104.4
2007 Q4	385.0	7.1	13.3	42.7	44.1	28.6	16.6	8.3	32.4	114.8	43.5	14.8	31.0	20.2	25.9
2008 Q1	402.9	7.3	13.7	43.7	46.4	29.5	16.8	8.5	34.6	121.1	44.8	14.9	34.4	20.1	26.6
Q2	406.1	7.8	13.7	42.5	47.4	30.6	17.5	8.5	33.7	120.0	45.4	14.7	36.9	20.0	27.4
Q3	411.5	7.9	13.4	42.2	48.0	33.4	17.8	8.2	34.9	123.3	47.6	13.9	37.7	21.2	23.4
Q4	372.4	7.2	11.5	36.9	43.7	24.2	17.4	7.1	33.6	113.3	46.5	13.0	30.6	19.7	27.0
2009 Q1	320.1	6.9	9.4	31.4	39.2	17.4	16.7	6.6	33.0	98.7	42.3	11.6	23.6	14.9	22.4
2008 Dec.	117.4	2.4	3.5	11.1	13.1	7.0	5.7	2.1	11.5	36.0	15.1	4.2	9.7	6.3	8.9
2009 Jan.	108.1	2.3	3.1	10.8	12.9	6.2	5.6	2.1	10.3	34.1	14.6	4.0	8.0	4.9	7.9
Feb.	106.3	2.2	3.1	10.3	12.8	5.2	5.6	2.2	10.9	32.1	13.7	3.8	8.2	4.9	8.6
Mar.	105.7	2.3	3.1	10.3	13.5	6.0	5.5	2.3	11.8	32.5	13.9	3.8	7.4	5.1	5.9
Apr.	102.8	2.1	2.9	10.0	13.0	5.7	5.5	2.0	9.3	31.6	13.9	3.6	7.9	4.8	8.0
May	99.9	.	.	.	.	5.8	5.4	2.1	9.9	30.4	13.2	3.5	7.2	4.6	.
<i>% share of total imports</i>															
2008	100.0	1.9	3.3	10.4	11.6	7.4	4.4	2.0	8.6	30.0	11.6	3.5	8.8	5.1	6.6
<b>Balance</b>															
2007	16.8	5.5	3.5	61.3	46.7	-34.3	15.1	9.0	64.5	-159.6	-112.0	-24.8	-25.8	-13.4	44.3
2008	-29.5	4.7	1.8	56.4	45.9	-39.3	16.6	10.5	50.1	-169.5	-118.6	-22.8	-38.9	-12.7	44.8
2007 Q4	-0.6	1.6	0.5	15.7	12.0	-10.8	4.2	2.6	15.0	-38.6	-27.6	-6.7	-8.6	-4.6	10.4
2008 Q1	-4.4	1.5	0.3	13.6	12.6	-9.8	4.5	3.8	15.1	-42.0	-27.6	-6.1	-10.2	-3.9	10.1
Q2	-7.3	1.3	0.8	15.8	12.4	-10.3	4.6	2.8	13.7	-42.1	-28.6	-6.2	-11.9	-3.3	9.0
Q3	-12.0	1.1	0.7	14.3	12.3	-12.6	3.9	2.6	11.4	-46.6	-31.6	-5.6	-11.0	-3.3	15.1
Q4	-5.9	0.8	0.1	12.7	8.5	-6.6	3.6	1.3	9.9	-38.9	-30.7	-4.8	-5.8	-2.2	10.7
2009 Q1	-9.5	0.5	0.7	10.9	4.8	-4.8	3.2	1.1	6.4	-33.3	-26.9	-4.6	-0.3	-2.1	3.6
2008 Dec.	-0.3	0.2	-0.1	4.2	2.4	-1.4	1.2	0.4	2.5	-11.4	-10.1	-1.5	-1.6	-0.3	3.7
2009 Jan.	-4.7	0.4	0.2	3.4	2.0	-2.0	1.1	0.3	2.6	-13.5	-10.0	-1.6	-0.3	-0.7	1.7
Feb.	-3.3	0.0	0.2	3.6	1.5	-0.9	1.1	0.3	1.9	-9.9	-8.6	-1.4	-0.3	-0.6	-0.1
Mar.	-1.5	0.0	0.3	3.8	1.3	-1.8	1.0	0.4	1.9	-9.9	-8.3	-1.6	0.3	-0.8	2.0
Apr.	0.7	0.2	0.3	4.2	1.6	-1.5	0.9	0.7	3.3	-8.4	-8.3	-1.2	-0.2	-0.6	0.3
May	0.8	.	.	.	.	-1.9	0.9	0.7	2.5	-7.1	-7.6	-1.3	0.3	-0.5	.

Source: Eurostat.

# EXCHANGE RATES

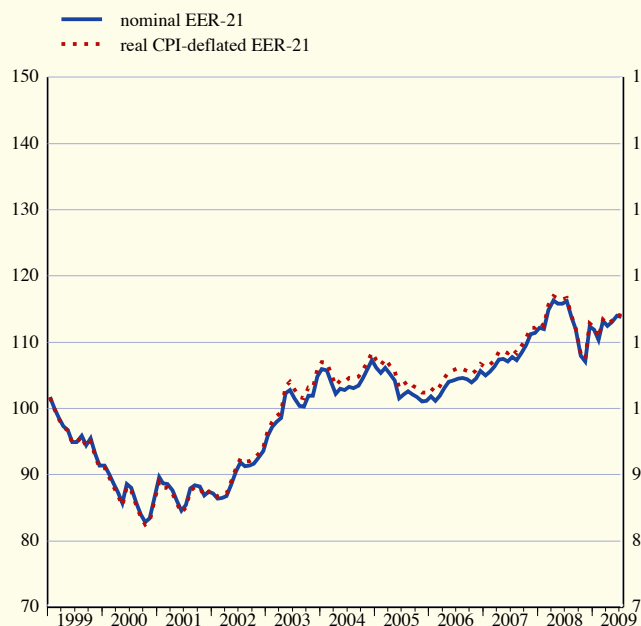
## 8.1 Effective exchange rates <sup>1)</sup>

(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	103.8
2007	107.9	109.0	107.8	106.4	104.5	104.4	114.3	107.1
2008	113.0	113.6	110.9	111.5	111.0	109.9	120.0	111.1
2008 Q2	116.0	116.7	114.1	113.2	113.6	112.1	122.9	114.1
Q3	114.1	114.3	111.2	111.3	112.7	109.9	120.8	111.6
Q4	109.1	109.6	106.2	106.3	107.4	105.5	116.7	107.7
2009 Q1	111.9	112.2	107.6	108.5	114.0	109.3	120.1	110.4
Q2	113.2	113.4	108.3	-	-	-	121.1	111.2
2008 July	116.2	116.7	113.5	-	-	-	123.2	114.1
Aug.	113.9	114.1	111.1	-	-	-	120.3	111.1
Sep.	112.0	112.1	109.0	-	-	-	118.7	109.4
Oct.	107.9	108.2	105.3	-	-	-	115.4	106.4
Nov.	107.1	107.5	104.3	-	-	-	114.5	105.6
Dec.	112.4	112.9	109.1	-	-	-	120.3	111.0
2009 Jan.	111.9	112.3	107.9	-	-	-	119.9	110.4
Feb.	110.4	110.7	106.1	-	-	-	118.6	109.1
Mar.	113.3	113.5	108.6	-	-	-	121.6	111.7
Apr.	112.5	112.8	107.8	-	-	-	120.5	110.7
May	113.0	113.2	108.3	-	-	-	120.9	110.9
June	114.0	114.2	108.7	-	-	-	122.0	111.9
July	113.8	114.0	108.3	-	-	-	121.9	111.8
	<i>% change versus previous month</i>							
2009 July	-0.2	-0.2	-0.4	-	-	-	-0.1	-0.2
	<i>% change versus previous year</i>							
2009 July	-2.1	-2.4	-4.5	-	-	-	-1.1	-2.0

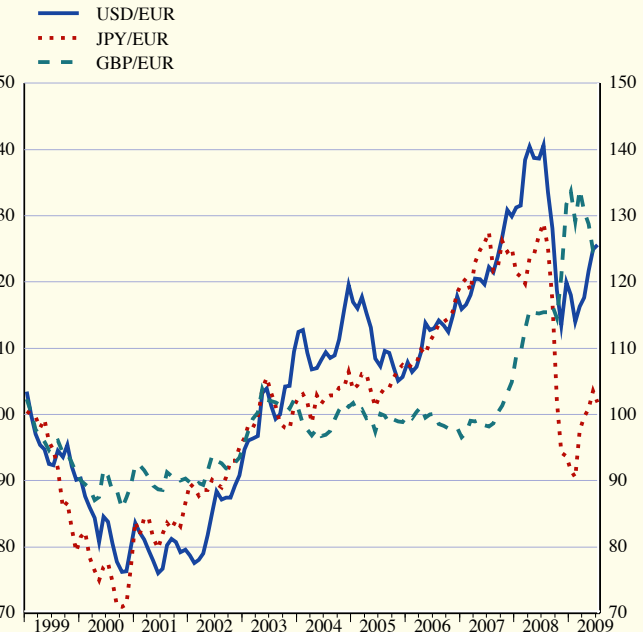
## C36 Effective exchange rates

(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 krone 1	Swedish krona 2	Pound sterling 3	US dollar 4	Japanese yen 5	Swiss franc 6	South Korean won 7	Hong Kong dollar 8	Singapore dollar 9	Canadian dollar 10	Norwegian krone 11	Australian dollar 12
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
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
2009 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
2009 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
2009 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
2009 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
2009 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
2009 July	7.4458	10.8262	0.86092	1.4088	133.09	1.5202	1,778.43	10.9182	2.0421	1.5824	8.9494	1.7504
% change versus previous month												
2009 July	0.0	-0.4	0.5	0.5	-1.7	0.4	0.5	0.5	0.3	0.4	0.1	0.2
% change versus previous year												
2009 July	-0.2	14.5	8.6	-10.7	-21.0	-6.1	10.8	-11.2	-4.7	-0.9	11.2	6.8
	Czech koruna 13	Estonian kroon 14	Latvian lats 15	Lithuanian litas 16	Hungarian forint 17	Polish zloty 18	Bulgarian lev 19	New Roma- nian 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		
2009 Jan.	27.169	15.6466	0.7043	3.4528	279.86	4.2300	1.9558	4.2354	7.3603	2.1233		
2009 Feb.	28.461	15.6466	0.7056	3.4528	298.30	4.6467	1.9558	4.2864	7.4309	2.1280		
2009 Mar.	27.231	15.6466	0.7083	3.4528	304.14	4.6210	1.9558	4.2828	7.4430	2.2340		
2009 Apr.	26.774	15.6466	0.7093	3.4528	295.26	4.4326	1.9558	4.2041	7.4172	2.1277		
2009 May	26.731	15.6466	0.7092	3.4528	281.93	4.4103	1.9558	4.1700	7.3515	2.1251		
2009 June	26.545	15.6466	0.7015	3.4528	280.46	4.5084	1.9558	4.2131	7.2954	2.1675		
2009 July	25.793	15.6466	0.7006	3.4528	272.06	4.2965	1.9558	4.2184	7.3307	2.1378		
% change versus previous month												
2009 July	-2.8	0.0	-0.1	0.0	-3.0	-4.7	0.0	0.1	0.5	-1.4		
% change versus previous year												
2009 July	9.6	0.0	-0.4	0.0	17.4	31.8	0.0	18.0	1.4	11.8		
	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
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
2009 Feb.	2.9685	8.7406	-	62.885	15,233.33	4.6466	18.6536	2.4851	60.832	45.8079	12.8005	45.156
2009 Mar.	3.0198	8.9210	-	66.803	15,477.84	4.7949	19.1278	2.4527	63.105	45.1451	12.9870	46.667
2009 Apr.	2.9197	9.0110	-	66.047	14,552.65	4.7562	17.7645	2.3123	63.462	44.2135	11.8784	46.741
2009 May	2.8232	9.3157	-	66.176	14,137.45	4.8057	17.9969	2.2663	64.600	43.5678	11.4475	47.241
2009 June	2.7391	9.5786	-	66.919	14,315.40	4.9305	18.6813	2.1967	67.036	43.5553	11.2718	47.844
2009 July	2.7221	9.6246	-	68.233	14,241.51	4.9963	18.8143	2.1873	67.724	44.3881	11.2007	47.969
% change versus previous month												
2009 July	-0.6	0.5	-	2.0	-0.5	1.3	0.7	-0.4	1.0	1.9	-0.6	0.3
% change versus previous year												
2009 July	8.5	-10.7	-	1.1	-1.4	-2.5	16.8	4.7	-4.2	20.5	-6.9	-9.2

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 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
Q2	3.1	1.0	1.1	0.2	4.4	4.9	3.6	4.3	6.1	1.7	2.1
2009 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
June	2.6	0.8	0.9	-0.5	3.1	3.9	3.7	4.2	5.9	1.6	1.8
<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>											
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
June	7.30	5.45	3.76	-	12.75	14.50	10.15	6.34	11.26	3.62	3.53
<b>3-month interest rate as a % per annum, period average</b>											
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
June	5.94	2.17	2.35	6.20	21.25	8.14	-	4.60	10.22	0.97	1.24
<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 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	-11.6	-5.4	1.9	-6.2	-6.3	-4.9
Q2	.	.	.	.	.	-22.6	.	.	.	-6.3	-5.6
<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	-2.5
2008	-24.5	-2.2	2.3	-7.7	-11.2	-9.7	-7.6	-4.4	-11.8	7.6	-1.5
2008 Q3	-14.2	-3.0	4.3	-6.5	-11.0	-8.4	-9.5	-4.2	-10.9	9.1	-2.1
Q4	-28.7	-5.2	2.6	-3.4	-7.0	-2.9	-10.0	-4.9	-8.3	5.5	-2.0
2009 Q1	-15.3	4.6	-0.1	1.2	4.1	4.6	1.1	3.2	-3.4	7.3	-2.4
<b>Unit labour costs</b>											
2007	14.2	2.9	4.2	19.7	27.3	10.3	5.2	2.6	.	4.7	3.0
2008	16.2	6.1	7.1	16.7	23.0	10.6	.	6.5	.	2.6	2.3
2008 Q3	13.0	4.1	7.9	19.6	24.5	12.0	-	4.8	-	2.0	1.7
Q4	17.5	7.9	9.1	13.8	18.5	9.3	-	12.2	-	6.0	1.6
2009 Q1	16.1	4.4	7.2	9.9	3.6	10.0	-	3.9	-	8.2	3.1
<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	7.4	9.6	6.4	6.1	5.3
2008	5.6	4.4	3.4	5.6	7.5	5.9	7.8	7.2	5.8	6.2	5.6
2008 Q4	5.2	4.5	3.8	7.7	10.3	8.1	8.1	6.9	5.9	6.9	6.3
2009 Q1	6.0	5.5	4.8	11.0	13.2	11.1	9.3	7.7	6.2	7.6	7.0
Q2	6.6	6.1	5.9	15.6	16.3	14.5	10.2	8.2	.	8.7	.
2009 Feb.	6.0	5.5	4.7	11.0	13.1	11.2	9.3	7.8	6.2	7.6	7.1
Mar.	6.4	5.8	5.2	12.3	14.1	12.1	9.7	8.0	6.2	8.0	7.2
Apr.	6.5	6.0	5.7	14.0	15.3	13.1	10.0	8.1	.	8.4	7.5
May	6.6	6.1	5.9	15.7	16.4	14.5	10.2	8.2	.	8.8	.
June	6.8	6.3	6.2	17.0	17.2	15.8	10.3	8.2	.	9.0	.

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

## 9.2 In the United States and Japan

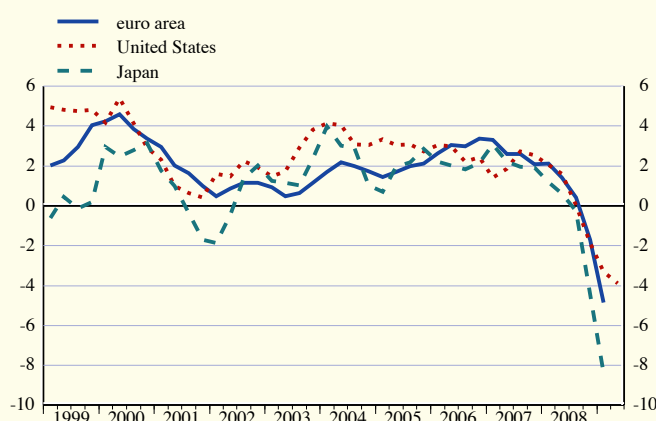
(annual percentage changes, unless otherwise indicated)

### 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	3.1	4.2	5.1	4.2	3.57	4.84	1.2441	-3.3	49.1
2006	3.2	2.8	2.7	2.7	4.6	5.0	5.20	5.41	1.2556	-2.2	48.5
2007	2.9	2.7	2.1	1.6	4.6	5.8	5.30	5.35	1.3705	-2.9	49.3
2008	3.8	0.9	0.4	-3.1	5.8	6.9	2.93	4.39	1.4708	-5.9	56.8
2008 Q2	4.4	0.2	1.6	-0.9	5.4	6.5	2.75	4.66	1.5622	-5.7	49.6
Q3	5.3	1.7	0.0	-3.9	6.1	6.1	2.91	4.69	1.5050	-5.9	52.8
Q4	1.6	1.6	-1.9	-8.7	6.9	8.3	2.77	3.71	1.3180	-8.0	56.8
2009 Q1	0.0	2.2	-3.3	-14.0	8.1	9.5	1.24	3.03	1.3029	.	.
Q2	-1.2	.	-3.9	-15.0	9.3	8.7	0.84	3.63	1.3632	.	.
2009 Mar.	-0.4	.	.	-14.7	8.5	9.3	1.27	3.15	1.3050	.	.
Apr.	-0.7	.	.	-14.4	8.9	8.3	1.11	3.17	1.3190	.	.
May	-1.3	.	.	-15.3	9.4	8.8	0.82	3.54	1.3650	.	.
June	-1.4	.	.	-15.4	9.5	9.0	0.62	4.17	1.4016	.	.
July	.	.	.	.	.	.	0.52	3.92	1.4088	.	.
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	-1.0	.	.	-27.9	.	2.6	0.53	1.41	132.59	.	.
2009 Mar.	-0.3	.	.	-34.2	4.8	2.2	0.62	1.26	127.65	.	.
Apr.	-0.1	.	.	-30.7	5.0	2.7	0.57	1.41	130.25	.	.
May	-1.1	.	.	-29.6	5.2	2.7	0.53	1.38	131.85	.	.
June	-1.8	.	.	-23.4	.	2.5	0.49	1.43	135.39	.	.
July	.	.	.	.	.	.	0.43	1.39	133.09	.	.

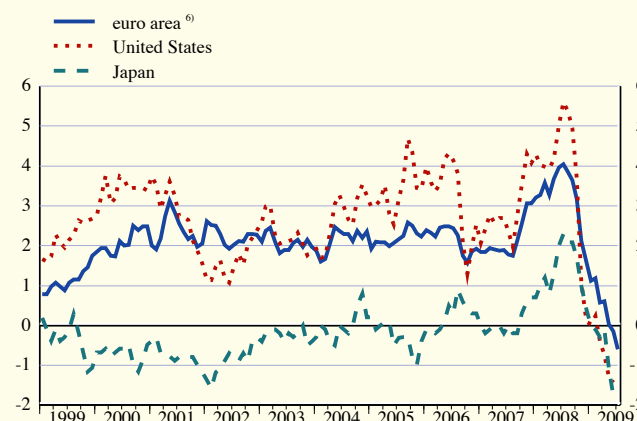
### C38 Real gross domestic product

(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.



## LIST OF CHARTS

C1	Monetary aggregates	S12
C2	Counterparts	S12
C3	Components of monetary aggregates	S13
C4	Components of longer-term financial liabilities	S13
C5	Loans to other financial intermediaries and non-financial corporations	S14
C6	Loans to households	S14
C7	Loans to government	S16
C8	Loans to non-euro area residents	S16
C9	Total deposits by sector (financial intermediaries)	S17
C10	Total deposits and deposits included in M3 by sector (financial intermediaries)	S17
C11	Total deposits by sector (non-financial corporations and households)	S18
C12	Total deposits and deposits included in M3 by sector (non-financial corporations and households)	S18
C13	Deposits by government and non-euro area residents	S19
C14	MFI holdings of securities	S20
C15	Total assets of investment funds	S24
C16	Total outstanding amounts and gross issues of securities, other than shares, issued by euro area residents	S35
C17	Net issues of securities, other than shares, seasonally adjusted and non-seasonally adjusted	S37
C18	Annual growth rates of long-term debt securities, by sector of the issuer, in all currencies combined	S38
C19	Annual growth rates of short-term debt securities, by sector of the issuer, in all currencies combined	S39
C20	Annual growth rates for quoted shares issued by euro area residents	S40
C21	Gross issues of quoted shares by sector of the issuer	S41
C22	New deposits with agreed maturity	S43
C23	New loans at floating rate and up to 1 year initial rate fixation	S43
C24	Euro area money market rates	S44
C25	3-month money market rates	S44
C26	Euro area spot yield curves	S45
C27	Euro area spot rates and spreads	S45
C28	Dow Jones EURO STOXX Broad, Standard & Poor's 500 and Nikkei 225	S46
C29	Deficit, borrowing requirement and change in debt	S59
C30	Maastricht debt	S59
C31	B.o.p. current account balance	S60
C32	B.o.p. goods	S61
C33	B.o.p. services	S61
C34	B.o.p. net direct and portfolio investment	S64
C35	Main b.o.p. transactions underlying the developments in MFI net external assets	S69
C36	Effective exchange rates	S72
C37	Bilateral exchange rates	S72
C38	Real gross domestic product	S75
C39	Consumer price indices	S75



## TECHNICAL NOTES

### RELATING TO THE EURO AREA OVERVIEW

#### CALCULATION OF GROWTH RATES FOR MONETARY DEVELOPMENTS

The average growth rate for the quarter ending in month  $t$  is calculated as:

$$a) \left( \frac{0.5I_t + \sum_{i=1}^2 I_{t-i} + 0.5I_{t-3}}{0.5I_{t-12} + \sum_{i=1}^2 I_{t-i-12} + 0.5I_{t-15}} - 1 \right) \times 100$$

where  $I_t$  is the index of adjusted outstanding amounts as at month  $t$  (see also below). Likewise, for the year ending in month  $t$ , the average growth rate is calculated as:

$$b) \left( \frac{0.5I_t + \sum_{i=1}^{11} I_{t-i} + 0.5I_{t-12}}{0.5I_{t-12} + \sum_{i=1}^{11} I_{t-i-12} + 0.5I_{t-24}} - 1 \right) \times 100$$

### RELATING TO SECTIONS 2.1 TO 2.6

#### CALCULATION OF TRANSACTIONS

Monthly transactions are calculated from monthly differences in outstanding amounts adjusted for reclassifications, other revaluations, exchange rate variations and any other changes which do not arise from transactions.

If  $L_t$  represents the outstanding amount at the end of month  $t$ ,  $C_t^M$  the reclassification adjustment in month  $t$ ,  $E_t^M$  the exchange rate adjustment and  $V_t^M$  the other revaluation adjustments, the transactions  $F_t^M$  in month  $t$  are defined as:

$$c) F_t^M = (L_t - L_{t-1}) - C_t^M - E_t^M - V_t^M$$

Similarly, the quarterly transactions  $F_t^Q$  for the quarter ending in month  $t$  are defined as:

$$d) F_t^Q = (L_t - L_{t-3}) - C_t^Q - E_t^Q - V_t^Q$$

where  $L_{t-3}$  is the amount outstanding at the end of month  $t-3$  (the end of the previous quarter)

and, for example,  $C_t^Q$  is the reclassification adjustment in the quarter ending in month  $t$ .

For those quarterly series for which monthly observations are now available (see below), the quarterly transactions can be derived as the sum of the three monthly transactions in the quarter.

#### CALCULATION OF GROWTH RATES FOR MONTHLY SERIES

Growth rates may be calculated from transactions or from the index of adjusted outstanding amounts. If  $F_t^M$  and  $L_t$  are defined as above, the index  $I_t$  of adjusted outstanding amounts in month  $t$  is defined as:

$$e) I_t = I_{t-1} \times \left( 1 + \frac{F_t^M}{L_{t-1}} \right)$$

The base of the index (of the non-seasonally adjusted series) is currently set as December 2006 = 100. Time series of the index of adjusted outstanding amounts are available on the ECB's website ([www.ecb.europa.eu](http://www.ecb.europa.eu)) under the "Money, banking and financial markets" sub-section of the "Statistics" section.

The annual growth rate  $a_t$  for month  $t$  – i.e. the change in the 12 months ending in month  $t$  – may be calculated using either of the following two formulae:

$$f) a_t = \left[ \prod_{i=0}^{11} \left( 1 + \frac{F_{t-i}^M}{L_{t-1-i}} \right) - 1 \right] \times 100$$

$$g) a_t = \left( \frac{I_t}{I_{t-12}} - 1 \right) \times 100$$

Unless otherwise indicated, the annual growth rates refer to the end of the indicated period. For example, the annual percentage change for the year 2002 is calculated in g) by dividing the index of December 2002 by the index of December 2001.



Growth rates for intra-annual periods may be derived by adapting formula g). For example, the month-on-month growth rate  $a_t^M$  may be calculated as:

$$h) \quad a_t^M = \left( \frac{I_t}{I_{t-1}} - 1 \right) \times 100$$

Finally, the three-month moving average (centred) for the annual growth rate of M3 is obtained as  $(a_{t+1} + a_t + a_{t-1})/3$ , where  $a_t$  is defined as in f) or g) above.

#### CALCULATION OF GROWTH RATES FOR QUARTERLY SERIES

If  $F_t^Q$  and  $L_{t-3}$  are defined as above, the index  $I_t$  of adjusted outstanding amounts for the quarter ending in month  $t$  is defined as:

$$i) \quad I_t = I_{t-3} \times \left( 1 + \frac{F_t^Q}{L_{t-3}} \right)$$

The annual growth rate in the four quarters ending in month  $t$ , i.e.  $a_t$ , may be calculated using formula g).

#### SEASONAL ADJUSTMENT OF THE EURO AREA MONETARY STATISTICS<sup>1</sup>

The approach used relies on a multiplicative decomposition through X-12-ARIMA.<sup>2</sup> The seasonal adjustment may include a day-of-the-week adjustment, and for some series is carried out indirectly by means of a linear combination of components. In particular, this is the case for M3, derived by aggregating the seasonally adjusted series for M1, M2 less M1, and M3 less M2.

The seasonal adjustment procedures are first applied to the index of adjusted outstanding amounts.<sup>3</sup> The resulting estimates of the seasonal factors are then applied to the levels and to the adjustments arising from reclassifications and

revaluations, in turn yielding seasonally adjusted transactions. Seasonal (and trading day) factors are revised at annual intervals or as required.

#### RELATING TO SECTIONS 3.1 TO 3.5

#### EQUALITY OF USES AND RESOURCES

In Table 3.1 the data conform to a basic accounting identity. As regards non-financial transactions, total uses equal total resources for each transaction category. Likewise in the financial account, this accounting identity is also reflected, i.e. for each financial instrument category, total transactions in financial assets equal total transactions in liabilities. In the other changes in assets account and the financial balance sheets, total financial assets equal total liabilities for each financial instrument category, with the exception of monetary gold and special drawing rights, which are by definition not a liability of any sector.

#### CALCULATION OF BALANCING ITEMS

The balancing items at the end of each account in Tables 3.1 and 3.2 are computed as follows:

The trade balance equals imports minus exports of goods and services vis-à-vis the euro area rest of the world.

1 For details, see "Seasonal adjustment of monetary aggregates and HICP for the euro area", ECB (August 2000) and the "Statistics" section of the ECB's website ([www.ecb.europa.eu](http://www.ecb.europa.eu)), under the "Money, banking and financial markets" sub-section.

2 For details, see Findley, D., Monsell, B., Bell, W., Otto, M., and Chen, B. C. (1998), "New Capabilities and Methods of the X-12-ARIMA Seasonal Adjustment Program", *Journal of Business and Economic Statistics*, 16, 2, pp.127-152, or "X-12-ARIMA Reference Manual", Time Series Staff, Bureau of the Census, Washington, D.C.

For internal purposes, the model-based approach of TRAMO-SEATS is also used. For details on TRAMO-SEATS, see Gomez, V. and Maravall, A. (1996), "Programs TRAMO and SEATS: Instructions for the User", Banco de España, Working Paper No. 9628, Madrid.

3 It follows that for the seasonally adjusted series, the level of the index for the base period, i.e. December 2001, generally differs from 100, reflecting the seasonality of that month.

Net operating surplus and mixed income is defined for resident sectors only and is calculated as gross value added (gross domestic product at market prices for the euro area) minus compensation of employees (uses) minus other taxes less subsidies on production (uses) minus consumption of fixed capital (uses).

Net national income is defined for resident sectors only and is computed as net operating surplus and mixed income plus compensation of employees (resources) plus taxes less subsidies on production (resources) plus net property income (resources minus uses).

Net disposable income is also only defined for resident sectors and equals net national income plus net current taxes on income and wealth (resources minus uses) plus net social contributions (resources minus uses) plus net social benefits other than social transfers in kind (resources minus uses) plus net other current transfers (resources minus uses).

Net saving is defined for resident sectors and is calculated as net disposable income plus the net adjustment for the change in net equity of households in pension funds reserves (resources minus uses) minus final consumption expenditure (uses). For the rest of the world, current external account is compiled as the trade balance plus all net income (resources minus uses).

Net lending/net borrowing is computed from the capital account as net saving plus net capital transfers (resources minus uses) minus gross capital formation (uses) minus acquisitions less disposals of non-produced non-financial assets (uses) plus consumption of fixed capital (resources). It can also be calculated in the financial account as total transactions in financial assets minus total transactions in liabilities (also known as changes in net financial worth (wealth) due to transactions). For the household and non-financial corporation sectors, there is a statistical discrepancy between these balancing items computed from the capital account and the financial account, respectively.

Changes in net worth (wealth) are calculated as changes in net worth (wealth) due to savings and capital transfers plus other changes in net financial worth (wealth). It currently excludes other changes in non-financial assets due to unavailability of data.

Net financial worth (wealth) is calculated as total financial assets minus total liabilities, whereas changes in net financial worth (wealth) are equal to the sum of changes in net financial worth (wealth) due to transactions (lending/ net borrowing from the financial account) and other changes in net financial worth (wealth).

Finally, changes in net financial worth (wealth) due to transactions are computed as total transactions in financial assets minus total transactions in liabilities and other changes in net financial worth (wealth) are calculated as total other changes in financial assets minus total other changes in liabilities.

#### RELATING TO SECTION 4.3 AND 4.4

#### CALCULATION OF GROWTH RATES FOR DEBT SECURITIES AND QUOTED SHARES

Growth rates are calculated on the basis of financial transactions and therefore exclude reclassifications, revaluations, exchange rate variations and any other changes which do not arise from transactions. They may be calculated from transactions or from the index of notional stocks. If  $N_t^M$  represents the transactions (net issues) in month  $t$  and  $L_t$  the level outstanding at the end of the month  $t$ , the index  $I_t$  of notional stocks in month  $t$  is defined as:

$$j) \quad I_t = I_{t-1} \times \left( 1 + \frac{N_t^M}{L_{t-1}} \right)$$

As a base, the index is set equal to 100 on December 2001. The growth rate  $a_t$  for month  $t$  corresponding to the change in the 12 months ending in month  $t$ , may be calculated using either of the following two formulae:

$$k) \quad a_t = \left[ \prod_{i=0}^{11} \left( 1 + \frac{N_{t-i}^M}{L_{t-1-i}} \right) - 1 \right] \times 100$$

$$l) \quad a_t = \left( \frac{I_t}{I_{t-12}} - 1 \right) \times 100$$

The method used to calculate the growth rates for securities other than shares is the same as that used for the monetary aggregates, the only difference being that an “N” is used rather than an “F”. The reason for this is to distinguish between the different ways of obtaining “net issues” for securities issues statistics and the equivalent “transactions” calculated used for the monetary aggregates.

The average growth rate for the quarter ending in month t is calculated as:

$$m) \quad \left( \frac{0.5I_t + \sum_{i=1}^2 I_{t-i} + 0.5I_{t-3}}{0.5I_{t-12} + \sum_{i=1}^2 I_{t-i-12} + 0.5I_{t-15}} - 1 \right) \times 100$$

where  $I_t$  is the index of notional stocks as at month t. Likewise, for the year ending in month t, the average growth rate is calculated as:

$$n) \quad \left( \frac{0.5I_t + \sum_{i=1}^{11} I_{t-i} + 0.5I_{t-12}}{0.5I_{t-12} + \sum_{i=1}^{11} I_{t-i-12} + 0.5I_{t-24}} - 1 \right) \times 100$$

The calculation formula used for Section 4.3 is also used for Section 4.4 and is likewise based on that used for the monetary aggregates. Section 4.4 is based on market values and the basis for the calculation are financial transactions, which exclude reclassifications, revaluations or any other changes that do not arise from transactions. Exchange rate variations are not included as all quoted shares covered are denominated in euro.

#### SEASONAL ADJUSTMENT OF SECURITIES ISSUES STATISTICS<sup>4</sup>

The approach used relies on a multiplicative decomposition through X-12-ARIMA. The

seasonal adjustment for the securities issues total is carried out indirectly by means of a linear combination of sector and maturity component breakdowns.

The seasonal adjustment procedures are applied to the index of notional stocks. The resulting estimates of the seasonal factors are then applied to the outstanding amounts, from which seasonally adjusted net issues are derived. Seasonal factors are revised at annual intervals or as required.

Similar as depicted in formula l) and m), the growth rate  $a_t$  for month t corresponding to the change in the 6 months ending in month t, may be calculated using either of the following two formulae:

$$o) \quad a_t = \left[ \prod_{i=0}^5 \left( 1 + \frac{N_{t-i}^M}{L_{t-1-i}} \right) - 1 \right] \times 100$$

$$p) \quad a_t = \left( \frac{I_t}{I_{t-6}} - 1 \right) \times 100$$

#### RELATING TO TABLE I IN SECTION 5.1

#### SEASONAL ADJUSTMENT OF THE HICP<sup>4</sup>

The approach used relies on multiplicative decomposition through X-12-ARIMA (see footnote 2 on page S78). The seasonal adjustment of the overall HICP for the euro area is carried out indirectly by aggregating the seasonally adjusted euro area series for processed food, unprocessed food, industrial goods excluding energy, and services. Energy is added without adjustment since there is no statistical evidence of seasonality. Seasonal factors are revised at annual intervals or as required.

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 5 August 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 AND 6 AUGUST 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 May and July 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.
- “Five years of EU membership”, May 2009.
- “Credit rating agencies: developments and policy issues”, May 2009.
- “The impact of government support to the banking sector on euro area public finances”, July 2009.
- “The implementation of monetary policy since August 2007”, July 2009.
- “Rotation of voting rights in the Governing Council of the ECB”, July 2009.
- “Housing finance in the euro area”, August 2009.
- “Recent developments in the retail bank interest rate pass-through in the euro area”, August 2009.

#### **STATISTICS POCKET BOOK**

Available monthly since August 2003.

#### **LEGAL WORKING PAPER SERIES**

- 6 “The legal implications of the prudential supervisory assessment of bank mergers and acquisitions under EU law” by S. Kerjean, June 2008.
- 7 “Electronic money institutions: current trends, regulatory issues and future prospects” by P. Athanassiou and N. Mas-Guix, July 2008.
- 8 “National rescue measures in response to the current financial crisis” by A. Petrovic and R. Tutsch, July 2009.

#### **OCCASIONAL PAPER SERIES**

- 78 “A framework for assessing global imbalances” by T. Bracke, M. Bussière, M. Fidora and R. Straub, January 2008.
- 79 “The workings of the Eurosystem: monetary policy preparations and decision-making – selected issues” by P. Moutot, A. Jung and F. P. Mongelli, January 2008.
- 80 “China’s and India’s roles in global trade and finance: twin titans for the new millennium?” by M. Bussière and A. Mehl, January 2008.
- 81 “Measuring financial integration in new EU Member States” by M. Baltzer, L. Cappiello, R. A. De Santis and S. Manganelli, March 2008.
- 82 “The sustainability of China’s exchange rate policy and capital account liberalisation” by L. Cappiello and G. Ferrucci, March 2008.
- 83 “The predictability of monetary policy” by T. Blattner, M. Catenaro, M. Ehrmann, R. Strauch and J. Turunen, March 2008.
- 84 “Short-term forecasting of GDP using large monthly datasets: a pseudo real-time forecast evaluation exercise” by G. Rünstler, K. Barhoumi, R. Cristadoro, A. Den Reijer, A. Jakaitiene, P. Jelonek, A. Rua, K. Ruth, S. Benk and C. Van Nieuwenhuyze, May 2008.
- 85 “Benchmarking the Lisbon strategy” by D. Ioannou, M. Ferdinandusse, M. Lo Duca and W. Coussens, June 2008.
- 86 “Real convergence and the determinants of growth in EU candidate and potential candidate countries: a panel data approach” by M. M. Borys, É. K. Polgár and A. Zlate, June 2008.

- 87 “Labour supply and employment in the euro area countries: developments and challenges”, by a Task Force of the Monetary Policy Committee of the European System of Central Banks, June 2008.
- 88 “Real convergence, financial markets, and the current account – emerging Europe versus emerging Asia” by S. Herrmann and A. Winkler, June 2008.
- 89 “An analysis of youth unemployment in the euro area” by R. Gomez-Salvador and N. Leiner-Killinger, June 2008.
- 90 “Wage growth dispersion across the euro area countries: some stylised facts” by M. Andersson, A. Gieseck, B. Pierluigi and N. Vidalis, July 2008.
- 91 “The impact of sovereign wealth funds on global financial markets” by R. Beck and M. Fidora, July 2008.
- 92 “The Gulf Cooperation Council countries: economic structures, recent developments and role in the global economy” by M. Sturm, J. Strasky, P. Adolf and D. Peschel, July 2008.
- 93 “Russia, EU enlargement and the euro” by Z. Polański and A. Winkler, August 2008.
- 94 “The changing role of the exchange rate in a globalised economy” by F. di Mauro, R. Ruffer and I. Bunda, September 2008.
- 95 “Financial stability challenges in candidate countries managing the transition to deeper and more market-oriented financial systems” by the International Relations Committee expert group on financial stability challenges in candidate countries, September 2008.
- 96 “The monetary presentation of the euro area balance of payments” by L. Bê Duc, F. Mayerlen and P. Sola, September 2008.
- 97 “Globalisation and the competitiveness of the euro area” by F. di Mauro and K. Forster, September 2008.
- 98 “Will oil prices decline over the long run?” by R. Kaufmann, P. Karadeloglou and F. di Mauro, October 2008.
- 99 “The ECB and IMF indicators for the macro-prudential analysis of the banking sector: a comparison of the two approaches” by A. M. Agresti, P. Baudino and P. Poloni, November 2008.
- 100 “Survey data on household finance and consumption: research summary and policy use” by the Eurosystem Household Finance and Consumption Network, January 2009.
- 101 “Housing finance in the euro area” by the Task Force of the Monetary Policy Committee of the European System of Central Banks, March 2009.
- 102 “Domestic financial development in emerging economies: evidence and implications” by E. Dorrucchi, A. Meyer-Cirkel and D. Santabárbara, April 2009.
- 103 “Transnational governance in global finance: the principles for stable capital flows and fair debt restructuring in emerging markets” by R. Ritter, April 2009.
- 104 “Fiscal policy challenges in oil-exporting countries: a review of key issues” by M. Sturm, F. Gurtner and J. González Alegre, June 2009.

#### RESEARCH BULLETIN

- “Research Bulletin”, No 7, June 2008.  
“Research Bulletin”, No 8, March 2009.

#### WORKING PAPER SERIES

- 1049 “Labour force participation in the euro area: a cohort-based analysis” by A. Balleer, R. Gómez-Salvador and J. Turunen, May 2009.  
1050 “Wealth effects on consumption: evidence from the euro area” by R. M. Sousa, May 2009.



- 1051 “Are more data always better for factor analysis? Results for the euro area, the six largest euro area countries and the United Kingdom” by G. Caggiano, G. Kapetanios and V. Labhard, May 2009.
- 1052 “Bidding behaviour in the ECB’s main refinancing operations during the financial crisis” by J. Eisenschmidt, A. Hirsch and T. Linzert, May 2009.
- 1053 “Inflation dynamics with labour market matching: assessing alternative specifications” by K. Christoffel, J. Costain, G. de Walque, K. Kuester, T. Linzert, S. Millard and O. Pierrard, May 2009.
- 1054 “Fiscal behaviour in the European Union: rules, fiscal decentralisation and government indebtedness” by A. Afonso and S. Hauptmeier, May 2009.
- 1055 “The impact of extreme weather events on budget balances and implications for fiscal policy” by E. M. Lis and C. Nickel, May 2009.
- 1056 “The pricing of sub-prime mortgage risk in good times and bad: evidence from the ABX.HE indices” by I. Fender and M. Scheicher, May 2009.
- 1057 “Euro area private consumption: is there a role for housing wealth effects?” by F. Skudelny, May 2009.
- 1058 “National prices and wage-setting in a currency union” by M. Sánchez, May 2009.
- 1059 “Forecasting the world economy in the short term” by A. Jakaitiene and S. Déés, June 2009.
- 1060 “What explains global exchange rate movements during the financial crisis?” by M. Fratzscher, June 2009.
- 1061 “The distribution of households’ consumption-expenditure budget shares” by M. Barigozzi, L. Alessi, M. Capasso and G. Fagiolo, June 2009.
- 1062 “External shocks and international inflation linkages: a global VAR analysis” by A. Galesi and M. J. Lombardi, June 2009.
- 1063 “Does private equity investment spur innovation? Evidence from Europe” by A. Popov and P. Roosenboom, June 2009.
- 1064 “Does it pay to have the euro? Italy’s politics and financial markets under the lira and the euro” by M. Fratzscher and L. Stracca, June 2009.
- 1065 “Monetary policy and inflationary shocks under imperfect credibility” by M. D. Pariès and S. Moyen, June 2009.
- 1066 “Universal banks and corporate control: evidence from the global syndicated loan market” by M. A. Ferreira and P. Matos, July 2009.
- 1067 “The dynamic effects of shocks to wages and prices in the United States and the euro area” by R. Duarte and C. R. Marques, July 2009.
- 1068 “Asset price misalignments and the role of money and credit” by D. Gerdesmeier, H.-E. Reimers and B. Roffia, July 2009.
- 1069 “Housing finance and monetary policy” by A. Calza, T. Monacelli and L. Stracca, July 2009.
- 1070 “Monetary policy committees: meetings and outcomes” by J. M. Berk and B. K. Bierut, July 2009.
- 1071 “Booms and busts in housing markets: determinants and implications” by L. Agnello and L. Schuknecht, July 2009.
- 1072 “How important are common factors in driving non-fuel commodity prices? A dynamic factor analysis” by I. Vansteenkiste, July 2009.
- 1073 “Can non-linear real shocks explain the persistence of PPP exchange rate disequilibria?” by T. Peltonen, M. Sager and A. Popescu, July 2009.
- 1074 “Wages are flexible, aren’t they? Evidence from monthly micro wage data” by P. Lünneemann and L. Wintr, July 2009.
- 1075 “Bank risk and monetary policy” by Y. Altunbas, L. Gambacorta and D. Marqués-Ibáñez, July 2009.

1076 “Optimal monetary policy in a new Keynesian model with habits in consumption”  
by C. Leith, I. Moldovan and R. Rossi, July 2009.

#### OTHER PUBLICATIONS

“Bond markets and long-term interest rates in non-euro area Member States of the European Union”, January 2008 (online only).

“Oversight framework for card payment schemes – standards”, January 2008 (online only).

“The role of money – money and monetary policy in the twenty-first century – proceedings of the Fourth ECB Central Banking Conference 2006”, February 2008.

“Euro area balance of payments and international investment position statistics – Annual quality report”, March 2008 (online only).

“ECB statistics quality framework (SQF)”, April 2008 (online only).

“Quality assurance procedures within the ECB statistical function”, April 2008 (online only).

“ECB statistics – an overview”, April 2008 (online only).

“TARGET Annual Report 2007”, April 2008 (online only).

“Financial integration in Europe”, April 2008.

“Financial Stability Review”, June 2008.

“Labour supply and employment in the euro area countries: developments and challenges”, June 2008.

“The international role of the euro”, July 2008 (online only).

“Payment systems and market infrastructure oversight report”, July 2008 (online only).

“Letter from the ECB President to Mr Dimitrios Papadimoulis, Member of the European Parliament”, July 2008 (online only).

“Letter from the ECB President to Mr Ashley Mote, Member of the European Parliament”, July 2008 (online only).

“Legal framework of the Eurosystem and the ESCB. ECB legal acts and instruments”, July 2008.

“CCBM2 User Requirements 4.1”, July 2008 (online only).

“Simulating financial instability – conference on stress testing and financial crisis simulation exercises, 12-13 July 2007”, September 2008.

“New procedure for constructing ECB staff projection ranges”, September 2008 (online only).

“Commission’s draft directive/regulation on credit rating agencies – Eurosystem contribution to the public consultation”, September 2008 (online only).

“Euro money market survey”, September 2008 (online only).

“EU banking structures”, October 2008 (online only).

“Letter from the ECB President to Mr Mario Borghesio, Member of the European Parliament”, October 2008 (online only).

“Letter from the ECB President to Mr Ashley Mote, Member of the European Parliament”, October 2008 (online only).

“A strategic vision for statistics: challenges for the next 10 years – Fourth ECB Conference on Statistics, 24 and 25 April 2008”, November 2008.

“The implementation of monetary policy in the euro area: General documentation on Eurosystem monetary policy instruments and procedures”, November 2008.

“The Eurosystem policy principles on the location and operation of infrastructures settling euro-denominated payment transactions: specification of ‘legally and operationally located in the euro area’”, November 2008 (online only).

“Single Euro Payments Area – sixth progress report”, November 2008 (online only).

“EU banks’ liquidity stress-testing and contingency funding plans”, November 2008 (online only).

“Government finance statistics guide”, December 2008 (online only).

“Financial Stability Review”, December 2008.

“Covered bonds in the EU financial system”, December 2008 (online only).

“The incentive structure of the ‘originate and distribute’ model”, December 2008 (online only).

“Recommendations of the Governing Council of the European Central Bank on the pricing of recapitalisations”, December 2008 (online only).

“Recommendations of the Governing Council of the European Central Bank on government guarantees for bank debt”, December 2008 (online only).

“Commercial property markets – financial stability risks, recent developments and EU banks’ exposures”, December 2008 (online only).

“Correspondent central banking model (CCBM) – procedures for Eurosystem counterparties”, December 2008 (online only).

“Letter from the ECB President to Mr Robert Sturdy, Member of the European Parliament”, January 2009 (online only).

“Euro money market study 2008”, February 2009 (online only).

“Eurosystem oversight policy framework”, February 2009 (online only).

“Harmonised oversight approach and oversight standards for payment instruments”, February 2009 (online only).

“European Commission’s consultation on hedge funds – Eurosystem contribution”, February 2009 (online only).

“Guiding principles for bank asset support schemes”, March 2009 (online only).

“Letter from the ECB President to Mr José Ribeiro e Castro, Member of the European Parliament”, March 2009 (online only).

“Letter from the ECB President to Mr Dimitrios Papadimoulis, Member of the European Parliament”, March 2009 (online only).

“Letter from the ECB President to Mr Manolis Mavrommatis, Member of the European Parliament, regarding the issuance of low denomination euro banknotes”, March 2009 (online only).

“Letter from the ECB President to Mr Eoin Ryan, Member of the European Parliament, concerning the recent widening of spreads between euro area government bond yields”, March 2009 (online only).

“Eurosystem’s SEPA expectations”, March 2009 (online only).

“Housing finance in the euro area”, March 2009 (online only).

“Euro area monetary and financial statistics: 2008 quality report”, March 2009 (online only).

“Euro area balance of payments and international investment position statistics: 2008 quality report”, March 2009 (online only).

“Manual on investment fund statistics”, May 2009 (online only).

“EU banks’ funding structures and policies”, May 2009 (online only).

“Letter from the ECB President to Mr Ashley Mote, Member of the European Parliament”, May 2009 (online only).

“TARGET2 oversight assessment report”, May 2009 (online only).

“TARGET Annual Report”, May 2009 (online only).

“The ECB’s advisory role – overview of opinions (1994-2008)”, May 2009.

“Financial Stability Review”, June 2009.

“Recommendations for securities settlement systems and recommendations for central counterparties in the European Union – European Central Bank (ECB) and the Committee of European Securities Regulators (CESR)”, June 2009 (online only).

“The international role of the euro”, July 2009.

**INFORMATION BROCHURES**

“The European Central Bank, the Eurosystem, the European System of Central Banks”,  
April 2008.

“Price stability – why is it important for you?”, June 2008.

“A single currency – an integrated market infrastructure”, September 2008.

“The European Central Bank, the Eurosystem, the European System of Central Banks”,  
April 2009.

“Price stability – why is it important for you?”, April 2009.

“The Single Euro Payments Area (SEPA): an integrated retail payments market”, July 2009.





## 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.



ISSN 1561-0136



9 771561 013006