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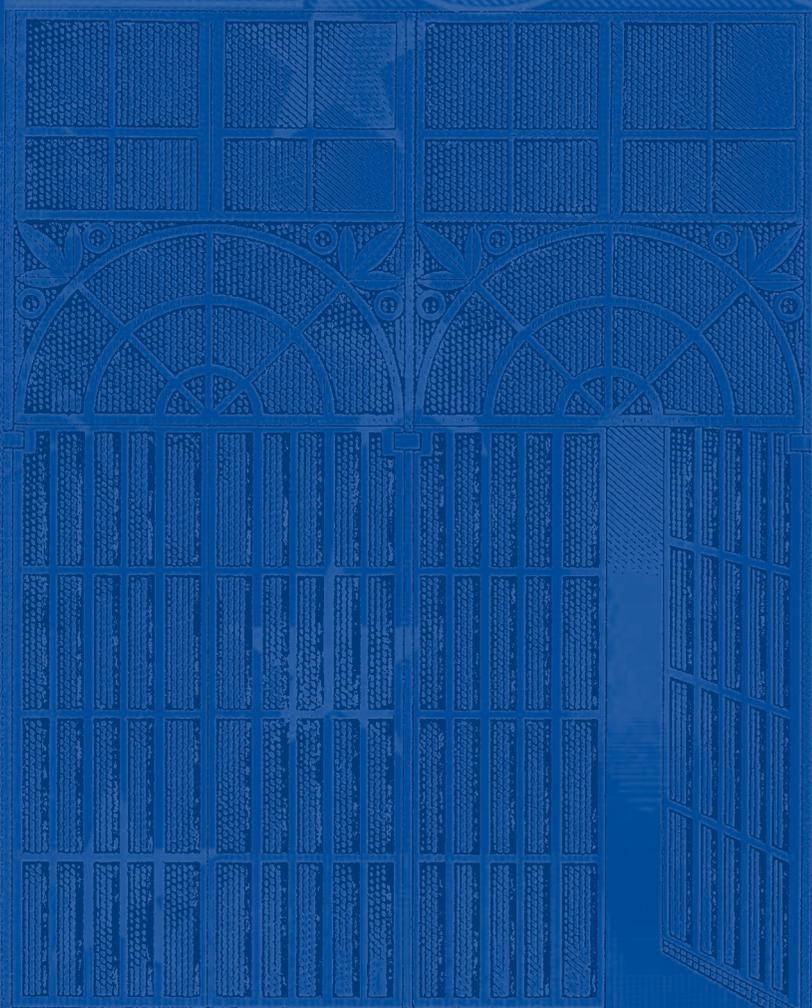
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MONTHLY BULLETIN  
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## MONTHLY BULLETIN FEBRUARY 2009

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## ABBREVIATIONS

### COUNTRIES

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

### OTHERS

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

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



## EDITORIAL

At its meeting on 5 February 2009 the Governing Council decided, on the basis of its regular economic and monetary analyses, to leave the key ECB interest rates unchanged. As anticipated on 15 January, the latest economic data and survey information confirm that the euro area and its major trading partners are undergoing an extended period of significant economic downturn, and that accordingly both external and domestic inflationary pressures are diminishing. The Governing Council continues to expect inflation rates in the euro area to be in line with price stability over the policy-relevant medium-term horizon, thereby supporting the purchasing power of euro area households. This assessment is supported by available indicators of inflation expectations for the medium term. It is also confirmed by the further deceleration in monetary and credit growth in the euro area. Fully in line with its primary objective of price stability, the Governing Council will continue to keep inflation expectations firmly anchored in accordance with its definition of price stability, i.e. inflation rates of below, but close to, 2% over the medium term. This supports sustainable economic growth and employment and contributes to financial stability. Overall, the level of uncertainty remains exceptionally high. Accordingly, the Governing Council will continue to monitor very closely all developments over the period ahead.

As regards the economic analysis, reflecting the impact of the intensified and broadened financial market turmoil, economic activity throughout the world, including in the euro area, has weakened substantially. Foreign demand for euro area exports has declined and domestic factors, notably very low confidence and tight financing conditions, have adversely affected domestic demand. Taken together with other available economic data for the euro area, this points to very negative quarter-on-quarter real GDP growth in the last quarter of 2008.

This information is in line with the Governing Council's current analysis and forward-looking assessment. The Governing Council continues to see persistent weakness in economic activity

in the euro area over the coming quarters, as the financial market tensions have a further impact on the global and domestic economy. At the same time, the very substantial fall in commodity prices seen since the middle of 2008 should support real disposable income, and thus consumption, in the period ahead. Most recently, there have been tentative signs of stabilisation in some survey data, albeit at historically low levels. These indications, however, require confirmation on a broader basis.

In the view of the Governing Council, the outlook for the economy remains surrounded by an exceptionally high degree of uncertainty. Overall, risks to economic growth remain clearly on the downside. They relate mainly to the potential for a stronger impact on the real economy of the turmoil in financial markets, as well as to concerns about the emergence and intensification of protectionist pressures and to possible adverse developments in the world economy stemming from a disorderly correction of global imbalances.

Over time, the euro area should reap the benefit of the effects of the significant policy measures that have been decided upon over recent months to deal with the financial turmoil and its adverse consequences. They should help to restore trust in the financial system and to ease constraints on credit supply to companies and households. In order to ensure that such measures effectively support a sustainable recovery, it is of the utmost importance that they remain focused and temporary in nature so as to maintain a stability-oriented and medium-term perspective in macroeconomic policy-making.

With regard to price developments, annual HICP inflation continued to decline in January 2009, falling to 1.1%, according to Eurostat's flash estimate, from 1.6% in December 2008. While no detailed breakdown of HICP developments in January is available as yet, the decline in headline inflation observed since the middle of 2008 primarily reflects the sharp fall in global commodity prices over this period, owing mainly to weak global demand.

Looking ahead, lower commodity prices and the prospect of weak demand confirm the Governing Council's assessment of mid-January that inflationary pressures in the euro area are diminishing. Owing mainly to base effects stemming from the past behaviour of energy prices, annual headline inflation rates are projected to decline further in the coming months, possibly reaching very low levels at mid-year. However, also owing to base effects stemming from past energy price developments, inflation rates are expected to increase again in the second half of the year. Accordingly, it is likely that HICP inflation rates will fluctuate sharply during 2009. Such short-term volatility is, however, not relevant from a monetary policy perspective. Looking over the policy-relevant medium-term horizon, annual HICP inflation is expected to be in line with price stability. This assessment is supported by available indicators of inflation expectations for the medium term.

Regarding risks to price stability over the medium term, unexpected further declines in commodity prices or a stronger than expected slowdown in the economy could put downward pressure on inflation, while upside risks to price stability could materialise, particularly if the recent fall in commodity prices were to reverse or if domestic price pressures turn out to be stronger than assumed. It is therefore crucial that price and wage-setters fully live up to their responsibilities.

Turning to the monetary analysis, the latest evidence confirms a continued deceleration in the underlying pace of monetary expansion in the euro area, supporting the view that inflationary pressures are diminishing.

In analysing monetary developments, it should be recognised that the intensification and broadening of the financial turmoil since September 2008 has the potential to affect the evolution of monetary aggregates significantly. It has already had a substantial impact on the behaviour of market participants, as indicated by recent money and credit data. Both the broad aggregate M3 and, in particular, the components

of M3 that are most closely related to the ongoing financial tensions – such as holdings of money market funds – have shown high month-to-month volatility of late. Overall, looking through this volatility, the underlying pace of broad money expansion continues to decelerate gradually from the peak seen in early 2007. However, the intensification and broadening of financial tensions since September 2008 is leading to significant substitution among the components of M3.

Turning to the evolution of bank credit, the flow of MFI loans to the private sector moderated in the course of 2008, largely on account of a weakness in loans to households, especially for house purchase. In December, however, outstanding MFI loans to non-financial corporations contracted for the first time since the onset of the financial turmoil, confirming the significant weakening of corporate credit at the end of the year after a long period of dynamic growth. At the same time, the substantial reduction in key ECB interest rates since October 2008 appears to have been passed through to lower bank lending rates, thereby easing financing conditions for companies and households. Moreover, there are some indications that the pace of tightening of bank credit standards is stabilising, albeit at high levels by historical standards. Overall, the incoming information on financing conditions requires continuous close monitoring.

To sum up, as anticipated in the interest rate decision of 15 January 2009, the latest economic data and survey information confirm that the euro area and its major trading partners are undergoing an extended period of significant economic downturn, and that accordingly both external and domestic inflationary pressures are diminishing. The Governing Council continues to expect inflation rates in the euro area to be in line with price stability over the policy-relevant medium-term horizon, thereby supporting the purchasing power of euro area households. This assessment is supported by available indicators of inflation expectations for the medium term. It is also confirmed by

a cross-check of the outcome of the economic analysis with that of the monetary analysis, against the background of a further deceleration in monetary and credit growth in the euro area. Fully in line with its primary objective of price stability, the Governing Council will continue to keep inflation expectations firmly anchored in accordance with its definition of price stability, i.e. inflation rates of below, but close to, 2% over the medium term. This supports sustainable economic growth and employment and contributes to financial stability. Overall, the level of uncertainty remains exceptionally high. Accordingly, the Governing Council will continue to monitor very closely all developments over the period ahead.

Turning to fiscal policy, the European Commission projects in its January 2009 interim forecast a substantial rise in the average euro area government budget deficit, to 4.0% of GDP in 2009, from 1.7% in 2008. This rapid deterioration of the fiscal position is broad-based among euro area countries and is due to the significant economic downturn, additional revenue shortfalls and the fiscal stimulus measures adopted by many governments. Seven euro area countries are currently expected by the Commission to exceed the 3% of GDP reference value for the budget deficit in 2009. In addition, many governments have assumed large contingent liabilities in connection with guarantees provided to banks and will need to finance capital injections in support of the financial sector. To support the public's confidence in the sustainability of public finances, it is therefore essential that governments return to a credible commitment to medium-term budgetary objectives as soon as possible.

As regards structural policies, it is important to continue on the long-term reform path foreseen by the Lisbon agenda. At the current juncture, it is essential to pursue economic policies in line with the principle of an open market economy with free competition, resisting any protectionist pressure. Product and services market reforms should foster competition and help to speed

up effective restructuring. Labour market reforms should help to facilitate appropriate wage-setting, as well as labour mobility across sectors and regions. This will be particularly important for those areas and sectors hit strongly by the negative demand shock. In several countries, it is also crucial to take measures with a view to addressing competitiveness losses accumulated over recent years.

This issue of the Monthly Bulletin contains two articles. The first provides new evidence on wage-setting in Europe based on a firm-level survey. The second article assesses global trends in protectionism and discusses their possible adverse economic effects on the world economy.



# ECONOMIC AND MONETARY DEVELOPMENTS

## I THE EXTERNAL ENVIRONMENT OF THE EURO AREA

*The global economy is undergoing a severe downturn. The markedly adverse impact of the financial turmoil on real economic activity has been aggravated by a strong contraction in international trade. At the same time, global inflationary pressures continue to ease, owing mainly to lower commodity prices but also to weak labour market conditions and sluggish global demand. The outlook for global economic growth remains highly uncertain, and risks are clearly on the downside.*

### I.1 DEVELOPMENTS IN THE WORLD ECONOMY

The global economy is undergoing a severe downturn. The markedly adverse impact of the financial turmoil on real economic activity has been aggravated by a strong contraction in international trade. In January 2009 the global all-industry output Purchasing Managers' Index (PMI) remained well below its contraction-expansion threshold and close to its lowest level since the survey began in 1998. The weakness in the global economic situation in January stemmed mainly from the manufacturing sector, with global demand for manufactured products falling further.

Global inflationary pressures continue to ease, owing mainly to lower commodity prices but also to weak labour market conditions and sluggish global demand. Consumer prices in OECD countries rose by 1.5% in the year to December 2008, compared with 2.2% the month before. Excluding food and energy, consumer price inflation was 2.0% in the year to December, compared with 2.2% in the year to November. The global PMI input price index pointed to a further reduction in average input costs in January (see Chart 1).

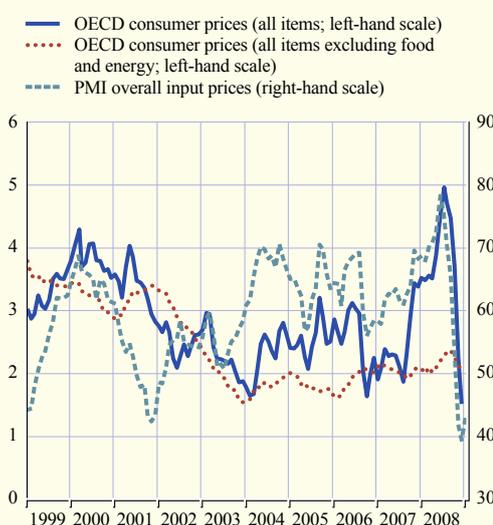
#### UNITED STATES

In the United States, activity weakened throughout the economy in the final quarter of 2008 amid clear signs of a deepening recession. According to advance estimates by the Bureau of Economic Analysis, real GDP contracted by 3.8% in annualised terms, compared with a contraction of 0.5% in the third quarter. The decline in final domestic demand deepened, while the impact of trade – a major contributor to growth in previous quarters – was broadly neutral as weaker foreign demand led to a sharp fall in exports. Personal consumption continued to contract at a rapid pace (-3.5% in annualised terms), reflecting a marked retreat in demand for durable goods, which has been affected by low consumer confidence, declining wealth and weak labour market conditions. Private fixed investment was another major drag on GDP growth, with the contraction in both equipment and software and residential investment increasing compared with the previous quarter. A positive contribution of 1.3 percentage points from inventories limited the decline in GDP.

As regards price developments, annual CPI inflation declined to just 0.1% in December 2008, which compares with an average of 3.8% for the year. The deceleration reflects the rapid reduction in

Chart 1 International price developments

(monthly data; annual percentage changes; diffusion index)



Sources: OECD and Markit.

energy costs, which was particularly marked in the final quarter of 2008, as well as growing slack in the economy and base effects. The annual rate of inflation excluding food and energy fell further to 1.8% in December, compared with an average of 2.3% for the year.

On 28 January 2009 the US Federal Open Market Committee (FOMC) decided to keep its target for the federal funds rate unchanged at a range of 0% to 0.25%. The FOMC signalled its readiness to proceed with, and possibly extend further, the use of non-conventional measures to support the functioning of financial markets and stimulate the economy.

### JAPAN

In Japan, economic activity has declined sharply recently, while inflation remains on a downward trend. In December 2008 industrial production posted a record month-on-month decline, which followed the previous record fall in November. Exports have also contracted sharply, showing a record decline in December. In addition, firms' investment has decreased, while private consumption has fallen as a result of the weakening labour market.

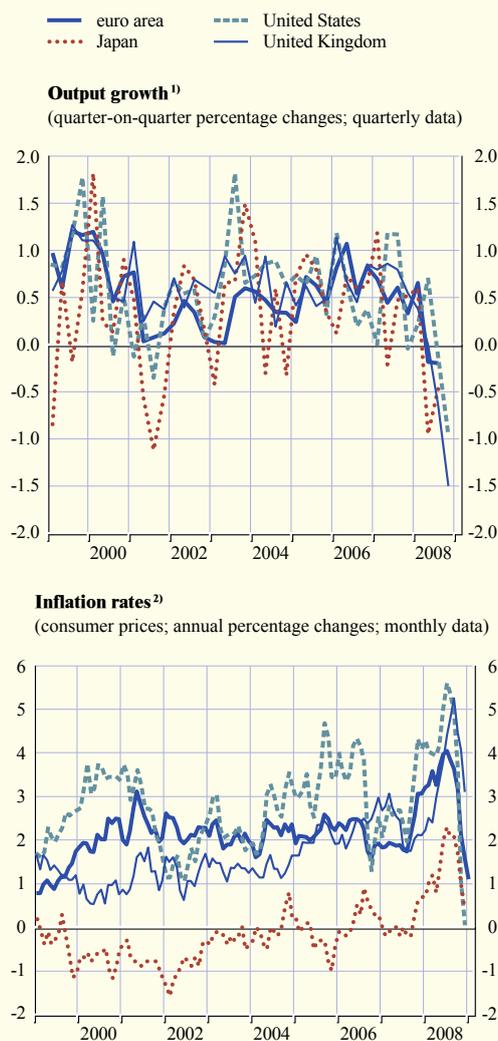
Consumer price inflation continued to fall in December. Driven by the moderation in energy prices and a widening output gap, annual CPI inflation declined to 0.4% from 1.0% in November. Excluding food and energy, annual CPI inflation remained at 0.0% in December.

At its meeting on 22 January 2008, the Bank of Japan decided to leave its target for the uncollateralised overnight call rate unchanged at 0.1%.

### UNITED KINGDOM

In the United Kingdom real GDP declined, according to the Office for National Statistics's preliminary estimate, by 1.5% quarter on quarter in the fourth quarter of 2008. The decline was broad-based across demand components, but reflected, in particular, a contraction in domestic demand. Confidence indicators suggest that output is likely to fall further in the coming quarters. The correction in the housing market continued, with house prices, as indicated by the Halifax House Price Index, down by 16.2% year on year in December. As regards the situation in credit markets, the Bank of England Credit Conditions Survey (issued on 2 January 2009) suggested that there has been a further tightening of credit supply and a decrease in credit demand. Annual HICP

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.

inflation declined further to 3.1% in December (from 4.1% in November), reflecting the impact of a temporary reduction in the standard VAT rate and the decrease in commodity prices.

On 8 January 2009 the Bank of England's Monetary Policy Committee decided to decrease its main policy rate by 50 basis points to 1.5%.

### OTHER EUROPEAN COUNTRIES

In most other non-euro area EU countries signs of weakening economic activity were accompanied by decreasing inflation.

In Sweden, GDP contracted by 0.1% quarter on quarter in the third quarter of 2008 for the second quarter in a row, owing to tighter financial conditions, weaker external demand and increased caution on the part of households. These factors also dampened economic activity in Denmark, where output contracted by 0.4% during the third quarter, following an increase of 0.4% in the second quarter. Short-term activity indicators point to further weakness of economic activity in both countries. HICP inflation continued its decline in both countries, after having reached a peak in late summer. In Sweden HICP inflation fell to 2.1% in December; in Denmark it eased to 2.4%. On 15 January 2009 Danmarks Nationalbank lowered its main policy rates by 75 basis points to 2.75%.

In the largest central and eastern European EU countries, signs of weaker economic activity started to emerge in the second half of 2008. Third-quarter GDP data for Hungary show that the economy contracted by 0.1% quarter on quarter. In the Czech Republic and Poland, real GDP growth fell slightly in the third quarter, to 0.9% and 1.2% respectively. Short-term indicators point to a further reduction in growth in both countries. In Romania, real GDP growth remained strong in the third quarter (partly driven by a good harvest in the agricultural sector), but short-term indicators suggest a marked decline in more recent months. The macroeconomic outlook has worsened substantially in the past few months in all four countries as a result of increased risk aversion towards the region, tighter financing conditions and contracting international trade. Annual inflation rates have declined, falling in December to 6.4% in Romania, 3.4% in Hungary and 3.3% in the Czech Republic and Poland. The moderation in HICP inflation reflects mainly the declines in food and energy prices, as well as weaker economic activity. On 19 January 2009 the Magyar Nemzeti Bank decreased its main policy rate by 50 basis points to 9.5%. On 27 January, Narodowy Bank Polski decided to lower its main policy rate by 75 basis points to 4.25%.

### EMERGING ASIA

Economic activity has continued to decelerate in emerging Asia, driven by the severe and synchronised downturn in external demand which has particularly affected exports and industrial production. Domestic demand has also weakened in many countries of the region, and unemployment rates have increased. Consumer price inflation has further moderated, allowing several central banks to loosen monetary policy.

In China, the economy experienced a marked downturn in the last quarter of 2008, when the annual rate of real GDP growth dropped to 6.8% from 9.0% in the third quarter, bringing 2008 GDP growth to 9.0%. The main drivers of the slowdown were the decline in external demand and the downturn in the domestic real estate sector. Weakening exports have also contributed to declining profits in the industrial sector. In December, annual CPI inflation fell further, to 1.2% from 2.4% in November, while producer prices were 1.2% lower than a year earlier. The annual growth rates



of the monetary aggregate M2 and bank loans accelerated to, respectively, 17.8% and 18.8% in December, from 14.8% and 15.4% in November.

### LATIN AMERICA

Economic activity has continued to decelerate in most countries in Latin America, while inflationary pressures persist. In Brazil, industrial production declined in November 2008 by 6.2% in annual terms, while annual CPI inflation remained at the same elevated level, 6.4%, as in the previous month. In Argentina, industrial production expanded by 2.6% in December, while annual inflation stood at 7.2%. In Mexico, economic activity continued to contract, with industrial production falling by 5.4% in November compared with a year earlier, after having decreased by 2.4% in October. This notwithstanding, annual CPI remained high, increasing to 6.5% in December from 6.2% in November.

## 1.2 COMMODITY MARKETS

Oil prices recovered in January 2009. On 4 February, they stood at USD 44.3, about 12% higher than at the beginning of 2009 (in euro terms, the increase is around 22%). Over the medium term, market participants expect higher prices, with futures for December 2009 trading at around USD 54.0.

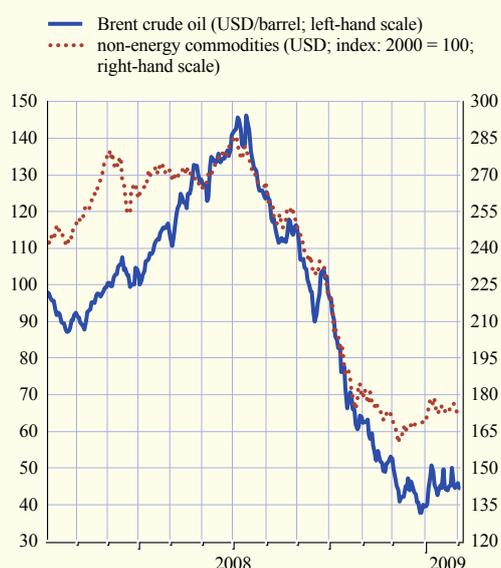
The recovery has taken place mainly as a result of supply-related factors. Signals have started to emerge that OPEC members are complying with agreed cuts, with December supply data showing a reduction of about 1 million barrels per day with respect to the September figures. Looking at the demand side, however, in its latest report the International Energy Agency heavily revised down oil demand prospects for 2009, with significant reductions projected in both OECD and non-OECD countries.

Prices of non-energy commodities increased slightly in January 2009. Metal prices showed signs of recovery but remained prone to downward pressures as a result of the global economic slowdown, with aluminium prices particularly sensitive. Prices of food commodities moved sideways. In aggregate terms, the price index for non-energy commodities (denominated in US dollars) was approximately 28% lower at the end of January than a year before.

## 1.3 OUTLOOK FOR THE EXTERNAL ENVIRONMENT

The prospects for foreign demand for euro area goods and services have deteriorated considerably. As the economic downturn in advanced economies increasingly spread to emerging economies, world trade contracted significantly in the last quarter of 2008. The OECD composite leading indicator (CLI) for November 2008 points to severe slowdowns in

Chart 3 Main developments in commodity markets



Sources: Bloomberg and HWWI.

all major industrialised economies, as well as in major non-OECD economies, particularly China, India and Russia.

The uncertainty surrounding the global economic outlook is exceptionally high, especially as financial market volatility has soared (see Box 6 entitled “The recent exceptional rise in exchange rate volatility” in Section 5). Overall, the risks for growth are clearly on the downside. They relate mainly to the potential for the turmoil in the financial markets to have a more significant impact on the real economy. The depth and duration of the global economic downturn will depend crucially on the speed at which the financial crisis can be resolved. Other risks relate to concerns about the emergence and intensification of protectionist pressures and to possible disorderly developments owing to 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 CLIs for Brazil, Russia and China.

## 2 MONETARY AND FINANCIAL DEVELOPMENTS

### 2.1 MONEY AND MFI CREDIT

The monetary data for December 2008 confirm the ongoing moderation of broad money and credit growth. The heightened level of stress in the financial system remains apparent in a number of MFI balance sheet positions, being visible, for example, in the negative net issuance of debt securities and the transformation of loans into securities in securitisation operations. The large-scale derecognition of loans in the context of these operations has a statistical downward effect on loans to the private sector. However, even taking this into account, the flow of financing was still relatively subdued in December, particularly for non-financial corporations. The subdued developments in loans seem mainly to reflect the slowdown in real economic activity, although the bank lending survey suggests that supply factors may also have played a role.

#### THE BROAD MONETARY AGGREGATE M3

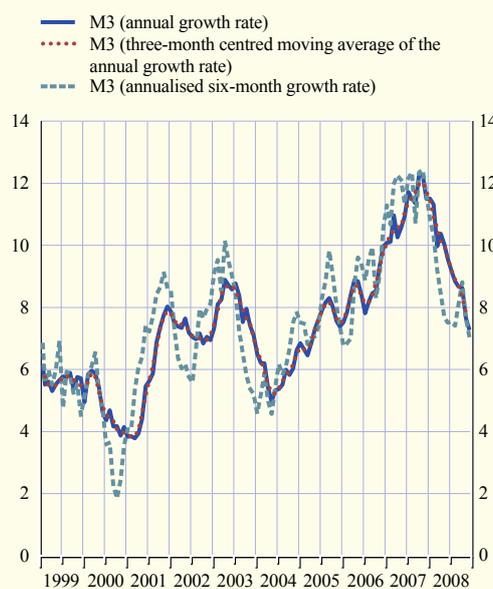
Developments in December 2008 point to a further moderation of monetary expansion, with the annual rate of growth of M3 declining to 7.3% in that month, down from 7.7% in November. The annualised three-month growth rate declined to levels slightly below those recorded prior to the intensification of the financial turmoil in September (see Chart 5). This reflects the subdued month-on-month growth rate of 0.2% observed in December. However, some caution is warranted when interpreting monetary developments at the end of the year, as the intensification of the financial turmoil may have given rise to accounting considerations that are not captured in seasonal adjustments.

The monetary data for December point to a continuation of the high levels of stress observed in the financial system following the intensification of the financial turmoil in mid-September. This is apparent, for example, in MFIs' negative net issuance of debt securities and their inability to sell them to the money-holding sector or non-residents. Moreover, MFIs continued to make their assets more liquid by derecognising loans, thereby removing them from their balance sheets in order to transform them into securities outside the MFI sector. Thereafter MFIs repurchased those securities. By the end of 2008 such securitisation operations were being conducted on a fairly large scale.

The monetary data for December also show a further decline in the growth rate of MFI loans to the non-financial private sector. Indeed, for the first time since the start of the financial turmoil, the data show a negative net flow of MFI loans to the private sector, mainly for non-financial corporations, even after correcting for the downward impact of securitisation. The subdued developments in loans seem mainly to reflect the slowdown in real economic activity, although the bank lending survey suggests that supply factors may also have played a role.

Chart 5 M3 growth

(percentage changes; adjusted for seasonal and calendar effects)



Source: ECB.

Monetary statistics for Slovakia will be included for the first time in the euro area aggregates for January 2009 (see below).

Box 1

**THE SLOVAK MFI SECTOR AND ITS IMPACT ON MONETARY STATISTICS FOR THE EURO AREA**

On 1 January 2009 Slovakia adopted the euro, thereby increasing the number of euro area countries from 15 to 16. Monetary statistics for Slovakia will be included for the first time in the euro area aggregates for January, which will be published on 26 February 2009 and reported in the March 2009 issue of the Monthly Bulletin.<sup>1</sup> This box highlights a few features of the balance sheets of MFIs resident in Slovakia,<sup>2</sup> which form the basis for the Slovak contribution to the euro area monetary statistics.

**Key features of the MFI sector in Slovakia**

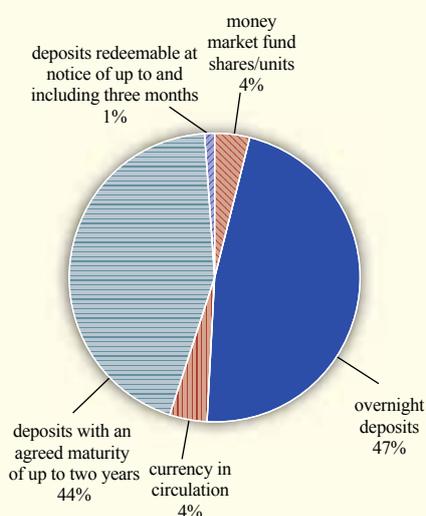
40 MFIs were resident in Slovakia at the end of December 2008, of which 26 were credit institutions and 13 were money market funds, with the remaining institution being the national central bank of Slovakia – Národná banka Slovenska. This compared with a total of 8,310 MFIs resident in the euro area in that month (i.e. excluding Slovakia), including 6,570 credit

1 For monetary statistics, the euro area series cover all of those EU Member States that had adopted the euro at the time to which the statistics relate. This approach, which is also applied for MFI interest rate statistics and the HICP, differs from that applied for all other datasets, such as GDP, for which data relate to the latest composition of the euro area for the entire time series.

2 For details of the statistical methodology adopted for MFI balance sheet statistics as regards the enlargement of the euro area, see Box 1, entitled “Implications of the entry of Slovenia into the euro area for monetary statistics”, in the February 2007 issue of the Monthly Bulletin. See also the “General notes” section of the Monthly Bulletin.

**Chart A Composition of M3 in Slovakia**

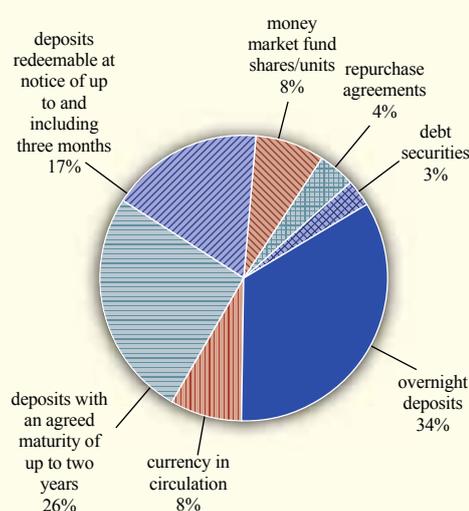
(percentages; December 2008)



Source: ECB.

**Chart B Composition of euro area M3**

(percentages; December 2008)



Source: ECB.

institutions, 1,721 money market funds, 15 NCBs and the ECB.<sup>3</sup> The aggregated balance sheet of Slovak MFIs totalled €80 billion at the end of December 2008, which amounts to around 0.2% of the aggregated MFI balance sheet of the enlarged euro area.

According to ECB calculations, Slovakia's contribution to euro area M3 in December 2008 would have totalled €37 billion. Deposits accounted for 92% of Slovak M3 in that month. Overnight deposits and deposits with an agreed maturity of up to two years (i.e. short-term time deposits) made up the two largest shares, accounting for 47% and 44% of Slovak M3 respectively, while deposits redeemable at notice of up to and including three months accounted for only 1% (see Chart A). This breakdown differed from that of euro area M3 in that month (i.e. excluding Slovakia), as total deposits excluding repurchase agreements accounted for 77% of euro area M3, with smaller contributions by both overnight deposits and deposits with an agreed maturity of up to two years (see Chart B). Holdings of money market fund shares/units accounted for 4% of M3 in Slovakia, compared with 8% for the euro area. Holdings of MFI short-term debt securities and repurchase agreements, which in the euro area accounted for 3% and 4% of M3 holdings respectively, were negligible in Slovakia.

Turning to the counterparts of M3, the value of the longer-term liabilities of Slovak MFIs was somewhat less than €2.5 billion in December 2008, while, on the asset side of the balance sheet, MFIs' outstanding loans to the private sector totalled €30 billion. From a sectoral point of view, €15 billion of those outstanding loans were granted to non-financial corporations, €13 billion were granted to households and €2 billion were granted to other financial intermediaries (OFIs).

Euro area MFI balance sheet statistics comprise the data for those EU Member States that had introduced the euro in the reference month. Thus, from January 2009 onwards both the nominal amounts and growth rates will cover the 16 countries now in the euro area.<sup>4</sup> Slovakia's contribution to euro area M3 in December 2008 would have been around 0.4%. Overall, given the size of that contribution, the integration of Slovakia in January 2009 will not significantly affect the dynamics of euro area M3 statistics.

3 For an overview of developments in the EU MFI sector, see, for example, <http://www.ecb.europa.eu/stats/money/mfi/statrep/html/index.en.html>.

4 In order to avoid breaks in statistics, the inclusion of new countries is treated as a reclassification – i.e. it is corrected for in transaction data, and thus also in growth rates. For details, see, for example, Annex III of the “Handbook for the compilation of flows statistics on the MFI balance sheet” (<http://www.ecb.europa.eu/pub/pdf/other/handbookcompilationflowstatisticsmfibalance200602en.pdf>).

### MAIN COMPONENTS OF M3

The moderation observed in annual M3 growth in December 2008 was driven by a decline in the contribution of short-term deposits other than overnight deposits, which more than offset the increases seen in the contributions of M1 and marketable instruments.

The annual growth rate of M1 increased to 3.2% in December, up from 2.2% in November, reflecting robust developments in both of its sub-components (see Table 1). With regard to currency in circulation, the month-on-month growth seen in December confirms the normalisation observed in November. At the same time, the surge in demand for currency recorded in October has not yet unwound, which supports the earlier assessment that this may largely reflect demand by non-residents.

Turning to overnight deposits, following a substantial outflow in the previous month, an inflow was again observed for this instrument in December. As a consequence, the annual growth rate

Table I 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 Q1	2008 Q2	2008 Q3	2008 Q4	2008 Nov.	2008 Dec.
<b>M1</b>	<b>42.4</b>	<b>3.8</b>	<b>2.3</b>	<b>0.6</b>	<b>2.7</b>	<b>2.2</b>	<b>3.2</b>
Currency in circulation	7.6	7.8	7.8	7.5	12.4	13.5	13.4
Overnight deposits	34.8	3.0	1.2	-0.7	0.8	0.1	1.2
<b>M2 - M1 (= other short-term deposits)</b>	<b>42.9</b>	<b>18.4</b>	<b>19.3</b>	<b>18.9</b>	<b>15.7</b>	<b>16.0</b>	<b>13.3</b>
Deposits with an agreed maturity of up to two years	26.4	41.4	40.4	37.6	29.0	29.3	23.2
Deposits redeemable at notice of up to three months	16.6	-3.3	-2.3	-2.0	-0.9	-0.7	0.6
<b>M2</b>	<b>85.4</b>	<b>10.3</b>	<b>10.0</b>	<b>9.1</b>	<b>8.8</b>	<b>8.7</b>	<b>8.0</b>
<b>M3 - M2 (= marketable instruments)</b>	<b>14.6</b>	<b>16.3</b>	<b>10.3</b>	<b>8.9</b>	<b>3.9</b>	<b>1.7</b>	<b>3.0</b>
<b>M3</b>	<b>100.0</b>	<b>11.2</b>	<b>10.1</b>	<b>9.0</b>	<b>8.1</b>	<b>7.7</b>	<b>7.3</b>
<b>Credit to euro area residents</b>		<b>10.0</b>	<b>9.6</b>	<b>9.1</b>	<b>7.4</b>	<b>7.2</b>	<b>6.5</b>
Credit to general government		-2.5	-1.2	0.6	2.1	2.5	5.4
Loans to general government		-0.9	0.8	2.2	2.9	3.1	1.2
Credit to the private sector		12.7	11.9	10.8	8.4	8.2	6.8
Loans to the private sector		11.1	10.5	9.1	7.3	7.1	5.8
Loans to the private sector adjusted for sales and securitisation		12.0	11.5	10.3	8.6	8.4	7.4
<b>Longer-term financial liabilities (excluding capital and reserves)</b>		<b>6.8</b>	<b>4.5</b>	<b>3.3</b>	<b>1.0</b>	<b>0.9</b>	<b>-0.1</b>

Source: ECB.

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

recovered to stand at 1.2% in that month, up from the 0.1% observed in November. The shifts observed from deposits with an agreed maturity of up to two years (i.e. short-term time deposits) to overnight deposits mainly concerned non-monetary financial intermediaries other than insurance corporations and pension funds and may have been prompted by a desire to hold liquid assets over the turn of the year.

The annual growth rate of short-term deposits other than overnight deposits declined markedly to stand at 13.3% in December, down from 16.0% in November, reflecting divergent developments in its sub-components. Despite remaining very high, the annual growth rate of short-term time deposits declined significantly in December to stand at 23.2%, down from 29.3% in each of the previous two months. The annual growth rate of deposits redeemable at notice of up to three months (i.e. short-term savings deposits) was slightly positive in December at 0.6%, following sustained negative growth rates in the course of last year. Remuneration considerations may explain the divergent developments in overnight deposits and the various types of short-term deposit. According to interest rate data available up to November, while the remuneration of short-term savings deposits remained roughly unchanged in that month, interest rates on short-term time deposits fell considerably, thereby also reducing the opportunity cost of holding liquid assets such as overnight deposits.

The annual growth rate of marketable instruments (i.e. M3-M2) increased in December to stand at 3.0%, up from the record low of 1.7% recorded in November. This reflects a rebound in repurchase agreements and significant inflows for money market fund shares/units. Indeed, following the withdrawals observed in September and October in the aftermath of Lehman Brothers' default, money market fund shares/units registered a further inflow in December, suggesting that the concerns of euro area residents regarding the safety of money market funds have been fading away.

On the other hand, turning to other types of marketable instrument, a further marked decline was observed in the annual growth rate of the money-holding sector's holdings of short-term MFI debt securities (i.e. debt securities with a maturity of less than two years), which fell to -14.1% in December, down from -8.1% in November. The aggregated balance sheet data indicate not only that the net issuance of these short-term debt securities was again negative in December (after negative net issuance in both September and October), but also that these instruments were acquired by MFIs themselves, while the money-holding sector and non-residents continued to be reluctant to hold them.

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 – continued the moderating trend observed since the start of 2008, standing at 8.1% in December, down from 8.9% in November. This mainly reflects a further decline in the annual growth rate of deposits held by non-financial corporations, which declined to stand at 0.3% in December, down from 2.9% in November. The annual growth rate of deposits held by households also decreased, falling to 8.8%, down from 10.0% in November. By contrast, the annual growth rate of the M3 deposit holdings of non-monetary financial intermediaries increased to stand at 17.5% in December, up from 13.9% in November.

These developments in the sectoral composition of deposit holdings support the view that non-financial corporations are increasingly making use of their liquidity buffers. This may be explained by several factors, for example a lack of investment opportunities owing to the deteriorating outlook for economic activity, limitations on cash flows or difficulties experienced by enterprises when raising loans.

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

Turning to the counterparts of M3, the annual growth rate of total MFI credit to euro area residents declined to stand at 6.5% in December, down from 7.2% in November (see Table 1). This decline conceals an increase in the annual growth rate of credit to general government, which rose to 5.4% in December, up from 2.5% in the previous month (see Chart 6). While there was a further reduction in MFI loans to the government sector, MFIs' purchases of securities issued by general government strengthened.

At the same time, the annual growth rate of MFI credit to the private sector declined further to stand at 6.8% in December, down from 8.2% in November. The annual growth rate of loans, the largest component of credit to the private sector, continued to decline – reaching 5.8%, down from the 7.1% observed in the previous month. All sectors – non-monetary financial intermediaries other than insurance corporations and pension funds; non-financial corporations; and households – contributed to this decline, albeit with growth rates at very different levels. As in previous months, however, the annual growth rate of MFI loans to the private sector reflected the statistical downward impact of the derecognition of loans in the context of large-scale securitisation activities. In December the impact of such activities totalled 1.7 percentage points, compared with 1.5 percentage points in November (see Table 1 and Box 2).

## Box 2

**PUBLICATION OF DATA ON MFI LOANS TO THE PRIVATE SECTOR ADJUSTED FOR SALES AND SECURITISATION**

In its press release on monetary developments for the reference month December 2008, the ECB published for the first time data on the flow of MFI loans to the private sector which were adjusted for the sale and securitisation of loans. This box briefly describes the construction and presentation of this adjusted series, which will be reported on a regular basis from now on and will be made available in the Statistical Data Warehouse on the ECB's website. With the publication of this series, the ECB is taking account of the increased relevance of the analysis of short-term developments as regards the origination of MFI loans and available private sector funding. Indeed, when assessing fundamental factors driving the supply of MFI loans or loan demand on the part of the private sector, short-term developments in the loan data that result from temporary factors such as specific loan securitisation transactions<sup>1</sup> conducted by euro area MFIs need to be singled out. The impact of such temporary factors has been analysed in the Monthly Bulletin on a regular basis.<sup>2</sup>

**The construction of loan flows adjusted for sales and securitisation**

In order to adjust MFI loan flows for sales and securitisation, the transactions reported in a given month (i.e. new loans minus redemptions and repayments) are augmented by the amount of loans removed from the MFI balance sheet (i.e. derecognised) owing to securitisation or outright sales to non-MFIs. The recording of such derecognition often depends on country-specific accounting standards, with the result that data on derecognition cannot easily be derived only from information on the issuance of securities generated through the process of securitisation. Where information is available, the adjustment also takes into consideration reintermediation effects – i.e. the loan flow is adjusted downwards where MFIs buy back loans from non-MFIs.<sup>3</sup> Moreover, the amounts redeemed and/or repaid by debtors following the disposal of those loans are in principle also considered in the construction of the adjusted flow. Finally, the information necessary in order to adjust the loan data for sales and securitisation is currently collected only for loans to the private sector as a whole. However, anecdotal evidence suggests that in recent years the majority of loan securitisation activities have concerned loans to households for house purchase. Further enhanced and more detailed statistics on the securitisation of MFI loans are currently being developed and are expected to become available by 2010.<sup>4</sup>

1 For a discussion of the origination and securitisation of loans, see the article entitled "Securitisation in the euro area" in the February 2008 issue of the Monthly Bulletin.

2 For previous assessments of the impact that traditional true-sale securitisation has on loan growth, see: Box 3, entitled "The impact of traditional true-sale securitisation on recent MFI loan developments", in the September 2008 issue of the Monthly Bulletin; Box 3, entitled "The importance of accounting standards for interpreting MFI loan statistics", in the March 2008 issue of the Monthly Bulletin; Box 2 in the article entitled "Securitisation in the euro area" in the February 2008 issue of the Monthly Bulletin; and Box 1, entitled "The impact of MFI loan securitisation on monetary analysis in the euro area", in the September 2005 issue of the Monthly Bulletin.

3 The information that the ECB uses to adjust MFIs' statistical balance sheet for loan disposals is generally thought to be of high quality. On the other hand, the coverage of loan buy-backs and redemption/repayment patterns for loans following their disposal is somewhat less reliable. For that reason, the ECB is not publishing series on outstanding amounts. However, despite this small caveat, it is considered that the new series will make a considerable contribution to the interpretation of these loan statistics.

4 The detailed reporting scheme for the information on loan securitisation which is to be collected from 2010 is laid down in Regulation (EC) No 25/2009 of the European Central Bank of 19 December 2008 concerning the balance sheet of the monetary financial institutions sector (recast; ECB/2008/32), which is available at [http://www.ecb.europa.eu/ecb/legal/pdf/l\\_01520090120en00140062.pdf](http://www.ecb.europa.eu/ecb/legal/pdf/l_01520090120en00140062.pdf).

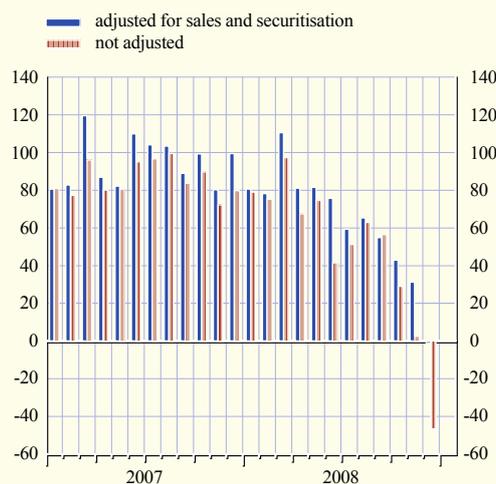
## Presentation of data on MFI loans adjusted for sales and securitisation

The MFI loan data adjusted for securitisation and sales are available as seasonally adjusted and non-seasonally adjusted monthly series in the form of flows (i.e. transactions during the relevant period), growth rates (including short-term growth rates for the seasonally adjusted version) and chain-linked indices.<sup>5</sup>

The chart shows the seasonally adjusted monthly flows of MFI loans to the private sector, both adjusted and unadjusted for sales and securitisation. This comparison shows the increasing downward impact that MFIs' loan securitisation has had on regular MFI loan flows in recent months. Indeed, whereas the average monthly downward impact between January 2006 and the start of the financial market turmoil in August 2007 was slightly more than €6 billion, the average monthly downward impact between October and December 2008 was more than four and a half times as much. At the same time, it is important to note that securities created through traditional true-sale securitisation activities in 2008 were largely purchased by the MFIs themselves, rather than being sold in the market or privately placed with investors, as was the case until 2007.

## Monthly flows of MFI loans to the private sector

(EUR billions; seasonally adjusted)



Source: ECB.

<sup>5</sup> For more details regarding the construction of the chain-linked index and the derivation of growth rates, please refer to equations e), f), g) and h) in the technical notes in the “Euro area statistics” section of this issue of the Monthly Bulletin.

In December the annual growth rate of MFI loans to non-financial corporations declined further to stand at 9.4%, down from the 11.1% observed in November (see Table 2). The annualised three-month growth rate (an indicator of shorter-term dynamics) fell more sharply, reflecting a negative monthly flow in December. This, in turn, was the result of zero flows for short-term loans, while monthly flows for longer-term loans were negative for the first time since the start of the turmoil. This is associated with the deteriorating economic outlook in the euro area, which mainly affects demand for loans, but also influences credit institutions' decisions on credit conditions. Moreover, it may be that securitisation activities are now increasingly being carried out also for loans to non-financial corporations. However, such activities are unlikely to be large enough to change the picture of a negative loan flow. The growth of loans to non-financial corporations may continue to moderate, given the economic outlook and the tightening of credit standards. For further information on developments in credit standards at the turn of the year, see Box 3, entitled “The results of the January 2009 bank lending survey for the euro area”.

The annual growth rate of loans to households declined further to stand at 1.8% in December, down from 2.5% in November. Shorter-term dynamics, as measured by the annualised three-month growth rate, slowed sharply. However, this development should be interpreted with caution, since it reflects to a large extent the impact of the derecognition of loans as a result of true-sale securitisation

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 Q1	2008 Q2	2008 Q3	2008 Q4	2008 Nov.	2008 Dec.
<b>Non-financial corporations</b>	<b>44.6</b>	<b>14.7</b>	<b>14.5</b>	<b>12.8</b>	<b>11.3</b>	<b>11.1</b>	<b>9.4</b>
Up to one year	28.6	13.0	12.9	10.8	9.1	8.6	7.4
Over one and up to five years	20.1	22.5	20.9	18.7	15.8	15.9	13.1
Over five years	51.3	12.8	13.0	11.8	10.8	10.8	9.1
<b>Households<sup>2)</sup></b>	<b>45.3</b>	<b>5.9</b>	<b>5.0</b>	<b>4.0</b>	<b>2.9</b>	<b>2.5</b>	<b>1.8</b>
Consumer credit <sup>3)</sup>	12.9	5.3	5.2	4.4	3.1	2.9	1.5
Lending for house purchase <sup>3)</sup>	71.4	6.7	5.6	4.2	3.0	2.5	1.7
Other lending	15.7	2.7	2.2	2.5	2.3	2.0	2.5
<b>Insurance corporations and pension funds</b>	<b>1.0</b>	<b>6.8</b>	<b>-1.5</b>	<b>-7.8</b>	<b>-7.6</b>	<b>-6.6</b>	<b>-4.2</b>
<b>Other non-monetary financial intermediaries</b>	<b>9.1</b>	<b>24.9</b>	<b>25.0</b>	<b>22.1</b>	<b>14.4</b>	<b>13.8</b>	<b>10.8</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.

activities. Given that such derecognition mainly concerns mortgage loans, the monthly flow of loans to households – particularly loans for house purchase – remained positive.

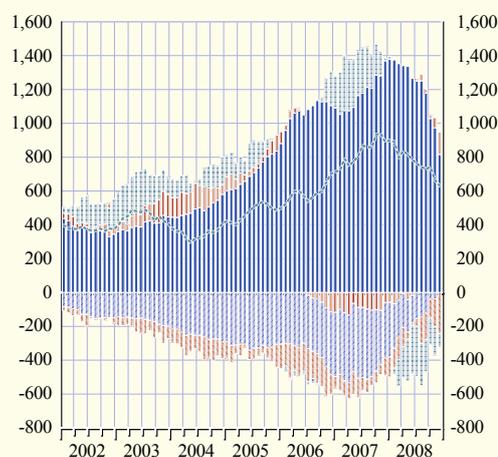
Among the other counterparts of M3, the annual growth rate of MFI longer-term financial liabilities excluding capital and reserves was -0.1% in December, down from 0.9% in both October and November. This negative annual growth rate conceals divergent developments in the various sub-components. Indeed, the growth rate of holdings of MFI debt securities with a maturity of over two years remained negative, more than offsetting the positive – though declining – growth rate of deposits with an agreed maturity of over two years, while the growth rate of deposits redeemable at notice of over three months was close to zero. The monthly data on MFIs' net issuance of debt securities show continued negative flows and confirm that banks are having difficulty obtaining funding from outside the MFI sector through this source.

The annual growth rate of capital and reserves declined to 9.5% in December, down from 12.0% in November. This development, which reflects a monthly outflow of €11 billion for these instruments in December, conceals the ongoing recapitalisation of individual financial institutions with the aid of governments.

Chart 6 Counterparts of M3

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

- credit to the private sector (1)
- credit to general government (2)
- net external assets (3)
- longer-term financial liabilities (excluding capital and reserves) (4)
- other counterparts (including capital and reserves) (5)
- - - M3



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.

Looking at developments in the external assets and liabilities of the MFI sector, large outflows can be seen on both sides of the balance sheet. These outflows support the view that the MFI sector's business activities with non-euro area residents are declining, thereby contributing to the deleveraging of credit institutions. In December the MFI sector's net external asset position recorded a robust net inflow of €47 billion, as liabilities fell more strongly than assets. The annual outflow in the net external asset position decreased to €79 billion, down from €168 billion in November.

To sum up, the December data confirm that the recent intensification of the financial market tensions has had an impact on specific MFI balance sheet positions. This is particularly apparent in the ongoing deleveraging vis-à-vis non-euro area residents. The growth of credit to the non-financial private sector, particularly non-financial corporations, was relatively subdued in December. This mainly reflected the slowdown in real economic activity and the worsening economic outlook, although the bank lending survey suggests that supply factors may also have played a role.

### Box 3

#### THE RESULTS OF THE JANUARY 2009 BANK LENDING SURVEY FOR THE EURO AREA

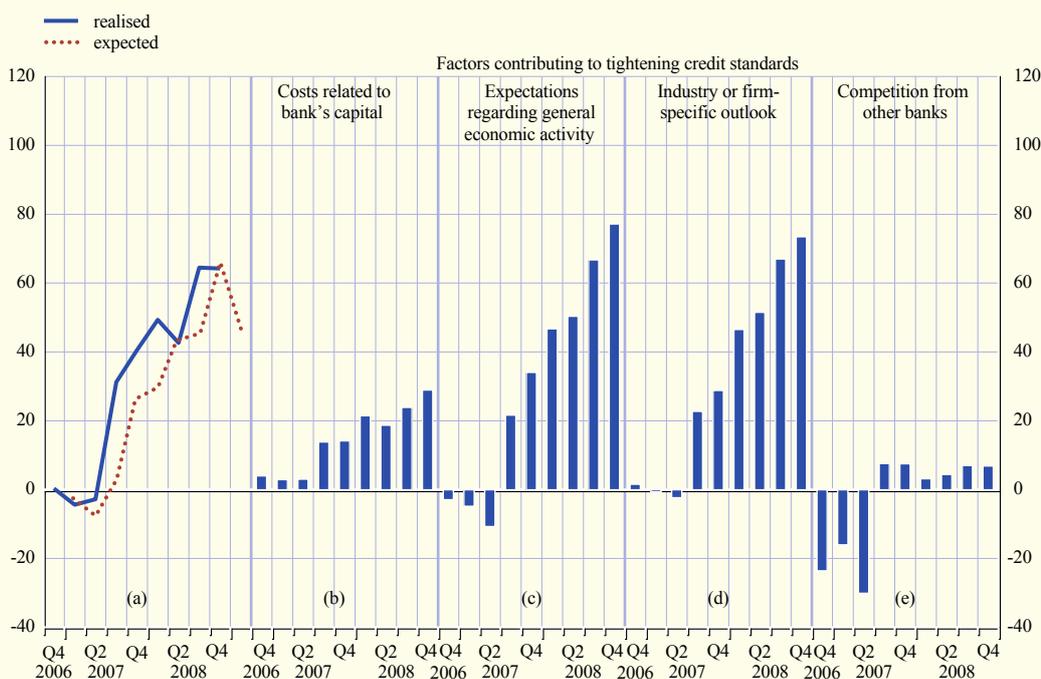
This box describes the main results of the January 2009 bank lending survey for the euro area conducted by the Eurosystem.<sup>1</sup> In the fourth quarter of 2008 the net percentage of banks reporting a tightening of credit standards for loans to enterprises broadly remained at the elevated level of the previous quarter.<sup>2</sup> The net tightening of credit standards was equally strong for large enterprises and for small and medium-sized enterprises (SMEs). Respondent banks also reported a further tightening in net terms of their credit standards for loans to households, with the net tightening for consumer credit and other lending reaching a level similar to the one for loans for house purchase. For the first quarter of 2009 banks expected a considerable decline in net tightening for all three categories compared with the actual net tightening in the fourth quarter of 2008. Regarding loan demand, banks noted that net demand for loans both to enterprises and to households for consumer credit and other lending declined further, while net demand for loans to households for house purchase remained at elevated negative levels in the fourth quarter of 2008.<sup>3</sup>

This survey round contained a set of additional ad hoc questions addressing the effect of the financial turmoil in part retaining some of the ad hoc questions included in previous survey rounds (see the last section of this box). Responses to a new ad hoc question indicate that governments' announcements of recapitalisation support and state guarantees for debt securities issued by banks already had some supportive impact on banks' access to wholesale funding in the fourth quarter of 2008 and are expected to further ease access to funding in the first quarter of 2009. Nevertheless, banks reported that their access to money markets and to securitisation

- 1 The cut-off date for the receipt of data from the responding banks was 7 January 2009. A comprehensive assessment of the results of the January 2009 bank lending survey for the euro area was published on 6 February 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").
- 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.

broadly remained hampered at elevated levels and their access was more hampered for debt securities markets as a result of the turmoil in financial markets.

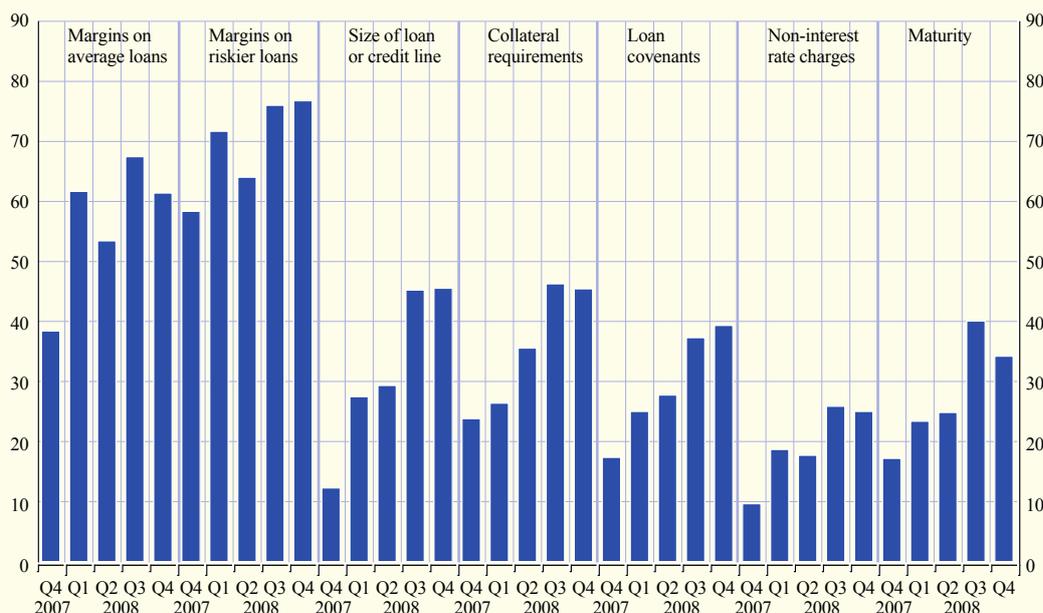
### Loans or credit lines to enterprises

**Credit standards:** In the fourth quarter of 2008 the net percentage of banks reporting a tightening of credit standards for loans to enterprises decreased by one percentage point (to 64%, from 65% in the third quarter of 2008; see Chart A); as in the previous quarter, this reflected the fact that most banks reported having “tightened somewhat” their credit standards, whereas only a minority stated that they had tightened them “considerably”. The most important factors driving the net tightening continued to be expectations of future economic activity and the industry or firm-specific outlook, which further gained in importance. At the same time, the impact of banks’ cost of funds and balance sheet constraints slightly increased, to remain at comparatively high levels, in particular banks’ cost related to their capital position and banks’ ability to access market financing, while banks’ liquidity position broadly remained unchanged.

Regarding the terms and conditions of loans to enterprises, banks reported a continued widening of their margins on average loans and on riskier loans in the fourth quarter, in net terms 61% (against 68% in the third quarter) and 77% (against 76%) respectively (see Chart B). Moreover, the tightening in non-price terms and conditions remained high. As in the previous

**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”.

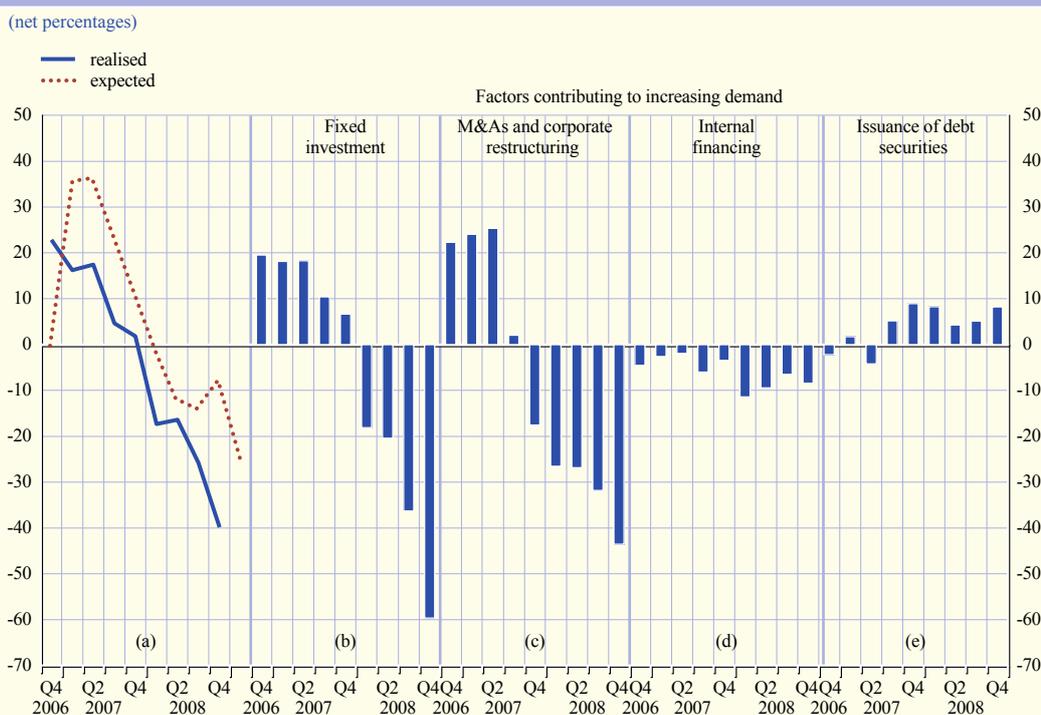
quarter, almost half of the banks tightened their credit standards by acting on the size of loans or credit lines and on collateral requirements.

Unlike in the previous survey rounds, the net tightening of credit standards was equally strong for large enterprises (63%, compared with 68% in the third quarter) and for SMEs (63%, compared with 56% in the third quarter). While for large enterprises some stabilisation occurred, the net tightening increased further for SMEs in the fourth quarter of 2008. As regards the factors underlying the changes in credit standards, for both large enterprises and SMEs, expectations regarding general economic activity and the industry or firm-specific outlook continued to be the most important factors behind the tightening. In addition, banks’ cost of funds and balance sheet constraints played a somewhat more important role in the net tightening for large firms than for SMEs, but they seem to have gained in importance for lending to SMEs.

For the first quarter of 2009 respondent banks expected a lower level of net tightening of credit standards for loans to enterprises (47%) compared with the actual net tightening in the fourth quarter of 2008 (see Chart A).

**Loan demand:** According to respondent banks, net demand for loans to enterprises again declined considerably and continued to be negative in the fourth quarter of 2008 (-40%, compared with -26% in the third quarter; see Chart C). The negative net demand was driven by a decline in the financing needs for fixed investment (to -60%, from -36% in the third quarter) and by a further fall in demand stemming from M&As and corporate restructuring (-44%, after -32% in the third quarter). Additionally, as in the previous quarter internal financing (i.e. cash flow)

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



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.

contributed somewhat to lowering net demand for loans to enterprises. By contrast, the issuance of debt securities continued to contribute positively, at slightly more elevated levels, to the net demand for loans by enterprises, reflecting difficult market conditions and the increased cost of market-based debt financing. In terms of borrower size, while net loan demand was negative for both large firms and SMEs, the decline was somewhat more pronounced for SMEs in the fourth quarter of 2008. Regarding the maturity spectrum, net demand decreased particularly for long-term loans.

For the first quarter of 2009 the decline in net demand for loans to enterprises is expected to be less negative, at -26%, compared with the actual net demand in the fourth quarter of 2008 (see Chart C).

### Loans to households for house purchase

**Credit standards:** In the fourth quarter of 2008 the net percentage of banks reporting a tightening of credit standards for loans to households for house purchase continued to increase somewhat (to 41%, from 36% in the third quarter; see Chart D). Expectations regarding general economic activity and housing market prospects continued to be the main factors contributing to the net tightening of credit standards. However, the cost of funds and balance sheet constraints also continued to put some strain on responding banks. As in the previous quarter, competition

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

(net percentages)



Note: See footnote for 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.

from other banks did not contribute to an easing of credit standards for loans to households for house purchase, but was broadly neutral.

As regards the terms and conditions for loans for house purchase, banks reported a further increase in net tightening via margins on average loans (45%, up from 35% in the third quarter). They also reported an increase in net tightening via margins on riskier loans, to 51% from 43% in the third quarter. In addition, non-price terms and conditions, such as collateral requirements and loan-to-value (LTV) ratios, were tightened further.

In the first quarter of 2009 credit standards for loans for house purchase are expected to tighten to a lesser extent (25%) compared with the actual net tightening in the fourth quarter of 2008 (see Chart D).

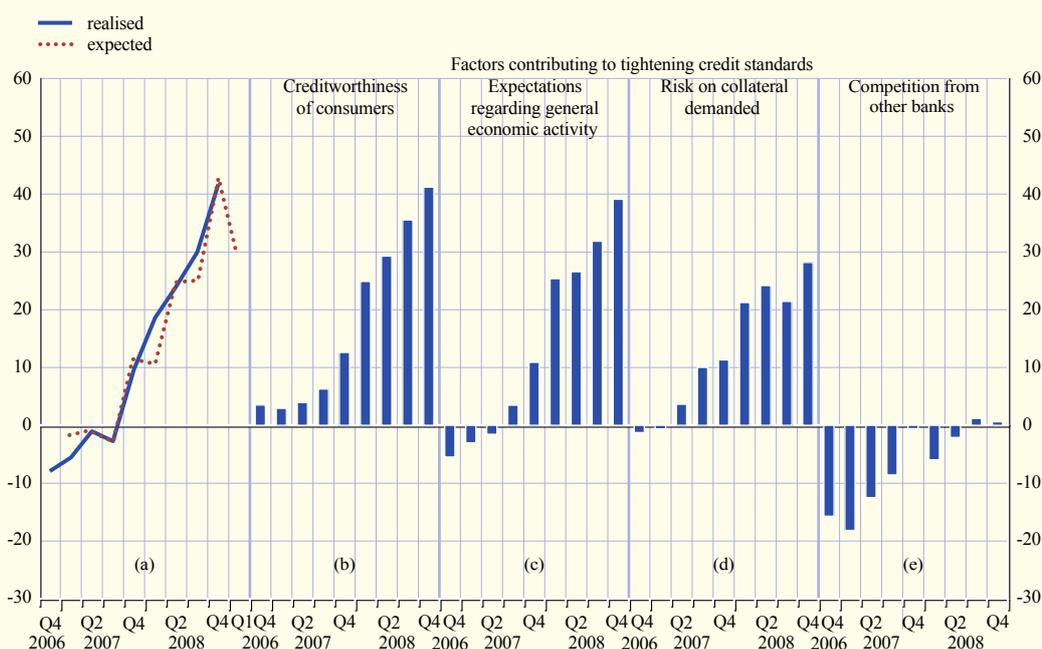
**Loan demand:** The net demand for housing loans remained at an elevated negative level in the fourth quarter of 2008 (-63%, after -64% in the third quarter of 2008; see Chart E). This mainly reflected worsened housing market prospects and deteriorating consumer confidence. For the first quarter of 2009 expectations point to a broadly unchanged negative level of net demand (-61%) compared with the actual net demand in the fourth quarter of 2008.

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

**Credit standards:** In the fourth quarter of 2008 the net percentage of banks reporting a tightening of credit standards for consumer credit and other lending to households continued

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

(net percentages)



Note: See footnote for Chart A.

to increase (42%, compared with 30% in the previous quarter; see Chart F), reaching a level similar to the one for loans for house purchase. Banks' risk perceptions were again the main factor behind the further increase in net tightening, mainly related to expectations regarding general economic activity and the creditworthiness of consumers. With respect to terms and conditions for granting consumer credit, banks reported an increase in net tightening via margins on average loans and a basically unchanged level of tightening for riskier loans (37% for both).

For the first quarter of 2009 expectations point to a considerably lower level of tightening of credit standards for consumer credit and other lending to households (28%) compared with the actual net tightening in the fourth quarter of 2008 (see Chart F).

**Loan demand:** Net demand for consumer credit and other lending to households declined in the fourth quarter compared with the third quarter of 2008 (to -47%; see Chart E). The main factors dampening demand were deteriorated consumer confidence as well as lower financing needs for durable consumer goods according to reporting banks.

#### **Ad hoc questions on the financial turmoil**

The January 2009 survey round retained some of the ad hoc questions included in previous surveys addressing the impact of the financial market tensions experienced since the second half of 2007, and included a new ad hoc question on the impact of governments' announcements of recapitalisation support and state guarantees for debt securities issued by banks on banks' access to wholesale funding.

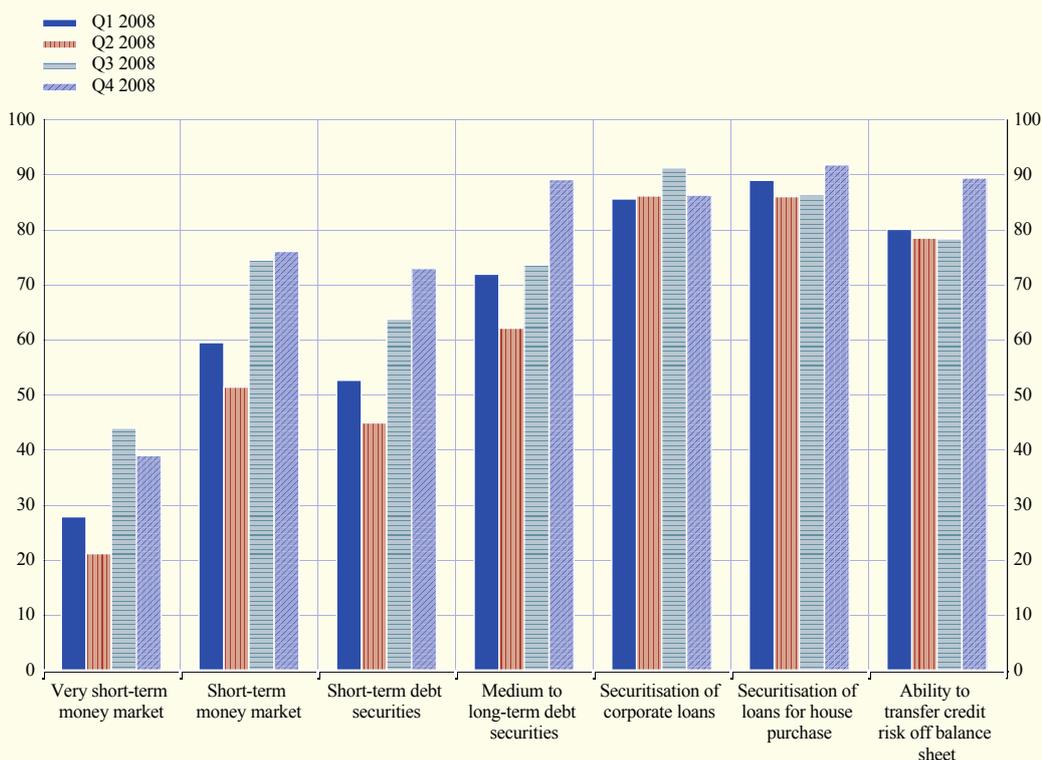
As regards banks' funding via wholesale markets, in the fourth quarter of 2008 banks reported that their access to money markets as a result of the turmoil in financial markets broadly remained hampered at elevated levels and their access was further hampered regarding debt securities markets compared with the third quarter (see Chart G). With 89% of the responding banks stating that they have been hampered in market access for medium to long-term debt issues, a similarly elevated level was reached as for access to securitisation, which continued to be similarly hampered as in the third quarter. 86% and 92% of the sub-set of responding banks for which securitisation activities were relevant reported that their access to securitisation was hampered for corporate loans and loans for house purchase, respectively. Over the next three months access to short-term funding is expected to improve; this holds true for money markets and, to some extent, the markets for short-term debt securities issues. At the same time, medium to long-term debt securities issues, as well as access to securitisation, are expected to broadly be hampered at similar levels to those reported in the fourth quarter of 2008.

In this regard, governments' announcements of recapitalisation support and state guarantees for debt securities issued by banks seem to have already supported to some extent banks' access to wholesale funding. This was indicated by banks in reply to the new ad hoc question.<sup>4</sup> Some improvement was felt by 34% of the replying banks for the fourth quarter of 2008. For

<sup>4</sup> 102 out of 112 banks responded, giving a response rate of 91%. 6% of responding banks reported "not applicable".

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.

the first quarter of 2009, 58% expected an improvement in their access to wholesale funding as a result of these measures.<sup>5</sup>

More or less in line with reported developments in the access to money markets and debt securities markets, banks described the impact on bank lending, for both quantities and margins, from these funding options as broadly unchanged at elevated levels. The impact continued to be stronger for margins than for the amount of loans granted to borrowers. With regard to the impact from the hampered access to securitisation on their lending, banks reported a somewhat lower impact on the amount of loans granted and a similar impact on margins compared with the previous quarter.

Finally, concerning the impact of the financial turmoil on their lending policy via changes in banks' costs related to their capital position, in the fourth quarter of 2008, 48% of the reporting banks indicated a considerable impact or some impact on capital and lending, a 5 percentage point increase compared with the third quarter.

<sup>5</sup> Including banks reporting a "considerable improvement in market access" of 2% and 3% for the fourth quarter of 2008 and expectations for the first quarter of 2009, respectively.

## 2.2 SECURITIES ISSUANCE

The annual growth rate of debt securities issued by euro area residents increased somewhat in November 2008. Whereas the growth rates for debt securities issued by MFIs and non-financial corporations remained subdued, the growth rate of debt securities issued by the central government sectors increased significantly, especially at short-term maturities. The growth rate of issuance of quoted shares increased marginally, albeit remaining at low levels.

### DEBT SECURITIES

The annual growth rate of debt securities issued by euro area residents increased somewhat in November 2008 to stand at 8.1%, compared with 7.0% in the previous month (see Table 3). The annual growth rate of short-term securities issued increased by 2.9 percentage points to 23.2% in November 2008, while that of long-term securities rose moderately by 0.9 percentage point to stand at 6.2%. Issuance of longer-term securities can be broken down further into securities issued at floating and fixed rates. Typically, investors' preferences shift towards floating rates over fixed rates in periods characterised by a flat yield curve. In accordance with this observation, the annual rate of growth of floating rate securities issuance in November 2008 was significantly higher, at 13.6%, than the rate of growth of fixed rate securities issuance, which stood at 3.3% in the same month.

The annual growth rate of debt securities issued by non-financial corporations in November 2008 remained broadly unchanged at 3.9%. Taking a longer-term perspective, the current issuance activity by non-financial corporations remains significantly lower, when compared with that prevailing before the outbreak of the turmoil in mid-2007 and up to the first quarter of 2008. The annual growth rate of long-term debt securities issued by non-financial corporations decreased slightly, by 0.6 percentage point to 2.7% in November 2008, whereas the growth rate of short-term issuance increased to 10.1%, up from 7.6% in the month before.

As regards seasonally adjusted data, which better capture short-term trends, the six-month annualised growth rate of debt securities issued increased by 1.6 percentage points to 10.5% in

Table 3 Securities issued by euro area residents

Issuing sector	Amount outstanding (EUR billions) 2008 Nov.	Annual growth rates <sup>1)</sup>					
		2007 Q4	2008 Q1	2008 Q2	2008 Q3	2008 Oct.	2008 Nov.
<b>Debt securities</b>	<b>13,073</b>	<b>8.9</b>	<b>8.1</b>	<b>6.9</b>	<b>7.3</b>	<b>7.0</b>	<b>8.1</b>
MFIs	5,332	10.8	9.3	7.7	8.1	5.3	5.7
Non-monetary financial corporations	1,798	26.6	24.9	21.8	23.5	21.7	24.4
Non-financial corporations	698	8.0	8.7	5.8	4.0	4.0	3.9
General government	5,245	3.0	2.7	2.2	2.4	4.8	6.4
of which:							
Central government	4,913	2.8	2.7	2.3	2.4	4.9	6.7
Other general government	332	5.2	2.7	1.3	3.0	2.8	2.8
<b>Quoted shares:</b>	<b>3,474</b>	<b>1.3</b>	<b>1.2</b>	<b>0.9</b>	<b>0.6</b>	<b>0.7</b>	<b>0.9</b>
MFIs	393	1.3	0.8	1.5	2.8	4.2	5.9
Non-monetary financial corporations	265	2.8	2.6	2.4	2.5	2.8	2.2
Non-financial corporations	2,816	1.2	1.2	0.6	0.0	-0.1	-0.1

Source: ECB.

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

November 2008. This was largely attributable to a marked increase in central government issuance activity. By contrast, the six-month annualised growth rate of debt securities issued by non-financial corporations remained subdued at 3.5%, the same rate as in the previous month (see Chart 7). In more detail, seasonally adjusted data point to relatively robust issuance by non-financial corporations of short-term debt securities and to protracted weakness in long-term issuance.

With regard to the financial sector, the annual growth rate of debt securities issued by MFIs increased to 5.7% in November 2008, up slightly from 5.3% in October 2008. The issuance of short-term securities, which had been buoyant since the start of the financial turmoil in the summer of 2007, has been gradually slowing down since September, recording an annual growth rate of 12.3% in November. The annual growth rate of MFI issuance of long-term debt securities declined moderately to 4.5% in November 2008. The further decline in the issuance of short-term debt securities by MFIs likely reflects soaring credit spreads for financial institutions' debt in the aftermath of the insolvency of Lehman Brothers, which was however partly counteracted by the announcement of various government measures in support of the banking sector in this period. The extent of the impact of the intensification of the financial turmoil can be gauged more precisely by examining seasonally adjusted data. Six-month seasonally adjusted data for November 2008 point to declines in the growth rates of both short and long-term debt securities issued by MFIs by 1.2 percentage points (to 7.8%) and 1.5 percentage points (to 4.5%), respectively.

The annual growth rate of debt securities issued by non-monetary financial corporations increased somewhat to stand at 24.4% in November 2008, compared with 21.7% in the previous month, thus confirming the continued robust issuance activity in this sector. This issuance activity reflects, to a large extent, the ongoing high level of securitisation activity undertaken by bank-sponsored special-purpose vehicles, despite the effective freezing-up of market placements since the start of the turmoil. The six-month annualised growth rate, which captures short-term dynamics, shows an increase to 29.2% in November from 24.6% in October.

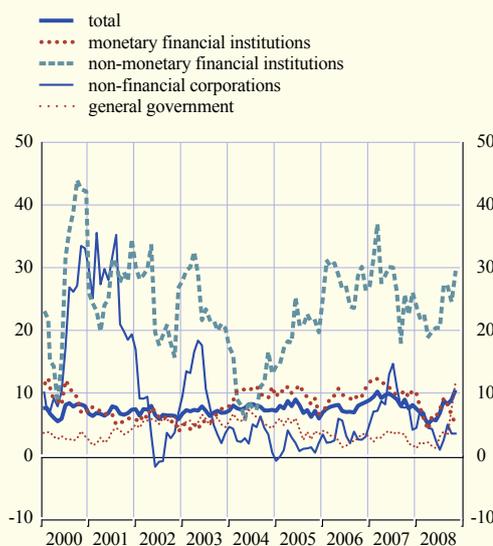
The annual growth rate of debt securities issued by the general government sector increased significantly to 6.4% in November 2008, the highest level since August 2004 and up from 4.8% in October 2008. This increase mostly reflected the sharply higher growth rate of debt securities issued by the central government sector at short-term maturities.

#### QUOTED SHARES

The annual growth rate of quoted shares issued by euro area residents was 0.9% in November 2008, up 0.2 percentage point from the previous month (see Table 3). Against the backdrop of a continued increase in the cost of equity, this subdued level reflects primarily the negative growth rate of quoted

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

(six-month annualised growth rates; seasonally adjusted)



Source: ECB.

shares issued by non-financial corporations, unchanged from October at -0.1%, while the growth rate of issuance by non-monetary financial institutions also decreased from 2.8% to 2.2%. At the same time, the annual growth rate of quoted shares issued by MFIs increased further from 4.2% to 5.9%, reflecting moves by euro area institutions to boost their capital base in the face of the heavy losses experienced on securities holdings in the course of the past year (see Chart 8).

### 2.3 MONEY MARKET INTEREST RATES

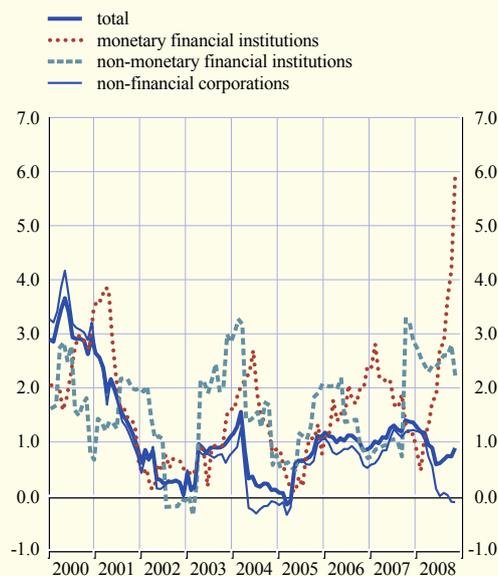
*Secured money market rates declined in January, in line with the downward revision of markets' expectations regarding future key ECB interest rates and reflecting the reduction in key ECB interest rates in mid-January. Unsecured money market interest rates also decreased, but at a more robust pace, resulting in a narrowing of the spread between unsecured and secured rates. Nonetheless, that spread remains at a very high level. The Eurosystem continued to provide the financial system with abundant amounts of liquidity in January by using fixed rate tender procedures with full allotment in its main refinancing operations and longer-term refinancing operations.*

Unsecured money market rates declined further between 15 January and 4 February 2009. On 4 February the one-month, three-month, six-month and twelve-month EURIBOR rates stood at 1.71%, 2.05%, 2.14% and 2.24% respectively, i.e. 49, 46, 43 and 42 basis points below the levels observed on 15 January (see Chart 9). This decline was particularly pronounced for the shorter maturities, with the result that the spread between the twelve-month and one-month EURIBOR rates increased to 53 basis points on 4 February, compared with 45 basis points on 15 January (see Chart 9).

EONIA swap rates also decreased over the reference period, but at a more subdued pace. This partly reflects the 50 basis point reduction

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

(annual growth rates)

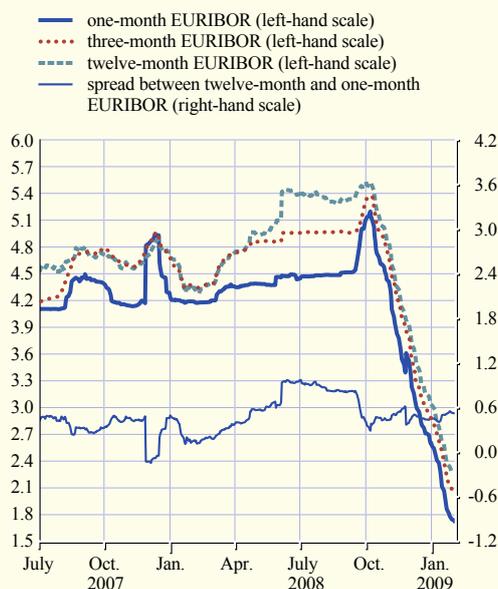


Source: ECB.

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)



Sources: ECB and Reuters.

in key ECB interest rates announced on 15 January and markets' expectations of further cuts in the coming months. Consequently, the spread between the unsecured EURIBOR and the EONIA swap index decreased to levels last seen at the end of September prior to the peak in early October. At the three-month maturity, the spread between the EURIBOR and the EONIA swap index decreased from 101 basis points on 15 January to 87 basis points on 4 February.

On 4 February the interest rates implied by the prices of three-month EURIBOR futures maturing in March, June and September 2009 stood at 1.800%, 1.665% and 1.695% respectively, representing declines of 28, 20.5 and 20.5 basis points respectively by comparison with 15 January. The behaviour of the interest rates implied by three-month EURIBOR futures partly reflects the downward revision of expectations as regards future key ECB interest rates, as well as a further decline in the expected spread between secured and unsecured rates.

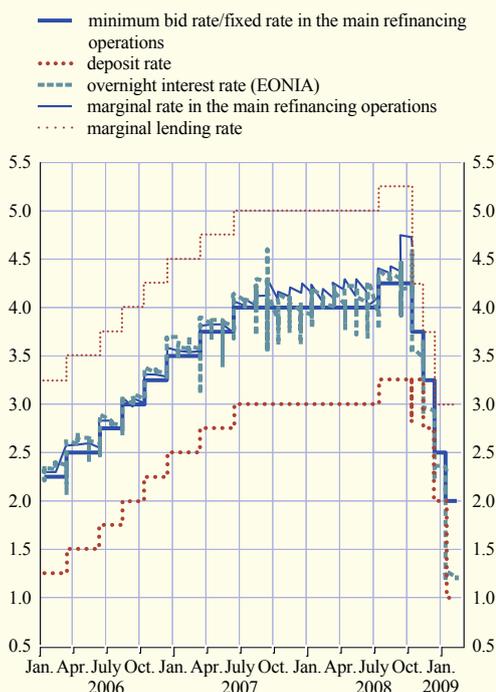
On 15 January the Governing Council decided to cut the key ECB interest rates by 50 basis points, which reduced the interest rate on the Eurosystem's main refinancing operations to 2.00%.

At the start of the first maintenance period of 2009 (which ended on 10 February 2009) the EONIA fell significantly, partly owing to the reduction in key ECB interest rates (see Chart 10) and partly on account of the corridor formed by the standing facilities being widened again from 100 basis points to 200 basis points in a symmetrical manner, which took effect on the first day of that maintenance period (i.e. 21 January). The EONIA continued to decline over the course of the maintenance period. Having stood at around 2.14% towards the end of the previous maintenance period, the EONIA declined to 1.498% on the first day of the new maintenance period and stood at 1.201% on 4 February. Overall, the EONIA remained at levels significantly below the rate in the main refinancing operations in the period from 15 January to 4 February, averaging 65 basis points below that rate. The average spread was 38 basis points before the widening of the corridor formed by the standing facilities on 21 January and 74 basis points thereafter. This behaviour is consistent with the provision of abundant amounts of liquidity in the context of the policy of full allotment at a fixed rate.

Owing to the Eurosystem's current liquidity management policy (i.e. the provision of liquidity through fixed rate tender procedures with full allotment in its main refinancing operations), the volume of liquidity provided to the market was determined solely by the bidding behaviour of counterparties. In the main refinancing operations of 20 and 27 January and 3 February, counterparties bid €119.5 billion, €183.5 billion and €213.3 billion in excess of the respective benchmark amounts, thereby obtaining liquidity well in excess of what would have been required in order to fulfil reserve requirements.

Chart 10 ECB interest rates and the overnight interest rate

(percentages per annum; daily data)



Sources: ECB and Reuters.

Recourse to the deposit facility remained at elevated levels during the first maintenance period of the year, although it was, on average, lower than in the previous maintenance period. Reflecting the ample liquidity conditions and the limited use of fine-tuning operations, daily recourse to the deposit facility averaged around €177 billion between 21 January and 4 February, with significant variation over this period. However, this was lower than the average of €239 billion observed in the previous maintenance period. This decline could be a result of the corridor being widened again, thereby reducing the appeal of the deposit facility, although such conclusions may be premature. The decline is also related to the fact that bidding volumes in the main refinancing operations were lower than in the previous maintenance period. Average daily recourse to the marginal lending facility declined marginally, falling from €2.8 billion in the previous maintenance period to around €2.3 billion in the period from 21 January to 4 February. This would suggest average daily net liquidity absorption of €174.7 billion in this period.

Moreover, the Eurosystem conducted a liquidity-absorbing fine-tuning operation on 20 January, the last day of the previous maintenance period, in which it absorbed €140 billion in a variable rate tender procedure with a maximum rate of 2.5% and a marginal rate of 2.3%.

In the Eurosystem's supplementary longer-term refinancing operation on 20 January (which was conducted with full allotment and a fixed rate equal to the interest rate in the Eurosystem's main refinancing operations), the ECB provided €113.4 billion with a maturity of one month. In the longer-term refinancing operation on 28 January (which was also conducted with full allotment at the fixed rate of 2.00% and a maturity of three months), the allotted amount was €43.2 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 with a maturity of one week on 21 and 28 January and 4 February and an operation with a maturity of three months on 27 January. The ECB has also provided Eurosystem counterparties with US dollar and Swiss franc funding against euro cash via foreign exchange swap operations.

## 2.4 BOND MARKETS

*In January and early February 2009 long-term government bond yields in major economic areas rose significantly, most likely as a result of the higher compensation for risk required by investors in global bond markets. Long-term break-even inflation rates in the euro area also rose, but developments in these rates may continue to be partly affected by supply-demand imbalances in the inflation-linked bond market. Implied bond market volatility remained at high levels on both sides of the Atlantic.*

Government bond yields in global bond markets have risen significantly since the beginning of the year. In the euro area and the United States, between end-December and 4 February, ten-year government bond yields rose by about 30 and 70 basis points, to stand at 3.9% and 3.0% respectively (see Chart 11). Accordingly, the ten-year nominal interest rate differential between US and euro area government bonds narrowed to around -90 basis points at the end of the review period. In Japan, ten-year government bond yields also rose, by 20 basis points, to stand at 1.4% in early February. In January and early February bond market volatility on both sides of the Atlantic continued to moderate from the peaks of mid-November, but nonetheless remained at very elevated levels.

In January there was a partial reversal of the decline in government bond yields in the United States that started in early November and intensified after the decision in early December of the Federal Open Market Committee (FOMC) of the Federal Reserve to set a target range for the federal funds rate of 0.0 to 0.25% and to likely maintain it at low levels for a prolonged period. Since late January long-term bond yields have risen significantly. This rebound in long-term government bond yields appears to be related to the higher compensation for risk required by investors in global bond markets, as reflected in the increases in credit default swaps in the United States and other major economies. Market concerns about the long-term outlook for public finances may have partly been spurred by the ongoing discussions on the USD 825 billion economic stimulus bill in the US Congress.

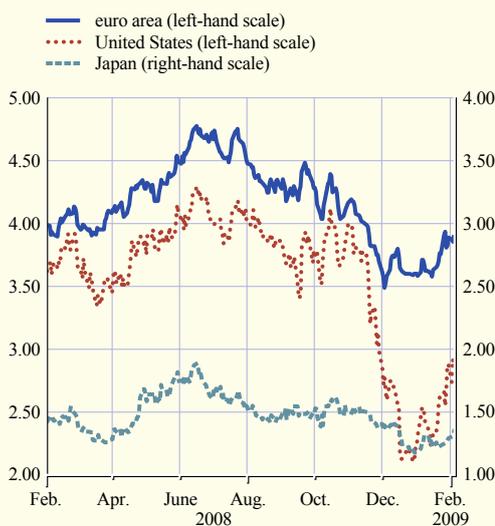
In the euro area bond markets, long-term government bond yields also increased despite the decision to lower the key ECB interest rates by 50 basis points on 15 January. As for the United States, such increases also appear to reflect increased risk awareness among bond market investors related to the fiscal burden stemming from the proposed rescue packages by European governments, in conjunction with an expanding supply of public debt and subdued investor demand for new issuance in sovereign debt markets (see the box entitled “Recent widening in euro area sovereign bond yield spreads” in the November 2008 issue of the Monthly Bulletin). The current market conditions and the heightened risk aversion among bond investors continued to contribute to the widening of the spreads of ten-year government bonds of individual euro area countries vis-à-vis their German equivalents, with new highs since the start of EMU being observed for some countries in the second half of January.

As for nominal bonds, yields on long-term inflation-linked government bonds in the euro area have also increased significantly since the beginning of 2009. The increase in real yields was mainly at medium to long maturities, with ten-year spot yields up by about 15 basis points since late December 2008 (see Chart 12). At shorter maturities, real yields remained broadly unchanged and even declined slightly. Developments in inflation-linked bond yields are however more difficult to interpret in the current circumstances, since they are likely to partly reflect supply-demand imbalances due to strong deleveraging by a number of financial institutions that has been taking place for several months under relatively poor liquidity conditions in this market.

Euro area break-even inflation rates at all maturities experienced a significant increase between end-December and early February. For instance, five and ten-year spot break-even inflation rates increased by about 15 basis points, and in early February stood at around 1.3% and 1.9% respectively, leading to an increase of about 30 basis points in the five-year forward rate five years ahead to 2.4% on 4 February (see Chart 13). The bulk of that increase however took place in the early part

Chart 11 Long-term government bond yields

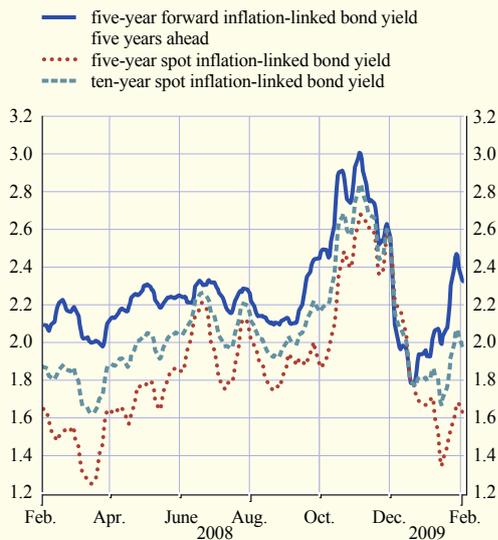
(percentages per annum; daily data)



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

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

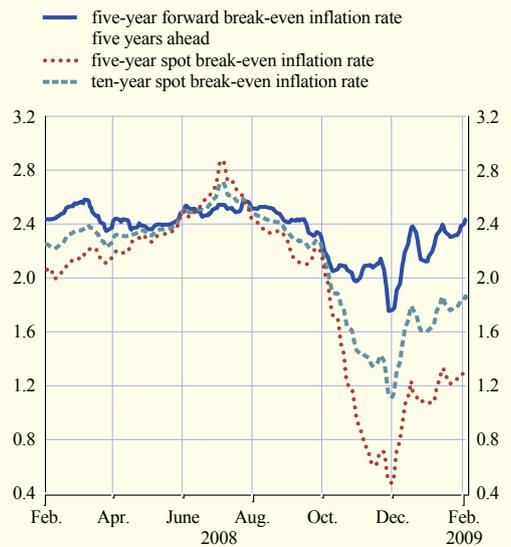
(percentages per annum; five-day moving averages of daily data; seasonally adjusted)



Sources: Reuters and ECB calculations.

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

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



Sources: Reuters and ECB calculations.

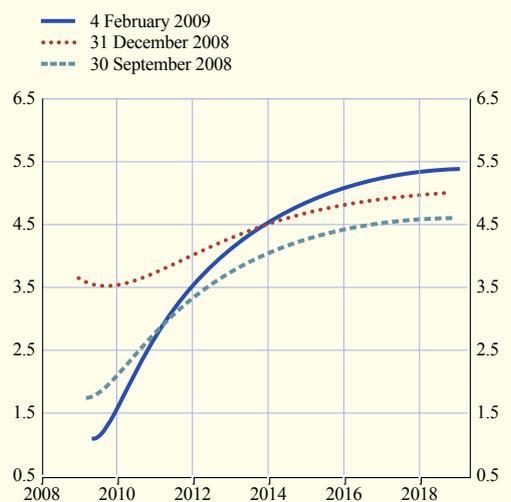
of the review period and could therefore mainly reflect the ongoing normalisation of the supply-demand imbalances in the euro area inflation-linked bond market. These movements should however be interpreted with caution in terms of changes in market participants' inflation expectations and related risk premia.

The current term structure of forward interest rates in the euro area reflects the downward adjustment of short-term interest rate expectations following the latest decision by the Governing Council of the ECB to lower policy rates by 50 basis points (see Chart 14). At the same time, the slightly higher level of long-term bond yields compared with end-December appears to be the result of a likely increase in risk premia over longer horizons.

Corporate bond spreads have declined slightly since late December, but remained close to the historical highs for most rating categories reached around the turn of the year. Non-financial corporate bond spreads decreased somewhat for all rating categories amidst

**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.

tentative signs of a return of investor demand. Similarly, in the financial sector, spreads of AAA- and AA-rated corporate debt narrowed slightly, while spreads for lower-rated debt continued to widen. Overall, the prevailing high corporate bond spreads reflect sustained investor concerns regarding the health of both non-financial and financial corporations. For instance, on 4 February BBB-rated bond spreads for non-financial corporations stood at about 425 basis points, while those for financial corporations stood at about 1,740 basis points.

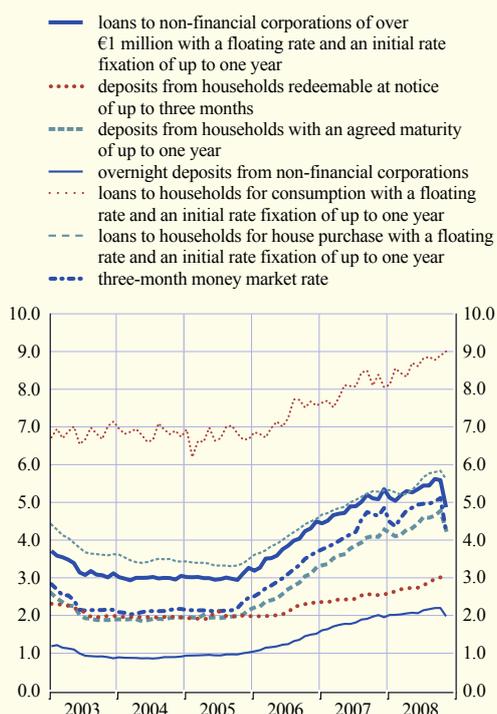
## 2.5 INTEREST RATES ON LOANS AND DEPOSITS

*In November 2008, almost all short and long-term MFI interest rates on new loans to households and non-financial corporations declined substantially. Likewise, most MFI interest rates on new deposits decreased in November 2008, following pronounced increases in previous months.*

Since the publication of the January 2009 Monthly Bulletin, no new data on bank lending rates became available before the cut-off date for the present publication. Therefore, this section reiterates the message of the corresponding section of the previous month. In November 2008, except for short-term MFI interest rates on consumer loans, all short-term MFI interest rates on loans to households and non-financial corporations decreased significantly, bringing to an end the upward trend observed in preceding months (see Chart 15). Likewise, in November 2008 MFI interest rates on short-term deposits (i.e. deposits with an agreed maturity of up to one year) from both non-financial corporations and households declined significantly. These developments were most likely driven by the parallel and more pronounced falls in market rates with corresponding rate fixation periods. Reflecting the reductions in key ECB interest rates and the somewhat abating tensions in the money markets, the three-month EURIBOR sharply declined in November and December 2008. This resulted in a widening of the spreads between short-term MFI lending rates and short-term money market rates, while the spread between money market rates and short-term MFI deposit rates declined to zero in November 2008 (see Chart 16). These movements probably reflect the traditional sluggish pass-through of changes in market rates to retail bank interest rates, tighter bank credit standards and, as regards the narrowing of the deposit spread, continued strong competition among banks to attract deposit funding.

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

(percentages per annum; rates on new business)



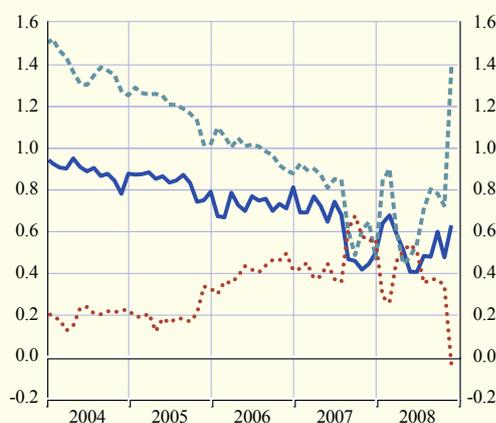
Source: ECB.

Similar developments were observed for longer-term MFI interest rates. Hence, all MFI lending rates with an initial rate fixation period of over one year declined in November 2008

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

(spreads in percentage points; rates on new business)

- spreads of loans to non-financial corporations of over €1 million with a floating rate and an initial rate fixation of up to one year versus the three-month money market rate
- ..... spreads of deposits from households with an agreed maturity of up to one year versus the three-month money market rate
- - - spreads of loans to households for house purchase with a floating rate and an initial rate fixation of up to one year versus the three-month money market rate

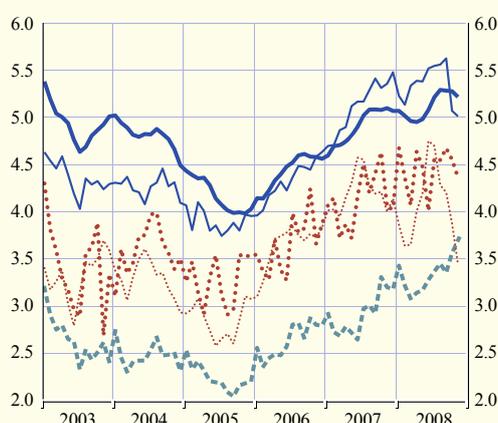


Source: ECB.  
Note: For the loans the spreads are calculated as the lending rate minus the three-month money market rate and for the deposits the spreads are calculated as the three-month money market rate minus the deposit rate.

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

(percentages per annum; rates on new business)

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



Source: ECB.

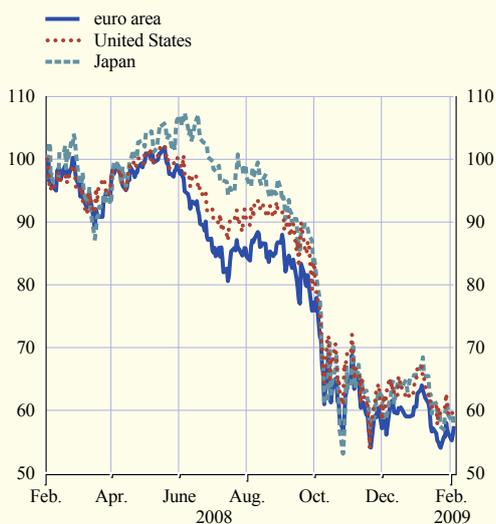
(see Chart 17). The declines were particularly pronounced for long-term rates on loans to non-financial corporations, halting the upward trend observed in preceding months, whereas the decreases in long-term rates on loans to households were somewhat more limited. These developments most likely reflected the fact that banks began adjusting to the significant decreases in market rates observed since September 2008. For example, between August and November 2008 the five-year euro area swap rate declined by around 140 basis points. Against this background, the overall decreases in MFI lending rates between August and November were more muted, possibly reflecting both the usual inertia in the retail bank rate adjustment and concerns about the outlook for bank borrower conditions. At the same time, MFI interest rates on long-term deposits from households continued to increase, probably reflecting the fact that competition for refinancing via deposits further increased in an environment where the access to other sources of bank funding remained very difficult.

## 2.6 EQUITY MARKETS

*Between end-December 2008 and 4 February 2009 stock price indices in the euro area and the United States declined by 5% and 8%, respectively. These declines can be explained by the combination of heightened risk aversion among investors, uncertainty about the depth and length of the recession in the global economy, and a further deterioration in corporate earnings. Stock market volatility rose over the review period, but remained well below the peaks of last autumn.*

Chart 18 Stock price indices

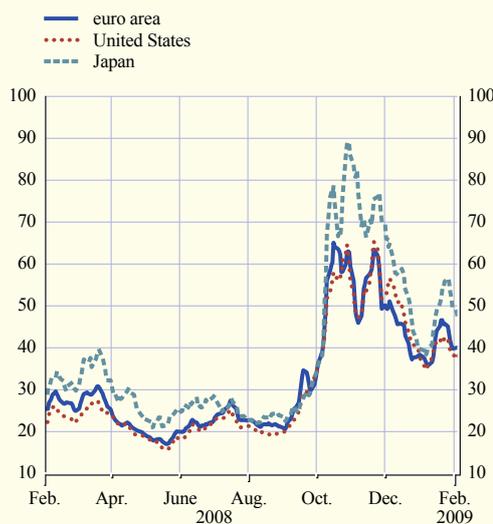
(index: 1 February 2008 = 100; daily data)



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.

Since end-December 2008 global stock markets have been characterised by significant volatility, as well as alternating gains and losses that overall resulted in lower stock prices by the end of the review period. By 4 February euro area stock prices, as measured by the broad-based Dow Jones EURO STOXX index, had decreased by 5%, while in the United States the Standard and Poor's 500 index declined by 8% from its end-December level (see Chart 18). Over the same period stock prices in Japan, as measured by the Nikkei 225 index, decreased by 9%. Implied near-term volatility as extracted from stock options rose somewhat in the first weeks of 2009, but – although high by historical standards – remained far below the peaks observed last autumn (see Chart 19). Uncertainty about future developments in the Dow Jones EURO STOXX 50 index beyond the very short term (at one and two-year horizons) remained broadly unchanged, but at rather high levels.

Over the review period, developments in the US and euro area stock markets were dominated by investors' concerns about the length and depth of the recession on both sides of the Atlantic. In the United States, the decline in the overall stock market index mainly reflects the poor performance of financial sector stocks, which registered a 23% decrease, while non-financial stocks fell by about 4%. These renewed declines, particularly in the financial sector, were triggered by the announcement of severe losses by some banks, concerns about the outlook for the US economy and heightened risk aversion among investors. The gloomy macroeconomic prospects led to a wave of layoff announcements and are also reflected in deterioration in actual and expected corporate earnings. Growth in actual earnings per share for firms listed in the Standard and Poor's 500 index decreased in January to -15%. Although growth rates for expected earnings in the next 12 months were also revised downwards to around 10%, the latter figure points to some recovery in corporate profits in the relatively near future.

In the euro area, stock price developments were more balanced across the non-financial and financial sectors, with respective declines of about 3% and 10% between end-December 2008 and 4 February 2009, but bank stocks suffered the more severe losses. Despite somewhat mixed earnings announcements, financial stocks – and bank stocks in particular – suffered from the negative results reported by some banks, which raised further concerns about the health of the sector among investors and kept equity premia high. Overall, euro area stock markets appear to be still strongly influenced by high risk aversion, low investor confidence and renewed concerns about deteriorating economic prospects.

The difficult economic climate also had a significant impact on the earnings of companies listed in the Dow Jones EURO STOXX index. Actual year-on-year earnings-per-share growth registered a further decline in January, to -16% from -13% in December. Looking ahead, expected growth rates for earnings per share 12 months ahead were also revised further downwards from 1.5% in December to 0.5% in January. At the sectoral level, earnings developments continued to show a marked contrast between non-financial and financial corporations in January. While non-financial corporations saw a relatively small decline in annual earnings-per-share growth of 8%, there was a considerably larger decline in financial sector earnings-per-share growth, of 41%. Possibly reflecting different levels in current earnings, analysts appear to expect a very different time profile of the effects of the crisis on earnings across sectors: while earnings per share for the financial sector are expected to rebound by 15% over the next 12 months, the outlook for the non-financial corporate sector is for a further decline of 4%.

### 3 PRICES AND COSTS

According to Eurostat's flash estimate, euro area annual HICP inflation continued to decline in January 2009, to 1.1%, from 1.6% in December 2008. At the same time, marked movements in global commodity prices have also contributed to a rapid fall in supply chain price pressures from the high levels recorded in the middle of last year. By contrast, available data suggest that euro area labour cost growth remained elevated in the third quarter of 2008.

On account of mainly base effects stemming from the past behaviour of energy prices, headline annual inflation rates are projected to decline further in the coming months, possibly reaching very low levels at mid-year. However, again owing to base effects stemming from past energy price developments, inflation rates are expected to increase again in the second half of the year. Accordingly, it is likely that HICP inflation rates will fluctuate sharply during 2009. Looking over the policy-relevant, medium-term horizon, annual HICP inflation is expected to be in line with price stability. As regards risks to price stability, unexpected further declines in commodity prices or a stronger than expected slowdown in the economy could put downward pressure on inflation, while upside risks to price stability could materialise, particularly if the recent fall in commodity prices were to reverse or if domestic price pressures turn out to be stronger than assumed.

#### 3.1 CONSUMER PRICES

According to Eurostat's flash estimate, euro area annual HICP inflation fell to 1.1% in January 2009, down from 1.6% in December 2008 (see Table 4). Although official estimates of the breakdown of the HICP for January have not yet been published, available evidence suggests that there was a month-on-month decline in energy prices, along with a likely dampening influence on inflation, given base effects in both the energy and the food components.

The detailed breakdown for December indicates that the sharp slowdown in annual HICP inflation in that month was mainly attributable to a further drop in the annual rate of change in the energy component (see Chart 20). This marked decline resulted from a significant month-on-month reduction of energy prices that stemmed mainly from oil-related energy components, such as car fuel and heating oil. By contrast, the HICP items of gas and heat energy rose on a monthly basis in December, possibly reflecting lagged effects of past oil price increases.

**Table 4 Price developments**

(annual percentage changes, unless otherwise indicated)

	2007	2008	2008 Aug.	2008 Sep.	2008 Oct.	2008 Nov.	2008 Dec.	2009 Jan.
<b>HICP and its components</b>								
Overall index <sup>1)</sup>	2.1	3.3	3.8	3.6	3.2	2.1	1.6	1.1
Energy	2.6	10.3	14.6	13.5	9.6	0.7	-3.7	.
Unprocessed food	3.0	3.5	3.7	3.6	3.4	2.8	2.8	.
Processed food	2.8	6.1	6.8	6.2	5.1	4.2	3.5	.
Non-energy industrial goods	1.0	0.8	0.7	0.9	1.0	0.9	0.8	.
Services	2.5	2.6	2.7	2.6	2.6	2.6	2.6	.
<b>Other price indicators</b>								
Industrial producer prices	2.8	6.2	8.5	7.9	6.3	3.3	1.7	.
Oil prices (EUR per barrel)	52.8	65.9	77.0	70.0	55.2	43.1	32.1	34.3
Non-energy commodity prices	9.2	4.4	10.5	5.5	-7.4	-7.7	-17.1	-20.7

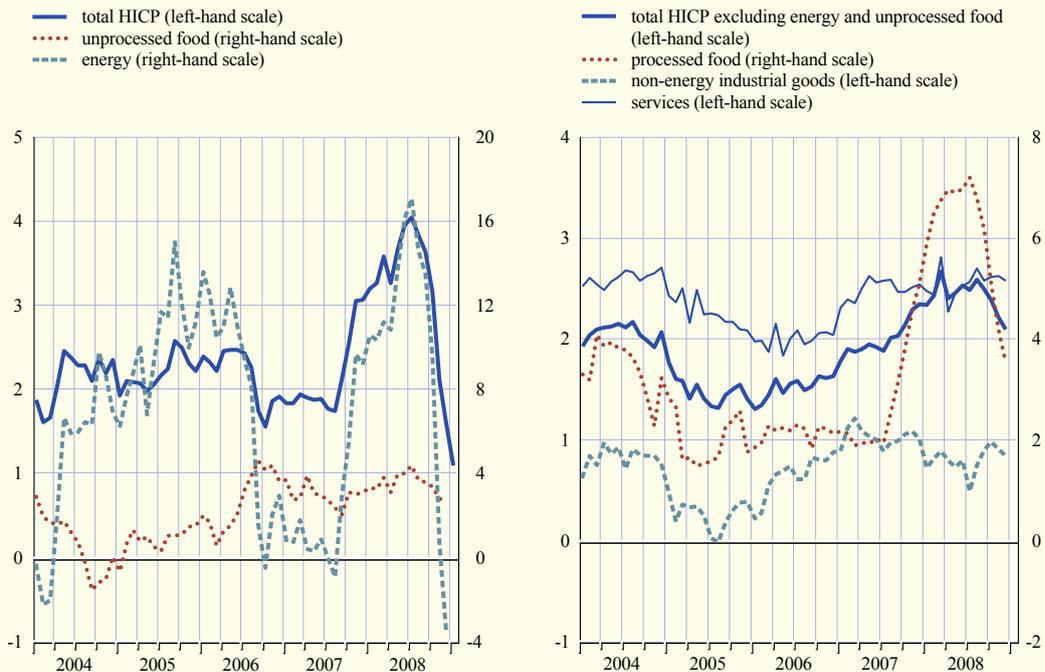
Sources: Eurostat, HWWI and ECB calculations based on Thomson Financial Datastream data.

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

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

Chart 20 Breakdown of HICP inflation: main components

(annual percentage changes; monthly data)



Source: Eurostat.

The annual growth rate of euro area food prices also fell further in December, on account of a decline in the annual growth rate of processed food prices. The annual rate of increase in processed food prices fell further to 3.5% in December, down from the peak of 7.2% in July, in an environment of lower agricultural commodity prices. The decline in December was mainly due to the bread and cereals, dairy, and oil and fats components, and largely reflected a favourable base effect. At 2.8%, year on year, the growth in unprocessed food price inflation remained unchanged in December. However, there were counteracting movements among unprocessed food components, with annual growth in the prices of meat, fish and fruit declining, while that of vegetables went up.

Excluding all food and energy items, which account for 30% of the HICP basket, HICP inflation declined marginally to 1.8% in December, down from 1.9% in the three preceding months. The annual rate of change in non-energy industrial goods prices posted a small decline for the second time in a row, falling from 1.0% in October to 0.8% in December, following some upward movement in previous months. The latest decline was mainly due to developments in car prices (which account for 15% of the non-energy industrial goods component). The drop in the annual rate of change in car prices to zero in December was due in part to a base effect and in part probably also to a small month-on-month decline against the background of a falling demand for cars. The annual growth rate of services prices remained at 2.6% in December, unchanged since September and broadly in line with the average over the period since January 2007. The unchanged rate of services price inflation in November nevertheless masked contrasting developments among the sub-components. In particular, there was a small increase in the annual rate of change in the transport services component, which was somewhat at odds with oil price developments in that month. This was offset by a significant fall in the annual rate of change in prices of package holidays.

### 3.2 INDUSTRIAL PRODUCER PRICES

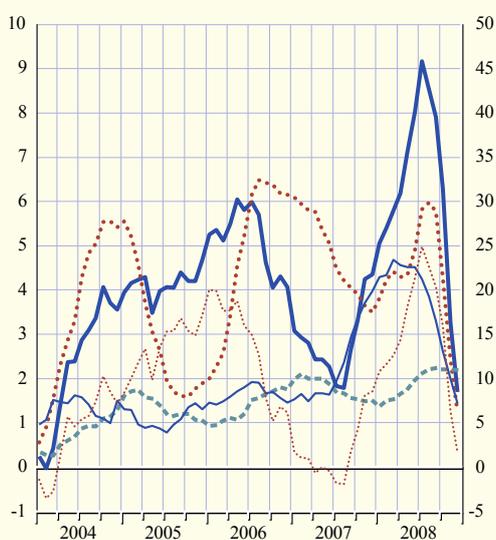
Supply chain price pressures have continued to recede steadily from the very elevated levels reached in the summer of last year. The annual growth in industrial producer prices (excluding construction) fell to 1.7% in December 2008, down from 3.3% in November (see Chart 21). The fall was mainly driven by developments in the prices of energy and intermediate goods. In more detail, the annual growth rate of the energy component dropped to 1.7% in December, from 6.3% in November, reflecting both a further marked fall in energy prices on a monthly basis and a favourable base effect. Excluding energy (and construction), annual producer price inflation declined to 1.5%, its lowest level in almost three years. The annual rate of growth of intermediate goods prices dropped markedly to 1.2% in December, while that of capital goods remained stable at 2.2%. The annual rate of change in consumer goods prices dropped to 1.4%, down from 2.0% in November, on account of lower inflation in the non-durable goods component that resulted, to some extent, from a further slowdown in the growth of prices of food items.

More recent information from surveys on the price-setting behaviour of firms suggests that supply chain price pressures eased further in early 2009 (see Chart 22). According to the latest Purchasing Managers' Index, following the sharp fall in indices for input prices and selling prices, most indicators of price pressures in the manufacturing and services sectors stood in the vicinity of historical lows at the beginning of 2009 – in stark contrast to the elevated readings in the middle of last year.

Chart 21 Breakdown of industrial producer prices

(annual percentage changes; monthly data)

- total industry excluding construction (left-hand scale)
- ..... intermediate goods (left-hand scale)
- ..... capital goods (left-hand scale)
- consumer goods (left-hand scale)
- ..... energy (right-hand scale)

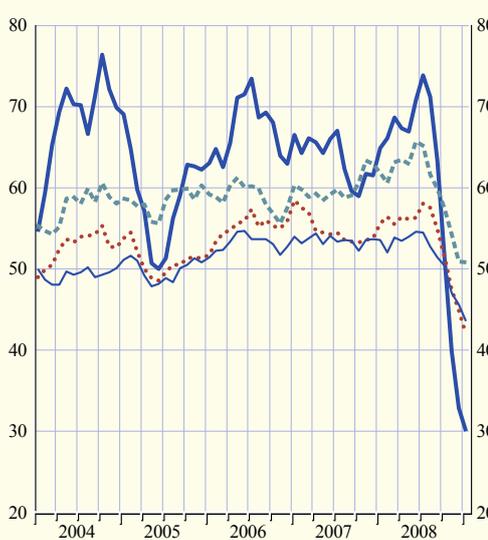


Sources: Eurostat and ECB calculations.  
Note: Data refer to the euro area including Slovakia.

Chart 22 Producer input and output price surveys

(diffusion indices; monthly data)

- manufacturing; input prices
- ..... manufacturing; prices charged
- ..... services; input prices
- services; prices charged



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

**Table 5 Labour cost indicators**

(annual percentage changes, unless otherwise indicated)

	2006	2007	2007 Q3	2007 Q4	2008 Q1	2008 Q2	2008 Q3
Negotiated wages	2.3	2.2	2.1	2.1	2.8	2.9	3.4
Total hourly labour costs	2.5	2.6	2.5	2.9	3.5	2.8	4.0
Compensation per employee	2.2	2.5	2.3	2.9	3.1	3.4	3.5
<i>Memo items:</i>							
Labour productivity	1.2	0.8	0.7	0.4	0.5	0.2	-0.1
Unit labour costs	1.0	1.7	1.6	2.5	2.6	3.2	3.6

Sources: Eurostat, national data and ECB calculations.

### 3.3 LABOUR COST INDICATORS

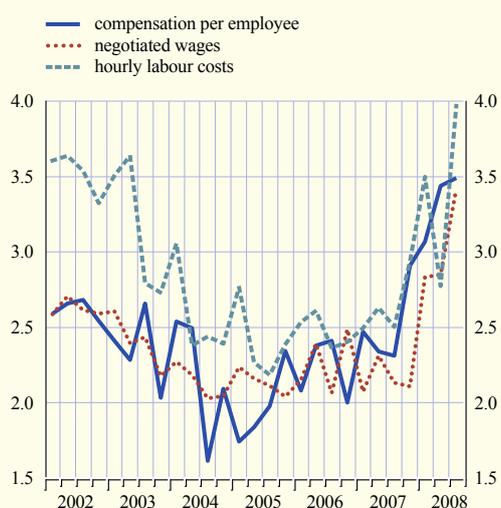
Available data indicates that euro area labour costs continued to grow at a rapid pace throughout much of 2008, with negotiated wages, hourly labour costs and compensation per employee all remaining high in the third quarter of the year (see Chart 23 and Table 5). Negotiated wages grew strongly by 3.4% in the third quarter of the year, probably influenced by past labour market tightness as well as by second-round effects in some euro area countries that stemmed from the indexation of wages to temporarily high inflation outcomes. Hourly labour costs showed signs of rapid upward movement in the third quarter, rising by 4.0% on an annual basis. The high outcome for hourly labour cost growth, which was broadly based across all sectors (see Chart 24), may to some extent have resulted from the evolution of hours worked, for example, from a downward adjustment in hours worked in response to weakening demand. The annual growth rate of compensation per employee also remained elevated in the third quarter, at 3.5%. This high reading, together with the contraction of euro area productivity witnessed in the same quarter, contributed to keeping annual growth in unit labour costs at the highest level recorded in over a decade. However, it appears very likely that, going forward, wage growth will fall in view of the weak outlook for euro area economic growth.

### 3.4 EURO AREA RESIDENTIAL PROPERTY PRICES

As reported in detail in Box 4, the latest estimates available at the euro area level for the first half of 2008 suggest that there has been a continuation of the general moderation in residential property price growth since its peak in mid-2005.

**Chart 23 Selected labour cost indicators**

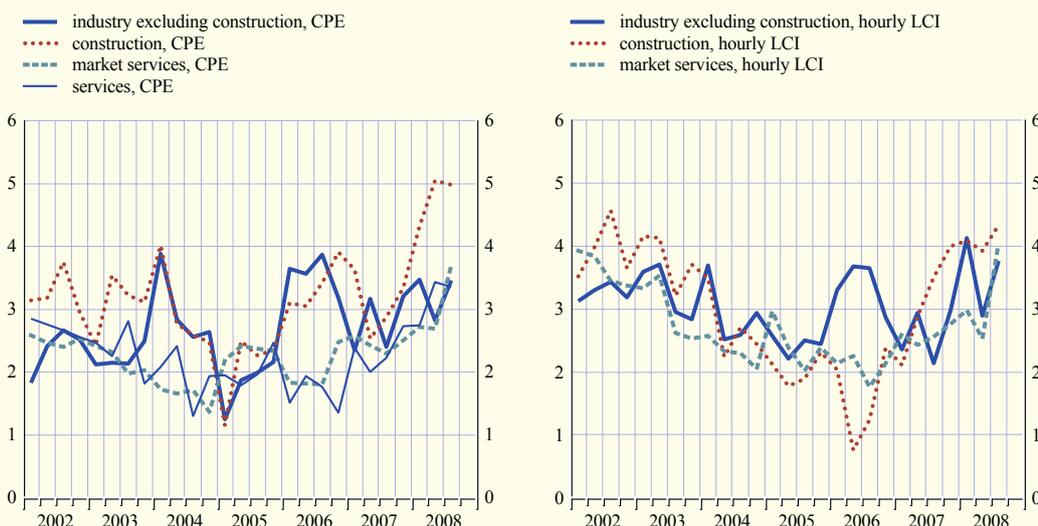
(annual percentage changes; quarterly data)



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

Chart 24 Sectoral labour cost developments

(annual percentage changes; monthly data)



Sources: Eurostat and ECB calculations.

Notes: Data refer to the euro area including Slovakia. CPE stands for “compensation per employee” and LCI stands for “labour cost index”.

#### Box 4

### RECENT HOUSING MARKET DEVELOPMENTS IN THE EURO AREA

Euro area residential property price inflation continued to ease in early 2008, thereby extending a moderating trend that has been evident over the last three years, following strong growth in the period leading up to 2005. This box reviews recent developments in residential property prices in the euro area, relates their evolution to selected housing demand and supply factors, and assesses the likely prospects for house prices.<sup>1</sup>

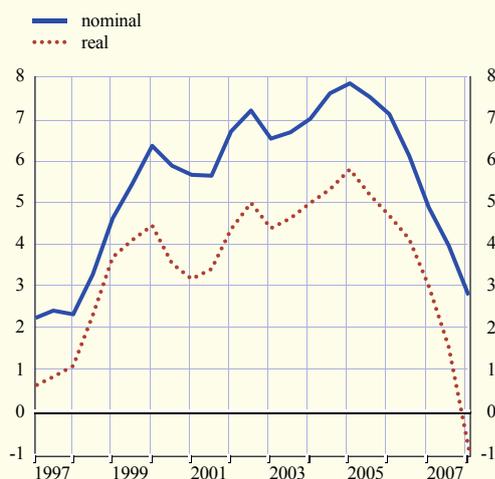
The most recent data indicate a continued steady downward trend in the growth rate of euro area residential property prices in the first half of 2008.<sup>2</sup> In annual terms, house price growth in the euro area is estimated to have declined steadily from a peak of 7.7% in the first half of 2005 to 2.7% in the first half of 2008 (see Chart A). The currently subdued growth in house prices contrasts with the strong average annual growth rate of 6.6% witnessed over the period from 1999 to 2005 (see the table below). Adjusted for HICP inflation, the recent slowdown in euro area house price growth was even more marked, with this measure of house price inflation falling from 5.7% in the first half of 2005 to -0.8% in the first half of 2008. This more marked movement, however, was exacerbated by the impact of volatile commodity price movements on euro area HICP.

1 For a detailed analysis of indicators of housing demand and supply, see the article entitled “Assessing house price developments in the euro area” in the February 2006 issue of the Monthly Bulletin.

2 It should be noted that there is high data uncertainty in assessing house price developments on account of, in particular, issues related to coverage, quality control and representativeness.

### Chart A Residential property prices in the euro area

(annual percentage changes; biannual data)



Source: ECB calculations based on national data.  
Notes: Real residential property price growth is obtained by subtracting annual HICP inflation from the growth of nominal residential property prices. The euro area residential property price aggregate is calculated from national series covering more than 90% of euro area GDP for the whole period.

Considerable cross-country heterogeneity continued to underlie the evolution of aggregate euro area house prices (see the table below). Available country data indicate that the speed and magnitude of the ongoing moderation in house price inflation broadly corresponded to the strength of the increases seen at the country level in preceding years. While a marked slowdown in residential property price growth was recorded for most euro area countries thus far in 2008, it is only in Ireland, Spain, Malta and Finland that house prices have shown signs of falling in comparison with their level a year earlier.

For the euro area as a whole, the recently slowing momentum of house price growth was associated with a moderation of housing demand, related in part to movements in housing demand fundamentals. In particular, “crude” housing affordability – defined as the ratio of households’ disposable

income to the house price index – has generally fallen over the past decade, against the background of strong house price increases. As indicated in Chart B, it was only in 2007 that

### Latest data on nominal residential property prices in the euro area

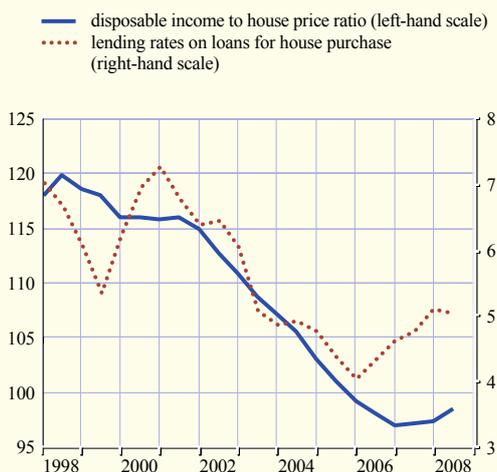
(annual percentage changes)

	Weight	Average annual change 1999-2005	2006	2007	2008	2008		2008			
						first half	second half	Q1	Q2	Q3	Q4
Belgium <sup>1)</sup>	3.7	9.4	11.1	9.2	..	..	..	..	..	..	..
Germany <sup>2)</sup>	27.2	-0.9	0.2	0.2	..	..	..	..	..	..	..
Ireland <sup>2)</sup>	2.1	12.2	13.4	0.9	-9.4	-9.0	-9.8	-8.6	-9.4	-10.0	-9.7
Greece <sup>2)</sup>	2.5	9.5	12.2	3.6	..	..	..	..	..	..	..
Spain <sup>2)</sup>	11.5	13.8	10.4	5.8	0.7	2.9	-1.4	3.8	2.0	0.4	-3.2
France <sup>1)</sup>	21.1	11.2	12.1	6.6	..	3.7	..	4.3	3.0	0.8	..
Italy <sup>2)</sup>	17.3	7.5	5.8	4.9	4.2	4.5	3.9	..	..	..	..
Cyprus <sup>2)</sup>	0.2	-	10.0	15.0	..	..	..	..	..	..	..
Luxembourg <sup>2)</sup>	0.4	11.1	..	..	..	..	..	..	..	..	..
Malta <sup>2)</sup>	0.1	10.8	3.5	1.1	-2.7	-1.7	-3.8	-0.7	-2.7	-3.2	-4.4
Netherlands <sup>1)</sup>	6.3	7.8	4.6	4.2	2.9	3.7	2.2	4.2	3.1	2.8	1.7
Austria <sup>2),3)</sup>	3.0	0.7	4.0	4.1	..	1.0	..	2.1	-0.2	0.7	..
Portugal <sup>2)</sup>	1.8	2.9	2.1	1.3	..	3.1	..	2.3	4.0	4.8	..
Slovenia <sup>1)</sup>	0.4	-	13.9	..	..	..	..	-	-	-	-
Slovakia <sup>1)</sup>	0.5	-	16.8	23.9	..	32.8	..	34.5	31.2	19.9	..
Finland <sup>1)</sup>	2.0	..	7.4	5.9	0.9	3.2	-1.4	3.7	2.7	0.6	-3.4
Euro area	100	6.6	6.5	4.3	..	2.7	..	..	..	..	..

Sources: National sources and ECB calculations.  
Note: Weights are based on 2006 nominal GDP.  
Definitions:  
1) Existing dwellings (houses and flats); whole country.  
2) All dwellings (new and existing houses and flats); whole country.  
3) Up to 2000 data for Vienna only.

Chart B “Crude” housing affordability and borrowing conditions

(index: 2005 = 100; percentages per annum)



Sources: Eurostat and ECB calculations.

Notes: “Crude” housing affordability is defined as the ratio of households’ nominal disposable income to the nominal house price index. Lending rates are calculated as the rate on loans to households for house purchase with an initial rate-fixation period of over five and up to ten years.

Chart C Survey evidence of the impact of housing market prospects on loans to households for house purchase

(net percentages)



Sources: ECB bank lending survey.

Note: The net percentages refer to the difference between the sum of the percentages of banks responding “tightened/decreased considerably” and “tightened/decreased somewhat” and the sum of the percentages of banks responding “eased/increased somewhat” and “eased/increased considerably”.

decelerating house price inflation contributed to some degree of stabilisation of this measure of affordability after many years of steady decline. Given, however, that the acquisition of housing is mainly debt-financed, borrowing conditions may also have affected housing affordability adversely over recent years. Borrowing conditions have generally tightened for households since early 2006, reflecting a general increase in the nominal interest rates applied to loans to households for house purchase (see Chart B). This followed a general decline in borrowing costs over previous years, which had helped to offset the steady fall in crude housing affordability. The latest ECB bank lending survey suggests that there was a further net tightening of credit standards for loans to households for house purchase in the last quarter of 2008.<sup>3</sup> The responses to the bank lending survey suggest that housing market prospects have led to both tightening bank credit standards and lower demand for loans since early 2007 (see Chart C). Indeed, the annual growth rate of household loans for house purchase has steadily declined from a peak of over 12% in mid-2006 to only 1.7% in December 2008.

In the context of the slowdown in both house prices and housing demand, there have been signs of a rapidly receding housing supply. In particular, real residential investment in the euro area has moderated markedly, falling from an annual growth rate of 6.1% in the first quarter of 2007 to a contraction of 3.3%, in annual terms, by the third quarter of 2008 (see Chart D). This also contributed to a decline in the share of resources devoted to housing construction in the economy, as illustrated by the fall in the ratio of nominal housing investment to nominal GDP from a historically elevated level. Building permits, which are often used as a leading indicator, suggest that weak residential investment will persist in the coming months, as the number of permits contracted sharply, by more

<sup>3</sup> See Box 3, entitled “The results of the January 2009 bank lending survey for the euro area”, in this issue of the Monthly Bulletin.

than 20% in annual terms, in the third quarter of 2008. Looking ahead, housing investment growth is expected to continue to moderate from the levels witnessed in recent years.

All in all, a subdued evolution of euro area house prices is likely to persist for some time to come. Against the background of the generally strong expansion of house prices over the last decade and a sharp weakening of activity, housing demand and supply dynamics would suggest that euro area house price inflation is likely to moderate further. Moreover, historical experience suggests that, in the short term, house prices may sometimes overshoot or undershoot their long-term trend as frictions and lags in the adjustment of the housing supply imply a dominant role for potentially volatile housing demand.<sup>4</sup>

**Chart D Residential investment in the euro area**

(percentage of GDP; annual percentage changes)



Sources: Eurostat and ECB calculations.

4 As indicated in ECB, "Structural factors in EU housing markets", 2003, the long-term development of house price inflation can be expected to exceed that of inflation for the economy as a whole, given – all else being equal – the scarcity of land that can be exploited for construction purposes and the fact that productivity in new home construction is lower than that for the overall economy. This may, however, be tempered by other factors such as demographic change, which would also be expected to strongly influence the long-term development of house prices.

### 3.5 THE OUTLOOK FOR INFLATION

According to Eurostat's estimate, euro area annual HICP inflation fell to 1.1% in January 2009, down from 1.6% in December 2008. At the same time, marked movements in global commodity prices have also contributed to a rapid decline in supply chain price pressures from the high levels recorded in the middle of last year. Available data on euro area labour costs, by contrast, suggest that they remained elevated in the third quarter of 2008.

Owing to strong base effects from past volatility in commodity prices, headline annual inflation rates are projected to decline further in the coming months, possibly reaching very low levels at mid-year. Likewise, base effects will contribute to raising inflation rates in the second half of the year, implying a high likelihood of sharp fluctuations in HICP inflation rates during 2009. However, looking through such volatility, annual HICP inflation is expected to be in line with price stability in the medium term.

This assessment is in line with the latest ECB Survey of Professional Forecasters (see Box 5). This indicates a marked downward revision to near-term inflation expectations in comparison with the previous round. As a result, inflation expectations stand at 0.9% for 2009 and at 1.6% for 2010. Average expectations for inflation five years ahead also declined slightly to 1.94%.

As regards risks to price stability, unexpected further declines in commodity prices or a stronger than expected slowdown in the economy could put downward pressure on inflation, while upside risks to price stability could materialise, particularly if the recent fall in commodity prices were to reverse or if domestic price pressures turn out to be stronger than assumed.

## Box 5

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

This box reports the results of the ECB Survey of Professional Forecasters (SPF) for the first quarter of 2009. The survey was conducted between 15 and 21 January 2009. 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 and 2010

SPF participants' inflation expectations for 2009 and 2010 have been revised markedly downwards since the previous round (conducted in October) and now stand at 0.9% and 1.6% respectively. The downward revision was largest for 2009, namely 1.3 percentage points (see the table below).<sup>2</sup> Many respondents mentioned the ongoing fall in commodity (energy and food) prices and the weaker than expected economic activity as the factors behind their downward revisions.

The SPF inflation expectations for 2009 and 2010 are below, or at the bottom end of, the ranges reported in the December 2008 Eurosystem staff macroeconomic projections for the euro area (finalised in late November 2008). The SPF inflation expectations are, on average, slightly below those of the January 2009 issues of Consensus Economics and the Euro Zone Barometer (both finalised on 12 January).

SPF participants were also asked to assess the probability of the future outcome falling within specific intervals. The aggregate probability distribution obtained by averaging the forecasters'

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)

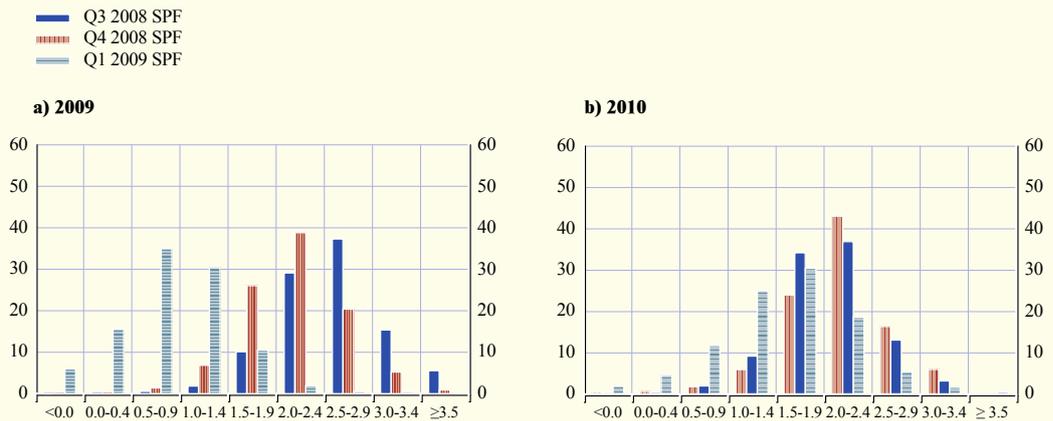
HICP inflation	Survey horizon				
	2009	December 2009	2010	December 2010	Longer term <sup>2)</sup>
SPF Q1 2009	0.9	1.4	1.6	1.7	1.9
<i>Previous SPF (Q4 2008)</i>	2.2	-	2.0	-	2.0
Eurosystem staff macroeconomic projections	1.1 - 1.7	-	1.5 - 2.1	-	-
Consensus Economics (January 2009)	1.0	-	1.7	-	2.0
Euro Zone Barometer (January 2009)	1.0	-	1.6	-	2.1
Real GDP growth	2009	Q3 2009	2010	Q3 2010	Longer term <sup>2)</sup>
SPF Q1 2009	-1.7	-1.8	0.6	0.9	2.0
<i>Previous SPF (Q4 2008)</i>	0.3	-	1.4	-	2.0
Eurosystem staff macroeconomic projections	-1.0 - 0.0	-	0.5 - 1.5	-	-
Consensus Economics (January 2009)	-1.4	-	0.8	-	2.0
Euro Zone Barometer (January 2009)	-1.5	-	0.9	-	2.2
Unemployment rate <sup>1)</sup>	2009	November 2009	2010	November 2010	Longer term <sup>2)</sup>
SPF Q1 2009	8.7	9.1	9.4	9.4	7.8
<i>Previous SPF (Q4 2008)</i>	8.0	-	8.1	-	7.1
Consensus Economics (January 2009)	8.5	-	9.1	-	-
Euro Zone Barometer (January 2009)	8.6	-	9.2	-	8.3

1) As a percentage of the labour force.

2) Longer-term inflation expectations in the SPF, the Euro Zone Barometer and Consensus Economics refer to 2013.

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

(probability in percentages)



Source: ECB.

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

responses provides a summary of their assessments. It also provides information about how, on average, survey participants gauge the risk of the actual outcome being above or below the most likely range. Reflecting the lower point estimates, the probability distributions associated with the forecast outcomes were revised heavily downwards for both 2009 and 2010, with the largest revision being made for 2009 (see Chart A). The probability distribution for both years shifted towards lower outcomes in comparison with the previous SPF, and only a small probability is now associated with outcomes being above 2% (about 3% for 2009 and 26% for 2010). Overall, the balance of risks to the forecasts is assessed by respondents to be on the downside, although some respondents cite commodity prices as an upward risk in the second half of 2009 and in 2010.

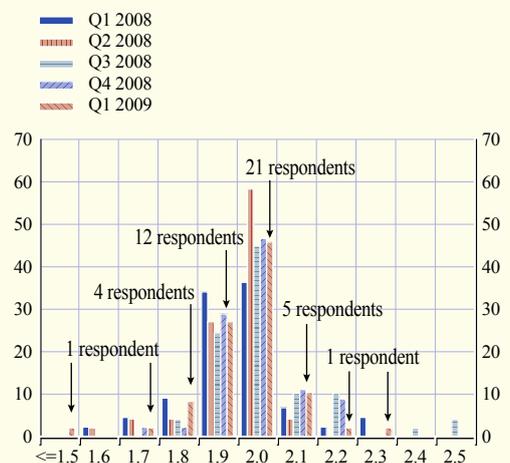
### Indicators of longer-term inflation expectations

Longer-term inflation expectations (for the year 2013) were revised slightly downwards, from 1.99% to 1.94%. These point expectations are below those in the latest long-term inflation projections provided by Consensus Economics in October 2008 and the Euro Zone Barometer in January 2009 by 0.1 and 0.2 percentage point respectively.

Consistent with the downward revision in average point expectations, the probability of longer-term inflation standing at 2% or above decreased to 49%, according to survey respondents (see Chart B). These survey results can be compared with the break-even inflation rate, an indicator of longer-

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

(percentage of respondents)



Source: ECB.

term inflation expectations among market participants calculated as the yield spread between nominal and inflation-linked bonds.<sup>3</sup> Until recently, 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) (see Chart C).<sup>4</sup> For instance, both showed an upward tendency from early 2007 to the middle of 2008. However, since September and the further intensification of financial market turmoil, financial market-based inflation expectations have been somewhat erratic and may have been distorted due to investors' efforts to reduce risk and leverage and their strong preference for more secure and liquid assets.<sup>5</sup>

### Real GDP growth expectations

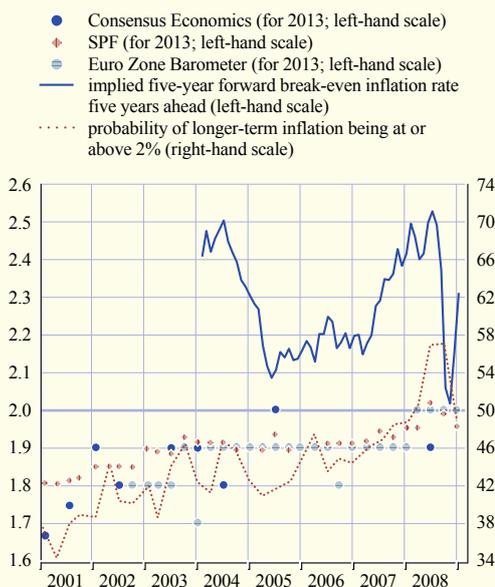
SPF respondents have revised their growth expectations for 2009 downwards to an unprecedented degree and now expect euro area economic activity (real GDP) to contract by 1.7% in 2009. This represents a further significant downward revision to their growth assessments for 2009 (the downward revision of 2.0 percentage points since the last round is by far the largest since the launch of the SPF in 1999 – double the previous “record” established in the SPF round for the fourth quarter of 2008). Respondents also revised their growth expectations for 2010 downwards substantially, by 0.8 percentage point to 0.6%. Since July 2008, SPF respondents have revised the growth forecast for the period 2009-2010 down by a cumulative 4 percentage points.

According to the qualitative explanations provided by approximately half the respondents, while many cited the financial market turmoil as a factor behind the slowdown, the downturn is now assessed to be widespread and impacting on all parts of the economy. However, there are some factors that SPF respondents believe will support economic activity. First, falls in commodity prices will increase consumers' real incomes. Second, already announced monetary and fiscal policy measures are expected to boost activity.

The SPF growth expectations for 2009 are considerably below the range reported in the December 2008 Eurosystem staff macroeconomic projections for the euro area, while those for 2010 are at the bottom end of the range. In addition, the SPF forecasts are also somewhat

**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, ECB, Reuters and ECB calculations.

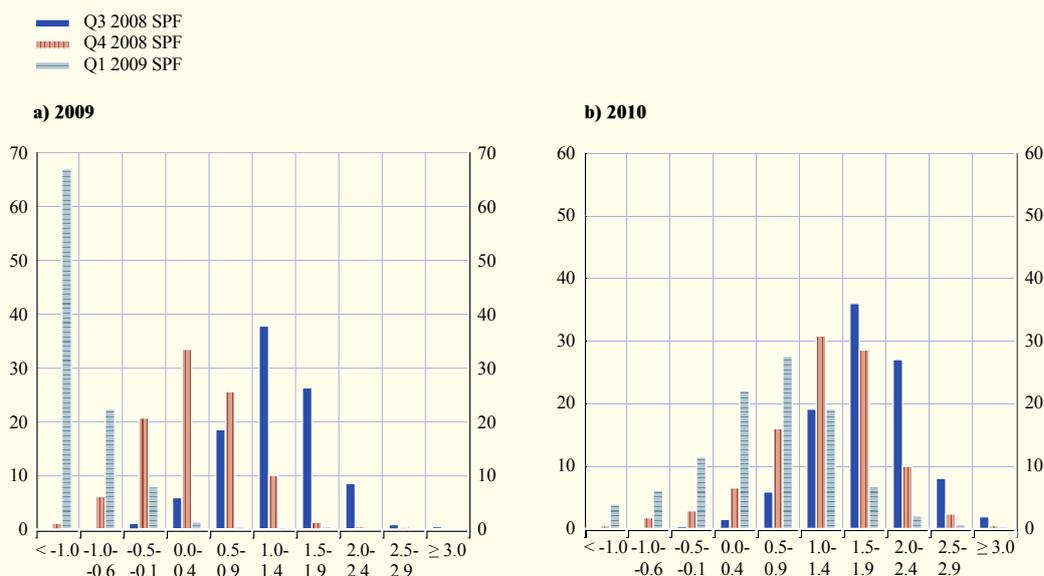
3 See also the article entitled “Measures of inflation expectations in the euro area” in the July 2006 issue of the Monthly Bulletin.

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.

**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)



Source: ECB.

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

lower than those reported in the January releases of Consensus Economics and the Euro Zone Barometer.

In line with the downward revision of expected real GDP growth for 2009, the aggregate probability distribution for 2009 has also been revised down substantially (see Chart D). The scale of the downward revision is evident from the fact that the largest probability is associated with outcomes in the open-ended interval (less than -1%).

For 2010, the aggregate probability distribution has also shifted towards lower outcomes. Respondents have assigned a 50% probability that real GDP growth will be in the range from 0.0% to 1.0%. Furthermore, the balance of risks is assessed to be slightly to the downside, with the estimated mean of the probability distribution (at around 0.5%) below the average of the reported point estimates (0.6%). Many of the forecasters stress the great uncertainty surrounding the possible timing and sources of a recovery. As reported in the previous round, uncertainty derived from the aggregate probability distribution surrounding two-years-ahead (with reference to the latest available data point) real GDP forecasts has increased substantially since the beginning of 2008, and reached a new peak in this round.

SPF respondents were also explicitly asked to specify when they expected the recovery (i.e. sustained and positive growth) in economic activity to start. Approximately 50% of those responding expect the recovery to take place during the second half of 2009, with many of these respondents specifying that it would set in towards the end of 2009 at the earliest. Approximately one-third gave the first half of 2010, while the remainder indicated the second half of 2010 or later.

Longer-term growth expectations (for 2013), at 2.0%, remained unchanged. Overall, respondents assess the balance of risks to be on the downside. SPF forecasters have assigned a higher probability to longer-term real GDP growth being within the 1.5% to 1.9% interval than to it being in the 2.0% to 2.4% interval.

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

Consistent with the major downward revisions to their growth expectations, SPF respondents revised their unemployment rate expectations substantially upwards for all horizons. Given the somewhat lagging relationship between growth and unemployment, the upward revision was largest for 2010 (by 1.3 percentage points to 9.4%), while the revision for 2009 was 0.7 percentage point to 8.7%. Longer-term unemployment rate expectations were also revised significantly upward, by a relatively large amount (0.7 percentage point), and now stand at 7.8%. The profile of unemployment expectations reported by SPF respondents implies that the unemployment rate is only expected to return to the current rate of 7.8% after five years. This underscores both the severity and length of the downturn anticipated and the considerable degree of hysteresis respondents still perceive in European labour markets.

In their qualitative explanations, forecasters mainly commented on short-term labour market prospects. Many respondents stated that the upward revision to forecast unemployment would have been larger and more prolonged were it not for the increased flexibility afforded by past structural reforms in the labour market. A number of them also explicitly mentioned that the decline expected in unemployment rates after 2010 is conditional on the pace of labour market reform being stepped up and not being halted or reversed owing to the current adverse environment.

## 4 OUTPUT, DEMAND AND THE LABOUR MARKET

The pace of euro area activity declined markedly in the second half of 2008 as tensions increasingly spilled over from the financial sector to the real economy. Survey data and monthly indicators pointed to a strong contraction in activity towards the end of 2008, with continued weakness early in 2009. Looking ahead, the outlook for economic activity is extraordinarily uncertain. Weakness in economic activity in the euro area is expected to persist over the coming quarters as the financial market tensions continue to have an impact on the global and domestic economy. At the same time, the very substantial fall in commodity prices is expected to support real disposable income, and thus consumption, in the period ahead. Furthermore, over time the euro area should benefit from the effects of the significant policy measures announced in recent months. Overall, risks to economic growth remain clearly on the downside. They relate mainly to the potential for the turmoil in financial markets to have a stronger impact on the real economy, to concerns about the emergence and intensification of protectionist pressures and to possible adverse developments in the world economy stemming from a disorderly correction of global imbalances.

### 4.1 REAL GDP AND DEMAND COMPONENTS

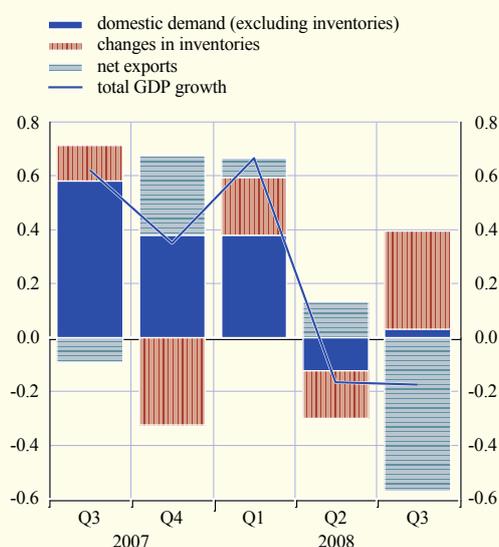
The pace of euro area activity declined markedly in the second half of 2008. Real GDP fell by 0.2% quarter on quarter in the second and third quarters of 2008 (see Chart 25). Surveys and monthly indicators pointed to a much deeper contraction in activity towards the end of 2008.

The breakdown of expenditure for the third quarter indicated sluggish final domestic demand, with the contribution from domestic demand (excluding inventories) close to zero in the third quarter of 2008. Private consumption rose slightly and investment fell. This was partly offset by a rise in government consumption. Growth in exports remained weak, while imports rebounded in the third quarter. As a result, the contribution of net trade to GDP growth was negative at -0.6 percentage point. The contribution of inventories to overall growth was 0.4 percentage point.

Private consumption rose slightly in the third quarter of 2008, after falling in the second quarter. The euro area integrated accounts provide some indication of the factors affecting recent household spending trends. A key influence has been the weakness of households' real disposable income. Year-on-year growth in nominal household income continued at a relatively robust pace in the third quarter of 2008, reflecting strong growth in compensation of employees. However, a sharp rise in inflation until the middle of the year – driven chiefly by large increases in commodity prices – squeezed real incomes. In the third quarter of 2008, households experienced continued low annual growth in real disposable income and also suffered falls in financial wealth. With continued economic uncertainty and falling consumer confidence, the household saving ratio increased further in the third quarter.

Chart 25 Real GDP growth and contributions

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



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

Recent developments in retail trade, taken together with consumer confidence levels and new car registrations, point to continued weak consumer spending in the last quarter of 2008 and the first few months of 2009. The volume of retail sales was unchanged month on month in December. Overall, in the fourth quarter of 2008, retail sales fell by 0.9% (see Chart 26). New passenger car registrations rose month on month in December, but the overall trend remained very weak. In December 2008, new passenger car registrations were 20% lower than a year earlier. Consumer confidence deteriorated slightly in January and reached the lowest level since the survey began in 1985. In particular, reflecting the continued worsening of developments in the labour market, households registered further declines in their assessment of the unemployment situation in the euro area.

Following a decline in the second quarter of 2008, investment growth also moderated in the third quarter. This reflected a sharp contraction in construction investment and a more modest decline in business investment.

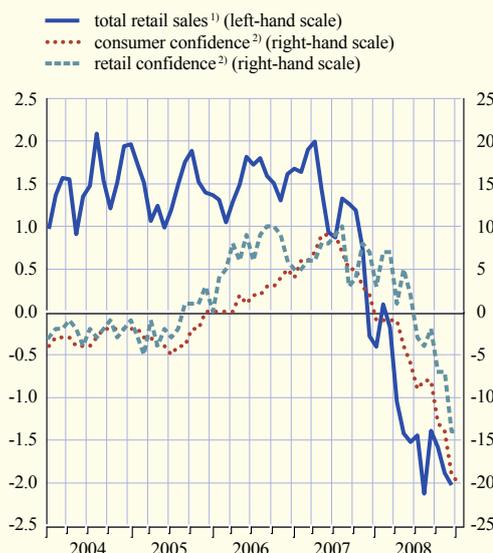
Construction investment fell by 1.0% quarter on quarter in the third quarter of 2008, after declining by 1.7% in the previous quarter. The contraction in construction investment in part reflects the ongoing adjustment in several euro area country housing markets, which has dampened residential investment. As discussed in Box 4, euro area residential property price inflation continued to ease early in 2008, continuing the moderating trend of the previous three years. Annual growth in new loans for house purchase in the euro area has been falling since 2007, but this contraction accelerated in the course of 2008, as credit conditions applied to loans to households tightened. Overall, given the ongoing weakness in household disposable income and the protracted deterioration in consumer confidence, it is likely that the subdued evolution of euro area housing markets will persist for some time. In turn, this is likely to dampen residential investment in the coming quarters.

Non-construction investment also fell slightly in the third quarter of 2008. Tighter lending standards have raised financing spreads, which tends to discourage investment growth. In addition, waning demand has already lowered profitability. According to the euro area integrated accounts, year-on-year growth in the gross operating surplus of non-financial corporations fell markedly in the third quarter of 2008. Falling demand has also reduced capacity constraints within firms, potentially dampening the need for businesses to expand production capacity. The January 2009 European Commission survey revealed a marked decline in capacity utilisation in the industrial sector, to the weakest rate since the survey began in 1985.

As the external environment has deteriorated, export growth moderated during 2008. Exports fell in the second quarter of 2008 and were broadly unchanged in the third quarter. With activity in

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

(monthly data)



Sources: European Commission Business and Consumer Surveys and Eurostat.

Notes: Data refer to the euro area including Slovakia.

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

2) Percentage balances; seasonally and mean-adjusted.

advanced economies remaining weak and the impact of the financial turmoil increasingly felt in emerging economies, it is likely that foreign demand for euro area exports will continue to be subdued. Surveys of the expectations of industrial sector firms for new orders from overseas confirm this very weak outlook.

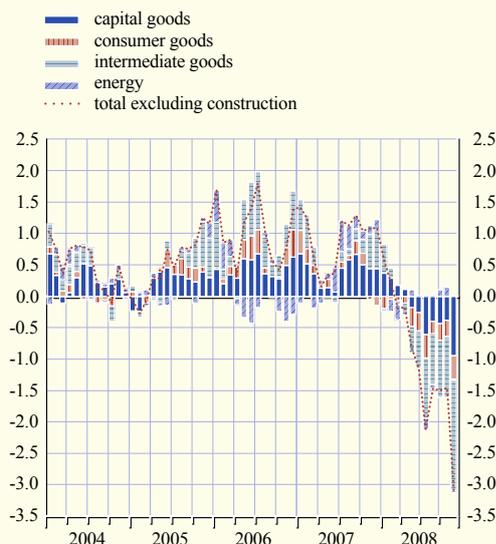
## 4.2 OUTPUT, SUPPLY AND LABOUR MARKET DEVELOPMENTS

The decline in activity in the third quarter primarily reflected falls in manufacturing and construction production. Service sector value-added growth was slightly more resilient, registering modest positive growth.

Monthly indicators suggest a marked weakening in activity during the last quarter of 2008. The figures for euro area industrial production (excluding construction) pointed to a steeper and accelerated contraction during the fourth quarter. Production fell by 1.9% month on month in November, after sharp falls in October and September (See Chart 27). The large decline brought industrial production to a level comparable to that reached in early 2006. Industrial new orders also continued to decline very sharply in November. Construction production in the euro area decreased in November, falling by 1.5% month on month. Overall, these data point to a very sharp slowdown in activity in the industrial sector in the fourth quarter.

**Chart 27 Industrial production growth and contributions**

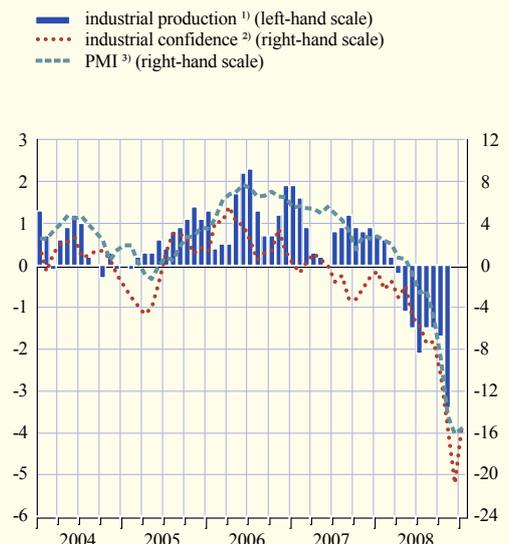
(growth rate and percentage point contributions; monthly data; seasonally adjusted)



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

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

(monthly data; seasonally adjusted)



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

Surveys of business activity revealed that business activity remained very weak in January and close to historically low levels, indicating continued weakness in activity at the start of 2009. However, although very sharp falls were recorded over the past three to four months, no further significant declines were registered in January (see Chart 28). It is difficult to draw strong conclusions from the data for a single month, but the January surveys may provide some tentative indication at least of a stabilisation in the pace of economic deterioration in early 2009. The PMI composite survey rose marginally in January 2009, reflecting moderate increases in both the manufacturing and services sectors. By contrast, the European Commission's surveys of industrial and service sector activity declined slightly in January, albeit at a more moderate pace than in the fourth quarter of 2008. The further loss in business confidence was broad based, occurring in the manufacturing, services and construction sectors.

### LABOUR MARKET

Conditions in euro area labour markets continued to deteriorate. Employment was unchanged quarter on quarter in the third quarter of 2008, following growth of 0.2% in the previous quarter (see Table 6). Employment fell in the industrial sector, reflecting falls in both the construction sector and industry excluding construction. Employment growth in the services sector remained positive, albeit at more modest rates than in previous quarters. Surveys of firms' employment intentions suggest a continuation of this subdued outlook for employment in the coming months (see Chart 29). Both the PMI and European Commission surveys of employment intentions fell further in January, with indications of broad-based declines in employment across sectors.

As activity contracted, productivity declined (see Chart 30). Year-on-year labour productivity growth (per person employed) was -0.1% in the third quarter of 2008 compared with 0.2% in the previous quarter. Labour productivity growth currently stands at its lowest annual rate since the beginning of 2002. The latest data for December from the PMI productivity index, suggest an ongoing deterioration in labour productivity growth. The index current stands at its lowest level since its inception (1998).

**Table 6 Employment growth**

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

	Annual rates		Quarterly rates				
	2006	2007	2007 Q3	2007 Q4	2008 Q1	2008 Q2	2008 Q3
Whole economy	1.6	1.8	0.5	0.3	0.4	0.2	0.0
<i>of which:</i>							
Agriculture and fishing	-1.9	-1.2	-1.0	-0.4	0.5	-1.2	-0.8
Industry	0.6	1.4	0.0	0.1	0.2	-0.3	-0.7
Excluding construction	-0.3	0.3	0.0	0.1	0.3	0.1	-0.3
Construction	2.7	3.9	-0.1	0.0	0.0	-1.2	-1.5
Services	2.2	2.1	0.7	0.4	0.4	0.4	0.2
Trade and transport	1.7	1.8	0.8	0.1	0.5	0.3	0.1
Finance and business	3.9	4.1	0.8	0.8	0.8	0.4	0.0
Public administration <sup>1)</sup>	1.9	1.4	0.5	0.5	0.1	0.5	0.5

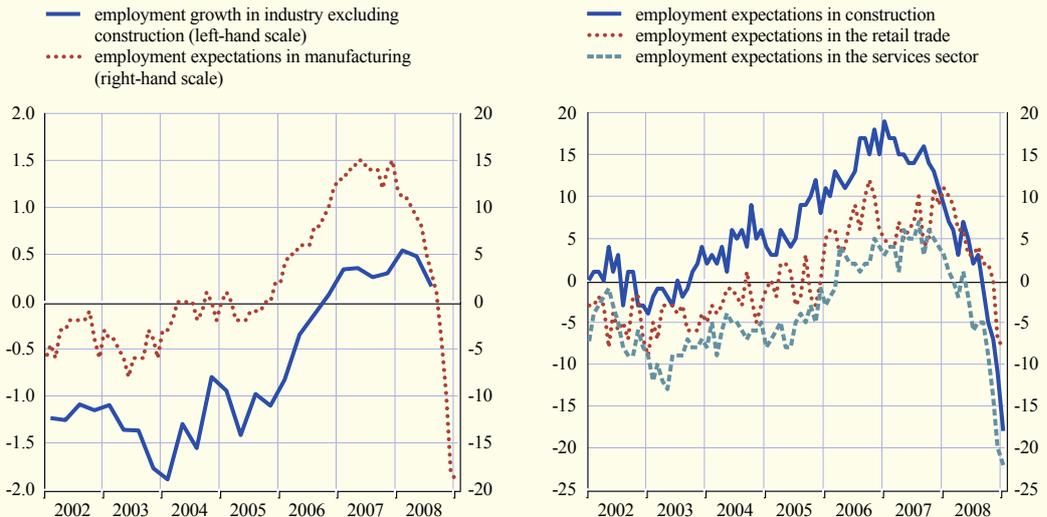
Sources: Eurostat and ECB calculations.

Note: Data refer to the euro area including Slovakia.

1) Also includes education, health and other services.

**Chart 29 Employment growth and employment expectations**

(annual percentage changes; percentage balances; seasonally adjusted)

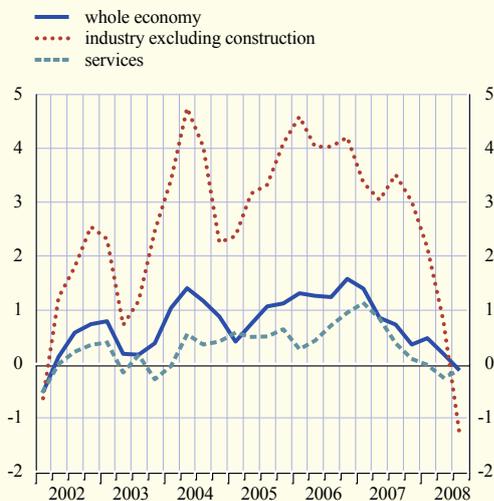


Sources: Eurostat and European Commission Business and Consumer Surveys.  
 Note: Percentage balances are mean-adjusted. Data refer to the euro area including Slovakia.

The unemployment rate in the euro area increased again in December 2008 to 8.0%, from 7.9% in the previous month (see Chart 31). The rise in the number of unemployed exceeded 200,000 for the third consecutive month. As in previous months, the rise reflected further marked rises in unemployment in Spain. However, Germany recorded the first rise in the numbers of unemployed since January 2006.

**Chart 30 Labour productivity**

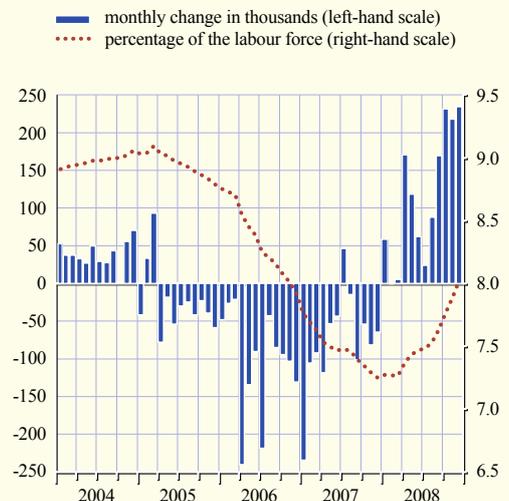
(annual percentage changes)



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

**Chart 31 Unemployment**

(monthly data; seasonally adjusted)



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

### 4.3 THE OUTLOOK FOR ECONOMIC ACTIVITY

The pace of euro area activity declined markedly in the second half of 2008 as tensions increasingly spilled over from the financial sector to the real economy. Survey data and monthly indicators pointed to a strong contraction in activity towards the end of the 2008, with continued weakness early in 2009. Looking ahead, the outlook for economic activity is extraordinarily uncertain. Weakness in economic activity in the euro area is expected to persist over the coming quarters as the financial market tensions continue to have an impact on the global and domestic economy. At the same time, the very substantial fall in commodity prices is expected to support real disposable income, and thus consumption, in the period ahead. Furthermore, over time the euro area should benefit from the effects of the significant policy measures announced in recent months. Overall, risks to economic growth remain clearly on the downside. They relate mainly to the potential for a stronger impact on the real economy of the turmoil in financial markets, to concerns about the emergence and intensification of protectionist pressures and to possible 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

*Over the last three months nominal bilateral foreign exchange rates have recorded sizeable swings. In nominal effective terms the euro strengthened in November and especially in December, but these gains were partially reversed in January and early February 2009.*

#### EFFECTIVE EXCHANGE RATE OF THE EURO

On 4 February 2009 the nominal effective exchange rate of the euro – as measured against the currencies of 21 of the euro area’s important trading partners – stood 4.6% above its level at the end of October (see Chart 32). The rebound was broadly based, with the noticeable exception of some weakening vis-à-vis the Japanese yen. The appreciation of the euro was sizeable especially vis-à-vis the pound sterling, the Swedish krona and the currencies of some new EU Member States and more moderate vis-à-vis most other major currencies.

The nominal effective exchange rate of the euro has continued to experience significant swings over the last three months (see Box 6 for an analysis of recent developments in exchange rate volatility). In November the euro began to appreciate, reversing the negative trend that had started in the summer, gathering further upward momentum in December, as the influence of US dollar-supportive factors appeared to wane (see Chart 32). In January and early February, however, the euro declined again, offsetting almost one-half of the rise since end-October. On 4 February, it still stood around 2.7% below its 2008 average.

#### US DOLLAR/EURO

After a phase of stabilisation in November, the euro rebounded in December, as financial deleveraging and technical factors apparently played a lesser role and monetary policy in the United States eased further. In January 2009 the euro weakened again, however, possibly as markets were discounting the implications of the expected fiscal package for US

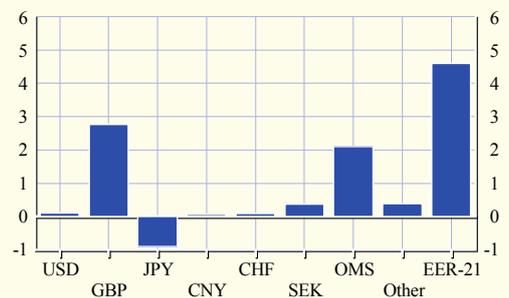
Chart 32 Euro effective exchange rate and its decomposition<sup>1)</sup>

(daily data)



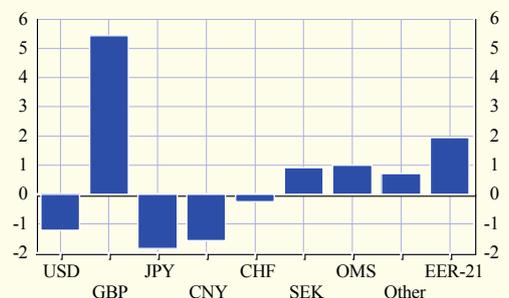
#### Contributions to EER changes<sup>2)</sup>

From 31 October 2008 to 4 February 2009  
(in percentage points)



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

From 3 January 2005 to 4 February 2009  
(in percentage points)



Source: ECB.

1) An upward movement of the index represents an appreciation of the euro against the currencies of 21 of the 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 GBP and SEK). 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.

economic growth. Inflation and industrial production releases in the euro area, both lower than expected by market participants, may have also influenced market expectations. On 4 February 2009 the euro traded at USD 1.28, close to the levels prevailing at the end of October and almost 13% weaker than its average level in 2008 (see Chart 33).

### JAPANESE YEN/EURO

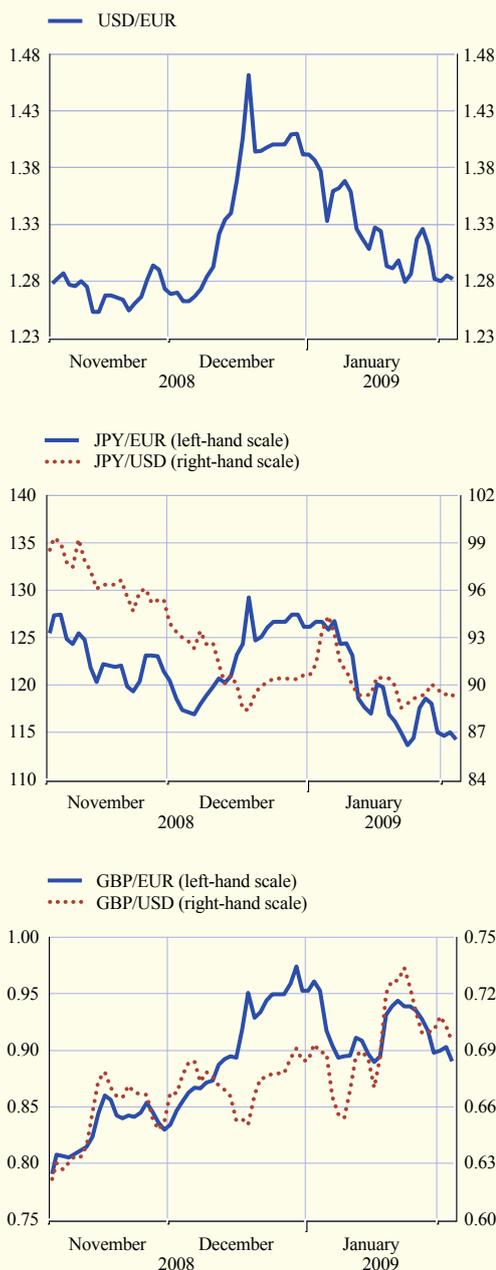
The period of weakness of the euro vis-à-vis the Japanese yen, which continued in November, was temporarily interrupted in December, before resuming in January 2009. The key factor underpinning the broad-based strength of the Japanese yen in the current environment appears to be related to the rise in implied exchange rate volatility to historical peaks for several major currency pairs (see Box 6), which reduced the attractiveness of the Japanese currency as a means of funding carry trade positions and fostered financial deleveraging. The strong convergence in nominal short-term interest rates worldwide also decreased the attractiveness of carry trades among the major currency pairs. On 4 February 2009 the euro stood at JPY 114, i.e. 8.6% weaker than its level at the end of October (see Chart 33) and 25% weaker than its average in 2008.

### EU MEMBER STATES' CURRENCIES

Over the past three months, most currencies participating in ERM II have remained stable and have continued to trade at, or close to, their respective central rates (see Chart 34). Since the end of October 2008 the Latvian lats has mostly traded on the weak side of its fluctuation band but has strengthened since end-December, and on 4 February was trading at values slightly stronger than its central rate.

Chart 33 Patterns in exchange rates

(daily data)



Source: ECB.

Box 6

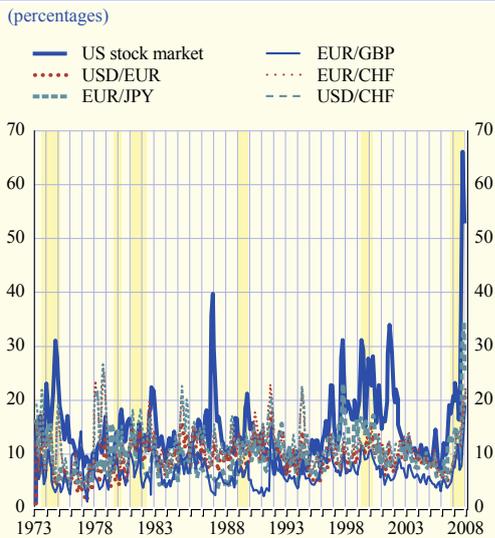
**THE RECENT EXCEPTIONAL RISE IN EXCHANGE RATE VOLATILITY**

The volatility of financial instruments, measured on the basis of historical returns, has, in recent months, increased across all asset classes. This rebound was particularly sharp by historical standards, and the peaks reached in late 2008 and early 2009 for major equity and foreign exchange markets were the highest recorded values since 1973 (see Chart A).

Cyclical swings in realised volatility have been typical of equity markets, with phases of more pronounced volatility very often associated with economic downturns. By contrast, the historical volatility in the bilateral USD/EUR rate and other key bilateral exchange rate pairs had, until recently, remained relatively stable since the 1970s, displaying little association with the global business cycle or major disruptive events. While there were large swings in the foreign exchange market, peaks and troughs were reached at a relatively gradual pace and did not, therefore, lead to significant increases in realised volatility. Realised volatility was particularly subdued between 2002 and 2007.

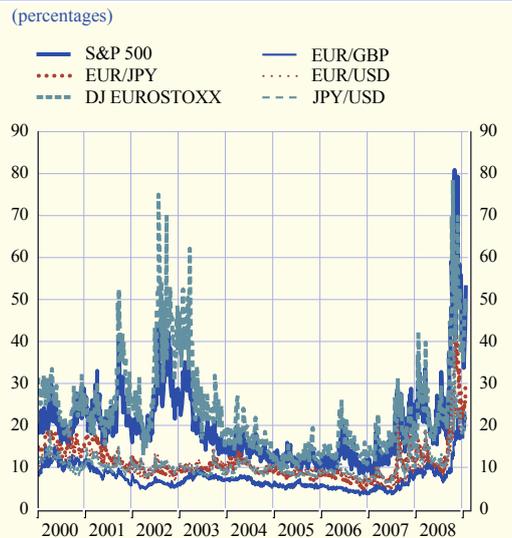
In the recent episode of turbulence, however, foreign exchange volatility among major currency pairs has risen to its highest peak since 1973, reflecting broader and more rapid movements in the main bilateral rates than in previous episodes.

**Chart A Historical volatilities**



Sources: Thomson Financial Datastream and ECB staff calculations.  
 Note: Monthly figures, annualised. Volatilities refer to a three-month horizon, i.e. they are measured as standard deviations of the 60 daily rates of change preceding each month-end. The shaded areas represent recession periods for the US economy. Last observation refers to 28 January 2009.

**Chart B Implied volatilities**



Sources: Reuters and Thomson Financial Datastream.  
 Note: Last observation refers to 28 January 2009. All implied volatilities refer to options with a life to maturity of approximately one month.

A number of useful insights can also be gained by reviewing developments in implied volatility in options markets.<sup>1</sup> In addition to expectations of future realised volatility, implied volatility also provides an indication of the price of uncertainty over the time period spanned by the maturity of the option and therefore reflects the market participants' degree of risk aversion. Looking at recent developments in equity markets, implied volatilities for the US (and similarly for the euro area) markets rose to very high values, especially in the period following the Lehman Brothers' collapse in September 2008, but declined thereafter, a pattern which is comparable to previous periods of market tension, such as after the terrorist attacks on the United States on 11 September 2001 and the phase of rapidly falling equity prices between 2002 and 2003 (see Chart B).

In this respect, while the historical equity market volatility remains high, the rapid retrenchment in implied volatility indicates that the compensation required for bearing volatility risk has decreased, possibly on account of the measures taken by public authorities aimed at stabilising the financial sector and the real economy.

By contrast with developments in the equity market, implied foreign exchange volatility has continued to remain at unprecedented levels in recent weeks. Chart B shows developments in implied volatilities for some key bilateral rates vis-à-vis the euro since the beginning of 2000.

It is difficult to assess the reasons why foreign exchange volatility remains so high at the current juncture compared with previous historical episodes. A possible explanation may relate to the length and depth of the ongoing recession, which is highly synchronised across the globe. In a period of low returns, high uncertainty, high liquidity needs and high risk aversion, market participants may be delaying their positioning in the currency markets until consensus expectations are formed about which economies will be the first to recover from the global downturn. As investments will likely flow towards such areas, their currencies are likely to eventually strengthen. However, uncertainty currently appears to prevail and market participants require a relatively higher compensation to take on exchange rate risk. Another explanation is the difficulty to assess the impact of expansionary fiscal actions undertaken by several governments in reaction to the global financial crisis on the US and other countries' current account positions, thus adding to the uncertainty about the future exchange rate configuration among major currency pairs.

<sup>1</sup> Implied volatility is taken from the prices of currency options. This box refers to at-the-money options, i.e. those whose exercise price coincides with the forward exchange rate over the maturity of the option, obtained by multiplying the spot exchange rate with the interest rate differentials.

With regard to the currencies of other EU Member States not participating in ERM II, the euro has appreciated rather sharply vis-à-vis the pound sterling since end-October. Following the significant easing of monetary policy conditions by the Bank of England's Monetary Policy Committee since November, the euro reached its highest level against the pound since its introduction, to stand at GBP 0.98 on 28 December. However, market considerations of the current position of the pound sterling relative to historical averages have reportedly supported the pound in January 2009, notwithstanding a further reduction in official interest rates carried out by the Bank of England (by 50 basis points) on 9 January and renewed signs of weakness in the UK banking sector. On 4 February 2009 the euro stood almost 13% higher vis-à-vis the pound relative to its level three months earlier. Over the same period the euro appreciated by 30% against the Polish zloty and by around 17% against the Romanian leu, as markets have reassessed the impact of the global

financial turmoil on these countries. Finally, the euro also appreciated by almost 8% against the Swedish krona.

#### OTHER CURRENCIES

The rapid increases in implied foreign exchange volatility in the second half of 2008 and early 2009 have had a significant effect on the CHF/EUR exchange rate, by lowering the funding role of the Swiss franc in carry trade operations. Following a rebound in November and early December, the euro resumed a downward trend in January this year but remained around 1.4% stronger than at the end of October 2008. The Swiss currency may have acted as a safe haven amid the financial turbulence, as evidenced by a prevailing positive relationship with exchange rate volatility. On 4 February 2009 the euro was trading at CHF 1.49 and was 6.1% weaker than its average in 2008.

#### 5.2 BALANCE OF PAYMENTS

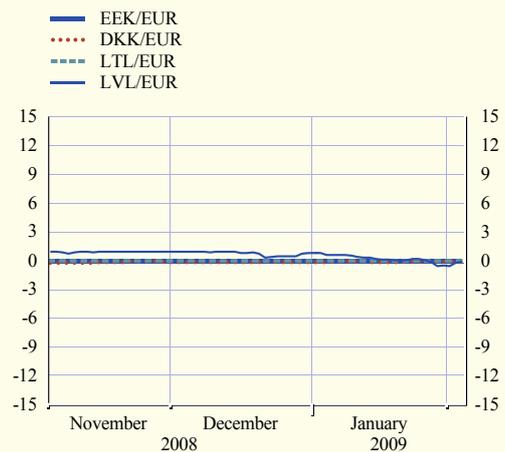
The 12-month cumulated current account up to November 2008 recorded a deficit of €65.3 billion (0.7% of GDP), compared with a surplus of €45.9 billion a year earlier. This largely resulted from a shift from surplus to deficit in the goods and income accounts and an increase in the deficit for current transfers. In the financial account, combined direct and portfolio investment registered cumulative net inflows of €108.9 billion in the 12-month period to November 2008, compared with net inflows of €86.0 billion a year earlier. This increase was largely due to a rise in net inflows in debt instruments, which significantly exceeded an increase in net outflows in direct investment.

#### TRADE AND THE CURRENT ACCOUNT

Having steadily increased since mid-2008, the 12-month cumulated current account deficit reached €65.3 billion (working day and seasonally adjusted data) in November 2008, corresponding to 0.7% of GDP, compared with a surplus of €45.9 billion a year earlier. This

Chart 34 Patterns in exchange rates in ERM II

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

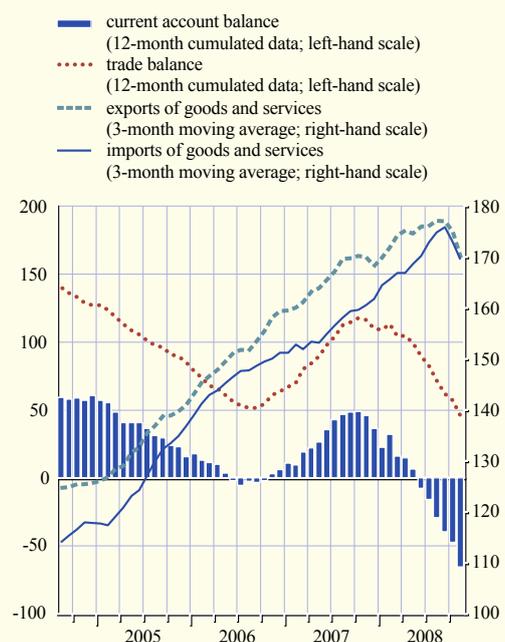


Source: ECB.

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

Chart 35 The euro area current account and trade balances

(EUR billions; monthly data; seasonally adjusted)



Source: ECB.

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

(seasonally adjusted, unless otherwise indicated)

			Three-month moving average figures ending				12-month cumulated figures ending	
	2008 Oct.	2008 Nov.	2008 Feb.	2008 May	2008 Aug.	2008 Nov.	2007 Nov.	2008 Nov.
<i>EUR billions</i>								
<b>Current account</b>	-6.0	-16.0	-2.3	-3.0	-6.2	-10.3	45.9	-65.3
Goods balance	1.6	-6.0	1.1	1.7	-1.8	-2.6	63.4	-4.8
Exports	130.5	121.5	129.9	132.8	135.5	128.2	1,506.6	1,579.6
Imports	128.9	127.5	128.9	131.1	137.4	130.8	1,443.2	1,584.4
Services balance	3.6	3.4	5.1	4.4	4.1	3.3	53.0	50.6
Exports	41.9	41.6	41.9	41.8	41.6	42.0	484.4	502.1
Imports	38.3	38.2	36.8	37.5	37.5	38.7	431.4	451.5
Income balance	-1.5	-4.0	-0.6	-1.2	-1.2	-2.3	11.9	-16.0
Current transfers balance	-9.7	-9.5	-7.9	-7.8	-7.2	-8.7	-82.5	-95.0
<b>Financial account<sup>1)</sup></b>	75.1	17.2	-15.2	28.7	12.6	34.4	32.8	181.6
Combined net direct and portfolio investment	106.5	16.7	-21.2	-13.4	12.7	58.2	86.0	108.9
Net direct investment	-13.9	-31.2	-32.2	-17.6	-13.7	-22.2	-107.0	-257.1
Net portfolio investment	120.3	47.9	11.0	4.1	26.4	80.4	193.0	366.0
Equities	6.2	35.9	20.4	-8.0	1.7	-5.3	49.3	26.4
Debt instruments	114.2	12.0	-9.4	12.2	24.7	85.7	143.7	339.6
Bonds and notes	7.9	18.8	9.7	20.0	17.3	19.6	208.1	199.8
Money market instruments	106.2	-6.7	-19.0	-7.8	7.3	66.1	-64.4	139.9
<i>Percentage changes over previous period</i>								
<b>Goods and services</b>								
Exports	-1.5	-5.4	1.1	1.6	1.4	-3.9	9.7	4.6
Imports	-4.7	-0.9	3.1	1.7	3.7	-3.1	6.9	8.6
<b>Goods</b>								
Exports	-1.6	-6.9	1.3	2.2	2.0	-5.4	9.3	4.8
Imports	-5.2	-1.1	4.2	1.7	4.8	-4.8	6.0	9.8
<b>Services</b>								
Exports	-1.2	-0.7	0.4	-0.2	-0.6	1.0	11.1	3.7
Imports	-3.2	-0.3	-0.5	1.8	-0.0	3.3	10.0	4.7

Source: ECB.

Note: Figures may not add up due to rounding.

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

was largely due to a shift from surplus to deficit in the goods and income balances and a widening deficit in current transfers.

In November 2008, the 12-month cumulated goods balance recorded a deficit of €4.8 billion, compared with a surplus of €63.4 billion a year earlier, driven by a faster decline in exports growth relative to imports (see Chart 35). Turning to more recent developments, in the three months to November 2008, the quarterly growth in the value of exports and imports of goods turned negative (-5.4% and -4.8%, respectively) after positive growth (2.0% and 4.8%, respectively) in the three months to August (see Table 7). Imports fell mostly as a result of decreases in oil and non-energy commodity prices, while exports registered a sharp decline associated with weaker foreign demand.

The breakdown of trade in goods into volumes and prices, available up to October 2008, shows that import prices have now started to decline after steadily increasing since the last quarter of 2007. While negative import price growth is due to the fall in oil prices, on a 12-month cumulated basis higher oil and non-oil commodity prices still account for most of the growth in the value of imports.

More specifically, on a 12-month cumulated basis, the oil trade deficit amounted to €227.64 billion in October 2008, compared with €163.36 billion a year earlier.

The quarterly growth rates of both export and import volumes have turned negative as a result of the fall in foreign and domestic demand, and possibly owing to a deterioration of trade financing worldwide. In the three months to October 2008, euro area export volumes to the United States and other OECD countries, as well as to China and to the Member States that have joined the European Union since 2004, declined compared with the previous three-month period. However, the growth in export volumes to OPEC remained fairly robust over the same period, owing to strong economic growth in these countries and rising income effects which, until recently, stemmed from oil revenues. In the three-month period to October 2008, the most significant export volume declines were recorded in intermediate and consumption goods, while import volumes declined mostly in consumer goods, followed by capital goods.

Turning to other items of the current account, in 12-month cumulated terms the surplus in services marginally decreased to €50.6 billion in November 2008, from €53.0 billion a year earlier. At the same time, the income balance fell by €27.9 billion, from a surplus of €11.9 billion in the 12-month period to November 2007 to a deficit of €16.0 billion in the 12 months to November 2008. This appears to have resulted from higher income payments to non-euro area residents. Finally, over the same period, the cumulated deficit in current transfers widened from €82.5 billion to €95.0 billion.

### FINANCIAL ACCOUNT

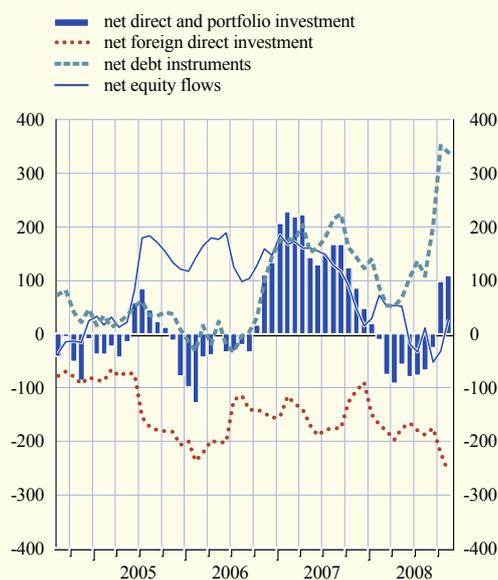
In the three-month period to November 2008, the euro area combined direct and portfolio investment account recorded average monthly net inflows of €58.2 billion, mainly owing to net inflows in portfolio investment in the form of money market instruments and, to a lesser extent, net inflows in bonds and notes. The increase in net inflows in debt instruments was partially offset by net outflows in foreign direct investment and portfolio equities.

The increase in net inflows in money market instruments by €58.8 billion compared with the three-month period to August 2008 is largely due to its temporary pick-up in September and October 2008 when inflows in money market instruments were the highest recorded since 1999. The latter was driven by both sales by residents of foreign money market instruments and foreign purchases of euro area money market instruments. This was possibly motivated by efforts to boost liquidity during the heightened financial turmoil following the collapse of Lehman Brothers.

From a longer-term perspective, combined direct and portfolio investment recorded net inflows of €108.9 billion in the 12-month period to November 2008, compared with net inflows of €86.0 billion a year earlier

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

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



Source: ECB.

(see Chart 36). This increase in net financial inflows reflects a significant rise in inflows in debt instruments (€339.6 billion in November 2008 against €143.7 billion a year earlier, see Table 7), partly offset by lower portfolio equity inflows and a further increase in net direct investment outflows, with the former largely a result of a sharp disinvestment in euro area stocks by non-resident investors as a consequence of the financial turmoil. Meanwhile, on a 12-month cumulated basis, net inflows in foreign direct investment liabilities continued to decrease, and in November 2008 reached lower levels comparable to the third quarter of 2004. In more detail, in the 12-month period to November 2008, direct investment recorded net outflows of €257.1 billion, while net portfolio equity inflows fell to €26.4 billion compared with €49.3 billion a year earlier. Net inflows in bonds and notes and money market instruments reached €199.8 billion and €139.9 billion, respectively (see Table 7). Increased risk aversion, heightened liquidity needs and short-term interest rate differentials might have contributed to this development.



## ARTICLES

# NEW SURVEY EVIDENCE ON WAGE SETTING IN EUROPE



*Drawing on new evidence from a firm-level survey conducted in a broad range of Member States, this article presents findings of recent research that will contribute to a better understanding of wage setting in the euro area and other EU countries. The main results of this research can be summarised as follows. The frequency of wage changes is lower than that of price adjustments and wage changes are more synchronised than price changes, with many such changes being concentrated in January. The pass-through of wages to prices is strong in firms with a high labour share and is mitigated if the firms are exposed to a high degree of competition or if their export share is high. There is evidence of downward wage rigidity, but the prevailing form of rigidity (nominal versus real) in a given country depends on wage-setting institutional features such as the degree of indexation, which varies considerably across countries. The survey evidence suggests that firms use various means to adjust labour costs that go beyond changes in base wages (e.g. cutting bonuses, reducing non-wage benefits, changing working practices, reducing promotion rates and replacing departing workers with lower-paid ones). Finally, wages of newly recruited workers are primarily determined by internal factors such as the collective agreement or the wages of similar employees in the firm rather than by external labour market conditions.*

### I INTRODUCTION

A proper understanding of the patterns, sources and implications of wage and labour cost dynamics is an essential requirement for the effective conduct of monetary policy. Wage costs are an important determinant of prices. The findings of the Inflation Persistence Network (IPN), a Eurosystem research network analysing the features and determinants of price setting in the euro area, suggest that inertial wage behaviour is an important factor behind price stickiness in the euro area.<sup>1</sup> These findings place wage-setting policies at the heart of central banks' concerns. More generally, knowledge about the features and determinants of wage setting is key to understanding both the transmission process of monetary policy and the potential trade-offs with which monetary policy can be confronted. The flexibility of wages is also of great importance for the proper functioning of a multi-country monetary union with segmented national labour markets, such as the euro area. The degree of price and wage flexibility will, among other factors, determine the speed and cost of adjustment in the presence of emerging macroeconomic imbalances. Identifying the features of wage rigidities is of key importance in designing appropriate structural policies to facilitate this adjustment process.

Against this background, the Eurosystem has set up a new research network, the Wage Dynamics Network (WDN), with researchers from the ECB and from 24 national central banks (NCBs) in the European Union conducting an in-depth study of the features and sources of wage and labour cost dynamics in the euro area and other EU countries. The WDN has followed three lines of research. The first explores the empirical characterisation of aggregate, country and sectoral wage and labour cost dynamics in the euro area, and conducts a structural analysis of their determinants and their interaction with inflation dynamics. A second line of research focuses on micro data on wages with a view to analysing wage behaviour and possible rigidities across countries and sectors in the euro area and their implications for labour costs and price-setting. Finally, the WDN has launched an ad hoc survey on wage and price-setting behaviour at the firm level. This article presents a first set of findings based on this survey. The survey provides a unique source of information that widens our understanding of wage-setting practices, the frequency of price and wage changes, and the links between wage and price stickiness in Europe. It makes available new

<sup>1</sup> See Altissimo, F., M. Ehrmann and F. Smets (2006), "Inflation and price-setting behaviour in the euro area", ECB Occasional Paper No 46, and the article entitled "Price-setting behaviour in the euro area" in the November 2005 issue of the Monthly Bulletin.

evidence on the extent and reasons behind different types of wage rigidity and, moreover, covers various means of labour cost adjustment that go beyond changes in base wages. The survey also addresses the issue of how wages adjust to different economic shocks stemming from the demand or the supply side.

One advantage of conducting an ad hoc firm survey is its flexibility. Firms can be asked directly about important features of price and wage setting, data which are otherwise difficult to collect. For example, the degree of competition that the firm is facing or the incidence of firm-level collective agreements versus more centralised wage-setting structures are difficult to measure otherwise, and are usually unobservable in large administrative and household data. This firm-level information makes it possible to examine the effects on wage and price setting of both firms' characteristics and the economic and institutional environment in which firms operate. Firm surveys typically also have the advantage of providing more accurate information on wages than household surveys. Nevertheless, several shortcomings inherent in ad hoc surveys, such as low rates of response and potential misunderstandings in interpreting the questions, should be borne in mind. Moreover, the replies may be influenced by the specific macroeconomic environment prevailing at the time of conducting these surveys.

The article is structured as follows. Section 2 describes the main features of the firm survey, while Section 3 briefly discusses certain institutional features of wage setting, namely the extent of collective bargaining and indexation mechanisms. Section 4 presents stylised facts on wage and price adjustment and their interaction. Section 5 examines the existence of downward wage rigidity and discusses various cost adjustment margins (over and above changes in base wages) that are relevant for European firms. Section 6 focuses on the firms' reactions to different shocks. Section 7 summarises.

## 2 DATA AND SAMPLE

The WDN survey was carried out by 17 NCBS between the end of 2007 and the first half of 2008 on the basis of a harmonised questionnaire. This led to a unique cross-country dataset on wage and price setting, unprecedented by international standards in terms of both geographical and sectoral coverage. The following sectors are covered: manufacturing, energy, construction, trade and transportation, market services, financial intermediation and, for some countries, non-market services. The total sample size of the dataset is some 17,000 firms. By design, this sample is relatively balanced across firm size categories within each country and for the sectors considered. Its distribution closely follows the distribution of private employment in the country. However, the sample size varies across countries both in absolute terms and relative to the number of firms in each country. Thus, individual weights have been calculated for each firm to make the sample representative of the overall number of firms in each country and to account for the number of workers that the firm represents in a given country.<sup>2</sup> This article concentrates on 15 countries (Austria, Belgium, Czech Republic, Estonia, France, Greece, Hungary, Italy, Ireland, Lithuania, the Netherlands, Poland, Portugal, Slovenia and Spain) for which fully harmonised data are available.<sup>3</sup> Data for Germany are reported wherever they are comparable with those of the other countries.<sup>4</sup>

2 The sample used in this article excludes firms with fewer than five employees.

3 Euro area countries include Austria, Belgium, France, Greece, Italy, Ireland, the Netherlands, Portugal, Slovenia and Spain. Non-euro area countries include the Czech Republic, Estonia, Hungary, Lithuania and Poland.

4 As the questionnaire was not fully harmonised, the survey data for Germany cannot be used in full. Data for Luxembourg are not yet available.

### 3 SOME INSTITUTIONAL FEATURES OF WAGE SETTING

The harmonised WDN survey provides firm-level information on several institutional aspects of wage setting, such as the level of collective bargaining, the coverage of collective wage agreements and the degree of wage indexation. This information is particularly interesting given the institutional heterogeneity of European labour markets.<sup>5</sup>

#### 3.1 COLLECTIVE WAGE BARGAINING

One of the institutional features that are likely to play an important role as regards both wage dynamics and, more generally, the operation of the labour market is the level of centralisation in collective wage bargaining. The survey asked firms whether they apply a collective wage agreement negotiated and signed outside the firm and/or at the firm level.<sup>6</sup> The latter type of agreement is usually regarded as more flexible

than the former, in the sense that it gives firms greater scope to react to economic circumstances specific to the firm.

The percentage of firms that apply some kind of collective wage agreement is very high in the euro area countries under consideration (around 95% on average, as shown in column 3 of Table 1). By contrast, in non-euro area countries only around a quarter (27.7%) of firms apply a collective wage agreement. Differences between euro area and non-euro area countries are also noticeable when looking separately at collective

- 5 There is a vast literature about the role of wage-bargaining institutions in shaping labour market outcomes, wage levels, wage dispersion and wage flexibility. For a recent survey, see Freeman R. (2007), "Labour Market Institutions around the World", NBER Working Paper No 13242.
- 6 Collective wage agreements outside the firm include those negotiated at the regional, sectoral, occupational or national levels. In the case of Greece, however, agreements negotiated at the national level, which are binding for all firms, and workers covered exclusively by the national level agreement, have been excluded, explaining why coverage for Greece is less than 100% in columns 2 and 4 of Table 1.

Table 1 Collective bargaining – level and coverage: country overview

Country	Percentage of firms with a collective bargaining agreement			Percentage of workers covered by a collective bargaining agreement	
	firm-level	non-firm level	either form		
Austria	23.3	96.2	97.8	94.5	H
Belgium	35.3	97.9	99.4	86.3	H
Czech Republic	51.4	17.5	54.0	50.2	M
Germany	8.2	51.6	59.7	n.a.	M
Estonia	10.4	3.4	12.1	8.7	L
Spain	16.9	83.1	100	96.8	H
France	58.7	98.8	99.9	67.1	H
Greece	20.8	85.6	93.4	91.0	H
Hungary	19.0	0.0	19.0	18.4	L
Ireland	18.1	48.2	54.2	29.4	n.a.
Italy	42.9	99.6	99.6	92.2	H
Lithuania	23.1	0.8	24.4	15.6	VL
Netherlands	30.1	45.4	75.5	67.6	H
Poland	21.4	4.7	22.9	19.3	L
Portugal	10.0	58.9	62.1	90.0	H
Slovenia	25.7	74.3	100.0	n.a.	H
Total	33.1	65.4	76.5	63.4	
Euro area countries	35.7	87.7	94.7	83.3	
Non-euro area countries	26.3	6.0	27.7	24.1	

Source: Babecký et al., 2008 (see footnote 16 for full reference).

Figures are weighted to reflect overall employment and are rescaled to exclude non-responses. "Total" and "Euro area countries" aggregates do not include Germany. In the last column: level of union coverage from Du Caju, P., E. Gautier, D. Momferatou and M. Ward-Warmedinger (2008), "Institutional features of wage bargaining in 23 European countries, the US and Japan", ECB Working Paper No 974. VL = very low (i.e. 0% to 25% of workers are covered by collective agreements); L = low (26% to 50% of workers are covered); M = moderate (51% to 75% are covered); H = high (76% to 100% are covered). The figures in the columns "firm-level" and "non-firm level" do not add up to those in the column "either form" as some firms may have bargaining agreements at both levels.

agreements signed at the firm level (column 1) and those signed outside the firm (column 2). Collective agreements signed outside the firm are the predominant practice in euro area countries, while firm-level agreements predominate in non-euro area countries. Larger firms appear more likely to apply firm-level agreements and, as regards sectors, the construction and trade sectors appear to apply fewer agreements of this type.

The evidence collected by the WDN survey also confirms the well-known fact that the percentage of workers that are covered by some form of collective wage agreement is very high in the euro area countries (column 4). By contrast, non-euro area countries have very low levels of coverage, the lowest being Estonia. This is consistent with complementary information on wage-bargaining institutions at a more aggregate – country and sectoral – level (see the information in the last column of Table 1).

### 3.2 INDEXATION

The WDN survey questionnaire included two questions related to the indexation of wages to inflation. In the first question firms were asked to report whether or not they had a policy of adapting base wages to inflation. If they did, they were asked to report whether or not the adjustment was automatic, and whether, automatic or not, this adjustment was based mainly on past or expected inflation.

Table 2 provides a summary of wage adjustment policies across countries. It shows that in all countries included in the sample (with the exception of Italy) some form of wage adjustment to inflation is at work in a significant proportion of firms. This practice is particularly pronounced in Belgium (98%) and Spain (70%), where automatic indexation is prevalent. In most countries the link is to past inflation. Only in the case of Portugal does expected inflation appear to be more important

**Table 2 Policy of adjusting base wages to inflation: country overview**

	Policy of adjusting base wages to inflation <sup>1)</sup>				Total	Country-level indexation <sup>2)</sup>
	Automatic		Informal			
	Past	Expected	Past	Expected		
Austria	9	1	9	3	22	VL
Belgium	98	0	0	0	98	H
Czech Republic	7	5	28	24	59	None
Germany	n.a.	n.a.	n.a.	n.a.	27	None
Estonia	3	2	35	21	54	None
Spain	38	16	11	5	70	H
France	9	2	21	8	33	VL
Greece	15	5	12	10	43	None
Hungary	7	4	14	6	31	None
Ireland	6	3	19	10	30	None
Italy	1	0	3	1	6	VL
Lithuania	7	4	24	13	48	n.a.
Poland	5	2	17	6	31	VL
Portugal	3	6	13	29	52	None
Slovenia	20	3	32	5	60	L
<b>Total</b>	<b>13.2</b>	<b>3.9</b>	<b>12.7</b>	<b>6.9</b>	<b>35.3</b>	
Euro area countries	16.3	4.1	9.7	5.5	34.2	
Non-euro area countries	5.5	3.2	19.8	10.2	37.6	

Source: Druant et al., 2008 (see footnote 9 for full reference).

1) Figures are weighted to reflect overall employment and are rescaled to exclude non-responses. "Total" and "Euro area countries" aggregates do not include Germany.

2) Level of indexation from Du Caju et al., 2008 (see note to Table 1). VL = very low (i.e. less than 25% of workers are covered by wage indexations clauses); L = low (26% to 50% are covered); H = high (76% to 100% are covered). Note that some firms apply more than one kind of policy and therefore the numbers in columns 1 to 4 do not necessarily add up to those in the column "Total".

than past inflation for the purposes of wage setting. Adapting changes in base wages to inflation is slightly less common in the euro area (34% of firms) than in the overall sample covered by the survey (35%). In the case of Germany, firms were not explicitly asked whether or not they have a policy of adapting base wages to inflation. Nevertheless, when asked about the two main factors behind the most recent wage increases, 27% of German firms replied that inflation was one of them.

The information collected by the survey qualifies and complements other information on formal indexation available at the country and sector level, according to which there is some form of automatic price indexation of private sector wages in seven euro area countries: Belgium, Spain, France, Cyprus, Luxembourg, Malta and Slovenia.<sup>7</sup> The survey evidence indicates that the practice of adapting wages to inflation is common in a wider set of countries. On average, about one-third of the firms responded that they have such policies.

#### 4 WAGE AND PRICE ADJUSTMENT

The WDN survey can be viewed as the natural follow-up to some of the results on pricing decisions in the euro area revealed by the IPN.<sup>8</sup> One of the findings of the IPN is the substantial heterogeneity in the degree of price stickiness across products and sectors. These cross-sectoral differences may reflect, among other factors, the variability of input costs and the cost structure at the firm and sectoral levels, and, in particular, the share of labour costs, of which wages are an important component. The WDN survey makes it possible to analyse price and wage adjustments simultaneously and can therefore shed some light on this important issue. In addition, it can provide useful micro evidence for macro models of wage and price staggering that have become very popular in new Keynesian models. This section presents the main findings of the WDN survey on the timing and frequency of wage changes in the European Union.<sup>9</sup>

#### 4.1 THE TIMING OF WAGE AND PRICE CHANGES

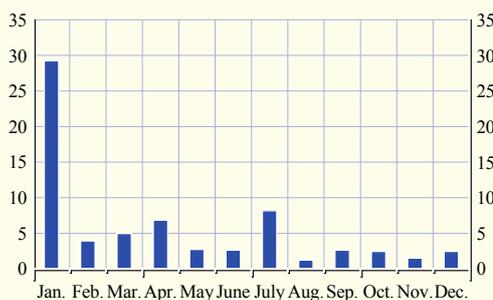
The WDN survey finds strong evidence of time dependence in wage setting. The survey first asked firms to specify whether wage-price changes are concentrated in any particular month(s) and, if so, to indicate the month(s) in which the adjustment typically takes place. Overall, around half of the firms in the countries in the sample tend to change wages in a particular month (Chart 1). There is a notable “January effect”: around 30% of wage changes take place in that month, and the prominent role of January is evident in all countries. Another, albeit much smaller, peak is observed in July. Overall, 54% of firms state that wage changes are concentrated in (a) particular month(s).

The percentage of firms that concentrate wage changes in any particular month(s) is

- 7 See Box 5 entitled: “Wage indexation mechanisms in euro area countries” in the May 2008 issue of the Monthly Bulletin and Du Caju et al. (2008), op. cit.
- 8 See Altissimo, F., M. Ehrmann and F. Smets (2006), op. cit., Fabiani, S., C. Loupias, F. Martins and R. Sabbatini (2007), “Pricing decisions in the euro area. How firms set prices and why”, Oxford University Press, and the November 2005 issue of the Monthly Bulletin (op. cit.).
- 9 The section summarises some of the findings in Druant, M., S. Fabiani, G. Kezdi, A. Lamo, F. Martins and R. Sabbatini (2008), “How are firms’ wages and prices linked: survey evidence in Europe”, mimeo (WDN). See [http://www.ecb.europa.eu/events/conferences/html/wage\\_dynamics\\_network\\_en.html](http://www.ecb.europa.eu/events/conferences/html/wage_dynamics_network_en.html)

Chart 1 Timing of wage changes

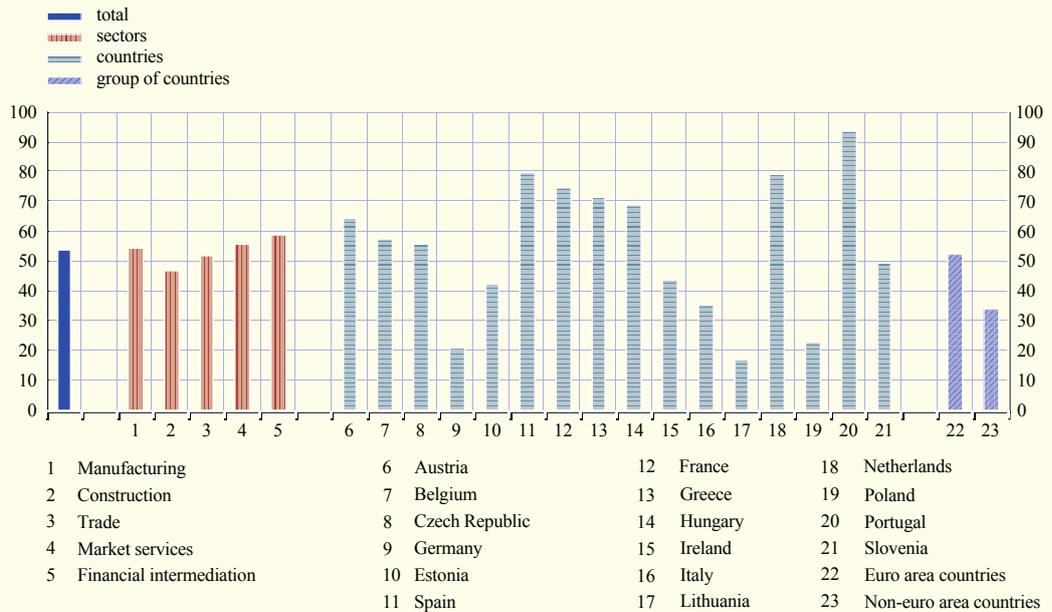
(percentage of firms that concentrate wage changes in (a) particular month(s))



Notes: Figures are weighted to reflect overall employment and are rescaled to exclude non-responses. Germany is not included in the calculations.

**Chart 2 Concentration of wage changes across sectors and countries**

(percentage of firms that concentrate wage changes in any particular month(s))

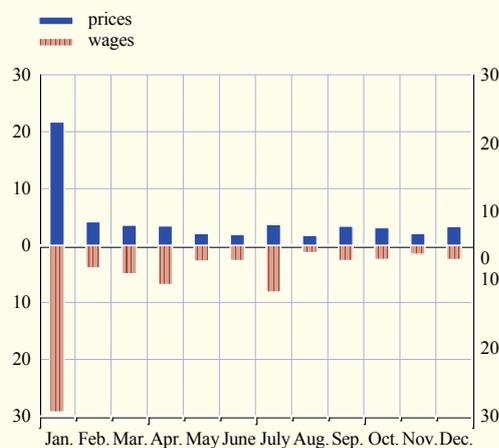


Notes: Figures are weighted to reflect overall employment and are rescaled to exclude non-responses. The column "total" in this chart corresponds to the sum of the monthly figures in Chart 1.

very similar across sectors (see Chart 2), with January again being the month in which the

**Chart 3 Timing of wage and price changes**

(percentage of firms that concentrate wage and price changes in (a) particular month(s))



Notes: Figures are weighted to reflect overall employment and are rescaled to exclude non-responses. Germany is not included in the calculations.

largest proportion of wage changes occurs in every sector. July also has some significance in the manufacturing and market services sectors, whereas wage changes are slightly less scattered among different months in the financial intermediation and manufacturing sectors. Small firms tend to concentrate wage changes in particular months more often than larger firms.

By contrast, differences in the timing of wage changes across countries are much more pronounced. One extreme is Portugal, where 94% of firms reported that they concentrate their wage changes in a particular month. This contrasts with less than a quarter of firms in Lithuania, Poland and Germany.

With regard to price adjustments, the percentage of firms reporting that price changes typically take place in a specific month is around one-third (35%). As shown in Chart 3, in this case the adjustment tends to be concentrated largely in January. The WDN survey also

points to some degree of synchronisation at the firm level between the timing of price and wage changes. For example, 50% of firms which change prices in January also change wages in that month.

#### 4.2 FREQUENCY OF WAGE AND PRICE ADJUSTMENT

The survey also contains information on the frequency of wage adjustment. Chart 4 shows that around 60% of firms represented in our sample report that they change their employees' base wages once a year, 12% do so more often and 26% change wages less frequently. Inflation stands out as the predominant factor behind frequent wage adjustment, while the frequency of wage changes due to tenure is the lowest.

The frequency of wage changes shows little variation across sectors. Wage changes are least frequent in the trade and business services sectors and most frequent in the construction sector. Firm size also appears to have little impact on the degree of variation. By contrast, the degree of cross-country heterogeneity is larger: in Lithuania, Greece and Slovenia

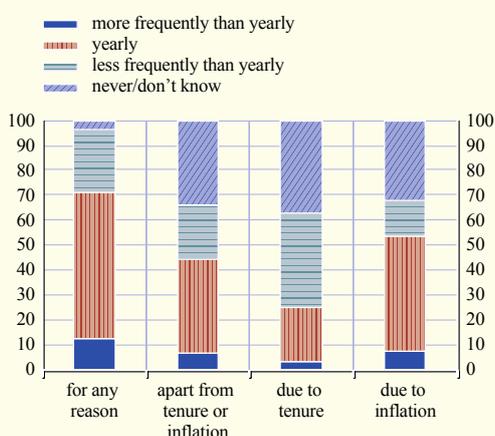
firms report the highest frequency of changes in base wages, while Italian, Hungarian and Portuguese firms adjust their wages least frequently. On average, there is very little difference between firms in euro area and non-euro area EU countries.

The large cross-country differences that emerge with regard to wage-setting practices, and in particular the frequency of wage changes, may be attributable to institutional features. This possibility has been formally explored through regression analysis. Indeed, according to results reported by the latter, some labour market institutional features (e.g. indexation and the level of wage bargaining) play a major role in explaining cross-country differences in the frequency of wage changes.

The frequency of price adjustment is higher than that of wage changes. Around 40% of the firms surveyed report that, on average, they change prices once a year (compared with 60% in the case of wage changes), and 7.4% report that prices are changed less frequently than once a year (compared with 26% in the case of wage changes). The cross-country variation in the frequency of price changes is limited as compared with that of wage changes. By contrast, the sectoral differences in price change frequencies are larger than those in wage change frequencies. This is consistent with the finding that product market characteristics, such as the degree of competition and the labour share, are significant determinants of differences in price change frequencies, whereas differences in wage change frequencies are influenced by institutional factors.

Chart 4 Frequency of wage changes

(percentages)

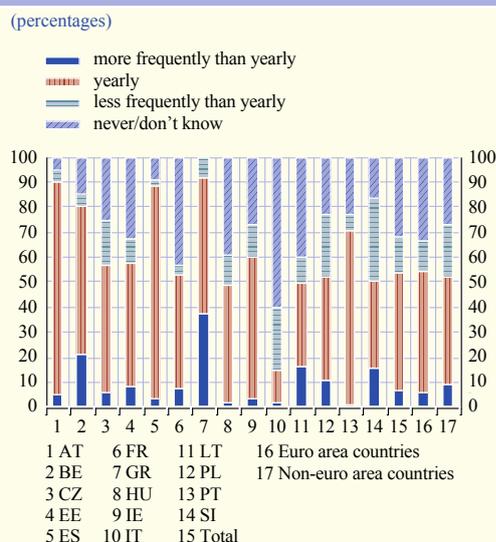


Notes: Figures are weighted to reflect overall employment and are rescaled to exclude non-responses. Germany is not included in the calculations.

#### 4.3 THE INTERACTION BETWEEN PRICE AND WAGE ADJUSTMENTS

The apparent synchronisation of price and wage changes at the firm level identified in the previous section is confirmed by the fact that around 40% of firms, when asked directly, acknowledged the existence of some relationship between the timing of price and wage adjustments within their company, though

**Chart 5 Frequency of wage changes due to inflation, by country**



Notes: Figures are weighted to reflect overall employment and are rescaled to exclude non-responses. Germany is not included in the calculations. In the case of Greece, figures relate to the percentage of firms that actually change wages due to inflation, as the option “never/don’t know” was not provided in the Greek questionnaire.

only 15% of all firms stated that this relationship was relatively strong. Breaking the latter percentage down, decisions are taken simultaneously in the case of 4% of firms, prices follow wages in the case of 8%, and wages follow prices in the remaining 3%. The intensity of the link between wage and price changes depends on the share of labour costs in total costs. As regards whether wages feed into prices, around 60% of firms surveyed stated that they would use a strategy of increasing prices when faced with a permanent unexpected increase in wages. Furthermore, regression analysis<sup>10</sup> reveals that the share of labour costs in total costs is a significant determinant of the probability of choosing a price increase as an adjustment. This is supported by the finding that the frequency of price adjustment is lower in firms and sectors with a high labour cost share, which suggests that labour costs and wages have an influence on price adjustments at the firm level.<sup>11</sup> Moreover, firms with a high labour cost share also report more frequently that there is a strong link between price and wage changes.

Inflation developments influence firms’ wage-setting decisions. The extent to and speed with which inflation feeds through to wage changes is influenced, on the one hand, by a firm’s internal wage adjustment policies and, on the other hand, by the characteristics of the prevailing institutional setting in each country. Results from regression analysis show that indexation does indeed play a major role in explaining the frequency of wage changes. In particular, firms tend to adjust wages more frequently in the presence of a (formal or informal) policy of adapting wage changes to (past or expected) inflation. Another source of information available from the survey on how inflation developments affect firms’ wage decisions is the frequency of wage adjustments due to inflation. Chart 4 shows that inflation stands out as the prevalent factor triggering frequent wage adjustment (at an annual or infra-annual frequency). Although sectoral heterogeneity is relatively limited, the variability across countries is instead remarkably large (Chart 5).<sup>12</sup> While in Austria, Belgium and Spain over 80% of firms change wages annually or more frequently on account of inflation, in Italy only 15% of firms appear to do so.

## 5 DOWNWARD WAGE RIGIDITY

The degree of downward wage rigidity has been the subject of a growing body of empirical research, partly because it has implications for the optimal rate of inflation.<sup>13</sup>

10 See Bertola, G., A. Dabusinskas, M. Hoeberichts, M. Izquierdo, C. Kwapil, J. Montornès and D. Radowski (2008), “Price, wage and employment response to shocks: evidence from the WDN survey”, mimeo (WDN). See [http://www.ecb.europa.eu/events/conferences/html/wage\\_dynamics\\_network.en.html](http://www.ecb.europa.eu/events/conferences/html/wage_dynamics_network.en.html)

11 See Druant et al. (2008), op.cit. The IPN has obtained similar results at the sectoral level.

12 The Netherlands is not included in this chart, as Dutch firms were not explicitly asked about these policies.

13 The debate goes back to Tobin, J. (1972), “Inflation and Unemployment”, *American Economic Review*, 62(1), pp. 1-18, who argued that if central bankers aim at inflation rates which are too low, this could hamper the functioning of labour markets, as it would be difficult to cut wages. Higher inflation would allow easier wage adjustments and thus “grease the wheels of the economy”.

## 5.1 DOWNWARD WAGE RIGIDITY EVIDENCE

Two types of downward rigidity are usually considered in the existing literature. Downward nominal wage rigidity (DNWR) relates to the inability of firms to implement (and, correspondingly, the reluctance of workers to accept) cuts in nominal wages. Similarly, downward real wage rigidity (DRWR) reflects the inability of firms to increase wages at rates below the prevailing rate of inflation. Recent studies using micro data have focused on the distributions of nominal wage changes to estimate downward wage rigidity. A spike at zero on this distribution is understood as evidence of nominal rigidity, as it suggests that a number of firms were unable to decrease nominal wages and thus kept them unchanged. If, by contrast, the spike is around the expected level of inflation, this is taken as evidence of real wage rigidity.<sup>14</sup> Another branch of the empirical literature relies on survey evidence to determine the presence and sources of downward wage rigidity.<sup>15</sup>

A recent study uses the WDN survey data to investigate the existence of downward nominal

and real wage rigidities in EU countries as well as the role played by firm characteristics and the economic and institutional environment in which firms operate in determining wage rigidity.<sup>16</sup> In this study DNWR is measured as the percentage of firms which report that they have frozen base wages over the previous five years. The WDN survey does not include a measure which directly captures DRWR. However, it is reasonable to expect that this will correlate closely with the extent to which wages set by the firm are strongly linked to inflation.<sup>17</sup> This study therefore uses the percentage of firms for which there is an automatic link between wages and past or expected inflation as a proxy for real wage rigidity (RWR). This includes firms that are constrained from adjusting real wages both downwards and upwards. This concept of real wage rigidity is nevertheless a relatively narrow one, as there may be reasons other than indexation which prevent real wages from adjusting.

A first key finding from the WDN survey is that the prevalence of nominal wage cuts among European firms, with the exception of Germany, is extremely low. Only around 4% of firms stated that wages had ever been cut in the previous five years. Prima facie, this is strongly suggestive of downward wage rigidity

**Table 3 Downward nominal and real wage rigidity across countries**

(percentage of firms affected by wage rigidities)

Country	DNWR	RWR
Austria	13.3	9.8
Belgium	11.8	98.2
Czech Republic	26.5	11.7
Estonia	21.7	4.4
Spain	2.4	54.8
France	7.1	9.6
Greece	12.5	20.0
Hungary	5.9	11.2
Ireland	7.1	8.2
Italy	3.9	1.7
Lithuania	19.9	10.8
Netherlands	23.2	n.a.
Poland	10.0	6.9
Portugal	15.0	9.0
Slovenia	2.9	23.5
Total	9.6	16.8
Euro area countries	8.1	20.3
Non-euro area countries	13.4	8.5

Note: Figures are weighted to reflect overall employment and are rescaled to exclude non-responses.

14 This kind of methodology has been used by, among others, Dickens, W. T., L. Goette, E. L. Groshen, S. Holden, J. Messina, M. E. Schweitzer, J. Turunen and M. E. Ward (2007), "How Wages Change: Micro Evidence from the International Wage Flexibility Project", *Journal of Economic Perspectives* 21(2), pp. 195-214; Messina, J., P. Du Caju, C. Filipa Duarte, M. Izquierdo and N. Lynggård Hansen (2008), "The Causes and Consequences of Nominal and Real Wage Rigidity: A Sectoral Approach", mimeo (WDN); and Holden, S. and F. Wulfsberg (2007), "Downward nominal wage rigidity in the OECD", ECB Working Paper No 964.

15 This body of literature follows the pioneering work of Blinder, A. S. and D. H. Choi (1990), "A Shred of Evidence on Theories of Wage Stickiness," *The Quarterly Journal of Economics* 105(4), pp. 1003-15.

16 This section mainly draws on findings by Babečý, J., P. Du Caju, O. Kosma, M. Lawless, J. Messina and T. Ródm (2008), "Downward wage rigidity and alternative margins of adjustment: survey evidence from European firms", mimeo (WDN). See [http://www.ecb.europa.eu/events/conferences/html/wage\\_dynamics\\_network.en.html](http://www.ecb.europa.eu/events/conferences/html/wage_dynamics_network.en.html)

17 This is confirmed by empirical evidence based on a comparison of the WDN survey measure with other measures of downward real wage rigidity obtained from micro studies on wage change distributions.

(DWR) in Europe. Table 3 shows that real wage rigidity, as defined above, is much more prevalent among the firms surveyed (with 16.8% affected) than DNWR (with only 9.6% affected), which is consistent with other evidence of downward wage rigidity in most continental European countries, as opposed to the United States and the United Kingdom.<sup>18</sup> There are sizeable differences between the EU countries as regards downward wage rigidity. Overall, non-euro area countries in the sample are twice as likely to experience DNWR as euro area countries, and the reverse is true for real wage rigidity. DNWR appears stronger than average in the Czech Republic, Estonia, Lithuania, the Netherlands and Portugal. It is considerably smaller than average in Spain, France, Italy, Hungary and Slovenia. Real wage rigidity is especially prevalent in Belgium, Spain and Slovenia, and less so in Italy, Estonia and Poland. Efficiency wages and fairness considerations seem to be important reasons behind the reluctance of firms to cut wages.

It appears that there are only modest differences in the incidence of wage rigidity across sectors and firm size categories. All in all, country characteristics seem to matter more for DWR than the sectoral dimension, which suggests

that national labour market institutions may be behind these differences between countries. This is consistent with findings from individual wage data. Indeed, in the recent literature the centralisation of wage setting and the degree of collective bargaining coverage have been related to the extent of downward wage rigidity. On the basis of the WDN survey information and multivariate regression analysis, Babecký et al. (2008) find that high country-level bargaining coverage and the strictness of employment protection legislation (EPL) increase DNWR.

## 5.2 ALTERNATIVE MEANS TO ADJUST LABOUR COSTS

The relevance of downward wage rigidity also depends on whether firms have other means than base wages to adjust labour costs. The WDN survey provides unique evidence on cost adjustment via non-wage labour costs. Surveyed firms were asked whether they have ever used means other than base wages to adjust labour costs. These include the possibility to reduce or eliminate bonus payments, reduce or eliminate non-pay benefits, change shift assignments or shift premia, slow or freeze the rate at which

<sup>18</sup> See, for example, Dickens et al. (2007), op.cit.

Table 4 Alternative means to adjust labour costs: country overview

(percentage of firms that use a given means to adjust labour costs)

Country	Any means	Reduce bonuses	Reduce benefits	Change shifts	Slow promotions	Employ lower-paid workers	Early retirement
Belgium	46	18.4	7.9	7.2	15	26.4	18.9
Czech Republic	67.9	32.2	7.5	11.1	1.9	8.7	8.9
Estonia	93.6	40.2	20.5	21.1	6.2	16.2	2.6
France	58.6	14.7	6.1	-	15.4	39	30.3
Greece	83.5	20.4	12.4	-	-	-	-
Hungary	67.2	22.7	11.9	38.3	35.1	26.5	10.2
Ireland	88.3	13.3	4.9	9.8	4.7	27.6	4
Italy	71.2	25.6	21.8	26	34	45.6	20.2
Poland	50.5	23.6	16.3	12.4	12.8	23.7	10.9
Portugal	39.5	13.7	8.4	10.7	14	16.2	0
Slovenia	57.5	13.5	12.8	9.1	18.9	15.8	8.9
Total	62.4	22.8	14.8	19.2	20.9	32.2	16.7
Euro area countries	63.5	20.6	14.8	21.4	25.2	38.8	20.7
Non-euro area countries	60.4	26.7	14.9	16.3	13.4	20.7	9.7

Notes: Figures are weighted to reflect overall employment and are rescaled to exclude non-responses. Data for Austria, Germany, Netherlands and Spain are not available. Firms may also use other means, such as company restructuring, reduction in overtime and reduction in workforce, etc.

Table 5 Alternative means to adjust labour costs: sectoral overview

(percentage of firms that use a given means to adjust labour costs)

Sector	Any means	Reduce bonuses	Reduce benefits	Change shifts	Slow promotions	Employ lower-paid workers	Early retirement
Manufacturing	61.2	21.1	13.5	18.9	20.5	31.9	17.7
Energy	66.2	30.7	22.1	4.1	13.0	18.5	25.2
Construction	50.9	20.6	15.2	11.0	13.1	16.2	5.6
Trade	64.0	25.4	17.6	22.1	21.9	37.2	10.9
Market services	65.7	23.3	14.8	21.4	22.2	32.9	19.2
Financial intermediaries	60.1	30.6	15.6	5.2	24.2	36.7	30.8
Non-market services	25.6	8.9	4.0	7.6	12.3	8.5	0.7
Total	62.4	22.8	14.8	19.2	20.9	32.2	16.7

Notes: Figures are weighted to reflect overall employment and are rescaled to exclude non-responses. Austria, Germany, Netherlands and Spain are not included in the calculations. Firms may also use other means, such as company restructuring, reduction in overtime and reduction in workforce, etc.

promotions are filled, recruit new employees at a lower wage level than those who left voluntarily, and encourage early retirement in order to replace high-wage employees with lower-paid entrants. Around half of the firms surveyed have used some of the means above to adjust labour costs, particularly those firms subject to downward nominal wage rigidity. Table 4 shows the percentage of firms in each country that reported using the various means to adjust labour costs. The prevalence of individual strategies varies quite substantially across countries. The reduction of bonus payments is the most common method used in the non-euro area countries, while it is less prevalent among euro area countries (with the exception of Italy, where almost a quarter of firms report using this method). Hiring new employees at lower rates of pay than those earned by employees leaving the company or encouraging early retirement are the most commonly used methods in Belgium, France and Italy.

In addition to varying across countries, the means of adjustment used also tend to differ across sectors (see Table 5). The use of cheaper labour to replace workers who leave the firm is the dominant strategy in most sectors. Firms belonging to the energy and financial intermediation sectors are the most likely to target bonuses when trying to reduce costs. Early retirement is the least likely strategy to be followed; the sector that uses it most widely

is manufacturing. The various cost-reduction methods are not mutually exclusive, and firms often use more than one such strategy. Reductions in benefits and bonuses appear to be one of the most popular combinations. Recruiting cheaper labour to replace workers who have left voluntarily and encouraging early retirement to create vacancies for lower-paid (e.g. more junior) staff is another common pairing, suggesting that some firms are using turnover to reduce labour costs. Finally, a third combination involves the use of the company's internal wage structure, with changes in shift patterns and slowing of promotions.

When exploring whether firms affected by downward wage rigidity can circumvent this constraint using alternative means to reduce labour costs, Babecký et al. (2008) find that firms subject to such rigidity are indeed more likely to do so. Moreover, regression analysis also shows that firms operating in a competitive environment are more likely to employ non-base wage labour cost adjustment strategies, and that there is a greater probability that such non-base wage means will be used to reduce costs in the case of collective bargaining agreements. This link is more significant in the case of firm-level bargaining contracts than in the case of higher-level bargaining contracts, probably reflecting the fact that the former type of agreement provides companies with more margin for manoeuvre.

### WAGES OF NEW WORKERS

Wages offered to newly hired employees may respond differently to aggregate labour market conditions than those of employees in ongoing employment relationships. A better understanding of the significance of such differences is needed because, as emphasised by Pissarides (2007) and Haefke et al. (2008), it is mostly rigidity in the wages of new employees which has an impact on job creation.

Most micro evidence based on individual wage data for the United States and some European countries (e.g. Carneiro et al., 2008) suggests that the wages offered to new workers are more responsive to changes in the unemployment rate than the wages of those in ongoing employment relationships. Pissarides (2007) surveys this evidence and concludes that, on average, a one percentage point rise in the unemployment rate is associated with a 3% decline in new workers' wages, whereas the corresponding elasticity for those in ongoing employment relationships is only about one-third of that.

However, direct firm-level survey evidence on the wage-setting practices followed by firms in the United States (Bewley, 2007) and Sweden (Agell and Lundborg, 2003) suggests that the wages of new workers are tightly linked to those of incumbents. The WDN survey discussed in this article lends support to this view. As reported by Galuscak et al. (2008), almost 80% of the firms surveyed report that internal factors, such as the collective agreement or the wages of similarly qualified workers already employed in the firm, are of greater significance than external labour market conditions in shaping the wages of new workers. There is some evidence to suggest that external labour market conditions might be more relevant in non-euro area countries (36% of firms) than in euro area countries (15% of firms). This difference might be partly attributed to institutional factors: in non-euro area countries bargaining is more decentralised and the percentage of workers covered by collective pay agreements is lower.

External labour market conditions also appear to be more important in certain sectors such as business services and in smaller-sized firms. Moreover, the probability that the wages of new workers deviate from the internal wage scale is lower the higher the average tenure of the firm's workforce and the lower the degree of competition the firm is facing. These findings lend support to the hypothesis advanced by Bewley (2007) that internal equity considerations are particularly important in firms that are characterised by the dominant presence of long-term and full-time jobs. Indeed, in the WDN survey firms report that both fairness considerations and the fear that wage differences between new and incumbent workers may have an impact on effort and morale are the most important reasons for not adjusting the relative wage of new workers in response to changing labour market conditions. This is particularly true in firms that employ skilled workers.

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Pissarides, C. (2007), “The Unemployment Volatility Puzzle: Is Wage Stickiness the Answer?”, The Walras-Bowley Lecture, North American Summer Meetings of the Econometric Society, Duke University, June 2007.

## 6 THE RESPONSE OF WAGES TO SHOCKS

Finally, the WDN survey also elicits information on how firms react to various shocks or unanticipated changes in the firms’ business environment. The shocks considered are two supply shocks, namely an increase in the cost of an intermediate input (e.g. an oil price increase) and an increase in wages (for example due to contracts negotiated at higher levels), and a demand shock, namely an unanticipated slowdown in demand. All three hypothetical shocks are common to all firms in the market, and the wage shock was explicitly described as permanent. The respondents were asked to assess the relevance of the following four adjustment strategies in response to these shocks: an increase in prices, a reduction in profit margins, a reduction in output, and a reduction in costs.

Approximately 70% of respondents indicate that reducing other costs and increasing prices are “very relevant” and “relevant” options in response to an increase in the cost of an intermediate input (cost-push shock), with the option of reducing costs being slightly more important than that of increasing prices. Around 60% of the firms indicate that they would adjust prices in the case of a wage shock (a cost-push shock). In the case of a slowdown in demand, around 80% of firms would try to reduce costs, whereas each of the other strategies is relevant for about half of the firms surveyed (see Table 6). Table 6 provides an overview of the relative importance of the various adjustment strategies. However, firms often employ combinations of these strategies. The combination of adjusting prices (increasing for the supply shocks and decreasing for the demand shock) and reducing other costs appears to be the most popular strategy among respondents.

**Table 6 Reaction after cost-push shocks, wage shocks and demand shocks**

(percentage of firms)

Adjustment strategy	Cost-push shock	Wage shock	Demand shock
Reduce (other) costs	67.8	59.0	78.0
Adjust prices	66.1	59.2	51.2
Reduce margins	53.6	49.8	56.8
Reduce output	21.6	22.5	48.6

Note: Figures are weighted to reflect overall employment and are rescaled to exclude non-responses.

The role of economic and institutional influences on the adjustment mechanisms used by firms has also been investigated, and in particular the extent to which shocks can be expected to pass through to prices in the case of wage and other cost-push shocks.<sup>19</sup> Firms operating in a more competitive environment are more responsive to both supply shocks, attaching greater importance to lowering margins, output and reducing other

<sup>19</sup> See Bertola et al. (2008), op. cit.

**Table 7 Cost-cutting strategies**

(percentage of firms)

Cost-cutting strategy	After a cost-push shock	After a wage shock	After a demand shock
Reduce base wages	1.2	-	1.2
Reduce flexible wage components	9.5	11.5	10.5
Reduce number of permanent employees	10.9	11.5	15.5
Reduce number of temporary/other employees	18.0	19.9	25.0
Reduce hours worked per employee	7.0	7.7	8.5
Reduce other costs	53.5	49.4	39.4

Note: Figures are weighted to reflect overall employment and are rescaled to exclude non-responses.

costs than firms exposed to fewer competitive pressures. By contrast, exposure to foreign markets limits the pass-through of cost increases to prices (inasmuch as it reduces firms' readiness to increase prices), particularly in the case of a permanent wage shock. There are several effects associated with collective bargaining: firms subject to collective bargaining at the national, regional or sectoral levels are more likely to respond to a cost-push shock by increasing prices. In the case of a wage shock, the influence of collective bargaining is less clear, but works in the same direction. Finally, regression results show that firms operating in the market services sector are less responsive to shocks than manufacturing firms, and larger firms seem to rely more on cost-cutting strategies than smaller ones. Nevertheless there is significant cross-country heterogeneity with regard to the responses to these shocks. It appears that the differing responses to an intermediate cost shock may, in part, be attributable to cross-country differences in employment protection legislation (EPL). However, EPL differences have less bearing on the differing responses to wage shocks.

The survey further enquired about the different cost-cutting strategies used in response to the various shocks. Surveyed firms could choose up to six different options: (i) reduce base wages, (ii) reduce flexible wage components, (iii) reduce the number of permanent employees, (iv) reduce the number of temporary employees, (v) reduce hours worked per employee and (vi) reduce non-labour costs. The reported cost-cutting strategies are summarised in Table 7. Interestingly, around half of the firms surveyed identified non-labour

cost reduction as the most relevant cost-cutting strategy following a supply shock, while the corresponding share was around 40% following a demand shock. Non-labour costs include negotiating with suppliers about prices, reducing administrative costs and reducing advertising costs. As expected, given the evidence on wage rigidity, cutting base wages is chosen by a very small percentage of firms (1.2%). Reducing flexible wage components is the preferred strategy of a larger, although modest, number of firms (around 10%).

## 7 CONCLUSION

Understanding the features and determinants of wage setting is important for the monetary policy transmission process. A better knowledge of the role of wages, and of the labour market in general, in the transmission process facilitates the shaping of monetary policy in the pursuit of price stability and increases the precision of macroeconomic models and their empirical application to policy analysis. In addition, identifying the sources of wage rigidities is of key importance in designing appropriate structural policies to facilitate the adjustment process in the presence of macroeconomic imbalances within the euro area.

Drawing on new evidence from a firm-level survey conducted in a broad range of Member States, this article contributes to a better understanding of wage-setting practices across the European Union. A number of tentative conclusions can be drawn from this evidence. First, the frequency of wage changes is lower

than that of price adjustments. 60% of the firms surveyed change wages once a year, and around 25% less frequently than once a year, while the corresponding percentages for price changes, at 40% and 7.4% respectively, are significantly lower. Second, around 30% of the firms surveyed report that wage changes typically take place in January. Wage changes are therefore more synchronised than price changes. Third, the survey evidence corroborates other micro evidence of downward nominal and real wage rigidity in a number of euro area countries. The prevailing form of rigidity (nominal versus real) in a given country depends on wage-setting institutions such as the degree of indexation, which varies quite considerably across countries. Fourth, the evidence on downward rigidity focuses on base wages. However, firms do have a number of other means for reducing labour costs, such as cutting bonuses, reducing non-wage benefits, changing working practices, reducing promotion rates and replacing departing workers with lower-paid ones. The WDN survey evidence suggests that around half of the firms surveyed have used one or another of these strategies to reduce costs. Fifth, it is, nonetheless, internal factors, such as the collective agreement or the wages of similar employees in the firm, which, for most firms, are the more important factors behind the wages of newly hired workers. Firms are reluctant to deviate from internal wage scales for reasons of fairness and efficiency. Finally, the survey evidence contributes to a better understanding of the link between wages and prices. Especially in firms with a high labour share, the pass-through of wages to prices is strong. Firms with a high labour cost share also report more frequently that there is a close link between the timing of price and wage changes. The pass-through of wages to prices is mitigated if the degree of competition or the export share is high.

Further analysis using micro-founded macroeconomic models is now required in order to gain a fuller understanding of the macroeconomic and policy implications of these micro findings for the monetary policy transmission process and

macroeconomic adjustment in the euro area. This is a major current research objective of the WDN.



## ASSESSING GLOBAL TRENDS IN PROTECTIONISM

*There is a broad consensus among economists that protectionism is not welfare-enhancing. Partly as a result of this consensus, and partly also due to the lacklustre economic performance of countries that did not engage in free trade in the period after the end of the Second World War, the past few decades have witnessed an unprecedented wave of liberalisation, which has considerably stimulated international trade and cross-border financial flows. This trend has affected virtually all regions of the world, albeit to different degrees and at different speeds. However, the perception that free trade has a favourable effect on growth and ultimately benefits all participants is not always shared among the general public, and calls for protectionism are not rare in the policy debate, particularly at times of economic and financial stress. One issue that has attracted considerable attention lately is the Doha round of trade negotiations, which was not completed according to schedule and is now at a critical juncture, given the call by G20 leaders for agreement to be reached on modalities that lead to a successful conclusion of the round.*

*This article takes stock of global trends in protectionism and discusses their possible economic effects, using results from the recent economic literature and ECB model simulations. A distinction is made between actual measures, such as tariff and non-tariff barriers, and protectionist pressures, which can be measured indirectly, for instance using surveys. The main conclusion is that to date there is no major evidence that actual protectionist measures are increasing, but at the same time there are clear signs that protectionist pressures are on the rise in certain regions of the world (although support for globalisation remains strong in emerging market economies). Given the large welfare loss that a rise in protectionism would entail, this calls for additional vigilance in resisting protectionist pressures worldwide.*

### I INTRODUCTION

Times of economic and financial stress seem to be particularly conducive to protectionist policies. This is suggested by several historical episodes; for example, many governments resorted to protectionist measures in the wake of the 1929 financial crisis in an effort to shield their domestic economies from the effects of the Great Depression. Such measures included higher import tariffs<sup>1</sup> but also exchange rate devaluations aimed at gaining export price competitiveness at the expense of trading partners (also known as “beggar-thy-neighbour” policies). This considerably hampered trade flows, which fell by 66% between 1929 and 1933.<sup>2</sup> While these policies failed to deliver economic prosperity in the countries that initiated them, they also triggered a spiral of reactions across countries, which contributed to the rise in nationalism in Europe and the rest of the world.

The widespread perception that protectionist policies were not successful and led to rising tensions across countries explains to a large

extent the fact that the world has experienced a clear trend towards globalisation since the Second World War. Other important factors have been the growing consensus against protectionism among economists and the positive experience of countries embracing free trade from an early stage compared with those that did not. As a result, important steps have been achieved in removing trade barriers, which has contributed to a sharp increase in world trade as a percentage of world GDP (Chart 1).<sup>3</sup>

- 1 In the United States, tariffs were raised sharply on a wide range of goods following the Smoot-Hawley Tariff Act of 17 June 1930.
- 2 For a detailed account of protectionism during the Great Depression, see Kindleberger, C. (1986), “The World in Depression 1929-1939”, University of California Press.
- 3 Other factors contributed to the rise in global trade flows, such as progress in transportation techniques. For a more general review of globalisation see in particular the article entitled “Globalisation, trade and the euro area macroeconomy” in the January 2008 issue of the Monthly Bulletin. Additional information on global trade flows can be found in di Mauro, F. and K. Forster (2008), “Globalisation and the competitiveness of the euro area”, ECB Occasional Paper No 97, and in di Mauro, F. and R. Anderton (2007), “The external dimension of the euro area”, Cambridge University Press.

Recently, however, the question has arisen as to whether the trend towards free trade that has been observed in recent decades will come to a halt or even be reversed. This concern is raised, in particular, by the failure to complete the Doha round of trade negotiations according to schedule and by growing indirect evidence that protectionist pressures are mounting. An additional source of concern stems from the chain of financial events that started in the summer of 2007 and accelerated in the autumn of 2008, since financial crisis episodes have often been associated with rising protectionist pressures. In fact, a search for instances of the word “protectionism” in the media shows a marked rise in October 2008.<sup>4</sup> Protectionist pressures can also be detected in statements by prominent policy-makers, as well as in the results of surveys. However, when evaluating global trends in protectionism, it is important to distinguish between actual protectionist measures (including tariff and non-tariff barriers) and protectionist pressures, which can be measured indirectly using surveys and other indicators. Protectionist pressures arise in particular from the political economy of trade liberalisation and protectionism: whereas the consumer surplus that results from liberalisation is spread over a large number of economic agents, the costs attached to liberalisation are concentrated on a small number of agents, who may then become very active in promoting protectionism.<sup>5</sup>

**Chart 1 World trade as a percentage of world economic output**



Source: IMF World Economic Outlook, October 2008.  
Notes: Trade refers to the sum of exports and imports of goods and services. Data for 2008 are estimated.

This article first describes the economic effects of protectionism by reviewing selected studies on the subject and by presenting results from model simulations (Section 2). It then, from a medium-run perspective, assesses past developments in protectionist measures across the world, including both tariff and non-tariff barriers (Section 3). Finally, the article considers recent developments in protectionist pressures (Section 4). The main conclusion is that while there is to date no firm evidence that actual protectionist measures are increasing, there are signs that protectionist pressures are on the rise in some regions of the world. Given the large welfare loss that a rise in protectionism would entail, this calls for greater vigilance in resisting protectionist pressures worldwide.

## 2 ASSESSING THE EFFECTS OF PROTECTIONISM

### TRADE PROTECTIONISM

Protectionism entails substantial long-run costs. The general case for free trade was made as early as the nineteenth century by classical economists such as David Ricardo, who focused on the notion of comparative advantage. Using a simplified representation of two economies with two sectors each, Ricardo showed that both countries were better off if each specialised and traded in the sector where it had a comparative advantage (i.e. higher productivity).<sup>6</sup>

Since the seminal work of Ricardo, economic techniques have progressed considerably and many studies have investigated the relationship between trade liberalisation and growth. As can be expected given the complexity of the question,

4 This is the case in particular when using the Factiva search engine. Two caveats to bear in mind are that the number of Factiva entries is very volatile over time and that this simple indicator does not distinguish between reports describing protectionism in a positive light and those describing it in a negative light.

5 See e.g. Olson, M. (1982), *The Rise and Decline of Nations: Economic Growth, Stagflation, and Social Rigidities*.

6 See Ricardo, D. (1817), *Principles of Political Economy and Taxation*. Ricardo opposed protectionism in the early nineteenth century in Britain, in particular the “Corn Laws” that imposed tariffs on agricultural goods between 1815 and 1846.

different studies provide different magnitudes for the economic impact of protectionism compared with free trade.<sup>7</sup> All in all, while a critical review of the literature by Rodríguez and Rodrik (2000)<sup>8</sup> argues that results in the empirical literature are not robust to a variety of tests, the main finding remains that imposing tariffs does not increase welfare or, alternatively, that trade liberalisation enhances growth (which implies that its delay represents an opportunity cost for the world economy). This finding is underlined by a dynamic stochastic general equilibrium (DSGE) model developed at the ECB. This model provides a quantitative assessment of the negative implications of a potential resurgence in protectionism for the world economy, as discussed in Box 1. Another study, described in the IMF World Economic Outlook of September 2002,<sup>9</sup> focuses on trade in agriculture and identifies three main effects. First, trade protectionism imposes substantial direct welfare costs on consumers (because tariffs raise prices) and taxpayers (given that subsidies may be financed with higher taxes). Second, it reduces efficiency in the use and allocation of resources within the economy (under protectionism, domestic producers can specialise in goods and services in which they are not competitive or do not have a comparative advantage). Third, protectionism can cause fiscal and balance of payments difficulties in countries where governments do not intervene (commodity-exporting countries in particular can be strongly affected by protectionism abroad; the recent food price crisis revealed the importance of this aspect). Overall, the results presented in this study suggest that the world's income would rise by about USD 128 billion (the equivalent of over 0.4% of world GDP) if all countries were to remove agricultural protection.

Aside from static gains from liberalisation, there are also dynamic gains, which are more difficult to measure and could potentially be much higher. Such gains consist in longer-run developments that follow trade liberalisation; they include in particular higher productivity growth rates that arise from the adoption of new technologies. There is no space here to present such aspects

in greater detail; the interested reader will find references in the World Economic Outlook article mentioned above. Finally, trade liberalisation can also bring gains other than those traditionally expected. For instance, trade agreements can help solve credibility issues faced by governments and can reduce uncertainty. They can also help governments of small countries signal good conditions in their domestic economy to the rest of the world, to the extent that competitive economies will be particularly willing to open up to international trade (see, for example, Fernández, 1997).<sup>10</sup>

Work has also been undertaken on the effects of a reintroduction of trade barriers. In its 2005 study on global imbalances based on the Global Economy Model (GEM), the IMF<sup>11</sup> simulated the impact of an increase in trade tariffs in all regions of the world as part of its scenario of disorderly unwinding. The model results suggested a very considerable downward impact on real GDP growth in all countries, with the US economy moving almost into recession during one year. This negative growth impact is largely due to the modelled response of monetary policy, which is assumed to tighten considerably in response to the upward price pressure

- 7 The economic literature on the subject is too broad to be listed here. A special feature published in "The Economic Journal" focuses on the link between trade liberalisation and growth in developing countries; see in particular the introductory chapter by A. Santos-Paulino and A. P. Thirlwall (*The Economic Journal*, vol 114, February 2004, pp. F1-F3), as well as the first article, by A. Winters, entitled "Trade Liberalisation and Economic Performance: an Overview", pp. F5-F21. Concerning the assessment of the expected benefits of the Doha round, results of course depend on what is agreed in the final package; see Decreux, Y. and L. Fontagné (2006), "A Quantitative Assessment of the Outcome of the Doha Development Agenda", CEPII Working Paper No 2006-10, May, for an assessment based on a computable general equilibrium model. This article also addresses the important question of the liberalisation of trade in services.
- 8 Rodríguez, F. and D. Rodrik (2000), "Trade Policy and Economic Growth: a Skeptic's Guide to the Cross-National Evidence", in Bernanke, B. and K. Rogoff, eds., *NBER Macroeconomics Annual*, MIT Press, Cambridge.
- 9 IMF (2002), "Trade and Finance" *World Economic Outlook*, September.
- 10 Fernández, R. (1997), "Returns to Regionalism: An Evaluation of Non-traditional Gains from RTAs," CEPR Discussion Paper No 1634.
- 11 IMF (2005) "How Will Global Imbalances Adjust?", *World Economic Outlook*, Appendix 1.2, September.

emanating from higher tariffs. More recently, a Federal Reserve Bank of New York paper by Faruqee et al (2006),<sup>12</sup> also based on the IMF's GEM, investigated the impact of trade barriers in greater detail. One of the main conclusions was that, if imposed simultaneously by all countries, an increase in import tariffs would be detrimental to world economic growth and would do little to help rebalance current account positions. One last point to note regarding the assessment of trade liberalisation is that several studies find that a further reduction in tariffs

would have only a small impact on growth, partly because tariffs have already decreased significantly and have little room to fall further.

### FINANCIAL PROTECTIONISM

Economic research has also been conducted on the effects of financial liberalisation. The

<sup>12</sup> Faruqee, H., D. Laxton, D. Muir and P. Pesenti (2006), "Would Protectionism Defuse Global Imbalances and Spur Economic Activity? A Scenario Analysis", Federal Reserve Bank of New York, Staff Report No 268, December.

#### Box 1

### MACROECONOMIC EFFECTS OF PROTECTIONISM: A SCENARIO ANALYSIS USING THE MULTI-COUNTRY VERSION OF THE ECB'S NEW AREA-WIDE MODEL

In recent years, the appearance of sizeable trade surpluses in emerging Asia and oil-exporting countries, accompanied by large current account deficits in countries such as the United States, has led to a lively debate in policy circles. Increasing external imbalances have, among other things, fuelled protectionist sentiment in a number of countries. Protectionist measures have to some observers appeared to be an appealing recipe for addressing internal and external imbalances. However, their effectiveness in reducing global imbalances is subject to controversy.

To facilitate the discussion, it is helpful to provide a quantitative assessment of the implications of a potential resurgence in protectionism for the world economy. In what follows, the macroeconomic effects of a rise in protectionist measures are analysed using the multi-country version of the ECB's New Area-Wide Model (MCNAWM).<sup>1</sup>

Three different scenarios are analysed. The first is a baseline scenario that is constructed to replicate the observed correlation of GDP growth with the trade balance in the United States and emerging Asia. In this scenario, global imbalances are fuelled by temporary productivity shocks in the tradable sector in emerging Asia and a permanent increase in non-tradable sector productivity in the United States. While the scenario is certainly stylised, it is able to capture the positive correlation of GDP growth and the trade balance in emerging Asia and the negative correlation of these variables in the United States. The second scenario alters the baseline scenario to include the unanticipated imposition of a 5% import tariff on goods from emerging Asia in the United States. The third scenario, labelled a "trade war" scenario, assesses the effects of a simultaneous introduction of import tariffs in the United States and emerging Asia on bilateral trade flows. The results are presented in the chart below.

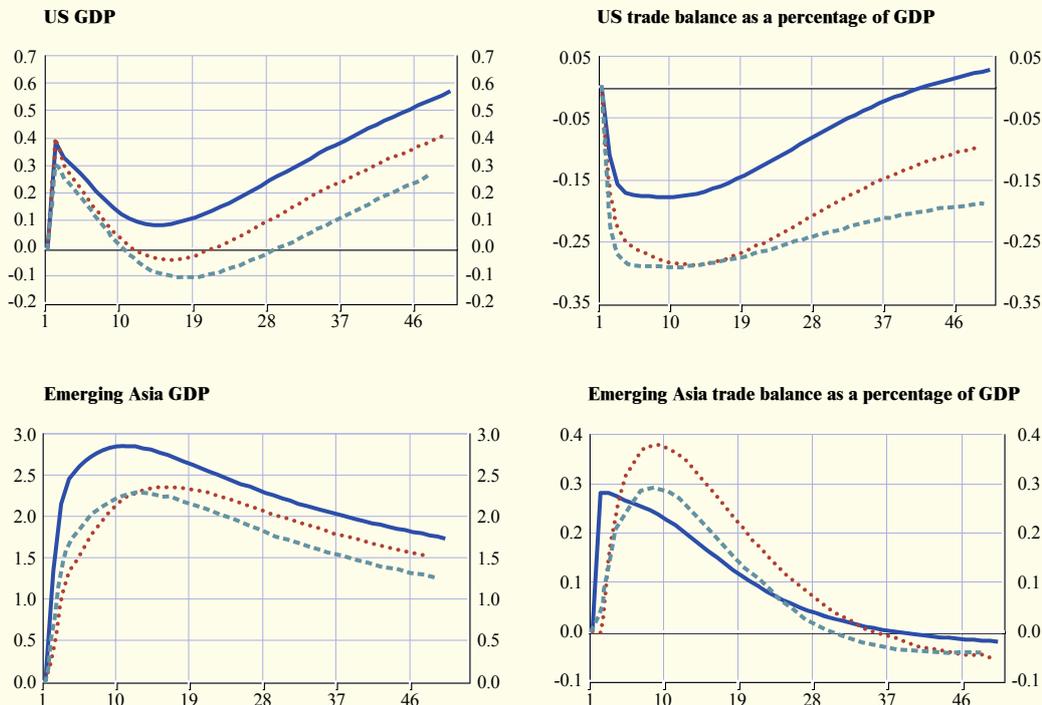
<sup>1</sup> For details of the MCNAWM see Jacquinet, P. and R. Straub (2008), "Globalisation and the euro area: simulation based analysis using the new Area wide model", ECB Working paper No 907. The MCNAWM is a microfounded open economy model consisting of a "four-country" block (consisting of the euro area, the United States, emerging Asia and a "remaining countries" block), and is parameterised to match macroeconomic ratios in the corresponding economies.

The main message of the analysis is that imposing import tariffs is unlikely to mitigate widening external imbalances but has negative effects on GDP growth in the medium term. By potentially boosting demand for domestic goods, the imposition of tariffs can give rise to an expenditure-switching effect, reducing the quantity of imports from the affected foreign economy. However, imposing tariffs on goods from one country cannot reduce a widening overall external imbalance as long as the fundamental drivers behind the imbalance are still in place. In fact, imposing tariffs can help to reduce bilateral imbalances with respect to certain counterparties at the cost of widening other bilateral surpluses/deficits. This is confirmed by the simulation exercise presented in the chart. It should also be noted that import tariffs have a negative impact on GDP in both emerging Asia and the United States compared with the benchmark scenario. The negative impact of protectionist measures on GDP growth is, as expected, amplified under a trade war scenario.

### Macroeconomic effects of protectionism: a scenario analysis using the MCNAWM

(impulse response functions as a percentage of GDP; quarters after the shock)

- first scenario
- ... second scenario
- - - third scenario



Source: ECB.

debate has in this case turned out to be more controversial, especially following the Asian crisis of the 1990s. The potential benefits of financial liberalisation can come through two major channels. First, financial liberalisation may have a positive impact on domestic investment and growth if the policy environment is favourable (i.e. robust institutions, sound macroeconomic policy, deep financial markets and high-quality financial sector regulation and supervision). Under certain conditions, foreign investment may facilitate the diffusion of new technologies and stimulate growth (see Borensztein et al., 1998<sup>13</sup>). Second, financial liberalisation may play an important catalytic role in improving institutions, enhancing good governance practices and strengthening macroeconomic discipline, as suggested by Kose et al. (2006).<sup>14</sup> In addition, it has been pointed out that cross-border capital mobility is not necessarily a driver of financial crises in developing countries. For instance, Edwards (2005)<sup>15</sup> finds no systematic evidence that countries with higher capital mobility tend to have a higher incidence of crises, or a higher probability of having crises, than countries with lower mobility.

In spite of this, the empirical literature has thus far reported mixed evidence on the link between freer capital flows and economic development. A study by Prasad, Rajan and Subramanian (2006)<sup>16</sup> finds evidence of the puzzle of financial openness and growth being positively correlated in mature economies, but negatively in developing countries. A number of explanations have been put forward for this puzzle. One of the most important is possibly that opening to foreign capital is beneficial to the extent that a country performs sufficiently well in terms of factors including property rights, contract enforceability, low corruption and the absence of expropriation measures. Otherwise, Rodrik and Subramanian (2008)<sup>17</sup> argue, an increase in financial openness due to financial account liberalisation would only boost consumption, while the effect on domestic investment and growth could be negative.

One difficulty that arises when evaluating the economic effects of financial account liberalisation is the fact that these effects may vary over time. In particular, countries that liberalise tend to gain in the period immediately following capital account liberalisation but do not always record higher growth or may even experience temporary growth reversals in the longer run.<sup>18</sup> The quality of domestic institutions, the size of foreign direct investment inflows and the sequencing of the liberalisation process have been found to be important factors in determining longer-run effects. To conclude, although the magnitude of the effects may vary depending on the methodology, the literature seems to point to important welfare gains from financial liberalisation in the long run, especially if the sequencing of reforms is properly scheduled.

### 3 ASSESSING GLOBAL TRENDS IN PROTECTIONISM: SELECTED INDICATORS

Barriers to trade in goods and services can be divided into two broad categories: quantitative and qualitative. The former include mainly tariffs, but also import quotas and limitations, subsidies and exchange controls. Such barriers are relatively straightforward to measure, in part because they are usually publicly announced. Qualitative barriers are more difficult to detect. These consist in government policies and regulations

13 Borensztein, E., J. De Gregorio and J-W. Lee (1998), "How Does Foreign Direct Investment Affect Growth?", *Journal of International Economics*, 45 (June), pp. 116-35.

14 Kose, M. A., E. Prasad, K. Rogoff and S-J. Wei (2006), "Financial Globalization: A Reappraisal", IMF Working Paper No 06/189.

15 Edwards, S. (2005), "Capital controls, sudden stops and current account reversals", NBER Working Paper No 11170.

16 Prasad, E., R. Rajan and A. Subramanian (2006), "Foreign Capital and Economic Growth", IMF, August, and NBER Working Paper No 13619.

17 Rodrik, D. and A. Subramanian (2008), "Why Did Financial Globalisation Disappoint?", March, mimeo. [http://ksghome.harvard.edu/~drodrik/Why\\_Did\\_FG\\_Disappoint\\_March\\_24\\_2008.pdf](http://ksghome.harvard.edu/~drodrik/Why_Did_FG_Disappoint_March_24_2008.pdf)

18 See Bussière, M. and M. Fratzscher (2008), "Financial Openness and Growth: Short-run Gain, Long-run Pain?", *Review of International Economics*, vol. 16(1), pp. 69-95.

that directly or indirectly hinder free trade. They include, for instance, competition policy, industrial policy, discriminatory treatment towards foreign capital, customs valuation and classification, industrial standards and quality standards. As the assessment of global trends in protectionism depends on which measures are considered, the rest of Section 3 reviews tariff measures and non-tariff measures separately.

### TARIFF MEASURES

Average import tariffs on manufactured goods have declined in recent years. The evaluation of tariffs depends on the products that are considered and the methodology. One important indicator is the tariffs reported by the United Nations Conference on Trade and Development (UNCTAD). Based on this, tariffs fell over the period 1990-2006 in both the major advanced economies (the United States, the EU and Japan), as shown in Chart 2, panel A, and in large emerging economies such as Brazil, Russia, India and China (often referred to as the “BRICs”),<sup>19</sup> as shown in Chart 2, panel B.<sup>20</sup> Tariffs are still markedly higher in the emerging economies, but the gap between

advanced and emerging economies has been decreasing over time.

However, one needs to take into account the fact that emerging markets have gained market share since 1990. For instance, the BRICs accounted for around 5% of world trade in 1990, against nearly 14% now, the counterpart of this rise being a fall in the market share of advanced economies. The growing market share of the BRICs, whose tariffs are higher, may therefore increase perceived protectionism.

Progress in tariff reduction has varied considerably across sectors, and developments in average tariffs may hide significant differences in the treatment of individual products. A declining average may be misleading if countries maintain very high tariffs on certain strategic products.

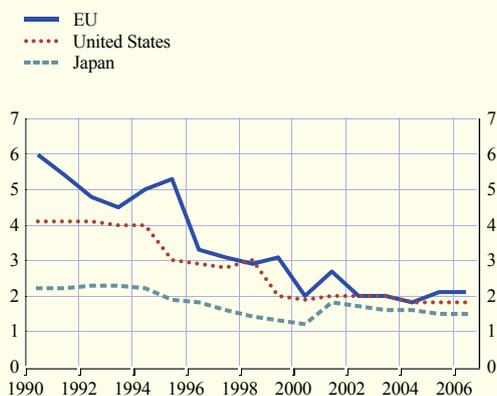
19 The concept (together with the acronym) was introduced by the bank Goldman Sachs in the early 2000s. These countries are usefully considered together given their large economic and demographic size, their systemic importance and their strong growth performance.

20 For a methodological discussion see Bouët, A., Y. Decreux, L. Fontagné, S. Jean and D. Laborde (2008), “Assessing Applied Protection across the World”, *Review of International Economics*, 16(5), pp. 850-863.

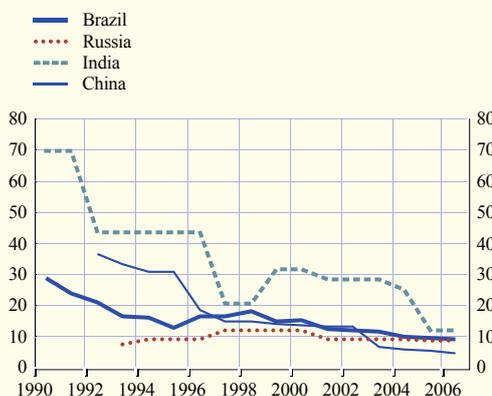
Chart 2 Average tariffs on imported manufactured goods

(percentages)

#### Panel A: selected advanced economies



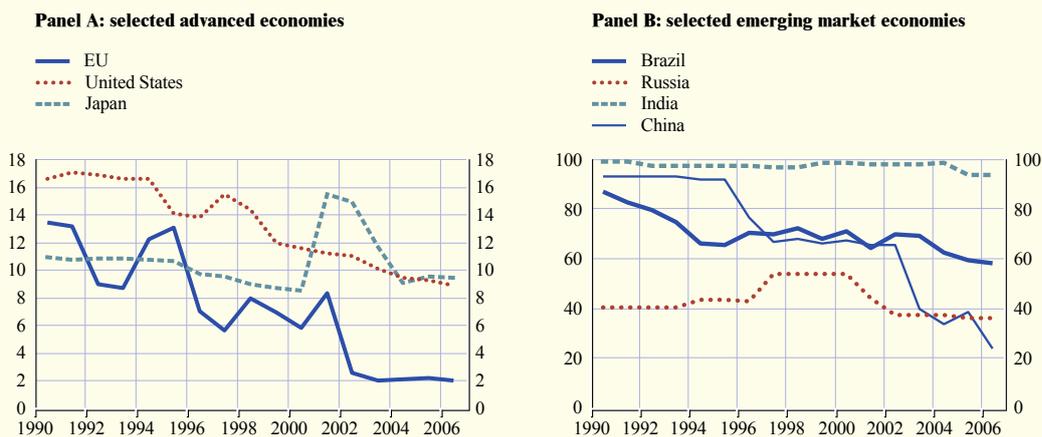
#### Panel B: selected emerging market economies



Sources: UNCTAD and ECB calculations.

**Chart 3 Percentage of manufactured goods subject to tariffs above 10%**

(percentages)



Sources: UNCTAD, Handbook of Statistics, 2008, and ECB calculations.

The distribution of tariffs across countries is characterised by an important difference between the emerging market economies, where around 60% of tariffs are above 10%, and the advanced economies, where this share is below 20% (Chart 3). Although emerging economies have been reducing average tariff levels, they still apply high tariffs to most manufactured goods.

### NON-TARIFF MEASURES

Tariffs provide only a very partial indication of the degree of protectionism. Countries are unlikely to increase tariffs by a large amount as these are capped through international agreements in the context of the World Trade Organization (WTO); protectionist measures are more likely to come in the form of non-tariff measures, which are more difficult to quantify. Such barriers include export subsidies, which should, theoretically, be easy to quantify. But subsidies can also take very indirect forms (such as funding for research programmes that enhance productivity). Alternatively, they can be aimed at supporting local producers against foreign competitors. While this issue is important, it is too vast to be tackled in full here,<sup>21</sup> and the article focuses instead on survey

data that provide a broad assessment of non-tariff barriers.

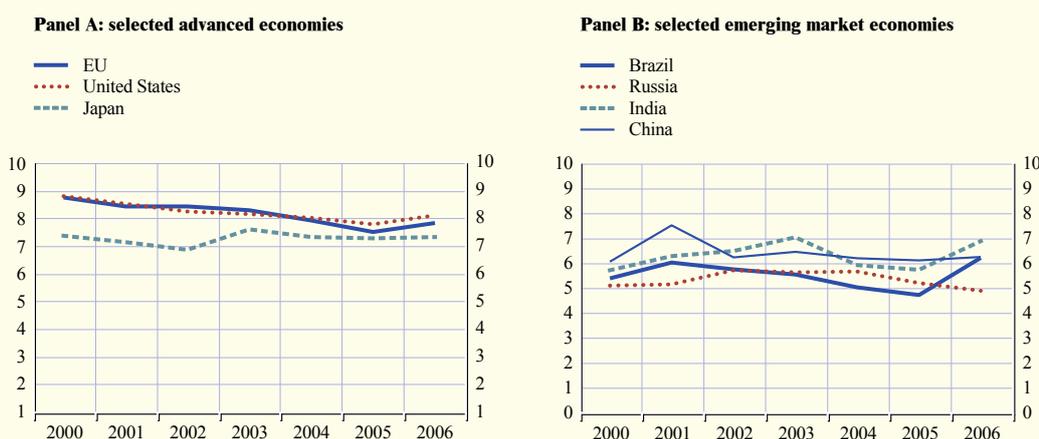
As non-tariff measures include various government policies and regulations that cannot be quantified directly, official data on this type of barrier are indeed very scarce and mainly confined to cross-country comparisons at a given point in time, which does not allow an assessment of trends over time.<sup>22</sup> Some private sector institutions provide quantified indices based on surveys, such as the ratings developed by the Fraser Institute. Although these measures are subject to caveats, they constitute useful proxies to assess non-tariff barriers.

Indicators provided by the Fraser Institute suggest that non-tariff barriers have remained broadly stable in both advanced and emerging

21 Useful information on the subject can be found on the website of the WTO; see [http://www.wto.org/english/tratop\\_e/scm\\_e/scm\\_e.htm](http://www.wto.org/english/tratop_e/scm_e/scm_e.htm). For further information and references see also Anderson, K. (2004), "Subsidies and Trade Barriers", Centre for International Economic Studies, School of Economics, University of Adelaide.

22 In recent years, for instance, the OECD has undertaken detailed studies on trade barriers relating to time and logistics. See e.g. Kyvik Nordås, H. (2006), "Time as a Trade Barrier: Implications for Low Income Countries", OECD Economic Studies No 42, 2006/1.

Chart 4 Index of regulatory trade barriers



Sources: Fraser Institute and ECB calculations.

Notes: For detailed information on these indices see "Economic Freedom of the World 2008 Annual Report", <http://www.freetheworld.com/release.html>. An increase in the index indicates lower trade barriers. The values provided for the EU were computed as a weighted average of the 27 Member States, using GDP weights converted to the same currency using purchasing power parity. They are therefore not directly comparable with those for the United States and Japan.

economies since the early 2000s (Chart 4). These indicators proxy non-price and non-quantity-related import barriers, providing a summary measure of hidden import barriers that ranges between 0 and 10, whereby a higher score represents a higher degree of freedom to trade.

## FINANCIAL FLOWS

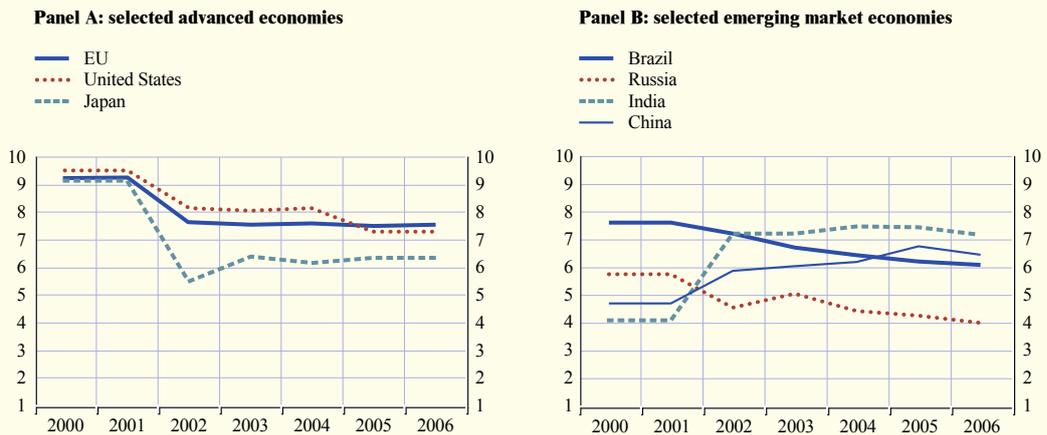
Given the importance of financial flows to the world economy, protectionism with regard to cross-border capital flows may be as significant as trade protectionism. A traditional way of measuring financial protectionism consists in measuring legal restrictions on cross-border capital flows. These include, for instance, controls on inflows and outflows, controls on quantities and prices, and restrictions on foreign equity holdings. The literature distinguishes between de jure and de facto measures (see, for example, Kose et al., 2006). The former use narrative descriptions to give a quantitative measure of financial openness, based in particular on IMF reports.<sup>23</sup> The latter include price-based and quantity-based measures of financial integration and rest on the idea that, regardless of the volume and direction of flows, full integration of capital markets should be

reflected in common prices for similar financial instruments across national borders. Several papers have proposed such measures; see in particular Chinn and Ito (2005), Quinn (2003), Mody and Murshid (2005), Miniane (2004) and Edwards (2005).<sup>24</sup> These two types of measure do not always give the same result because legal restrictions are not always implemented in practice (in which case the de jure measures are more restrictive than the de facto measures) or because agents may decide not to invest in a given country even if they have been granted the right to do so (in which case the de facto measures will be more restrictive). For example, despite capital controls, China has received large private capital inflows in recent years.

23 The IMF Annual Report on Exchange Arrangements and Exchange Restrictions.

24 Chinn, M. D. and H. Ito (2005), "What Matters for Financial Development? Capital Controls, Institutions, and Interactions", NBER Working Paper No 11370; Quinn, D. (2003), "Capital Account Liberalization and Financial Globalization, 1980-1990", *International Journal of Finance and Economics* 8 (3), pp. 189-204; Miniane, J. (2004), "A new set of measures on capital account restrictions", IMF Staff Papers 51(2), pp. 276-308; and Mody, A. and A. P. Murshid (2005), "Growing up with capital flows", *Journal of International Economics*, 65, pp. 249-266.

Chart 5 Index of foreign capital market restrictions

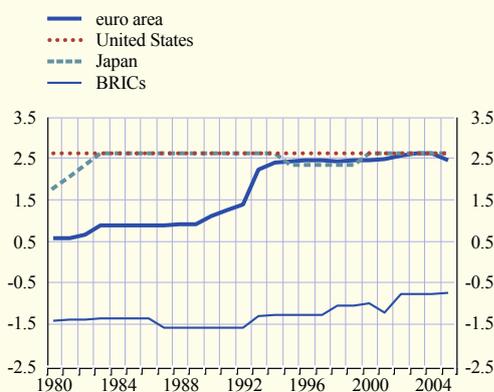


Sources: Fraser Institute and ECB calculations.  
 Notes: For detailed information on these indices see “Economic Freedom of the World 2008 Annual Report”, <http://www.freetheworld.com/release.html>. An increase in the index indicates weaker capital market restrictions. See also last note to Chart 4.

As regards de jure measures, two main indices can be used in the present context. The first is an index of capital market access for both non-residents and residents (Chart 5). The second is the Chinn-Ito index on the degree of capital account openness (Chart 6). These indices suggest

that restrictions tend to be greater in emerging economies than in advanced economies. This can be seen more clearly in the Chinn-Ito index, which shows a larger gap between the BRICs and the advanced economies. However, there seems to be significant heterogeneity across emerging market economies (Chart 5, Panel B).

Chart 6 Index of foreign capital account openness

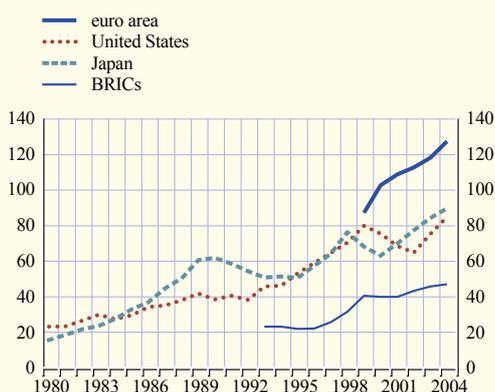


Sources: Chinn and Ito, 2005, and ECB calculations.  
 Notes: An increase in the index indicates weaker capital market restrictions. The values provided for the euro area and the BRICs were computed as a weighted average of the individual countries, using GDP weights converted to the same currency using purchasing power parity. They are therefore not directly comparable with those for the United States and Japan. For the calculation, the euro area consists of Belgium, Germany, Ireland, Greece, Spain, France, Italy, Cyprus, Malta, the Netherlands, Austria and Portugal.

Turning to the de facto measures of capital account openness, there can be seen in particular a significant increase in the level of (gross) foreign assets expressed as percentage of GDP since 1990 (see Chart 7; a similar pattern emerges from gross liabilities). The change in assets and liabilities does not completely correspond to the cumulated sum of flows, owing to valuation effects. Although the magnitude of the increase may be different on the basis of alternative measures, and in spite of differences across countries, there has been a clear trend since the mid-1990s towards markedly higher cross-border capital flows. In addition, financial liberalisation has in certain regions taken place at a rapid pace; this is particularly the case for the euro area.<sup>25</sup>

25 See “Financial integration in Europe”, ECB, April 2008.

Chart 7 Total foreign assets as a percentage of GDP



Source: Milesi-Ferretti, G.-M. and P. R. Lane (2006), "The External Wealth of Nations Mark II: Revised and Extended Estimates of Foreign Assets and Liabilities, 1970-2004," IMF Working Papers 06/69.

In conclusion it can be said that there is to date no firm evidence from long-run trends based on available data that protectionist measures are increasing (partly because such data are published with significant lags). This does not mean, however, that protectionist pressures are not rising. The above measures must be supplemented by other, indirect indicators.

#### 4 ASSESSING GLOBAL TRENDS IN PROTECTIONIST PRESSURES

Indirect measures of protectionism are more difficult to quantify, but they can be gauged by considering a range of indicators, including delays in multilateral trade negotiations, the number of trade disputes at the WTO, the proliferation of free trade agreements and informal survey data.

##### MULTILATERAL TRADE NEGOTIATIONS

One important factor that suggests a rise in protectionist pressures in the world is the fact that multilateral trade negotiations have not proceeded as planned and have given rise to marked disagreement between key global trading partners. In July 2006 the Doha round of WTO trade negotiations was indefinitely suspended; negotiations resumed but were again halted in July 2008. At the beginning of 2009, it remains unclear whether the parties will move towards the concessions originally envisaged as the basis for agreement (see Box 2 for a more detailed account).

#### Box 2

##### THE DOHA ROUND

Since the Second World War continuous efforts have been made to liberalise world trade. Initially, negotiations took place in the framework of the General Agreement on Tariffs and Trade (GATT). From 1947 onwards seven, often difficult, negotiation rounds resulted in the progressive abolition of tariffs. The last round, the Uruguay round (1986-1994), extended trade liberalisation to new areas such as intellectual property rights, services, capital and agriculture. Moreover, the creation of the WTO was agreed upon during this round. Whereas the GATT was strictly speaking a set of trade rules, the WTO is an international organisation that supervises world trade and promotes its further liberalisation.

The first WTO conference of trade ministers took place in Singapore in 1996. It identified four main subjects, the "Singapore issues", on which negotiations should focus: rules on investment, competition policy, transparency in government procurement and the simplification of trade

procedures. A new “millennium” negotiation round was intended to start in Seattle in 1999, but the meeting ended in failure.

Thus the Doha round is the first multilateral trade round since the WTO was established. It was launched in Doha, Qatar, in November 2001. Its objective is to integrate developing countries into the world trade system. Three issues are at the centre of the negotiations: a) reducing EU agricultural tariffs, b) reducing US farm subsidies and c) enhancing access (for example, by tariff reduction) for industrial goods and services to the markets of the major developing countries.

For a long time, the EU and the United States were the key players in international trade negotiations, given their economic strength and large shares in world trade. Over recent years, however, their influence has weakened with the growing economic weight of emerging markets, which joined forces in the course of the Doha talks. A group of 20 countries, with Brazil, India, China and South Africa taking the lead, has been playing an increasingly important role in the negotiations. It has pressed for the abolishment of agricultural subsidies and the reduction of agricultural tariffs in industrialised countries while defending protective mechanisms in emerging markets. The EU is represented by the European Commission in these trade negotiations. During the negotiations, the Commission continuously consults with a committee of high-level national trade officials, and any agreement concluded needs to be adopted by the EU Council. The EU has been actively involved in the Doha round negotiations and has to a large extent shaped its agenda. To achieve a successful conclusion of the talks, the EU has offered significant concessions with regard to a further opening up of its agricultural markets.

Originally, it was envisaged that the Doha round would be finished in January 2005, but the first meeting at the ministerial level in Cancún (2003) did not lead to a successful conclusion. Neither did the ministerial meeting in Hong Kong SAR (2005). Due to a lack of progress, member countries decided in July 2006 to suspend the negotiations. By January 2007, the trade ministers from 30 key countries had agreed to restart the talks. However, the G4 trade ministers (those of the United States, the EU, Brazil and India) could not come to an agreement in Potsdam in June 2007, and the WTO ministerial conference scheduled for December 2007 was cancelled. A new ministerial meeting was finally scheduled to take place in Geneva in July 2008. However, the talks were once again suspended.

The Doha Development Agenda initially covered 12 subject areas (agriculture, industrial products, services, intellectual property, investment, competition, government procurement, trade facilitation, anti-dumping, subsidies, regional trade agreements, and trade and environment). However, in view of the difficult negotiations, the original mandate has been adjusted in the course of the talks. As the Cancún meeting ended in deadlock over the Singapore issues, three of these issues (investment, competition and government procurement) were dropped in 2004. Of the remaining nine subject areas, the most important concern concessions and commitments for increased market access for agriculture, industrial products and services.

During the negotiations in Geneva, positions converged with regard to most topics on the agenda. However, no agreement was possible on a special safeguard mechanism that had long been a key demand of developing countries. It would permit them to raise agricultural tariffs temporarily in the event of import surges or price falls in order to protect farmers. The United States considered the import increase proposed to trigger the application of the safeguards as unacceptably low. Especially for some of the bigger emerging market countries, such as China and India, it viewed

the safeguards as difficult to justify in view of their growth dynamics and increasing role in world trade. This conflict between the United States and the emerging market countries led to the suspension of the talks at the end of July 2008.

The failure of the Geneva meeting does not necessarily mean the end of the Doha round. As a rule, previous negotiation rounds took several years to conclude, and also included many suspensions. In the current round, no party has so far declared that it is no longer willing to negotiate. On the contrary, since the breakdown of the talks many political meetings have taken place to look for possible ways forward. In September 2008 negotiators in Geneva resumed work, in particular on the special safeguard mechanism and other pending questions such as cotton subsidies. In November 2008, the G20 declared its intention to aim for an agreement in 2008 on the modalities allowing a successful conclusion of the Doha round. However, as insufficient progress was subsequently made, a ministerial meeting to conclude the negotiations could not be convened by the end of the year.

The suspension of negotiations can be seen as a major setback to the multilateral trading system. Against the background of a difficult global economic environment, it raises concerns about the emergence of protectionist pressures. Furthermore, in the light of the difficulty of achieving progress at the global level, the focus of policy-makers may now shift further towards concluding bilateral or regional trade agreements. Many such agreements already exist, for example the North American Free Trade Agreement (NAFTA) between the United States, Canada and Mexico. The EU has also concluded numerous trade agreements, ranging from the European Economic Area with Iceland, Liechtenstein and Norway and association agreements with many countries (above all in south-eastern Europe and the Mediterranean region) to an Economic Partnership Agreement with Caribbean states. A failure at the multilateral level could also be expected to further strengthen the ongoing dialogues between the EU and countries such as the United States, Russia and China with regard to trade and economic cooperation.

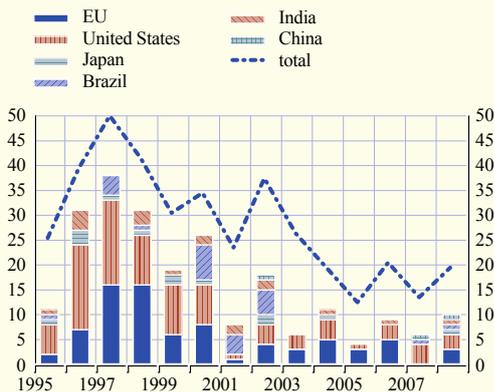
Another indirect indicator of protectionist pressures, also related to multilateral trade negotiations, may be the number of disputes brought to the WTO since 1995 (Chart 8). One important caveat with this measure is that it can be interpreted in two ways: an increase could reveal higher protectionist pressures, but also increased confidence in the legal support provided by the WTO. It is noticeable that in the two years following the establishment of the WTO the number of cases per year increased to 50; however, this period could be interpreted as a learning phase. Thereafter, the number of disputes followed a downward trend, excluding a peak in 2002 at around 37 submissions (of which four by the EU, four by the United States and eight by the BRICs). In recent years, the number of submissions has been below the 1995 level, despite increases in 2006 and 2008.

A further indirect measure of protectionist pressures is the proliferation of regional trade arrangements (RTAs) over time (Chart 9). While promoting free trade, such agreements do so at regional or bilateral level rather than at global level and can therefore be seen either as an alternative path towards free trade or as an obstacle to it (see, for example, Limao, 2006, and Limao and Karacaovali, 2008, for recent discussions<sup>26</sup>). This measure should be interpreted with caution, therefore, because the literature remains divided with regard to the effect of RTAs and, in particular, as to whether

26 Limao, N. (2007), "Are Preferential Trade Agreements with Non-trade Objectives a Stumbling Block for Multilateral Liberalization?", *Review of Economic Studies*, Blackwell Publishing, vol. 74(3), pp. 821-855. Karacaovali, B. and N. Limao (2005), "The clash of liberalizations: preferential versus multilateral trade liberalization in the European Union", World Bank Policy Research Working Paper No 3493.

**Chart 8 Number of disputes at the WTO**

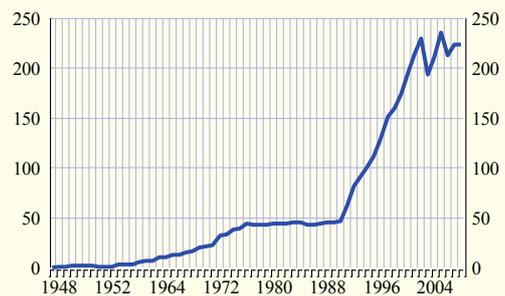
(by complainant)



Source: WTO.  
Note: Disputes are classified by the year of their submission.

**Chart 9 Number of regional trade arrangements**

(data cumulated over time)



Source: WTO.  
Note: Arrangements are classified by the year of their entry into force.

they complement or substitute the WTO-led process (see, for example, Baldwin, 2006,<sup>27</sup> a proponent of the view that RTAs can be viewed as building blocks of globalisation).

#### EVIDENCE FROM SURVEY DATA

Turning now to evidence from survey data, globalisation is perceived differently across countries and population segments. Survey data are helpful in gauging trends in protectionist sentiment, but one should remember that the surveys are carried out using a small sample of the population and that they are very question-specific. Still, they provide a useful indicator of the general perception of globalisation. Some surveys<sup>28</sup> show support for trade globalisation to be falling significantly in the EU and the United States, and by a smaller amount in emerging market economies and developing countries (Table 1). In fact, support for trade globalisation seems to be high in emerging market economies and developing countries (particularly in Asia and Africa, with above 80% of the population agreeing with the statement that trade with other countries is good).

A recent poll found that in the United States the majority of the population (60% of respondents) considered that globalisation, “especially the increasing connections of their country’s economy with others around the world”, was mostly “good” (see World Public Opinion, 2007<sup>29</sup>). As regards the rest of the world, globalisation finds wide support in Asia, notably China, Korea and Thailand (with, respectively, 87%, 86% and 75% of the population supporting globalisation). This support is somewhat lower in India (at 54%). In the EU, the perception of globalisation varies considerably across countries. It is more negative, in particular, among some of the countries that have joined the EU since 2004 (Chart 10).

27 Baldwin, R. (2006), “Multilateralising Regionalism: Spaghetti Bowls as Building Blocks on the Path to Global Free Trade”, CEPR Discussion Paper No 5775, August.

28 E.g. the Pew Global Attitudes Project (October 2007), “World Publics Welcome Global Trade – But Not Immigration”, <http://pewglobal.org/reports/display.php?ReportID=258>.

29 The Chicago Council on Global Affairs (2007), World Public Opinion, [http://www.thechicagocouncil.org/UserFiles/File/POS\\_Topline%20Reports/POS%202007\\_Global%20Issues/WPO\\_07%20full%20report.pdf](http://www.thechicagocouncil.org/UserFiles/File/POS_Topline%20Reports/POS%202007_Global%20Issues/WPO_07%20full%20report.pdf).

**Table I Support for globalisation in selected regions of the world**

(percentage of positive answers to the question “Is trade with other countries good?”)

	2002	2007	Variation
United States	78%	59%	-19
EU <sup>1)</sup>	87%	77%	-9
Latin America <sup>2)</sup>	76%	76%	0
Asia <sup>3)</sup>	84%	83%	-1
Africa <sup>4)</sup>	91%	87%	-3

Sources: The Pew Global Attitudes Project (2007) and ECB calculations.

Note: Figures may not add up due to rounding.

1) Arithmetic average of Germany, France, Italy and the United Kingdom.

2) Arithmetic average of Argentina, Bolivia, Mexico, Brazil, Peru and Venezuela.

3) Arithmetic average of Bangladesh, Pakistan, China, India, Japan, Korea and Indonesia.

4) Arithmetic average of Kenya, Ghana, Tanzania, South Africa, Côte d'Ivoire, Nigeria and Uganda.

Taking the EU as a whole, opinion is almost evenly split between supporters and opponents of globalisation.<sup>30</sup> In 2008 39% of EU citizens considered globalisation “a good opportunity for national companies thanks to the opening-up of markets”, while 43% considered it a “threat to employment and national companies” and 18% responded “don’t know”.

There are marked differences across Member States, however.

Finally, surveys among business leaders suggest that protectionism is perceived as a significant threat. In a comprehensive survey of more than 500 global business leaders by “The Economist” in the autumn of 2006, almost half of the respondents indicated that protectionist measures were increasing.

### POLITICAL AND SOCIETAL PRESSURES

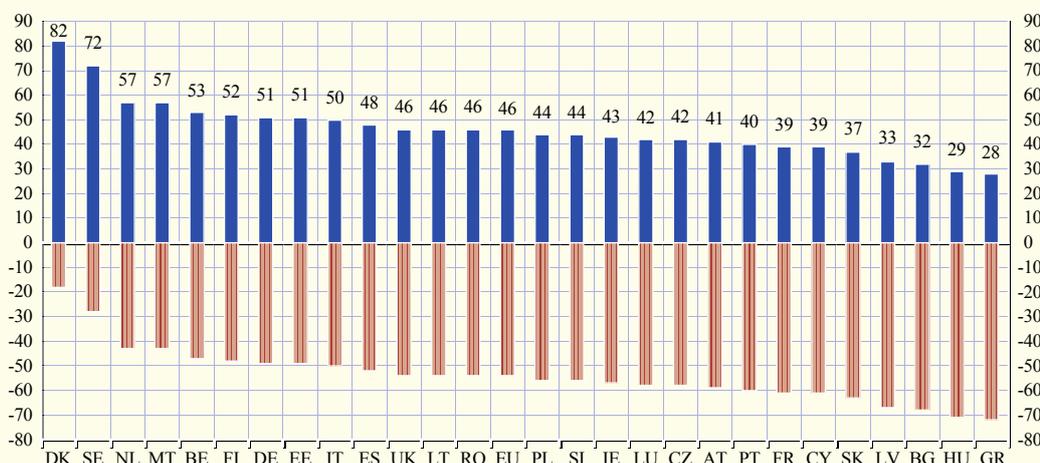
Within countries, the perception of globalisation varies considerably across segments of the population. In particular, support for globalisation is strongest among high-skilled workers in mature economies (see, for example, O’Rourke and Sinnott (2001); Mayda and Rodrik (2005); and Scheve and

30 See European Commission (2008), “Eurobarometer 69, the Europeans and globalisation”, November, p. 31, [http://ec.europa.eu/public\\_opinion/archives/eb/eb69/eb69\\_globalisation\\_en.pdf](http://ec.europa.eu/public_opinion/archives/eb/eb69/eb69_globalisation_en.pdf).

**Chart 10 Support for globalisation among EU countries**

**Question: Does the term globalisation bring to mind something very positive, fairly positive, fairly negative or very negative?**

— percentage of positive answers  
 — percentage of negative answers or “don’t knows”



Source: European Commission’s Eurobarometer 67 (2007).

Slaughter (2006)<sup>31</sup>). Exposure to international competition plays less of a role. Individuals working in sectors open to international competition – and with a comparative advantage – are not much more likely to support or oppose trade liberalisation than those working in sectors sheltered from international competition (see Mayda and Rodrik, 2005). Other studies also find that sectoral factors do not play a significant role (Scheve and Slaughter, 2006). Arguably, individuals working in sectors open to international competition – but with a comparative disadvantage – are only slightly more likely to oppose trade liberalisation than those working in sheltered sectors.

Faltering support for globalisation might induce governments to reverse the globalisation trend that has taken place in the past few decades. Evidence for this is presented in a recent report by the Council on Foreign Relations, which reviewed recent projects to (re)introduce regulations on foreign direct investment in a group of 11 countries.<sup>32</sup> Although not all these attempts will lead to restrictions, this trend suggests that there are ongoing pressures to restrict investment flows across countries, a process that the authors of the report called “protectionist drift”.

Finally, broad political and societal concerns about the impact of free trade can be a significant source of protectionist pressure. Such concerns arise from the fact that globalisation is perceived to contribute to widening wage inequalities in advanced economies.<sup>33</sup> One indication of concern about free trade relates to official programmes providing personalised support (income support and retraining) to workers who lose their jobs as a result of trade liberalisation, which have been adopted by a number of countries. Such programmes have a long tradition in the United States. Trade Adjustment Assistance programmes were first introduced in 1962 at the start of the Kennedy round of discussions on trade liberalisation. Expenditure under such programmes has increased steadily over recent years and was budgeted at around

USD 650 million in the fiscal year 2007, compared with around USD 100 million in the early 1990s. In 2006 the EU established a broadly similar programme, the European Globalisation Adjustment Fund, which will provide funds of up to €500 million per year over the period 2007-13.<sup>34</sup>

## 5 CONCLUSION

The past few decades have witnessed an unprecedented trend towards the liberalisation of trade and capital flows. This trend has affected virtually all regions of the world but has perhaps been more pronounced among emerging markets and developing countries. The creation of the WTO represented a unique opportunity to conduct trade negotiations at the global level. There is a broad consensus among economists that the impact of protectionism on economic growth (and on economic welfare in general) is largely negative, although researchers have pointed out that the magnitude of this impact varies considerably across countries and crucially depends on the macroeconomic and policy environment.

Will the trend towards liberalisation continue or is there a risk that it will stop or even reverse? This article has reviewed past developments in protectionism throughout the world. Although, to date, there is no major evidence that

31 O'Rourke, K. H. and R. Sinnott (2001), “The determinants of individual trade policy preferences: international survey evidence”, *Brookings Trade Forum*, pp. 157-206; Mayda, A.-M. and D. Rodrik (2005), “Why are some people (and countries) more protectionist than others?”, *European Economic Review*, 49, pp. 1393-1430; Scheve, K. and M. J. Slaughter (2006), “Public Opinion, International Economic Integration, and the Welfare State” in Bowles, S., P. Bardhan and M. Wallerstein (eds.), *Globalization and Egalitarian Redistribution*, Princeton University Press.

32 Marchick, D. M and M. J. Slaughter (2008), “Global FDI Policy, Correcting a Protectionist Drift”, Council on Foreign Relations, Council Special Report No 34, June.

33 See, in particular, IMF (2007), “Globalization and Inequality”, *World Economic Outlook*, October. A thorough survey of the effects of globalisation can also be found in OECD (2007), “Making the Most of Globalisation”, *OECD Economic Outlook*, No 81, June.

34 Information on the European Globalisation Adjustment Fund can be found at [http://ec.europa.eu/employment\\_social/egf/index\\_en.html](http://ec.europa.eu/employment_social/egf/index_en.html).

## ARTICLES

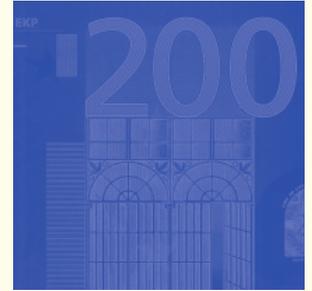
Assessing global  
trends in  
protectionism

concrete protectionist measures have increased, protectionist pressures seem to be mounting. Support for globalisation is weakening in several regions of the world, which is unsurprising given that protectionist pressures tend to become stronger at times of economic and financial stress. For this reason, looking ahead, it will be very important to continue to resist any calls for measures in this direction.



# EURO AREA STATISTICS





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

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#### ENLARGEMENT OF THE EURO AREA ON 1 JANUARY 2009 TO INCLUDE SLOVAKIA

Unless otherwise indicated, all data series covering observations for 2009 relate to the Euro 16 (the euro area including Slovakia) for the whole time series. For interest rates, monetary statistics and the HICP (and, for consistency reasons, the components and counterparts of M3 and the components of the HICP), the statistical series relating to the euro area cover the EU Member States that had adopted the euro at the time to which the statistics relate. Where applicable, this is indicated in the tables by means of a footnote. In such cases, where underlying data are available, absolute and percentage changes for the respective year of entry into the euro area of Greece (2001), Slovenia (2007), Cyprus (2008), Malta (2008) and Slovakia (2009), calculated from bases covering the year prior to the year of entry, use a series in which the impact of these countries' joining the euro area is taken into account. Historical data referring to the euro area before the entry of Slovakia are available on the ECB's website at <http://www.ecb.europa.eu/stats/services/downloads/html/index.en.html>

#### Conventions used in the tables

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



# EURO AREA OVERVIEW

## Summary of economic indicators for the euro area

(annual percentage changes, unless otherwise indicated)

### 1. Monetary developments and interest rates<sup>1)</sup>

	M1 <sup>3)</sup>	M2 <sup>3)</sup>	M3 <sup>3),4)</sup>	M3 <sup>3),4)</sup> 3-month moving average (centred)	MFI loans to euro area residents excluding MFIs and general government <sup>3)</sup>	Securities other than shares issued in euro by non-MFI corporations <sup>3)</sup>	3-month interest rate (EURIBOR, % per annum, period averages)	10-year spot rate (% per annum, end-of- period) <sup>5)</sup>
	1	2	3	4	5	6	7	8
2007	6.4	9.9	11.1	-	10.8	18.6	4.28	4.38
2008	2.3	9.5	9.6	-	9.5	.	4.64	3.69
2008 Q1	3.8	10.3	11.2	-	11.1	19.8	4.48	4.13
Q2	2.3	10.0	10.1	-	10.5	17.2	4.86	4.73
Q3	0.6	9.1	9.0	-	9.1	18.6	4.98	4.34
Q4	2.7	8.8	8.1	-	7.3	.	4.24	3.69
2008 Aug.	0.2	8.9	8.8	8.9	8.9	20.0	4.97	4.34
Sep.	1.2	8.9	8.7	8.7	8.5	20.4	5.02	4.34
Oct.	3.7	9.3	8.6	8.3	7.8	18.0	5.11	4.25
Nov.	2.2	8.7	7.7	7.9	7.1	20.2	4.24	3.77
Dec.	3.2	8.0	7.3	.	5.8	.	3.29	3.69
2009 Jan.	.	.	.	.	.	.	2.46	4.02

### 2. Prices, output, demand and labour markets<sup>2)</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	2.8	2.6	2.7	3.5	84.1	1.8	7.5
2008	3.3	6.2	.	.	.	81.9	.	7.5
2008 Q2	3.6	7.1	2.8	1.5	1.2	83.3	1.3	7.4
Q3	3.8	8.5	4.0	0.7	-1.5	82.2	0.8	7.5
Q4	2.3	3.7	.	.	.	78.3	.	7.9
2008 Aug.	3.8	8.5	-	-	-0.6	-	-	7.5
Sep.	3.6	7.9	-	-	-2.5	-	-	7.6
Oct.	3.2	6.3	-	-	-5.6	81.5	-	7.8
Nov.	2.1	3.3	-	-	-8.1	-	-	7.9
Dec.	1.6	1.7	-	-	.	-	-	8.0
2009 Jan.	1.1	.	-	-	.	75.0	-	.

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

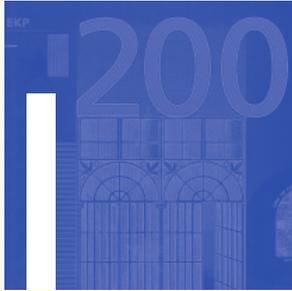
(EUR billions, unless otherwise indicated)

	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	51.8	57.5	-90.4	137.7	347.4	107.9	109.0	1.3705
2008	.	.	.	.	383.9	113.0	113.6	1.4708
2008 Q1	-2.4	-1.5	-107.1	73.8	356.3	112.9	113.9	1.4976
Q2	-22.1	7.9	-50.6	40.1	353.9	116.0	116.5	1.5622
Q3	-10.8	-6.7	-43.1	109.7	370.9	114.1	114.1	1.5050
Q4	.	.	.	.	383.9	109.1	109.8	1.3180
2008 Aug.	-8.6	-6.7	-8.8	11.2	350.7	113.9	114.0	1.4975
Sep.	-3.3	-1.5	-21.5	73.1	370.9	112.0	112.1	1.4370
Oct.	-4.2	3.0	-13.9	120.3	368.0	107.9	108.4	1.3322
Nov.	-12.5	-5.2	-31.2	47.9	393.4	107.1	107.9	1.2732
Dec.	.	.	.	.	383.9	112.4	113.0	1.3449
2009 Jan.	.	.	.	.	.	111.9	112.4	1.3239

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) Unless otherwise indicated, data refer to Euro 16.
- 3) 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) 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.
- 5) Based on AAA-rated euro area central government bond yield curves. For further information, see table 4.7.
- 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 9 January	2009 16 January	2009 23 January	2009 30 January
<b>Gold and gold receivables</b>	218,392	218,366	218,319	218,320
<b>Claims on non-euro area residents in foreign currency</b>	159,502	159,123	161,737	159,179
<b>Claims on euro area residents in foreign currency</b>	218,039	204,802	205,948	171,214
<b>Claims on non-euro area residents in euro</b>	20,517	21,481	22,824	22,532
<b>Lending to euro area credit institutions in euro</b>	828,533	821,887	842,407	748,324
Main refinancing operations	216,830	204,501	252,225	214,860
Longer-term refinancing operations	610,161	610,188	588,531	528,617
Fine-tuning reverse operations	0	0	0	0
Structural reverse operations	0	0	0	0
Marginal lending facility	1,459	7,107	1,575	4,836
Credits related to margin calls	84	91	76	11
<b>Other claims on euro area credit institutions in euro</b>	56,861	37,260	34,928	33,509
<b>Securities of euro area residents in euro</b>	280,219	279,790	281,966	282,982
<b>General government debt in euro</b>	37,438	37,438	37,438	37,439
<b>Other assets</b>	226,063	230,508	234,232	233,480
<b>Total assets</b>	<b>2,045,566</b>	<b>2,010,655</b>	<b>2,039,799</b>	<b>1,906,979</b>

### 2. Liabilities

	2009 9 January	2009 16 January	2009 23 January	2009 30 January
<b>Banknotes in circulation</b>	751,133	743,269	739,970	740,264
<b>Liabilities to euro area credit institutions in euro</b>	475,277	450,764	450,461	365,607
Current accounts (covering the minimum reserve system)	157,536	169,237	251,699	200,534
Deposit facility	315,254	281,393	198,674	164,935
Fixed-term deposits	0	0	0	0
Fine-tuning reverse operations	2,305	0	0	0
Deposits related to margin calls	182	134	89	138
<b>Other liabilities to euro area credit institutions in euro</b>	325	271	432	409
<b>Debt certificates issued</b>	1,003	1,003	0	0
<b>Liabilities to other euro area residents in euro</b>	98,652	106,609	130,557	127,770
<b>Liabilities to non-euro area residents in euro</b>	282,120	270,975	280,187	232,203
<b>Liabilities to euro area residents in foreign currency</b>	1,793	2,427	1,365	1,828
<b>Liabilities to non-euro area residents in foreign currency</b>	11,517	7,932	7,769	8,123
<b>Counterpart of special drawing rights allocated by the IMF</b>	5,446	5,446	5,446	5,446
<b>Other liabilities</b>	170,573	174,232	175,885	177,593
<b>Revaluation accounts</b>	176,589	176,589	176,589	176,589
<b>Capital and reserves</b>	71,140	71,138	71,138	71,149
<b>Total liabilities</b>	<b>2,045,566</b>	<b>2,010,655</b>	<b>2,039,799</b>	<b>1,906,979</b>

Source: ECB.

## 1.2 Key ECB interest rates

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

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

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)</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>4)</sup>	Weighted average rate			
	1	2	3	4	5	6	7	8		
Main refinancing operations										
2008 8 Oct.	271,271	436	250,000	-	4.25	4.70	4.99	7		
15 <sup>5)</sup>	310,412	604	310,412	3.75	-	-	-	7		
22	305,421	703	305,421	3.75	-	-	-	7		
29	325,112	736	325,112	3.75	-	-	-	7		
5 Nov.	311,991	756	311,991	3.75	-	-	-	7		
12	334,413	848	334,413	3.25	-	-	-	7		
19	338,018	851	338,018	3.25	-	-	-	7		
26	334,461	836	334,461	3.25	-	-	-	7		
3 Dec.	339,520	787	339,520	3.25	-	-	-	7		
10	217,856	783	217,856	2.50	-	-	-	7		
17	209,721	792	209,721	2.50	-	-	-	6		
23	223,694	640	223,694	2.50	-	-	-	7		
30	238,891	629	238,891	2.50	-	-	-	7		
2009 6 Jan.	216,122	600	216,122	2.50	-	-	-	8		
14	203,792	614	203,792	2.50	-	-	-	7		
21	251,516	668	251,516	2.00	-	-	-	7		
28	214,150	544	214,150	2.00	-	-	-	7		
4 Feb.	207,052	501	207,052	2.00	-	-	-	7		
Longer-term refinancing operations										
2008 30 Oct. <sup>5)</sup>	103,108	223	103,108	3.75	-	-	-	91		
7 Nov.	20,416	55	20,416	3.75	-	-	-	33		
13	66,807	139	66,807	3.25	-	-	-	91		
13	41,558	127	41,558	3.25	-	-	-	182		
27	42,185	161	42,185	3.25	-	-	-	91		
10 Dec.	134,949	139	134,949	2.50	-	-	-	42		
11	38,080	96	38,080	2.50	-	-	-	182		
11	55,924	105	55,924	2.50	-	-	-	91		
18	50,793	169	50,793	2.50	-	-	-	98		
2009 8 Jan.	7,559	39	7,559	2.50	-	-	-	182		
8	9,454	45	9,454	2.50	-	-	-	98		
21	113,395	139	113,395	2.00	-	-	-	21		
29	43,239	133	43,239	2.00	-	-	-	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>4)</sup>	Weighted average rate		
		1	2	3	4	5	6	7	8	9	10
2008 12 Aug.	Collection of fixed-term deposits	22,630	10	21,000	4.25	-	-	-	-	-	1
9 Sep.	Collection of fixed-term deposits	20,145	17	20,145	4.25	-	-	-	-	-	1
15	Reverse transaction	90,270	51	30,000	-	4.25	-	4.30	4.39	-	1
16	Reverse transaction	102,480	56	70,000	-	4.25	-	4.32	4.40	-	1
18	Reverse transaction	49,330	43	25,000	-	4.25	-	4.30	4.39	-	1
24	Reverse transaction	50,335	36	40,000	-	4.25	-	4.25	4.35	-	1
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

Source: ECB.

- The amounts shown may differ slightly from those in Section 1.1 due to operations allotted but not settled.
- With effect from April 2002, split tender operations, i.e. operations with one-week maturity conducted as standard tenders in parallel with a main refinancing operation, are classified as main refinancing operations. For split tender operations conducted before this month, see Table 2 in Section 1.3.
- On 8 June 2000 the ECB announced that, starting from the operation to be settled on 28 June 2000, the main refinancing operations of the Eurosystem would be conducted as variable rate tenders. The minimum bid rate refers to the minimum interest rate at which counterparties may place their bids.
- In liquidity-providing (absorbing) operations, the marginal rate refers to the lowest (highest) rate at which bids were accepted.
- 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.

## 1.4 Minimum reserve and liquidity statistics

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

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

Reserve base as at <sup>1)</sup>	Total	Liabilities to which a 2% reserve coefficient is applied			Liabilities to which a 0% reserve coefficient is applied		
		Deposits (overnight, up to 2 years' agreed maturity and notice period)	Debt securities up to 2 years' agreed maturity	Deposits (over 2 years' agreed maturity and notice period)	Repos	Debt securities over 2 years' agreed maturity	
	1	2	3	4	5	6	
2006	15,648.3	8,411.7	601.9	1,968.4	1,180.3	3,486.1	
2007	17,394.7	9,438.8	815.0	2,143.1	1,364.0	3,633.9	
2008 Q1	17,703.3	9,551.7	840.2	2,126.0	1,558.4	3,627.1	
Q2	17,971.8	9,775.4	916.3	2,172.4	1,439.4	3,668.1	
2008 July	18,035.4	9,825.2	938.2	2,175.7	1,407.4	3,689.0	
Aug.	18,165.4	9,888.1	948.6	2,184.4	1,438.7	3,705.6	
Sep.	18,231.2	9,968.9	917.1	2,186.7	1,457.1	3,701.5	
Oct. <sup>2)</sup>	18,439.8	10,156.0	900.0	2,211.7	1,445.4	3,726.8	
Nov. <sup>2)</sup>	18,396.5	10,195.5	884.3	2,227.2	1,378.8	3,710.8	

## 2. Reserve maintenance

Maintenance period ending on:	Required reserves	Credit institutions' current accounts	Excess reserves	Deficiencies	Interest rate on minimum reserves
	1	2	3	4	5
2006	172.5	173.2	0.7	0.0	3.30
2007	195.9	196.8	1.0	0.0	4.17
2008 12 Aug.	214.1	214.8	0.7	0.0	4.35
9 Sep.	213.3	214.0	0.7	0.0	4.38
7 Oct.	214.8	216.8	2.0	0.0	4.58
11 Nov.	216.1	218.6	2.4	0.0	3.94
9 Dec.	217.2	218.7	1.5	0.0	3.25
2009 20 Jan. <sup>3)</sup>	220.2	221.5	1.2	0.0	2.50
10 Feb.	221.1	.	.	.	.

## 3. Liquidity

Maintenance period ending on:	Liquidity-providing factors							Liquidity-absorbing factors			Credit institutions' current accounts	Base money
	Monetary policy operations of the Eurosystem							Banknotes in circulation	Central government deposits with the Eurosystem	Other factors (net) <sup>4)</sup>		
	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					
1	2	3	4	5	6	7	8	9	10	11	12	
2006	327.0	313.1	120.0	0.1	0.1	0.1	0.0	598.6	54.9	-66.4	173.2	771.8
2007	327.5	173.0	278.6	0.3	0.0	0.4	2.2	644.6	61.9	-126.6	196.8	841.9
2008 8 July	376.4	185.4	275.4	0.1	0.0	0.4	0.5	677.2	64.9	-118.3	212.7	890.3
12 Aug.	374.5	166.3	299.3	0.1	0.0	0.3	0.6	686.1	61.3	-123.0	214.8	901.2
9 Sep.	376.6	163.5	300.0	0.1	0.0	0.6	0.7	685.0	61.1	-121.2	214.0	899.5
7 Oct.	417.3	174.1	334.3	7.5	5.9	19.9	45.5	684.3	55.2	-82.6	216.8	921.0
11 Nov.	549.0	301.6	452.5	12.7	4.2	213.7	2.3	722.1	85.0	78.2	218.6	1,154.4
9 Dec.	580.5	337.3	457.2	2.7	0.0	200.9	4.9	731.1	107.8	114.3	218.7	1,150.7
2009 20 Jan.	581.3	219.2	613.6	2.9	0.0	238.5	3.3	753.1	99.9	100.6	221.5	1,213.1

Source: ECB.

1) End of period.

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

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

4) From 1 January 2009 including 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
Eurosystem														
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 Q2	2,098.5	1,010.6	18.5	0.7	991.5	277.5	234.7	2.4	40.4	-	15.7	381.5	15.9	397.3
2008 July	2,098.8	1,004.4	18.4	0.7	985.4	277.1	234.9	2.5	39.8	-	15.4	385.6	16.1	400.1
Aug.	2,147.2	1,048.3	18.4	0.7	1,029.2	279.0	236.8	2.4	39.8	-	15.5	456.5	16.1	331.8
Sep.	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
Oct.	2,781.3	1,632.6	18.5	0.6	1,613.5	283.8	242.5	2.4	38.9	-	13.9	478.7	16.0	356.2
Nov.	2,803.0	1,632.5	18.5	0.6	1,613.3	291.3	249.9	2.4	39.0	-	14.2	497.0	16.0	352.0
Dec. <sup>(p)</sup>	2,982.9	1,809.0	18.6	0.6	1,789.8	350.8	307.9	2.4	40.4	-	14.4	479.8	15.9	313.0
MFIs excluding the Eurosystem														
2006	25,950.2	14,904.3	810.5	9,160.3	4,933.5	3,555.4	1,276.5	645.9	1,632.9	83.5	1,171.4	4,329.0	172.6	1,733.9
2007	29,446.8	16,904.8	956.1	10,159.8	5,788.9	3,880.6	1,194.1	949.8	1,736.6	93.5	1,296.2	4,873.3	206.0	2,192.4
2008 Q2	30,759.9	17,638.7	975.8	10,661.4	6,001.5	4,192.5	1,219.3	1,079.4	1,893.9	98.4	1,309.8	4,895.0	201.3	2,424.2
2008 July	30,769.0	17,695.9	977.3	10,715.1	6,003.5	4,239.4	1,226.2	1,096.5	1,916.7	97.9	1,328.8	4,933.2	201.6	2,272.2
Aug.	31,031.6	17,742.1	970.1	10,723.5	6,048.4	4,287.7	1,228.1	1,125.9	1,933.7	98.5	1,324.5	5,040.3	202.1	2,336.4
Sep.	31,535.4	18,147.4	980.8	10,821.0	6,345.6	4,191.8	1,192.4	1,098.2	1,901.3	101.8	1,318.3	5,118.5	203.5	2,454.2
Oct.	32,450.9	18,442.4	980.5	10,877.5	6,584.4	4,251.4	1,184.8	1,132.7	1,933.9	95.5	1,264.6	5,298.3	204.4	2,894.4
Nov.	32,424.5	18,286.2	978.4	10,886.2	6,421.6	4,364.5	1,226.5	1,167.0	1,971.0	96.6	1,243.6	5,161.7	205.4	3,066.5
Dec. <sup>(p)</sup>	31,807.3	18,007.5	969.8	10,782.1	6,255.6	4,586.6	1,243.9	1,355.3	1,987.5	98.3	1,205.4	4,778.7	213.2	2,917.6

### 2. Liabilities

	Total	Currency in circulation	Deposits of euro area residents				Money market fund shares/units <sup>3)</sup>	Debt securities issued <sup>4)</sup>	Capital and reserves	External liabilities	Remaining liabilities
			Total	Central government	Other general government/other euro area residents	MFIs					
	1	2	3	4	5	6	7	8	9	10	11
Eurosystem											
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 Q2	2,098.5	699.6	733.2	55.2	24.6	653.3	-	0.1	240.7	98.7	326.2
2008 July	2,098.8	707.8	720.9	61.3	17.5	642.1	-	0.1	242.5	102.1	325.5
Aug.	2,147.2	704.8	766.9	67.5	14.8	684.7	-	0.1	243.9	178.8	252.7
Sep.	2,473.4	705.4	932.3	51.3	17.7	863.3	-	0.1	264.4	285.0	286.2
Oct.	2,781.3	749.1	1,026.0	78.9	29.8	917.3	-	0.1	262.0	401.9	342.2
Nov.	2,803.0	752.9	1,079.9	107.7	27.6	944.6	-	0.1	283.5	369.1	317.6
Dec. <sup>(p)</sup>	2,982.9	784.8	1,217.5	79.6	16.8	1,121.1	-	0.1	275.6	369.7	335.1
MFIs excluding the Eurosystem											
2006	25,950.2	-	13,257.2	124.2	7,890.6	5,242.4	698.3	4,247.6	1,449.7	3,991.1	2,306.2
2007	29,446.8	-	15,082.4	127.1	8,865.9	6,089.4	754.1	4,645.2	1,678.9	4,533.2	2,753.0
2008 Q2	30,759.9	-	15,660.0	155.9	9,216.7	6,287.4	831.7	4,808.3	1,713.8	4,790.2	2,955.8
2008 July	30,769.0	-	15,649.2	119.6	9,232.3	6,297.3	841.5	4,851.8	1,734.9	4,829.0	2,862.6
Aug.	31,031.6	-	15,727.0	119.3	9,256.4	6,351.3	856.7	4,880.0	1,739.4	4,939.4	2,889.0
Sep.	31,535.4	-	16,216.3	140.2	9,324.5	6,751.6	833.2	4,865.5	1,751.0	4,885.8	2,983.7
Oct.	32,450.9	-	16,815.9	179.5	9,414.8	7,221.6	825.6	4,879.2	1,743.5	4,880.2	3,306.5
Nov.	32,424.5	-	16,688.3	221.2	9,440.2	7,027.0	836.6	4,896.9	1,754.2	4,783.1	3,465.4
Dec. <sup>(p)</sup>	31,807.3	-	16,685.1	195.2	9,633.6	6,856.4	821.5	4,829.0	1,771.4	4,397.1	3,303.2

Source: ECB.

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

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

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

**1. Assets**

	Total	Loans to euro area residents			Holdings of securities other than shares issued by euro area residents			Holdings of shares/other equity issued by other euro area residents	External assets	Fixed assets	Remaining assets
		Total	General government	Other euro area residents	Total	General government	Other euro area residents				
	1	2	3	4	5	6	7	8	9	10	11
Outstanding amounts											
2006	19,723.8	9,991.1	830.2	9,161.0	2,112.4	1,464.0	648.4	811.2	4,680.4	187.3	1,941.4
2007	22,331.2	11,134.3	973.9	10,160.4	2,371.0	1,419.2	951.8	884.3	5,247.0	221.1	2,473.5
2008 Q2	23,320.2	11,656.3	994.2	10,662.1	2,535.8	1,454.0	1,081.8	860.5	5,276.5	217.2	2,773.9
2008 July	23,310.2	11,711.5	995.7	10,715.8	2,560.1	1,461.1	1,098.9	878.9	5,318.8	217.7	2,623.3
Aug.	23,520.3	11,712.7	988.6	10,724.2	2,593.2	1,464.9	1,128.4	880.0	5,496.8	218.2	2,619.4
Sep.	23,792.8	11,821.0	999.3	10,821.7	2,530.4	1,429.8	1,100.5	876.4	5,600.9	219.5	2,744.8
Oct.	24,474.3	11,877.1	999.0	10,878.1	2,562.4	1,427.2	1,135.1	837.0	5,777.0	220.4	3,200.4
Nov.	24,605.7	11,883.8	996.9	10,886.9	2,645.8	1,476.4	1,169.4	826.7	5,658.7	221.4	3,369.3
Dec. <sup>(p)</sup>	24,123.8	11,771.2	988.4	10,782.8	2,909.5	1,551.8	1,357.7	786.5	5,258.5	229.1	3,169.0
Transactions											
2006	1,997.5	877.3	-14.4	891.6	10.7	-96.8	107.5	97.7	801.9	6.4	203.5
2007	2,594.2	1,016.7	-9.7	1,026.4	229.5	-46.8	276.3	60.1	792.9	-0.5	495.4
2008 Q3	274.0	148.2	4.8	143.4	-16.0	-34.4	18.4	23.3	74.3	2.2	42.1
Q4 <sup>(p)</sup>	243.9	-45.5	-10.4	-35.2	254.4	112.0	142.4	-78.9	-293.8	2.3	405.4
2008 July	-20.5	57.9	1.5	56.4	20.0	3.4	16.6	19.5	33.3	0.5	-151.7
Aug.	111.4	-9.7	-7.4	-2.3	26.5	-0.1	26.7	0.4	20.1	0.4	73.6
Sep.	183.1	100.0	10.7	89.3	-62.5	-37.6	-24.8	3.4	20.9	1.2	120.1
Oct.	413.0	16.9	-1.1	17.9	25.0	-6.1	31.1	-33.0	-47.3	1.0	450.3
Nov.	169.9	16.4	-2.0	18.4	77.9	42.9	35.0	-7.5	-85.5	1.0	167.6
Dec. <sup>(p)</sup>	-338.9	-78.8	-7.3	-71.5	151.4	75.2	76.3	-38.4	-161.1	0.3	-212.4

**2. Liabilities**

	Total	Currency in circulation	Deposits of central government	Deposits of other general government/other euro area residents	Money market fund shares/units <sup>2)</sup>	Debt securities issued <sup>3)</sup>	Capital and reserves	External liabilities	Remaining liabilities	Excess of inter-MFI liabilities
Outstanding amounts										
2006	19,723.8	592.2	158.0	7,906.5	614.6	2,587.8	1,280.8	4,026.5	2,541.8	15.6
2007	22,331.2	638.5	151.0	8,885.0	660.4	2,867.1	1,487.6	4,599.2	3,083.3	-41.1
2008 Q2	23,320.2	652.0	211.2	9,241.2	733.0	2,874.1	1,489.5	4,889.0	3,282.0	-52.2
2008 July	23,310.2	658.7	180.9	9,249.8	743.2	2,895.5	1,512.0	4,931.1	3,188.1	-49.5
Aug.	23,520.3	656.0	186.8	9,271.2	757.9	2,906.5	1,523.2	5,118.3	3,141.7	-41.7
Sep.	23,792.8	657.1	191.5	9,342.1	731.1	2,925.2	1,558.7	5,170.8	3,269.9	-54.0
Oct.	24,474.3	698.8	258.4	9,444.6	729.8	2,906.5	1,564.1	5,282.1	3,648.6	-58.9
Nov.	24,605.7	703.7	328.9	9,467.8	739.7	2,887.0	1,606.7	5,152.1	3,782.9	-63.3
Dec. <sup>(p)</sup>	24,123.8	723.2	274.8	9,650.4	723.0	2,801.1	1,613.8	4,766.8	3,638.3	-67.8
Transactions										
2006	1,997.5	59.4	-15.2	683.7	27.6	285.5	57.4	601.6	252.2	45.3
2007	2,594.2	45.8	-13.3	835.1	54.5	270.5	163.1	778.8	467.6	-8.0
2008 Q3	274.0	5.1	-19.7	73.0	-4.2	14.6	71.9	50.2	120.7	-37.4
Q4 <sup>(p)</sup>	243.9	66.1	83.3	192.0	-10.2	-128.9	38.5	-400.8	425.2	-21.1
2008 July	-20.5	6.7	-30.2	3.2	8.8	21.7	23.5	34.5	-92.2	3.5
Aug.	111.4	-2.7	5.9	8.9	14.6	-7.8	12.5	27.5	64.9	-12.4
Sep.	183.1	1.1	4.7	60.8	-27.6	0.6	35.9	-11.8	148.0	-28.5
Oct.	413.0	41.7	66.9	69.2	-1.3	-75.3	13.9	-97.8	468.8	-73.1
Nov.	169.9	4.8	70.4	31.5	10.1	-13.9	23.4	-101.2	134.5	10.1
Dec. <sup>(p)</sup>	-338.9	19.5	-54.1	91.3	-19.0	-39.8	1.2	-201.8	-178.0	41.8

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>4)</sup>	
	M2		M3-M2	Loans				Memo item: Loans adjusted for sales and securitisation <sup>3)</sup>				
	M1	M2-M1										
	1	2	3	4	5	6	7	8	9	10	11	12
<b>Outstanding amounts</b>												
2006	3,685.4	2,954.2	6,639.6	1,101.5	7,741.1	-	5,434.1	2,321.3	10,644.4	9,171.5	-	634.3
2007	3,832.7	3,507.2	7,339.9	1,310.5	8,650.4	-	5,977.8	2,417.2	12,027.2	10,176.4	-	627.5
2008 Q2	3,843.3	3,826.0	7,669.4	1,355.9	9,025.3	-	6,007.0	2,432.2	12,564.6	10,633.0	-	378.9
2008 July	3,832.1	3,904.1	7,736.2	1,364.3	9,100.5	-	6,047.0	2,450.3	12,660.6	10,681.4	-	373.4
Aug.	3,844.5	3,949.1	7,793.6	1,363.8	9,157.4	-	6,098.9	2,466.3	12,794.5	10,755.1	-	385.0
Sep.	3,879.1	3,976.5	7,855.6	1,371.9	9,227.5	-	6,134.0	2,443.0	12,825.1	10,819.7	-	426.6
Oct.	4,001.6	4,010.2	8,011.8	1,358.6	9,370.5	-	6,134.0	2,435.0	12,870.3	10,887.2	-	476.2
Nov.	3,960.6	4,054.2	8,014.7	1,349.2	9,363.9	-	6,172.0	2,471.1	12,885.9	10,880.2	-	481.4
Dec. <sup>(p)</sup>	3,972.0	4,019.6	7,991.6	1,370.3	9,362.0	-	6,237.1	2,566.6	12,958.5	10,801.0	-	472.3
<b>Transactions</b>												
2006	261.2	310.5	571.7	130.9	702.6	-	427.7	-114.7	1,105.8	898.6	961.7	200.6
2007	145.4	525.4	670.7	220.3	891.0	-	489.5	-60.1	1,369.9	1,031.7	1,132.8	13.5
2008 Q3	26.8	136.0	162.8	17.3	180.1	-	84.9	0.4	251.6	170.6	179.4	29.2
Q4 <sup>(p)</sup>	90.4	40.3	130.8	1.2	132.0	-	-33.8	114.0	33.3	-14.9	73.2	91.2
2008 July	-13.0	74.9	62.0	8.4	70.4	-	39.4	14.4	99.4	51.2	59.3	-6.9
Aug.	8.3	38.9	47.2	0.5	47.6	-	31.0	11.9	119.7	62.9	65.2	13.4
Sep.	31.4	22.3	53.7	8.5	62.1	-	14.4	-26.0	32.5	56.4	54.8	22.7
Oct.	111.2	17.3	128.5	-10.1	118.4	-	-56.8	-12.4	9.6	29.0	43.0	35.3
Nov.	-40.6	46.7	6.0	-8.8	-2.8	-	29.2	30.0	28.8	2.6	31.2	9.3
Dec. <sup>(p)</sup>	19.9	-23.6	-3.8	20.2	16.4	-	-6.3	96.4	-5.0	-46.5	-1.0	46.6
<b>Growth rates</b>												
2006 Dec.	7.6	11.7	9.4	13.3	10.0	9.8	8.5	-4.7	11.6	10.8	11.5	200.6
2007 Dec.	3.9	17.7	10.1	20.0	11.5	11.8	9.0	-2.6	12.8	11.2	12.2	13.5
2008 June	1.5	19.0	9.5	9.8	9.6	9.6	5.4	-0.8	11.2	9.9	11.0	-287.0
2008 July	0.3	19.4	9.1	9.6	9.2	9.2	5.2	0.3	10.9	9.3	10.5	-297.8
Aug.	0.2	19.0	8.9	8.5	8.8	8.9	5.2	1.6	10.8	8.9	10.0	-249.9
Sep.	1.2	17.7	8.9	7.4	8.7	8.7	5.2	1.0	10.1	8.5	9.6	-192.1
Oct.	3.7	15.5	9.3	5.0	8.6	8.3	3.3	0.7	8.7	7.8	8.9	-154.8
Nov.	2.2	16.0	8.7	1.7	7.7	7.9	3.6	2.5	8.2	7.1	8.4	-168.3
Dec. <sup>(p)</sup>	3.2	13.3	8.0	3.0	7.3	.	2.2	5.4	6.8	5.8	7.4	-79.5

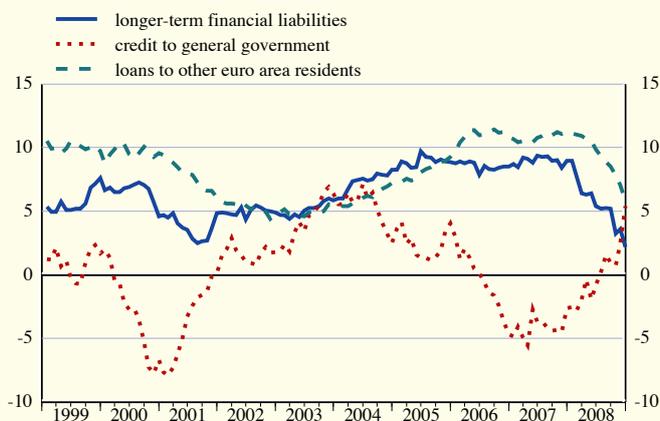
### C1 Monetary aggregates <sup>1)</sup>

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

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

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

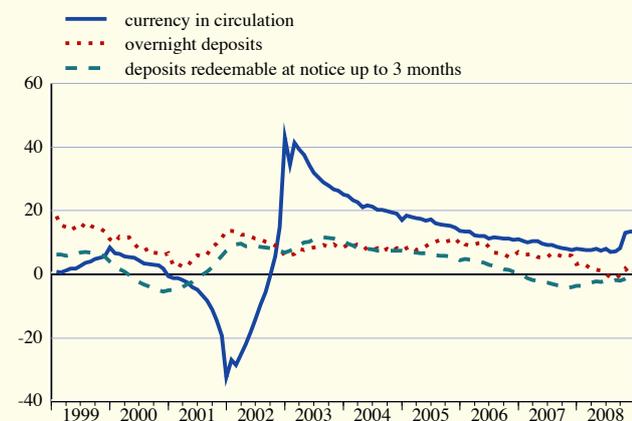
(EUR billions and annual growth rates; seasonally adjusted; outstanding amounts and growth rates at end of period, transactions during period)

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

	Currency in circulation	Overnight deposits	Deposits with agreed maturity up to 2 years	Deposits redeemable at notice up to 3 months	Repos	Money market fund shares/units	Debt securities up to 2 years	Debt securities over 2 years	Deposits redeemable at notice over 3 months	Deposits with agreed maturity over 2 years	Capital and reserves
	1	2	3	4	5	6	7	8	9	10	11
Outstanding amounts											
2006	578.4	3,107.0	1,402.2	1,552.0	266.1	636.9	198.5	2,399.6	102.2	1,655.0	1,277.3
2007	625.8	3,206.9	1,971.8	1,535.3	307.4	686.6	316.6	2,561.0	119.6	1,813.5	1,483.7
2008 Q2	649.6	3,193.7	2,289.3	1,536.7	340.6	728.0	287.3	2,570.4	116.9	1,832.8	1,486.9
2008 July	649.7	3,182.5	2,374.0	1,530.1	346.4	727.5	290.4	2,592.0	116.4	1,833.3	1,505.2
Aug.	653.7	3,190.8	2,421.2	1,527.8	336.6	745.6	281.6	2,618.8	115.4	1,841.1	1,523.6
Sep.	662.9	3,216.2	2,454.6	1,521.9	344.5	736.3	291.1	2,630.0	114.2	1,836.7	1,553.0
Oct.	698.4	3,303.2	2,485.7	1,524.6	346.1	734.1	278.4	2,619.5	116.3	1,834.2	1,563.9
Nov.	704.1	3,256.5	2,522.2	1,532.0	329.9	741.8	277.5	2,607.6	118.8	1,831.0	1,614.6
Dec. <sup>(p)</sup>	710.8	3,261.2	2,468.8	1,550.9	355.7	753.0	261.7	2,550.3	121.7	1,955.3	1,609.7
Transactions											
2006	57.3	203.9	301.2	9.3	30.9	30.0	70.0	217.2	15.4	138.1	57.0
2007	46.9	98.4	581.3	-55.9	43.3	58.6	118.3	152.3	9.9	164.5	162.8
2008 Q3	13.3	13.5	151.7	-15.6	3.6	6.0	7.8	19.2	-2.7	-0.4	68.8
Q4 <sup>(p)</sup>	47.9	42.5	11.5	28.8	12.8	14.5	-26.1	-87.5	7.5	6.2	40.0
2008 July	0.1	-13.0	82.1	-7.2	5.7	-2.0	4.7	20.5	-0.5	0.2	19.3
Aug.	4.0	4.3	41.3	-2.4	-9.9	18.2	-7.8	6.9	-1.1	5.5	19.7
Sep.	9.2	22.2	28.3	-6.1	7.8	-10.2	10.9	-8.2	-1.2	-6.0	29.8
Oct.	35.5	75.7	15.0	2.3	1.3	-2.2	-9.2	-70.4	2.1	-7.8	19.4
Nov.	5.7	-46.3	39.2	7.5	-14.5	7.9	-2.1	-5.1	2.5	0.3	31.4
Dec. <sup>(p)</sup>	6.7	13.1	-42.7	19.1	26.1	8.8	-14.7	-12.1	2.9	13.7	-10.8
Growth rates											
2006 Dec.	11.0	7.0	27.2	0.6	13.2	4.9	54.4	9.9	17.8	9.1	4.7
2007 Dec.	8.1	3.2	41.4	-3.6	16.3	9.2	59.6	6.3	9.6	9.9	12.5
2008 June	8.0	0.3	38.8	-2.0	18.4	2.0	21.5	2.7	-0.8	5.5	10.9
2008 July	7.1	-1.0	38.9	-2.1	17.2	1.1	25.0	3.0	-2.2	4.6	10.5
Aug.	7.2	-1.1	37.3	-1.8	16.7	4.2	10.5	2.7	-3.4	4.6	11.5
Sep.	8.2	-0.2	34.4	-2.0	16.5	4.1	5.8	2.3	-5.7	4.0	13.1
Oct.	13.0	1.9	29.3	-1.4	19.5	2.1	-2.7	-0.2	-4.4	2.8	10.7
Nov.	13.5	0.1	29.3	-0.7	11.6	1.7	-8.1	-0.2	-2.2	2.6	12.0
Dec. <sup>(p)</sup>	13.4	1.2	23.2	0.6	16.1	4.8	-14.1	-1.2	0.6	1.4	9.5

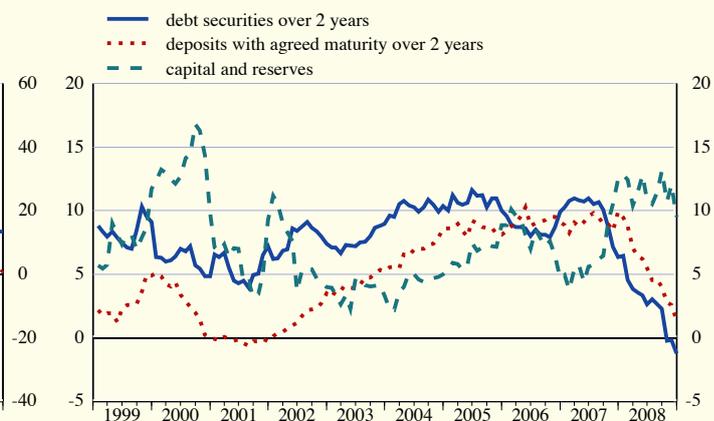
### C3 Components of monetary aggregates <sup>1)</sup>

(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>

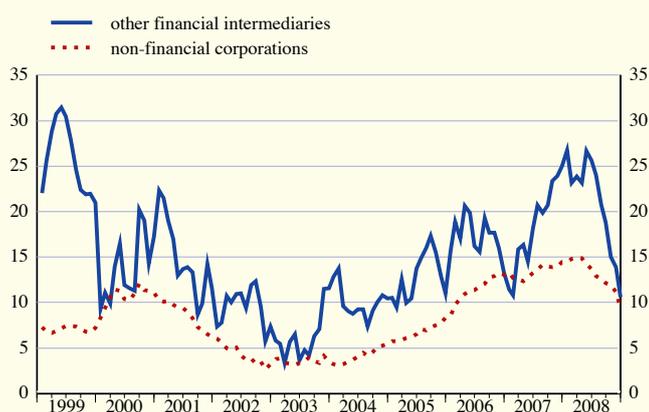
(EUR billions and annual growth rates; seasonally adjusted; outstanding amounts and growth rates at end of period, transactions during period)

### 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	93.8	709.7	3,837.9	1,139.6	706.7	1,991.6	4,530.0	584.3	3,207.8	737.9
2007	107.9	886.4	4,381.0	1,279.3	857.9	2,243.8	4,801.0	615.5	3,432.7	752.9
2008 Q2	101.1	996.2	4,652.2	1,347.1	926.0	2,379.1	4,883.4	632.6	3,486.5	764.3
2008 Oct.	102.3	1,018.7	4,828.2	1,390.5	965.1	2,472.6	4,938.0	635.5	3,533.2	769.3
Nov. <sup>(p)</sup>	99.0	1,013.7	4,845.8	1,383.2	976.0	2,486.6	4,921.7	633.0	3,519.8	769.0
Dec. <sup>(p)</sup>	103.8	985.5	4,818.6	1,378.5	968.5	2,471.6	4,893.1	629.0	3,493.5	770.6
Transactions										
2006	20.7	87.5	445.2	101.4	122.6	221.2	345.3	42.5	281.9	20.9
2007	15.9	180.1	555.1	145.9	155.1	254.2	280.6	31.1	228.6	20.8
2008 Q3	-1.1	7.1	112.9	26.8	28.7	57.4	51.6	3.3	44.3	4.0
Q4 <sup>(p)</sup>	3.2	-23.3	42.4	1.1	14.7	26.5	-37.2	-7.2	-34.8	4.9
2008 Oct.	1.4	-4.4	35.0	6.4	6.1	22.5	-3.0	-0.4	-3.3	0.7
Nov. <sup>(p)</sup>	-3.3	-2.5	22.3	-5.5	12.5	15.2	-13.9	-2.0	-12.4	0.5
Dec. <sup>(p)</sup>	5.1	-16.3	-14.9	0.2	-3.9	-11.2	-20.3	-4.8	-19.1	3.6
Growth rates										
2006 Dec.	28.2	14.0	13.1	9.8	20.7	12.4	8.2	7.7	9.6	2.9
2007 Dec.	17.0	25.2	14.5	12.8	21.9	12.8	6.2	5.3	7.1	2.8
2008 June	-4.7	25.7	13.7	11.9	20.0	12.4	4.2	4.9	4.4	2.8
2008 Oct.	-9.3	14.8	11.9	10.1	16.2	11.3	3.3	3.5	3.5	2.4
Nov. <sup>(p)</sup>	-6.6	13.8	11.1	8.6	15.9	10.8	2.5	2.9	2.5	2.0
Dec. <sup>(p)</sup>	-4.2	10.8	9.4	7.4	13.1	9.1	1.8	1.5	1.7	2.5

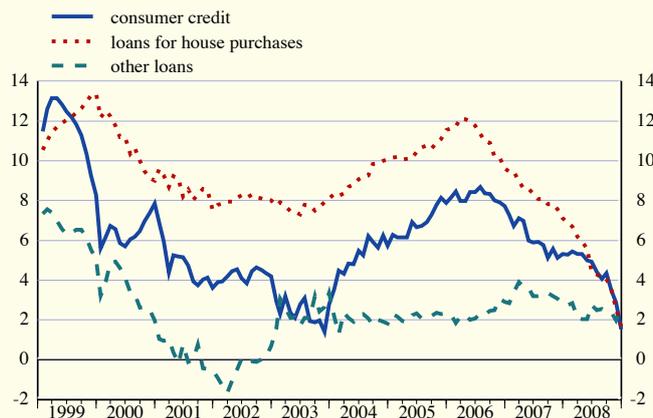
### C5 Loans to other financial intermediaries and non-financial corporations <sup>2)</sup>

(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
<b>Outstanding amounts</b>												
2007	95.1	70.6	7.5	17.0	867.9	526.3	148.5	193.1	4,388.7	1,276.5	858.9	2,253.3
2008 Q2	103.3	79.3	7.7	16.4	998.0	625.8	160.4	211.8	4,670.7	1,365.6	925.7	2,379.4
2008 July	101.1	78.0	6.4	16.6	1,000.3	612.3	164.2	223.8	4,709.2	1,375.8	933.5	2,399.9
Aug.	99.9	76.1	6.6	17.2	987.2	596.6	165.6	225.1	4,722.3	1,360.9	943.6	2,417.8
Sep.	100.8	77.0	6.4	17.5	1,017.6	621.0	170.0	226.7	4,763.0	1,372.2	953.4	2,437.4
Oct.	104.2	81.0	5.8	17.4	1,015.6	623.6	168.9	223.0	4,816.5	1,382.2	965.7	2,468.7
Nov.	101.0	77.2	5.6	18.2	1,015.7	616.0	175.3	224.4	4,841.4	1,382.6	975.1	2,483.7
Dec. <sup>(p)</sup>	91.4	68.1	5.2	18.1	963.3	558.1	168.1	237.1	4,827.3	1,375.1	969.9	2,482.3
<b>Transactions</b>												
2007	14.0	15.8	-5.2	3.4	175.4	113.5	34.5	27.4	556.3	144.9	155.7	255.7
2008 Q3	-3.0	-2.5	-1.3	0.9	12.1	-10.3	8.5	13.9	85.0	3.9	27.6	53.4
Q4 <sup>(p)</sup>	-9.6	-9.1	-1.2	0.7	-52.4	-60.4	-1.1	9.1	60.6	2.2	17.6	40.8
2008 Oct.	3.0	3.7	-0.6	-0.1	-14.4	-5.1	-2.9	-6.4	32.8	2.5	8.1	22.2
Nov.	-3.2	-3.8	-0.2	0.8	2.6	-5.9	6.7	1.9	29.6	2.3	11.0	16.3
Dec. <sup>(p)</sup>	-9.4	-9.0	-0.4	0.0	-40.6	-49.4	-4.9	13.6	-1.8	-2.6	-1.5	2.4
<b>Growth rates</b>												
2007 Dec.	16.8	28.5	-41.0	23.2	25.0	27.0	29.9	16.5	14.5	12.7	22.0	12.8
2008 June	-4.8	-4.6	-29.7	10.2	25.6	26.0	31.8	20.3	13.7	11.9	20.0	12.3
2008 July	-7.8	-7.4	-37.5	7.9	24.0	22.2	29.8	24.9	12.9	11.1	18.8	11.9
Aug.	-8.5	-10.8	-25.3	12.5	20.8	18.2	24.8	24.9	12.6	10.8	18.4	11.6
Sep.	-9.0	-12.3	-25.9	18.4	18.8	15.6	24.4	24.2	12.2	9.8	17.6	11.5
Oct.	-9.2	-10.7	-31.1	9.4	15.0	15.5	13.4	14.8	11.9	10.1	16.3	11.3
Nov.	-6.6	-7.9	-32.3	11.7	13.9	13.4	16.0	13.9	11.1	8.6	15.8	10.8
Dec. <sup>(p)</sup>	-4.3	-3.8	-31.2	5.7	10.6	5.6	13.8	21.9	9.4	7.4	13.1	9.2

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

	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
<b>Outstanding amounts</b>												
2007	617.8	137.6	203.7	276.5	3,436.9	15.9	73.8	3,347.2	753.4	147.5	104.0	501.8
2008 Q2	635.8	139.8	203.8	292.2	3,485.1	15.8	73.2	3,396.0	768.6	152.7	102.4	513.4
2008 July	636.7	139.1	203.3	294.2	3,503.2	15.8	73.4	3,414.1	764.7	146.8	102.2	515.7
Aug.	634.0	137.3	202.5	294.1	3,515.5	15.9	72.6	3,427.0	764.6	146.7	100.7	517.1
Sep.	637.0	139.4	201.2	296.5	3,535.1	16.9	71.8	3,446.4	767.4	149.6	100.1	517.7
Oct.	637.8	138.9	200.0	298.9	3,535.3	17.0	71.2	3,447.1	768.0	148.0	99.6	520.4
Nov.	633.5	136.2	198.9	298.5	3,523.7	16.9	70.3	3,436.5	770.8	151.8	98.1	521.0
Dec. <sup>(p)</sup>	631.3	137.6	196.9	296.9	3,497.7	17.1	69.8	3,410.8	771.1	152.4	96.8	521.9
<b>Transactions</b>												
2007	31.3	3.6	1.1	26.6	228.6	0.9	2.3	225.3	20.8	1.7	4.4	14.7
2008 Q3	1.5	-0.3	-2.5	4.4	48.2	1.0	-0.9	48.1	-0.4	-3.2	-2.0	4.8
Q4 <sup>(p)</sup>	-6.3	-1.5	-4.8	0.1	-33.1	0.2	-1.9	-31.3	5.6	2.9	-1.9	4.6
2008 Oct.	0.5	-0.3	-1.1	1.9	-3.6	0.1	-0.7	-3.1	-0.5	-2.4	-0.2	2.2
Nov.	-3.8	-2.7	-1.0	-0.1	-10.6	-0.1	-0.8	-9.7	3.7	4.0	-1.3	1.1
Dec. <sup>(p)</sup>	-3.0	1.5	-2.7	-1.8	-18.9	0.1	-0.4	-18.6	2.3	1.3	-0.4	1.3
<b>Growth rates</b>												
2007 Dec.	5.3	2.7	0.5	10.7	7.1	6.1	3.2	7.2	2.8	1.2	4.4	3.0
2008 June	4.9	4.0	-0.8	9.9	4.4	-1.0	1.0	4.5	2.8	2.0	0.6	3.4
2008 July	4.4	2.7	-1.2	9.6	4.3	0.0	0.6	4.4	2.5	0.6	-0.2	3.6
Aug.	4.0	2.0	-1.3	9.1	4.1	0.2	0.2	4.2	2.5	2.1	-1.5	3.5
Sep.	4.4	4.1	-1.3	8.7	4.1	4.8	-1.3	4.2	2.4	2.2	-2.2	3.5
Oct.	3.5	2.4	-2.3	8.3	3.5	5.9	-2.7	3.6	2.4	1.3	-2.7	3.7
Nov.	2.9	2.7	-3.2	7.5	2.5	5.7	-3.8	2.7	2.0	0.7	-4.5	3.7
Dec. <sup>(p)</sup>	1.5	-0.1	-4.0	6.4	1.7	5.9	-4.7	1.8	2.5	3.0	-5.0	4.0

Source: ECB.

- 1) MFI sector excluding the Eurosystem; sectoral classification is based on ESA 95.
- 2) Data refer to the changing composition of the euro area. For further information, see the General notes.
- 3) Including investment funds.
- 4) Including non-profit institutions serving households.

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

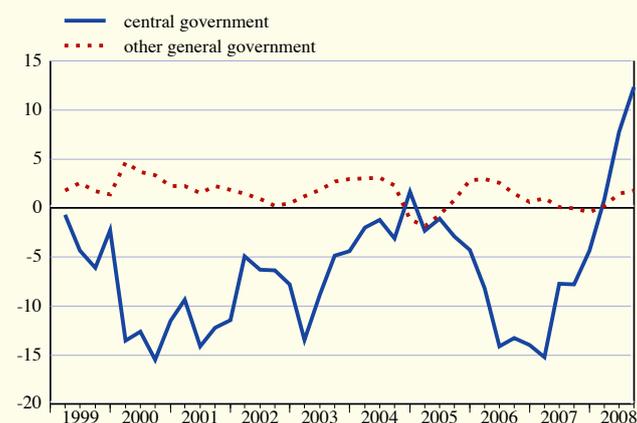
(EUR billions and annual growth rates; not seasonally adjusted; outstanding amounts and growth rates at end of period, transactions during period)

### 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										
2005	826.9	125.1	246.8	425.8	29.2	2,485.2	1,722.1	763.1	66.0	697.1
2006	810.5	104.1	232.5	448.1	25.8	2,924.3	2,061.0	863.4	63.2	800.2
2007 Q4	956.1	213.4	217.6	495.7	29.4	3,295.3	2,337.9	957.4	59.8	897.5
2008 Q1	958.0	210.6	212.8	497.3	37.2	3,413.9	2,395.5	1,018.4	61.5	956.9
Q2	975.8	221.0	215.1	497.6	42.0	3,310.8	2,299.2	1,011.5	63.0	948.5
Q3 <sup>(p)</sup>	980.8	223.7	210.0	501.6	44.1	3,519.1	2,459.2	1,059.7	63.4	996.3
Transactions										
2006	-13.4	-17.6	-14.3	21.9	-3.4	532.5	402.9	129.5	-0.1	129.6
2007	-7.7	-4.5	-13.0	6.2	3.5	542.1	382.1	160.1	0.3	159.8
2007 Q4	8.0	7.1	3.8	9.2	-12.0	56.9	23.3	33.7	-0.1	33.8
2008 Q1	0.7	-3.3	-4.8	1.0	7.8	215.8	122.3	93.3	2.9	90.4
Q2	17.7	10.3	2.1	0.6	4.8	-100.1	-94.8	-5.2	1.6	-6.7
Q3 <sup>(p)</sup>	4.8	2.4	-5.2	4.0	2.1	94.3	84.1	10.0	-1.8	11.8
Growth rates										
2005 Dec.	1.7	-4.3	-3.2	5.4	22.9	14.8	15.3	13.6	2.0	14.9
2006 Dec.	-1.6	-14.0	-5.8	5.1	-11.6	21.8	23.7	17.4	-0.1	19.1
2007 Dec.	-1.0	-4.3	-5.6	1.4	13.7	18.7	18.6	18.8	0.5	20.3
2008 Mar.	0.1	0.9	-5.1	1.6	19.5	15.7	12.7	23.2	10.0	24.1
June	2.4	7.8	-1.8	2.3	11.8	7.7	4.6	15.4	9.5	15.8
Sep. <sup>(p)</sup>	3.5	12.3	-1.9	3.2	6.6	8.2	5.8	14.2	4.3	14.9

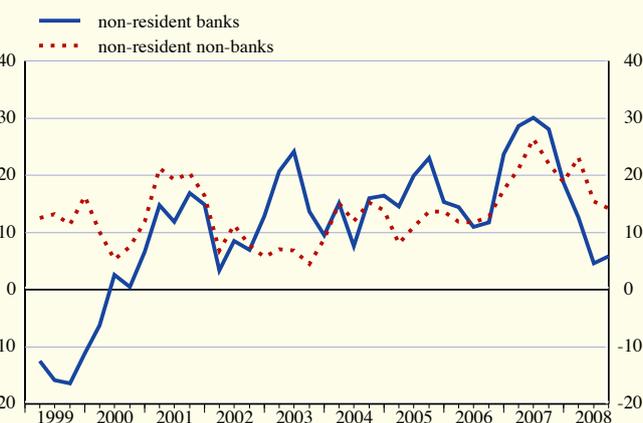
### C7 Loans to government <sup>2)</sup>

(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>

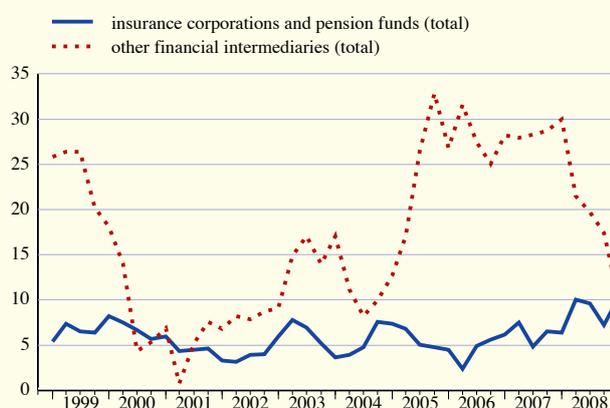
(EUR billions and annual growth rates; outstanding amounts and growth rates at end of period, transactions during period)

### 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	650.0	70.2	57.1	495.4	1.0	1.4	24.9	1,140.3	283.1	251.8	469.4	10.6	0.2	125.1
2007	687.8	71.1	68.9	525.1	0.8	1.1	20.9	1,472.7	312.3	348.0	652.8	12.2	0.3	147.1
2008 Q2	717.5	73.5	83.7	537.5	1.4	1.6	19.8	1,600.7	335.6	387.2	682.5	12.0	0.2	183.2
2008 July	716.8	69.6	86.0	538.3	1.3	1.6	20.1	1,604.5	299.9	428.9	683.1	14.1	0.2	178.4
Aug.	713.2	66.6	85.5	538.7	1.2	1.6	19.5	1,615.5	287.0	449.1	681.9	12.9	0.1	184.3
Sep.	727.9	75.5	90.3	538.9	1.2	1.6	20.4	1,641.3	322.6	445.1	674.3	11.7	0.1	187.5
Oct.	735.9	83.6	90.4	538.2	1.2	1.5	21.1	1,673.4	335.8	445.5	683.4	12.2	0.1	196.3
Nov.	738.1	84.9	95.0	535.9	1.1	1.5	19.7	1,654.5	319.7	443.5	685.6	12.0	0.1	193.7
Dec. <sup>4)</sup>	760.2	85.5	111.9	537.5	1.1	1.5	22.8	1,749.9	319.0	420.6	809.3	12.3	0.1	188.7
Transactions														
2006	37.9	2.7	5.5	25.6	-0.2	0.0	4.4	249.2	45.5	67.8	130.5	0.3	0.1	4.9
2007	41.4	0.8	11.7	33.4	-0.2	-0.3	-4.1	341.1	32.7	98.9	183.7	1.7	0.1	24.1
2008 Q3	8.8	1.7	6.0	0.7	-0.2	0.0	0.5	28.3	-16.6	53.5	-12.0	-0.6	-0.1	4.1
Q4 <sup>4)</sup>	34.1	9.9	21.6	0.4	-0.1	-0.1	2.4	-6.4	-4.2	-24.7	19.1	0.6	0.0	2.8
2008 July	-0.8	-3.9	2.2	0.8	-0.1	0.0	0.3	1.7	-36.4	40.6	0.2	2.1	0.0	-4.8
Aug.	-4.1	-3.1	-0.7	0.4	-0.1	0.0	-0.6	5.2	-14.5	18.4	-3.2	-1.3	0.0	5.8
Sep.	13.7	8.8	4.6	-0.5	0.0	0.0	0.8	21.4	34.4	-5.6	-9.1	-1.3	0.0	3.1
Oct.	6.7	7.6	-0.7	-0.7	0.0	-0.1	0.6	17.5	8.7	-4.3	4.3	0.2	0.0	8.6
Nov.	4.1	1.3	4.8	-0.5	-0.1	0.0	-1.3	-15.4	-15.9	-1.5	3.0	-0.1	0.0	-1.0
Dec. <sup>4)</sup>	23.3	0.9	17.5	1.7	0.0	0.0	3.2	-8.5	3.1	-19.0	11.8	0.5	0.0	-4.8
Growth rates														
2006 Dec.	6.2	4.0	10.7	5.4	-16.3	-	21.2	28.2	19.5	36.8	38.9	2.9	-	4.0
2007 Dec.	6.4	1.1	20.5	6.8	-22.5	-	-16.3	30.0	11.5	39.5	39.1	16.0	-	19.0
2008 June	9.6	13.3	42.4	5.7	-10.5	-	3.4	19.8	5.5	35.7	19.7	5.6	-	20.8
2008 July	7.1	-4.1	38.3	5.5	-20.6	-	-3.2	17.9	-6.3	48.4	16.1	5.8	-	18.4
Aug.	7.4	8.4	23.4	5.6	-15.4	-	-5.9	18.7	-4.9	48.5	15.7	8.8	-	18.4
Sep.	7.2	10.8	40.2	3.2	-20.1	-	-3.1	17.4	-3.2	44.5	16.0	-11.6	-	16.1
Oct.	5.2	12.2	18.1	2.7	-20.0	-	-3.7	15.2	1.7	28.6	12.9	-6.3	-	25.2
Nov.	6.2	21.6	20.3	2.3	-29.7	-	0.3	12.6	-8.0	33.2	12.1	-2.1	-	17.2
Dec. <sup>4)</sup>	10.2	19.4	58.5	2.6	-23.3	-	9.2	10.4	0.9	20.1	6.0	-2.2	-	28.9

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

(annual growth rates)

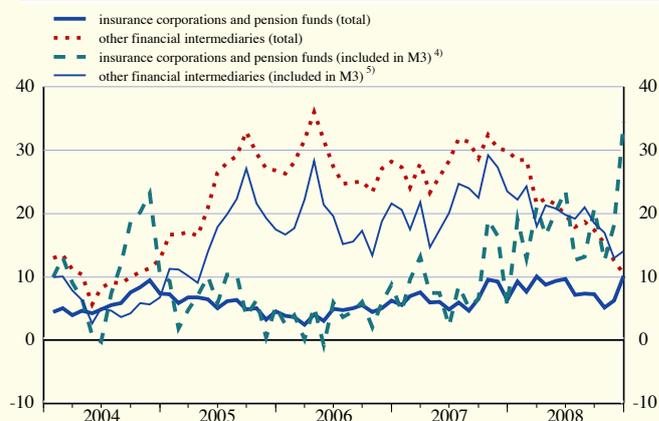


Source: ECB.

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

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

(annual growth rates)



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

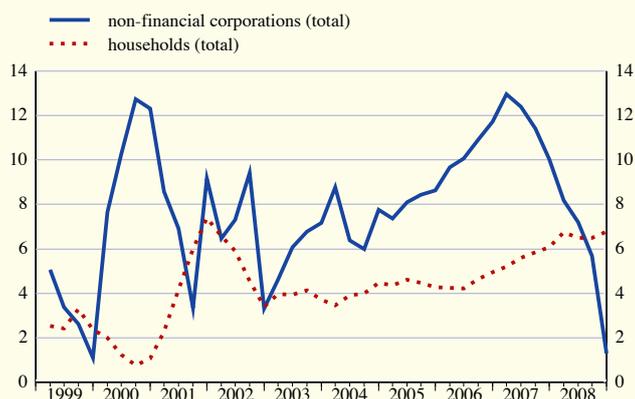
(EUR billions and annual growth rates; outstanding amounts and growth rates at end of period, transactions during period)

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

	Non-financial corporations							Households <sup>3)</sup>						
	Total	Overnight	With agreed maturity		Redeemable at notice		Repos	Total	Overnight	With agreed maturity		Redeemable at notice		Repos
			Up to 2 years	Over 2 years	Up to 3 months	Over 3 months				Up to 2 years	Over 2 years	Up to 3 months	Over 3 months	
Outstanding amounts														
2006	1,343.1	851.8	355.3	69.4	40.5	1.3	24.8	4,552.6	1,751.2	669.0	606.8	1,355.7	99.8	70.0
2007	1,470.6	882.1	474.6	59.6	29.2	1.4	23.7	4,989.0	1,777.7	994.5	561.1	1,457.6	111.1	87.1
2008 Q2	1,481.1	866.2	501.4	61.8	27.3	1.5	23.0	5,162.9	1,784.0	1,179.5	534.8	1,460.4	105.7	98.5
2008 Oct.	1,500.4	860.8	518.3	66.0	24.9	1.4	29.0	5,252.4	1,758.4	1,332.1	515.4	1,439.3	106.1	101.1
Nov.	1,498.3	870.8	509.5	65.6	26.0	1.3	25.0	5,290.2	1,778.1	1,352.7	511.6	1,443.0	109.8	95.1
Dec. <sup>(p)</sup>	1,509.0	882.2	498.0	76.1	27.9	1.3	23.5	5,361.1	1,808.1	1,350.1	517.2	1,479.0	113.7	93.0
Transactions														
2006	141.2	85.7	55.7	3.9	-4.2	0.1	0.2	215.2	65.7	137.5	-23.1	2.5	15.4	17.2
2007	134.5	31.8	123.3	-8.0	-11.0	-0.7	-1.1	280.9	21.7	321.9	-45.4	-45.6	11.2	17.1
2008 Q3	4.0	2.7	0.7	0.7	-2.2	-0.1	2.1	33.5	-34.4	89.2	-9.0	-19.2	-2.6	9.5
Q4 <sup>(p)</sup>	9.1	7.7	-11.6	12.3	2.3	0.0	-1.6	160.2	57.6	75.9	-6.4	37.6	10.6	-15.1
2008 Oct.	-7.0	-17.3	5.6	1.4	-0.6	0.0	3.9	47.2	6.9	55.0	-8.4	-2.3	2.9	-7.0
Nov.	-1.5	10.1	-8.5	-0.2	1.1	0.0	-4.0	37.7	19.7	20.3	-3.7	3.8	3.7	-6.0
Dec. <sup>(p)</sup>	17.6	14.8	-8.6	11.1	1.8	0.0	-1.5	75.3	31.0	0.7	5.7	36.1	3.9	-2.1
Growth rates														
2006 Dec.	11.7	11.2	18.4	5.7	-9.4	5.9	0.6	5.0	3.9	25.8	-3.7	0.2	18.2	32.6
2007 Dec.	10.0	3.7	34.8	-11.7	-26.9	-31.6	-4.3	6.1	1.2	47.8	-7.5	-3.5	11.2	24.4
2008 June	7.2	0.8	28.2	-7.4	-26.5	-6.7	-13.0	6.5	-0.4	44.8	-7.3	-1.6	-1.1	26.8
2008 Oct.	4.4	1.8	10.5	0.0	-19.6	-12.6	19.6	7.4	1.2	40.5	-7.8	-0.5	-3.4	17.1
Nov.	3.0	1.3	7.9	3.6	-22.3	-15.4	3.2	7.7	2.1	38.7	-7.9	0.3	-0.9	8.9
Dec. <sup>(p)</sup>	1.3	-0.6	2.9	24.1	-10.7	-15.7	-1.0	6.8	1.3	33.1	-7.7	1.2	1.6	6.8

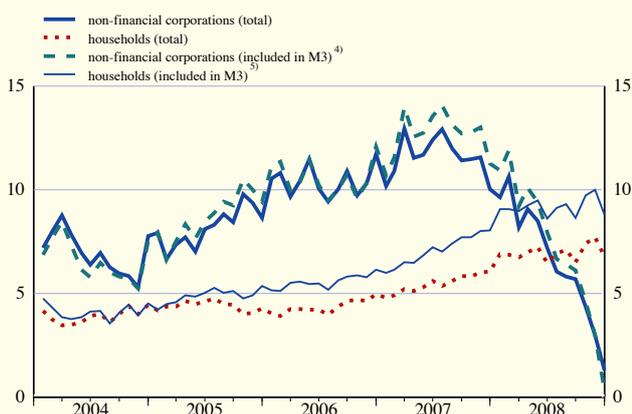
### C11 Total deposits by sector <sup>2)</sup>

(annual growth rates)



### C12 Total deposits and deposits included in M3 by sector <sup>2)</sup>

(annual growth rates)



Source: ECB.

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

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

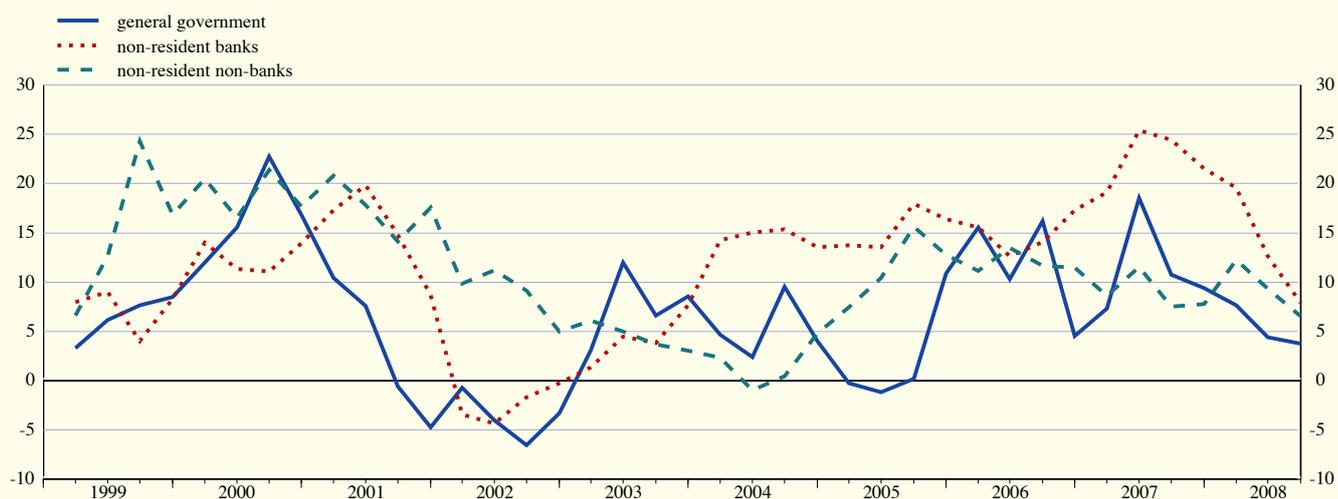
(EUR billions and annual growth rates; outstanding amounts and growth rates at end of period, transactions during period)

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

	General government					Non-euro area residents				
	Total	Central government	Other general government			Total	Banks <sup>3)</sup>	Non-banks		
			State government	Local government	Social security funds			Total	General government	Other
	1	2	3	4	5	6	7	8	9	10
Outstanding amounts										
2005	313.1	149.2	38.3	80.9	44.7	3,050.5	2,250.5	800.0	125.8	674.2
2006	329.0	124.2	45.4	90.8	68.6	3,429.0	2,557.1	871.9	128.6	743.3
2007 Q4	372.9	127.1	59.0	106.8	80.1	3,856.2	2,944.2	912.0	143.4	768.6
2008 Q1	375.9	139.6	49.6	107.6	79.1	4,039.7	3,075.7	964.1	131.1	833.0
Q2	410.3	155.9	56.4	112.0	86.0	4,019.9	3,036.7	983.2	129.3	853.9
Q3 <sup>(p)</sup>	400.2	140.2	61.7	113.4	85.0	4,140.1	3,147.5	990.9	139.6	851.3
Transactions										
2006	14.2	-24.5	7.0	7.8	23.9	476.6	385.8	90.8	6.6	84.2
2007	30.9	-3.1	13.6	8.9	11.5	614.6	547.2	67.4	20.2	47.2
2007 Q4	-12.0	-21.9	-1.0	2.8	8.1	50.2	53.2	-3.0	-0.5	-2.5
2008 Q1	2.8	12.4	-9.3	0.7	-1.0	279.2	220.4	58.8	-8.5	67.3
Q2	34.4	16.0	6.8	4.4	7.2	-17.5	-37.0	19.5	-1.8	21.3
Q3 <sup>(p)</sup>	-10.4	-15.7	5.2	1.3	-1.1	-20.5	-6.4	-15.8	6.5	-22.3
Growth rates										
2005 Dec.	10.9	8.1	25.4	16.6	0.6	15.4	16.4	12.7	16.8	12.0
2006 Dec.	4.5	-16.5	18.4	9.6	53.5	15.8	17.3	11.5	5.3	12.6
2007 Dec.	9.4	-2.3	29.9	9.8	16.7	18.0	21.5	7.8	15.8	6.4
2008 Mar.	7.7	-3.7	18.1	13.4	16.5	17.8	19.6	12.2	5.5	13.4
June	4.4	-12.2	28.9	10.0	21.0	11.8	12.6	9.4	-0.2	11.0
Sep. <sup>(p)</sup>	3.8	-6.7	2.9	9.0	18.3	7.6	7.9	6.5	-2.9	8.3

**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.

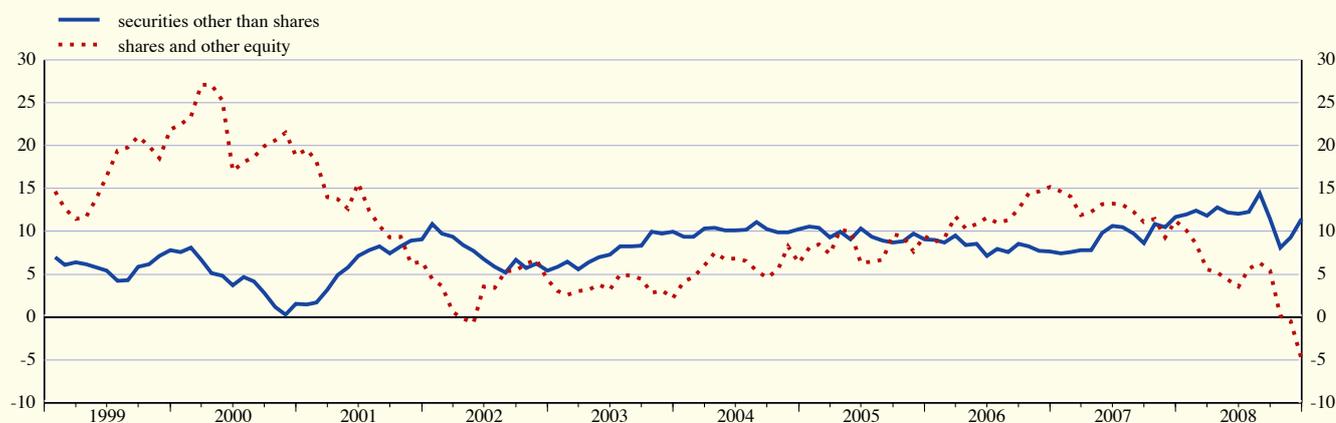
## 2.6 MFI holdings of securities, breakdown <sup>1), 2)</sup>

(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	4,664.3	1,560.6	72.3	1,260.4	16.2	615.8	30.1	1,108.9	1,465.9	373.0	798.5	294.4
2007	5,113.7	1,652.6	84.0	1,177.5	16.6	916.5	33.4	1,233.1	1,639.9	424.8	871.4	343.7
2008 Q2	5,483.3	1,795.3	98.6	1,204.1	15.1	1,031.4	48.0	1,290.7	1,601.2	460.4	849.3	291.4
2008 July	5,547.5	1,813.3	103.3	1,211.2	15.1	1,047.8	48.6	1,308.1	1,621.5	460.8	868.0	292.7
Aug.	5,638.7	1,828.2	105.5	1,213.3	14.8	1,075.1	50.9	1,351.0	1,618.4	455.5	869.0	293.9
Sep.	5,499.3	1,799.3	102.0	1,176.8	15.6	1,048.7	49.5	1,307.5	1,608.3	452.2	866.2	290.0
Oct.	5,561.6	1,824.6	109.2	1,165.5	19.3	1,079.7	53.0	1,310.2	1,551.4	436.9	827.7	286.8
Nov.	5,666.5	1,866.8	104.2	1,208.3	18.2	1,114.6	52.3	1,302.0	1,530.5	426.5	817.1	286.9
Dec. <sup>(p)</sup>	5,814.4	1,888.8	98.6	1,224.9	19.0	1,298.6	56.6	1,227.8	1,483.9	428.6	776.7	278.5
<b>Transactions</b>												
2006	337.4	122.8	10.6	-122.7	0.5	100.6	6.5	219.0	193.3	58.6	96.2	38.5
2007	541.2	136.3	18.2	-86.7	1.5	267.3	9.5	195.0	164.5	52.0	60.0	52.5
2008 Q3	-41.4	4.6	-2.9	-33.3	-0.8	19.2	-0.8	-27.5	27.8	0.7	23.5	3.6
Q4 <sup>(p)</sup>	210.3	89.3	-1.5	42.7	3.1	135.6	6.8	-65.6	-94.3	-7.7	-79.3	-7.3
2008 July	57.9	18.2	4.2	4.7	-0.1	16.1	0.4	14.4	22.9	1.4	19.5	2.0
Aug.	56.8	14.4	-0.9	-0.3	-0.9	26.6	0.2	17.8	-2.4	-5.1	0.4	2.3
Sep.	-156.1	-28.0	-6.2	-37.7	0.3	-23.4	-1.4	-59.6	7.2	4.4	3.6	-0.7
Oct.	-9.3	26.5	-1.4	-11.6	1.8	32.6	-1.5	-55.8	-47.5	-14.1	-32.9	-0.4
Nov.	114.2	43.9	-3.5	38.6	-1.1	35.3	-0.4	-1.3	-9.7	-3.5	-7.8	1.7
Dec. <sup>(p)</sup>	105.4	18.9	3.4	15.7	2.3	67.7	8.6	-11.1	-37.2	9.9	-38.5	-8.5
<b>Growth rates</b>												
2006 Dec.	7.7	8.5	16.5	-8.9	3.0	19.3	25.7	24.2	15.2	18.6	13.6	15.2
2007 Dec.	11.7	8.7	25.6	-6.9	10.5	42.9	33.4	17.7	11.2	13.9	7.5	17.8
2008 June	12.0	11.2	36.7	-4.5	9.7	36.3	61.2	12.5	3.6	17.5	2.4	-10.4
2008 July	12.2	11.4	26.4	-2.3	9.8	35.7	53.4	11.4	5.6	18.2	5.9	-10.1
Aug.	14.4	12.5	33.0	0.2	4.9	37.9	62.9	13.9	6.3	15.9	7.1	-7.6
Sep.	11.4	11.1	24.0	-1.8	6.5	31.1	46.0	10.1	5.5	13.4	7.8	-10.1
Oct.	8.1	9.4	16.3	-2.9	17.1	29.0	29.0	1.5	0.1	11.3	-1.4	-9.7
Nov.	9.3	11.5	15.3	0.6	10.5	30.3	42.7	-0.9	-0.5	11.2	-2.2	-10.3
Dec. <sup>(p)</sup>	11.4	13.3	15.2	3.5	8.0	29.7	69.9	1.1	-4.9	8.0	-8.1	-13.0

## C14 MFI holdings of securities <sup>2)</sup>

(annual growth rates)



Source: ECB.

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

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

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

(EUR billions)

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

	Consumer credit				Lending for house purchase				Other lending			
	Total	Up to 1 year	Over 1 year and up to 5 years	Over 5 years	Total	Up to 1 year	Over 1 year and up to 5 years	Over 5 years	Total	Up to 1 year	Over 1 year and up to 5 years	Over 5 years
	1	2	3	4	5	6	7	8	9	10	11	12
2006	-3.9	-1.5	-0.9	-1.6	-2.7	-0.1	-0.1	-2.4	-6.7	-1.1	-2.0	-3.6
2007	-4.2	-1.2	-1.4	-1.6	-2.7	-0.2	-0.2	-2.3	-6.9	-0.8	-2.3	-3.7
2008 Q2	-0.9	-0.2	-0.4	-0.4	-0.4	0.0	0.0	-0.4	-1.9	-0.2	-0.9	-0.8
2008 Q3	-1.0	-0.2	-0.4	-0.4	-0.4	0.0	0.0	-0.4	-1.3	-0.2	-0.5	-0.7
2008 July	-0.3	-0.1	-0.1	-0.1	0.0	0.0	0.0	0.0	-0.2	0.0	0.0	-0.2
Aug.	-0.3	-0.1	-0.1	-0.1	-0.1	0.0	0.0	-0.1	-0.6	0.0	-0.4	-0.2
Sep.	-0.4	-0.1	-0.1	-0.2	-0.3	0.0	0.0	-0.3	-0.5	-0.1	-0.1	-0.3
Oct.	-0.6	-0.3	-0.2	-0.1	-0.6	0.0	0.0	-0.6	-0.7	0.1	-0.5	-0.2
Nov.	-0.3	0.0	-0.2	-0.1	-0.2	0.0	0.0	-0.1	-0.5	0.0	-0.1	-0.3
Dec. <sup>(p)</sup>	-0.4	0.0	-0.1	-0.3	-0.3	0.0	0.0	-0.3	-1.7	-0.4	-0.8	-0.5

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

	Non-financial corporations				Non-euro area residents		
	Total	Up to 1 year	Over 1 year and up to 5 years	Over 5 years	Total	Up to 1 year	Over 1 year
	1	2	3	4	5	6	7
2006	-13.2	-3.5	-4.6	-5.1	-0.8	-0.1	-0.7
2007	-12.5	-2.1	-5.4	-4.9	-5.2	-3.4	-1.8
2008 Q2	-5.4	-0.9	-3.4	-1.1	0.0	-0.1	0.0
2008 Q3	-4.2	-0.8	-2.3	-1.0	-1.3	-0.7	-0.5
2008 July	-0.5	-0.2	-0.2	-0.2	-0.5	-0.4	-0.1
Aug.	-1.9	-0.1	-1.6	-0.2	-0.1	0.0	-0.1
Sep.	-1.8	-0.5	-0.6	-0.6	-0.6	-0.3	-0.3
Oct.	-1.5	0.0	-1.1	-0.4	-1.0	-0.2	-0.8
Nov.	-2.0	-0.4	-1.2	-0.4	-0.6	-0.2	-0.4
Dec. <sup>(p)</sup>	-3.1	-0.9	-1.3	-1.0	-1.3	-0.4	-0.9

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

	Securities other than shares							Shares and other equity				
	Total	MFIs		General government		Other euro area residents		Non-euro area residents	Total	MFIs	Non-MFIs	Non-euro area residents
		Euro	Non-euro	Euro	Non-euro	Euro	Non-euro					
	1	2	3	4	5	6	7	8	9	10	11	12
2006	-8.6	1.2	-0.4	-7.9	-0.2	-0.4	-0.3	-0.7	31.5	7.1	16.3	8.0
2007	-11.8	-2.7	0.0	0.6	-0.2	-2.5	-0.5	-6.5	12.6	3.0	8.8	0.8
2008 Q2	-18.5	-1.5	-0.1	-8.7	-0.1	-2.5	-0.5	-5.0	-7.8	-2.9	-6.5	1.5
2008 Q3	-1.7	-1.2	0.2	5.8	0.2	-1.7	0.0	-5.0	-19.3	-7.6	-6.7	-5.1
2008 July	1.9	0.1	0.1	2.3	0.0	0.4	0.0	-1.0	-2.0	-0.4	-0.8	-0.7
Aug.	4.6	0.9	0.2	2.4	0.1	0.3	0.1	0.8	-0.7	-0.1	0.6	-1.1
Sep.	-8.3	-2.2	0.0	1.1	0.1	-2.3	-0.1	-4.8	-16.7	-7.0	-6.4	-3.3
Oct.	-4.6	-1.2	0.2	0.2	0.2	-1.5	-0.1	-2.4	-9.4	-1.2	-5.5	-2.7
Nov.	2.4	-0.2	0.0	4.3	0.1	0.2	0.0	-2.0	-4.2	-1.1	-1.5	-1.6
Dec. <sup>(p)</sup>	-1.5	0.5	-0.1	0.9	-0.2	-0.9	0.3	-1.9	-1.9	-0.6	-1.5	0.1

Source: ECB.

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

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

3) Including non-profit institutions serving households.

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

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

### 1. Deposits

	MFIs <sup>3)</sup>							Non-MFIs						
	All currencies (outstanding amount)	Euro <sup>4)</sup>	Non-euro currencies				All currencies (outstanding amount)	Euro <sup>4)</sup>	Non-euro currencies					
			Total						Total					
			USD	JPY	CHF	GBP			USD	JPY	CHF	GBP		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	
	By euro area residents													
2005	4,851.2	90.9	9.1	5.6	0.4	1.5	1.0	7,361.0	96.8	3.2	1.9	0.3	0.1	0.5
2006	5,242.4	90.7	9.3	5.6	0.4	1.5	1.2	8,014.8	96.4	3.6	2.2	0.3	0.1	0.6
2007 Q4	6,089.4	92.1	7.9	4.8	0.4	1.1	1.0	8,993.0	96.4	3.6	2.2	0.4	0.1	0.5
2008 Q1	6,147.8	91.8	8.2	4.7	0.5	1.3	1.0	9,151.4	96.4	3.6	2.1	0.4	0.1	0.6
Q2	6,287.4	91.6	8.4	5.0	0.4	1.4	1.0	9,372.6	96.4	3.6	2.1	0.5	0.1	0.5
Q3 <sup>4)</sup>	6,751.6	89.4	10.6	6.8	0.4	1.6	1.1	9,464.7	96.3	3.7	2.2	0.5	0.1	0.6
	By non-euro area residents													
2005	2,250.5	46.2	53.8	35.4	2.7	2.8	10.0	800.0	51.8	48.2	32.1	1.7	2.2	9.2
2006	2,557.1	45.3	54.7	35.1	2.3	2.7	11.5	871.9	50.7	49.3	32.0	1.3	2.0	10.4
2007 Q4	2,944.2	46.8	53.2	33.6	2.9	2.4	11.1	912.0	50.0	50.0	32.9	1.6	1.8	9.9
2008 Q1	3,075.7	48.1	51.9	32.9	3.0	2.6	10.5	964.1	52.3	47.7	31.9	1.4	1.8	8.7
Q2	3,036.7	46.5	53.5	33.9	3.0	2.7	10.6	983.2	51.8	48.2	31.8	1.2	1.7	9.3
Q3 <sup>4)</sup>	3,147.5	46.0	54.0	34.8	2.9	2.7	10.2	990.9	51.2	48.8	31.3	1.2	1.6	10.5

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

	All currencies (outstanding amount)	Euro <sup>4)</sup>	Non-euro currencies			
			Total			
			USD	JPY	CHF	GBP
1	2	3	4	5	6	7
2005	4,051.7	81.2	18.8	9.6	1.8	3.2
2006	4,485.5	80.5	19.5	10.0	1.6	3.5
2007 Q4	4,948.0	81.4	18.6	9.3	1.7	3.4
2008 Q1	4,993.0	82.1	17.9	8.8	1.8	3.2
Q2	5,146.7	82.0	18.0	8.9	1.7	3.5
Q3 <sup>4)</sup>	5,183.2	81.8	18.2	8.9	1.8	3.4

Source: ECB.

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

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

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

**3. Loans**

	MFIs <sup>3)</sup>							Non-MFIs						
	All currencies (outstanding amount)	Euro <sup>4)</sup>	Non-euro currencies				All currencies (outstanding amount)	Euro <sup>4)</sup>	Non-euro currencies					
			Total						Total					
			USD	JPY	CHF	GBP			USD	JPY	CHF	GBP		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	
To euro area residents														
2005	4,569.7	-	-	-	-	-	9,112.0	96.3	3.7	1.6	0.2	1.3	0.5	
2006	4,933.5	-	-	-	-	-	9,970.8	96.4	3.6	1.6	0.2	1.1	0.5	
2007 Q4	5,788.9	-	-	-	-	-	11,115.9	96.2	3.8	1.8	0.2	0.9	0.6	
2008 Q1	5,836.3	-	-	-	-	-	11,415.0	96.1	3.9	1.8	0.2	1.0	0.6	
Q2	6,001.5	-	-	-	-	-	11,637.2	96.0	4.0	1.9	0.2	1.0	0.6	
Q3 <sup>(p)</sup>	6,345.6	-	-	-	-	-	11,801.8	95.8	4.2	2.1	0.2	1.0	0.5	
To non-euro area residents														
2005	1,722.1	48.5	51.5	30.5	4.3	2.0	10.1	763.1	38.2	61.8	43.7	1.8	4.1	8.6
2006	2,061.0	50.7	49.3	28.9	2.0	2.3	11.0	863.4	39.3	60.7	43.2	1.1	4.0	8.6
2007 Q4	2,337.9	48.0	52.0	28.9	2.3	2.4	12.7	957.4	40.9	59.1	41.3	1.2	3.7	8.2
2008 Q1	2,395.5	48.2	51.8	27.9	2.9	2.8	12.4	1,018.4	43.0	57.0	39.1	1.3	4.2	7.8
Q2	2,299.2	46.4	53.6	29.3	2.3	2.9	12.7	1,011.5	43.0	57.0	38.4	1.1	4.0	8.6
Q3 <sup>(p)</sup>	2,459.2	42.8	57.2	32.6	2.7	2.7	12.8	1,059.7	40.7	59.3	40.5	1.4	3.9	8.5

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

	Issued by MFIs <sup>3)</sup>							Issued by non-MFIs						
	All currencies (outstanding amount)	Euro <sup>4)</sup>	Non-euro currencies				All currencies (outstanding amount)	Euro <sup>4)</sup>	Non-euro currencies					
			Total						Total					
			USD	JPY	CHF	GBP			USD	JPY	CHF	GBP		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	
Issued by euro area residents														
2005	1,517.7	95.6	4.4	2.0	0.3	0.4	1.4	1,980.9	97.8	2.2	1.1	0.3	0.1	0.5
2006	1,632.9	95.6	4.4	2.3	0.2	0.3	1.3	1,922.5	97.6	2.4	1.3	0.3	0.1	0.7
2007 Q4	1,736.6	95.2	4.8	2.4	0.3	0.3	1.5	2,144.0	97.7	2.3	1.4	0.2	0.1	0.5
2008 Q1	1,816.0	95.2	4.8	2.5	0.3	0.3	1.4	2,219.9	97.2	2.8	1.9	0.3	0.1	0.4
Q2	1,893.9	94.8	5.2	2.6	0.4	0.3	1.6	2,298.6	97.3	2.7	1.8	0.3	0.1	0.5
Q3 <sup>(p)</sup>	1,901.3	94.6	5.4	2.9	0.4	0.3	1.5	2,290.6	97.2	2.8	1.9	0.3	0.1	0.5
Issued by non-euro area residents														
2005	397.5	51.0	49.0	28.5	0.8	0.5	15.7	522.8	38.3	61.7	35.0	7.8	0.8	12.6
2006	514.5	52.2	47.8	28.8	0.7	0.4	14.5	594.4	38.9	61.1	36.5	4.9	0.8	14.2
2007 Q4	580.8	53.8	46.2	27.4	0.7	0.4	14.4	652.3	35.8	64.2	39.4	4.5	0.8	12.6
2008 Q1	636.2	50.8	49.2	30.2	0.8	0.6	14.4	629.5	38.0	62.0	36.8	5.8	0.9	11.4
Q2	663.7	50.2	49.8	30.7	0.7	0.5	14.9	627.0	38.5	61.5	36.9	5.8	0.8	10.4
Q3 <sup>(p)</sup>	653.0	51.1	48.9	30.7	0.7	0.4	14.2	655.4	37.2	62.8	38.0	6.0	0.9	10.4

Source: ECB.

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

## 2.9 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 Q2	5,993.1	344.2	2,046.7	191.9	1,854.8	2,219.3	786.1	179.7	417.2
Q3	5,892.8	358.3	2,015.0	187.0	1,828.0	2,168.5	773.6	180.6	396.6
Q4	5,781.3	353.4	1,993.4	184.1	1,809.3	2,077.4	784.0	189.1	384.0
2008 Q1	5,160.6	365.5	1,857.8	164.8	1,693.0	1,670.3	719.8	197.1	350.1
Q2	5,015.2	359.3	1,807.2	157.5	1,649.7	1,624.4	690.7	204.9	328.7
Q3 <sup>(p)</sup>	4,713.2	377.1	1,747.3	148.1	1,599.2	1,411.4	641.3	202.8	333.3

### 2. Liabilities

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

### 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 Q2	5,993.1	1,826.0	1,692.8	1,541.6	230.8	701.8	4,579.4	1,413.8	
Q3	5,892.8	1,797.1	1,654.6	1,523.2	236.1	681.7	4,468.3	1,424.5	
Q4	5,781.3	1,735.5	1,596.8	1,535.4	244.2	669.4	4,344.6	1,436.7	
2008 Q1	5,160.6	1,362.6	1,483.3	1,427.8	249.6	637.4	3,778.1	1,382.5	
Q2	5,015.2	1,325.3	1,413.4	1,405.2	256.1	615.3	3,647.1	1,368.1	
Q3 <sup>(p)</sup>	4,713.2	1,132.6	1,382.5	1,358.8	253.1	586.2	3,340.8	1,372.4	

### C15 Total assets of investment funds

(EUR billions)



Source: ECB.

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

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

(EUR billions; outstanding amounts at end of period)

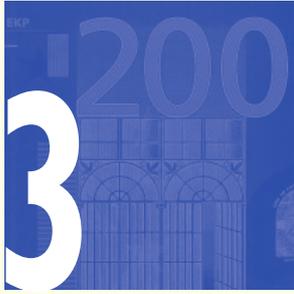
## 1. Funds by investment policy

	Total 1	Deposits 2	Holdings of securities other than shares			Holdings of shares/ other equity 6	Holdings of investment fund shares 7	Fixed assets 8	Other assets 9
			Total 3	Up to 1 year 4	Over 1 year 5				
Equity funds									
2007 Q2	1,826.0	61.1	67.7	27.0	40.7	1,546.9	84.5	-	65.8
Q3	1,797.1	72.0	68.7	26.7	41.9	1,505.5	82.4	-	68.5
Q4	1,735.5	58.1	71.8	26.5	45.2	1,464.2	79.5	-	61.9
2008 Q1	1,362.6	51.2	63.0	21.3	41.7	1,130.9	65.7	-	51.7
Q2	1,325.3	54.3	65.0	22.0	43.0	1,088.6	65.7	-	51.6
Q3 <sup>(p)</sup>	1,132.6	48.3	61.3	20.2	41.1	915.2	57.6	-	50.2
Bond funds									
2007 Q2	1,692.8	115.1	1,347.9	98.3	1,249.6	62.3	55.6	-	112.0
Q3	1,654.6	109.9	1,318.4	97.0	1,221.5	62.6	53.3	-	110.4
Q4	1,596.8	116.1	1,273.1	92.7	1,180.4	58.0	49.8	-	99.8
2008 Q1	1,483.3	124.7	1,167.7	80.3	1,087.5	56.8	45.5	-	88.6
Q2	1,413.4	115.9	1,118.4	74.6	1,043.7	57.9	42.7	-	78.5
Q3 <sup>(p)</sup>	1,382.5	128.7	1,073.5	67.9	1,005.6	55.7	41.1	-	83.5
Mixed funds									
2007 Q2	1,541.6	81.5	530.2	50.8	479.4	399.2	347.9	0.9	181.9
Q3	1,523.2	86.2	522.6	46.3	476.3	405.4	345.1	0.5	163.3
Q4	1,535.4	89.7	547.0	47.3	499.7	393.1	343.6	0.7	161.4
2008 Q1	1,427.8	97.9	528.0	46.4	481.6	339.4	313.9	1.2	147.3
Q2	1,405.2	99.0	519.9	42.6	477.3	341.6	307.9	0.8	135.9
Q3 <sup>(p)</sup>	1,358.8	108.9	512.6	42.2	470.4	312.1	287.1	1.1	137.0
Real estate funds									
2007 Q2	230.8	18.8	6.6	1.9	4.7	4.3	10.0	178.1	12.9
Q3	236.1	20.7	6.4	1.6	4.8	3.9	13.1	179.2	12.8
Q4	244.2	19.7	6.0	1.5	4.5	3.4	12.5	187.9	14.7
2008 Q1	249.6	19.9	5.3	1.1	4.2	3.1	11.3	195.4	14.6
Q2	256.1	17.9	5.9	1.1	4.8	3.0	10.1	203.5	15.7
Q3 <sup>(p)</sup>	253.1	18.9	4.7	1.3	3.4	3.0	9.3	201.2	15.9

## 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 Q2	4,579.4	278.8	1,434.5	1,819.1	577.5	145.0	324.5
Q3	4,468.3	287.9	1,375.7	1,791.2	564.1	142.9	306.4
Q4	4,344.6	279.9	1,336.9	1,717.4	569.6	149.1	291.8
2008 Q1	3,778.1	277.6	1,218.3	1,362.1	514.2	154.1	251.9
Q2	3,647.1	264.5	1,177.3	1,326.8	485.5	155.0	238.0
Q3 <sup>(p)</sup>	3,340.8	265.1	1,104.7	1,140.7	440.7	152.4	237.2
Special investors' funds							
2007 Q2	1,413.8	65.4	612.2	400.2	208.6	34.7	92.6
Q3	1,424.5	70.4	639.3	377.3	209.5	37.7	90.2
Q4	1,436.7	73.4	656.6	360.0	214.5	40.0	92.2
2008 Q1	1,382.5	88.0	639.6	308.1	205.6	43.0	98.2
Q2	1,368.1	94.8	629.9	297.6	205.2	49.9	90.7
Q3 <sup>(p)</sup>	1,372.4	112.0	642.5	270.7	200.6	50.5	96.1

Source: ECB.



## EURO AREA ACCOUNTS

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

(EUR billions)

Uses	Euro area	Households	Non-financial corporations	Financial corporations	General government	Rest of the world
<b>2008 Q3</b>						
<b>External account</b>						
Exports of goods and services						530.8
<i>Trade balance</i> <sup>1)</sup>						-4.1
<b>Generation of income account</b>						
Gross value added (basic prices)						
Taxes less subsidies on products						
Gross domestic product (market prices)						
Compensation of employees	1,069.1	106.5	688.2	53.0	221.5	
Other taxes less subsidies on production	28.1	6.1	14.6	3.8	3.6	
Consumption of fixed capital	339.0	91.6	192.6	11.2	43.6	
<i>Net operating surplus and mixed income</i> <sup>1)</sup>	609.1	300.2	279.9	30.3	-1.3	
<b>Allocation of primary income account</b>						
Net operating surplus and mixed income						4.4
Compensation of employees						
Taxes less subsidies on production						
Property income	872.6	61.8	281.6	457.9	71.2	147.0
Interest	582.0	59.7	93.6	357.6	71.1	85.2
Other property income	290.6	2.1	188.1	100.3	0.1	61.8
<i>Net national income</i> <sup>1)</sup>	1,932.3	1,564.5	103.8	63.4	200.5	
<b>Secondary distribution of income account</b>						
Net national income						
Current taxes on income, wealth, etc.	266.4	205.9	49.8	10.5	0.3	1.7
Social contributions	405.4	405.4				1.0
Social benefits other than social transfers in kind	411.4	1.4	15.8	27.4	366.9	0.6
Other current transfers	183.4	72.5	23.7	46.6	40.5	6.9
Net non-life insurance premiums	44.7	34.0	9.2	0.8	0.7	1.1
Non-life insurance claims	44.6			44.6		0.6
Other	94.1	38.5	14.5	1.2	39.8	5.3
<i>Net disposable income</i> <sup>1)</sup>	1,910.9	1,379.0	41.6	68.9	421.4	
<b>Use of income account</b>						
Net disposable income						
Final consumption expenditure	1,764.7	1,316.6			448.1	
Individual consumption expenditure	1,587.5	1,316.6			270.9	
Collective consumption expenditure	177.2				177.2	
Adjustment for the change in net equity of households in pension fund reserves	16.8	0.0	0.2	16.6	0.0	0.0
<i>Net saving/current external account</i> <sup>1)</sup>	146.3	79.2	41.4	52.3	-26.7	19.9
<b>Capital account</b>						
Net saving / current external account						
Gross capital formation	505.2	159.7	275.3	13.2	57.0	
Gross fixed capital formation	494.6	156.7	267.8	13.2	56.9	
Changes in inventories and acquisitions less disposals of valuables	10.6	3.0	7.5	0.0	0.1	
Consumption of fixed capital						
Acquisitions less disposals of non-produced non-financial assets	0.1	-1.6	1.1	0.4	0.3	-0.1
Capital transfers	34.2	9.3	1.9	1.0	22.1	4.2
Capital taxes	6.2	6.0	0.2	0.0		0.0
Other capital transfers	28.0	3.2	1.7	1.0	22.1	4.2
<i>Net lending (+)/net borrowing (-) (from capital account)</i> <sup>1)</sup>	-18.2	12.5	-26.3	49.6	-54.1	18.2
Statistical discrepancy	0.0	-6.8	6.8	0.0	0.0	0.0

Sources: ECB and Eurostat.

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

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

(EUR billions)

Resources	Euro area	Households	Non-financial corporations	Financial corporations	General government	Rest of the world
2008 Q3						
<b>External account</b>						
Imports of goods and services						526.7
<i>Trade balance</i>						
<b>Generation of income account</b>						
Gross value added (basic prices)	2,045.3	504.3	1,175.3	98.3	267.4	
Taxes less subsidies on products	228.7					
Gross domestic product (market prices) <sup>2)</sup>	2,274.0					
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	609.1	300.2	279.9	30.3	-1.3	
Compensation of employees	1,070.2	1,070.2				3.3
Taxes less subsidies on production	255.3				255.3	1.5
Property income	870.2	255.9	105.6	491.0	17.7	149.3
Interest	566.8	85.9	49.9	422.9	8.1	100.5
Other property income	303.5	169.9	55.8	68.2	9.6	48.9
<i>Net national income</i>						
<b>Secondary distribution of income account</b>						
Net national income	1,932.3	1,564.5	103.8	63.4	200.5	
Current taxes on income, wealth, etc.	267.5				267.5	0.7
Social contributions	405.4	1.0	16.3	44.1	344.0	1.1
Social benefits other than social transfers in kind	408.9	408.9				3.1
Other current transfers	163.5	89.9	10.7	45.9	17.1	26.8
Net non-life insurance premiums	44.6			44.6		1.2
Non-life insurance claims	44.0	36.2	6.9	0.7	0.3	1.2
Other	75.0	53.7	3.8	0.6	16.8	24.4
<i>Net disposable income</i>						
<b>Use of income account</b>						
Net disposable income	1,910.9	1,379.0	41.6	68.9	421.4	
Final consumption expenditure						
Individual consumption expenditure						
Collective consumption expenditure						
Adjustment for the change in net equity of households in pension fund reserves	16.9	16.9				0.0
<i>Net saving/current external account</i>						
<b>Capital account</b>						
Net saving / current external account	146.3	79.2	41.4	52.3	-26.7	19.9
Gross capital formation						
Gross fixed capital formation						
Changes in inventories and acquisitions less disposals of valuables						
Consumption of fixed capital	339.0	91.6	192.6	11.2	43.6	
Acquisitions less disposals of non-produced non-financial assets						
Capital transfers	36.0	9.0	18.0	0.6	8.4	2.4
Capital taxes	6.2				6.2	0.0
Other capital transfers	29.8	9.0	18.0	0.6	2.1	2.4
<i>Net lending (+)/net borrowing (-) (from capital account)</i>						
Statistical discrepancy						

Sources: ECB and Eurostat.

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

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

(EUR billions)

Assets	Euro area	Households	Non-financial corporations	MFIs	Other financial inter- mediaries	Insurance corporations and pension funds	General govern- ment	Rest of the world
2008 Q3								
<b>Opening balance sheet, financial assets</b>								
Total financial assets		17,189.2	14,624.5	23,246.6	10,120.3	6,161.5	2,936.1	15,097.4
Monetary gold and special drawing rights (SDRs)				212.2				
Currency and deposits		5,875.2	1,768.1	2,387.5	1,666.7	830.4	606.0	4,184.1
Short-term debt securities		62.2	119.8	144.4	383.1	278.2	29.8	755.4
Long-term debt securities		1,381.2	195.2	3,870.1	1,778.2	2,003.9	223.9	2,709.1
Loans		40.3	2,345.5	12,672.2	1,812.7	353.1	368.3	1,730.6
<i>of which long-term</i>		23.5	1,235.8	9,489.1	1,430.8	291.3	330.3	.
Shares and other equity		4,396.9	7,140.5	1,854.8	4,256.6	2,202.3	1,127.8	4,926.0
Quoted shares		838.9	1,598.1	603.7	2,060.5	613.2	364.8	.
Unquoted shares and other equity		2,083.6	5,189.0	1,005.6	1,563.6	466.2	618.5	.
Mutual fund shares		1,474.4	353.4	245.5	632.5	1,122.8	144.5	.
Insurance technical reserves		5,198.3	142.6	2.0	0.0	150.9	3.4	219.3
Other accounts receivable and financial derivatives		235.1	2,912.7	2,103.4	222.9	342.7	576.9	572.9
<i>Net financial worth</i>								
<b>Financial account, transactions in financial assets</b>								
Total transactions in financial assets		56.7	115.8	251.4	-39.9	69.4	-16.3	178.7
Monetary gold and special drawing rights (SDRs)				-0.2				0.2
Currency and deposits		38.8	33.7	80.6	24.8	1.8	-38.6	91.1
Short-term debt securities		5.3	-3.1	-5.9	-35.6	6.3	-2.1	39.6
Long-term debt securities		-7.4	-2.6	-32.1	-26.8	41.3	10.0	96.7
Loans		0.5	6.0	158.6	9.4	1.9	1.2	6.2
<i>of which long-term</i>		0.3	-5.3	159.3	-7.2	-0.6	1.9	.
Shares and other equity		-32.9	86.5	-1.7	-26.9	15.8	13.0	-63.5
Quoted shares		-13.5	51.8	-4.0	-24.7	2.4	0.8	.
Unquoted shares and other equity		21.8	33.1	5.1	35.3	9.3	10.2	.
Mutual fund shares		-41.2	1.7	-2.8	-37.4	4.0	2.0	.
Insurance technical reserves		51.7	0.5	0.0	0.0	2.6	0.0	3.1
Other accounts receivable and financial derivatives		0.7	-5.2	51.9	15.1	-0.3	0.2	5.3
<i>Changes in net financial worth due to transactions</i>								
<b>Other changes account, financial assets</b>								
Total other changes in financial assets		-431.6	-274.8	170.6	-266.5	-83.8	-46.5	186.6
Monetary gold and special drawing rights (SDRs)				9.4				
Currency and deposits		0.9	14.5	101.3	11.9	3.1	1.4	216.0
Short-term debt securities		-1.2	1.5	0.0	-0.6	-0.6	0.0	28.7
Long-term debt securities		-42.9	0.8	116.5	-1.0	13.6	0.9	96.3
Loans		0.1	34.3	55.0	-9.4	0.4	0.1	35.0
<i>of which long-term</i>		0.0	18.6	19.5	0.9	0.2	0.1	.
Shares and other equity		-319.9	-353.1	-41.4	-268.9	-101.7	-49.5	-192.4
Quoted shares		-100.9	-149.9	-28.9	-192.2	-55.9	-45.5	.
Unquoted shares and other equity		-180.2	-193.2	-7.0	-63.6	-18.4	1.8	.
Mutual fund shares		-38.8	-10.0	-5.5	-13.1	-27.4	-5.8	.
Insurance technical reserves		-66.6	-0.5	0.0	0.0	0.0	0.0	-0.9
Other accounts receivable and financial derivatives		-2.0	27.7	-70.3	1.4	1.6	0.5	4.0
<i>Other changes in net financial worth</i>								
<b>Closing balance sheet, financial assets</b>								
Total financial assets		16,814.3	14,465.6	23,668.6	9,813.8	6,147.1	2,873.3	15,462.5
Monetary gold and special drawing rights (SDRs)				221.5				
Currency and deposits		5,915.0	1,816.2	2,569.4	1,703.4	835.3	568.8	4,491.2
Short-term debt securities		66.2	118.3	138.5	347.0	283.9	27.7	823.6
Long-term debt securities		1,330.9	193.5	3,954.5	1,750.4	2,058.8	234.9	2,902.1
Loans		40.9	2,385.8	12,885.8	1,812.7	355.4	369.5	1,771.9
<i>of which long-term</i>		23.9	1,249.1	9,667.8	1,424.5	290.9	332.3	.
Shares and other equity		4,044.1	6,874.0	1,811.8	3,960.8	2,116.3	1,091.3	4,670.2
Quoted shares		724.5	1,500.0	570.9	1,843.6	559.6	320.1	.
Unquoted shares and other equity		1,925.2	5,028.9	1,003.7	1,535.3	457.1	630.5	.
Mutual fund shares		1,394.4	345.1	237.1	582.0	1,099.5	140.7	.
Insurance technical reserves		5,183.4	142.6	2.0	0.0	153.5	3.4	221.5
Other accounts receivable and financial derivatives		233.8	2,935.2	2,085.0	239.5	344.0	577.6	582.1
<i>Net financial worth</i>								

Source: ECB.

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

(EUR billions)

Liabilities	Euro area	Households	Non-financial corporations	MFI's	Other financial intermediaries	Insurance corporations and pension funds	General government	Rest of the world
<b>2008 Q3</b>								
<b>Opening balance sheet, liabilities</b>								
Total liabilities		6,195.2	23,242.4	22,997.3	9,853.0	6,373.6	6,860.4	13,641.4
Monetary gold and special drawing rights (SDRs)								
Currency and deposits			24.8	14,316.0	31.9	2.4	239.1	2,703.7
Short-term debt securities			294.2	411.4	111.0	0.3	679.0	277.0
Long-term debt securities			429.5	2,801.2	1,896.2	26.4	4,367.3	2,641.0
Loans		5,512.6	7,779.5		1,683.7	201.5	1,213.2	2,932.3
<i>of which long-term</i>		5,180.4	5,222.5		809.4	69.3	1,038.1	.
Shares and other equity			11,798.5	2,910.1	6,018.1	582.5	5.4	4,590.3
Quoted shares			3,946.7	661.7	226.2	216.1	0.0	.
Unquoted shares and other equity			7,851.9	1,083.5	1,085.9	365.7	5.4	.
Mutual fund shares				1,164.8	4,706.0			.
Insurance technical reserves		33.1	329.1	58.1	0.6	5,295.0	0.5	
Other accounts payable and financial derivatives		649.5	2,586.8	2,500.5	111.4	265.5	355.9	497.0
<i>Net financial worth<sup>1)</sup></i>	-1,243.8	10,994.0	-8,618.0	249.3	267.3	-212.1	-3,924.3	
<b>Financial account, transactions in liabilities</b>								
Total transactions in liabilities		51.0	135.4	210.7	-23.2	43.6	37.8	160.5
Monetary gold and special drawing rights (SDRs)								
Currency and deposits			0.4	148.1	2.0	-0.2	-5.3	87.1
Short-term debt securities			-1.3	-32.4	12.0	0.2	30.9	-4.8
Long-term debt securities			4.0	11.4	52.0	0.1	16.3	-4.5
Loans		45.8	102.5		4.5	-3.0	-7.3	41.4
<i>of which long-term</i>		48.2	98.7		15.2	0.5	-9.6	.
Shares and other equity			44.0	18.5	-83.3	2.2	0.0	9.0
Quoted shares			-0.2	14.0	0.7	0.1	0.0	.
Unquoted shares and other equity			44.2	12.6	20.2	2.1	0.0	.
Mutual fund shares				-8.2	-104.2			.
Insurance technical reserves		0.0	0.2	0.9	0.0	56.8	0.0	
Other accounts payable and financial derivatives		5.2	-14.4	64.3	-10.4	-12.4	3.2	32.2
<i>Changes in net financial worth due to transactions<sup>1)</sup></i>	-18.2	5.7	-19.5	40.6	-16.8	25.7	-54.1	18.2
<b>Other changes account, liabilities</b>								
Total other changes in liabilities		7.8	-763.6	66.5	-298.9	-67.7	151.8	148.5
Monetary gold and special drawing rights (SDRs)								
Currency and deposits			0.0	244.8	0.6	0.0	0.0	103.6
Short-term debt securities			0.2	7.9	-0.6	0.0	1.4	18.9
Long-term debt securities			1.8	43.5	-0.1	-0.5	101.8	37.6
Loans		-0.6	18.9		24.7	0.9	17.1	54.5
<i>of which long-term</i>		0.1	14.3		12.9	0.1	17.1	.
Shares and other equity			-801.8	-110.3	-315.0	-17.1	-0.3	-82.3
Quoted shares			-530.1	-66.5	-50.9	-3.2	0.0	.
Unquoted shares and other equity			-271.7	-46.1	-64.6	-13.9	-0.3	.
Mutual fund shares				2.4	-199.5			.
Insurance technical reserves		0.0	0.0	0.0	0.0	-68.1	0.0	
Other accounts payable and financial derivatives		8.4	17.3	-119.5	-8.5	17.1	31.8	16.2
<i>Other changes in net financial worth<sup>1)</sup></i>	-28.6	-439.4	488.8	104.1	32.4	-16.1	-198.3	38.0
<b>Closing balance sheet, liabilities</b>								
Total liabilities		6,254.0	22,614.3	23,274.5	9,531.0	6,349.5	7,050.0	13,950.3
Monetary gold and special drawing rights (SDRs)								
Currency and deposits			25.3	14,708.9	34.5	2.2	233.8	2,894.5
Short-term debt securities			293.1	386.8	122.5	0.5	711.3	291.1
Long-term debt securities			435.3	2,856.2	1,948.1	26.0	4,485.4	2,674.1
Loans		5,557.8	7,900.8		1,713.0	199.3	1,222.9	3,028.1
<i>of which long-term</i>		5,228.7	5,335.4		837.5	69.9	1,045.5	.
Shares and other equity			11,040.7	2,818.3	5,619.8	567.6	5.1	4,517.0
Quoted shares			3,416.3	609.2	176.0	213.0	0.0	.
Unquoted shares and other equity			7,624.3	1,050.0	1,041.4	353.9	5.1	.
Mutual fund shares				1,159.0	4,402.4			.
Insurance technical reserves		33.1	329.3	59.0	0.6	5,283.8	0.5	
Other accounts payable and financial derivatives		663.1	2,589.8	2,445.3	92.5	270.2	390.8	545.5
<i>Net financial worth<sup>1)</sup></i>	-1,290.7	10,560.2	-8,148.7	394.0	282.9	-202.4	-4,176.7	

Source: ECB.

## 3.2 Euro area non-financial accounts

(EUR billions; four-quarter cumulated flows)

Uses	2004	2005	2006	2006 Q4- 2007 Q3	2007 Q1- 2007 Q4	2007 Q2- 2008 Q1	2007 Q3- 2008 Q2	2007 Q4- 2008 Q3
<b>Generation of income account</b>								
Gross value added (basic prices)								
Taxes less subsidies on products								
Gross domestic product (market prices)								
Compensation of employees	3,777.3	3,891.5	4,050.2	4,178.6	4,231.3	4,280.6	4,332.1	4,377.9
Other taxes less subsidies on production	122.9	130.0	129.2	135.2	136.8	137.2	137.4	138.1
Consumption of fixed capital	1,124.0	1,177.8	1,234.9	1,284.5	1,299.4	1,310.7	1,322.7	1,335.3
<i>Net operating surplus and mixed income</i> <sup>1)</sup>	1,990.3	2,061.3	2,173.9	2,274.3	2,301.1	2,321.4	2,349.8	2,357.2
<b>Allocation of primary income account</b>								
Net operating surplus and mixed income								
Compensation of employees								
Taxes less subsidies on production								
Property income	2,367.3	2,610.3	3,018.4	3,396.6	3,519.0	3,609.9	3,708.9	3,792.5
Interest	1,250.2	1,343.5	1,635.0	1,902.7	1,999.8	2,078.7	2,150.8	2,221.8
Other property income	1,117.1	1,266.8	1,383.4	1,493.9	1,519.2	1,531.2	1,558.1	1,570.7
<i>Net national income</i> <sup>1)</sup>	6,692.8	6,938.0	7,288.1	7,562.5	7,649.8	7,712.0	7,773.3	7,818.0
<b>Secondary distribution of income account</b>								
Net national income								
Current taxes on income, wealth, etc.	883.8	933.3	1,024.6	1,085.3	1,109.0	1,124.8	1,135.1	1,135.8
Social contributions	1,430.0	1,472.4	1,534.7	1,576.8	1,593.6	1,610.5	1,627.2	1,644.4
Social benefits other than social transfers in kind	1,455.4	1,499.2	1,549.5	1,579.1	1,594.9	1,606.5	1,619.7	1,636.8
Other current transfers	684.7	707.1	714.9	732.6	742.2	751.9	758.8	761.4
Net non-life insurance premiums	178.0	178.3	177.4	181.4	182.7	183.0	184.3	184.7
Non-life insurance claims	178.7	179.3	177.5	181.2	182.1	182.4	183.9	184.5
Other	328.0	349.5	360.0	370.0	377.4	386.5	390.5	392.2
<i>Net disposable income</i> <sup>1)</sup>	6,617.0	6,851.2	7,196.9	7,471.6	7,557.0	7,614.1	7,674.3	7,721.7
<b>Use of income account</b>								
Net disposable income								
Final consumption expenditure	6,084.4	6,327.2	6,591.2	6,767.6	6,839.6	6,907.4	6,981.7	7,053.2
Individual consumption expenditure	5,438.2	5,666.1	5,912.5	6,070.9	6,135.8	6,197.4	6,262.3	6,324.5
Collective consumption expenditure	646.2	661.1	678.7	696.7	703.8	710.0	719.5	728.7
Adjustment for the change in net equity of households in pension funds reserves	58.0	60.4	59.0	58.0	59.4	60.5	63.4	65.6
<i>Net saving</i> <sup>1)</sup>	532.8	524.3	606.0	704.2	717.6	706.9	692.8	668.7
<b>Capital account</b>								
Net saving								
Gross capital formation	1,613.4	1,704.2	1,855.4	1,952.5	1,988.0	2,009.7	2,037.3	2,056.5
Gross fixed capital formation	1,602.0	1,697.9	1,842.5	1,942.1	1,967.8	1,985.7	2,009.4	2,023.0
Changes in inventories and acquisitions less disposals of valuables	11.5	6.3	12.9	10.4	20.1	24.0	27.9	33.5
Consumption of fixed capital								
Acquisitions less disposals of non-produced non-financial assets	-1.1	-0.1	0.5	-0.1	0.2	0.3	0.6	0.6
Capital transfers	174.5	180.8	173.8	177.3	166.4	166.6	170.1	163.6
Capital taxes	29.9	24.4	22.5	23.8	23.8	23.4	23.6	23.9
Other capital transfers	144.7	156.4	151.2	153.6	142.5	143.2	146.4	139.7
<i>Net lending (+)/net borrowing (-) (from capital account)</i> <sup>1)</sup>	60.5	11.2	-0.3	51.3	43.1	23.8	-4.7	-36.4

Sources: ECB and Eurostat.

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

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

(EUR billions; four-quarter cumulated flows)

Resources	2004	2005	2006	2006 Q4- 2007 Q3	2007 Q1- 2007 Q4	2007 Q2- 2008 Q1	2007 Q3- 2008 Q2	2007 Q4- 2008 Q3
<b>Generation of income account</b>								
Gross value added (basic prices)	7,014.4	7,260.6	7,588.3	7,872.5	7,968.5	8,049.9	8,141.9	8,208.5
Taxes less subsidies on products	797.5	841.3	910.2	946.6	953.9	955.4	952.7	951.5
Gross domestic product (market prices) <sup>2)</sup>	7,811.9	8,101.9	8,498.5	8,819.2	8,922.4	9,005.4	9,094.6	9,159.9
Compensation of employees								
Other taxes less subsidies on production								
Consumption of fixed capital								
<i>Net operating surplus and mixed income</i>								
<b>Allocation of primary income account</b>								
Net operating surplus and mixed income	1,990.3	2,061.3	2,173.9	2,274.3	2,301.1	2,321.4	2,349.8	2,357.2
Compensation of employees	3,784.8	3,897.9	4,057.0	4,185.5	4,238.2	4,287.8	4,339.3	4,385.1
Taxes less subsidies on production	935.0	983.8	1,050.4	1,088.9	1,097.3	1,097.7	1,095.2	1,094.9
Property income	2,350.2	2,605.1	3,025.1	3,410.5	3,532.2	3,614.9	3,697.8	3,773.2
Interest	1,216.8	1,315.9	1,609.1	1,872.1	1,964.5	2,035.2	2,099.2	2,162.1
Other property income	1,133.4	1,289.3	1,416.1	1,538.5	1,567.7	1,579.8	1,598.6	1,611.1
<i>Net national income</i>								
<b>Secondary distribution of income account</b>								
Net national income	6,692.8	6,938.0	7,288.1	7,562.5	7,649.8	7,712.0	7,773.3	7,818.0
Current taxes on income, wealth, etc.	886.8	937.1	1,029.6	1,092.9	1,116.6	1,132.1	1,142.8	1,143.2
Social contributions	1,429.1	1,471.7	1,533.9	1,575.9	1,592.8	1,609.6	1,626.3	1,643.6
Social benefits other than social transfers in kind	1,447.8	1,491.4	1,541.3	1,569.9	1,585.6	1,597.1	1,610.2	1,627.3
Other current transfers	614.2	625.2	627.8	644.1	651.8	656.9	662.6	668.1
Net non-life insurance premiums	178.7	179.3	177.5	181.2	182.1	182.4	183.9	184.5
Non-life insurance claims	175.9	177.0	174.7	178.8	179.8	180.2	181.4	181.9
Other	259.6	268.9	275.5	284.1	289.9	294.3	297.2	301.7
<i>Net disposable income</i>								
<b>Use of income account</b>								
Net disposable income	6,617.0	6,851.2	7,196.9	7,471.6	7,557.0	7,614.1	7,674.3	7,721.7
Final consumption expenditure								
Individual consumption expenditure								
Collective consumption expenditure								
Adjustment for the change in net equity of households in pension funds reserves	58.2	60.7	59.3	58.2	59.6	60.7	63.6	65.8
<i>Net saving</i>								
<b>Capital account</b>								
Net saving	532.8	524.3	606.0	704.2	717.6	706.9	692.8	668.7
Gross capital formation								
Gross fixed capital formation								
Changes in inventories and acquisitions less disposals of valuables								
Consumption of fixed capital	1,124.0	1,177.8	1,234.9	1,284.5	1,299.4	1,310.7	1,322.7	1,335.3
Acquisitions less disposals of non-produced non-financial assets								
Capital transfers	190.6	194.1	188.4	192.4	180.6	182.8	187.8	180.4
Capital taxes	29.9	24.4	22.5	23.8	23.8	23.4	23.6	23.9
Other capital transfers	160.7	169.7	165.9	168.6	156.8	159.4	164.2	156.4
<i>Net lending (+)/net borrowing (-) (from capital account)</i>								

Sources: ECB and Eurostat.

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

### 3.3 Households

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

	2004	2005	2006	2006 Q4- 2007 Q3	2007 Q1- 2007 Q4	2007 Q2- 2008 Q1	2007 Q3- 2008 Q2	2007 Q4- 2008 Q3
<b>Income, saving and changes in net worth</b>								
Compensation of employees (+)	3,784.8	3,897.9	4,057.0	4,185.5	4,238.2	4,287.8	4,339.3	4,385.1
Gross operating surplus and mixed income (+)	1,270.6	1,321.8	1,397.7	1,462.7	1,480.6	1,499.5	1,517.8	1,532.8
Interest receivable (+)	233.2	229.9	266.4	291.9	301.8	311.1	321.1	330.6
Interest payable (-)	126.2	130.5	164.4	198.2	208.7	215.6	222.1	228.2
Other property income receivable (+)	667.1	716.1	756.4	787.3	793.9	795.4	799.6	803.8
Other property income payable (-)	9.2	9.5	9.7	9.7	9.9	9.9	10.0	9.7
Current taxes on income and wealth (-)	707.4	739.8	792.3	832.9	851.8	866.1	880.3	886.4
Net social contributions (-)	1,426.3	1,468.4	1,530.6	1,572.6	1,589.4	1,606.3	1,623.0	1,640.2
Net social benefits (+)	1,442.9	1,486.2	1,535.9	1,564.3	1,580.0	1,591.5	1,604.6	1,621.7
Net current transfers receivable (+)	64.0	67.0	67.1	68.7	69.4	69.5	72.1	73.1
<b>= Gross disposable income</b>	<b>5,193.5</b>	<b>5,370.8</b>	<b>5,583.5</b>	<b>5,747.1</b>	<b>5,804.2</b>	<b>5,857.0</b>	<b>5,919.1</b>	<b>5,982.6</b>
Final consumption expenditure (-)	4,489.7	4,669.7	4,867.5	4,996.4	5,048.8	5,101.5	5,152.3	5,203.4
Changes in net worth in pension funds (+)	57.8	60.3	58.9	58.1	59.6	60.8	63.6	65.7
<b>= Gross saving</b>	<b>761.5</b>	<b>761.4</b>	<b>774.9</b>	<b>808.7</b>	<b>815.0</b>	<b>816.3</b>	<b>830.4</b>	<b>845.0</b>
Consumption of fixed capital (-)	301.5	317.3	334.5	348.4	352.7	355.7	359.2	362.2
Net capital transfers receivable (+)	18.4	23.9	22.1	17.7	15.2	15.6	15.8	15.2
Other changes in net worth <sup>1)</sup> (+)	322.6	525.0	542.7	239.9	-36.0	-838.4	-1,240.6	-1,466.8
<b>= Changes in net worth <sup>1)</sup></b>	<b>801.0</b>	<b>993.0</b>	<b>1,005.2</b>	<b>717.8</b>	<b>441.6</b>	<b>-362.2</b>	<b>-753.6</b>	<b>-968.9</b>
<b>Investment, financing and changes in net worth</b>								
Net acquisition of non-financial assets (+)	519.9	552.0	607.2	638.5	640.9	642.4	643.1	640.7
Consumption of fixed capital (-)	301.5	317.3	334.5	348.4	352.7	355.7	359.2	362.2
Main items of financial investment (+)								
Short-term assets	214.2	206.3	307.6	395.0	417.6	439.4	415.9	424.0
Currency and deposits	212.7	247.1	284.3	327.7	347.3	381.9	382.7	387.8
Money market fund shares	-7.1	-20.2	0.9	42.5	40.0	34.1	10.5	14.3
Debt securities <sup>2)</sup>	8.6	-20.6	22.5	24.9	30.3	23.4	22.7	21.9
Long-term assets	349.7	422.0	349.3	213.8	208.8	153.8	166.2	109.7
Deposits	32.8	-4.8	0.2	-29.6	-28.6	-33.1	-30.7	-31.8
Debt securities	64.2	3.1	85.6	17.4	35.7	50.6	82.2	73.5
Shares and other equity	0.0	130.8	-22.4	-40.6	-50.6	-104.2	-112.6	-147.7
Quoted, unquoted shares and other equity	-9.6	62.6	-2.2	26.9	23.8	-9.4	-3.8	-14.9
Mutual fund shares	9.6	68.2	-20.1	-67.5	-74.4	-94.8	-108.8	-132.8
Life insurance and pension fund reserves	252.7	292.9	285.8	266.7	252.3	240.5	227.3	215.7
Main items of financing (-)								
Loans	308.0	389.9	392.3	365.7	350.8	310.2	278.2	240.3
of which from euro area MFIs	277.8	358.5	348.3	303.2	283.2	251.2	199.2	183.9
Other changes in financial assets (+)								
Shares and other equity	281.9	450.3	493.3	233.1	-69.4	-746.0	-1,096.5	-1,198.4
Life insurance and pension fund reserves	48.9	105.6	54.5	21.6	2.1	-76.1	-130.9	-182.5
Remaining net flows (+)	-4.1	-35.9	-80.0	-70.0	-55.1	-110.0	-114.0	-159.9
<b>= Changes in net worth <sup>1)</sup></b>	<b>801.0</b>	<b>993.0</b>	<b>1,005.2</b>	<b>717.8</b>	<b>441.6</b>	<b>-362.2</b>	<b>-753.6</b>	<b>-968.9</b>
<b>Financial balance sheet</b>								
Financial assets (+)								
Short-term assets	4,271.6	4,487.7	4,749.8	5,013.7	5,201.4	5,354.4	5,472.5	5,531.8
Currency and deposits	3,925.7	4,175.5	4,455.9	4,652.6	4,843.4	4,934.1	5,050.7	5,100.9
Money market fund shares	309.9	296.4	257.6	298.4	296.0	347.0	346.5	349.5
Debt securities <sup>2)</sup>	36.0	15.8	36.4	62.7	62.1	73.3	75.3	81.5
Long-term assets	9,943.8	10,945.7	11,908.3	12,085.0	12,014.0	11,356.8	11,087.6	10,650.7
Deposits	898.1	947.6	945.2	912.8	879.6	831.3	824.5	814.1
Debt securities	1,219.1	1,198.6	1,312.6	1,301.6	1,347.8	1,368.2	1,368.1	1,315.6
Shares and other equity	3,976.5	4,550.9	5,061.6	5,077.4	4,943.2	4,329.8	4,050.4	3,694.6
Quoted, unquoted shares and other equity	2,804.4	3,209.1	3,640.6	3,689.6	3,587.5	3,146.4	2,922.5	2,649.6
Mutual fund shares	1,172.2	1,341.8	1,420.9	1,387.9	1,355.7	1,183.4	1,128.0	1,044.9
Life insurance and pension fund reserves	3,850.1	4,248.6	4,588.9	4,793.2	4,843.4	4,827.6	4,844.6	4,826.4
Remaining net assets (+)	99.7	55.6	18.1	9.1	-14.1	-47.0	-53.5	-64.5
Liabilities (-)								
Loans	4,285.3	4,691.9	5,091.2	5,329.3	5,413.2	5,450.4	5,512.6	5,557.8
of which from euro area MFIs	3,812.5	4,210.4	4,559.5	4,769.8	4,827.8	4,863.3	4,890.1	4,940.1
<b>= Net financial wealth</b>	<b>10,029.9</b>	<b>10,797.1</b>	<b>11,585.1</b>	<b>11,778.4</b>	<b>11,788.2</b>	<b>11,213.9</b>	<b>10,994.0</b>	<b>10,560.2</b>

Sources: ECB and Eurostat.

1) Excluding changes in net worth due to other changes in non-financial assets such as revaluations of residential property.

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

## 3.4 Non-financial corporations

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

	2004	2005	2006	2006 Q4- 2007 Q3	2007 Q1- 2007 Q4	2007 Q2- 2008 Q1	2007 Q3- 2008 Q2	2007 Q4- 2008 Q3
<b>Income and saving</b>								
Gross value added (basic prices) (+)	4,015.8	4,155.7	4,354.7	4,531.1	4,587.4	4,632.6	4,684.8	4,720.1
Compensation of employees (-)	2,397.7	2,469.6	2,580.2	2,670.7	2,705.1	2,739.8	2,771.9	2,802.1
Other taxes less subsidies on production (-)	65.6	72.8	75.1	80.0	81.2	81.3	80.9	81.0
<b>= Gross operating surplus (+)</b>	<b>1,552.5</b>	<b>1,613.3</b>	<b>1,699.4</b>	<b>1,780.4</b>	<b>1,801.1</b>	<b>1,811.5</b>	<b>1,831.9</b>	<b>1,837.0</b>
Consumption of fixed capital (-)	636.9	667.3	698.0	726.7	735.5	742.0	748.8	756.5
<b>= Net operating surplus (+)</b>	<b>915.6</b>	<b>946.0</b>	<b>1,001.5</b>	<b>1,053.6</b>	<b>1,065.6</b>	<b>1,069.4</b>	<b>1,083.1</b>	<b>1,080.5</b>
Property income receivable (+)	376.9	442.3	505.8	563.7	579.0	586.7	590.5	594.9
Interest receivable	125.1	136.1	158.3	177.6	184.7	189.6	193.9	195.8
Other property income receivable	251.9	306.1	347.5	386.1	394.3	397.1	396.7	399.1
Interest and rents payable (-)	226.3	236.3	278.5	317.4	331.4	345.2	357.2	368.7
<b>= Net entrepreneurial income (+)</b>	<b>1,066.3</b>	<b>1,152.0</b>	<b>1,228.8</b>	<b>1,299.9</b>	<b>1,313.2</b>	<b>1,310.9</b>	<b>1,316.4</b>	<b>1,306.7</b>
Distributed income (-)	773.3	878.0	944.8	990.6	1,002.4	1,011.4	1,024.3	1,031.8
Taxes on income and wealth payable (-)	135.4	148.6	187.5	204.5	208.9	209.7	206.9	201.3
Social contributions receivable (+)	73.5	72.7	77.1	69.0	66.8	66.0	66.6	67.0
Social benefits payable (-)	60.4	60.6	62.5	64.0	64.4	64.5	64.3	64.0
Other net transfers (-)	59.8	61.4	64.2	56.0	54.9	54.5	55.9	55.6
<b>= Net saving</b>	<b>110.9</b>	<b>76.1</b>	<b>46.9</b>	<b>53.9</b>	<b>49.3</b>	<b>36.8</b>	<b>31.6</b>	<b>20.9</b>
<b>Investment, financing and saving</b>								
Net acquisition of non-financial assets (+)	218.1	244.2	293.8	321.7	343.0	353.2	366.6	376.3
Gross fixed capital formation (+)	847.9	903.5	975.5	1,035.8	1,055.9	1,069.5	1,086.7	1,099.1
Consumption of fixed capital (-)	636.9	667.3	698.0	726.7	735.5	742.0	748.8	756.5
Net acquisition of other non-financial assets (+)	7.1	7.9	16.3	12.6	22.5	25.7	28.8	33.7
Main items of financial investment (+)								
Short-term assets	103.8	128.2	148.9	171.8	167.6	160.7	120.6	100.2
Currency and deposits	89.2	113.7	144.0	158.4	149.1	122.4	110.3	87.6
Money market fund shares	16.1	8.3	2.6	-7.7	-18.1	-10.0	-9.3	7.1
Debt securities <sup>1)</sup>	-1.5	6.2	2.3	21.1	36.6	48.3	19.7	5.5
Long-term assets	193.8	379.7	412.0	476.8	462.5	513.8	485.2	495.2
Deposits	-4.5	29.2	28.6	28.6	23.4	-3.0	-21.7	10.9
Debt securities	-50.6	-33.4	-20.3	-51.7	-70.0	-84.5	-111.2	-72.5
Shares and other equity	189.0	242.2	229.6	289.6	322.8	390.3	402.6	385.1
Other, mainly intercompany loans	59.9	141.7	174.0	210.4	186.3	211.0	215.5	171.7
Remaining net assets (+)	67.7	84.9	196.6	204.3	179.4	110.9	35.6	-22.6
Main items of financing (-)								
Debt	204.8	439.3	703.3	770.1	783.5	782.0	696.3	665.0
of which loans from euro area MFIs	164.8	264.5	449.8	522.4	559.5	593.7	562.8	517.2
of which debt securities	9.7	14.3	38.5	29.9	35.3	37.0	11.8	31.3
Shares and other equity	202.0	260.8	229.9	273.8	253.6	251.4	210.3	189.4
Quoted shares	11.7	101.5	38.7	82.0	41.8	21.4	-13.1	-28.9
Unquoted shares and other equity	190.3	159.3	191.1	191.8	211.8	230.0	223.4	218.2
Net capital transfers receivable (-)	65.7	60.7	71.2	74.6	66.8	69.2	73.3	76.6
<b>= Net saving</b>	<b>110.9</b>	<b>76.1</b>	<b>46.9</b>	<b>53.9</b>	<b>49.3</b>	<b>36.8</b>	<b>31.6</b>	<b>20.9</b>
<b>Financial balance sheet</b>								
Financial assets								
Short-term assets	1,379.7	1,510.1	1,652.2	1,753.9	1,821.3	1,838.4	1,845.6	1,862.4
Currency and deposits	1,102.9	1,221.8	1,357.5	1,430.4	1,501.2	1,486.0	1,514.0	1,529.7
Money market fund shares	164.1	176.5	184.9	186.6	162.0	183.0	183.2	183.6
Debt securities <sup>1)</sup>	112.7	111.8	109.9	136.9	158.1	169.4	148.5	149.1
Long-term assets	7,577.4	8,591.9	9,838.6	10,461.0	10,549.9	9,919.4	9,723.5	9,525.4
Deposits	159.6	198.9	227.2	275.0	269.7	259.8	254.1	286.6
Debt securities	323.7	279.3	273.1	206.0	201.8	186.8	166.6	162.7
Shares and other equity	5,398.0	6,270.7	7,316.1	7,795.1	7,848.3	7,182.5	6,957.4	6,690.4
Other, mainly intercompany loans	1,696.2	1,843.0	2,022.1	2,185.0	2,230.1	2,290.2	2,345.5	2,385.8
Remaining net assets	296.1	363.1	469.4	557.0	582.0	552.1	493.3	513.2
Liabilities								
Debt	6,524.1	7,013.8	7,713.8	8,286.7	8,483.0	8,650.7	8,832.3	8,958.5
of which loans from euro area MFIs	3,160.8	3,433.0	3,872.5	4,247.9	4,407.4	4,548.1	4,670.7	4,763.0
of which debt securities	649.6	672.7	689.6	710.4	715.0	720.8	723.7	728.4
Shares and other equity	9,583.9	10,929.7	12,718.8	13,614.6	13,631.8	12,251.9	11,798.5	11,040.7
Quoted shares	2,992.4	3,689.1	4,457.7	4,939.0	4,960.3	4,184.4	3,946.7	3,416.3
Unquoted shares and other equity	6,591.6	7,240.5	8,261.1	8,675.6	8,671.5	8,067.5	7,851.9	7,624.3

Sources: ECB and Eurostat.

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

### 3.5 Insurance corporations and pension funds

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

	2004	2005	2006	2006 Q4- 2007 Q3	2007 Q1- 2007 Q4	2007 Q2- 2008 Q1	2007 Q3- 2008 Q2	2007 Q4- 2008 Q3
<b>Financial account, financial transactions</b>								
<b>Main items of financial investment (+)</b>								
Short-term assets	39.4	25.6	53.7	51.5	47.9	64.4	78.4	93.7
Currency and deposits	13.2	7.2	12.4	8.8	7.8	32.6	34.3	32.5
Money market fund shares	2.7	-0.5	3.5	1.6	3.1	15.8	14.2	20.5
Debt securities <sup>1)</sup>	23.5	18.9	37.8	41.0	37.0	16.0	29.9	40.6
Long-term assets	223.6	293.5	321.1	263.6	236.1	228.9	187.4	176.2
Deposits	36.8	16.9	76.9	67.2	53.3	30.0	17.1	0.6
Debt securities	133.3	131.9	129.5	150.7	128.2	108.9	93.9	97.1
Loans	7.3	-4.1	1.6	-21.7	-17.6	16.4	16.6	20.5
Quoted shares	12.7	30.7	0.0	2.6	-0.6	4.0	1.5	-2.2
Unquoted shares and other equity	2.6	30.9	29.2	23.8	23.6	42.4	39.1	44.8
Mutual fund shares	30.9	87.2	83.9	41.0	49.1	27.2	19.1	15.4
Remaining net assets (+)	12.7	18.3	22.8	30.5	5.4	4.1	6.5	13.2
<b>Main items of financing (-)</b>								
Debt securities	-1.7	-0.4	5.2	3.0	1.1	1.1	2.0	2.2
Loans	4.7	17.4	40.2	22.2	7.2	32.3	11.9	4.0
Shares and other equity	12.3	13.8	10.7	9.2	1.5	1.7	4.1	3.3
Insurance technical reserves	262.6	334.3	332.4	324.9	305.5	287.5	273.3	258.6
Net equity of households in life insurance and pension fund reserves	231.0	292.1	282.7	277.2	267.3	255.8	241.3	226.1
Prepayments of insurance premiums and reserves for outstanding claims	31.7	42.2	49.7	47.6	38.2	31.6	32.0	32.5
<b>= Changes in net financial worth due to transactions</b>	-2.2	-27.8	9.1	-13.7	-25.9	-25.1	-19.1	15.0
<b>Other changes account</b>								
<b>Other changes in financial assets (+)</b>								
Shares and other equity	110.7	190.7	178.8	123.2	-4.5	-217.2	-325.8	-390.8
Other net assets	142.4	68.5	-35.2	-98.8	-54.4	-6.7	-6.8	-11.9
<b>Other changes in liabilities (-)</b>								
Shares and other equity	21.3	118.4	47.3	14.9	-21.0	-92.1	-152.9	-133.3
Insurance technical reserves	83.7	137.9	52.7	24.7	15.2	-61.5	-117.0	-171.6
Net equity of households in life insurance and pension fund reserves	63.9	147.0	56.0	25.0	1.3	-74.1	-128.5	-180.8
Prepayments of insurance premiums and reserves for outstanding claims	19.8	-9.1	-3.3	-0.3	13.9	12.6	11.5	9.3
<b>= Other changes in net financial worth</b>	148.1	2.9	43.6	-15.2	-53.2	-70.3	-62.7	-97.8
<b>Financial balance sheet</b>								
<b>Financial assets (+)</b>								
Short-term assets	403.1	433.4	488.0	522.2	530.7	570.4	590.1	612.7
Currency and deposits	133.6	142.7	154.6	154.0	163.2	190.9	180.0	189.1
Money market fund shares	74.4	75.6	81.5	82.9	82.4	95.4	94.8	98.0
Debt securities <sup>1)</sup>	195.1	215.1	251.9	285.3	285.0	284.1	315.4	325.6
Long-term assets	4,092.9	4,614.6	5,050.3	5,252.7	5,233.0	5,121.2	5,077.8	5,037.0
Deposits	500.8	520.9	597.9	647.1	647.8	646.5	650.4	646.1
Debt securities	1,617.9	1,776.8	1,848.7	1,927.3	1,934.6	1,970.0	1,966.8	2,017.1
Loans	348.3	353.1	350.4	332.7	327.6	354.2	353.1	355.4
Quoted shares	587.2	653.3	732.4	768.7	737.0	637.7	613.2	559.6
Unquoted shares and other equity	349.6	403.2	474.3	484.0	497.1	479.2	466.2	457.1
Mutual fund shares	689.2	907.2	1,046.6	1,092.9	1,088.8	1,033.8	1,028.1	1,001.5
Remaining net assets (+)	131.9	176.7	223.2	221.0	224.5	239.8	225.6	225.1
<b>Liabilities (-)</b>								
Debt securities	22.3	21.3	26.7	26.1	27.2	26.2	26.7	26.4
Loans	118.0	136.3	171.8	195.0	175.9	210.1	201.5	199.3
Shares and other equity	497.6	629.8	687.8	697.6	668.3	613.7	582.5	567.6
Insurance technical reserves	4,086.9	4,559.2	4,944.3	5,196.7	5,265.0	5,267.5	5,295.0	5,283.8
Net equity of households in life insurance and pension fund reserves	3,454.5	3,893.5	4,232.3	4,451.9	4,500.9	4,492.3	4,512.6	4,497.2
Prepayments of insurance premiums and reserves for outstanding claims	632.5	665.6	712.0	744.8	764.0	775.1	782.4	786.6
<b>= Net financial wealth</b>	-96.9	-121.8	-69.1	-119.6	-148.2	-186.1	-212.1	-202.4

Source: ECB.

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

## FINANCIAL MARKETS

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

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

	Total in euro <sup>1)</sup>			By euro area residents								
	Outstanding amounts	Gross issues	Net issues	In euro			In all currencies					
				Outstanding amounts	Gross issues	Net issues	Outstanding amounts	Gross issues	Net issues	Annual growth rates	Seasonally adjusted <sup>2)</sup>	
1	2	3	4	5	6	7	8	9	10	Net issues	6-month growth rates	
											11	12
<b>Total</b>												
2007 Nov.	12,866.2	1,177.9	88.5	10,781.6	1,109.6	70.6	12,083.4	1,161.9	65.5	8.6	52.9	7.5
Dec.	12,890.9	1,040.8	27.8	10,777.6	959.2	-1.0	12,063.6	1,002.3	-18.4	9.0	94.2	8.1
2008 Jan.	12,923.6	1,200.1	36.6	10,830.9	1,130.5	57.4	12,130.7	1,196.2	67.0	8.5	28.2	7.5
Feb.	13,004.6	1,025.8	82.1	10,902.0	967.2	72.2	12,186.7	1,035.4	75.4	8.0	44.8	6.9
Mar.	13,110.7	1,072.1	105.1	10,949.2	967.7	46.0	12,207.5	1,023.2	43.7	7.0	20.1	6.1
Apr.	13,160.3	1,159.2	49.7	11,014.1	1,067.6	65.0	12,285.6	1,132.3	77.0	7.0	57.9	5.0
May	13,338.7	1,125.0	178.4	11,153.0	1,035.2	138.9	12,448.2	1,109.1	153.7	6.7	98.6	5.8
June	13,475.4	1,154.4	135.1	11,228.7	1,039.1	74.1	12,520.0	1,111.4	80.3	6.8	87.1	5.6
July	13,487.9	1,136.3	11.0	11,286.5	1,070.9	55.9	12,595.9	1,158.1	75.5	7.1	97.6	6.8
Aug.	13,614.2	878.4	123.4	11,395.1	813.9	105.8	12,727.0	887.9	112.3	7.8	163.4	8.8
Sep.	13,617.9	1,020.5	2.2	11,363.8	929.1	-32.7	12,687.4	1,000.6	-41.8	7.1	-13.0	8.2
Oct.	.	.	.	11,511.9	1,414.0	148.1	12,883.2	1,492.6	144.4	7.0	102.4	8.9
Nov.	.	.	.	11,734.3	1,364.1	222.8	13,073.3	1,432.3	210.1	8.1	196.2	10.5
<b>Long-term</b>												
2007 Nov.	11,580.7	176.9	80.4	9,626.5	143.3	60.0	10,743.8	158.3	57.0	7.1	39.7	5.3
Dec.	11,636.2	198.9	56.1	9,673.3	164.8	47.4	10,777.6	176.1	36.2	7.3	71.9	5.7
2008 Jan.	11,634.0	194.9	1.2	9,665.1	166.6	-4.9	10,773.6	190.4	0.4	6.7	15.0	5.1
Feb.	11,679.6	182.4	46.5	9,712.8	163.1	48.7	10,811.1	187.5	51.0	6.1	28.6	4.7
Mar.	11,715.5	179.9	35.1	9,738.3	145.1	24.5	10,812.8	160.2	21.3	5.3	11.8	4.5
Apr.	11,802.1	258.4	86.7	9,801.2	207.2	63.0	10,885.9	225.0	68.3	5.5	64.0	4.4
May	11,955.3	290.4	153.4	9,914.6	234.6	113.6	11,009.8	257.1	122.7	5.1	69.0	4.9
June	12,069.4	283.3	114.3	10,002.0	229.8	87.7	11,096.4	252.9	95.0	5.2	67.9	4.8
July	12,095.6	206.5	24.7	10,033.9	176.6	29.9	11,135.6	194.8	35.6	5.4	60.5	5.7
Aug.	12,185.2	158.0	87.5	10,112.4	132.0	76.6	11,235.3	147.7	78.4	6.1	134.3	7.7
Sep.	12,175.0	183.0	-9.4	10,091.7	145.3	-20.0	11,220.0	158.5	-30.2	5.7	-16.2	7.1
Oct.	.	.	.	10,125.0	179.9	34.2	11,310.0	193.6	29.9	5.3	22.0	6.3
Nov.	.	.	.	10,295.9	248.9	170.1	11,462.0	257.6	161.8	6.2	141.9	7.6

### 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											
2006	11,102	4,571	1,191	617	4,411	313	948	699	42	87	110	8
2007	12,064	5,053	1,502	662	4,520	327	1,137	841	59	109	116	12
2007 Q4	12,064	5,053	1,502	662	4,520	327	1,171	888	81	94	92	16
2008 Q1	12,207	5,095	1,517	667	4,612	317	1,085	786	38	92	150	19
Q2	12,520	5,235	1,622	681	4,662	320	1,118	786	69	102	140	20
Q3	12,687	5,273	1,691	689	4,711	324	1,015	690	54	97	147	27
2008 Aug.	12,727	5,318	1,690	687	4,707	325	888	586	81	87	113	20
Sep.	12,687	5,273	1,691	689	4,711	324	1,001	673	37	101	164	26
Oct.	12,883	5,312	1,729	695	4,817	330	1,493	1,020	94	111	242	25
Nov.	13,073	5,332	1,798	698	4,913	332	1,432	966	121	97	223	25
	Short-term											
2006	1,014	573	29	79	322	12	766	616	11	80	56	4
2007	1,286	786	36	101	345	18	946	754	18	101	64	9
2007 Q4	1,286	786	36	101	345	18	984	809	23	86	55	12
2008 Q1	1,395	817	48	112	407	11	906	700	21	88	83	14
Q2	1,424	832	51	114	415	11	873	665	21	92	77	17
Q3	1,467	824	61	112	457	13	848	614	25	92	94	24
2008 Aug.	1,492	859	63	116	442	11	740	521	31	84	88	18
Sep.	1,467	824	61	112	457	13	842	602	21	95	101	23
Oct.	1,573	826	63	114	553	17	1,299	933	54	105	189	18
Nov.	1,611	841	61	117	574	18	1,175	884	35	89	146	20
	Long-term <sup>2)</sup>											
2006	10,089	3,998	1,162	539	4,089	301	181	84	31	8	54	5
2007	10,778	4,267	1,466	561	4,174	309	191	86	41	8	52	3
2007 Q4	10,778	4,267	1,466	561	4,174	309	187	79	59	9	37	4
2008 Q1	10,813	4,278	1,469	555	4,205	306	179	86	17	4	67	5
Q2	11,096	4,403	1,571	566	4,247	309	245	120	48	10	64	3
Q3	11,220	4,448	1,630	577	4,254	311	167	76	29	5	53	3
2008 Aug.	11,235	4,459	1,627	571	4,265	313	148	66	51	3	26	2
Sep.	11,220	4,448	1,630	577	4,254	311	159	71	16	5	63	3
Oct.	11,310	4,487	1,666	581	4,264	313	194	87	40	7	53	7
Nov.	11,462	4,491	1,737	581	4,339	314	258	82	86	8	77	5
	Of which long-term fixed rate											
2006	7,059	2,135	544	413	3,731	237	108	40	12	5	48	3
2007	7,324	2,272	588	426	3,788	250	107	44	10	5	45	3
2007 Q4	7,324	2,272	588	426	3,788	250	93	43	8	6	33	3
2008 Q1	7,303	2,269	582	418	3,789	246	110	43	4	3	56	3
Q2	7,470	2,357	599	430	3,836	248	145	66	11	9	56	2
Q3	7,528	2,381	613	437	3,849	248	101	42	7	3	47	2
2008 Aug.	7,518	2,386	605	432	3,843	251	66	32	9	2	21	1
Sep.	7,528	2,381	613	437	3,849	248	111	41	10	4	55	2
Oct.	7,563	2,404	616	441	3,853	249	96	38	1	6	47	4
Nov.	7,632	2,394	625	443	3,923	248	131	33	17	8	72	1
	Of which long-term variable rate											
2006	2,609	1,513	608	112	312	64	60	34	19	3	4	1
2007	2,998	1,617	860	125	338	58	69	31	30	3	4	0
2007 Q4	2,998	1,617	860	125	338	58	81	25	50	2	3	1
2008 Q1	3,038	1,629	866	126	357	60	53	32	12	1	7	2
Q2	3,169	1,676	947	126	360	60	88	46	36	1	4	1
Q3	3,220	1,692	990	131	345	61	52	24	21	2	4	1
2008 Aug.	3,249	1,696	996	129	366	62	73	27	41	1	3	1
Sep.	3,220	1,692	990	131	345	61	32	20	6	2	4	1
Oct.	3,275	1,711	1,022	131	349	63	86	42	37	1	3	3
Nov.	3,352	1,722	1,084	129	352	64	112	37	68	1	3	3

Source: ECB.

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

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

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

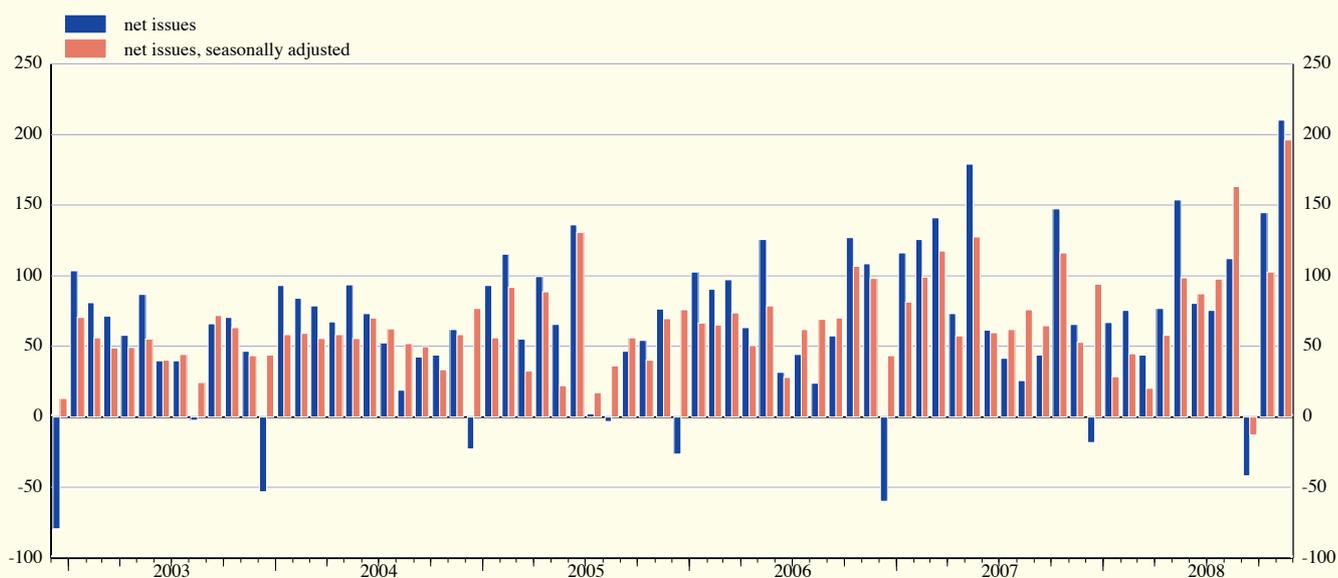
(EUR billions unless otherwise indicated; transactions during the period; nominal values)

## 2. Net issues

	Non-seasonally adjusted <sup>1)</sup>						Seasonally adjusted <sup>1)</sup>					
	Total	MFIs (including Eurosystem)	Non-MFI corporations		General government		Total	MFIs (including Eurosystem)	Non-MFI corporations		General government	
			Financial corporations other than MFIs	Non-financial corporations	Central government	Other general government			Financial corporations other than MFIs	Non-financial corporations	Central government	Other general government
1	2	3	4	5	6	7	8	9	10	11	12	
	Total											
2006	67.6	35.2	20.9	2.2	7.0	2.3	67.6	35.5	20.5	2.2	7.1	2.3
2007	83.4	40.5	27.7	4.2	9.7	1.2	84.0	41.1	27.2	4.4	10.1	1.2
2007 Q4	64.8	32.0	48.6	3.6	-22.9	3.5	87.7	42.5	32.1	5.2	4.9	2.9
2008 Q1	62.0	23.3	7.1	2.6	32.1	-3.1	31.0	4.1	16.8	2.1	11.5	-3.4
Q2	103.7	46.1	35.0	4.8	16.8	0.9	81.2	48.0	30.9	0.6	1.1	0.6
Q3	48.6	11.8	20.2	1.6	13.9	1.2	82.7	19.6	33.4	4.9	22.2	2.4
2008 Aug.	112.3	26.0	47.9	0.9	35.4	2.1	163.4	40.1	66.5	5.9	47.2	3.8
Sep.	-41.8	-39.4	-3.0	0.7	1.2	-1.3	-13.0	-28.2	16.6	5.9	-7.2	0.0
Oct.	144.4	15.0	26.4	0.1	97.4	5.6	102.4	-21.6	11.4	-5.3	113.4	4.5
Nov.	210.1	36.2	70.8	4.8	96.5	1.9	196.2	42.6	61.2	5.4	88.0	-1.1
	Long-term											
2006	63.4	29.0	20.1	2.2	10.1	1.9	63.2	29.1	19.7	2.2	10.2	1.9
2007	61.6	23.8	27.1	2.4	7.7	0.7	61.3	23.9	26.7	2.4	7.7	0.7
2007 Q4	55.2	9.5	45.2	2.5	-3.7	1.6	60.4	17.6	29.2	2.0	10.7	0.8
2008 Q1	24.2	11.5	3.0	-1.0	11.4	-0.7	18.5	2.4	12.5	1.5	2.9	-0.8
Q2	95.3	42.4	34.1	4.0	14.0	0.9	67.0	36.0	30.1	0.4	-0.3	0.7
Q3	27.9	7.9	16.7	2.3	0.6	0.5	59.5	15.7	29.3	3.9	9.0	1.6
2008 Aug.	78.4	9.3	42.1	1.9	23.1	2.0	134.3	27.2	62.0	4.7	36.9	3.5
Sep.	-30.2	-17.7	-0.8	4.4	-13.2	-3.0	-16.2	-12.7	16.0	6.5	-23.6	-2.4
Oct.	29.9	3.7	24.4	-1.8	1.9	1.8	22.0	-3.8	7.0	-3.6	21.6	0.8
Nov.	161.8	10.4	72.6	2.2	75.4	1.3	141.9	14.8	64.2	1.3	63.4	-1.7

## 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.

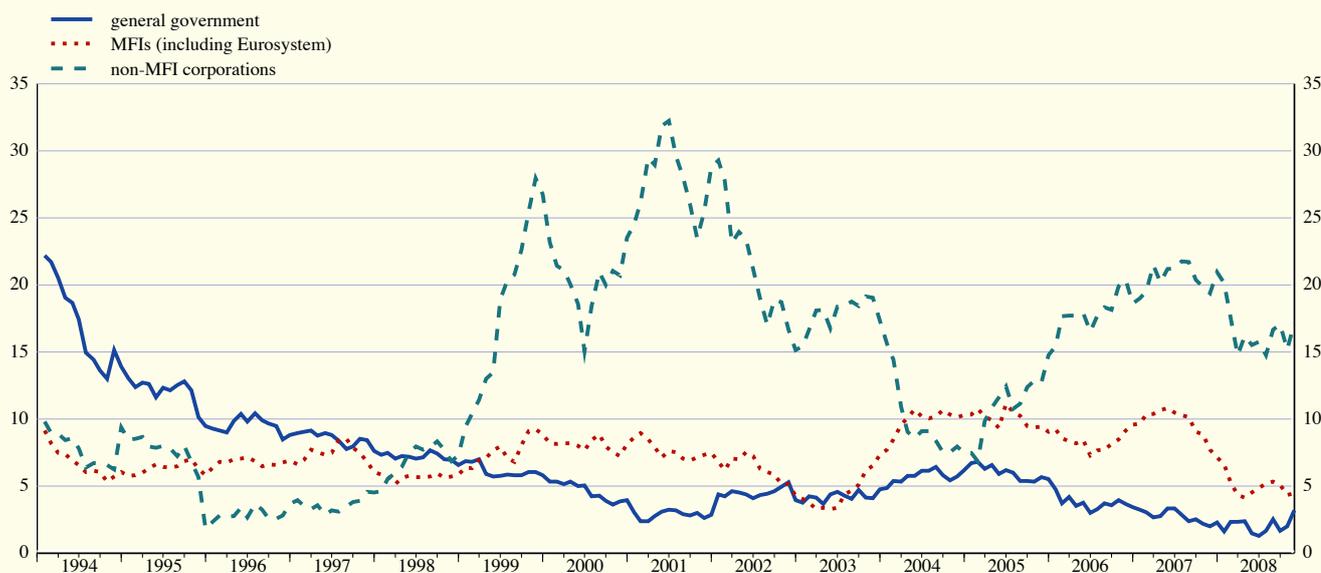
### 4.3 Growth rates of securities, other than shares, issued by euro area residents <sup>1)</sup>

(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												
2007 Nov.	8.6	10.5	25.7	8.0	2.6	4.7	7.5	9.3	22.5	7.8	1.7	4.7
Dec.	9.0	10.6	28.1	8.2	2.6	4.6	8.1	10.5	26.1	4.1	1.2	9.9
2008 Jan.	8.5	10.0	26.9	9.3	2.2	3.0	7.5	9.9	23.8	4.4	1.0	4.3
Feb.	8.0	8.7	23.9	9.1	3.0	2.1	6.9	7.6	21.8	7.4	2.2	0.4
Mar.	7.0	7.7	20.3	7.3	2.8	1.1	6.1	5.7	22.4	6.8	2.2	-1.0
Apr.	7.0	7.3	22.3	6.1	3.0	0.3	5.0	4.1	19.0	4.4	2.5	-3.3
May	6.7	7.9	21.2	6.1	1.7	1.9	5.8	6.3	19.8	4.3	1.7	-0.9
June	6.8	8.2	23.1	3.3	1.4	2.1	5.6	6.3	20.4	2.4	1.7	-5.2
July	7.1	8.5	22.0	2.7	2.1	3.3	6.8	7.3	20.4	0.9	3.1	2.2
Aug.	7.8	8.3	24.6	4.9	3.0	3.4	8.8	9.2	27.3	2.5	3.7	6.6
Sep.	7.1	6.9	24.5	5.8	2.6	2.3	8.2	8.1	27.0	5.0	3.1	5.8
Oct.	7.0	5.3	21.7	4.0	4.9	2.8	8.9	6.5	24.6	3.5	7.3	9.5
Nov.	8.1	5.7	24.4	3.9	6.7	2.8	10.5	5.0	29.2	3.5	11.9	6.8
Long-term												
2007 Nov.	7.1	7.7	25.6	6.2	1.9	3.1	5.3	4.6	21.4	5.6	1.4	3.2
Dec.	7.3	7.1	28.2	5.3	2.2	2.7	5.7	4.2	24.9	2.0	2.0	4.1
2008 Jan.	6.7	6.6	26.6	6.1	1.6	2.2	5.1	4.1	22.7	3.9	1.0	3.1
Feb.	6.1	5.3	22.7	6.0	2.3	1.9	4.7	2.9	18.9	4.5	2.3	0.9
Mar.	5.3	4.3	19.1	4.6	2.4	0.9	4.5	2.9	19.3	3.8	2.0	0.0
Apr.	5.5	4.2	21.2	4.5	2.5	0.4	4.4	2.7	17.8	4.1	2.3	-1.9
May	5.1	4.5	20.0	4.9	1.4	1.8	4.9	4.5	18.4	4.2	1.4	0.5
June	5.2	4.9	21.6	2.1	1.2	1.9	4.8	5.5	18.6	2.0	0.4	-0.1
July	5.4	5.2	20.1	2.0	1.5	3.1	5.7	6.2	17.6	0.2	2.1	3.0
Aug.	6.1	5.3	22.4	2.9	2.4	3.5	7.7	7.7	26.1	1.3	2.5	6.2
Sep.	5.7	5.1	22.3	4.2	1.6	2.2	7.1	7.4	25.7	4.6	1.2	4.6
Oct.	5.3	4.3	20.0	3.3	2.0	1.4	6.3	6.0	22.2	2.4	1.8	5.0
Nov.	6.2	4.5	22.9	2.7	3.3	1.3	7.6	4.5	27.6	1.2	5.2	2.1

### 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.

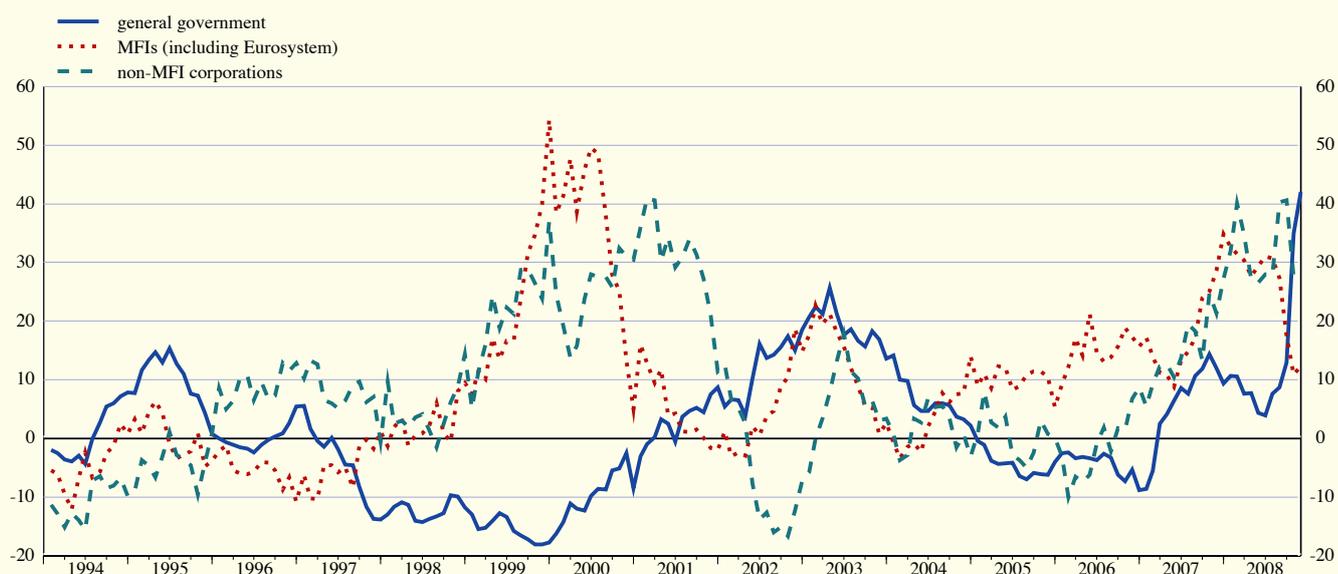
4.3 Growth rates of securities, other than shares, issued by euro area residents <sup>1)</sup> (cont'd)

(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											
2006	4.5	4.7	14.1	0.3	3.2	13.5	16.2	11.9	40.4	24.9	5.0	4.3
2007	5.1	7.1	17.4	3.7	2.4	6.6	15.8	11.1	37.8	18.1	3.8	-1.8
2007 Q4	4.5	6.7	13.1	4.7	1.8	6.3	15.0	9.1	38.5	14.3	4.8	-6.5
2008 Q1	3.3	5.3	8.4	4.5	1.3	3.3	14.1	6.0	37.3	12.8	11.4	-3.2
Q2	2.6	4.3	5.2	3.8	1.3	1.4	12.0	5.0	32.2	8.6	7.6	0.4
Q3	3.1	5.6	5.1	3.2	1.4	2.0	12.5	5.2	33.4	3.3	6.3	6.0
2008 June	2.8	5.3	6.2	2.4	0.9	1.9	11.8	4.9	32.8	2.8	5.4	1.6
July	3.0	5.7	4.8	2.6	1.2	2.1	11.7	5.1	30.9	2.5	5.7	6.6
Aug.	3.3	5.6	4.4	3.4	1.9	2.4	13.7	5.6	35.6	3.7	9.3	7.0
Sep.	3.1	5.5	5.8	4.8	1.1	0.8	12.4	5.1	34.5	4.6	2.6	7.4
Oct.	2.7	4.5	3.7	3.4	1.7	-0.7	11.8	5.3	31.3	5.1	1.6	9.2
Nov.	3.3	4.1	5.2	2.8	3.0	-1.7	13.6	6.0	35.1	4.7	2.3	12.1
	In euro											
2006	3.8	3.1	11.5	-0.4	3.2	13.7	15.0	10.2	36.9	27.1	5.2	3.5
2007	4.5	6.4	14.1	2.0	2.7	6.7	15.1	10.3	35.4	17.8	3.9	-2.4
2007 Q4	4.0	6.2	10.9	3.1	2.1	6.6	14.8	8.7	36.9	13.0	4.9	-7.1
2008 Q1	2.9	4.9	7.1	3.0	1.5	3.5	14.7	5.9	37.6	11.9	11.7	-4.0
Q2	2.4	3.9	4.6	1.7	1.5	1.4	13.2	5.6	33.5	8.3	8.0	-1.2
Q3	3.0	5.4	6.1	0.8	1.6	1.8	14.3	6.7	35.3	3.9	6.7	4.6
2008 June	2.5	5.0	6.6	-0.1	1.1	2.0	13.4	6.3	33.9	3.2	5.8	0.1
July	2.8	5.5	5.3	0.3	1.5	2.0	13.4	6.5	32.8	3.1	6.1	5.2
Aug.	3.3	5.4	6.1	0.9	2.2	2.1	15.7	7.0	37.8	4.5	9.8	5.6
Sep.	3.0	5.6	7.6	2.8	1.4	0.4	14.5	6.8	36.8	5.4	2.9	6.3
Oct.	2.8	4.7	5.8	1.3	1.9	-1.2	13.9	7.0	33.8	6.0	1.8	8.2
Nov.	3.5	4.3	7.9	0.5	3.2	-2.3	15.9	8.0	38.0	5.4	2.5	11.3

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

(annual percentage changes)



Source: ECB.

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

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

(EUR billions, unless otherwise indicated; market values)

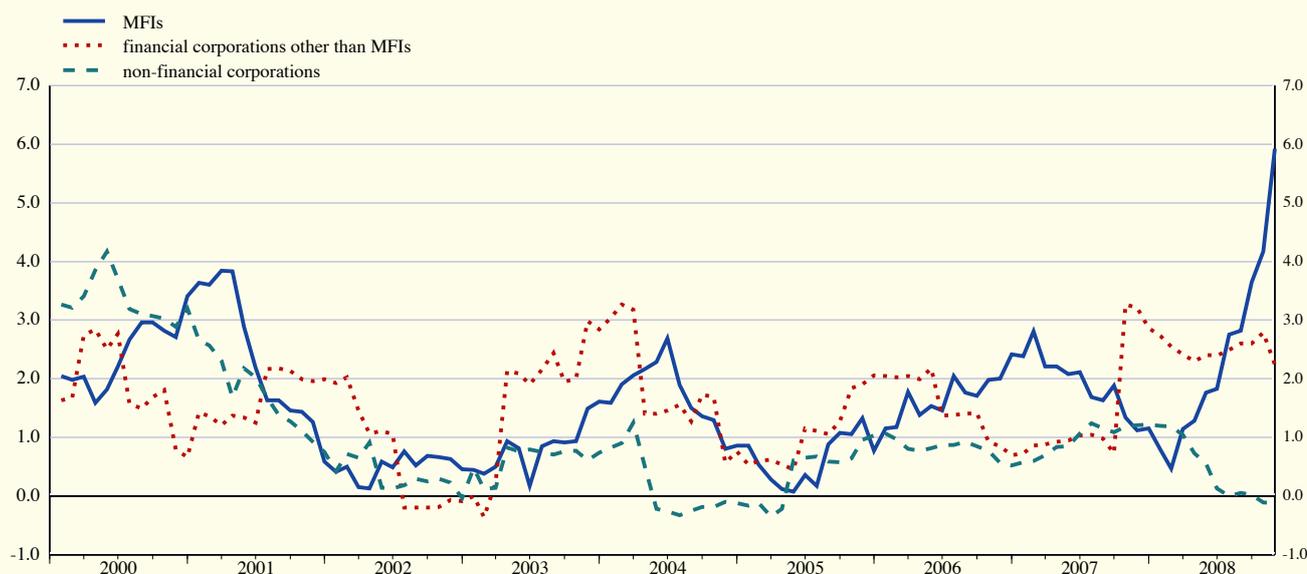
##### 1. Outstanding amounts and annual growth rates

(outstanding amounts as end-of-period)

	Total			MFIs		Financial corporations other than MFIs		Non-financial corporations	
	Total	Index Dec. 01 = 100	Annual growth rates (%)	Total	Annual growth rates (%)	Total	Annual growth rates (%)	Total	Annual growth rates (%)
	1	2	3	4	5	6	7	8	9
2006 Nov.	5,972.3	103.1	0.8	1,031.9	2.0	613.7	0.8	4,326.8	0.6
Dec.	6,191.0	103.2	0.9	1,064.0	2.4	633.3	0.7	4,493.7	0.5
2007 Jan.	6,370.0	103.3	0.9	1,123.6	2.4	646.3	0.7	4,600.2	0.6
Feb.	6,284.1	103.4	1.0	1,093.0	2.8	637.9	0.9	4,553.2	0.6
Mar.	6,510.2	103.5	1.0	1,111.5	2.2	649.3	0.9	4,749.4	0.7
Apr.	6,760.6	103.7	1.1	1,168.8	2.2	675.6	0.9	4,916.3	0.8
May	7,040.5	103.7	1.1	1,174.7	2.1	688.9	0.9	5,177.0	0.8
June	6,962.0	104.0	1.3	1,128.8	2.1	677.2	1.0	5,156.0	1.1
July	6,731.5	104.2	1.3	1,100.0	1.7	608.9	1.0	5,022.6	1.2
Aug.	6,618.2	104.1	1.2	1,060.3	1.6	583.8	1.0	4,974.0	1.2
Sep.	6,682.2	104.2	1.2	1,048.9	1.9	597.3	0.7	5,036.0	1.1
Oct.	6,936.9	104.5	1.4	1,072.9	1.3	629.3	3.3	5,234.7	1.2
Nov.	6,622.5	104.5	1.4	1,032.8	1.1	579.2	3.2	5,010.5	1.2
Dec.	6,579.4	104.6	1.4	1,017.3	1.1	579.0	2.9	4,983.1	1.2
2008 Jan.	5,757.0	104.6	1.3	888.1	0.8	497.4	2.7	4,371.5	1.2
Feb.	5,811.2	104.7	1.2	858.3	0.5	492.4	2.6	4,460.5	1.2
Mar.	5,557.6	104.7	1.2	858.7	1.1	501.3	2.4	4,197.6	1.0
Apr.	5,738.5	104.6	0.9	835.4	1.3	519.4	2.3	4,383.7	0.7
May	5,719.3	104.7	0.9	769.1	1.8	497.1	2.4	4,453.1	0.6
June	5,070.8	104.7	0.6	663.3	1.8	435.8	2.4	3,971.6	0.1
July	4,962.4	104.8	0.6	689.6	2.8	428.2	2.5	3,844.5	0.0
Aug.	4,989.1	104.8	0.7	663.7	2.8	438.4	2.6	3,887.0	0.1
Sep.	4,420.0	104.9	0.7	610.3	3.6	382.2	2.6	3,427.5	0.0
Oct.	3,734.5	105.2	0.7	450.2	4.2	280.3	2.8	3,004.0	-0.1
Nov.	3,474.1	105.5	0.9	392.8	5.9	265.3	2.2	2,816.0	-0.1

#### 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>

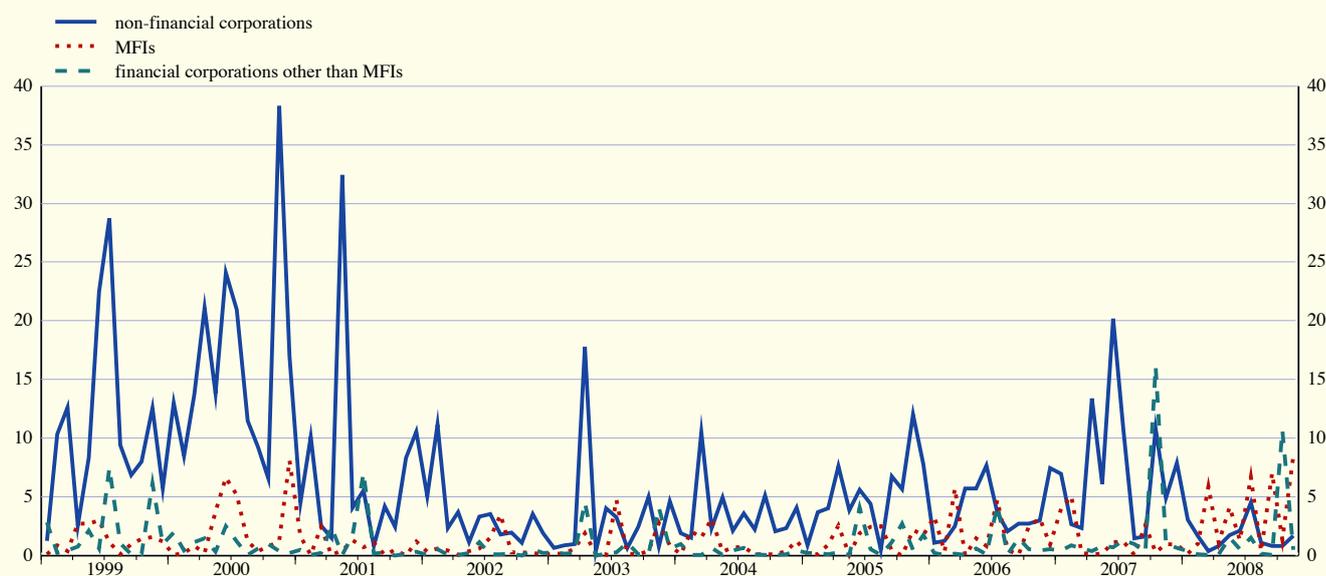
(EUR billions; market values)

##### 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
2006 Nov.	6.5	2.0	4.5	3.1	0.0	3.1	0.4	0.4	0.0	3.0	1.6	1.4
Dec.	8.9	3.8	5.1	0.9	0.3	0.6	0.5	0.0	0.5	7.5	3.4	4.0
2007 Jan.	11.3	3.9	7.4	4.0	0.1	3.8	0.4	0.0	0.4	6.9	3.8	3.2
Feb.	8.5	2.0	6.5	5.0	0.0	5.0	0.9	0.0	0.9	2.7	2.0	0.6
Mar.	3.1	1.7	1.4	0.2	0.0	0.2	0.6	0.3	0.2	2.3	1.4	0.9
Apr.	13.8	0.4	13.4	0.1	0.3	-0.2	0.3	0.0	0.3	13.4	0.2	13.2
May	7.0	1.9	5.2	0.1	0.0	0.1	0.8	0.0	0.8	6.1	1.9	4.2
June	21.9	1.6	20.4	1.1	0.0	1.1	0.7	0.0	0.7	20.2	1.6	18.6
July	13.1	1.8	11.3	1.2	0.0	1.2	1.3	0.3	1.0	10.7	1.5	9.1
Aug.	2.4	6.6	-4.2	0.0	0.1	-0.1	1.0	1.4	-0.5	1.4	5.1	-3.6
Sep.	4.5	2.5	2.0	2.6	0.0	2.6	0.3	0.3	-0.1	1.6	2.1	-0.5
Oct.	27.1	8.0	19.1	0.2	3.2	-3.0	16.1	0.5	15.5	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.	9.4	4.6	4.8	0.9	0.0	0.9	0.7	2.2	-1.5	7.9	2.5	5.4
2008 Jan.	3.6	1.4	2.2	0.1	0.0	0.1	0.4	0.7	-0.3	3.0	0.7	2.3
Feb.	2.7	1.9	0.9	1.0	0.0	1.0	0.1	0.3	-0.2	1.6	1.6	0.1
Mar.	6.3	5.8	0.4	5.9	0.0	5.9	0.0	0.5	-0.4	0.4	5.4	-5.0
Apr.	2.0	3.0	-1.0	1.1	0.0	1.1	0.1	0.5	-0.3	0.8	2.5	-1.7
May	7.3	5.9	1.3	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	1.5	0.0	0.3	0.0	0.3	0.1	0.0	0.1	1.1	1.5	-0.5
Sep.	7.8	2.8	5.0	7.0	0.0	7.0	0.0	0.1	-0.1	0.8	2.8	-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	1.3

#### 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>2),3)</sup>		Overnight <sup>2)</sup>	With agreed maturity			
		Up to 1 year	Over 1 and up to 2 years	Over 2 years	Up to 3 months	Over 3 months		Up to 1 year	Over 1 and up to 2 years		Over 2 years
	1	2	3	4	5	6	7	8	9	10	11
2007 Dec.	1.18	4.28	4.14	3.18	2.57	3.68	1.95	4.26	4.40	4.03	3.95
2008 Jan.	1.20	4.19	4.32	3.43	2.57	3.75	2.01	4.13	4.38	4.68	3.95
Feb.	1.21	4.10	4.18	3.22	2.65	3.77	2.01	4.07	4.18	4.36	3.93
Mar.	1.22	4.14	3.97	3.08	2.69	3.78	2.03	4.20	4.23	4.07	3.96
Apr.	1.22	4.28	4.16	3.14	2.72	3.81	2.05	4.27	4.56	4.64	4.00
May	1.23	4.32	4.27	3.17	2.73	3.84	2.07	4.26	4.68	4.48	4.03
June	1.24	4.43	4.62	3.28	2.74	3.88	2.06	4.28	4.72	4.01	4.11
July	1.26	4.61	4.83	3.37	2.81	3.94	2.14	4.46	5.06	4.57	4.26
Aug.	1.29	4.59	4.84	3.45	2.87	3.98	2.17	4.46	5.34	4.55	4.30
Sep.	1.32	4.65	4.85	3.35	2.97	4.01	2.20	4.52	5.19	4.67	4.27
Oct.	1.34	4.77	4.85	3.56	3.01	4.12	2.20	4.25	5.05	4.55	3.66
Nov.	1.29	4.27	4.68	3.70	3.02	4.20	1.98	3.55	4.59	4.36	3.19

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

	Bank overdrafts <sup>2)</sup>	Consumer credit				Lending for house purchase					Other lending by initial rate fixation		
		By initial rate fixation			Annual percentage rate of charge <sup>4)</sup>	By initial rate fixation				Annual percentage rate of charge <sup>4)</sup>	Floating rate and up to 1 year	Over 1 and up to 5 years	Over 5 years
		Floating rate and up to 1 year	Over 1 and up to 5 years	Over 5 years		Floating rate and up to 1 year	Over 1 and up to 5 years	Over 5 and up to 10 years	Over 10 years				
	1	2	3	4	5	6	7	8	9	10	11	12	13
2007 Dec.	10.46	8.05	6.93	8.17	8.26	5.32	5.03	5.07	5.18	5.40	5.67	5.83	5.43
2008 Jan.	10.46	8.12	7.00	8.47	8.48	5.32	5.02	5.07	5.14	5.37	5.59	5.93	5.49
Feb.	10.45	8.55	7.24	8.44	8.70	5.26	4.97	5.02	5.11	5.35	5.55	5.87	5.55
Mar.	10.52	8.43	7.05	8.42	8.56	5.20	4.89	4.96	5.11	5.28	5.65	5.79	5.46
Apr.	10.53	8.33	7.02	8.46	8.55	5.23	4.91	4.95	5.12	5.29	5.83	5.80	5.45
May	10.57	8.70	7.02	8.44	8.64	5.34	4.96	4.98	5.13	5.36	5.99	5.87	5.59
June	10.63	8.61	6.94	8.44	8.57	5.48	5.11	5.08	5.20	5.46	6.03	6.12	5.67
July	10.66	8.82	7.15	8.58	8.80	5.67	5.27	5.22	5.34	5.62	6.08	6.21	5.82
Aug.	10.77	8.86	7.22	8.69	8.95	5.77	5.37	5.29	5.26	5.69	6.05	6.28	5.70
Sep.	10.80	8.77	7.20	8.70	8.86	5.80	5.43	5.28	5.37	5.71	6.24	6.36	5.77
Oct.	10.83	8.89	7.23	8.70	8.93	5.84	5.39	5.28	5.37	5.69	6.37	6.26	5.80
Nov.	10.80	9.00	7.17	8.68	8.92	5.62	5.33	5.22	5.27	5.60	5.85	6.16	5.60

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

	Bank overdrafts <sup>2)</sup>	Other loans up to EUR 1 million by initial rate fixation			Other loans over EUR 1 million by initial rate fixation		
		Floating rate and up to 1 year	Over 1 and up to 5 years	Over 5 years	Floating rate and up to 1 year	Over 1 and up to 5 years	Over 5 years
		1	2	3	4	5	6
2007 Dec.	6.62	6.08	5.96	5.30	5.35	5.62	5.48
2008 Jan.	6.62	5.93	5.92	5.27	5.12	5.35	5.23
Feb.	6.56	5.84	5.86	5.24	5.04	5.43	5.14
Mar.	6.56	5.91	5.77	5.23	5.19	5.44	5.34
Apr.	6.54	6.03	5.77	5.20	5.30	5.42	5.39
May	6.57	6.10	5.93	5.25	5.27	5.70	5.38
June	6.67	6.16	6.09	5.43	5.35	5.68	5.52
July	6.74	6.26	6.29	5.53	5.45	5.82	5.55
Aug.	6.77	6.27	6.34	5.49	5.45	5.60	5.56
Sep.	6.92	6.34	6.37	5.64	5.62	5.84	5.63
Oct.	6.89	6.52	6.35	5.57	5.59	5.75	5.07
Nov.	6.66	6.04	6.10	5.39	4.87	5.05	5.01

Source: ECB.

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

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

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

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

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

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

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

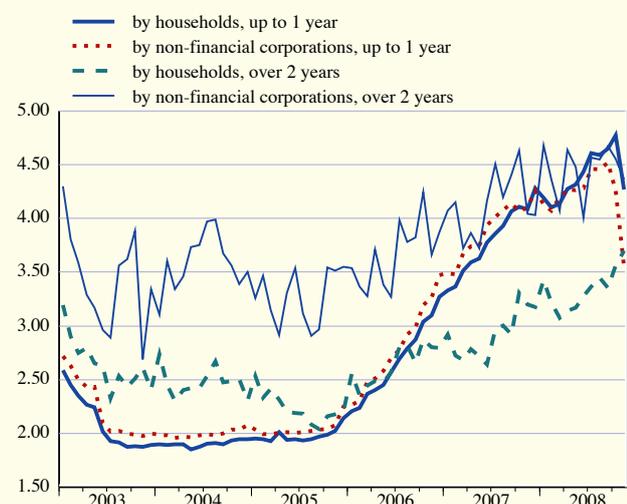
	Deposits from households					Deposits from non-financial corporations			Repos
	Overnight <sup>1)</sup>	With agreed maturity		Redeemable at notice <sup>1)2)</sup>		Overnight <sup>1)</sup>	With agreed maturity		
		Up to 2 years	Over 2 years	Up to 3 months	Over 3 months		Up to 2 years	Over 2 years	
	1	2	3	4	5	6	7	8	9
2007 Dec.	1.18	3.95	3.03	2.57	3.68	1.95	4.33	4.16	4.01
2008 Jan.	1.20	3.98	3.06	2.57	3.75	2.01	4.27	4.21	4.01
Feb.	1.21	3.99	3.11	2.65	3.77	2.01	4.23	4.24	3.97
Mar.	1.22	4.01	3.07	2.69	3.78	2.03	4.29	4.23	3.96
Apr.	1.22	4.07	3.07	2.72	3.81	2.05	4.37	4.29	3.91
May	1.23	4.13	3.06	2.73	3.84	2.07	4.43	4.26	4.04
June	1.24	4.20	3.08	2.74	3.88	2.06	4.47	4.31	4.12
July	1.26	4.31	3.07	2.81	3.94	2.14	4.59	4.39	4.24
Aug.	1.29	4.38	3.09	2.87	3.98	2.17	4.65	4.38	4.23
Sep.	1.32	4.45	3.11	2.97	4.01	2.20	4.73	4.44	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	3.11	3.02	4.20	1.98	4.44	4.42	3.95

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

	Loans to households						Loans to non-financial corporations		
	Lending for house purchase, with maturity			Consumer credit and other loans, with maturity			With maturity		
	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Up to 1 year	Over 1 and up to 5 years	Over 5 years
	1	2	3	4	5	6	7	8	9
2007 Dec.	5.54	4.75	5.00	8.97	7.13	6.22	6.08	5.57	5.28
2008 Jan.	5.62	4.75	5.01	8.99	7.15	6.24	6.06	5.55	5.27
Feb.	5.60	4.82	5.03	9.05	7.21	6.26	5.99	5.52	5.30
Mar.	5.61	4.80	5.02	9.06	7.19	6.25	5.99	5.51	5.27
Apr.	5.59	4.85	5.03	9.07	7.22	6.28	6.04	5.54	5.29
May	5.62	4.85	5.05	9.08	7.22	6.27	6.09	5.59	5.32
June	5.68	4.89	5.07	9.11	7.29	6.35	6.18	5.68	5.39
July	5.72	4.93	5.11	9.19	7.34	6.37	6.25	5.76	5.44
Aug.	5.78	4.95	5.11	9.26	7.38	6.41	6.28	5.79	5.46
Sep.	5.79	5.02	5.14	9.38	7.47	6.47	6.39	5.90	5.54
Oct.	5.81	5.05	5.17	9.45	7.48	6.48	6.43	5.99	5.58
Nov.	5.74	4.99	5.16	9.24	7.51	6.47	6.17	5.81	5.51

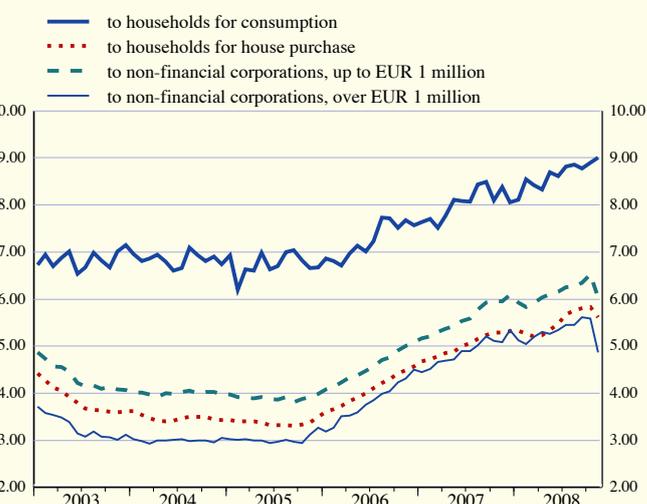
#### C22 New deposits with agreed maturity

(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)

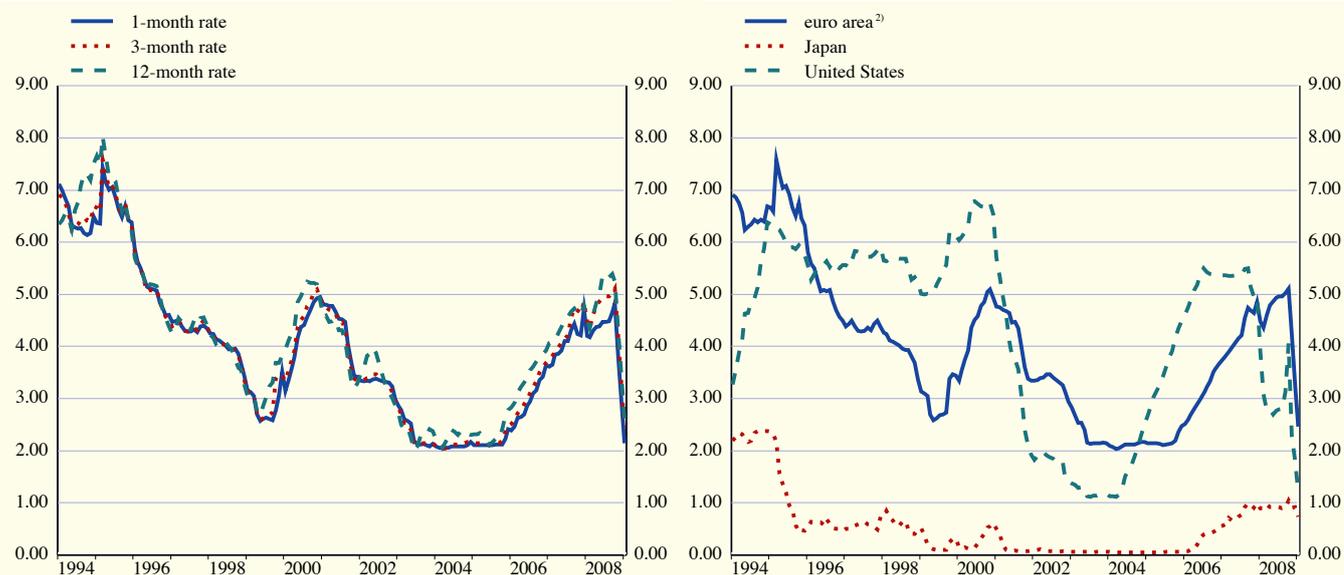
	Euro area <sup>1,2)</sup>					United States	Japan
	Overnight deposits (EONIA)	1-month deposits (EURIBOR)	3-month deposits (EURIBOR)	6-month deposits (EURIBOR)	12-month deposits (EURIBOR)	3-month deposits (LIBOR)	3-month deposits (LIBOR)
	1	2	3	4	5	6	7
2006	2.83	2.94	3.08	3.23	3.44	5.20	0.30
2007	3.87	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
2007 Q4	3.95	4.37	4.72	4.70	4.68	5.03	0.96
2008 Q1	4.05	4.23	4.48	4.48	4.48	3.29	0.92
Q2	4.00	4.41	4.86	4.93	5.05	2.75	0.92
Q3	4.25	4.54	4.98	5.18	5.37	2.91	0.90
Q4	3.17	3.92	4.24	4.31	4.38	2.77	0.96
2008 Jan.	4.02	4.20	4.48	4.50	4.50	3.92	0.89
Feb.	4.03	4.18	4.36	4.36	4.35	3.09	0.90
Mar.	4.09	4.30	4.60	4.59	4.59	2.78	0.97
Apr.	3.99	4.37	4.78	4.80	4.82	2.79	0.92
May	4.01	4.39	4.86	4.90	4.99	2.69	0.92
June	4.01	4.47	4.94	5.09	5.36	2.77	0.92
July	4.19	4.47	4.96	5.15	5.39	2.79	0.92
Aug.	4.30	4.49	4.97	5.16	5.32	2.81	0.89
Sep.	4.27	4.66	5.02	5.22	5.38	3.12	0.91
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

### 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.

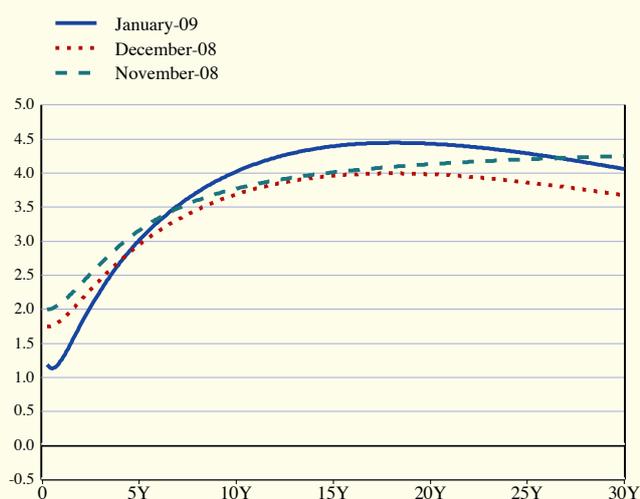
### 4.7 Euro area yield curves <sup>1)</sup>

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

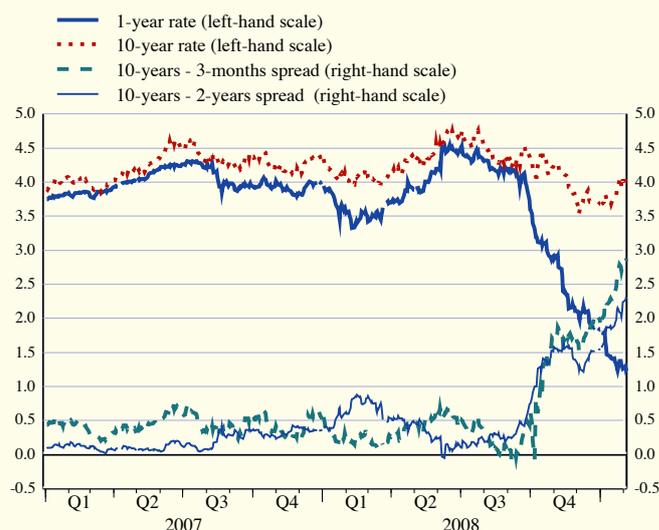
### C26 Euro area spot yield curves

(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
2007 Q4	417.8	4,377.9	567.3	228.3	383.8	455.7	381.2	484.1	406.3	620.0	544.8	509.2	1,494.6	16,002.5
2008 Q1	361.8	3,809.4	520.9	194.0	327.1	412.0	318.1	413.3	339.2	573.3	490.1	454.4	1,351.7	13,372.6
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
2008 Jan.	380.2	4,042.1	529.7	202.3	338.7	431.4	339.7	426.3	351.2	602.9	528.4	492.9	1,380.3	13,953.4
Feb.	360.6	3,776.6	520.7	194.0	323.8	407.6	311.9	417.7	356.2	573.9	493.2	452.6	1,354.6	13,522.6
Mar.	342.9	3,587.3	511.4	184.7	317.6	395.2	300.8	394.7	308.9	540.2	444.9	414.1	1,317.5	12,586.6
Apr.	359.6	3,768.1	553.9	189.3	324.6	423.2	326.5	406.2	312.8	550.2	449.3	429.6	1,370.5	13,382.1
May	367.1	3,812.8	588.9	189.2	328.2	462.5	325.8	424.3	313.2	567.2	447.5	436.3	1,402.0	14,000.2
June	340.2	3,527.8	586.2	176.1	299.6	442.6	287.6	393.5	292.8	553.8	415.3	414.7	1,341.3	14,084.6
July	311.9	3,298.7	529.0	158.2	272.7	401.5	260.0	348.6	281.7	513.7	412.7	418.1	1,257.6	13,153.0
Aug.	316.1	3,346.0	513.7	167.1	287.0	388.1	266.0	356.6	304.4	504.4	411.2	403.0	1,281.5	12,989.4
Sep.	301.3	3,193.7	474.6	161.8	287.4	358.2	255.8	332.2	271.8	465.8	413.2	400.6	1,220.0	12,126.2
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

### 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	82.6	59.1	40.9	100.0	11.9	7.6	29.8	9.8	40.9	88.8	11.2
	1	2	3	4	5	6	7	8	9	10	11	12	13
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
2007 Q4	105.7	2.9	2.3	3.2	2.5	1.0	2.6	1.2	0.3	2.9	0.6	3.0	1.9
2008 Q1	106.4	3.4	2.5	3.9	2.6	1.0	2.1	0.5	0.2	3.4	0.7	3.5	2.5
Q2	108.1	3.6	2.5	4.5	2.4	1.1	1.1	1.1	0.2	6.0	0.6	3.7	2.7
Q3	108.4	3.8	2.5	4.7	2.6	0.7	0.9	1.0	0.1	2.1	0.7	3.9	3.3
Q4	108.2	2.3	2.2	2.1	2.6	-0.5	0.2	0.3	0.4	-8.7	0.6	2.1	3.4
2008 Aug.	108.3	3.8	2.6	4.6	2.7	-0.1	0.3	-0.4	0.3	-3.0	0.3	3.9	3.3
Sep.	108.5	3.6	2.5	4.4	2.6	0.1	0.1	0.2	0.2	-0.4	0.0	3.7	3.4
Oct.	108.6	3.2	2.4	3.5	2.6	-0.1	0.1	0.5	0.2	-2.9	0.2	3.1	3.4
Nov.	108.0	2.1	2.2	1.8	2.6	-0.4	0.0	-0.2	0.0	-4.9	0.2	2.0	3.4
Dec.	107.9	1.6	2.1	0.9	2.6	-0.4	0.0	0.1	0.0	-4.7	0.2	1.3	3.4
2009 Jan. <sup>4)</sup>		1.1											

	Goods						Services						
	Food (incl. alcoholic beverages and tobacco)			Industrial goods			Housing	Transport	Communication	Recreation and personal	Miscellaneous		
	Total	Processed food	Unprocessed food	Total	Non-energy industrial goods	Energy						Rents	
% of total <sup>3)</sup>	19.5	11.9	7.6	39.6	29.8	9.8	10.1	6.0	6.1	3.3	14.7	6.8	
	14	15	16	17	18	19	20	21	22	23	24	25	
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	
2007 Q4	3.9	4.5	3.1	2.8	1.0	8.1	2.7	2.0	2.6	-2.1	3.0	3.2	
2008 Q1	5.2	6.4	3.5	3.2	0.8	10.7	2.5	1.9	3.1	-2.5	3.2	3.2	
Q2	5.7	6.9	3.7	3.9	0.8	13.6	2.3	1.9	3.6	-1.8	3.0	2.2	
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	
2008 July	6.1	7.2	4.4	4.6	0.5	17.1	2.3	1.9	4.1	-2.2	3.4	2.2	
Aug.	5.6	6.8	3.7	4.2	0.7	14.6	2.2	1.9	4.8	-2.5	3.5	2.3	
Sep.	5.2	6.2	3.6	4.0	0.9	13.5	2.3	1.9	4.5	-2.6	3.3	2.3	
Oct.	4.4	5.1	3.4	3.1	1.0	9.6	2.3	1.9	4.6	-2.2	3.3	2.3	
Nov.	3.7	4.2	2.8	0.8	0.9	0.7	2.2	1.8	4.4	-2.1	3.4	2.2	
Dec.	3.3	3.5	2.8	-0.3	0.8	-3.7	2.2	1.8	4.5	-1.8	3.2	2.1	

Sources: Eurostat and ECB calculations.

- 1) Data refer to the changing composition of the euro area. For further information, see the General notes.
- 2) ECB estimates based on Eurostat data; these experimental statistics can only provide an approximate measure of price administration since changes in administered prices cannot be fully isolated from other influences. Please refer to <http://www.ecb.europa.eu/stats/prices/hicp/html/index.en.html> for a note explaining the methodology used in the compilation of this indicator.
- 3) Referring to the index period 2008.
- 4) Estimate based on provisional national releases usually covering around 95% of the euro area, as well as on early information on energy prices.

## 5.1 HICP, other prices and costs

(annual percentage changes, unless otherwise indicated)

### 2. Industry, construction and residential property prices<sup>1)</sup>

	Industrial producer prices excluding construction										Construction <sup>2)</sup>	Residential property prices <sup>3)</sup>
	Total (index 2000 = 100)	Total		Industry excluding construction and energy						Energy		
		Manufacturing	Total	Intermediate goods	Capital goods	Consumer goods						
						Total	Durable	Non-durable				
% of total <sup>4)</sup>	100.0	100.0	89.4	82.4	31.6	21.1	29.6	4.0	25.6	17.6		
	1	2	3	4	5	6	7	8	9	10	11	12
2005	110.2	4.1	3.2	1.8	2.9	1.4	1.1	1.3	1.1	13.6	2.8	7.6
2006	115.9	5.1	3.4	2.8	4.8	1.4	1.6	1.6	1.7	13.4	4.1	6.5
2007	119.2	2.8	3.1	3.2	4.8	1.8	2.3	1.9	2.4	1.8	4.0	4.3
2008	126.5	6.2	4.7	3.5	4.3	1.9	3.7	2.4	3.9	15.0	.	.
2007 Q4	121.3	4.0	4.5	3.2	3.7	1.5	3.7	1.9	3.9	7.0	3.3	3.9 <sup>5)</sup>
2008 Q1	123.7	5.4	5.4	3.6	4.2	1.5	4.4	2.3	4.8	11.7	3.1	-
Q2	127.0	7.1	6.3	3.8	4.5	1.8	4.5	2.3	4.8	18.0	4.0	2.7 <sup>5)</sup>
Q3	129.6	8.5	6.5	4.2	5.9	2.2	3.8	2.5	4.0	22.6	5.5	-
Q4	125.8	3.7	0.8	2.3	2.6	2.2	2.0	2.6	2.0	7.8	.	.
2008 July	130.1	9.2	7.3	4.4	5.8	2.1	4.3	2.5	4.6	24.9	-	-
Aug.	129.5	8.5	6.6	4.3	6.0	2.2	3.9	2.4	4.1	22.7	-	-
Sep.	129.2	7.9	5.5	4.1	5.8	2.2	3.3	2.5	3.4	20.3	-	-
Oct.	128.1	6.3	3.4	3.2	4.3	2.2	2.6	2.7	2.7	15.9	-	-
Nov.	125.6	3.3	0.5	2.2	2.4	2.2	2.0	2.6	1.9	6.3	-	-
Dec.	123.8	1.7	-1.4	1.5	1.2	2.2	1.4	2.5	1.3	1.7	-	-

### 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	9.3	2.5	14.8	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	24.6	5.9	38.0	113.8	1.9	2.4	2.2	2.1	2.9	2.7	3.9	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	1.5	1.3	1.3
2008	65.9	2.0	18.1	-4.3	-1.5	9.6	-8.1	.	.	.	.	.	.	.	.	.
2007 Q4	61.0	-2.2	22.8	-10.8	-2.9	17.8	-13.6	117.2	2.3	2.9	2.8	2.3	2.5	1.5	2.8	
2008 Q1	64.2	8.4	36.4	-1.3	7.2	31.6	-5.3	117.9	2.1	2.9	3.1	2.1	2.3	2.3	4.3	
Q2	78.5	2.5	32.4	-7.5	-0.3	20.3	-10.7	118.8	2.2	3.2	3.4	3.2	2.4	2.5	4.9	
Q3	77.6	6.7	16.2	2.8	0.8	4.3	-1.4	119.4	2.3	3.3	3.5	2.4	2.8	3.1	5.5	
Q4	43.5	-10.2	-8.0	-11.2	-14.3	-13.0	-15.3	.	.	.	.	.	.	.	.	
2008 Aug.	77.0	7.9	17.4	3.9	2.4	7.1	-0.6	.	.	.	.	.	.	.	.	
Sep.	70.0	5.2	6.4	4.6	-1.8	-5.5	0.8	.	.	.	.	.	.	.	.	
Oct.	55.2	-6.3	-5.0	-7.0	-11.4	-12.6	-10.6	.	.	.	.	.	.	.	.	
Nov.	43.1	-7.0	-4.4	-8.3	-10.4	-7.4	-12.5	.	.	.	.	.	.	.	.	
Dec.	32.1	-17.3	-14.4	-18.7	-21.2	-18.7	-23.1	.	.	.	.	.	.	.	.	
2009 Jan.	34.3	-20.4	-11.0	-24.8	-21.5	-13.7	-26.9	.	.	.	.	.	.	.	.	

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 Euro 16, with the exception of the data in columns 5, 6 and 7 of Table 3, which refer to the Euro 15.
- 2) Input prices for residential buildings.
- 3) Experimental data based on non-harmonised national sources (see the ECB website for further details).
- 4) In 2000.
- 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>								
2004	107.7	0.8	-10.8	-1.2	3.2	-0.1	2.5	2.1
2005	109.0	1.2	8.7	-1.1	2.9	1.4	2.0	2.0
2006	110.0	1.0	3.3	-0.4	3.3	0.0	2.5	2.0
2007	111.9	1.7	0.6	-0.4	3.7	1.4	2.6	2.1
2007 Q3	111.9	1.6	0.6	-1.1	4.6	2.0	2.3	2.0
Q4	113.0	2.5	0.7	0.2	4.0	2.8	3.1	2.9
2008 Q1	113.7	2.6	0.7	1.3	2.0	2.4	3.8	2.9
Q2	115.3	3.2	-0.7	2.0	2.2	3.6	2.9	4.7
Q3	115.9	3.6	-0.8	4.8	1.9	5.1	3.0	2.9
Compensation per employee								
2004	110.2	2.2	1.8	3.0	3.0	1.5	1.7	2.4
2005	112.3	2.0	2.4	1.8	2.0	2.1	2.4	1.9
2006	114.8	2.2	3.4	3.5	3.4	1.5	2.4	1.5
2007	117.7	2.5	2.5	2.8	3.0	2.3	2.2	2.5
2007 Q3	117.8	2.3	2.2	2.4	2.9	2.4	1.9	2.3
Q4	119.0	2.9	2.7	3.2	3.3	2.2	2.5	3.2
2008 Q1	120.1	3.1	3.6	3.5	4.3	2.4	2.9	2.9
Q2	121.4	3.4	3.8	2.8	5.1	2.7	2.6	4.4
Q3	121.9	3.5	3.8	3.5	5.0	4.2	3.1	2.9
Labour productivity <sup>3)</sup>								
2004	102.3	1.4	14.1	4.3	-0.2	1.6	-0.8	0.3
2005	103.1	0.7	-5.7	2.9	-0.8	0.7	0.3	-0.1
2006	104.3	1.2	0.1	3.9	0.1	1.4	-0.2	-0.6
2007	105.2	0.8	1.8	3.2	-0.6	0.8	-0.4	0.3
2007 Q3	105.3	0.7	1.6	3.5	-1.6	0.4	-0.5	0.2
Q4	105.3	0.4	2.0	3.0	-0.6	-0.5	-0.5	0.3
2008 Q1	105.7	0.5	2.9	2.2	2.2	0.0	-0.9	0.0
Q2	105.3	0.2	4.6	0.8	2.7	-0.9	-0.2	-0.3
Q3	105.2	-0.1	4.6	-1.3	3.0	-0.9	0.1	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	
% of total <sup>6)</sup>	100.0	100.0	73.1	26.9	34.6	9.1	56.3	
	1	2	3	4	5	6	7	8
2004	113.6	2.6	2.6	3.2	2.9	2.7	2.3	2.1
2005	116.5	2.4	2.6	2.2	2.4	2.0	2.5	2.1
2006	119.4	2.5	2.7	2.1	3.4	1.6	2.1	2.3
2007	122.4	2.6	2.8	2.3	2.6	3.1	2.6	2.2
2007 Q3	122.7	2.5	2.6	2.2	2.1	3.5	2.6	2.1
Q4	123.8	2.9	3.1	2.3	3.0	4.0	2.8	2.1
2008 Q1	124.8	3.5	3.7	2.9	4.2	4.1	3.0	2.8
Q2	125.9	2.8	2.8	2.8	3.0	3.9	2.5	2.9
Q3	127.1	4.0	3.9	4.2	3.9	4.7	4.0	3.4

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>									
2004	7,841.8	7,685.9	4,489.8	1,601.0	1,586.5	8.6	155.9	2,888.9	2,732.9
2005	8,143.0	8,022.1	4,666.5	1,664.7	1,683.8	7.1	120.9	3,113.1	2,992.1
2006	8,553.0	8,450.3	4,868.8	1,732.2	1,834.9	14.4	102.7	3,472.8	3,370.0
2007	8,986.2	8,848.6	5,061.0	1,799.8	1,965.4	22.4	137.6	3,740.4	3,602.8
2007 Q3	2,260.8	2,227.7	1,272.8	451.4	493.5	10.0	33.1	947.4	914.3
Q4	2,277.2	2,246.5	1,287.1	456.4	501.7	1.3	30.7	955.0	924.2
2008 Q1	2,306.8	2,278.4	1,297.4	460.2	512.4	8.4	28.5	981.6	953.1
Q2	2,321.2	2,295.3	1,307.6	471.1	512.5	4.0	26.0	988.8	962.8
Q3	2,329.1	2,319.4	1,319.2	472.9	512.5	14.8	9.7	997.4	987.7
<i>percentage of GDP</i>									
2007	100.0	98.5	56.3	20.0	21.9	0.2	1.5	-	-
<i>Chain-linked volumes (prices of the previous year, seasonally adjusted<sup>4)</sup>)</i>									
<i>quarter-on-quarter percentage changes</i>									
2007 Q3	0.6	0.7	0.4	0.5	1.0	-	-	1.9	2.2
Q4	0.3	0.1	0.2	0.3	1.0	-	-	0.5	-0.2
2008 Q1	0.7	0.6	0.0	0.3	1.4	-	-	1.7	1.6
Q2	-0.2	-0.3	-0.2	0.8	-0.9	-	-	-0.1	-0.5
Q3	-0.2	0.4	0.1	0.7	-0.6	-	-	0.0	1.4
<i>annual percentage changes</i>									
2004	2.2	1.9	1.6	1.6	2.3	-	-	7.4	7.0
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	-	-	8.4	8.3
2007	2.7	2.4	1.6	2.3	4.3	-	-	6.0	5.4
2007 Q3	2.7	2.2	1.8	2.4	3.7	-	-	7.2	6.2
Q4	2.2	2.1	1.3	2.0	3.2	-	-	4.0	3.9
2008 Q1	2.1	1.7	1.3	1.4	3.7	-	-	5.3	4.4
Q2	1.5	1.1	0.4	2.0	2.6	-	-	3.9	3.1
Q3	0.7	0.8	0.1	2.2	0.9	-	-	2.0	2.2
<i>contributions to quarter-on-quarter percentage changes of GDP in percentage points</i>									
2007 Q3	0.6	0.7	0.3	0.1	0.2	0.1	-0.1	-	-
Q4	0.3	0.1	0.1	0.1	0.2	-0.3	0.3	-	-
2008 Q1	0.7	0.6	0.0	0.1	0.3	0.2	0.1	-	-
Q2	-0.2	-0.3	-0.1	0.2	-0.2	-0.2	0.1	-	-
Q3	-0.2	0.4	0.0	0.1	-0.1	0.4	-0.6	-	-
<i>contributions to annual percentage changes of GDP in percentage points</i>									
2004	2.2	1.9	0.9	0.3	0.5	0.2	0.3	-	-
2005	1.7	1.9	1.0	0.3	0.7	-0.1	-0.1	-	-
2006	2.9	2.7	1.1	0.4	1.1	0.0	0.2	-	-
2007	2.7	2.4	0.9	0.5	0.9	0.1	0.3	-	-
2007 Q3	2.7	2.2	1.1	0.5	0.8	-0.1	0.5	-	-
Q4	2.2	2.1	0.7	0.4	0.7	0.2	0.1	-	-
2008 Q1	2.1	1.7	0.7	0.3	0.8	-0.1	0.4	-	-
Q2	1.5	1.1	0.3	0.4	0.6	-0.2	0.4	-	-
Q3	0.7	0.7	0.0	0.4	0.2	0.1	-0.1	-	-

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>								
2004	7,041.3	155.7	1,443.7	414.3	1,499.7	1,922.1	1,605.7	800.6
2005	7,298.0	144.1	1,481.9	441.9	1,539.5	2,021.7	1,668.8	845.0
2006	7,638.5	141.2	1,551.5	479.0	1,603.8	2,138.4	1,724.6	914.5
2007	8,027.7	151.0	1,631.4	519.3	1,668.7	2,261.0	1,796.2	958.5
2007 Q3	2,020.8	38.5	411.4	130.3	420.3	569.5	450.8	240.0
Q4	2,039.2	39.0	413.5	133.1	422.1	575.4	456.0	238.1
2008 Q1	2,065.1	40.2	419.9	137.2	427.5	581.9	458.4	241.7
Q2	2,083.2	40.0	420.9	137.4	428.2	589.6	467.0	238.1
Q3	2,090.6	39.5	415.7	137.9	432.2	596.9	468.4	238.5
<i>percentage of value added</i>								
2007	100.0	1.9	20.3	6.5	20.8	28.2	22.4	-
<i>Chain-linked volumes (prices of the previous year, seasonally adjusted<sup>2)</sup>)</i>								
<i>quarter-on-quarter percentage changes</i>								
2007 Q3	0.6	-0.8	1.1	-0.1	0.5	0.7	0.4	0.8
Q4	0.5	1.3	0.5	0.9	0.2	0.6	0.3	-0.6
2008 Q1	0.6	1.7	0.2	2.6	0.7	0.6	0.1	1.5
Q2	0.0	0.2	-0.6	-1.8	-0.4	0.6	0.5	-1.2
Q3	-0.2	-0.5	-1.3	-1.2	-0.2	0.2	0.6	0.1
<i>annual percentage changes</i>								
2004	2.3	11.9	2.8	1.1	2.8	1.6	1.5	0.8
2005	1.7	-6.4	1.8	1.9	1.4	2.8	1.4	1.7
2006	2.8	-1.9	3.6	2.8	3.1	3.7	1.3	3.3
2007	2.9	0.5	3.6	3.3	2.7	3.6	1.7	0.6
2007 Q3	2.8	0.2	3.8	2.2	2.7	3.5	1.7	1.2
Q4	2.5	0.5	3.3	1.7	1.7	3.4	1.8	-0.7
2008 Q1	2.3	1.5	2.7	2.8	2.3	2.8	1.2	0.5
Q2	1.6	2.4	1.3	1.6	0.9	2.6	1.3	0.4
Q3	0.8	2.7	-1.1	0.4	0.1	2.1	1.5	-0.3
<i>contributions to quarter-on-quarter percentage changes of value added in percentage points</i>								
2007 Q3	0.6	0.0	0.2	0.0	0.1	0.2	0.1	-
Q4	0.5	0.0	0.1	0.1	0.0	0.2	0.1	-
2008 Q1	0.6	0.0	0.1	0.2	0.1	0.2	0.0	-
Q2	0.0	0.0	-0.1	-0.1	-0.1	0.2	0.1	-
Q3	-0.2	0.0	-0.3	-0.1	0.0	0.1	0.1	-
<i>contributions to annual percentage changes of value added in percentage points</i>								
2004	2.3	0.3	0.6	0.1	0.6	0.4	0.3	-
2005	1.7	-0.1	0.4	0.1	0.3	0.8	0.3	-
2006	2.8	0.0	0.7	0.2	0.7	1.0	0.3	-
2007	2.9	0.0	0.7	0.2	0.6	1.0	0.4	-
2007 Q3	2.8	0.0	0.8	0.1	0.6	1.0	0.4	-
Q4	2.5	0.0	0.7	0.1	0.4	0.9	0.4	-
2008 Q1	2.3	0.0	0.6	0.2	0.5	0.8	0.3	-
Q2	1.6	0.0	0.3	0.1	0.2	0.7	0.3	-
Q3	0.8	0.0	-0.2	0.0	0.0	0.6	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
	Total (s.a. index 2000 = 100)	Total	Industry excluding construction and energy							Energy		
			Manu- facturing	Total	Intermediate goods	Capital goods	Consumer goods					
							Total	Durable	Non-durable			
% of total <sup>2)</sup>	100.0	82.8	82.8	74.8	73.6	29.9	22.2	21.6	3.6	18.0	9.1	17.2
	1	2	3	4	5	6	7	8	9	10	11	12
2005	1.4	104.1	1.4	1.5	1.2	0.9	3.0	0.5	-0.7	0.7	1.4	0.7
2006	4.0	108.3	4.0	4.4	4.4	4.9	5.9	2.6	4.5	2.2	0.7	3.9
2007	3.5	112.1	3.5	4.0	3.8	3.9	6.1	2.3	1.2	2.5	-0.6	3.2
2007 Q4	2.6	113.8	3.0	2.7	2.1	1.9	5.4	0.6	-2.6	1.2	5.4	-0.5
2008 Q1	2.4	113.6	2.5	1.9	1.8	1.6	5.1	0.0	-1.5	0.6	4.4	1.3
Q2	0.7	112.2	1.2	1.3	1.0	0.5	4.0	-1.1	-2.6	-0.9	1.6	-2.2
Q3	-1.8	110.6	-1.5	-1.6	-1.9	-2.0	-0.1	-2.6	-6.0	-2.3	0.2	-3.4
2008 June	-0.7	111.2	-0.4	-0.3	-0.7	-0.9	1.7	-1.4	-4.0	-0.7	-1.0	-2.8
July	-1.4	110.8	-1.1	-1.2	-1.2	-1.7	-0.1	-1.1	-5.3	-0.8	0.0	-3.5
Aug.	-1.0	111.5	-0.6	-0.9	-1.4	0.1	0.8	-4.2	-6.0	-3.2	0.5	-3.0
Sep.	-2.7	109.5	-2.5	-2.6	-3.0	-3.9	-0.8	-2.8	-6.5	-2.8	0.1	-3.8
Oct.	-5.3	107.8	-5.6	-5.7	-6.0	-7.8	-5.3	-3.7	-8.6	-2.9	-1.6	-3.9
Nov.	-7.6	105.8	-8.1	-8.4	-9.0	-11.6	-8.4	-4.5	-10.4	-2.9	-3.7	-5.1
<i>month-on-month percentage changes (s.a.)</i>												
2008 June	-0.4	-	-0.3	-0.3	-0.2	-0.5	-0.5	0.6	0.4	0.7	0.3	-0.8
July	-0.3	-	-0.4	-0.5	-0.5	-0.6	-0.6	-0.1	-1.1	-0.2	0.8	-0.2
Aug.	0.4	-	0.6	0.6	0.7	1.0	1.1	-0.6	0.8	-0.4	1.2	0.0
Sep.	-1.6	-	-1.8	-1.9	-2.2	-3.1	-1.9	-0.7	-2.4	-0.8	-0.5	-0.9
Oct.	-1.3	-	-1.5	-1.6	-1.6	-2.4	-2.2	-0.2	-1.8	0.1	-0.5	0.1
Nov.	-1.9	-	-1.8	-2.0	-2.2	-3.1	-2.2	-0.6	-2.6	0.0	-1.5	-1.5

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

	Industrial new orders		Industrial turnover		Retail sales							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 2000 = 100)	Total	Total (s.a. index 2000 = 100)	Total	Total	Total (s.a. index 2000 = 100)	Total	Food, beverages, tobacco	Non-food				
									Textiles, clothing, footwear	Household equipment			
% of total <sup>2)</sup>	100.0	100.0	100.0	100.0	100.0	100.0	43.7	56.3	10.6	14.8	12	13	
	1	2	3	4	5	6	7	8	9	10	11	12	13
2006	119.7	9.4	119.6	7.8	2.9	108.5	1.5	0.3	2.5	2.7	4.4	978	3.3
2007	129.4	8.4	126.9	6.3	2.4	109.6	0.9	-0.3	1.8	3.2	2.0	970	-0.9
2008	.	.	.	.	1.7	108.1	-1.3	-1.9	-0.9	.	.	892	-8.0
2008 Q1	131.4	3.7	132.2	4.4	3.1	109.0	-0.2	-1.5	0.6	0.1	-0.9	943	-1.4
Q2	128.6	0.2	132.7	6.3	2.0	108.1	-1.5	-2.4	-0.9	-2.3	-1.8	907	-4.8
Q3	124.6	-1.3	131.2	3.9	2.2	108.1	-1.4	-2.0	-0.9	-0.9	-3.0	892	-8.8
Q4	.	.	.	.	0.0	107.1	-2.0	-1.7	-2.2	.	.	827	-18.5
2008 July	128.2	3.2	132.2	6.3	2.1	107.9	-1.5	-2.2	-0.8	0.1	-2.7	885	-8.5
Aug.	126.3	-6.6	132.8	-2.3	2.1	108.0	-1.7	-2.1	-1.5	-2.8	-3.5	923	-5.9
Sep.	119.4	-1.5	128.7	6.7	2.4	108.3	-1.0	-1.7	-0.2	-0.3	-2.9	868	-11.3
Oct.	112.5	-15.1	124.9	-3.0	0.6	107.2	-2.0	-2.1	-2.1	-2.4	-3.6	841	-14.4
Nov.	106.2	-27.3	121.7	-11.1	-0.5	107.1	-2.6	-2.2	-2.7	-2.5	-4.2	812	-18.3
Dec.	.	.	.	.	-0.1	107.1	-1.5	-1.0	-1.9	.	.	828	-23.2
<i>month-on-month percentage changes (s.a.)</i>													
2008 July	-	1.7	-	-0.7	0.5	-	0.2	-0.2	0.5	2.3	1.0	-	0.3
Aug.	-	-1.5	-	0.4	0.2	-	0.1	0.4	-0.1	-1.7	-0.3	-	4.4
Sep.	-	-5.4	-	-3.1	0.3	-	0.2	0.4	0.2	2.6	-0.6	-	-6.0
Oct.	-	-5.8	-	-3.0	-1.0	-	-1.0	-0.7	-1.1	-3.1	-0.5	-	-3.2
Nov.	-	-5.5	-	-2.6	-0.2	-	-0.1	-0.1	-0.2	-0.5	-1.0	-	-3.4
Dec.	-	.	-	.	0.1	-	0.0	0.2	-0.4	.	.	-	1.9

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

1) Data refer to Euro 16.

2) In 2000.

3) Includes manufacturing industries working mainly on the basis of orders, representing 59.7% of total manufacturing in 2000.

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	106.8	2	0	6	13	83.1	-9	-3	-9	15	-9	
2007	108.9	4	5	5	13	84.1	-5	-2	-4	4	-8	
2008	91.1	-9	-15	11	-2	81.9	-18	-10	-25	23	-14	
2007 Q4	105.0	2	1	7	12	83.9	-8	-4	-10	7	-10	
2008 Q1	101.4	1	-1	7	10	83.8	-12	-7	-17	11	-12	
Q2	97.5	-3	-6	9	7	83.3	-15	-10	-22	13	-14	
Q3	89.9	-10	-15	12	-2	82.2	-19	-12	-28	22	-15	
Q4	75.8	-25	-36	18	-22	78.3	-26	-11	-34	44	-15	
2008 Aug.	89.9	-9	-13	12	-3	-	-19	-12	-28	23	-14	
Sep.	88.9	-12	-20	13	-4	-	-19	-11	-26	24	-15	
Oct.	81.6	-18	-26	15	-13	81.5	-24	-12	-33	34	-15	
Nov.	76.8	-25	-36	17	-22	-	-25	-11	-32	43	-15	
Dec.	68.9	-33	-47	22	-30	-	-30	-11	-39	55	-14	
2009 Jan.	67.1	-34	-49	20	-31	75.0	-31	-11	-38	58	-15	
		Construction confidence indicator			Retail trade confidence indicator				Services confidence indicator			
		Total <sup>4)</sup>	Order books	Employment expectations	Total <sup>4)</sup>	Present business situation	Volume of stocks	Expected business situation	Total <sup>4)</sup>	Business climate	Demand in recent months	Demand in the months ahead
		12	13	14	15	16	17	18	19	20	21	22
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
2007 Q4		-3	-10	5	0	5	16	13	15	11	14	20
2008 Q1		-7	-13	-1	0	3	16	12	10	4	12	15
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
2008 Aug.		-12	-19	-5	-10	-7	19	-3	1	-7	4	5
Sep.		-15	-21	-9	-8	-11	14	1	0	-7	2	6
Oct.		-20	-26	-13	-13	-14	17	-9	-7	-13	-4	-3
Nov.		-23	-31	-15	-13	-11	15	-12	-12	-21	-8	-7
Dec.		-27	-35	-19	-20	-23	19	-18	-17	-27	-15	-10
2009 Jan.		-30	-35	-26	-20	-22	20	-19	-22	-32	-20	-15

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	85.0	15.0	3.9	17.2	7.7	25.5	15.7	29.9
	1	2	3	4	5	6	7	8	9	10
2004	140.507	0.8	0.7	1.6	-2.0	-1.4	1.3	1.2	2.4	1.2
2005	141.863	1.0	1.1	0.5	-0.7	-1.1	2.7	0.7	2.5	1.5
2006	144.187	1.6	1.8	0.8	-1.9	-0.3	2.7	1.7	3.9	1.9
2007	146.811	1.8	2.0	0.9	-1.2	0.3	3.9	1.8	4.1	1.4
2007 Q3	147.216	1.9	2.0	1.5	-1.4	0.2	3.6	2.3	3.9	1.5
Q4	147.666	1.8	2.0	0.6	-1.7	0.2	2.5	2.3	4.0	1.5
2008 Q1	148.185	1.7	1.8	0.7	-1.3	0.6	0.9	2.5	3.7	1.2
Q2	148.436	1.3	1.5	0.1	-2.1	0.4	-1.1	1.9	2.9	1.6
Q3	148.379	0.8	1.1	-0.7	-2.0	0.2	-2.6	1.2	2.1	1.6
	<i>quarter-on-quarter percentage changes (s.a.)</i>									
2007 Q3	0.663	0.5	0.4	0.5	-1.0	0.0	-0.1	0.8	0.8	0.5
Q4	0.450	0.3	0.5	-0.8	-0.4	0.1	0.0	0.1	0.8	0.5
2008 Q1	0.519	0.4	0.3	0.4	0.5	0.3	0.0	0.5	0.8	0.1
Q2	0.250	0.2	0.2	-0.2	-1.2	0.1	-1.2	0.3	0.4	0.5
Q3	-0.057	0.0	0.0	-0.5	-0.8	-0.3	-1.5	0.1	0.0	0.5

### 2. Unemployment

(seasonally adjusted)

	Total		By age <sup>3)</sup>				By gender <sup>4)</sup>			
	Millions	% of labour force	Adult		Youth		Male		Female	
			Millions	% of labour force	Millions	% of labour force	Millions	% of labour force	Millions	% of labour force
% of total <sup>2)</sup>	100.0		78.2		21.8		49.2		50.8	
	1	2	3	4	5	6	7	8	9	10
2005	13.691	9.0	10.662	7.9	3.030	17.4	6.909	8.1	6.783	10.0
2006	12.883	8.3	10.074	7.3	2.809	16.3	6.393	7.5	6.490	9.4
2007	11.661	7.5	9.122	6.6	2.538	14.9	5.737	6.7	5.923	8.5
2008	11.874	7.5	9.251	6.6	2.624	15.4	5.996	6.9	5.878	8.3
2007 Q4	11.421	7.3	8.916	6.4	2.505	14.7	5.632	6.5	5.789	8.3
2008 Q1	11.410	7.3	8.907	6.4	2.503	14.6	5.624	6.5	5.787	8.2
Q2	11.683	7.4	9.099	6.5	2.585	15.1	5.827	6.7	5.856	8.3
Q3	11.903	7.5	9.277	6.6	2.626	15.4	6.048	7.0	5.856	8.3
Q4	12.500	7.9	9.720	6.9	2.781	16.3	6.486	7.4	6.015	8.4
2008 July	11.788	7.5	9.191	6.5	2.597	15.3	5.955	6.9	5.834	8.2
Aug.	11.876	7.5	9.264	6.6	2.612	15.4	6.030	7.0	5.846	8.2
Sep.	12.046	7.6	9.377	6.7	2.668	15.7	6.158	7.1	5.888	8.3
Oct.	12.277	7.8	9.545	6.8	2.732	16.0	6.317	7.3	5.959	8.4
Nov.	12.495	7.9	9.715	6.9	2.780	16.3	6.483	7.4	6.011	8.4
Dec.	12.729	8.0	9.899	7.0	2.830	16.5	6.656	7.6	6.073	8.5

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 2007.

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

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

# GOVERNMENT FINANCE

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

### 1. Euro area – revenue

	Current revenue											Capital revenue		Memo: fiscal burden <sup>2)</sup>
	Total	Direct taxes					Indirect taxes	Social contributions			Sales	Capital taxes		
		Households	Corporations	Received by EU institutions	Employers	Employees								
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1999	47.0	46.7	12.5	9.3	2.9	14.1	0.6	16.1	8.3	4.9	2.3	0.3	0.3	43.0
2000	46.5	46.2	12.7	9.4	3.0	13.9	0.6	15.8	8.2	4.8	2.2	0.3	0.3	42.6
2001	45.7	45.5	12.3	9.2	2.7	13.6	0.5	15.6	8.1	4.7	2.2	0.2	0.3	41.7
2002	45.2	44.9	11.8	9.1	2.5	13.5	0.4	15.6	8.2	4.6	2.1	0.3	0.3	41.2
2003	45.0	44.4	11.4	8.8	2.3	13.5	0.4	15.8	8.2	4.6	2.1	0.6	0.5	41.2
2004	44.6	44.1	11.3	8.5	2.5	13.5	0.3	15.6	8.1	4.5	2.1	0.5	0.4	40.8
2005	44.9	44.4	11.6	8.6	2.7	13.7	0.3	15.4	8.1	4.5	2.2	0.5	0.3	41.0
2006	45.5	45.1	12.1	8.8	3.0	13.9	0.3	15.3	8.1	4.5	2.1	0.3	0.3	41.6
2007	45.6	45.3	12.5	9.0	3.2	13.8	0.3	15.2	8.0	4.4	2.1	0.3	0.3	41.8

### 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	3	4	5	6	7	8	9	10	11	12	13	14
1999	48.4	44.5	10.6	4.8	4.1	25.1	22.1	2.1	0.5	3.9	2.5	1.4	0.1	44.3
2000	46.5	43.8	10.4	4.8	3.9	24.7	21.7	2.0	0.5	2.8	2.5	1.3	0.0	42.6
2001	47.6	43.7	10.3	4.8	3.8	24.8	21.7	1.9	0.5	3.9	2.5	1.4	0.0	43.8
2002	47.8	44.0	10.4	4.9	3.5	25.1	22.2	1.9	0.5	3.8	2.4	1.4	0.0	44.2
2003	48.1	44.2	10.5	4.9	3.3	25.4	22.6	1.9	0.5	4.0	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	47.4	43.5	10.4	5.0	3.0	25.1	22.3	1.7	0.5	3.9	2.5	1.4	0.1	44.4
2006	46.8	42.9	10.2	5.0	2.9	24.8	22.1	1.7	0.5	3.8	2.5	1.4	0.0	43.8
2007	46.2	42.4	10.0	5.0	3.0	24.4	21.7	1.6	0.4	3.9	2.5	1.3	0.0	43.3

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

	Deficit (-)/surplus (+)					Primary deficit (-)/surplus (+)	Government consumption <sup>4)</sup>							
	Total	Central gov.	State gov.	Local gov.	Social security funds		Total	Compensation of employees	Intermediate consumption	Transfers in kind via market producers	Consumption of fixed capital	Sales (minus)	Collective consumption	Individual consumption
1999	-1.4	-1.7	-0.1	0.1	0.4	2.6	19.9	10.6	4.8	4.9	1.8	2.3	8.3	11.6
2000	0.0	-0.4	-0.1	0.1	0.5	3.9	19.7	10.4	4.8	4.9	1.8	2.2	8.2	11.6
2001	-1.9	-1.7	-0.4	-0.1	0.3	2.0	19.8	10.3	4.8	5.0	1.8	2.2	8.1	11.7
2002	-2.6	-2.1	-0.5	-0.2	0.2	0.9	20.2	10.4	4.9	5.1	1.8	2.1	8.2	12.0
2003	-3.1	-2.4	-0.5	-0.2	0.0	0.2	20.5	10.5	4.9	5.2	1.8	2.1	8.3	12.2
2004	-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	-2.6	-2.2	-0.3	-0.2	0.2	0.4	20.4	10.4	5.0	5.2	1.9	2.2	8.1	12.3
2006	-1.3	-1.4	-0.1	-0.2	0.4	1.6	20.3	10.2	5.0	5.2	1.9	2.1	8.0	12.3
2007	-0.6	-1.2	0.0	0.0	0.5	2.3	20.1	10.0	5.0	5.2	1.9	2.1	7.9	12.2

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

	BE	DE	IE	GR	ES	FR	IT	CY	LU	MT	NL	AT	PT	SI	SK	FI
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
2004	-0.2	-3.8	1.4	-7.5	-0.3	-3.6	-3.5	-4.1	-1.2	-4.7	-1.7	-4.4	-3.4	-2.2	-2.3	2.4
2005	-2.6	-3.3	1.7	-5.1	1.0	-2.9	-4.3	-2.4	-0.1	-2.8	-0.3	-1.5	-6.1	-1.4	-2.8	2.9
2006	0.3	-1.5	3.0	-2.8	2.0	-2.4	-3.4	-1.2	1.3	-2.3	0.6	-1.5	-3.9	-1.2	-3.5	4.1
2007	-0.3	-0.2	0.2	-3.5	2.2	-2.7	-1.6	3.5	3.2	-1.8	0.3	-0.4	-2.6	0.5	-1.9	5.3

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

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

Transactions among Member States' governments are not consolidated.

2) The fiscal burden comprises taxes and social contributions.

3) Comprises total expenditure minus interest expenditure.

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

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

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

(as a percentage of GDP)

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

	Total	Financial instruments				Holders				
		Currency and deposits	Loans	Short-term securities	Long-term securities	Domestic creditors <sup>2)</sup>				Other creditors <sup>3)</sup>
						Total	MFIs	Other financial corporations	Other sectors	
1	2	3	4	5	6	7	8	9	10	
1998	72.9	2.8	15.2	5.3	49.6	52.5	26.5	14.5	11.4	20.4
1999	72.0	2.9	14.4	4.3	50.5	48.8	25.4	13.8	9.7	23.2
2000	69.3	2.7	13.1	3.7	49.7	44.2	22.0	12.4	9.7	25.1
2001	68.2	2.8	12.4	4.0	49.1	42.0	20.6	11.1	10.3	26.2
2002	68.1	2.7	11.8	4.5	49.0	40.1	19.4	10.7	10.1	27.9
2003	69.2	2.1	12.4	5.0	49.7	39.4	19.5	11.2	8.7	29.8
2004	69.6	2.2	12.0	5.0	50.5	37.5	18.4	10.8	8.2	32.1
2005	70.2	2.4	11.8	4.7	51.3	35.4	17.2	11.2	7.0	34.8
2006	68.5	2.5	11.4	4.1	50.4	33.8	17.6	9.4	6.8	34.7
2007	66.3	2.2	10.8	4.3	49.0	32.6	17.0	8.7	6.9	33.7

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

	Total	Issued by <sup>4)</sup>				Original maturity			Residual maturity			Currencies	
		Central gov.	State gov.	Local gov.	Social security funds	Up to 1 year	Over 1 year	Variable interest rate	Up to 1 year	Over 1 year and up to 5 years	Over 5 years	Euro or participating currencies <sup>5)</sup>	Other currencies
1998	72.9	61.2	6.1	5.2	0.3	8.2	64.7	8.0	15.5	26.3	31.0	71.1	1.8
1999	72.0	60.5	6.0	5.1	0.4	7.3	64.7	7.0	13.6	27.8	30.7	70.0	2.0
2000	69.3	58.1	5.9	4.9	0.4	6.5	62.8	6.3	13.4	27.8	28.1	67.5	1.8
2001	68.2	57.1	6.1	4.7	0.4	7.0	61.2	5.3	13.7	26.6	27.9	66.7	1.5
2002	68.1	56.7	6.3	4.7	0.4	7.6	60.4	5.2	15.5	25.3	27.2	66.8	1.3
2003	69.2	57.0	6.5	5.0	0.6	7.8	61.4	5.1	14.9	26.0	28.3	68.3	0.9
2004	69.6	57.4	6.6	5.1	0.4	7.8	61.7	4.8	14.9	26.2	28.5	68.7	0.9
2005	70.2	57.7	6.7	5.2	0.5	7.9	62.3	4.7	14.9	25.6	29.7	69.2	1.0
2006	68.5	56.0	6.5	5.4	0.5	7.5	61.0	4.5	14.5	24.1	29.9	67.8	0.7
2007	66.3	54.2	6.3	5.3	0.6	7.5	58.8	4.2	14.2	22.6	29.5	65.8	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
2004	94.3	65.6	29.4	98.6	46.2	64.9	103.8	70.2	6.3	72.1	52.4	64.8	58.3	27.2	41.4	44.1
2005	92.1	67.8	27.3	98.8	43.0	66.4	105.9	69.1	6.1	69.9	51.8	63.7	63.6	27.0	34.2	41.3
2006	87.8	67.6	24.7	95.9	39.6	63.6	106.9	64.6	6.6	63.8	47.4	62.0	64.7	26.7	30.4	39.2
2007	83.9	65.1	24.8	94.8	36.2	63.9	104.1	59.5	7.0	62.2	45.7	59.5	63.6	23.4	29.4	35.1

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

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

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

(as a percentage of GDP)

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

	Total	Source of change				Financial instruments				Holders			Other creditors <sup>7)</sup>
		Borrowing requirement <sup>2)</sup>	Valuation effects <sup>3)</sup>	Other changes in volume <sup>4)</sup>	Aggregation effect <sup>5)</sup>	Currency and deposits	Loans	Short-term securities	Long-term securities	Domestic creditors <sup>6)</sup>	MFIs	Other financial corporations	
1999	2.0	1.6	0.4	0.0	-0.1	0.2	-0.2	-0.9	2.8	-1.6	-0.2	-0.2	3.6
2000	1.0	1.1	0.0	-0.1	0.0	0.0	-0.5	-0.3	1.9	-2.1	-2.0	-0.6	3.1
2001	1.8	1.9	-0.1	0.1	0.0	0.2	-0.2	0.4	1.4	-0.3	-0.5	-0.8	2.2
2002	2.1	2.7	-0.5	0.0	0.0	0.0	-0.2	0.7	1.6	-0.5	-0.5	-0.1	2.6
2003	3.1	3.3	-0.2	0.0	0.0	-0.6	0.9	0.6	2.1	0.4	0.7	0.8	2.7
2004	3.1	3.2	-0.1	0.0	0.0	0.2	0.1	0.1	2.7	-0.3	-0.3	0.1	3.4
2005	3.1	3.1	0.0	0.0	0.0	0.3	0.3	-0.1	2.6	-0.8	-0.6	0.8	3.9
2006	1.5	1.4	0.1	0.0	0.0	0.2	0.2	-0.4	1.5	0.1	1.2	-1.3	1.5
2007	1.1	1.1	0.0	0.0	0.0	-0.1	-0.1	0.4	0.9	0.4	0.3	-0.2	0.7

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

	Change in debt	Deficit (-) / surplus (+) <sup>8)</sup>	Deficit-debt adjustment <sup>9)</sup>											Other <sup>10)</sup>
			Total	Transactions in main financial assets held by general government							Valuation effects	Exchange rate effects	Other changes in volume	
				Total	Currency and deposits	Loans	Securities <sup>11)</sup>	Shares and other equity	Privatisations	Equity injections				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	
1999	2.0	-1.4	0.6	0.0	0.5	0.1	0.0	-0.5	-0.8	0.0	0.4	0.3	0.0	0.2
2000	1.0	0.0	1.0	1.0	0.7	0.2	0.2	0.0	-0.4	0.2	0.0	0.1	-0.1	0.1
2001	1.8	-1.9	0.0	-0.5	-0.6	0.1	0.1	-0.1	-0.3	0.1	-0.1	0.0	0.1	0.6
2002	2.1	-2.6	-0.5	0.1	0.1	0.0	0.0	0.0	-0.3	0.1	-0.5	-0.1	0.0	0.0
2003	3.1	-3.1	0.0	0.1	0.1	0.0	0.0	0.1	-0.2	0.1	-0.2	-0.1	0.0	0.1
2004	3.1	-3.0	0.1	0.2	0.2	0.0	0.1	0.0	-0.5	0.2	-0.1	0.0	0.0	0.0
2005	3.1	-2.6	0.5	0.7	0.4	0.1	0.2	0.1	-0.3	0.2	0.0	0.0	0.0	-0.2
2006	1.5	-1.3	0.2	0.3	0.3	-0.2	0.3	-0.1	-0.3	0.1	0.1	0.0	0.0	-0.2
2007	1.1	-0.6	0.5	0.6	0.2	0.0	0.2	0.1	-0.2	0.2	0.0	0.0	0.0	-0.1

Source: ECB.

- The data refer to the Euro 15 and are partially estimated. Annual change in gross nominal consolidated debt is expressed as a percentage of GDP, i.e.  $[\text{debt}(t) - \text{debt}(t-1)] \div \text{GDP}(t)$ .
- The borrowing requirement is by definition equal to transactions in debt.
- Includes, in addition to the impact of foreign exchange movements, effects arising from measurement at nominal value (e.g. premia or discounts on securities issued).
- Includes, in particular, the impact of the reclassification of units and certain types of debt assumption.
- The difference between the changes in the aggregated debt, resulting from the aggregation of countries' debt, and the aggregation of countries' change in debt is due to variations in the exchange rates used for aggregation before 2001.
- 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	
2002 Q3	43.5	43.1	11.2	12.8	15.5	1.9	0.7	0.4	0.3	39.7
Q4	49.0	48.4	13.4	14.1	16.2	2.9	0.9	0.6	0.3	44.0
2003 Q1	41.9	41.4	9.8	12.8	15.5	1.7	0.7	0.5	0.2	38.4
Q2	46.0	44.6	12.0	12.9	15.7	2.0	1.4	1.4	1.2	41.7
Q3	42.6	42.1	10.8	12.5	15.5	1.9	0.6	0.5	0.2	39.0
Q4	49.3	48.2	13.1	14.2	16.2	2.9	0.8	1.0	0.3	43.8
2004 Q1	41.3	40.9	9.6	12.8	15.3	1.7	0.6	0.4	0.3	38.0
Q2	45.0	44.2	12.1	13.0	15.3	2.0	1.0	0.8	0.6	41.0
Q3	42.7	42.2	10.6	12.7	15.4	1.9	0.6	0.5	0.3	39.0
Q4	49.1	48.1	13.0	14.3	16.2	2.9	0.7	1.0	0.4	43.9
2005 Q1	42.0	41.5	9.9	13.0	15.3	1.7	0.6	0.5	0.3	38.4
Q2	44.6	44.0	11.8	13.2	15.1	2.0	1.1	0.6	0.3	40.4
Q3	43.3	42.6	11.0	12.9	15.2	1.9	0.7	0.7	0.3	39.4
Q4	49.2	48.4	13.4	14.3	16.1	2.9	0.8	0.8	0.3	44.0
2006 Q1	42.4	41.9	10.2	13.3	15.1	1.7	0.8	0.5	0.3	38.9
Q2	45.7	45.2	12.4	13.6	15.1	2.0	1.3	0.5	0.3	41.4
Q3	43.6	43.2	11.5	12.9	15.2	1.9	0.8	0.5	0.3	39.9
Q4	49.5	48.9	14.1	14.3	15.9	2.9	0.8	0.6	0.3	44.6
2007 Q1	42.2	41.8	10.3	13.4	14.8	1.7	0.8	0.4	0.3	38.8
Q2	46.2	45.8	13.0	13.6	15.0	2.0	1.4	0.4	0.3	41.9
Q3	43.8	43.3	12.1	12.8	15.0	1.9	0.8	0.5	0.3	40.1
Q4	49.7	49.2	14.5	14.2	15.8	2.9	0.9	0.5	0.3	44.8
2008 Q1	42.3	41.9	10.6	13.0	14.9	1.7	0.8	0.4	0.2	38.7
Q2	45.5	45.1	12.9	13.0	15.0	1.9	1.5	0.4	0.3	41.2
Q3	43.2	42.8	11.8	12.4	15.1	1.9	0.8	0.4	0.3	39.6

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

	Total		Current expenditure					Capital expenditure			Deficit (-)/ surplus (+)	Primary deficit (-)/ surplus (+)	
	Total 1	Compensation of employees 2	Intermediate consumption 3	Interest 4	Current transfers 5	Social benefits 6	Subsidies 7	Investment 8	Capital transfers 9				
										10			11
2002 Q3	46.9	43.2	10.1	4.7	3.5	24.9	21.4	1.4	3.7	2.5	1.2	-3.4	0.1
Q4	50.8	46.4	11.1	5.6	3.3	26.4	22.7	1.6	4.4	2.8	1.6	-1.8	1.6
2003 Q1	46.8	43.3	10.3	4.6	3.5	25.0	21.5	1.3	3.5	1.9	1.6	-5.0	-1.5
Q2	47.1	43.6	10.4	4.7	3.4	25.1	21.7	1.3	3.5	2.3	1.2	-1.1	2.3
Q3	47.1	43.4	10.3	4.8	3.3	25.1	21.6	1.3	3.7	2.5	1.2	-4.5	-1.2
Q4	51.2	46.3	11.0	5.6	3.1	26.5	22.9	1.5	4.8	3.3	1.6	-1.9	1.2
2004 Q1	46.4	43.0	10.3	4.6	3.2	25.0	21.4	1.2	3.4	1.9	1.5	-5.1	-1.9
Q2	46.6	43.2	10.4	4.8	3.3	24.8	21.4	1.3	3.4	2.3	1.1	-1.6	1.6
Q3	46.1	42.7	10.0	4.7	3.1	24.9	21.5	1.3	3.4	2.4	1.0	-3.4	-0.3
Q4	50.9	45.7	11.0	5.7	2.9	26.1	22.6	1.4	5.2	3.1	2.1	-1.8	1.1
2005 Q1	46.9	43.1	10.2	4.6	3.1	25.2	21.4	1.2	3.7	1.9	1.8	-4.9	-1.8
Q2	46.1	42.8	10.2	4.9	3.2	24.5	21.3	1.1	3.4	2.3	1.1	-1.5	1.6
Q3	45.8	42.4	9.9	4.8	3.0	24.7	21.3	1.2	3.4	2.5	1.0	-2.6	0.4
Q4	50.6	45.8	11.1	5.8	2.8	26.1	22.5	1.3	4.8	3.1	1.6	-1.4	1.4
2006 Q1	45.3	42.2	10.0	4.6	2.9	24.7	21.1	1.1	3.1	1.9	1.2	-2.9	0.0
Q2	45.5	42.3	10.2	4.9	3.1	24.1	21.1	1.1	3.2	2.3	0.9	0.2	3.3
Q3	45.4	42.0	9.8	4.7	2.9	24.5	21.1	1.2	3.4	2.5	1.0	-1.7	1.2
Q4	50.4	45.1	10.7	5.8	2.7	25.9	22.3	1.3	5.3	3.2	2.2	-0.9	1.8
2007 Q1	44.4	41.3	9.8	4.6	3.0	23.9	20.5	1.1	3.1	2.0	1.2	-2.2	0.7
Q2	44.8	41.6	9.9	4.8	3.2	23.7	20.7	1.1	3.2	2.3	0.8	1.4	4.6
Q3	45.1	41.4	9.6	4.7	3.0	24.0	20.8	1.2	3.7	2.5	1.2	-1.3	1.7
Q4	50.2	45.1	10.7	5.7	2.8	25.9	22.1	1.4	5.1	3.3	1.8	-0.5	2.3
2008 Q1	44.5	41.3	9.8	4.6	2.9	24.1	20.5	1.2	3.2	2.0	1.1	-2.2	0.7
Q2	45.1	41.8	10.1	4.9	3.1	23.7	20.6	1.1	3.3	2.4	1.0	0.4	3.5
Q3	45.6	42.1	9.7	4.9	3.1	24.3	21.1	1.2	3.5	2.5	1.0	-2.4	0.8

Source: ECB calculations based on Eurostat and national data.

1) The data refer to the Euro 15. Revenue, expenditure and deficit/surplus are based on the ESA 95. Transactions between the EU budget and entities outside the government sector are not included. Otherwise, and except for different data transmission deadlines, the quarterly data are consistent with the annual data. The data are not seasonally adjusted.

2) The fiscal burden comprises taxes and social contributions.

## 6.5 Quarterly debt and change in debt <sup>1)</sup>

(as a percentage of GDP)

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

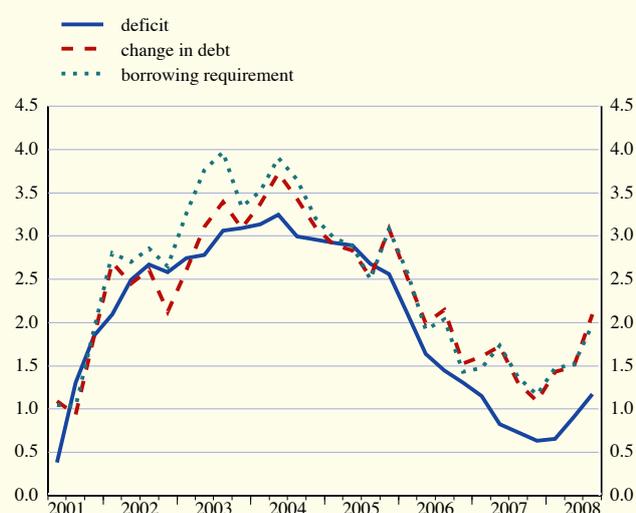
	Total 1	Financial instruments			
		Currency and deposits 2	Loans 3	Short-term securities 4	Long-term securities 5
2005 Q4	70.2	2.4	11.8	4.7	51.3
2006 Q1	70.5	2.5	11.7	4.9	51.3
Q2	70.6	2.5	11.6	4.9	51.6
Q3	70.1	2.5	11.6	4.7	51.2
Q4	68.5	2.5	11.4	4.1	50.4
2007 Q1	68.8	2.4	11.5	4.8	50.1
Q2	68.9	2.2	11.2	5.1	50.4
Q3	68.0	2.1	11.1	5.2	49.6
Q4	66.3	2.2	10.8	4.3	49.0
2008 Q1	67.2	2.2	11.1	5.0	49.0
Q2	67.5	2.1	11.0	5.0	49.3
Q3	67.5	2.1	10.9	5.6	48.9

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

	Change in debt 1	Deficit (-)/ surplus (+) 2	Deficit-debt adjustment								Memo: Borrowing requirement 11
			Total 3	Transactions in main financial assets held by general government				Valuation effects and other changes in volume 9	Other 10		
				Total 4	Currency and deposits 5	Loans 6	Securities 7			Shares and other equity 8	
2005 Q4	-0.6	-1.4	-2.0	-0.4	0.0	0.0	-0.3	-0.1	0.0	-1.5	-0.6
2006 Q1	4.8	-2.9	1.9	1.2	1.0	0.1	0.6	-0.5	-0.4	1.0	5.1
Q2	3.3	0.2	3.5	3.2	2.5	0.0	0.4	0.2	0.6	-0.3	2.6
Q3	1.2	-1.7	-0.5	-0.8	-0.7	-0.1	0.2	-0.1	0.2	0.1	1.0
Q4	-2.8	-0.9	-3.7	-2.2	-1.4	-0.6	-0.2	-0.2	-0.1	-1.4	-2.7
2007 Q1	4.9	-2.2	2.7	2.1	1.0	0.1	0.6	0.3	-0.2	0.8	5.1
Q2	3.6	1.4	5.1	4.8	4.1	0.0	0.5	0.2	0.1	0.2	3.6
Q3	-0.4	-1.3	-1.8	-1.6	-2.1	0.2	0.4	0.0	0.0	-0.2	-0.4
Q4	-3.4	-0.5	-3.9	-2.9	-2.2	-0.1	-0.6	0.0	-0.1	-0.9	-3.3
2008 Q1	6.1	-2.2	3.9	2.2	1.9	0.0	0.1	0.3	0.0	1.7	6.2
Q2	3.8	0.4	4.1	2.4	2.0	0.2	0.1	0.0	0.1	1.7	3.7
Q3	2.0	-2.4	-0.4	-0.7	-1.6	0.1	0.2	0.6	0.5	-0.1	1.5

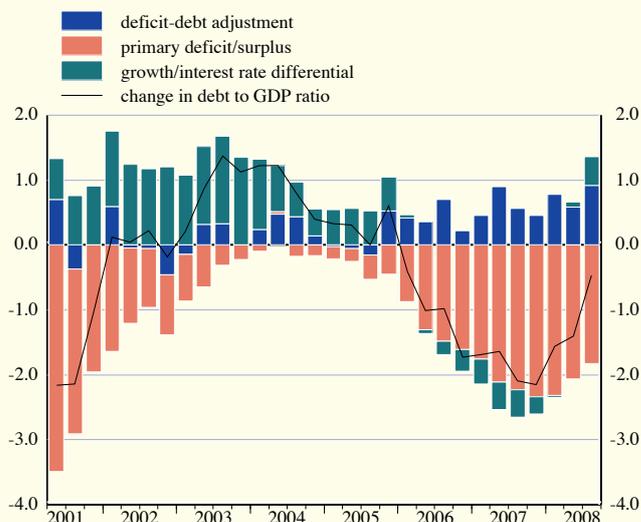
### C29 Deficit, borrowing requirement and change in debt

(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 15.

2) The stock data in quarter t are expressed as a percentage of the sum of GDP in t and the previous three quarters.



## EXTERNAL TRANSACTIONS AND POSITIONS

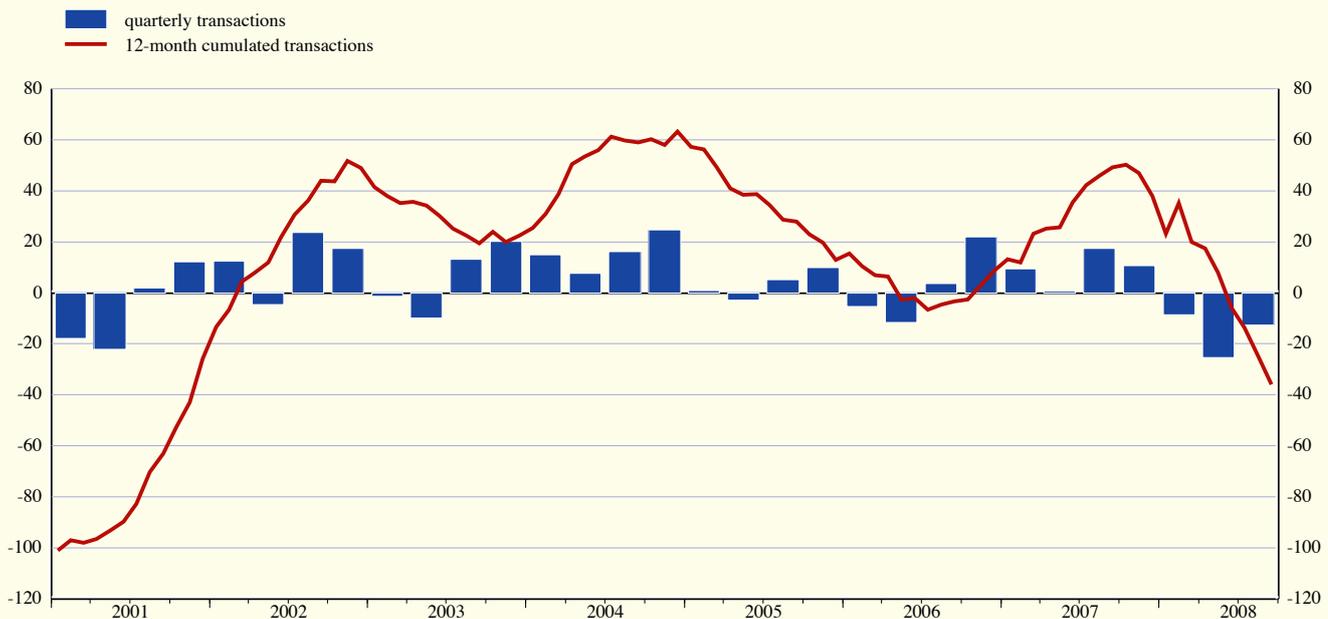
### 7.1 Summary balance of payments <sup>1)</sup>

(EUR billions; net transactions)

	Current account					Capital account	Net lending/borrowing to/from rest of the world (columns 1-6)	Financial account						Errors and omissions
	Total	Goods	Services	Income	Current transfers			Total	Direct investment	Portfolio investment	Financial derivatives	Other investment	Reserve assets	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
2005	13.0	47.0	38.2	1.4	-73.5	11.4	24.4	10.8	-207.4	129.2	-17.3	88.6	17.7	-35.2
2006	8.5	19.8	44.1	23.8	-79.2	9.3	17.9	137.8	-156.7	290.4	3.0	1.9	-0.9	-155.6
2007	37.8	57.5	53.2	11.1	-84.0	14.0	51.8	29.4	-90.4	137.7	-53.9	41.1	-5.1	-81.3
2007 Q3	17.3	17.7	17.8	7.6	-25.9	1.7	19.0	104.8	-34.1	46.7	-15.3	111.9	-4.4	-123.8
Q4	10.6	10.3	11.2	9.4	-20.3	5.2	15.8	-73.2	25.0	-73.2	-19.1	-10.6	4.7	57.4
2008 Q1	-8.6	-1.5	11.9	8.0	-26.9	6.1	-2.4	-4.4	-107.1	73.8	-21.0	55.0	-5.1	6.8
Q2	-25.3	7.9	14.2	-30.2	-17.2	3.1	-22.1	85.8	-50.6	40.1	-8.6	104.9	0.0	-63.7
Q3	-12.7	-6.7	15.3	2.3	-23.5	1.9	-10.8	33.6	-43.1	109.7	-8.7	-26.0	1.6	-22.8
2007 Nov.	2.6	5.1	3.4	0.7	-6.6	0.9	3.5	-0.8	4.5	0.9	-11.2	4.8	0.2	-2.7
Dec.	3.7	-2.1	3.4	5.8	-3.5	3.0	6.7	-25.6	-11.1	-25.9	-5.3	12.2	4.5	18.9
2008 Jan.	-15.0	-8.1	3.5	0.0	-10.4	2.5	-12.4	5.5	-64.2	58.7	-26.9	44.2	-6.4	7.0
Feb.	9.8	4.8	4.5	4.8	-4.4	2.4	12.2	-25.3	-21.4	0.3	2.5	-11.3	4.5	13.1
Mar.	-3.3	1.8	3.8	3.1	-12.1	1.2	-2.2	15.4	-21.6	14.8	3.4	22.1	-3.2	-13.3
Apr.	-5.1	6.0	3.8	-6.9	-7.9	0.7	-4.4	26.8	-22.9	-14.6	-2.8	70.3	-3.3	-22.4
May	-22.0	-1.2	4.4	-20.1	-5.0	1.9	-20.1	43.8	-8.2	12.2	-10.3	47.5	2.7	-23.7
June	1.8	3.1	6.0	-3.1	-4.3	0.6	2.4	15.2	-19.5	42.6	4.6	-13.0	0.5	-17.5
July	0.3	1.5	5.4	1.3	-7.9	0.9	1.1	28.8	-12.8	25.5	0.1	18.3	-2.3	-30.0
Aug.	-9.1	-6.7	4.8	0.3	-7.6	0.5	-8.6	-6.1	-8.8	11.2	-8.7	-2.0	2.3	14.7
Sep.	-3.8	-1.5	5.0	0.7	-8.1	0.5	-3.3	10.8	-21.5	73.1	-0.1	-42.3	1.6	-7.5
Oct.	-4.2	3.0	3.6	0.2	-11.0	0.0	-4.2	75.1	-13.9	120.3	25.4	-48.2	-8.6	-70.9
Nov.	-13.9	-5.2	2.0	-1.4	-9.3	1.5	-12.5	17.2	-31.2	47.9	-1.8	3.3	-1.0	-4.7
	<i>12-month cumulated transactions</i>													
2008 Nov.	-61.0	-4.7	50.3	-15.2	-91.4	15.6	-45.4	181.6	-257.1	366.0	-19.8	101.1	-8.5	-136.3

### 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**

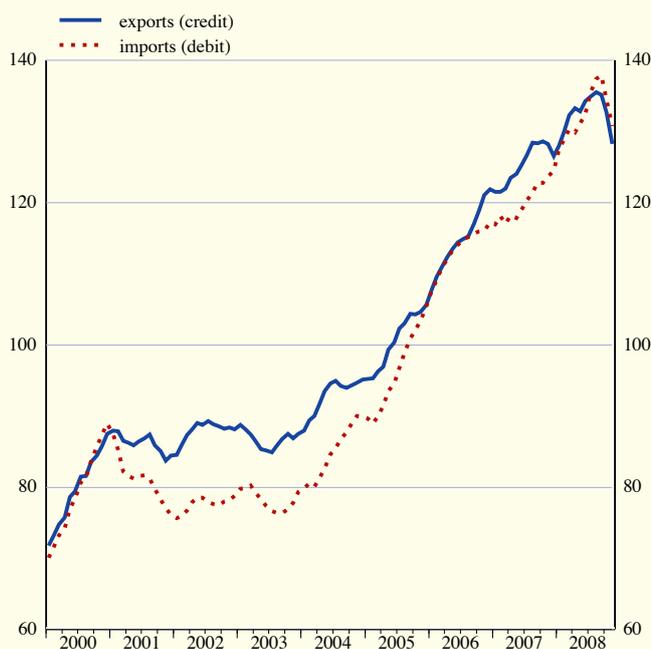
(EUR billions; transactions)

**1. Summary current and capital accounts**

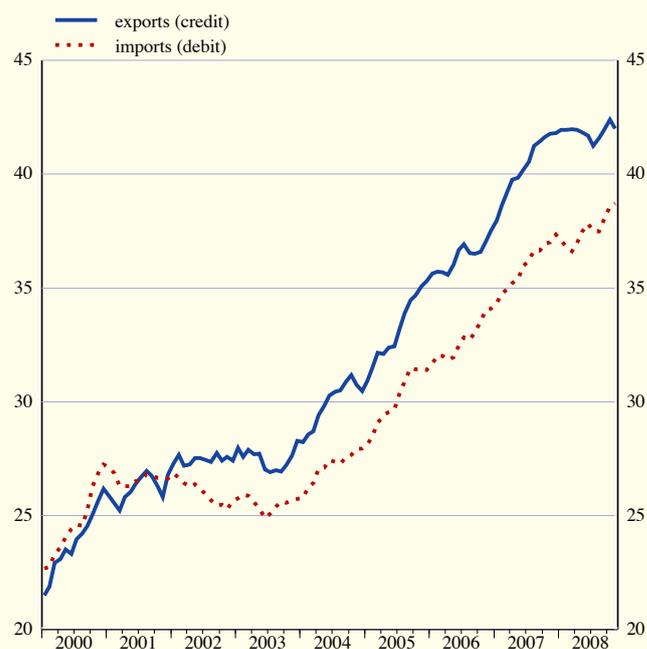
	Current account											Capital account			
	Total			Goods		Services		Income		Current transfers			Credit	Debit	
	Credit	Debit	Net	Credit	Debit	Credit	Debit	Credit	Debit	Credit	Workers remittances				
											11	12	13		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
2005	2,098.1	2,085.0	13.0	1,221.9	1,174.9	403.8	365.6	387.1	385.7	85.2	5.0	158.7	14.5	24.4	13.0
2006	2,422.9	2,414.4	8.5	1,391.5	1,371.7	438.8	394.7	504.0	480.2	88.7	5.3	167.8	17.2	23.9	14.5
2007	2,685.8	2,648.0	37.8	1,506.7	1,449.2	488.3	435.1	601.8	590.7	89.0	6.3	173.0	20.2	25.9	11.9
2007 Q3	675.6	658.3	17.3	377.0	359.3	133.7	115.8	148.9	141.3	16.0	1.7	41.9	5.2	4.5	2.9
Q4	702.8	692.2	10.6	394.0	383.7	126.2	115.0	156.0	146.6	26.6	1.6	46.9	5.5	8.7	3.5
2008 Q1	684.7	693.2	-8.6	389.0	390.5	115.7	103.9	153.6	145.6	26.4	1.5	53.3	5.0	9.0	2.9
Q2	710.6	735.8	-25.3	406.4	398.5	125.1	111.0	157.1	187.3	21.9	1.5	39.1	5.2	7.3	4.1
Q3	699.9	712.6	-12.7	401.0	407.7	135.7	120.5	149.4	147.1	13.7	1.8	37.2	5.2	4.9	3.0
2008 Sep.	240.7	244.6	-3.8	139.2	140.7	45.1	40.0	51.7	51.0	4.8	.	12.8	.	1.5	1.0
Oct.	239.9	244.1	-4.2	143.2	140.2	43.9	40.3	48.1	47.9	4.7	.	15.7	.	0.9	0.9
Nov.	214.3	228.3	-13.9	122.9	128.2	38.5	36.5	47.8	49.2	5.1	.	14.4	.	2.2	0.7
	Seasonally adjusted														
2007 Q3	684.6	674.3	10.2	385.1	368.2	124.3	109.9	155.8	153.4	19.4	.	42.8	.	.	.
Q4	680.5	684.0	-3.5	379.5	373.5	125.4	112.0	154.5	154.4	21.1	.	44.1	.	.	.
2008 Q1	700.7	707.3	-6.6	396.9	390.8	125.9	109.9	155.6	158.4	22.2	.	48.2	.	.	.
Q2	703.7	711.6	-7.9	402.8	397.4	125.0	113.4	151.0	154.9	24.8	.	45.8	.	.	.
Q3	703.3	724.8	-21.5	405.4	413.6	125.9	114.1	155.2	159.1	16.7	.	38.1	.	.	.
2008 June	231.4	237.3	-5.9	133.8	134.5	41.3	38.0	48.3	49.6	8.0	.	15.2	.	.	.
July	236.6	240.3	-3.7	137.9	139.2	40.6	36.7	52.1	51.3	5.9	.	13.2	.	.	.
Aug.	234.3	243.3	-9.0	134.8	138.4	42.8	37.8	51.8	55.0	4.9	.	12.1	.	.	.
Sep.	232.4	241.2	-8.8	132.7	136.0	42.4	39.6	51.3	52.8	6.0	.	12.8	.	.	.
Oct.	228.6	234.6	-6.0	130.5	128.9	41.9	38.3	50.4	51.9	5.8	.	15.4	.	.	.
Nov.	221.1	237.1	-16.0	121.5	127.5	41.6	38.2	52.0	56.0	5.9	.	15.3	.	.	.

**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
2005	16.2	9.5	370.9	376.2	147.3	40.2	106.2	-13.3	16.0	16.8	31.5	70.2	82.3	80.9	93.8	102.1
2006	16.8	10.0	487.1	470.2	186.2	44.2	108.2	34.5	20.5	20.0	39.6	99.6	103.5	91.0	137.4	151.4
2007	17.6	10.5	584.3	580.2	210.4	81.2	127.5	34.7	25.9	23.4	45.5	116.5	118.7	114.4	183.8	198.3
2007 Q3	4.3	3.2	144.6	138.1	49.5	24.0	28.9	14.5	6.2	5.5	11.0	24.1	30.1	28.5	47.8	51.1
Q4	4.6	2.7	151.4	143.9	52.9	16.5	30.8	5.4	7.3	6.3	9.2	20.7	32.0	32.4	50.0	53.6
2008 Q1	4.6	2.0	149.0	143.6	53.6	25.9	30.2	14.3	6.6	6.0	9.6	20.9	31.4	33.3	47.9	53.2
Q2	4.3	2.6	152.8	184.7	54.6	16.2	35.3	6.3	7.4	6.7	14.3	58.1	29.8	31.6	46.7	53.0
Q3	4.3	3.2	145.1	144.0	50.6	22.2	30.7	14.9	6.9	5.8	10.1	23.8	31.4	31.4	46.1	52.1

### 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									
2007 Q4 to 2008 Q3	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Credits																
<b>Current account</b>	2,798.0	1,042.0	60.4	86.5	536.3	300.5	58.3	40.4	38.1	85.3	32.9	56.5	99.4	184.7	409.7	809.0
Goods	1,590.4	570.7	36.6	55.9	240.3	238.0	0.0	21.8	18.6	65.3	24.9	33.6	76.7	90.4	194.0	494.3
Services	502.8	177.1	12.3	13.5	115.6	30.1	5.6	6.9	6.8	15.3	6.1	10.8	13.0	48.8	80.5	137.5
Income	616.1	229.8	10.7	15.6	167.1	29.6	6.8	11.5	12.0	4.5	1.9	11.7	9.3	39.3	128.7	167.6
Investment income	598.2	223.4	10.6	15.5	164.9	29.4	3.0	11.4	11.9	4.4	1.9	11.6	9.2	32.5	127.2	164.7
Current transfers	88.7	64.3	0.8	1.5	13.2	2.9	45.9	0.2	0.8	0.3	0.1	0.4	0.3	6.2	6.5	9.6
<b>Capital account</b>	29.9	26.2	0.0	0.1	0.8	0.1	25.2	0.0	0.0	0.0	0.0	0.0	0.0	0.4	1.7	1.4
Debits																
<b>Current account</b>	2,833.9	940.4	48.0	84.8	472.8	234.3	100.6	-	30.3	-	-	102.5	-	177.5	374.7	-
Goods	1,580.4	450.7	29.7	52.8	180.7	187.6	0.0	27.7	13.7	173.1	20.5	55.9	109.8	78.2	141.7	509.1
Services	450.3	139.3	9.1	10.6	87.7	31.6	0.2	5.2	6.7	10.8	4.5	7.9	9.5	38.0	90.7	137.6
Income	626.6	240.1	8.3	20.0	192.7	10.8	8.3	-	8.0	-	-	38.2	-	55.5	136.6	-
Investment income	616.1	233.9	8.3	19.9	191.2	6.2	8.2	-	7.9	-	-	38.1	-	55.0	135.7	-
Current transfers	176.5	110.2	0.8	1.4	11.6	4.3	92.2	1.4	1.9	2.3	0.7	0.5	0.6	5.7	5.5	47.7
<b>Capital account</b>	13.6	2.6	0.0	0.1	1.3	0.3	0.8	0.2	1.1	0.1	0.2	0.1	0.1	0.6	1.3	7.4
Net																
<b>Current account</b>	-35.9	101.6	12.4	1.8	63.5	66.3	-42.3	-	7.8	-	-	-46.0	-	7.3	35.0	-
Goods	10.0	120.0	6.9	3.1	59.6	50.4	0.0	-5.9	4.9	-107.8	4.4	-22.3	-33.0	12.2	52.3	-14.8
Services	52.5	37.8	3.2	2.9	27.9	-1.5	5.4	1.7	0.0	4.5	1.6	3.0	3.5	10.8	-10.2	-0.1
Income	-10.5	-10.4	2.4	-4.4	-25.6	18.7	-1.5	-	4.0	-	-	-26.5	-	-16.2	-8.0	-
Investment income	-17.9	-10.5	2.4	-4.4	-26.3	23.2	-5.3	-	4.0	-	-	-26.5	-	-22.5	-8.5	-
Current transfers	-87.9	-45.9	0.0	0.1	1.6	-1.4	-46.3	-1.2	-1.1	-2.0	-0.6	-0.1	-0.3	0.5	1.0	-38.0
<b>Capital account</b>	16.3	23.6	0.0	0.0	-0.5	-0.2	24.3	-0.1	-1.0	-0.1	-0.2	-0.1	0.0	-0.2	0.4	-6.0

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	8,609.6	9,507.7	-898.1	110.1	121.6	-11.5	2,276.0	2,229.8	3,043.1	4,078.8	-37.3	3,046.9	3,199.1	281.0
2005	10,795.0	11,593.7	-798.7	133.1	143.0	-9.8	2,800.9	2,438.7	3,883.8	5,107.9	-21.4	3,809.2	4,047.1	322.5
2006	12,272.5	13,292.9	-1,020.4	144.3	156.3	-12.0	3,143.7	2,721.3	4,370.2	5,864.9	-20.9	4,451.8	4,706.8	327.7
2007	13,773.8	14,904.4	-1,130.7	154.3	166.9	-12.7	3,542.2	3,084.5	4,653.3	6,339.5	-10.3	5,241.2	5,480.5	347.4
2008 Q2	13,700.3	14,825.4	-1,125.1	150.5	162.8	-12.4	3,653.9	3,090.7	4,433.7	6,042.5	-4.3	5,263.1	5,692.2	353.9
Q3	13,976.9	15,135.1	-1,158.2	152.4	165.0	-12.6	3,767.9	3,128.1	4,302.3	6,064.8	24.7	5,511.1	5,942.2	370.9
<b>Changes to outstanding amounts</b>														
2004	748.0	878.1	-130.2	9.6	11.2	-1.7	106.5	145.6	387.4	492.7	-17.3	297.1	239.8	-25.7
2005	2,185.4	2,086.0	99.4	26.9	25.7	1.2	524.9	208.9	840.7	1,029.0	15.9	762.3	848.0	41.5
2006	1,477.5	1,699.2	-221.7	17.4	20.0	-2.6	342.8	282.5	486.4	757.0	0.5	642.6	659.7	5.2
2007	1,501.3	1,611.5	-110.2	16.8	18.1	-1.2	398.5	363.2	283.1	474.6	10.7	789.4	773.7	19.7
2008 Q2	-32.1	-11.3	-20.8	-1.4	-0.5	-0.9	40.9	16.2	81.6	-36.3	-12.4	-139.7	8.9	-2.5
Q3	276.6	309.7	-33.1	12.2	13.6	-1.5	114.0	37.4	-131.3	22.3	29.0	248.0	250.1	17.0
<b>Transactions</b>														
2004	821.2	794.2	27.0	10.5	10.2	0.3	169.6	88.6	346.2	417.7	8.5	309.4	287.9	-12.5
2005	1,330.7	1,341.4	-10.8	16.4	16.5	-0.1	359.8	152.3	414.4	543.6	17.3	556.8	645.5	-17.7
2006	1,686.4	1,824.1	-137.8	19.8	21.4	-1.6	415.6	258.9	533.9	824.2	-3.0	739.1	741.0	0.9
2007	1,873.1	1,902.5	-29.4	21.0	21.3	-0.3	455.3	364.9	440.6	578.3	53.9	918.3	959.3	5.1
2008 Q1	537.8	533.4	4.4	23.9	23.7	0.2	151.6	44.4	69.4	143.2	21.0	290.8	345.8	5.1
Q2	78.2	164.0	-85.8	3.4	7.1	-3.7	40.1	-10.5	132.2	172.3	8.6	-102.8	2.2	0.0
Q3	124.2	157.8	-33.6	5.5	6.9	-1.5	78.7	35.6	-64.0	45.8	8.7	102.4	76.4	-1.6
2008 July	44.7	73.5	-28.8	.	.	.	23.8	11.0	8.3	33.8	-0.1	10.5	28.7	2.3
Aug.	34.6	28.5	6.1	.	.	.	17.5	8.7	15.8	27.0	8.7	-5.2	-7.2	-2.3
Sep.	45.0	55.8	-10.8	.	.	.	37.5	15.9	-88.1	-15.0	0.1	97.2	54.9	-1.6
Oct.	-89.8	-14.7	-75.1	.	.	.	15.7	1.8	-130.9	-10.5	-25.4	42.2	-6.0	8.6
Nov.	-78.3	-61.1	-17.2	.	.	.	15.3	-15.9	-2.3	45.6	1.8	-94.0	-90.7	1.0
<b>Other changes</b>														
2004	-73.3	83.9	-157.2	-0.9	1.1	-2.0	-63.1	57.0	41.3	75.0	-25.8	-12.4	-48.1	-13.3
2005	854.7	744.6	110.1	10.5	9.2	1.4	165.1	56.6	426.3	485.4	-1.4	205.5	202.5	59.2
2006	-208.9	-125.0	-84.0	-2.5	-1.5	-1.0	-72.8	23.6	-47.5	-67.2	3.5	-96.5	-81.4	4.3
2007	-371.8	-291.0	-80.8	-4.2	-3.3	-0.9	-56.8	-1.7	-157.5	-103.7	-43.2	-128.9	-185.6	14.6
<b>Other changes due to exchange rate changes</b>														
2004	-174.7	-97.2	-77.5	-2.2	-1.2	-1.0	-37.3	8.9	-66.7	-52.8	.	-61.4	-53.3	-9.3
2005	389.8	210.0	179.8	4.8	2.6	2.2	90.2	-22.2	153.4	118.2	.	127.5	114.0	18.7
2006	-346.4	-203.8	-142.6	-4.1	-2.4	-1.7	-73.2	14.2	-152.8	-116.8	.	-105.2	-101.1	-15.2
2007	-534.8	-238.8	-296.0	-6.0	-2.7	-3.3	-114.3	33.6	-222.3	-125.8	.	-183.3	-146.5	-14.9
<b>Other changes due to price changes</b>														
2004	113.1	222.1	-109.0	1.4	2.8	-1.4	34.4	26.4	107.5	195.7	-25.8	.	.	-3.1
2005	304.8	333.8	-29.0	3.8	4.1	-0.4	67.0	51.4	197.1	282.4	-1.4	.	.	42.1
2006	319.1	296.3	22.8	3.8	3.5	0.3	67.7	41.7	231.7	254.6	3.5	.	.	16.2
2007	179.4	-63.3	242.8	2.0	-0.7	2.7	32.3	13.0	158.7	-76.3	-43.2	.	.	31.7
<b>Other changes due to other adjustments</b>														
2004	-11.6	-40.9	29.3	-0.1	-0.5	0.4	-60.3	21.7	0.4	-67.8	.	49.1	5.2	-0.8
2005	159.4	200.8	-41.4	2.0	2.5	-0.5	8.0	27.4	75.7	84.8	.	77.9	88.5	-2.2
2006	-181.3	-217.5	36.3	-2.1	-2.6	0.4	-67.3	-32.3	-126.3	-205.0	.	8.6	19.8	3.7
2007	-16.1	11.1	-27.2	-0.2	0.1	-0.3	25.2	-48.3	-93.8	98.5	.	54.4	-39.1	-1.9
<b>Growth rates of outstanding amounts</b>														
2004	10.3	9.1	-	.	.	.	7.8	4.2	12.8	11.5	.	11.2	9.7	-4.1
2005	14.9	13.7	-	.	.	.	15.2	6.8	13.1	12.8	.	17.7	19.6	-5.8
2006	15.8	15.9	-	.	.	.	14.9	10.6	14.0	16.3	.	19.5	18.4	0.2
2007	15.3	14.2	-	.	.	.	14.5	13.4	10.1	9.8	.	20.7	20.4	1.6
2008 Q1	13.7	12.8	-	.	.	.	15.5	11.3	8.0	7.6	.	17.2	20.4	2.6
Q2	9.9	10.0	-	.	.	.	12.1	8.2	7.7	7.0	.	10.0	14.8	1.4
Q3	7.9	7.5	-	.	.	.	10.9	6.6	5.2	6.4	.	7.6	9.5	-0.4

Source: ECB.

1) Net financial derivatives are included in assets.

## 7.3 Financial account

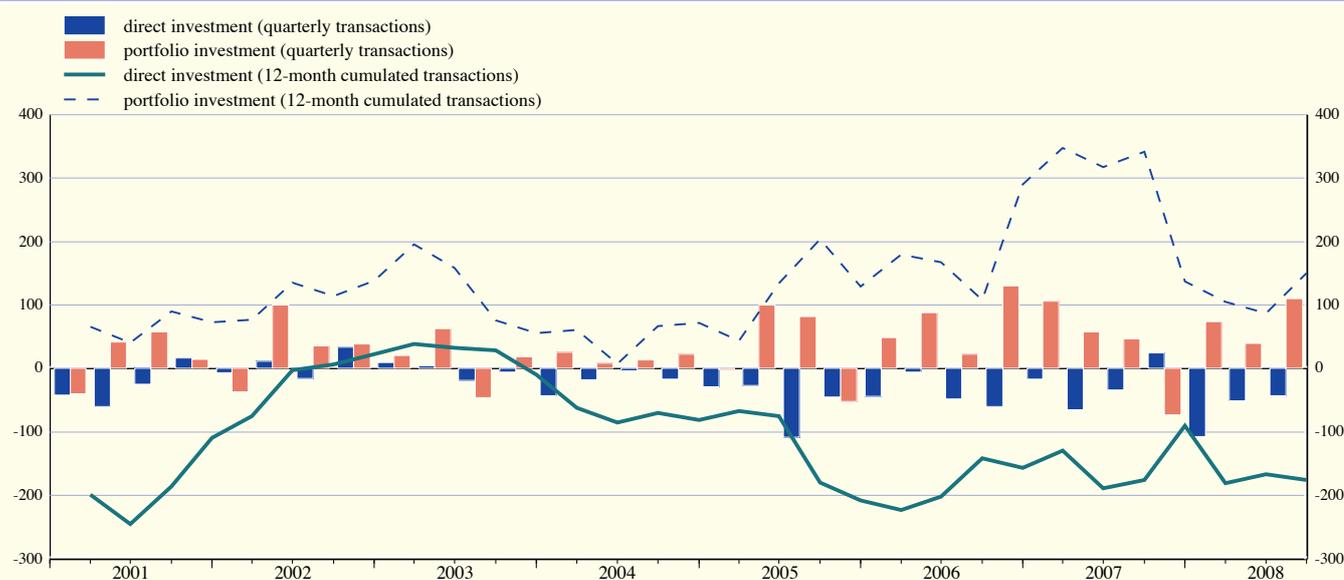
(EUR billions and annual growth rates; outstanding amounts and growth rates at end of period, transactions during period)

### 2. Direct investment

	By resident units abroad							By non-resident units in the euro area						
	Total	Equity capital and reinvested earnings			Other capital (mostly inter-company loans)			Total	Equity capital and reinvested earnings			Other capital (mostly inter-company loans)		
		Total	MFI	Non-MFI	Total	MFI	Non-MFI		Total	into MFI	into Non-MFI	Total	to MFI	to Non-MFI
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Outstanding amounts (international investment position)														
2006	3,143.7	2,551.1	219.1	2,332.0	592.6	2.3	590.4	2,721.3	2,085.7	65.1	2,020.6	635.5	9.7	625.9
2007	3,542.2	2,858.8	248.4	2,610.3	683.4	6.4	677.1	3,084.5	2,338.4	68.4	2,270.0	746.1	14.9	731.1
2008 Q2	3,653.9	2,910.4	259.0	2,651.3	743.5	6.6	736.9	3,090.7	2,334.4	63.2	2,271.2	756.3	19.1	737.2
Q3	3,767.9	3,001.5	260.8	2,740.7	766.4	6.7	759.7	3,128.1	2,348.7	64.7	2,284.0	779.4	18.2	761.1
Transactions														
2006	415.6	325.7	40.2	285.5	89.9	0.0	89.9	258.9	224.0	5.7	218.3	34.9	0.0	34.9
2007	455.3	354.4	28.4	326.1	100.9	-0.6	101.5	364.9	250.7	4.4	246.4	114.2	1.4	112.7
2008 Q1	151.6	113.8	10.0	103.8	37.8	2.3	35.4	44.4	37.9	0.0	37.9	6.6	0.1	6.4
Q2	40.1	14.9	8.8	6.1	25.3	-1.8	27.1	-10.5	-8.2	-2.3	-5.9	-2.3	1.0	-3.3
Q3	78.7	60.0	-5.6	65.6	18.8	-0.2	19.0	35.6	21.2	0.6	20.5	14.5	0.5	14.0
2008 July	23.8	17.2	-13.5	30.7	6.5	1.5	5.0	11.0	2.8	0.2	2.6	8.2	0.4	7.8
Aug.	17.5	21.7	2.9	18.7	-4.2	-1.2	-3.0	8.7	7.9	0.3	7.7	0.8	-0.1	0.9
Sep.	37.5	21.1	4.9	16.2	16.4	-0.6	17.0	15.9	10.5	0.2	10.2	5.5	0.2	5.3
Oct.	15.7	13.5	3.0	10.5	2.2	0.0	2.3	1.8	3.6	-0.8	4.5	-1.8	0.2	-2.0
Nov.	15.3	-4.7	3.1	-7.8	20.0	0.2	19.7	-15.9	-5.6	0.3	-5.8	-10.4	0.2	-10.6
Growth rates														
2006	14.9	14.4	22.1	13.7	17.3	-2.9	17.4	10.6	12.2	9.5	12.3	5.8	-1.0	5.9
2007	14.5	13.9	12.7	14.0	17.0	-88.7	17.3	13.4	12.0	7.0	12.2	18.0	8.7	18.1
2008 Q1	15.5	15.0	13.9	15.1	17.2	106.6	16.8	11.3	10.7	5.6	10.9	13.2	17.2	13.1
Q2	12.1	10.9	13.8	10.6	17.1	6.1	17.2	8.2	7.0	1.3	7.2	12.4	16.9	12.3
Q3	10.9	9.7	3.6	10.3	15.6	11.5	15.7	6.6	5.4	0.1	5.6	10.6	16.9	10.5

### C34 B.o.p. net direct and portfolio investment

(EUR billions)



Source: ECB.

## 7.3 Financial account

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

## 3. Portfolio investment assets

	3. Portfolio investment assets															
	Total	Equity					Debt instruments									
		Total	MFIs		Non-MFIs		Bonds and notes					Money market instruments				
				Euro-system	General government			Total	MFIs	Non-MFIs	Total	MFIs	Non-MFIs	Total	MFIs	Non-MFIs
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Outstanding amounts (international investment position)																
2006	4,370.2	1,936.0	127.7	2.8	1,808.2	37.0	2,056.7	875.1	11.2	1,181.6	14.1	377.5	309.9	9.2	67.7	0.2
2007	4,653.3	1,984.2	145.1	2.4	1,839.1	44.6	2,232.5	937.9	13.9	1,294.6	17.0	436.6	349.5	32.6	87.1	0.5
2008 Q2	4,433.7	1,689.4	94.9	2.7	1,594.5	40.1	2,244.1	963.8	18.0	1,280.3	18.4	500.2	411.0	56.7	89.2	0.8
Q3	4,302.3	1,525.0	93.9	2.7	1,431.1	39.0	2,276.1	982.8	16.8	1,293.3	19.4	501.2	401.4	58.6	99.8	0.7
Transactions																
2006	533.9	153.2	18.2	0.0	135.0	6.1	313.1	172.8	2.4	140.4	1.1	67.5	56.5	8.0	11.1	-0.1
2007	440.6	81.1	36.2	-0.4	44.8	5.4	283.3	154.0	3.5	129.3	2.2	76.2	67.3	23.7	8.8	0.3
2008 Q1	69.4	-44.4	-40.9	0.1	-3.5	-0.6	39.2	29.8	3.4	9.4	0.5	74.6	59.2	7.1	15.3	0.1
Q2	132.2	31.3	-5.5	0.1	36.8	0.8	92.5	37.3	8.3	55.2	1.5	8.4	18.2	20.9	-9.8	0.1
Q3	-64.0	-50.9	-4.4	0.1	-46.4	0.6	16.8	-2.3	-1.1	19.1	1.1	-29.9	-33.4	-1.2	3.5	-0.2
2008 July	8.3	-7.3	6.2	0.1	-13.5	.	4.0	-3.3	-0.1	7.3	.	11.6	11.6	-0.4	0.0	.
Aug.	15.8	-12.8	-1.5	0.0	-11.3	.	15.7	8.4	-0.1	7.3	.	12.9	6.8	-0.5	6.1	.
Sep.	-88.1	-30.8	-9.1	0.0	-21.6	.	-3.0	-7.4	-1.0	4.4	.	-54.4	-51.8	-0.3	-2.6	.
Oct.	-130.9	-49.0	-11.6	0.0	-37.4	.	-30.9	-13.0	-0.2	-17.9	.	-51.0	-30.5	0.0	-20.5	.
Nov.	-2.3	-2.7	2.5	0.3	-5.2	.	-2.2	-2.5	-0.1	0.4	.	2.6	3.1	-0.3	-0.6	.
Growth rates																
2006	14.0	9.0	17.5	0.9	8.4	22.1	17.4	24.3	26.1	12.9	9.4	21.6	22.5	1,019.8	20.4	-27.3
2007	10.1	4.1	29.2	-13.1	2.4	14.0	13.8	17.9	32.5	10.8	15.9	20.5	22.2	251.2	12.8	173.4
2008 Q1	8.0	0.6	-18.0	-4.8	1.8	9.8	11.1	14.6	48.5	8.6	12.5	27.7	32.8	173.5	7.5	-90.0
Q2	7.7	1.4	-27.2	0.6	3.7	8.0	10.5	11.4	83.6	9.8	19.6	21.3	29.7	236.0	-10.2	-93.6
Q3	5.2	-2.5	-25.6	6.6	-0.7	4.5	9.7	10.4	62.7	9.3	21.5	16.9	22.8	157.9	-6.4	-94.8

## 4. Portfolio investment liabilities

	4. Portfolio investment liabilities															
	Total	Equity			Debt instruments											
		Total	MFIs		Non-MFIs		Bonds and notes					Money market instruments				
					General government			Total	MFIs	Non-MFIs	Total	MFIs	Non-MFIs	Total	MFIs	Non-MFIs
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Outstanding amounts (international investment position)																
2006	5,864.9	2,910.7	657.5	2,253.2	2,655.3	955.2	1,702.4	1,015.4	298.9	125.8	173.3	138.0				
2007	6,339.5	3,103.1	754.7	2,348.4	2,916.8	1,129.5	1,787.2	1,109.3	319.6	153.3	166.2	142.5				
2008 Q2	6,042.5	2,661.7	738.1	1,923.6	3,015.1	1,095.4	1,919.7	1,161.7	365.8	171.1	194.6	171.0				
Q3	6,064.8	2,383.7	741.6	1,642.1	3,225.5	1,173.1	2,052.4	1,260.8	455.6	177.5	278.2	229.9				
Transactions																
2006	824.2	299.9	94.5	205.4	521.6	212.7	308.8	137.3	2.7	21.4	-18.7	-19.6				
2007	578.3	96.0	76.1	19.6	446.4	232.6	213.8	152.0	35.9	37.6	-1.8	3.2				
2008 Q1	143.2	46.1	73.1	-27.0	78.3	23.1	55.2	65.2	18.8	4.4	14.4	27.6				
Q2	172.3	-17.9	17.1	-35.0	169.4	67.9	101.5	43.9	20.9	2.2	18.7	10.7				
Q3	45.8	-92.6	-18.4	-74.2	69.1	11.8	57.3	55.6	69.3	-4.1	73.4	53.0				
2008 July	33.8	4.1	.	.	4.8	.	.	.	24.9	.	.	.				
Aug.	27.0	-8.0	.	.	35.1	.	.	.	-0.1	.	.	.				
Sep.	-15.0	-88.7	.	.	29.1	.	.	.	44.5	.	.	.				
Oct.	-10.5	-42.8	.	.	-23.0	.	.	.	55.2	.	.	.				
Nov.	45.6	33.2	.	.	16.6	.	.	.	-4.2	.	.	.				
Growth rates																
2006	16.3	12.2	17.3	10.8	23.1	25.9	21.4	15.1	0.9	18.7	-9.6	-12.1				
2007	9.8	3.3	11.3	0.9	16.9	24.6	12.6	15.0	11.8	30.5	0.3	3.8				
2008 Q1	7.6	2.2	11.9	-1.0	12.9	16.7	10.8	17.4	13.5	31.5	2.8	8.8				
Q2	7.0	0.1	11.4	-3.5	14.0	16.1	12.8	16.3	7.8	21.4	0.5	3.0				
Q3	6.4	-3.6	5.0	-6.6	14.0	12.5	14.9	18.0	25.3	18.1	33.6	28.2				

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

	Outstanding amounts (international investment position)														
	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	Currency and deposits	Trade credits	Loans/currency and deposits	Currency and deposits		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
2006	4,451.8	13.4	12.6	0.7	2,941.2	2,878.3	62.8	119.6	14.2	57.8	15.4	1,377.7	187.6	1,062.7	395.8
2007	5,241.2	38.2	37.6	0.7	3,350.5	3,279.1	71.4	106.7	12.7	47.7	13.5	1,745.7	190.8	1,388.4	441.9
2008 Q2	5,263.1	34.2	33.9	0.3	3,363.7	3,287.6	76.2	105.7	12.4	47.4	17.0	1,759.5	200.2	1,356.2	382.1
Q3	5,511.1	33.4	33.1	0.3	3,563.7	3,487.8	75.8	99.8	12.3	39.0	8.7	1,814.2	201.9	1,388.9	384.5
Transactions															
2006	739.1	-8.7	-8.7	0.0	521.9	516.1	5.8	-7.2	-5.2	-2.7	3.1	233.1	6.3	211.5	30.9
2007	918.3	21.9	22.0	0.0	555.0	547.6	7.4	-7.6	-1.4	-7.1	-2.0	348.9	13.5	293.5	37.5
2008 Q1	290.8	9.3	9.3	0.0	218.5	214.4	4.1	-4.9	-0.3	-4.9	-1.3	67.9	6.4	34.5	12.8
Q2	-102.8	-9.4	-9.4	0.0	-101.7	-102.7	0.9	6.2	-0.4	5.9	5.6	2.2	10.8	-21.1	-48.2
Q3	102.4	-2.0	-2.0	0.0	81.2	81.3	0.0	-8.0	-0.1	-8.8	-8.3	31.2	4.5	6.9	-2.4
2008 July	10.5	-0.5	.	.	8.8	.	.	-8.8	.	.	-9.2	10.9	.	.	4.5
Aug.	-5.2	-1.2	.	.	0.8	.	.	-1.1	.	.	-0.2	-3.6	.	.	-10.4
Sep.	97.2	-0.2	.	.	71.6	.	.	1.9	.	.	1.1	23.9	.	.	3.5
Oct.	42.2	-6.4	.	.	26.7	.	.	0.3	.	.	-2.8	21.6	.	.	15.0
Nov.	-94.0	-1.6	.	.	-90.2	.	.	7.3	.	.	8.1	-9.5	.	.	0.6
Growth rates															
2006	19.5	-39.4	-40.8	3.1	21.1	21.3	10.5	-5.6	-26.1	-4.6	24.4	20.0	3.4	24.5	8.6
2007	20.7	165.6	174.8	-3.4	19.0	19.1	11.7	-6.4	-9.8	-12.4	-13.1	25.2	7.3	27.4	9.5
2008 Q1	17.2	113.1	116.8	-4.8	15.6	15.5	18.3	-4.5	-10.3	-9.7	17.7	20.8	7.8	21.8	2.0
Q2	10.0	27.1	28.1	-4.1	7.6	7.6	6.2	-12.1	-9.9	-23.1	-34.1	16.6	12.4	16.2	-9.4
Q3	7.6	2.2	2.6	0.2	7.7	7.6	10.3	-5.2	-8.9	-13.7	-31.3	8.2	14.0	3.9	-11.5

### 6. Other investment liabilities

	Outstanding amounts (international investment position)														
	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
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
2006	4,706.8	115.9	115.6	0.2	3,483.9	3,429.5	54.4	50.7	0.0	46.6	4.1	1,056.2	146.1	818.3	91.8
2007	5,480.5	201.2	201.0	0.2	3,938.2	3,871.1	67.1	50.9	0.0	45.7	5.2	1,290.2	157.6	1,023.2	109.4
2008 Q2	5,692.2	258.9	258.6	0.3	4,078.7	4,009.8	68.9	49.1	0.0	45.5	3.6	1,305.5	169.2	1,031.9	104.4
Q3	5,942.2	370.5	370.2	0.3	4,195.2	4,126.0	69.2	51.8	0.0	47.8	4.0	1,324.7	171.1	1,041.5	112.1
Transactions															
2006	741.0	20.4	20.4	0.0	497.0	490.6	6.4	1.9	0.0	2.1	-0.1	221.7	12.7	197.2	11.8
2007	959.3	91.4	91.4	0.0	635.8	631.0	4.8	-1.2	0.0	-2.0	0.8	233.4	9.7	227.5	-3.9
2008 Q1	345.8	21.3	21.2	0.2	283.7	281.1	2.7	-1.0	0.0	0.9	-1.9	41.7	3.3	34.9	3.6
Q2	2.2	41.0	41.2	-0.1	-25.4	-23.4	-2.1	-1.0	0.0	-1.5	0.4	-12.4	6.3	-11.8	-6.9
Q3	76.4	106.2	106.1	0.1	-27.7	-30.5	2.8	2.0	0.0	2.0	0.1	-4.2	1.3	-8.2	2.8
2008 July	28.7	-1.2	.	.	17.6	.	.	2.0	.	.	.	10.4	.	.	.
Aug.	-7.2	2.0	.	.	2.1	.	.	-1.8	.	.	.	-9.5	.	.	.
Sep.	54.9	105.5	.	.	-47.4	.	.	1.9	.	.	.	-5.1	.	.	.
Oct.	-6.0	131.6	.	.	-179.0	.	.	6.8	.	.	.	34.6	.	.	.
Nov.	-90.7	-30.8	.	.	-57.6	.	.	2.6	.	.	.	-5.0	.	.	.
Growth rates															
2006	18.4	22.7	22.7	5.7	16.2	16.2	13.3	4.0	-24.1	4.7	-3.2	26.9	9.5	31.6	17.5
2007	20.4	79.6	79.8	-6.9	18.4	18.5	8.8	-2.3	29.4	-4.2	16.4	21.6	6.7	27.9	-2.3
2008 Q1	20.4	70.9	71.1	15.6	17.8	17.9	10.8	-6.3	21.2	-5.7	-15.3	24.2	10.3	31.0	-4.8
Q2	14.8	72.4	72.5	-6.3	11.7	11.9	3.1	-9.4	26.7	-7.2	-30.3	18.5	10.4	23.6	-8.8
Q3	9.5	126.4	126.6	10.3	7.2	7.2	5.6	-11.0	59.5	-8.1	-36.0	2.5	9.5	2.6	-7.6

Source: ECB.

## 7.3 Financial account

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

## 7. Reserve assets

	Reserve assets													Memo		
	Total	Monetary gold		Special drawing rights	Reserve position in the IMF	Foreign exchange							Other claims	Assets	Liabilities	
		In EUR billions	In fine troy ounces (millions)			Total	Currency and deposits		Securities			Financial derivatives		Claims on euro area residents in foreign currency	Predetermined short-term net drains in foreign currency	
							With monetary authorities and the BIS	With banks	Total	Equity	Bonds and notes					Money market instruments
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
<b>Outstanding amounts (international investment position)</b>																
2005	320.1	163.4	375.861	4.3	10.6	141.7	12.6	21.4	107.9	0.6	69.4	38.0	-0.2	0.0	25.6	-17.9
2006	325.8	176.3	365.213	4.6	5.2	139.7	6.3	22.5	110.7	0.5	79.3	30.8	0.3	0.0	24.6	-21.5
2007	347.4	201.0	353.688	4.6	3.6	138.2	7.2	22.0	108.5	0.4	87.8	20.3	0.5	0.0	44.1	-38.5
2008 Q1	356.3	208.4	353.060	4.3	3.4	140.1	6.6	26.8	105.9	0.5	89.8	15.6	0.9	0.1	36.7	-37.3
Q2	353.9	207.9	352.314	4.3	4.0	137.7	7.4	24.0	105.6	0.5	89.9	15.2	0.6	0.0	59.4	-59.2
Q3	370.9	216.8	350.634	4.6	4.0	145.4	11.6	18.2	117.8	0.5	100.0	17.2	-2.1	0.0	188.9	-185.3
2008 Oct.	368.0	200.5	350.021	5.0	4.3	158.3	9.9	18.3	137.5	-	-	-	-7.4	0.0	254.4	-250.8
Nov.	393.4	223.8	349.718	5.0	7.1	157.5	9.1	12.8	139.1	-	-	-	-3.5	0.0	255.1	-245.5
Dec.	383.9	217.0	349.191	4.7	7.3	154.8	7.6	8.0	129.5	-	-	-	9.7	0.1	253.6	-245.7
<b>Transactions</b>																
2005	-17.7	-3.9	-	0.2	-8.6	-5.4	-0.2	-6.8	1.6	0.0	4.8	-3.2	0.0	0.0	-	-
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 Q1	5.1	-0.6	-	-0.3	0.0	5.9	-0.7	5.7	0.9	0.1	6.1	-5.3	0.1	0.1	-	-
Q2	0.0	-0.4	-	0.0	0.7	-0.2	0.7	-2.9	2.0	0.0	1.7	0.3	-0.1	-0.1	-	-
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	-	-
<b>Growth rates</b>																
2005	-5.8	-2.8	-	4.4	-44.7	-3.8	-2.0	-23.7	1.6	2.2	6.9	-7.9	20.5	-	-	-
2006	0.2	-2.4	-	11.6	-48.8	7.2	-48.4	10.6	13.1	0.0	28.4	-15.3	-73.2	-	-	-
2007	1.6	-1.7	-	7.3	-18.2	6.3	15.0	6.2	5.7	1.1	18.5	-27.5	-59.1	-	-	-
2008 Q1	2.6	-1.8	-	0.4	-3.3	8.5	33.2	9.3	7.3	406.6	18.3	-33.3	-43.6	-	-	-
Q2	1.4	-1.4	-	-2.4	2.7	5.3	27.2	-3.6	6.4	165.8	17.3	-33.7	-47.9	-	-	-
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	-	-	-

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
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
<b>2007</b>	<b>Outstanding amounts (international investment position)</b>														
<b>Direct investment</b>	457.7	-77.0	-3.7	-32.7	-277.5	237.2	-0.3	23.7	27.1	-10.8	113.1	-66.7	-37.3	-0.2	485.7
Abroad	3,542.2	1,302.0	37.1	82.5	916.1	266.2	0.0	91.6	30.7	69.1	350.1	684.4	391.6	0.0	622.6
Equity/reinvested earnings	2,858.8	1,027.4	32.3	55.2	709.9	230.0	0.0	67.8	24.1	57.8	292.5	525.9	366.1	0.0	497.3
Other capital	683.4	274.7	4.9	27.3	206.2	36.3	0.0	23.8	6.6	11.4	57.6	158.6	25.5	0.0	125.3
In the euro area	3,084.5	1,379.0	40.8	115.2	1,193.6	29.0	0.3	67.9	3.7	79.9	236.9	751.1	428.8	0.2	136.9
Equity/reinvested earnings	2,338.4	1,124.2	33.4	93.6	987.8	9.2	0.2	56.6	0.9	65.7	181.3	552.1	267.6	0.0	90.0
Other capital	746.1	254.8	7.4	21.6	205.8	19.9	0.1	11.3	2.7	14.3	55.6	199.0	161.2	0.2	46.9
<b>Portfolio investment assets</b>	4,653.3	1,374.6	68.2	139.3	995.2	101.4	70.5	82.5	42.0	241.9	132.3	1,489.3	630.2	26.8	633.8
Equity	1,984.2	415.2	11.4	45.9	335.3	22.0	0.5	20.2	39.5	141.6	115.7	634.9	285.3	0.9	330.9
Debt instruments	2,669.0	959.4	56.8	93.4	659.9	79.4	70.0	62.3	2.5	100.2	16.6	854.4	344.9	25.9	302.8
Bonds and notes	2,232.5	784.2	52.7	78.2	505.4	78.5	69.4	58.6	2.2	63.5	12.9	710.7	303.1	24.8	272.5
Money market instruments	436.6	175.2	4.0	15.1	154.5	0.8	0.7	3.6	0.3	36.7	3.8	143.8	41.8	1.1	30.4
<b>Other investment</b>	-239.3	-152.6	-155.4	-8.7	121.7	54.4	-164.6	-66.0	-45.2	-31.5	-54.7	-73.1	-91.2	-23.3	298.3
Assets	5,241.2	2,581.4	104.4	72.2	2,241.7	152.3	10.8	23.5	35.0	81.3	266.1	838.0	516.8	57.5	841.7
General government	106.7	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	40.4
MFIs	3,388.7	1,924.7	86.7	52.1	1,663.2	121.9	0.8	15.0	15.3	45.0	157.5	409.6	353.5	18.7	449.4
Other sectors	1,745.7	635.2	16.9	20.0	568.2	29.2	0.9	8.5	17.9	36.1	108.5	425.3	161.9	0.5	351.9
Liabilities	5,480.5	2,734.0	259.8	80.9	2,120.0	97.9	175.5	89.5	80.2	112.8	320.7	911.0	608.0	80.8	543.4
General government	50.9	28.4	0.0	0.3	2.4	0.0	25.6	0.0	0.0	0.5	0.8	6.3	0.3	11.5	3.1
MFIs	4,139.4	2,142.0	249.6	58.3	1,659.9	72.4	101.8	81.5	62.2	89.0	247.6	525.1	523.7	66.7	401.7
Other sectors	1,290.2	563.6	10.2	22.3	457.7	25.5	48.0	8.0	18.0	23.3	72.3	379.7	84.0	2.6	138.6
<b>2007 Q4 to 2008 Q3</b>	<b>Cumulated transactions</b>														
<b>Direct investment</b>	175.9	49.0	0.7	0.6	26.7	21.0	0.0	0.4	4.4	13.6	33.6	-11.2	34.2	0.0	52.1
Abroad	372.3	78.1	2.9	9.1	38.0	28.0	0.0	5.8	4.1	13.8	44.7	60.4	80.2	0.0	85.3
Equity/reinvested earnings	269.1	53.3	2.1	6.5	28.9	15.8	0.0	4.6	3.8	6.0	34.3	44.8	69.6	0.0	52.6
Other capital	103.3	24.8	0.8	2.6	9.1	12.2	0.0	1.2	0.3	7.8	10.4	15.5	10.6	0.0	32.7
In the euro area	196.4	29.1	2.1	8.5	11.4	7.1	0.0	5.4	-0.2	0.3	11.1	71.6	46.0	0.0	33.2
Equity/reinvested earnings	122.7	33.3	0.6	5.8	26.2	0.7	0.0	3.3	0.1	3.3	5.0	39.3	25.6	0.0	12.8
Other capital	73.7	-4.3	1.5	2.7	-14.8	6.4	0.0	2.1	-0.4	-3.0	6.1	32.3	20.4	0.0	20.5
<b>Portfolio investment assets</b>	236.7	108.4	3.3	7.6	83.8	10.1	3.6	17.8	5.9	17.2	-13.4	36.2	12.5	-1.1	53.2
Equity	-44.0	-16.4	-0.5	-4.3	-13.5	1.6	0.2	6.3	4.6	-26.3	-13.3	-17.0	20.4	-0.1	-2.0
Debt instruments	280.7	124.9	3.9	11.8	97.3	8.5	3.4	11.4	1.3	43.5	0.0	53.2	-7.9	-1.0	55.2
Bonds and notes	209.5	94.6	2.8	4.2	78.6	7.3	1.7	12.4	0.5	11.6	1.2	52.4	-14.1	-0.1	51.0
Money market instruments	71.1	30.3	1.1	7.7	18.7	1.2	1.6	-1.0	0.8	31.9	-1.2	0.8	6.2	-0.9	4.2
<b>Other investment</b>	-123.2	-165.3	30.7	2.0	-255.1	55.0	2.0	6.7	17.6	4.2	-79.5	-88.5	67.6	18.2	95.7
Assets	390.1	52.4	7.6	7.3	-35.7	67.0	6.2	2.8	8.4	26.9	-57.1	90.5	95.7	7.5	163.1
General government	-5.4	-2.2	-1.3	0.2	-2.0	-0.5	1.4	0.0	-0.1	0.0	0.0	0.1	0.0	0.7	-4.1
MFIs	256.5	11.9	9.0	6.9	-70.6	62.1	4.6	3.3	5.8	29.0	-57.9	92.8	67.0	6.8	97.8
Other sectors	139.1	42.6	-0.1	0.2	36.9	5.5	0.1	-0.5	2.7	-2.1	0.8	-2.4	28.7	0.0	69.4
Liabilities	513.3	217.7	-23.1	5.2	219.4	12.0	4.2	-4.0	-9.2	22.7	22.4	179.1	28.0	-10.8	67.4
General government	-6.2	-5.6	0.0	0.2	-2.7	0.0	-3.1	0.0	0.0	0.0	0.0	-0.8	0.1	0.5	-0.4
MFIs	487.4	205.5	-23.6	2.0	218.2	6.4	2.4	-2.1	-10.4	24.0	26.3	180.6	11.0	-11.1	63.5
Other sectors	32.1	17.8	0.4	3.0	3.9	5.6	4.9	-1.9	1.1	-1.3	-4.0	-0.8	17.0	-0.1	4.3

Source: ECB.

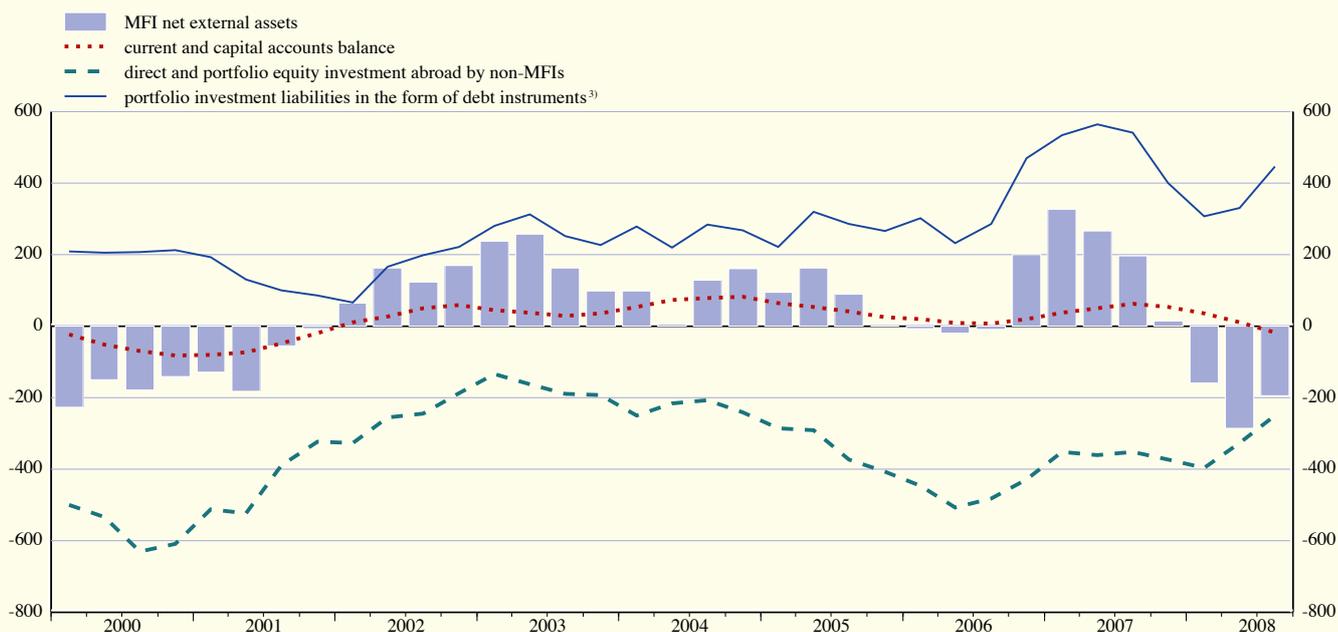
7.4 Monetary presentation of the balance of payments <sup>1)</sup>

(EUR billions; transactions)

	B.o.p. items balancing transactions in the external counterpart of M3											Memo: Transactions in the external counterpart of M3
	Current and capital accounts balance	Direct investment		Portfolio investment			Other investment		Financial derivatives	Errors and omissions	Total of columns 1 to 10	
		By resident units abroad (non-MFIs)	By non- resident units in the euro area	Assets Non-MFIs	Liabilities		Assets Non-MFIs	Liabilities Non-MFIs				
					Equity <sup>2)</sup>	Debt instruments <sup>3)</sup>						
1	2	3	4	5	6	7	8	9	10	11	12	
2005	24.7	-344.2	153.6	-266.4	212.6	265.4	-155.8	151.0	-17.3	-30.4	-6.7	-0.1
2006	19.8	-381.6	264.2	-286.6	239.7	469.7	-225.9	223.7	3.2	-150.5	175.6	200.3
2007	53.2	-428.5	363.4	-184.1	50.3	399.5	-341.3	232.3	-54.1	-77.6	13.2	14.1
2007 Q3	18.8	-94.6	78.1	-51.2	1.7	58.8	-130.7	176.2	-15.4	-118.8	-77.1	-67.2
Q4	17.3	-107.6	126.1	-19.4	-40.8	33.2	-39.2	0.4	-19.2	61.9	12.7	-6.6
2008 Q1	-2.4	-139.2	44.3	-21.3	4.8	75.3	-63.0	40.7	-21.0	6.8	-75.0	-84.7
Q2	-22.1	-33.2	-11.5	-82.2	-34.0	163.7	-8.4	-13.4	-8.6	-63.7	-113.5	-126.8
Q3	-10.8	-84.5	35.2	23.9	-88.6	174.0	-23.2	-2.1	-8.7	-22.8	-7.7	24.1
2007 Nov.	3.9	-41.3	49.0	-1.2	-7.9	55.5	-15.9	3.4	-11.2	-0.9	33.5	28.6
Dec.	7.4	-23.2	13.7	-5.6	-8.1	-30.1	2.9	-6.6	-5.3	20.4	-34.6	-47.1
2008 Jan.	-12.4	-86.5	28.3	6.4	-9.7	52.8	0.2	26.6	-26.9	7.0	-14.2	-18.1
Feb.	12.2	-34.1	15.8	-4.6	18.9	4.2	-36.1	-9.3	2.5	13.1	-17.4	-18.3
Mar.	-2.2	-18.6	0.2	-23.0	-4.4	18.3	-27.0	23.4	3.4	-13.3	-43.4	-48.2
Apr.	-4.4	12.4	-31.0	-20.1	-42.7	52.1	-5.5	-8.4	-2.8	-22.4	-72.7	-72.2
May	-20.1	-23.1	15.1	-42.9	-1.6	47.4	-2.9	-4.6	-10.3	-23.7	-66.8	-70.1
June	2.4	-22.5	4.5	-19.3	10.3	64.2	0.0	-0.4	4.6	-17.5	26.1	15.5
July	1.1	-35.7	10.6	6.2	-10.6	30.2	-2.2	12.4	0.1	-30.0	-17.8	-1.2
Aug.	-8.6	-15.7	8.8	-2.2	-25.7	33.7	4.7	-11.3	-8.7	14.7	-10.3	-7.4
Sep.	-3.3	-33.2	15.8	19.8	-52.3	110.2	-25.8	-3.2	-0.1	-7.5	20.4	32.7
Oct.	-4.2	-12.7	1.6	75.8	-42.2	57.1	-21.9	41.4	25.4	-70.9	49.4	50.5
Nov.	-12.5	-12.0	-16.1	5.4	12.0	44.9	2.2	-2.4	-1.8	-4.7	15.1	15.7
	<i>12-month cumulated transactions</i>											
2008 Nov.	-44.6	-304.9	67.1	-4.0	-156.2	484.9	-111.3	57.5	-19.8	-134.8	-166.2	-168.2

 C35 Main b.o.p. transactions underlying the developments in MFI net external assets <sup>1)</sup>

(EUR billions; 12-month cumulated transactions)



Source: ECB.

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

2) Excluding money market fund shares/units.

3) Excluding debt securities with a maturity of up to two years issued by euro area MFIs.

## 7.5 Trade in goods

### 1. Values and volumes by product group<sup>1)</sup>

(seasonally adjusted, unless otherwise indicated)

	Total (n.s.a.)		Exports (f.o.b.)					Imports (c.i.f.)					
	Exports	Imports	Total			Memo: Manufactures	Total			Memo:			
			Intermediate	Capital	Consumption		Intermediate	Capital	Consumption	Manufactures	Oil		
	1	2	3	4	5	6	7	8	9	10	11	12	13
Values (EUR billions; annual percentage changes for columns 1 and 2)													
2005	7.8	13.4	1,237.7	604.4	271.2	328.6	1,068.4	1,226.7	723.7	210.4	272.9	846.5	187.0
2006	11.7	13.7	1,385.0	686.9	296.6	365.1	1,183.2	1,397.3	856.8	216.5	304.3	943.9	224.6
2007	8.6	6.4	1,504.9	740.7	327.4	396.0	1,277.1	1,483.7	904.9	232.1	326.1	1,016.7	225.4
2007 Q4	5.6	7.8	384.3	189.3	83.3	100.8	323.8	382.6	236.9	57.9	83.1	253.8	65.1
2008 Q1	6.9	8.5	396.6	196.4	84.3	104.3	333.5	396.5	248.5	57.6	82.4	258.1	70.2
Q2	8.3	10.8	397.5	198.3	83.8	103.0	333.0	401.6	254.8	54.9	82.6	255.8	75.2
Q3	5.2	12.0	398.1	198.5	84.2	101.2	329.5	416.1	265.2	56.5	82.9	259.5	84.5
2008 June	4.8	10.5	130.7	65.2	27.7	33.7	110.7	134.5	85.7	18.0	27.4	85.6	27.0
July	9.4	14.9	134.2	67.4	28.3	34.4	110.4	140.7	89.8	19.4	27.8	86.6	30.6
Aug.	-3.1	5.7	131.2	65.7	26.6	32.7	110.0	137.2	87.6	18.3	27.2	86.8	28.1
Sep.	8.8	15.1	132.8	65.3	29.3	34.1	109.2	138.2	87.7	18.8	27.8	86.2	25.8
Oct.	0.3	3.0	129.1	63.8	28.2	33.2	107.4	131.2	83.3	18.3	27.4	84.2	22.9
Nov.	-10.4	-3.6	123.0	.	.	.	103.1	127.9	.	.	.	83.8	.
Volume indices (2000 = 100; annual percentage changes for columns 1 and 2)													
2005	4.7	4.9	123.5	122.7	130.8	121.7	124.6	114.0	110.3	124.7	121.8	117.0	110.6
2006	7.9	6.0	133.5	133.7	140.3	131.2	134.4	121.0	117.9	128.4	131.2	126.1	110.0
2007	6.3	4.9	141.8	139.6	152.8	140.6	142.3	126.7	120.8	141.6	139.7	134.7	108.4
2007 Q4	3.5	2.1	144.5	142.4	155.6	143.1	144.8	127.2	120.8	142.1	141.8	135.4	108.4
2008 Q1	4.0	-1.8	146.7	144.2	154.7	146.4	147.8	126.2	120.3	139.7	138.9	135.6	109.7
Q2	5.8	-1.3	146.1	143.4	154.7	145.1	147.8	123.6	116.5	135.2	141.8	135.0	103.0
Q3	1.0	-3.6	143.6	140.1	153.6	140.8	143.9	121.0	113.2	136.9	137.5	132.6	106.8
2008 June	1.5	-3.5	142.5	139.7	152.9	140.7	146.3	120.5	112.6	132.5	140.2	134.7	101.4
July	5.2	-1.8	144.9	142.6	154.7	143.1	144.5	121.6	113.0	142.4	139.5	133.8	108.2
Aug.	-6.9	-9.9	142.5	139.1	146.8	137.5	144.5	119.2	111.2	133.3	136.3	133.1	106.0
Sep.	4.1	0.6	143.3	138.6	159.3	141.7	142.5	122.2	115.2	135.1	136.8	130.8	106.1
Oct.	-3.6	-6.8	140.1	136.2	153.7	139.6	139.7	119.9	114.8	129.5	134.9	127.4	108.3
Nov.	.	.	.	.	.	.	.	.	.	.	.	.	.

### 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	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	100.0	100.0	32.2	44.2	20.4	3.2	99.5	100.0	100.0	28.4	27.6	23.7	20.4	81.2
2007	103.6	1.4	2.8	1.3	1.3	2.8	1.5	108.4	1.0	2.5	-2.5	0.4	2.2	0.4
2008	106.0	2.4	2.1	0.8	2.7	20.3	2.2	.	.	.	.	.	.	.
2008 Q2	106.1	2.4	1.7	0.2	2.8	30.6	2.3	119.7	11.1	0.6	-2.8	1.0	46.8	1.0
Q3	107.2	3.3	3.0	0.6	2.7	33.4	3.1	121.6	11.3	3.1	-2.5	1.5	42.0	1.9
Q4	105.8	1.8	2.3	1.8	3.2	-11.3	1.7	.	.	.	.	.	.	.
2008 July	107.5	3.5	3.0	0.6	2.7	38.1	3.2	123.9	13.2	2.0	-2.5	1.1	51.0	1.9
Aug.	107.1	3.2	2.9	0.4	2.9	34.6	2.9	121.8	12.1	3.3	-2.7	1.5	46.4	1.9
Sep.	107.2	3.3	3.2	0.9	2.6	27.6	3.1	119.1	8.6	4.1	-2.3	1.9	28.9	1.9
Oct.	106.9	3.1	3.2	1.9	3.3	7.5	2.9	114.6	3.7	3.3	-1.4	3.2	9.2	1.5
Nov.	105.9	1.8	2.2	2.4	3.4	-17.0	1.8	109.4	-2.5	1.0	-0.5	3.8	-11.2	0.1
Dec.	104.5	0.5	1.3	1.0	2.8	-23.0	0.4	.	.	.	.	.	.	.

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.

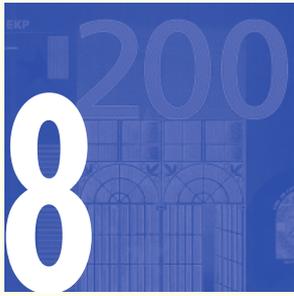
## 7.5 Trade in goods

(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
	1	Denmark	Sweden	United Kingdom	Other EU countries	6	7	8	9	China	Japan	13	14	15	
<b>Exports (f.o.b.)</b>															
2004	1,144.0	25.8	42.1	204.5	133.9	35.8	66.6	31.8	172.7	225.7	40.4	33.3	64.5	40.6	100.0
2005	1,237.7	29.0	45.2	203.3	153.2	43.5	70.7	34.7	185.1	244.2	43.3	34.2	73.4	46.8	108.6
2006	1,385.0	31.7	49.9	216.8	189.9	55.1	77.3	38.8	199.9	271.7	53.8	34.6	77.7	54.3	122.0
2007	1,504.9	33.8	55.2	229.0	221.4	66.9	82.1	41.0	195.0	296.3	60.4	34.3	87.5	61.5	135.2
2007 Q2	370.3	8.4	13.8	55.8	54.1	16.6	20.0	9.9	48.7	72.9	14.7	8.8	21.5	15.5	33.3
Q3	381.6	8.5	14.1	58.7	56.6	17.2	20.7	10.2	49.3	75.2	15.6	8.5	22.1	15.6	33.3
Q4	384.3	8.6	13.8	57.8	57.8	17.6	20.9	10.7	47.5	76.3	15.8	8.3	22.5	15.6	35.4
2008 Q1	396.6	8.8	13.9	57.3	60.2	19.4	21.0	12.0	49.0	78.9	16.8	8.6	24.0	16.0	36.0
Q2	397.5	8.9	14.1	57.5	61.0	19.6	22.0	11.2	47.0	78.0	16.9	8.5	24.9	16.5	36.9
Q3	398.1	9.0	13.8	55.8	62.0	20.1	21.6	10.7	46.1	76.6	16.0	8.2	26.4	18.0	38.0
2008 June	130.7	3.0	4.7	18.8	20.2	6.5	7.3	3.6	15.5	25.9	5.6	2.8	8.5	5.6	11.0
July	134.2	3.0	4.7	18.9	20.7	6.8	7.2	3.7	15.1	25.7	5.6	2.8	8.8	6.0	13.4
Aug.	131.2	3.0	4.5	18.5	20.5	6.6	7.2	3.5	15.4	25.4	5.2	2.7	8.9	5.8	12.0
Sep.	132.8	3.0	4.6	18.4	20.8	6.7	7.2	3.5	15.6	25.4	5.2	2.7	8.8	6.2	12.6
Oct.	129.1	2.9	4.5	17.9	20.3	6.6	7.2	3.1	14.9	25.2	5.5	2.7	8.5	6.3	11.7
Nov.	123.0	.	.	.	.	5.3	7.1	2.7	14.7	25.0	5.3	2.7	8.4	5.0	.
<i>% share of total exports</i>															
2007	100.0	2.2	3.7	15.2	14.7	4.4	5.5	2.7	13.0	19.7	4.0	2.3	5.8	4.1	9.0
<b>Imports (c.i.f.)</b>															
2004	1,075.1	25.4	39.8	144.8	115.5	56.6	53.3	23.2	113.4	309.1	92.3	54.1	72.9	45.2	75.9
2005	1,226.7	26.5	42.3	153.2	127.8	76.2	58.1	25.5	119.8	363.4	118.1	53.2	96.0	53.8	83.9
2006	1,397.3	28.6	47.9	167.2	152.3	95.6	62.3	29.4	125.9	418.6	144.5	57.0	110.5	66.2	92.9
2007	1,483.7	28.5	52.0	168.6	174.7	97.9	67.2	32.4	131.6	450.5	171.2	58.7	114.2	75.2	91.0
2007 Q2	363.2	7.2	12.9	42.0	42.8	24.0	16.5	7.9	32.1	109.2	40.4	14.5	27.4	18.3	22.9
Q3	375.7	7.4	12.9	43.0	44.9	23.7	17.2	8.2	33.2	114.3	44.4	14.8	28.1	18.9	23.9
Q4	382.6	6.9	13.3	42.7	45.2	27.4	16.5	8.4	32.7	114.6	43.6	14.6	31.6	19.8	23.4
2008 Q1	396.5	7.3	13.8	43.6	47.6	28.0	17.0	8.3	34.2	118.1	43.8	14.9	34.3	19.8	24.5
Q2	401.6	7.7	13.2	41.6	48.4	29.2	17.4	8.4	33.8	117.4	44.2	14.3	36.7	20.5	27.3
Q3	416.1	8.1	13.1	42.0	49.0	32.1	17.7	8.1	34.6	121.9	47.4	14.3	37.7	20.5	31.1
2008 June	134.5	2.4	4.3	13.8	16.0	9.4	5.9	2.8	11.4	39.5	14.8	4.7	12.6	6.7	9.7
July	140.7	3.0	4.4	14.0	16.1	11.6	6.1	2.8	12.0	41.1	15.7	4.8	12.5	6.7	10.4
Aug.	137.2	2.4	4.4	14.1	16.6	10.1	5.8	2.7	11.1	40.8	15.9	4.9	13.1	6.9	9.3
Sep.	138.2	2.6	4.4	13.9	16.3	10.5	5.9	2.7	11.4	40.1	15.8	4.7	12.1	6.9	11.4
Oct.	131.2	2.3	4.3	13.9	16.2	9.0	5.9	2.7	10.9	39.5	16.0	4.5	10.7	6.7	9.2
Nov.	127.9	.	.	.	.	7.5	5.8	2.6	11.2	37.8	15.6	4.4	10.5	6.6	.
<i>% share of total imports</i>															
2007	100.0	1.9	3.5	11.4	11.8	6.6	4.5	2.2	8.9	30.4	11.5	4.0	7.7	5.1	6.1
<b>Balance</b>															
2004	68.9	0.4	2.3	59.6	18.4	-20.8	13.3	8.6	59.3	-83.4	-52.0	-20.8	-8.4	-4.6	24.1
2005	11.1	2.5	2.9	50.0	25.4	-32.8	12.7	9.2	65.2	-119.2	-74.8	-19.1	-22.6	-6.9	24.7
2006	-12.3	3.2	2.0	49.7	37.6	-40.5	15.0	9.4	73.9	-146.8	-90.8	-22.4	-32.7	-12.0	29.1
2007	21.2	5.3	3.3	60.4	46.7	-31.0	14.9	8.6	63.5	-154.1	-110.9	-24.5	-26.8	-13.7	44.2
2007 Q2	7.1	1.2	0.9	13.7	11.3	-7.4	3.5	2.0	16.6	-36.2	-25.7	-5.7	-6.0	-2.9	10.3
Q3	5.9	1.2	1.2	15.7	11.7	-6.4	3.5	2.0	16.0	-39.1	-28.8	-6.3	-6.1	-3.3	9.4
Q4	1.7	1.6	0.5	15.1	12.5	-9.9	4.4	2.3	14.8	-38.3	-27.8	-6.3	-9.1	-4.3	12.0
2008 Q1	0.1	1.6	0.1	13.8	12.6	-8.6	4.0	3.7	14.8	-39.2	-27.1	-6.4	-10.2	-3.8	11.5
Q2	-4.1	1.2	0.8	15.9	12.6	-9.5	4.6	2.8	13.2	-39.4	-27.3	-5.8	-11.8	-4.0	9.6
Q3	-18.0	0.9	0.7	13.8	13.0	-12.1	3.9	2.6	11.5	-45.3	-31.4	-6.1	-11.3	-2.6	6.9
2008 June	-3.8	0.5	0.4	4.9	4.2	-2.8	1.4	0.9	4.1	-13.6	-9.2	-1.9	-4.0	-1.1	1.4
July	-6.5	0.0	0.3	4.9	4.6	-4.8	1.1	1.0	3.1	-15.3	-10.0	-2.0	-3.7	-0.7	3.0
Aug.	-6.1	0.6	0.1	4.4	3.9	-3.5	1.4	0.8	4.2	-15.3	-10.8	-2.1	-4.2	-1.1	2.7
Sep.	-5.4	0.4	0.2	4.5	4.5	-3.8	1.4	0.8	4.2	-14.7	-10.7	-2.0	-3.4	-0.7	1.2
Oct.	-2.1	0.6	0.2	4.0	4.1	-2.4	1.3	0.5	3.9	-14.3	-10.5	-1.8	-2.2	-0.4	2.5
Nov.	-4.9	.	.	.	.	-2.2	1.3	0.1	3.4	-12.9	-10.3	-1.7	-2.1	-1.6	.

Source: Eurostat.



## EXCHANGE RATES

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

(period averages; index 1999 Q1=100)

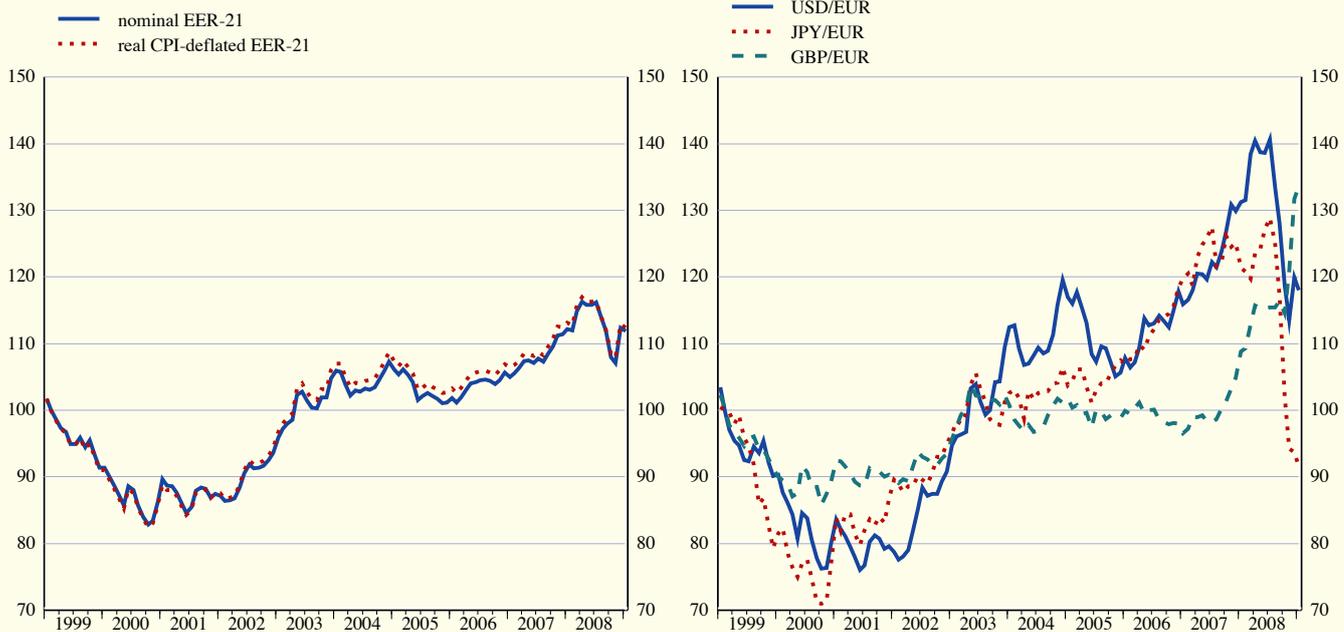
	EER-21					EER-41		
	Nominal	Real CPI	Real PPI	Real GDP deflator	Real ULCM	Real ULCT	Nominal	Real CPI
	1	2	3	4	5	6	7	8
2006	103.7	105.1	103.2	102.3	102.3	101.1	110.1	103.8
2007	107.9	109.0	107.1	106.4	105.2	104.7	114.3	107.1
2008	113.0	113.6	110.0	.	.	.	120.0	111.0
2007 Q4	110.7	111.9	109.8	109.1	107.5	107.5	117.2	109.6
2008 Q1	112.9	113.9	111.4	111.5	110.7	109.3	119.6	111.4
Q2	116.0	116.5	113.2	114.5	114.4	113.0	122.9	113.9
Q3	114.1	114.1	110.2	112.6	114.5	111.1	120.8	111.3
Q4	109.1	109.8	105.2	.	.	.	116.7	107.7
2008 Jan.	112.2	113.1	110.6	-	-	-	118.5	110.6
Feb.	112.0	112.7	110.6	-	-	-	118.4	110.1
Mar.	114.8	115.8	113.0	-	-	-	121.8	113.4
Apr.	116.3	116.9	114.0	-	-	-	123.4	114.4
May	115.8	116.3	113.0	-	-	-	122.7	113.6
June	115.8	116.3	112.5	-	-	-	122.7	113.5
July	116.2	116.3	112.4	-	-	-	123.2	113.5
Aug.	113.9	114.0	110.2	-	-	-	120.3	111.0
Sep.	112.0	112.1	108.1	-	-	-	118.7	109.3
Oct.	107.9	108.4	104.3	-	-	-	115.4	106.4
Nov.	107.1	107.9	103.2	-	-	-	114.5	105.7
Dec.	112.4	113.0	108.0	-	-	-	120.3	110.7
2009 Jan.	111.9	112.4	107.0	-	-	-	119.9	110.2
	<i>% change versus previous month</i>							
2009 Jan.	-0.4	-0.5	-1.0	-	-	-	-0.3	-0.5
	<i>% change versus previous year</i>							
2009 Jan.	-0.2	-0.7	-3.3	-	-	-	1.2	-0.3

### C36 Effective exchange rates

(monthly averages; index 1999 Q1=100)

### C37 Bilateral exchange rates

(monthly averages; index 1999 Q1=100)



Source: ECB.

1) For the definition of the trading partner groups and other information, please refer to the General notes.

## 8.2 Bilateral exchange rates

(period averages; units of national currency per euro)

	Danish kroner 1	Swedish krona 2	Pound sterling 3	US dollar 4	Japanese yen 5	Swiss franc 6	South Korean won 7	Hong Kong dollar 8	Singapore dollar 9	Canadian dollar 10	Norwegian kroner 11	Australian dollar 12
2006	7.4591	9.2544	0.68173	1.2556	146.02	1.5729	1,198.58	9.7545	1.9941	1.4237	8.0472	1.6668
2007	7.4506	9.2501	0.68434	1.3705	161.25	1.6427	1,272.99	10.6912	2.0636	1.4678	8.0165	1.6348
2008	7.4560	9.6152	0.79628	1.4708	152.45	1.5874	1,606.09	11.4541	2.0762	1.5594	8.2237	1.7416
2008 Q2	7.4599	9.3517	0.79286	1.5622	163.35	1.6114	1,590.82	12.1845	2.1346	1.5769	7.9401	1.6559
Q3	7.4592	9.4738	0.79504	1.5050	161.83	1.6115	1,600.93	11.7372	2.1010	1.5650	8.0604	1.6955
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
2008 July	7.4599	9.4566	0.79308	1.5770	168.45	1.6193	1,604.58	12.3004	2.1438	1.5974	8.0487	1.6386
Aug.	7.4595	9.3984	0.79279	1.4975	163.63	1.6212	1,566.23	11.6932	2.1024	1.5765	7.9723	1.6961
Sep.	7.4583	9.5637	0.79924	1.4370	153.20	1.5942	1,630.26	11.1905	2.0549	1.5201	8.1566	1.7543
Oct.	7.4545	9.8506	0.78668	1.3322	133.52	1.5194	1,759.07	10.3368	1.9666	1.5646	8.5928	1.9345
Nov.	7.4485	10.1275	0.83063	1.2732	123.28	1.5162	1,783.12	9.8687	1.9183	1.5509	8.8094	1.9381
Dec.	7.4503	10.7538	0.90448	1.3449	122.51	1.5393	1,850.06	10.4240	1.9888	1.6600	9.4228	2.0105
2009 Jan.	7.4519	10.7264	0.91819	1.3239	119.73	1.4935	1,801.97	10.2687	1.9742	1.6233	9.2164	1.9633
	<i>% change versus previous month</i>											
2009 Jan.	0.0	-0.3	1.5	-1.6	-2.3	-3.0	-2.6	-1.5	-0.7	-2.2	-2.2	-2.3
	<i>% change versus previous year</i>											
2009 Jan.	0.0	13.7	22.9	-10.1	-24.5	-7.8	29.9	-10.6	-6.3	9.2	15.8	17.6
	Czech koruna 13	Estonian kroon 14	Latvian lats 15	Lithuanian litas 16	Hungarian forint 17	Polish zloty 18	Bulgarian lev 19	New Roman- ian leu 20	Croatian kuna 21	New Turkish lira 22		
2006	28.342	15.6466	0.6962	3.4528	264.26	3.8959	1.9558	3.5258	7.3247	1.8090		
2007	27.766	15.6466	0.7001	3.4528	251.35	3.7837	1.9558	3.3353	7.3376	1.7865		
2008	24.946	15.6466	0.7027	3.4528	251.51	3.5121	1.9558	3.6826	7.2239	1.9064		
2008 Q2	24.830	15.6466	0.6997	3.4528	248.04	3.4070	1.9558	3.6521	7.2556	1.9717		
Q3	24.093	15.6466	0.7045	3.4528	236.07	3.3081	1.9558	3.5768	7.1827	1.8235		
Q4	25.344	15.6466	0.7090	3.4528	263.36	3.7658	1.9558	3.8165	7.1752	2.0261		
2008 July	23.528	15.6466	0.7035	3.4528	231.82	3.2591	1.9558	3.5764	7.2297	1.9128		
Aug.	24.287	15.6466	0.7039	3.4528	235.88	3.2920	1.9558	3.5271	7.1947	1.7669		
Sep.	24.497	15.6466	0.7060	3.4528	240.68	3.3747	1.9558	3.6248	7.1223	1.7843		
Oct.	24.768	15.6466	0.7093	3.4528	260.15	3.5767	1.9558	3.7479	7.1639	1.9612		
Nov.	25.193	15.6466	0.7092	3.4528	265.32	3.7326	1.9558	3.7838	7.1366	2.0342		
Dec.	26.120	15.6466	0.7084	3.4528	265.02	4.0044	1.9558	3.9227	7.2245	2.0894		
2009 Jan.	27.169	15.6466	0.7043	3.4528	279.86	4.2300	1.9558	4.2354	7.3603	2.1233		
	<i>% change versus previous month</i>											
2009 Jan.	4.0	0.0	-0.6	0.0	5.6	5.6	0.0	8.0	1.9	1.6		
	<i>% change versus previous year</i>											
2009 Jan.	4.3	0.0	0.9	0.0	9.3	17.2	0.0	14.7	0.6	22.6		
	Brazilian real <sup>1)</sup> 23	Chinese yuan renminbi 24	Icelandic krona <sup>2)</sup> 25	Indonesian rupiah 26	Malaysian ringgit 27	Mexican peso <sup>1)</sup> 28	New Zealand dollar 29	Philippine peso 30	Russian rouble 31	South African rand 32	Thai baht 33	
2006	2.7333	10.0096	87.76	11,512.37	4.6044	13.6936	1.9373	64.379	34.1117	8.5312	47.594	
2007	2.6594	10.4178	87.63	12,528.33	4.7076	14.9743	1.8627	63.026	35.0183	9.6596	44.214	
2008	2.6737	10.2236	143.83	14,165.16	4.8893	16.2911	2.0770	65.172	36.4207	12.0590	48.475	
2008 Q2	2.5882	10.8687	119.09	14,460.45	5.0183	16.2919	2.0129	67.174	36.9108	12.1648	50.437	
Q3	2.4986	10.2969	125.69	13,868.99	5.0209	15.5214	2.1094	68.422	36.4917	11.7055	50.959	
Q4	3.0102	9.0155	261.87	14,469.21	4.6798	17.1856	2.2829	63.653	35.9649	13.0786	45.904	
2008 July	2.5097	10.7809	123.61	14,442.77	5.1258	16.1119	2.0900	70.694	36.8261	12.0328	52.821	
Aug.	2.4103	10.2609	122.07	13,700.21	4.9843	15.1269	2.1097	67.307	36.2502	11.4680	50.697	
Sep.	2.5712	9.8252	131.33	13,430.23	4.9461	15.2805	2.1293	67.113	36.3727	11.5899	49.264	
Oct.	2.9112	9.1071	274.64	13,283.63	4.6895	16.8177	2.1891	63.882	35.2144	12.9341	45.872	
Nov.	2.8967	8.6950	242.95	14,984.85	4.5682	16.6735	2.2554	62.496	34.7964	12.8785	44.677	
Dec.	3.2266	9.2205	290.00	15,276.62	4.7755	18.0764	2.4119	64.505	37.8999	13.4275	47.107	
2009 Jan.	3.0596	9.0496	-	14,802.07	4.7291	18.3762	2.4132	62.354	42.3282	13.1255	46.218	
	<i>% change versus previous month</i>											
2009 Jan.	-5.2	-1.9	-	-3.1	-1.0	1.7	0.1	-3.3	11.7	-2.2	-1.9	
	<i>% change versus previous year</i>											
2009 Jan.	17.2	-15.1	-	7.0	-1.7	14.4	26.6	3.8	17.5	27.3	3.3	

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 latest rate of the Icelandic krona refers to 3 December 2008.



## 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 Q2	14.0	6.7	3.7	11.5	17.5	12.3	6.8	4.3	8.6	3.6	3.4
Q3	12.5	6.5	4.6	11.0	15.6	12.0	6.3	4.4	8.2	4.0	4.8
Q4	9.0	4.4	3.0	8.7	11.9	9.4	4.2	3.6	6.9	2.7	3.9
2008 Aug.	11.8	6.2	4.8	11.1	15.6	12.2	6.4	4.4	8.1	4.1	4.7
Sep.	11.4	6.4	4.5	10.8	14.7	11.3	5.6	4.1	7.3	4.2	5.2
Oct.	11.2	5.7	3.8	10.1	13.7	10.7	5.1	4.0	7.4	3.4	4.5
Nov.	8.8	4.1	2.8	8.5	11.6	9.2	4.1	3.6	6.8	2.4	4.1
Dec.	7.2	3.3	2.4	7.5	10.4	8.5	3.4	3.3	6.4	2.1	3.1
<b>General government deficit (-)/surplus (+) as a % of GDP</b>											
2005	1.9	-3.6	5.2	1.5	-0.4	-0.5	-7.8	-4.3	-1.2	2.4	-3.4
2006	3.0	-2.7	5.1	2.9	-0.2	-0.4	-9.3	-3.8	-2.2	2.3	-2.7
2007	0.1	-1.0	4.9	2.7	0.1	-1.2	-5.0	-2.0	-2.6	3.6	-2.8
<b>General government gross debt as a % of GDP</b>											
2005	29.2	29.8	36.4	4.5	12.4	18.4	61.7	47.1	15.8	50.9	42.3
2006	22.7	29.6	30.5	4.3	10.7	18.0	65.6	47.7	12.4	45.9	43.4
2007	18.2	28.9	26.2	3.5	9.5	17.0	65.8	44.9	12.9	40.4	44.2
<b>Long-term government bond yield as a % per annum, period average</b>											
2008 July	5.17	4.90	4.78	-	6.57	5.49	8.11	6.45	7.28	4.37	5.00
Aug.	5.17	4.47	4.49	-	6.60	5.47	7.77	6.11	8.20	4.11	4.67
Sep.	5.17	4.42	4.37	-	6.60	5.45	7.99	5.89	8.32	3.90	4.58
Oct.	5.17	4.53	4.43	-	6.60	5.40	9.57	6.35	8.27	3.57	4.52
Nov.	6.00	4.52	4.06	-	7.60	8.16	9.41	6.23	8.38	3.34	4.14
Dec.	7.76	4.30	3.50	-	9.03	9.00	8.31	5.70	8.38	2.67	3.37
<b>3-month interest rate as a % per annum, period average</b>											
2008 July	7.19	4.11	5.38	6.37	6.23	5.77	8.99	6.62	11.41	5.09	5.83
Aug.	7.31	3.81	5.38	6.35	6.26	5.75	8.33	6.52	12.11	5.12	5.77
Sep.	7.32	3.81	5.42	6.34	6.35	5.80	8.62	6.56	13.00	5.33	5.91
Oct.	7.69	4.19	5.99	6.69	10.03	7.00	8.95	6.80	18.21	5.27	6.13
Nov.	7.89	4.24	6.08	7.25	12.19	7.86	-	6.74	15.24	4.50	4.45
Dec.	7.74	3.89	5.29	7.84	13.94	9.20	11.18	6.38	14.70	2.75	3.20
<b>Real GDP</b>											
2007	6.2	6.0	1.6	6.3	10.0	8.9	1.1	6.7	6.0	2.5	3.0
2008	.	.	.	.	.	3.2	.	.	.	.	0.7
2008 Q2	7.1	4.6	0.6	-1.1	-2.0	5.3	1.6	5.8	9.3	0.7	1.7
Q3	6.8	4.2	-1.3	-3.5	-3.7	2.8	1.0	5.6	9.1	0.3	0.3
Q4	.	.	.	.	.	-1.4	.	.	.	.	-1.8
<b>Current and capital accounts balance as a % of GDP</b>											
2006	-17.1	-2.3	2.9	-14.6	-21.3	-9.5	-7.1	-2.1	-10.5	7.8	-3.3
2007	-20.6	-1.2	0.7	-16.9	-20.6	-12.8	-5.1	-3.6	-12.9	8.4	-2.6
2008 Q1	-25.1	4.1	-2.3	-11.2	-15.7	-15.2	-3.4	-3.6	-13.5	10.1	-0.9
Q2	-27.6	-4.7	3.4	-9.6	-11.4	-15.1	-6.8	-4.1	-14.7	5.0	-1.8
Q3	-13.8	-3.2	3.4	-6.6	-11.0	-8.4	-8.7	-3.9	-10.3	8.1	-2.0
<b>Unit labour costs</b>											
2006	4.4	1.2	2.2	8.7	15.3	10.2	1.3	0.1	4.9	-0.4	2.2
2007	14.2	3.1	4.2	19.8	27.0	10.6	4.9	3.1	14.6	4.7	1.3
2008 Q1	16.8	4.9	7.1	19.4	26.8	10.9	-	-	-	2.2	1.6
Q2	17.7	3.3	3.8	15.2	22.6	11.4	-	-	-	0.8	1.8
Q3	13.0	2.3	.	19.6	24.5	12.0	-	-	-	2.2	2.5
<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	5.7	4.4	3.5	6.0	7.3	5.7	7.9	7.1	.	6.2	.
2008 Q2	5.8	4.5	3.2	4.4	6.2	4.8	7.7	7.3	5.7	5.8	5.4
Q3	5.4	4.3	3.5	6.4	7.3	6.1	7.9	6.8	5.8	6.1	5.8
Q4	5.3	4.5	4.2	8.5	9.3	7.2	8.2	6.5	.	6.8	.
2008 Aug.	5.4	4.3	3.5	6.4	7.3	6.3	7.9	6.8	5.8	6.1	5.8
Sep.	5.3	4.3	3.6	7.1	7.8	6.2	7.9	6.6	5.8	6.4	5.9
Oct.	5.3	4.4	3.8	7.8	8.3	6.4	8.0	6.5	.	6.6	6.1
Nov.	5.3	4.5	4.1	8.5	9.2	7.1	8.2	6.5	.	6.9	.
Dec.	5.4	4.7	4.5	9.2	10.4	8.0	8.5	6.5	.	6.9	.

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

## 9.2 In the United States and Japan

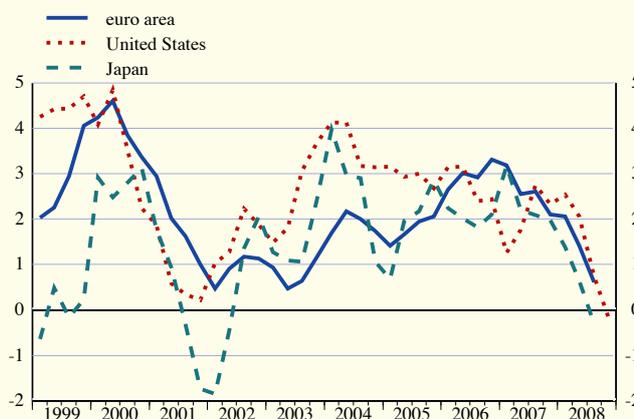
(annual percentage changes, unless otherwise indicated)

### 1. Economic and financial developments

	Consumer price index	Unit labour costs <sup>1)</sup>	Real GDP	Industrial production index (manufacturing)	Unemployment rate as a % of labour force (s.a.)	Broad money <sup>2)</sup>	3-month interbank deposit rate <sup>3)</sup>	10-year zero coupon government bond yield <sup>3)</sup> end-of-period	Exchange rate <sup>4)</sup> as national currency per euro	Fiscal deficit (-)/surplus (+) as a % of GDP	Gross public debt <sup>5)</sup> as a % of GDP
	1	2	3	4	5	6	7	8	9	10	11
United States											
2005	3.4	2.2	2.9	4.2	5.1	4.3	3.57	4.84	1.2441	-3.3	49.1
2006	3.2	2.8	2.8	2.8	4.6	5.0	5.20	5.41	1.2556	-2.2	48.5
2007	2.9	2.7	2.0	1.8	4.6	5.7	5.30	5.35	1.3705	-2.9	49.3
2008	3.8	.	1.3	-2.4	5.8	6.8	2.93	4.39	1.4708	.	.
2007 Q4	4.0	0.9	2.3	2.5	4.8	5.8	5.03	5.07	1.4486	-3.2	49.3
2008 Q1	4.1	0.0	2.5	2.0	4.9	6.3	3.29	4.48	1.4976	-4.0	50.4
Q2	4.4	0.1	2.1	-0.3	5.4	6.2	2.75	4.66	1.5622	-5.7	49.6
Q3	5.3	1.4	0.7	-3.5	6.1	6.1	2.91	4.69	1.5050	-5.9	52.8
Q4	1.6	.	-0.2	-7.7	6.9	8.5	2.77	3.71	1.3180	.	.
2008 Sep.	4.9	.	.	-6.6	6.2	6.5	3.12	4.48	1.4370	.	.
Oct.	3.7	.	.	-5.4	6.6	7.7	4.06	4.46	1.3322	.	.
Nov.	1.1	.	.	-7.8	6.8	8.0	2.28	3.95	1.2732	.	.
Dec.	0.1	.	.	-10.0	7.2	9.9	1.83	2.75	1.3449	.	.
2009 Jan.	.	.	.	.	.	.	1.21	2.75	1.3239	.	.
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	-0.6	2.0	4.5	4.1	1.0	0.30	1.98	146.02	-1.4	159.5
2007	0.1	-1.6	2.4	2.8	3.8	1.6	0.79	1.89	161.25	.	.
2008	1.4	.	.	-3.4	4.0	2.1	0.93	1.67	152.45	.	.
2007 Q4	0.5	-1.4	2.0	3.4	3.8	2.0	0.96	1.78	163.83	.	.
2008 Q1	1.0	0.0	1.4	2.3	3.9	2.2	0.92	1.61	157.80	.	.
Q2	1.4	-0.3	0.6	1.0	4.0	2.0	0.92	1.85	163.35	.	.
Q3	2.2	.	-0.3	-1.3	4.1	2.2	0.90	1.75	161.83	.	.
Q4	1.0	.	.	-14.7	4.0	1.8	0.96	1.46	126.71	.	.
2008 Sep.	2.1	.	.	0.2	4.0	2.2	0.91	1.71	153.20	.	.
Oct.	1.7	.	.	-7.1	3.7	1.8	1.04	1.56	133.52	.	.
Nov.	1.0	.	.	-16.6	3.9	1.8	0.91	1.50	123.28	.	.
Dec.	0.4	.	.	-20.7	4.4	1.8	0.92	1.33	122.51	.	.
2009 Jan.	.	.	.	.	.	.	0.73	1.27	119.73	.	.

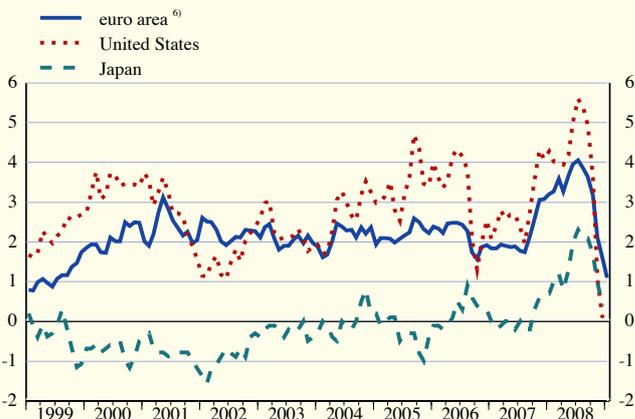
#### C38 Real gross domestic product

(annual percentage changes; quarterly)



#### C39 Consumer price indices

(annual percentage changes; monthly)



Sources: National data (columns 1, 2 (United States), 3, 4, 5 (United States), 6, 9 and 10); OECD (column 2 (Japan)); Eurostat (column 5 (Japan), euro area chart data); Reuters (columns 7 and 8); ECB calculations (column 11).

1) Seasonally adjusted. The data for the United States refer to the private non-agricultural business sector.

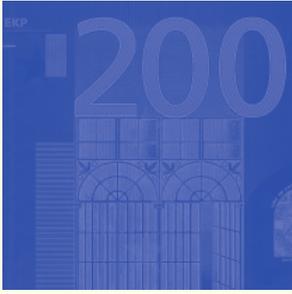
2) Average-of-period values; M2 for US, M2+CDs for Japan.

3) Percentages per annum. For further information on 3-month interbank deposit rate, see Section 4.6.

4) For more information, see Section 8.2.

5) Gross consolidated general government debt (end of period).

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



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## TECHNICAL NOTES

### RELATING TO THE EURO AREA OVERVIEW

#### CALCULATION OF GROWTH RATES FOR MONETARY DEVELOPMENTS

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

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

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

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

### RELATING TO SECTIONS 2.1 TO 2.6

#### CALCULATION OF TRANSACTIONS

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

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

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

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

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

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

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

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

#### CALCULATION OF GROWTH RATES FOR MONTHLY SERIES

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

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

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

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

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

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

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

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

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

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

#### CALCULATION OF GROWTH RATES FOR QUARTERLY SERIES

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

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

The annual growth rate in the four quarters ending in month  $t$ , i.e.  $a_t$ , 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 4 February 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 15 (i.e. the Euro 13 plus Cyprus and Malta) for the whole time series (fixed composition).

Statistics on securities other than shares and quoted shares (Sections 4.1 to 4.4) are produced by the ECB using data from the ESCB and the BIS. Section 4.5 presents MFI interest rates on euro-denominated deposits and loans by euro area residents. Statistics on money market interest rates, long-term government bond yields and stock market indices (Sections 4.6 to 4.8) are produced by the ECB using data from wire services.

Statistics on securities issues cover securities other than shares (debt securities), which are presented in Sections 4.1, 4.2 and 4.3, and quoted shares, which are presented in Section 4.4. Debt securities are broken down into short-term and long-term securities. "Short-term" means securities with an original maturity of one year or less (in exceptional cases two years or less). Securities with a longer maturity, or with optional maturity dates, the latest of which is more than one year away, or with indefinite maturity dates, are classified as "long-term". Long-term debt securities issued by euro area residents are broken down further into fixed and variable rate issues. Fixed rate issues consist of issues where the coupon rate does not change during the life of the issues. Variable rate issues include all issues where the coupon is periodically re-fixed by reference to an independent interest rate or index. The statistics on debt securities are estimated to cover approximately 95% of total issues by euro area residents. The euro-denominated securities indicated in Sections 4.1, 4.2 and 4.3 also include items expressed in national denominations of the euro.

Section 4.1 shows securities other than shares, by original maturity, residency of the issuer and currency. The section presents outstanding amounts, gross issues and net issues of securities other than shares denominated in euro

and securities other than shares issued by euro area residents in euro and in all currencies for total and long-term debt securities. Net issues differ from the changes in outstanding amounts owing to valuation changes, reclassifications and other adjustments. This section also presents seasonally adjusted statistics, including annualised six-month seasonally adjusted growth rates for total and long-term debt securities. The latter are calculated from the seasonally adjusted index of notional stocks, from which the seasonal effects have been removed. See the Technical notes for details.

Section 4.2 contains a sectoral breakdown of outstanding amounts, gross issues and net issues for issuers resident in the euro area in line with the ESA 95. The ECB is included in the Eurosystem.

The total outstanding amounts for total and long-term debt securities in column 1 of Table 1 in Section 4.2 corresponds to the data on outstanding amounts for total and long-term debt securities issued by euro area residents in column 7 of Section 4.1. The outstanding amounts for total and long-term debt securities issued by MFIs in column 2 of Table 1 in Section 4.2 are broadly comparable with data for debt securities issued, as shown on the liabilities side of the aggregated MFI balance sheet in column 8 of Table 2 in Section 2.1. The total net issues for total debt securities in column 1 of Table 2 in Section 4.2 correspond to the data on total net issues by euro area residents in column 9 of Section 4.1. The residual difference between long-term debt securities and total fixed and variable rate long-term debt securities in Table 1 in Section 4.2 consists of zero coupon bonds and revaluation effects.

Section 4.3 shows non-seasonally and seasonally adjusted growth rates for debt securities issued by euro area residents (broken down by maturity, type of instrument, sector of the issuer and currency), which are based on financial transactions that occur when an institutional unit incurs or redeems

liabilities. The growth rates therefore exclude reclassifications, revaluations, exchange rate variations and any other changes that do not arise from transactions. The seasonally adjusted growth rates have been annualised for presentational purposes. See the Technical notes for details.

Section 4.4, columns 1, 4, 6 and 8, show the outstanding amounts of quoted shares issued by euro area residents broken down by issuing sector. The monthly data for quoted shares issued by non-financial corporations correspond to the quarterly series shown in Section 3.4 (financial balance sheet, quoted shares).

Section 4.4, columns 3, 5, 7 and 9, show annual growth rates for quoted shares issued by euro area residents (broken down by the sector of the issuer), which are based on financial transactions that occur when an issuer issues or redeems shares for cash excluding investments in the issuers' own shares. The calculation of annual growth rates excludes reclassifications, revaluations and any other changes that do not arise from transactions.

Section 4.5 presents statistics on all the interest rates that MFIs resident in the euro area apply to euro-denominated deposits and loans vis-à-vis households and non-financial corporations resident in the euro area. Euro area MFI interest rates are calculated as a weighted average (by corresponding business volume) of the euro area countries' interest rates for each category.

MFI interest rate statistics are broken down by type of business coverage, sector, instrument category and maturity, period of notice or initial period of interest rate fixation. The new MFI interest rate statistics replace the ten transitional statistical series on euro area retail interest rates that have been published in the Monthly Bulletin since January 1999.

Section 4.6 presents money market interest rates for the euro area, the United States and Japan. For the euro area, a broad spectrum of money market interest rates is covered, ranging from

interest rates on overnight deposits to those on twelve-month deposits. Before January 1999, synthetic euro area interest rates were calculated on the basis of national rates weighted by GDP. With the exception of the overnight rate to December 1998, monthly, quarterly and yearly values are period averages. Overnight deposits are represented by interbank deposit bid rates up to December 1998. From January 1999, column 1 of Section 4.6 shows the euro overnight index average (EONIA). These are end-of-period rates up to December 1998 and period averages thereafter. From January 1999, interest rates on one-, three-, six- and twelve-month deposits are euro interbank offered rates (EURIBOR); until December 1998, London interbank offered rates (LIBOR) where available. For the United States and Japan, interest rates on three-month deposits are represented by LIBOR.

Table 4.7 shows end-of-period rates estimated from nominal spot yield curves based on AAA-rated euro-denominated bonds issued by euro area central governments. The yield curves are estimated using the Svensson model<sup>3</sup>. Spreads between the ten-year rates and the three-month and two-year rates are also released. Additional yield curves (daily releases, including charts and tables) and the corresponding methodological information are available at <http://www.ecb.europa.eu/stats/money/yc/html/index.en.html>. Daily data may also be downloaded.

Section 4.8 shows stock market indices for the euro area, the United States and Japan.

## PRICES, OUTPUT, DEMAND AND LABOUR MARKETS

Most of the data described in this section are produced by the European Commission (mainly Eurostat) and national statistical authorities. Euro area results are obtained by aggregating data for individual countries. As far as possible, the data are harmonised and comparable. Statistics on hourly labour costs, GDP and expenditure

3 Svensson, L. E., 1994, "Estimating and Interpreting Forward Interest Rates: Sweden 1992-1994", Centre for Economic Policy Research, Discussion Paper No 1051.

components, value added by economic activity, industrial production, retail sales and passenger car registrations are adjusted for the variations in the number of working days.

The Harmonised Index of Consumer Prices (HICP) for the euro area (Table 1 in Section 5.1) is available from 1995 onwards. It is based on national HICPs, which follow the same methodology in all euro area countries. The breakdown by goods and services components is derived from the classification of individual consumption by purpose (Coicop/HICP). The HICP covers monetary expenditure by households on final consumption in the economic territory of the euro area. The table includes seasonally adjusted HICP data and experimental HICP-based estimates of administered prices, which are compiled by the ECB.

Industrial producer prices (Table 2 in Section 5.1), industrial production, industrial new orders, industrial turnover and retail sales (Section 5.2) are covered by Council Regulation (EC) No 1165/98 of 19 May 1998 concerning short-term statistics<sup>4</sup>. The breakdown by end-use of products for industrial producer prices and industrial production is the harmonised sub-division of industry excluding construction (NACE sections C to E) into main industrial groupings (MIGs), as defined by Commission Regulation (EC) No 586/2001 of 26 March 2001<sup>5</sup>. Industrial producer prices reflect the ex-factory gate prices of producers. They include indirect taxes except VAT and other deductible taxes. Industrial production reflects the value added of the industries concerned.

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>6</sup> and in the implementing Commission Regulation (EC) No 1216/2003 of 7 July 2003<sup>7</sup>. A breakdown of hourly labour costs for the euro area is available by labour cost component (wages and salaries, and employers’ social contributions plus employment-related taxes paid by the employer less subsidies received by the employer) and by economic activity. The ECB calculates the indicator of negotiated wages (memo item in Table 3 of Section 5.1) on the basis of non-harmonised, national-definition data.

Unit labour cost components (Table 4 in Section 5.1), GDP and its components (Tables 1 and 2 in Section 5.2), GDP deflators (Table 3 in Section 5.1) and employment statistics (Table 1 in Section 5.3) are results of the ESA 95 quarterly national accounts.

Industrial new orders (Table 4 in Section 5.2) measure the orders received during the reference period and cover industries working mainly on the basis of orders – in particular the textile, pulp and paper, chemical, metal, capital goods and durable consumer goods industries. The data are calculated on the basis of current prices.

4 OJ L 162, 5.6.1998, p. 1.

5 OJ L 86, 27.3.2001, p. 11.

6 OJ L 69, 13.3.2003, p. 1.

7 OJ L 169, 8.7.2003, p. 37.

Indices for turnover in industry and for the retail trade (Table 4 in Section 5.2) measure the turnover, including all duties and taxes with the exception of VAT, invoiced during the reference period. Retail trade turnover covers all retail trade (excluding sales of motor vehicles and motorcycles), except repairs. New passenger car registrations cover registrations of both private and commercial passenger cars. The series for the euro area excludes Cyprus and Malta.

Qualitative business and consumer survey data (Table 5 in Section 5.2) draw on the European Commission Business and Consumer Surveys.

Unemployment rates (Table 2 in Section 5.3) conform to International Labour Organization (ILO) guidelines. They refer to persons actively seeking work as a share of the labour force, using harmonised criteria and definitions. The labour force estimates underlying the unemployment rate are different from the sum of the employment and unemployment levels published in Section 5.3.

## GOVERNMENT FINANCE

Sections 6.1 to 6.5 show the general government fiscal position in the euro area. The data are mainly consolidated and are based on the ESA 95 methodology. The annual euro area aggregates in Sections 6.1 to 6.3 are compiled by the ECB on the basis of harmonised data provided by the NCBs, which are regularly updated. The deficit and debt data for the euro area countries may therefore differ from those used by the European Commission within the excessive deficit procedure. The quarterly euro area aggregates in Sections 6.4 and 6.5 are compiled by the ECB on the basis of Eurostat and national data.

Section 6.1 presents annual figures on general government revenue and expenditure on the basis of definitions laid down in Commission Regulation (EC) No 1500/2000 of 10 July 2000<sup>8</sup> amending the ESA 95. Section 6.2 shows details of general government gross consolidated debt at nominal value in line with the Treaty provisions on the excessive deficit procedure. Sections 6.1

and 6.2 include summary data for the individual euro area countries owing to their importance in the framework of the Stability and Growth Pact. The deficits/surpluses presented for the individual euro area countries correspond to excessive deficit procedure B.9, as defined by Commission Regulation (EC) No 351/2002 of 25 February 2002 amending Council Regulation (EC) No 3605/93 as regards references to the ESA 95. Section 6.3 presents changes in general government debt. The difference between the change in the government debt and the government deficit – the deficit-debt adjustment – is mainly explained by government transactions in financial assets and by foreign exchange valuation effects. Section 6.4 presents quarterly figures on general government revenue and expenditure on the basis of definitions laid down in Regulation (EC) No 1221/2002 of the European Parliament and of the Council of 10 June 2002 on quarterly non-financial accounts for general government<sup>9</sup>. Section 6.5 presents quarterly figures on gross consolidated government debt, the deficit-debt adjustment and the government borrowing requirement. These figures are compiled using data provided by the Member States under Regulations (EC) No 501/2004 and No 222/2004 and data provided by the NCBs.

## EXTERNAL TRANSACTIONS AND POSITIONS

The concepts and definitions used in balance of payments (b.o.p.) and international investment position (i.i.p.) statistics (Sections 7.1 to 7.4) are generally in line with the IMF Balance of Payments Manual (fifth edition, October 1993), the ECB Guideline of 16 July 2004 on the statistical reporting requirements of the ECB (ECB/2004/15)<sup>10</sup> and the amending ECB Guideline of 31 May 2007 (ECB/2007/3)<sup>11</sup>. Additional references about the methodologies and sources used in the euro area b.o.p. and i.i.p. statistics can be found in the ECB publication entitled “European Union balance of payments/

8 OJ L 172, 12.7.2000, p. 3.

9 OJ L 179, 9.7.2002, p. 1.

10 OJ L 354, 30.11.2004, p. 34.

11 OJ L 159, 20.6.2007, p. 48.

international investment position statistical methods” (May 2007), and in the following Task Force reports: “Portfolio investment collection systems” (June 2002), “Portfolio investment income” (August 2003) and “Foreign direct investment” (March 2004), 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.

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 C 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 C to E of NACE. 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 586/2001 (OJ L 86, 27.3.2001, p. 11). 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.

## DEVELOPMENTS OUTSIDE THE EURO AREA

Statistics on other EU Member States (Section 9.1) follow the same principles as those for data relating to the euro area. The data for the United States and Japan contained in Section 9.2 are obtained from national sources.



## ANNEXES

# CHRONOLOGY OF MONETARY POLICY MEASURES OF THE EUROSYSTEM<sup>1</sup>



### 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 fixed 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 decided 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.



## 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, the list only refers to publications released between November 2008 and January 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.

### 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.
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- "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.
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- "Housing wealth and private consumption in the euro area", January 2009.
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- "Assessing global trends in protectionism", February 2009.

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## OCCASIONAL PAPER SERIES

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- 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.
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- 82 “The sustainability of China’s exchange rate policy and capital account liberalisation” by L. Cappiello and G. Ferrucci, March 2008.
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- 85 “Benchmarking the Lisbon strategy” by D. Ioannou, M. Ferdinandusse, M. Lo Duca and W. Coussens, June 2008.
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- “Simulating financial instability – conference on stress testing and financial crisis simulation exercises, 12-13 July 2007”, September 2008.
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“Price Stability – why is it important for you?”, June 2008.

“A single currency – an integrated market infrastructure”, September 2008.



## GLOSSARY

This glossary contains selected items that are frequently used in the Monthly Bulletin. A more comprehensive and detailed glossary can be found on the ECB's website ([www.ecb.europa.eu/home/glossary/html/index.en.html](http://www.ecb.europa.eu/home/glossary/html/index.en.html)).

**Autonomous liquidity factors:** liquidity factors that do not normally stem from the use of monetary policy instruments. Such factors are, for example, banknotes in circulation, government deposits with the central bank and the net foreign assets of the central bank.

**Balance of payments (b.o.p.):** a statistical statement that summarises, for a specific period of time, the economic transactions of an economy with the rest of the world.

**Bank lending survey (BLS):** a quarterly survey on lending policies that has been conducted by the Eurosystem since January 2003. It addresses qualitative questions on developments in credit standards, terms and conditions of loans and loan demand for both enterprises and households to a predefined sample group of banks in the euro area.

**Borrowing requirement (general government):** net incurrence of debt by the general government.

**Capital account:** a b.o.p. account that covers all capital transfers and acquisitions/disposals of non-produced, non-financial assets between residents and non-residents.

**Capital accounts:** part of the system of national (or euro area) accounts consisting of the change in net worth that is due to net saving, net capital transfers and net acquisitions of non-financial assets.

**Central parity (or central rate):** the exchange rate of each ERM II member currency vis-à-vis the euro, around which the ERM II fluctuation margins are defined.

**Compensation per employee or per hour worked:** the total remuneration, in cash or in kind, that is payable by employers to employees, i.e. gross wages and salaries, as well as bonuses, overtime payments and employers' social security contributions, divided by the total number of employees or by the total number of employees' hours worked.

**Consolidated balance sheet of the MFI sector:** a balance sheet obtained by netting out inter-MFI positions (e.g. inter-MFI loans and deposits) in the aggregated MFI balance sheet. It provides statistical information on the MFI sector's assets and liabilities vis-à-vis residents of the euro area not belonging to this sector (i.e. the general government and other euro area residents) and vis-à-vis non-euro area residents. It is the main statistical source for the calculation of monetary aggregates, and it provides the basis for the regular analysis of the counterparts of M3.

**Current account:** a b.o.p. account that covers all transactions in goods and services, income and current transfers between residents and non-residents.

**Debt (financial accounts):** loans, deposit liabilities, debt securities issued and pension fund reserves of non-financial corporations (resulting from employers' direct pension commitments on behalf of their employees), valued at market value at the end of the period.

**Debt (general government):** the gross debt (deposits, loans and debt securities excluding financial derivatives) at nominal value outstanding at the end of the year and consolidated between and within the sectors of general government.

**Debt security:** a promise on the part of the issuer (i.e. the borrower) to make one or more payment(s) to the holder (the lender) on a specified future date or dates. Such securities usually carry a specific rate of interest (the coupon) and/or are sold at a discount to the amount that will be repaid at maturity. Debt securities issued with an original maturity of more than one year are classified as long-term.

**Debt-to-GDP ratio (general government):** the ratio of general government debt to GDP at current market prices. It is the subject of one of the fiscal criteria laid down in Article 104(2) of the Treaty establishing the European Community to define the existence of an excessive deficit.

**Deficit (general government):** the general government's net borrowing, i.e. the difference between total government revenue and total government expenditure.

**Deficit-debt adjustment (general government):** the difference between the general government deficit and the change in general government debt.

**Deficit ratio (general government):** the ratio of the general government deficit to GDP at current market prices. It is the subject of one of the fiscal criteria laid down in Article 104(2) of the Treaty establishing the European Community to define the existence of an excessive deficit. It is also referred to as the budget deficit ratio or the fiscal deficit ratio.

**Deflation:** a decline in the general price level, e.g. in the consumer price index.

**Deposit facility:** a standing facility of the Eurosystem which counterparties may use to make overnight deposits, remunerated at a pre-specified interest rate, at an NCB.

**Direct investment:** cross-border investment for the purpose of obtaining a lasting interest in an enterprise resident in another economy (assumed, in practice, for ownership of at least 10% of the ordinary shares or voting power). Included are equity capital, reinvested earnings and other capital associated with inter-company operations. The direct investment account records net transactions/positions in assets abroad by euro area residents (as "direct investment abroad") and net transactions/positions in euro area assets by non-residents (as "direct investment in the euro area").

**Effective exchange rates (EERs) of the euro (nominal/real):** weighted averages of bilateral euro exchange rates against the currencies of the euro area's main trading partners. The nominal EER indices for the euro are calculated against two groups of trading partners: the EER-21 (comprising the 11 non-euro area EU Member States and 10 trading partners outside the EU) and the EER-41 (composed of the EER-21 and 20 additional countries). The weights used reflect the share of each partner country in euro area trade and account for competition in third markets. Real EERs are nominal EERs deflated by a weighted average of foreign, relative to domestic, prices or costs. They are thus measures of price and cost competitiveness.

**EONIA (euro overnight index average):** a measure of the effective interest rate prevailing in the euro interbank overnight market. It is calculated as a weighted average of the interest rates on unsecured overnight lending transactions denominated in euro, as reported by a panel of contributing banks.

**Equities:** securities representing ownership of a stake in a corporation. They comprise shares traded on stock exchanges (quoted shares), unquoted shares and other forms of equity. Equities usually produce income in the form of dividends.

**ERM II (exchange rate mechanism II):** the exchange rate arrangement that provides the framework for exchange rate policy cooperation between the euro area countries and the EU Member States not participating in Stage Three of EMU.

**EURIBOR (euro interbank offered rate):** the rate at which a prime bank is willing to lend funds in euro to another prime bank, computed daily for interbank deposits with different maturities of up to 12 months.

**Euro area:** the area formed by those EU Member States in which the euro has been adopted as the single currency in accordance with the Treaty establishing the European Community.

**European Commission surveys:** harmonised surveys of business and/or consumer sentiment conducted on behalf of the European Commission in each of the EU Member States. Such questionnaire-based surveys are addressed to managers in the manufacturing, construction, retail and services industries, as well as to consumers. From each monthly survey, composite indicators are calculated that summarise the replies to a number of different questions in a single indicator (confidence indicators).

**Eurosystem:** the central banking system made up of the ECB and the NCBs of those EU Member States that have already adopted the euro.

**Eurozone Purchasing Managers' Surveys:** surveys of business conditions in manufacturing and in services industries conducted for a number of countries in the euro area and used to compile indices. The Eurozone Manufacturing Purchasing Managers' Index (PMI) is a weighted indicator calculated from indices of output, new orders, employment, suppliers' delivery times and stocks of purchases. The services sector survey asks questions on business activity, expectations of future business activity, the amount of business outstanding, incoming new business, employment, input prices and prices charged. The Eurozone Composite Index is calculated by combining the results from the manufacturing and services sector surveys.

**External trade in goods:** exports and imports of goods with countries outside the euro area, measured in terms of value and as indices of volume and unit value. External trade statistics are not comparable with the exports and imports recorded in the national accounts, as the latter include both intra-euro area and extra-euro area transactions, and also combine goods and services. Nor are they fully comparable with the goods item in b.o.p. statistics. Besides methodological adjustments, the main difference is that imports in external trade statistics are recorded including insurance and freight services, whereas they are recorded free on board in the goods item in the b.o.p. statistics.

**Financial account:** a b.o.p. account that covers transactions between residents and non-residents in direct investment, portfolio investment, other investment, financial derivatives and reserve assets.

**Financial accounts:** part of the system of national (or euro area) accounts showing the financial positions (stocks or balance sheets), financial transactions and other changes of the different institutional sectors of an economy by type of financial asset.

**Fixed rate tender:** a tender procedure in which the interest rate is specified in advance by the central bank and in which participating counterparties bid the amount of money they wish to transact at the fixed interest rate.

**General government:** a sector defined in the ESA 95 as comprising resident entities that are engaged primarily in the production of non-market goods and services intended for individual and collective consumption and/or in the redistribution of national income and wealth. Included are central, regional and local government authorities as well as social security funds. Excluded are government-owned entities that conduct commercial operations, such as public enterprises.

**Gross domestic product (GDP):** the value of an economy's total output of goods and services less intermediate consumption, plus net taxes on products and imports. GDP can be broken down by output, expenditure or income components. The main expenditure aggregates that make up GDP are household final consumption, government final consumption, gross fixed capital formation, changes in inventories, and imports and exports of goods and services (including intra-euro area trade).

**Harmonised Index of Consumer Prices (HICP):** a measure of the development of consumer prices that is compiled by Eurostat and harmonised for all EU Member States.

**Hourly labour cost index:** a measure of labour costs, including gross wages and salaries (in cash and in kind, including bonuses) and other labour costs (employers' social contributions plus employment-related taxes paid by the employer minus subsidies received by the employer), per hour actually worked (including overtime).

**Implied volatility:** the expected volatility (i.e. standard deviation) in the rates of change of the price of an asset (e.g. a share or a bond). It can be derived from the asset's price, maturity date and exercise price of its options, as well as from a riskless rate of return, using an option pricing model such as the Black-Scholes model.

**Index of negotiated wages:** a measure of the direct outcome of collective bargaining in terms of basic pay (i.e. excluding bonuses) at the euro area level. It refers to the implied average change in monthly wages and salaries.

**Industrial producer prices:** factory-gate prices (transportation costs are not included) of all products sold by industry excluding construction on the domestic markets of the euro area countries, excluding imports.

**Industrial production:** the gross value added created by industry at constant prices.

**Inflation:** an increase in the general price level, e.g. in the consumer price index.

**Inflation-indexed government bonds:** debt securities issued by the general government, the coupon payments and principal of which are linked to a specific consumer price index.

**International investment position (i.i.p.):** the value and composition of an economy's outstanding net financial claims on (or financial liabilities to) the rest of the world.

**International reserves:** external assets readily available to and controlled by monetary authorities for directly financing or regulating the magnitude of payments imbalances through intervention in exchange markets. The international reserves of the euro area comprise non-euro denominated claims on non-euro area residents, gold, special drawing rights (SDRs) and the reserve positions in the IMF which are held by the Eurosystem.

**Investment funds (except money market funds):** financial institutions that pool capital raised from the public and invest it in financial and non-financial assets. See also **MFIs**.

**Job vacancies:** a collective term covering newly created jobs, unoccupied jobs or jobs about to become vacant in the near future, for which the employer has recently taken active steps to find a suitable candidate.

**Key ECB interest rates:** the interest rates, set by the Governing Council, which reflect the monetary policy stance of the ECB. They are the rates at the main refinancing operations, on the marginal lending facility and on the deposit facility.

**Labour force:** the sum total of persons in employment and the number of unemployed.

**Labour productivity:** the output that can be produced with a given input of labour. It can be measured in several ways, but is commonly measured as GDP (volume) divided by either total employment or total hours worked.

**Longer-term refinancing operation:** a regular open market operation executed by the Eurosystem in the form of reverse transactions. Such operations are carried out through a monthly standard tender and normally have a maturity of three months.

**M1:** a narrow monetary aggregate that comprises currency in circulation plus overnight deposits held with MFIs and central government (e.g. at the post office or treasury).

**M2:** an intermediate monetary aggregate that comprises M1 plus deposits redeemable at a period of notice of up to and including three months (i.e. short-term savings deposits) and deposits with an agreed maturity of up to and including two years (i.e. short-term time deposits) held with MFIs and central government.

**M3:** a broad monetary aggregate that comprises M2 plus marketable instruments, in particular repurchase agreements, money market fund shares and units, and debt securities with a maturity of up to and including two years issued by MFIs.

**Main refinancing operation:** a regular open market operation executed by the Eurosystem in the form of reverse transactions. Such operations are carried out through a weekly standard tender and normally have a maturity of one week.

**Marginal lending facility:** a standing facility of the Eurosystem which counterparties may use to receive overnight credit from an NCB at a pre-specified interest rate against eligible assets.

**MFI credit to euro area residents:** MFI loans granted to non-MFI euro area residents (including general government and the private sector) and MFI holdings of securities (shares, other equity and debt securities) issued by non-MFI euro area residents.

**MFI interest rates:** the interest rates that are applied by resident credit institutions and other MFIs, excluding central banks and money market funds, to euro-denominated deposits and loans vis-à-vis households and non-financial corporations resident in the euro area.

**MFI longer-term financial liabilities:** deposits with an agreed maturity of over two years, deposits redeemable at a period of notice of over three months, debt securities issued by euro area MFIs with an original maturity of more than two years and the capital and reserves of the euro area MFI sector.

**MFI net external assets:** the external assets of the euro area MFI sector (such as gold, foreign currency banknotes and coins, securities issued by non-euro area residents and loans granted to non-euro area residents) minus the external liabilities of the euro area MFI sector (such as non-euro area residents' deposits and repurchase agreements, as well as their holdings of money market fund shares/units and debt securities issued by MFIs with a maturity of up to and including two years).

**MFIs (monetary financial institutions):** financial institutions which together form the money-issuing sector of the euro area. These include the Eurosystem, resident credit institutions (as defined in Community law) and all other resident financial institutions whose business is to receive deposits and/or close substitutes for deposits from entities other than MFIs and, for their own account (at least in economic terms), to grant credit and/or invest in securities. The latter group consists predominantly of money market funds, i.e. funds that invest in short-term and low-risk instruments usually with a maturity of one year or less.

**Minimum bid rate:** the lower limit to the interest rates at which counterparties may submit bids in the variable tenders.

**Other investment:** an item in the b.o.p. and the i.i.p. that covers the financial transactions/positions with non-residents in trade credits, deposits and loans, and other accounts receivable and payable.

**Portfolio investment:** euro area residents' net transactions and/or positions in securities issued by non-residents of the euro area ("assets") and non-residents' net transactions and/or positions in securities issued by euro area residents ("liabilities"). Included are equity securities and debt securities (bonds and notes, and money market instruments). Transactions are recorded at the effective price paid or received, less commissions and expenses. To be regarded as a portfolio asset, ownership in an enterprise must be equivalent to less than 10% of the ordinary shares or voting power.

**Price stability:** the maintenance of price stability is the primary objective of the Eurosystem. The Governing Council defines price stability as a year-on-year increase in the HICP for the euro area of below 2%. The Governing Council has also made it clear that, in the pursuit of price stability, it aims to maintain inflation rates below, but close to, 2% over the medium term.

**Purchasing power parity (PPP):** the rate at which one currency is converted into another so as to equalise the purchasing power of the two currencies by eliminating the differences in the price levels prevailing in the countries concerned. In their simplest form, PPPs show the ratio of the prices in national currency of the same good or service in different countries.

**Reference value for M3 growth:** the annual growth rate of M3 over the medium term that is consistent with the maintenance of price stability. At present, the reference value for annual M3 growth is 4½%.

**Reserve requirement:** the minimum amount of reserves a credit institution is required to hold with the Eurosystem over a predefined maintenance period. Compliance with the requirement

is determined on the basis of the average of the daily balances in the reserve accounts over the maintenance period.

**Survey of Professional Forecasters (SPF):** a quarterly survey that has been conducted by the ECB since 1999 to collect macroeconomic forecasts on euro area inflation, real GDP growth and unemployment from a panel of experts affiliated to financial and non-financial organisations based in the EU.

**Unit labour costs:** a measure of total labour costs per unit of output calculated for the euro area as the ratio of total compensation per employee to labour productivity (defined as GDP (volume) per person employed).

**Variable rate tender:** a tender procedure where the counterparties bid both the amount of money they wish to transact with the central bank and the interest rate at which they wish to enter into the transaction.

**Write-down:** a downward adjustment to the value of loans recorded in the balance sheets of MFIs when it is recognised that the loans have become partly unrecoverable.

**Write-off:** the removal of the value of loans from the balance sheets of MFIs when the loans are considered to be totally unrecoverable.

**Yield curve:** a graphical representation of the relationship between the interest rate or yield and the residual maturity at a given point in time for sufficiently homogenous debt securities with different maturity dates. The slope of the yield curve can be measured as the difference between the interest rates or yield at two selected maturities.



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