



EUROPEAN CENTRAL BANK

EUROSYSTEM

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FEBRUARY

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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	statistical classification of economic activities in the European Union
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 EU practice, the EU countries are listed in this Bulletin using the alphabetical order of the country names in the national languages.**



## EDITORIAL

Based on its regular economic and monetary analyses, the Governing Council decided at its meeting on 9 February to keep the key ECB interest rates unchanged. The information that has become available since mid-January broadly confirms the Governing Council's previous assessment. Inflation is likely to stay above 2% for several months to come, before declining to below 2%. Available survey indicators confirm some tentative signs of a stabilisation in economic activity at a low level around the turn of the year, but the economic outlook remains subject to high uncertainty and downside risks. The underlying pace of monetary expansion remains subdued. Looking ahead, it is essential for monetary policy to maintain price stability for the euro area as a whole. This ensures a firm anchoring of inflation expectations in line with the Governing Council's aim of maintaining inflation rates below, but close to, 2% over the medium term. Such anchoring is a prerequisite for monetary policy to make its contribution to supporting economic growth and job creation in the euro area. A very thorough analysis of all incoming data and developments over the period ahead is warranted.

Through its non-standard monetary policy measures the Governing Council will continue to support the functioning of the euro area financial sector, and thus the financing of the real economy. Since the first three-year longer-term refinancing operation (LTRO) was conducted in December 2011 the Governing Council has approved specific national eligibility criteria and risk control measures for the temporary acceptance in a number of countries of additional credit claims as collateral in Eurosystem credit operations, which should lead to an increase in available collateral.<sup>1</sup> At the start of the current reserve maintenance period on 18 January 2012 the reserve ratio was reduced, freeing up additional collateral. As stated on previous occasions, all non-standard measures are temporary in nature.

With regard to the economic analysis, real GDP growth in the fourth quarter of 2011 is likely to have been very weak. According to the survey

data for the last two months, there are tentative signs of a stabilisation in economic activity at a low level. Looking ahead, the Governing Council expects the euro area economy to recover very gradually in the course of 2012. The very low short-term interest rates and all the measures taken to foster the proper functioning of the euro area financial sector are lending support to the euro area economy. Moreover, stress in financial markets has diminished in response to the Governing Council's monetary policy measures, but also in response to the progress made towards a stronger euro area governance framework and intensified fiscal consolidation in several euro area countries. However, subdued global demand growth, the remaining tensions in euro area sovereign debt markets and their impact on credit conditions, as well as the process of balance sheet adjustment in the financial and non-financial sectors, continue to dampen the underlying growth momentum.

This outlook is subject to downside risks. They notably relate to tensions in euro area debt markets and their potential spillover to the euro area real economy. Downside risks also relate to possible adverse developments in the global economy, higher than assumed increases in commodity prices, protectionist pressures and the potential for a disorderly correction of global imbalances.

Euro area annual HICP inflation was 2.7% in January 2012, according to Eurostat's flash estimate, unchanged from December. The average inflation rate for 2011 was 2.7%, mainly driven by higher energy and other commodity prices. Looking ahead, inflation is likely to stay above 2% for several months to come, before declining to below 2%. This pattern reflects the expectation that, in an environment of weak growth in the euro area and globally, underlying price pressures in the euro area should remain limited.

<sup>1</sup> For further details, see the press release of 9 February 2012 "ECB's Governing Council approves eligibility criteria for additional credit claims".

Risks to the medium-term outlook for price developments remain broadly balanced. On the upside, they relate to higher than assumed increases in indirect taxes and administered prices, as well as increases in commodity prices. The main downside risks relate to the impact of weaker than expected growth in the euro area and globally.

The monetary analysis indicates that the underlying pace of monetary expansion remains subdued. The annual growth rate of M3 decreased to 1.6% in December 2011, after 2.0% in November, reflecting a further weakening of monetary dynamics towards the end of the year.

The annual growth rates of loans to non-financial corporations and loans to households, adjusted for loan sales and securitisation, also decreased further in December, and stood at 1.2% and 1.9% respectively. The volume of MFI loans to both sectors declined in December, and this was particularly pronounced in the case of the non-financial corporate sector. In addition, there are indications that bank lending conditions tightened further, affecting loan supply in several euro area countries in late 2011. It is not yet possible to draw firm conclusions from these developments, particularly given that the impact of the first three-year LTRO on bank funding is still unfolding and may not have been fully reflected in the most recent bank lending survey. In addition, other non-standard monetary policy measures announced in December are still to be implemented. Accordingly, close scrutiny of credit developments in the period ahead is essential.

The soundness of bank balance sheets will be a key factor in facilitating an appropriate provision of credit to the economy over time. It is essential that the implementation of banks' recapitalisation plans does not result in developments that are detrimental to the financing of economic activity in the euro area.

To sum up, the economic analysis indicates that underlying price pressures should remain

limited and risks to the medium-term outlook for price developments are broadly balanced. A cross-check with the signals from the monetary analysis confirms this picture.

A combination of structural reforms and fiscal discipline is essential for boosting confidence and delivering a favourable environment for sustainable growth. Regarding fiscal policies, all euro area governments need to continue to do their utmost to ensure fiscal sustainability. It is essential that all countries adhere to the fiscal targets they announced for 2012. This should help to anchor expectations of sound fiscal policies and strengthen confidence. The rules guiding the design and implementation of national fiscal policies are being strengthened at the EU level as well as in the legal frameworks of several Member States. These are important steps in the right direction. With regard to structural reforms, these are key to increasing the adjustment capacity and competitiveness of euro area countries, thereby strengthening growth prospects and job creation. Notably, far-reaching and ambitious reforms should be implemented to foster competition in product markets, particularly in services sectors, while rigidities in labour markets should be reduced and wage flexibility should be enhanced.

This issue of the Monthly Bulletin contains three articles. The first article analyses patterns in average money and credit growth around the time of past economic and financial crises. The second article describes developments in the debt ratios of non-financial corporations in the euro area. The third article reviews the role of the euro area in global cross-border finance before and after the global financial crisis.

# ECONOMIC AND MONETARY DEVELOPMENTS

## I THE EXTERNAL ENVIRONMENT OF THE EURO AREA

*The latest survey indicators suggest that tentative signs of stabilisation in global economic activity continue to emerge. Inflationary dynamics remain contained in advanced economies. In emerging economies, inflation rates have continued their modest decline, although inflationary pressures persist.*

### I.1 DEVELOPMENTS IN THE WORLD ECONOMY

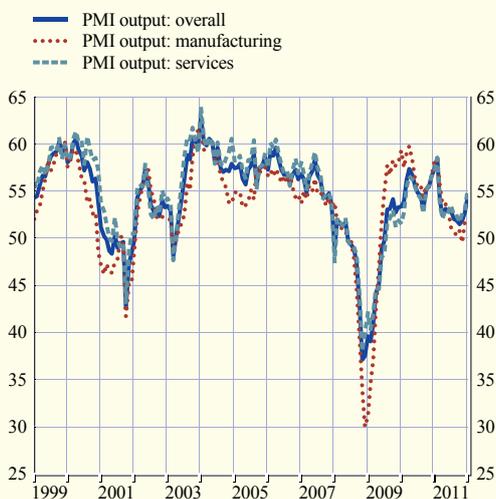
While the momentum in global growth slowed in the latter half of 2011, tentative signs of stabilisation in global economic activity continue to emerge. However, the ongoing and necessary balance sheet adjustment process as well as weaknesses in labour and housing markets in some major advanced economies continue to constrain the outlook for growth. In emerging economies, growth remains solid, albeit moderating on account of both weaker external and domestic demand.

In January 2012 the Purchasing Managers' Index (PMI) for global all-industry output increased to 54.6, compared with 52.7 in December. This was its highest reading since February 2011. The services activity index recorded an eleven-month high, while the manufacturing output index remained above the expansion-contraction threshold of 50, although it was still below its long-term average (see Chart 1). The PMI component for new orders also increased in January, with the index increasing for both the manufacturing and the services sectors.

Inflationary dynamics continue to remain relatively contained in advanced economies. In the OECD area, annual headline consumer price inflation stood at 2.9% in December, compared with 3.1% in November. Excluding food and energy, the annual inflation rate remained unchanged at 2.0% in December (see Chart 2). In emerging economies inflation rates have recently declined slightly from high levels.

Chart 1 Global PMI output

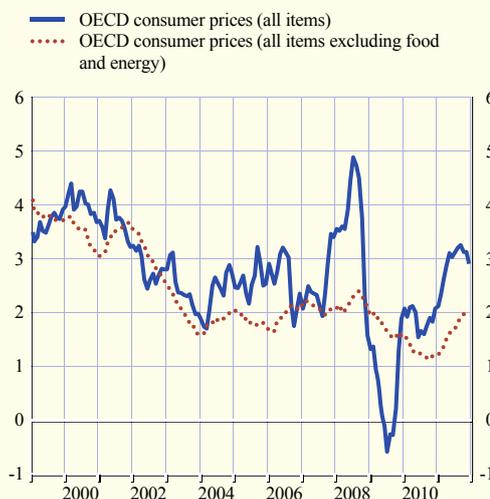
(diffusion index; seasonally adjusted; monthly data)



Source: Markit.

Chart 2 International price developments

(monthly data; annual percentage changes)



Source: OECD.

## UNITED STATES

In the United States, economic activity continued to gain momentum gradually in the fourth quarter of 2011, after growing at a slow pace in the first half of the year (see Chart 3). According to the advance estimate by the Bureau of Economic Analysis, US real GDP increased by 2.8% in annualised terms in the fourth quarter of 2011, up from 1.8% in the previous quarter. The expansion in the fourth quarter was driven primarily by consumer spending, as well as by the change in private inventories. Residential investment picked up strongly, while net exports contributed negatively to growth. Real disposable personal income growth recovered, but was still below the growth rate of real consumption. Available monthly data point to continued economic expansion in the first quarter of 2012, but at a slower rate than in the final quarter of 2011.

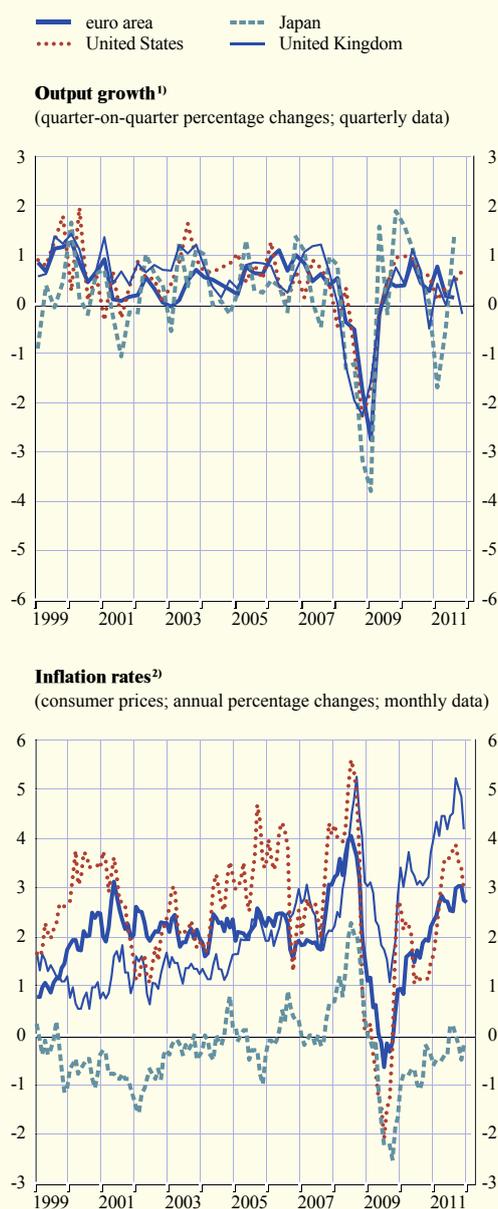
As regards price developments, annual CPI inflation declined to 3.0% in December 2011 from 3.4% in the previous month. This was the third consecutive decline following the peak in September (3.9%), mainly resulting from the easing of energy prices. Excluding food and energy, core CPI inflation remained unchanged from the previous month, at an annual rate of 2.2%. Recent developments in core inflation partly reflect some stabilisation in the growth rates of housing and transportation costs.

On 25 January 2012 the US Federal Open Market Committee stated that, notwithstanding some slowing in global growth, recent indicators point to a moderate expansion in the US economy and some further improvement in overall labour market conditions. The Committee decided to maintain its target range for the federal funds rate at 0.0% to 0.25% and anticipated that economic conditions are likely to warrant exceptionally low levels for the federal funds rate at least until late 2014.

## JAPAN

In Japan, following the rebound observed in the third quarter, economic activity was somewhat weaker during the last quarter of 2011, driven to a large extent by a slowdown in global demand, the appreciation of the yen and supply-side disruptions triggered by the floods in Thailand. Industrial

Chart 3 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.

production declined by 0.4% quarter on quarter in the last quarter of 2011, despite a stronger than expected increase in December (4% on a monthly basis). Exports of goods in real terms also picked up in December (by 1.1% on a monthly basis), but this rise was not enough to reverse the losses in previous months, and exports fell by almost 4% in the last quarter of 2011. In nominal terms, however, the monthly trade deficit increased further in December (on a seasonally adjusted basis), bringing the annual trade balance in 2011 to JPY -2.5 trillion, its first annual deficit since 1980 (on a customs trade basis). The latest data releases largely point to a firming-up of activity at the start of 2012. The PMI manufacturing output index for January 2012 signalled a return to growth for manufacturing production for the first time in three months, albeit at a modest pace.

With regard to price developments, annual headline CPI inflation increased in December to -0.2%, compared with -0.5% in the previous month. Excluding fresh food, annual CPI inflation was -0.1% in December, up from -0.2% in November, while annual CPI inflation excluding food and energy remained at -1.1%. In its latest monetary policy meeting on 24 January, the Bank of Japan decided to maintain its target for the uncollateralised overnight call rate at around 0.0% to 0.1%.

#### UNITED KINGDOM

In the United Kingdom, economic activity has continued to be subdued. In the fourth quarter of 2011 real GDP declined by 0.2% quarter on quarter, mainly owing to weak industrial production and construction activity. Available business and household survey indicators improved somewhat at the beginning of 2012. However, they remained consistent with a very sluggish recovery in economic activity in the short term, even though monetary stimuli should provide support going forward. There have not been signs of improvement in the labour market situation, and indicators of money and credit growth have remained weak. Growth in domestic demand is expected to remain constrained by tight credit conditions, ongoing household balance sheet adjustment and substantial fiscal tightening, while the weak outlook for external demand is likely to restrain export growth.

Inflation has continued to ease, but remains elevated. Annual CPI inflation declined to 4.2% in December from 4.8% in November, while CPI inflation excluding energy and unprocessed food declined by 0.2 percentage point to 3.4%. The gradual diminishing of certain temporary factors (higher past commodity prices, large electricity price increases in the autumn of 2011 and the increase in the rate of VAT in January 2011), as well as the existence of spare capacity, should contribute to dampening inflationary pressures. The Bank of England's Monetary Policy Committee maintained the official Bank Rate paid on commercial bank reserves at 0.5%, but decided to increase the stock of asset purchases financed by the issuance of central bank reserves by GBP 50 billion to GBP 325 billion in total in February.

#### CHINA

In China, real GDP growth slowed to 8.9% year on year in the fourth quarter of 2011, down from 9.1% in the third quarter. This deceleration was mainly due to weaker external demand and restrictive domestic policies aimed at restraining investment in the property sector. External imbalances declined further at the end of 2011, driven by a diminishing trade surplus and net capital outflows, which intensified amid reduced expectations of an appreciation in the renminbi and some concerns about the outlook for growth and financial stability. As a result, in the fourth quarter of 2011 foreign exchange reserves declined for the first time since 1998. Annual CPI inflation declined to 4.1% in December, close to the authorities' annual target of 4.0%. The decrease in CPI inflation during the fourth quarter of 2011 was driven mainly by food prices, but also lately by the prices of non-food items. Producer prices also declined sharply in

year-on-year terms to 1.7% in December. The monetary policy stance has started to ease. After the People's Bank of China reduced the reserve requirement ratio by 50 basis points in late November, domestic new lending and M2 accelerated marginally in December.

## 1.2 COMMODITY MARKETS

Oil prices increased in January and early February. Brent crude oil prices stood at USD 116.3 per barrel on 8 February, which is 8.1% higher than at the beginning of January 2012 and 24.8% higher than at the beginning of 2011 (see Chart 4). Looking ahead, however, market participants expect lower oil prices in the medium term, with futures contracts for December 2013 trading at USD 107.7 per barrel.

There have been some signs of weakness on the demand side associated with concerns over the global macroeconomic environment. This is the case especially for demand in developed economies, whereas demand in emerging economies has proved more resilient. Against this background, the International Energy Agency has repeatedly downgraded its demand projections for 2012. At the same time, concerns over the supply side have sustained prices at high levels. The EU has imposed an embargo on Iranian oil exports as of 1 July 2012, so market tightness can be expected thereafter.

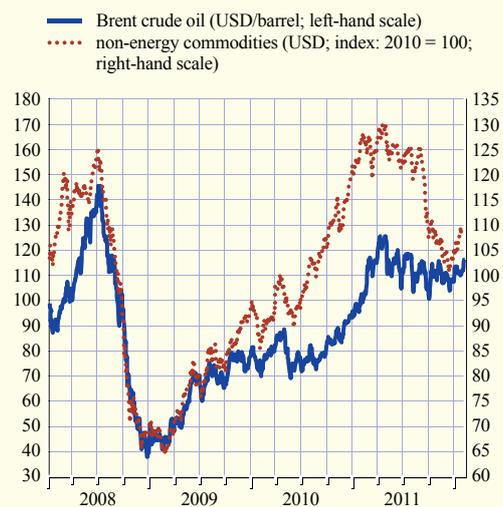
On aggregate, prices of non-energy commodities increased somewhat in the course of January. More specifically, food prices remained broadly stable, and metal prices were sustained by strong imports from emerging economies. In aggregate US dollar terms, the price index for non-energy commodities was about 14% lower towards the end of January than at the beginning of 2011.

## 1.3 EXCHANGE RATES

Between the end of October 2011 and early February 2012 the nominal effective exchange rate of the euro, as measured against the currencies of 20 of the euro area's most important trading partners, depreciated overall in an environment of significantly declining volatility. This depreciation took place until mid-January 2012, when the euro reversed its downward trend. On 8 February 2012 the nominal effective exchange rate of the euro was 4.2% below its level at the end of October 2011 and 3.0% below its average level in 2011 (see Chart 5).

In bilateral terms, over the past three months the euro has depreciated against most major currencies. Between 31 October 2011 and 8 February 2012 the euro declined against the US dollar by 5.2%, the pound sterling by 4.4%, the Japanese yen by 6.5%, and the Chinese renminbi by 6.1%. The euro also depreciated against other Asian currencies, in particular against the Korean won, the Hong Kong dollar and the Singapore dollar by 4.6%, 5.3% and 5.6% respectively, as well as against the currencies of some commodity exporting countries. The single currency also

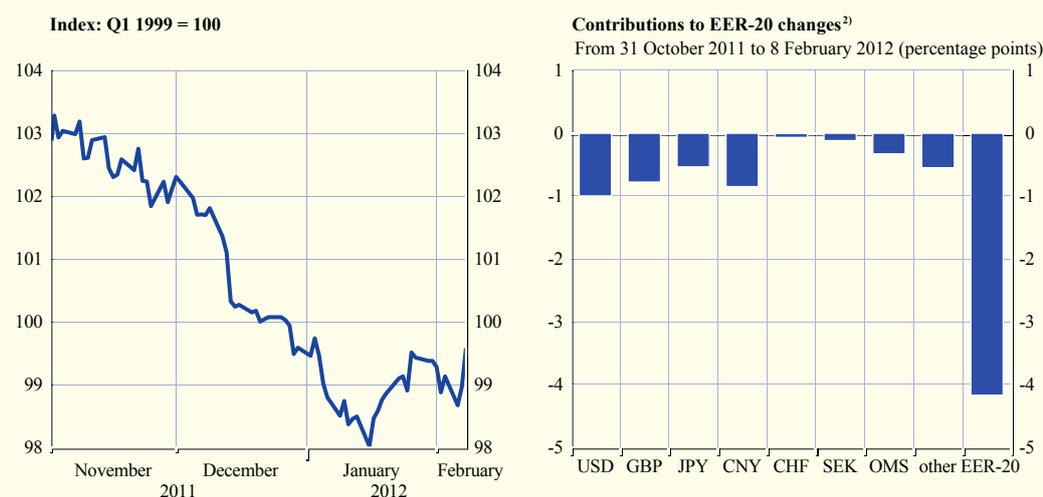
Chart 4 Main developments in commodity prices



Sources: Bloomberg and HWWI.

Chart 5 Euro effective exchange rate (EER-20) and its decomposition<sup>1)</sup>

(daily data)



Source: ECB.

1) An upward movement of the index represents an appreciation of the euro against the currencies of 20 of the most important trading partners of the euro area (including all non-euro area EU Member States).

2) Contributions to EER-20 changes are displayed individually for the currencies of the six main trading partners of the euro area. The category "Other Member States" (OMS) refers to the aggregate contribution of the currencies of the non-euro area Member States (except the pound sterling and the Swedish krona). The category "Other" refers to the aggregate contribution of the currencies of the remaining six trading partners of the euro area in the EER-20 index. Changes are calculated using the corresponding overall trade weights in the EER-20 index.

depreciated vis-à-vis some other European currencies, most notably the Hungarian forint and the Polish zloty, by 4.6% and 3.9% respectively, as well as against the Swiss franc by 0.6% (see Table 1). Market volatility, as measured on the basis of foreign exchange option prices, significantly declined in the period under review in most currency pairs and currently stands close to long-term average levels.

Table 1 Euro exchange rate developments<sup>1)</sup>

(daily data; units of national currency per euro; percentage changes)

	Weight in EER-20	Level on 8 February 2012	Appreciation (+)/ depreciation (-) of the euro as at 8 February 2012		
			since: 31 October 2011	3 January 2011	compared with: average for 2011
US dollar	19.4	1.327	-5.2	-0.6	-0.4
Pound sterling	17.8	0.835	-4.4	-3.1	-2.5
Chinese renminbi	13.6	8.361	-6.1	-4.9	-5.0
Japanese yen	8.3	102.1	-6.5	-6.1	-6.5
Swiss franc	6.4	1.211	-0.6	-2.8	-3.7
Polish zloty	4.9	4.177	-3.9	5.5	6.2
Swedish krona	4.9	8.829	-2.0	-1.2	-1.3
Czech koruna	4.1	24.81	0.0	-1.1	-0.6
Korean won	3.9	1,481	-4.6	-1.3	-1.1
Hungarian forint	3.1	289.7	-4.6	4.0	4.5
NEER <sup>2)</sup>		99.6	-4.2	-2.0	-3.0

Source: ECB.

1) Bilateral exchange rates in descending order based on the corresponding currencies' trade weights in the EER-20 index.

2) Euro nominal effective exchange rate against the currencies of 20 of the most important trading partners of the euro area (EER-20).

Between 31 October 2011 and 8 February 2012 the currencies participating in ERM II remained broadly stable against the euro, trading at, or close to, their respective central rates. The Latvian lats mostly traded on the stronger side of its central rate within the unilaterally set fluctuation band of +/-1%.

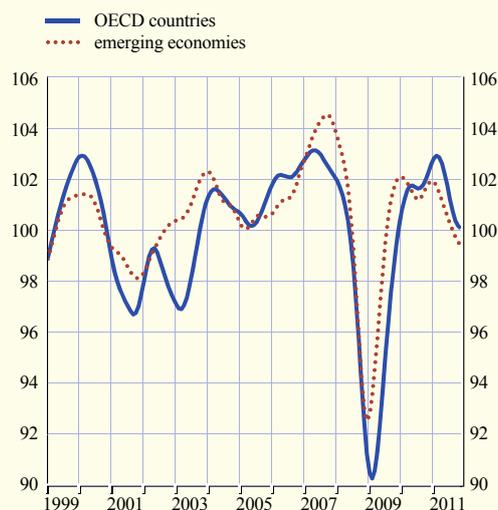
#### 1.4 OUTLOOK FOR THE EXTERNAL ENVIRONMENT

Looking ahead, global growth is expected to remain subdued on account of heightened uncertainty, tensions in global financial markets, as well as the ongoing economic adjustment process in major advanced economies. In November 2011 the OECD's composite leading indicator continued to suggest a slowdown in OECD countries and other major economies. However, at the country level the latest readings indicate a positive change in momentum in the United States and Japan.

In an environment of high uncertainty, risks to activity remain on the downside. These risks notably relate to higher than assumed increases in commodities prices, protectionist pressures and the potential for a disorderly correction of global imbalances.

**Chart 6 OECD composite leading indicators**

(monthly data; amplitude-adjusted)



Source: OECD.

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

## 2 MONETARY AND FINANCIAL DEVELOPMENTS

### 2.1 MONEY AND MFI CREDIT

The annual growth rate of M3 declined further in December 2011. The decline in broad money growth was visible in all main components of M3 and in all sectors. The weak monetary developments in December were mirrored by a further moderation in the annual growth of MFI lending to the private sector, especially for loans to non-financial corporations (NFCs) and to other financial intermediaries (OFIs). Monetary data for December were affected by various special factors, including end-of-year operations of banks and continued high economic and financial market uncertainty, whose effects are likely to be temporary but difficult to assess. The latest data should therefore be interpreted with particular caution. This notwithstanding, the data overall point to subdued money and credit dynamics in the euro area in the last quarter of 2011.

#### THE BROAD MONETARY AGGREGATE M3

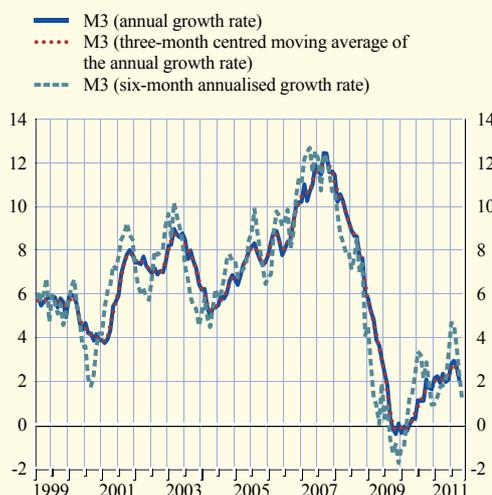
The annual growth rate of M3 declined further in December 2011, to 1.6% from 2.0% in November (see Chart 7). This reflected a further sizeable increase in the monthly flows out of broad money, with a month-on-month growth rate of M3 of -0.5% in December. The outcome for December was again largely driven by a contraction in repurchase agreements (repos), which in turn mirrored a further marked decline in secured interbank borrowing conducted via central counterparties (CCPs) located in the euro area. Adjusted for the impact of repos conducted via CCPs, M3 holdings declined only slightly from the previous month and the annual growth rate of the adjusted M3 series remained unchanged at 1.6% in December.

On the component side, in December all components of broad money registered sizeable monthly outflows. These were particularly strong for repos, most of which were conducted via CCPs. A decline in M3 deposit holdings was observed for all sectors. As in previous months, this was particularly marked for OFIs, but, unlike in previous months, a strong decline was also observed for households, especially in overnight deposits. The latter was largely concentrated in some of the countries most strongly affected by the sovereign debt crisis.

On the counterpart side, the annual growth rate of MFI loans to the private sector (adjusted for the impact of loan sales and securitisation activity) declined further in December, to 1.2% from 1.9% in November, after having hovered around 3% between January and October 2011. The decline in December reflected strong monthly outflows for all sectors, but particularly for loans to NFCs and OFIs (in part mirroring the decline in CCP transactions). These developments were largely driven by negative contributions from a few countries, especially those whose banking systems were under pressure. In this respect, various special factors may have played a role in driving December lending figures, including end-of-year operations aimed at adjusting bank balance sheets.

Chart 7 M3 growth

(percentage changes; adjusted for seasonal and calendar effects)



Source: ECB.

The main assets held by euro area MFIs (excluding the Eurosystem) increased modestly in December, after having declined in the previous two months. The latest increase was especially visible in sizeable purchases of debt securities issued by MFIs and general government, which offset the significant reduction in loans to the private sector and to other MFIs. The reversal of the tendencies observed over previous months with regard to holdings of MFI and government securities is likely to be partly a consequence of the liquidity provided by the three-year longer-term refinancing operation (LTRO). At the same time, the period between the allotment of the three-year LTRO and the reporting of the monetary data was too short to determine significant effects on lending flows.

### MAIN COMPONENTS OF M3

The slowdown in the annual growth rate of M3 in December mainly reflected a further significant decrease in the annual growth rate of marketable instruments. While the annual growth rate of the narrow monetary aggregate M1 also declined visibly compared with November, that of other short-term deposits remained unchanged.

The annual growth rate of M1 decreased to 1.6% in December, down from 2.1% in the previous month. It thus continued to fluctuate in a relatively narrow range (between 1.6% and 2.1%), as has been the case since August 2011. Both overnight deposits and currency in circulation experienced negative monthly flows, causing their respective annual growth rates to decline. As regards overnight deposits, withdrawals were recorded for households in particular. This pattern points to some extent to continued portfolio reallocations by households in favour of other instruments inside and outside of M3. By contrast, both OFIs and NFCs increased their overnight deposit holdings. The developments with regard to the former probably continue to reflect hoarding by institutional investors (including investment funds) of liquidity received from securities sales and the need to hold liquid instruments in case of redemptions, as was also reflected in the substantial withdrawals observed prior to August, in particular from investment funds.

The annual growth rate of short-term deposits other than overnight deposits remained unchanged at 2.1% in December. This masks, however, different developments in the annual growth rates of its two sub-components. The annual growth rate of short-term time deposits (i.e. deposits with an agreed maturity of up to two years) strengthened, despite a largely stagnating monthly flow. The annual growth rate of short-term savings deposits (i.e. deposits redeemable at notice of up to three months) declined, as withdrawals by OFIs, NFCs and households resulted in a negative overall monthly flow.

The annual growth rate of marketable instruments declined further to -0.2% in December, which was significantly lower than the 1.1% recorded in November. This decrease was entirely driven by an extraordinarily strong negative monthly flow in repos, mainly reflecting a decline in interbank transactions conducted via CCPs. The reduction in the annual growth rate of M3 in December was almost entirely attributable to CCP-related repos. By contrast, money market fund shares/units, and in particular short-term MFI debt securities, were purchased by the money-holding sector in significant amounts. This development might hint at further shifts from investment fund shares/units into money market fund shares/units, as such transactions are possible without fees.

The annual growth rate of M3 deposits – which comprise short-term deposits and repos and represent the broadest monetary aggregate for which a timely sectoral breakdown is available – declined to 1.4% in December, which was significantly lower than the 2.1% recorded in the previous month. As in November, this mainly reflected another noticeable negative monthly flow in the OFI sector.

However, in contrast to the previous month, negative monthly flows in M3 deposit holdings were also observed for all the other sectors in December.

### MAIN COUNTERPARTS OF M3

As regards the counterparts of M3, the annual growth rate of MFI credit to euro area residents increased to 1.0% in December, from 0.8% in the previous month (see Table 2). This development masks a notable strengthening in the growth of credit to general government and further moderation in the growth of credit to the private sector.

The strengthening in the growth of credit to general government was driven by purchases of government debt securities (including purchases made by the Eurosystem), which were partly offset by a decline in the annual growth rate of loans to general government.

The annual growth rate of credit to the private sector declined to 0.4% in December, down from 1.0% in the previous month. This reflects the shedding of holdings of both equity and debt securities by MFIs, as well as a reduction in MFI loans. The negative monthly flow for MFI loans to the private sector (adjusted for sales and securitisation) was not the result of any major loan sales and securitisation activity in December, reflecting instead the (unadjusted) outflow for loans to the private sector, which was in turn the result of a reduction in MFI lending to NFCs and OFIs. Lending via CCPs contracted sharply in December, owing to a more general decline in repo activity via CCPs in certain euro area countries.

The annual growth rate of loans to NFCs (adjusted for sales and securitisation) declined to 1.2%, from 1.9% in the previous month. This development reflected a large negative monthly flow.

**Table 2 Summary table of monetary variables**

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

	Outstanding amounts as a percentage of M3 <sup>1)</sup>	Annual growth rates					
		2011 Q1	2011 Q2	2011 Q3	2011 Q4	2011 Nov.	2011 Dec.
<b>M1</b>	<b>49.2</b>	<b>3.2</b>	<b>1.7</b>	<b>1.4</b>	<b>1.9</b>	<b>2.1</b>	<b>1.6</b>
Currency in circulation	8.7	4.9	4.2	4.5	6.2	6.5	6.1
Overnight deposits	40.5	2.9	1.2	0.8	1.0	1.2	0.6
<b>M2-M1 (=other short-term deposits)</b>	<b>39.0</b>	<b>1.3</b>	<b>3.4</b>	<b>3.4</b>	<b>2.3</b>	<b>2.1</b>	<b>2.1</b>
Deposits with an agreed maturity of up to two years	18.8	-2.7	2.3	3.2	2.1	1.6	2.1
Deposits redeemable at notice of up to three months	20.2	5.4	4.5	3.7	2.6	2.6	2.0
<b>M2</b>	<b>88.2</b>	<b>2.4</b>	<b>2.4</b>	<b>2.3</b>	<b>2.1</b>	<b>2.1</b>	<b>1.8</b>
<b>M3-M2 (=marketable instruments)</b>	<b>11.8</b>	<b>-1.7</b>	<b>-0.3</b>	<b>3.0</b>	<b>3.8</b>	<b>1.1</b>	<b>-0.2</b>
<b>M3</b>	<b>100.0</b>	<b>1.9</b>	<b>2.1</b>	<b>2.4</b>	<b>2.3</b>	<b>2.0</b>	<b>1.6</b>
<b>Credit to euro area residents</b>		<b>3.7</b>	<b>3.1</b>	<b>2.4</b>	<b>1.3</b>	<b>0.8</b>	<b>1.0</b>
Credit to general government		10.9	6.5	5.1	1.4	0.3	3.6
Loans to general government		17.7	10.7	7.0	-2.2	-5.7	-4.7
Credit to the private sector		2.1	2.3	1.7	1.3	1.0	0.4
Loans to the private sector		2.4	2.6	2.5	2.1	1.7	1.0
Loans to the private sector adjusted for sales and securitisation <sup>2)</sup>		2.9	2.8	2.7	2.3	1.9	1.2
<b>Longer-term financial liabilities (excluding capital and reserves)</b>		<b>2.8</b>	<b>3.4</b>	<b>3.6</b>	<b>2.6</b>	<b>2.3</b>	<b>1.3</b>

Source: ECB.

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

2) Adjusted for the derecognition of loans from the MFI statistical balance sheet owing to their sale or securitisation.

**Table 3 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					
		2011 Q1	2011 Q2	2011 Q3	2011 Q4	2011 Nov.	2011 Dec.
<b>Non-financial corporations</b>	<b>42.2</b>	<b>0.6</b>	<b>1.0</b>	<b>1.5</b>	<b>1.6</b>	<b>1.6</b>	<b>1.1</b>
<i>Adjusted for sales and securitisation<sup>2)</sup></i>	-	1.5	1.9	2.2	1.9	1.9	1.2
Up to one year	24.4	-1.2	1.6	4.1	3.9	3.9	2.5
Over one and up to five years	18.2	-2.4	-2.9	-3.6	-3.4	-3.2	-3.6
Over five years	57.4	2.4	2.2	2.1	2.3	2.2	2.1
<b>Households<sup>3)</sup></b>	<b>46.8</b>	<b>3.1</b>	<b>3.4</b>	<b>3.0</b>	<b>2.2</b>	<b>2.1</b>	<b>1.5</b>
<i>Adjusted for sales and securitisation<sup>2)</sup></i>	-	3.1	3.0	2.7	2.3	2.3	1.9
Consumer credit <sup>4)</sup>	11.7	-0.9	-1.0	-2.0	-2.0	-2.2	-2.2
Lending for house purchase <sup>4)</sup>	72.2	4.0	4.4	4.0	3.0	3.0	2.1
Other lending	16.2	2.4	2.0	2.4	1.9	1.6	1.4
<b>Insurance corporations and pension funds</b>	<b>0.8</b>	<b>7.5</b>	<b>2.8</b>	<b>6.8</b>	<b>4.2</b>	<b>1.4</b>	<b>1.3</b>
<b>Other non-monetary financial intermediaries</b>	<b>10.2</b>	<b>7.1</b>	<b>6.0</b>	<b>4.0</b>	<b>3.3</b>	<b>0.5</b>	<b>-2.0</b>

Source: ECB.

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

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

2) Adjusted for the derecognition of loans from the MFI statistical balance sheet owing to their sale or securitisation.

3) As defined in the ESA 95.

4) Definitions of consumer credit and lending for house purchase are not fully consistent across the euro area.

The negative flow in lending to NFCs came after three months of relatively sizeable borrowing activity by NFCs between August and October and a modest outflow in November. The decline in lending was observed at all maturities, with the bulk of the monthly outflow being attributable to short-term loans (i.e. with an initial maturity of up to one year), while for longer-term loans (i.e. with an initial maturity of over five years) the outflow was more moderate. Bank lending practices have tightened further and loan supply deteriorated in some euro area countries in late 2011 (see Box 1). At the same time, the reduction in lending in December should be interpreted with caution, as it reflects complex balance sheet operations at the end of the year. Cross-country heterogeneity in loan developments remained significant, reflecting uneven developments in economic activity, differences in the external financing needs of the various industrial sectors, differences in banks' funding stress and differences in the level of indebtedness of NFCs in the various euro area countries. Box 3 presents sectoral account imbalances in the euro area, drawing on the country information underlying the sectoral euro area accounts. An analysis of savings, investments and financing broken down by sector is presented in Box 4. (See Section 2.6.)

The annual growth rates of MFI loans to households (adjusted for sales and securitisation) declined further to 1.9% in December from 2.3% in November, thereby continuing the gradual slowdown in lending to households observed since May 2011. Loans to households were dominated by lending for house purchase, for which the annual growth rate declined from 3.0% to 2.1%. Government support schemes for the real estate market in some euro area countries are expected to have a diminishing impact on this borrowing activity going forward. At the same time, the annual growth rates of credit for consumption and of other lending were -2.2% and 1.4% respectively in December, as households continued to rein in their borrowing for these purposes.

Turning to the other counterparts of M3, the annual growth rate of MFIs' longer-term financial liabilities (excluding capital and reserves) declined to 1.3% in December from 2.3% in November, reflecting a decline in the annual growth rate of all components. While all components recorded negative

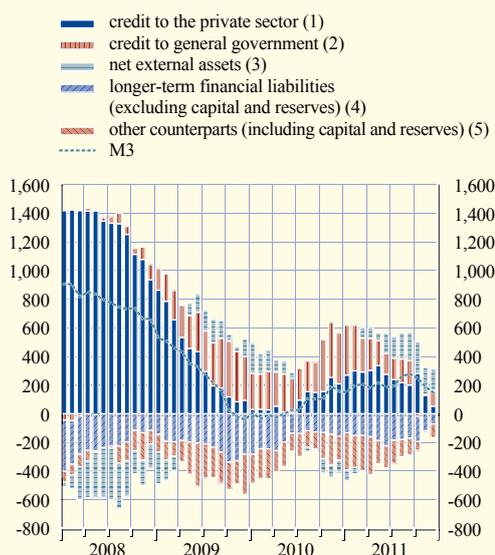
flows in November, longer-term debt securities contracted significantly on a consolidated basis in December. This is the result of considerable negative issuance on an unconsolidated basis and higher holdings of these instruments by MFIs. In addition, a sizeable reduction in deposits with an agreed maturity of over two years held by OFIs was observed in December, partly due to the unwinding of a securitisation transaction and a reduction in deposit holdings by insurance corporations and pension funds. A further increase in the flow of capital and reserves was observed in December, resulting in an increase in the annual rate of growth to 6.9%, from 6.2% in the previous month.

The annual inflow for MFIs' net external asset position decreased to €153 billion in December, down from €190 billion in November (see Chart 8). However, the small inflow of €4 billion in December represented a reversal with respect to the larger outflows observed between August and November. In gross terms, MFIs again accumulated external assets and external liabilities.

Overall, the December monetary data indicate subdued money and credit expansion vis-à-vis euro area residents, in part driven by a contraction in interbank borrowing via CCPs. The slowdown is mitigated by the fact that euro area MFIs have lent significant amounts to euro area general government. The expansion of credit to the euro area private sector declined both on account of lower holdings of securities and a slowdown in lending activity. In December the moderation in the annual growth of MFI loans to the private sector was especially marked for loans to NFCs and OFIs. Bank lending practices have tightened further and loan supply deteriorated in some euro area countries in late 2011. However, complex balance sheet operations at the end of the year may lead to an overestimation of the reduction in lending in December. Overall, a close monitoring of credit developments in the period ahead is essential in order to detect signs of credit curtailment.

Chart 8 Counterparts of M3

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



Source: ECB.

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

Box 1

THE RESULTS OF THE EURO AREA BANK LENDING SURVEY FOR THE FOURTH QUARTER OF 2011

This box summarises the main results of the euro area bank lending survey for the fourth quarter of 2011, which was conducted by the Eurosystem between 19 December 2011 and 9 January 2012.<sup>1</sup> Overall, euro area banks reported a sharp increase in the net tightening of credit standards in comparison with the third quarter of 2011, which was stronger than expected

<sup>1</sup> The cut-off date of the survey was 9 January 2012. A comprehensive assessment of its results was published on the ECB's website on 1 February 2012.

by survey participants three months earlier. The increase in net tightening was particularly pronounced for loans to non-financial corporations and loans to households for house purchase and largely reflected respondents' perceptions of increased risks to the outlook for the economy, as well as renewed strains on banks' funding and capital positions. As regards loan demand, survey participants reported a decline in net demand from enterprises and for loans to households for house purchase. Expectations of survey participants point to a further deterioration in credit standards and in net demand for both loans to enterprises and loans to households in the first quarter of 2012.

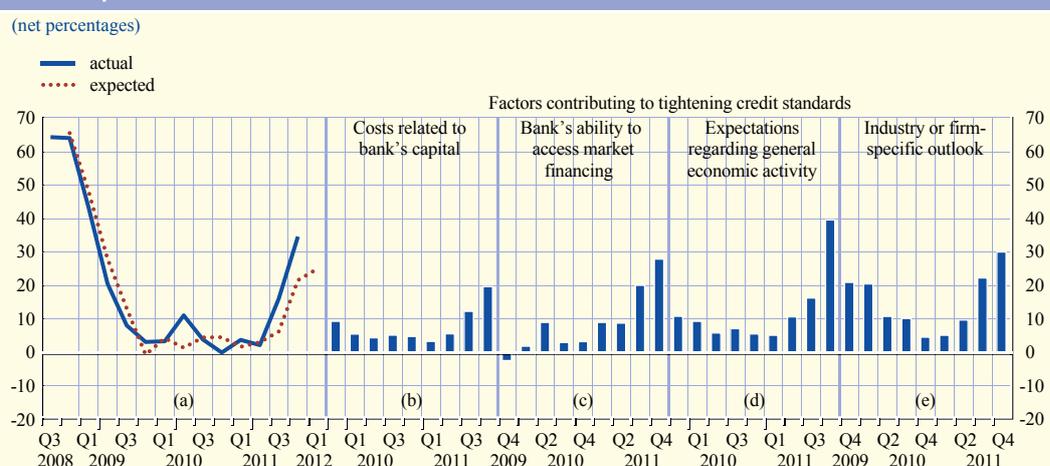
### Loans and credit lines to enterprises

**Credit standards:** In the fourth quarter of 2011, the net percentage<sup>2</sup> of banks reporting a tightening of credit standards on loans and credit lines to enterprises surged to 35%, from 16% in the previous quarter (see Chart A). The observed net tightening was stronger than anticipated by survey participants three months earlier (22%). Credit standards were tightened in net terms on both short-term loans (24%, up from 11% in the previous quarter) and long-term loans (42%, up from 20%). In addition, the increase in the net tightening of credit standards was stronger for loans to large firms (44%, up from 19%) than for loans to small and medium-sized enterprises (SMEs) (28%, up from 14%).

Among the factors underlying the overall net tightening in credit standards, those related to the perception of risks surrounding the general economic outlook and the industry or firm-specific outlook were reported to have contributed to a large extent to the higher net tightening of credit

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").

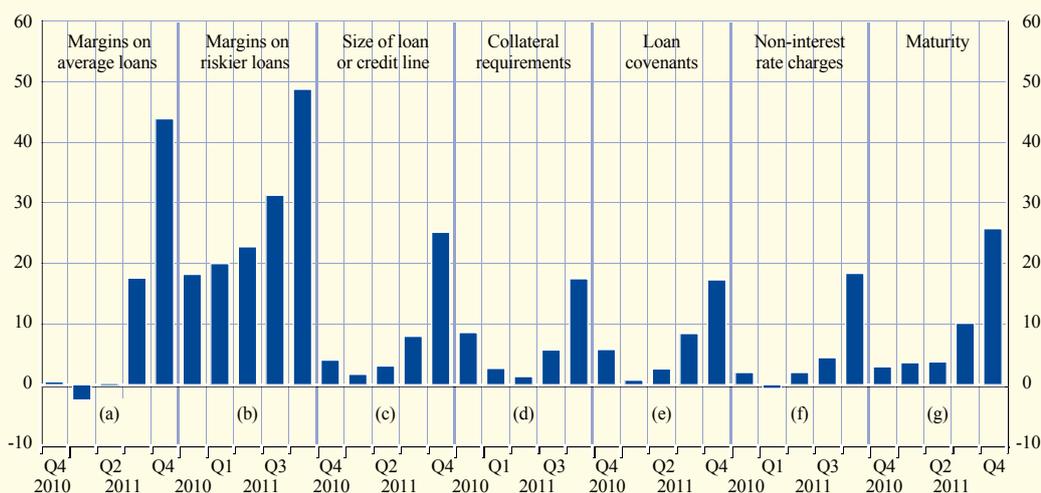
**Chart A Changes in credit standards applied to the approval of loans or credit lines to enterprises**



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.

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”.

standards (40% and 30% respectively, up from 16% and 22% in the third quarter). Furthermore, against the backdrop of heightened financial market tensions and bank funding difficulties, banks reported that the cost of funds and balance sheet constraints contributed more strongly to the net tightening of credit standards than in the third quarter. This held true for all three components of this factor, namely, banks’ costs related to their capital position (20%, up from 12%), banks’ ability to access market financing (28%, after 20%) and banks’ liquidity positions (27%, up from 14%). By contrast, other factors, such as competitive pressures exerted by other banks and non-banks, remained broadly unchanged for the second consecutive quarter.

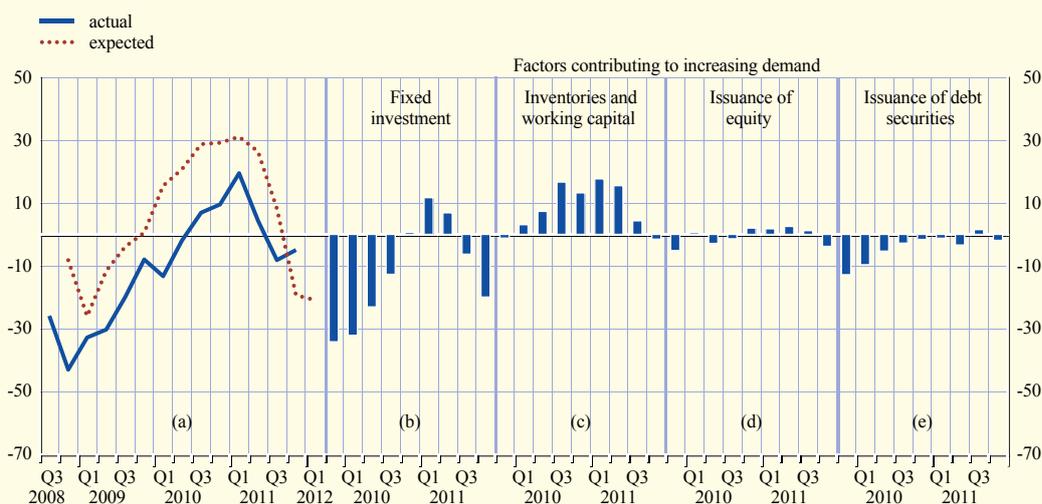
The tighter lending terms and conditions reported by euro area banks accompanied the developments in credit standards during the fourth quarter of 2011 (see Chart B). The widening of margins visibly affected both average loans (44%, up from 18%) and riskier loans (49%, up from 31%). Other terms and conditions (e.g. non-interest rate charges, loan size and maturity, and collateral requirements) were also tightened further in the fourth quarter of 2011.

Looking forward, on balance, euro area banks expect a further, though moderate, increase (to 25%) in the net tightening of credit standards for loans to enterprises in the first quarter of 2012. This is expected to affect primarily large firms and long-term loans.

**Loan demand:** In the fourth quarter of 2011, net demand for loans from enterprises was in negative territory for the second consecutive quarter (see Chart C), although declining at a slower pace (-5%, up from -8%). Moreover, the net demand for loans was lower for SMEs than for large firms in the fourth quarter (-7% and -2% respectively), whereas the decline in net demand was similar across firm sizes in the third quarter (both -3%). While the net demand for long-term loans stabilised around 0, the net demand for short-term loans was reported to have declined at the same pace as in the past quarter (-4%).

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

(net percentages)



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

According to survey participants, the decline in net demand appeared to be driven mainly by lower financing needs for fixed investment (-20%, down from -6% in the previous quarter), as well as for mergers and acquisitions (-18%, down from -4%), and was thus in line with overall weaker economic growth expectations. Furthermore, financing needs for inventories and working capital turned negative for the first time since end-2009 (-1%, down from 4%). Respondents also reported that non-financial corporations may have turned somewhat to alternative sources of finance, such as internal financing.

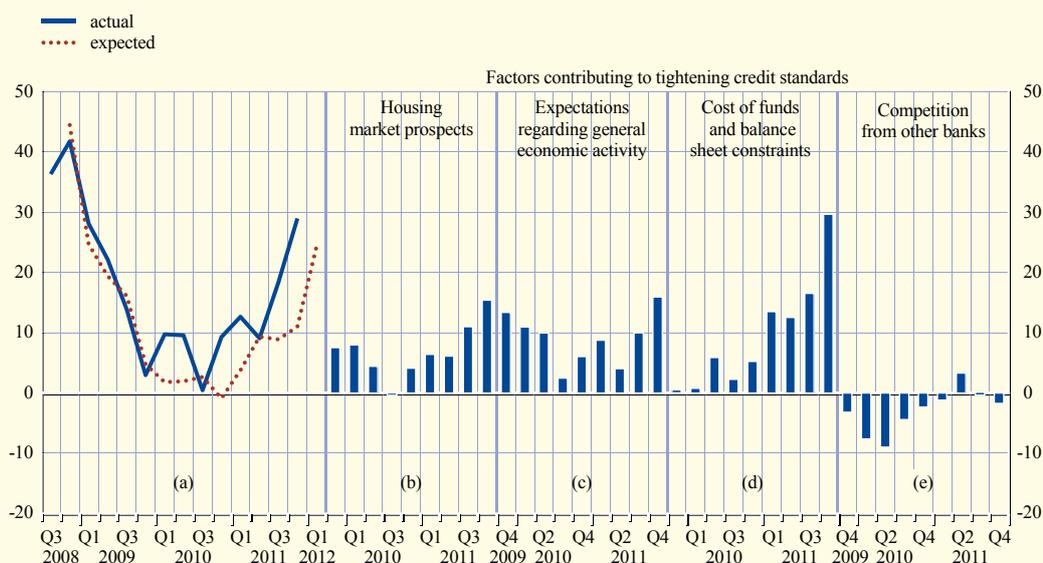
Looking forward, banks expect demand for corporate loans to decline further in the first quarter of 2012 (-21% in net terms). That would apply to a greater extent to large firms (-21%) than to SMEs (-14%). As regards maturities, it is expected that this decline would affect long-term loans (-27%) more markedly than short-term loans (-10%).

### Loans to households for house purchase

**Credit standards:** As in the case of loans to enterprises, the net percentage of banks reporting a tightening of credit standards for loans to households for house purchase increased significantly to 29% in the fourth quarter of 2011, up from 18% in the previous quarter (see Chart D) and by more than expected at that time (11%). According to survey participants, the increase in the degree of net tightening in the fourth quarter was again mainly driven by banks’ cost of funds and balance sheet constraints (with a net percentage of 30% of the survey participants reporting a contribution from this factor to the tightening of credit standards, up from 17% in the previous quarter). In addition, banks’ risk perceptions regarding the outlook for general economic activity (16%, up from 10%) and housing market prospects (15%, up from 11%) contributed to the higher net tightening of credit standards on housing loans.

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

(net percentages)



Note: See notes to Chart A.

The significant increase in the net tightening of credit standards on housing loans also led to a marked widening of bank margins, on average loans (29%, up from 10%, in net terms) and on riskier loans (33%, up from 14%), as well as a stronger net tightening of most non-price terms and conditions, compared with the third quarter.

Looking ahead, banks expect a somewhat lower degree of net tightening of credit standards on loans for house purchase (24%) for the first quarter of 2012.

**Loan demand:** In parallel to the decline in net loan demand by firms and reflecting the moderation in economic growth, participating banks reported a further, though moderate, decline in the net demand for housing loans (-27%, down from -24%; see Chart E). This decline appeared to be driven mainly by an ongoing deterioration of housing market prospects (-27%, down from -23%) and consumer confidence (-34%, down from -24%).

Looking forward, banks expect a sharp fall in demand for housing loans (-44% in net terms) in the first quarter of 2012.

### Consumer credit and other lending to households

**Credit standards:** For the fourth quarter of 2011 euro area banks reported a moderate increase in the degree of net tightening of credit standards (13%, up from 10%; see Chart F). The increase was smaller than for other loan categories. The main factors driving this net tightening were the cost of funds and balance sheet constraints, whereas risk perceptions related to the economic outlook and consumers' creditworthiness remained broadly unchanged. The increase in the net tightening translated into an increase in price terms and conditions. The net percentage of

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

(net percentages)



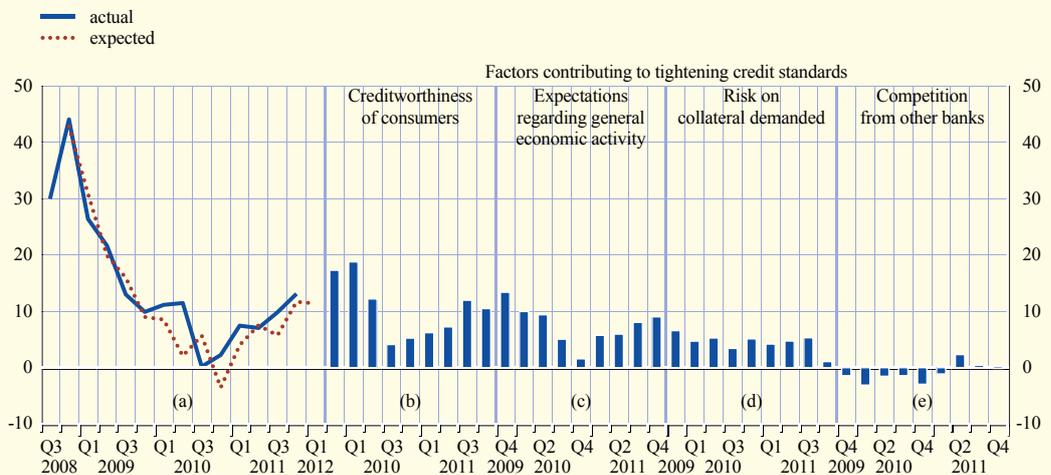
Notes: The net percentages refer to the difference between the sum of the percentages for “increased considerably” and “increased somewhat” and the sum of the percentages for “decreased somewhat” and “decreased considerably”. “Realised” values refer to the period in which the survey was conducted. “Expected”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

banks reporting an increase in their margins increased slightly in the fourth quarter, while the contribution of non-price terms and conditions hardly changed compared with the previous survey round.

Looking forward, in net terms, 11% of banks expect a further tightening of credit standards for consumer credit and other lending to households in the first quarter of 2012.

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

(net percentages)



Note: See notes to Chart A.

**Loan demand:** In the fourth quarter of 2011, net demand for consumer credit was reported to have declined slightly further (-16% in net terms, down from -15% in the previous quarter; see Chart E). This was mainly explained by lower consumer confidence and spending on durable consumer goods.

Looking ahead, banks expect the decline of net demand for consumer credit to continue in the first quarter of 2012 (-18% in net terms).

### Ad hoc questions on the access to funding

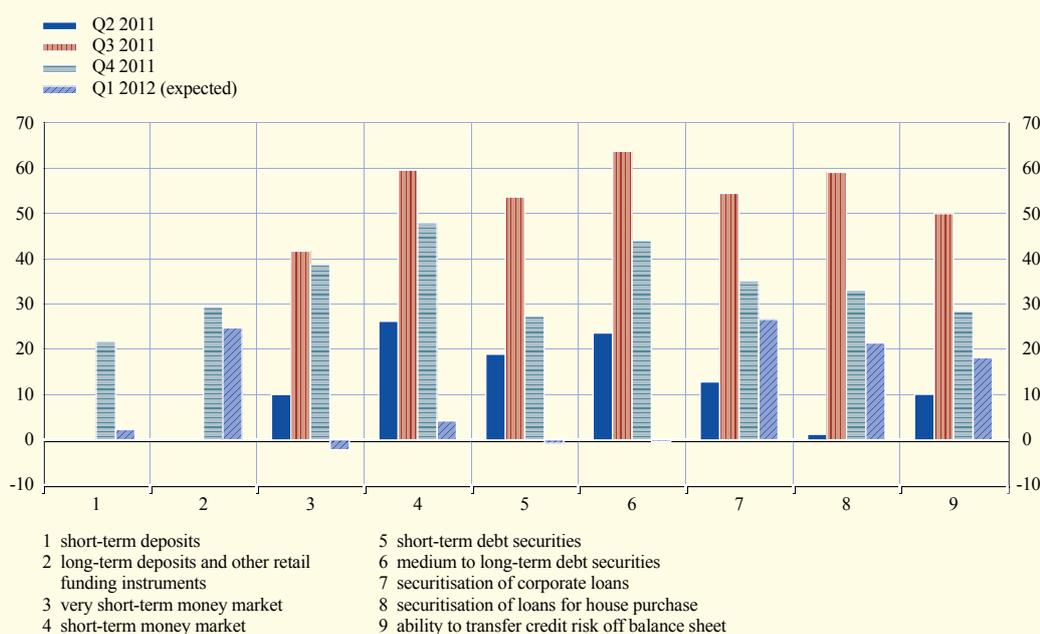
As in previous survey rounds, the January 2012 survey contained an ad hoc question aimed at assessing the extent to which the financial market tensions affected banks' access to the wholesale funding market in the fourth quarter of 2011, and the extent to which they might still have an effect in the first quarter of 2012. For the first time, the question also assessed access to retail funding.

On balance, euro area banks reported a slight improvement in their access to money markets, both for very short maturities<sup>3</sup> and for maturities of more than one week, as well as a slight improvement in their issuance of debt securities across all maturities (see Chart G). In addition, conditions for securitisation appeared to have considerably improved in the fourth quarter of 2011, both for true-sale securitisation and for banks' ability to transfer risks off their balance

3 Maturities of less than one week.

**Chart G Change in the access to wholesale funding over the past three months**

(net percentages of banks reporting deteriorated market access)



Note: The net percentages are defined as the difference between the sum of the percentages for "deteriorated considerably" and "deteriorated somewhat" and the sum of the percentages for "eased somewhat" and "eased considerably".

sheets (synthetic securitisation). As regards the access to retail funding, banks pointed to a challenging environment in the fourth quarter of 2011, albeit less so, on average, than for access to wholesale funding.

Looking forward, euro area banks expect a stabilisation in the conditions of access to wholesale market funding in the first quarter of 2012. By contrast, the securitisation of loans is expected to remain limited. Furthermore, banks anticipate only mild relief in retail funding conditions.

#### **Ad hoc questions on the impact of the sovereign debt crisis on banks' funding conditions and credit standards**

The January 2012 survey questionnaire also included a new ad hoc question aimed at assessing the impact of the sovereign debt crisis on banks' funding conditions and their credit standards. Banks indicated that sovereign market tensions led to a substantial deterioration of funding conditions through balance sheet and liquidity management constraints and also through other more indirect channels. Roughly 30% of respondents – in net terms – attributed the deterioration of funding conditions to the sovereign debt crisis through direct exposure to sovereign debt, the reduced collateral value of government bonds or other effects.

Banks also reported that vulnerabilities related to the sovereign crisis have significantly contributed to the tightening of credit standards, although part of the banking system was in a position to shield lending policies from the impact of the crisis. Indeed, a smaller number of banks – in net terms – actually acknowledged an impact on the tightening of their credit standards, reaching about 27% on average for loans to non-financial corporations and about 15% for loans to households.

#### **Ad hoc questions on the impact of Basel III and other changes in bank regulation**

The questionnaire for the January 2012 survey also included two ad hoc questions that aimed at assessing the extent to which the new regulatory capital requirements set out in “Basel III”<sup>4</sup> or any other specific national regulations concerning capital requirements may affect banks' lending policies.

According to banks' replies, in net terms,<sup>5</sup> 34% of the banks reported a decline in their risk-weighted assets over the past six months and 43% expect a further decline in the next six months as a result of compliance with the capital requirements set out in Basel III (or any other specific national regulations concerning banks' capital that have recently been approved or are expected to be approved in the near future). This decline was, and is, expected to remain focused on riskier, as opposed to average, loans. As regards the effect on their capital position, on balance, 42% of the banks noted an increase in their capital position for the past six months, whereas 34% expect one in the first half of 2012. In the last six months, the rise in banks' capital positions was achieved mainly through the issuance of new shares rather than through retained earnings. A comparison with the replies in the July 2011 bank lending survey shows a clear acceleration of the process of adjustment to the new regulatory requirements via the reduction of risk-weighted assets in the second half of 2011.

4 See *Basel III: A global regulatory framework for more resilient banks and banking systems*, Basel Committee on Banking Supervision, Bank for International Settlements, 16 December 2010 (available at: <http://www.bis.org/publ/bcbs189.pdf>).

5 The results shown are calculated as a percentage of the number of banks that did not reply “not applicable”.

About a third of responding banks indicated that their credit standards for loans to large enterprises were tightened as a result of adjustments implemented in view of the new national regulations and/or capital requirements set out in Basel III. Credit standards for loans to SMEs and for housing or consumer loans were affected to a lesser extent, though by more than expected in the July 2011 bank lending survey. For the first half of 2012 banks expect an increase in the net tightening of credit standards due to regulatory pressures which should affect primarily large firms and house purchase financing.

## 2.2 SECURITIES ISSUANCE

The annual growth of debt securities issuance by euro area residents dropped to 2.5% in November 2011. The decline in issuance activity by the general government and by financial corporations other than MFIs was not offset by the stronger annual growth of debt securities issuance by non-financial corporations and, to a lesser extent, MFIs. At the same time, the annual growth rate of quoted share issuance decreased somewhat, to 1.5%. This decrease was driven mainly by lower issuance activity on the part of the financial sector, whereas issuance by non-financial corporations remained broadly unchanged.

### DEBT SECURITIES

In November 2011 the annual rate of growth in debt securities issued by euro area residents dropped to 2.5%, from 3.4% in the previous month (see Table 4). This overall development was driven mainly by a larger year-on-year contraction of the issuance of short-term debt, while growth in the issuance of long-term fixed rate debt securities was slower than in the previous month. Looking at short-term trends, the seasonally adjusted annualised six-month growth rate of debt securities issuance declined to 3.1% in November 2011, from 3.5% in the previous month (see Chart 9). This decline was broadly spread across all sectors, with the exception of MFIs.

In November 2011 the contraction, on an annual basis, of the issuance of short-term securities, which had started at the beginning of 2010, was more than offset by the growth in the issuance

Table 4 Securities issued by euro area residents

Issuing sector	Amount outstanding (EUR billions) 2011 November	Annual growth rates <sup>1)</sup>					
		2010 Q4	2011 Q1	2011 Q2	2011 Q3	2011 Oct.	2011 Nov.
<b>Debt securities</b>	<b>16,456</b>	<b>3.6</b>	<b>3.8</b>	<b>3.5</b>	<b>3.5</b>	<b>3.4</b>	<b>2.5</b>
MFIs	5,453	-0.1	0.6	1.1	1.9	2.9	3.1
Non-monetary financial corporations	3,283	1.5	1.9	0.8	-0.3	0.0	-1.9
Non-financial corporations	870	8.3	6.2	4.1	4.9	4.7	5.0
General government	6,850	7.5	7.3	6.9	6.6	5.3	3.9
of which:							
Central government	6,229	7.1	6.7	6.1	5.9	4.7	3.0
Other general government	621	12.4	13.0	15.8	14.6	12.8	13.6
<b>Quoted shares</b>	<b>3,893</b>	<b>1.7</b>	<b>1.4</b>	<b>1.5</b>	<b>1.9</b>	<b>1.7</b>	<b>1.5</b>
MFIs	331	6.6	6.4	7.5	12.4	10.2	9.1
Non-monetary financial corporations	271	4.2	3.4	4.2	5.0	5.8	4.6
Non-financial corporations	3,291	0.8	0.6	0.5	0.4	0.3	0.3

Source: ECB.

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

of debt securities with fixed long-term rates. At the same time, the issuance of long-term debt securities with floating rates contracted further, continuing the trend that began in mid-2011.

The overall growth rate of debt securities issuance in November concealed diverging developments across sectors. The annual growth rate of debt securities issued by non-financial corporations edged up to 5% in that month, from 4.7% in October. This slight increase should be assessed against the background of declining yields, in particular for intermediate and high-rated corporations. As a result of the tensions associated with the euro area sovereign debt crisis, some euro area corporate bonds traded at lower yields than government bonds issued by the countries where the corporate issuers are based.

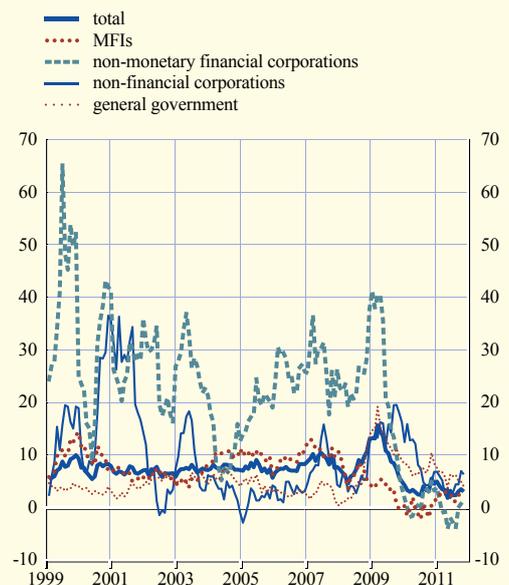
According to data provided by market participants, issuance activity in November was distributed equally across all main sectors, such as the automotive industry, energy and telecommunications. In the financial sector, the annual rate of growth of securities issued by MFIs increased slightly, by 0.2 percentage points, to stand at 3.1% in November, against the background of further capitalisation needs, and despite the relatively high nominal cost of market-based debt financing for financial institutions. By contrast, securities issuance by financial corporations other than MFIs contracted by 1.9% on an annual basis in November, from 0% in the previous month. Finally, the annual rate of growth of debt issuance by the general government sector continued to decline amid renewed efforts to improve countries' fiscal positions, to 3.9% in November, from 5.3% in October.

### QUOTED SHARES

The annual growth rate of quoted share issuance by euro area residents decreased somewhat, to 1.5% in November, driven mainly by lower issuance activity on the part of the financial sector. The annual rate of growth in equity issuance by MFIs fell to 9.1% in November, from 10.2% in October (see Chart 10). Less

**Chart 9 Sectoral breakdown of debt securities issued by euro area residents**

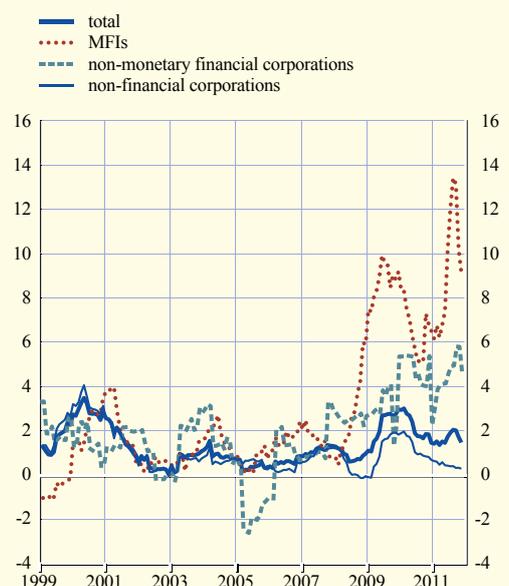
(six-month annualised growth rates; seasonally adjusted)



Source: ECB.

**Chart 10 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.

buoyant equity issuance activity by euro area MFIs partly reflected ongoing financial market tensions. At the same time, the annual growth rate of quoted shares issued by financial corporations other than MFIs declined by 1.2 percentage points, to 4.6%, while that of quoted share issuance by non-financial corporations remained broadly unchanged at 0.3%.

### 2.3 MONEY MARKET INTEREST RATES

Money market interest rates declined between early January and early February 2012. In the first maintenance period of 2012, which began on 18 January, the EONIA remained at a low level, reflecting large amounts of excess liquidity, in part associated with the cut in the reserve requirement ratio that entered into force in this period.

Unsecured money market interest rates declined between early January and early February 2012. On 8 February the one-month, three-month, six-month and twelve-month EURIBOR stood at 0.66%, 1.08%, 1.38% and 1.71% respectively, i.e. 22, 18, 16 and 16 basis points lower than the levels observed on 11 January. Additionally, the spread between the twelve-month and one-month EURIBOR – an indicator of the slope of the money market yield curve – increased marginally to stand at 105 basis points on 8 February (see Chart 11).

The three-month EONIA swap rate stood at 0.34% on 8 February, 1 basis point lower than on 11 January. The corresponding unsecured rate decreased by 18 basis points to 1.08%.

Chart 11 Money market interest rates

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

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

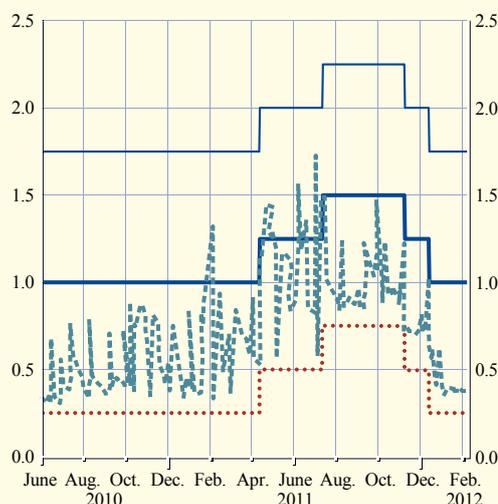


Sources: ECB and Thomson Reuters.

Chart 12 ECB interest rates and the overnight interest rate

(percentages per annum; daily data)

- fixed rate in the main refinancing operations
- ... interest rate on the deposit facility
- overnight interest rate (EONIA)
- interest rate on the marginal lending facility



Sources: ECB and Thomson Reuters.

This resulted in the spread between the unsecured three-month EURIBOR and the three-month EONIA swap rate decreasing by 17 basis points to stand at 74 basis points on 8 February.

The interest rates implied by the prices of three-month EURIBOR futures maturing in March, June, September and December 2012 stood at 0.89%, 0.78%, 0.76% and 0.78% respectively on 8 February, representing decreases of 12, 13, 10 and 8 basis points respectively by comparison with the levels observed on 11 January.

Between 11 January and the end of the twelfth maintenance period of 2011 on 17 January, the EONIA remained stable, hovering around 0.37% amid higher levels of excess liquidity, and, unlike in recent months, did not spike on the last day of the maintenance period, when it stood at 0.39%. The EONIA was equally stable during the remainder of January and the beginning of February, continuing to hover around 0.37%. On the whole, the negative spread between the EONIA and the rate on the main refinancing operations (MROs) reflected the overall amount of excess liquidity. On 8 February the EONIA stood at 0.36%.

The Eurosystem conducted several refinancing operations between 11 January and 8 February. On 17 January it conducted a fine-tuning operation in which €217.0 billion was absorbed in order to counter a liquidity surplus that emerged at the end of the twelfth maintenance period of the year 2011. In line with a decision of the Governing Council of 8 December, these fine tuning operations have now been discontinued until further notice. In the MROs of the first maintenance period of 2012, which were conducted on 17, 24 and 31 January and 7 February, the Eurosystem allotted €126.9 billion, €130.3 billion, €115.6 billion and €109.5 billion respectively.

The Eurosystem also conducted two LTROs in January, both as fixed rate tender procedures with full allotment: a special-term refinancing operation on 17 January with a maturity of one maintenance period (in which €38.7 billion was allotted); and a three-month LTRO on 25 January (in which €19.6 billion was allotted). The decline observed in the allotment values for the MROs and LTROs reflected the fact that the banking sector had received substantial liquidity at the longer maturity of three years on 21 December and the reduction from 2% to 1% in the reserve requirement ratio that entered into force with the first reserve maintenance period of 2012. The conduct of three-year operations and the reduction in the reserve requirement were intended to support the provision of credit to the economy by allowing banks to manage their liquidity risk over longer horizons. This also had the automatic effect of reducing demand from banks for liquidity granted at short maturities (see also Box 2).

The Eurosystem also conducted four one-week liquidity-absorbing operations on 17, 24 and 31 January and 7 February as variable rate tender procedures with a maximum bid rate of 1.00%. With these operations, the Eurosystem absorbed in full the liquidity provided by means of purchases carried out under the Securities Markets Programme.

The first maintenance period of 2012, which began on 18 January, was characterised by high levels of excess liquidity, with average daily recourse to the deposit facility for the period standing at €483.6 billion on 8 February.

## Box 2

**IMPLEMENTATION OF NEW COLLATERAL RULES AND RESERVE REQUIREMENTS**

In its continued efforts to support bank lending and liquidity in the euro area money market and thereby to ensure that the ECB's monetary policy continues to be effectively transmitted to the real economy throughout the euro area, the Governing Council announced additional non-standard measures after its meeting on 8 December 2011.<sup>1</sup> In addition to expanding the offer of refinancing operations, the Governing Council decided, with a view to ensuring a smooth transmission of monetary policy, to temporarily expand the list of collateral eligible for Eurosystem operations, as some banks' access to refinancing operations may be restricted by a lack of eligible collateral.<sup>2</sup> In order to reduce the banking system's need for liquidity and support activity in the euro area money market, the Governing Council decided to temporarily reduce the positive minimum reserve ratio from 2% to 1%.

**Expanding the list of eligible collateral supports access to funding**

The temporary expansion of the list of eligible collateral announced on 8 December 2011 consisted of two elements. First, the Governing Council decided to reduce the rating threshold for certain types of eligible asset-backed securities.<sup>3</sup> Second, a larger proportion of loans which are not securitised (i.e. credit claims) will be accepted as collateral for Eurosystem operations. In particular, each NCB may, as a temporary solution, authorise their use on the basis of eligibility criteria and a corresponding risk-control framework that have to be approved by the Governing Council. The national dimension of this measure achieves additional risk protection due to the NCBs' in-depth knowledge of the domestic markets for credit claims. It is expected that this measure will facilitate a more uniform transmission of the single monetary policy across the euro area. The responsibility entailed in accepting these "additional performing credit claims" (ACCs) will be borne by the NCB authorising their use. On 9 February the Governing Council approved a first wave consisting of seven ACC frameworks submitted by the Central Bank of Ireland, Banco de España, Banque de France, Banca d'Italia, the Central Bank of Cyprus, Oesterreichische Nationalbank and Banco de Portugal.

With a view to maintaining consistency between different ACC frameworks and between these frameworks and the Eurosystem risk control framework, the Governing Council also decided that a minimum quality threshold should apply to all ACC frameworks. However, each NCB may decide to set a stricter minimum quality threshold. Furthermore, a minimum haircut schedule has been established for individual credit claims other than those backed by real estate assets. For individual credit claims backed by real estate assets and pools of credit claims, equivalent haircut calibration approaches have been adopted. Haircut schedules ensure risk equivalence for the different types of credit claim submitted across all jurisdictions. In addition, the use and effectiveness of the ACC frameworks will be monitored by the Governing Council on an ongoing basis.

1 See also the box entitled "The impact of the first three-year longer-term refinancing operation" in the January 2012 issue of the Monthly Bulletin and the box entitled "Additional non-standard monetary policy measures decided by the Governing Council on 8 December 2011" in the December 2011 issue of the Monthly Bulletin.

2 The general Eurosystem eligibility criteria for credit claims, as stipulated in the publication entitled "The implementation of monetary policy in the euro area – general documentation on Eurosystem monetary policy instruments and procedures", remain unchanged.

3 For details, see the press release entitled "ECB announces measures to support bank lending and money market activity", ECB, 8 December 2011.

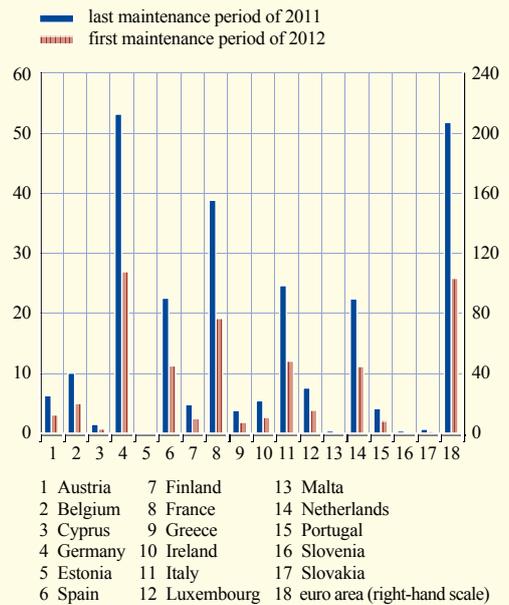
It is expected that, after applying the eligibility criteria and haircut schedules specified in the respective ACC framework, the Central Bank of Ireland, Banco de España, Banque de France, Banca d'Italia, the Central Bank of Cyprus, Oesterreichische Nationalbank and Banco de Portugal will be able to accept ACCs for an estimated aggregate value of around €200 billion. This flexible approach to accepting ACCs will allow a swift expansion of eligible collateral where needed to counter the risk of a more broadly based collateral shortage resulting from persistent financial market tensions. At the same time, maintaining a consistent approach to controlling risk ensures that the Eurosystem's high standards regarding prudence are met.

#### A lower reserve ratio reduces the banking system's liquidity needs

The Governing Council also decided to lower the positive minimum reserve ratio from 2% to 1% as of the maintenance period starting on 18 January 2012. This measure implies that the average amount of liquidity that banks need to hold on their current accounts during a maintenance period in order to fulfil their minimum reserve requirements was halved from around €200 billion in aggregate to around €100 billion. The chart shows that reserve requirements decreased proportionally across countries between the last maintenance period of 2011 and the first maintenance period of 2012. The purpose of reducing the minimum reserve requirement is twofold. First and most importantly, it reduces banks' liquidity needs and thereby the amount of collateral that they may need to mobilise in order to achieve the required amount of refinancing with the Eurosystem to satisfy reserve requirements. Second, the measure is also intended to foster money market activity, mainly because it increases the incentives of cash long banks to offer their liquidity to other banks, as they can no longer deposit it with the fully remunerated reserve account.

#### Comparison of reserve requirements

(EUR billions)



Source: ECB.

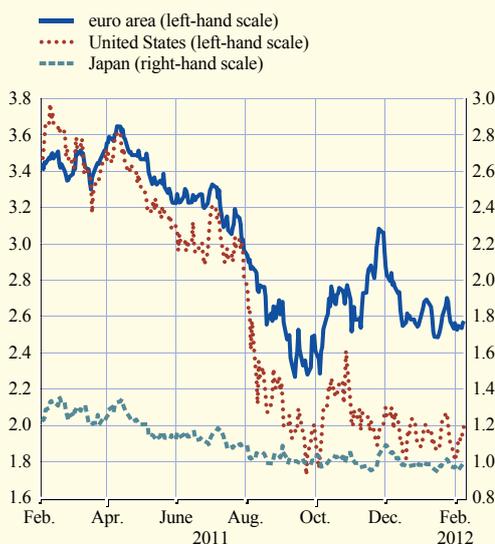
## 2.4 BOND MARKETS

*Between the turn of the year and early February 2012, AAA-rated long-term euro area government bond yields remained broadly unchanged, while the yields on comparable US government securities increased slightly. Developments in government bond markets over this period appeared to reflect a mix of factors. In the United States, positive market sentiment reflected generally better than expected macroeconomic data. In the euro area, mixed economic and financial news, including the credit rating downgrades of several euro area sovereigns, appear not to have weighed significantly on market sentiment. Uncertainty about future bond market developments, as measured by implied bond market volatility, remains high by historical standards, despite significant moderation over the period under review. Market-based indicators suggest that inflation expectations remain fully consistent with price stability.*

From 2 January to 8 February 2012, AAA-rated long-term euro area government bond yields remained broadly unchanged, standing at around 2.6% on 8 February. In the United States, long-term government bond yields rose by 11 basis points, edging up to 2.0% over the same period, largely on account of the release of better than expected macroeconomic data (see Chart 13). The upward trend in government bond yields that resulted from better than expected fundamentals may have been somewhat dampened by the end-January statement of the Federal Open Market Committee (FOMC) that economic conditions are likely to warrant exceptionally low levels for the federal funds rate up to at least late 2014. The nominal interest rate differential between ten-year government bond yields in the United States and those in the euro area thus narrowed slightly in the period under review. In Japan, ten-year government bond yields remained broadly unchanged over the period under review, standing at just under 1% on 8 February.

**Chart 13 Long-term government bond yields**

(percentages per annum; daily data)



Sources: Bloomberg and Thomson Reuters.

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

Investors' uncertainty about near-term bond market developments in both the euro area and the United States, as measured by option-implied volatilities in the respective regions, dropped moderately in the period under review. This held particularly true for the euro area, where relatively mixed economic and financial news, including further sovereign rating downgrades, did not appear to have noticeably dented market sentiment. Instead, bond markets seem to have struck a more positive chord in the run-up to the meeting of the Heads of State or Government of the euro area countries on 30 January, with the decisions taken by euro area leaders on the finalisation of the Treaty on Stability, Coordination and Governance in Economic and Monetary Union (commonly known as the "fiscal compact"), as well as the bringing-forward of the permanent crisis mechanism (the European Stability Mechanism) playing a role as well.

However, implied bond market volatility in the euro area remained high by historical standards in the period under review. Despite a moderation in investors' risk aversion, demand for "safe-haven" assets (as proxied by still high liquidity premia on German government bonds relative to those on agency bonds) remained elevated in the period under review, suggesting that overall bond market sentiment, although improving, still remains fragile.

The spreads of sovereign bond yields vis-à-vis those of German sovereign bonds tended to narrow – in some cases significantly – for most euro area countries in the period under review. The credit rating downgrades of a large number of euro area sovereigns by two different credit rating agencies (Fitch Ratings and Standard & Poor's) did not appear to have had a lasting upward impact on euro area sovereign bond yield spreads. For example, the sovereign yield spreads of France and Austria, two countries that were stripped of their AAA rating by Standard & Poor's, declined moderately over the period, by 40 and 25 basis points respectively, while Italy, a country that was downgraded by both rating agencies, saw a decline of 155 basis points in its sovereign

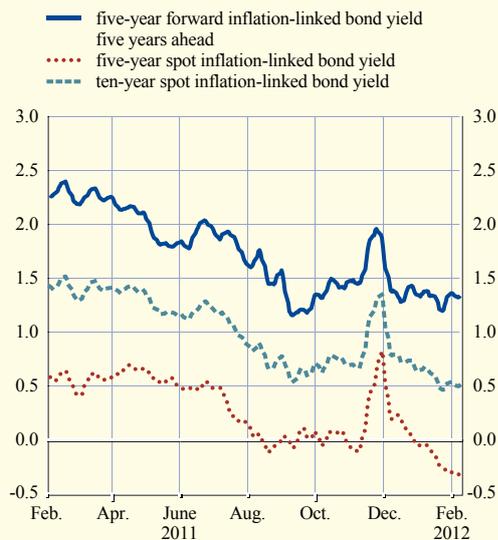
bond yield spread over the same period. The announcement of additional fiscal measures and structural reforms by some euro area governments also contributed to a more favourable bond market environment.

Yields on five and ten-year inflation-linked euro area government bonds declined by 20 and 6 basis points respectively in the period under review, with corresponding real yields standing at -0.3% and 0.6% respectively on 8 February (see Chart 14). Implied forward break-even inflation rates in the euro area (five-year forward five years ahead) remained broadly unchanged at 2.5% in the period under review (see Chart 15). However, the inflation swap rate with the same time horizon edged up 25 basis points over the same period, to stand at 2.6% on 8 February.

Break-even inflation rates have remained volatile in recent months, reflecting the high volatility of government bond markets, as well as the existence of sizeable liquidity premia. Inflation expectations inferred from bond markets have thus been less reliable than those based on the signals received from the inflation swap markets. While relatively more stable, swap rate markets have not been immune to market tensions, with the increase in inflation swap rates recorded in recent months (especially in the segment five-year forward five years ahead) partly reflecting rising inflation risk premia. Overall, taking into account not only market volatility and distortions amid high liquidity premia, but also inflation risk premia, market-based indicators suggest that inflation expectations remain fully consistent with price stability.

**Chart 14 Euro area zero coupon inflation-linked bond yields**

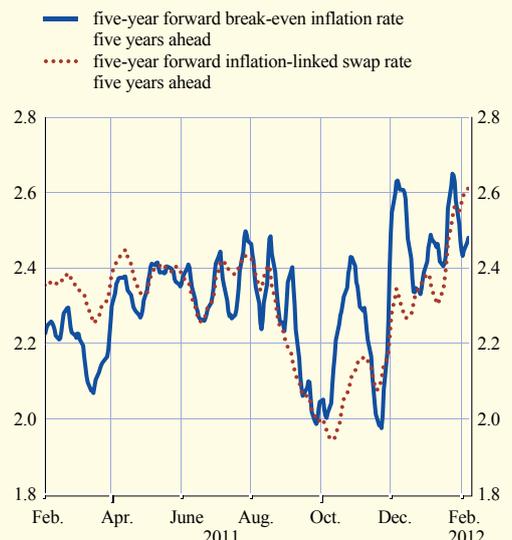
(percentages per annum; five-day moving averages of daily data; seasonally adjusted)



Sources: Thomson Reuters and ECB calculations.  
Notes: Since the end of August 2011, real rates are computed as a GDP-weighted average of separate real rates for France and Germany. Before this date, real rates were computed by estimating a combined real yield curve for France and Germany.

**Chart 15 Euro area zero coupon break-even inflation rates and inflation-linked swap rates**

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



Sources: Thomson Reuters and ECB calculations.  
Notes: Since the end of August 2011, break-even inflation rates have been computed as a GDP-weighted average of separately estimated break-even rates for France and Germany. Before this date, break-even inflation rates were computed by comparing yields from the nominal yield curve of AAA-rated euro area government bonds with a combined real yield curve derived from French and German inflation-linked government bonds.

The general pattern of AAA-rated long-term euro area bond yields can be decomposed into changes in interest rate expectations (and related risk premia) at different horizons (see Chart 16). Compared with the end of December 2011, the term structure of short-term forward rates shifted downwards at short to medium-term maturities (around six years) and upwards at longer-term maturities, reflecting adjustments to yield expectations and the outlook for economic activity and inflation at different time horizons.

Spreads on investment-grade corporate bonds issued by non-financial corporations declined moderately in the period under review. Spreads on investment-grade corporate bonds issued by financial corporates, by contrast, declined far more sharply, especially at the lower end of the investment-grade rating scale. The marked compression of spreads may have reflected a combination of factors, including: (i) lower risk aversion, as proxied by the spread of BBB-rated corporate bond yields versus AAA-rated corporate bond yields, for example; (ii) reduced funding pressures for financial institutions after the Eurosystem's announcement of two three-year long-term refinancing operations (the first of which was conducted in December 2011); and (iii) the prospect of more limited spillovers emanating from sovereigns in the run-up to the decisions taken by Heads of State or Government of the euro area countries on 30 January 2012, with which they sought to reinforce the fiscal and crisis management framework of Monetary Union. The nominal cost of market-based debt financing for euro area financial corporations also edged down significantly.

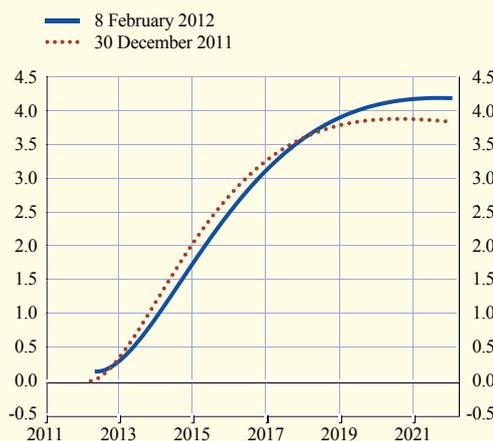
## 2.5 INTEREST RATES ON LOANS AND DEPOSITS

*In December 2011 MFI interest rates tended to increase across most types of loans and maturities. The increases were substantial in the case of short-term loans to non-financial corporations, while they were moderate in that of household loans.*

In December 2011 short-term MFI interest rates on deposits remained broadly unchanged from the previous month. In particular, short-term interest rates declined marginally in the case of both deposits from households with an agreed maturity of up to one year and deposits from non-financial corporations, while they increased slightly in the case of household deposits with maturities of up to three months (see Chart 17). Short-term MFI lending rates increased slightly in the case of loans to households for house purchase, by 5 basis points, while they decreased by 28 basis points in that of consumer credit. Short-term MFI lending rates for non-financial corporations increased more markedly across all loan categories in the same period. More precisely, MFI lending rates for small corporate loans (i.e. loans of up to €1 million) increased by 13 basis points, while those on

**Chart 16 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 AAA-rated euro area government bond yields.

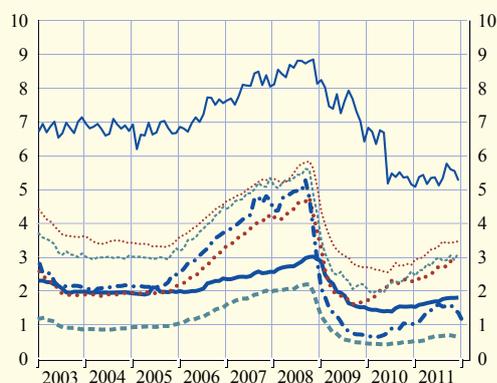
large loans (i.e. loans of more than €1 million) rose by 23 basis points. In December 2011 interest rates on overdrafts for non-financial corporations were broadly unchanged. In that month, with the EURIBOR decreasing by about 11 basis points in the context of lower key ECB interest rates, the spread vis-à-vis short-term MFI lending rates on large-sized loans to non-financial corporations edged up to around 180 basis points, while that vis-à-vis households increased, to stand close to 210 basis points (see Chart 18).

Taking a longer-term perspective, a significant pass-through of changes in market rates to bank lending rates occurred during the latest full cycle of monetary policy easing (between October 2008 and March 2010). As regards the most recent episode of monetary policy accommodation, the pass-through of the two recent cuts in ECB key interest rates to MFI lending rates should be assessed against the background of acute tensions in banks' funding markets and sizeable deleveraging needs. The ECB's most recent non-standard measures are aimed at improving the funding situation of banks, thereby ensuring an adequate functioning of the monetary policy transmission mechanism in an environment of high uncertainty. Against this background, while historical regularities suggest that lower market rates should gradually be reflected in lending rates, this cannot be taken for granted at current very low levels of policy rates and may also depend crucially on the extent of pressures on banks' balance sheets and funding.

**Chart 17 Short-term MFI interest rates and a short-term market rate**

(percentages per annum; rates on new business)

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



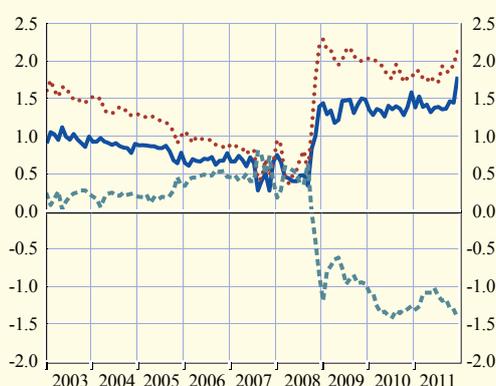
Source: ECB.

Note: Data as of June 2010 may not be fully comparable with those prior to that date owing to methodological changes arising from the implementation of Regulations ECB/2008/32 and ECB/2009/7 (amending Regulation ECB/2001/18).

**Chart 18 Spreads of short-term MFI interest rates vis-à-vis the three-month money market rate**

(percentage points; rates on new business)

- loans to non-financial corporations of over €1 million with a floating rate and an initial rate fixation period of up to one year
- ..... loans to households for house purchase with a floating rate and an initial rate fixation period of up to one year
- - - deposits from households with an agreed maturity of up to one year



Source: ECB.

Notes: For the loans, the spreads are calculated as the lending rate minus the three-month money market rate. For the deposits, the spread is calculated as the three-month money market rate minus the deposit rate. Data as of June 2010 may not be fully comparable with those prior to that date owing to methodological changes arising from the implementation of Regulations ECB/2008/32 and ECB/2009/7 (amending Regulation ECB/2001/18).

In the case of longer-term maturities, MFI lending rates tended to increase for non-financial corporations in December 2011, while they declined slightly for households (see Chart 19). More specifically, corporate lending rates on large loans with an initial rate fixation period of over five years increased by 10 basis points, while those on small-sized loans with similar maturity fell by 5 basis points. By contrast, the rates on loans to households for house purchase with an initial rate fixation period of over five and up to ten years declined slightly, by about 3 basis points.

In December 2011 spreads vis-à-vis AAA-rated seven-year government bond yields increased substantially, partly driven by the downward pressure on AAA-rated government bond yields caused by flight-to-safety flows. In particular, the spread between long-term rates on loans to households for house purchase and the yield on AAA-rated seven-year government bonds widened by 30 basis points, to 1.7%. For non-financial corporations, the spread of such yields vis-à-vis large-sized loans increased as well, by about 50 basis points, to stand at 1.7%.

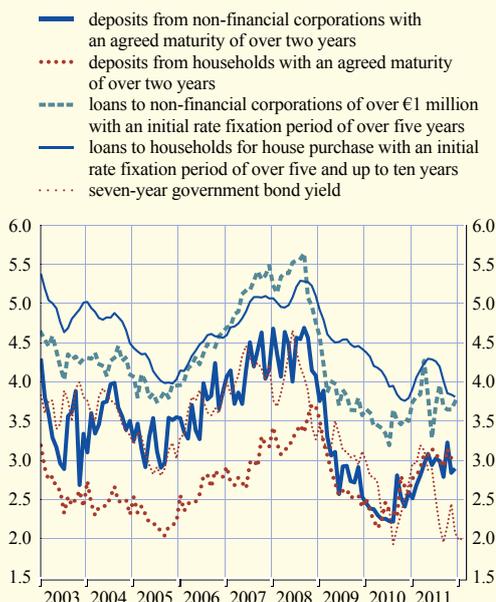
Viewed from a longer-term perspective, lending rates to households and the rates on small-sized long-term corporate loans have generally shown a somewhat incomplete and sluggish pass-through, while lending rates on large long-term corporate loans have evolved more in line with the yields on AAA-rated long-term government bonds. As in the case of the pass-through of short-term market rates to short-term bank rates, the historical regularities between long-term lending rates and the yields on corresponding AAA-rated government bonds may recently have been distorted by the tensions associated with the euro area sovereign debt crisis, as well as by the vulnerabilities of euro area banks.

## 2.6 EQUITY MARKETS

*Between the turn of the year and early February 2012, stock prices rose sharply in both the euro area and the United States. Positive market sentiment appeared to be supported by generally better than expected macroeconomic data releases in the United States and renewed hopes for a durable solution to the sovereign debt crisis in the euro area. Equity gains in the euro area, which were led by financial share prices benefiting from easing funding conditions on account of the longer-term Eurosystem refinancing operations, seemed to reflect a moderate reduction of risk aversion, notwithstanding relatively weak earnings reports and a subdued near-term outlook for economic activity. Stock market uncertainty, as measured by implied volatility, decreased over the period under review, to levels last seen in mid-2011.*

**Chart 19 Long-term MFI interest rates and a long-term market rate**

(percentages per annum; rates on new business)



Source: ECB.

Note: Data as of June 2010 may not be fully comparable with those prior to that date owing to methodological changes arising from the implementation of Regulations ECB/2008/32 and ECB/2009/7 (amending Regulation ECB/2001/18).

From 2 January to 8 February 2012, stock prices increased strongly in both the euro area and the United States. The prices of euro area equities, as measured by the broad-based Dow Jones EURO STOXX index, rose by 9.5% over the period under review, while the Standard and Poor's 500 index in the United States rose by 7.3% (see Chart 20). Stock prices in Japan, as measured by the Nikkei 225 index, increased by 6.6% over the same period.

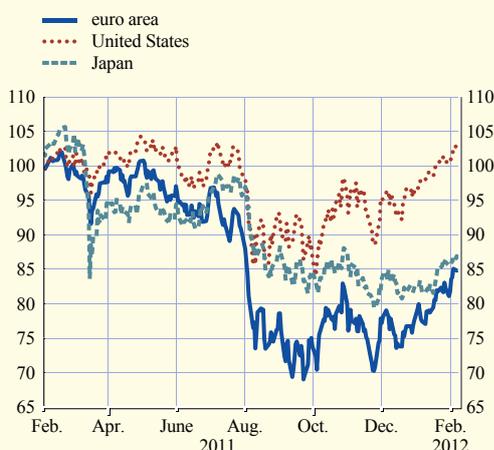
Positive sentiment in equity markets in the United States appeared to be supported by generally better than expected macroeconomic data releases. In this context, indications of a positive growth momentum continuing in the new year (e.g. orders for durable goods in December 2011, non-farm payrolls in January) and solid earnings indicators by some major non-financial corporations seemed to more than compensate for mixed housing market data and weaker than expected consumer confidence.

Stock markets in the euro area were supported by favourable developments in the run-up to the meeting of the Heads of State or Government of euro area countries on 30 January and subsequently by the decisions taken at this meeting to reinforce the fiscal and crisis management framework of Monetary Union. Expectations that a sovereign debt restructuring agreement between Greece and its private creditors could be reached in the very near term and eased funding pressures on euro area financial entities after the enhanced longer-term refinancing operations by the Eurosystem also seemed to support euro area equity markets in the period under review. Mixed economic data releases, as well as the downgrade of several euro area sovereigns by two major rating agencies, did not appear to weigh significantly on market sentiment.

Stock market uncertainty, as measured by implied volatility, decreased moderately in both the United States and the euro area in the period under review, edging down to levels last seen in

Chart 20 Stock price indices

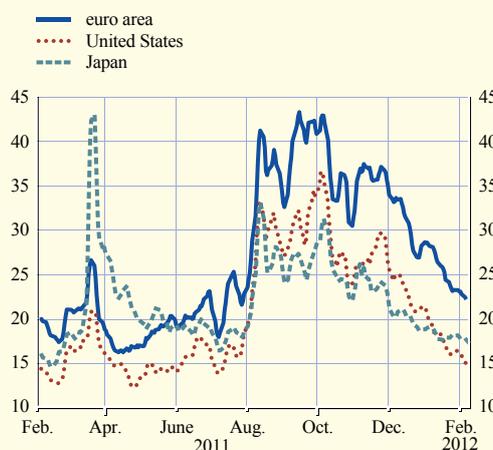
(index: 1 February 2011 = 100; daily data)



Source: Thomson Reuters.  
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 21 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.

mid-2011 (see Chart 21). However, the levels of uncertainty remained elevated by historical standards, reflecting both concerns about the euro area sovereign debt crisis and investors' perceptions of risks looking forward. Taking into account differences in the underlying composition of the respective indices, implied volatility continued to remain significantly higher in the euro area than in the United States, which may reflect the tensions emanating from euro area sovereign debt markets.

Euro area equity price gains in the period under review were driven primarily by financial share prices, with the relative performance of this sub-component increasing by 16.3% over the review period, while prices of euro area non-financial corporate shares increased by 8.1%. Financial share prices were apparently supported by reduced funding constraints for banks after the first of the two three-year refinancing operations to be conducted by the Eurosystem. Prospects for more limited negative spillovers emanating from sovereigns to financial sector balance sheets following the agreement on a "fiscal compact" in the euro area also appeared to help in this context. By contrast, credit rating downgrades for some euro area banks and generally weak earnings reports did not seem to weigh significantly on market sentiment. In the United States, financial stocks increased by 11.8% over the reference period, thereby also outperforming the overall gains posted by the headline index.

**Box 3****A SECTORAL ACCOUNT PERSPECTIVE OF IMBALANCES IN THE EURO AREA**

Persistent intra-euro area imbalances had been building up in the years prior to the financial turmoil. This box provides a closer look at country heterogeneities in the run-up to the financial crisis and in more recent quarters, drawing on the country information underlying the sectoral euro area accounts.<sup>1</sup> For the analytical purpose of this box, accounts are compiled for two groups of countries of the euro area, taking together countries that had run external current account surpluses over a period of five years ending with the onset of the financial crisis in 2007 (the "external surplus group" – Belgium, Germany, Luxembourg, the Netherlands, Austria and Finland) and separately those that ran current account deficits (the "external deficit group" – Ireland, Estonia, Greece, Spain, France, Italy, Cyprus, Malta, Portugal, Slovakia and Slovenia).<sup>2</sup>

The criterion used to assign countries to each group was selected for illustrative purposes in order to present some common stylised facts on the boom period observed up to 2008. Each of the groupings in this box is itself rather heterogeneous, comprising countries with very large external deficits or surpluses, while others had (and still have) current account positions that were close to balance. In addition, the countries often differ considerably in terms of other indicators, such as the fiscal position or the presence of specific boom-bust market cycles. Obviously, the composition of the group is closely tied to the reference period and would change over time. Germany, for instance, would have been in the "external deficit group" in the case of a similar

1 This type of presentation was first used in "The financial crisis in the light of euro area accounts: a flow-of-funds perspective", *Monthly Bulletin*, ECB, October 2011. The group aggregates are obtained by simple aggregation of national data, while maintaining additivity to euro area totals, by way of allocating any difference relative to the euro area totals (stemming mainly from intra-euro area balance of payments asymmetries) to each grouping on a pro rata basis. No further consolidation is conducted (which is broadly appropriate as the EAA are mainly compiled on a non-consolidated basis).

2 Greece, Cyprus, Malta, Slovakia, Slovenia and Estonia are included over the whole period studied, despite their having joined the euro area only progressively.

exercise conducted at the beginning of the century, while Italy and France would have been in the “external surplus group” at that time – which, in itself, underscores the point that corrections and reversals of imbalances within Monetary Union occur over time.

### Developments in net lending/net borrowing

Chart A, panel 1, depicts the net lending/net borrowing by sector of the economy<sup>3</sup> for the euro area as a whole, on a four-quarter-sum basis, according to the traditional sectoral breakdown (showing households, non-financial corporations (NFCs), government and financial corporations). Chart A, panel 2, shows these financial deficits/surpluses for the government sector and the private sector<sup>4</sup> only, but distinguishing between the external surplus and the external deficit groups defined above. Chart A, panel 1, illustrates that the period from 2006 to 2008 was characterised, for the euro area as a whole, by a sharp increase in NFCs’ net borrowing, which was then reversed in the period from 2008 to 2010. Together with an increase in the net lending of households, this later reversal found a counterpart in a considerable increase in net borrowing by government.

Taking a country group view, Chart A, panel 2, highlights the pronounced increase in financial deficits of the private sector in the external deficit group during the boom years, which were matched by ample private sector surpluses, as well as by sharp reductions in government deficits, in the external surplus group. These growing sectoral imbalances across the two country groupings partly reflect increased financial integration and the easier cross-border circulation of savings within Monetary Union. At the same time, they also reflect the impact of local demand booms and supply rigidities on competitiveness.

In 2008 the financial crisis triggered a reduction of the financial imbalances of the private sector in the external deficit group, which turned sharply into surpluses in 2009. At the same time, in the external surplus group, the private sector surpluses increased further. In the absence of any significant improvement in the euro area’s current and capital account (the line “euro area” in Chart A, panels 1 and 2), these mounting private sector surpluses had their counterpart in generally high government deficits.<sup>5</sup> Furthermore, in the external deficit group taken as a whole,<sup>6</sup> the fiscal situation did not improve sufficiently during the boom years (with an overall deficit of 1.4% of GDP in 2007), so that public finances ended up seriously impaired by 2009-10, and in need of immediate and substantial corrective measures. This contrasts with governments in the external surplus group that used the boom period to turn their overall deficit into a surplus (in 2007), although this did not prevent the later occurrence of excessive deficits that were also in need of correction.

The sectoral composition of the differences in private sector balances between the two country groupings can be seen in Chart B. During the crisis, starting from the far lower levels reached at the height of the boom, the net lending of households increased more in the external deficit

3 The net lending/net borrowing, or financial surplus/deficit, of a sector is the balance of its capital account, and measures the excess of saving and net capital transfers received over capital investments (net lending), or vice versa (net borrowing). It is the difference between the revenue and expenditure of each sector. It is also the balance of the financial accounts of the sector, which measures the difference between transactions in financial assets and transactions in liabilities.

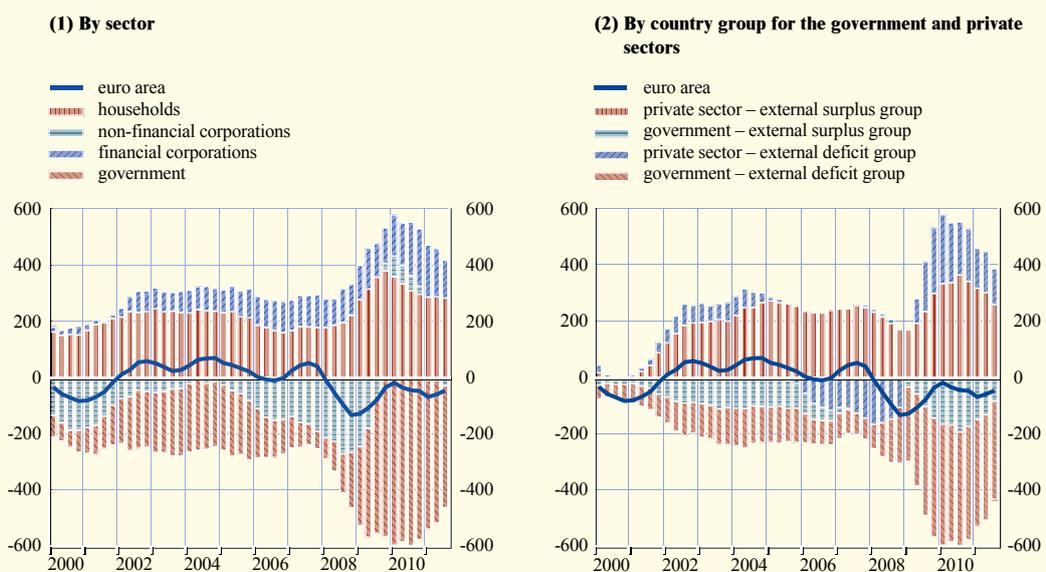
4 Defined here as the sum of all non-government sectors (thus including public corporations).

5 It should be noted that this fundamental accounting constraint does not, in itself, indicate the direction of causality, i.e. whether the government deficits resulted from increased private surpluses/saving or, alternatively, whether the latter reacted to increased government deficits.

6 Some countries in the external deficit group (such as Spain or Ireland), however, recorded government surpluses at the height of the boom. Their current account deficits therefore reflected private sector dissaving and lagging competitiveness.

Chart A Euro area net lending/net borrowing

(four-quarter sums; EUR billions)

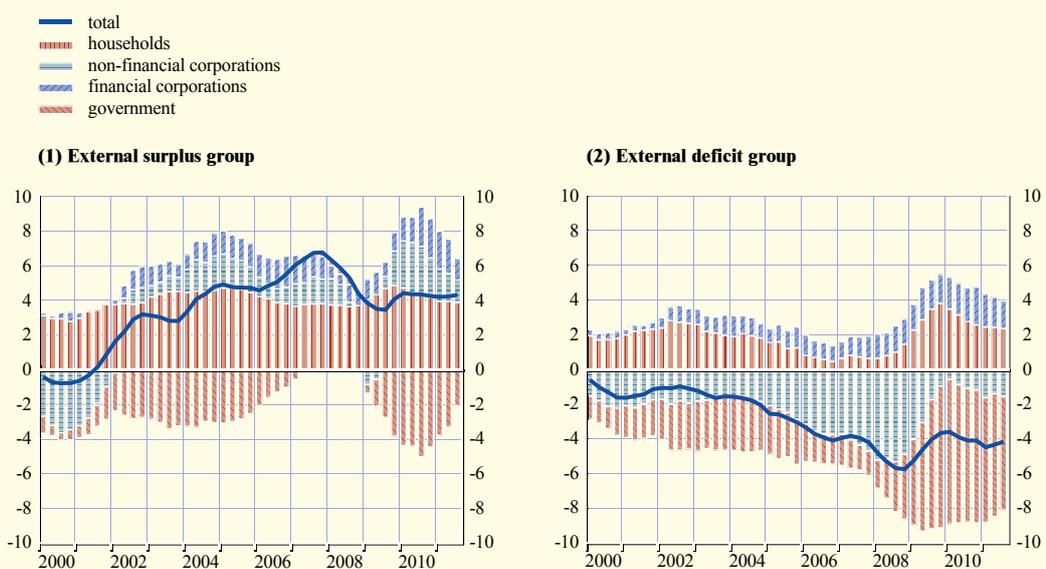


Sources: Eurostat and ECB.

Note: The net lending/net borrowing shown in the charts of this box has been adjusted, for convenience, so as to exclude “acquisitions less disposals of non-financial non-produced assets” (in order to avoid the distortions caused by the large proceeds from the sale of UMTS mobile phone licences in 2000).

Chart B Net lending/net borrowing by country grouping

(four-quarter sums; percentage of GDP)



Sources: Eurostat and ECB.

Note: The net lending/net borrowing shown in the charts of this box has been adjusted, for convenience, so as to exclude “acquisitions less disposals of non-financial non-produced assets” (in order to avoid the distortions caused by the large proceeds from the sale of UMTS mobile phone licences in 2000).

group than in the external surplus group. Financial corporations' surpluses (mostly their retained earnings) were significant in both country groupings, but increased slightly more in the external surplus group in the wake of the crisis, after having declined when the boom peaked. However, overall, the heterogeneity between country groupings seems most pronounced in the case of NFCs. Whereas the NFCs in the external deficit group maintained a traditional net borrowing position throughout the period, those in the external surplus group experienced atypical long-lasting net lending positions as from 2003, which can generally be observed during recessions or that are associated with strong foreign direct investment abroad. It is worth noting that the expansionary financial balances of NFCs had turned around earlier, at the start of the crisis, in the external deficit group, with the net borrowing position peaking in the third quarter of 2008. In the external surplus group, the peak was only reached in the first quarter of 2009.

### Saving and investment

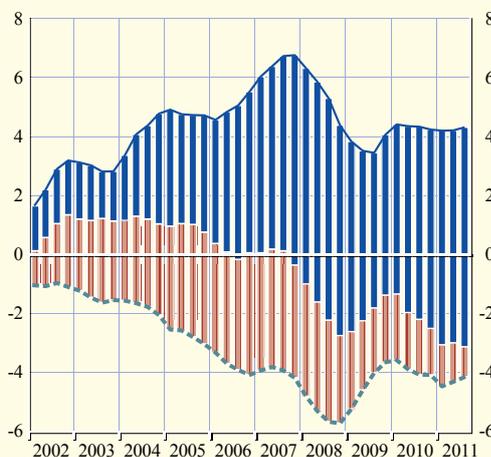
Useful insight can be gained from the analysis of surpluses/deficits by looking at the dynamics of the two main components of net lending/net borrowing, namely investment (gross capital formation) and saving (including net capital transfers). Chart C, panel 1, shows the dynamics of the differentials between groups in both the saving ratios (i.e. the ratio of domestic saving to GDP in the external surplus group minus that in the external deficit group) and the investment ratios, which explain the dynamics of the gap between the external balances of the external surplus group and those of the external deficit group. As can be seen from the chart, the gradual but ultimately substantial increase of this gap in external balances prior to the recession of 2008 was

**Chart C Differentials between external surplus group and external deficit group**

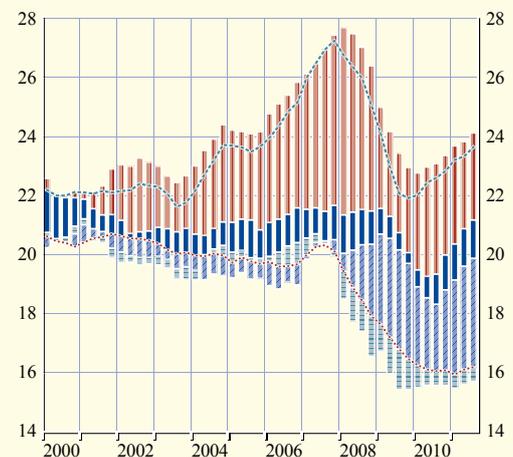
(four-quarter sums; percentage of GDP)

- contribution of the saving ratio differential (external surplus group minus external deficit group)
- contribution of the investment ratio differential (external surplus group minus external deficit group)
- net lending/net borrowing – external deficit group
- net lending/net borrowing – external surplus group
- households saving differential (contributions)
- NFC saving differential (contributions)
- financial corporations saving differential (contributions)
- government saving differential (contributions)
- total saving – external deficit group
- total saving – external surplus group

**(1) Saving and investment ratios<sup>1)</sup>**



**(2) Sectoral saving ratios**



Sources: Eurostat and ECB.

1) The saving ratio differential includes net capital transfers.

driven mainly by increasing domestic saving differentials and, to a lesser extent, by increasing investment differentials (through ever higher investment ratios in the external deficit group). Chart C, panel 2, shows the rapid expansion of the saving differentials until 2007, resulting from generally falling saving ratios in the external deficit group standing in stark contrast to the pronounced increase in the external surplus group. In addition, it shows the sectoral contributions to the saving ratio differentials. The divergence of saving behaviour in the country groupings originated largely in the NFC sector, where the saving differential rose until 2008. The ratios of NFC saving to GDP in the external surplus group increased persistently throughout the five years to 2008, while they edged down steadily in the external deficit group over that period. The differential in household saving, by contrast, remained more stable over time.

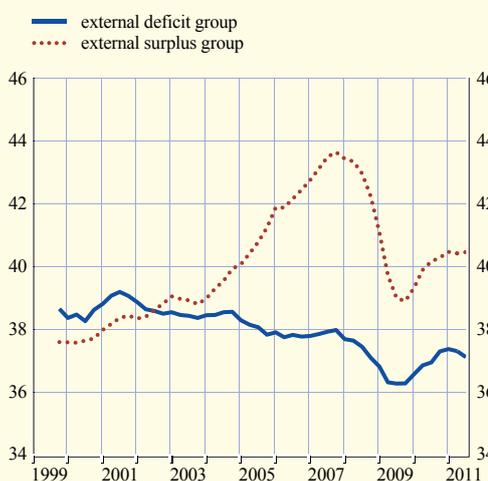
During the recession of 2008-09, the saving differentials decreased to some extent for both NFCs and households, as corporate saving contracted more in the external surplus group than in the external deficit group, and as household saving increased more in the external deficit group than in the external surplus group. These significant asymmetric movements in saving during the recession were subsequently partially reversed. Finally, while there were only few divergences in government savings between the two country groupings before 2007, they became notable thereafter. During the recession, government saving fell faster and more steeply in the external deficit group. This drift was not corrected, but compounded by the stronger rebound recorded in government savings in the external surplus group since mid-2010. In this group, gross saving again turned positive in the 12 months to the second quarter of 2011.

### Corporate margins

One of the reasons for the decline in retained earnings and the associated high deficit position of NFCs in the external deficit group is their lower profitability, as measured, for instance, by the margin of gross operating surplus to value added (see Chart D). These margins were at similar levels of around 38% in the two country groupings until 2004, but started to diverge thereafter, increasing to a maximum of 43.7% at the end of 2007 in the external surplus group, while they fell in the external deficit group. This opened up a gap of almost 6 percentage points, which narrowed temporarily during the 2008-09 recession, but started to widen again during the subsequent recovery. As of the third quarter of 2011, NFC margins generally remain depressed in the external deficit group, standing 3.4 percentage points lower than in the external surplus group. One of the main reasons for the lower corporate margins of the external deficit group is to be found in the far larger increase in wages paid by businesses in the period from 2000 to 2010 (see Chart E), an increase over and beyond what would have been justified by stronger output growth (both higher productivity and employment gains) in those countries. Indeed, any change in total

**Chart D Ratio of the gross operating surplus to value added of NFCs**

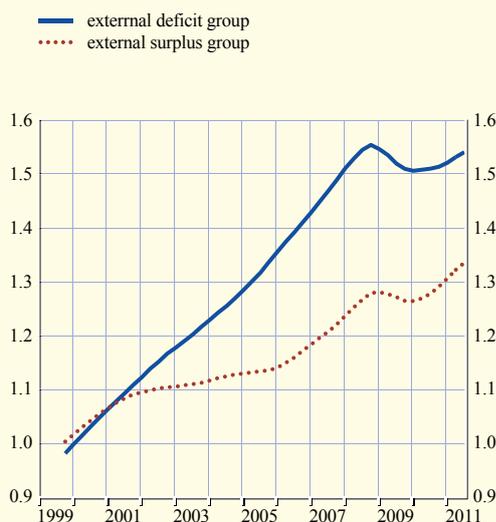
(four-quarter averages; percentages)



Sources: Eurostat and ECB.

**Chart E Compensation of employees paid by NFCs**

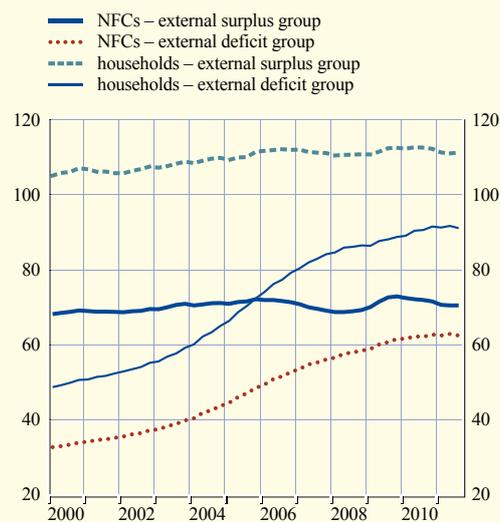
(four-quarter sums; EUR trillions)



Sources: Eurostat and ECB.

**Chart F Debt ratio of the private non-financial sectors**

(percentage of gross disposable income or GDP)



Sources: Eurostat and ECB.

compensation of employees can be decomposed into output growth in volume terms and changes in unit labour costs. In the external deficit group, the latter rose by 28% in the ten years to 2010, compared with an increase of less than 11% in the external surplus group.<sup>7</sup> This gap reflects wage growth in the external deficit group over the past ten years that was excessive in comparison with that in the external surplus group, leading to a loss of competitiveness. This compressed corporate margins in the external deficit group, as businesses could not pass on cost increases in full, especially in the case of NFCs exposed to foreign competition.

### Leverage

The different configuration of surpluses/deficits across the euro area also resulted in differing debt accumulation patterns. This is visible in the debt ratio of the non-financial sectors (see Chart F). The debt ratios in terms of income or GDP for the household and the NFC sectors respectively increased steadily in the external deficit group, while they remained virtually unchanged in the external surplus group. In the case of households, developments were driven primarily by the housing boom in parts of the external deficit group (in particular Spain and Ireland), while those in the NFC sector were more broadly based. At the same time, NFCs in the external surplus group set out on a path of deleveraging in 2009, while trends towards deleveraging in the external deficit group were far more subdued, with essentially stable debt ratios in recent quarters. Similarly, the household debt ratio remained more resilient in the external deficit group than in the external surplus group, resulting in a broadly unchanged overall euro area ratio in recent quarters.

### Conclusions

All in all, using a presentation of the euro area accounts in terms of external surplus and external deficit groups can shed light on the dynamics of the growing sectoral imbalances within the

<sup>7</sup> Weighted by GDP.

euro area during the boom. Ex post, these imbalances have mostly reflected the impact of local demand booms in the external deficit group. The analysis of saving and investment patterns shows that, until 2008, a large part of the growing imbalances between the two country groupings was a result of divergences in NFCs' retained earnings, which increased in the external surplus group, while they decreased in the external deficit group. This, in turn, reflected mainly the impact of rapidly rising wages in the external deficit group, which came without a commensurate increase in productivity, implying a deterioration of competitiveness in the external deficit group. Finally, the imbalances during the boom years and the incomplete rebalancing of sectoral surpluses/deficits since the onset of the crisis are also reflected in continued differences in leverage dynamics, with the non-financial sectors of the external surplus group presenting more favourable debt ratio dynamics.

**Box 4****INTEGRATED EURO AREA ACCOUNTS FOR THE THIRD QUARTER OF 2011<sup>1</sup>**

The integrated euro area accounts released on 30 January 2012, covering data up to the third quarter of 2011, offer comprehensive information on the income, spending, financing and portfolio decisions of institutional sectors in the euro area. The progressive sectoral rebalancing of financial deficits/surpluses observed during the phase of economic recovery resumed in the third quarter: the household saving ratio, after stabilising in previous quarters, fell again to pre-crisis lows; the strong reduction in government deficits resumed; and non-financial corporations (NFCs) again recorded a net borrowing position, although this levelled off somewhat. At the same time, large holding losses on equity holdings on the back of renewed financial market turbulence in the quarter contributed to increasing the leverage ratio of NFCs, to dampening households' net wealth growth and to reversing the improvement in financial corporations' capital ratios measured at market value.

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

Annual growth in euro area nominal gross disposable income edged down to 3.0% in the third quarter of 2011, reflecting the slowdown in economic activity (see Chart A). Euro area income nonetheless expanded faster than total consumption (which included low government consumption growth of below 1% year on year), resulting in continued solid growth in euro area gross saving (6.6% year on year) in the third quarter of 2011. This reflected strongly reduced dissaving by governments and increased saving by financial corporations, but lower saving by households and NFCs. Euro area fixed capital formation growth edged down to 3.1% in the third quarter of 2011, mostly as a result of a decline in government investment, while both NFC and household investment growth increased somewhat. In addition, the levelling off in restocking caused gross capital formation to grow at a slower pace in the third quarter of 2011 (3.6% year on year) than at the beginning of the year.

As euro area gross capital formation grew at a slower pace than saving in the third quarter of 2011, the euro area net borrowing position declined again, to close to balance on a seasonally

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

**Chart A Gross disposable income in the euro area – contribution by sector**

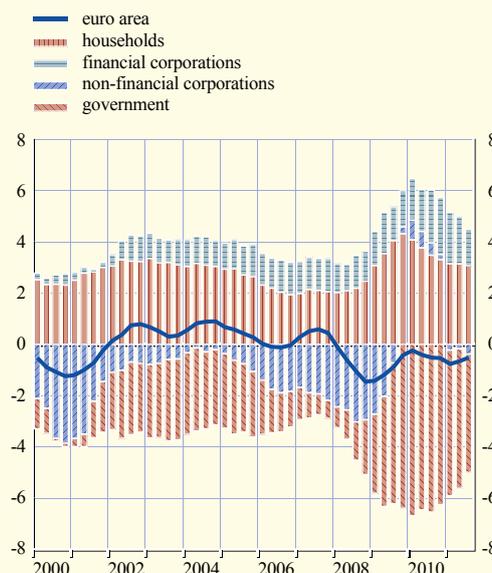
(annual percentage changes; percentage point contributions)



Sources: Eurostat and ECB.

**Chart B Net lending/net borrowing of the euro area**

(percentages of GDP; four-quarter moving sums)



Sources: Eurostat and ECB.

adjusted basis (and to a deficit of 0.5% of GDP on a four-quarter sum basis). This development mirrors the decline in the current account deficit, which reflects improved net exports of goods and services. From a sectoral viewpoint, it mostly reflects the resumption of the reduction in government deficits (to 4.6% of GDP in the third quarter of 2011, on a four-quarter sum basis, from a peak of 6.7% in the first quarter of 2010), a small reduction in NFCs' net borrowing and a small increase in financial corporations' net lending (all on a seasonally adjusted basis). By contrast, household net lending contracted somewhat (see Chart B).<sup>2</sup> On the financing side, cross-border transactions continued to expand (by €100-200 billion per quarter in recent quarters), but reduced gross inflows in debt securities and some disposals of equity held abroad in the course of the third quarter of 2011 suggest some return of investors' home bias.

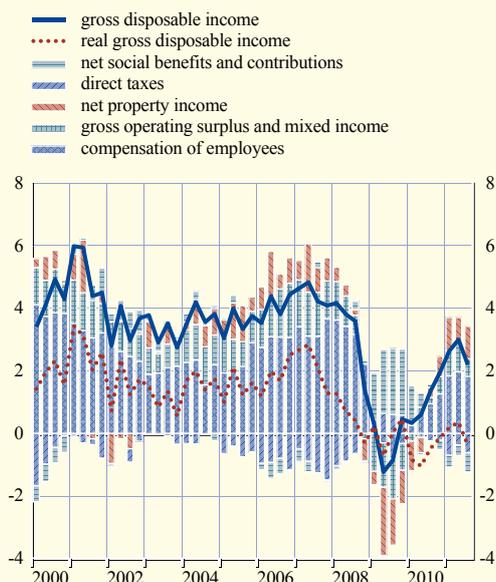
### Behaviour of institutional sectors

*Households'* nominal income growth fell to 2.2% year on year in the third quarter of 2011 owing to the increasingly adverse impact of the fiscal drag (tax payments and net social transfers) and to lower growth in gross operating surplus and mixed income (see Chart C). Growth in wages and salaries also levelled off, while net property income earned supported household income growth. In real terms, household income resumed its decline (-0.4% year on year), after a brief interruption in the first half of the year, notably owing to high commodity-price-driven inflation. With private consumption remaining more robust than income, households again tapped their stock of precautionary savings. As a result the saving ratio fell again, on a seasonally adjusted

<sup>2</sup> The net lending/net borrowing of a sector is the balance of its capital account, which measures the excess of saving and net capital transfers received over capital investments (net lending), or vice versa (net borrowing). It is also the balance of the financial accounts, which measures the difference between transactions in financial assets and transactions in liabilities.

Chart C Households' nominal gross disposable income

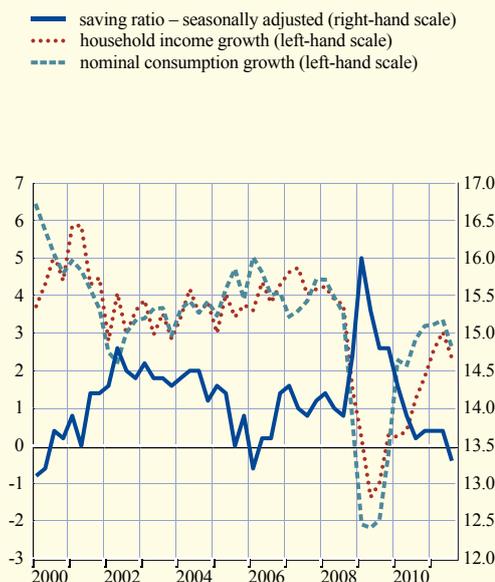
(annual percentage changes; percentage point contributions)



Sources: Eurostat and ECB.

Chart D Households' income, consumption and saving ratio

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



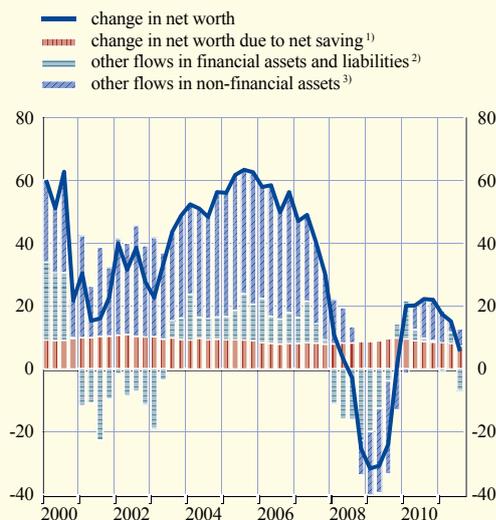
Sources: Eurostat and ECB.

basis, to a pre-crisis low (13.3%, see Chart D). Combined with a slight increase in investment, this drove the household net lending position down. In this context, as growth in financing was stable at low levels, households further reduced financial asset accumulation, shifting their portfolios towards less risky deposits and debt securities. Holding losses incurred by households on their equity portfolios reduced the year-on-year growth of their net wealth (see Chart E).

The growth in the gross operating surplus of *NFCs* slowed again markedly in the third quarter of 2011, as value added growth decreased, although this was partly compensated by some moderation in annual wage growth from its second quarter peak of +3.7% year on year. Also, *NFCs* stepped up dividend distribution (net of dividends earned) and paid higher corporate tax. As a result, *NFC* savings (i.e. their retained earnings) registered an abrupt decrease in the growth rate, to -1.3% year on year, though remaining at still high nominal levels (see Chart F). With gradually increasing fixed capital investment but moderating restocking, *NFC* net borrowing increased (on a four-quarter sum basis), although it remained moderate. This contrasts with the fragility, prior to the bankruptcy of Lehman Brothers, of an overextended *NFC* sector, which at the time showed a very large net borrowing position. The present, cautiously expansionary posture of *NFCs* is reflected in a slight acceleration in financing on a consolidated basis, while *NFCs* stepped up their acquisitions of equity in the third quarter of 2011 and further built up their ample liquidity buffers (€2.6 trillion). The disintermediation in *NFC* external financing triggered after the bankruptcy of Lehman Brothers moderated further, as growth in MFI lending accelerated somewhat (to 1.9% year on year), while growth in debt securities issuance and in intra-sector lending (trade credit and intra-group credit) were broadly stable, below the robust levels seen in 2009-10. At the same time, the gradual reduction

**Chart E Change in the net worth of households**

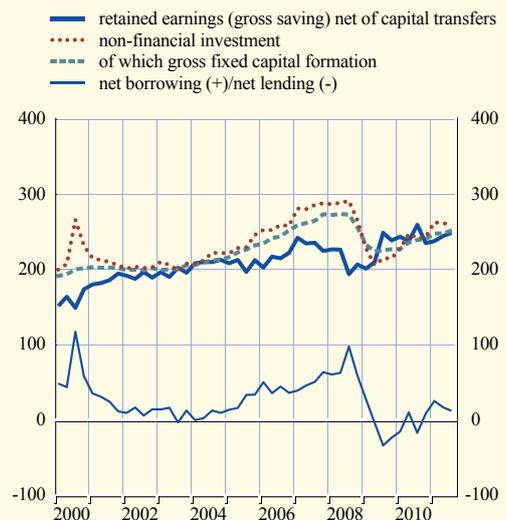
(four-quarter moving sums; percentages of gross disposable income)



Sources: Eurostat and ECB.  
Notes: Data on non-financial assets are estimates by the ECB.  
1) This item comprises net saving, net capital transfers received and the discrepancy between the non-financial and the financial accounts.  
2) Mainly holding gains and losses on shares and other equity.  
3) Mainly holding gains and losses on real estate and land.

**Chart F Non-financial corporations' saving, capital investment and net lending(-)/net borrowing(+)**

(EUR billions, seasonally adjusted)



Sources: Eurostat and ECB.  
Note: Seasonal adjustment by the ECB.

in leverage observed since the first quarter of 2009 was interrupted, with a second quarterly increase, as the result of the adverse impact of holding losses on equity held.

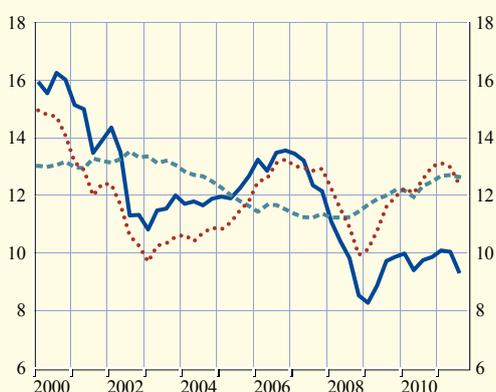
In the third quarter of 2011 the fairly rapid reduction in *government* deficits since the beginning of 2010 (on a seasonally adjusted basis) resumed, after an interruption in the second quarter, as a temporary weakness in tax revenue reversed. Year-on-year growth in total expenditure remained fairly low at close to 1% (excluding one-off transfers), reflecting the impact of sizeable consolidation measures (including close to zero annual growth in compensation of employees), despite significant increases in interest payments. Debt issuance slowed on a quarterly basis (albeit remaining elevated on a four-quarter sum basis) and was largely absorbed by purchases under the Securities Markets Programme as banks and non-residents reduced their holdings.

The disposable income of *financial corporations* increased in the third quarter of 2011 as a result of a larger increase in dividends earned than in dividends paid, while value added plus net interest earned continued to grow. Despite sizeable net retained earnings (€35 billion per quarter in recent quarters), financial corporations' net assets at market value (a euro area accounts measure of capital ratio) fell markedly as a result of the pronounced holding losses on equity portfolios, although it remained significantly above the market's valuation of their equity (see Chart G). Chart H shows that financial corporations suffered large holding losses on, mostly, their portfolios of equity assets held (quoted shares, unquoted shares and mutual funds). On other instruments (deposits, loans and debt securities held), by contrast, holding gains were recorded, stemming in part from the appreciation of assets denominated in foreign currencies. In addition, the holding losses on debt securities issued by sovereigns under stress (all recorded at market value in the

**Chart G Capital ratios of financial institutions excluding mutual funds**

(percentage of total assets)

- equity to assets
- ... capital to assets
- - - notional capital to assets



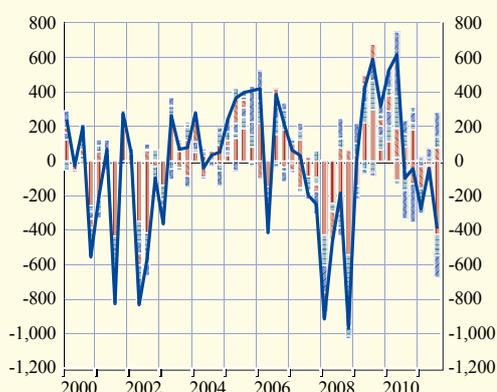
Source: ECB.

Note: "Equity" comprises here shares and other equity other than mutual fund shares. "Capital" is defined as the difference between financial assets and liabilities other than equity. All assets and liabilities are valued at market value. The "notional capital to assets" ratio is calculated on the basis of transactions in capital and assets, i.e. excluding changes in prices of assets and liabilities.

**Chart H Holding gains and losses in financial corporations' assets**

(quarterly flows; EUR billions)

- total
- quoted shares
- unquoted shares
- mutual fund shares
- debt securities
- loans
- other



Sources: Eurostat and ECB.

Note: Total refers to "other economic flows", which mainly relate to (realised or unrealised) holding gains and losses (including loan write-offs).

euro area accounts, whether part of trading or investment books) were more than compensated by gains on other debt securities held, including those issued by other euro area governments that benefited from safe haven flows.

### Balance sheet dynamics

In the third quarter of 2011 the annual growth in households' net worth slowed noticeably to 5.6% of income (from a peak of 22% in the fourth quarter of 2010). While there was a positive, but somewhat decreasing, influence from net saving (7.2% of income), households suffered overall holding losses (1.6% of income), mainly on their equity portfolios. Holding gains, albeit subdued, were again recorded on non-financial assets (housing) (see Chart E).

The fall in equity prices also resulted in a marked increase in the NFC debt-to-assets ratio, interrupting the gradual reduction in leverage observed since the first quarter of 2009. It also explains the steep fall in the capital ratios of financial corporations when measured at market value. The "notional" capital-to-assets ratio of financial corporations – calculated by cumulating transactions over time and thus excluding the impact of asset price changes – declined by much less (0.1 percentage point), mainly reflecting the mechanical impact on both sides of the balance sheet of increased Eurosystem liquidity support. At the same time, financial corporations' substantial retained earnings and high recourse to equity markets (issuance of more than €100 billion in the third quarter of 2011) continued to contribute positively to the building-up of their capital base (Chart G).

## 3 PRICES AND COSTS

According to Eurostat's flash estimate, euro area annual HICP inflation was 2.7% in January 2012, unchanged from the previous month. On average, inflation rates stood at 2.7% in 2011, mainly driven by higher energy and other commodity prices. Looking ahead, inflation is likely to stay above 2% for several months to come, before declining to below 2%. This pattern reflects the expectation that, in an environment of weak growth in the euro area and globally, underlying price pressures in the euro area should remain limited. Risks to the medium-term outlook for price developments remain broadly balanced.

### 3.1 CONSUMER PRICES

According to Eurostat's flash estimate, euro area annual HICP inflation was 2.7% in January 2012, unchanged from December 2011 (see Table 5). Higher oil prices and excise taxes on fuel in some euro area countries, as well as the effects of the past depreciation of the euro, appear to have boosted energy prices in January and broadly counterbalanced a base effect of -0.2 percentage point stemming from the energy component. Energy prices and, to a lesser extent, food prices were the key factors behind the elevated average rate of HICP inflation in 2011, which was 2.7%. Box 5, entitled "Base effects and their impact on HICP inflation in 2012", discusses the base effects stemming from the strong increases in the prices of energy and food in 2011, and examines how they will affect the path of the annual inflation rate during 2012.

**Table 5 Price developments**

(annual percentage changes, unless otherwise indicated)

	2010	2011	2011 Aug.	2011 Sep.	2011 Oct.	2011 Nov.	2011 Dec.	2012 Jan.
<b>HICP and its components</b>								
Overall index <sup>1)</sup>	1.6	2.7	2.5	3.0	3.0	3.0	2.7	2.7
Energy	7.4	11.9	11.8	12.4	12.4	12.3	9.7	.
Unprocessed food	1.3	1.8	1.1	1.4	1.8	1.9	1.6	.
Processed food	0.9	3.3	3.6	4.0	4.3	4.3	4.1	.
Non-energy industrial goods	0.5	0.8	0.0	1.2	1.3	1.3	1.2	.
Services	1.4	1.8	1.9	1.9	1.8	1.9	1.9	.
<b>Other price indicators</b>								
Industrial producer prices	2.9	5.9	5.8	5.8	5.5	5.4	4.3	.
Oil prices (EUR per barrel)	60.7	79.7	76.7	79.8	78.9	81.4	81.7	86.2
Non-energy commodity prices	44.6	12.2	2.5	1.5	1.6	-1.9	-6.7	-4.6

Sources: Eurostat, ECB and ECB calculations based on Thomson Reuters data.

1) HICP inflation in January 2012 refers to Eurostat's flash estimate.

### Box 5

#### BASE EFFECTS AND THEIR IMPACT ON HICP INFLATION IN 2012

Euro area HICP inflation increased significantly in the first part of 2011 and remained at elevated levels for the rest of the year. This development largely reflected strong contributions from energy and, to a lesser extent, food prices (see Chart A). This box discusses the so-called base effects that were generated by the strong increases in energy and food prices in 2011 and how

they will affect the path of the annual inflation rate during 2012.

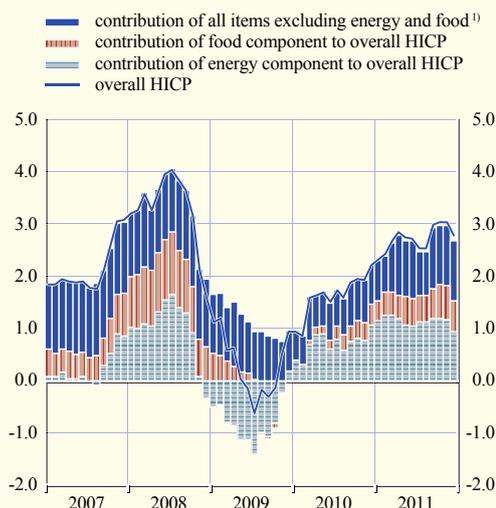
Base effects occur when variations in the annual growth rate of an economic indicator, in this case the HICP, are attributable to an atypical movement in the index 12 months earlier owing, for instance, to strong changes in commodity prices.<sup>1</sup> More specifically, they explain to what extent the change from one month to the next in the year-on-year rate of inflation results from the “dropping out” of an unusual month-on-month change from the price index 12 months earlier. In analysing developments in the annual inflation rate, it is important to distinguish the effects of these unusual month-on-month changes that took place 12 months earlier from those that occurred in the latest month (i.e. the actual “news”).

In the light of the strong increases in energy and food prices in early 2011, base effects are expected to have a strong downward influence on the path of headline inflation in 2012. Chart B shows the expected contribution of base effects from the energy and food components to the change in the annual inflation rate from one month to the next in the period from January to December 2012.<sup>2</sup> In particular, it shows that the contribution of base effects stemming from energy prices is estimated to be negative in most months and particularly strong in the first four months of the year, as the sharp increases in energy prices recorded a year earlier drop out of the annual comparison. Likewise, the contribution of base effects stemming from food prices is estimated to be mostly negative throughout 2012, but in general of a smaller scale.

The cumulative impact of these base effects will influence the profile of HICP developments in 2012. Taking the base effects from the energy and food components together, it is estimated that by April the downward impact will have reached around 0.7 percentage point and will hover around this magnitude for the remainder of 2012 (see Chart C). The contribution of the base effects from food prices remains modest in absolute size, but its relevance increases over the year compared with that from energy prices.

Overall, downward base effects stemming mostly from past changes in energy prices are expected to result in a downward profile of annual HICP inflation over the coming months. This assumes that there will be no strong increases in energy and food prices in 2012, which is in

Chart A Contributions to annual HICP inflation from January 2007



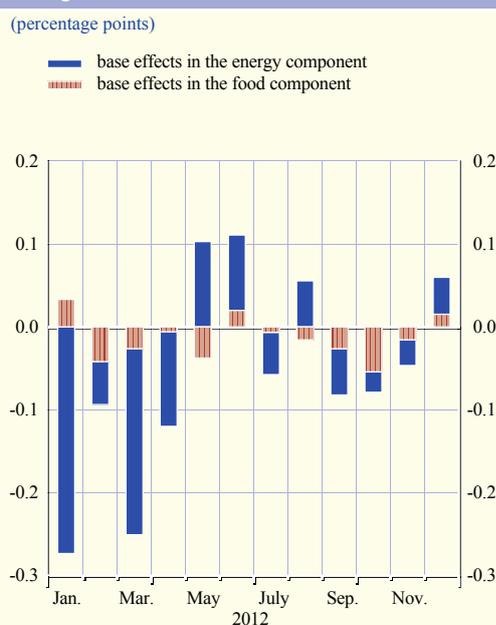
Sources: Eurostat and ECB calculations.

1) Includes HICP services and non-energy industrial goods.

1 Technically, a base effect can be defined as the contribution to the change in the year-on-year inflation rate in a particular month that stems from a deviation in the month-on-month rate of change in the base month (i.e. the same month one year earlier) from its usual or normal pattern, taking into account seasonal fluctuations. For further details, see the box entitled “Accounting for recent and prospective movements in HICP inflation: the role of base effects”, *Monthly Bulletin*, ECB, December 2008.

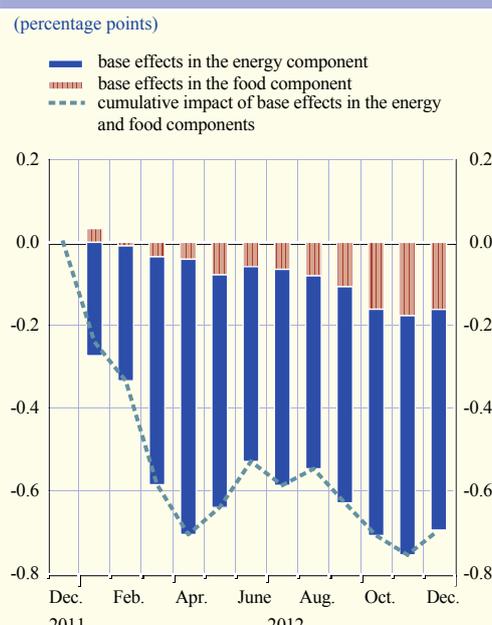
2 Identifying and estimating base effects is not a straightforward task. Defining a base effect as stemming from atypical influences affecting the price index 12 months earlier involves calculating the deviation in the month-on-month rate of change in the base period from its usual pattern. There is no commonly agreed way of identifying such atypical influences on inflation. For the purposes of this box, the usual pattern of month-on-month changes in the HICP is computed for each month by adding an estimated seasonal effect to the average month-on-month change observed since January 1995.

**Chart B Contribution of base effects in the energy and food components to the monthly change in annual HICP inflation in 2012**



Sources: Eurostat and ECB calculations.

**Chart C Cumulative impact of base effects in the energy and food components in 2012**



Sources: Eurostat and ECB calculations.

line with the current broadly flat profile of oil future prices in the coming months. However, the profile of the annual growth rate of the HICP will also depend on the impact of changes in economic fundamentals, such as the strength of consumer demand and labour cost growth, as well as developments in indirect taxes and administered prices. This implies that it cannot be assessed mechanically on the basis of base effects alone.

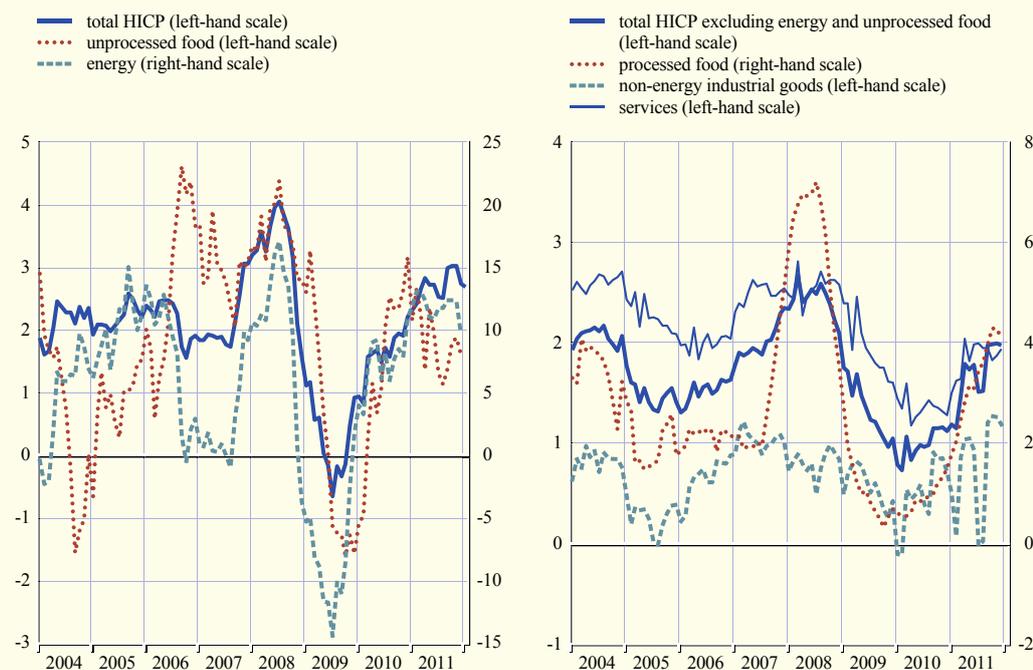
In December 2011, the last month for which an official breakdown is available, the annual growth rate of overall HICP inflation dropped to 2.7%, from 3% in the previous three months (see Chart 22). This decline reflected lower annual rates of increase in all HICP components, in particular energy. The only exception was the services component, for which the annual rate of increase remained unchanged.

Looking at the main HICP components in more detail, energy inflation fell from 12.3% in November to 9.7% in December, the lowest it has been since November 2010. The decline was due to a downward base effect, as well as a marginal drop in energy prices month on month. In particular, the annual rates of increase in the prices of liquid fuels, and fuels and lubricants for personal transportation decreased in December from the previous month (from 26.7% to 18.9% and from 13.1% to 8.9% respectively).

The annual rate of change in unprocessed food prices decreased by 0.3 percentage point in December, to 1.6%, on account of lower annual rates of increase in the prices of fruit and vegetables, which more than offset the higher annual rate of increase in meat prices. With regard to processed food prices, the annual rate of change fell slightly to 4.1%, reflecting minor changes in the prices of several items. The annual rate of increase in tobacco prices slowed further in December.

Chart 22 Breakdown of HICP inflation: main components

(annual percentage changes; monthly data)



Source: Eurostat.

Excluding all food and energy items, which represent around 30% of the HICP basket, annual HICP inflation remained stable at 1.6% in December 2011 for the fourth consecutive month. HICP inflation excluding total food and energy is determined predominantly by domestic factors, such as wages, profit mark-ups and indirect taxes, and consists of two main components, namely non-energy industrial goods and services.

The annual rate of change in non-energy industrial goods prices edged down to 1.2% in December. The rate for services prices remained unchanged at 1.9%, owing to the rise in prices for transportation services being offset by a fall in prices for communication services. The prices for housing services, as well as recreation and personal services, remained unchanged.

The introduction of the euro banknotes and coins on 1 January 2002 coincided with widespread concern that the cash changeover could trigger a general increase in prices. Box 6, entitled “Average price increases since the euro cash changeover”, reports on developments in perceived inflation and reviews average price increases in the euro area as a whole over the last decade.

## AVERAGE PRICE INCREASES SINCE THE EURO CASH CHANGEOVER

The introduction of the euro banknotes and coins on 1 January 2002 coincided with widespread concern that the cash changeover could trigger a general increase in prices. However, this contrasted with the general expectation that, in the longer term, the cash changeover would have a dampening impact on prices through greater transparency and competition.<sup>1</sup> Against this background, this box first recalls the movements in inflation perceptions following the cash changeover and then reviews the average price increases in the euro area as a whole over the ten years since the cash changeover.

### Inflation perceptions and actual inflation

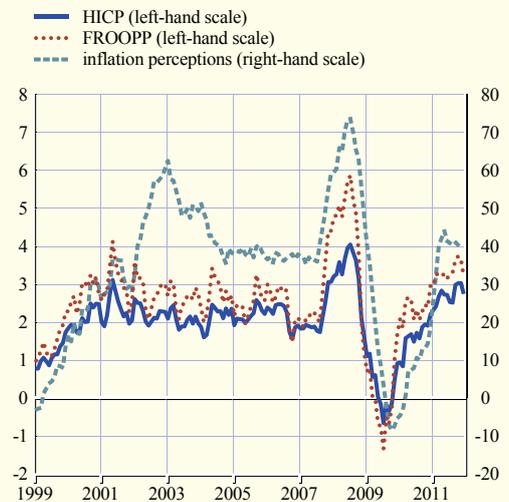
Around the time of the cash changeover, developments in perceived inflation – as measured through the European Commission’s Consumer Survey – started to deviate significantly from those in actual HICP inflation

(see Chart A).<sup>2</sup> It should be noted, however, that the levels of the two series cannot be compared directly, as the measure of perceived inflation is based on qualitative information on the direction of change in price developments rather than on the level of inflation.<sup>3</sup> Nevertheless, there was a clear deviation in the trends of the two indicators, which lasted for around a year. Thereafter, the deviation diminished again, as perceptions were corrected downwards. In the period since mid-2004, perceived and actual inflation have moved in a more synchronous manner.

The deviation in developments in perceived inflation and actual inflation around the time of the cash changeover was especially evident with regard to prices for goods and services that consumers buy more frequently and which may thus have a stronger bearing on inflation perceptions (see Chart A). Such purchases are known as “frequent out-of-pocket purchases” (FROOPP) and include all food and most energy items in the HICP, but exclude, for instance, rents and insurance. It can be seen that movements in inflation perceptions have been more highly correlated with the FROOPP index than with the HICP. Given the relatively higher weight of food and energy in the FROOPP index than in the HICP,<sup>4</sup> and the fact that the euro area has been

Chart A HICP inflation, FROOPP inflation and perceived inflation

(annual percentage changes; percentage balances)



Sources: European Commission and ECB calculations.  
Note: FROOPP refers to “frequent out-of-pocket purchases”.

1 See the box entitled “Euro cash changeover not expected to have a significant impact on consumer prices at the aggregate level”, *Monthly Bulletin*, ECB, January 2002.

2 For further information, see the box entitled “Recent developments in consumers’ inflation perceptions”, *Monthly Bulletin*, ECB, July 2002; and the box entitled “Recent developments in perceived and actual inflation”, *Monthly Bulletin*, ECB, October 2002.

3 See the box entitled “The European Commission Survey of consumers’ inflation perceptions”, *Monthly Bulletin*, ECB, May 2007.

4 Taken together, food and energy have a weight of 29.7% in the HICP. The weight of selected sub-components related to food and energy in the FROOPP index is 53%.

hit by a number of adverse shocks<sup>5</sup> in these two price components, FROOPP inflation has, on average, been both more volatile and higher than overall HICP inflation over the past ten years. This was particularly the case in the period of severe international commodity price shocks in 2007-08.<sup>6</sup>

### Average price increases in individual HICP components

Overall, the average rate of increase in the euro area HICP since the cash changeover has been 2.1%. However, there have been significant differences in the trends of certain categories since 2002. Charts B and C illustrate this very clearly.

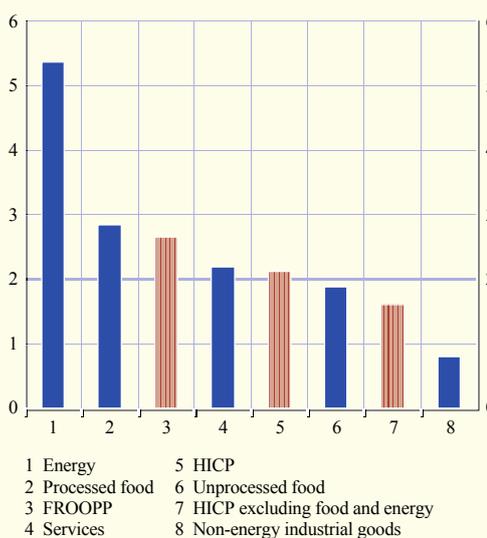
The number of adverse upward shocks to food and energy prices is reflected in the much higher average annual rates of increase in these two components than in the others. For the energy component as a whole, the average annual rate of increase since the cash changeover has been 5.4%, whereas for the liquid fuels sub-component, for instance, it has been 9.6%.

Processed food prices have increased, on average, by 2.8% per annum, to a large extent reflecting an average annual rate of increase of 6% in tobacco prices, which was due mainly to tax hikes. Unprocessed food prices rose, on average, by 1.9% per annum (fish 2.4%, fruit 2.2%, meat 1.8% and vegetables 1.4%).

With regard to services prices, the average annual rate of increase since the cash changeover has stood at 2.2%, i.e. broadly in line with average HICP inflation. The services component covers, for example, the price of a meal in a restaurant, a haircut or a cinema ticket, which, at the time of the cash changeover, were perceived to have increased significantly. However, on average over the ten years since then, the price increases have not been exceptional. For instance, prices in the category “hairdressing salons and personal grooming establishments” have risen, on average, by 2.2% per annum and prices in the category “restaurants, cafes and the like” have increased, on average, by 2.8% per annum, with the latter having also been indirectly affected by hikes in processed food prices. Finally, the average annual rate of inflation in the non-energy industrial goods component has been only 0.8%, owing mainly to the substantial fall in the prices of Information and Communication Technology (ICT) goods on the back of rapid

Chart B HICP and its main components

(average annual rate of increase between December 2001 and December 2011)



Sources: Eurostat and ECB calculations.

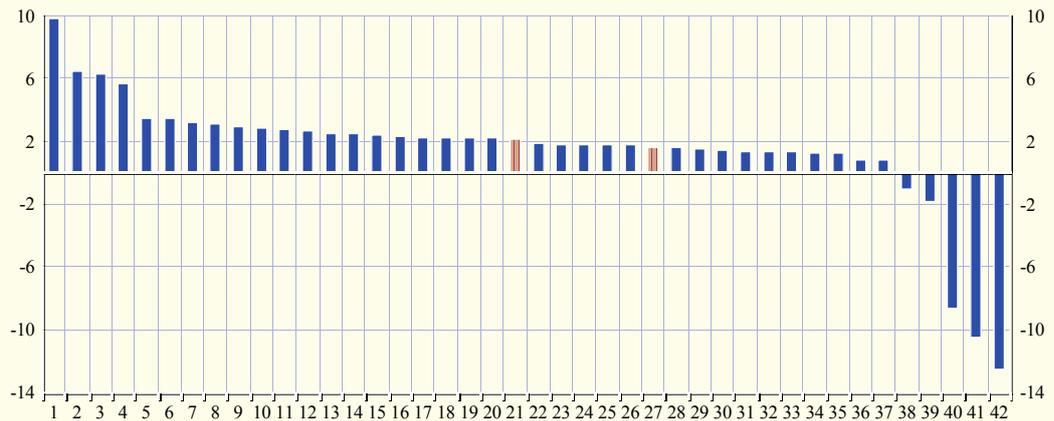
Notes: The main HICP components are energy, processed food, services, unprocessed food and non-energy industrial goods. Frequent out-of-pocket purchases (FROOPP) and the HICP excluding food and energy are included for reference only.

5 For an overview of the clustering of shocks to HICP inflation, see the box entitled “The clustering of shocks to HICP inflation since the start of Stage Three of EMU”, *Monthly Bulletin*, ECB, June 2002.

6 See the box entitled “The implications of external price pressures for euro area HICP inflation”, *Monthly Bulletin*, ECB, October 2011.

Chart C Selected HICP categories

(average annual rate of increase between December 2001 and December 2011)



- |   |  |
|---|--|
| 1 Liquid fuels  | 22 Cultural services   |
| 2 Jewellery, clocks and watches                             | 23 Actual rentals paid by tenants                                      |
| 3 Tobacco   | 24 Meat  |
| 4 Fuels and lubricants for personal transport equipment     | 25 Glassware, tableware and household utensils                         |
| 5 Passenger transport by railway                            | 26 Postal services   |
| 6 Maintenance and repair of personal transport              | 27 HICP excluding food and energy                                      |
| 7 Hospital services   | 28 Wine  |
| 8 Education   | 29 Beer  |
| 9 Recreational and sporting services                        | 30 Furniture and furnishings   |
| 10 Restaurants, cafés and the like                          | 31 Vegetables  |
| 11 Newspapers and periodicals                               | 32 Package holidays  |
| 12 Bread and cereals  | 33 Books   |
| 13 Dental services  | 34 Shoes and footwear  |
| 14 Coffee, tea and cocoa                                    | 35 Pharmaceutical products   |
| 15 Fish   | 36 Motor cars  |
| 16 Canteens   | 37 Garments  |
| 17 Cleaning, repair and hire of clothing                    | 38 Games, toys and hobbies   |
| 18 Fruit  | 39 Telephone and telefax equipment and services                        |
| 19 Hairdressing salons and personal grooming establishments | 40 Equipment for the recording and reproduction of sounds and pictures |
| 20 Passenger transport by air                               | 41 Photographic and cinematographic equipment and optical instruments  |
| 21 HICP   | 42 Information processing equipment                                    |

Sources: Eurostat and ECB calculations.

technological progress in this field. For instance, prices for information processing equipment have decreased by 12.5% per annum and those for photographic and cinematographic equipment and optical instruments by 10.5% per annum. By contrast, the average annual rate of increase in the prices of jewellery, clocks and watches has stood at 6.4%, largely as a result of the surge in commodity prices, in particular gold, over the last few years.

Overall, the euro area has seen very large differences in the developments of prices for individual goods and services since the cash changeover. One clear development has been the upward impact of energy and food prices resulting from international commodity price shocks, alongside the dampening impact of the prices of ICT goods resulting from technological progress in that field. At the same time, services prices have developed broadly in line with average HICP inflation.

### 3.2 INDUSTRIAL PRODUCER PRICES

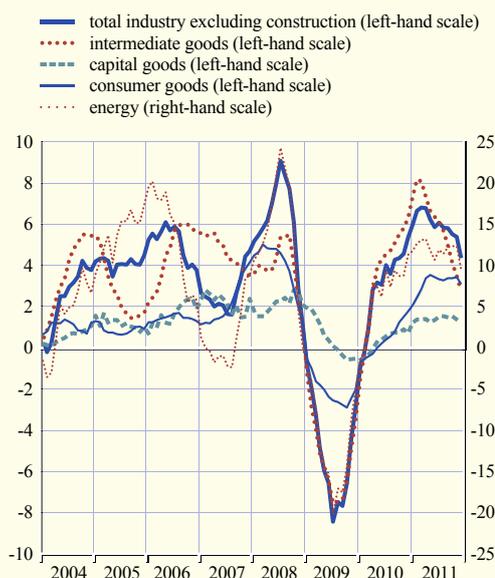
Industrial producer price inflation (excluding construction) fell to 4.3% in December 2011, from 5.4% in November (see Chart 23). This largely reflected a markedly lower annual rate of change in intermediate goods and energy prices, which was in turn due to negative base effects in both components. Input price pressures continued to ease. This easing is currently more visible at the earlier stages of the production chain (e.g. producer prices for intermediate goods) than at the later ones (e.g. producer prices for consumer goods excluding food). Producer price inflation excluding construction and energy declined from 3.0% in November to 2.6% in December.

In the same period, producer price inflation in consumer goods industries declined from 3.4% to 3.1%. This decrease was driven by consumer food prices, for which the annual rate of change fell from 4.7% to 4.1%. Further declines are expected in the coming months, owing to the recent sharp falls in the annual rate of change in food commodity prices in the EU. The annual rate of change in the non-food component remained unchanged at a historically elevated level of 1.7%. This, together with rising import price inflation as a result of the recent depreciation of the euro, signals continued short-term pipeline pressures for underlying consumer price inflation.

With regard to survey indicators, which lead industrial producer price developments, the Purchasing Managers' Index (PMI) for manufacturing selling prices was broadly unchanged in January 2012 and thus confirmed the stabilisation that followed the decline from spring to October 2011 (see Chart 24). By contrast, the PMI for manufacturing input prices increased from 49.8 in December 2011 to 52.8 in January 2012, implying a monthly increase in input prices for the first time since September 2011. For the services sector, the PMI for input and selling prices decreased in January from 56.6 to 53.3 and from 49.3 to 48.7 respectively.

Chart 23 Breakdown of industrial producer prices

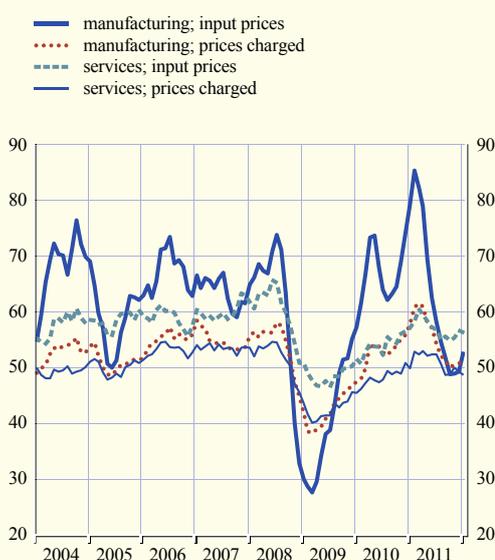
(annual percentage changes; monthly data)



Sources: Eurostat and ECB calculations.

Chart 24 Producer input and output price surveys

(diffusion indices; monthly data)



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

To sum up, further downward base effects, together with lower inflationary pressures anticipated by price survey data, suggest further declines in producer price inflation over the coming months. All in all, price survey indicators remain slightly below their long-run averages, implying that price pressures are generally contained.

### 3.3 LABOUR COST INDICATORS

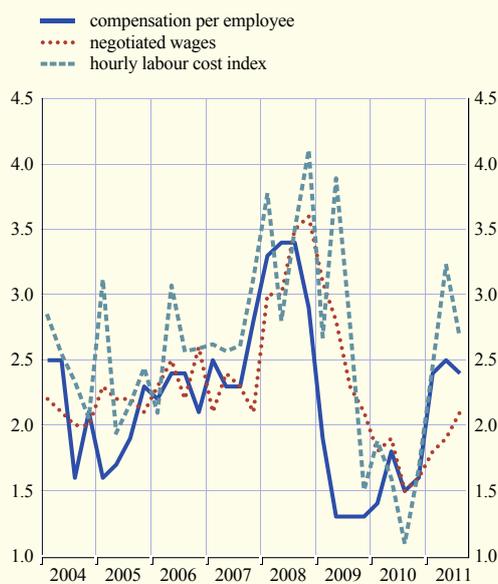
Reflecting the improvement in labour market conditions which lasted until the summer of 2011, labour cost indicators in the euro area increased gradually (see Table 6 and Chart 25). However, preliminary data for November on negotiated wages in the euro area show signs of a stabilisation in wage growth.

Euro area negotiated wages grew by 2.1% year on year in the third quarter of 2011, after 1.9% in the previous quarter. The annual rate of growth in hourly labour costs slowed to 2.7% in the third quarter, compared with 3.2% in the previous quarter. This deceleration reflected primarily developments in the industrial sector, as the decreases in the construction and market services sectors were much less pronounced. Overall, non-wage costs continued to grow at a faster rate than the wages and salaries component of euro area hourly labour costs.

Other labour cost indicators also showed some signs of a stabilisation. Compensation per employee stood at 2.4% year on year in the third quarter, virtually unchanged from the previous two quarters. At the same time, unit labour cost growth increased only slightly to 1.3% year on year in the third quarter. This was due primarily to a decline in the annual growth rate of labour productivity, from 1.3% in the second quarter to 1.0% in the third quarter, on the back of slower output growth. Looking ahead, the latest surveys point to a further slowdown in productivity in the coming quarters, which could drive up growth in unit labour costs further. In the medium term labour cost pressures are

Chart 25 Selected labour cost indicators

(annual percentage changes; quarterly data)



Sources: Eurostat, national data and ECB calculations.

Table 6 Labour cost indicators

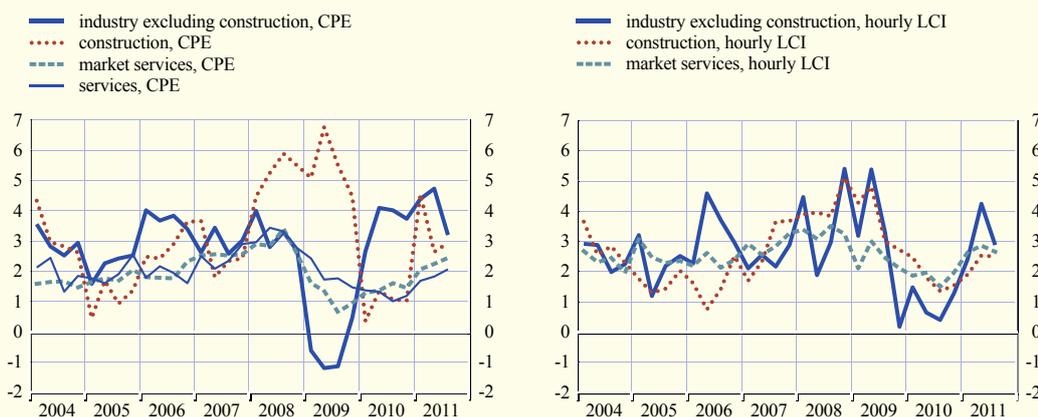
(annual percentage changes, unless otherwise indicated)

	2009	2010	2010 Q3	2010 Q4	2011 Q1	2011 Q2	2011 Q3
Negotiated wages	2.6	1.7	1.5	1.6	1.8	1.9	2.1
Hourly labour cost index	2.7	1.6	1.1	1.7	2.5	3.2	2.7
Compensation per employee	1.4	1.6	1.5	1.6	2.4	2.5	2.4
<i>Memo items:</i>							
Labour productivity	-2.5	2.4	2.3	1.9	2.2	1.3	1.0
Unit labour costs	4.0	-0.8	-0.7	-0.3	0.2	1.2	1.3

Sources: Eurostat, national data and ECB calculations.

Chart 26 Sectoral labour cost developments

(annual percentage changes; quarterly data)



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

likely to remain contained, given the rather weak outlook for growth and the continued slack in the labour market.

### 3.4 THE OUTLOOK FOR INFLATION

Looking ahead, inflation rates are likely to stay above 2% for several months to come, before declining to below 2%. While current futures prices for commodities indicate that they will have a lesser impact on inflation, underlying price pressures in the euro area should remain limited, reflecting the expectation of weak growth in the euro area and globally.

The latest ECB Survey of Professional Forecasters (see Box 7) shows that, compared with the previous round, respondents’ outlook for inflation in 2012 and 2013 has remained broadly unchanged, with inflation expectations having been revised up slightly for 2012, to 1.9%, and down slightly for 2013, to 1.7%. These forecasts are broadly in line with the ranges reported in the December 2011 Eurosystem staff macroeconomic projections for the euro area. Longer-term inflation expectations (for 2016) remained unchanged at 2.0%.

Risks to the medium-term outlook for price developments remain broadly balanced. On the upside, they relate to higher than assumed increases in indirect taxes and administered prices, owing to the need for fiscal consolidation in the coming years, and increases in commodity prices. The main downside risks relate to the impact of weaker than expected economic growth in the euro area and globally.

## Box 7

### RESULTS OF THE ECB SURVEY OF PROFESSIONAL FORECASTERS FOR THE FIRST QUARTER OF 2012

This box reports the results of the ECB Survey of Professional Forecasters (SPF) for the first quarter of 2012. The survey was conducted between 17 and 20 January 2012 and received 58 responses.<sup>1</sup>

Compared with the previous survey round, the latest results show that respondents' outlook for inflation in 2012 and 2013 has remained broadly unchanged. As regards longer-term inflation expectations (for 2016), the average point forecast and the median of the point forecasts remained unchanged at 2.0%. GDP growth expectations have been revised down significantly for 2012 and 2013.

#### Shorter-term inflation expectations revised up slightly for 2012 and down slightly for 2013

The SPF inflation expectations for 2012 and 2013 stand at 1.9% and 1.7% respectively (see the table). These figures are broadly in line with the corresponding forecasts published in the January 2012 issues of Consensus Economics and the Euro Zone Barometer, and are within the ranges reported in the December 2011 Eurosystem staff macroeconomic projections.

Compared with the previous survey round, inflation expectations have ticked up by 0.1 percentage point for 2012 and decreased marginally by 0.1 percentage point for 2013. In their qualitative comments, respondents attributed the upward revision to the inflation forecast for 2012 to a combination of upward revisions to expected indirect taxes and administered prices

1 The survey collects information on expectations for euro area inflation, real GDP growth and unemployment from experts affiliated with financial or non-financial institutions that are based in the EU. 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 the Euro Zone Barometer

(annual percentage changes, unless otherwise indicated)

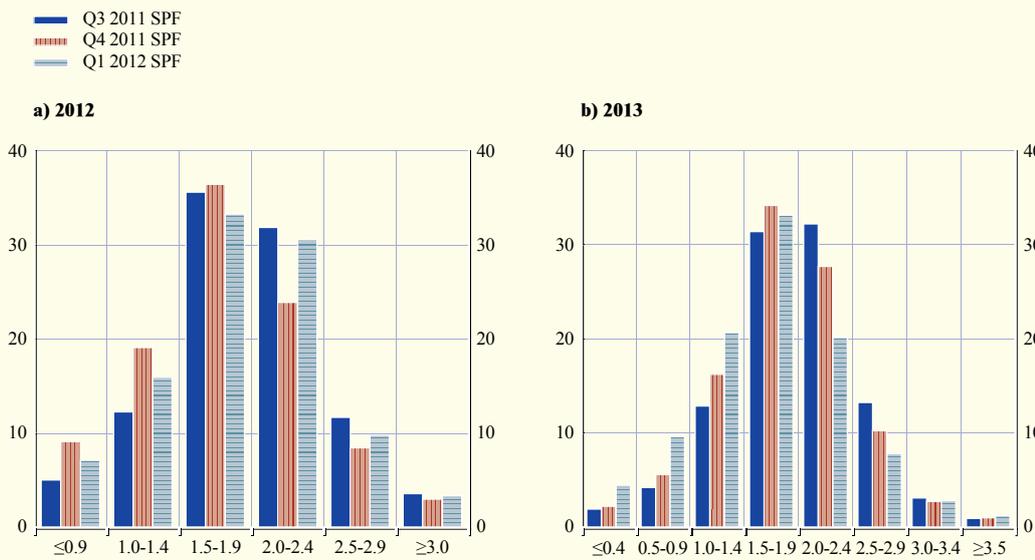
	Survey horizon		
	2012	2013	Longer-term <sup>2)</sup>
<b>HICP inflation</b>			
SPF Q1 2012	1.9	1.7	2.0
<i>Previous SPF (Q4 2011)</i>	1.8	1.8	2.0
Eurosystem staff macroeconomic projections (December 2011)	1.5-2.5	0.8-2.2	-
Consensus Economics (January 2012)	1.9	1.7	2.0
Euro Zone Barometer (January 2012)	1.8	1.7	2.1
<b>Real GDP growth</b>			
SPF Q1 2012	-0.1	1.1	1.8
<i>Previous SPF (Q4 2011)</i>	0.8	1.6	1.8
Eurosystem staff macroeconomic projections (December 2011)	-0.4-1.0	0.3-2.3	-
Consensus Economics (January 2012)	-0.3	1.0	1.7
Euro Zone Barometer (January 2012)	-0.3	1.0	1.9
<b>Unemployment rate<sup>1)</sup></b>			
SPF Q1 2012	10.6	10.6	8.8
<i>Previous SPF (Q4 2011)</i>	10.0	9.7	8.5
Consensus Economics (January 2012)	10.6	10.6	-
Euro Zone Barometer (January 2012)	10.6	10.5	9.2

1) As a percentage of the labour force.

2) Longer-term expectations refer to 2016 in the SPF, Consensus Economics and the Euro Zone Barometer.

**Chart A Aggregated probability distribution of average annual inflation expectations for 2012 and 2013 in the latest SPF rounds**

(probability in percentages)



Source: ECB.

Note: The aggregated probability distribution corresponds to the average of individual probability distributions provided by SPF forecasters.

in some countries, an upward revision to expected oil prices and a downward revision to the expected EUR/USD exchange rate. Furthermore, they put the downward revision to the inflation forecast for 2013 down to expectations of lower economic activity (partially on the back of stronger fiscal consolidation measures) and profit margins, as well as of higher unemployment.

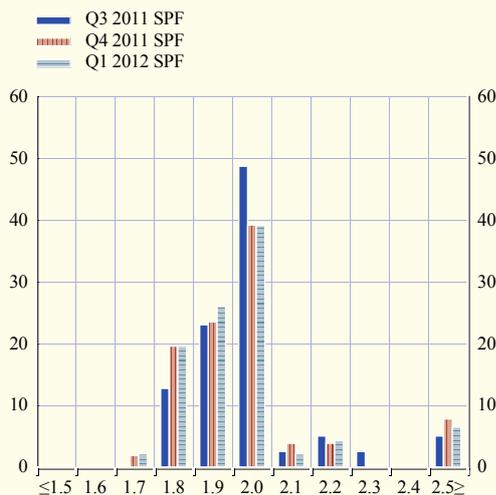
With regard to the risks to the inflation outlook, the aggregate probability distribution for 2012 has shifted towards somewhat higher outcomes compared with the previous survey round (see Chart A). The probabilities attached to the interval between 1.5% and 1.9% and between 2.0% and 2.4% are now more or less equal at slightly more than 30%, and the probability assigned to inflation being at 2% or above has increased from 35% to 44%. By contrast with 2012, the aggregate probability distribution for 2013 has shifted towards somewhat lower outcomes compared with the previous survey round, and the highest probability is now assigned more clearly to the interval between 1.5% and 1.9%.

Some respondents mentioned higher energy and commodity prices, as well as further increases in indirect taxes and administered prices, as upward risks to their baseline inflation forecasts, and a weaker than expected economic outlook as the main downside risk. Based on the individual probability distributions, the balance of risks to the shorter-term point forecasts is assessed to be on the downside for 2012 and broadly balanced for 2013.<sup>2</sup>

2 The balance of risks can be defined as being on the upside (downside) when fewer respondents report a point forecast above (below) the mean of their probability distribution than respondents reporting a point forecast below (above) the mean. The mean of the probability distribution is computed by assuming that the probability mass is concentrated in the interval mid-point.

**Chart B Cross-sectional distribution of longer-term (five years ahead) inflation point forecasts**

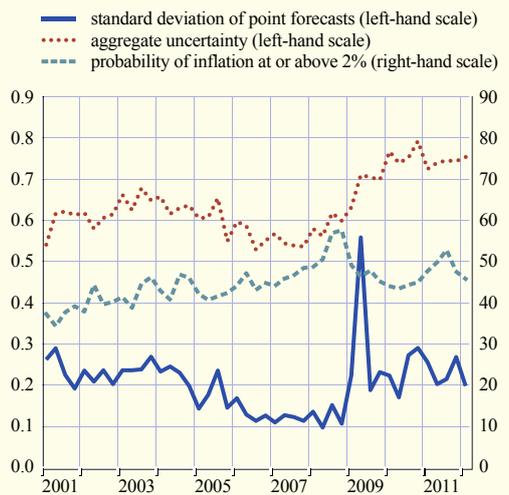
(percentage of respondents)



Source: ECB.

**Chart C Disagreement and uncertainty about longer-term inflation expectations**

(percentage points; percentages)



Source: ECB.

Note: Aggregate uncertainty is defined as the standard deviation of the aggregate probability distribution (assuming discrete probability density function with probability mass concentrated in the middle of the interval).

### Longer-term inflation expectations unchanged at 2.0%

The average point forecast for longer-term inflation remains at 2.0% for 2016. At two decimal places, expectations stand on average at 1.98%, down from 2.01% in the previous survey round. The median and the mode of the point forecasts are unchanged at 2.0%, and the share of respondents providing a point forecast of 2.0% is stable at around 40% (see Chart B). The longer-term inflation expectations are also broadly in line with the longer-term forecasts published in the October 2011 issue of *Consensus Economics* and the January 2012 issue of the *Euro Zone Barometer* (both for 2016).

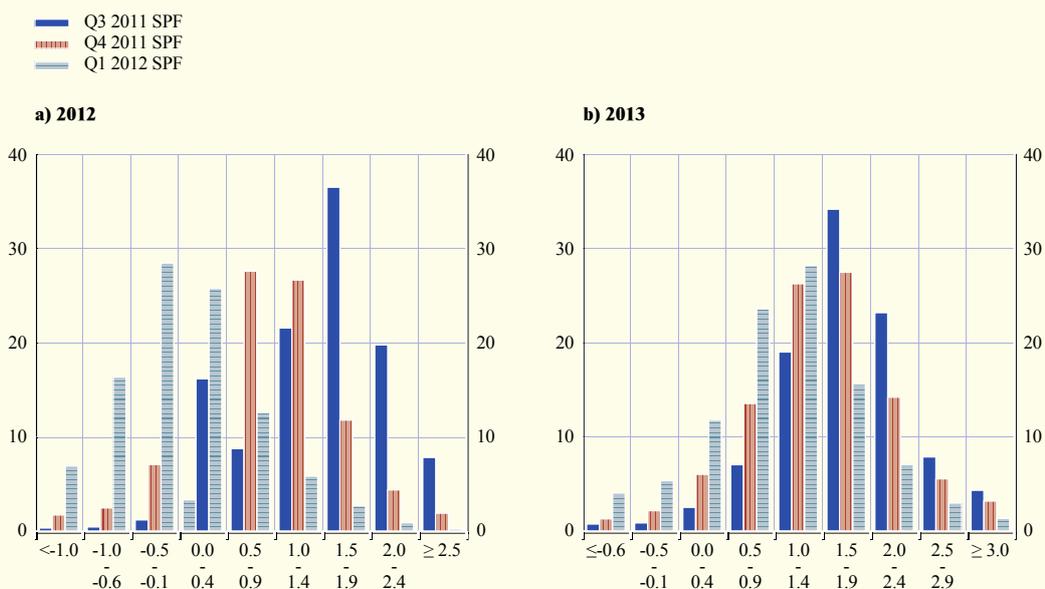
The aggregate probability distribution has shifted marginally towards lower outcomes compared with the previous survey round, with the probability of inflation being at or above 2.0% decreasing from 48% to 46%. As there is still a large number of respondents with a point forecast above the mean of their probability distribution, the balance of risks surrounding the average point forecast is assessed to be largely on the downside.

Disagreement about longer-term inflation expectations, as measured by the standard deviation of the point forecasts, decreased to 0.2 percentage point (from 0.3 percentage point in the previous survey round). Aggregate uncertainty surrounding longer-term inflation expectations, as measured by the standard deviation of the aggregate probability distribution, is stable at a relatively high level (see Chart C).<sup>3</sup>

<sup>3</sup> For a discussion regarding uncertainty measures, see the box entitled "Measuring perceptions of macroeconomic uncertainty", *Monthly Bulletin*, ECB, January 2010.

Chart D Aggregated probability distribution of GDP growth expectations for 2012 and 2013 in the latest SPF rounds

(probability in percentages)



Source: ECB.

Note: The aggregated probability distribution corresponds to the average of individual probability distributions provided by SPF forecasters.

### Real GDP growth expectations revised down significantly for both 2012 and 2013

According to the latest survey results, real GDP growth expectations stand at -0.1% for 2012 and at 1.1% for 2013. Compared with the latest corresponding forecasts of Consensus Economics and the Euro Zone Barometer, they are slightly higher for 2012, but broadly similar for 2013. They are also within the ranges reported in the December 2011 Eurosystem staff macroeconomic projections.

By comparison with the previous round of the SPF, GDP growth expectations have been revised down significantly, by 0.9 percentage point for 2012 and by 0.5 percentage point for 2013. Respondents attributed this more negative baseline outlook to additional fiscal consolidation measures in many euro area countries, a further tightening of credit conditions, lower confidence and a generally higher level of uncertainty.

The aggregate probability distributions for 2012 and 2013 have shifted noticeably towards lower outcomes. For 2012, in particular, respondents now assign a probability of 54% to the intervals between -0.5% and 0.4% (see Chart D). The main upside risk to the baseline outlook was quoted as being a credible solution to the sovereign debt crisis, while the main downside risk was a further worsening of the crisis. Other downside risks included further falls in confidence, higher levels of uncertainty and the possibility of more significant credit constraints. The balance of risks to the growth outlook is assessed to be on the upside for 2012 and on the downside for 2013.

Longer-term growth expectations (for 2016) stand at 1.8%, unchanged from the previous survey round. The balance of risks to this longer-term growth outlook is assessed to be largely on the downside. However, the aggregate probability distribution has not changed significantly from the previous round, with respondents still assigning a probability of around 30% to longer-term real GDP growth being within the interval between 1.5% and 1.9%.

### **Expectations for the unemployment rate revised up significantly for both 2012 and 2013**

Unemployment rate expectations stand at 10.6% for both 2012 and 2013. These forecasts are broadly in line with the latest Consensus Economics and Euro Zone Barometer forecasts. Compared with the previous round of the SPF, unemployment rate expectations have been revised up significantly, by 0.6 percentage point for 2012 and by 0.9 percentage point for 2013. According to respondents, these upward revisions were due mainly to downward revisions to expected economic activity.

With regard to the risks to this outlook, an escalation of the ongoing crisis, increased uncertainty and a worsening of financing were mentioned by respondents as the main upside risks, while the further implementation of, and the lagged effects of already implemented, structural reforms are quoted as downside risks. Comparing the point forecasts with the means of the probability distributions, the balance of risks is assessed to be slightly on the downside for 2012 and on the upside for 2013.

Longer-term unemployment rate expectations (for 2016) have increased to 8.8%, with the balance of risks assessed to be clearly on the upside. The aggregate probability distribution has shifted significantly towards higher outcomes.

### **Other variables and conditioning assumptions**

According to other information provided by respondents, both the assumptions for the EUR/USD exchange rate and the ECB's main refinancing rate have been revised down significantly. Oil price assumptions have moved upwards, while assumptions for growth in compensation per employee have remained unchanged. In particular, oil prices are now expected to stand at around USD 110 per barrel during 2012 and then to increase marginally in 2013. The EUR/USD exchange rate is expected to stand at around 1.28 in 2012, with the euro appreciating slightly at the end of the year. The ECB's main refinancing rate is expected to be 0.9% on average in 2012 and 1.0% on average in 2013. Finally, average annual growth in compensation per employee is expected to stabilise around 2.1% in 2012 and 2013, and to increase to 2.4% in the long term.

## 4 OUTPUT, DEMAND AND THE LABOUR MARKET

Real GDP growth, which slowed further to 0.1%, quarter on quarter, in the third quarter of 2011, is likely to have been very weak in the fourth quarter. According to survey data for the last two months, there are tentative signs of a stabilisation in economic activity at a low level. Looking ahead, the euro area economy is expected to recover very gradually in the course of 2012. The very low short-term interest rates and all the measures taken to foster the proper functioning of the euro area financial sector are lending support to the euro area economy. Moreover, stress in financial markets has diminished in response to the monetary policy measures taken, but also in response to the progress made towards a stronger euro area governance framework and intensified fiscal consolidation in several euro area countries. However, subdued global demand growth, the remaining tensions in euro area sovereign debt markets and their impact on credit conditions, as well as the process of balance sheet adjustment in the financial and non-financial sectors, continue to dampen the underlying growth momentum. This outlook is subject to downside risks.

### 4.1 REAL GDP AND DEMAND COMPONENTS

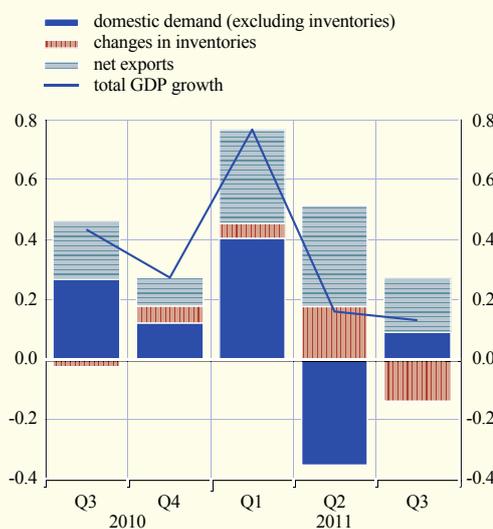
Real GDP growth in the euro area slowed further, to 0.1%, quarter on quarter, in the third quarter of 2011, following growth of 0.2% in the second quarter and 0.8% in the first (see Chart 27). Lower contributions from net trade and inventories more than offset a rise in private consumption growth. The level of output in the third quarter was still 1.7% below the peak recorded in the first quarter of 2008.

Following a contraction of 0.5% in the second quarter of 2011, private consumption growth turned positive again in the third quarter, rising by 0.2% on the quarter. This increase seems to be entirely explained by consumption of services, as both the volume of retail trade and car registrations declined between the second and third quarters.

As regards the fourth quarter of 2011, information on private consumption points to continued sluggish developments in consumer spending. The volume of retail sales declined again in December, leading to a quarterly decline of 0.7% in the fourth quarter of 2011. This represents a further deterioration compared with the previous quarter, when retail sales declined by 0.1%. At the same time, new passenger car registrations rose sharply in December, compared with the previous month. They increased by 1.3%, quarter on quarter, in the fourth quarter of 2011. This was an improvement on the third quarter, although the increase only slightly offset the slowdown in retail sales growth. Retail sector survey data point to continued weakness in consumption of retail goods at the beginning of 2012 (see Chart 28). The Purchasing Managers' Index (PMI) for retail trade, which stood below the theoretical no-growth threshold of 50 throughout the fourth quarter, declined further in January 2012,

Chart 27 Real GDP growth and contributions

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



Sources: Eurostat and ECB calculations.

reaching a 35-month low. However, euro area consumer confidence increased in January, according to the Directorate General for Economic and Financial Affairs (DG ECFIN), the first time it had done so since June 2011. Even so, both consumer confidence and the indicator for major purchases still remain at levels well below their long-term averages.

As in the second quarter, gross fixed capital formation declined by 0.1%, quarter on quarter, in the third quarter of 2011. With regard to the breakdown of investment in the third quarter, construction investment contracted by 0.9%, quarter on quarter, while non-construction investment rose by 0.8%.

Looking ahead, industrial production of capital goods (an indicator of future non-construction investment) rose by 0.3% in November, following an increase of 0.9% in October. The average level of capital goods production in these two months nonetheless stood 0.9% below that of the third quarter, which compares with

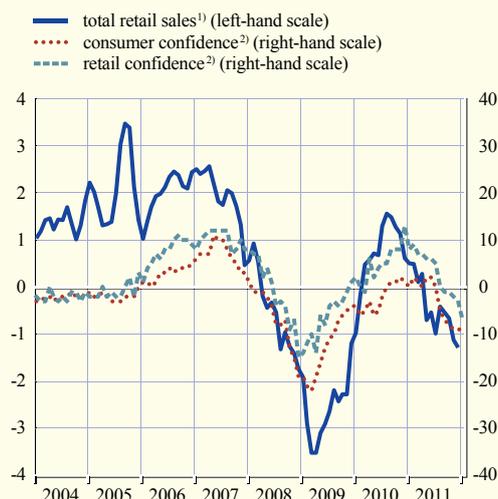
a quarter-on-quarter rise of 2.3% in the third quarter. The recent weakening was entirely due to a sharp fall in the production of capital goods in September. Survey results for the non-construction industrial sector from both the PMI and the European Commission's industrial confidence indicator point to a slowdown in investment activity in the fourth quarter of 2011, with some tentative signs of stabilisation towards the end of the year and in January 2012. At the same time, the European Commission's surveys indicate that capacity utilisation, which had declined for two consecutive three-month periods, rose somewhat in the three months to January 2012.

Construction investment is also likely to have remained weak in the fourth quarter. Euro area construction production rose by 0.7%, month on month, in November 2011, after a decline of 1.4% in the previous month. There are no signs of a recovery as yet. Financing constraints and ongoing housing market adjustments in a number of euro area countries may weigh on construction investment in the period ahead. Survey indicators confirm the picture of continued weak construction investment. For instance, the indicator on construction confidence published by the European Commission remains at levels below its historical average (data are available up to January 2012). Meanwhile, the PMI for construction in the euro area was, on average, well below 50 during the fourth quarter, pointing to further negative developments in that quarter.

Turning to trade flows, both imports and exports grew moderately in the third quarter of 2011. In the first two months of the fourth quarter, however, imports declined compared with the previous quarter, on account of weak domestic demand and the depreciation of the euro over the preceding few months. Exports also weakened over the same period, albeit to a lesser extent, in the face of continued weak foreign demand. Looking ahead, the PMI for new export orders in the euro area manufacturing sector improved markedly in January for the second consecutive month. While the

**Chart 28 Retail sales and confidence in the retail trade and household sectors**

(monthly data)



Sources: European Commission Business and Consumer Surveys and Eurostat.

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

2) Percentage balances; seasonally and mean-adjusted.

PMI remained below 50, tentative signs of stabilisation suggest that euro area export growth might have gradually resumed around the turn of the year.

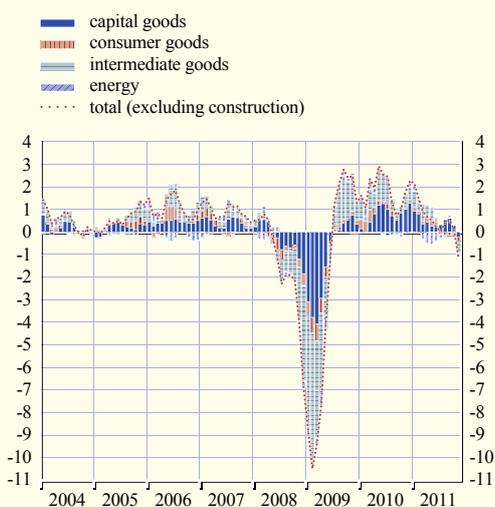
## 4.2 OUTPUT, SUPPLY AND LABOUR MARKET DEVELOPMENTS

Real value added increased by 0.1%, quarter on quarter, in the third quarter of 2011. Activity in industry (excluding construction) grew by 0.3%, while services activity increased by 0.1%. At the same time, value added in construction contracted by 0.5%, quarter on quarter.

With regard to developments in the fourth quarter, growth in industrial production (excluding construction) increased by 0.1% in November, following a decline of 0.2% in the previous month. The three-month percentage change, calculated on a three-month moving average of the index, declined from 0.1% in October to -1.1% in November (see Chart 29). This is the first time this measure has turned negative since the 2008-09 recession. It also represents a pronounced slowdown compared with the third quarter, when production rose by 0.5%, quarter on quarter. Meanwhile, euro area industrial new orders (excluding heavy transport equipment) declined by 0.5%, month on month, in November, following a slightly larger decline in October. The three-month-on-three-month rate of change for industrial new orders, which was -3.3% in October, declined further to -5.3%. Although more recent survey data confirm the picture of a weak fourth quarter, they also point to a slight improvement at the beginning of the first quarter of 2012. For example, the manufacturing output PMI increased in January for the second consecutive month, reaching a level consistent with positive growth for the first time since July 2011 (see Chart 30). At the same time, European

**Chart 29 Industrial production growth and contributions**

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



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

**Chart 30 Industrial production, industrial confidence and the manufacturing output PMI**

(monthly data; seasonally adjusted)



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

Commission survey data indicate that limits to production decreased somewhat in the three months to January 2012, moving towards the levels seen in the second and third quarters of 2011. This decline was mainly related to supply factors, such as more equipment and labour being available. The services PMI also rose above the no-growth threshold of 50 in January 2012, having been below it throughout the fourth quarter of 2011. Other business surveys, such as those of the European Commission, are broadly in line with developments in the PMI.

### LABOUR MARKET

Euro area labour markets have been weakening. While employment has been declining, the unemployment rate has edged upwards. Survey data anticipate further negative developments. Employment fell by 0.1%, quarter on quarter, in the third quarter of 2011, following positive growth in the previous two quarters (see Table 7). In contrast, hours worked rose by 0.1%, quarter on quarter, in the third quarter. At the sectoral level, on a quarter-on-quarter basis, the latest figures indicate that headcount employment in industry (excluding construction) and services remained stable between the second and third quarters, while employment in the construction sector declined sharply (by 1.6%).

Although GDP growth exceeded the increase in employment in the third quarter in terms of quarterly rates, annual growth in labour productivity per person employed slowed to 1.0%, down from 1.3% in the second quarter (see Chart 32). At the same time, annual growth in hourly labour productivity declined further (by 0.5 percentage point) to 0.8% in the third quarter. As regards the fourth quarter, the latest developments in the productivity PMI suggest a further decline in productivity growth.

The unemployment rate stood at 10.4% in December, unchanged from the previous month (see Chart 33). This is an increase of 0.5 percentage point compared with April 2011, when the unemployment rate started to edge upwards again. Survey indicators point towards continued negative employment developments in both industry and services in the fourth quarter of 2011 and

**Table 7 Employment growth**

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

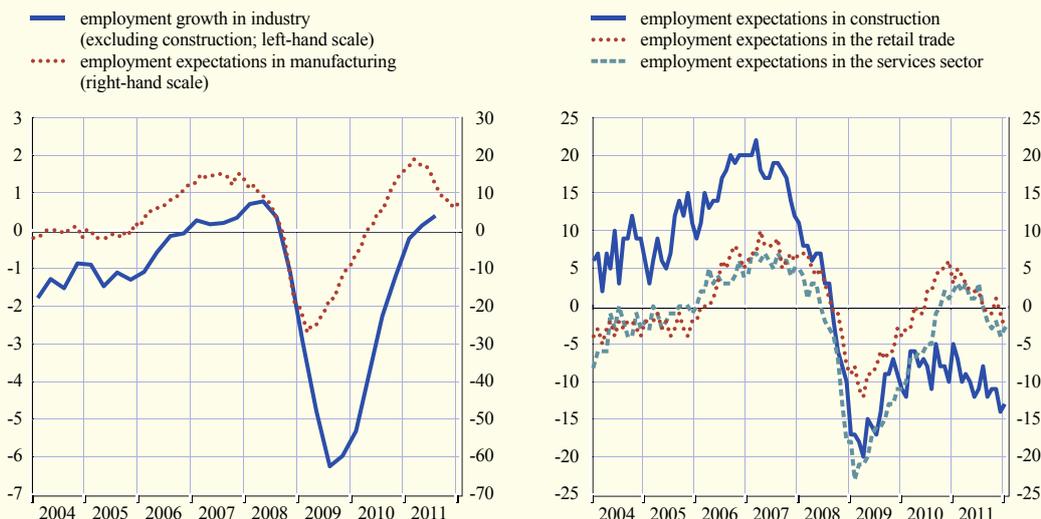
	Persons					Hours				
	Annual rates		Quarterly rates			Annual rates		Quarterly rates		
	2009	2010	2011 Q1	2011 Q2	2011 Q3	2009	2010	2011 Q1	2011 Q2	2011 Q3
Whole economy	-1.8	-0.5	0.1	0.2	-0.1	-3.4	0.0	0.6	-0.1	0.1
<i>of which:</i>										
Agriculture and fishing	-2.2	-0.9	-1.6	0.8	-1.0	-3.1	-0.7	-0.7	-0.4	-1.6
Industry	-5.6	-3.3	-0.2	0.0	-0.5	-8.7	-1.8	0.5	-0.4	-0.2
Excluding construction	-5.0	-3.2	0.2	0.1	0.0	-8.9	-0.9	0.7	-0.1	0.2
Construction	-6.8	-3.7	-1.2	-0.3	-1.6	-8.3	-3.6	0.2	-1.1	-1.1
Services	-0.5	0.4	0.2	0.3	0.0	-1.6	0.6	0.7	0.0	0.4
Trade and transport	-1.8	-0.7	0.0	0.5	0.2	-2.9	-0.3	0.5	0.2	0.6
Information and communication	-0.8	-1.0	1.0	0.3	-0.2	-1.3	-0.5	1.4	0.3	0.3
Finance and insurance	0.1	-0.8	0.5	-0.2	-0.1	-1.5	-0.3	1.1	-0.5	-0.3
Real estate activities	-2.7	-0.5	1.7	-0.5	-1.0	-3.7	0.9	1.0	-1.7	-0.1
Professional services	-2.5	1.8	0.9	0.9	-0.3	-3.8	2.5	1.5	0.3	0.2
Public administration	1.4	1.1	-0.2	-0.1	0.0	1.1	1.3	0.3	0.0	0.1
Other services <sup>1)</sup>	1.1	0.7	0.4	-0.1	0.2	-0.3	0.1	0.7	-0.7	1.4

Sources: Eurostat and ECB calculations.

1) Also includes household services, the arts and activities of extraterritorial organisations.

Chart 31 Employment growth and employment expectations

(annual percentage changes; percentage balances; seasonally adjusted)

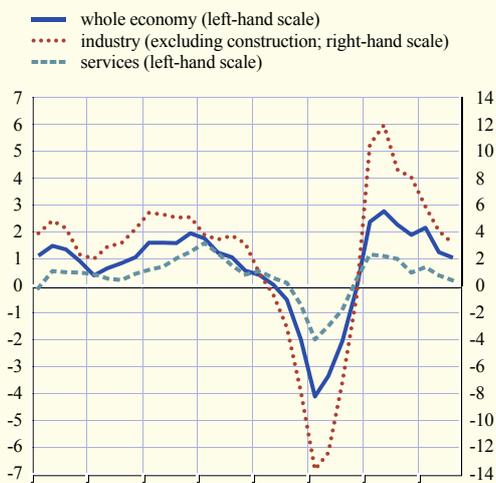


Sources: Eurostat and European Commission Business and Consumer Surveys.  
Notes: Percentage balances are mean-adjusted.

at the beginning of the first quarter of 2012 (see Chart 31). The latest data are in line with upward revisions to the unemployment rate expected for 2012 and 2013 in the Survey of Professional Forecasters (see Box 7 in Section 3).

Chart 32 Labour productivity per person employed

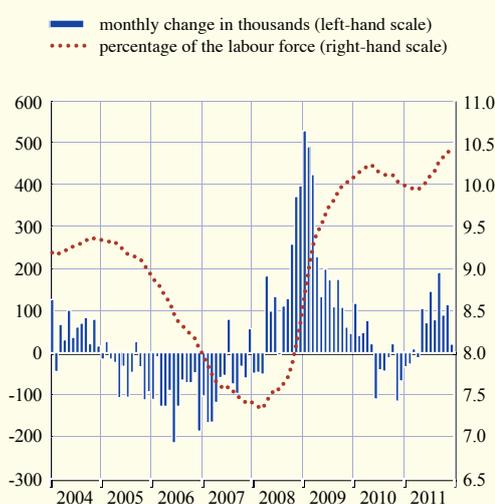
(annual percentage changes)



Sources: Eurostat and ECB calculations.

Chart 33 Unemployment

(monthly data; seasonally adjusted)



Source: Eurostat.

### 4.3 THE OUTLOOK FOR ECONOMIC ACTIVITY

Real GDP growth in the fourth quarter of 2011 is likely to have been very weak. According to survey data for the last two months, there are tentative signs of a stabilisation in economic activity at a low level. Looking ahead, the euro area economy is expected to recover very gradually in the course of 2012. The very low short-term interest rates and all the measures taken to foster the proper functioning of the euro area financial sector are lending support to the euro area economy. Moreover, stress in financial markets has diminished in response to the monetary policy measures taken, but also in response to the progress made towards a stronger euro area governance framework and intensified fiscal consolidation in several euro area countries. However, subdued global demand growth, the remaining tensions in euro area sovereign debt markets and their impact on credit conditions, as well as the process of balance sheet adjustment in the financial and non-financial sectors, continue to dampen the underlying growth momentum.

This outlook is subject to downside risks. They notably relate to tensions in euro area debt markets and their potential spillover to the euro area real economy. Downside risks also relate to possible adverse developments in the global economy, higher than assumed increases in commodity prices, protectionist pressures and the potential for a disorderly correction of global imbalances.

## ARTICLES

# MONEY AND CREDIT GROWTH AFTER ECONOMIC AND FINANCIAL CRISES – A HISTORICAL GLOBAL PERSPECTIVE



*Patterns in average money and credit growth around the time of past economic and financial crises represent a useful benchmark for the assessment of current and future developments in money, credit and output. This is especially true if a distinction is made between different types of recession, namely those which coincided with a financial crisis and those which did not. This article derives historical benchmarks for those types of recession and compares those stylised patterns with euro area data for recent years. Recent developments in euro area money and credit appear to be broadly in line with general patterns observed during recessions and recoveries in OECD economies since 1960 if the recent economic slowdown is compared with recessions accompanied by systemic banking crises. For example, broad money growth, narrow money growth and domestic credit growth typically diverge during such periods, with M1 growth typically leading the turnaround in the business cycle, broad money growth moving in line with the economic cycle (albeit being less pronounced during the downturn), and credit growth generally lagging behind the recovery in economic activity. Looking ahead, it is impossible to rule out some intensification in the interplay between euro area monetary and credit aggregates (with the potential for output to deviate from historical averages as a result), mainly owing to the simultaneous presence of various factors. The latter may be associated with: i) the unusually high levels of private and public sector indebtedness observed in recent years; ii) the interplay between the sovereign debt crisis, investors' concerns and pressure on banks' funding and capital in various European countries; and iii) the more pronounced manner in which the crisis has spread internationally.*

### I INTRODUCTION

The ECB regularly monitors monetary aggregates in order to gauge inflationary pressures in the medium to longer term within the context of the monetary pillar. For this purpose, it is useful to assess the various components and counterparts of monetary aggregates on the basis of their degree of persistence (with low-frequency and business cycle-frequency components potentially being of use here), as the role played by money in the economy varies according to a number of factors, including the stage of the business cycle. Thus, analysing patterns in broad money and its components and counterparts during a specific phase of the business cycle – i.e. a recession – can help us to understand the signals imparted by monetary developments. Such analysis not only provides insight into future developments in money growth, but also enables an assessment both of the extent to which current and future developments in monetary aggregates are likely to be temporary and of the corresponding impact on output and inflation.<sup>1</sup> Against this background, this article reviews recent developments in euro area broad money, its main component (i.e. narrow money) and its main counterpart (i.e. domestic credit), comparing these with

developments in a number of OECD countries around the time of a series of recessions since 1960.<sup>2</sup> Recent developments are compared with the general patterns observed both during and after previous recessions, and there is a specific focus on recessions which coincide with a systemic banking crisis, as these may well be the best point of reference as regards the recent crisis.

The recession experienced by the euro area and several other advanced economies in 2008 and 2009 was the most severe for several decades. In the euro area, it was the deepest recession since at least 1960 – with synthetic annual euro area aggregates with sufficient coverage unable to be constructed for periods prior to this date – and possibly even since the Great Depression (see Chart 1).<sup>3</sup> This economic downturn

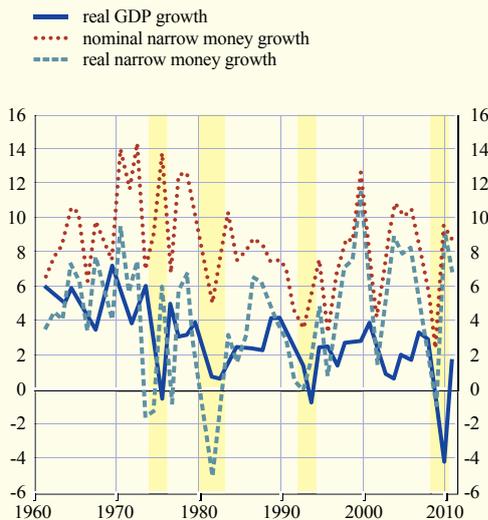
1 For further details on various aspects of the monetary analysis carried out by the ECB, see Papademos, L. and Stark, J. (eds.), *Enhancing monetary analysis*, ECB, 2010.

2 This article is based on data available for the period up to 15 January 2012.

3 For the period from 1995 to 2010, annual data on real euro area GDP are based on data from Eurostat (ESA 95). For the period from 1960 to 1994, Eurostat data are extended backwards using data from the European Commission (AMECO database). These series are euro area aggregates for the 12 countries comprising the euro area in 2002 (the largest euro area aggregate for which historical data for the entire period since 1960 can be found in official databases).

**Chart 1 Euro area real GDP and narrow money growth**

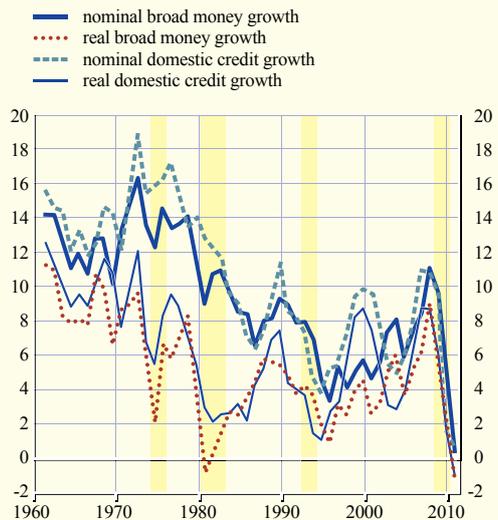
(annual percentage changes)



Sources: ECB, European Commission and ECB calculations.  
Note: Shaded areas denote euro area recessions as defined by the Euro Area Business Cycle Dating Committee of the Centre for Economic Policy Research.

**Chart 2 Euro area broad money and domestic credit growth**

(annual percentage changes)



Sources: ECB, European Commission and ECB calculations.  
Note: Shaded areas denote euro area recessions as defined by the Euro Area Business Cycle Dating Committee of the Centre for Economic Policy Research.

coincided with widespread tensions in financial markets and was linked to difficulties in the banking sector, the bursting of asset price bubbles and a slowdown in credit growth both in a considerable number of euro area countries and in several other advanced economies. The economic and financial crisis significantly affected the growth of money and credit. In 2010, for example, euro area broad money growth and domestic credit growth were the weakest they had been since at least 1960 in both real and nominal terms (see Chart 2).<sup>4</sup> Both in nominal and in real terms, narrow money growth declined markedly in 2008, before recovering, thereby confirming its leading indicator properties as regards turning points in real GDP growth. Similar developments were observed for several other advanced economies.

Despite the fact that the recent economic and financial crisis was, in some respects, unprecedented in the period since the Second World War, it is still possible to learn lessons by comparing those developments with other

recessions and financial crises in advanced economies over the past five decades. Indeed, the general patterns observed in past episodes sharing some similarities with the recent crisis may prove a useful point of reference as regards assessing the current behaviour of money and credit and gaining insight into their future development. Needless to say, every crisis has unique characteristics, something that should be borne in mind in order to avoid mechanically applying historical patterns to the current situation. Furthermore, it is important not only to assess historical regularities and any related uncertainty, but also to examine any factors which may imply deviations from these general patterns.

4 For the period from 1980 to 2010, annual data on euro area monetary and credit aggregates and consumer prices (which are used to deflate money and credit series) are based on data from the ECB. For the period from 1960 to 1979, ECB data are extended backwards using data from the European Commission (AMECO database). These series are euro area aggregates for the 12 countries comprising the euro area in 2002 (the largest euro area aggregate for which historical data for the entire period since 1960 can be found in official databases).

This article is organised as follows. Section 2 provides an overview of general developments in the growth of broad money, narrow money and domestic credit around the time of recessions in OECD countries from 1960 to 2010, with a specific focus on certain types of recession. Since this concerns short to medium-term developments in output, the main focus will be on monetary and credit aggregates expressed in real terms. Section 3 then discusses the main factors which can explain the various patterns observed in money and credit growth around the time of recessions. This section also highlights the specific factors that may potentially result in euro area money and credit growth deviating from historical averages. On the basis of the analysis presented, some broad conclusions are drawn in respect of any future recovery in euro area money and credit growth.

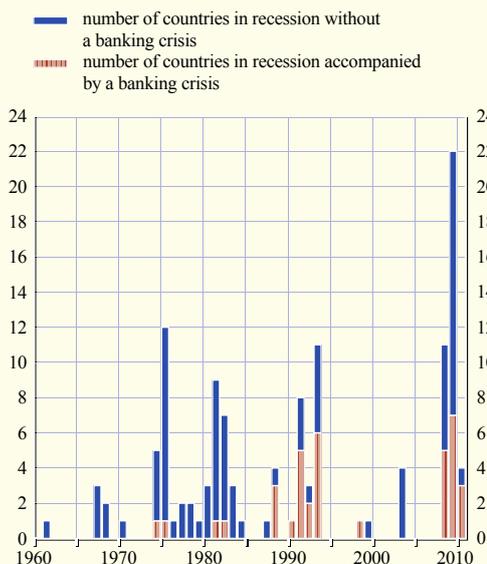
## 2 PATTERNS IN MONEY AND CREDIT GROWTH AROUND THE TIME OF CRISIS PERIODS

Recessions are a recurrent phenomenon in all advanced economies. This can be seen, for example, by applying a simple rule of thumb whereby recessions are defined as periods of one or more years of negative annual real GDP growth. This does not capture all recessions as they are typically defined, capturing only the more severe episodes. However, even using such a definition, countries with advanced economies for which historical data are available (in this case, 12 euro area countries and 11 other OECD countries) experienced 87 recessions between 1960 and 2010 (see Chart 3).<sup>5</sup> Those 87 recessions had an average duration of 1.4 years, which corresponds to an 11% probability of a country experiencing a recession in any given year.

Financial crises were also far from rare in that period. For example, according to a widely used chronology of banking crises,<sup>6</sup> the 23 OECD countries considered experienced 24 banking crises (i.e. periods of one or more years of banking crisis), which lasted four

Chart 3 Recessions and banking crises in OECD countries, 1960-2010

(number of countries)



Sources: ECB, European Commission and ECB calculations.  
Notes: 23 OECD countries are considered: 12 euro area countries and 11 other OECD countries (see footnote 5). For definitions of recessions and banking crises, see the main text and footnote 8.

years on average, implying a probability of around 8% of a country experiencing a banking crisis in any given year. In the sample under consideration, 23 episodes were characterised by both a recession and a banking crisis (i.e. with the banking crisis occurring either in the same year as the recession or in the years directly preceding or following it). According to the data, the time periods featuring widespread recessions and recessions accompanied by banking crises are the mid-1970s, the early 1980s, the early 1990s and the period from 2008 to 2010.

5 The following euro area countries are considered: Austria, Belgium, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal and Spain. The other OECD countries considered are: Australia, Canada, Denmark, Iceland, Japan, New Zealand, Norway, Sweden, Switzerland, the United Kingdom and the United States.

6 See Reinhart, C. and Rogoff, K., *This time is different. Eight centuries of financial folly*, Princeton University Press, Princeton, 2009 (particularly Data Appendix A.3).

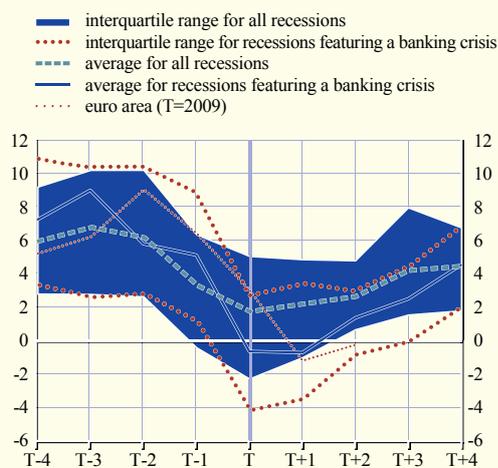
## AVERAGE BROAD MONEY GROWTH AROUND THE TIME OF CRISIS PERIODS

Broad money<sup>7</sup> growth tends to be a good leading indicator of consumer price inflation in the medium to longer term. However, business cycle-related developments in real broad money growth are also linked to real GDP growth. Indeed, at those frequencies, money demand is also influenced by portfolio considerations related to developments in economic activity. Experience in advanced economies over the past five decades suggests that, on average, real broad money growth tends to decline around recession periods in line with real GDP growth (albeit less markedly and remaining in positive territory; see Chart 4). Moreover, troughs in real broad money growth tend to coincide with those in real GDP growth, and recoveries in money growth following recessions tend to take place at a relatively moderate pace. The fact that real broad money growth moves in line with – but declines less strongly than – real GDP growth during recessions may reflect various factors, such as:

i) portfolio shifts towards more liquid and less risky instruments, with the aim of reducing portfolio risk or for precautionary purposes; and ii) the need to compensate for declines in disposable income growth and smooth consumption expenditure by reducing the amount of savings allocated to long-term financial investments. In the upswing, portfolio shifts into more risky assets might explain why broad money growth does not recover as strongly as output. The variability of real broad money growth tends to be significant around the time of recessions, as exemplified by the average difference of 6 percentage points between the upper and lower quartiles. Recent developments in euro area real M3 growth appear similar to those observed, on average, in previous recessions – albeit with growth continuing to decline in 2010, despite the recession having ended. Having said that, a delayed recovery of this kind appears typical of recessions accompanied by a banking crisis.<sup>8</sup> Accordingly, the slight recovery observed in euro area real broad money growth in 2011 was also broadly in line with previous recessions featuring a banking crisis.

**Chart 4 Average real broad money growth around the time of recessions and banking crises**

(annual percentage changes; percentage points)



Sources: ECB, European Commission, BIS, IMF, OECD and ECB calculations.

Notes: 23 OECD countries are considered: 12 euro area countries and 11 other OECD countries (see footnote 5). Averages are based on country data, so euro area aggregates are not included. Period "T" represents the first year of recession. For definitions of recessions and banking crises, see the main text and footnote 8. Euro area data for 2011 are estimates based on data up to the November of that year.

## AVERAGE NARROW MONEY GROWTH AROUND THE TIME OF CRISIS PERIODS

Growth in real narrow money,<sup>9</sup> M1, tends to be closely related to growth in real activity. However, while it is a less reliable indicator of the strength of real GDP growth, real M1 growth tends to be a good leading indicator of turning points in economic growth. Thus, while, for the

7 Broad money is approximated here by M3 or, where this is not possible, M2. These series are deflated using harmonised indices of consumer prices or, where this is not possible, consumer price indices. The principal data sources are the ECB and the European Commission (AMECO database), with missing data obtained from the BIS (BISM database), the IMF (IFS database) and the OECD (Economic Outlook database). Averages are based on country data, so do not include euro area aggregates.

8 Recessions accompanied by banking crises are defined as recessions (i.e. periods of one or more years of negative real GDP growth) featuring a banking crisis either during the recession or in the years directly preceding or following it. Using this definition, of the 87 recessions considered in the sample, 23 also saw a banking crisis, including 17 in the period before 2007. The evidence does not change significantly if averages exclude the recessions of 2008-10.

9 Narrow money is measured here by M1 for all countries. For data treatment and sources, see footnote 7.

sample under consideration, the average correlation between real narrow money growth and real GDP growth is significant, but not very substantial (23%), the informational content of real M1 growth just before and after recessions appears to be highly valuable. Indeed, it appears that, on average, real M1 growth tends to decline to levels close to zero in the year preceding a recession, before beginning to slowly recover in the first year of recession (see Chart 5). However, where recessions coincide with a banking crisis, real M1 growth generally tends to decline further in the first year of recession. This suggests that, on average, broad and narrow money growth tend to diverge during the first year of recession, although this is less likely where recessions feature a banking crisis. This divergence is likely to reflect the differing degrees of liquidity of the main components of broad money, with narrow money attracting funds in periods of heightened uncertainty at the

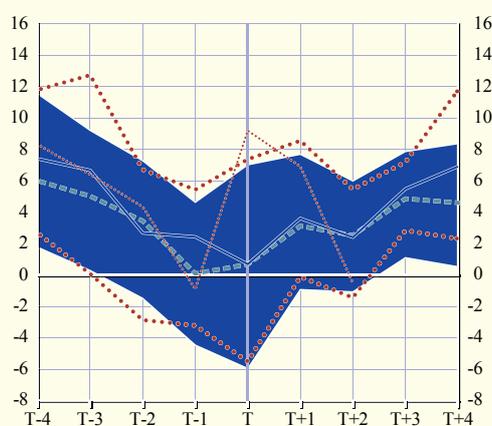
expense of other components (e.g. owing to the lower opportunity costs of holding currency and overnight deposits during such periods) and allowing faster action in terms of reallocating funds in response to changes to the economic outlook.

The variability of real narrow money growth around the time of recessions is clearly higher than that of real broad money growth, as indicated by the average difference of 9 percentage points between the upper and lower quartiles. Recent developments in euro area real M1 growth appear to have deviated somewhat from these general patterns, particularly with regard to the strong recovery observed in 2009 and its subsequent decline. These latest developments, to a large extent, do not conform to general historical patterns as regards the period following a recession – whether with or without a banking crisis. Consequently, such developments are probably linked to factors specific to the last few years, especially the particularly high degree of uncertainty and volatility.

**Chart 5 Average real narrow money growth around the time of recessions and banking crises**

(annual percentage changes; percentage points)

- interquartile range for all recessions
- interquartile range for recessions featuring a banking crisis
- average for all recessions
- average for recessions featuring a banking crisis
- ..... euro area (T=2009)



Sources: ECB, European Commission, BIS, IMF, OECD and ECB calculations.

Notes: 23 OECD countries are considered: 12 euro area countries and 11 other OECD countries (see footnote 5). Averages are based on country data, so euro area aggregates are not included. Period “T” represents the first year of recession. For definitions of recessions and banking crises, see the main text and footnote 8. Euro area data for 2011 are estimates based on data up to the November of that year.

#### AVERAGE DOMESTIC CREDIT GROWTH AROUND THE TIME OF CRISIS PERIODS

Real domestic credit growth<sup>10</sup> tends to be highly synchronised with real GDP growth and often appears to lag slightly behind turning points in the growth of real economic activity. This is confirmed by patterns in average domestic credit growth around the time of crisis periods in OECD countries over the past five decades. For example, real credit growth has tended to decline in the two years immediately preceding a recession and then decline further the following year, before recovering only gradually in

<sup>10</sup> Domestic credit is approximated here by loans issued by the banking sector to domestic residents other than banks. Historical data mainly concern credit, rather than just loans to residents (i.e. they include other forms of claim on the non-financial private sector, such as corporate bonds), so data on loan growth are extended backwards using data on domestic credit growth. These series are deflated using harmonised indices of consumer prices or, where this is not possible, consumer price indices. The principal data sources are the ECB, the BIS (BISM database) and the IMF (IFS database). Averages are based on country data, so euro area aggregates are not included.

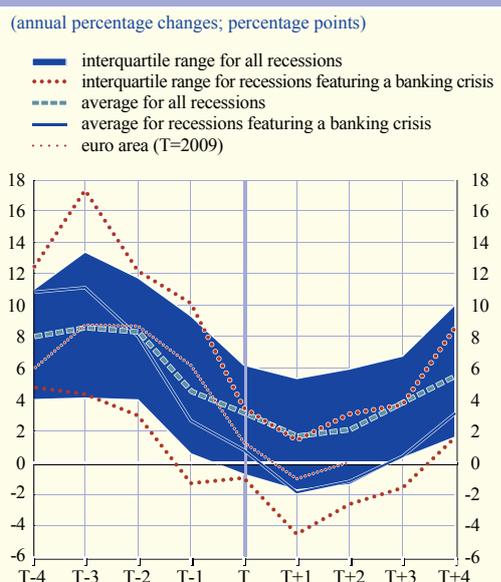
subsequent years (see Chart 6). Real credit growth generally tends to decline more markedly where recessions are accompanied by banking crises, even turning negative in the two years following the first year of recession. This indicates that broad money growth and its main counterpart (i.e. domestic credit growth) tend to diverge after the first year of recession. This is likely to reflect the “credit-less” recoveries which are often observed and can be linked to various factors. First, while broad money is supported by the aforementioned shifting of funds towards more liquid assets, banks may find it increasingly difficult to attract funds in capital markets. This, in turn, implies a tightening of their balance sheets, a reduction in loan supply and the need to pursue deleveraging during recessions (with deleveraging potentially extending into the initial recovery phase until the sustainability of the recovery becomes clear). Needless to say, these problems are more

severe in the case of recessions accompanied by a banking crisis, which are often characterised by a decline in total bank assets and a decrease in the size of banks’ loan portfolios (in real terms).<sup>11</sup> Second, in order to limit the share of non-performing loans (which tends to increase during recessions), and given asymmetric information problems such as adverse selection and moral hazard, banks may prefer to restrict the volume of loans granted, rather than predominantly adjusting lending rates. Third, in the initial phases of a recovery, non-financial corporations may favour using internal sources of funding, market-based funding and intra-company loans, in order to finance their investment needs, to contain their exposure to the banking system and to limit their indebtedness ratios.

As regards the degree of variability seen in real credit growth around the time of recessions, this appears relatively high compared with that of real broad money growth, and only slightly lower than that of real narrow money growth (the average difference between the upper and lower quartiles being 8 percentage points). Developments in euro area real domestic credit growth over the past few years are broadly in line with those observed in previous recessions accompanied by banking crises.

Overall, the following conclusions emerge from the evidence presented. On average, real broad money growth tends to move in line with real GDP growth around the time of a recession, while real narrow money growth tends to lead the turnaround in economic activity and real domestic credit growth tends to lag behind the business cycle. As a result, both the main component and the main counterpart of broad money have a tendency to diverge from M3 growth around the time of a recession and in the initial phases of a recovery. Such divergence has, to some extent, also been observed for certain notable historical episodes, such as the Great Depression in the United States and the “lost decade” in Japan

**Chart 6 Average real domestic credit growth around the time of recessions and banking crises**



Sources: ECB, European Commission, BIS, IMF, OECD and ECB calculations.  
 Notes: 23 OECD countries are considered: 12 euro area countries and 11 other OECD countries (see footnote 5). Averages are based on country data, so euro area aggregates are not included. Period “T” represents the first year of recession. For definitions of recessions and banking crises, see the main text and footnote 8. Euro area data for 2011 are estimates based on data up to the November of that year.

<sup>11</sup> See, for example, the evidence reported in Box 3 (“The banking sector during systemic crises: lessons from the past”) in the article entitled “The latest euro area recession in a historical context”, *Monthly Bulletin*, ECB, November 2009.

(which are considered in Boxes 1 and 2 respectively). The evidence presented in these two boxes also confirms the importance of any accompanying banking crisis in terms of the pattern of money and credit growth. Real narrow money growth and, to a lesser extent, real domestic credit growth tend to exhibit a much greater degree of variability than real broad

money growth around the time of recessions featuring a banking crisis. Recent developments in euro area monetary and credit aggregates tend to conform to these general patterns, particularly when recessions featuring banking crises are taken as a point of reference (albeit with the possible exception of real M1 growth, the volatility of which has been more marked than usual).

## Box 1

## MONEY AND CREDIT IN THE UNITED STATES DURING THE GREAT DEPRESSION

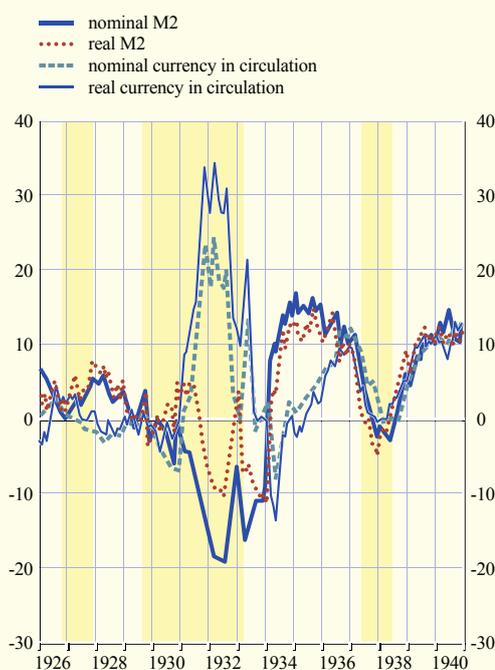
The severity and nature of the recent financial crisis have led several commentators to draw comparisons with the Great Depression in the United States in the 1930s. Focusing on money and credit developments in particular, two specific observations can be made. First, during the downturn (i.e. the period from 1929 to 1933), money and credit declined significantly: the collapse in credit was of a magnitude broadly similar to that seen in economic activity over the same period, while the contraction in money was more contained. Second, during the economic recovery, money and credit followed divergent paths. While money grew in line with economic activity, the level of credit bottomed out at a later stage and did not increase until the second half of the decade, with the economy experiencing a kind of “credit-less” recovery.

The Great Depression lasted for more than three and a half years. This severe downturn was accompanied by several banking crises (from 1930 to 1933) and a protracted period of deflation. The final banking crisis culminated in the proclamation of a week-long nationwide banking holiday in March 1933, after which the United States suspended the gold standard.

In both nominal and real terms, M2 experienced substantial declines during this episode. These declines persisted over a long period and were deep (with the annual rate of contraction reaching 20% in nominal terms and 10% in real terms), aggravated by a series of bank runs beginning in the autumn of 1930 (see Chart A). It was only after the banking holiday and the suspension of the gold standard that broad money recovered on a more sustainable basis.

Chart A Growth in US broad money and currency in circulation during the Great Depression

(annual percentage changes)



Sources: NBER, US Bureau of Labor Statistics and ECB calculations.

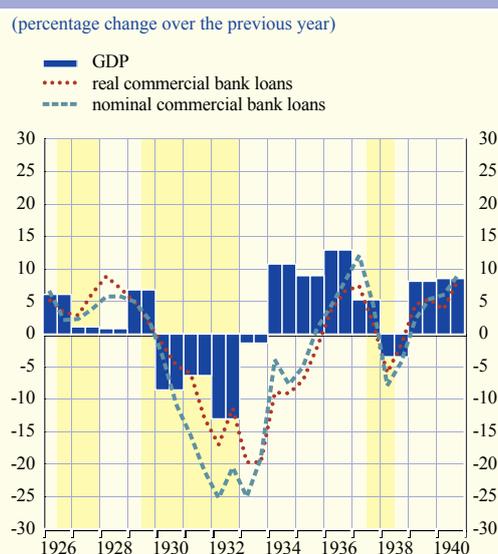
Notes: Monthly data for M2 and currency in circulation and real M2 and currency in circulation are deflated using the CPI index. Shaded areas denote periods of recession as defined by the NBER.

Broad and narrow money returned to their pre-Depression levels in 1936 – i.e. three years after the end of the recession. The decline in money reflected households’ conversion of deposits into cash during the bank runs, as can be seen from the increase observed in currency in circulation in the early 1930s. At the same time, demand and time deposits held with banks decreased in nominal terms and did not begin to recover until 1933. The stable money growth observed post-1933 coincided with the economic recovery and, according to Romer<sup>1</sup>, and Friedman and Schwartz,<sup>2</sup> was prompted by capital inflows from abroad, which, in turn, reflected the unstable political situation in Europe (which was on the brink of the Second World War) and the reintroduction of the gold standard in the United States in 1934.

Turning to credit developments, real credit experienced an unprecedented contraction, both in nominal and in real terms (see Chart B). Real credit growth began decelerating rapidly in 1929 and by mid-1930 had turned negative in line with the decline in output. While the contraction during the first year of the Great Depression was not unprecedented in scale, the credit situation worsened dramatically when the severe banking crises began in October 1930. Between 1931 and 1933 the contraction of credit accelerated, with annual rates in real terms ranging between 10% and 20%, and this negative trend continued beyond the end of the economic downturn. The rate of contraction did not moderate until 1934, and annual credit growth did not turn positive until 1936 – i.e. three years after the end of the Great Depression. By that time, the cumulative contraction relative to pre-Depression levels was almost 50%.

Several factors can explain the steep decline and slow recovery in credit. First, given the depth of the economic downturn, credit might simply have responded to the decline in aggregate output and demand. However, this does not adequately explain the continued contraction in credit following the start of the economic recovery. Second, credit developments can perhaps be explained by supply constraints arising from banks’ need to replenish their stock of information on borrowers, which is generally accumulated over time. This information was lost with the exceptionally large number of bank failures observed as of 1930, which ultimately saw the number of operating banks reduced by almost 50%. Changes in banks’ behaviour also played a role, as the prevailing uncertainty contributed to a precautionary rise in reserve-to-deposit ratios and an increase in banks’ preference for liquid assets, such as Treasury debt discountable at the Federal Reserve. The result was that a smaller share of banks’ available funds could be used to

**Chart B US credit growth during the Great Depression**



Sources: US Bureau of Economic Analysis, US Bureau of Labor Statistics and ECB calculations.  
Notes: Biannual data for credit are based on loan balances in June and December of each year. Real credit is deflated using the CPI index. Shaded areas denote periods of recession as defined by the NBER.

1 See Romer, Christina, “What ended the Great Depression?”, *The Journal of Economic History*, Vol. 52, No 4, 1992, pp. 757-784. She concludes that the surge observed in money supply (as measured by M1) could not be attributed to endogenous demand-driven adjustment, as neither the deposit-to-reserve ratio nor the deposit-to-currency ratio increased in the period between 1933 and 1940. Such changes are necessary conditions for an endogenous increase in M1, given a monetary base at a certain level.

2 See Friedman, M. and Schwartz, A., *A Monetary History of the United States, 1867-1960*, Princeton University Press, Princeton, 1963.

issue long-term, illiquid credit to private borrowers.<sup>3</sup> Finally, credit demand factors may also have played a role, as there may have been a desire to keep debt ratios at levels lower than those observed before the Great Depression.

In conclusion, the decline seen in money and credit during the Great Depression was dramatic. The recovery was sluggish, and in the case of credit, it was not completed for a very long time. The decoupling of money and credit in the recovery phase can be explained as follows. On the one hand, the developments in money reflected the gradual return of confidence in the stability of the banking system.<sup>4</sup> This was boosted by the economic recovery and benefited from large foreign capital inflows. On the other hand, the subdued credit developments can generally be explained by supply constraints arising from banks' need to replenish their stock of information on borrowers, which had been lost during the various banking crises, as well as banks' increased preference for assets perceived as being more liquid or having better risk characteristics.

<sup>3</sup> See Bernanke, Ben, "Non-Monetary Effects of the Financial Crisis in the Propagation of the Great Depression", *American Economic Review*, Vol. 73, No 3, 1983, pp. 257-276.

<sup>4</sup> Following the panic observed in the banking system in 1933, the United States introduced a number of measures to safeguard financial stability, including a permanent deposit insurance scheme.

## Box 2

### LESSONS FROM ASIA: MONEY AND CREDIT GROWTH IN JAPAN DURING AND AFTER THE "LOST DECADE" AND IN EMERGING ECONOMIES IN ASIA IN TIMES OF CRISIS

The crisis experienced by Japan during the 1990s (a period often referred to as its "lost decade") and the Asian crisis of 1997 to 1999 share some similarities with the recent economic and financial crisis in the euro area. Consequently, insight can be gained by comparing developments in money and credit growth during these two episodes. Accordingly, this box comprises two sections. The first considers money and credit growth in Japan during and after the lost decade, while the second discusses money and credit growth in emerging economies in Asia during the Asian crisis.

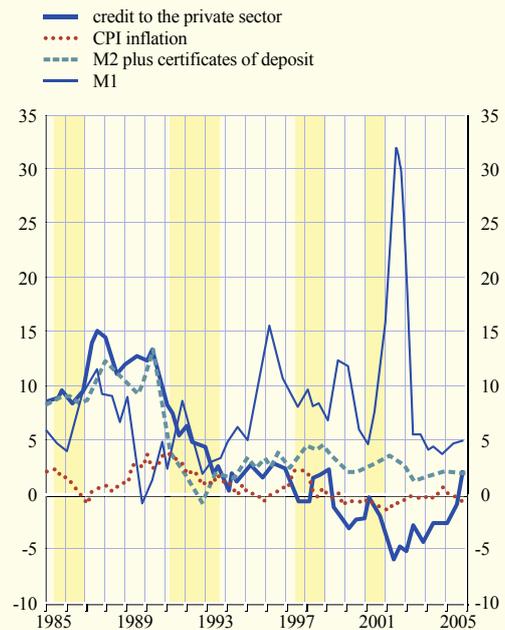
#### Money and credit during Japan's lost decade

This section documents three main observations regarding money and credit developments in Japan during the 1990s. First, the trend growth rates of money and credit fell dramatically following the collapse in stock and land prices in 1990 and 1991. Second, after initially moving in line with each other, money and credit growth began to diverge with the onset of the Asian crisis in 1997. While broader monetary aggregates continued to increase at a moderate but stable pace, the recovery in economic activity following the Asian crisis was not accompanied by growth in private sector credit, which contracted for almost an entire decade. Third, the moderate growth of broad money coincided with a strong expansion in narrow money and a surge in credit to the public sector. Japan's experience suggests both that money and credit growth may remain subdued for a prolonged period of time following financial turmoil and that credit growth in particular may remain weak while deficiencies continue to prevail in the banking system.

Two main arguments have been put forward in the literature to explain the decoupling of money and credit in Japan during the lost decade: the “credit crunch” and “liquidity trap” hypotheses. The credit crunch hypothesis stresses the delayed regulatory response and the importance of credit supply conditions for the divergence of money and credit growth. The sharp decline observed in stock and land prices in the early 1990s resulted in large losses for the corporate sector, as well as affecting companies’ creditworthiness by reducing the value of their collateral. However, this did not lead to an immediate reduction in credit. Banks continued to extend existing loans to troubled companies in order to limit defaults and loan write-offs (a process termed “zombie lending”<sup>1</sup>). In the absence of large deposit withdrawals during this period, banks had little incentive to clean up their balance sheets and instead tried to cover up problem loans. In turn, the outstanding stock of credit granted to the private sector initially remained broadly unchanged. Credit growth declined to almost zero and increased only modestly when the economy recovered in 1994 (see Chart A).

**Chart A Money and credit growth during and after Japan’s lost decade**

(annual percentage changes; quarterly data)



Sources: Bank of Japan, Japanese Cabinet Office, IMF and ECB calculations.  
Notes: Shaded areas denote periods of recession. Data are adjusted for inconsistencies between the Bank of Japan’s Monetary Survey and the IMF’s IFS statistics.

It was only after a series of bank failures in 1997 that the government tackled the problem of the non-performing loan overhang by introducing legislation that limited forbearance and forced the recapitalisation of weak banks. Many commentators have concluded that the protracted period of credit contraction that followed was a consequence of procrastination with regard to the cleaning-up of problem loans.<sup>2</sup> Indeed, empirical research finds that the loan losses resulting from prudential reforms in 1997 had a negative effect on banks’ capital buffers, which, in turn, limited their ability to extend credit to private companies.<sup>3</sup> Instead, banks increased their exposure to government debt, which carried a risk weight of zero and did not, therefore, imply any additional capital requirements.

By contrast, proponents of the liquidity trap hypothesis argue that the decoupling of narrow and broad money growth was the result of Japan falling into a situation where nominal interest

1 Caballero, R.J., Hoshi, T. and Kashyap, A.K., “Zombie Lending and Depressed Restructuring in Japan”, *American Economic Review*, Vol. 98, No 5, 2008, pp. 1943-1977.  
2 See, for instance, Sekine, T., “Firm Investment and Balance Sheet Problems in Japan”, *Working Paper Series*, No 99/111, IMF, Washington DC, 1999; Kanaya, A. and Woo, D., “The Japanese Banking Crisis of the 1990s: Sources and Lessons”, *Working Paper Series*, No 00/7, IMF, Washington DC, 2000; and Callen, T. and Ostry, J.D., *Japan’s Lost Decade. Policies for Economic Revival*, IMF, Washington DC, 2003.  
3 See, for instance, Watanabe, W., “Prudential Regulation and the ‘Credit Crunch’: Evidence from Japan”, *Journal of Money, Credit and Banking*, Vol. 39, No 2-3, 2007, pp. 639-665; and Woo, D., “In Search of the ‘Capital Crunch’: Supply Factors Behind the Credit Slowdown in Japan”, *Journal of Money, Credit and Banking*, Vol. 35, No 6 (Part 1), 2003, pp. 1019-1038.

rates were either at or close to zero and conventional monetary policies that increase the monetary base were rendered impotent, as base money and bonds become perfect substitutes for private investors.<sup>4</sup>

As of the mid-1990s, when interest rates approached zero, demand for money became disconnected from real economic developments. According to the liquidity trap hypothesis, this reflected an increase in precautionary demand for money amid financial instability and growing volumes of non-performing assets on banks' balance sheets.<sup>5</sup> Banks increasingly preferred liquid assets, which also began to be seen in the stronger growth of credit to the public sector (mainly via holdings of government bonds). Moreover, the zero lower bound constrained the central bank's ability to further promote private credit growth by lowering nominal interest rates, since real interest rates remained positive in the deflationary environment. Krugman<sup>6</sup> and Bernanke<sup>7</sup> argue that an earlier policy response could have helped to avoid the zero lower bound. As the persistent deflationary pressures in the economy did not disappear, the Bank of Japan eventually introduced non-conventional monetary policy measures between 2001 and 2006, conducting a policy of "quantitative easing".

### Money and credit in emerging economies in Asia in times of crisis

This section investigates the behaviour of monetary and credit aggregates in emerging economies in Asia during the Asian crisis of 1997 to 1999. Developments at this time are compared with the corresponding patterns during the global crisis that followed the collapse of Lehman Brothers in 2008. Although the two crises differ substantially in terms of their origins and the magnitude of the shocks involved, in both cases large capital outflows put pressure on domestic exchange rates, prompting balance of payments tensions. However, in 1997 and 1998 this was eventually associated with a banking crisis, whereas banks were much less affected in 2008 and 2009. Consequently, the emergence of a "twin crisis" – i.e. both a financial and an exchange rate crisis – led to a strong and prolonged decline both in real output and in the supply of credit to the private sector during the 1990s, as opposed to the milder contraction and faster recovery observed in recent years. The remainder of this section looks at differences between these two episodes in terms of the behaviour of monetary and credit aggregates.

A large withdrawal of funds from domestic financial markets marked the beginning of the Asian crisis of 1997 to 1999, a crisis ultimately precipitated by investors discovering that local banks were overexposed to underperforming assets. The subsequent political instability and uncertainty regarding the actual implementation of banking sector reforms resulted in markets overreacting and herding behaviour being displayed, leading to the sharp depreciation of currencies. The contraction in financial markets then led to a collapse in real GDP growth throughout the region.

In the third quarter of 2008 emerging Asian economies were also significantly affected by the global financial crisis that followed the collapse of Lehman Brothers. Deleveraging by global financial institutions and heightened risk aversion raised the cost of external financing in emerging

4 See Krugman, P., "It's baaack: Japan's slump and the return of the liquidity trap", *Brookings Papers on Economic Activity*, Vol. 29, No 2, 1998, pp. 137-206; and Bernanke, B., "Japanese Monetary Policy: A Case of Self-Induced Paralysis", in Mikitani, R. and Posen, A. (eds.), *Japan's financial crisis and its parallels to the US experience*, Institute for International Economics, Washington DC, 2000, pp.149-166.

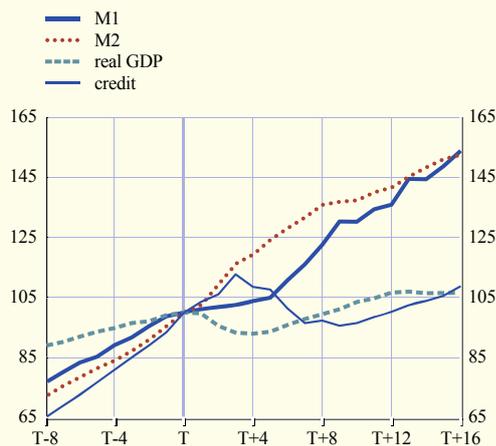
5 Iwata, K., *The role of money and monetary policy in Japan*, speech at the Fourth ECB Central Banking Conference on "The Role of Money: Money and Monetary Policy in the Twenty-First Century", Frankfurt am Main, 9-10 November 2006.

6 See the paper referred to in footnote 4.

7 See the paper referred to in footnote 4.

**Chart B Developments in money and credit growth around the time of the Asian crisis of 1997 to 1999**

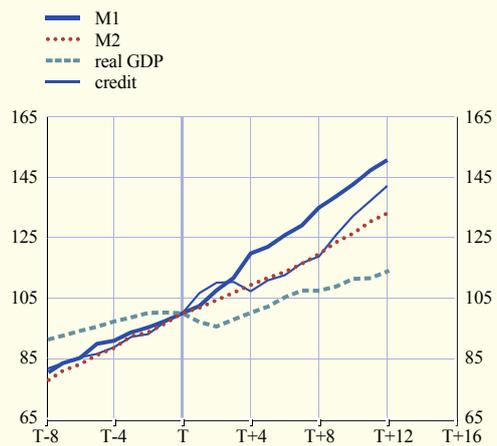
(index: T=100; quarterly averages)



Source: Haver Analytics.  
Notes: Data are for Hong Kong SAR, Indonesia, Malaysia, the Philippines, South Korea and Thailand. "T" represents the third quarter of 1997.

**Chart C Developments in money and credit growth around the time of the collapse of Lehman Brothers in 2008**

(index: T=100; quarterly averages)



Source: Haver Analytics.  
Notes: Data are for Hong Kong SAR, Indonesia, Malaysia, the Philippines, South Korea and Thailand. "T" represents the third quarter of 2008.

markets and reduced its availability. Between the end of August and the end of November 2008, equity prices fell and the cost of credit default swaps increased throughout the region, indicating an increase in investors' perception of risk; exchange rates declined somewhat against the US dollar, but a full-blown balance of payments crisis did not develop. Moreover, thanks to proactive policy measures and sound fundamentals, output swiftly returned to pre-crisis levels.

Charts B and C show the general evolution of key monetary variables for a number of emerging Asian economies over a six-year period around the time of the Asian crisis and the collapse of Lehman Brothers in 2008. Overall, the Asian crisis had a greater impact on monetary developments in the economies selected. Domestic credit (defined as claims on the private sector) increased initially in the aftermath of both crises, yet the subsequent peak-to-trough decline during the Asian crisis was much more severe. Moreover, domestic credit did not return to pre-crisis levels until 12 quarters after the 1997 shock, whereas, with the exception of one single quarter (i.e. the third quarter of 2009), it maintained its upward trajectory following the collapse of Lehman Brothers. Meanwhile, narrow money (i.e. M1) increased more rapidly in the first four quarters after the Asian crisis broke out, before growing at a more subdued pace in the period immediately after the crisis; developments in M1 after the collapse of Lehman Brothers in 2008 were similar, albeit less striking. At the same time, there is no significant difference between the two crises in terms of the behaviour of broad money (i.e. M2). By contrast, real GDP did not return to pre-crisis levels until three years after the outbreak of the Asian crisis, as opposed to five quarters after the collapse of Lehman Brothers.

Despite differences in terms of the origins and magnitudes of the two shocks, the heterogeneous impact of these two crises on money and credit growth can, to a large extent, be explained by the significantly weaker banking system in emerging Asian economies in the late 1990s and the constrained political environment at that time. In that crisis, the Asian banking system as a whole was highly vulnerable to external short-term funding pressures; moreover, the majority

of banks had invested too heavily in risky and poorly performing projects.<sup>8</sup> In addition, the monetary and interest rate policies of governments which had entered into IMF programmes were constrained by tight limits and conditions. On the other hand, in 2008 and the years that followed, governments were able to counter the external turmoil by easing monetary and fiscal policy in the presence of much improved fundamentals, benefiting from the restructuring and strengthening of banking systems that had taken place in the previous decade.

8 Corsetti, G., Pesenti, P. and Roubini, N., “What Caused the Asian Currency and Financial Crisis?”, *Japan and the World Economy*, Vol. 11, No 3, 1998, pp. 305-373.

### 3 MAIN FACTORS DRIVING MONEY AND CREDIT GROWTH AROUND THE TIME OF CRISIS PERIODS

Several factors account for the divergence of money and credit growth around the time of economic and financial crises in advanced economies. This section will review some of the main factors, as well as discuss factors which may be unique to recent years and thus imply possible deviations from historical averages.

#### APPROXIMATE CAUSES AND PROPAGATION CHANNELS OF CRISES

Developments in monetary and credit aggregates around the time of recessions are likely to be determined by the approximate causes and principal propagation channels underlying an economic crisis. More specifically, the role played by financial factors in precipitating and propagating a crisis is likely to be of key importance in assessing developments in money and credit growth. Accordingly, there is a large body of economic literature considering the role of money and credit during recessions and financial crises from a historical perspective.<sup>12</sup> A key finding is that major global economic and financial crises are often preceded by high levels of money and credit growth (typically triggered by overly optimistic expectations of strong economic growth) and accompanied by macroeconomic imbalances such as budget or current account deficits, leading to an abundance of liquidity. In order to benefit from and participate in ongoing booms, market participants have an incentive to focus on short-term capital gains, which increasingly become

decoupled from real productivity gains. A boom suddenly transforms into a bust when confidence in debtors’ ability to honour their financial obligations is jolted or evaporates completely. As a consequence, asset prices drop sharply, the value of securities decreases significantly (or is erased entirely), and financial markets freeze up, partly fail or collapse completely.<sup>13</sup> At a macroeconomic level, interaction between asset prices and money and credit takes place through a variety of channels. For example, asset price booms and busts affect demand for money, as the returns on various assets determine money holdings in the context of a broader portfolio allocation problem. Moreover, credit dynamics are affected by asset price booms and busts – e.g. via the balance sheets of non-financial corporations and households or other channels. More precisely, the borrowing constraints faced by such agents (arising from asymmetric information problems in credit markets) tighten when, following an asset

12 Literature on the role of money and credit in the macroeconomy over the business cycle ranges from the contributions of Irving Fisher (e.g. “The Debt-Deflation Theory of Great Depressions”, *Econometrica*, Vol. 1, No 4, 1933, pp. 337-357), who discusses the role of monetary factors and debt deflation in propagating downturns, to those of Friedman and Schwartz, and Bernanke (see the publications referred to in footnotes 2 and 3 respectively in Box 1), who consider the role of money and credit in the Great Depression in the United States. For a more recent discussion of the role of money and credit in the macroeconomy, see the publication referred to in footnote 1 (particularly Chapter 1) and Freixas, X. and Rochet, J.-C., *Microeconomics of Banking*, MIT Press, 2008 (particularly Chapter 6), respectively.

13 See, for example, Kindleberger, C. and Aliber, R., *Manias, Panics, and Crashes: A History of Financial Crises*, Palgrave Macmillan, 2005, which provides detailed historical analysis of the role played by monetary and credit factors in financial crises, and the publication referred to in footnote 6, which looks in detail at the role played by debt in precipitating and propagating financial crises.

price bust, their net worth decreases, thereby lowering the value of the collateral against which loans can be secured.<sup>14</sup>

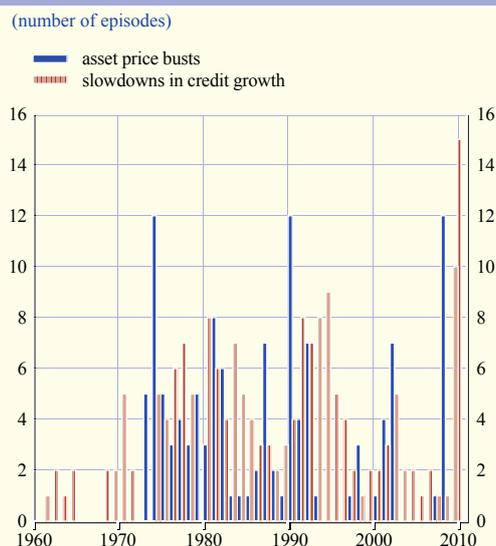
The period since the Second World War has witnessed unprecedented expansion in the financial sector. This has coincided with important changes, such as the financial innovation, the easing of financial regulation and the financial globalisation observed in recent decades, particularly prior to the outbreak of the recent financial crisis.<sup>15</sup> As a result, along with several benefits, such as increased availability of credit to households and firms for consumption and investment purposes, these changes have also increased the importance of the financial sector, both as a source of instability and as a propagator of shocks originating elsewhere in the economy.

Evidence suggests that most of the recessions experienced in OECD economies since 1960 (i.e. the mid-1970s, the early 1980s, the early 1990s and the period from 2008 to 2010, as indicated in Chart 3) were also accompanied by financial crises spanning several countries. For example, as already shown, in a number of countries the recessions of the early 1990s and 2008-10 also featured a systemic banking crisis. Furthermore, there have also been waves in which asset price bubbles have burst<sup>16</sup> and credit growth has slowed,<sup>17</sup> and these have tended to overlap with recessions (although they have also occurred at other times, such as the early 2000s; see Chart 7).<sup>18</sup>

Overall, the most far-reaching economic crises have been accompanied by some form of financial crisis unfolding in several countries simultaneously. Thus, it is not surprising that marked fluctuations in money and credit growth are observed around the time of most recessions. However, the past few years have been characterised by a deeper and more widespread economic and financial crisis.

The role played by the financial sector in originating and propagating the most recent crisis is undisputed and is associated, for

**Chart 7 Asset price busts and slowdowns in credit growth**



Sources: European Commission, Eurostat, IMF, OECD and ECB calculations.  
 Notes: 23 OECD countries are considered: 12 euro area countries and 11 other OECD countries (see footnote 5). For definitions of asset price busts and slowdowns in credit growth, see the main text and footnotes 16 and 17. Data on asset price busts are available only for the period from 1970 to 2008.

example, with bubbles in housing and mortgage markets and fundamental changes in the banking system (such as the expansion of securitisation

14 See the publication referred to in footnote 1 (particularly Chapter 6) for a more detailed overview of the channels linking asset prices, money and credit.

15 See, for example, Schularick, M. and Taylor, A., "Credit booms gone bust: monetary policy, leverage cycles and financial crises, 1870-2008", *NBER Working Paper Series*, No 15512, NBER, November 2009.

16 Asset price busts are identified for 17 OECD economies between 1970 and 2008 in Gerdesmeier, D., Reimers, H.E. and Roffia, B., "Asset price misalignments and the role of money and credit", *Working Paper Series*, No 1068, ECB, July 2009. The results are broadly similar if one uses the chronology (for 18 OECD economies between 1970 and 2007) in Alessi, L. and Detken, C., "Quasi real time early warning indicators for costly asset price boom/bust cycles: a role for global liquidity", *European Journal of Political Economy*, Vol. 27, No 3, 2011, pp.520-533.

17 Slowdowns in credit growth are defined here as periods when the growth rate of real domestic credit is negative.

18 For more evidence on the linkages between recessions and financial crises, see also: Claessens, S., Kose, M.A. and Terrones, M., "What happens during recessions, crunches and busts?", *Economic Policy*, Vol. 24, No 60, October 2009, pp. 653-700; and Claessens, S., Kose, M.A. and Terrones, M., "How do the business and financial cycles interact?", *Working Paper Series*, No 11/88, IMF, Washington DC, April 2011. These authors conclude that the interaction between macroeconomic and financial variables plays a key role in determining the severity and duration of recessions.

markets).<sup>19</sup> Looking ahead, the unprecedented role played by banking and credit markets in recent crises, at least as regards the period since the Second World War, suggests that the possibility of euro area money and credit growth deviating from historical averages cannot be ruled out. One particular feature of recent years is the historically very high levels of indebtedness on the part of both the private and public sector in most OECD countries.<sup>20</sup> This suggests that, following a recession, one might expect the recovery in credit growth to be weaker than usual, as economic agents may attempt – or be forced – to limit their indebtedness in order to prevent it from reaching unsustainable levels. This may, therefore, signal a need for more drastic restructuring, which could delay a more dynamic recovery in real GDP in several advanced economies, including the euro area. Thus, weaker credit growth is likely to affect economic activity, which, owing to structural factors, will also have a dampening effect on money and credit growth for a prolonged period of time.

### INTERNATIONAL DIMENSION OF CRISES

The international dimension is also likely to be an important aspect in explaining money and credit growth around the time of recessions and banking crises. Of course, the severity, propagation and duration of economic and financial turmoil will be amplified in the case of a widespread international crisis that results in negative spillovers for the domestic economy and offers little scope for taking advantage of economic expansion abroad.

The analysis presented above suggests that several episodes have seen crises experienced by a number of economies simultaneously. Another aspect which is of relevance here is the fact that systemic events in the global economy (particularly in major economies) have, over the past 50 years, been more frequent in times of relatively strong growth in global liquidity, as measured by the rates of growth of global monetary and credit aggregates. Thus, to the extent that liquidity conditions in

major advanced economies are increasingly interrelated, and given the increasingly integrated nature of global financial markets, global liquidity conditions can have important implications for domestic economies and need to be taken into account.

Developments in real broad money growth around the time of recessions have tended to vary depending on whether global liquidity levels are relatively moderate or abundant. In the case of the former, there is only a mild, short-lived moderation in real broad money growth, while in the case of the latter, there is a protracted decline in real broad money growth during the recovery. Developments in the euro area during and after the recent recession are broadly in line with patterns observed in the presence of abundant global liquidity (see Chart 8),<sup>21</sup> and similar evidence can be found for real domestic credit growth. Such evidence is consistent with the view that global liquidity reached buoyant levels before the recession, with a significant correction taking place only after 2009.

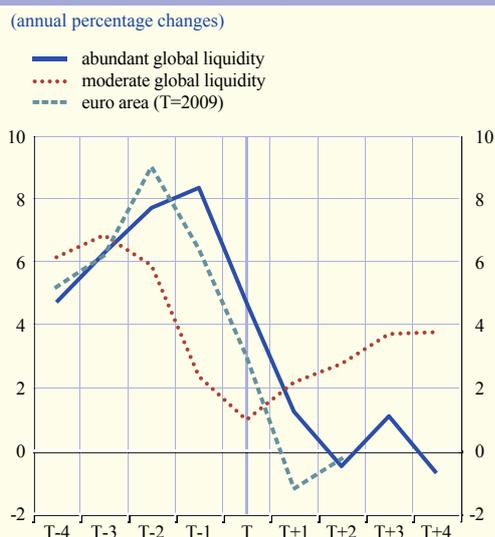
The reason why developments in money and credit vary depending on the level of global liquidity is that global liquidity conditions, international capital flows and domestic money and credit are directly linked through various channels, as captured by the balance of payments and its monetary presentation. First, international capital flows, which include transactions with the domestic

19 See, for example, Brunnermeier, M., “Deciphering the liquidity and credit crunch 2007-2008”, *Journal of Economic Perspectives*, Vol. 23, No 1, 2009, pp. 77-100.

20 See Reinhart, C. and Rogoff, K., “A Decade of Debt”, *NBER Working Paper Series*, No 16827, NBER, February 2011. The authors demonstrate that in recent years the public debt of advanced economies has reached levels not witnessed since the end of the Second World War, standing at levels even higher than those observed during the First World War and the Great Depression. The same applies to private debt levels. Reinhart and Rogoff’s results underline that, as an empirical regularity, historical highs in terms of leverage have very often been associated with slower economic growth.

21 For the purposes of this analysis, abundant global liquidity is defined as global broad money growth and global domestic credit growth above the 66th percentile. Growth below this threshold is classified as moderate global liquidity.

**Chart 8 Average real broad money growth around the time of recessions featuring abundant and moderate global liquidity**



Sources: ECB, European Commission, BIS, IMF, OECD and ECB calculations.

Notes: 23 OECD countries are considered: 12 euro area countries and 11 other OECD countries (see footnote 5). Period “T” represents the first year of recession. For definitions of abundant and moderate global liquidity, see footnote 21.

money-holding sector (including securities issued by this sector) which are settled via the resident banking sector, lead to changes both in banks’ net external asset position and, often, in the overall stock of money. Thus, capital inflows can, under certain circumstances, contribute to growth in domestic monetary aggregates and, at times, to excessive money growth. Similarly, capital outflows can constrain the availability of money – and ultimately credit – in the domestic economy, with adverse consequences for the financial sector and the real economy. In fact, there is some related evidence suggesting that, on average, countries which were net importers of capital prior to a recession experience a sharper decline in their stock of money than those that were net exporters of capital. Second, the availability of cross-border finance can have a direct impact on domestic credit over and above that implied by domestic monetary conditions. Indeed, cross-border interbank lending is one channel through which the domestic banking system can extend credit above and beyond the limitations established by the available pool of domestic funding.

This helps to explain why the dynamics of credit growth are likely to be more pronounced than those of money around the time of crisis periods.

Overall, the international dimension is an important aspect when assessing patterns in money and credit growth around the time of crisis periods. Indeed, the international dimension of the recent crisis is undoubtedly highly significant, though by no means unprecedented among OECD countries given the demise of the Bretton Woods system and the progressive liberalisation of global capital flows in the 1970s.<sup>22</sup> That being said, this particular crisis has been the most internationally widespread since the Second World War, indicating that this factor may also be a source of deviation from historical averages.

## ECONOMIC POLICIES AND OTHER FACTORS

As the severity of the recent economic and financial crisis has been unprecedented, at least since the Second World War, policy-makers in several advanced economies have implemented some equally unprecedented economic policy measures. Certain measures have been aimed specifically at supporting domestic credit growth, which is considered to be an important aspect of the recovery. With domestic credit being the main counterpart of broad money, this has also affected developments in monetary aggregates. Unparalleled economic policy measures, including non-standard monetary policy measures, are likely to account for the fact that euro area money and credit growth has not deviated significantly from historical averages for crisis periods over the past three to four years. For example, the ECB’s non-standard monetary policy measures have been instrumental in supporting the euro area banking system, considerably improving the liquidity situation. There is also some evidence suggesting that these measures have helped to prevent a

<sup>22</sup> It should be noted that, since most of the crises in the sample considered coincide with an absence of capital controls, it is difficult to assess the impact that such controls have on money and credit dynamics around the time of crisis periods.

significant decline in monetary and credit aggregates, thereby hindering feedback loops with potentially negative consequences for macroeconomic variables.<sup>23</sup>

At the same time, important sources of uncertainty remain. For example, there is uncertainty in respect of the duration and impact of the sovereign debt crisis in certain European countries, as well as regarding the solidity of bank balance sheets in several OECD countries. This uncertainty is likely to have precipitated increased risk aversion on the part of economic agents and contributed to increased volatility in monetary flows in recent years. Such risk aversion leads to expansion in narrow money – and, to some extent, broad money – while credit growth remains contained. Thus, these factors may account for deviations from historical averages. Indeed, it is likely to be these factors that lie behind the unusually large fluctuations observed in real narrow money in 2009 and 2010.

#### 4 CONCLUSION

Patterns in average money and credit growth around the time of past economic and financial crises may provide a useful benchmark for the assessment of current and future developments in money, credit and output. This article has presented evidence showing that such benchmarks need to distinguish between different types of recession, namely by drawing a distinction between those which coincided with a financial crisis and those which did not. This demonstrates the significant interplay between money, credit and output, particularly during such periods. Recent developments in euro area money and credit growth appear to be broadly in line with general patterns observed during previous recessions and recoveries if the recent economic slowdown is compared with recessions accompanied by systemic banking crises. Indeed, the slow recovery observed in broad money growth and domestic credit growth in 2011 is in line with the modest recovery seen in economic activity in 2010 and 2011 following the severe recession in 2008 and 2009. The slow

recovery in monetary and credit aggregates is also likely to reflect the correction of excess growth accumulated prior to the crisis. Moreover, broad money growth, narrow money growth and domestic credit growth typically diverge during such periods, with M1 growth typically leading the turnaround in the business cycle, broad money growth moving in line with the economic cycle (albeit being less pronounced during the downturn) and credit growth generally lagging behind the recovery in economic activity. While recent euro area developments largely conform to these regularities, narrow money growth has fluctuated more markedly than usual in recent years (i.e. compared with typical developments around the time of economic and financial crises), possibly reflecting the exceptionally high levels of volatility and uncertainty observed in the euro area in recent years.

Looking ahead, it is impossible to rule out some intensification in the interplay between euro area monetary and credit aggregates (with the potential for output to deviate from historical averages as a result), mainly owing to the simultaneous presence of various factors. The latter may be associated with: i) the unusually high levels of private and public sector indebtedness observed in recent years; ii) the interplay between the sovereign debt crisis, investors concerns' and pressure on banks' funding and capital in various European countries; and iii) the more pronounced manner in which the crisis has spread internationally.

<sup>23</sup> For evidence on the impact on monetary and credit aggregates, see the article entitled "The ECB's non-standard measures – impact and phasing-out", *Monthly Bulletin*, ECB, July 2011 (particularly Box 2).



## CORPORATE INDEBTEDNESS IN THE EURO AREA

*Since the second half of 2009 the debt ratios of non-financial corporations have gradually declined from the high levels of indebtedness accumulated previously. This occurred in an environment that changed with the outbreak of the financial crisis in the late summer of 2007 and is characterised by substantially increased credit risk and risk aversion, as well as stronger debt sustainability concerns in general. The ratio of debt to total assets of non-financial corporations has declined somewhat, from 46% in the second quarter of 2009 to 43% in the first quarter of 2011, stabilising in the second quarter.<sup>1</sup>*

*The gradual decline in debt ratios reflects both demand and supply-side factors affecting credit to the corporate sector. As regards the demand side, lower levels of economic activity and, in particular, weaker capital formation, as well as a higher propensity to retain earnings have contributed to firms' reduced need for external financing. On the supply side, the tighter credit standards applied by banks have curtailed the growth of bank loans to the non-financial corporate sector. This has contributed to firms' deleveraging, but also to a change in the capital structure of firms overall towards a lower share of bank loan financing relative to market-based financing. At the same time, corporate debt ratios are substantial by historical standards. This can be seen, in particular, in long-term comparisons with non-financial businesses in the United States.*

*An important aspect of corporate indebtedness in the euro area relates to the high degree of heterogeneity across euro area countries, mainly in terms of the levels of corporate debt upon the outbreak of the financial crisis, but also with respect to the pace of deleveraging since mid-2009. Nevertheless, firms in most of the largest euro area countries started to deleverage gradually in mid-2009, thus reflecting the overall euro area picture. Another important dimension of heterogeneity in euro area corporate indebtedness relates to the role played by the size of the firm. According to survey evidence, on balance, a higher percentage of large firms indicated a decline in their debt-to-assets ratios from 2009 to 2011 than small and medium-sized enterprises (SMEs).*

*Looking at the impact of this deleveraging on the outlook for debt sustainability, non-financial corporations have reduced somewhat their vulnerability in this respect, as shown by the fact that their debt service burden has declined from a peak in 2009. Notwithstanding this positive signal, the still very high level of indebtedness of non-financial corporations by historical standards points to remaining vulnerabilities, in particular in scenarios of higher costs of debt financing.*

### I INTRODUCTION

The indebtedness of non-financial private sectors (i.e. households and non-financial corporations) in the euro area increased rapidly over the past decade, broadly until 2009. This rise in indebtedness to high levels has heightened the vulnerability of the non-financial private sector to interest rate developments and negative credit risk assessments by market participants.

While debt has positive implications for growth up to a certain degree, as it helps investors to finance growth via taking up loans or issuing

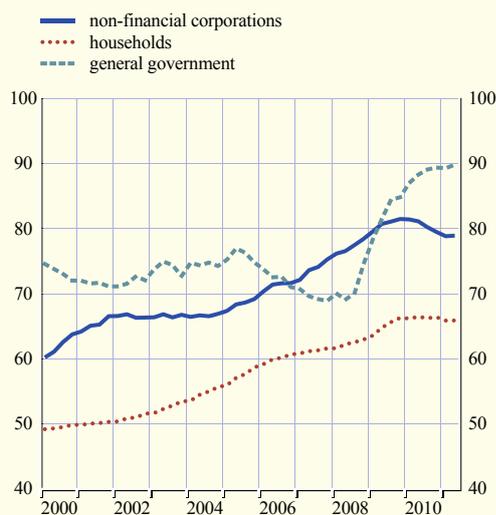
debt securities, it becomes harmful for growth when it becomes too high.<sup>2</sup> The financial crisis, which started in mid-2007 and intensified in September 2008, brought about a rethink of what constitutes a sustainable level of debt, as well as a rediscovery of credit risks. This, in turn, led to efforts by debtors to reduce their indebtedness. While weak economic activity led to a further rise in debt ratios in the course of

<sup>1</sup> This article includes data from the integrated euro area accounts up to the second quarter of 2011.

<sup>2</sup> Cecchetti, S.G., Mohanty, M.S. and Zampolli, F., "The real effects of debt", *Working Paper Series*, BIS, No 352. See also Section 5 of this article.

**Chart 1 Debt-to-GDP ratios of non-financial sectors in the euro area**

(percentages)



Source: ECB.

Notes: Debt of households consists of loans. Debt of non-financial corporations and general government includes loans (excluding inter-company loans), debt securities and insurance technical reserves. General government debt-to-GDP ratio is according to the integrated euro area accounts.

2009, the non-financial corporate debt-to-GDP ratio started to decline gradually, from 81% in the last quarter of 2009 to 79% in the second quarter of 2011 (see Chart 1). Households' debt-to-GDP ratio continued to increase up to the second quarter of 2010, but declined slightly thereafter until the second quarter of 2011. In contrast to the non-financial private sectors, during the crisis, general government debt went in the opposite direction.<sup>3</sup> The economic downturn and, related to this, weaker government revenues and higher expenditures, led to a steep increase in general government debt ratios during the financial crisis up to the second quarter of 2011. The increase in public sector debt has repercussions on private sector funding when country risk premia increase and when sovereign risks spill over to bank lending conditions and to conditions for market-based funding of corporations. Hence, the financial crisis has pointed clearly to the interconnectedness of private and public sector balance sheets.

Based on this general picture of debt developments across sectors, this article focuses on debt developments for non-financial corporations in the euro area. Section 2 describes in detail non-financial corporate debt developments in the euro area and across euro area countries during the past decade and gives reasons for these developments. In addition, this section includes a box comparing non-financial corporate debt developments in the euro area and the United States. Section 3 turns to the composition of external financing and the role of debt in the financing of euro area non-financial corporations. In particular, it looks at changes in the funding structure of non-financial corporations during the financial crisis. Section 4 investigates the external financing needs and debt developments of small and medium-sized enterprises and large firms in the euro area based on firm-level data, as well as debt financing across the main industry sectors. Section 5 focuses on the crucial question of debt sustainability and discusses indicators that may help to assess corporate debt sustainability. Finally, Section 6 concludes by summarising the key points of this article.

## 2 DEVELOPMENTS IN CORPORATE INDEBTEDNESS IN THE EURO AREA

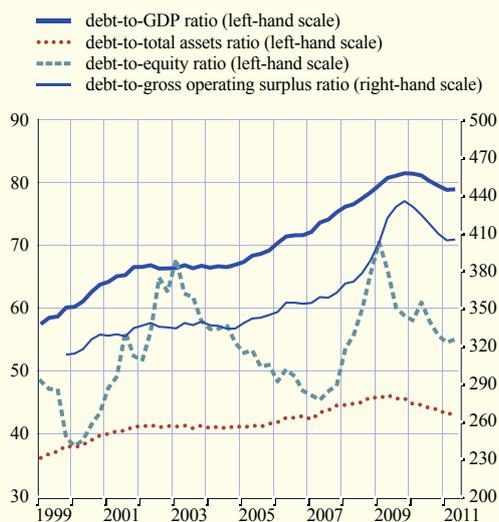
The sharp increase in euro area non-financial corporate debt, from a debt-to-GDP ratio of 57% in the first quarter of 1999 to a peak of 81% in the fourth quarter of 2009, reflected a build-up of corporate debt over different phases (see Chart 2; see also the box for a longer-term perspective).<sup>4</sup> From the second half of the 1990s until the beginning of 2002, non-financial corporate debt ratios increased in the environment of the “new economy boom”, when

<sup>3</sup> The definition of general government debt based on the integrated euro area accounts differs from the Maastricht definition of government debt in that it is non-consolidated and at market value.

<sup>4</sup> Non-financial corporate debt includes loans (excluding inter-company loans, i.e. loans extended between non-financial corporations), debt securities issued by non-financial corporations and pension fund reserves of non-financial corporations.

**Chart 2 Debt ratios of non-financial corporations in the euro area**

(percentages)



Source: ECB.

Notes: Debt of non-financial corporations includes loans (excluding inter-company loans), debt securities and insurance technical reserves. Financial assets have been consolidated with inter-company loans, shares and other accounts receivables excluding trade receivables.

conditions for financing firms' real and financial investment were favourable and loan growth was high. After a subsequent period of balance sheet consolidation, euro area non-financial corporate debt-to-GDP ratios increased again from 2005 onwards and peaked in 2009. This development is reflected by a variety of debt indicators. While the debt-to-GDP ratio relates corporate indebtedness to economic activity, the ratio of debt to gross operating surplus of non-financial corporations reflects corporate debt relative to income generation. This ratio is particularly informative for the assessment of debt sustainability, as the gross operating surplus is used for debt repayment (see Section 5). The debt-to-gross operating surplus ratio rose from 313% in 1999 to 437% in the fourth quarter of 2009 and fell thereafter, to 405% in the second quarter of 2011 (see Chart 2). The sharp increase in the second half of 2008 and in 2009 was driven mainly by a decline in the gross operating surplus as a result of weak economic activity. The increase was less pronounced for the debt-to-assets ratio, which includes both

fixed and financial assets, and is thus more comprehensive regarding the assets of non-financial corporations that generate income or may be sold if necessary. The debt-to-total assets ratio<sup>5</sup> increased from 36.2% in the first quarter of 1999 and peaked in the second quarter of 2009 at 46.2%. It declined gradually thereafter, to 43% in the second quarter of 2011. In contrast to other debt ratios, the debt-to-equity ratio of non-financial corporations is more volatile, largely driven by valuation effects owing to movements in equity prices.

Hence, most of the debt ratios of euro area non-financial corporations peaked in the course of 2009 and fell back somewhat until 2011, when some stabilisation seems to have occurred. This reflects the impact of the business cycle and non-financial corporations' efforts to deleverage in an environment of increased sensitivity towards credit risks. The rise in the debt-to-assets ratios was generally more moderate than that in the ratios of debt to economic activity. This shows that the rise in non-financial corporations' indebtedness was backed to a large extent by an increase in assets, which can be used as collateral and allowed firms to take up more debt. At the same time, the rise in indebtedness relative to firms' income raises concerns regarding corporate debt sustainability (see Section 5).

The strong decline in economic activity in 2008 and 2009 led to a substantial fall in the demand for credit owing to lower capital formation and less need for working capital by non-financial corporations. In addition, the substantial decline in non-financial corporations' merger and acquisition activity from 2008 until the first quarter of 2010 reduced non-financial corporations' demand for external financing. The accumulation of debt thus declined considerably driven by the demand side. This is also evident from the bank lending survey, in which participating banks reported a decline in net demand for loans from enterprises from

<sup>5</sup> Debt and assets exclude inter-company loans. Shares and other equity (excluding mutual fund shares) and other accounts (without trade credit) were netted in the definition of assets.

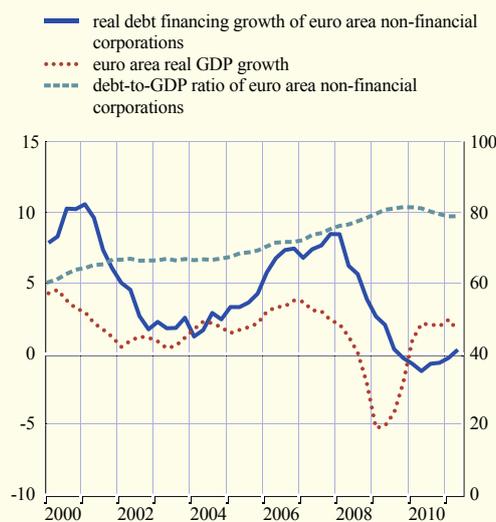
the first quarter of 2008 to the second quarter of 2010, and again in the third quarter of 2011.

Moreover, constraints in the supply of bank loans may have contributed to firms' deleveraging. In the period before the financial crisis, the rise in firms' debt levels received limited attention, in particular, as the cost of debt financing and the interest payment burden of non-financial corporations stood at moderate levels. However, the attitude of banks and market participants changed during the financial crisis, when banks themselves came under pressure in their access to funding in relation to balance sheet concerns. Banks participating in the euro area bank lending survey reported in 2008 and 2009, and again in the third quarter of 2011, that the cost of funds and balance sheet constraints that they were experiencing contributed considerably to the net tightening of credit standards on loans to enterprises.<sup>6</sup> In addition, during the same period, a substantial net percentage of banks reported a widening of margins on loans, which was greater for riskier loans than for average loans. As regards market-based financing of non-financial corporations, the cost of debt securities financing for non-financial corporations rose considerably in 2008 in the context of increasing market concerns about the creditworthiness of borrowers. As a reaction to such developments in bank lending and market-based debt financing, and in addition to the cyclical decline in demand for external financing, firms may have increased their efforts to deleverage in order to secure or improve their creditworthiness.

Debt deleveraging by non-financial corporations can also be seen from developments in real debt financing growth and real GDP growth (see Chart 3). In 2008 and 2009 the real debt financing growth of non-financial corporations declined markedly and turned negative from the fourth quarter of 2009 until the first quarter of 2011. In addition, the decline in real debt financing growth continued until the second quarter of 2010, whereas GDP growth had already started to recover in 2009. This is in line with evidence on historical patterns of loans to non-financial corporations, which tend

**Chart 3 Real debt financing growth of non-financial corporations and real GDP growth**

(annual percentage changes, deflated by the GDP deflator, percentages)



Source: ECB.

Note: Debt financing includes loans (excluding inter-company loans), debt securities and pension fund reserves.

to lag the cycle by about three quarters.<sup>7</sup> It can also be seen from Chart 3 that the decline in the debt-to-GDP ratio of euro area non-financial corporations from its peak in the last quarter of 2009 started around one to two years after the decline in GDP growth.

Debt deleveraging by non-financial corporations was helped by the considerable internal funds that firms had accumulated. From the third quarter of 2009 to the second quarter of 2010 non-financial corporations increased markedly their retained earnings, which was reflected in corporate saving (and net capital transfers). Corporate saving remained broadly stable in relation to GDP from that time until the second quarter of 2011 (see Chart D in the box). This led, in combination with strongly declining capital formation, to a substantial narrowing of the financing gap of non-financial corporations (which is the ratio of

<sup>6</sup> See the results of the euro area bank lending survey on the ECB's website.

<sup>7</sup> See the article entitled "Recent developments in loans to the private sector", *Monthly Bulletin*, ECB, January 2011.

net lending (+)/net borrowing (-) to GDP), which even turned temporarily into a surplus (from the fourth quarter of 2009 to the fourth quarter of 2010). The development of corporate earnings is broadly in line with evidence on corporate profit developments based on firm-level data. According to this evidence, the return on firms' assets increased from the second half of 2009 to mid-2010 and then remained broadly stable until mid-2011 in an environment of increasing cost pressures and a slowdown in the growth of sales.

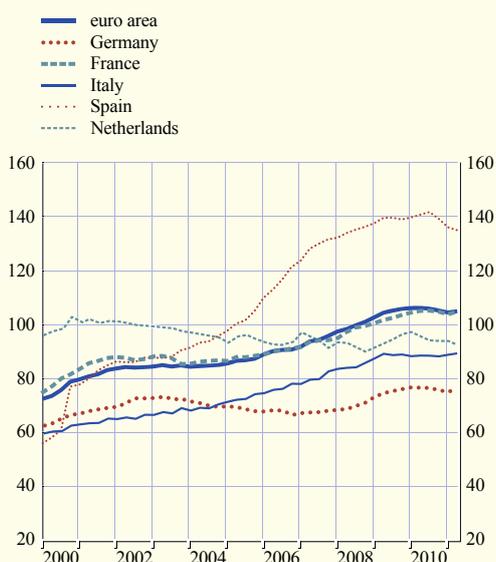
While there was a moderation in the levels of various debt indicators for non-financial corporations in 2010 and the first quarter of 2011 at the euro area level, the picture is heterogeneous across euro area countries.<sup>8</sup> First, as regards the level of debt ratios, non-financial corporations in Germany have had the lowest debt-to-GDP ratio out of the five largest euro area countries since the fourth quarter of 2004 (see Chart 4). By contrast, in Spain the ratio was considerably above the euro area level for most

of the period under review. At the same time, with regard to the ratio of debt to financial assets, French non-financial corporations were below the euro area average throughout the entire period under review, whereas Italian non-financial corporations were considerably above the euro area level (see Chart 5). Looking at debt developments from 2000 to the second quarter of 2011, of the five largest euro area countries, the debt-to-financial assets ratios of non-financial corporations increased most in Italy and Spain, whereas they were more stable in France and Germany. In all four countries, non-financial corporations' debt ratios started to decline in the second quarter of 2009, reflecting euro area developments. However, while the debt-to-financial assets ratio of non-financial corporations in Germany, France and Spain remained broadly stable in 2011 up to the second quarter, for Italian non-financial corporations

8 This article focuses mainly on the five largest euro area countries.

Chart 4 Debt-to-GDP ratio of non-financial corporations in selected euro area countries

(percentages)

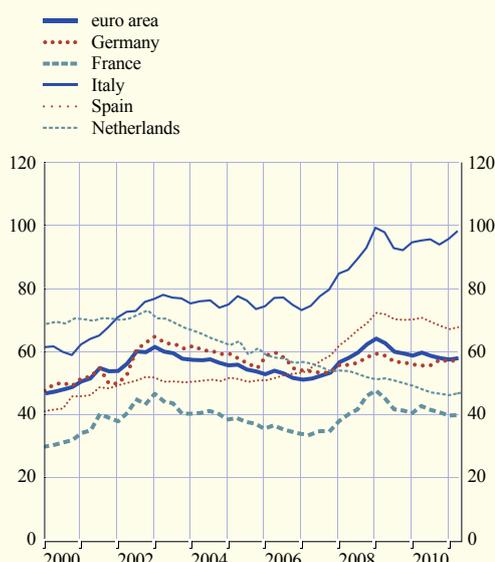


Sources: ECB and Eurostat.

Note: Debt includes all loans, debt securities and pension fund reserves.

Chart 5 Debt-to-financial assets ratio of non-financial corporations in selected euro area countries

(percentages)



Sources: ECB and Eurostat.

Notes: Debt includes all loans, debt securities and pension fund reserves. Financial assets include currency and deposits, loans, debt securities, shares and other equity, other accounts receivable and insurance technical reserves.

this ratio started to build up again this year. In addition, based on the debt-to-financial assets ratio, Dutch non-financial corporations started

to deleverage much earlier (from the first quarter of 2003) than non-financial corporations in the other four largest euro area countries.

## Box

### COMPARISON OF CORPORATE INDEBTEDNESS IN THE EURO AREA AND THE UNITED STATES

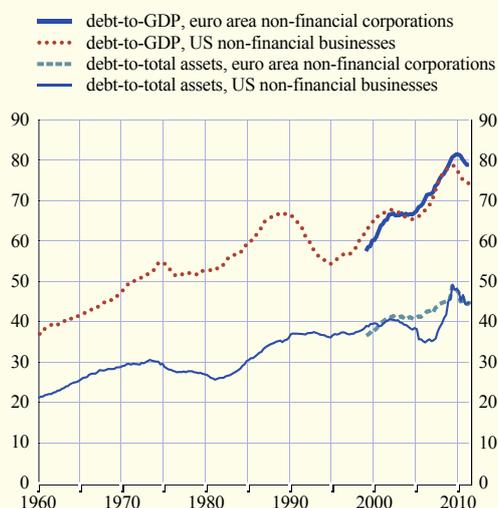
This box compares the indebtedness of euro area non-financial corporations with that of non-financial businesses in the United States, which is the most comparable sector.<sup>1</sup> At the time of the outbreak of the financial crisis non-financial corporations in both economies had a high level of debt and started to deleverage from 2009 in the context of the crisis. Both demand factors, given the sharp decline in economic activity since the last quarter of 2008, and supply constraints, in terms of the provision of bank lending, have contributed to the decrease in non-financial corporations' debt ratios. In addition, an increase in earnings has helped firms to deleverage.

#### Debt ratios of non-financial corporations in the euro area and the United States – a long-term perspective

Taking a long-term perspective, Chart A shows that the debt-to-GDP ratio of US non-financial businesses has broadly doubled during the past 50 years, from 37% in 1960 to 74% in the second quarter of 2011. The increase in the debt-to-total assets ratio has been similarly pronounced, from 21% in 1960 to 45% in the second quarter of 2011. The rise in the debt-to-GDP ratio of US non-financial businesses was particularly marked during the 1980s, in an environment of elevated inflation and interest rates, while it declined considerably in the first half of the 1990s. In the second half of the 1990s until 2002, the debt-to-GDP ratio quickly built up again in the context of the “new economy boom” and reached similar levels to those seen in 1989. This rise in debt mainly reflected very strong loan growth in the second half of the 1990s up to 2000 to finance substantial investment, driven by high levels of confidence in strong

Chart A Debt ratios of non-financial corporations in the euro area and the United States

(percentages)



Sources: Bureau of Economic Analysis, Board of Governors of the Federal Reserve System and ECB.

Notes: Debt excludes inter-company loans. For the euro area, assets have been consolidated with inter-company loans, shares and other accounts (excluding trade credit receivables). Shares and other equity (excluding mutual fund shares) and other accounts (without trade credit) were netted in the definition of assets, as these are not included in the US data.

<sup>1</sup> The US non-financial business sector includes all corporate and non-corporate non-financial businesses. In contrast to the euro area non-financial corporate sector, it also includes sole proprietorships, which are in the household sector in the integrated euro area accounts. See also the box entitled “Corporate financing developments – a comparison between the euro area and the United States” in the article “Developments in corporate finance in the euro area”, *Monthly Bulletin*, ECB, November 2005; and the box entitled “Comparability of the national account data of the United States and the euro area” in the article entitled “Developments in private sector balance sheets in the euro area and the United States”, *Monthly Bulletin*, ECB, February 2004.

productivity growth. After a period of balance sheet consolidation, US non-financial businesses' debt-to-GDP ratio increased again to 79% in the second quarter of 2009, which was its highest level in 50 years.

While no comparable data is available for such a long period for the euro area, Chart A shows that debt-to-GDP ratios of euro area non-financial corporations and US non-financial businesses have evolved at similar levels since 1999. In the second quarter of 2011 the debt-to-GDP ratio of non-financial corporations in the euro area (78.9%) was somewhat higher than the ratio for US non-financial businesses (74.3%). The ratio of debt to total assets was broadly similar in both economies, standing at 43.4% for euro area non-financial corporations and at 44.7% for US non-financial businesses.

While the economic structures and environment have changed fundamentally over this 50-year period, the very high level of indebtedness reached by non-financial businesses in 2009, as well as the high levels that continue to prevail today, make them vulnerable to increases in the cost of funding.

#### Evidence of corporate deleveraging during the financial crisis

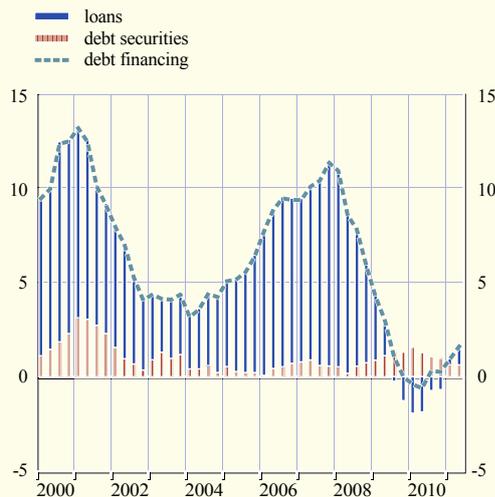
In the context of the financial crisis, non-financial corporations' debt-to-GDP ratios started to decline in both economies in 2009. As can be seen from Charts B and C, the annual growth rate of debt financing fell markedly from the second half of 2007, when the financial crisis started, to the first quarter of 2010. The annual rate of change of debt financing declined more sharply in the United States than in the euro area and, in particular, was negative for US non-financial businesses from the third quarter of 2009 to the third quarter of 2010. For euro area non-financial corporations, it was only slightly negative in the first half of 2010. This implied a somewhat sharper fall in the debt-to-GDP ratio of US non-financial businesses from its peak in the second quarter of 2009 to the second quarter of 2011, whereas for euro area non-financial corporations the decline in this ratio (from its peak in the fourth quarter of 2009) was more gradual.

The decline in debt financing in the two economies was driven by the substantial downturn in economic activity during the financial crisis. In addition, there is evidence from the US senior loan officer survey and from the euro area bank lending survey that credit standards on loans to enterprises were tightened considerably by banks during the financial crisis, starting in the third quarter of 2007 and reaching a peak in the fourth quarter of 2008. This is especially relevant for euro area non-financial corporations and, in particular, for smaller enterprises, as they rely to a large extent on bank loans for their external financing. From 2009 to 2011 the net tightening of credit standards for loans to enterprises mostly declined and turned into a net easing in the United States, whereas there was a rebound in the net tightening of credit standards for loans to euro area enterprises in the third quarter of 2011. Hence, particularly in the first phase of the financial crisis, bank loan supply appeared to be constrained. Both demand and supply of debt financing have therefore contributed to the decline in debt financing growth in both economies.

During the financial crisis, important changes occurred relating to the composition of the external financing of non-financial corporations in the euro area and the United States. Market-based financing of non-financial corporations gained importance in both economies during the crisis (see Charts B and C). By contrast, US non-financial businesses reduced their bank loan financing from the second quarter of 2009 to the second quarter of 2011. Euro area

**Chart B Contributions to debt financing growth of non-financial corporations in the euro area**

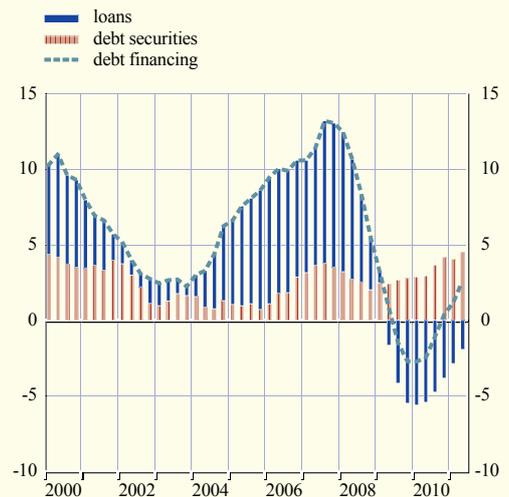
(annual percentage changes; percentage points)



Source: ECB.  
Note: Debt financing includes loans (excluding inter-company loans) and debt securities.

**Chart C Contributions to debt financing growth of non-financial businesses in the United States**

(annual percentage changes; percentage points)



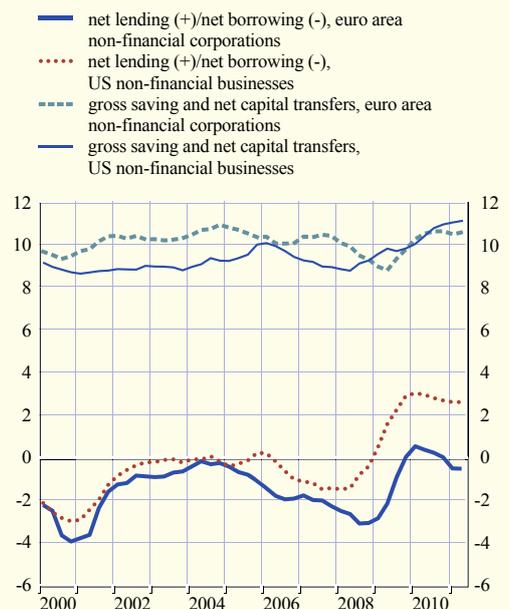
Source: Board of Governors of the Federal Reserve System.  
Note: Debt financing is defined as credit market instruments according to the US flow of funds statistics.

non-financial corporations also reduced their bank loan financing from the third quarter of 2009 to the fourth quarter of 2010, but to a lesser extent than US firms.

In both economies, substantial increases in retained earnings were conducive to the reduction by non-financial corporations of their debt ratios and thus also their debt dependency. In the United States, the rise in corporate earnings is reflected in the ratio of gross saving and net capital transfers to GDP of non-financial businesses, which increased from 8.7% in the second quarter of 2008 to 11.1% in the second quarter of 2011 (see Chart D). For euro area non-financial corporations, the rise was similar, from 8.8% in the second quarter of 2009 to 10.5% in the second quarter of 2011. In addition, capital formation declined severely in 2008 and 2009 in the context of the crisis. Both developments imply that non-financial corporations' need for external financing decreased very substantially. The financing gap (defined as the ratio of net lending (+)/net borrowing (-) to GDP), which is typically negative for corporations that need

**Chart D The financing gap and retained earnings of non-financial corporations in the euro area and the United States**

(percentages of GDP)



Sources: Board of Governors of the Federal Reserve System and ECB.  
Notes: The financing gap is defined as the ratio of net lending (+)/net borrowing (-) to GDP and broadly equals gross saving and net capital transfers minus gross capital formation in relation to GDP.

to finance their investments with external funds, turned positive for US non-financial businesses from the first quarter of 2009 (0.5%) to the second quarter of 2011 (2.6%) and for euro area non-financial corporations from the fourth quarter of 2009 to the fourth quarter of 2010.

### Conclusions

Overall, in terms of both their levels and the way in which they have developed, the debt ratios of non-financial corporations in the euro area and the United States appear broadly comparable. In both economies, non-financial corporations had accumulated a very high level of debt by historical standards prior to the outbreak of the financial crisis in the late summer of 2007, but debt ratios started to decline thereafter. This notwithstanding, debt ratios continue to be high by historical standards and constitute an important source of vulnerability for the outlook of the corporate sector, in particular with respect to risks associated with increased costs of debt financing.

### 3 THE ROLE OF DEBT IN THE EXTERNAL FINANCING OF EURO AREA NON-FINANCIAL CORPORATIONS

Determining the shape of a firm's capital structure is one of the most important decisions that managers take. Following the seminal contribution of Modigliani and Miller<sup>9</sup> in the form of their irrelevance proposition that dates back to 1958, it is now widely recognised that capital market imperfections make the capital structure of a firm relevant to its value. Various theoretical approaches, based on the relaxation of the assumption of Modigliani and Miller, consider, in alternative scenarios, the presence of agency costs, asymmetric information, corporate control considerations and taxes as factors governing firms' decisions on their capital structure. According to the pecking order theory, managers perceive that information asymmetries are such that markets generally underprice a firm's shares, then they prefer internal financing to external financing and debt to equity.<sup>10</sup> According to this theory, a firm's leverage reflects mainly historical profitability and investment opportunities. When, instead, managers try to exploit asymmetric information to benefit current shareholders, they tend to sell shares when the firm's value is high, linking in this way the capital structure to share price fluctuations.<sup>11</sup> In both theories, managers are not really interested in setting a specific debt

target and, furthermore, there is no reason for them to try to reverse leverage changes owing to changes in the firm's value. Alternatively, another theory, known as the trade-off theory, maintains that market imperfections generate a link between leverage and the value of a firm.<sup>12</sup> This theory suggests that the optimal capital structure for any particular firm will reflect the balance between the tax shield benefits of debt and the increasing agency and financial distress costs (such as bankruptcy costs) associated with high debt levels. In this case, managers actively act to offset deviations from their optimal debt ratios.

According to recent surveys,<sup>13</sup> most firms reported that they do have specific targets for the mixture of fixed/floating debt, short-term/

9 Modigliani, F. and Miller, H.M., "The Cost of Capital, Corporation Finance and the Theory of Investment", *American Economic Review*, Vol. 48(3), June 1958, pp. 261-297.

10 Myers, S.C., "The capital structure puzzle", *Journal of Finance*, No 39, 1984, pp. 575-592.

11 Baker, M.P. and Wurgler, J.A., "Market timing and capital structure", *Journal of Finance*, Vol. 57(1), 2002, pp. 1-32.

12 DeAngelo, H. and Masulis, R., "Optimal capital structure under corporate and personal taxation", *Journal of Financial Economics*, Vol. 8, 1980, pp. 3-29.

13 Graham, J.R. and Harvey, C.R., "The theory and practice of corporate finance: evidence from the field", *Journal of Financial Economics*, No 60, 2001, pp. 187-243; Brounen, D., de Jong, A. and Koedijk, K., "Capital structure policies in Europe: Survey evidence", *Journal of Banking and Finance*, Vol. 30(5), 2006, pp. 1409-1442; and Servaes, H. and Tufano, P., *The Theory and Practice of Corporate Debt Structure*, Deutsche Bank, 2006.

long-term debt, average maturity, duration, and the proportion of borrowing from the banking sector. Focusing on the determinants of the target ratios, financial flexibility, credit ratings, earnings volatility, as well as on the tax advantages of interest expenses is deemed to be most important when considering the appropriate amount of debt.

Non-financial corporations' debt-to-equity ratios provide some information about the importance of debt compared with the equity holdings of the firms and, hence, on the capital structure of the firms. Since 2000 this ratio has stood on average at 69% for euro area non-financial corporations (see Chart 6). While the ratio fluctuates considerably owing to the volatility of equity prices, this implies that a firm's capital structure generally consists of a higher share of equity, especially unquoted equity,<sup>14</sup> than of debt. During the period under review the share of debt relative to firms' equity has been below the euro area average in France and above the

euro area average in Germany. Overall, there appears to be some heterogeneity in the capital structure across euro area countries.

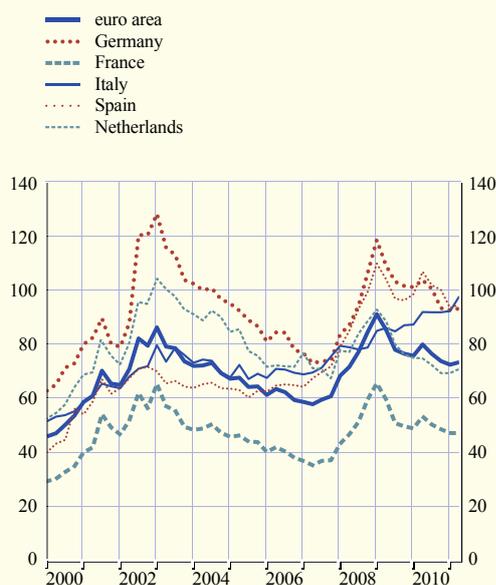
With respect to firms' debt structure, traditionally, euro area non-financial corporations' debt consists to a large extent of bank loans.<sup>15</sup> Smaller firms, in particular, often use this source of external financing, as their access to market-based funding is limited. However, during the financial crisis this pattern changed markedly (see Chart 7). The contribution of bank loan financing to overall debt financing declined from the second quarter of 2008 onwards, indicating a tendency towards disintermediation, and turned negative from the

14 While quoted shares accounted for 17% of non-financial corporations' total liabilities on average from 2000 to the second quarter of 2011, unquoted equity accounted for 34%.

15 Debt is defined here as loans (including inter-company loans), debt securities and trade credit (net of trade credit receivables) in order to reflect the relative importance of the various instruments.

**Chart 6 Debt-to-equity ratio of non-financial corporations in selected euro area countries**

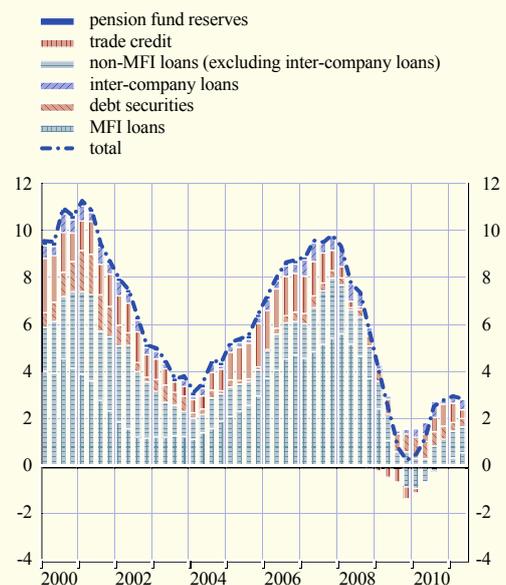
(percentages)



Source: ECB.

**Chart 7 Contributions to the annual growth rate of debt financing of non-financial corporations in the euro area**

(annual percentage changes; percentage points)



Source: ECB.

Note: Debt financing includes all loans, debt securities, trade credit and pension fund reserves.

third quarter of 2009 to the third quarter of 2010. Instead, other sources of debt financing became more important. In particular, the issuance of debt securities by non-financial corporations gained importance during the financial crisis. As regards the cost of financing, from a peak in November 2008, shortly after the bankruptcy of Lehman Brothers, the cost of market-based debt of non-financial corporations declined considerably up to September 2010 and increased moderately thereafter. Similarly, after some increases in bank lending rates up to October 2008, the monetary policy measures adopted by the ECB's Governing Council led to a decline in bank lending rates until early 2010, which increased moderately thereafter until mid-2011. While cost of financing developments therefore provide little indication of a change in the debt financing structure of non-financial corporations, information from the euro area bank lending survey suggests that the change in the debt financing structure of non-financial corporations away from bank loans may have been related to restrictions in bank loan supply (see Section 2).

In addition, financing between firms may have served as a buffer for less available bank credit.<sup>16</sup> In particular, loans from parent companies to subsidiaries (inter-company loans) may have helped small companies to access funding. In addition, trade credit, which is linked to the exchange of goods, gained in importance, and thus suggests some buffer role.<sup>17</sup>

#### 4 EXTERNAL FINANCING NEEDS AND DEBT DEVELOPMENTS BY SIZE OF FIRM AND MAIN INDUSTRY SECTOR IN THE EURO AREA

An importance source of heterogeneity in the degree of corporate indebtedness in the euro area relates to the size of firms. It is well accepted that small firms face different and often greater financing problems than large firms owing mainly to specificities in their financing.<sup>18</sup> First of all, small firms are often believed to be more opaque and to be more at risk of failure than

large firms. Second, small firms are often less established and have not had the time to build up a track record and reputation. Third, SMEs do not normally issue traded securities that are continuously priced in public markets, so that they cannot rely on this to provide the market with information. At the same time, small firms rely on external financing, in particular bank loans, to fund their growth. Therefore major financing obstacles can be a considerable challenge for SMEs, which in turn can increase credit risks in the corporate sector and also negatively affect productivity in the economy. This seems to be even more relevant today, as sources of firm financing have become scarcer and the availability of financing instruments has deteriorated during the financial crisis.

In order to give an idea of the importance of external financing for firms according to their size, Chart 8 shows the percentage of firms using external financing to fund their growth.<sup>19</sup>

Two stylised facts emerge from the figure. First, a large proportion of small firms tended to use external finance at the end of the 1990s in order to grow at a rate that was higher than that determined by their internal resources alone. Second, this proportion has declined over time as the capacity of firms to meet their interest payments with the income they generated has reduced. In fact, the interest payment burden ratio, which reflects the combined impact of changes in interest rates (related to general credit conditions at country level), as well as

16 See also the article entitled "The financial crisis in the light of the euro area accounts – a flow-of-funds perspective", *Monthly Bulletin*, ECB, October 2011.

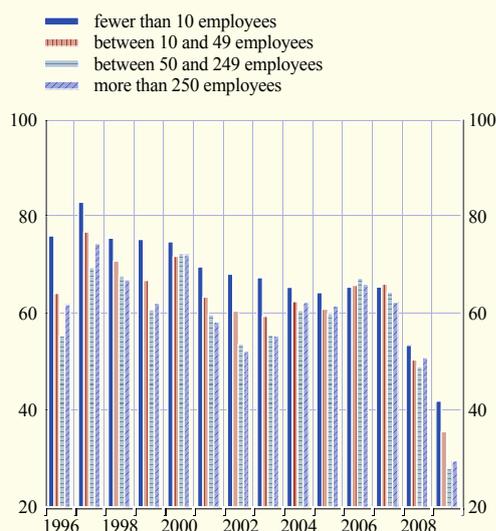
17 On recent developments in trade credit, see the box entitled "The use of trade credit by euro area non-financial corporations", *Monthly Bulletin*, ECB, April 2011.

18 For a review, see "Corporate finance in the euro area", *Occasional Paper Series*, ECB, No 63, June 2007.

19 The analysis presented in this section relies on firm-level data, which is derived from the AMADEUS database compiled by Bureau van Dijk. The sample comprises mostly non-listed non-financial enterprises, excluding in the agriculture, forestry, fishing and mining sectors, from nine euro area countries (BE, DE, ES, GR, FR, IT, NL, PT and FI). The sample contains around 300,000 firms that are present for at least four consecutive years during the period 1994-2009.

**Chart 8 Firms growing faster than predicted by their internal funds<sup>1)</sup>**

(percentages of firms)



Sources: Bureau van Dijk (AMADEUS database) and ECB calculations.

1) Following Demirgüç-Kunt and Maksimovic's approach in "Funding growth in bank-based and market-based financial systems: evidence from firm-level data", *Journal of Financial Economics*, Vol. 65, pp. 337-363, the "percentage of sales" financial planning model is used to calculate for each firm the maximum rate of growth at which it can grow when only internal funds are available.

companies' profitability and their levels of indebtedness, had already started to rise in 2005 and peaked in 2009, which is the last year under observation (see Chart 9). While, overall, the interest payment burden has been proportionally higher for small-sized firms, their indebtedness ratios were increasing during the financial crisis up to 2009.

The information provided directly by the firms through a firm-level survey based on a sample of non-financial corporations in the EU (survey on the access to finance of SMEs in the euro area)<sup>20</sup> give some insights into more recent developments of corporate debt across firm sizes. This survey was carried out five times between the summer of 2009 and September 2011 and therefore reflects firms' assessments of short-term developments regarding their financing needs and access to finance as the financial crisis has intensified. In particular, firms indicated that the amount of their debt compared with their assets

had tended to decline at the euro area level since the beginning of the survey (see Chart 10), pointing to some deleveraging efforts, which seem to have been stronger for large firms than for SMEs. At country level, Spanish and, to a lesser extent, Italian companies reported that they were still increasing their debt ratios during 2010 and 2011. It is interesting that these developments mimic the macro-developments reported in Chart 5.

The survey also provides useful information on the factor that most limited access to financing by SMEs between 2009 and 2011. While more than a third of firms reported that they had not encountered any obstacles in receiving financing at the euro area level, existing financing difficulties were mainly related to having insufficient collateral or guarantees and to interest rates or prices that were judged to be too high.

With regard to main industry sectors, Chart 11 shows the development over time of the financing gap of large listed companies. The indicator displays the percentage of firms with a positive financing gap, i.e. the percentage of firms whose investment cannot be financed internally through their cash flow, and hence has to be financed with external sources of finance. As listed companies have access to a variety of financing sources (both securities and loans) and can take best advantage of global growth opportunities through international markets, it is assumed that these firms face the least frictions in accessing external finance. Consequently, the reliance on external financing of the listed firms belonging to a given sector should closely reflect the sector's need for external finance.<sup>21</sup>

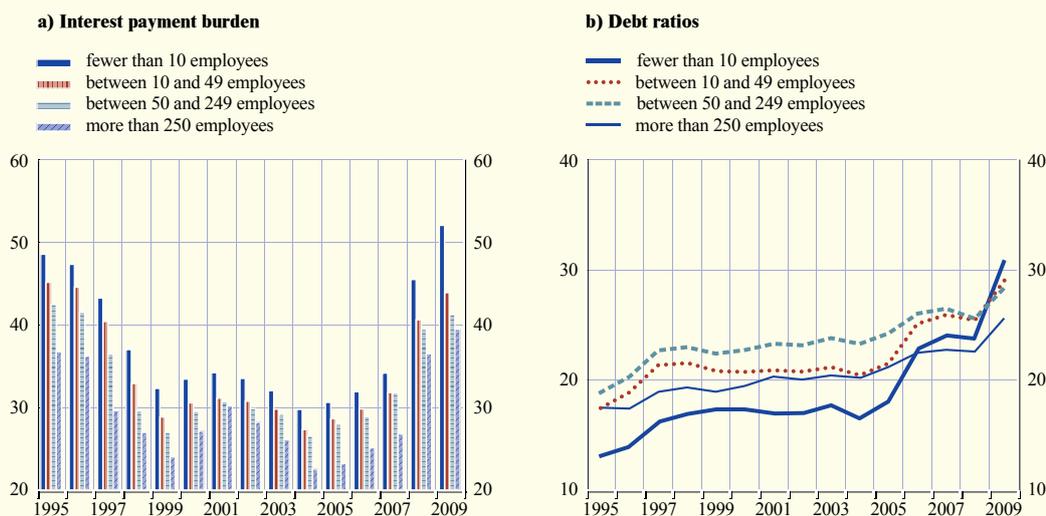
The indicator clearly indicates pro-cyclicality in the financing gap, but it also displays structural

20 For more information regarding the survey, as well as the reports on the individual waves, see <http://www.ecb.europa.eu/stats/money/surveys/sme/html/index.en.html>.

21 The approach is similar to the one proposed by Rajan, G.R. and Zingales, L., "Financial Dependence and Growth", *The American Economic Review*, Vol. 88(3), pp. 559-586, for US-listed companies.

Chart 9 Interest payments and debt ratios across firm size

(percentages)

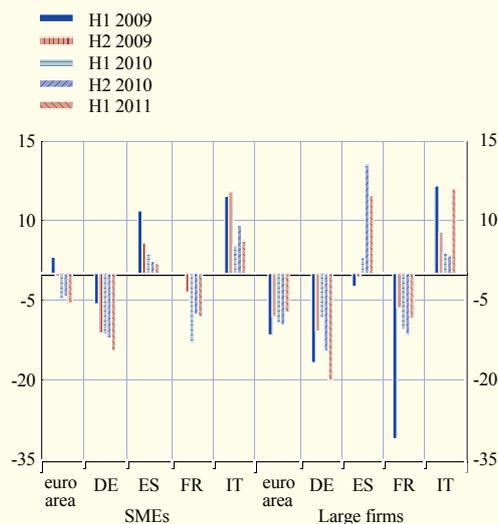


Sources: Bureau van Dijk (AMADEUS database) and ECB calculations.

Note: The interest payment burden is defined as the ratio of interest payments to earnings before interest, taxes, depreciation and amortisation plus financial revenues.

Chart 10 Ratio of debt to total assets

(over the preceding six months; net percentage of respondents)

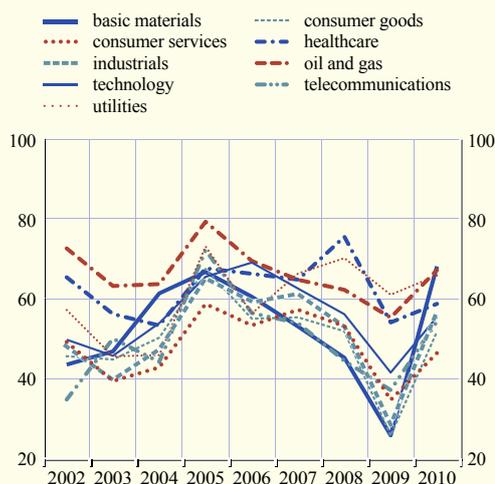


Source: ECB and European Commission survey on the access to finance of small and medium-sized enterprises in the euro area.

Note: Net percentages are defined as the difference between the percentage of firms reporting an increase and that reporting a decrease.

Chart 11 Firms with a positive financing gap across sectors

(percentages)



Sources: Thompson Datastream and ECB calculations.

Notes: The indicator shows the percentage of firms with a positive financing gap. A financing gap is defined as the difference between fixed investment and firms' available internal funds divided by the fixed investment. Investment in non-financial fixed assets is calculated as the first difference in tangible and intangible fixed assets plus depreciation. Net cash flow is defined as cash flow (profit for the period plus depreciation) minus the increase in non-cash current assets (inventories plus receivables) plus the increase in trade credit.

differences across sectors. Firms in the oil and gas, and healthcare and utilities sectors rely more intensively on external financing, which could reflect the exceptionally high investment rates in these sectors. By contrast, firms in the basic materials and consumer goods sectors make less intensive use of external finance, but most probably this results not from high profits, but from low investment. The economic and financial crisis has had an impact on the sectoral financing needs that is broadly similar across sectors. In 2009 the percentage of firms that needed external finance reached the lowest level since the beginning of 2000 in all sectors except utilities.

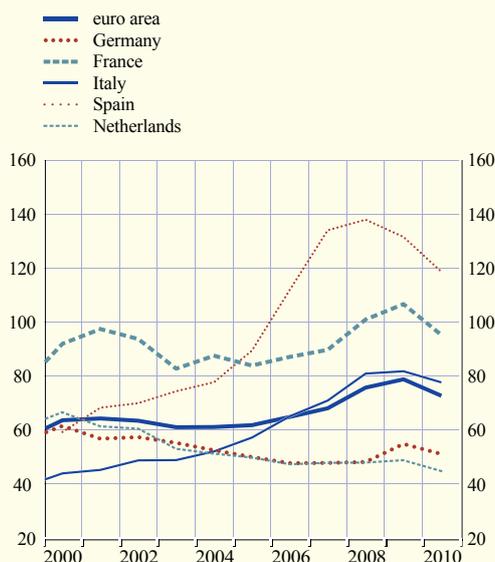
## 5 DEBT SUSTAINABILITY OF EURO AREA NON-FINANCIAL CORPORATIONS

While non-financial corporations' debt ratios have declined somewhat since 2009 in the context of the financial crisis, they remain high by historical standards (see the box in Section 2). At the same time, data on the level of the debt ratios alone are insufficient for assessing debt sustainability. The strength of a firm in terms of income generation, as well as the interest environment and the maturity composition of the firms' debt also contribute to the assessment of whether the level of debt appears sustainable.

An important factor for assessing debt sustainability is the debt service burden of firms. It reflects the combined burden of non-financial corporations arising from their interest payments and their debt repayment obligations. Chart 12 shows the debt service burden in relation to the gross operating surplus of non-financial corporations. The debt service burden of euro area non-financial corporations has tended to decline from its peak in 2009. This relates to a decline in gross interest payments by euro area non-financial corporations from the last quarter of 2008 to the second quarter of 2010 and to a rebound in the gross operating surplus in 2010, whereas the debt repayment

**Chart 12 Debt service burden of non-financial corporations in selected euro area countries**

(as a percentage of gross operating surplus)



Sources: ECB, Dealogic (debt securities maturity), ENSR Survey 2002 (bank loan maturity).

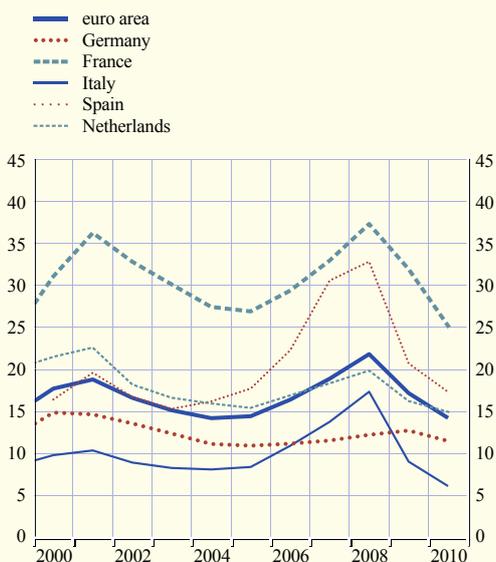
Note: The debt service burden is defined as the sum of gross interest payments and estimated debt repayments (based on amounts outstanding for long-term loans (net), long-term debt securities and pension fund reserves and average maturities for the debt), as a percentage of the gross operating surplus.

remained broadly stable. Across the five largest euro area countries, the debt service burden of non-financial corporations increased until 2008 in Spain and until 2009 in France and Italy, declining somewhat thereafter. In line with the evidence presented in Chart 13 on the interest payment burden, the debt service burden is above the euro area average for French and Spanish non-financial corporations. By contrast, it is below the euro area average for Germany and the Netherlands. In these two countries, the debt service burden declined slightly during most of the period under review.

When focusing only on the interest payments of non-financial corporations, the decline in the interest payment burden (as a percentage of the gross operating surplus) in 2009 and 2010 is shown clearly in Chart 13. For euro area non-financial corporations, this ratio declined from a peak of 22% in the last quarter of 2008

**Chart 13 Interest payment burden of non-financial corporations in selected euro area countries**

(as a percentage of gross operating surplus)

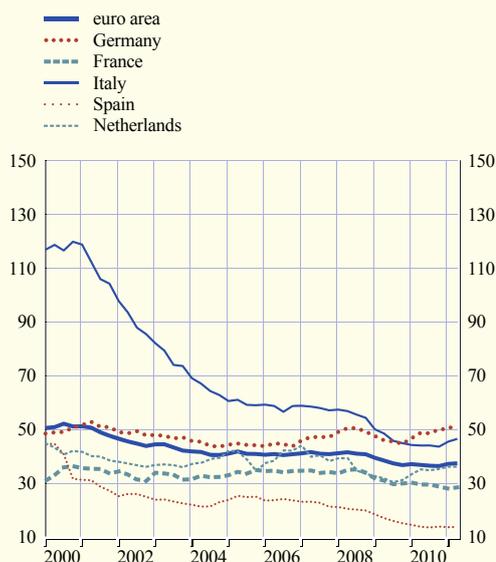


Source: ECB.

Note: Ratio of gross interest payments to gross operating surplus.

**Chart 14 Ratio of short-term to long-term debt of non-financial corporations in selected euro area countries**

(percentages)



Source: ECB.

Note: Debt includes all loans, debt securities and pension fund reserves.

to 15% in the second quarter of 2011. In the five largest euro area countries the interest payment burden declined markedly after 2008, with the exception of Germany, where it remained broadly stable.

The maturity profile of corporate debt also provides some indications on the presence of interest rate risks and liquidity risks and is therefore important for an assessment of debt sustainability. Generally, a smaller share of short-term debt reduces corporate vulnerabilities as debt repayments and a prolongation of debt occur less frequently.

During the financial crisis, the maturity structure of non-financial corporations' debt changed in that the proportion of short-term debt to long-term debt declined, from 42% in the second quarter of 2008 to 37% in the fourth quarter of 2010, remaining broadly stable thereafter until the second quarter of 2011 (see Chart 14). The decline in the share of short-term debt of non-financial corporations was widespread

across the largest euro area countries (except for Germany). In Germany and Italy, firms had the highest share of short-term debt, whereas the share was below the euro area average for French and Spanish firms.

With respect to market-based debt, the average maturity of corporate bond debt declined between 2010 and 2011 in most of the euro area countries shown in Table 1. At the same time, there was considerable heterogeneity across euro area countries. Among the five largest euro area countries, the average maturity of corporate bond debt declined considerably from 2010 to 2011 in France and Italy, whereas it increased in particular in Spain. The average maturity remained broadly stable from 2010 to 2011 in Germany and the Netherlands. Moreover, of the five largest euro area countries, the average maturity of corporate bond debt was lowest in Germany.

While there is no firm evidence from the literature on an optimal level of debt in

### Average maturity of corporate bond debt in selected euro area countries

(in years)

	1999-2007	2008	2009	2010	2011
Belgium	12,4	6,0	8,7	6,0	7,1
Germany	4,7	5,1	5,9	5,0	4,8
Ireland	8,8	9,0	7,0	8,4	9,0
Greece	7,8	5,0	7,5	8,5	5,8
Spain	7,3	10,1	8,0	6,2	9,2
France	6,3	6,7	7,5	9,2	8,3
Italy	8,5	8,8	8,9	8,3	7,3
Luxembourg	7,5	5,7	8,9	11,2	10,2
Netherlands	7,6	9,7	8,3	8,6	8,7
Austria	7,6	5,3	7,3	8,1	7,8
Portugal	7,5	7,2	7,8	7,8	7,0
Finland	6,8	5,0	8,0	5,7	6,1

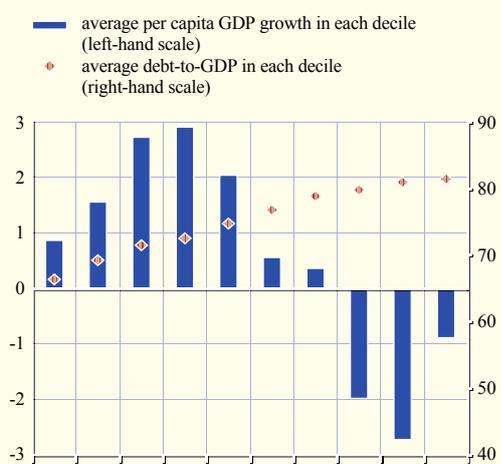
Source: Dealogic.

the economy, high debt levels constitute a vulnerability *per se* as they increase the fragility of corporations to changes in the business cycle, inflation and interest rates. Moreover, when debt ratios rise beyond a certain level, financial crises become more likely and also more severe and they tend to be followed by protracted periods of debt reduction.<sup>22</sup> Certain economies, however, may be able to sustain much higher levels of

leverage than others, owing to country-specific institutional features, in particular regarding the financial system, or owing to productivity differentials that turn into higher relative economic growth. Thus, the leverage ratio should not be considered as a precise indicator of sustainability, but should be assessed in conjunction with other factors. Nonetheless, significant or rapid increases in a leverage ratio compared with its historical trend, or compared with the respective increases in comparable countries, may indicate a credit boom that may not be justified by macroeconomic fundamentals.<sup>23</sup>

Chart 15 Debt and output growth

(percentages and annual rate of growth)



Sources: ECB and Eurostat.

Note: Debt includes loans (excluding inter-company loans), debt securities and pension fund reserves, while output is given by the per capita GDP growth. Data refer to the period March 1999-June 2011.

A recent analysis carried out by the BIS on the impact of debt on economic activity for a sample of OECD countries shows that there are debt thresholds beyond which increases in debt reduce trend growth.<sup>24</sup> Chart 15 displays the relationship between the euro area debt-to-GDP

22 See Tang, G. and Upper, C., "Debt reduction after crises", *Quarterly Review*, BIS, September 2010.

23 For instance, in the preparation of the scoreboard for the surveillance of macroeconomic imbalances, the European Commission has recently considered some thresholds related to debt-to-GDP and credit flow-to-GDP for the private sector (non-financial corporations and households) as a whole. The threshold related to debt to GDP (160%) is calculated as the upper quartile using information for the period 1994-2007 in the EU 27.

24 Cecchetti, S., Mohanty, M.S. and Zampolli, F., "The real effects of debt", *Working Paper Series*, No 352, BIS, 2011. In the BIS research, the estimated threshold for the corporate sector beyond which an increase in the debt-to-GDP ratio will determine a decline in GDP growth is around 90%. The debt series is defined on a non-consolidated basis.

ratio and per capita GDP growth over the period 1999-2011. This is calculated by splitting the euro area per capita GDP growth on the decile distribution of the euro area aggregated debt-to-GDP ratio (which is defined as excluding inter-company loans). The average per capita GDP growth increases from the first decile to the fourth decile, which corresponds to an average debt-to-GDP ratio of 73%. As the leverage ratio increases the rate of GDP growth declines and in the last deciles turns negative. For a comparison with the latest available data, aggregated debt to GDP in the euro area reached 79% in the second quarter of 2011, while the per capita GDP annual rate of growth was 1.6%. Chart 15 shows that, historically, higher levels of debt to GDP have indeed been associated in the euro area with lower (and negative) rates of growth of output per capita. However, this simple analysis cannot provide any indication of future paths of leverage and likely impact on output growth.

## 6 CONCLUSION

Overall, euro area non-financial corporations accumulated high levels of debt prior to the beginning of the financial crisis in the late summer of 2007. While non-financial corporations' debt ratios started to decline gradually in the context of the financial crisis, their level remained substantial until the second quarter of 2011. This can be seen by means of a historical comparison using data on US non-financial businesses.

Across euro area countries and sectors, the debt ratios of non-financial corporations are heterogeneous, mainly as regards the levels at which they stood at the time of the outbreak of the financial crisis, but also with respect to the pace of deleveraging since mid-2009. Nevertheless, broadly in line with overall euro area developments, from mid-2009 non-financial corporations' debt-to-financial assets ratios started to decline in most of the five largest euro area countries. Similarly,

non-financial corporations' need for external financing has declined across sectors since 2009.

With respect to debt sustainability, euro area non-financial corporations have reduced somewhat their vulnerability since 2009 as their debt service burden has declined. This notwithstanding, the substantial level of debt of non-financial corporations by historical standards implies that it remains an important source of vulnerability for the outlook of the corporate sector, in particular with respect to risks associated with increased costs of debt financing.



## EURO AREA CROSS-BORDER FINANCIAL FLOWS

Since the introduction of the single currency in 1999 European Monetary Union has played a key role in the process of financial integration, not only within the euro area, but also at the global level. The global financial crisis, which started in mid-2007 and came to a head after the collapse of Lehman Brothers in September 2008, suddenly interrupted the process of steady global financial integration. Against this background, this article reviews the role of the euro area in global cross-border finance both prior to, and since, the global financial crisis.

### I THE ROLE OF THE EURO AREA IN GLOBAL CROSS-BORDER FINANCE

The process of global financial integration manifests itself in steadily rising cross-border financial flows and the accumulation of large and rising foreign assets and liabilities. These can take the form of, for instance, portfolio investment in bonds or equities, foreign direct investment in enterprises, or loans between residents of different countries<sup>1</sup>. Taken together, total cross-border financial flows are thus an aggregate measure of the size of transactions in financial assets, and, more generally, of the intensity of financial linkages between different economies.

Between 1980 and 2007, before the outbreak of the global financial crisis, global foreign

assets and liabilities grew sixfold, from around 60% of world GDP to more than 360% of world GDP – corresponding to average annual growth in excess of 10% of world GDP (see Chart 1). Over the same period gross global financial flows grew at an equally fast pace, rising from 6% of world GDP in 1980 to 36% of world GDP in 2007. Although global trade in assets, measured thus, still falls short of trade in goods and services, the latter increased over the same period at a much lower rate, from around 40% of world GDP in 1980 to roughly 50% of world GDP in 2007 (see Chart 2).

<sup>1</sup> A more detailed presentation of how international financial flows can be categorised and how they are accounted for in balance of payments statistics is provided in Section 2.

**Chart 1 Total outstanding cross-border financial assets and liabilities**

(percentages of world GDP)

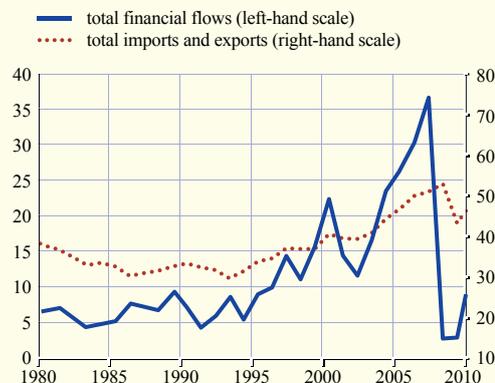


Sources: IMF and ECB staff calculations.

Note: Last observation refers to 2010. The data are based on the IMF's International Financial Statistics (IFS), and data gaps in the IFS are filled on the basis of the methodology presented in Lane, P.R. and Milesi-Ferretti, G.M., "The external wealth of nations mark II: Revised and extended estimates of foreign assets and liabilities, 1970-2004", *Journal of International Economics*, Vol. 73, No 2, 2007, pp. 223-250.

**Chart 2 Total cross-border financial flows, and total imports and exports of goods**

(percentages of world GDP)



Source: IMF World Economic Outlook.  
Note: Last observation refers to 2010.

During the global financial crisis world trade in both goods and financial assets collapsed. Global cross-border investment, as measured by global asset and liability financial flows, plunged from over USD 20 trillion (more than 35% of world GDP) in 2007 to around USD 1.5 trillion (less than 5% of world GDP) in the following year (see Chart 2). Since then global cross-border investment has steadily recovered and the annual

value of international transactions in financial assets currently exceeds USD 10 trillion. This indicates that the crisis has only temporarily halted the process of increasing financial integration and that the global economy is likely in the future to continue reaping the sizeable benefits that international financial integration can offer for partaking economies (as discussed in more detail in Box 1 of this article).

#### Box 1

#### THE BENEFITS AND CHALLENGES ASSOCIATED WITH CROSS-BORDER FINANCIAL INTEGRATION

There is a broad consensus in the literature on international financial integration that global cross-border investment is beneficial to both the investing and the recipient economies, and that, over a longer horizon in particular, the benefits can be sizeable.<sup>1</sup>

First, cross-border holdings of assets and liabilities allow economies to share the risk associated with their individual domestic business cycles.<sup>2</sup> By enabling a country to borrow during economic downturns and to lend in economic upturns, financial openness enhances consumption and income risk-sharing, while reducing the volatility of consumption growth. This counter-cyclical effect of global capital markets on real variables is particularly important, given that shocks tend to be temporary or idiosyncratic. Besides, improved risk-sharing, in turn, enhances the ability of countries to specialise in their most productive sectors, leading to increased economic efficiency.<sup>3</sup>

Second, international financial flows are essential in order to direct global capital to the areas where it can be used most productively. This observation is based on the neoclassical growth model, which predicts that, under the assumption of diminishing marginal returns on capital, capital should flow from economies where its use yields a relatively smaller marginal return to economies where the marginal productivity of capital is higher. The ability to draw upon an international pool of resources, in turn, affects domestic investment and growth, as it allows economies to expand investment and production beyond the constraints imposed by domestic savings. In many emerging economies, the capacity to save is constrained by a low level of income. Net capital inflows can thus supplement domestic savings and increase the level of capital employed, helping the recipient country to raise its rate of economic growth and improve its living standards.<sup>4</sup>

Third, it is often argued that the presence of foreign investors increases the level of productivity in the recipient country, for instance via a concomitant transfer of knowledge that is not accounted for

1 See Kaminsky, G.L. and Schmukler, S.L., "Short-run pain, long-run gain: the effects of financial liberalisation", *NBER Working Paper*, No 9787, 2003.

2 See Fratzscher, M. and Imbs, J., "Risk sharing, finance, and institutions in international portfolios", *Journal of Financial Economics*, Vol. 94, No 3, 2009, pp. 428-447.

3 See Kalemli-Özcan, S., Sorensen, B. and Yosha, O., "Risk Sharing and Industrial Specialization: Regional and International Evidence", *American Economic Review*, Vol. 93, No 3, 2003, pp. 903-918.

4 See Levine, R., "International financial liberalization and economic growth", *Review of International Economics*, Vol. 9, No 4, 2001, pp. 688-702.

in the capital flows themselves.<sup>5</sup> A related point in favour of financial openness is that it can have a beneficial impact on the efficiency of the domestic banking system by increasing the depth and breadth of domestic financial markets and lowering costs associated with oligopolistic markets.<sup>6</sup>

Fourth, there is another indirect effect – or “collateral benefit” – of cross-border financial integration, which emerges as a result of the disciplining forces that financial integration may exert on domestic economic policies and on public and corporate governance.<sup>7</sup> The literature on cross-border investment typically finds that foreign investors are particularly sensitive to information asymmetries and prefer to invest in countries with sound institutions and a stable macroeconomic track record.<sup>8</sup> To the extent that domestic authorities want to reap some of the above-mentioned benefits of financial integration and thus want to attract foreign investment to the domestic economy, financial integration may have a disciplining impact on domestic policy-makers by encouraging them to refocus on stability-oriented and sustainable economic and monetary policies.<sup>9</sup> Given that greater policy discipline translates into greater macroeconomic stability, this in itself leads to faster economic growth – as do the direct effects of financial integration – as emphasised in the recent literature on endogenous growth.

Against the background of the global financial crisis, the role of macroeconomic discipline and stability has recently moved to the centre of public debate and economic research on global financial integration. The reason for this is that, despite the undeniably beneficial effects of financial integration on growth and on general societal welfare in the long run, imbalanced capital flows can also pose considerable challenges and imply significant risks for domestic economies with unsustainable domestic policies that fail to align the objectives of external and domestic stability.

In fact, excessively prolonged and large net capital inflows can have undesirable macroeconomic effects, including rapid monetary expansion and inflationary pressures, and can thus inflate asset prices and fuel credit growth, raising the risk of boom and bust cycles. Financial flows driven by volatile factors such as herding behaviour among investors or the so-called “hunt for yield” can, in an environment of increased risk appetite, lead to a mispricing of financial assets, with the associated risk of sudden adjustments, giving rise to painful consequences for the real economy. At the same time, the impact of such speculative inflows on long-run growth may be minor if such inflows are used to finance speculative or low-quality domestic investments.

Thus the lesson that can be gleaned from the economic literature on financial integration and cross-border capital flows is that balanced and sustainable macroeconomic policies are needed in order to reap the benefits of global financial integration, as they enable countries to attract stable and balanced capital inflows, which are conducive to the long-run growth of the economy.

5 See Kose, M.A., Prasad, E.S. and Terrones, E.M., “Does Openness to International Financial Flows Raise Productivity Growth?”, *Journal of International Money and Finance*, Vol. 28, No 4, 2009, pp. 554-580.

6 See Levine, R., “Finance and development: Issues and experience”, *Journal of International Economics*, Vol. 37, No 3, 1994, pp. 273-277.

7 See Kose, M.A., Prasad, E., Rogoff, K. and Wei, S-J., “Financial Globalization: A Reappraisal”, *IMF Staff Papers*, Vol. 56, No 1, 2009, pp. 8-62.

8 For the role of institutions, see Alfaro, L., Kalemli-Özcan, S. and Volosovych, V., “Capital Flows in a Globalized World: The Role of Policies and Institutions”, *NBER Working Paper*, No 11696, 2005; Fidora, M., Fratzscher, M. and Thimann, C., “Home bias in global bond and equity markets: the role of real exchange rate volatility”, *Journal of International Money and Finance*, Vol. 26, No 4, 2007, pp. 631-655; and Gelos, R.G. and Wei, S-J., “Transparency and International Portfolio Holdings”, *Journal of Finance*, Vol. 60, No 6, 2005, pp. 2987-3020.

9 See “Financial Globalization and Monetary Policy Discipline: A Survey With New Evidence from Financial Remoteness”, *IMF Staff Papers*, Vol. 56, No 1, 2009, pp. 198-221.

Moreover, economic policies also need to be carefully aligned with the objective of external sustainability, as the volatility that is inherent in cross-border capital flows can have a significant impact on the volatility of domestic macroeconomic variables in the absence of stability-oriented domestic economic, monetary and exchange rate policies.

The euro area has played an important role in the rapid expansion of global cross-border finance, facilitating the intensification of financial linkages not only between euro area Member States, but also between the euro area and the world economy. With regard to the former, the catalytic effect of European Monetary Union, which fostered a continuing process of integration in European financial markets and brought about a surge in intra-euro area cross-border investment, is well documented in the literature on financial integration.<sup>2</sup> With the introduction of the single currency, European Monetary Union has also given rise to increased extra-euro area financial flows and a steadily growing euro area share in the global trade of financial assets (see Chart 3).

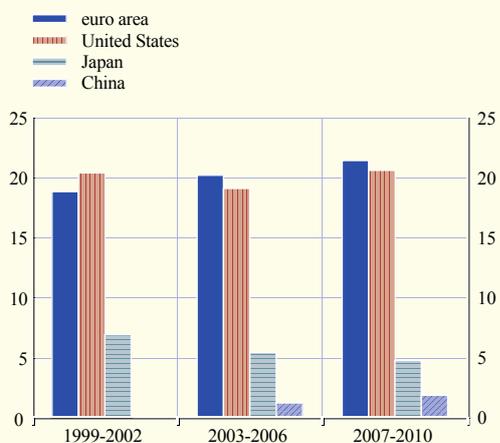
Conventional measures of financial integration suggest that, of the world's largest economies, the

euro area is the one to display the highest degree of financial integration with the rest of the world. Between 2007 and 2010 the euro area accounted for, on average, 21% of the global stock of foreign assets and liabilities, placing it slightly ahead of the United States. While these figures reflect the relatively large share of the euro area and the United States in global economic activity, the stock of euro area foreign assets and liabilities also exceeds that of the United States and other major economies when measured in terms of the economies' GDP (see Chart 4). This pattern is even more pronounced when comparing cross-border financial activity in individual

2 See Lane, P. R., "Global Bond Portfolios and EMU", *International Journal of Central Banking*, Vol. 2, No 2, 2006, pp. 1-23. See also the article entitled "The contribution of the ECB and the Eurosystem to European financial integration", *Monthly Bulletin*, ECB, May 2006, and that entitled "The integration of Europe's financial markets", *Monthly Bulletin*, ECB, October 2003.

**Chart 3 Share in world total of foreign assets and liabilities**

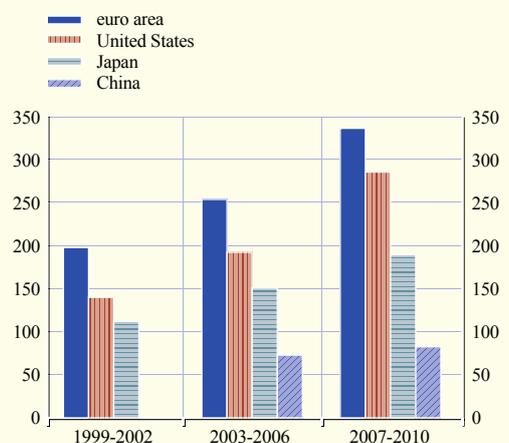
(average percentages of world total)



Sources: IMF, ECB and ECB staff calculations.<sup>1)</sup>  
 Note: For the euro area, data are net of intra-euro area cross-border investment. For China, data are only available for 2005-2009.  
 1) See the note in Chart 1.

**Chart 4 Foreign assets and liabilities as a share of own GDP**

(average percentages of GDP)



Sources: IMF, ECB and ECB staff calculations.<sup>1)</sup>  
 Note: For the euro area, data are net of intra-euro area cross-border investment. For China, data are only available for 2005-2009.  
 1) See the note in Chart 1.

economies – both in terms of stocks and flows and with regard to assets and liabilities – with measures of domestic financial activity such as domestic stock market capitalisation, the share of outstanding debt securities, and total turnover in domestic financial markets.

The euro area therefore not only has a prominent role in global financial markets (as implied by its large share in global financial stocks and flows), but also a high degree of integration with global finance (as indicated by the large share of stocks and flows of foreign assets and liabilities in euro area GDP). Taken together, this is indicative of the importance of euro area cross-border financial flows for the assessment of developments in global financial markets, as well as for the analysis of their impact on the euro area financial and real economy.

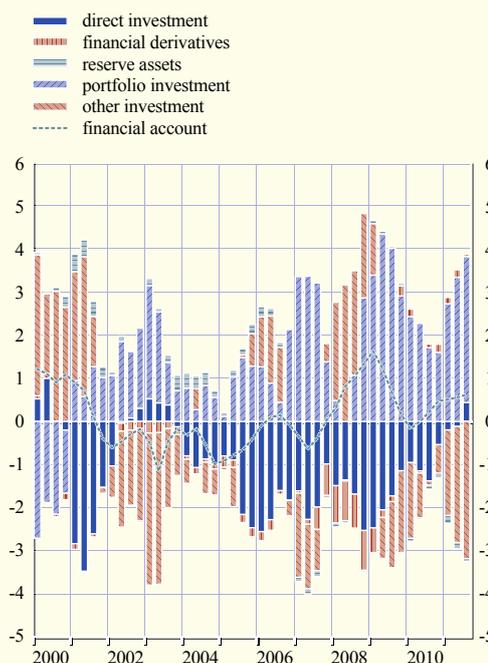
This article reviews the main trends in euro area cross-border finance since the inception of European Monetary Union. Particular emphasis is given to developments since the onset of the global financial crisis in 2007. The article also characterises some of the main drivers of euro area capital flows over the recent past. It then concludes with a discussion of policy implications.

## 2 TRENDS IN EURO AREA CROSS-BORDER FINANCE

Euro area cross-border financial transactions are summarised in the financial account

**Chart 5 Euro area financial account by type of investment**

(quarterly flows; four-quarter sum in percentage of GDP)



Source: ECB.  
Note: Last observation refers to the third quarter of 2011.

of the euro area balance of payments (as briefly discussed in Box 2). Since the inception of European Monetary Union the euro area financial account has been stable and, at the same time, broadly in balance. In fact, since 1999, the financial account balance has been averaged 0.1% of GDP and fluctuated within a narrow band of approximately  $\pm 1\%$  of GDP (see Chart 5).

### Box 2

#### THE FINANCIAL ACCOUNT OF THE EURO AREA BALANCE OF PAYMENTS

The economic transactions between the euro area and the rest of the world are accounted for in the euro area balance of payments.<sup>1</sup> In the balance of payments, the sum of the current account balance's capital account balance, which is typically much smaller in the case of most major advanced and emerging economies, equals the financial account balance (subject to errors and omissions),

<sup>1</sup> The ECB follows the recommendations of the IMF Balance of Payments Manual in the compilation of its external statistics.

which includes all external transactions involving financial capital.<sup>2</sup> In the particular case of the euro area balance of payments, the transactions recorded are only those that involve the rest of the world, i.e. intra-euro area transactions are excluded. The transactions recorded are typically divided into five sub-components: direct investment, portfolio investment, financial derivatives, other investment and reserve assets.

First, direct investment reflects the objective of a resident entity in one economy to obtain a lasting interest in an enterprise resident in another economy. A lasting interest implies both the existence of a long-term economic relationship and a significant degree of influence on the management of the enterprise on the part of the direct investor. In line with international standards and best practices, as laid out in the IMF's Balance of Payments Manual, foreign direct investment is comprised of transactions where an acquiring entity has obtained a stake of at least 10% in the target enterprise.

Second, portfolio investment includes transactions in debt and equity securities, except those included in direct investment and reserve assets (see below).

Third, financial derivatives are financial instruments linked to a specific underlying asset or underlying index. The most common types of financial instruments included in the financial derivatives item are options, futures, swaps, forward foreign exchange contracts and credit derivatives.

Fourth, the reserve assets of the euro area consist of the Eurosystem's holdings of foreign assets, i.e. the ECB's reserve assets and the reserve assets held by the national central banks of euro area Member States. These comprise monetary gold, Special Drawing Rights, the reserve position in the International Monetary Fund, foreign exchange assets (consisting of currency and deposits, as well as securities) and other claims.

Fifth, "other investment" refers to a residual category that comprises all external financial transactions that are not included in the aforementioned sub-components of the financial account and do not reflect changes in the reserve assets of the euro area. Most notably, it includes cross-border loans and deposits, as well as trade credit and other assets or liabilities.

<sup>2</sup> For the sake of simplicity and following general usage in the economic literature, both "financial flows" and "capital flows" are used throughout the article to refer to transactions in the financial account.

The main source of funding for the euro area has typically been portfolio investment. Since 2001 the euro area has, without interruption, been a net importer of portfolio investment, in both debt securities (in the form of bonds, notes and money market instruments), reflecting the size and depth of euro area debt securities markets, and equity securities (see Charts 5 and 6).

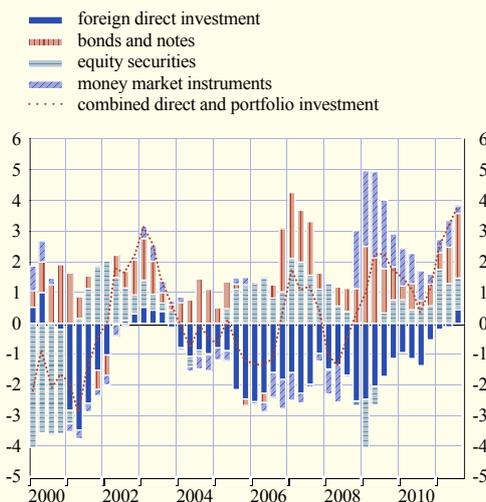
At the same time, the euro area has typically been a net exporter of foreign direct investment, mostly in the form of equity capital and, to a lesser extent, re-invested earnings and other

capital, the latter consisting mainly of inter-company loans.

The general pattern of net foreign direct investment outflows offsetting net portfolio investment inflows is a common characteristic of advanced economies' cross-border financial flows. The reasons for this are as follows. First, advanced economies offer security markets that are large and deep enough to attract sizeable portfolio investment inflows. Second, investors from advanced economies often prefer direct investment – granting immediate ownership and

**Chart 6 Euro area combined direct and portfolio investment**

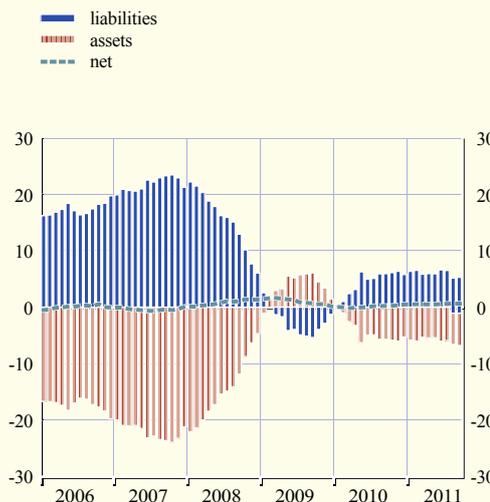
(quarterly flows; four-quarter sum as a percentage of GDP)



Source: ECB.  
Note: Last observation refers to the third quarter of 2011.

**Chart 7 Euro area asset and liability financial flows**

(monthly flows, 12-month cumulated as a percentage of GDP)



Source: ECB.  
Note: Last observation refers to September 2011.

control over a firm – to portfolio investment in emerging economies, which tend to have less deep financial markets and a less developed institutional framework, with poorer public and corporate governance.<sup>3</sup> In addition, foreign direct investment often forms part of the market penetration strategies of large multinational firms with headquarters in advanced economies.

While financial derivatives and official reserves typically account for only a small fraction of the financial account, the residual component of “other investment” is typically large and volatile. This is mostly a reflection of the nature of the euro area banking sector activities involving loans, currency and deposits.

### 3 DRIVERS OF EURO AREA FINANCIAL FLOWS SINCE THE CRISIS

Although the general patterns of net financial flows have not changed dramatically during the global financial crisis, the stability of the net financial account and its breakdown according to instrument masks significant changes in asset and liability cross-border financial flows and

their sectoral composition. In this respect, the recent financial retrenchment serves to highlight three important aspects that need to be taken into account in the analysis of cross-border financial flows. First, asset and liability flows can be far larger than net flows. Second, external financial flows can be volatile and easily reversible. And third, balanced net flows may mask the gradual build-up of macroeconomic imbalances and financial risks as the parallel growth of assets and liabilities in relation to GDP increases the vulnerability of a country to abrupt changes in financial market conditions and to adverse wealth and balance sheet shocks.

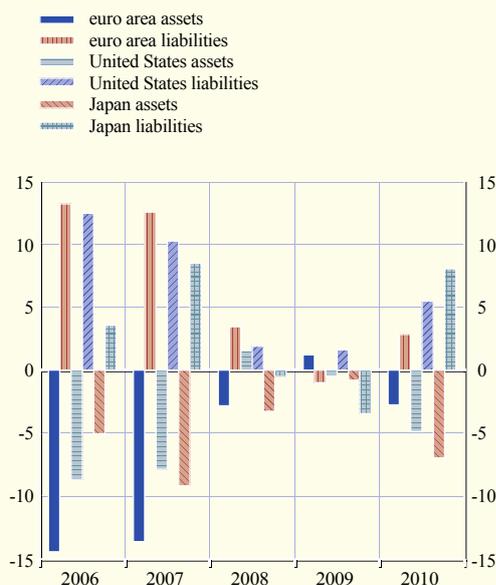
Following the emergence of the first period of financial market turbulence which marked the onset of the global financial crisis in 2007, euro area asset and liability financial flows fell sharply, from 20% of GDP to less than 5% of GDP in 2008, and global investors – both in the euro area and in other major economies – repatriated foreign investments in net terms in 2009 (see Chart 7).

<sup>3</sup> See also Daude, C. and Fratzscher, M., “The pecking order of cross-border investment”, *Journal of International Economics*, Vol. 74, No 1, 2008, pp. 94-119.



**Chart 8 Asset and liability financial flows of selected advanced economies**

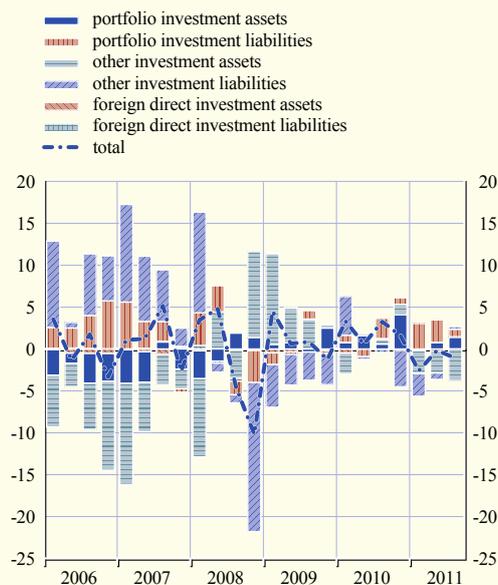
(annual flows as a percentage of own stock)



Sources: Haver and ECB staff calculations.

**Chart 9 Financial account of the euro area MFIs**

(quarterly flows; percentages of GDP)



Sources: ECB and ECB staff calculations.

Notes: Last observation refers to the third quarter of 2011. Financial derivatives are excluded.

Although a resumption of capital flows has since led to an increase in both global and euro area cross-border financial flows, global cross-border financial activity still remains far below the pre-crisis levels prevailing prior to the retrenchment of global financial flows during 2008 and 2009 (see Chart 8).

The deleveraging process also involved a significant restructuring of euro area banks' balance sheets, which resulted in a reduction in cross-border lending on the part of the euro area banking sector. Banks decreased their assets held abroad, while their liabilities vis-à-vis foreign investors declined. This was particularly the case in the last quarter of 2008, immediately after the collapse of Lehman Brothers, as reflected in the reduction in other investment liabilities – mostly deposits and loans – by more than 20% of euro area GDP (see Chart 9).

Further extraordinary circumstances amplified the reduction in asset and liability cross-border investment. First, liquidity shortages resulting

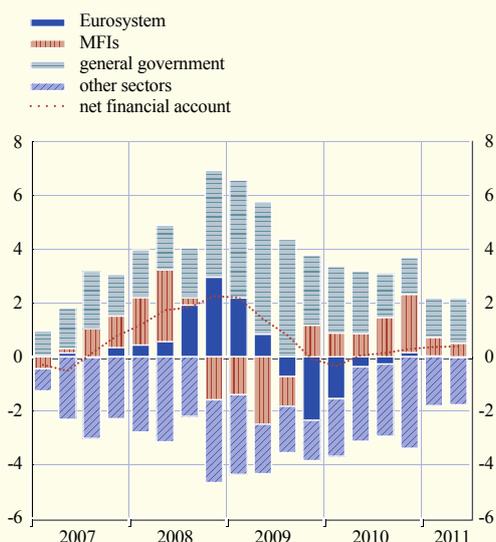
from the breakdown of the interbank and asset-backed securities markets initially triggered significant sales of other assets as global investors endeavoured to raise liquidity. Second, heightened uncertainty and asymmetric information between lenders and borrowers resulted in a sudden rise in risk aversion, and it is likely that this led to herd behaviour among international investors. As a result of the liquidity shortage in the global banking sector, euro area banks went from being net borrowers to being net lenders in the last quarter of 2008 and for most of 2009 (see Chart 10).<sup>4</sup>

The deleveraging of the banking sector was accompanied by an increase in the leveraging of euro area governments, which acted as a substitute for private leverage during the global financial crisis (see Chart 10).

<sup>4</sup> See also Forster, K., Vasardani, M. and Ca' Zorzi, M., "Euro area cross-border financial flows and the global financial crisis", *Occasional Paper Series*, No 126, ECB, Frankfurt am Main, July 2011.

**Chart 10 Euro area financial account  
by sector**

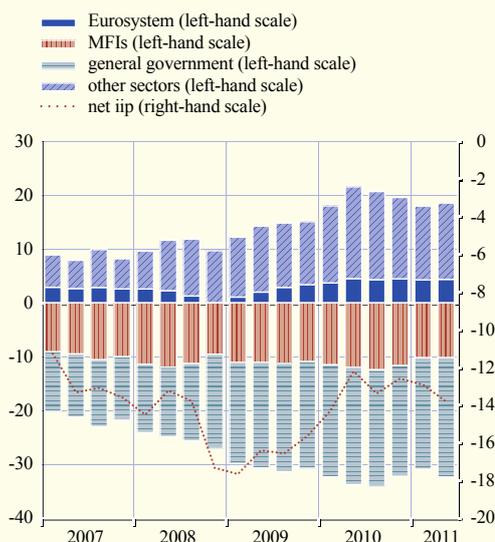
(quarterly flows; four-quarter sum as a percentage of GDP)



Sources: ECB and ECB staff calculations.  
Notes: Last observation refers to the second quarter of 2011.  
Financial derivatives are excluded.

**Chart 11 Euro area net international  
investment position (iip) by sector**

(quarterly end-period outstanding amounts as a percentage of GDP)



Sources: ECB and ECB staff calculations.  
Notes: Last observation refers to the second quarter of 2011.  
Financial derivatives are excluded.

On account of the rising funding needs of euro area governments due to automatic stabilisers, and on account of the fiscal stimulus packages that were implemented in response to the global financial crisis, the general government sector's net financial account, i.e. public net external borrowing, rose from about 2% of GDP in the years prior to the crisis to over 4% of GDP in the last quarter of 2008 and the first three quarters of 2009 (see Chart 10). The increase in the leverage of the euro area government sector – reflected in rising portfolio investment inflows absorbing part of the issuance of euro area government debt – and the temporary extension of foreign currency swap lines in coordination with foreign monetary authorities were the main factors behind the moderate increase in the financial account balances during the global financial crisis. Furthermore, the subsequent reversal, reflecting the fiscal consolidation measures, reduced the funding needs of the euro area government sector.

The temporary increase in net inflows to the euro area also led to the euro area's international

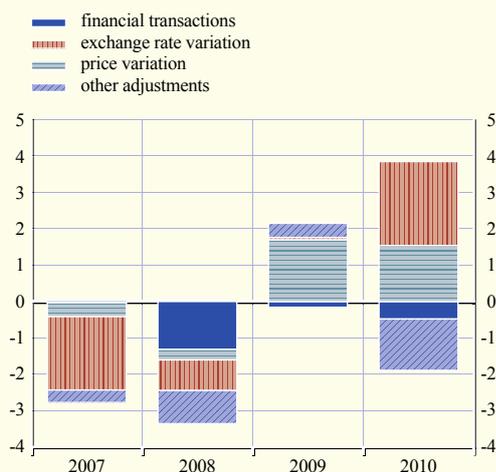
investment position, which comprises external assets and liabilities, recording a temporary increase in the net liability position. This development was mainly accounted for by the increase in the general government sector's net liability position of almost 10% of GDP, which was only partly offset by an increase in the net asset position of "other sectors" (see Chart 11).<sup>5</sup> Since 2009 the euro area's international investment position has moved closer to its pre-crisis levels on account of the slowdown in net inflows to the euro area, the depreciation of the euro in 2010 – which increased the value of non-euro-denominated foreign assets – and the relatively weaker equity market performance in the euro area compared with the rest of the world (see Chart 12).

The overall stability of euro area net cross-border financial flows and the euro area's international investment position nevertheless

5 Other sectors include non-financial corporations, financial corporations other than MFIs – i.e. investment funds, insurance corporations, pension funds and other financial corporations – and households.

**Chart 12 Breakdown of changes in the euro area international investment position**

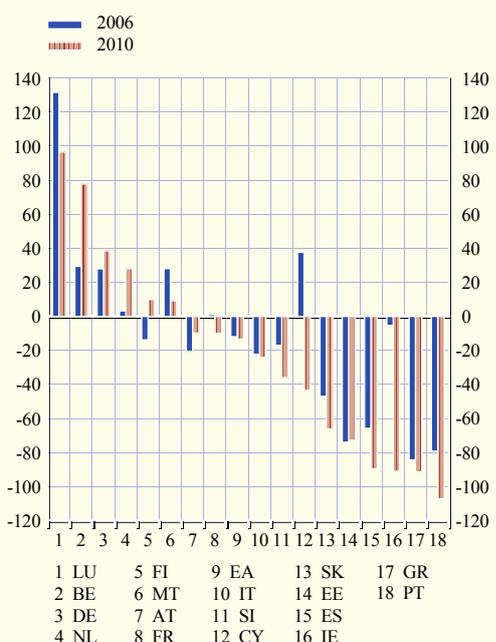
(annual flows; percentages of GDP)



Source: ECB.  
Note: Last observation refers to 2010.

**Chart 13 International investment position of euro area countries in 2006 and 2010**

(percentages of GDP)



Source: ECB.  
Note: Countries are positioned according to their international investment position as a percentage of own GDP in 2010.

masks significant heterogeneity across individual euro area countries (see Chart 13). Some euro area countries have been net capital exporters in recent years, while other euro area countries have exhibited large and persistent funding needs and have been net capital importers over a prolonged period. In the case of some countries, persistent net financial inflows have also been a reflection of protracted periods of strong growth in domestic demand leading to overly optimistic expectations of future income and profits. This development has often been accompanied or intensified by imbalanced domestic policies and, in particular, an insufficiently tight fiscal stance that has ultimately undermined the long-run growth potential and triggered a progressive loss in competitiveness.

As a result, the net international investment position of some euro area countries has worsened further in recent years, giving rise to growing concerns in global financial markets about the funding needs of such countries, with tensions intensifying further since the first half of 2010, when risk aversion re-emerged and volatility in financial markets increased.

Events during the crisis have shown that capital flows can react quickly to adverse shocks. Specifically, episodes that lead to uncertainty can generate rapid changes in investment sentiment, which may manifest themselves in sudden swings. Although the global economic and financial outlook was initially the main factor affecting the dynamics of euro area cross-border flows, country-specific risk factors have steadily gained in importance. This was, for instance, demonstrated in early 2010, when cross-border financial flows into euro area debt instruments declined as the tensions in some financial market segments re-emerged. With a view to gaining further insight into the impact of risk aversion on the dynamics of capital flows, Box 3 draws on an analysis of correlations between capital flows and measures of risk aversion during the crisis, as well as other potential drivers.

## Box 3

## THE ROLE OF RISK AVERSION IN EURO AREA CAPITAL FLOWS SINCE THE CRISIS

The existence of a large body of literature on the determinants of international financial flows is not surprising, given that financial integration and cross-border capital flows are typically found to play an important role in promoting investment and growth in domestic economies participating in the international trade of assets (as discussed in Box 1 of this article).<sup>1</sup> At the same time, the volatility of financial flows over recent decades, and especially during periods of heightened financial tension, has further spurred academia's interest in the determinants of cross-border financial flows. More recently the literature has devoted increasing attention to the determinants behind different "waves" of financial flows, identified as either "stops", "surges", "flights" or "retrenchments" depending on their direction and origin – i.e. from or to the domestic economy or abroad.<sup>2</sup>

However, the focus of the literature has typically been on longer samples of data, given the long-run nature of the process of financial integration. Here, therefore, in order to assess the determinants of euro area cross-border financial flows over the relatively short period of time that has elapsed since the crisis erupted, a methodology has been used that tries to capture time-varying factors that have affected euro area cross-border capital flows at different stages of the crisis.

The quantification of the time-varying impact of different drivers on net portfolio flows of the euro area is based on a model in which the regression coefficients are allowed to change in each period. Time-varying regression coefficients are used to capture possible changes in market sentiment, since the focus of market participants changes over time, as, therefore, do the determinants of portfolio flows.<sup>3</sup>

More specifically, monthly euro area net portfolio investment and net other investment flows are modelled on the basis of the following reduced-form regression equation:

$$y_t = \sum_i^n \beta_{i,t} x_{i,t-1} + \varepsilon_t,$$

where the variable  $y_t$  corresponds to net portfolio investment or, alternatively, net other investment, four variables  $x_{it}$  correspond to (i) an index of implied volatility in stock markets proxying for the degree of global risk aversion, (ii) the yield differential between euro area government bond yields and an aggregate measure of non-euro area advanced economies' government bond yields, (iii) the change in the effective exchange rate of the euro, and (iv) the difference in growth of industrial production between the euro area and non-euro area advanced economies proxying for fundamentals affecting the state of the real economy.

1 The literature on the determinants of cross-border financial flows is too extensive to give a complete overview here. In addition to those cited elsewhere in this article, some insightful contributions include: Ahearne, A.G., Grier, W.L. and Warnock, F.E., "Information costs and home bias: an analysis of U.S. holdings of foreign equities", *Journal of International Economics*, Vol. 62, No 2, 2004, pp. 313-363; Chan, K., Covrig, V. and Ng, L., "What Determines the Domestic Bias and the Foreign Bias? Evidence from Mutual Fund Equity Allocations Worldwide", *Journal of Finance*, Vol. 60, No 3, 2005, pp. 1495-1534; and Rey, H. and Oh, Y., "Information and Capital Flows: The Determinants of Transactions in Financial Assets", *European Economic Review*, Vol. 45, No 4, 2001, pp. 783-796.

2 See, for example, Forbes, K. and Warnock, F., "Capital Flow Waves: Surges, Stops, Flight and Retrenchment", *NBER Working Paper*, No 17351, 2011.

3 For a detailed description of the methodology and how it applies to emerging economies' capital flows, see the special feature entitled "Portfolio flows to emerging market economies: determinants and domestic impact", *Financial Stability Review*, ECB, Frankfurt am Main, June 2011.

The degree to which net portfolio investment and net other investment flows respond to changes in each of their determinants, i.e.  $\beta_{it}$ , is in turn allowed to change over time in response to possible changes in market sentiment not explained in the model.<sup>4</sup>

$$\beta_{i,t} = \beta_{i,t-1} + \mu_{i,t}$$

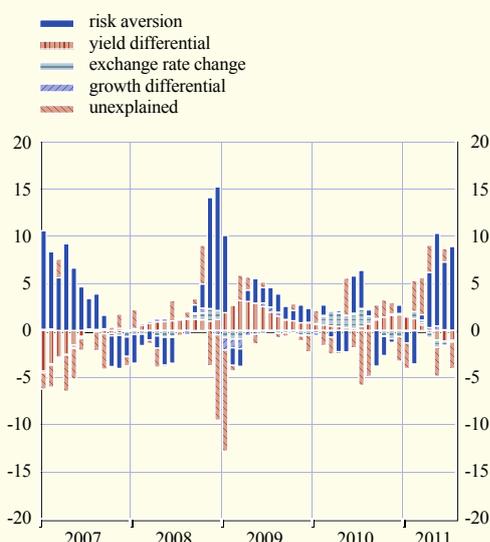
The resulting estimated responses of portfolio and other investment flows to their determinants can then, together with the actual changes in the determinants themselves, be transformed into contributions to the overall change in flows on the basis of the reduced-form model. In the absence of a structural model based on microeconomic foundations, these contributions can be interpreted econometrically as time-varying conditional correlations between net portfolio investment and net other investment flows and their determinants.

The central finding of the model-based analysis is that, since the onset of the global financial crisis, risk aversion has been the key driver of euro area financial flows. Notably, the impact of risk aversion on the direction of euro area financial flows has been changing throughout the different stages of the crisis. Other determinants of euro area cross-border financial flows that normally tend to be their main drivers, such as exchange rate developments and interest rate differentials, have, in contrast, only played a minor role. To some extent, however, the differential between the yield of euro area government bonds and that of other major advanced economies (in particular the United States), which has generally been positive since the onset of the crisis, has supported net financial inflows to the euro area (see Charts A and B).

4 The model can be estimated on the basis of Kalman filtering via maximum likelihood, as suggested in Kim, C-J. and Nelson, E., *State Space Models with Regime Switching: Classical and Gibbs-Sampling Approaches with Applications*, MIT Press, 1998, or alternatively by using Bayesian methods.

**Chart A Net portfolio investment – estimated determinants**

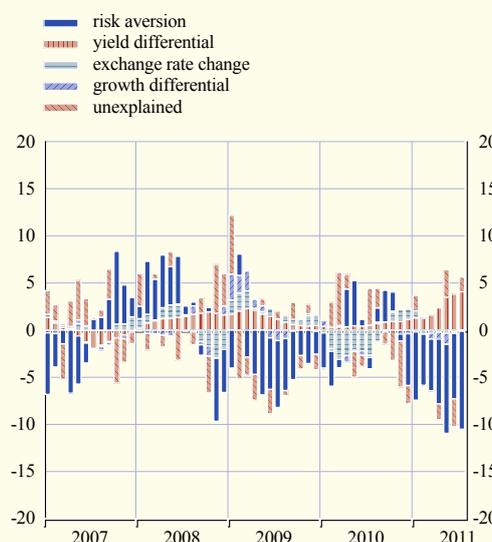
(percentages of GDP; three-month cumulated flows)



Source: ECB staff calculations.  
Note: Last observation refers to July 2011.

**Chart B Net other investment – estimated determinants**

(percentages of GDP, three-month cumulated flows)



Source: ECB staff calculations.  
Note: Last observation refers to July 2011.

As regards portfolio investment, the model associates the higher capital inflows recorded at the end of 2008 with the substantial increase in risk aversion in the aftermath of the Lehman Brothers failure (see Chart A). Thus, according to the model, risk aversion at the beginning of the crisis generally contributed to net inflows to the euro area, probably because the main source of risk was at that time perceived to be outside the euro area, making it a safe haven for both domestic and global investors.

In 2009 the re-intensification of financial market tensions, particularly in Europe, as evidenced in the renewed increase in risk aversion, seems to have supported a gradual reduction of portfolio investment inflows to – and later net portfolio investment outflows from – the euro area, probably as a result of strains in the sovereign debt markets of some countries becoming the centre of attention (see Chart A).

From 2010 to mid-2011 the model associates risk aversion with an overall surge in sizeable net portfolio inflows to the euro area. This could well reflect safe-haven flows from foreign investors to (sovereign) debt securities issued by core euro area countries (see Chart A). At the same time, risk aversion continues to support net outflows of other investment, a residual component mainly comprising transactions involving the euro area banking sector (see Chart B).

#### 4 CONCLUSIONS

The current crisis has led to significant changes in the patterns of cross-border financial flows. These changes – prompted by sudden swings and increased volatility – have led to increased attention being paid to cross-border financial flows and a recognition of their importance for macroeconomic and financial stability in both advanced and emerging economies.<sup>6</sup> The following conclusions emerge from the analysis carried out in this article.

First, the build-up of imbalances should be carefully monitored, with particular attention being paid to deficits – which may go hand in hand with funding problems and currency crises – but also to surpluses, as they can be associated with credit and housing price booms to the extent that these are fuelled by speculative gross capital inflows.

Second, the size of asset and liability financial flows and positions matters even in the absence of large and persistent funding needs, i.e. in countries that have relatively balanced current accounts. Asset and liability financial flows or positions that are sizeable in terms of a

country's economic activity may signal the potential for high exposure to spillovers from abroad. Furthermore, countries with a very high degree of financial openness are more exposed to periods of higher tension in the financial markets, leading to retrenchment behaviour or even the repatriation of foreign investment capital. The limited access to international capital markets resulting from this can rapidly lead to liquidity shocks and a sudden fall in asset prices, especially in busts, with significant negative consequences for the real economy.

Third, within the euro area, sector and country-specific factors need to be given due consideration. Notably, domestic imbalances should be closely monitored in order to identify possible vulnerabilities that are not apparent at the euro area level.

Finally, the crisis has also provided some lessons in macroeconomic discipline. The reason for this is that, despite the undeniably beneficial effects of financial integration on growth and on general societal welfare in the long run, imbalanced capital flows imply significant

6 See also Forster, K., Vasardani, M. and Ca' Zorzi, M., op. cit.

risks for economies whenever they are coupled with unsustainable domestic policies. Balanced and sustainable macroeconomic policies are a prerequisite if countries are to reap the benefits of global financial integration, as they enable countries to attract stable and balanced capital inflows, which are conducive to the long-run growth of the economy. Moreover, economic policies need to be carefully aligned with the objective of external sustainability, as the volatility that is inherent in cross-border capital flows can have a significant impact on the volatility of domestic macroeconomic variables in the absence of stability-oriented domestic economic policies.

# 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's Statistical Data Warehouse in the "Statistics" section of the ECB's website (<http://sdw.ecb.europa.eu>) for longer runs and more detailed data.

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#### Conventions used in the tables

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

# EURO AREA OVERVIEW

## Summary of economic indicators for the euro area

(annual percentage changes, unless otherwise indicated)

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

	M1 <sup>2)</sup>	M2 <sup>2)</sup>	M3 <sup>2),3)</sup>	M3 <sup>2),3)</sup> 3-month moving average (centred)	MFI loans to euro area residents excluding MFIs and general government <sup>2)</sup>	Securities other than shares issued in euro by non-MFI corporations <sup>2)</sup>	3-month interest rate (EURIBOR; % per annum; period averages)	10-year spot rate (% per annum; end of period) <sup>4)</sup>
	1	2	3	4	5	6	7	8
2010	8.5	1.8	0.5	-	0.6	4.1	0.81	3.36
2011	2.0	2.3	2.2	-	2.4	.	1.39	2.65
2011 Q1	3.2	2.4	1.9	-	2.4	2.1	1.10	3.66
Q2	1.7	2.4	2.1	-	2.6	1.5	1.42	3.41
Q3	1.4	2.3	2.4	-	2.5	0.6	1.56	2.48
Q4	1.9	2.1	2.3	-	2.1	.	1.50	2.65
2011 Aug.	1.7	2.4	2.8	2.6	2.5	0.1	1.55	2.76
Sep.	2.0	2.5	2.9	2.8	2.5	0.0	1.54	2.48
Oct.	1.7	1.9	2.6	2.5	2.7	0.8	1.58	2.79
Nov.	2.1	2.1	2.0	2.1	1.7	-0.7	1.48	3.07
Dec.	1.6	1.8	1.6	.	1.0	.	1.43	2.65
2012 Jan.	.	.	.	.	.	.	1.22	2.67

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

	HICP <sup>1)</sup>	Industrial producer prices	Hourly labour costs	Real GDP (s.a.)	Industrial production excluding construction	Capacity utilisation in manufacturing (%)	Employment (s.a.)	Unemployment (% of labour force; s.a.)
	1	2	3	4	5	6	7	8
2010	1.6	2.9	1.6	1.9	7.4	76.7	-0.5	10.1
2011	2.7	5.9	.	.	.	80.3	.	10.1
2011 Q2	2.8	6.3	3.3	1.6	4.2	80.9	0.4	10.0
Q3	2.7	5.9	2.7	1.3	4.0	80.0	0.3	10.2
Q4	2.9	5.1	.	.	.	79.8	.	10.4
2011 Aug.	2.5	5.8	-	-	6.0	-	-	10.2
Sep.	3.0	5.8	-	-	2.2	-	-	10.3
Oct.	3.0	5.5	-	-	1.0	79.6	-	10.3
Nov.	3.0	5.4	-	-	0.1	-	-	10.4
Dec.	2.7	4.3	-	-	.	-	-	10.4
2012 Jan.	2.7	.	-	-	.	79.9	-	.

### 3. External statistics

(EUR billions, unless otherwise indicated)

	Balance of payments (net transactions)			Reserve assets (end-of-period positions)	Net international investment position (as a % of GDP)	Gross external debt (as a % of GDP)	Effective exchange rate of the euro: EER-20 <sup>6)</sup> (index: 1999 Q1 = 100)		USD/EUR exchange rate
	Current and capital accounts	Goods	Combined direct and portfolio investment				Nominal	Real (CPI)	
2010	-36.7	12.9	98.1	591.2	-13.4	120.4	103.6	101.6	1.3257
2011	.	.	.	667.1	.	.	103.4	100.7	1.3920
2011 Q1	-27.8	-13.0	118.7	576.6	-13.4	117.6	102.7	100.1	1.3680
Q2	-20.4	-3.0	121.2	580.9	-14.1	119.5	105.2	102.6	1.4391
Q3	0.6	3.1	21.1	646.6	-13.8	123.1	103.5	100.6	1.4127
Q4	.	.	.	667.1	.	.	102.1	99.4	1.3482
2011 Aug.	-1.5	-4.2	33.3	656.3	.	.	103.8	100.8	1.4343
Sep.	0.9	3.6	29.7	646.6	.	.	102.8	99.9	1.3770
Oct.	4.1	1.7	-34.1	651.6	.	.	103.0	100.3	1.3706
Nov.	3.2	6.4	-4.5	683.4	.	.	102.6	99.9	1.3556
Dec.	.	.	.	667.1	.	.	100.8	98.2	1.3179
2012 Jan.	.	.	.	.	.	.	98.9	96.4	1.2905

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

Note: For more information on the data, see the relevant tables later in this section.

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

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

3) M3 and its components exclude holdings by non-euro area residents of money market fund shares/units and debt securities with a maturity of up to two years.

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

5) Data refer to the Euro 17, unless otherwise indicated.

6) For a definition of the trading partner groups and other information, please refer to the General Notes.



# MONETARY POLICY STATISTICS

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

### 1. Assets

	13 January 2012	20 January 2012	27 January 2012	3 February 2012
<b>Gold and gold receivables</b>	423,451	423,450	423,446	423,446
<b>Claims on non-euro area residents in foreign currency</b>	246,024	245,306	244,971	246,012
Claims on euro area residents in foreign currency	94,543	94,514	96,673	100,434
Claims on non-euro area residents in euro	23,489	25,732	25,009	24,180
<b>Lending to euro area credit institutions in euro</b>	817,255	831,730	809,248	794,978
Main refinancing operations	110,881	126,877	130,317	115,579
Longer-term refinancing operations	703,894	701,478	676,505	676,505
Fine-tuning reverse operations	0	0	0	0
Structural reverse operations	0	0	0	0
Marginal lending facility	2,386	3,323	2,366	2,799
Credits related to margin calls	94	53	59	94
<b>Other claims on euro area credit institutions in euro</b>	69,534	75,550	72,292	73,319
<b>Securities of euro area residents in euro</b>	623,042	623,968	624,849	623,229
Securities held for monetary policy purposes	278,835	282,215	282,579	282,541
Other securities	344,207	341,753	342,270	340,688
<b>General government debt in euro</b>	33,926	33,926	33,926	31,176
<b>Other assets</b>	345,723	352,020	352,164	345,352
<b>Total assets</b>	<b>2,676,987</b>	<b>2,706,197</b>	<b>2,682,576</b>	<b>2,662,126</b>

### 2. Liabilities

	13 January 2012	20 January 2012	27 January 2012	3 February 2012
<b>Banknotes in circulation</b>	876,589	871,841	869,167	871,508
<b>Liabilities to euro area credit institutions in euro</b>	840,822	845,255	797,868	815,235
Current accounts (covering the minimum reserve system)	132,536	134,722	88,939	83,915
Deposit facility	493,272	491,780	488,884	511,438
Fixed-term deposits	213,000	217,000	219,000	219,000
Fine-tuning reverse operations	0	0	0	0
Deposits related to margin calls	2,015	1,752	1,045	882
<b>Other liabilities to euro area credit institutions in euro</b>	1,354	1,480	1,676	2,017
<b>Debt certificates issued</b>	0	0	0	0
<b>Liabilities to other euro area residents in euro</b>	87,509	108,874	136,115	93,804
<b>Liabilities to non-euro area residents in euro</b>	117,730	118,930	118,556	122,474
<b>Liabilities to euro area residents in foreign currency</b>	3,224	1,969	2,845	3,541
<b>Liabilities to non-euro area residents in foreign currency</b>	9,777	9,965	9,523	9,584
<b>Counterpart of special drawing rights allocated by the IMF</b>	55,942	55,942	55,942	55,942
<b>Other liabilities</b>	208,460	216,363	215,299	212,116
<b>Revaluation accounts</b>	394,031	394,028	394,028	394,028
<b>Capital and reserves</b>	81,550	81,550	81,558	81,877
<b>Total liabilities</b>	<b>2,676,987</b>	<b>2,706,197</b>	<b>2,682,576</b>	<b>2,662,126</b>

Source: ECB.

## 1.2 Key ECB interest rates

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

	With effect from: <sup>1)</sup>		Main refinancing operations				Marginal lending facility	
	Deposit facility		Fixed rate tenders	Variable rate tenders	Change	Level	Change	
	Level	Change	Fixed rate	Minimum bid rate				
			1	2	3	4	5	6
1999	4 Jan.	2.00	-	3.00	-	-	4.50	-
	4 <sup>2)</sup>	2.75	0.75	3.00	-	...	3.25	-1.25
	22	2.00	-0.75	3.00	-	...	4.50	1.25
	9 Apr.	1.50	-0.50	2.50	-	-0.50	3.50	-1.00
	5 Nov.	2.00	0.50	3.00	-	0.50	4.00	0.50
2000	4 Feb.	2.25	0.25	3.25	-	0.25	4.25	0.25
	17 Mar.	2.50	0.25	3.50	-	0.25	4.50	0.25
	28 Apr.	2.75	0.25	3.75	-	0.25	4.75	0.25
	9 June	3.25	0.50	4.25	-	0.50	5.25	0.50
	28 <sup>3)</sup>	3.25	...	-	4.25	...	5.25	...
	1 Sep.	3.50	0.25	-	4.50	0.25	5.50	0.25
	6 Oct.	3.75	0.25	-	4.75	0.25	5.75	0.25
2001	11 May	3.50	-0.25	-	4.50	-0.25	5.50	-0.25
	31 Aug.	3.25	-0.25	-	4.25	-0.25	5.25	-0.25
	18 Sep.	2.75	-0.50	-	3.75	-0.50	4.75	-0.50
	9 Nov.	2.25	-0.50	-	3.25	-0.50	4.25	-0.50
2002	6 Dec.	1.75	-0.50	-	2.75	-0.50	3.75	-0.50
2003	7 Mar.	1.50	-0.25	-	2.50	-0.25	3.50	-0.25
	6 June	1.00	-0.50	-	2.00	-0.50	3.00	-0.50
2005	6 Dec.	1.25	0.25	-	2.25	0.25	3.25	0.25
2006	8 Mar.	1.50	0.25	-	2.50	0.25	3.50	0.25
	15 June	1.75	0.25	-	2.75	0.25	3.75	0.25
	9 Aug.	2.00	0.25	-	3.00	0.25	4.00	0.25
	11 Oct.	2.25	0.25	-	3.25	0.25	4.25	0.25
	13 Dec.	2.50	0.25	-	3.50	0.25	4.50	0.25
2007	14 Mar.	2.75	0.25	-	3.75	0.25	4.75	0.25
	13 June	3.00	0.25	-	4.00	0.25	5.00	0.25
2008	9 July	3.25	0.25	-	4.25	0.25	5.25	0.25
	8 Oct.	2.75	-0.50	-	-	-	4.75	-0.50
	9 <sup>4)</sup>	3.25	0.50	-	-	-	4.25	-0.50
	15 <sup>5)</sup>	3.25	...	3.75	-	-0.50	4.25	...
	12 Nov.	2.75	-0.50	3.25	-	-0.50	3.75	-0.50
	10 Dec.	2.00	-0.75	2.50	-	-0.75	3.00	-0.75
2009	21 Jan.	1.00	-1.00	2.00	-	-0.50	3.00	...
	11 Mar.	0.50	-0.50	1.50	-	-0.50	2.50	-0.50
	8 Apr.	0.25	-0.25	1.25	-	-0.25	2.25	-0.25
	13 May	0.25	...	1.00	-	-0.25	1.75	-0.50
2011	13 Apr.	0.50	0.25	1.25	-	0.25	2.00	0.25
	13 July	0.75	0.25	1.50	-	0.25	2.25	0.25
	9 Nov.	0.50	-0.25	1.25	-	-0.25	2.00	-0.25
	14 Dec.	0.25	-0.25	1.00	-	-0.25	1.75	-0.25

Source: ECB.

- 1) From 1 January 1999 to 9 March 2004, the date refers to the deposit and marginal lending facilities. For main refinancing operations, changes in the rate are effective from the first operation following the date indicated. The change on 18 September 2001 was effective on that same day. From 10 March 2004 onwards, the date refers both to the deposit and marginal lending facilities and to the main refinancing operations (with changes effective from the first main refinancing operation following the Governing Council decision), unless otherwise indicated.
- 2) On 22 December 1998 the ECB announced that, as an exceptional measure between 4 and 21 January 1999, a narrow corridor of 50 basis points would be applied between the interest rates for the marginal lending facility and the deposit facility, aimed at facilitating the transition to the new monetary regime by market participants.
- 3) On 8 June 2000 the ECB announced that, starting from the operation to be settled on 28 June 2000, the main refinancing operations of the Eurosystem would be conducted as variable rate tenders. The minimum bid rate refers to the minimum interest rate at which counterparties may place their bids.
- 4) 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.
- 5) 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 tender procedures <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 tender procedures	Variable rate tender procedures			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								
2011 1 Nov.	182,773	143	182,773	1.50	-	-	-	8
9	194,765	150	194,765	1.25	-	-	-	7
16	230,265	161	230,265	1.25	-	-	-	7
23	247,175	178	247,175	1.25	-	-	-	7
30	265,456	192	265,456	1.25	-	-	-	7
7 Dec.	252,100	197	252,100	1.25	-	-	-	7
14	291,629	197	291,629	1.00	-	-	-	7
21	169,024	146	169,024	1.00	-	-	-	7
28	144,755	171	144,755	1.00	-	-	-	7
2012 4 Jan.	130,622	138	130,622	1.00	-	-	-	7
11	110,923	131	110,923	1.00	-	-	-	7
18	126,877	143	126,877	1.00	-	-	-	7
25	130,317	136	130,317	1.00	-	-	-	7
1 Feb.	115,579	135	115,579	1.00	-	-	-	7
8	109,462	135	109,462	1.00	-	-	-	7
Longer-term refinancing operations								
2011 14 Sep.	54,222	37	54,222	1.50	-	-	-	28
29 <sup>5)</sup>	140,628	214	140,628	1.35	-	-	-	84
12 Oct.	59,062	39	59,062	1.50	-	-	-	28
27 <sup>5)</sup>	56,934	181	56,934	.	-	-	-	371
27	44,564	91	44,564	1.17	-	-	-	91
9 Nov.	55,547	47	55,547	1.25	-	-	-	35
1 Dec. <sup>5)</sup>	38,620	108	38,620	.	-	-	-	91
14	41,150	42	41,150	1.00	-	-	-	35
22 <sup>5)</sup>	29,741	72	29,741	.	-	-	-	98
22 <sup>5)6)</sup>	489,191	523	489,191	.	-	-	-	1,134
2012 18 Jan.	38,734	44	38,734	1.00	-	-	-	28
26	19,580	54	19,580	.	-	-	-	91

#### 2. Other tender operations

Date of settlement	Type of operation	Bids (amount)	Number of participants	Allotment (amount)	Fixed rate tender procedures	Variable rate tender procedures			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
2011 8 Nov.	Collection of fixed-term deposits	284,108	165	284,043	-	-	1.50	1.30	1.27	1	
9	Collection of fixed-term deposits	214,817	99	183,000	-	-	1.25	0.69	0.64	7	
16	Collection of fixed-term deposits	260,476	100	187,000	-	-	1.25	0.65	0.61	7	
23	Collection of fixed-term deposits	233,094	88	194,500	-	-	1.25	0.63	0.60	7	
30	Collection of fixed-term deposits	194,199	85	194,199	-	-	1.25	1.25	0.62	7	
7 Dec.	Collection of fixed-term deposits	246,344	113	207,000	-	-	1.25	1.00	0.65	7	
13	Collection of fixed-term deposits	260,883	137	258,029	-	-	1.25	1.05	1.03	1	
14	Collection of fixed-term deposits	241,403	110	207,500	-	-	1.00	0.80	0.49	7	
21	Collection of fixed-term deposits	257,035	106	211,000	-	-	1.00	0.75	0.53	7	
28	Collection of fixed-term deposits	263,336	95	211,000	-	-	1.00	0.89	0.56	7	
2012 4 Jan.	Collection of fixed-term deposits	336,926	134	211,500	-	-	1.00	0.44	0.36	7	
11	Collection of fixed-term deposits	376,720	131	213,000	-	-	1.00	0.34	0.32	7	
18	Collection of fixed-term deposits	377,640	118	217,000	-	-	1.00	0.31	0.29	7	
25	Collection of fixed-term deposits	345,649	113	219,000	-	-	1.00	0.30	0.28	7	
1 Feb.	Collection of fixed-term deposits	325,503	100	219,000	-	-	1.00	0.28	0.27	7	

Source: ECB.

- The amounts shown may differ slightly from those in Section 1.1 owing to operations that have been allotted but not settled.
- With effect from April 2002, split tender operations (i.e. operations with a one-week maturity conducted as standard tender procedures in parallel with a main refinancing operation) are classified as main refinancing operations.
- 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 tender procedures. The minimum bid rate refers to the minimum interest rate at which counterparties may place their bids. On 8 October 2008 the ECB announced that, starting from the operation to be settled on 15 October 2008, 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. On 4 March 2010 the ECB decided to return to variable rate tender procedures in the regular three-month longer-term refinancing operations, starting with the operation to be allotted on 28 April 2010 and settled on 29 April 2010.
- In liquidity-providing (absorbing) operations, the marginal rate refers to the lowest (highest) rate at which bids were accepted.
- In this longer-term refinancing operation, the rate at which all bids are satisfied is indexed to the average minimum bid rate in the main refinancing operations over the life of the operation. The interest rates displayed for these indexed longer-term refinancing operations have been rounded to two decimal places. For the precise calculation method, please refer to the Technical Notes.
- After one year counterparties will have the option to repay any part of the liquidity that they have been allotted in this operation, on any day that coincides with the settlement day of a main refinancing operation.

**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 positive reserve coefficient is applied <sup>2)</sup>		Liabilities to which a 0% reserve coefficient is applied		
		Overnight deposits and deposits with an agreed maturity or notice period of up to 2 years	Debt securities issued with a maturity of up to 2 years	Deposits with an agreed maturity or notice period of over 2 years	Repos	Debt securities issued with a maturity of over 2 years
	1	2	3	4	5	6
2008	18,169.6	10,056.8	848.7	2,376.9	1,243.5	3,643.7
2009	18,318.2	9,808.5	760.4	2,475.7	1,170.1	4,103.5
2010	18,948.1	9,962.6	644.3	2,683.3	1,335.4	4,322.5
2011 July	19,046.3	9,695.1	635.0	2,777.7	1,502.7	4,435.8
Aug.	19,095.3	9,688.3	645.8	2,782.6	1,557.4	4,421.3
Sep.	19,247.9	9,761.9	650.5	2,808.3	1,576.5	4,450.7
Oct.	19,126.2	9,718.9	657.4	2,788.5	1,562.7	4,398.7
Nov.	19,073.0	9,708.5	673.6	2,776.0	1,509.5	4,405.4

**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
2010	211.8	212.5	0.7	0.5	1.00
2011	207.7	212.2	4.5	0.0	1.25
2011 13 Sep.	207.0	209.5	2.5	0.0	1.50
11 Oct.	206.1	208.7	2.6	0.0	1.50
8 Nov.	206.2	208.9	2.8	0.0	1.50
13 Dec.	207.7	212.2	4.5	0.0	1.25
2012 17 Jan.	207.0	212.3	5.3	0.0	1.00
14 Feb.	103.3	.	.	.	.

**3. Liquidity**

Maintenance period ending on:	Liquidity-providing factors					Liquidity-absorbing factors					Credit institutions' current accounts	Base money
	Monetary policy operations of the Eurosystem					Deposit facility	Other liquidity-absorbing operations <sup>4)</sup>	Banknotes in circulation	Central government deposits with the Eurosystem	Other factors (net)		
	Eurosystem's net assets in gold and foreign currency	Main refinancing operations	Longer-term refinancing operations	Marginal lending facility	Other liquidity-providing operations <sup>3)</sup>							
	1	2	3	4	5	6	7	8	9	10	11	12
2010	511.1	179.5	336.3	1.9	130.4	44.7	70.8	815.9	94.4	-79.1	212.5	1,073.1
2011	622.1	238.0	389.0	4.4	260.3	253.7	200.5	869.4	63.8	-85.9	212.2	1,335.3
2011 9 Aug.	541.3	171.7	321.5	0.1	133.9	56.7	79.2	854.2	71.4	-104.5	211.5	1,122.4
13 Sep.	540.3	135.1	389.8	0.3	178.0	121.8	109.8	853.2	52.3	-103.0	209.5	1,184.5
11 Oct.	571.0	193.0	373.6	1.5	217.4	168.7	162.9	854.9	50.0	-88.5	208.7	1,232.2
8 Nov.	612.1	196.1	387.1	2.8	231.9	204.6	178.0	861.4	57.9	-80.8	208.9	1,274.8
13 Dec.	622.1	238.0	389.0	4.4	260.3	253.7	200.5	869.4	63.8	-85.9	212.2	1,335.3
2012 17 Jan.	683.9	169.4	627.3	6.0	278.6	399.3	210.8	883.7	67.7	-8.7	212.3	1,495.3

Source: ECB.

1) End of period.

2) A coefficient of 1% is applied as of the maintenance period beginning on 18 January 2012. A coefficient of 2% is applied to all previous maintenance periods.

3) Includes liquidity provided under the Eurosystem's covered bond purchase programmes and the Eurosystem's Securities Markets Programme.

4) Includes liquidity absorbed as a result of the Eurosystem's foreign exchange swap operations.

 For more information, please see: <http://www.ecb.europa.eu/mopo/liq/html/index.en.html>



## MONEY, BANKING AND OTHER FINANCIAL CORPORATIONS

### 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 <sup>3)</sup>	
		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
Eurosystème														
2010	3,212.4	1,551.0	18.6	0.9	1,531.5	574.4	463.8	9.6	101.1	-	18.1	684.1	8.5	376.3
2011 <sup>(p)</sup>	4,701.9	2,728.6	18.0	1.0	2,709.6	716.9	600.3	10.9	105.7	-	19.9	779.2	8.8	448.6
2011 Q3	3,928.6	2,043.3	18.0	1.0	2,024.4	659.9	544.3	10.9	104.7	-	17.9	767.4	8.7	431.3
Q4 <sup>(p)</sup>	4,701.9	2,728.6	18.0	1.0	2,709.6	716.9	600.3	10.9	105.7	-	19.9	779.2	8.8	448.6
2011 Sep.	3,928.6	2,043.3	18.0	1.0	2,024.4	659.9	544.3	10.9	104.7	-	17.9	767.4	8.7	431.3
Oct.	4,013.1	2,122.5	18.0	1.0	2,103.6	667.3	551.8	10.8	104.7	-	18.6	757.7	8.7	438.3
Nov.	4,329.7	2,383.6	18.0	1.0	2,364.7	691.8	576.5	10.9	104.3	-	18.4	784.5	8.8	442.7
Dec. <sup>(p)</sup>	4,701.9	2,728.6	18.0	1.0	2,709.6	716.9	600.3	10.9	105.7	-	19.9	779.2	8.8	448.6
MFIs excluding the Eurosystème														
2010	32,199.5	17,763.1	1,221.8	11,026.1	5,515.2	4,938.6	1,524.2	1,528.6	1,885.8	59.9	1,233.1	4,323.4	223.5	3,658.0
2011 <sup>(p)</sup>	33,552.5	18,511.9	1,159.6	11,163.2	6,189.1	4,760.4	1,397.7	1,514.6	1,848.1	50.6	1,213.6	4,246.7	232.3	4,536.9
2011 Q3	33,661.5	18,445.7	1,145.8	11,296.1	6,003.8	4,674.6	1,416.1	1,458.7	1,799.7	58.4	1,229.9	4,420.8	230.3	4,601.7
Q4 <sup>(p)</sup>	33,552.5	18,511.9	1,159.6	11,163.2	6,189.1	4,760.4	1,397.7	1,514.6	1,848.1	50.6	1,213.6	4,246.7	232.3	4,536.9
2011 Sep.	33,661.5	18,445.7	1,145.8	11,296.1	6,003.8	4,674.6	1,416.1	1,458.7	1,799.7	58.4	1,229.9	4,420.8	230.3	4,601.7
Oct.	33,341.6	18,438.3	1,145.4	11,266.6	6,026.3	4,715.2	1,393.6	1,518.8	1,802.9	55.9	1,226.5	4,277.8	230.8	4,397.0
Nov.	33,401.1	18,538.5	1,144.2	11,256.8	6,137.6	4,711.9	1,382.5	1,524.2	1,805.3	56.3	1,227.6	4,283.4	231.2	4,352.2
Dec. <sup>(p)</sup>	33,552.5	18,511.9	1,159.6	11,163.2	6,189.1	4,760.4	1,397.7	1,514.6	1,848.1	50.6	1,213.6	4,246.7	232.3	4,536.9

#### 2. Liabilities

	Total	Currency in circulation	Deposits of euro area residents			Money market fund shares/units <sup>4)</sup>	Debt securities issued <sup>5)</sup>	Capital and reserves	External liabilities	Remaining liabilities <sup>3)</sup>	
			Total	Central government	Other general government/other euro area residents						MFIs
	1	2	3	4	5	6	7	8	9	10	11
Eurosystème											
2010	3,212.4	863.7	1,394.8	68.0	8.7	1,318.1	-	0.0	428.5	153.8	371.7
2011 <sup>(p)</sup>	4,701.9	913.7	2,609.5	63.8	12.1	2,533.6	-	0.0	483.5	287.7	407.6
2011 Q3	3,928.6	882.1	1,984.0	50.1	6.6	1,927.3	-	0.0	475.8	189.4	397.3
Q4 <sup>(p)</sup>	4,701.9	913.7	2,609.5	63.8	12.1	2,533.6	-	0.0	483.5	287.7	407.6
2011 Sep.	3,928.6	882.1	1,984.0	50.1	6.6	1,927.3	-	0.0	475.8	189.4	397.3
Oct.	4,013.1	889.2	2,068.0	66.4	10.6	1,991.0	-	0.0	477.1	177.5	401.3
Nov.	4,329.7	892.7	2,367.8	60.9	12.0	2,294.9	-	0.0	489.4	178.2	401.8
Dec. <sup>(p)</sup>	4,701.9	913.7	2,609.5	63.8	12.1	2,533.6	-	0.0	483.5	287.7	407.6
MFIs excluding the Eurosystème											
2010	32,199.5	-	16,497.6	196.2	10,526.4	5,774.9	612.3	4,845.2	2,045.5	4,220.4	3,978.5
2011 <sup>(p)</sup>	33,552.5	-	17,284.9	195.2	10,752.1	6,337.6	574.2	5,000.4	2,232.6	3,801.0	4,659.5
2011 Q3	33,661.5	-	17,079.4	211.4	10,783.6	6,084.4	607.5	4,952.8	2,203.5	4,033.4	4,785.0
Q4 <sup>(p)</sup>	33,552.5	-	17,284.9	195.2	10,752.1	6,337.6	574.2	5,000.4	2,232.6	3,801.0	4,659.5
2011 Sep.	33,661.5	-	17,079.4	211.4	10,783.6	6,084.4	607.5	4,952.8	2,203.5	4,033.4	4,785.0
Oct.	33,341.6	-	17,073.5	195.5	10,763.5	6,114.5	594.0	4,920.7	2,203.2	3,953.5	4,596.7
Nov.	33,401.1	-	17,115.5	204.2	10,724.9	6,186.3	606.9	4,941.8	2,204.0	3,976.8	4,556.1
Dec. <sup>(p)</sup>	33,552.5	-	17,284.9	195.2	10,752.1	6,337.6	574.2	5,000.4	2,232.6	3,801.0	4,659.5

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) In December 2010 a change was made to the recording practice for derivatives in one Member State, leading to an increase in this position.
- 4) Amounts held by euro area residents.
- 5) Amounts issued with a maturity of up to two years and 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 <sup>2)</sup>
		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
<b>Outstanding amounts</b>											
2010	25,812.0	12,267.4	1,240.4	11,027.0	3,526.2	1,988.0	1,538.2	799.9	5,007.5	232.0	3,979.1
2011 <sup>(p)</sup>	26,801.7	12,341.8	1,177.6	11,164.2	3,523.5	1,998.0	1,525.5	739.9	5,025.9	241.0	4,929.5
2011 Q3	27,052.7	12,460.9	1,163.8	11,297.0	3,430.0	1,960.4	1,469.6	752.4	5,188.2	239.0	4,982.1
Q4 <sup>(p)</sup>	26,801.7	12,341.8	1,177.6	11,164.2	3,523.5	1,998.0	1,525.5	739.9	5,025.9	241.0	4,929.5
2011 Sep.	27,052.7	12,460.9	1,163.8	11,297.0	3,430.0	1,960.4	1,469.6	752.4	5,188.2	239.0	4,982.1
Oct.	26,716.1	12,430.9	1,163.4	11,267.5	3,475.0	1,945.4	1,529.6	751.6	5,035.5	239.5	4,783.6
Nov.	26,718.9	12,419.9	1,162.1	11,257.8	3,494.1	1,959.0	1,535.1	753.5	5,067.9	239.9	4,743.6
Dec. <sup>(p)</sup>	26,801.7	12,341.8	1,177.6	11,164.2	3,523.5	1,998.0	1,525.5	739.9	5,025.9	241.0	4,929.5
<b>Transactions</b>											
2010	600.2	413.0	206.3	206.7	142.5	144.8	-2.3	5.7	-109.0	2.4	145.5
2011 <sup>(p)</sup>	993.0	47.6	-59.2	106.8	143.6	166.0	-22.4	-31.3	-50.9	6.8	877.1
2011 Q3	1,379.5	46.2	-6.9	53.1	30.7	37.1	-6.4	-23.2	19.6	1.6	1,304.6
Q4 <sup>(p)</sup>	-276.6	-104.7	13.1	-117.9	94.8	59.3	35.6	-12.6	-189.1	2.5	-67.5
2011 Sep.	553.1	51.6	3.0	48.6	12.6	21.1	-8.4	-12.0	-12.4	0.6	512.5
Oct.	-253.3	0.5	-0.3	0.8	39.9	-1.1	40.9	-4.8	-90.7	0.5	-198.7
Nov.	-78.7	-19.6	-1.4	-18.2	44.8	40.4	4.4	5.1	-69.1	0.5	-40.4
Dec. <sup>(p)</sup>	55.4	-85.6	14.9	-100.5	10.1	19.9	-9.8	-13.0	-29.3	1.6	171.6

**2. Liabilities**

	Total	Currency in circulation	Deposits of central government	Deposits of other general government/ other euro area residents	Money market fund shares/ units <sup>3)</sup>	Debt securities issued <sup>4)</sup>	Capital and reserves	External liabilities	Remaining liabilities <sup>2)</sup>	Excess of inter-MFI liabilities over inter-MFI assets
<b>Outstanding amounts</b>										
2010	25,812.0	808.6	264.2	10,535.1	552.4	2,858.3	2,022.6	4,374.2	4,350.2	46.3
2011 <sup>(p)</sup>	26,801.7	857.6	259.0	10,764.2	523.6	3,046.6	2,222.5	4,088.8	5,067.0	-27.6
2011 Q3	27,052.7	831.2	261.5	10,790.2	549.0	3,048.3	2,183.8	4,222.8	5,182.3	-16.5
Q4 <sup>(p)</sup>	26,801.7	857.6	259.0	10,764.2	523.6	3,046.6	2,222.5	4,088.8	5,067.0	-27.6
2011 Sep.	27,052.7	831.2	261.5	10,790.2	549.0	3,048.3	2,183.8	4,222.8	5,182.3	-16.5
Oct.	26,716.1	837.5	261.9	10,774.1	538.1	3,013.1	2,186.8	4,131.0	4,998.0	-24.5
Nov.	26,718.9	841.4	265.1	10,736.9	550.6	3,032.2	2,200.9	4,155.0	4,957.9	-21.0
Dec. <sup>(p)</sup>	26,801.7	857.6	259.0	10,764.2	523.6	3,046.6	2,222.5	4,088.8	5,067.0	-27.6
<b>Transactions</b>										
2010	600.2	38.6	11.8	331.6	-98.2	41.2	101.7	-25.4	146.2	52.7
2011 <sup>(p)</sup>	993.0	49.2	-1.1	167.1	-24.2	54.0	142.0	-204.3	893.0	-82.7
2011 Q3	1,379.5	11.5	-77.5	104.8	6.3	-16.6	49.6	-10.9	1,339.3	-26.9
Q4 <sup>(p)</sup>	-276.6	26.4	-2.5	-39.5	-4.1	-44.3	52.9	-124.3	-102.8	-38.5
2011 Sep.	553.1	7.7	4.9	58.0	-11.1	-10.5	2.2	-34.4	543.4	-7.3
Oct.	-253.3	6.3	0.5	-7.5	-10.9	-16.9	4.1	-38.2	-179.6	-11.2
Nov.	-78.7	3.9	3.2	-47.3	12.8	-9.6	18.7	-42.3	-21.1	3.1
Dec. <sup>(p)</sup>	55.4	16.2	-6.1	15.2	-5.9	-17.8	30.1	-43.9	98.0	-30.4

Source: ECB.

- 1) Data refer to the changing composition of the euro area. For further information, see the General Notes.
- 2) In December 2010 a change was made to the recording practice for derivatives in one Member State, leading to an increase in this position.
- 3) Amounts held by euro area residents.
- 4) Amounts issued with a maturity of up to two years and held by non-euro area residents are included in external liabilities.

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

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

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

	M3				M3 3-month moving average (centred)	Longer-term financial liabilities	Credit to general government	Credit to other euro area residents			Net external assets <sup>3)</sup>	
	M2		M3-M2	Loans				Loans adjusted for sales and securitisation <sup>4)</sup>				
	M1	M2-M1										
	1	2	3	4	5	6	7	8	9	10	11	12
Outstanding amounts												
2010	4,698.5	3,696.2	8,394.8	1,125.2	9,520.0	-	7,313.7	3,270.4	13,379.4	11,047.8	-	615.1
2011 <sup>(p)</sup>	4,782.1	3,790.8	8,572.8	1,151.5	9,724.3	-	7,718.3	3,220.0	13,444.5	11,185.7	-	918.3
2011 Q3	4,783.5	3,821.2	8,604.7	1,230.5	9,835.3	-	7,709.2	3,121.0	13,505.1	11,267.6	-	959.3
Q4 <sup>(p)</sup>	4,782.1	3,790.8	8,572.8	1,151.5	9,724.3	-	7,718.3	3,220.0	13,444.5	11,185.7	-	918.3
2011 Sep.	4,783.5	3,821.2	8,604.7	1,230.5	9,835.3	-	7,709.2	3,121.0	13,505.1	11,267.6	-	959.3
Oct.	4,769.5	3,809.9	8,579.3	1,200.1	9,779.4	-	7,711.9	3,106.2	13,555.4	11,261.3	-	893.1
Nov.	4,789.0	3,800.6	8,589.6	1,185.8	9,775.4	-	7,723.4	3,125.6	13,527.9	11,254.5	-	904.3
Dec. <sup>(p)</sup>	4,782.1	3,790.8	8,572.8	1,151.5	9,724.3	-	7,718.3	3,220.0	13,444.5	11,185.7	-	918.3
Transactions												
2010	194.7	-12.8	181.9	-25.5	156.4	-	254.5	355.2	209.7	207.7	264.6	-83.6
2011 <sup>(p)</sup>	73.8	76.7	150.5	-1.6	148.9	-	210.4	108.0	54.0	107.4	131.5	152.8
2011 Q3	57.0	35.6	92.6	71.7	164.3	-	69.2	62.6	44.0	57.2	68.9	23.8
Q4 <sup>(p)</sup>	-6.3	-32.7	-39.1	-72.2	-111.3	-	-11.0	119.7	-66.2	-67.0	-32.6	-77.6
2011 Sep.	-5.4	16.7	11.3	9.5	20.7	-	14.5	15.6	-8.3	11.1	9.5	16.3
Oct.	-10.5	-7.6	-18.1	-29.6	-47.7	-	22.8	-0.7	57.4	24.0	53.0	-57.9
Nov.	14.8	-12.5	2.3	-14.8	-12.5	-	-14.1	46.2	-33.8	-15.3	-11.9	-24.0
Dec. <sup>(p)</sup>	-10.7	-12.5	-23.3	-27.8	-51.0	-	-19.7	74.3	-89.8	-75.7	-73.7	4.3
Growth rates												
2010	4.3	-0.4	2.2	-2.3	1.7	1.8	3.7	12.1	1.6	1.9	2.4	-83.6
2011 <sup>(p)</sup>	1.6	2.1	1.8	-0.2	1.6	2.1	2.9	3.6	0.4	1.0	1.2	152.8
2011 Q3	2.0	3.1	2.5	5.8	2.9	2.8	4.2	5.6	1.5	2.5	2.7	193.7
Q4 <sup>(p)</sup>	1.6	2.1	1.8	-0.2	1.6	2.1	2.9	3.6	0.4	1.0	1.2	152.8
2011 Sep.	2.0	3.1	2.5	5.8	2.9	2.8	4.2	5.6	1.5	2.5	2.7	193.7
Oct.	1.7	2.3	1.9	7.7	2.6	2.5	4.3	-0.5	2.1	2.7	3.0	224.7
Nov.	2.1	2.1	2.1	1.1	2.0	2.1	3.4	0.3	1.0	1.7	1.9	189.7
Dec. <sup>(p)</sup>	1.6	2.1	1.8	-0.2	1.6	.	2.9	3.6	0.4	1.0	1.2	152.8

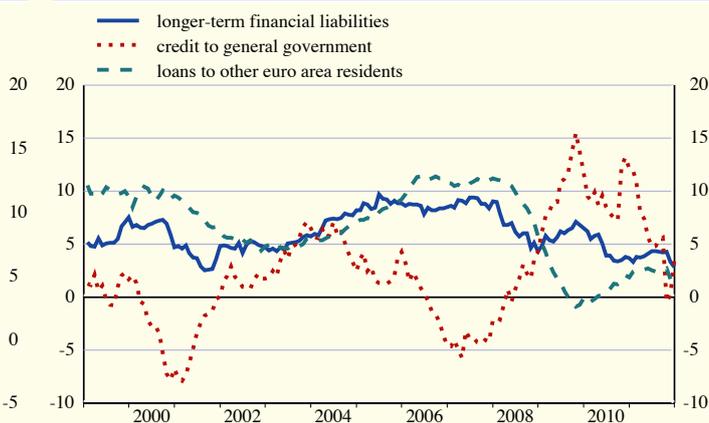
### C1 Monetary aggregates <sup>1)</sup>

(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, etc.) vis-à-vis non-MFI euro area residents excluding central government.

For definitions of M1, M2 and M3, see glossary.

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

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

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

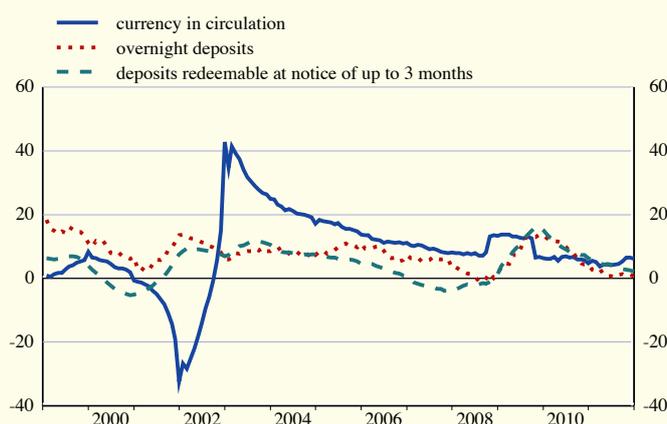
(EUR billions and annual growth rates; seasonally adjusted; outstanding amounts and growth rates at end of period; transactions during period)

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

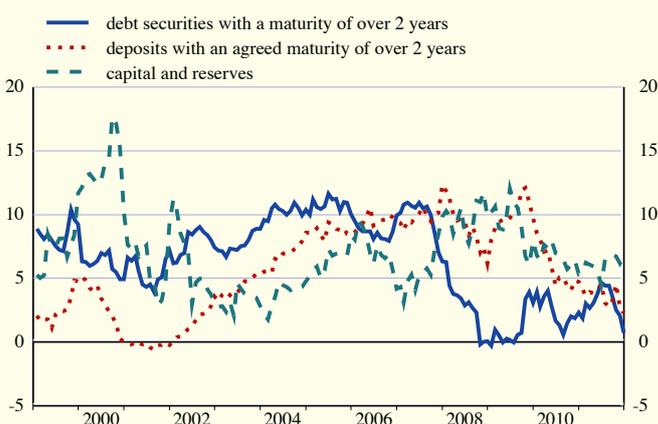
	Currency in circulation	Overnight deposits	Deposits with an agreed maturity of up to 2 years	Deposits redeemable at notice of up to 3 months	Repos	Money market fund shares/units	Debt securities with a maturity of up to 2 years	Debt securities with a maturity of over 2 years	Deposits redeemable at notice of over 3 months	Deposits with an agreed maturity of over 2 years	Capital and reserves
	1	2	3	4	5	6	7	8	9	10	11
Outstanding amounts											
2010	793.6	3,904.9	1,781.3	1,914.9	433.8	570.2	121.2	2,753.6	118.4	2,436.0	2,005.8
2011 <sup>(p)</sup>	842.2	3,939.9	1,830.4	1,960.3	402.2	540.4	209.0	2,855.3	114.9	2,545.0	2,203.2
2011 Q3	832.3	3,951.2	1,862.7	1,958.6	508.8	552.6	169.1	2,878.6	119.4	2,529.6	2,181.6
Q4 <sup>(p)</sup>	842.2	3,939.9	1,830.4	1,960.3	402.2	540.4	209.0	2,855.3	114.9	2,545.0	2,203.2
2011 Sep.	832.3	3,951.2	1,862.7	1,958.6	508.8	552.6	169.1	2,878.6	119.4	2,529.6	2,181.6
Oct.	843.3	3,926.2	1,846.3	1,963.5	486.8	543.1	170.2	2,840.6	118.6	2,568.5	2,184.2
Nov.	847.3	3,941.7	1,828.7	1,971.9	464.3	549.3	172.1	2,865.7	115.6	2,550.4	2,191.7
Dec. <sup>(p)</sup>	842.2	3,939.9	1,830.4	1,960.3	402.2	540.4	209.0	2,855.3	114.9	2,545.0	2,203.2
Transactions											
2010	36.0	158.7	-125.7	112.9	95.3	-101.2	-19.6	62.1	-14.1	108.3	98.2
2011 <sup>(p)</sup>	48.7	25.1	38.1	38.6	-13.8	-24.7	36.8	18.4	-2.5	55.4	139.1
2011 Q3	16.9	40.1	15.1	20.5	74.6	7.3	-10.2	-1.3	-0.4	23.0	47.9
Q4 <sup>(p)</sup>	9.8	-16.2	-32.3	-0.4	-107.5	9.9	25.4	-51.6	-3.5	8.4	35.7
2011 Sep.	6.9	-12.3	11.7	5.0	11.2	3.2	-5.0	0.9	-0.5	16.1	-2.0
Oct.	11.0	-21.4	-12.7	5.1	-21.7	-9.4	1.5	-20.1	-0.7	39.9	3.7
Nov.	4.0	10.8	-20.2	7.7	-22.8	6.4	1.6	-3.1	-2.1	-21.0	12.1
Dec. <sup>(p)</sup>	-5.1	-5.6	0.6	-13.1	-63.0	12.9	22.3	-28.3	-0.7	-10.6	19.9
Growth rates											
2010	4.8	4.2	-6.6	6.3	28.3	-15.1	-14.4	2.3	-10.7	4.7	5.3
2011 <sup>(p)</sup>	6.1	0.6	2.1	2.0	-3.3	-4.3	26.8	0.7	-2.1	2.2	6.9
2011 Q3	5.3	1.4	3.2	3.0	31.1	-9.5	2.8	3.6	-2.4	3.1	6.8
Q4 <sup>(p)</sup>	6.1	0.6	2.1	2.0	-3.3	-4.3	26.8	0.7	-2.1	2.2	6.9
2011 Sep.	5.3	1.4	3.2	3.0	31.1	-9.5	2.8	3.6	-2.4	3.1	6.8
Oct.	6.5	0.7	1.9	2.6	34.8	-8.9	8.3	2.5	-1.1	4.5	6.7
Nov.	6.5	1.2	1.6	2.6	12.4	-8.9	13.3	2.0	-2.0	2.8	6.2
Dec. <sup>(p)</sup>	6.1	0.6	2.1	2.0	-3.3	-4.3	26.8	0.7	-2.1	2.2	6.9

**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

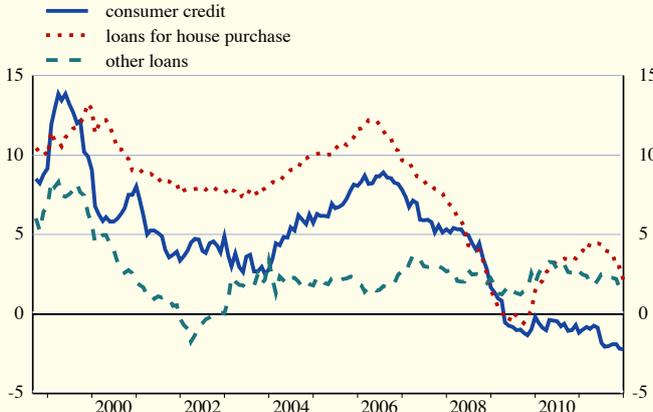
	Insurance corporations and pension funds		Non-financial corporations				Households <sup>3)</sup>					
	Total	Total	Total	Loans adjusted for sales and securitisation <sup>4)</sup>	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Total	Loans adjusted for sales and securitisation <sup>4)</sup>	Consumer credit	Loans for house purchase	Other loans
<b>Outstanding amounts</b>												
2010	95.0	1,126.4	4,667.2	-	1,127.3	899.0	2,640.9	5,159.3	-	639.3	3,701.3	818.7
2011 <sup>(p)</sup>	92.1	1,137.4	4,721.1	-	1,151.4	857.4	2,712.2	5,235.2	-	611.5	3,778.0	845.8
2011 Q3	97.0	1,140.7	4,761.0	-	1,178.0	870.3	2,712.6	5,269.0	-	627.6	3,805.8	835.6
Q4 <sup>(p)</sup>	92.1	1,137.4	4,721.1	-	1,151.4	857.4	2,712.2	5,235.2	-	611.5	3,778.0	845.8
2011 Sep.	97.0	1,140.7	4,761.0	-	1,178.0	870.3	2,712.6	5,269.0	-	627.6	3,805.8	835.6
Oct.	93.7	1,176.6	4,760.6	-	1,180.7	868.0	2,711.9	5,230.4	-	626.7	3,768.1	835.5
Nov.	93.2	1,163.1	4,758.2	-	1,177.4	864.4	2,716.3	5,240.0	-	626.1	3,777.9	836.0
Dec. <sup>(p)</sup>	92.1	1,137.4	4,721.1	-	1,151.4	857.4	2,712.2	5,235.2	-	611.5	3,778.0	845.8
<b>Transactions</b>												
2010	7.0	55.7	-2.1	45.7	-37.5	-26.2	61.6	147.1	155.7	-7.6	133.7	21.0
2011 <sup>(p)</sup>	1.0	-22.4	52.0	56.8	28.4	-31.6	55.1	76.9	96.1	-14.2	79.5	11.5
2011 Q3	8.5	18.8	24.2	25.0	-0.7	1.4	23.4	5.7	17.1	-3.1	7.4	1.5
Q4 <sup>(p)</sup>	-5.0	-6.2	-36.7	-35.1	-21.7	-12.8	-2.1	-19.1	14.0	-2.7	-16.1	-0.3
2011 Sep.	-2.0	-11.8	18.5	18.5	6.9	2.2	9.5	6.3	5.1	-0.7	7.2	-0.1
Oct.	-3.2	38.0	7.0	8.6	4.6	-0.3	2.7	-17.8	9.7	-0.9	-17.7	0.9
Nov.	-0.6	-16.8	-6.8	-6.3	-5.0	-4.0	2.3	8.8	12.0	-0.5	8.7	0.6
Dec. <sup>(p)</sup>	-1.2	-27.5	-36.9	-37.4	-21.3	-8.5	-7.1	-10.1	-7.7	-1.3	-7.0	-1.8
<b>Growth rates</b>												
2010	8.0	5.1	0.0	1.0	-3.2	-2.8	2.4	2.9	3.1	-1.2	3.8	2.7
2011 <sup>(p)</sup>	1.3	-2.0	1.1	1.2	2.5	-3.6	2.1	1.5	1.9	-2.2	2.1	1.4
2011 Q3	9.8	4.5	1.6	2.2	4.0	-3.7	2.4	2.9	2.6	-1.9	3.9	2.3
Q4 <sup>(p)</sup>	1.3	-2.0	1.1	1.2	2.5	-3.6	2.1	1.5	1.9	-2.2	2.1	1.4
2011 Sep.	9.8	4.5	1.6	2.2	4.0	-3.7	2.4	2.9	2.6	-1.9	3.9	2.3
Oct.	5.7	8.5	1.8	2.2	4.6	-3.2	2.4	2.2	2.5	-1.9	3.0	2.2
Nov.	1.4	0.5	1.6	1.9	3.9	-3.2	2.2	2.1	2.3	-2.2	3.0	1.6
Dec. <sup>(p)</sup>	1.3	-2.0	1.1	1.2	2.5	-3.6	2.1	1.5	1.9	-2.2	2.1	1.4

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

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				Non-financial corporations				
	Total	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Total	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Total	Up to 1 year	Over 1 and up to 5 years	Over 5 years	
													Reverse repos to central counterparties
1	2	3	4	5	6	7	8	9	10	11	12	13	
Outstanding amounts													
2011 <sup>(p)</sup>	83.8	64.0	6.2	13.6	1,114.7	155.6	580.1	212.9	321.8	4,720.2	1,144.0	857.0	2,719.2
2011 Q3	98.3	78.8	5.2	14.2	1,168.0	178.1	631.3	207.4	329.3	4,754.9	1,176.5	870.6	2,707.7
2011 Q4 <sup>(p)</sup>	83.8	64.0	6.2	13.6	1,114.7	155.6	580.1	212.9	321.8	4,720.2	1,144.0	857.0	2,719.2
2011 Oct.	95.2	76.1	5.3	13.8	1,187.1	212.2	648.4	206.4	332.3	4,750.8	1,174.3	868.3	2,708.2
2011 Nov.	93.6	74.5	5.4	13.8	1,161.9	186.8	613.2	214.9	333.7	4,759.4	1,179.1	864.0	2,716.3
2011 Dec. <sup>(p)</sup>	83.8	64.0	6.2	13.6	1,114.7	155.6	580.1	212.9	321.8	4,720.2	1,144.0	857.0	2,719.2
Transactions													
2011 <sup>(p)</sup>	1.5	2.3	1.1	-1.8	-23.3	12.8	-29.6	-9.3	15.7	51.0	27.6	-31.6	55.0
2011 Q3	7.6	7.5	0.0	0.0	31.1	25.1	26.7	1.0	3.3	10.0	-11.4	0.4	21.0
2011 Q4 <sup>(p)</sup>	-14.6	-14.9	1.0	-0.7	-56.2	-22.5	-65.6	5.4	4.0	-31.5	-27.7	-13.6	9.8
2011 Oct.	-3.0	-2.7	0.1	-0.4	21.2	34.1	18.8	-0.4	2.8	3.3	-0.2	-0.4	3.8
2011 Nov.	-1.7	-1.7	0.1	-0.1	-28.4	-25.4	-37.0	8.0	0.5	4.3	3.1	-4.8	5.9
2011 Dec. <sup>(p)</sup>	-9.9	-10.5	0.8	-0.2	-48.9	-31.2	-47.4	-2.2	0.7	-39.0	-30.5	-8.5	0.0
Growth rates													
2011 <sup>(p)</sup>	1.6	3.1	20.6	-12.4	-2.0	8.9	-4.9	-4.4	5.0	1.1	2.5	-3.6	2.1
2011 Q3	9.9	15.2	-7.0	-8.1	4.5	20.1	6.4	-4.5	7.1	1.6	4.1	-3.7	2.3
2011 Q4 <sup>(p)</sup>	1.6	3.1	20.6	-12.4	-2.0	8.9	-4.9	-4.4	5.0	1.1	2.5	-3.6	2.1
2011 Oct.	5.7	11.1	-5.1	-14.2	8.6	58.5	14.3	-4.4	7.0	1.8	4.6	-3.2	2.4
2011 Nov.	1.2	4.6	-6.8	-11.4	0.4	8.9	-1.5	-1.4	5.5	1.6	3.9	-3.2	2.2
2011 Dec. <sup>(p)</sup>	1.6	3.1	20.6	-12.4	-2.0	8.9	-4.9	-4.4	5.0	1.1	2.5	-3.6	2.1

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

	Total	Consumer credit				Loans for house purchase				Other loans				
		Total	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Total	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Total	Up to 1 year	Over 1 and up to 5 years	Over 5 years	
	1	2	3	4	5	6	7	8	9	10	Sole proprietors 11	12	13	14
Outstanding amounts														
2011 <sup>(p)</sup>	5,244.5	613.8	125.4	183.8	304.6	3,784.1	14.5	56.8	3,712.9	846.6	420.7	158.3	87.6	600.7
2011 Q3	5,274.9	629.7	138.6	186.3	304.8	3,809.8	14.4	56.7	3,738.7	835.4	409.7	147.5	87.9	600.0
2011 Q4 <sup>(p)</sup>	5,244.5	613.8	125.4	183.8	304.6	3,784.1	14.5	56.8	3,712.9	846.6	420.7	158.3	87.6	600.7
2011 Oct.	5,233.4	629.2	138.8	185.1	305.2	3,771.0	14.4	56.5	3,700.1	833.3	408.2	145.8	87.4	600.0
2011 Nov.	5,241.9	627.2	137.7	184.8	304.8	3,775.3	14.3	56.8	3,704.1	839.4	410.1	150.6	87.3	601.5
2011 Dec. <sup>(p)</sup>	5,244.5	613.8	125.4	183.8	304.6	3,784.1	14.5	56.8	3,712.9	846.6	420.7	158.3	87.6	600.7
Transactions														
2011 <sup>(p)</sup>	77.5	-14.2	-6.2	-6.6	-1.4	80.1	-0.2	2.8	77.6	11.6	-3.3	-3.6	-2.3	17.4
2011 Q3	4.5	-4.6	-2.4	-0.8	-1.4	13.2	-0.2	1.3	12.1	-4.1	-1.3	-5.8	-0.8	2.6
2011 Q4 <sup>(p)</sup>	-15.6	-2.4	-0.2	-2.1	-0.1	-13.9	0.2	0.4	-14.5	0.7	-2.0	-2.2	0.0	2.9
2011 Oct.	-20.6	-0.6	0.0	-0.7	0.1	-18.9	-0.1	0.1	-19.0	-1.2	-1.4	-1.5	-0.3	0.6
2011 Nov.	7.7	-1.7	-1.0	-0.3	-0.3	3.2	-0.1	0.3	2.9	6.3	1.7	4.7	-0.1	1.7
2011 Dec. <sup>(p)</sup>	-2.7	-0.2	0.8	-1.1	0.1	1.8	0.4	-0.1	1.5	-4.4	-2.3	-5.3	0.4	0.6
Growth rates														
2011 <sup>(p)</sup>	1.5	-2.2	-4.2	-3.5	-0.5	2.2	-1.7	5.1	2.1	1.4	-0.8	-2.4	-2.7	3.0
2011 Q3	2.9	-1.9	-2.0	-3.6	-0.8	3.9	-3.0	0.6	3.9	2.3	0.0	-0.1	-3.7	3.8
2011 Q4 <sup>(p)</sup>	1.5	-2.2	-4.2	-3.5	-0.5	2.2	-1.7	5.1	2.1	1.4	-0.8	-2.4	-2.7	3.0
2011 Oct.	2.2	-1.9	-1.9	-3.8	-0.7	3.0	-2.9	0.4	3.0	2.2	0.1	0.7	-3.2	3.4
2011 Nov.	2.1	-2.2	-3.4	-3.7	-0.7	3.0	-4.1	0.4	3.0	1.6	-0.6	-1.3	-3.4	3.1
2011 Dec. <sup>(p)</sup>	1.5	-2.2	-4.2	-3.5	-0.5	2.2	-1.7	5.1	2.1	1.4	-0.8	-2.4	-2.7	3.0

Source: ECB.

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

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

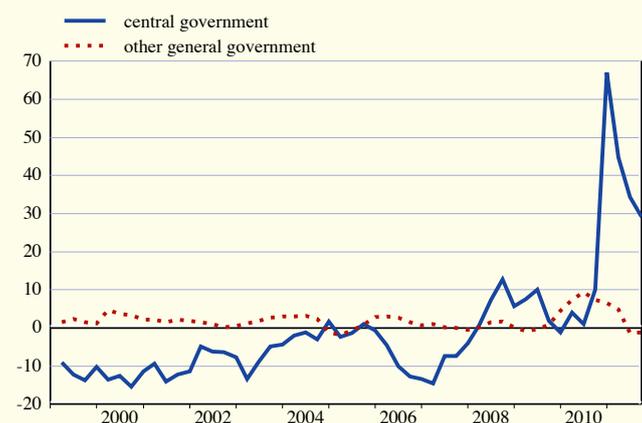
(EUR billions and annual growth rates; not seasonally adjusted; outstanding amounts and growth rates at end of period; transactions during period)

### 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										
2009	1,001.7	229.3	209.8	528.8	33.8	2,821.7	1,914.9	906.8	46.2	860.7
2010	1,221.8	397.5	225.2	553.0	46.1	2,963.0	2,010.9	952.1	49.5	902.6
2010 Q4	1,221.8	397.5	225.2	553.0	46.1	2,963.0	2,010.9	952.1	49.5	902.6
2011 Q1	1,188.8	359.4	229.6	557.8	41.9	2,934.4	1,957.5	976.9	54.5	922.4
Q2	1,152.7	346.4	223.4	555.9	27.0	3,006.5	2,012.0	994.5	60.1	934.4
Q3 <sup>3)</sup>	1,145.8	343.5	224.0	553.7	24.7	3,155.0	2,132.4	1,022.7	62.7	960.0
Transactions										
2009	30.5	-2.7	0.1	21.6	11.5	-384.4	-345.9	-38.2	-1.4	-36.9
2010	207.2	156.3	14.9	24.1	11.9	6.0	8.0	-2.3	0.6	-3.0
2010 Q4	138.6	126.6	1.6	8.8	1.5	-16.9	-2.4	-14.5	-2.0	-12.5
2011 Q1	-28.2	-34.3	4.4	4.9	-3.2	56.1	0.0	56.0	6.9	49.0
Q2	-36.5	-13.0	-6.5	-2.1	-14.9	44.4	21.8	22.6	6.1	16.6
Q3 <sup>3)</sup>	-7.1	-3.3	0.6	-2.1	-2.4	65.5	59.0	6.4	1.4	5.0
Growth rates										
2009	3.1	-1.2	0.1	4.2	51.9	-11.7	-15.1	-4.0	-2.9	-4.1
2010	20.6	67.1	7.1	4.6	35.1	0.6	0.5	-0.1	0.8	-0.2
2010 Q4	20.6	67.1	7.1	4.6	35.1	0.6	0.5	-0.1	0.8	-0.2
2011 Q1	14.3	44.7	9.6	3.4	0.6	0.5	-0.7	2.3	16.2	1.5
Q2	7.1	34.4	-1.1	1.4	-38.6	2.6	0.5	6.6	30.3	5.3
Q3 <sup>3)</sup>	6.2	29.1	0.0	1.8	-43.3	5.2	4.0	7.4	24.6	6.4

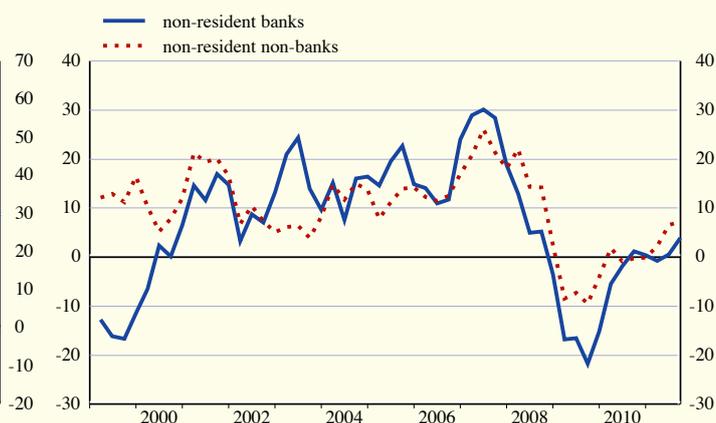
### C7 Loans to government <sup>2)</sup>

(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 the 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 similar to MFIs which are resident outside the euro area.

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

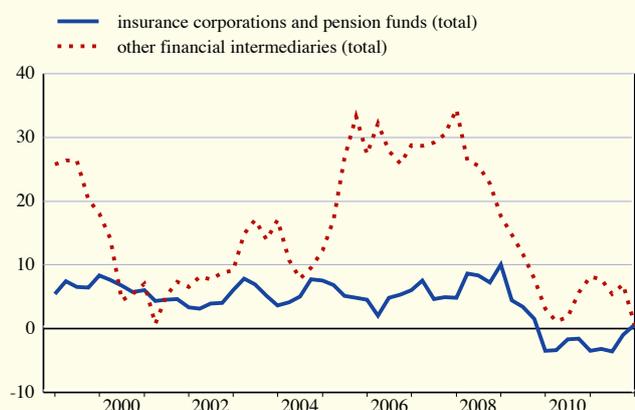
(EUR billions and annual growth rates; outstanding amounts and growth rates at end of period; transactions during period)

**1. Deposits by financial intermediaries**

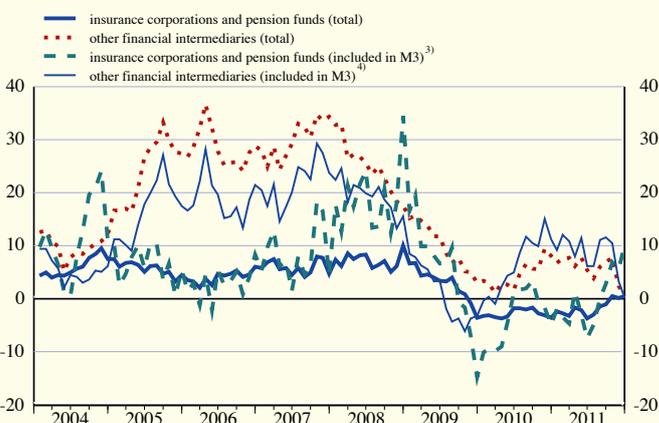
	Insurance corporations and pension funds							Other financial intermediaries							
	Total	Overnight	With an agreed maturity of:		Redeemable at notice of:		Repos	Total	Overnight	With an agreed maturity of:		Redeemable at notice of:		Repos	
			Up to 2 years	Over 2 years	Up to 3 months	Over 3 months				Up to 2 years	Over 2 years	Up to 3 months	Over 3 months		
															1
<b>Outstanding amounts</b>															
2010	716.9	84.6	79.3	528.3	2.6	0.3	21.9	2,168.3	358.5	305.7	1,132.6	10.7	0.5	360.3	255.0
2011 <sup>(p)</sup>	709.0	92.4	80.1	512.6	4.0	0.2	19.6	2,214.3	389.7	286.6	1,186.9	14.8	0.5	335.8	258.5
2011 Q3	718.0	88.4	85.0	520.2	3.6	0.2	20.6	2,313.1	382.6	308.8	1,167.4	11.4	0.5	442.4	338.7
2011 Q4 <sup>(p)</sup>	709.0	92.4	80.1	512.6	4.0	0.2	19.6	2,214.3	389.7	286.6	1,186.9	14.8	0.5	335.8	258.5
2011 Sep.	718.0	88.4	85.0	520.2	3.6	0.2	20.6	2,313.1	382.6	308.8	1,167.4	11.4	0.5	442.4	338.7
2011 Oct.	721.5	93.2	85.2	520.3	3.8	0.2	18.7	2,298.5	382.0	295.5	1,187.9	10.9	0.4	421.7	325.4
2011 Nov.	709.3	88.3	79.8	518.0	4.0	0.2	19.0	2,279.7	396.1	288.7	1,181.6	19.1	0.4	393.7	303.9
2011 Dec. <sup>(p)</sup>	709.0	92.4	80.1	512.6	4.0	0.2	19.6	2,214.3	389.7	286.6	1,186.9	14.8	0.5	335.8	258.5
<b>Transactions</b>															
2010	-26.5	-3.3	-8.4	-16.6	0.2	0.0	1.6	156.9	45.1	-37.6	52.8	-8.0	0.4	104.2	-
2011 <sup>(p)</sup>	4.1	11.9	4.4	-13.9	1.3	-0.1	0.5	10.8	29.2	-26.7	8.9	4.0	0.1	-4.7	4.1
2011 Q3	13.9	3.3	12.8	-3.9	0.4	0.0	1.3	89.9	10.3	8.6	7.3	-1.1	0.2	64.7	48.6
2011 Q4 <sup>(p)</sup>	-6.3	3.8	-5.0	-6.2	0.3	0.0	0.8	-108.9	4.9	-22.3	11.5	3.4	0.1	-106.6	-80.3
2011 Sep.	0.4	0.9	3.3	-3.2	0.0	0.0	-0.5	48.9	10.1	-0.4	12.0	-0.4	0.0	27.6	24.3
2011 Oct.	5.7	5.0	0.3	0.1	0.1	0.0	0.2	-10.2	0.7	-11.4	21.4	-0.5	0.0	-20.4	-13.2
2011 Nov.	-12.8	-5.1	-5.5	-2.3	0.2	0.0	-0.1	-24.3	12.6	-8.2	-8.7	8.2	0.0	-28.2	-21.7
2011 Dec. <sup>(p)</sup>	0.8	3.9	0.2	-4.0	0.0	0.0	0.7	-74.4	-8.4	-2.7	-1.2	-4.3	0.1	-57.9	-45.5
<b>Growth rates</b>															
2010	-3.6	-3.4	-9.6	-3.0	9.7	-	7.8	8.1	14.4	-11.1	4.9	-48.5	-	41.1	-
2011 <sup>(p)</sup>	0.6	14.5	5.8	-2.6	50.8	-	3.5	0.5	8.1	-8.5	0.7	37.0	-	-1.6	1.5
2011 Q3	-1.0	4.3	-0.6	-2.3	28.7	-	8.1	6.9	1.5	-0.2	2.6	2.8	-	33.8	47.4
2011 Q4 <sup>(p)</sup>	0.6	14.5	5.8	-2.6	50.8	-	3.5	0.5	8.1	-8.5	0.7	37.0	-	-1.6	1.5
2011 Sep.	-1.0	4.3	-0.6	-2.3	28.7	-	8.1	6.9	1.5	-0.2	2.6	2.8	-	33.8	47.4
2011 Oct.	0.5	10.2	3.7	-1.7	37.2	-	2.1	7.7	3.3	-8.8	5.3	-3.0	-	39.3	58.9
2011 Nov.	0.1	4.3	4.9	-1.7	45.1	-	9.4	2.4	3.9	-10.8	1.7	79.5	-	13.0	17.2
2011 Dec. <sup>(p)</sup>	0.6	14.5	5.8	-2.6	50.8	-	3.5	0.5	8.1	-8.5	0.7	37.0	-	-1.6	1.5

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

(annual growth rates)


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

(annual growth rates)



Source: ECB.

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

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

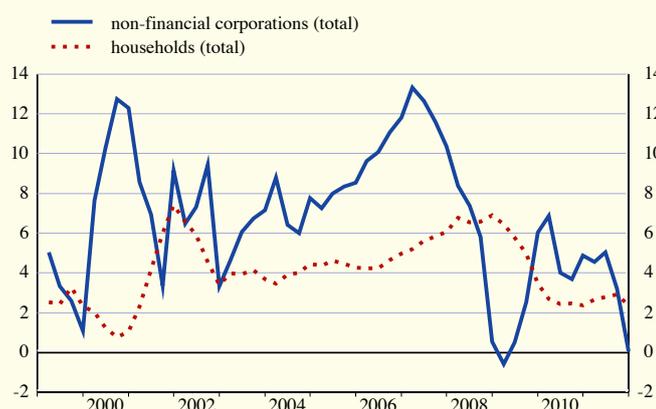
(EUR billions and annual growth rates; outstanding amounts and growth rates at end of period; transactions during period)

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

	Non-financial corporations							Households <sup>3)</sup>						
	Total		With an agreed maturity of:		Redeemable at notice of:		Repos	Total		With an agreed maturity of:		Redeemable at notice of:		Repos
	Overnight		Up to 2 years	Over 2 years	Up to 3 months	Over 3 months		Overnight		Up to 2 years	Over 2 years	Up to 3 months	Over 3 months	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Outstanding amounts														
2010	1,670.7	1,036.4	455.5	87.2	75.8	1.5	14.2	5,739.1	2,244.5	901.0	665.0	1,788.5	110.3	29.8
2011 <sup>(p)</sup>	1,686.6	1,045.5	453.3	97.7	71.8	2.0	16.3	5,895.1	2,255.7	949.0	724.7	1,836.6	106.7	22.6
2011 Q3	1,663.6	999.2	471.0	96.7	76.5	1.7	18.5	5,835.4	2,240.9	921.9	709.8	1,820.1	109.0	33.9
2011 Q4 <sup>(p)</sup>	1,686.6	1,045.5	453.3	97.7	71.8	2.0	16.3	5,895.1	2,255.7	949.0	724.7	1,836.6	106.7	22.6
2011 Sep.	1,663.6	999.2	471.0	96.7	76.5	1.7	18.5	5,835.4	2,240.9	921.9	709.8	1,820.1	109.0	33.9
Oct.	1,663.8	998.3	472.1	97.3	74.5	2.0	19.6	5,833.7	2,234.6	925.7	712.0	1,820.2	108.8	32.3
Nov.	1,653.8	1,001.4	460.8	97.6	72.4	1.9	19.6	5,825.0	2,223.2	935.0	713.0	1,815.8	107.2	30.8
Dec. <sup>(p)</sup>	1,686.6	1,045.5	453.3	97.7	71.8	2.0	16.3	5,895.1	2,255.7	949.0	724.7	1,836.6	106.7	22.6
Transactions														
2010	78.1	40.3	23.2	9.0	7.8	-0.2	-2.1	132.9	81.7	-98.9	58.7	113.6	-14.6	-7.5
2011 <sup>(p)</sup>	1.0	1.5	-2.6	8.8	-6.6	0.5	-0.5	135.9	7.0	43.3	51.4	43.9	-2.6	-7.2
2011 Q3	2.9	-17.3	17.1	1.8	-0.9	-0.4	2.6	4.6	-18.9	15.6	3.7	4.2	-0.4	0.4
2011 Q4 <sup>(p)</sup>	20.3	44.4	-17.1	0.8	-5.8	0.3	-2.4	58.2	14.1	26.7	14.6	15.4	-1.3	-11.3
2011 Sep.	6.9	0.6	6.8	1.5	-0.9	-0.1	-1.0	2.8	3.3	2.2	2.8	-3.8	-0.4	-1.2
Oct.	2.8	0.6	2.0	0.7	-1.9	0.3	1.1	-0.6	-5.7	4.4	2.2	0.2	-0.1	-1.6
Nov.	-12.8	0.8	-11.9	0.1	-1.7	-0.1	0.0	-10.1	-12.1	8.9	0.8	-5.5	-0.7	-1.5
Dec. <sup>(p)</sup>	30.3	43.0	-7.2	0.1	-2.1	0.0	-3.5	68.9	31.9	13.3	11.7	20.7	-0.5	-8.2
Growth rates														
2010	4.9	4.1	5.3	11.2	11.4	-10.1	-12.8	2.4	3.8	-9.9	9.7	6.8	-11.7	-20.2
2011 <sup>(p)</sup>	0.1	0.1	-0.6	9.9	-8.5	29.3	-5.1	2.4	0.3	4.8	7.7	2.5	-2.4	-24.1
2011 Q3	3.2	0.3	8.3	12.0	-2.5	-19.9	31.2	2.9	1.5	2.4	7.5	3.4	-1.7	8.0
2011 Q4 <sup>(p)</sup>	0.1	0.1	-0.6	9.9	-8.5	29.3	-5.1	2.4	0.3	4.8	7.7	2.5	-2.4	-24.1
2011 Sep.	3.2	0.3	8.3	12.0	-2.5	-19.9	31.2	2.9	1.5	2.4	7.5	3.4	-1.7	8.0
Oct.	2.6	0.5	5.2	12.7	-4.4	-3.4	44.7	2.5	0.6	2.8	7.4	3.2	-0.6	4.8
Nov.	1.2	0.0	3.2	11.8	-9.6	-2.8	17.2	2.6	0.8	3.9	7.3	2.7	-1.7	3.3
Dec. <sup>(p)</sup>	0.1	0.1	-0.6	9.9	-8.5	29.3	-5.1	2.4	0.3	4.8	7.7	2.5	-2.4	-24.1

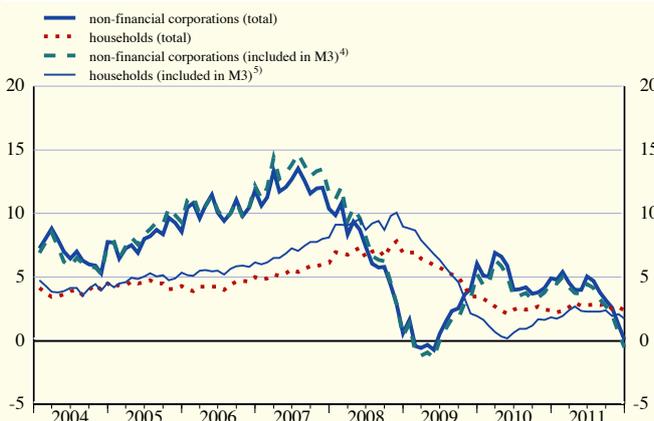
### C11 Total deposits by sector <sup>2)</sup>

(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 the 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>**

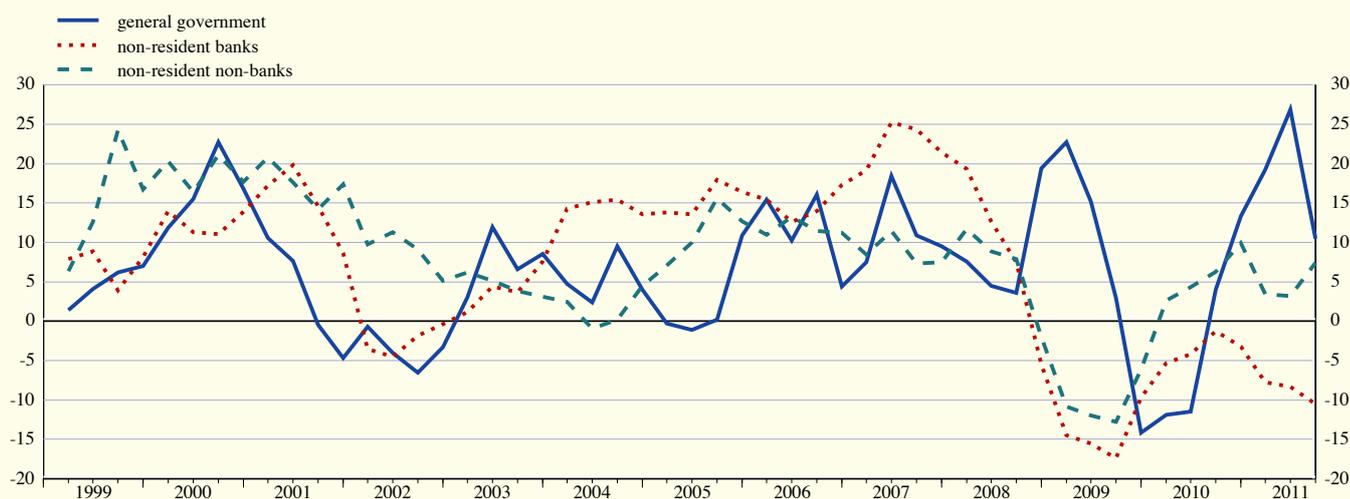
(EUR billions and annual growth rates; outstanding amounts and growth rates at end of period; transactions during period)

**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										
2009	374.9	146.0	43.4	114.3	71.2	3,369.4	2,532.8	836.7	56.7	780.0
2010	427.6	196.2	47.7	109.6	74.1	3,488.8	2,492.0	996.9	45.9	950.9
2010 Q4	427.6	196.2	47.7	109.6	74.1	3,488.8	2,492.0	996.9	45.9	950.9
2011 Q1	475.6	235.8	52.3	108.7	78.8	3,314.1	2,346.8	967.4	41.4	926.0
Q2	521.5	266.4	55.0	112.6	87.5	3,280.6	2,295.8	984.8	47.7	937.1
Q3 <sup>(p)</sup>	464.8	211.4	54.3	111.4	87.8	3,346.4	2,298.8	1,047.6	50.0	997.7
Transactions										
2009	-62.8	-36.2	-8.7	-2.5	-15.0	-329.9	-274.8	-55.0	-4.5	-50.5
2010	50.0	47.4	4.3	-4.9	2.9	0.2	-84.4	84.6	7.5	77.1
2010 Q4	5.4	19.3	-11.0	-2.3	-0.5	-102.8	-108.3	5.5	-2.7	8.2
2011 Q1	50.4	43.4	4.7	-2.4	4.7	-77.2	-71.7	-5.6	-3.6	-1.9
Q2	45.7	30.9	2.7	3.9	8.2	-19.8	-41.6	21.8	6.4	15.4
Q3 <sup>(p)</sup>	-56.9	-55.1	-1.0	-1.2	0.2	0.4	-49.4	49.7	1.4	48.4
Growth rates										
2009	-14.1	-18.9	-16.7	-2.1	-17.4	-8.7	-9.7	-6.2	-6.9	-6.1
2010	13.3	32.2	9.9	-4.3	4.1	0.3	-3.3	9.9	12.7	9.6
2010 Q4	13.3	32.2	9.9	-4.3	4.1	0.3	-3.3	9.9	12.7	9.6
2011 Q1	19.2	41.4	4.0	-1.3	9.2	-4.7	-7.8	3.4	-10.5	4.2
Q2	26.8	61.3	1.2	-2.5	14.0	-5.1	-8.3	3.2	5.0	3.1
Q3 <sup>(p)</sup>	10.5	21.6	-7.8	-1.8	17.0	-5.5	-10.5	7.4	3.3	7.6

**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 the 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 similar to MFIs which are resident outside the euro area.

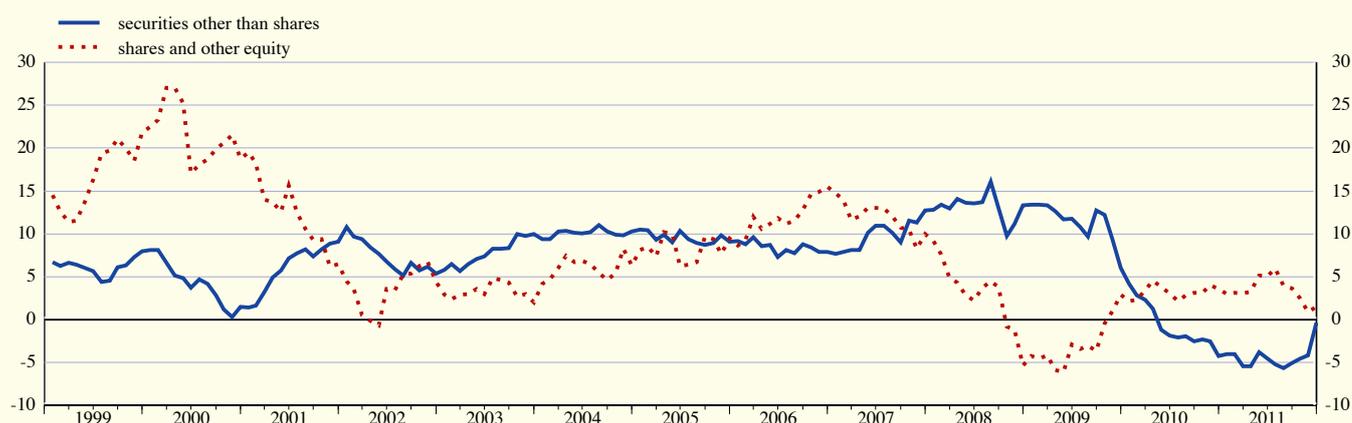
## 2.6 MFI holdings of securities: breakdown <sup>1), 2)</sup>

(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>												
2010	5,993.1	1,778.4	107.4	1,507.8	16.4	1,500.8	27.8	1,054.5	1,535.9	445.3	787.8	302.8
2011 <sup>(p)</sup>	5,692.6	1,760.3	87.7	1,374.8	22.9	1,486.2	28.4	932.2	1,509.1	486.2	727.4	295.4
2011 Q3	5,635.8	1,706.9	92.8	1,393.8	22.3	1,433.7	25.0	961.2	1,530.5	489.3	740.6	300.5
Q4 <sup>(p)</sup>	5,692.6	1,760.3	87.7	1,374.8	22.9	1,486.2	28.4	932.2	1,509.1	486.2	727.4	295.4
2011 Sep.	5,635.8	1,706.9	92.8	1,393.8	22.3	1,433.7	25.0	961.2	1,530.5	489.3	740.6	300.5
Oct.	5,654.0	1,709.9	93.0	1,371.7	21.9	1,493.9	24.9	938.8	1,522.8	487.3	739.2	296.3
Nov.	5,653.3	1,707.9	97.4	1,360.6	21.9	1,497.5	26.7	941.4	1,521.7	486.4	741.2	294.1
Dec. <sup>(p)</sup>	5,692.6	1,760.3	87.7	1,374.8	22.9	1,486.2	28.4	932.2	1,509.1	486.2	727.4	295.4
<b>Transactions</b>												
2010	-268.6	-167.1	-6.9	42.8	-2.0	10.2	-14.8	-130.8	54.4	28.2	5.2	20.9
2011 <sup>(p)</sup>	-23.6	43.2	8.1	6.4	5.5	-24.3	0.4	-63.0	22.5	61.2	-33.0	-5.7
2011 Q3	-48.0	37.0	0.3	-43.4	0.3	-6.7	-0.7	-34.9	-13.6	17.2	-23.2	-7.6
Q4 <sup>(p)</sup>	80.1	63.8	0.6	-4.3	-0.2	33.2	2.4	-15.5	-9.9	6.3	-13.2	-2.9
2011 Sep.	-0.3	17.0	4.2	-10.8	-2.5	-5.5	-3.3	0.7	-2.4	8.8	-12.0	0.8
Oct.	22.4	2.4	2.3	-14.0	0.2	40.4	0.6	-9.5	-10.7	-2.2	-4.8	-3.7
Nov.	-0.9	4.2	1.9	4.6	-0.8	3.3	1.0	-14.9	4.4	0.4	4.8	-0.7
Dec. <sup>(p)</sup>	58.5	57.3	-3.6	5.1	0.4	-10.5	0.8	8.9	-3.6	8.1	-13.2	1.6
<b>Growth rates</b>												
2010	-4.3	-8.5	-5.5	2.9	-11.1	0.7	-35.4	-11.1	3.6	6.5	0.6	7.5
2011 <sup>(p)</sup>	-0.4	2.5	8.0	0.4	33.7	-1.6	1.0	-6.4	1.5	14.0	-4.3	-1.9
2011 Q3	-5.1	-4.9	8.0	-1.0	24.8	-4.3	-16.9	-13.0	3.6	13.4	-1.0	1.0
Q4 <sup>(p)</sup>	-0.4	2.5	8.0	0.4	33.7	-1.6	1.0	-6.4	1.5	14.0	-4.3	-1.9
2011 Sep.	-5.1	-4.9	8.0	-1.0	24.8	-4.3	-16.9	-13.0	3.6	13.4	-1.0	1.0
Oct.	-4.5	-2.3	6.8	-8.2	49.7	-0.1	-6.3	-10.6	2.4	12.6	-2.3	-0.4
Nov.	-4.2	-3.0	6.6	-5.2	28.8	-2.2	0.9	-9.3	0.9	11.8	-3.8	-2.8
Dec. <sup>(p)</sup>	-0.4	2.5	8.0	0.4	33.7	-1.6	1.0	-6.4	1.5	14.0	-4.3	-1.9

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

(annual growth rates)



Source: ECB.

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

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

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

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

**1. Loans, holdings of securities other than shares, and 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	USD	JPY	CHF			GBP	Total	USD	JPY	CHF	GBP
1	2	3	4	5	6	7	8	9	10	11	12	13	14	
<b>Loans</b>														
<i>To euro area residents</i>														
2009	5,916.1	-	-	-	-	-	11,785.6	96.2	3.8	1.9	0.2	1.0	0.4	
2010	5,515.2	-	-	-	-	-	12,247.8	96.0	4.0	2.1	0.2	1.1	0.4	
2011 Q2	5,502.4	-	-	-	-	-	12,376.6	96.2	3.8	1.8	0.2	1.1	0.4	
Q3 <sup>(p)</sup>	6,003.8	-	-	-	-	-	12,441.9	96.1	3.9	1.9	0.3	1.1	0.4	
<i>To non-euro area residents</i>														
2009	1,914.9	45.8	54.2	29.4	2.7	2.9	12.6	906.8	40.0	60.0	42.1	1.2	3.7	8.0
2010	2,010.9	44.9	55.1	30.7	2.9	3.2	11.6	952.1	39.9	60.1	42.8	1.4	3.7	6.7
2011 Q2	2,012.0	45.4	54.6	31.8	2.7	3.2	10.0	994.5	41.4	58.6	39.8	1.4	3.6	6.8
Q3 <sup>(p)</sup>	2,132.4	44.2	55.8	34.7	2.8	3.3	9.0	1,022.7	40.0	60.0	41.3	2.2	3.3	7.0
<b>Holdings of securities other than shares</b>														
<i>Issued by euro area residents</i>														
2009	2,079.9	94.8	5.2	3.1	0.2	0.3	1.4	2,980.2	98.1	1.9	1.2	0.2	0.1	0.3
2010	1,885.8	94.3	5.7	3.3	0.1	0.3	1.7	3,052.8	98.6	1.4	0.8	0.1	0.1	0.4
2011 Q2	1,760.3	94.8	5.2	2.9	0.2	0.3	1.4	2,929.9	98.5	1.5	0.8	0.1	0.1	0.4
Q3 <sup>(p)</sup>	1,799.7	94.8	5.2	2.6	0.1	0.3	1.8	2,874.8	98.4	1.6	0.9	0.2	0.1	0.4
<i>Issued by non-euro area residents</i>														
2009	552.1	55.3	44.7	27.1	0.4	0.5	14.6	595.6	35.3	64.7	37.9	4.3	0.9	15.3
2010	545.9	49.9	50.1	27.6	0.3	0.5	16.8	508.6	33.6	66.4	40.3	3.9	0.9	13.5
2011 Q2	493.0	53.1	46.9	24.9	0.3	0.6	15.7	480.2	33.9	66.1	38.6	5.3	0.8	12.4
Q3 <sup>(p)</sup>	478.6	54.7	45.3	21.8	0.3	0.4	17.1	482.9	32.6	67.4	39.2	6.0	0.8	12.5
<b>Deposits</b>														
<i>By euro area residents</i>														
2009	6,281.6	92.9	7.1	4.4	0.3	1.2	0.7	10,187.4	97.0	3.0	1.9	0.2	0.1	0.4
2010	5,774.9	92.9	7.1	4.1	0.3	1.3	0.8	10,722.6	97.1	2.9	1.9	0.2	0.1	0.4
2011 Q2	5,692.3	92.5	7.5	4.3	0.2	1.5	0.8	10,922.0	97.1	2.9	1.9	0.1	0.1	0.4
Q3 <sup>(p)</sup>	6,084.4	92.2	7.8	4.6	0.3	1.4	0.8	10,995.0	97.0	3.0	2.0	0.2	0.1	0.4
<i>By non-euro area residents</i>														
2009	2,532.8	49.2	50.8	34.2	1.8	2.2	9.6	836.7	53.5	46.5	31.4	1.1	1.7	7.5
2010	2,492.0	52.1	47.9	31.8	2.2	1.8	8.6	996.9	58.8	41.2	29.3	1.2	1.4	5.1
2011 Q2	2,295.8	53.5	46.5	29.8	2.2	1.9	8.0	984.8	58.7	41.3	29.3	1.3	1.4	4.5
Q3 <sup>(p)</sup>	2,298.8	57.1	42.9	26.9	2.1	1.8	7.8	1,047.6	59.1	40.9	28.6	1.5	1.7	4.6

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

	All currencies (outstanding amount)	Euro <sup>4)</sup>	Non-euro currencies				
			Total				
			USD	JPY	CHF	GBP	
1	2	3	4	5	6	7	
2009	5,168.3	83.3	16.7	8.8	1.6	1.9	2.5
2010	5,082.6	81.6	18.4	9.7	1.8	2.1	2.5
2011 Q2	5,155.8	81.9	18.1	9.6	1.6	2.2	2.4
Q3 <sup>(p)</sup>	5,180.3	81.8	18.2	9.7	1.7	2.1	2.5

Source: ECB.

- 1) MFI sector excluding the Eurosystem; sectoral classification is based on the 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 similar to euro area MFIs.
- 4) Including items expressed in the national denominations of the euro.

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

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

### 1. Assets

	Total	Deposits and loan claims	Securities other than shares	Shares and other equity (excl. investment fund/money market fund shares)	Investment fund/money market fund shares	Non-financial assets	Other assets (incl. financial derivatives)
	1	2	3	4	5	6	7
Outstanding amounts							
2011 May	6,431.0	392.2	2,399.8	1,992.2	897.8	224.9	524.0
June	6,352.7	390.6	2,386.8	1,958.6	886.8	224.9	505.0
July	6,435.7	394.8	2,420.4	1,943.8	891.5	226.5	558.6
Aug.	6,192.9	411.8	2,382.8	1,736.5	840.2	227.9	593.8
Sep.	6,072.2	420.9	2,383.0	1,632.5	829.9	229.5	576.4
Oct.	6,191.2	423.1	2,370.3	1,734.3	842.8	227.5	593.1
Nov. <sup>(p)</sup>	6,117.4	421.8	2,344.0	1,701.6	826.4	227.5	596.2
Transactions							
2011 Q1	110.1	19.2	25.2	14.9	8.4	2.4	40.0
Q2	68.9	5.6	38.2	25.9	12.3	5.8	-18.9
Q3	-6.3	29.1	-21.3	-42.0	-16.8	2.8	41.9

### 2. Liabilities

	Total	Loans and deposits received	Investment fund shares issued				Other liabilities (incl. financial derivatives)
			Total	Held by euro area residents		Held by non-euro area residents	
				Investment funds			
	1	2	3	4	5	6	7
Outstanding amounts							
2011 May	6,431.0	126.8	5,861.2	4,532.4	682.9	1,328.8	443.0
June	6,352.7	121.0	5,790.3	4,466.8	672.6	1,323.5	441.4
July	6,435.7	122.3	5,825.8	4,465.3	672.8	1,360.6	487.6
Aug.	6,192.9	128.6	5,545.2	4,267.8	621.7	1,277.4	519.1
Sep.	6,072.2	125.1	5,416.4	4,162.3	602.2	1,254.1	530.7
Oct.	6,191.2	130.4	5,521.3	4,225.4	614.1	1,295.9	539.5
Nov. <sup>(p)</sup>	6,117.4	135.7	5,437.4	4,147.0	597.4	1,290.5	544.3
Transactions							
2011 Q1	110.1	12.0	55.4	27.1	4.1	28.3	42.8
Q2	68.9	-2.9	79.0	25.8	9.6	53.3	-7.3
Q3	-6.3	6.4	-45.2	-56.0	-32.9	10.8	32.5

### 3. Investment fund shares issued broken down by investment policy and type of fund

	Total	Funds by investment policy					Funds by type		Memo item: Money market funds	
		Bond funds	Equity funds	Mixed funds	Real estate funds	Hedge funds	Other funds	Open-end funds		Closed-end funds
	1	2	3	4	5	6	7	8	9	10
Outstanding amounts										
2011 Apr.	5,814.3	1,797.4	1,724.8	1,429.1	269.6	113.3	480.2	5,728.8	85.5	1,070.8
May	5,861.2	1,825.3	1,729.6	1,438.2	271.2	114.5	482.5	5,775.6	85.6	1,090.1
June	5,790.3	1,812.5	1,689.6	1,424.5	272.5	112.5	478.8	5,703.5	86.8	1,047.5
July	5,825.8	1,836.8	1,674.4	1,434.3	287.0	116.2	477.3	5,737.3	88.6	1,032.5
Aug.	5,545.2	1,807.2	1,495.2	1,381.7	286.2	114.1	460.8	5,456.9	88.4	1,060.3
Sep.	5,416.4	1,786.1	1,413.9	1,386.8	286.5	119.2	424.0	5,327.2	89.2	1,066.9
Oct.	5,521.3	1,787.3	1,500.2	1,405.8	288.2	115.8	423.9	5,439.2	82.1	1,049.5
Nov. <sup>(p)</sup>	5,437.4	1,756.2	1,470.6	1,383.8	287.3	119.0	420.6	5,354.6	82.8	1,083.7
Transactions										
2011 May	27.8	9.8	9.7	5.9	-0.2	-1.0	3.6	28.1	-0.3	8.1
June	8.8	2.1	2.1	1.5	2.8	-0.3	0.6	6.8	2.0	-36.9
July	36.4	12.0	5.6	2.5	13.3	2.0	1.0	34.9	1.5	-20.0
Aug.	-49.0	-14.0	-22.8	-10.8	0.8	-0.2	-2.0	-49.0	0.0	32.8
Sep.	-32.6	-16.3	-11.1	-4.9	1.1	0.6	-2.0	-32.9	0.3	-12.3
Oct.	-25.6	-2.1	-6.7	-6.4	-0.2	-0.8	-9.5	-18.9	-6.7	-7.5
Nov. <sup>(p)</sup>	-22.4	-10.3	-7.5	-5.4	-0.4	0.0	1.2	-23.0	0.6	21.2

Source: ECB.

1) Other than money market funds (which are shown as a memo item in column 10 in Table 3 of this section). For further details, see the General Notes.

**2.9 Securities held by investment funds <sup>1)</sup> broken down by issuer of securities**

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

**1. Securities other than shares**

	Total	Euro area						Rest of the world			
		Total	MFIs	General government	Other financial intermediaries	Insurance corporations and pension funds	Non-financial corporations	EU Member States outside the euro area	United States	Japan	
	1	2	3	4	5	6	7	8	9	10	11
<b>Outstanding amounts</b>											
2010 Q4	2,369.5	1,432.6	375.5	692.0	193.9	6.2	165.0	936.8	247.0	365.8	16.1
2011 Q1	2,354.9	1,430.3	383.4	675.7	200.2	5.6	165.5	924.5	246.5	354.5	14.1
Q2	2,386.8	1,429.8	386.3	671.3	196.3	5.8	170.1	957.0	252.3	358.6	17.8
Q3 <sup>(p)</sup>	2,383.0	1,413.6	380.7	682.1	184.1	4.7	162.0	969.4	252.3	369.7	18.7
<b>Transactions</b>											
2011 Q1	25.2	10.7	9.3	-8.3	7.9	-0.1	1.8	14.5	1.9	2.3	-1.0
Q2	38.2	-0.4	1.7	-3.5	-1.6	0.4	2.7	37.0	8.2	7.7	3.6
Q3 <sup>(p)</sup>	-21.3	-16.9	-5.8	1.3	-7.7	-0.3	-4.3	-4.5	6.0	-4.1	5.3

**2. Shares and other equity (other than investment fund and money market fund shares)**

	Total	Euro area						Rest of the world			
		Total	MFIs	General government	Other financial intermediaries	Insurance corporations and pension funds	Non-financial corporations	EU Member States outside the euro area	United States	Japan	
	1	2	3	4	5	6	7	8	9	10	11
<b>Outstanding amounts</b>											
2010 Q4	1,987.7	751.1	77.8	-	39.5	25.2	608.7	1,236.5	171.4	355.8	83.8
2011 Q1	1,973.7	782.8	89.2	-	41.7	26.2	625.7	1,191.0	167.2	365.2	71.1
Q2	1,958.6	773.6	84.5	-	41.2	26.1	621.9	1,185.0	166.4	362.8	77.0
Q3 <sup>(p)</sup>	1,632.5	615.4	53.3	-	35.7	20.4	506.0	1,017.0	141.8	323.6	72.5
<b>Transactions</b>											
2011 Q1	14.9	11.6	5.5	-	2.3	-0.9	4.7	3.3	-0.5	16.0	-3.9
Q2	25.9	-0.9	-0.6	-	1.3	0.3	-2.0	26.8	2.9	8.5	6.9
Q3 <sup>(p)</sup>	-42.0	-8.9	-4.9	-	-0.7	0.2	-3.5	-33.1	-5.1	-11.8	-3.2

**3. Investment fund/money market fund shares**

	Total	Euro area						Rest of the world			
		Total	MFIs <sup>2)</sup>	General government	Other financial intermediaries <sup>2)</sup>	Insurance corporations and pension funds	Non-financial corporations	EU Member States outside the euro area	United States	Japan	
	1	2	3	4	5	6	7	8	9	10	11
<b>Outstanding amounts</b>											
2010 Q4	875.6	740.5	76.0	-	664.4	-	-	135.1	23.8	38.6	0.6
2011 Q1	882.9	746.3	78.0	-	668.3	-	-	136.6	22.6	41.7	0.5
Q2	886.8	752.0	79.4	-	672.6	-	-	134.8	22.1	42.8	0.5
Q3 <sup>(p)</sup>	829.9	697.5	95.3	-	602.2	-	-	132.4	20.1	42.6	0.5
<b>Transactions</b>											
2011 Q1	8.4	6.1	2.1	-	4.1	-	-	2.3	-0.9	3.3	-0.1
Q2	12.3	10.8	1.2	-	9.6	-	-	1.5	0.3	1.3	0.0
Q3 <sup>(p)</sup>	-16.8	-16.2	16.7	-	-32.9	-	-	-0.6	-0.5	-0.3	0.0

Source: ECB.

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

2) Investment fund shares (other than money market fund shares) are issued by other financial intermediaries. Money market fund shares are issued by MFIs.

## 2.10 Aggregated balance sheet of euro area financial vehicle corporations

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

### 1. Assets

	Total	Deposits and loan claims	Securitised loans						Securities other than shares	Other securitised assets	Shares and other equity	Other assets	
			Total	Originated in euro area				Originated outside euro area					
				MFIs	Other financial intermediaries, insurance corporations and pension funds	Non-financial corporations	General government						
													Remaining on the MFI balance sheet <sup>1)</sup>
1	2	3	4	5	6	7	8	9	10	11	12	13	
Outstanding amounts													
2010 Q2	2,285.9	363.2	1,437.5	1,131.2	570.6	140.6	25.0	6.4	134.2	278.8	101.3	41.1	64.0
Q3	2,284.9	350.2	1,467.1	1,173.3	582.4	133.7	24.8	6.4	128.8	260.4	100.3	41.4	65.6
Q4	2,350.1	373.6	1,521.9	1,237.6	606.4	124.9	22.9	6.0	130.4	251.8	92.5	41.9	68.5
2011 Q1	2,256.1	353.1	1,482.1	1,193.7	595.3	131.3	23.3	5.9	127.8	242.0	89.0	36.8	53.1
Q2	2,215.8	339.7	1,461.1	1,177.1	585.5	134.1	21.8	5.2	123.0	232.5	88.6	35.7	58.2
Q3	2,200.2	321.4	1,470.1	1,195.7	590.5	132.3	21.8	5.2	115.1	231.5	86.5	34.4	56.4
Transactions													
2010 Q3	-4.5	-12.1	23.4	32.9	-	-2.3	-0.6	-0.1	-6.5	-16.3	-0.5	0.4	0.7
Q4	44.8	24.5	24.2	30.1	-	-4.7	-2.1	-0.4	1.3	-5.5	-0.9	-0.6	3.0
2011 Q1	-92.3	-23.1	-36.5	-44.2	-	8.8	0.6	0.0	-1.8	-10.0	-2.4	-4.9	-15.3
Q2	-44.6	-11.7	-26.0	-22.3	-	2.5	-0.9	-0.3	-4.9	-7.9	0.0	0.0	1.0
Q3	-23.4	-18.3	4.6	14.6	-	-2.0	-0.2	0.0	-7.8	-2.3	-2.2	-1.1	-4.2

### 2. Liabilities

	Total	Loans and deposits received	Debt securities issued			Capital and reserves	Other liabilities
			Total	Up to 2 years	Over 2 years		
1	2	3	4	5	6	7	
Outstanding amounts							
2010 Q2	2,285.9	107.6	1,961.1	91.1	1,870.0	45.0	172.2
Q3	2,284.9	119.9	1,946.8	86.5	1,860.3	43.2	175.1
Q4	2,350.1	134.4	1,970.0	93.5	1,876.5	42.6	203.2
2011 Q1	2,256.1	133.1	1,887.6	83.9	1,803.6	37.7	197.7
Q2	2,215.8	134.0	1,844.0	82.6	1,761.4	34.8	203.1
Q3	2,200.2	131.1	1,824.8	80.0	1,744.8	34.4	209.9
Transactions							
2010 Q3	-4.5	11.6	-10.9	-4.2	-6.7	-0.1	-5.1
Q4	44.8	15.9	24.0	5.7	18.3	-2.1	7.0
2011 Q1	-92.3	-1.0	-79.2	-9.9	-69.3	-4.5	-7.7
Q2	-44.6	0.9	-48.6	-5.7	-42.8	-1.2	4.3
Q3	-23.4	-2.2	-22.6	-4.1	-18.6	-1.7	3.1

### 3. Holdings of securitised loans originated by euro area MFIs and securities other than shares

	Securitised loans originated by euro area MFIs						Securities other than shares						
	Total	Euro area borrowing sector					Non-euro area borrowing sector	Total	Euro area residents				Non-euro area residents
		Households	Non-financial corporations	Other financial intermediaries	Insurance corporations and pension funds	General government			Total	MFIs	Non-MFIs		
											Financial vehicle corporations		
1	2	3	4	5	6	7	8	9	10	11	12	13	
Outstanding amounts													
2010 Q2	1,131.2	812.6	215.9	19.4	14.7	7.4	61.1	278.8	149.2	50.5	98.7	45.5	129.6
Q3	1,173.3	828.7	221.2	18.2	15.0	7.0	83.2	260.4	140.8	47.4	93.4	38.3	119.6
Q4	1,237.6	852.7	251.4	17.2	15.3	7.1	94.1	251.8	131.9	45.7	86.3	36.5	119.9
2011 Q1	1,193.7	804.1	250.7	17.0	15.4	7.2	99.3	242.0	125.7	42.4	83.3	36.8	116.3
Q2	1,177.1	788.8	250.9	18.8	15.4	9.8	93.4	232.5	124.5	41.1	83.4	35.4	108.2
Q3	1,195.7	795.2	257.5	18.1	15.2	9.6	100.1	231.5	121.6	41.7	79.9	33.8	109.1
Transactions													
2010 Q3	32.9	9.7	1.3	-0.8	0.3	-0.4	22.8	-16.3	-9.8	-2.5	-7.4	-6.7	-6.5
Q4	30.1	16.3	14.1	-1.6	-0.2	0.1	1.4	-5.5	-5.3	-1.1	-4.2	-2.2	-0.2
2011 Q1	-44.2	-52.2	3.2	-0.4	0.0	0.0	5.2	-10.0	-5.9	-3.1	-2.8	0.1	-4.1
Q2	-22.3	-21.1	0.3	0.6	-0.2	2.6	-4.4	-7.9	0.6	-0.4	0.9	-0.7	-8.5
Q3	14.6	6.3	2.5	-0.7	0.0	-0.2	6.7	-2.3	-3.3	-0.2	-3.1	-1.2	1.0

Source: ECB.

1) Loans securitised using euro area financial vehicle corporations which remain on the balance sheet of the relevant MFI - i.e. which have not been derecognised. Whether or not loans are derecognised from the balance sheet of the MFI depends on the relevant accounting rules. For further information, see the General Notes.

**2.11 Aggregated balance sheet of euro area insurance corporations and pension funds**

(EUR billions; outstanding amounts at end of period)

**1. Assets**

	Total	Currency and deposits	Loans	Securities other than shares	Shares and other equity	Investment fund shares	Money market fund shares	Prepayments of insurance premiums and reserves for outstanding claims	Other accounts receivable/payable and financial derivatives	Non-financial assets
	1	2	3	4	5	6	7	8	9	10
2008 Q4	6,158.6	800.7	478.6	2,292.9	819.1	1,088.2	93.9	245.7	184.8	154.5
2009 Q1	6,188.0	797.2	493.7	2,361.0	785.6	1,071.9	101.6	244.1	176.2	156.7
Q2	6,329.9	782.8	487.7	2,384.4	818.9	1,200.3	89.7	248.6	162.1	155.3
Q3	6,517.3	784.2	483.4	2,424.9	792.4	1,377.3	86.0	252.0	163.2	153.8
Q4	6,642.1	786.9	477.9	2,462.8	804.3	1,456.7	86.4	256.2	158.1	152.8
2010 Q1	6,864.3	784.5	486.3	2,575.8	815.3	1,534.1	83.4	267.1	169.4	148.4
Q2	6,891.1	785.5	488.9	2,613.5	792.7	1,518.4	79.8	272.1	190.2	150.1
Q3	7,060.3	783.2	498.0	2,698.8	807.4	1,559.7	75.3	272.9	215.1	149.9
Q4	6,978.8	774.1	501.6	2,642.2	823.1	1,579.1	65.3	271.8	170.0	151.5
2011 Q1	7,050.6	775.1	499.7	2,676.3	826.6	1,602.0	63.5	279.0	174.3	154.1
Q2	7,073.9	778.4	506.8	2,691.8	830.6	1,605.3	66.8	269.5	171.8	153.0
Q3	7,060.5	793.6	498.8	2,714.4	780.2	1,553.4	74.6	267.4	225.2	152.9

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

	Total	Issued by euro area residents					Issued by non-euro area residents	
		Total	MFIs	General government	Other financial intermediaries	Insurance corporations and pension funds		Non-financial corporations
	1	2	3	4	5	6	7	8
2008 Q4	2,292.9	1,874.6	505.9	1,014.0	207.0	11.4	136.4	418.3
2009 Q1	2,361.0	1,939.5	531.1	1,040.5	218.3	13.5	136.1	421.5
Q2	2,384.4	1,987.6	541.7	1,060.8	231.2	15.0	139.0	396.8
Q3	2,424.9	2,021.7	552.6	1,086.7	229.4	15.1	137.8	403.2
Q4	2,462.8	2,053.6	543.8	1,114.4	239.3	16.7	139.5	409.2
2010 Q1	2,575.8	2,157.9	578.5	1,184.6	231.7	16.2	146.9	417.9
Q2	2,613.5	2,190.3	581.7	1,196.8	244.3	16.6	150.9	423.1
Q3	2,698.8	2,271.6	593.4	1,242.3	264.1	19.5	152.4	427.2
Q4	2,642.2	2,218.7	594.3	1,215.0	236.1	17.7	155.5	423.5
2011 Q1	2,676.3	2,260.2	617.3	1,208.6	261.9	19.0	153.5	416.0
Q2	2,691.8	2,266.7	638.0	1,229.6	223.5	16.1	159.5	425.1
Q3	2,714.4	2,289.6	640.4	1,236.2	235.6	17.4	160.1	424.8

**3. Liabilities and net worth**

	Liabilities								Net worth	
	Total	Loans received	Securities other than shares	Shares and other equity	Insurance technical reserves					Other accounts receivable/payable and financial derivatives
					Total	Net equity of households in life insurance reserves	Net equity of households in pension fund reserves	Prepayments of insurance premiums and reserves for outstanding claims		
	1	2	3	4	5	6	7	8	9	10
2008 Q4	6,123.7	348.8	31.7	422.1	5,178.6	2,909.2	1,445.8	823.6	142.6	34.8
2009 Q1	6,129.8	347.8	31.8	378.6	5,228.6	2,927.5	1,460.2	841.0	142.9	58.2
Q2	6,215.9	321.6	33.1	395.1	5,325.5	3,005.5	1,477.4	842.6	140.6	114.1
Q3	6,363.7	303.8	36.1	440.0	5,438.6	3,094.8	1,501.7	842.2	145.1	153.6
Q4	6,441.3	284.6	39.5	436.2	5,527.8	3,168.6	1,519.8	839.3	153.3	200.8
2010 Q1	6,622.5	293.6	39.5	455.4	5,676.6	3,255.9	1,560.2	860.5	157.5	241.7
Q2	6,661.4	298.9	40.9	427.9	5,733.7	3,281.4	1,589.1	863.2	160.0	229.7
Q3	6,774.7	315.0	39.8	435.7	5,829.0	3,338.9	1,629.5	860.5	155.2	285.6
Q4	6,816.8	284.5	42.3	444.6	5,895.6	3,381.8	1,651.3	862.4	149.8	162.0
2011 Q1	6,919.1	304.2	40.1	459.7	5,965.0	3,414.1	1,664.5	886.3	150.0	131.5
Q2	6,933.4	305.6	43.2	447.4	5,987.2	3,437.1	1,674.4	875.6	149.9	140.6
Q3	6,892.2	311.4	42.4	401.5	5,972.6	3,422.1	1,678.9	871.6	164.3	168.3

Source: ECB.



## EURO AREA ACCOUNTS

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

(EUR billions)

Uses	Euro area	Households	Non-financial corporations	Financial corporations	General government	Rest of the world
2011 Q3						
<b>External account</b>						
Exports of goods and services						584
<i>Trade balance</i> <sup>1)</sup>						-20
<b>Generation of income account</b>						
Gross value added (basic prices)						
Taxes less subsidies on products						
Gross domestic product (market prices)						
Compensation of employees	1,108	115	701	56	235	
Other taxes less subsidies on production	27	6	14	4	4	
Consumption of fixed capital	362	97	206	11	49	
<i>Net operating surplus and mixed income</i> <sup>1)</sup>	600	284	279	37	-1	
<b>Allocation of primary income account</b>						
Net operating surplus and mixed income						6
Compensation of employees						
Taxes less subsidies on production						
Property income	667	39	249	308	71	104
Interest	399	37	74	217	71	55
Other property income	268	2	175	91	0	49
<i>Net national income</i> <sup>1)</sup>	1,979	1,588	129	49	214	
<b>Secondary distribution of income account</b>						
Net national income						
Current taxes on income, wealth, etc.	266	210	46	9	0	2
Social contributions	428	428				1
Social benefits other than social transfers in kind	457	1	17	33	405	1
Other current transfers	184	68	23	45	49	10
Net non-life insurance premiums	43	33	9	1	1	2
Non-life insurance claims	43			43		1
Other	98	35	14	1	48	8
<i>Net disposable income</i> <sup>1)</sup>	1,954	1,421	72	56	404	
<b>Use of income account</b>						
Net disposable income						
Final consumption expenditure	1,850	1,365			484	
Individual consumption expenditure	1,665	1,365			300	
Collective consumption expenditure	184				184	
Adjustment for the change in the net equity of households in pension fund reserves	16	0	0	16	0	0
<i>Net saving/current external account</i> <sup>1)</sup>	104	71	72	41	-80	1
<b>Capital account</b>						
Net saving/current external account						
Gross capital formation	468	148	255	11	54	
Gross fixed capital formation	455	145	245	11	54	
Changes in inventories and acquisitions less disposals of valuables	13	3	10	0	0	
Consumption of fixed capital						
Acquisitions less disposals of non-produced non-financial assets	0	-1	0	0	0	0
Capital transfers	30	9	1	2	19	5
Capital taxes	6	6	1	0		0
Other capital transfers	24	3	0	2	19	5
<i>Net lending (+)/net borrowing (-) (from capital account)</i> <sup>1)</sup>	1	21	37	39	-97	-1
Statistical discrepancy	0	-15	15	0	0	0

Sources: ECB and Eurostat.

1) For details of 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
2011 Q3						
<b>External account</b>						
Imports of goods and services						564
<i>Trade balance</i>						
<b>Generation of income account</b>						
Gross value added (basic prices)	2,097	502	1,200	108	287	
Taxes less subsidies on products	240					
Gross domestic product (market prices) <sup>2)</sup>	2,338					
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	600	284	279	37	-1	
Compensation of employees	1,109	1,109				4
Taxes less subsidies on production	267				267	1
Property income	671	233	99	319	19	100
Interest	391	62	49	269	10	63
Other property income	280	172	49	50	9	37
<i>Net national income</i>						
<b>Secondary distribution of income account</b>						
Net national income	1,979	1,588	129	49	214	
Current taxes on income, wealth, etc.	267				267	1
Social contributions	428	1	17	50	360	1
Social benefits other than social transfers in kind	455	455				3
Other current transfers	160	85	12	45	18	35
Net non-life insurance premiums	43			43		2
Non-life insurance claims	43	35	7	1	0	2
Other	74	50	5	0	18	32
<i>Net disposable income</i>						
<b>Use of income account</b>						
Net disposable income	1,954	1,421	72	56	404	
Final consumption expenditure						
Individual consumption expenditure						
Collective consumption expenditure						
Adjustment for the change in the net equity of households in pension fund reserves	16	16				0
<i>Net saving/current external account</i>						
<b>Capital account</b>						
Net saving/current external account	104	71	72	41	-80	1
Gross capital formation						
Gross fixed capital formation						
Changes in inventories and acquisitions less disposals of valuables						
Consumption of fixed capital	362	97	206	11	49	
Acquisitions less disposals of non-produced non-financial assets						
Capital transfers	32	9	16	1	7	3
Capital taxes	6				6	0
Other capital transfers	26	9	16	1	1	3
<i>Net lending (+)/net borrowing (-) (from capital account)</i>						
Statistical discrepancy						

Sources: ECB and Eurostat.

2) Gross domestic product is equal to the gross value added of all domestic sectors plus net taxes (i.e. 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
2011 Q3								
<b>Opening balance sheet, financial assets</b>								
Total financial assets		18,903	16,948	32,249	15,364	6,834	3,874	16,763
Monetary gold and special drawing rights (SDRs)				412				
Currency and deposits		6,708	1,901	9,114	2,364	805	787	3,572
Short-term debt securities		57	76	464	317	47	32	714
Long-term debt securities		1,371	244	5,973	2,436	2,659	442	3,824
Loans		80	3,132	13,430	3,588	472	545	1,900
<i>of which: Long-term</i>		59	1,796	10,308	2,560	352	463	.
Shares and other equity		4,397	7,901	1,912	6,383	2,469	1,363	6,033
Quoted shares		829	1,413	370	2,154	572	262	.
Unquoted shares and other equity		2,204	6,078	1,242	3,233	297	933	.
Mutual fund shares		1,364	410	300	996	1,600	168	.
Insurance technical reserves		5,815	178	3	0	230	4	241
Other accounts receivable and financial derivatives		476	3,516	941	276	152	701	479
<i>Net financial worth</i>								
<b>Financial account, transactions in financial assets</b>								
Total transactions in financial assets		28	195	1,340	50	54	-27	118
Monetary gold and SDRs				0				0
Currency and deposits		12	19	1,140	92	26	-86	31
Short-term debt securities		-3	4	47	-3	7	0	-18
Long-term debt securities		-10	7	-15	-62	-15	-5	19
Loans		0	93	53	55	-3	-15	38
<i>of which: Long-term</i>		0	27	-140	30	0	-2	.
Shares and other equity		-17	69	0	-32	43	13	8
Quoted shares		6	40	1	-69	3	3	.
Unquoted shares and other equity		8	34	10	56	3	14	.
Mutual fund shares		-30	-5	-11	-19	37	-4	.
Insurance technical reserves		24	0	0	0	-1	0	-3
Other accounts receivable and financial derivatives		22	4	114	0	-3	66	43
<i>Changes in net financial worth due to transactions</i>								
<b>Other changes account, financial assets</b>								
Total other changes in financial assets		-466	-840	61	-340	-113	-46	8
Monetary gold and SDRs				57				
Currency and deposits		9	5	94	0	2	0	73
Short-term debt securities		-2	3	-1	4	0	-1	21
Long-term debt securities		-43	-16	43	11	21	2	172
Loans		-1	11	41	21	-1	0	24
<i>of which: Long-term</i>		-1	2	19	13	0	0	.
Shares and other equity		-406	-823	-155	-383	-137	-58	-283
Quoted shares		-182	-231	-71	-302	-52	-45	.
Unquoted shares and other equity		-145	-561	-79	-34	-7	-3	.
Mutual fund shares		-79	-31	-5	-46	-78	-9	.
Insurance technical reserves		-13	0	0	0	2	0	2
Other accounts receivable and financial derivatives		-10	-20	-18	6	0	11	-1
<i>Other changes in net financial worth</i>								
<b>Closing balance sheet, financial assets</b>								
Total financial assets		18,466	16,303	33,651	15,074	6,776	3,800	16,889
Monetary gold and SDRs				469				
Currency and deposits		6,728	1,925	10,348	2,456	833	700	3,676
Short-term debt securities		52	83	510	318	54	31	717
Long-term debt securities		1,318	235	6,001	2,385	2,666	439	4,015
Loans		79	3,237	13,524	3,664	468	530	1,961
<i>of which: Long-term</i>		58	1,825	10,187	2,603	352	461	.
Shares and other equity		3,974	7,146	1,758	5,968	2,375	1,318	5,758
Quoted shares		652	1,222	301	1,782	523	220	.
Unquoted shares and other equity		2,066	5,551	1,173	3,254	293	943	.
Mutual fund shares		1,255	374	284	932	1,559	155	.
Insurance technical reserves		5,827	177	3	0	231	4	240
Other accounts receivable and financial derivatives		488	3,499	1,037	282	149	777	521
<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>2011 Q3</b>								
<b>Opening balance sheet, liabilities</b>								
Total liabilities		6,670	26,813	31,393	14,736	6,891	9,218	14,801
Monetary gold and special drawing rights (SDRs)								
Currency and deposits			30	22,301	21	0	259	2,640
Short-term debt securities			82	623	78	1	687	235
Long-term debt securities			799	4,540	2,738	33	6,002	2,838
Loans		6,152	8,564		3,376	270	1,706	3,079
<i>of which: Long-term</i>		5,784	6,077		1,855	121	1,401	.
Shares and other equity		7	13,364	2,691	8,389	423	6	5,577
Quoted shares			3,914	489	250	122	0	.
Unquoted shares and other equity		7	9,451	1,155	2,552	300	6	.
Mutual fund shares				1,048	5,587			.
Insurance technical reserves		35	335	70	1	6,029	1	
Other accounts payable and financial derivatives		476	3,638	1,168	133	135	558	431
<i>Net financial worth <sup>1)</sup></i>	-1,550	12,233	-9,865	856	628	-57	-5,345	
<b>Financial account, transactions in liabilities</b>								
Total transactions in liabilities		22	143	1,288	100	18	69	118
Monetary gold and SDRs								
Currency and deposits			-1	1,148	12	0	3	72
Short-term debt securities			11	6	-10	0	15	11
Long-term debt securities			3	-17	-7	0	-35	-24
Loans		16	40		96	6	28	35
<i>of which: Long-term</i>		24	25		43	-2	27	.
Shares and other equity		0	54	27	23	1	0	-20
Quoted shares			4	17	3	1	0	.
Unquoted shares and other equity		0	50	9	75	0	0	.
Mutual fund shares				0	-55			.
Insurance technical reserves		0	0	2	0	17	0	
Other accounts payable and financial derivatives		6	34	122	-13	-6	58	44
<i>Changes in net financial worth due to transactions <sup>1)</sup></i>	1	6	53	52	-50	36	-97	-1
<b>Other changes account, liabilities</b>								
Total other changes in liabilities		6	-1,435	-2	-367	-83	90	-2
Monetary gold and SDRs								
Currency and deposits			0	117	0	0	0	66
Short-term debt securities			0	10	0	0	0	15
Long-term debt securities			27	64	-32	-1	97	36
Loans		1	13		42	-1	1	38
<i>of which: Long-term</i>		2	1		14	-1	1	.
Shares and other equity		0	-1,461	-200	-379	-45	0	-159
Quoted shares			-776	-158	-68	-25	0	.
Unquoted shares and other equity		0	-685	-61	0	-20	0	.
Mutual fund shares				19	-311			.
Insurance technical reserves		0	0	0	0	-9	0	
Other accounts payable and financial derivatives		4	-14	8	3	-28	-7	3
<i>Other changes in net financial worth <sup>1)</sup></i>	47	-472	595	64	26	-29	-137	10
<b>Closing balance sheet, liabilities</b>								
Total liabilities		6,698	25,520	32,680	14,470	6,825	9,378	14,917
Monetary gold and SDRs								
Currency and deposits			30	23,566	32	0	262	2,778
Short-term debt securities			94	639	68	1	702	261
Long-term debt securities			828	4,587	2,699	32	6,064	2,850
Loans		6,169	8,617		3,514	275	1,735	3,151
<i>of which: Long-term</i>		5,811	6,104		1,912	118	1,429	.
Shares and other equity		7	11,958	2,518	8,033	378	6	5,398
Quoted shares			3,142	348	185	97	0	.
Unquoted shares and other equity		7	8,816	1,103	2,627	279	6	.
Mutual fund shares				1,067	5,221			.
Insurance technical reserves		35	335	72	1	6,038	1	
Other accounts payable and financial derivatives		487	3,658	1,298	123	101	609	479
<i>Net financial worth <sup>1)</sup></i>	-1,502	11,767	-9,217	971	604	-50	-5,578	

Source: ECB.

### 3.2 Euro area non-financial accounts

(EUR billions; four-quarter cumulated flows)

Uses	2007	2008	2009	2009 Q4- 2010 Q3	2010 Q1- 2010 Q4	2010 Q2- 2011 Q1	2010 Q3- 2011 Q2	2010 Q4- 2011 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	4,278	4,460	4,442	4,472	4,490	4,517	4,548	4,575
Other taxes less subsidies on production	99	94	85	87	82	84	88	94
Consumption of fixed capital	1,294	1,361	1,384	1,405	1,415	1,425	1,435	1,442
<i>Net operating surplus and mixed income</i> <sup>1)</sup>	2,398	2,360	2,117	2,187	2,213	2,240	2,259	2,271
<b>Allocation of primary income account</b>								
Net operating surplus and mixed income								
Compensation of employees								
Taxes less subsidies on production								
Property income	3,689	3,936	2,959	2,759	2,803	2,848	2,922	2,976
Interest	2,129	2,383	1,606	1,401	1,410	1,441	1,484	1,532
Other property income	1,560	1,553	1,353	1,358	1,393	1,407	1,438	1,445
<i>Net national income</i> <sup>1)</sup>	7,773	7,807	7,538	7,680	7,733	7,797	7,862	7,920
<b>Secondary distribution of income account</b>								
Net national income								
Current taxes on income, wealth, etc.	1,136	1,145	1,028	1,043	1,054	1,071	1,081	1,096
Social contributions	1,596	1,671	1,676	1,689	1,699	1,708	1,717	1,733
Social benefits other than social transfers in kind	1,586	1,657	1,774	1,813	1,821	1,826	1,831	1,837
Other current transfers	738	771	775	779	771	771	773	772
Net non-life insurance premiums	183	187	181	180	180	178	178	179
Non-life insurance claims	184	188	182	180	180	179	178	179
Other	370	395	412	419	412	414	416	415
<i>Net disposable income</i> <sup>1)</sup>	7,679	7,705	7,430	7,565	7,621	7,684	7,750	7,810
<b>Use of income account</b>								
Net disposable income								
Final consumption expenditure	6,884	7,135	7,140	7,259	7,301	7,350	7,399	7,438
Individual consumption expenditure	6,185	6,399	6,369	6,486	6,529	6,576	6,623	6,660
Collective consumption expenditure	699	737	771	773	772	774	776	778
Adjustment for the change in the net equity of households in pension fund reserves	61	70	62	56	55	54	55	58
<i>Net saving</i> <sup>1)</sup>	796	570	290	306	320	334	351	373
<b>Capital account</b>								
Net saving								
Gross capital formation	2,065	2,074	1,719	1,768	1,793	1,838	1,855	1,871
Gross fixed capital formation	1,990	2,011	1,763	1,761	1,773	1,799	1,814	1,828
Changes in inventories and acquisitions less disposals of valuables	75	63	-43	7	19	39	41	43
Consumption of fixed capital								
Acquisitions less disposals of non-produced non-financial assets	-1	1	1	2	1	1	1	1
Capital transfers	153	152	185	221	226	214	206	164
Capital taxes	24	24	34	30	25	26	25	25
Other capital transfers	129	128	151	191	201	188	181	139
<i>Net lending (+)/net borrowing (-) (from capital account)</i> <sup>1)</sup>	40	-135	-37	-47	-49	-70	-61	-48

Sources: ECB and Eurostat.

1) For details of 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	2007	2008	2009	2009 Q4- 2010 Q3	2010 Q1- 2010 Q4	2010 Q2- 2011 Q1	2010 Q3- 2011 Q2	2010 Q4- 2011 Q3
<b>Generation of income account</b>								
Gross value added (basic prices)	8,069	8,275	8,028	8,151	8,200	8,265	8,329	8,382
Taxes less subsidies on products	960	946	894	931	940	956	958	966
Gross domestic product (market prices) <sup>2)</sup>	9,029	9,221	8,922	9,082	9,139	9,221	9,288	9,347
Compensation of employees								
Other taxes less subsidies on production								
Consumption of fixed capital								
<i>Net operating surplus and mixed income</i>								
<b>Allocation of primary income account</b>								
Net operating surplus and mixed income	2,398	2,360	2,117	2,187	2,213	2,240	2,259	2,271
Compensation of employees	4,286	4,468	4,450	4,481	4,500	4,527	4,558	4,585
Taxes less subsidies on production	1,067	1,047	996	1,032	1,035	1,053	1,059	1,072
Property income	3,711	3,867	2,933	2,740	2,788	2,825	2,908	2,968
Interest	2,092	2,327	1,561	1,358	1,370	1,402	1,446	1,496
Other property income	1,619	1,540	1,372	1,382	1,418	1,423	1,462	1,473
<i>Net national income</i>								
<b>Secondary distribution of income account</b>								
Net national income	7,773	7,807	7,538	7,680	7,733	7,797	7,862	7,920
Current taxes on income, wealth, etc.	1,144	1,153	1,034	1,047	1,059	1,076	1,087	1,103
Social contributions	1,595	1,670	1,674	1,688	1,698	1,707	1,716	1,732
Social benefits other than social transfers in kind	1,578	1,649	1,767	1,807	1,814	1,819	1,824	1,830
Other current transfers	644	671	669	665	662	660	662	664
Net non-life insurance premiums	184	188	182	180	180	179	178	179
Non-life insurance claims	180	184	178	177	176	175	175	175
Other	280	298	309	308	306	306	309	310
<i>Net disposable income</i>								
<b>Use of income account</b>								
Net disposable income	7,679	7,705	7,430	7,565	7,621	7,684	7,750	7,810
Final consumption expenditure								
Individual consumption expenditure								
Collective consumption expenditure								
Adjustment for the change in the net equity of households in pension fund reserves	61	70	62	56	55	54	55	58
<i>Net saving</i>								
<b>Capital account</b>								
Net saving	796	570	290	306	320	334	351	373
Gross capital formation								
Gross fixed capital formation								
Changes in inventories and acquisitions less disposals of valuables								
Consumption of fixed capital	1,294	1,361	1,384	1,405	1,415	1,425	1,435	1,442
Acquisitions less disposals of non-produced non-financial assets								
Capital transfers	168	162	194	231	236	224	215	174
Capital taxes	24	24	34	30	25	26	25	25
Other capital transfers	144	138	160	202	211	198	190	149
<i>Net lending (+)/net borrowing (-) (from capital account)</i>								

Sources: ECB and Eurostat.

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

### 3.3 Households

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

	2007	2008	2009	2009 Q4- 2010 Q3	2010 Q1- 2010 Q4	2010 Q2- 2011 Q1	2010 Q3- 2011 Q2	2010 Q4- 2011 Q3
<b>Income, saving and changes in net worth</b>								
Compensation of employees (+)	4,286	4,468	4,450	4,481	4,500	4,527	4,558	4,585
Gross operating surplus and mixed income (+)	1,483	1,521	1,449	1,446	1,455	1,466	1,482	1,491
Interest receivable (+)	316	351	241	213	214	221	229	238
Interest payable (-)	221	249	146	125	126	130	137	142
Other property income receivable (+)	788	785	714	704	713	726	736	748
Other property income payable (-)	10	10	10	10	10	10	10	10
Current taxes on income and wealth (-)	834	872	841	844	848	858	864	873
Net social contributions (-)	1,592	1,667	1,671	1,684	1,694	1,703	1,712	1,728
Net social benefits (+)	1,573	1,644	1,762	1,802	1,809	1,814	1,819	1,824
Net current transfers receivable (+)	62	70	73	72	70	69	68	69
<b>= Gross disposable income</b>	<b>5,853</b>	<b>6,041</b>	<b>6,020</b>	<b>6,054</b>	<b>6,083</b>	<b>6,122</b>	<b>6,169</b>	<b>6,202</b>
Final consumption expenditure (-)	5,078	5,237	5,153	5,246	5,288	5,329	5,373	5,408
Changes in net worth in pension funds (+)	60	69	61	56	54	54	55	57
<b>= Gross saving</b>	<b>835</b>	<b>874</b>	<b>928</b>	<b>864</b>	<b>850</b>	<b>846</b>	<b>851</b>	<b>851</b>
Consumption of fixed capital (-)	358	372	375	378	380	381	382	384
Net capital transfers receivable (+)	12	-1	10	5	10	9	9	9
Other changes in net worth (+)	1,273	-2,040	-499	854	858	590	456	-130
<b>= Changes in net worth</b>	<b>1,762</b>	<b>-1,539</b>	<b>64</b>	<b>1,346</b>	<b>1,339</b>	<b>1,065</b>	<b>934</b>	<b>346</b>
<b>Investment, financing and changes in net worth</b>								
Net acquisition of non-financial assets (+)	661	646	553	554	558	565	568	574
Consumption of fixed capital (-)	358	372	375	378	380	381	382	384
Main items of financial investment (+)								
Short-term assets	420	455	-13	-23	56	115	125	130
Currency and deposits	351	438	121	89	120	141	139	149
Money market fund shares	37	-9	-41	-82	-51	-38	-33	-23
Debt securities <sup>1)</sup>	32	27	-93	-30	-13	11	19	4
Long-term assets	156	26	516	485	407	321	280	242
Deposits	-31	-27	85	80	56	40	50	51
Debt securities	86	14	28	-9	-6	37	37	57
Shares and other equity	-108	-96	179	167	130	44	12	-21
Quoted and unquoted shares and other equity	37	72	131	109	107	55	22	22
Mutual fund shares	-145	-167	48	59	23	-11	-9	-43
Life insurance and pension fund reserves	209	135	225	247	228	199	180	155
Main items of financing (-)								
Loans	384	258	110	111	125	125	141	126
<i>of which: From euro area MFIs</i>	283	83	65	135	147	170	168	149
Other changes in assets (+)								
Non-financial assets	1,224	-672	-796	762	797	619	217	330
Financial assets	67	-1,412	275	97	82	-14	193	-457
Shares and other equity	48	-1,158	85	-43	41	32	172	-354
Life insurance and pension fund reserves	8	-239	175	141	85	25	46	-37
Remaining net flows (+)	-24	48	14	-39	-57	-34	75	38
<b>= Changes in net worth</b>	<b>1,762</b>	<b>-1,539</b>	<b>64</b>	<b>1,346</b>	<b>1,339</b>	<b>1,065</b>	<b>934</b>	<b>346</b>
<b>Balance sheet</b>								
Non-financial assets (+)	27,914	27,515	26,897	27,732	27,872	27,769	27,812	28,252
Financial assets (+)								
Short-term assets	5,261	5,804	5,780	5,767	5,841	5,875	5,915	5,911
Currency and deposits	4,851	5,321	5,475	5,500	5,599	5,599	5,652	5,659
Money market fund shares	277	309	236	200	186	203	191	187
Debt securities <sup>1)</sup>	132	174	70	68	56	73	73	64
Long-term assets	12,141	10,710	11,538	11,905	12,015	12,082	12,102	11,653
Deposits	965	915	971	1,015	1,028	1,037	1,056	1,069
Debt securities	1,286	1,303	1,379	1,343	1,317	1,330	1,355	1,306
Shares and other equity	5,103	3,808	4,104	4,172	4,274	4,266	4,206	3,786
Quoted and unquoted shares and other equity	3,710	2,870	2,983	2,998	3,065	3,092	3,032	2,719
Mutual fund shares	1,392	938	1,121	1,174	1,209	1,174	1,174	1,068
Life insurance and pension fund reserves	4,787	4,683	5,083	5,375	5,396	5,450	5,484	5,493
Remaining net assets (+)	324	324	306	301	293	280	369	372
Liabilities (-)								
Loans	5,569	5,821	5,925	6,031	6,087	6,094	6,152	6,169
<i>of which: From euro area MFIs</i>	4,831	4,914	4,968	5,159	5,213	5,256	5,304	5,313
<b>= Net worth</b>	<b>40,071</b>	<b>38,532</b>	<b>38,596</b>	<b>39,673</b>	<b>39,934</b>	<b>39,913</b>	<b>40,045</b>	<b>40,019</b>

Sources: ECB and Eurostat.

1) Securities issued by MFIs with a maturity of less than two years and securities issued 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)

	2007	2008	2009	2009 Q4- 2010 Q3	2010 Q1- 2010 Q4	2010 Q2- 2011 Q1	2010 Q3- 2011 Q2	2010 Q4- 2011 Q3
<b>Income and saving</b>								
Gross value added (basic prices) (+)	4,646	4,755	4,499	4,590	4,627	4,676	4,720	4,758
Compensation of employees (-)	2,711	2,833	2,774	2,788	2,804	2,827	2,854	2,876
Other taxes less subsidies on production (-)	49	46	39	39	33	34	37	41
<b>= Gross operating surplus (+)</b>	<b>1,886</b>	<b>1,876</b>	<b>1,686</b>	<b>1,763</b>	<b>1,790</b>	<b>1,814</b>	<b>1,829</b>	<b>1,841</b>
Consumption of fixed capital (-)	725	767	783	796	802	809	816	820
<b>= Net operating surplus (+)</b>	<b>1,161</b>	<b>1,110</b>	<b>903</b>	<b>967</b>	<b>987</b>	<b>1,005</b>	<b>1,014</b>	<b>1,021</b>
Property income receivable (+)	639	637	541	520	535	540	561	571
Interest receivable	218	239	173	154	157	164	171	183
Other property income receivable	421	398	369	366	377	376	389	388
Interest and rents payable (-)	366	421	297	260	263	269	280	292
<b>= Net entrepreneurial income (+)</b>	<b>1,434</b>	<b>1,326</b>	<b>1,147</b>	<b>1,226</b>	<b>1,259</b>	<b>1,276</b>	<b>1,294</b>	<b>1,299</b>
Distributed income (-)	1,002	1,023	927	915	937	954	961	969
Taxes on income and wealth payable (-)	248	236	152	161	167	173	176	181
Social contributions receivable (+)	64	68	70	69	69	69	70	70
Social benefits payable (-)	63	65	68	69	69	70	70	70
Other net transfers (-)	43	48	46	46	45	45	43	43
<b>= Net saving</b>	<b>142</b>	<b>22</b>	<b>24</b>	<b>105</b>	<b>109</b>	<b>104</b>	<b>114</b>	<b>106</b>
<b>Investment, financing and saving</b>								
Net acquisition of non-financial assets (+)	409	369	83	142	163	196	199	209
Gross fixed capital formation (+)	1,058	1,077	912	931	946	966	978	990
Consumption of fixed capital (-)	725	767	783	796	802	809	816	820
Net acquisition of other non-financial assets (+)	76	58	-46	7	20	39	37	39
Main items of financial investment (+)								
Short-term assets	167	72	93	26	18	20	37	-3
Currency and deposits	153	15	88	51	67	61	64	43
Money market fund shares	-20	33	40	-28	-41	-27	-20	-34
Debt securities <sup>1)</sup>	34	24	-34	3	-8	-14	-7	-12
Long-term assets	769	681	263	377	438	438	512	560
Deposits	-10	36	5	-7	0	15	21	30
Debt securities	49	-37	17	-11	-5	10	25	27
Shares and other equity	423	337	124	130	172	176	240	268
Other (mainly intercompany loans)	307	344	116	265	270	236	226	235
Remaining net assets (+)	184	-41	48	82	-3	2	-1	-92
Main items of financing (-)								
Debt	919	670	80	215	209	243	306	259
of which: Loans from euro area MFIs	537	394	-114	-35	-8	28	71	73
of which: Debt securities	32	48	90	71	67	45	44	46
Shares and other equity	400	310	296	226	224	235	257	242
Quoted shares	58	6	67	36	30	29	28	29
Unquoted shares and other equity	342	304	230	190	195	206	229	212
Net capital transfers receivable (-)	69	75	83	79	72	70	69	67
<b>= Net saving</b>	<b>142</b>	<b>22</b>	<b>24</b>	<b>105</b>	<b>109</b>	<b>104</b>	<b>114</b>	<b>106</b>
<b>Financial balance sheet</b>								
Financial assets								
Short-term assets	1,788	1,878	1,959	1,926	1,973	1,952	1,938	1,935
Currency and deposits	1,507	1,538	1,632	1,626	1,693	1,667	1,672	1,678
Money market fund shares	163	192	214	182	174	178	167	151
Debt securities <sup>1)</sup>	118	148	113	119	107	107	99	105
Long-term assets	10,759	9,327	10,283	10,743	11,030	11,201	11,316	10,692
Deposits	208	247	228	242	225	225	229	247
Debt securities	228	184	197	206	201	222	221	212
Shares and other equity	7,984	6,248	7,078	7,289	7,540	7,682	7,733	6,996
Other (mainly intercompany loans)	2,339	2,648	2,779	3,007	3,064	3,072	3,132	3,237
Remaining net assets	259	210	187	180	36	134	86	48
Liabilities								
Debt	8,651	9,340	9,453	9,632	9,641	9,660	9,780	9,875
of which: Loans from euro area MFIs	4,466	4,871	4,711	4,709	4,698	4,728	4,755	4,766
of which: Debt securities	648	704	827	900	887	864	881	922
Shares and other equity	14,316	11,071	12,388	12,631	13,101	13,378	13,364	11,958
Quoted shares	5,061	2,935	3,516	3,542	3,814	3,923	3,914	3,142
Unquoted shares and other equity	9,255	8,136	8,872	9,090	9,287	9,455	9,451	8,816

Sources: ECB and Eurostat.

1) Securities issued by MFIs with a maturity of less than two years and securities issued 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)

	2007	2008	2009	2009 Q4- 2010 Q3	2010 Q1- 2010 Q4	2010 Q2- 2011 Q1	2010 Q3- 2011 Q2	2010 Q4- 2011 Q3
<b>Financial account, financial transactions</b>								
Main items of financial investment (+)								
Short-term assets	23	78	-49	-4	-10	-24	-37	3
Currency and deposits	7	57	-33	6	-10	-9	-15	9
Money market fund shares	5	18	-2	-4	-6	-23	-25	-15
Debt securities <sup>1)</sup>	11	3	-14	-6	5	8	3	9
Long-term assets	229	126	281	261	230	215	232	199
Deposits	47	-9	21	-12	-8	8	10	16
Debt securities	108	75	101	159	142	112	105	51
Loans	-15	26	6	12	28	22	25	17
Quoted shares	20	-7	-60	14	14	17	15	10
Unquoted shares and other equity	7	18	-22	-18	-13	-8	-5	2
Mutual fund shares	63	24	235	106	66	64	82	103
Remaining net assets (+)	9	20	38	38	21	0	-42	-35
Main items of financing (-)								
Debt securities	3	4	5	2	0	0	2	3
Loans	-2	24	-18	5	3	10	6	0
Shares and other equity	2	8	1	4	4	4	0	1
Insurance technical reserves	245	130	229	279	256	209	176	140
Net equity of households in life insurance and pension fund reserves	211	126	225	269	244	200	176	144
Prepayments of insurance premiums and reserves for outstanding claims	34	4	4	10	12	9	0	-4
<b>= Changes in net financial worth due to transactions</b>	<b>13</b>	<b>58</b>	<b>53</b>	<b>6</b>	<b>-24</b>	<b>-32</b>	<b>-31</b>	<b>24</b>
<b>Other changes account</b>								
Other changes in financial assets (+)								
Shares and other equity	34	-562	228	126	118	37	68	-119
Other net assets	-38	52	20	68	-10	-33	-12	-22
Other changes in liabilities (-)								
Shares and other equity	-21	-173	11	-19	-9	-9	12	-38
Insurance technical reserves	30	-260	188	144	94	35	54	-18
Net equity of households in life insurance and pension fund reserves	18	-248	185	146	97	38	58	-24
Prepayments of insurance premiums and reserves for outstanding claims	12	-12	4	-2	-3	-3	-5	6
<b>= Other changes in net financial worth</b>	<b>-14</b>	<b>-77</b>	<b>49</b>	<b>69</b>	<b>23</b>	<b>-22</b>	<b>-11</b>	<b>-85</b>
<b>Financial balance sheet</b>								
Financial assets (+)								
Short-term assets	321	401	346	369	341	328	329	365
Currency and deposits	163	224	195	203	190	181	181	203
Money market fund shares	94	110	99	106	94	85	86	93
Debt securities <sup>1)</sup>	63	67	52	60	57	62	62	69
Long-term assets	5,503	5,074	5,662	5,989	5,997	6,092	6,123	6,030
Deposits	594	599	617	610	610	624	624	630
Debt securities	2,203	2,269	2,446	2,637	2,575	2,628	2,643	2,650
Loans	411	434	439	453	467	468	472	468
Quoted shares	750	492	524	542	563	578	572	523
Unquoted shares and other equity	381	313	305	297	307	301	297	293
Mutual fund shares	1,164	965	1,331	1,449	1,474	1,494	1,515	1,466
Remaining net assets (+)	173	241	228	294	252	257	247	279
Liabilities (-)								
Debt securities	20	23	31	31	33	31	33	33
Loans	245	273	255	279	262	267	270	275
Shares and other equity	578	413	425	415	420	438	423	378
Insurance technical reserves	5,295	5,165	5,582	5,916	5,932	6,005	6,029	6,038
Net equity of households in life insurance and pension fund reserves	4,472	4,350	4,760	5,081	5,101	5,161	5,195	5,201
Prepayments of insurance premiums and reserves for outstanding claims	822	815	822	835	831	844	835	837
<b>= Net financial wealth</b>	<b>-140</b>	<b>-159</b>	<b>-56</b>	<b>11</b>	<b>-57</b>	<b>-64</b>	<b>-57</b>	<b>-50</b>

Source: ECB.

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



## FINANCIAL MARKETS

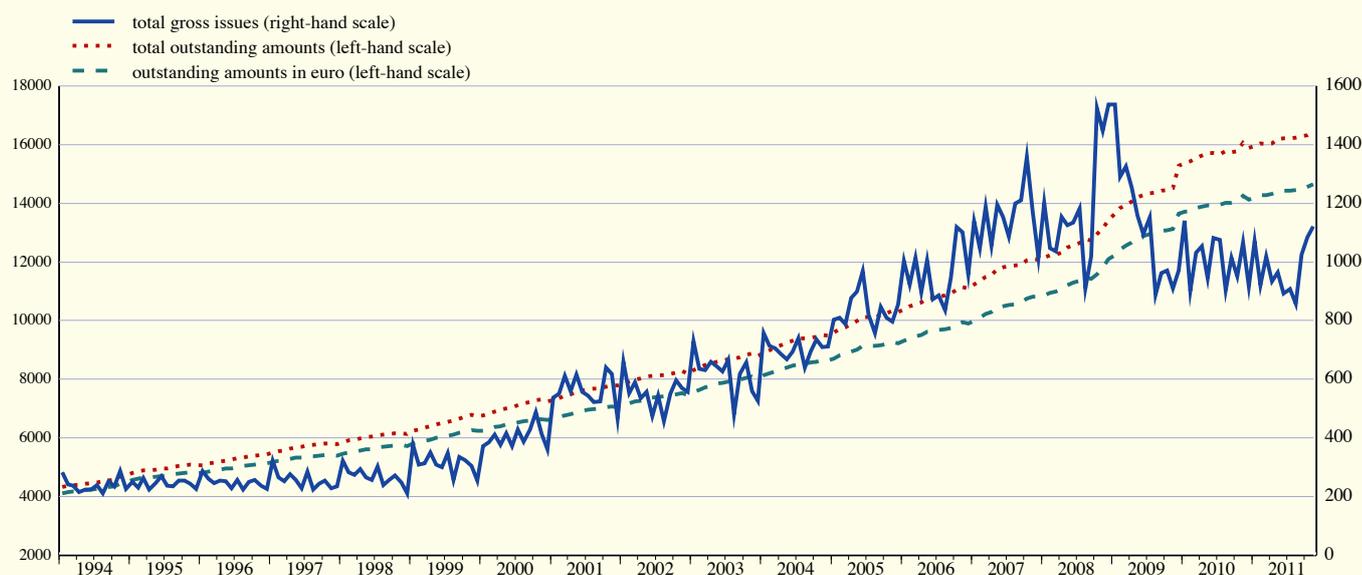
### 4.1 Securities other than shares by original maturity, residency of the issuer and currency

(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								Seasonally adjusted <sup>2)</sup>		
	Outstanding amounts	Gross issues	Net issues	In euro			In all currencies					Annual growth rates	Net issues	6-month growth rates
				Outstanding amounts	Gross issues	Net issues	Outstanding amounts	Gross issues	Net issues	Outstanding amounts	Gross issues			
	1	2	3	4	5	6	7	8	9	10	11	12		
<b>Total</b>														
2010 Nov.	16,457.7	993.0	183.2	14,266.7	954.0	202.1	16,063.0	1,067.0	234.7	4.3	156.2	5.5		
Dec.	16,294.1	876.6	-162.2	14,120.4	843.9	-144.9	15,879.3	916.4	-176.9	3.6	-57.0	4.5		
2011 Jan.	16,370.0	1,005.0	75.1	14,193.3	954.5	72.2	15,952.5	1,070.7	91.8	3.7	78.1	5.0		
Feb.	16,469.4	866.8	100.3	14,284.4	813.9	92.2	16,044.6	920.2	98.0	4.1	47.7	4.1		
Mar.	16,468.2	978.7	-0.9	14,275.9	911.8	-8.2	16,021.1	1,019.8	1.0	3.4	10.5	3.5		
Apr.	16,489.6	889.1	22.0	14,324.0	850.3	48.7	16,048.2	934.9	52.1	3.2	26.2	3.3		
May	16,592.8	922.5	101.6	14,416.6	865.9	90.9	16,196.6	963.7	118.1	3.6	41.6	1.8		
June	16,623.8	848.3	30.9	14,439.0	796.4	22.3	16,213.8	893.3	22.9	3.9	49.0	3.2		
July	16,745.8	852.7	-31.3	14,428.7	824.9	-10.9	16,225.3	906.8	-11.7	3.7	13.8	2.4		
Aug.	16,774.4	805.8	28.9	14,459.5	771.8	31.0	16,232.8	857.7	18.7	3.2	47.4	2.4		
Sep.	16,813.3	1,001.1	37.8	14,472.3	925.7	13.1	16,285.5	1,026.2	15.1	3.3	67.6	3.1		
Oct.	.	.	.	14,550.6	992.0	79.0	16,328.8	1,085.1	69.4	3.4	59.2	3.5		
Nov.	.	.	.	14,645.9	1,009.4	93.0	16,455.9	1,121.0	96.2	2.5	7.3	3.1		
<b>Long-term</b>														
2010 Nov.	14,898.4	337.5	146.7	12,798.1	321.0	161.6	14,386.8	359.5	186.8	4.8	111.3	5.5		
Dec.	14,856.7	186.8	-39.1	12,774.2	179.6	-21.3	14,339.4	193.8	-41.1	4.8	19.4	5.6		
2011 Jan.	14,920.1	308.9	64.9	12,823.2	278.0	50.5	14,386.7	320.1	67.4	4.8	97.2	6.2		
Feb.	15,025.6	284.3	105.7	12,918.3	253.2	95.5	14,474.3	285.2	92.1	5.0	42.8	5.6		
Mar.	15,036.6	305.4	11.6	12,936.0	269.2	18.2	14,468.2	303.5	15.6	4.3	21.2	5.1		
Apr.	15,089.5	302.7	53.1	13,000.2	278.4	64.5	14,514.4	308.9	67.8	4.3	48.4	4.8		
May	15,165.6	275.8	75.0	13,067.9	243.4	66.5	14,620.1	266.4	80.2	4.5	14.8	3.4		
June	15,216.9	255.5	50.8	13,117.4	224.3	49.0	14,668.6	253.1	52.0	4.6	42.2	3.7		
July	15,345.5	203.1	-21.1	13,105.9	191.7	-13.8	14,678.1	213.3	-13.4	4.4	25.3	2.7		
Aug.	15,338.8	120.6	-6.4	13,105.0	112.0	-1.0	14,658.1	122.0	-9.6	4.0	28.4	2.5		
Sep.	15,335.0	228.0	-3.4	13,099.2	189.8	-5.3	14,693.2	213.9	2.3	4.0	49.1	2.9		
Oct.	.	.	.	13,179.0	251.1	81.7	14,739.6	268.2	70.2	4.0	74.2	3.2		
Nov.	.	.	.	13,262.6	189.6	81.7	14,855.2	210.2	88.5	3.3	5.6	3.1		

### C15 Total outstanding amounts and gross issues of securities other than shares issued by euro area residents

(EUR billions)



Sources: ECB and BIS (for issues by non-euro area residents).

- 1) Total euro-denominated securities other than shares issued by euro area residents and non-euro area residents.
- 2) For details of the calculation of the growth rates, see the Technical Notes. The six-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											
2009	15,287	5,371	3,226	803	5,418	469	1,126	734	68	80	215	29
2010	15,879	5,246	3,296	851	5,932	554	1,007	625	80	69	205	29
2010 Q4	15,879	5,246	3,296	851	5,932	554	978	566	110	63	206	32
2011 Q1	16,021	5,348	3,260	825	6,024	564	1,004	592	89	59	220	43
Q2	16,214	5,364	3,254	833	6,167	597	931	551	85	60	192	43
Q3	16,285	5,425	3,239	855	6,160	607	930	579	78	60	180	33
2011 Aug.	16,233	5,393	3,231	847	6,165	597	858	572	57	52	145	32
Sep.	16,285	5,425	3,239	855	6,160	607	1,026	633	92	65	202	34
Oct.	16,329	5,412	3,269	860	6,181	607	1,085	627	144	86	197	31
Nov.	16,456	5,453	3,283	870	6,229	621	1,121	729	104	63	181	45
	Short-term											
2009	1,639	733	90	71	714	31	876	635	25	63	133	20
2010	1,540	572	122	67	724	54	758	534	34	57	115	19
2010 Q4	1,540	572	122	67	724	54	716	484	38	52	117	25
2011 Q1	1,553	618	113	71	700	52	701	462	41	49	118	30
Q2	1,545	582	124	72	702	65	654	440	31	51	102	32
Q3	1,592	613	113	83	712	72	747	512	42	53	114	26
2011 Aug.	1,575	604	117	82	707	64	736	516	41	51	104	24
Sep.	1,592	613	113	83	712	72	812	555	54	56	120	28
Oct.	1,589	625	109	83	703	70	817	544	68	73	109	24
Nov.	1,601	651	108	82	686	74	911	665	66	54	95	31
	Long-term <sup>2)</sup>											
2009	13,648	4,638	3,136	731	4,704	438	251	99	44	17	82	9
2010	14,339	4,674	3,174	784	5,207	499	248	91	46	12	90	9
2010 Q4	14,339	4,674	3,174	784	5,207	499	262	83	72	11	89	8
2011 Q1	14,468	4,730	3,148	754	5,325	512	303	130	48	10	102	13
Q2	14,669	4,781	3,130	761	5,465	532	276	111	54	9	90	12
Q3	14,693	4,812	3,126	772	5,448	535	183	67	36	7	66	7
2011 Aug.	14,658	4,789	3,113	765	5,458	533	122	56	17	1	41	8
Sep.	14,693	4,812	3,126	772	5,448	535	214	78	38	9	82	6
Oct.	14,740	4,788	3,160	777	5,478	537	268	84	76	13	88	7
Nov.	14,855	4,802	3,175	788	5,544	547	210	64	38	9	85	13
	<i>of which: Long-term fixed rate</i>											
2009	8,816	2,563	1,043	598	4,261	351	172	60	18	16	72	6
2010	9,481	2,634	1,103	670	4,697	377	156	50	13	10	77	6
2010 Q4	9,481	2,634	1,103	670	4,697	377	142	43	19	11	65	5
2011 Q1	9,640	2,700	1,111	655	4,787	387	195	78	12	8	87	9
Q2	9,865	2,743	1,144	665	4,912	401	173	62	20	8	74	8
Q3	9,887	2,773	1,150	677	4,887	400	112	35	8	6	58	5
2011 Aug.	9,850	2,748	1,143	671	4,889	399	67	27	4	0	31	5
Sep.	9,887	2,773	1,150	677	4,887	400	144	47	10	8	75	3
Oct.	9,891	2,758	1,145	682	4,903	403	132	48	4	11	66	4
Nov.	9,971	2,764	1,146	691	4,962	407	117	28	7	9	64	8
	<i>of which: Long-term variable rate</i>											
2009	4,382	1,786	2,016	123	372	85	62	28	25	1	6	2
2010	4,387	1,760	1,966	108	432	121	78	34	29	1	10	4
2010 Q4	4,387	1,760	1,966	108	432	121	102	33	44	1	22	2
2011 Q1	4,335	1,741	1,920	94	458	123	87	42	29	1	11	4
Q2	4,303	1,765	1,841	91	477	129	82	42	22	1	13	4
Q3	4,301	1,767	1,819	90	491	133	56	26	21	0	5	3
2011 Aug.	4,292	1,765	1,816	90	490	132	41	22	8	0	8	3
Sep.	4,301	1,767	1,819	90	491	133	55	26	24	0	3	3
Oct.	4,343	1,754	1,863	90	503	133	121	27	70	2	20	3
Nov.	4,371	1,762	1,873	92	507	138	80	28	27	1	19	5

Source: ECB.

1) Monthly data on gross issues refer to transactions during the month. For the purposes of comparison, quarterly and annual data refer to the respective monthly averages.

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

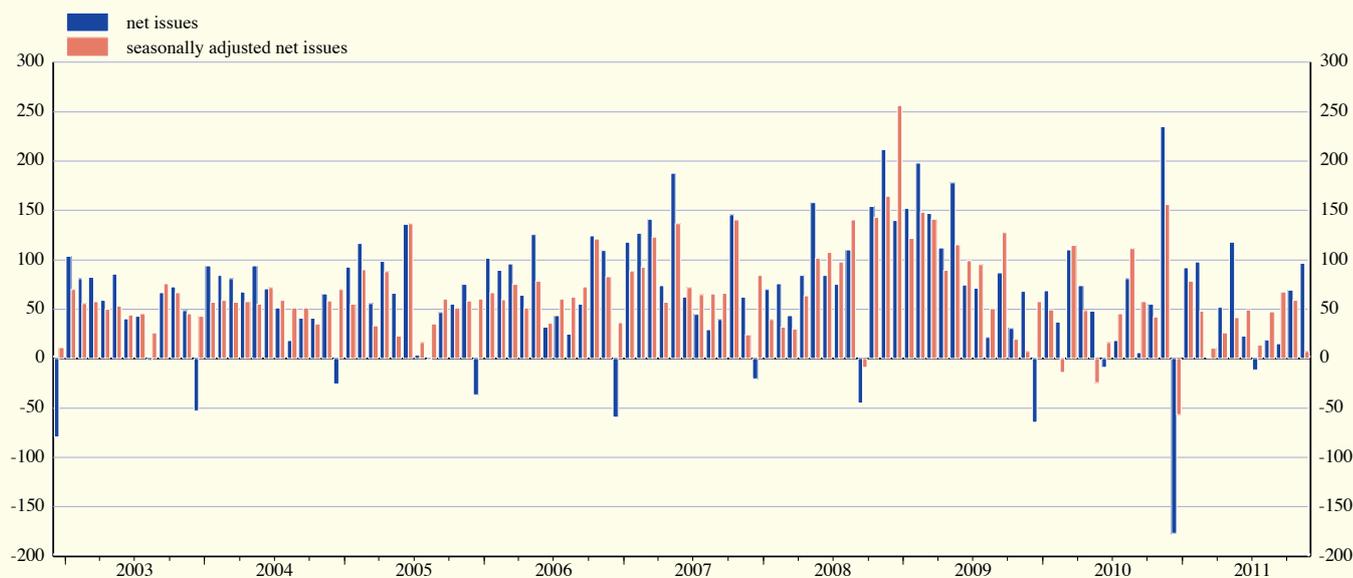
(EUR billions unless otherwise indicated; transactions during the period; nominal values)

### 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											
2009	89.6	10.2	21.7	8.6	44.9	4.2	89.4	10.1	21.6	8.3	45.2	4.2
2010	45.6	-1.2	4.8	5.0	31.6	5.3	45.4	-1.4	5.0	5.0	31.8	5.1
2010 Q4	37.7	-19.9	25.5	1.5	22.9	7.7	47.0	-4.5	-1.4	4.3	44.0	4.6
2011 Q1	63.6	43.0	-20.4	4.2	32.5	4.3	45.5	24.0	-3.9	2.7	16.7	5.9
Q2	64.4	4.9	-1.9	2.8	47.5	11.0	39.0	0.5	-7.0	-0.2	34.2	11.5
Q3	7.4	12.6	-8.0	4.5	-3.8	2.0	42.9	20.1	7.3	6.3	5.6	3.7
2011 Aug.	18.7	27.2	-24.3	1.3	4.8	9.6	47.4	33.3	-18.0	8.4	10.1	13.6
Sep.	15.1	13.6	0.6	3.5	-8.9	6.3	67.6	31.9	42.5	4.8	-20.2	8.6
Oct.	69.4	1.5	34.2	8.3	23.2	2.2	59.2	9.4	12.9	7.4	35.1	-5.7
Nov.	96.2	25.6	8.0	6.4	45.1	11.2	7.3	18.1	-35.2	5.6	8.1	10.7
	Long-term											
2009	90.2	14.9	24.7	12.8	33.0	4.8	90.3	15.1	24.6	12.8	33.0	4.8
2010	54.1	1.8	2.1	5.4	41.3	3.5	54.5	1.9	2.3	5.4	41.4	3.5
2010 Q4	70.4	-5.3	16.4	3.0	53.1	3.3	65.6	8.2	-8.7	4.4	58.8	2.9
2011 Q1	58.4	27.4	-16.6	2.3	40.5	4.9	53.7	17.1	-1.6	2.5	31.2	4.6
Q2	66.6	16.6	-5.6	2.4	46.7	6.5	35.1	5.5	-9.9	-0.6	35.1	5.0
Q3	-6.9	2.8	-4.3	0.9	-6.9	0.6	34.3	10.7	9.5	2.3	9.1	2.7
2011 Aug.	-9.6	0.8	-21.9	-1.3	9.0	3.9	28.4	10.2	-13.0	4.6	20.9	5.7
Sep.	2.3	6.9	5.2	2.6	-13.4	1.0	49.1	21.7	41.5	0.6	-16.9	2.2
Oct.	70.2	-10.8	38.1	8.4	31.4	3.1	74.2	-3.9	21.2	9.4	45.2	2.3
Nov.	88.5	1.4	8.6	6.7	63.4	8.4	5.6	5.7	-35.8	6.2	21.0	8.4

### CI6 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 data on net issues refer to transactions during the month. For the purposes of comparison, quarterly and annual data refer to the respective monthly averages.

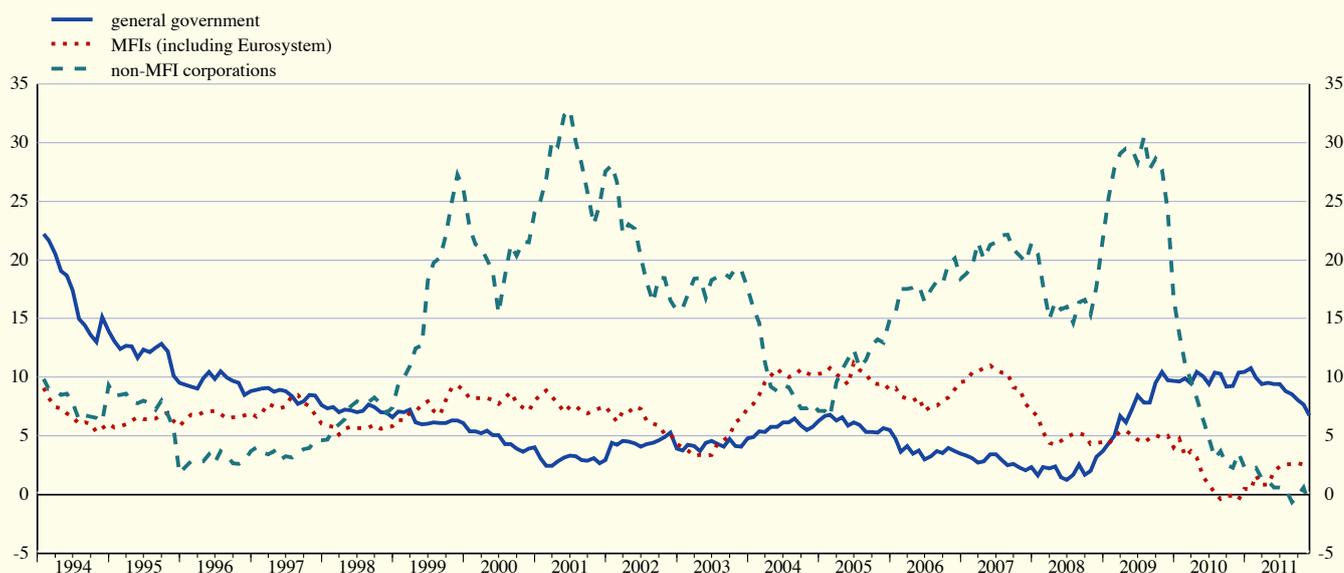
### 4.3 Growth rates of securities other than shares issued by euro area residents <sup>1)</sup>

(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												
2010 Nov.	4.3	0.1	2.5	8.5	8.1	12.8	5.5	0.5	4.9	4.9	9.7	19.1
Dec.	3.6	-0.3	1.8	7.5	7.0	13.2	4.5	0.6	3.2	6.8	8.0	13.3
2011 Jan.	3.7	0.0	1.8	7.1	7.1	13.4	5.0	2.3	3.8	6.8	7.3	10.9
Feb.	4.1	1.6	2.3	5.4	6.7	11.9	4.1	2.5	1.4	6.0	6.4	9.4
Mar.	3.4	0.8	1.3	4.7	5.9	14.5	3.5	2.2	-1.0	5.2	6.3	12.1
Apr.	3.2	0.4	1.2	3.4	6.0	14.6	3.3	2.9	-0.7	2.5	5.3	12.3
May	3.6	1.7	0.4	4.3	6.1	17.4	1.8	3.0	-4.0	3.7	2.7	15.8
June	3.9	1.8	0.5	4.2	6.5	16.1	3.2	2.8	-2.0	1.8	5.2	20.1
July	3.7	1.8	0.4	4.9	6.2	13.3	2.4	1.2	-2.8	2.9	5.1	15.9
Aug.	3.2	1.9	-1.2	5.2	5.6	15.3	2.4	1.2	-3.8	4.4	4.9	22.0
Sep.	3.3	2.3	-0.4	4.8	5.1	14.2	3.1	2.3	0.1	4.4	4.0	16.8
Oct.	3.4	2.9	0.0	4.7	4.7	12.9	3.5	2.9	0.8	6.9	4.2	12.9
Nov.	2.5	3.1	-1.9	5.0	3.0	13.6	3.1	3.2	0.0	6.3	3.4	11.1
Long-term												
2010 Nov.	4.8	-0.5	2.1	9.6	10.4	10.9	5.5	0.4	4.1	7.3	10.4	13.0
Dec.	4.8	0.5	0.8	8.8	10.5	9.2	5.6	1.9	1.8	7.4	11.2	6.8
2011 Jan.	4.8	0.4	0.8	8.0	11.0	8.3	6.2	3.7	2.0	7.4	10.9	7.5
Feb.	5.0	1.7	1.3	6.4	10.1	8.6	5.6	4.1	0.2	6.0	10.0	8.5
Mar.	4.3	0.8	0.3	5.7	9.4	9.0	5.1	3.3	-1.9	5.6	11.0	9.4
Apr.	4.3	0.9	0.2	5.0	9.5	9.5	4.8	3.4	-1.5	4.0	10.0	8.7
May	4.5	2.0	-0.5	5.2	9.1	12.1	3.4	3.6	-4.8	3.1	7.9	11.0
June	4.6	2.4	-0.3	4.4	9.4	9.4	3.7	2.9	-2.2	1.5	7.8	11.9
July	4.4	2.5	-0.5	4.7	8.7	9.8	2.7	1.4	-2.9	2.1	6.6	12.2
Aug.	4.0	2.6	-1.8	4.4	8.4	10.2	2.5	1.1	-3.9	2.9	6.8	12.1
Sep.	4.0	2.7	-1.0	3.4	7.9	9.4	2.9	2.1	-0.1	1.3	5.0	9.3
Oct.	4.0	2.5	-0.1	3.5	7.6	8.7	3.2	1.7	1.4	3.1	5.3	8.5
Nov.	3.3	2.7	-2.0	4.0	6.4	10.0	3.1	1.8	0.6	4.9	4.9	9.1

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

(annual percentage changes)



Source: ECB.

1) For details of the calculation of the growth rates, see the Technical Notes. The six-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												
2009	9.5	7.1	17.3	25.3	8.0	5.4	12.2	1.7	36.9	-1.8	-0.3	22.2
2010	8.8	5.8	6.4	19.7	9.9	8.8	-0.6	-3.9	0.7	-1.5	6.4	27.5
2010 Q4	7.0	2.8	3.2	12.4	9.8	7.2	-0.2	-3.3	-0.9	-1.0	12.1	25.7
2011 Q1	6.9	3.4	3.2	9.2	9.7	5.6	0.5	-1.8	-1.9	-1.2	19.0	20.0
Q2	6.5	4.6	3.7	6.4	8.2	7.9	-0.4	-2.1	-4.5	-1.5	23.5	18.4
Q3	6.6	6.2	4.3	5.2	7.4	8.9	-1.4	-1.4	-7.6	-2.3	25.7	13.0
2011 June	7.0	5.9	4.4	5.3	8.3	8.6	-0.7	-1.2	-6.2	-1.9	25.7	12.3
July	6.8	6.1	4.4	5.5	7.7	9.0	-1.3	-1.3	-7.2	-1.8	24.4	12.7
Aug.	6.5	6.3	3.9	5.2	7.2	9.4	-1.9	-1.5	-8.5	-2.2	25.6	13.4
Sep.	6.1	6.3	4.6	4.3	6.4	8.3	-1.4	-1.2	-8.1	-3.7	28.3	13.4
Oct.	5.7	5.7	3.5	4.2	6.2	7.5	-0.5	-1.0	-5.9	-2.9	25.8	12.7
Nov.	5.2	5.1	1.6	4.6	5.8	8.5	-1.6	0.0	-7.4	-2.3	14.6	15.1
In euro												
2009	10.0	9.0	20.4	23.6	8.3	4.4	14.7	3.9	39.3	-2.3	-0.4	21.4
2010	9.1	5.6	7.4	20.1	10.0	8.3	-0.3	-3.3	0.5	-1.9	5.9	26.2
2010 Q4	7.2	1.6	4.2	12.8	10.0	6.6	0.1	-2.4	-1.3	-1.5	12.3	26.5
2011 Q1	7.0	2.2	3.4	9.5	9.9	4.5	1.0	-0.1	-2.7	-1.7	19.1	21.0
Q2	6.6	3.8	4.1	6.5	8.5	7.3	0.3	-0.6	-4.6	-2.6	23.5	18.1
Q3	6.7	5.4	4.5	5.9	7.6	8.6	-1.1	-0.2	-8.3	-3.4	25.6	11.1
2011 June	7.1	5.0	4.8	6.0	8.5	8.1	0.0	0.1	-6.0	-2.4	25.5	10.6
July	6.9	5.3	4.7	6.3	7.9	8.4	-1.2	-0.2	-8.2	-3.2	24.3	10.7
Aug.	6.6	5.6	4.0	6.0	7.4	9.0	-1.6	-0.5	-9.1	-3.6	25.6	11.5
Sep.	6.1	5.7	4.5	4.8	6.6	8.4	-1.4	0.0	-9.4	-4.5	28.3	11.4
Oct.	5.8	5.4	3.4	4.5	6.4	8.2	0.0	0.5	-6.5	-3.9	25.6	11.0
Nov.	5.4	5.1	1.8	4.7	6.1	9.0	-1.1	1.5	-7.9	-3.3	14.3	13.7

**C18 Annual growth rates of short-term debt securities, by sector of the issuer, in all currencies combined**  
(annual percentage changes)



Source: ECB.

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

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

(EUR billions, unless otherwise indicated; market values)

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

(outstanding amounts as at end of period)

	Total			MFIs		Financial corporations other than MFIs		Non-financial corporations	
	Total	Index: Dec. 2008 = 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
2009 Nov.	4,079.4	102.6	2.7	563.8	8.8	319.9	2.2	3,195.7	1.9
Dec.	4,410.6	103.0	3.0	566.0	9.2	350.9	5.4	3,493.7	1.8
2010 Jan.	4,242.8	103.1	2.9	516.7	8.3	340.7	5.4	3,385.4	1.9
Feb.	4,161.5	103.2	3.0	499.3	8.3	339.2	5.4	3,323.0	2.0
Mar.	4,474.4	103.4	2.8	543.6	7.5	365.2	5.4	3,565.5	1.8
Apr.	4,409.1	103.4	2.7	508.4	7.1	345.7	5.4	3,555.0	1.7
May	4,093.4	103.5	2.4	445.9	6.3	322.7	5.3	3,324.9	1.5
June	4,054.6	103.7	1.9	446.4	5.7	315.5	4.4	3,292.7	1.0
July	4,256.1	103.7	1.7	519.8	5.1	338.0	4.5	3,398.3	0.9
Aug.	4,121.2	103.7	1.7	479.3	5.1	314.4	4.1	3,327.5	0.9
Sep.	4,345.2	103.8	1.6	487.0	5.1	326.6	4.0	3,531.6	0.9
Oct.	4,531.0	104.2	1.8	514.4	7.3	333.5	4.0	3,683.1	0.8
Nov.	4,413.3	104.4	1.8	437.8	6.8	316.6	5.4	3,658.9	0.8
Dec.	4,596.2	104.4	1.4	458.4	6.5	334.0	2.3	3,803.8	0.7
2011 Jan.	4,759.8	104.6	1.4	514.3	6.2	365.8	3.0	3,879.7	0.6
Feb.	4,845.8	104.7	1.5	535.0	6.8	378.9	3.9	3,931.9	0.6
Mar.	4,767.3	104.8	1.4	491.7	6.2	363.2	4.1	3,912.5	0.5
Apr.	4,891.8	105.0	1.5	497.5	6.8	371.5	4.1	4,022.8	0.6
May	4,777.5	105.0	1.5	475.9	7.4	356.2	4.1	3,945.4	0.4
June	4,722.7	105.5	1.7	491.6	10.2	350.5	4.6	3,880.6	0.4
July	4,504.3	105.7	1.9	458.8	12.1	325.5	4.9	3,720.0	0.4
Aug.	3,975.4	105.9	2.0	383.0	13.4	281.6	4.9	3,310.7	0.4
Sep.	3,749.2	105.9	2.0	350.7	13.1	264.3	5.8	3,134.2	0.3
Oct.	4,044.0	105.9	1.7	361.3	10.2	288.0	5.8	3,394.8	0.3
Nov.	3,893.4	106.0	1.5	330.6	9.1	271.5	4.6	3,291.3	0.3

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

(annual percentage changes)



Source: ECB.

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

4.4 Quoted shares issued by euro area residents

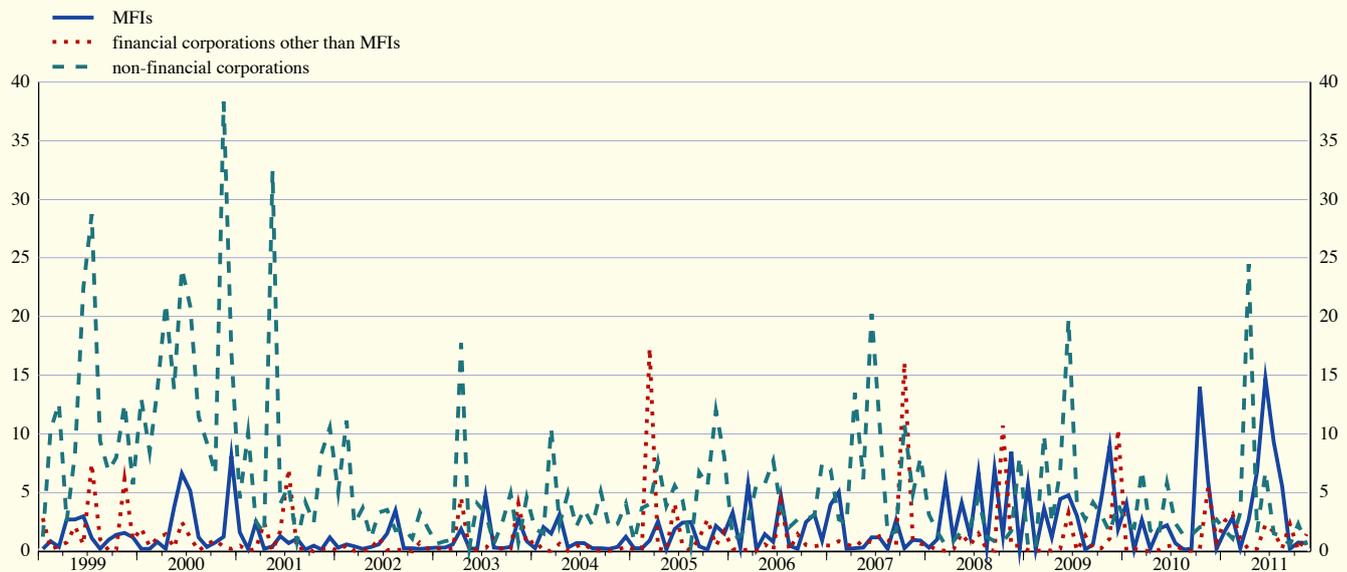
(EUR billions; market values)

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
2009 Nov.	11.6	0.2	11.4	9.0	0.0	9.0	1.0	0.0	1.0	1.6	0.2	1.4
Dec.	16.2	0.2	16.1	1.9	0.0	1.9	10.4	0.1	10.3	4.0	0.1	3.9
2010 Jan.	6.4	0.0	6.4	4.1	0.0	4.1	0.1	0.0	0.1	2.3	0.0	2.3
Feb.	2.2	0.3	1.9	0.0	0.0	0.0	0.2	0.0	0.2	2.0	0.3	1.7
Mar.	9.6	0.6	9.0	2.6	0.0	2.6	0.1	0.0	0.1	6.9	0.6	6.3
Apr.	1.8	0.4	1.5	0.1	0.0	0.0	0.0	0.0	0.0	1.8	0.3	1.5
May	3.2	0.8	2.4	1.9	0.0	1.9	0.1	0.0	0.1	1.3	0.8	0.4
June	8.4	0.4	8.0	2.2	0.0	2.2	0.4	0.0	0.4	5.8	0.4	5.4
July	3.6	0.8	2.7	0.7	0.0	0.7	0.5	0.0	0.5	2.4	0.8	1.6
Aug.	1.4	1.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	1.4	1.2	0.2
Sep.	1.6	0.2	1.4	0.2	0.0	0.2	0.0	0.0	0.0	1.4	0.2	1.2
Oct.	16.3	0.2	16.0	14.0	0.0	14.0	0.2	0.1	0.1	2.0	0.2	1.9
Nov.	13.5	1.5	12.0	5.9	0.0	5.9	5.5	0.1	5.4	2.1	1.4	0.7
Dec.	3.7	3.5	0.2	0.2	0.0	0.2	0.9	0.3	0.5	2.7	3.2	-0.5
2011 Jan.	6.1	1.3	4.8	1.7	0.0	1.7	2.6	0.0	2.6	1.8	1.3	0.5
Feb.	7.1	0.2	6.9	2.9	0.0	2.9	3.2	0.0	3.2	1.1	0.2	0.8
Mar.	4.4	1.0	3.5	0.1	0.0	0.1	1.0	0.2	0.8	3.3	0.7	2.6
Apr.	27.3	18.5	8.8	2.7	0.0	2.7	0.1	0.0	0.1	24.5	18.5	6.0
May	8.6	8.8	-0.2	6.8	2.1	4.6	0.2	0.0	0.2	1.6	6.6	-5.0
June	23.7	1.3	22.5	14.7	0.0	14.7	2.3	0.3	2.0	6.7	1.0	5.7
July	12.4	0.7	11.7	9.3	0.0	9.3	1.6	0.0	1.6	1.5	0.7	0.8
Aug.	7.1	1.1	6.0	5.5	0.0	5.5	0.3	0.2	0.1	1.3	0.9	0.4
Sep.	2.9	2.9	0.0	0.0	0.9	-0.9	2.3	0.0	2.3	0.5	2.0	-1.4
Oct.	3.1	0.4	2.7	0.7	0.0	0.7	0.1	0.0	0.1	2.3	0.4	1.9
Nov.	2.6	1.5	1.1	0.7	0.0	0.7	1.4	0.0	1.4	0.5	1.5	-1.0

C20 Gross issues of quoted shares by sector of the issuer

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



Source: ECB.

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

(percentages per annum; outstanding amounts as at 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	With an agreed maturity of:			Redeemable at notice of: <sup>2)</sup>		Overnight	With an agreed maturity of:			
		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
2011 Jan.	0.43	2.38	2.61	2.77	1.53	1.85	0.54	1.29	2.42	2.52	1.02
Feb.	0.44	2.36	2.74	2.80	1.60	1.86	0.52	1.32	2.37	2.69	1.04
Mar.	0.45	2.34	2.78	2.90	1.61	1.88	0.54	1.37	2.53	2.81	1.14
Apr.	0.46	2.47	2.85	3.08	1.65	1.90	0.61	1.58	2.62	2.95	1.30
May	0.49	2.52	2.96	3.07	1.67	1.91	0.63	1.65	2.78	3.08	1.30
June	0.49	2.58	3.25	3.15	1.70	1.92	0.67	1.78	2.82	2.94	1.47
July	0.52	2.74	3.16	3.10	1.70	1.93	0.66	1.77	2.66	3.03	1.41
Aug.	0.54	2.73	3.16	2.99	1.77	1.93	0.68	1.64	2.69	2.99	1.42
Sep.	0.55	2.73	3.15	2.92	1.79	1.94	0.69	1.71	2.72	2.79	1.47
Oct.	0.55	2.88	3.17	3.14	1.80	1.96	0.69	1.67	2.74	3.23	1.65
Nov.	0.55	2.78	3.08	3.03	1.80	1.96	0.67	1.46	2.60	2.84	1.62
Dec.	0.54	2.78	3.20	3.05	1.81	1.97	0.65	1.50	2.80	2.90	1.39

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

	Revolving loans and overdrafts	Extended credit card debt <sup>3)</sup>	Consumer credit				Lending for house purchase				Lending to sole proprietors and unincorporated partnerships			
			By initial rate fixation			APRC <sup>4)</sup>	By initial rate fixation				APRC <sup>4)</sup>	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 and up to 10 years	Over 10 years		Floating rate and up to 1 year	Over 1 and up to 5 years	Over 5 years
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
2011 Jan.	8.06	16.73	5.09	6.13	7.83	7.20	2.94	3.69	3.91	3.84	3.83	3.21	4.24	4.08
Feb.	8.09	16.81	5.38	6.13	7.83	7.31	2.96	3.83	4.06	3.92	3.90	3.36	4.63	4.30
Mar.	8.04	16.88	5.44	6.22	7.82	7.32	3.01	3.82	4.15	4.01	3.93	3.43	4.69	4.43
Apr.	8.12	16.92	5.17	6.23	7.80	7.25	3.12	3.95	4.24	4.15	4.03	3.54	4.68	4.53
May	8.19	16.91	5.35	6.37	7.99	7.49	3.23	4.01	4.30	4.18	4.09	3.75	4.81	4.60
June	8.24	16.95	5.37	6.47	7.87	7.42	3.26	4.04	4.29	4.18	4.09	3.82	4.78	4.62
July	8.28	16.94	5.13	6.53	7.98	7.43	3.33	4.02	4.26	4.19	4.10	3.83	4.82	4.60
Aug.	8.31	17.10	5.34	6.54	7.97	7.57	3.47	3.96	4.20	4.15	4.16	3.95	4.96	4.39
Sep.	8.41	17.18	5.77	6.57	7.94	7.64	3.41	3.86	4.02	4.02	4.02	3.97	4.86	4.20
Oct.	8.43	17.18	5.60	6.53	7.94	7.54	3.44	3.79	3.86	3.94	3.95	3.98	4.76	4.16
Nov.	8.40	17.12	5.56	6.47	7.78	7.39	3.43	3.74	3.84	3.93	3.96	4.22	4.93	4.02
Dec.	8.38	17.08	5.27	6.44	7.64	7.16	3.48	3.74	3.81	3.95	4.02	4.13	4.84	3.92

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

	Revolving loans and overdrafts	Other loans of up to EUR 0.25 million by initial rate fixation						Other loans of over EUR 1 million by initial rate fixation					
		Floating rate and up to 3 months	Over 3 months and up to 1 year	Over 1 and up to 3 years	Over 3 and up to 5 years	Over 5 and up to 10 years	Over 10 years	Floating rate and up to 3 months	Over 3 months and up to 1 year	Over 1 and up to 3 years	Over 3 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
2011 Jan.	4.11	3.82	4.07	4.35	4.63	4.03	3.88	2.37	2.90	2.64	3.55	3.67	3.85
Feb.	4.12	3.98	4.21	4.48	4.89	4.39	3.94	2.55	3.06	2.96	3.86	3.88	3.75
Mar.	4.12	4.02	4.39	4.63	5.00	4.49	4.02	2.53	3.26	3.00	3.61	3.84	3.84
Apr.	4.25	4.07	4.47	4.73	5.05	4.57	4.15	2.72	3.31	3.38	3.78	4.36	4.15
May	4.30	4.18	4.65	4.79	5.14	4.67	4.19	2.65	3.37	3.17	3.63	3.65	4.11
June	4.41	4.23	4.68	4.74	5.16	4.67	4.44	2.78	3.49	3.50	3.61	2.77	4.00
July	4.43	4.38	4.79	4.79	5.10	4.68	4.44	2.88	3.45	3.46	3.98	4.09	3.24
Aug.	4.49	4.44	4.94	4.85	5.03	4.58	4.35	2.80	3.56	3.70	3.99	3.87	4.06
Sep.	4.55	4.59	4.94	4.79	4.94	4.46	4.31	2.84	3.44	3.74	3.63	3.64	3.74
Oct.	4.60	4.70	5.10	4.86	4.99	4.56	4.27	2.98	3.55	3.85	3.89	3.60	3.71
Nov.	4.61	4.77	5.26	4.98	5.10	4.66	4.26	2.81	3.69	3.51	3.92	3.60	3.71
Dec.	4.66	4.89	5.17	4.91	5.04	4.58	4.27	3.01	3.76	3.11	3.95	3.75	3.75

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, 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 when all participating Member States are combined.
- 3) This instrument category excludes convenience credit card debt, i.e. credit granted at an interest rate of 0% during the billing cycle.
- 4) The annual percentage rate of charge (APRC) covers the total cost of a loan. The total cost comprises both an interest rate component and a component incorporating other (related) charges, such as the cost of inquiries, administration, preparation of documents and guarantees.

#### 4.5 MFI interest rates on euro-denominated deposits from and loans to euro area residents <sup>1)</sup>, \*

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

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

	Deposits from households					Deposits from non-financial corporations			Repos
	Overnight <sup>2)</sup>	With an agreed maturity of:		Redeemable at notice of: <sup>2)3)</sup>		Overnight <sup>2)</sup>	With an agreed maturity of:		
		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
2011 Jan.	0.43	2.31	2.72	1.53	1.85	0.54	1.78	3.07	1.55
Feb.	0.44	2.34	2.73	1.60	1.86	0.52	1.80	3.09	1.59
Mar.	0.45	2.38	2.71	1.61	1.88	0.54	1.85	3.13	1.65
Apr.	0.46	2.40	2.73	1.65	1.90	0.61	1.94	3.12	1.72
May	0.49	2.45	2.73	1.67	1.91	0.63	1.99	3.12	1.76
June	0.49	2.49	2.75	1.70	1.92	0.67	2.07	3.11	1.93
July	0.52	2.54	2.77	1.70	1.93	0.66	2.13	3.13	1.94
Aug.	0.54	2.58	2.77	1.77	1.93	0.68	2.12	3.14	1.97
Sep.	0.55	2.62	2.79	1.79	1.94	0.69	2.14	3.15	2.07
Oct.	0.55	2.65	2.78	1.80	1.96	0.69	2.16	3.14	2.15
Nov.	0.55	2.69	2.80	1.80	1.96	0.67	2.17	3.16	2.24
Dec.	0.54	2.72	2.78	1.81	1.97	0.65	2.14	3.13	2.37

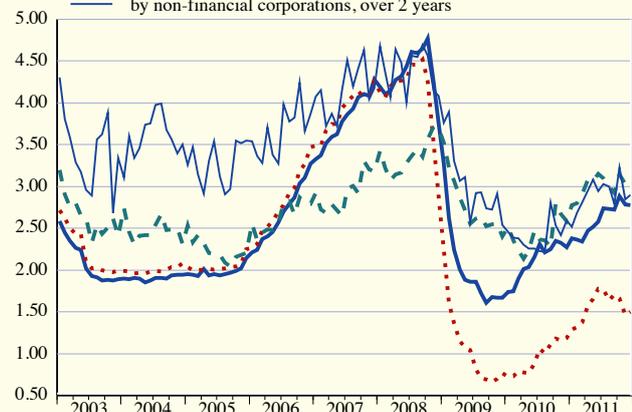
#### 5. Interest rates on loans (outstanding amounts)

	Loans to households						Loans to non-financial corporations		
	Lending for house purchase with a maturity of:			Consumer credit and other loans with a maturity of:			With a maturity of:		
	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
2011 Jan.	3.70	3.80	3.80	7.85	6.40	5.18	3.59	3.44	3.42
Feb.	3.68	3.81	3.82	7.88	6.43	5.20	3.64	3.47	3.46
Mar.	3.72	3.80	3.84	7.92	6.40	5.20	3.68	3.49	3.48
Apr.	3.82	3.78	3.84	7.94	6.43	5.23	3.78	3.60	3.53
May	3.81	3.78	3.85	7.96	6.38	5.24	3.84	3.65	3.56
June	3.87	3.78	3.86	7.95	6.45	5.28	3.93	3.73	3.63
July	4.03	3.79	3.90	8.03	6.42	5.30	4.00	3.80	3.69
Aug.	4.06	3.78	3.89	8.07	6.42	5.31	4.06	3.84	3.72
Sep.	4.13	3.80	3.92	8.14	6.48	5.32	4.11	3.85	3.74
Oct.	4.12	3.78	3.91	8.17	6.44	5.33	4.18	3.87	3.74
Nov.	4.12	3.77	3.91	8.09	6.45	5.34	4.20	3.90	3.76
Dec.	4.12	3.75	3.89	8.11	6.42	5.31	4.26	3.87	3.72

#### C21 New deposits with an agreed maturity

(percentages per annum excluding charges; period averages)

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



#### C22 New loans with a floating rate and up to 1 year's initial rate fixation

(percentages per annum excluding charges; period averages)

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



Source: ECB.

\* For the source of the data in the table and the related footnotes, please see page S42.

## 4.6 Money market interest rates

(percentages per annum; period averages)

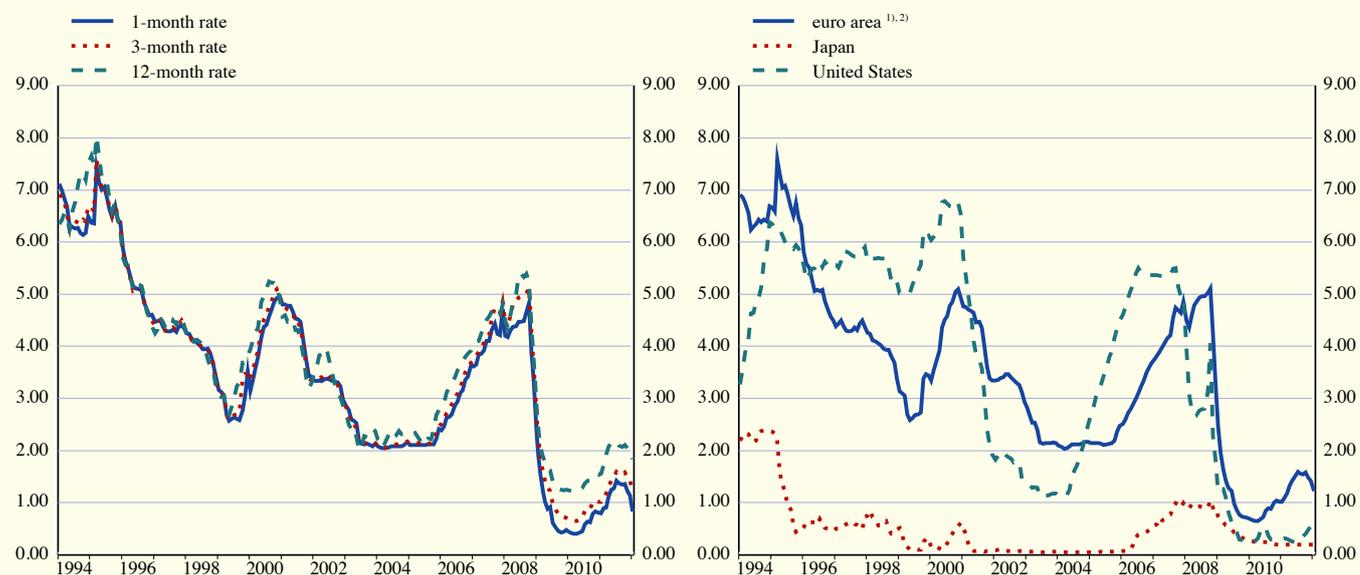
	Euro area <sup>1),2)</sup>					United States	Japan
	Overnight deposits (EONIA)	1-month deposits (EURIBOR)	3-month deposits (EURIBOR)	6-month deposits (EURIBOR)	12-month deposits (EURIBOR)	3-month deposits (LIBOR)	3-month deposits (LIBOR)
	1	2	3	4	5	6	7
2009	0.71	0.89	1.22	1.43	1.61	0.69	0.47
2010	0.44	0.57	0.81	1.08	1.35	0.34	0.23
2011	0.87	1.18	1.39	1.64	2.01	0.34	0.19
2010 Q4	0.59	0.81	1.02	1.25	1.52	0.29	0.19
2011 Q1	0.67	0.86	1.10	1.37	1.74	0.31	0.19
Q2	1.04	1.22	1.42	1.70	2.13	0.26	0.20
Q3	0.97	1.38	1.56	1.77	2.11	0.30	0.19
Q4	0.79	1.24	1.50	1.72	2.05	0.48	0.20
2011 Jan.	0.66	0.79	1.02	1.25	1.55	0.30	0.19
Feb.	0.71	0.89	1.09	1.35	1.71	0.31	0.19
Mar.	0.66	0.90	1.18	1.48	1.92	0.31	0.20
Apr.	0.97	1.13	1.32	1.62	2.09	0.28	0.20
May	1.03	1.24	1.43	1.71	2.15	0.26	0.20
June	1.12	1.28	1.49	1.75	2.14	0.25	0.20
July	1.01	1.42	1.60	1.82	2.18	0.25	0.20
Aug.	0.91	1.37	1.55	1.75	2.10	0.29	0.19
Sep.	1.01	1.35	1.54	1.74	2.07	0.35	0.19
Oct.	0.96	1.36	1.58	1.78	2.11	0.41	0.19
Nov.	0.79	1.23	1.48	1.71	2.04	0.48	0.20
Dec.	0.63	1.14	1.43	1.67	2.00	0.56	0.20
2012 Jan.	0.38	0.84	1.22	1.50	1.84	0.57	0.20

### C23 Euro area money market rates <sup>1), 2)</sup>

(monthly averages; percentages per annum)

### C24 3-month money market rates

(monthly averages; percentages per annum)



Source: ECB.

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

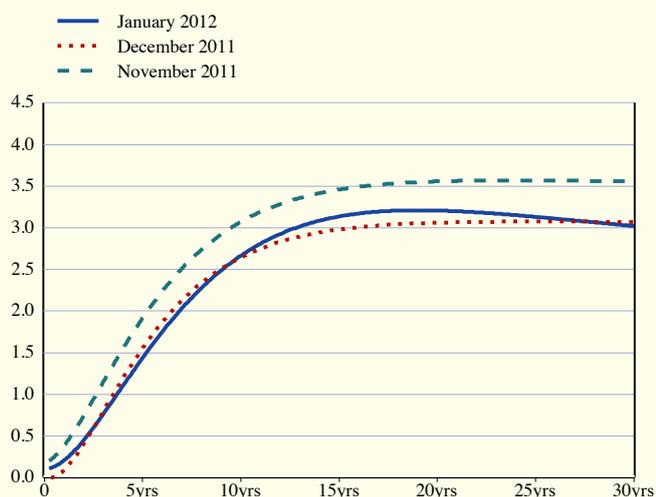
### 4.7 Euro area yield curves <sup>1)</sup>

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

	Spot rates								Instantaneous forward rates			
	3 months 1	1 year 2	2 years 3	5 years 4	7 years 5	10 years 6	10 years - 3 months (spread) 7	10 years - 2 years (spread) 8	1 year 9	2 years 10	5 years 11	10 years 12
2009	0.38	0.81	1.38	2.64	3.20	3.76	3.38	2.38	1.41	2.44	4.27	5.20
2010	0.49	0.60	0.93	2.15	2.78	3.36	2.87	2.43	0.85	1.70	3.99	4.69
2011	0.00	0.09	0.41	1.56	2.13	2.65	2.65	2.24	0.32	1.15	3.24	3.84
2010 Q4	0.49	0.60	0.93	2.15	2.78	3.36	2.87	2.43	0.85	1.70	3.99	4.69
2011 Q1	0.87	1.30	1.79	2.83	3.26	3.66	2.79	1.87	1.84	2.69	4.12	4.63
Q2	1.24	1.39	1.65	2.50	2.94	3.41	2.17	1.75	1.63	2.22	3.76	4.60
Q3	0.27	0.47	0.75	1.55	1.99	2.48	2.21	1.74	0.74	1.31	2.77	3.79
Q4	0.00	0.09	0.41	1.56	2.13	2.65	2.65	2.24	0.32	1.15	3.24	3.84
2011 Jan.	0.65	1.03	1.48	2.55	3.03	3.49	2.84	2.01	1.51	2.34	3.96	4.62
Feb.	0.69	1.08	1.53	2.55	3.02	3.49	2.80	1.96	1.56	2.37	3.91	4.67
Mar.	0.87	1.30	1.79	2.83	3.26	3.66	2.79	1.87	1.84	2.69	4.12	4.63
Apr.	1.02	1.41	1.86	2.80	3.19	3.55	2.53	1.70	1.90	2.67	3.96	4.46
May	1.03	1.32	1.67	2.52	2.93	3.37	2.34	1.69	1.69	2.34	3.69	4.51
June	1.24	1.39	1.65	2.50	2.94	3.41	2.17	1.75	1.63	2.22	3.76	4.60
July	1.01	1.11	1.32	2.09	2.55	3.06	2.05	1.74	1.28	1.79	3.34	4.39
Aug.	0.61	0.67	0.86	1.69	2.21	2.76	2.15	1.90	0.80	1.33	3.09	4.22
Sep.	0.27	0.47	0.75	1.55	1.99	2.48	2.21	1.74	0.74	1.31	2.77	3.79
Oct.	0.38	0.54	0.81	1.71	2.22	2.79	2.41	1.98	0.78	1.39	3.12	4.29
Nov.	0.20	0.38	0.74	1.92	2.51	3.07	2.87	2.33	0.69	1.53	3.64	4.41
Dec.	0.00	0.09	0.41	1.56	2.13	2.65	2.65	2.24	0.32	1.15	3.24	3.84
2012 Jan.	0.11	0.21	0.45	1.44	2.03	2.67	2.55	2.22	0.39	1.03	3.07	4.26

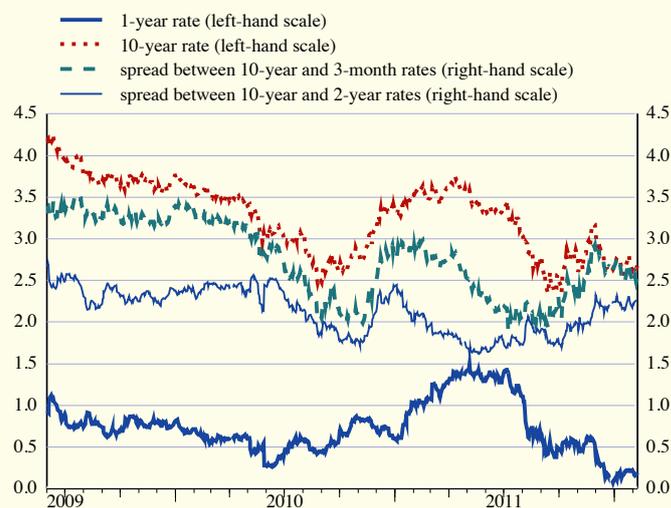
### C25 Euro area spot yield curves <sup>2)</sup>

(percentages per annum; end of period)



### C26 Euro area spot rates and spreads <sup>2)</sup>

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



Sources: ECB calculations based on underlying data provided by EuroMTS and ratings provided by Fitch Ratings.

- 1) Data refer to the changing composition of the euro area. For further information, see the General Notes.
- 2) Data cover AAA-rated euro area central government bonds.

## 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 index	50	Basic materials	Consumer services	Consumer goods	Oil and gas	Financials	Industrials	Technology	Utilities	Telecoms	Health care		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	
2009	234.2	2,521.0	353.2	140.5	244.5	293.5	172.1	269.7	200.7	353.7	380.4	363.5	946.2	9,321.6
2010	265.5	2,779.3	463.1	166.2	323.4	307.2	182.8	337.6	224.1	344.9	389.6	408.4	1,140.0	10,006.5
2011	256.0	2,611.0	493.4	158.1	351.2	311.6	152.6	349.4	222.5	301.7	358.4	432.7	1,267.6	9,425.4
2010 Q4	273.4	2,817.8	513.8	176.1	361.3	309.9	175.7	361.9	227.0	333.0	399.2	405.0	1,204.6	9,842.4
2011 Q1	285.5	2,932.9	532.7	175.5	366.3	341.1	185.0	388.0	249.6	347.7	396.7	415.0	1,302.5	10,285.3
Q2	281.2	2,862.7	552.0	169.6	370.7	328.8	175.2	391.5	239.7	333.7	385.0	448.4	1,318.3	9,609.4
Q3	236.0	2,381.6	463.7	146.0	341.5	282.0	133.8	323.0	199.8	270.2	333.0	435.0	1,225.3	9,246.3
Q4	222.4	2,277.8	427.1	142.1	327.1	295.5	117.2	296.6	201.8	256.5	320.3	432.4	1,225.7	8,580.6
2011 Jan.	282.8	2,900.7	531.1	178.1	375.3	335.1	178.0	385.8	246.1	346.2	390.7	411.8	1,282.6	10,449.5
Feb.	292.3	3,015.7	540.5	179.0	369.7	348.0	193.5	393.1	257.6	359.0	402.9	418.7	1,321.1	10,622.3
Mar.	281.9	2,890.4	527.4	170.1	355.0	340.5	184.1	385.7	245.9	339.1	396.8	414.6	1,304.5	9,852.4
Apr.	287.5	2,947.2	557.3	172.5	366.6	343.8	182.4	397.9	250.0	346.9	402.8	435.4	1,331.5	9,644.6
May	284.0	2,885.8	557.0	171.7	374.9	330.4	176.3	395.5	246.5	337.8	386.4	457.8	1,338.3	9,650.8
June	272.9	2,766.6	542.5	164.9	370.0	314.3	168.0	382.0	224.1	318.3	368.2	450.3	1,287.3	9,541.5
July	270.5	2,743.5	550.7	160.8	384.4	317.4	160.6	375.7	221.0	307.8	360.0	467.4	1,325.2	9,996.7
Aug.	226.9	2,297.2	443.7	141.1	329.7	268.6	129.0	307.3	189.7	258.4	329.3	420.7	1,185.3	9,072.9
Sep.	212.6	2,124.3	401.4	137.0	312.8	262.4	113.3	289.2	190.1	246.7	311.1	419.0	1,173.9	8,695.4
Oct.	226.1	2,312.3	424.8	142.4	325.6	290.2	123.1	302.3	203.0	269.9	334.1	426.1	1,207.2	8,733.6
Nov.	219.2	2,239.6	423.6	141.5	325.9	293.5	112.8	292.2	205.7	250.6	316.6	423.3	1,226.4	8,506.1
Dec.	222.2	2,283.3	433.2	142.4	329.9	302.9	115.9	295.5	196.6	249.3	310.3	448.4	1,243.3	8,506.0
2012 Jan.	233.4	2,382.1	477.6	146.9	351.8	317.3	120.4	319.2	206.9	248.8	305.0	473.6	1,300.6	8,616.7

## C27 Dow Jones EURO STOXX broad index, 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 vis-à-vis 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 in 2011	100.0	100.0	82.3	58.6	41.4	100.0	11.9	7.4	28.9	10.4	41.4	88.7	11.3
	1	2	3	4	5	6	7	8	9	10	11	12	13
2008	107.8	3.3	2.4	3.8	2.6	-	-	-	-	-	-	3.4	2.7
2009	108.1	0.3	1.3	-0.9	2.0	-	-	-	-	-	-	0.1	1.8
2010	109.8	1.6	1.0	1.8	1.4	-	-	-	-	-	-	1.6	1.5
2011	112.8	2.7	1.7	3.3	1.8	-	-	-	-	-	-	2.6	3.5
2010 Q4	110.8	2.0	1.1	2.5	1.3	0.5	0.5	0.4	0.3	2.0	0.4	2.0	2.3
2011 Q1	111.3	2.5	1.3	3.1	1.6	1.0	0.9	0.4	-0.1	6.3	0.5	2.4	3.4
Q2	113.1	2.8	1.8	3.3	1.9	0.8	1.1	0.4	0.5	2.8	0.6	2.7	3.6
Q3	112.8	2.7	1.7	3.2	2.0	0.3	1.1	0.1	-0.3	0.4	0.5	2.6	3.5
Q4	114.1	2.9	2.0	3.7	1.9	0.8	1.0	0.9	1.1	1.5	0.3	2.9	3.5
2011 Aug.	112.6	2.5	1.5	3.0	1.9	0.2	0.3	0.1	0.2	-0.2	0.2	2.4	3.4
Sep.	113.5	3.0	2.0	3.7	1.9	0.5	0.4	0.2	1.2	0.9	0.1	2.9	3.5
Oct.	113.9	3.0	2.0	3.9	1.8	0.2	0.5	0.4	0.2	0.6	0.1	3.0	3.6
Nov.	114.0	3.0	2.0	3.9	1.9	0.2	0.2	0.4	0.1	0.7	0.1	3.0	3.5
Dec.	114.4	2.7	2.0	3.3	1.9	0.1	0.1	0.1	0.0	-0.1	0.2	2.7	3.5
2012 Jan. <sup>3)</sup>		2.7											

	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 in 2011	19.3	11.9	7.4	39.3	28.9	10.4	10.1	6.0	6.5	3.2	14.6	7.0
	14	15	16	17	18	19	20	21	22	23	24	25
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
2009	0.7	1.1	0.2	-1.7	0.6	-8.1	2.0	1.8	2.9	-1.0	2.1	2.1
2010	1.1	0.9	1.3	2.2	0.5	7.4	1.8	1.5	2.3	-0.8	1.0	1.5
2011	2.7	3.3	1.8	3.7	0.8	11.9	1.8	1.4	2.9	-1.3	2.0	2.1
2010 Q4	1.9	1.3	2.7	2.9	0.8	9.2	1.6	1.3	1.9	-0.8	1.2	1.5
2011 Q1	2.2	2.1	2.3	3.6	0.5	12.7	1.8	1.3	2.0	-0.4	1.5	1.9
Q2	2.6	3.0	1.9	3.7	1.0	11.5	1.9	1.4	3.2	-1.0	2.0	2.1
Q3	2.8	3.7	1.3	3.4	0.4	12.0	1.8	1.5	3.2	-1.8	2.2	2.1
Q4	3.3	4.2	1.8	3.9	1.2	11.5	1.7	1.4	3.0	-1.8	2.2	2.1
2011 July	2.6	3.4	1.3	3.1	0.0	11.8	1.9	1.5	3.4	-1.6	2.2	2.0
Aug.	2.7	3.6	1.1	3.1	0.0	11.8	1.8	1.5	3.3	-1.8	2.2	2.1
Sep.	3.0	4.0	1.4	4.1	1.2	12.4	1.8	1.4	3.1	-1.9	2.3	2.2
Oct.	3.3	4.3	1.8	4.2	1.3	12.4	1.7	1.4	2.9	-1.9	2.2	2.0
Nov.	3.4	4.3	1.9	4.1	1.3	12.3	1.7	1.3	2.9	-1.7	2.2	2.2
Dec.	3.1	4.1	1.6	3.4	1.2	9.7	1.7	1.4	3.2	-1.9	2.2	2.3

Sources: Eurostat and ECB calculations.

- 1) Data refer to the changing composition of the euro area. For further information, see the General Notes.
- 2) 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 Eurostat's website (<http://epp.eurostat.ec.europa.eu/portal/page/portal/hicp/introduction>) for a note explaining the methodology used in the compilation of this indicator.
- 3) Estimate based on provisional national releases, which usually cover 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

	Industrial producer prices excluding construction										Construction <sup>1)</sup>	Residential property prices <sup>2)</sup>
	Total (index: 2005 = 100)	Total		Industry excluding construction and energy						Energy		
		Manu- facturing	Total	Intermediate goods	Capital goods	Consumer goods						
						Total	Durable	Non-durable				
% of total in 2005	100.0	100.0	82.8	75.6	30.0	22.0	23.7	2.7	21.0	24.4		
	1	2	3	4	5	6	7	8	9	10	11	12
2008	114.4	6.1	4.8	3.4	3.9	2.1	3.9	2.8	4.1	14.2	3.8	1.9
2009	108.6	-5.1	-5.4	-2.9	-5.3	0.4	-2.1	1.2	-2.5	-11.8	0.1	-3.1
2010	111.7	2.9	3.4	1.6	3.5	0.3	0.4	0.9	0.3	6.4	1.9	1.1
2011	118.3	5.9	5.5	3.8	5.9	1.4	3.1	2.1	3.3	11.9	.	.
2010 Q4	113.5	4.8	4.6	3.1	5.9	0.8	1.5	1.4	1.5	9.6	2.8	1.9
2011 Q1	116.7	6.5	6.3	4.4	7.9	1.3	2.5	1.8	2.6	12.5	4.1	2.0
Q2	118.5	6.3	5.8	4.3	6.8	1.3	3.4	1.9	3.7	11.9	3.0	1.1
Q3	118.9	5.9	5.5	3.8	5.6	1.5	3.3	2.2	3.5	11.8	3.2	1.0
Q4	119.3	5.1	4.5	2.9	3.4	1.5	3.3	2.5	3.4	11.4	.	.
2011 July	118.9	6.1	5.8	4.0	6.1	1.5	3.3	1.9	3.5	11.9	-	-
Aug.	118.7	5.8	5.5	3.8	5.7	1.5	3.3	2.1	3.5	11.4	-	-
Sep.	119.0	5.8	5.4	3.5	5.0	1.5	3.4	2.5	3.5	12.2	-	-
Oct.	119.2	5.5	5.0	3.2	4.1	1.5	3.4	2.5	3.5	12.3	-	-
Nov.	119.5	5.4	4.7	3.0	3.5	1.4	3.4	2.5	3.6	12.4	-	-
Dec.	119.2	4.3	3.7	2.6	2.8	1.5	3.1	2.3	3.2	9.5	-	-

### 3. Commodity prices and gross domestic product deflators

	Oil prices <sup>3)</sup> (EUR per barrel)	Non-energy commodity prices						GDP deflators							
		Import-weighted <sup>4)</sup>			Use-weighted <sup>5)</sup>			Total (s.a.; index: 2005 = 100)	Total	Domestic demand				Exports <sup>6)</sup>	Imports <sup>6)</sup>
		Total	Food	Non-food	Total	Food	Non-food			Total	Private consump- tion	Government consump- tion	Gross fixed capital formation		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
2008	65.9	2.0	18.4	-4.4	-1.7	9.7	-8.6	106.2	1.9	2.6	2.7	2.8	2.3	2.4	3.9
2009	44.6	-18.5	-8.9	-23.0	-18.0	-11.4	-22.8	107.1	0.9	-0.1	-0.4	2.1	-0.5	-3.3	-5.9
2010	60.7	44.6	21.4	57.9	42.1	27.1	54.5	107.9	0.7	1.5	1.7	0.8	1.1	2.7	4.9
2011	79.7	12.2	22.4	7.7	12.9	20.7	7.5	.	.	.	.	.	.	.	.
2010 Q4	64.4	48.6	36.6	54.7	48.7	48.4	48.9	108.2	0.9	1.8	2.1	0.6	1.5	3.9	6.2
2011 Q1	77.3	42.9	46.1	41.4	41.0	47.2	36.6	108.7	1.1	2.3	2.5	0.6	2.0	4.7	7.7
Q2	81.3	11.6	28.8	4.6	13.3	26.2	5.1	109.1	1.2	2.1	2.7	0.8	1.6	3.2	5.3
Q3	79.3	3.8	16.7	-1.6	4.9	11.7	0.3	109.5	1.3	2.2	2.6	0.8	1.6	2.8	4.8
Q4	80.7	-2.5	3.6	-5.2	-1.7	4.4	-6.0	.	.	.	.	.	.	.	.
2011 Aug.	76.7	2.5	17.2	-3.6	4.1	12.7	-1.8	-	-	-	-	-	-	-	-
Sep.	79.8	1.5	14.3	-3.9	1.5	7.5	-2.6	-	-	-	-	-	-	-	-
Oct.	78.9	1.6	10.7	-2.4	2.5	10.6	-3.2	-	-	-	-	-	-	-	-
Nov.	81.4	-1.9	4.7	-4.9	-0.7	6.0	-5.5	-	-	-	-	-	-	-	-
Dec.	81.7	-6.7	-3.6	-8.1	-6.3	-2.5	-9.0	-	-	-	-	-	-	-	-
2012 Jan.	86.2	-4.6	-4.1	-4.8	-4.1	-1.9	-5.8	-	-	-	-	-	-	-	-

Sources: Eurostat, ECB calculations based on Eurostat data (column 7 in Table 2 in Section 5.1 and columns 8-15 in Table 3 in Section 5.1), ECB calculations based on Thomson Reuters 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) Input prices for residential buildings.

2) Experimental data based on non-harmonised national sources (see <http://www.ecb.europa.eu/stats/intro/html/experiment.en.html> for further details).

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

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

5) 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 <http://www.ecb.europa.eu/stats/intro/html/experiment.en.html> for details).

6) 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)

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

(quarterly data seasonally adjusted; annual data unadjusted)

	Total (index: 2005 = 100)	Total	By economic activity									
			Agriculture, forestry and fishing	Manufac- turing, energy and utilities	Construction	Trade, transport, accommoda- tion and food services	Information and commu- nication	Finance and insurance	Real estate	Professional, business and support services	Public admi- nistration, education, health and social work	Arts, enter- tainment and other services
	1	2	3	4	5	6	7	8	9	10	11	12
Unit labour costs <sup>1)</sup>												
2009	110.0	4.0	-0.6	8.9	5.4	5.3	-0.3	-2.7	-3.7	5.4	2.7	1.9
2010	109.1	-0.8	-1.4	-5.8	1.6	-1.9	-0.9	0.3	2.6	1.5	1.1	1.7
2010 Q4	109.4	-0.3	-0.9	-4.0	0.0	-1.2	-0.2	0.9	2.8	2.2	1.3	2.0
2011 Q1	109.6	0.2	0.8	-1.4	0.0	-1.2	1.8	2.8	4.4	3.0	0.8	2.3
Q2	110.3	1.2	-0.1	0.6	0.1	0.0	3.2	3.7	3.5	3.2	0.6	3.3
Q3	110.2	1.3	-1.2	0.1	-0.8	1.7	3.6	1.5	3.3	3.1	0.8	3.6
Compensation per employee												
2009	109.8	1.4	1.2	-0.6	5.5	1.4	1.3	0.8	-0.4	0.9	2.7	1.7
2010	111.5	1.6	1.5	3.6	1.0	1.3	2.5	2.0	3.5	1.3	0.8	1.1
2010 Q4	112.4	1.6	2.7	3.7	1.0	1.5	3.0	1.4	3.4	1.7	0.8	0.5
2011 Q1	113.4	2.4	4.4	4.4	4.5	2.0	2.1	2.0	2.4	2.7	1.2	1.2
Q2	114.0	2.5	3.4	4.7	2.6	1.8	2.4	3.1	2.3	2.7	1.3	2.1
Q3	114.2	2.4	3.4	3.2	2.9	2.3	2.7	2.9	3.6	2.7	1.6	2.1
Labour productivity per person employed <sup>2)</sup>												
2009	99.8	-2.5	1.8	-8.8	0.0	-3.6	1.6	3.6	3.4	-4.2	0.0	-0.2
2010	102.2	2.4	3.0	10.1	-0.6	3.3	3.5	1.8	1.0	-0.1	-0.3	-0.5
2010 Q4	102.7	1.9	3.6	8.0	1.0	2.7	3.3	0.5	0.6	-0.4	-0.5	-1.4
2011 Q1	103.5	2.2	3.5	5.9	4.6	3.2	0.3	-0.8	-1.9	-0.2	0.4	-1.1
Q2	103.4	1.3	3.6	4.1	2.5	1.8	-0.7	-0.5	-1.2	-0.5	0.8	-1.2
Q3	103.6	1.0	4.7	3.1	3.7	0.6	-0.8	1.4	0.3	-0.3	0.7	-1.5
Compensation per hour worked												
2009	112.1	3.3	2.2	3.9	7.3	2.7	1.8	2.7	1.4	2.5	3.0	3.1
2010	113.3	1.0	-0.1	1.1	1.2	1.1	1.9	1.7	2.5	0.6	0.7	1.8
2010 Q4	114.3	1.6	1.2	1.4	1.8	2.0	3.4	2.2	3.2	1.5	1.0	1.2
2011 Q1	114.7	1.8	-0.3	2.0	3.2	2.3	1.8	2.0	1.6	2.4	0.9	1.1
Q2	115.7	2.5	2.1	3.9	3.1	2.4	2.7	3.5	4.5	2.9	1.1	1.9
Q3	115.5	2.1	1.1	2.6	3.3	2.4	2.0	3.3	4.5	2.2	1.3	1.5
Hourly labour productivity <sup>2)</sup>												
2009	102.2	-0.8	2.7	-4.9	1.6	-2.5	2.1	5.4	4.5	-2.9	0.3	1.2
2010	104.2	1.9	2.8	7.5	-0.8	2.8	3.0	1.2	-0.5	-0.8	-0.5	0.1
2010 Q4	104.8	1.8	3.2	5.7	1.5	3.0	3.7	0.8	-0.4	-0.4	-0.3	-0.7
2011 Q1	105.0	1.6	1.2	3.5	3.0	3.3	0.1	-1.0	-2.5	-0.3	0.1	-0.9
Q2	105.3	1.3	4.5	3.1	2.6	2.2	-0.7	-0.3	0.6	-0.2	0.5	-1.1
Q3	105.2	0.8	5.7	2.4	3.2	0.4	-1.7	1.6	0.8	-0.7	0.5	-2.3

### 5. Labour cost indices<sup>3)</sup>

	Total (s.a.; index: 2008 = 100)	Total	By component		For selected economic activities			Memo item: Indicator of negotiated wages <sup>4)</sup>
			Wages and salaries	Employers' social contributions	Mining, manufacturing and energy	Construction	Services	
% of total in 2008	100.0	100.0	75.2	24.8	32.4	9.0	58.6	
	1	2	3	4	5	6	7	8
2009	102.7	2.7	2.6	3.0	3.0	3.7	2.4	2.6
2010	104.3	1.6	1.5	1.9	1.0	1.8	1.8	1.7
2010 Q4	105.1	1.7	1.6	2.0	1.3	1.5	2.0	1.6
2011 Q1	106.2	2.5	2.3	3.3	2.4	1.9	2.6	1.8
Q2	107.2	3.2	3.3	3.7	4.2	2.5	2.9	1.9
Q3	107.4	2.7	2.6	3.2	2.9	2.5	2.7	2.1

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

- 1) Compensation (at current prices) per employee divided by labour productivity per person employed.
- 2) Total GDP and value added by economic activity (volumes) per labour input (persons employed and hours worked).
- 3) Hourly labour cost indices for the whole economy, excluding agriculture, public administration, education, health and services not classified elsewhere. Owing to differences in coverage, the estimates for the components may not be consistent with the total.
- 4) Experimental data (see <http://www.ecb.europa.eu/stats/intro/html/experiment.en.html> for further details).

## 5.2 Output and demand

(quarterly data seasonally adjusted; annual data unadjusted)

### 1. GDP and expenditure components

	GDP								
	Total	Domestic demand					External balance <sup>1)</sup>		
		Total	Private consumption	Government consumption	Gross fixed capital formation	Changes in inventories <sup>2)</sup>	Total	Exports <sup>1)</sup>	Imports <sup>1)</sup>
1	2	3	4	5	6	7	8	9	
<i>Current prices (EUR billions)</i>									
2007	9,030.2	8,897.4	5,050.0	1,805.3	1,965.3	76.7	132.8	3,749.6	3,616.8
2008	9,244.3	9,158.9	5,207.0	1,898.9	1,989.8	63.2	85.3	3,882.1	3,796.8
2009	8,930.8	8,812.7	5,127.1	1,986.9	1,741.4	-42.7	118.1	3,273.6	3,155.5
2010	9,161.5	9,045.8	5,261.2	2,013.8	1,751.0	19.9	115.6	3,748.4	3,632.7
2010 Q3	2,300.7	2,268.3	1,319.4	504.3	440.7	3.9	32.4	958.8	926.4
Q4	2,309.8	2,282.7	1,333.1	504.5	440.0	5.1	27.1	978.4	951.2
2011 Q1	2,337.7	2,315.1	1,342.5	507.6	451.3	13.6	22.6	1,009.7	987.0
Q2	2,350.8	2,321.9	1,346.5	507.5	453.3	14.6	28.9	1,024.6	995.7
Q3	2,362.6	2,327.0	1,354.3	508.3	453.2	11.1	35.7	1,042.4	1,006.7
<i>percentage of GDP</i>									
2010	100.0	98.7	57.4	22.0	19.1	0.2	1.3	-	-
<i>Chain-linked volumes (prices for the previous year)</i>									
<i>quarter-on-quarter percentage changes</i>									
2010 Q3	0.4	0.2	0.4	0.1	0.2	-	-	2.1	1.7
Q4	0.3	0.2	0.3	0.0	-0.4	-	-	1.5	1.3
2011 Q1	0.8	0.5	0.0	0.2	1.8	-	-	1.8	1.1
Q2	0.2	-0.2	-0.5	-0.1	-0.1	-	-	1.2	0.5
Q3	0.1	-0.1	0.2	-0.1	-0.1	-	-	1.2	0.8
<i>annual percentage changes</i>									
2007	3.0	2.8	1.7	2.2	4.7	-	-	6.6	6.2
2008	0.4	0.3	0.4	2.3	-1.1	-	-	1.0	0.9
2009	-4.3	-3.7	-1.2	2.5	-12.0	-	-	-12.8	-11.7
2010	1.9	1.1	0.9	0.6	-0.6	-	-	11.5	9.7
2010 Q3	2.1	1.4	1.0	0.5	0.8	-	-	12.2	10.6
Q4	2.0	1.5	1.1	-0.1	1.3	-	-	12.0	11.2
2011 Q1	2.4	1.6	0.9	0.5	3.6	-	-	10.4	8.5
Q2	1.6	0.7	0.2	0.1	1.6	-	-	6.8	4.6
Q3	1.3	0.4	0.0	0.0	1.3	-	-	5.8	3.7
<i>contributions to quarter-on-quarter percentage changes in GDP; percentage points</i>									
2010 Q3	0.4	0.2	0.2	0.0	0.0	0.0	0.2	-	-
Q4	0.3	0.2	0.2	0.0	-0.1	0.1	0.1	-	-
2011 Q1	0.8	0.5	0.0	0.0	0.4	0.0	0.3	-	-
Q2	0.2	-0.2	-0.3	0.0	0.0	0.2	0.3	-	-
Q3	0.1	0.0	0.1	0.0	0.0	-0.1	0.2	-	-
<i>contributions to annual percentage changes in GDP; percentage points</i>									
2007	3.0	2.8	1.0	0.4	1.0	0.3	0.2	-	-
2008	0.4	0.3	0.2	0.5	-0.2	-0.1	0.1	-	-
2009	-4.3	-3.7	-0.7	0.5	-2.6	-0.9	-0.6	-	-
2010	1.9	1.1	0.5	0.1	-0.1	0.6	0.8	-	-
2010 Q3	2.1	1.3	0.6	0.1	0.2	0.5	0.7	-	-
Q4	2.0	1.5	0.6	0.0	0.2	0.7	0.5	-	-
2011 Q1	2.4	1.6	0.5	0.1	0.7	0.3	0.8	-	-
Q2	1.6	0.7	0.1	0.0	0.3	0.3	0.9	-	-
Q3	1.3	0.4	0.0	0.0	0.2	0.1	0.9	-	-

Sources: Eurostat and ECB calculations.

- Exports and imports cover goods and services and include cross-border intra-euro area trade. They are not fully consistent with: Section 3.1; Table 1 of Section 7.1; Table 3 of Section 7.2; or Tables 1 or 3 of Section 7.5.
- Including acquisitions less disposals of valuables.

## 5.2 Output and demand

(quarterly data seasonally adjusted; annual data unadjusted)

### 2. Value added by economic activity

	Gross value added (basic prices)											Taxes less subsidies on products
	Total	Agriculture, forestry and fishing	Manufac- turing, energy and utilities	Construction	Trade, transport, accommoda- tion and food services	Information and commu- nication	Finance and insurance	Real estate	Professional, business and support services	Public admi- nistration, education, health and social work	Arts, enter- tainment and other services	
	1	2	3	4	5	6	7	8	9	10	11	12
<i>Current prices (EUR billions)</i>												
2007	8,071.4	144.0	1,650.2	538.6	1,550.5	352.6	393.8	889.7	821.5	1,449.8	280.7	958.8
2008	8,299.0	142.0	1,652.6	560.8	1,597.8	358.5	384.9	930.3	859.4	1,520.7	291.9	945.3
2009	8,037.8	125.5	1,465.4	537.3	1,517.8	360.5	427.3	904.4	817.8	1,581.9	300.1	893.0
2010	8,222.5	137.4	1,550.9	512.8	1,561.4	357.7	437.5	922.3	830.6	1,609.2	302.7	938.9
2010 Q3	2,063.8	35.0	390.3	128.5	392.2	89.6	109.9	231.9	208.9	401.8	75.6	236.9
2010 Q4	2,072.8	35.1	395.3	127.2	395.1	88.9	108.5	234.4	209.8	402.1	76.1	237.1
2011 Q1	2,096.0	36.7	402.4	130.9	401.6	88.8	108.1	234.9	210.8	405.2	76.6	241.7
2011 Q2	2,107.8	37.0	406.0	130.3	404.2	88.7	107.6	238.7	212.3	406.6	76.4	243.0
2011 Q3	2,119.8	35.7	412.1	130.5	405.1	88.7	109.2	240.7	213.3	407.4	77.1	242.8
<i>percentage of value added</i>												
2010	100.0	1.7	18.9	6.2	19.0	4.4	5.3	11.2	10.1	19.6	3.7	-
<i>Chain-linked volumes (prices for the previous year)</i>												
<i>quarter-on-quarter percentage changes</i>												
2010 Q3	0.4	-0.4	1.0	-0.8	1.1	0.2	-1.6	0.4	0.9	0.2	0.0	0.5
2010 Q4	0.3	0.6	1.3	-1.2	0.3	0.8	-0.3	0.2	0.2	0.0	-0.2	-0.1
2011 Q1	0.7	1.4	1.2	1.4	1.2	-0.8	1.2	-0.2	1.0	0.3	0.0	1.0
2011 Q2	0.2	0.3	0.6	-0.2	0.1	0.3	0.1	0.3	0.5	0.1	-0.6	-0.4
2011 Q3	0.1	0.3	0.3	-0.5	0.0	0.0	0.5	0.1	0.1	0.2	0.2	0.2
<i>annual percentage changes</i>												
2007	3.2	6.2	3.8	1.8	3.3	6.2	6.4	1.5	5.2	1.3	2.1	0.9
2008	0.6	2.1	-2.3	-1.2	1.1	2.7	1.0	1.2	1.8	2.0	1.5	-1.3
2009	-4.3	-0.4	-13.3	-6.8	-5.4	0.8	3.8	0.6	-6.6	1.4	0.9	-4.1
2010	2.0	2.1	6.6	-4.4	2.5	2.5	0.9	0.4	1.7	0.8	0.1	1.0
2010 Q3	2.1	1.2	6.2	-3.3	3.1	3.0	-1.0	0.7	2.4	0.8	0.1	2.1
2010 Q4	2.1	2.2	6.7	-2.9	2.9	2.7	-0.5	0.5	2.4	0.3	-0.5	1.3
2011 Q1	2.2	1.0	5.7	0.7	3.4	1.0	-0.9	0.5	3.0	0.6	-0.1	3.7
2011 Q2	1.7	1.9	4.2	-0.8	2.7	0.5	-0.7	0.7	2.6	0.7	-0.9	1.0
2011 Q3	1.4	2.6	3.5	-0.6	1.7	0.4	1.5	0.3	1.8	0.6	-0.6	0.7
<i>contributions to quarter-on-quarter percentage changes in value added; percentage points</i>												
2010 Q3	0.4	0.0	0.2	0.0	0.2	0.0	-0.1	0.0	0.1	0.0	0.0	-
2010 Q4	0.3	0.0	0.2	-0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	-
2011 Q1	0.7	0.0	0.2	0.1	0.2	0.0	0.1	0.0	0.1	0.1	0.0	-
2011 Q2	0.2	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-
2011 Q3	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-
<i>contributions to annual percentage changes in value added; percentage points</i>												
2007	3.2	0.1	0.8	0.1	0.6	0.3	0.3	0.2	0.5	0.2	0.1	-
2008	0.6	0.0	-0.5	-0.1	0.2	0.1	0.0	0.1	0.2	0.4	0.1	-
2009	-4.3	0.0	-2.6	-0.5	-1.0	0.0	0.2	0.1	-0.7	0.3	0.0	-
2010	2.0	0.0	1.2	-0.3	0.5	0.1	0.1	0.1	0.2	0.2	0.0	-
2010 Q3	2.1	0.0	1.1	-0.2	0.6	0.1	-0.1	0.1	0.2	0.2	0.0	-
2010 Q4	2.1	0.0	1.2	-0.2	0.5	0.1	0.0	0.1	0.2	0.1	0.0	-
2011 Q1	2.2	0.0	1.1	0.0	0.7	0.0	0.0	0.1	0.3	0.1	0.0	-
2011 Q2	1.7	0.0	0.8	-0.1	0.5	0.0	0.0	0.1	0.3	0.1	0.0	-
2011 Q3	1.4	0.0	0.7	0.0	0.3	0.0	0.1	0.0	0.2	0.1	0.0	-

Sources: Eurostat and ECB calculations.

## 5.2 Output and demand

(annual percentage changes, unless otherwise indicated)

### 3. Industrial production

	Total		Industry excluding construction								Construction	
	% of total in 2005	Total (s.a.; index: 2005 = 100)	Total	Industry excluding construction and energy							Energy	
				Manu- facturing	Total	Intermediate goods	Capital goods	Consumer goods				
								Total	Durable	Non-durable		
1	2	3	4	5	6	7	8	9	10	11	12	
2008	-2.4	106.5	-1.6	-1.7	-1.8	-3.4	0.0	-1.9	-5.2	-1.3	0.2	-5.1
2009	-13.6	90.8	-14.8	-15.9	-16.0	-19.0	-20.9	-4.9	-17.3	-2.9	-5.3	-7.8
2010	4.1	97.5	7.4	7.8	7.8	10.1	9.1	3.4	2.5	3.5	3.8	-8.1
2010 Q4	4.5	100.1	8.0	8.4	8.5	7.9	13.9	3.0	2.0	3.1	4.9	-9.2
2011 Q1	4.6	101.1	6.6	8.2	8.2	9.0	13.2	1.4	2.9	1.2	-2.3	-2.3
Q2	2.2	101.3	4.2	5.4	5.5	4.3	9.4	2.3	1.1	2.4	-5.4	-4.9
Q3	3.6	101.8	4.0	4.9	4.9	3.8	9.8	0.9	1.9	0.8	-3.2	1.6
2011 June	-0.3	100.8	2.8	3.6	3.4	3.1	7.0	0.4	-2.7	0.9	-3.7	-11.0
July	4.0	101.7	4.3	5.2	5.2	4.3	11.7	-0.2	4.3	-0.7	-4.1	2.4
Aug.	5.3	102.9	6.0	7.1	7.2	5.4	12.9	3.0	3.0	3.1	-2.1	2.2
Sep.	1.8	100.8	2.2	2.9	2.9	2.2	5.9	0.2	-1.0	0.3	-3.4	0.5
Oct.	0.3	100.6	1.0	1.8	1.8	0.3	4.8	0.3	-3.1	0.9	-5.0	-2.4
Nov.	0.2	100.7	0.1	1.0	1.1	-0.2	4.7	-1.5	-3.0	-1.2	-6.4	0.1
<i>month-on-month percentage changes (s.a.)</i>												
2011 June	-1.3	-	-0.7	-1.1	-0.8	-0.8	-1.5	-0.7	-2.6	-0.8	1.1	-1.2
July	1.6	-	0.8	0.7	0.8	0.6	2.8	-0.2	3.5	-0.7	0.2	1.7
Aug.	0.9	-	1.2	1.5	1.1	1.4	2.2	0.9	-0.3	1.7	1.0	-0.2
Sep.	-1.8	-	-2.0	-2.5	-1.7	-2.2	-3.8	-1.0	-3.4	-1.4	-1.7	-1.4
Oct.	-0.4	-	-0.2	-0.1	-0.2	-0.9	0.9	-0.1	-1.1	0.4	-0.6	-1.4
Nov.	0.3	-	0.1	0.1	-0.1	0.6	0.3	-0.6	-0.4	-0.8	-0.1	0.7

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

	Industrial new orders		Industrial turnover		Retail sales (including automotive fuel)							New passenger car registrations		
	Manufacturing <sup>1)</sup> (current prices)		Manufacturing (current prices)		Current prices	Constant prices						Total (s.a.; thousands) <sup>2)</sup>	Total	
	Total (s.a.; index: 2005 = 100)	Total	Total (s.a.; index: 2005 = 100)	Total	Total	Total (s.a.; index: 2005 = 100)	Total	Food, beverages, tobacco	Non-food		Fuel			
									Textiles, clothing, footwear	Household equipment				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	
2009	87.3	-22.7	95.6	-18.3	-4.3	100.6	-2.5	-1.7	-2.2	-1.8	-3.9	-5.7	925	3.3
2010	102.7	17.6	105.3	10.2	2.1	101.4	0.8	0.5	1.7	2.6	0.7	-2.9	843	-8.5
2011	.	.	.	.	1.6	100.8	-0.6	-0.9	-0.1	.	.	.	838	-1.1
2011 Q1	112.1	18.6	114.6	13.7	2.1	101.3	0.1	-1.1	1.2	-0.2	1.7	-1.3	867	-3.1
Q2	114.5	11.6	114.7	9.8	1.7	100.9	-0.5	-0.5	0.0	1.7	-1.2	-3.6	825	-1.8
Q3	111.2	5.4	115.2	8.8	1.7	100.9	-0.5	-0.8	0.1	-2.3	-0.1	-4.2	824	2.9
Q4	.	.	.	.	0.9	100.2	-1.3	-1.1	-1.3	.	.	.	835	-1.7
2011 July	112.9	8.9	115.4	9.8	1.7	101.0	-0.4	-2.4	1.7	2.3	1.5	-5.4	817	2.2
Aug.	114.9	6.0	116.6	10.3	2.1	101.1	-0.1	0.1	0.4	-1.1	-1.3	-2.9	823	6.1
Sep.	105.9	1.6	113.6	6.6	1.5	100.5	-1.2	-0.1	-1.9	-8.4	-0.4	-4.2	833	1.3
Oct.	107.5	1.5	113.7	4.8	1.9	100.6	-0.7	-0.4	-1.0	-4.1	-0.4	-4.3	822	-0.6
Nov.	106.3	-2.5	114.6	3.8	1.0	100.2	-1.5	-1.5	-1.2	-4.4	-1.4	-3.7	827	-3.3
Dec.	.	.	.	.	0.0	99.8	-1.6	-1.3	-1.5	.	.	.	857	-1.1
<i>month-on-month percentage changes (s.a.)</i>														
2011 Aug.	-	1.7	-	1.1	0.1	-	0.0	0.3	-0.2	-1.5	-0.7	1.1	-	0.8
Sep.	-	-7.9	-	-2.6	-0.4	-	-0.6	0.1	-0.8	-4.2	0.0	-0.8	-	1.2
Oct.	-	1.5	-	0.1	0.6	-	0.1	0.1	0.3	2.0	0.1	-1.2	-	-1.3
Nov.	-	-1.1	-	0.8	-0.6	-	-0.4	-0.8	-0.1	-0.4	-0.7	-0.3	-	0.6
Dec.	-	.	-	.	-0.5	-	-0.4	-0.2	-0.1	.	.	.	-	3.6

Sources: Eurostat, except columns 13 and 14 in Table 4 in Section 5.2 (which comprise ECB calculations based on data from the European Automobile Manufacturers' Association).

1) Includes manufacturing industries working mainly on the basis of orders, which represented 61.2% of total manufacturing in 2005.

2) 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> (%)	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
2008	93.5	-8.4	-13.4	10.8	-1.0	82.0	-18.4	-10.1	-25.4	23.9	-14.1
2009	80.2	-28.7	-56.7	14.8	-14.7	70.8	-24.8	-7.0	-26.1	55.3	-10.7
2010	100.5	-4.7	-24.7	0.8	11.4	76.7	-14.2	-5.3	-12.3	31.2	-8.1
2011	101.0	0.1	-6.9	2.3	9.4	80.3	-14.5	-7.5	-18.2	23.3	-9.2
2010 Q4	105.3	2.4	-9.8	-0.7	16.3	79.0	-10.8	-5.6	-9.2	21.4	-7.1
2011 Q1	106.9	6.1	-2.1	-1.8	18.7	80.7	-11.0	-6.2	-10.0	20.1	-7.5
Q2	105.2	4.0	-2.0	-0.7	13.1	80.9	-10.7	-6.7	-12.6	15.2	-8.3
Q3	98.4	-2.8	-9.0	4.5	5.2	80.0	-15.9	-7.4	-21.8	24.1	-10.1
Q4	93.6	-7.0	-14.6	7.0	0.6	79.8	-20.6	-9.7	-28.4	33.8	-10.8
2011 Aug.	98.1	-2.9	-9.5	4.9	5.9	-	-16.8	-7.3	-23.5	25.7	-10.5
Sep.	94.6	-6.0	-12.3	6.0	0.2	-	-19.3	-8.9	-27.3	30.0	-11.0
Oct.	94.4	-6.6	-13.5	6.5	0.2	79.6	-20.1	-9.1	-28.7	32.7	-10.0
Nov.	93.5	-7.3	-14.2	7.1	-0.5	-	-20.5	-9.2	-28.8	33.9	-10.2
Dec.	92.8	-7.2	-16.2	7.4	2.0	-	-21.3	-10.7	-27.7	34.8	-12.2
2012 Jan.	93.4	-7.2	-16.8	6.5	1.8	79.9	-20.7	-10.9	-27.4	33.1	-11.6
	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
2008	-14.2	-20.7	-7.7	-10.0	-11.0	15.8	-3.3	0.4	-3.8	0.5	4.7
2009	-33.1	-42.1	-24.1	-15.5	-21.4	9.8	-15.4	-15.8	-20.8	-18.2	-8.5
2010	-28.8	-39.3	-18.4	-4.1	-6.6	7.2	1.6	4.5	1.9	3.5	8.0
2011	-27.4	-34.9	-20.0	-5.5	-5.8	11.1	0.5	5.4	2.1	5.4	8.6
2010 Q4	-27.6	-36.5	-18.8	0.6	0.5	7.2	8.4	8.4	6.1	7.7	11.5
2011 Q1	-27.8	-38.2	-17.3	-0.9	-0.5	8.1	5.9	10.1	7.6	9.8	12.9
Q2	-26.9	-33.8	-20.0	-2.4	-1.6	9.7	4.1	9.5	7.1	9.7	11.6
Q3	-27.7	-35.0	-20.4	-7.5	-7.3	12.8	-2.3	3.5	0.3	3.7	6.6
Q4	-27.4	-32.5	-22.3	-11.1	-13.6	14.0	-5.7	-1.6	-6.4	-1.8	3.4
2011 Aug.	-26.0	-34.1	-17.9	-8.8	-7.8	13.6	-5.0	3.4	-0.2	3.6	6.9
Sep.	-29.8	-37.2	-22.4	-9.9	-11.1	14.4	-4.1	-0.3	-3.7	0.3	2.4
Oct.	-27.3	-33.6	-21.1	-9.9	-12.3	13.7	-3.8	-0.2	-3.8	-0.9	4.0
Nov.	-26.0	-30.5	-21.4	-11.2	-14.1	13.8	-5.8	-2.0	-7.0	-1.8	2.8
Dec.	-28.9	-33.5	-24.4	-12.2	-14.5	14.4	-7.6	-2.6	-8.4	-2.7	3.3
2012 Jan.	-28.3	-33.6	-23.0	-15.5	-18.3	16.1	-12.0	-0.6	-7.3	0.5	4.9

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 for the economic sentiment indicator of above (below) 100 indicate above-average (below-average) economic sentiment, calculated for the period 1990 to 2010.
- 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>

(quarterly data seasonally adjusted; annual data unadjusted)

### 1. Employment

	By employment status			By economic activity									
	Total	Employees	Self-employed	Agriculture, forestry and fishing	Manufacturing, energy and utilities	Construction	Trade, transport, accommodation and food services	Information and communication	Finance and insurance	Real estate	Professional, business and support services	Public administration, education, health and social work	Arts, entertainment and other services
	1	2	3	4	5	6	7	8	9	10	11	12	13
Persons employed													
<i>levels (thousands)</i>													
2010	146,433	125,205	21,228	5,087	23,079	10,302	35,740	3,959	4,142	1,289	17,595	34,497	10,743
<i>percentage of total persons employed</i>													
2010	100.0	85.5	14.5	3.5	15.8	7.0	24.4	2.7	2.8	0.9	12.0	23.6	7.3
<i>annual percentage changes</i>													
2008	0.8	1.0	-0.3	-1.8	0.2	-2.2	0.9	1.0	0.3	1.3	3.3	1.2	1.2
2009	-1.8	-1.8	-1.8	-2.2	-5.0	-6.8	-1.8	-0.8	0.1	-2.7	-2.5	1.4	1.1
2010	-0.5	-0.5	-0.7	-0.9	-3.2	-3.7	-0.7	-1.0	-0.8	-0.5	1.8	1.1	0.7
2010 Q4	0.1	0.2	-0.7	-1.4	-1.2	-3.9	0.2	-0.6	-1.0	-0.2	2.8	0.8	1.0
2011 Q1	0.2	0.4	-0.9	-2.5	-0.2	-3.8	0.3	0.7	0.0	2.5	3.2	0.3	1.0
Q2	0.4	0.6	-0.8	-1.6	0.1	-3.2	0.9	1.2	-0.1	1.9	3.2	-0.1	0.4
Q3	0.3	0.5	-1.1	-2.0	0.4	-4.1	1.1	1.2	0.1	0.0	2.1	-0.1	0.9
<i>quarter-on-quarter percentage changes</i>													
2010 Q4	0.1	0.2	-0.3	-0.3	0.1	-1.1	0.3	0.1	-0.1	-0.1	0.5	0.1	0.4
2011 Q1	0.1	0.1	0.0	-1.6	0.2	-1.2	0.0	1.0	0.5	1.7	0.9	-0.2	0.4
Q2	0.2	0.3	-0.3	0.8	0.1	-0.3	0.5	0.3	-0.2	-0.5	0.9	-0.1	-0.1
Q3	-0.1	-0.1	-0.5	-1.0	0.0	-1.6	0.2	-0.2	-0.1	-1.0	-0.3	0.0	0.2
Hours worked													
<i>levels (millions)</i>													
2010	231,190	185,633	45,556	10,516	36,433	18,211	60,091	6,363	6,521	1,974	26,791	49,145	15,145
<i>percentage of total hours worked</i>													
2010	100.0	80.3	19.7	4.5	15.8	7.9	26.0	2.8	2.8	0.9	11.6	21.3	6.6
<i>annual percentage changes</i>													
2008	0.8	1.2	-0.7	-2.1	-0.4	-2.5	1.0	1.6	1.6	1.3	3.5	1.6	1.6
2009	-3.4	-3.6	-2.8	-3.1	-8.9	-8.3	-2.9	-1.3	-1.5	-3.7	-3.8	1.1	-0.3
2010	0.0	0.1	-0.2	-0.7	-0.9	-3.6	-0.3	-0.5	-0.3	0.9	2.5	1.3	0.1
2010 Q4	0.1	0.3	-0.5	-1.0	1.0	-4.4	-0.1	-1.0	-1.3	0.9	2.8	0.6	0.3
2011 Q1	0.8	1.0	-0.1	-0.2	2.1	-2.3	0.1	0.9	0.1	3.1	3.3	0.5	0.8
Q2	0.3	0.6	-0.7	-2.5	1.0	-3.4	0.5	1.2	-0.4	0.0	2.9	0.1	0.2
Q3	0.6	0.8	-0.3	-2.9	1.1	-3.7	1.2	2.1	-0.2	-0.4	2.5	0.1	1.8
<i>quarter-on-quarter percentage changes</i>													
2010 Q4	-0.1	-0.1	0.0	-0.2	0.3	-1.7	0.0	0.1	-0.5	0.3	0.5	-0.2	0.3
2011 Q1	0.6	0.7	0.2	-0.7	0.7	0.2	0.5	1.4	1.1	1.0	1.5	0.3	0.7
Q2	-0.1	0.0	-0.6	-0.4	-0.1	-1.1	0.2	0.3	-0.5	-1.7	0.3	0.0	-0.7
Q3	0.1	0.2	0.1	-1.6	0.2	-1.1	0.6	0.3	-0.3	-0.1	0.2	0.1	1.4
Hours worked per person employed													
<i>levels (thousands)</i>													
2010	1,579	1,483	2,146	2,067	1,579	1,768	1,681	1,607	1,575	1,531	1,523	1,425	1,410
<i>annual percentage changes</i>													
2008	0.0	0.2	-0.4	-0.2	-0.5	-0.2	0.1	0.7	1.3	0.0	0.2	0.4	0.4
2009	-1.7	-1.8	-1.0	-0.9	-4.1	-1.6	-1.2	-0.5	-1.6	-1.1	-1.4	-0.3	-1.3
2010	0.5	0.5	0.5	0.2	2.4	0.2	0.4	0.5	0.6	1.4	0.6	0.1	-0.6
2010 Q4	0.0	0.1	0.1	0.4	2.2	-0.5	-0.4	-0.4	-0.3	1.0	0.0	-0.2	-0.7
2011 Q1	0.5	0.6	0.7	2.4	2.3	1.5	-0.1	0.2	0.1	0.6	0.1	0.3	-0.2
Q2	-0.1	0.0	0.1	-0.9	0.9	-0.1	-0.4	-0.1	-0.2	-1.8	-0.3	0.2	-0.1
Q3	0.3	0.2	0.8	-0.9	0.7	0.5	0.1	0.9	-0.3	-0.4	0.4	0.3	0.9
<i>quarter-on-quarter percentage changes</i>													
2010 Q4	3.1	3.6	1.5	-2.7	4.6	0.6	3.0	3.9	4.0	2.4	6.0	3.3	2.0
2011 Q1	0.6	0.8	-0.8	-1.7	0.5	0.3	0.4	1.0	1.9	0.7	0.2	1.7	0.6
Q2	-2.2	-3.0	1.3	4.2	-2.7	0.6	-2.0	-4.1	-4.1	-3.8	-3.9	-3.5	-1.4
Q3	-1.1	-1.0	-1.3	-0.8	-1.4	-1.0	-1.1	0.3	-1.5	0.6	-1.6	-1.3	-0.3

Source: ECB calculations based on Eurostat data.

1) Data for employment are based on the ESA 95.

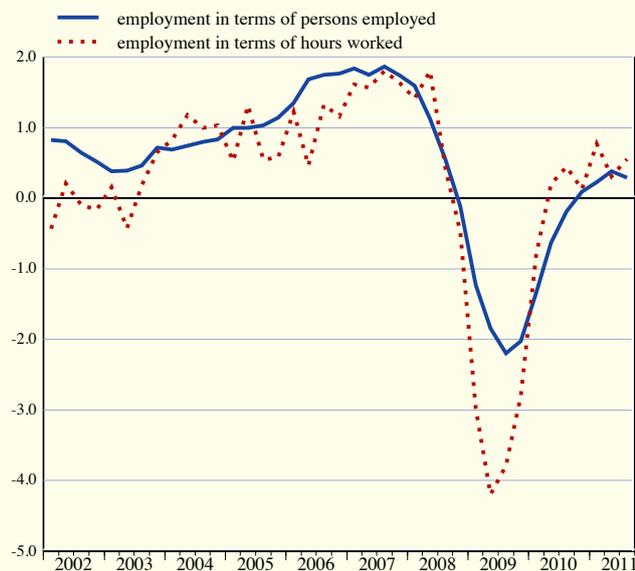
## 5.3 Labour markets

(seasonally adjusted, unless otherwise indicated)

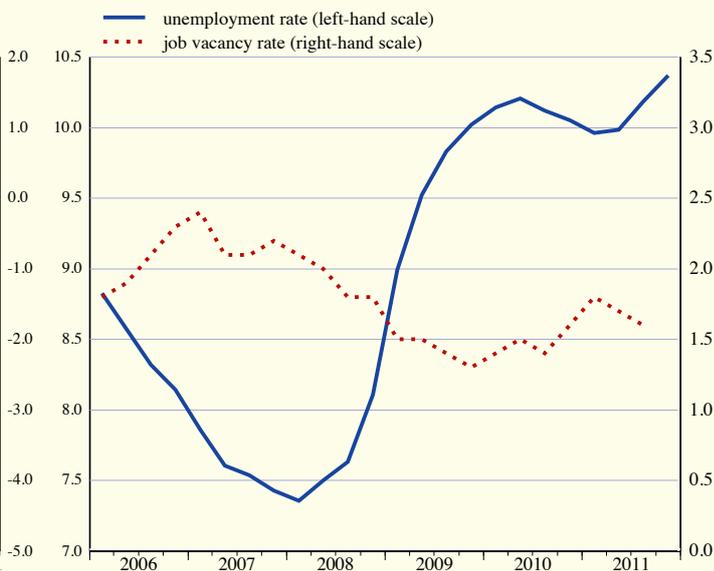
### 2. Unemployment and job vacancies<sup>1)</sup>

	Unemployment										Job vacancy rate <sup>2)</sup>
	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 in 2010	100.0	79.5		20.5		54.0		46.0		% of total posts	
	1	2	3	4	5	6	7	8	9	10	11
2008	11.972	7.6	9.294	6.6	2.678	16.0	6.048	7.0	5.924	8.5	1.9
2009	15.049	9.6	11.766	8.4	3.283	20.3	8.143	9.4	6.905	9.8	1.4
2010	15.924	10.1	12.651	8.9	3.273	20.9	8.590	10.0	7.333	10.3	1.5
2011	15.981	10.1	12.769	9.0	3.212	20.8	8.506	9.9	7.475	10.4	.
2010 Q4	15.802	10.1	12.609	8.9	3.192	20.6	8.445	9.8	7.357	10.3	1.6
2011 Q1	15.668	10.0	12.486	8.8	3.182	20.6	8.340	9.7	7.329	10.3	1.8
Q2	15.747	10.0	12.573	8.8	3.173	20.6	8.377	9.7	7.369	10.3	1.7
Q3	16.091	10.2	12.884	9.0	3.207	20.8	8.523	9.9	7.568	10.6	1.6
Q4	16.418	10.4	13.132	9.2	3.285	21.3	8.786	10.2	7.632	10.6	.
2011 July	15.975	10.1	12.783	9.0	3.192	20.7	8.460	9.8	7.516	10.5	-
Aug.	16.054	10.2	12.867	9.0	3.187	20.7	8.495	9.9	7.559	10.5	-
Sep.	16.245	10.3	13.003	9.1	3.241	21.0	8.614	10.0	7.630	10.6	-
Oct.	16.335	10.3	13.078	9.2	3.257	21.1	8.729	10.1	7.606	10.6	-
Nov.	16.449	10.4	13.141	9.2	3.307	21.4	8.782	10.2	7.667	10.7	-
Dec.	16.469	10.4	13.178	9.2	3.290	21.3	8.846	10.2	7.623	10.6	-

### C28 Employment - persons employed and hours worked (annual percentage changes)



### C29 Unemployment and job vacancy<sup>2)</sup> rates



Source: Eurostat.

- 1) Data for unemployment refer to persons and follow ILO recommendations.
- 2) Industry, construction and services (excluding households as employers and extra-territorial organisations and bodies); non-seasonally adjusted.
- 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.

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

#### 1. Euro area – revenue

	Current revenue											Capital revenue		Memo item: Fiscal burden <sup>2)</sup>
	Total	Direct taxes			Indirect taxes	Social contributions			Sales	Capital taxes				
		Households	Corporations	Received by EU institutions		Employers	Employees	Employers		Employees				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	
2002	44.9	44.6	11.9	9.0	2.8	13.2	0.4	15.6	8.1	4.6	2.2	0.3	0.3	40.9
2003	44.9	44.2	11.5	8.8	2.7	13.2	0.4	15.7	8.2	4.6	2.2	0.6	0.5	40.9
2004	44.5	44.0	11.5	8.5	2.9	13.2	0.3	15.5	8.1	4.5	2.2	0.5	0.4	40.6
2005	44.8	44.3	11.7	8.6	3.0	13.3	0.3	15.4	8.1	4.5	2.3	0.5	0.3	40.7
2006	45.3	44.9	12.3	8.8	3.4	13.4	0.3	15.3	8.0	4.5	2.3	0.4	0.3	41.3
2007	45.3	45.0	12.7	8.9	3.6	13.3	0.3	15.1	8.0	4.4	2.3	0.3	0.3	41.3
2008	45.1	44.8	12.5	9.1	3.2	12.9	0.3	15.3	8.1	4.5	2.3	0.3	0.3	40.9
2009	44.8	44.5	11.6	9.2	2.3	12.8	0.3	15.8	8.3	4.5	2.5	0.4	0.4	40.5
2010	44.7	44.4	11.6	8.9	2.5	12.9	0.3	15.6	8.2	4.5	2.5	0.3	0.3	40.4

#### 2. Euro area – expenditure

	Current expenditure									Capital expenditure			Memo item: Primary expenditure <sup>3)</sup>	
	Total	Compensation of employees	Intermediate consumption	Interest	Current transfers	Social payments		Subsidies	Paid by EU institutions	Investment	Capital transfers	Paid by EU institutions		
						7	8							
1	2	3	4	5	6	7	8	9	10	11	12	13	14	
2002	47.6	43.8	10.5	4.9	3.5	24.9	22.0	1.9	0.5	3.9	2.4	1.4	0.1	44.1
2003	48.0	44.1	10.6	4.9	3.3	25.2	22.3	1.8	0.5	4.0	2.5	1.4	0.1	44.7
2004	47.4	43.5	10.5	5.0	3.1	24.9	22.1	1.7	0.5	3.9	2.5	1.5	0.1	44.3
2005	47.3	43.4	10.5	5.0	3.0	24.9	22.1	1.7	0.5	3.9	2.5	1.4	0.0	44.3
2006	46.7	42.8	10.3	5.0	2.9	24.6	21.8	1.6	0.5	3.9	2.5	1.4	0.0	43.8
2007	46.0	42.2	10.1	5.0	3.0	24.2	21.4	1.6	0.4	3.8	2.6	1.2	0.0	43.1
2008	47.2	43.3	10.3	5.2	3.0	24.8	21.9	1.6	0.4	3.9	2.6	1.3	0.0	44.2
2009	51.2	46.9	11.0	5.7	2.9	27.4	24.2	1.8	0.4	4.3	2.8	1.4	0.0	48.4
2010	50.9	46.6	10.8	5.6	2.8	27.3	24.2	1.8	0.4	4.4	2.5	1.9	0.0	48.1

#### 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
2002	-2.7	-2.3	-0.5	-0.3	0.3	0.8	20.2	10.5	4.9	5.1	1.9	2.2	8.1	12.1
2003	-3.1	-2.5	-0.5	-0.2	0.1	0.2	20.5	10.6	4.9	5.2	1.9	2.2	8.1	12.3
2004	-2.9	-2.5	-0.4	-0.3	0.2	0.2	20.4	10.5	5.0	5.1	1.9	2.2	8.1	12.3
2005	-2.5	-2.2	-0.3	-0.2	0.2	0.5	20.4	10.5	5.0	5.1	1.9	2.3	8.0	12.4
2006	-1.4	-1.5	-0.1	-0.2	0.4	1.5	20.3	10.3	5.0	5.2	1.9	2.3	7.9	12.4
2007	-0.7	-1.2	0.0	-0.1	0.6	2.3	20.0	10.1	5.0	5.1	1.9	2.3	7.7	12.3
2008	-2.1	-2.3	-0.2	-0.2	0.5	0.9	20.5	10.3	5.2	5.3	2.0	2.3	8.0	12.6
2009	-6.4	-5.2	-0.5	-0.3	-0.4	-3.5	22.2	11.0	5.7	5.8	2.1	2.5	8.6	13.6
2010	-6.2	-5.1	-0.7	-0.3	-0.1	-3.4	22.0	10.8	5.6	5.8	2.1	2.5	8.4	13.6

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

	BE	DE	EE	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	17
2007	-0.3	0.2	2.4	0.1	-6.5	1.9	-2.7	-1.6	3.5	3.7	-2.4	0.2	-0.9	-3.1	0.0	-1.8	5.3
2008	-1.3	-0.1	-2.9	-7.3	-9.8	-4.5	-3.3	-2.7	0.9	3.0	-4.6	0.5	-0.9	-3.6	-1.9	-2.1	4.3
2009	-5.8	-3.2	-2.0	-14.2	-15.8	-11.2	-7.5	-5.4	-6.1	-0.9	-3.7	-5.6	-4.1	-10.1	-6.1	-8.0	-2.5
2010	-4.1	-4.3	0.2	-31.3	-10.6	-9.3	-7.1	-4.6	-5.3	-1.1	-3.6	-5.1	-4.4	-9.8	-5.8	-7.7	-2.5

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

- 1) Data refer to the Euro 17. The concepts "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				Other creditors <sup>3)</sup>
		Currency and deposits	Loans	Short-term securities	Long-term securities	Domestic creditors <sup>2)</sup>				
						Total	MFIs	Other financial corporations	Other sectors	
1	2	3	4	5	6	7	8	9	10	
2001	68.2	2.8	12.4	4.0	48.9	42.7	20.8	11.2	10.7	25.4
2002	68.0	2.7	11.8	4.6	48.9	41.0	19.6	10.8	10.5	27.0
2003	69.1	2.1	12.4	5.1	49.6	40.3	19.8	11.3	9.2	28.9
2004	69.5	2.2	12.1	5.0	50.3	38.8	18.9	11.1	8.8	30.7
2005	70.4	2.4	12.2	4.7	51.2	37.1	18.1	11.2	7.7	33.3
2006	68.6	2.5	11.9	4.1	50.2	35.0	18.3	9.3	7.4	33.6
2007	66.3	2.2	11.2	4.2	48.7	32.7	17.1	8.5	7.1	33.6
2008	70.1	2.3	11.5	6.7	49.6	33.1	17.8	7.8	7.6	36.9
2009	79.8	2.5	12.6	8.6	56.2	37.3	20.6	8.9	7.8	42.5
2010	85.3	2.4	15.3	7.7	60.0	40.5	23.4	9.6	7.5	44.8

### 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 and up to 5 years	Over 5 years	Euro or participating currencies	Other currencies
2001	68.2	56.6	6.0	4.7	0.8	7.0	61.1	5.3	13.7	26.6	27.9	66.8	1.3
2002	68.0	56.3	6.2	4.7	0.8	7.6	60.4	5.2	15.5	25.3	27.2	66.8	1.1
2003	69.1	56.6	6.5	5.0	1.0	7.8	61.3	5.0	14.9	26.0	28.2	68.3	0.9
2004	69.5	56.5	6.6	5.1	1.3	7.8	61.7	4.6	14.8	26.2	28.5	68.4	1.1
2005	70.4	57.1	6.7	5.2	1.4	7.8	62.6	4.6	14.9	25.7	29.8	69.2	1.2
2006	68.6	55.4	6.5	5.4	1.4	7.4	61.2	4.3	14.4	24.2	30.0	67.8	0.8
2007	66.3	53.5	6.2	5.3	1.4	7.4	58.9	4.3	15.0	23.4	27.8	65.9	0.4
2008	70.1	56.9	6.6	5.3	1.3	10.2	59.9	4.9	18.7	23.1	28.3	69.4	0.7
2009	79.8	64.7	7.6	5.8	1.7	12.3	67.5	5.0	21.1	26.7	32.0	79.1	0.7
2010	85.3	69.3	8.3	5.9	1.9	13.1	72.2	5.2	24.0	28.1	33.3	84.5	0.8

### 3. Euro area countries

	BE	DE	EE	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	17
2007	84.1	65.2	3.7	24.8	107.4	36.2	64.2	103.1	58.8	6.7	62.1	45.3	60.2	68.3	23.1	29.6	35.2
2008	89.3	66.7	4.5	44.2	113.0	40.1	68.2	105.8	48.9	13.7	62.2	58.5	63.8	71.6	21.9	27.8	33.9
2009	95.9	74.4	7.2	65.2	129.3	53.8	79.0	115.5	58.5	14.8	67.8	60.8	69.5	83.0	35.3	35.5	43.3
2010	96.2	83.2	6.7	92.5	144.9	61.0	82.3	118.4	61.5	19.1	69.0	62.9	71.8	93.3	38.8	41.0	48.3

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

- 1) Data refer to the Euro 17. Gross general government debt at nominal value and consolidated between sub-sectors of government. Holdings by non-resident governments are not consolidated. Intergovernmental lending in the context of the financial crisis is 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.

## 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>6)</sup>
		Borrowing requirement <sup>2)</sup>	Valuation effects <sup>3)</sup>	Other changes in volume <sup>4)</sup>	Currency and deposits	Loans	Short-term securities	Long-term securities	Domestic creditors <sup>5)</sup>	MFI's	Other financial corporations	
	1	2	3	4	5	6	7	8	9	10	11	12
2002	2.1	2.7	-0.5	-0.1	0.0	-0.2	0.7	1.6	-0.3	-0.5	0.0	2.4
2003	3.1	3.3	-0.2	0.0	-0.6	0.9	0.6	2.1	0.5	0.8	0.8	2.6
2004	3.2	3.3	-0.1	0.0	0.2	0.1	0.1	2.7	0.1	-0.2	0.3	3.0
2005	3.3	3.1	0.2	0.0	0.3	0.5	-0.1	2.6	-0.4	-0.1	0.5	3.6
2006	1.7	1.4	0.1	0.1	0.2	0.3	-0.3	1.5	-0.3	1.1	-1.4	2.0
2007	1.2	1.2	0.0	0.0	-0.1	0.0	0.3	1.0	-0.5	-0.3	-0.3	1.6
2008	5.3	5.2	0.1	0.0	0.1	0.5	2.6	2.0	1.1	1.0	-0.6	4.2
2009	7.2	7.5	-0.2	0.0	0.1	0.7	1.6	4.8	3.0	2.3	0.8	4.3
2010	7.6	7.7	-0.1	0.0	0.0	3.0	-0.7	5.2	4.2	3.3	1.0	3.3

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

	Change in debt	Deficit (-) / surplus (+) <sup>7)</sup>	Deficit-debt adjustment <sup>8)</sup>											
			Total	Transactions in main financial assets held by general government							Valuation effects	Exchange rate effects	Other changes in volume	Other <sup>9)</sup>
				Total	Currency and deposits	Loans	Securities <sup>10)</sup>	Shares and other equity	Privatisations	Equity injections				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
2002	2.1	-2.7	-0.6	0.1	0.1	0.0	0.0	-0.1	-0.4	0.1	-0.5	-0.1	-0.1	-0.1
2003	3.1	-3.1	0.0	0.1	0.1	0.0	0.0	0.1	-0.2	0.1	-0.2	-0.1	0.0	0.1
2004	3.2	-2.9	0.2	0.2	0.2	0.0	0.1	0.0	-0.5	0.2	-0.1	0.0	0.0	0.1
2005	3.3	-2.5	0.7	0.6	0.3	0.0	0.1	0.1	-0.3	0.2	0.2	0.0	0.0	-0.1
2006	1.7	-1.4	0.3	0.2	0.3	-0.1	0.2	-0.2	-0.4	0.1	0.1	0.0	0.1	-0.1
2007	1.2	-0.7	0.5	0.6	0.2	0.0	0.2	0.1	-0.3	0.2	0.0	0.0	0.0	-0.1
2008	5.3	-2.1	3.2	3.0	0.8	0.7	0.7	0.9	-0.1	0.7	0.1	0.0	0.0	0.0
2009	7.2	-6.4	0.8	1.0	0.3	0.0	0.3	0.5	-0.3	0.5	-0.2	0.0	0.0	0.1
2010	7.6	-6.2	1.3	1.7	0.0	0.5	1.1	0.1	0.0	0.2	-0.1	0.0	0.0	-0.3

Source: ECB.

- 1) Data refer to the Euro 17 and are partially estimated. Annual change in gross nominal consolidated debt is expressed as a percentage of GDP, i.e.  $[\text{debt}(t) - \text{debt}(t-1)] \div \text{GDP}(t)$ . Intergovernmental lending in the context of the financial crisis is consolidated.
- 2) The borrowing requirement is by definition equal to transactions in debt.
- 3) Includes, in addition to the impact of foreign exchange movements, effects arising from measurement at nominal value (e.g. premia or discounts on securities issued).
- 4) Includes, in particular, the impact of the reclassification of units and certain types of debt assumption.
- 5) Holders resident in the country whose government has issued the debt.
- 6) Includes residents of euro area countries other than the country whose government has issued the debt.
- 7) Including proceeds from sales of UMTS licences.
- 8) The difference between the annual change in gross nominal consolidated debt and the deficit as a percentage of GDP.
- 9) Mainly composed of transactions in other assets and liabilities (trade credits, other receivables/payables and financial derivatives).
- 10) 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 item: Fiscal burden <sup>2)</sup>
	1	2	Direct taxes	Indirect taxes	Social contributions	Sales	Property income	8	Capital taxes	
2005 Q3	43.4	42.7	11.2	12.5	15.1	2.2	0.7	0.7	0.3	39.2
2005 Q4	48.6	47.8	13.6	14.0	16.1	2.4	0.8	0.8	0.3	44.0
2006 Q1	42.6	42.1	10.4	12.8	15.1	2.2	0.8	0.4	0.3	38.6
2006 Q2	45.6	45.2	12.5	13.1	15.1	2.3	1.4	0.5	0.3	40.9
2006 Q3	43.6	43.1	11.8	12.4	15.1	2.2	0.8	0.5	0.3	39.5
2006 Q4	49.0	48.4	14.4	14.1	15.8	2.4	0.9	0.6	0.3	44.5
2007 Q1	42.3	41.9	10.4	12.8	14.7	2.2	0.9	0.4	0.3	38.3
2007 Q2	45.8	45.4	13.0	13.0	15.0	2.3	1.4	0.4	0.3	41.2
2007 Q3	43.6	43.1	12.3	12.3	14.8	2.2	0.8	0.5	0.3	39.6
2007 Q4	49.2	48.6	14.8	13.9	15.7	2.4	1.0	0.6	0.3	44.6
2008 Q1	42.5	42.2	10.9	12.3	14.8	2.3	1.1	0.3	0.2	38.2
2008 Q2	45.2	44.9	12.9	12.3	15.0	2.3	1.5	0.4	0.3	40.5
2008 Q3	43.3	43.0	12.2	12.0	15.0	2.2	0.8	0.4	0.3	39.5
2008 Q4	48.8	48.2	13.9	13.4	16.4	2.5	1.1	0.5	0.3	44.0
2009 Q1	42.5	42.4	10.4	12.0	15.5	2.5	1.1	0.1	0.2	38.2
2009 Q2	45.2	44.6	11.8	12.5	15.7	2.5	1.4	0.6	0.5	40.4
2009 Q3	42.7	42.3	11.0	11.9	15.5	2.4	0.7	0.4	0.3	38.7
2009 Q4	48.4	47.6	13.0	13.6	16.4	2.6	0.9	0.8	0.5	43.5
2010 Q1	42.2	42.0	10.1	12.1	15.5	2.5	0.9	0.2	0.3	38.0
2010 Q2	45.1	44.7	11.9	12.7	15.4	2.6	1.3	0.4	0.3	40.3
2010 Q3	42.9	42.5	11.0	12.4	15.2	2.4	0.7	0.3	0.3	38.9
2010 Q4	48.3	47.5	13.1	13.4	16.4	2.7	1.0	0.7	0.3	43.2
2011 Q1	42.8	42.5	10.5	12.4	15.3	2.5	1.0	0.3	0.3	38.5
2011 Q2	45.0	44.7	12.0	12.5	15.3	2.6	1.4	0.3	0.3	40.1
2011 Q3	43.7	43.4	11.4	12.6	15.3	2.4	0.8	0.3	0.3	39.6

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

	Total		Current expenditure						Capital expenditure			Deficit (-)/ surplus (+)	Primary deficit (-)/ surplus (+)
	1	2	Total	Compensation of employees	Intermediate consumption	Interest	Current transfers	Social benefits	Subsidies	Investment	Capital transfers		
2005 Q3	45.8	42.3	10.0	4.8	3.0	24.6	21.2	1.2	3.5	2.6	1.0	-2.4	0.6
2005 Q4	49.6	45.0	11.3	5.8	2.7	25.2	21.6	1.3	4.6	2.9	1.7	-1.0	1.8
2006 Q1	45.9	42.6	10.1	4.6	3.0	24.9	21.4	1.1	3.3	2.1	1.3	-3.3	-0.4
2006 Q2	45.8	42.5	10.3	4.9	3.1	24.1	21.1	1.1	3.4	2.4	1.0	-0.2	2.9
2006 Q3	45.3	41.8	9.8	4.7	2.9	24.3	20.9	1.2	3.6	2.6	1.0	-1.7	1.2
2006 Q4	49.4	44.3	10.8	5.8	2.7	25.1	21.3	1.3	5.1	2.9	2.2	-0.5	2.2
2007 Q1	44.9	41.5	9.9	4.5	2.9	24.1	20.7	1.1	3.4	2.2	1.2	-2.7	0.3
2007 Q2	45.1	41.7	10.0	4.9	3.2	23.6	20.6	1.1	3.4	2.5	0.9	0.8	4.0
2007 Q3	44.6	41.1	9.6	4.7	3.0	23.8	20.6	1.1	3.6	2.6	0.9	-1.0	1.9
2007 Q4	49.2	44.5	10.8	5.8	2.8	25.1	21.2	1.5	4.7	3.0	1.7	0.0	2.8
2008 Q1	45.5	42.0	9.9	4.7	3.0	24.4	20.8	1.2	3.5	2.2	1.2	-3.0	0.0
2008 Q2	45.9	42.4	10.2	5.0	3.3	23.9	20.8	1.1	3.5	2.5	1.0	-0.6	2.6
2008 Q3	45.7	42.1	9.7	4.9	3.1	24.4	21.2	1.1	3.6	2.6	1.0	-2.4	0.7
2008 Q4	51.3	46.4	11.2	6.2	2.8	26.3	22.2	1.4	4.8	3.2	1.7	-2.5	0.3
2009 Q1	49.6	45.9	10.7	5.4	2.9	26.9	22.9	1.3	3.7	2.5	1.2	-7.1	-4.2
2009 Q2	50.6	46.5	11.1	5.5	3.0	26.8	23.3	1.3	4.1	2.8	1.3	-5.4	-2.4
2009 Q3	49.9	45.9	10.5	5.3	2.9	27.1	23.5	1.3	4.1	2.8	1.2	-7.2	-4.3
2009 Q4	54.4	49.3	11.8	6.5	2.6	28.4	24.0	1.5	5.1	3.1	1.9	-5.9	-3.3
2010 Q1	50.5	46.7	10.7	5.2	2.8	27.9	23.6	1.4	3.8	2.3	1.5	-8.3	-5.5
2010 Q2	49.6	46.1	10.9	5.5	2.9	26.7	23.2	1.3	3.5	2.5	1.2	-4.5	-1.6
2010 Q3	50.4	45.2	10.2	5.3	2.8	26.9	23.2	1.3	5.2	2.5	2.7	-7.5	-4.7
2010 Q4	53.1	48.3	11.4	6.4	2.7	27.7	23.7	1.5	4.9	2.8	2.1	-4.8	-2.1
2011 Q1	48.7	45.7	10.4	5.2	2.9	27.1	23.1	1.3	3.0	2.1	0.9	-5.9	-2.9
2011 Q2	48.6	45.4	10.6	5.4	3.1	26.2	22.8	1.2	3.2	2.4	0.9	-3.6	-0.5
2011 Q3	47.8	44.7	10.0	5.2	3.0	26.5	23.0	1.2	3.1	2.3	0.8	-4.1	-1.1

Sources: ECB calculations based on Eurostat and national data.

- 1) Data refer to the Euro 17. The concepts "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, 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>

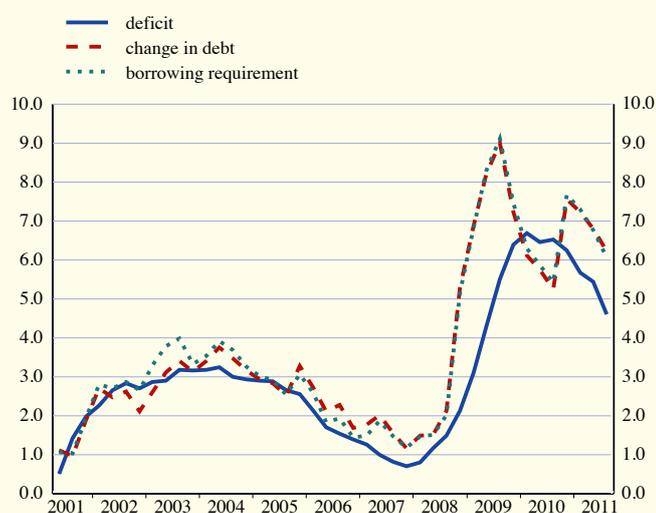
	Total 1	Financial instruments			
		Currency and deposits 2	Loans 3	Short-term securities 4	Long-term securities 5
2008 Q4	70.1	2.3	11.5	6.7	49.6
2009 Q1	73.8	2.3	11.8	7.9	51.8
Q2	77.0	2.4	12.2	8.4	54.0
Q3	78.9	2.4	12.4	9.2	54.9
Q4	79.8	2.5	12.6	8.6	56.2
2010 Q1	81.5	2.4	12.8	8.4	57.9
Q2	82.8	2.4	13.4	8.1	59.0
Q3	83.0	2.4	13.3	8.2	59.1
Q4	85.3	2.4	15.3	7.7	60.0
2011 Q1	86.3	2.4	15.1	7.7	61.0
Q2	87.2	2.4	14.9	7.8	62.0
Q3	86.8	2.4	15.1	8.0	61.4

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

	Change in debt 1	Deficit (-)/ surplus (+) 2	Deficit-debt adjustment								Memo item: 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	
2008 Q4	9.2	-2.5	6.7	5.5	0.6	2.5	0.4	2.1	0.2	1.0	9.0
2009 Q1	12.8	-7.1	5.7	6.7	5.2	-0.1	0.9	0.7	-0.5	-0.5	13.3
Q2	9.1	-5.4	3.7	3.2	2.3	-0.6	0.3	1.2	-0.4	0.9	9.5
Q3	5.0	-7.2	-2.3	-2.8	-3.1	0.6	-0.1	-0.3	0.2	0.3	4.7
Q4	2.4	-5.9	-3.5	-2.8	-2.9	-0.1	0.1	0.1	-0.2	-0.5	2.6
2010 Q1	8.1	-8.3	-0.1	0.7	0.8	0.0	-0.4	0.3	-0.3	-0.5	8.5
Q2	7.6	-4.5	3.2	3.2	2.0	1.1	-0.2	0.4	-0.1	0.0	7.7
Q3	3.0	-7.5	-4.5	-3.0	-2.3	-0.6	-0.1	0.1	0.0	-1.5	3.0
Q4	11.3	-4.8	6.5	5.9	-0.3	1.7	4.7	-0.2	0.0	0.6	11.3
2011 Q1	6.8	-5.9	0.9	0.9	2.0	-0.4	-0.4	-0.3	-0.2	0.2	7.0
Q2	6.0	-3.6	2.3	2.9	2.9	0.5	-0.4	-0.1	0.3	-0.8	5.7
Q3	0.8	-4.1	-3.3	-4.2	-3.8	-0.7	-0.2	0.6	0.5	0.3	0.3

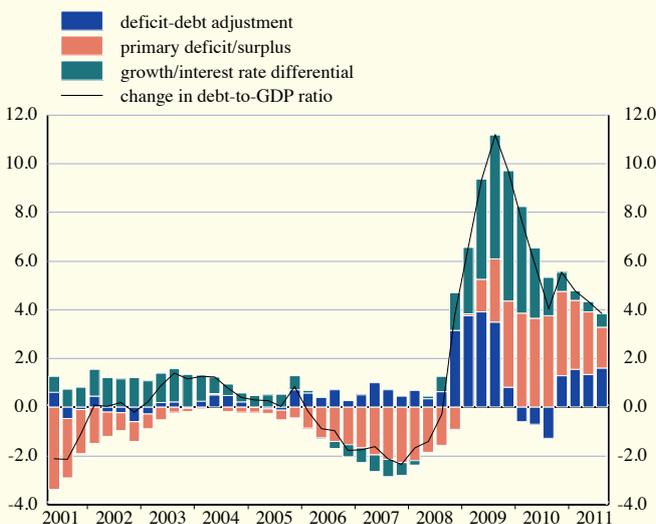
### C30 Deficit, borrowing requirement and change in debt

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



### C31 Maastricht debt

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



Sources: ECB calculations based on Eurostat and national data.

1) Data refer to the Euro 17. Intergovernmental lending in the context of the financial crisis is consolidated.

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
2008	-143.5	-21.8	42.1	-66.8	-97.0	10.0	-133.5	121.3	-231.1	261.4	-84.5	178.9	-3.4	12.2
2009	-25.9	36.0	35.1	-5.8	-91.2	7.3	-18.6	14.0	-102.8	261.4	21.1	-170.2	4.6	4.6
2010	-42.2	12.9	45.9	2.3	-103.3	5.5	-36.7	44.1	-49.9	148.0	17.4	-61.2	-10.3	-7.4
2010 Q3	-7.1	5.5	16.1	2.5	-31.2	0.8	-6.3	6.8	-52.2	11.0	6.3	46.8	-5.1	-0.5
Q4	3.4	5.5	10.5	4.3	-16.8	1.3	4.7	9.5	79.5	19.5	8.9	-96.8	-1.6	-14.2
2011 Q1	-30.2	-13.0	7.0	10.2	-34.5	2.4	-27.8	15.7	-9.9	128.5	-2.2	-89.1	-11.6	12.1
Q2	-21.0	-3.0	17.9	-14.0	-21.8	0.6	-20.4	18.4	-29.0	150.2	1.6	-108.9	4.5	2.0
Q3	-1.2	3.1	21.0	4.2	-29.5	1.8	0.6	9.8	-16.5	37.7	-15.4	0.3	3.8	-10.4
2010 Nov.	-3.4	-0.8	3.4	0.3	-6.2	0.5	-2.9	13.4	45.4	18.4	3.1	-53.5	0.0	-10.5
Dec.	3.0	0.6	3.9	0.1	-1.7	2.0	4.9	-5.8	42.7	-4.2	6.1	-49.2	-1.3	0.9
2011 Jan.	-19.9	-14.7	2.6	1.1	-8.9	0.4	-19.6	13.5	11.7	-28.9	-1.0	37.7	-6.0	6.0
Feb.	-9.3	-0.8	2.6	4.2	-15.2	2.1	-7.1	2.2	-27.9	93.6	0.8	-65.3	1.0	5.0
Mar.	-1.0	2.5	1.8	5.0	-10.3	-0.1	-1.1	0.0	6.3	63.9	-2.1	-61.5	-6.6	1.1
Apr.	-4.9	-3.9	4.2	1.7	-6.9	-0.1	-5.0	-4.0	-29.8	13.6	2.6	3.6	6.0	8.9
May	-15.9	0.3	5.6	-15.3	-6.6	0.4	-15.5	15.4	-5.0	45.1	-2.3	-19.4	-3.1	0.2
June	-0.2	0.5	8.1	-0.4	-8.3	0.3	0.1	7.0	5.8	91.5	1.2	-93.2	1.6	-7.1
July	1.4	3.8	7.4	1.2	-11.0	-0.1	1.3	-3.8	-17.2	-24.6	-0.8	40.1	-1.2	2.5
Aug.	-3.6	-4.2	5.5	3.4	-8.3	2.0	-1.5	1.4	7.7	25.6	-6.5	-28.7	3.4	0.1
Sep.	1.0	3.6	8.1	-0.3	-10.3	-0.1	0.9	12.2	-7.0	36.7	-8.1	-11.0	1.6	-13.1
Oct.	2.6	1.7	5.3	3.2	-7.6	1.5	4.1	-5.0	-7.6	-26.4	-0.9	31.0	-1.1	0.9
Nov.	1.0	6.4	2.6	1.5	-9.5	2.2	3.2	-3.6	-6.8	2.4	0.8	0.3	-0.2	0.4
<i>12-month cumulated transactions</i>														
2011 Nov.	-45.8	-4.1	57.6	5.3	-104.6	10.4	-35.3	29.5	-27.1	288.1	-10.0	-215.6	-5.9	5.8
<i>12-month cumulated transactions as a percentage of GDP</i>														
2011 Nov.	-0.5	0.0	0.6	0.1	-1.1	0.1	-0.4	0.3	-0.3	3.1	-0.1	-2.3	-0.1	0.1

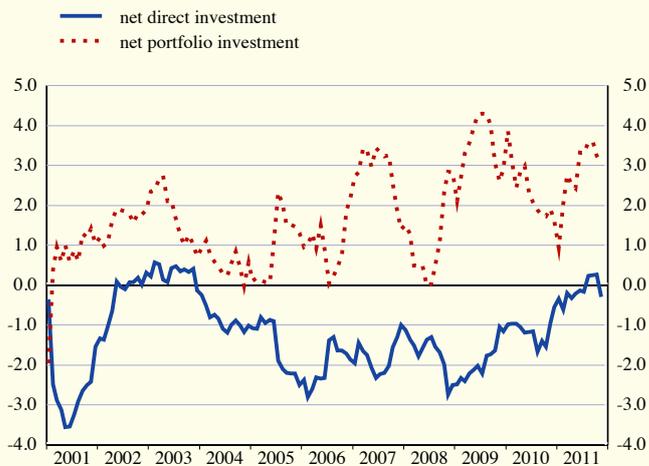
### C32 Euro area b.o.p.: current account

(seasonally adjusted; 12-month cumulated transactions as a percentage of GDP)



### C33 Euro area b.o.p.: direct and portfolio investment

(12-month cumulated transactions as a percentage of GDP)



Source: ECB.

1) The sign convention is explained in the General Notes.

## 7.2 Current and capital accounts

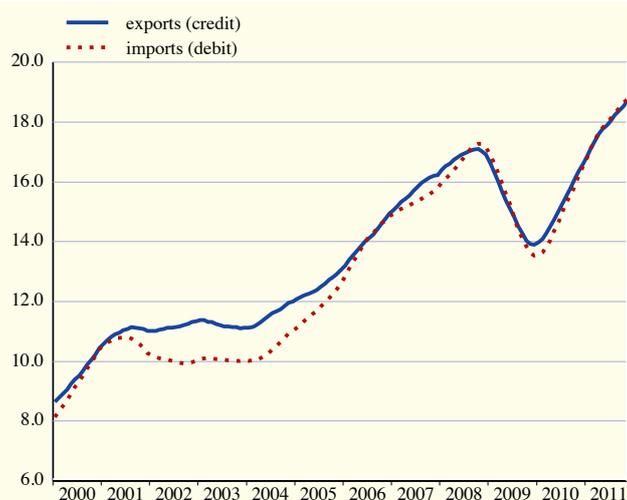
(EUR billions; transactions)

### 1. Summary current and capital accounts

	Current account												Capital account		
	Total			Goods		Services		Income		Current transfers			Credit	Debit	
	Credit	Debit	Net	Credit	Debit	Credit	Debit	Credit	Debit	Credit	Debit				
											Workers' remittances	Workers' remittances			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
2008	2,717.2	2,860.8	-143.5	1,588.5	1,610.4	513.3	471.2	523.6	590.4	91.8	6.9	188.8	21.6	24.7	14.7
2009	2,292.4	2,318.3	-25.9	1,302.5	1,266.5	473.9	438.8	421.5	427.3	94.5	6.4	185.7	22.5	20.6	13.4
2010	2,617.1	2,659.3	-42.2	1,560.0	1,547.1	518.8	472.9	450.7	448.4	87.6	6.3	190.9	22.3	21.2	15.7
2010 Q3	666.8	674.0	-7.1	402.3	396.8	139.3	123.2	109.7	107.2	15.6	1.7	46.8	5.8	4.6	3.7
Q4	705.7	702.2	3.4	421.7	416.2	135.7	125.2	117.3	113.0	31.0	1.6	47.8	6.0	7.1	5.9
2011 Q1	684.5	714.7	-30.2	423.3	436.4	123.0	116.0	113.5	103.3	24.7	1.5	59.1	5.4	5.0	2.6
Q2	719.5	740.4	-21.0	438.7	441.8	134.1	116.2	127.7	141.8	18.9	1.6	40.7	5.6	3.7	3.1
Q3	723.1	724.2	-1.2	444.5	441.4	146.1	125.1	115.8	111.6	16.6	1.8	46.1	5.7	5.2	3.4
2011 Sep.	249.4	248.4	1.0	155.2	151.7	48.9	40.8	39.8	40.1	5.4	.	15.7	.	0.8	0.9
Oct.	243.6	241.0	2.6	152.4	150.7	46.6	41.4	37.0	33.8	7.6	.	15.2	.	2.4	0.9
Nov.	247.6	246.6	1.0	159.8	153.4	43.2	40.6	38.9	37.4	5.8	.	15.3	.	3.1	0.9
	Seasonally adjusted														
2011 Q1	707.4	717.6	-10.2	434.4	435.7	133.6	120.7	116.7	112.6	22.7	.	48.6	.	.	.
Q2	713.5	726.8	-13.3	437.0	441.9	133.5	118.7	121.2	118.2	21.9	.	47.9	.	.	.
Q3	727.5	729.2	-1.7	443.4	441.5	138.0	120.5	122.1	118.7	23.9	.	48.4	.	.	.
2011 Sep.	244.0	240.1	3.9	148.2	145.0	46.8	39.8	40.7	39.6	8.2	.	15.7	.	.	.
Oct.	241.2	247.8	-6.6	147.0	151.0	46.4	41.1	39.1	40.0	8.7	.	15.7	.	.	.
Nov.	244.8	246.6	-1.8	153.0	148.1	44.9	40.7	41.6	41.3	5.3	.	16.6	.	.	.
	12-month cumulated transactions														
2011 Nov.	2,859.0	2,903.9	-44.9	1,749.3	1,755.5	540.2	482.5	479.5	472.6	90.1	.	193.4	.	.	.
	12-month cumulated transactions as a percentage of GDP														
2011 Nov.	30.5	31.0	-0.5	18.7	18.8	5.8	5.2	5.1	5.0	1.0	.	2.1	.	.	.

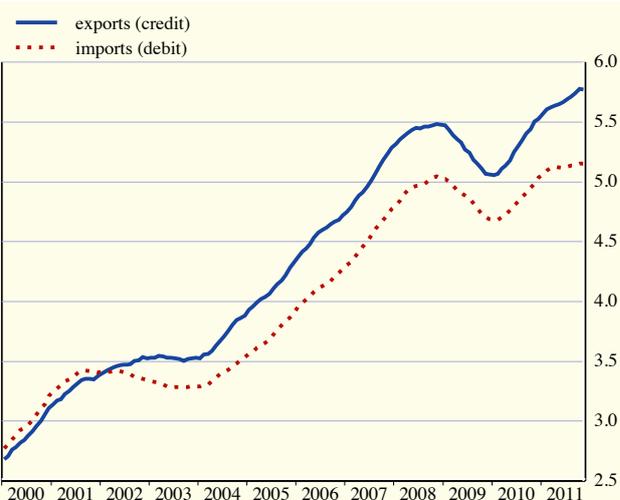
### C34 Euro area b.o.p.: goods

(seasonally adjusted; 12-month cumulated transactions as a percentage of GDP)



### C35 Euro area b.o.p.: services

(seasonally adjusted; 12-month cumulated transactions as a percentage of GDP)



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	Reinv. earnings	Credit	Debit	Credit	Debit	Credit	Debit	Credit	Debit		
			1	2											3	4
2008	21.1	13.1	502.5	577.3	140.5	-7.8	117.4	20.5	31.3	26.7	39.3	111.2	119.1	128.7	172.3	193.3
2009	21.7	13.8	399.9	413.5	148.8	16.1	100.4	14.9	24.7	23.5	24.5	77.3	101.0	122.1	100.8	90.2
2010	23.3	14.2	427.3	434.2	195.6	20.1	139.6	38.4	24.0	19.9	29.1	86.3	99.3	122.7	79.3	65.6
2010 Q3	5.6	4.1	104.1	103.1	46.5	14.6	35.0	12.5	5.7	4.6	7.4	16.8	25.4	31.1	19.1	15.6
Q4	6.4	4.1	111.0	108.9	51.2	-2.0	36.0	6.4	6.7	6.2	6.4	18.5	25.5	30.0	21.2	18.2
2011 Q1	5.7	2.7	107.8	100.6	47.7	11.1	33.8	21.5	6.5	4.3	7.4	14.2	25.4	30.8	20.9	17.5
Q2	5.8	3.3	121.9	138.5	57.8	9.7	38.5	10.7	5.7	4.8	12.3	46.3	25.2	31.0	20.9	17.8
Q3	5.8	4.0	110.0	107.6	47.7	18.0	34.8	17.9	6.5	4.8	9.0	18.4	25.1	32.2	21.8	17.3

### 3. Geographical breakdown

(cumulated transactions)

	Total	EU Member States outside the euro area						Brazil	Canada	China	India	Japan	Russia	Switzerland	United States	Other
		Total	Denmark	Sweden	United Kingdom	Other EU countries	EU institutions									
2010 Q4 to 2011 Q3	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Credits																
<b>Current account</b>	2,832.7	936.1	52.2	89.6	430.4	304.4	59.4	55.0	39.0	136.7	40.2	62.0	107.1	218.5	354.4	883.9
Goods	1,728.3	553.6	33.4	59.4	224.2	236.3	0.2	29.1	20.0	110.8	30.5	38.2	78.7	117.7	193.9	555.9
Services	538.9	168.3	11.0	15.1	104.1	31.5	6.6	8.7	8.4	17.5	7.1	13.3	17.9	55.0	78.5	164.3
Income	474.4	152.6	6.7	13.4	91.4	32.7	8.3	16.8	9.8	7.8	2.4	9.7	9.9	37.6	76.0	151.7
Investment income	450.7	146.0	6.6	13.3	89.9	32.1	4.0	16.8	9.8	7.8	2.4	9.6	9.9	26.3	74.2	148.0
Current transfers	91.2	61.6	1.2	1.7	10.6	3.8	44.4	0.4	0.7	0.6	0.2	0.9	0.6	8.2	6.0	12.0
<b>Capital account</b>	21.0	17.8	0.0	0.0	1.1	0.4	16.3	0.1	0.0	0.0	0.0	0.2	0.1	0.4	0.4	1.8
Debits																
<b>Current account</b>	2,881.6	878.1	44.6	86.1	373.5	269.8	104.2	-	31.8	-	-	93.9	-	185.6	367.4	-
Goods	1,735.7	479.6	29.6	51.7	179.6	218.6	0.0	31.1	14.4	213.5	27.9	52.9	126.4	96.0	140.5	553.5
Services	482.5	137.8	7.9	12.9	81.8	35.0	0.2	5.2	6.4	13.0	5.9	9.5	10.1	43.0	98.8	152.8
Income	469.6	144.4	6.4	20.0	100.5	11.7	5.8	-	9.2	-	-	31.0	-	39.2	121.6	-
Investment income	455.5	136.3	6.3	19.9	99.0	5.3	5.8	-	9.0	-	-	30.8	-	38.8	120.3	-
Current transfers	193.8	116.4	0.7	1.5	11.6	4.4	98.1	1.5	1.8	3.6	0.7	0.5	0.7	7.4	6.6	54.6
<b>Capital account</b>	15.0	1.6	0.0	0.1	0.9	0.4	0.2	0.2	0.3	0.3	0.3	0.1	0.1	0.6	1.2	10.3
Net																
<b>Current account</b>	-48.9	58.0	7.7	3.5	56.8	34.6	-44.7	-	7.2	-	-	-32.0	-	32.9	-13.0	-
Goods	-7.4	74.0	3.8	7.7	44.6	17.7	0.2	-2.0	5.6	-102.7	2.6	-14.8	-47.7	21.7	53.5	2.4
Services	56.4	30.5	3.1	2.2	22.3	-3.5	6.3	3.5	2.0	4.5	1.2	3.8	7.7	12.1	-20.3	11.6
Income	4.7	8.2	0.3	-6.5	-9.1	21.0	2.6	-	0.7	-	-	-21.3	-	-1.6	-45.6	-
Investment income	-4.8	9.7	0.3	-6.6	-9.1	26.8	-1.7	-	0.8	-	-	-21.2	-	-12.5	-46.2	-
Current transfers	-102.6	-54.7	0.5	0.1	-1.0	-0.6	-53.7	-1.1	-1.1	-3.1	-0.5	0.4	-0.1	0.7	-0.5	-42.6
<b>Capital account</b>	6.0	16.2	0.0	-0.1	0.2	0.0	16.1	-0.1	-0.2	-0.3	-0.2	0.1	0.1	-0.2	-0.8	-8.5

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>														
2008	13,377.1	14,961.4	-1,584.3	144.7	161.8	-17.1	3,878.4	3,247.8	3,834.9	5,976.8	-0.5	5,290.0	5,736.7	374.2
2009	13,764.1	15,170.3	-1,406.2	154.1	169.9	-15.7	4,287.2	3,403.0	4,341.3	6,781.9	0.2	4,675.9	4,985.4	459.6
2010	15,234.8	16,461.7	-1,226.9	166.3	179.7	-13.4	4,798.2	3,714.8	4,907.5	7,442.9	-61.6	5,002.9	5,304.0	587.8
2011 Q1	15,135.4	16,377.3	-1,241.9	163.7	177.2	-13.4	4,801.9	3,739.5	4,811.3	7,469.7	-31.6	4,977.1	5,168.1	576.6
Q2	15,278.0	16,592.6	-1,314.6	164.1	178.2	-14.1	4,905.2	3,801.7	4,762.6	7,641.6	-48.6	5,077.8	5,149.4	581.0
Q3	15,432.1	16,725.3	-1,293.2	164.7	178.5	-13.8	4,960.3	3,850.3	4,574.8	7,511.6	-46.0	5,296.3	5,363.3	646.7
<b>Changes to outstanding amounts</b>														
2007	1,608.0	1,858.8	-250.9	17.8	20.6	-2.8	572.8	486.8	258.7	591.3	-8.1	763.3	780.7	21.4
2008	-615.7	-305.5	-310.3	-6.7	-3.3	-3.4	151.7	25.9	-796.2	-561.3	28.4	-26.7	229.9	27.0
2009	387.1	208.9	178.1	4.3	2.3	2.0	408.8	155.2	506.4	805.1	0.7	-614.1	-751.4	85.4
2010	1,470.7	1,291.5	179.3	16.1	14.1	2.0	511.0	311.8	566.2	661.0	-61.7	327.1	318.7	128.2
2011 Q2	142.7	215.4	-72.7	6.1	9.1	-3.1	103.3	62.2	-48.7	171.9	-17.0	100.7	-18.7	4.4
Q3	154.0	132.7	21.4	6.6	5.7	0.9	55.1	48.7	-187.8	-129.9	2.6	218.5	214.0	65.7
<b>Transactions</b>														
2007	1,940.3	1,943.2	-3.0	21.5	21.5	0.0	512.9	422.5	439.5	566.3	66.9	915.8	954.4	5.1
2008	429.9	551.3	-121.3	4.7	6.0	-1.3	336.6	105.5	5.0	266.4	84.5	0.5	179.4	3.4
2009	-128.9	-114.9	-14.0	-1.4	-1.3	-0.2	334.7	231.9	94.0	355.3	-21.1	-531.9	-702.1	-4.6
2010	490.0	534.1	-44.1	5.3	5.8	-0.5	174.9	125.0	145.6	293.6	-17.4	176.7	115.5	10.3
2011 Q1	217.2	233.0	-15.7	9.5	10.2	-0.7	89.3	79.5	27.1	155.6	2.2	86.9	-2.2	11.6
Q2	198.2	216.6	-18.4	8.4	9.2	-0.8	55.9	26.9	33.0	183.2	-1.6	115.3	6.4	-4.5
Q3	114.7	124.5	-9.8	4.9	5.3	-0.4	40.7	24.1	-64.6	-27.0	15.4	127.0	127.3	-3.8
2011 July	3.1	-0.7	3.8	.	.	.	25.4	8.2	-0.7	-25.3	0.8	-23.6	16.5	1.2
Aug.	62.4	63.8	-1.4	.	.	.	-6.3	1.4	-54.1	-28.5	6.5	119.7	90.9	-3.4
Sep.	49.2	61.4	-12.2	.	.	.	21.5	14.5	-9.8	26.9	8.1	31.0	19.9	-1.6
Oct.	-62.9	-67.9	5.0	.	.	.	18.3	10.6	-36.0	-62.5	0.9	-47.1	-16.1	1.1
Nov.	-47.9	-51.4	3.6	.	.	.	12.9	6.1	-22.9	-20.5	-0.8	-37.3	-37.0	0.2
<b>Other changes</b>														
2007	-332.3	-84.4	-247.9	-3.7	-0.9	-2.7	59.9	64.3	-180.8	25.1	-75.1	-152.6	-173.8	16.3
2008	-1,045.7	-856.7	-188.9	-11.3	-9.3	-2.0	-184.9	-79.5	-801.2	-827.7	-56.0	-27.2	50.5	23.7
2009	515.9	323.8	192.2	5.8	3.6	2.2	74.1	-76.7	412.4	449.7	21.7	-82.2	-49.3	89.9
2010	980.7	757.4	223.3	10.7	8.3	2.4	336.1	186.8	420.6	367.4	-44.3	150.4	203.1	117.9
<b>Other changes due to exchange rate changes</b>														
2007	-522.0	-339.7	-182.3	-5.8	-3.8	-2.0	-104.2	-17.1	-217.4	-146.8	.	-186.6	-175.8	-13.7
2008	-49.8	27.9	-77.7	-0.5	0.3	-0.8	-25.0	-34.0	6.6	41.9	.	-40.7	20.1	9.3
2009	-49.6	-55.2	5.5	-0.6	-0.6	0.1	-4.6	5.7	-30.5	-32.9	.	-11.9	-28.0	-2.7
2010	535.0	323.6	211.3	5.8	3.5	2.3	160.3	57.4	179.4	101.6	.	182.2	164.6	13.0
<b>Other changes due to price changes</b>														
2007	78.7	113.4	-34.6	0.9	1.3	-0.4	45.2	5.8	77.3	107.6	-75.1	.	.	31.3
2008	-1,002.7	-975.7	-27.1	-10.8	-10.6	-0.3	-159.2	-60.7	-809.5	-915.0	-56.0	.	.	22.0
2009	635.3	483.4	151.9	7.1	5.4	1.7	142.5	28.4	425.3	455.0	21.7	.	.	45.8
2010	295.0	153.7	141.3	3.2	1.7	1.5	50.1	2.2	187.3	151.5	-44.3	.	.	102.0
<b>Other changes due to other adjustments</b>														
2007	110.9	142.0	-31.0	1.2	1.6	-0.3	118.8	75.6	-40.7	64.3	.	34.1	2.0	-1.3
2008	6.8	91.0	-84.1	0.1	1.0	-0.9	-0.7	15.2	1.8	45.4	.	13.4	30.4	-7.7
2009	-69.7	-104.4	34.7	-0.8	-1.2	0.4	-63.9	-110.8	17.6	27.7	.	-70.3	-21.3	46.8
2010	150.8	280.1	-129.3	1.6	3.1	-1.4	125.7	127.2	53.9	114.4	.	-31.8	38.5	2.9
<b>Growth rates of outstanding amounts</b>														
2007	15.6	14.3	-	.	.	.	15.8	15.1	10.0	9.4	.	20.2	20.2	1.6
2008	3.0	3.6	-	.	.	.	9.2	3.3	-0.2	4.2	.	0.0	3.3	1.0
2009	-1.0	-0.8	-	.	.	.	8.6	7.3	2.4	5.9	.	-10.1	-12.2	-1.2
2010	3.5	3.4	-	.	.	.	3.9	3.5	3.2	4.2	.	3.7	2.3	2.0
2011 Q1	3.4	3.4	-	.	.	.	4.5	5.3	2.6	5.3	.	3.4	-0.4	2.9
Q2	3.8	3.8	-	.	.	.	3.7	4.5	3.1	6.3	.	4.9	-0.2	2.3
Q3	3.8	3.9	-	.	.	.	3.5	5.2	0.8	5.2	.	7.2	1.2	0.8

Source: ECB.

1) Net financial derivatives are included in assets.

### 7.3 Financial account

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

#### 2. Direct investment

	By resident units abroad							By non-resident units in the euro area						
	Total	Equity capital and reinvested earnings			Other capital (mostly inter-company loans)			Total	Equity capital and reinvested earnings			Other capital (mostly inter-company loans)		
		Total	MFIs	Non-MFIs	Total	MFIs	Non-MFIs		Total	Into MFIs	Into non-MFIs	Total	To MFIs	To non-MFIs
1	2	3	4	5	6	7	8	9	10	11	12	13	14	
Outstanding amounts (international investment position)														
2009	4,287.2	3,305.5	236.2	3,069.3	981.7	14.8	966.9	3,403.0	2,501.9	74.2	2,427.7	901.1	18.1	883.0
2010	4,798.2	3,667.1	277.9	3,389.2	1,131.1	17.8	1,113.3	3,714.8	2,820.2	83.2	2,737.0	894.6	12.7	881.9
2011 Q2	4,905.2	3,775.8	281.0	3,494.8	1,129.4	14.5	1,114.9	3,801.7	2,896.3	85.4	2,810.9	905.4	9.5	895.8
Q3	4,960.3	3,807.6	283.5	3,524.1	1,152.7	13.2	1,139.5	3,850.3	2,952.7	86.5	2,866.2	897.6	8.5	889.2
Transactions														
2008	336.6	193.8	9.3	184.5	142.8	-0.3	143.1	105.5	64.3	-8.2	72.5	41.1	1.6	39.6
2009	334.7	257.5	20.1	237.3	77.2	2.6	74.6	231.9	236.7	7.5	229.2	-4.8	-0.6	-4.2
2010	174.9	51.1	12.6	38.5	123.8	1.2	122.6	125.0	176.7	7.2	169.5	-51.7	-7.5	-44.2
2011 Q1	89.3	77.8	3.8	74.0	11.6	0.1	11.5	79.5	69.6	0.8	68.8	9.9	-1.5	11.4
Q2	55.9	51.2	9.4	41.8	4.7	-2.6	7.3	26.9	24.8	1.7	23.2	2.1	-1.5	3.6
Q3	40.7	27.7	2.2	25.5	13.0	-1.7	14.7	24.1	41.2	1.3	39.9	-17.0	-0.8	-16.2
2011 July	25.4	22.7	0.1	22.6	2.7	-1.6	4.3	8.2	13.5	0.6	12.9	-5.3	-0.5	-4.8
Aug.	-6.3	-5.9	1.4	-7.3	-0.4	0.1	-0.5	1.4	16.2	0.2	16.0	-14.8	-0.3	-14.5
Sep.	21.5	10.9	0.8	10.1	10.6	-0.2	10.9	14.5	11.4	0.5	11.0	3.1	0.0	3.1
Oct.	18.3	14.1	0.1	14.0	4.2	0.2	4.0	10.6	5.1	0.1	5.1	5.5	-0.1	5.6
Nov.	12.9	16.0	-0.9	16.9	-3.0	0.3	-3.3	6.1	2.2	0.7	1.5	3.9	0.0	3.9
Growth rates														
2009	8.6	8.6	9.2	8.5	8.8	20.5	8.6	7.3	10.4	11.6	10.4	-0.5	-3.2	-0.5
2010	3.9	1.5	5.3	1.2	12.5	7.8	12.6	3.5	6.8	9.4	6.8	-5.7	-41.3	-5.0
2011 Q1	4.5	2.9	2.1	3.0	9.9	6.4	10.0	5.3	6.3	8.7	6.2	2.0	-48.1	3.1
Q2	3.7	3.4	5.6	3.2	4.9	-12.7	5.2	4.5	5.0	8.0	5.0	2.9	-47.9	3.9
Q3	3.5	2.9	5.9	2.7	5.4	-24.0	5.9	5.2	5.2	6.6	5.2	5.5	-52.3	6.7

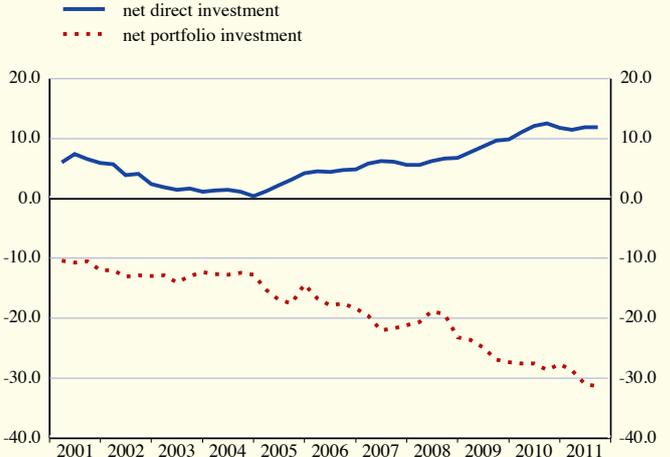
#### C36 Euro area international investment position

(outstanding amounts at end of period; as a percentage of GDP)



#### C37 Euro area direct and portfolio investment position

(outstanding amounts at end of period; as a percentage of GDP)



Source: ECB.

### 7.3 Financial account

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

#### 3. Portfolio investment assets

	Total		Equity				Debt instruments									
	1	2	3	4	5	6	Bonds and notes			Money market instruments						
							7	8	9	10	11	12	13	14	15	16
			Euro-system	General government		Euro-system	General government		Euro-system	General government						
Outstanding amounts (international investment position)																
2009	4,341.3	1,514.5	80.8	3.4	1,433.6	36.6	2,426.6	924.6	17.1	1,502.0	36.6	400.2	330.2	44.9	69.9	2.0
2010	4,907.5	1,914.2	93.8	3.6	1,820.5	47.6	2,588.8	810.7	15.6	1,778.1	75.7	404.5	314.9	41.7	89.6	0.2
2011 Q2	4,762.6	1,838.4	94.4	3.5	1,744.0	41.6	2,552.7	761.1	17.6	1,791.6	91.3	371.6	278.8	45.7	92.8	0.4
Q3	4,574.8	1,621.8	76.4	3.4	1,545.4	38.6	2,551.7	749.4	17.7	1,802.4	93.9	401.3	301.8	54.9	99.5	0.5
Transactions																
2008	5.0	-93.7	-34.3	0.7	-59.4	-0.1	72.1	37.7	3.2	34.4	2.7	26.5	49.6	13.1	-23.0	0.4
2009	94.0	53.4	-1.3	0.0	54.8	2.5	45.7	-93.2	-3.8	138.9	17.5	-5.2	1.0	-12.9	-6.2	0.9
2010	145.6	76.5	5.6	-0.2	70.9	1.7	109.3	-124.5	-0.8	233.8	52.8	-40.3	-55.5	-11.7	15.3	-1.9
2011 Q1	27.1	-1.0	0.0	-0.4	-1.0	-1.8	5.3	-12.7	1.7	18.0	0.4	22.8	16.8	1.5	6.1	0.7
Q2	33.0	18.0	3.2	0.1	14.8	-2.3	28.0	-4.4	0.4	32.4	-1.2	-12.9	-12.3	4.8	-0.5	-0.5
Q3	-64.6	-53.3	-12.9	0.0	-40.4	-1.9	-19.9	-21.6	-0.2	1.6	0.1	8.6	8.2	3.5	0.4	0.0
2011 July	-0.7	-3.0	0.5	0.0	-3.6	.	5.6	-6.5	-0.3	12.1	.	-3.3	-7.6	-3.5	4.3	.
Aug.	-54.1	-38.3	-11.1	0.0	-27.2	.	-10.6	-7.1	0.2	-3.5	.	-5.2	-7.2	6.6	2.1	.
Sep.	-9.8	-11.9	-2.3	0.0	-9.6	.	-14.9	-7.9	-0.1	-7.0	.	17.1	23.0	0.4	-5.9	.
Oct.	-36.0	-6.5	-3.2	-0.1	-3.2	.	-12.6	-6.7	0.6	-5.9	.	-17.0	-22.4	-6.3	5.4	.
Nov.	-22.9	-14.2	-0.7	0.0	-13.5	.	-11.6	-14.6	0.4	2.9	.	2.9	0.5	-1.1	2.4	.
Growth rates																
2009	2.4	3.9	-2.4	-0.6	4.3	8.5	1.9	-9.5	-19.0	10.7	93.4	-2.0	-0.8	-22.3	-7.9	67.2
2010	3.2	4.8	7.0	-5.2	4.7	4.8	4.4	-13.5	-4.9	14.9	127.8	-9.5	-16.0	-25.4	21.1	-91.9
2011 Q1	2.6	2.6	1.7	-16.4	2.6	-3.2	2.9	-14.0	2.5	12.4	131.9	0.8	-6.5	-10.2	34.8	65.6
Q2	3.1	3.4	4.8	-9.8	3.4	-14.1	3.6	-12.4	9.7	12.2	125.5	-0.8	-4.4	9.2	13.8	93.4
Q3	0.8	0.3	-7.3	-8.7	0.7	-15.7	0.6	-15.2	9.1	8.8	133.2	5.9	0.7	0.9	28.8	-7.4

#### 4. Portfolio investment liabilities

	Total		Equity				Debt instruments								
	1	2	3	4	5	6	Bonds and notes			Money market instruments					
							7	8	9	10	11	12			
													Total	MFIs	Non-MFIs
							General government					General government			
Outstanding amounts (international investment position)															
2009	6,781.9	2,781.9	686.2	2,095.7	3,493.1	1,093.2	2,399.9	1,481.2	506.9	66.2	440.7	409.3			
2010	7,442.9	3,150.7	658.0	2,492.7	3,823.0	1,165.4	2,657.5	1,680.3	469.2	77.2	392.0	352.6			
2011 Q2	7,641.6	3,123.9	637.8	2,486.1	3,965.7	1,166.9	2,798.8	1,785.7	551.9	140.3	411.6	359.9			
Q3	7,511.6	2,795.1	618.2	2,176.8	4,153.2	1,223.1	2,930.2	1,848.7	563.3	139.3	424.0	376.6			
Transactions															
2008	266.4	-108.6	78.1	-186.7	175.5	-15.6	191.0	159.4	199.5	-25.0	224.6	191.0			
2009	355.3	121.6	10.7	110.9	143.2	-15.6	158.8	103.7	90.5	-18.3	108.9	144.3			
2010	293.6	128.9	-14.2	143.1	174.2	57.3	116.9	189.2	-9.5	28.9	-38.4	-34.8			
2011 Q1	155.6	88.2	6.9	81.4	22.1	28.8	-6.8	31.7	45.4	35.4	10.0	20.8			
Q2	183.2	-20.1	-7.3	-12.7	175.2	44.6	130.5	97.9	28.2	21.6	6.6	-0.2			
Q3	-27.0	-31.3	-11.3	-19.9	11.0	14.6	-3.7	-16.8	-6.6	-10.3	3.7	17.9			
2011 July	-25.3	-4.2	-19.1	14.9	-19.1	6.7	-25.8	.	-2.0	-5.7	3.7	.			
Aug.	-28.5	-8.9	9.5	-18.4	-4.5	1.8	-6.3	.	-15.2	-5.6	-9.6	.			
Sep.	26.9	-18.2	-1.7	-16.5	34.6	6.2	28.4	.	10.6	1.0	9.5	.			
Oct.	-62.5	-10.0	2.1	-12.2	-39.2	-23.8	-15.4	.	-13.3	-4.8	-8.5	.			
Nov.	-20.5	-3.0	10.4	-13.5	-3.8	-3.6	-0.2	.	-13.6	7.6	-21.2	.			
Growth rates															
2009	5.9	5.2	1.6	6.6	4.2	-1.3	7.2	7.4	23.0	-28.7	33.0	53.5			
2010	4.2	4.5	-2.1	6.7	4.9	5.0	4.8	12.6	-1.9	42.9	-8.9	-8.7			
2011 Q1	5.3	7.1	1.1	8.9	3.4	5.9	2.3	8.6	9.0	68.9	-1.5	0.9			
Q2	6.3	5.9	1.1	7.2	5.5	9.9	3.6	7.5	17.1	150.5	-1.3	3.3			
Q3	5.2	2.8	-2.9	4.4	6.7	10.3	5.2	8.6	8.7	60.5	-1.0	5.9			

Source: ECB.

### 7.3 Financial account

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

#### 5. Other investment assets

	Total		Eurosystem			MFIs (excluding Eurosystem)			General government			Other sectors			
	1	2	Loans/ currency and deposits 3	Other assets 4	Total 5	Loans/ currency and deposits 6	Other assets 7	8	Trade credits 9	Loans/currency and deposits 10	Currency and deposits 11	12	Trade credits 13	Loans/currency and deposits 14	Currency and deposits 15
Outstanding amounts (international investment position)															
2009	4,675.9	30.2	29.8	0.4	2,834.7	2,804.2	30.5	122.1	8.4	74.9	15.9	1,688.9	201.4	1,344.7	402.6
2010	5,002.9	32.6	32.0	0.7	2,972.3	2,939.9	32.4	166.3	7.6	117.6	21.0	1,831.8	214.4	1,468.5	428.6
2011 Q2	5,077.8	40.5	40.3	0.2	3,042.6	2,992.9	49.7	147.3	7.5	99.4	19.2	1,847.5	223.6	1,478.2	441.1
Q3	5,296.3	42.4	42.1	0.3	3,206.2	3,148.7	57.5	142.7	7.4	94.6	17.5	1,905.0	229.0	1,516.0	454.6
Transactions															
2008	0.5	-9.5	-9.5	0.0	-42.6	-59.2	16.6	-5.7	-1.1	-5.9	-4.7	58.3	-1.1	48.0	-22.0
2009	-531.9	0.1	0.0	0.1	-420.5	-399.9	-20.5	10.7	-0.4	9.3	1.2	-122.2	7.5	-128.0	-34.6
2010	176.7	-2.9	-2.9	0.0	8.5	-0.4	8.9	40.0	-0.3	39.4	4.9	131.2	7.0	100.9	46.3
2011 Q1	86.9	3.6	3.6	0.0	63.3	55.2	8.1	-7.8	-0.1	-8.2	-4.2	27.8	11.2	-0.7	2.6
Q2	115.3	4.6	4.6	0.0	60.8	54.2	6.6	0.9	0.0	0.5	2.4	49.0	-1.1	47.9	17.2
Q3	127.0	-2.8	-2.9	0.1	82.7	68.2	14.4	-6.6	-0.1	-6.5	-1.6	53.7	4.2	36.8	16.9
2011 July	-23.6	0.0	.	.	-27.4	.	.	-5.8	.	.	-1.7	9.5	.	.	0.6
Aug.	119.7	0.5	.	.	105.9	.	.	-3.6	.	.	-3.0	16.8	.	.	2.4
Sep.	31.0	-3.3	.	.	4.1	.	.	2.8	.	.	3.2	27.4	.	.	13.9
Oct.	-47.1	-3.4	.	.	-72.7	.	.	6.7	.	.	7.6	22.3	.	.	20.0
Nov.	-37.3	-3.4	.	.	-47.0	.	.	9.6	.	.	6.8	3.5	.	.	6.3
Growth rates															
2009	-10.1	-0.4	-1.4	23.4	-12.8	-12.4	-36.9	9.8	-3.5	15.3	7.9	-6.7	3.8	-8.6	-8.1
2010	3.7	-13.1	-13.0	-9.9	0.4	0.1	27.8	31.9	-3.1	50.8	30.6	7.6	3.4	7.3	11.1
2011 Q1	3.4	26.3	27.3	-10.9	0.5	0.1	44.7	32.3	-3.3	53.5	36.0	5.9	10.7	4.8	10.0
Q2	4.9	65.6	67.1	-1.3	2.8	2.4	37.7	18.1	-3.2	27.5	3.7	6.5	6.0	6.2	13.5
Q3	7.2	45.4	45.7	62.4	6.0	5.1	84.3	16.2	-3.6	25.0	9.1	8.0	7.4	7.6	13.3

#### 6. Other investment liabilities

	Total		Eurosystem			MFIs (excluding Eurosystem)			General government			Other sectors			
	1	2	Loans/ currency and deposits 3	Other liabilities 4	Total 5	Loans/ currency and deposits 6	Other liabilities 7	8	Trade credits 9	Loans 10	Other liabilities 11	12	Trade credits 13	Loans 14	Other liabilities 15
Outstanding amounts (international investment position)															
2009	4,985.4	251.7	251.3	0.4	3,399.7	3,360.7	39.0	85.2	0.0	80.8	4.4	1,248.8	177.8	929.3	141.7
2010	5,304.0	268.8	265.7	3.1	3,508.6	3,462.6	46.0	153.9	0.0	147.2	6.6	1,372.8	200.8	1,016.2	155.8
2011 Q2	5,149.4	278.0	275.1	2.8	3,325.3	3,269.4	55.9	187.1	0.0	181.3	5.8	1,359.0	209.5	1,000.2	149.3
Q3	5,363.3	315.2	312.3	2.9	3,403.7	3,340.5	63.3	210.8	0.0	204.9	5.9	1,433.6	214.0	1,044.5	175.0
Transactions															
2008	179.4	280.9	280.9	0.0	-174.7	-186.0	11.3	9.5	0.0	10.9	-1.3	63.6	9.4	44.4	9.8
2009	-702.1	-233.2	-233.4	0.2	-352.7	-341.5	-11.2	17.8	0.0	17.8	0.0	-134.0	0.8	-126.1	-8.7
2010	115.5	8.9	6.3	2.6	-10.8	-16.8	6.0	64.6	0.0	63.8	0.8	52.8	15.5	13.5	23.8
2011 Q1	-2.2	9.6	12.1	-2.6	-62.9	-73.7	10.8	27.1	0.0	28.3	-1.2	24.0	6.3	-0.4	18.0
Q2	6.4	7.2	4.9	2.4	-17.9	-19.2	1.3	12.6	0.0	12.3	0.3	4.5	-1.1	3.9	1.7
Q3	127.3	29.8	29.8	0.0	21.3	5.7	15.6	23.4	0.0	23.3	0.1	52.8	3.2	30.4	19.1
2011 July	16.5	14.2	.	.	-19.2	.	.	6.9	.	.	.	14.5	.	.	.
Aug.	90.9	7.0	.	.	57.9	.	.	-2.5	.	.	.	28.6	.	.	.
Sep.	19.9	8.6	.	.	-17.3	.	.	19.0	.	.	.	9.7	.	.	.
Oct.	-16.1	-7.4	.	.	-34.0	.	.	2.8	.	.	.	22.6	.	.	.
Nov.	-37.0	-2.8	.	.	-38.2	.	.	-0.2	.	.	.	4.2	.	.	.
Growth rates															
2009	-12.2	-48.1	-48.2	.	-9.3	-9.2	-19.8	25.7	.	27.4	-0.9	-9.4	0.3	-11.5	-5.8
2010	2.3	3.4	2.4	.	-0.2	-0.4	15.8	74.2	.	78.3	11.7	4.0	8.6	1.2	15.8
2011 Q1	-0.4	9.4	9.6	.	-4.9	-5.3	26.8	99.8	.	106.7	-2.7	3.5	14.2	-0.2	14.6
Q2	-0.2	12.6	11.8	.	-5.2	-5.6	23.3	89.4	.	96.4	-12.6	4.2	8.1	1.2	18.6
Q3	1.2	25.9	25.6	.	-4.4	-5.4	72.7	102.8	.	110.0	-9.8	3.3	9.6	0.1	18.3

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<sup>1)</sup>

	Reserve assets													Memo items			
	Total	Monetary gold		SDR holdings	Reserve position in the IMF	Foreign exchange							Other claims	Other foreign currency assets	Pre-determined short-term net drains on foreign currency	SDR allocations	
		In EUR billions	In fine troy ounces (millions)			Total	Currency and deposits		Securities								Financial derivatives
							With monetary authorities and the BIS	With banks	Total	Equity	Bonds and notes	Money market instruments					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
Outstanding amounts (international investment position)																	
2008	374.2	217.0	349.207	4.7	7.3	145.1	7.6	8.1	129.5	0.6	111.3	17.6	0.0	0.0	262.8	-245.7	5.5
2009	462.4	266.1	347.180	50.8	10.5	134.9	11.7	8.1	115.2	0.5	92.0	22.7	-0.1	0.0	32.1	-24.2	51.2
2010	591.2	366.2	346.962	54.2	15.8	155.0	7.7	16.1	131.3	0.5	111.2	19.5	0.0	0.0	26.3	-24.4	54.5
2011 Q1	576.6	351.5	346.987	51.1	21.6	152.4	5.6	18.2	128.2	0.5	108.6	19.0	0.4	0.0	21.3	-24.5	52.6
Q2	580.9	361.4	346.988	50.5	22.4	146.5	5.1	13.0	128.2	0.5	108.3	19.3	0.2	0.0	20.4	-18.1	52.2
Q3	646.6	416.3	346.989	52.9	26.0	151.4	5.5	11.1	135.1	0.6	120.5	14.0	-0.4	0.0	31.4	-24.5	54.5
2011 Nov.	683.4	451.3	346.844	52.7	26.3	153.1	5.8	8.9	138.7	-	-	-	-0.2	0.0	32.7	-21.8	54.5
Dec.	667.1	422.1	346.846	54.0	30.1	160.9	5.3	7.8	148.1	-	-	-	-0.4	0.0	97.4	-86.0	55.9
Transactions																	
2008	3.4	-2.7	-	-0.1	3.8	2.4	5.0	-15.7	11.8	0.1	15.8	-4.1	1.3	0.0	-	-	-
2009	-4.6	-2.0	-	0.5	3.4	-6.4	3.1	-1.2	-9.5	0.0	-14.1	4.6	1.2	0.0	-	-	-
2010	10.3	0.0	-	-0.1	4.9	5.4	-5.4	6.7	4.1	0.0	10.6	-6.5	0.0	0.0	-	-	-
2011 Q1	11.6	0.0	-	-1.2	6.7	6.1	-1.8	3.1	4.8	0.0	4.0	0.7	0.0	0.0	-	-	-
Q2	-4.5	0.0	-	-0.2	0.9	-5.2	-0.5	-5.4	0.8	0.0	0.4	0.4	-0.1	0.0	-	-	-
Q3	-3.8	0.0	-	0.2	2.3	-6.3	0.3	-2.9	-3.8	0.0	3.0	-6.7	0.0	0.0	-	-	-
Growth rates																	
2007	1.6	-1.7	-	7.3	-18.3	6.3	15.0	6.4	5.7	1.1	18.6	-27.6	-	-	-	-	-
2008	1.0	-1.3	-	-2.5	105.5	1.7	67.8	-68.9	10.8	28.0	17.9	-20.6	-	-	-	-	-
2009	-1.2	-0.9	-	-2.6	45.5	-4.4	41.1	-21.3	-7.3	1.0	-12.8	25.3	-	-	-	-	-
2010	2.0	0.0	-	-0.1	46.4	3.6	-43.3	76.2	3.4	-5.2	10.3	-25.5	-	-	-	-	-
2011 Q1	2.9	0.0	-	-1.9	77.7	5.3	-44.7	68.6	4.0	-4.3	12.0	-27.9	-	-	-	-	-
Q2	2.3	0.0	-	-2.4	49.9	4.5	-36.6	5.3	7.3	1.9	12.4	-16.1	-	-	-	-	-
Q3	0.8	0.0	-	-2.1	65.5	-3.1	-29.3	-36.8	3.0	1.9	9.9	-42.1	-	-	-	-	-

### 8. Gross external debt

	Total	By instrument					By sector (excluding direct investment)				
		Loans, currency and deposits	Money market instruments	Bonds and notes	Trade credits	Other debt liabilities	Direct investment: inter-company lending	General government	Eurosysteem	MFIs (excluding Eurosystem)	Other sectors
Outstanding amounts (international investment position)											
2008	10,914.5	5,340.8	398.1	3,377.9	184.1	211.8	1,401.7	1,747.0	482.7	5,006.5	2,276.5
2009	10,391.3	4,622.0	506.9	3,493.1	177.8	185.6	1,405.9	1,975.7	251.7	4,559.1	2,198.9
2010	11,016.4	4,891.7	469.2	3,823.0	200.8	211.5	1,420.2	2,186.8	268.8	4,751.3	2,389.4
2011 Q1	10,855.2	4,735.4	502.8	3,760.6	207.6	225.1	1,423.7	2,232.3	272.3	4,588.4	2,338.5
Q2	11,108.1	4,726.0	551.9	3,965.7	209.5	213.8	1,441.0	2,332.7	278.0	4,632.5	2,423.9
Q3	11,526.7	4,902.2	563.3	4,153.2	214.1	247.1	1,446.8	2,436.1	315.2	4,766.1	2,562.5
Outstanding amounts as a percentage of GDP											
2008	118.2	57.8	4.3	36.6	2.0	2.3	15.2	18.9	5.2	54.2	24.6
2009	116.4	51.8	5.7	39.1	2.0	2.1	15.7	22.1	2.8	51.1	24.6
2010	120.4	53.4	5.1	41.8	2.2	2.3	15.5	23.9	2.9	51.9	26.1
2011 Q1	117.6	51.3	5.4	40.7	2.2	2.4	15.4	24.2	2.9	49.7	25.3
Q2	119.5	50.8	5.9	42.6	2.3	2.3	15.5	25.1	3.0	49.8	26.1
Q3	123.1	52.4	6.0	44.4	2.3	2.6	15.5	26.0	3.4	50.9	27.4

Source: ECB.

1) Data refer to the changing composition of the euro area, in line with the approach adopted for the reserve assets of the Eurosystem. For further information, see the General Notes.

## 7.3 Financial account

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

## 9. Geographical breakdown

	Total	EU Member States outside the euro area					Canada	China	Japan	Switzer-land	United States	Offshore financial centres	Interna-tional organisa-tions	Other countries	
	1	Total	Denmark	Sweden	United Kingdom	Other EU countries	EU institutions	8	9	10	11	12	13	14	15
<b>2010</b>	Outstanding amounts (international investment position)														
<b>Direct investment</b>	1,083.3	116.9	3.8	-6.6	-170.8	291.8	-1.3	50.4	57.1	-3.9	178.9	-23.2	42.7	-0.3	664.8
Abroad	4,798.2	1,490.8	36.2	141.7	994.2	318.7	0.0	154.7	61.5	87.2	479.5	899.7	586.7	0.0	1,037.9
Equity/reinvested earnings	3,667.1	1,114.0	32.2	88.8	733.5	259.4	0.0	121.4	49.5	65.8	374.0	637.1	501.8	0.0	803.6
Other capital	1,131.1	376.8	4.0	52.9	260.7	59.2	0.0	33.3	12.0	21.4	105.6	262.7	85.0	0.0	234.3
In the euro area	3,714.8	1,374.0	32.5	148.4	1,165.0	26.9	1.3	104.3	4.4	91.1	300.6	922.9	544.1	0.4	373.1
Equity/reinvested earnings	2,820.2	1,121.1	22.5	133.9	958.4	4.9	1.3	91.7	3.4	73.5	201.8	702.5	387.3	0.1	238.8
Other capital	894.6	252.9	10.0	14.4	206.6	21.9	0.0	12.6	1.0	17.6	98.8	220.4	156.7	0.2	134.3
<b>Portfolio investment assets</b>	4,907.5	1,550.5	84.0	189.3	1,054.9	103.5	118.9	110.8	59.5	203.6	134.6	1,557.4	460.8	30.8	799.6
Equity	1,914.2	379.4	13.7	46.0	300.5	18.1	1.1	44.6	57.2	106.3	117.5	574.9	243.0	1.4	390.1
Debt instruments	2,993.3	1,171.1	70.3	143.3	754.4	85.3	117.8	66.3	2.2	97.3	17.1	982.5	217.8	29.4	409.6
Bonds and notes	2,588.8	1,031.4	63.0	121.3	646.1	83.8	117.2	61.8	1.4	44.3	11.7	836.1	208.6	29.0	364.5
Money market instruments	404.5	139.7	7.3	21.9	108.3	1.6	0.6	4.5	0.8	53.0	5.5	146.4	9.2	0.4	45.1
<b>Other investment</b>	-301.1	-241.1	54.8	1.5	-202.0	85.9	-181.2	-7.3	-8.0	19.9	-34.4	-94.6	-5.0	-25.2	94.7
Assets	5,002.9	2,295.1	112.6	96.9	1,869.7	198.5	17.4	28.5	38.7	103.7	275.2	713.1	588.7	48.8	911.2
General government	166.3	55.0	0.8	6.5	34.6	2.1	11.0	1.9	3.2	2.6	1.2	13.7	3.6	31.8	53.2
MFIs	3,004.9	1,576.0	90.7	52.9	1,268.2	160.9	3.3	15.6	12.1	72.6	136.3	375.8	367.6	16.5	432.4
Other sectors	1,831.8	664.0	21.1	37.5	566.9	35.5	3.1	11.0	23.4	28.5	137.7	323.6	217.4	0.6	425.5
Liabilities	5,304.0	2,536.1	57.9	95.4	2,071.7	112.6	198.6	35.8	46.7	83.8	309.6	807.8	593.6	74.0	816.5
General government	153.9	92.1	0.2	0.5	57.1	0.2	34.1	0.1	0.1	0.1	0.8	27.3	1.7	27.6	4.1
MFIs	3,777.4	1,855.6	45.5	63.8	1,555.6	84.5	106.1	27.6	22.1	50.4	233.4	491.5	475.5	43.4	577.9
Other sectors	1,372.8	588.4	12.2	31.1	458.9	27.9	58.3	8.2	24.6	33.2	75.4	289.0	116.5	3.0	234.5
<b>2010 Q4 to 2011 Q3</b>	Cumulated transactions														
<b>Direct investment</b>	-24.1	23.4	2.6	-11.2	13.6	18.4	0.0	-27.8	8.7	7.6	-16.6	-46.1	-13.3	-0.1	39.9
Abroad	166.3	49.5	4.1	-6.5	31.0	21.0	0.0	-4.1	8.9	1.7	4.8	31.1	-2.9	0.0	77.3
Equity/reinvested earnings	107.0	34.2	3.5	-3.4	13.1	21.0	0.0	-1.6	3.2	1.5	4.4	24.4	-18.1	0.0	59.1
Other capital	59.3	15.4	0.6	-3.1	17.9	0.0	0.0	-2.5	5.7	0.3	0.4	6.7	15.2	0.0	18.2
In the euro area	190.4	26.1	1.5	4.7	17.4	2.5	0.0	23.7	0.2	-5.9	21.3	77.2	10.4	0.1	37.3
Equity/reinvested earnings	145.5	37.3	1.0	2.5	34.0	-0.2	0.0	29.0	0.2	0.3	4.2	40.7	7.2	0.0	26.7
Other capital	44.9	-11.2	0.5	2.2	-16.6	2.8	0.0	-5.3	0.0	-6.2	17.2	36.5	3.2	0.1	10.7
<b>Portfolio investment assets</b>	41.6	26.9	4.2	18.9	-18.6	1.8	20.5	-4.9	5.5	-3.2	-6.6	23.7	-17.3	3.3	14.3
Equity	4.4	-2.7	-0.1	1.5	-3.6	-0.8	0.4	4.0	4.3	2.2	-7.0	0.8	0.5	-0.4	2.7
Debt instruments	37.2	29.6	4.4	17.5	-15.0	2.6	20.1	-8.9	1.2	-5.4	0.5	22.8	-17.8	3.7	11.6
Bonds and notes	14.2	19.1	5.2	10.0	-15.4	3.1	16.2	-9.6	1.0	-4.2	2.6	6.9	-23.9	3.8	18.5
Money market instruments	23.0	10.5	-0.8	7.5	0.4	-0.4	3.9	0.7	0.1	-1.2	-2.1	15.9	6.1	-0.1	-6.9
<b>Other investment</b>	294.5	-3.3	2.0	-12.8	61.7	-4.0	-50.2	1.3	-1.4	-3.0	17.0	184.8	178.0	-52.3	-26.6
Assets	354.3	88.2	3.7	13.6	70.3	0.7	-0.2	1.4	9.1	-2.8	37.0	74.3	111.0	-11.9	48.1
General government	21.4	8.3	0.8	-0.6	7.0	1.0	0.1	0.8	0.0	2.2	0.7	7.0	0.9	0.5	1.0
MFIs	189.7	27.4	2.2	10.9	18.7	-3.0	-1.4	0.4	6.8	-6.8	17.8	57.6	82.2	-12.5	16.8
Other sectors	143.2	52.5	0.7	3.3	44.6	2.7	1.1	0.2	2.3	1.9	18.5	9.6	27.9	0.1	30.3
Liabilities	59.8	91.4	1.7	26.5	8.6	4.7	50.0	0.1	10.5	0.3	20.1	-110.5	-67.1	40.3	74.7
General government	108.7	62.3	0.0	0.0	38.0	0.0	24.3	0.0	0.0	-0.2	-0.8	15.7	1.1	30.5	0.1
MFIs	-95.7	-2.3	-0.1	23.4	-47.4	2.6	19.3	-1.6	7.8	0.7	13.9	-120.1	-70.9	9.8	67.0
Other sectors	46.8	31.4	1.8	3.1	17.9	2.1	6.5	1.7	2.7	-0.2	7.0	-6.0	2.7	-0.1	7.5

Source: ECB.

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

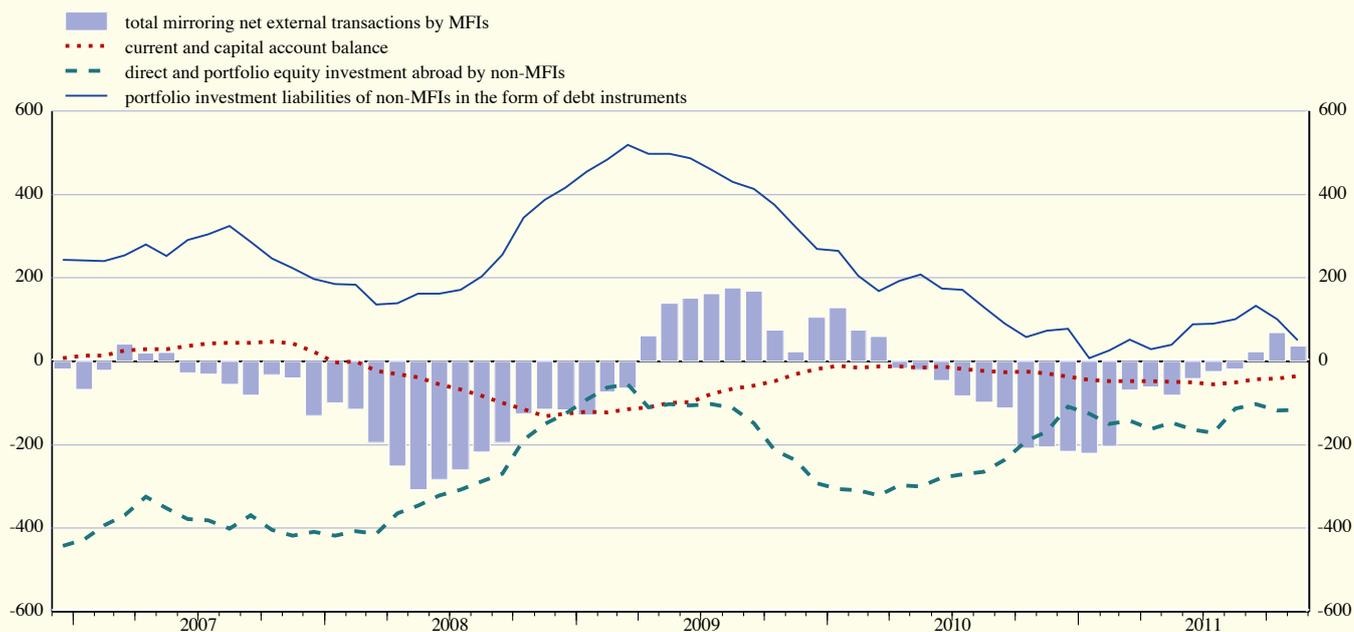
(EUR billions; transactions)

### B.o.p. items mirroring net transactions by MFIs

	Total	Current and capital account balance	Transactions by non-MFIs								Financial derivatives	Errors and omissions
			Direct investment		Portfolio investment				Other investment			
			By resident units abroad	By non-resident units in euro area	Assets		Liabilities		Assets	Liabilities		
					Equity	Debt instruments	Equity	Debt instruments				
1	2	3	4	5	6	7	8	9	10	11	12	
2008	-116.9	-125.2	-327.9	112.0	59.2	-11.0	-186.9	416.4	-53.1	73.5	-84.4	10.6
2009	105.7	-19.1	-311.9	224.8	-54.8	-132.8	111.0	268.8	111.5	-115.9	21.1	3.0
2010	-216.3	-37.3	-161.3	125.2	-70.7	-249.1	143.2	77.8	-170.3	117.2	17.4	-8.4
2010 Q3	-59.5	-6.4	-49.0	-3.8	-3.8	-44.6	41.0	-43.9	-23.2	68.6	6.3	-0.6
Q4	-57.3	4.2	20.2	63.1	-37.6	-113.2	54.6	-7.4	-46.9	11.1	8.9	-14.4
2011 Q1	69.3	-27.8	-85.5	80.2	1.0	-24.0	81.4	3.2	-20.0	51.1	-2.2	12.1
Q2	5.7	-20.4	-49.2	26.8	-14.8	-31.8	-12.7	137.1	-49.9	17.1	1.6	2.0
Q3	5.8	0.6	-40.2	23.7	40.4	-2.0	-19.9	0.0	-47.2	76.2	-15.4	-10.4
2010 Nov.	-7.0	-3.0	7.8	39.5	-9.4	-23.4	-15.1	30.4	-23.3	-2.9	3.1	-10.6
Dec.	33.8	4.7	7.1	39.9	-11.0	-2.0	25.1	-45.1	3.1	4.8	6.1	1.0
2011 Jan.	-23.6	-19.6	-29.4	37.4	0.2	-12.3	10.3	-37.0	-21.4	43.2	-1.0	6.0
Feb.	3.2	-7.1	-25.6	0.5	-1.1	-12.2	43.8	10.6	0.8	-12.3	0.8	5.0
Mar.	89.7	-1.1	-30.4	42.2	1.9	0.5	27.2	29.6	0.6	20.2	-2.1	1.1
Apr.	-25.6	-5.0	-42.3	18.1	-7.4	-14.6	-2.7	18.9	-7.6	5.3	2.6	8.9
May	-5.3	-15.5	-4.7	0.0	-1.4	-18.5	-15.4	69.1	-32.2	15.5	-2.3	0.2
June	36.7	0.1	-2.2	8.6	-6.0	1.3	5.4	49.1	-10.1	-3.7	1.2	-7.1
July	-18.2	1.3	-26.9	8.1	3.6	-16.4	14.9	-22.1	-3.7	21.4	-0.8	2.5
Aug.	8.6	-1.5	7.8	1.5	27.2	1.4	-18.4	-15.9	-13.2	26.1	-6.5	0.1
Sep.	15.4	0.9	-21.0	14.1	9.6	13.0	-16.5	37.9	-30.2	28.7	-8.1	-13.1
Oct.	-39.1	4.1	-17.9	10.7	3.2	0.5	-12.2	-23.9	-29.0	25.4	-0.9	0.9
Nov.	-39.6	3.2	-13.6	5.4	13.5	-5.3	-13.5	-21.4	-13.1	4.0	0.8	0.4
<i>12-month cumulated transactions</i>												
2011 Nov.	36.0	-35.6	-199.2	186.6	32.3	-64.7	48.1	49.9	-156.1	178.7	-10.1	6.0

### C38 Main b.o.p. items mirroring developments in MFI net external transactions <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.

## 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 item: Manufacturing	Total			Memo items:			
			Intermediate	Capital	Consumption		Intermediate	Capital	Consumption	Manufacturing	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)													
2009	-18.0	-21.7	1,280.2	628.0	264.4	355.5	1,063.0	1,267.8	734.6	194.0	317.3	842.0	182.0
2010	20.1	22.5	1,533.4	765.6	311.4	420.2	1,269.3	1,547.8	946.7	230.1	348.4	1,018.4	247.4
2010 Q4	22.1	25.7	405.0	202.0	84.5	109.6	333.4	407.7	254.1	59.2	89.6	266.5	66.4
2011 Q1	21.5	24.0	427.0	214.5	86.1	116.2	350.2	435.6	275.9	59.8	91.8	277.7	75.6
Q2	13.0	12.7	429.1	215.9	86.8	116.3	350.7	436.2	280.6	58.7	89.7	275.0	78.6
Q3	9.4	9.1	436.4	218.6	87.1	118.7	358.5	438.8	280.9	58.8	91.5	275.1	80.6
2011 June	3.3	3.7	138.8	70.2	28.2	37.0	113.5	141.5	91.1	18.7	29.5	89.1	25.3
July	5.1	7.3	141.8	71.5	28.2	38.4	116.5	145.4	93.4	19.5	29.8	90.6	27.4
Aug.	13.9	12.1	148.2	73.8	29.8	40.2	122.4	149.5	95.4	20.3	31.1	94.8	26.8
Sep.	9.8	8.2	146.4	73.3	29.1	40.0	119.6	144.0	92.1	19.1	30.6	89.7	26.4
Oct.	5.8	7.5	143.5	72.5	27.7	39.5	116.9	143.0	90.9	19.5	30.2	88.9	26.4
Nov.	10.2	3.6	149.2	.	.	.	120.7	143.0	.	.	.	87.8	.
Volume indices (2000 = 100; annual percentage changes for columns 1 and 2)													
2009	-16.5	-13.6	119.6	114.9	119.0	128.1	115.9	109.8	101.0	115.7	136.7	111.1	101.8
2010	15.0	10.8	136.8	132.5	138.5	143.7	134.0	120.9	113.1	131.2	143.3	127.9	100.9
2010 Q4	15.2	10.4	142.9	137.5	149.9	148.5	139.7	123.8	116.5	134.5	145.2	132.2	102.9
2011 Q1	13.3	7.7	146.1	141.2	149.8	152.7	143.2	125.1	117.6	133.0	145.1	133.9	98.7
Q2	8.2	2.6	146.8	140.8	152.1	154.3	144.0	123.8	116.6	133.5	143.4	134.1	94.4
Q3	5.1	2.3	148.0	141.8	151.6	155.2	146.1	124.4	117.2	134.3	142.8	133.3	99.0
2011 May	17.4	8.2	150.2	143.4	159.3	158.7	148.6	127.0	119.3	135.3	147.4	138.6	92.5
June	0.1	-4.5	142.6	137.7	147.2	148.0	139.9	119.9	113.2	126.1	140.1	129.2	93.3
July	1.3	1.1	144.4	139.3	147.4	150.9	142.4	124.3	117.5	134.0	140.7	132.2	100.9
Aug.	9.1	4.4	150.7	143.4	155.9	158.0	149.5	126.4	118.7	138.6	143.8	137.3	98.6
Sep.	5.4	1.6	148.8	142.8	151.4	156.7	146.3	122.7	115.5	130.4	143.8	130.6	97.4
Oct.	0.1	0.0	144.7	139.8	144.1	153.1	141.3	121.0	113.3	132.9	140.5	128.5	96.6

### 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 item: Manufacturing	Total (index: 2005 = 100)	Total				Memo item: 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
2010	105.4	3.8	4.8	1.4	2.2	26.3	3.8	108.9	9.9	9.7	1.5	2.9	27.5	5.9
2011	110.0	4.4	5.8	1.4	2.2	23.3	4.3	118.6	9.0	4.6	-0.1	3.8	26.5	4.0
2011 Q2	110.0	4.1	6.0	0.8	1.8	22.0	4.0	118.6	8.4	4.6	-0.7	3.3	25.6	3.5
Q3	110.4	3.9	5.0	0.9	1.8	25.5	3.9	118.8	8.0	3.0	-1.5	2.9	26.8	2.8
Q4	110.6	3.7	3.8	1.7	2.3	20.3	3.6	119.9	7.5	0.5	0.7	3.4	24.5	2.7
2011 July	110.4	4.0	5.3	0.8	1.7	25.9	3.9	118.8	8.2	4.0	-2.0	3.0	27.2	2.9
Aug.	110.3	3.8	4.8	0.8	1.8	23.4	3.7	118.2	7.3	2.6	-1.4	2.6	24.3	2.6
Sep.	110.6	4.0	4.7	1.1	1.9	27.2	4.0	119.3	8.5	2.5	-1.1	3.3	29.1	2.9
Oct.	110.4	4.1	4.4	1.7	2.4	24.4	4.0	119.3	8.8	1.5	0.5	4.0	28.6	3.4
Nov.	110.6	3.9	3.8	1.8	2.4	22.3	3.8	119.8	8.1	0.8	0.5	3.3	27.1	2.8
Dec.	110.7	3.1	3.1	1.7	2.1	14.6	3.0	120.5	5.8	-0.9	1.1	2.9	18.5	1.8

Source: Eurostat.

- Product groups as classified in the Broad Economic Categories. Unlike the product groups shown in Table 2, intermediate and consumption product groups include agricultural and energy products.
- Product groups as classified in the 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 those deflators 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	EU Member States outside the euro area				Russia	Switzerland	Turkey	United States	Asia		Africa	Latin America	Other countries	
		Denmark	Sweden	United Kingdom	Other EU countries					China	Japan				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
<b>Exports (f.o.b.)</b>															
2009	1,280.2	27.4	41.5	175.3	174.6	50.1	79.0	34.8	152.5	284.4	68.9	28.6	92.0	54.4	29.3
2010	1,533.4	30.1	52.6	194.7	208.6	63.4	92.7	47.4	180.6	356.0	94.8	34.6	104.9	73.4	18.2
2010 Q2	378.9	7.3	13.2	48.0	51.0	15.3	22.8	11.5	45.3	88.8	23.6	8.7	25.7	18.5	4.7
Q3	397.1	7.6	13.4	50.0	53.9	17.1	23.9	12.1	47.8	92.2	24.0	8.9	26.8	18.9	4.2
Q4	405.0	8.2	14.1	50.3	56.2	17.4	24.6	13.3	46.2	93.4	25.5	9.0	27.5	19.2	4.0
2011 Q1	427.0	8.0	15.0	53.1	59.2	18.7	25.9	15.4	49.9	99.5	28.9	9.3	28.0	20.2	0.2
Q2	429.1	8.2	15.4	52.1	60.2	20.0	26.3	14.3	48.1	98.4	27.3	9.5	27.1	21.0	3.7
Q3	436.4	8.3	15.6	53.4	61.0	20.7	28.2	13.5	48.4	101.6	28.6	10.2	27.6	21.2	2.8
2011 June	138.8	2.7	5.0	17.1	20.0	6.5	8.2	4.5	15.5	32.1	8.9	3.1	8.8	6.6	0.7
July	141.8	2.7	5.2	17.2	19.8	6.6	9.3	4.5	15.6	33.0	9.2	3.2	9.0	6.9	0.9
Aug.	148.2	2.8	5.3	18.4	20.8	7.0	9.4	4.5	17.1	34.5	9.9	3.5	9.2	7.2	0.4
Sep.	146.4	2.8	5.1	17.8	20.4	7.1	9.5	4.5	15.8	34.0	9.6	3.4	9.4	7.0	1.4
Oct.	143.5	2.7	4.7	17.7	19.9	6.6	9.4	4.4	15.6	34.3	10.2	3.6	9.2	6.9	1.1
Nov.	149.2	.	.	.	.	7.1	9.4	4.3	17.4	35.4	10.2	3.5	9.4	7.2	.
<b>Percentage share of total exports</b>															
2010	100.0	2.0	3.4	12.7	13.6	4.1	6.0	3.1	11.8	23.2	6.2	2.3	6.8	4.8	1.2
<b>Imports (c.i.f.)</b>															
2009	1,267.8	27.1	38.2	127.1	161.9	84.3	65.4	26.6	116.3	380.9	157.9	44.2	94.9	59.5	-25.4
2010	1,547.8	27.4	47.4	147.8	195.6	112.7	73.3	30.9	129.8	494.6	208.6	51.4	119.2	75.3	-49.6
2010 Q2	385.9	6.8	11.9	36.6	48.3	28.5	19.5	7.6	32.0	125.0	53.0	13.1	29.9	18.2	-14.6
Q3	400.8	6.9	12.5	37.5	50.1	28.2	18.8	7.7	34.3	130.3	55.5	13.2	29.7	19.4	-10.6
Q4	407.7	7.0	12.6	38.6	52.5	30.2	18.2	8.3	34.2	128.5	54.2	13.1	32.6	21.0	-14.5
2011 Q1	435.6	7.2	13.2	40.9	55.7	35.4	18.9	9.0	35.4	136.2	55.0	13.7	35.8	21.5	-17.9
Q2	436.2	7.5	13.4	40.7	56.3	35.1	19.6	8.9	34.1	139.4	55.9	12.7	30.6	21.9	-15.1
Q3	438.8	7.3	13.7	42.2	57.1	32.3	21.8	8.5	34.3	137.5	54.2	13.2	30.9	23.4	-11.1
2011 June	141.5	2.4	4.3	13.4	18.6	9.8	6.5	2.9	11.1	45.7	18.4	4.1	10.8	7.1	-3.9
July	145.4	2.4	4.5	13.9	18.7	11.9	6.7	2.9	11.0	46.4	18.1	4.5	9.6	7.7	-5.2
Aug.	149.5	2.4	4.7	14.0	19.1	10.0	8.2	2.9	11.5	47.0	18.9	4.5	10.8	8.1	-2.3
Sep.	144.0	2.5	4.5	14.2	19.3	10.4	6.9	2.8	11.7	44.1	17.2	4.3	10.5	7.6	-3.6
Oct.	143.0	2.5	4.2	13.6	18.9	11.7	6.7	2.8	11.8	44.3	17.4	4.3	10.3	7.7	-6.0
Nov.	143.0	.	.	.	.	11.3	6.8	2.7	11.7	43.5	16.9	4.2	10.3	7.7	.
<b>Percentage share of total imports</b>															
2010	100.0	1.8	3.1	9.6	12.6	7.3	4.7	2.0	8.4	31.9	13.5	3.3	7.7	4.9	-3.2
<b>Balance</b>															
2009	12.4	0.3	3.3	48.2	12.7	-34.2	13.6	8.2	36.2	-96.5	-88.9	-15.6	-2.9	-5.1	54.7
2010	-14.5	2.7	5.2	46.9	13.1	-49.3	19.4	16.5	50.8	-138.6	-113.8	-16.8	-14.3	-1.8	67.8
2010 Q2	-6.9	0.5	1.3	11.4	2.6	-13.2	3.3	3.9	13.2	-36.1	-29.4	-4.4	-4.2	0.4	19.3
Q3	-3.7	0.6	0.9	12.5	3.8	-11.1	5.1	4.4	13.5	-38.1	-31.5	-4.3	-2.9	-0.5	14.8
Q4	-2.8	1.2	1.5	11.6	3.7	-12.8	6.5	5.0	12.0	-35.1	-28.8	-4.1	-5.1	-1.8	18.5
2011 Q1	-8.5	0.8	1.8	12.2	3.5	-16.7	7.0	6.4	14.5	-36.8	-26.0	-4.4	-7.7	-1.3	18.2
Q2	-7.1	0.7	2.0	11.3	4.0	-15.1	6.7	5.5	14.1	-41.0	-28.6	-3.2	-3.5	-0.9	18.8
Q3	-2.3	1.0	1.9	11.2	3.9	-11.7	6.4	5.0	14.2	-35.9	-25.6	-3.1	-3.3	-2.2	13.9
2011 June	-2.7	0.2	0.7	3.7	1.4	-3.3	1.7	1.6	4.5	-13.7	-9.5	-1.0	-2.1	-0.5	4.7
July	-3.6	0.3	0.7	3.2	1.1	-5.4	2.6	1.6	4.6	-13.4	-8.9	-1.2	-0.7	-0.7	6.1
Aug.	-1.2	0.4	0.6	4.3	1.7	-3.0	1.2	1.6	5.5	-12.4	-9.1	-1.0	-1.6	-0.9	2.7
Sep.	2.5	0.3	0.6	3.7	1.1	-3.3	2.6	1.7	4.0	-10.1	-7.6	-0.8	-1.0	-0.6	5.0
Oct.	0.5	0.3	0.5	4.1	1.0	-5.1	2.7	1.6	3.8	-10.0	-7.2	-0.7	-1.1	-0.8	7.0
Nov.	6.1	.	.	.	.	-4.2	2.6	1.6	5.7	-8.1	-6.7	-0.7	-0.9	-0.4	.

Source: Eurostat.

## EXCHANGE RATES

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

(period averages; index: 1999 Q1=100)

	EER-20						EER-40	
	Nominal	Real CPI	Real PPI	Real GDP deflator	Real ULCM	Real ULCT	Nominal	Real CPI
	1	2	3	4	5	6	7	8
2009	110.6	109.2	104.3	104.8	118.7	104.8	119.7	106.8
2010	103.6	101.6	98.1	96.7	107.8	97.2	111.4	98.1
2011	103.4	100.7	97.6	.	.	.	112.1	97.6
2010 Q4	103.4	101.0	97.9	95.8	107.1	96.8	111.3	97.5
2011 Q1	102.7	100.1	97.1	94.7	105.7	95.4	110.7	96.6
Q2	105.2	102.6	99.3	97.0	108.9	97.8	113.5	99.0
Q3	103.5	100.6	97.6	95.0	107.7	95.5	112.5	97.7
Q4	102.1	99.4	96.2	.	.	.	111.6	97.0
2011 Jan.	101.4	98.9	96.0	-	-	-	109.3	95.4
Feb.	102.4	99.7	96.9	-	-	-	110.6	96.4
Mar.	104.2	101.6	98.5	-	-	-	112.3	98.1
Apr.	105.9	103.3	100.0	-	-	-	114.0	99.6
May	104.9	102.2	98.8	-	-	-	113.2	98.6
June	105.0	102.3	99.0	-	-	-	113.4	98.9
July	104.0	101.0	98.1	-	-	-	112.4	97.7
Aug.	103.8	100.8	97.9	-	-	-	112.9	98.0
Sep.	102.8	99.9	96.8	-	-	-	112.0	97.4
Oct.	103.0	100.3	97.0	-	-	-	112.6	97.8
Nov.	102.6	99.9	96.7	-	-	-	112.1	97.4
Dec.	100.8	98.2	95.0	-	-	-	110.3	95.7
2012 Jan.	98.9	96.4	93.2	-	-	-	108.0	93.7
	<i>Percentage change versus previous month</i>							
2012 Jan.	-1.8	-1.9	-1.8	-	-	-	-2.1	-2.2
	<i>Percentage change versus previous year</i>							
2012 Jan.	-2.4	-2.6	-2.8	-	-	-	-1.2	-1.8

### C39 Effective exchange rates

(monthly averages; index: 1999 Q1=100)



### C40 Bilateral exchange rates

(monthly averages; index: 1999 Q1=100)



Source: ECB.

1) For a 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)

	Bulgarian lev	Czech koruna	Danish krone	Latvian lats	Lithuanian litas	Hungarian forint	Polish zloty	New Romanian leu	Swedish krona	Pound sterling	Croatian kuna	New Turkish lira
	1	2	3	4	5	6	7	8	9	10	11	12
2009	1.9558	26.435	7.4462	0.7057	3.4528	280.33	4.3276	4.2399	10.6191	0.89094	7.3400	2.1631
2010	1.9558	25.284	7.4473	0.7087	3.4528	275.48	3.9947	4.2122	9.5373	0.85784	7.2891	1.9965
2011	1.9558	24.590	7.4506	0.7063	3.4528	279.37	4.1206	4.2391	9.0298	0.86788	7.4390	2.3378
2011 Q2	1.9558	24.324	7.4573	0.7092	3.4528	266.42	3.9596	4.1378	9.0153	0.88274	7.3932	2.2579
Q3	1.9558	24.387	7.4506	0.7093	3.4528	275.10	4.1527	4.2587	9.1451	0.87760	7.4629	2.4535
Q4	1.9558	25.276	7.4398	0.7017	3.4528	303.47	4.4207	4.3365	9.0910	0.85727	7.4968	2.4759
2011 July	1.9558	24.335	7.4560	0.7092	3.4528	267.68	3.9951	4.2413	9.1340	0.88476	7.4316	2.3654
Aug.	1.9558	24.273	7.4498	0.7093	3.4528	272.37	4.1195	4.2505	9.1655	0.87668	7.4620	2.5147
Sep.	1.9558	24.566	7.4462	0.7093	3.4528	285.05	4.3379	4.2838	9.1343	0.87172	7.4936	2.4736
Oct.	1.9558	24.841	7.4442	0.7061	3.4528	296.79	4.3516	4.3244	9.1138	0.87036	7.4849	2.5089
Nov.	1.9558	25.464	7.4412	0.7015	3.4528	309.15	4.4324	4.3560	9.1387	0.85740	7.4923	2.4565
Dec.	1.9558	25.514	7.4341	0.6975	3.4528	304.19	4.4774	4.3282	9.0184	0.84405	7.5136	2.4632
2012 Jan.	1.9558	25.531	7.4353	0.6990	3.4528	307.33	4.3760	4.3417	8.8503	0.83210	7.5543	2.3759
	<i>Percentage change versus previous month</i>											
2012 Jan.	0.0	0.1	0.0	0.2	0.0	1.0	-2.3	0.3	-1.9	-1.4	0.5	-3.5
	<i>Percentage change versus previous year</i>											
2012 Jan.	0.0	4.4	-0.2	-0.6	0.0	11.6	12.5	1.9	-0.7	-1.8	2.1	13.6
	Australian dollar	Brazilian real	Canadian dollar	Chinese yuan renminbi	Hong Kong dollar	Icelandic krona <sup>1)</sup>	Indian rupee <sup>2)</sup>	Indonesian rupiah	Israeli shekel	Japanese yen	Malaysian ringgit	
	13	14	15	16	17	18	19	20	21	22	23	
2009	1.7727	2.7674	1.5850	9.5277	10.8114	-	67.3611	14,443.74	5.4668	130.34	4.9079	
2010	1.4423	2.3314	1.3651	8.9712	10.2994	-	60.5878	12,041.70	4.9457	116.24	4.2668	
2011	1.3484	2.3265	1.3761	8.9960	10.8362	-	64.8859	12,206.51	4.9775	110.96	4.2558	
2011 Q2	1.3550	2.2960	1.3932	9.3509	11.1932	-	64.3809	12,364.41	4.9490	117.41	4.3451	
Q3	1.3459	2.3063	1.3841	9.0653	11.0105	-	64.7000	12,181.09	5.0174	109.77	4.2666	
Q4	1.3316	2.4240	1.3788	8.5682	10.4879	-	68.5352	12,111.94	5.0172	104.22	4.2458	
2011 July	1.3249	2.2329	1.3638	9.2121	11.1104	-	63.3537	12,171.27	4.8801	113.26	4.2716	
Aug.	1.3651	2.2888	1.4071	9.1857	11.1846	-	65.0717	12,249.95	5.0841	110.43	4.2822	
Sep.	1.3458	2.3946	1.3794	8.7994	10.7333	-	65.5964	12,118.49	5.0788	105.75	4.2456	
Oct.	1.3525	2.4336	1.3981	8.7308	10.6616	-	67.5519	12,150.54	5.0253	105.06	4.2963	
Nov.	1.3414	2.4210	1.3897	8.6154	10.5495	-	68.8330	12,214.99	5.0521	105.02	4.2756	
Dec.	1.3003	2.4175	1.3481	8.3563	10.2496	-	69.2066	11,965.40	4.9725	102.55	4.1639	
2012 Jan.	1.2405	2.3084	1.3073	8.1465	10.0187	-	66.0601	11,709.25	4.9141	99.33	4.0151	
	<i>Percentage change versus previous month</i>											
2012 Jan.	-4.6	-4.5	-3.0	-2.5	-2.3	-	-4.5	-2.1	-1.2	-3.1	-3.6	
	<i>Percentage change versus previous year</i>											
2012 Jan.	-7.5	3.2	-1.5	-7.6	-3.6	-	8.8	-3.0	2.6	-10.0	-1.8	
	Mexican peso	New Zealand dollar	Norwegian krone	Philippine peso	Russian rouble	Singapore dollar	South African rand	South Korean won	Swiss franc	Thai baht	US dollar	
	24	25	26	27	28	29	30	31	32	33	34	
2009	18.7989	2.2121	8.7278	66.338	44.1376	2.0241	11.6737	1,772.90	1.5100	47.804	1.3948	
2010	16.7373	1.8377	8.0043	59.739	40.2629	1.8055	9.6984	1,531.82	1.3803	42.014	1.3257	
2011	17.2877	1.7600	7.7934	60.260	40.8846	1.7489	10.0970	1,541.23	1.2326	42.429	1.3920	
2011 Q2	16.8752	1.7992	7.8259	62.256	40.2750	1.7842	9.7852	1,559.23	1.2514	43.592	1.4391	
Q3	17.3908	1.6976	7.7652	60.371	41.1734	1.7309	10.0898	1,532.60	1.1649	42.574	1.4127	
Q4	18.3742	1.7353	7.7602	58.566	42.0737	1.7348	10.9209	1,542.87	1.2293	41.791	1.3482	
2011 July	16.6491	1.6877	7.7829	60.961	39.8343	1.7359	9.7000	1,510.29	1.1766	42.949	1.4264	
Aug.	17.5456	1.7108	7.7882	60.836	41.2954	1.7340	10.1532	1,542.01	1.1203	42.875	1.4343	
Sep.	17.9370	1.6932	7.7243	59.322	42.3239	1.7229	10.3956	1,544.04	1.2005	41.902	1.3770	
Oct.	18.4315	1.7361	7.7474	59.412	42.8569	1.7493	10.9188	1,578.17	1.2295	42.297	1.3706	
Nov.	18.5646	1.7584	7.7868	58.743	41.8082	1.7476	11.0547	1,537.42	1.2307	41.969	1.3556	
Dec.	18.1174	1.7102	7.7451	57.537	41.5686	1.7070	10.7829	1,513.26	1.2276	41.099	1.3179	
2012 Jan.	17.3140	1.6132	7.6752	56.208	40.4394	1.6510	10.3405	1,474.96	1.2108	40.718	1.2905	
	<i>Percentage change versus previous month</i>											
2012 Jan.	-4.4	-5.7	-0.9	-2.3	-2.7	-3.3	-4.1	-2.5	-1.4	-0.9	-2.1	
	<i>Percentage change versus previous year</i>											
2012 Jan.	6.9	-7.5	-1.9	-4.9	0.5	-4.0	11.6	-1.4	-5.3	-0.3	-3.4	

Source: ECB.

1) The most recent rate for the Icelandic krona refers to 3 December 2008.

2) For this currency the ECB computes and publishes euro reference exchange rates as from 1 January 2009. Previous data are indicative.



## DEVELOPMENTS OUTSIDE THE EURO AREA

### 9.1 Economic and financial developments in other EU Member States

(annual percentage changes, unless otherwise indicated)

	Bulgaria	Czech Republic	Denmark	Latvia	Lithuania	Hungary	Poland	Romania	Sweden	United Kingdom
	1	2	3	4	5	6	7	8	9	10
HICP										
2010	3.0	1.2	2.2	-1.2	1.2	4.7	2.7	6.1	1.9	3.3
2011	3.4	2.1	2.7	4.2	4.1	3.9	3.9	5.8	1.4	4.5
2011 Q3	3.1	2.0	2.6	4.4	4.6	3.4	3.7	4.2	1.6	4.7
2011 Q4	2.5	2.8	2.5	4.1	4.0	4.1	4.2	3.4	0.9	4.7
2011 Oct.	3.0	2.6	2.7	4.3	4.2	3.8	3.8	3.6	1.1	5.0
2011 Nov.	2.6	2.9	2.5	4.0	4.4	4.3	4.4	3.5	1.1	4.8
2011 Dec.	2.0	2.8	2.4	3.9	3.5	4.1	4.5	3.2	0.4	4.2
General government deficit (-)/surplus (+) as a percentage of GDP										
2008	1.7	-2.2	3.2	-4.2	-3.3	-3.7	-3.7	-5.7	2.2	-5.0
2009	-4.3	-5.8	-2.7	-9.7	-9.5	-4.6	-7.3	-9.0	-0.7	-11.5
2010	-3.1	-4.8	-2.6	-8.3	-7.0	-4.2	-7.8	-6.9	0.2	-10.3
General government gross debt as a percentage of GDP										
2008	13.7	28.7	34.5	19.8	15.5	72.9	47.1	13.4	38.8	54.8
2009	14.6	34.4	41.8	36.7	29.4	79.7	50.9	23.6	42.7	69.6
2010	16.3	37.6	43.7	44.7	38.0	81.3	54.9	31.0	39.7	79.9
Long-term government bond yield as a percentage per annum; period average										
2011 July	5.36	3.79	3.02	5.67	5.05	7.35	5.81	7.30	2.75	2.88
2011 Aug.	5.32	3.40	2.49	5.60	5.05	7.49	5.70	7.38	2.17	2.37
2011 Sep.	5.30	3.00	2.07	5.60	5.09	7.64	5.74	7.43	1.83	2.41
2011 Oct.	5.27	3.14	2.23	5.62	5.06	7.88	5.71	7.48	1.90	2.52
2011 Nov.	5.27	3.67	2.01	5.73	5.25	8.53	5.80	7.43	1.69	2.29
2011 Dec.	5.23	3.70	1.86	5.93	5.75	8.97	5.84	7.21	1.68	2.12
3-month interest rate as a percentage per annum; period average										
2011 July	3.75	1.19	1.66	0.82	1.81	6.74	4.70	5.11	2.56	0.83
2011 Aug.	3.74	1.19	1.60	0.83	1.86	7.12	4.72	5.60	2.58	0.86
2011 Sep.	3.67	1.17	1.44	0.87	1.85	6.19	4.75	5.77	2.53	0.92
2011 Oct.	3.68	1.17	1.40	0.99	1.88	6.18	4.80	5.96	2.52	0.97
2011 Nov.	3.64	1.15	1.29	1.27	1.87	7.25	4.94	6.01	2.62	1.01
2011 Dec.	3.64	1.16	1.08	1.86	1.78	6.50	4.98	6.05	2.69	1.06
Real GDP										
2009	-5.5	-4.7	-5.8	-17.7	-14.8	-6.8	1.6	-7.1	-5.2	-4.4
2010	0.2	2.7	1.3	-0.3	1.4	1.3	3.9	-1.3	5.6	2.1
2011 Q2	2.0	2.0	1.7	5.3	6.5	1.7	4.6	1.9	4.8	0.6
2011 Q3	1.6	1.2	0.0	6.1	7.3	1.5	4.2	4.4	4.6	0.5
2011 Q4	.	.	.	.	4.5	.	.	.	.	0.8
Current and capital account balance as a percentage of GDP										
2009	-7.6	-1.0	3.3	11.1	7.8	1.0	-2.2	-3.6	6.9	-1.5
2010	-0.5	-2.3	5.6	4.9	4.2	2.9	-2.8	-3.7	6.5	-3.1
2011 Q1	2.0	2.5	5.8	1.2	1.8	3.0	-1.7	-2.6	8.0	-1.8
2011 Q2	1.3	-6.1	7.2	1.3	-1.7	3.3	-2.1	-6.8	6.7	-1.4
2011 Q3	12.1	-4.1	8.5	2.4	6.0	4.2	-3.6	-3.3	9.3	-4.4
Gross external debt as a percentage of GDP										
2009	108.3	51.6	188.5	156.5	87.0	144.7	59.4	69.0	210.8	416.9
2010	102.8	55.8	190.7	165.4	87.4	143.4	66.0	77.2	190.4	413.9
2011 Q1	98.5	55.2	185.4	158.1	85.5	137.3	68.3	74.6	188.5	416.6
2011 Q2	96.6	55.4	181.5	154.7	85.8	137.0	68.7	78.1	190.0	418.2
2011 Q3	93.7	57.5	182.7	151.4	82.6	146.3	72.4	77.8	197.8	435.6
Unit labour costs										
2009	12.7	2.4	5.7	-7.9	-1.4	2.9	2.2	3.8	4.6	5.7
2010	0.8	-0.7	-1.0	-10.2	-7.3	-3.2	2.2	-4.0	-1.7	1.7
2011 Q1	1.7	-0.2	-0.5	2.6	-3.0	2.9	1.2	-1.3	-2.4	-0.7
2011 Q2	5.3	0.6	-1.0	2.3	-0.7	5.9	0.1	9.4	-0.7	0.8
2011 Q3	7.8	0.4	0.4	1.9	-1.1	6.1	2.0	9.3	-1.0	2.1
Standardised unemployment rate as a percentage of labour force (s.a.)										
2010	10.3	7.3	7.4	18.6	17.8	11.1	9.6	7.3	8.4	7.8
2011	11.1	6.8	7.6	.	.	10.9	9.6	7.3	7.5	.
2011 Q3	11.0	6.6	7.5	14.8	15.3	10.9	9.7	7.5	7.3	8.3
2011 Q4	11.0	6.7	7.8	.	.	10.8	9.9	7.2	7.5	.
2011 Oct.	10.9	6.6	7.7	.	.	10.8	9.9	7.3	7.5	8.4
2011 Nov.	11.0	6.7	7.8	.	.	10.7	9.9	7.3	7.5	.
2011 Dec.	11.2	6.8	7.8	.	.	10.9	9.9	7.0	7.5	.

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

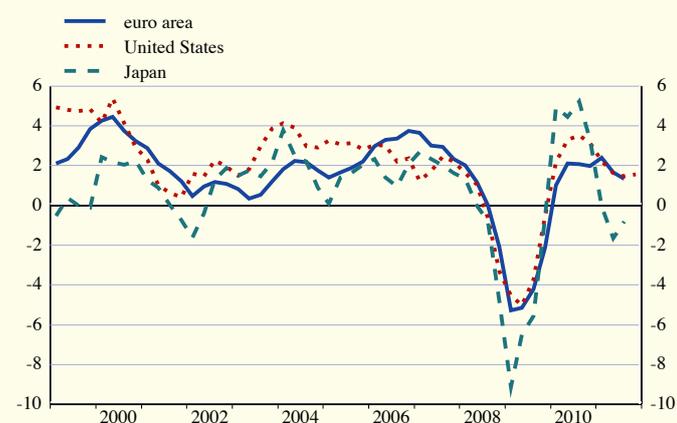
## 9.2 Economic and financial developments in the United States and Japan

(annual percentage changes, unless otherwise indicated)

	Consumer price index	Unit labour costs <sup>1)</sup>	Real GDP	Industrial production index (manufacturing)	Unemployment rate as a % of labour force <sup>2)</sup> (s.a.)	Broad money <sup>3)</sup>	3-month interbank deposit rate <sup>4)</sup>	10-year zero coupon government bond yield; <sup>4)</sup> end of period	Exchange rate <sup>5)</sup> as national currency per euro	Fiscal deficit (-)/ surplus (+) as a % of GDP	Gross public debt <sup>6)</sup> as a % of GDP
	1	2	3	4	5	6	7	8	9	10	11
United States											
2008	3.8	2.8	-0.3	-4.7	5.8	7.1	2.93	2.70	1.4708	-6.6	61.5
2009	-0.4	-0.6	-3.5	-13.5	9.3	7.9	0.69	4.17	1.3948	-11.6	74.1
2010	1.6	-2.0	3.0	5.9	9.6	2.3	0.34	3.57	1.3257	-10.7	82.4
2011	3.2	1.0	1.7	4.9	9.0	7.2	0.34	2.10	1.3920	.	.
2010 Q4	1.3	-0.9	3.1	6.6	9.6	3.1	0.29	3.57	1.3583	-10.5	82.4
2011 Q1	2.1	1.3	2.2	6.6	9.0	4.6	0.31	3.76	1.3680	-9.9	83.2
Q2	3.4	1.0	1.6	4.4	9.0	5.4	0.26	3.46	1.4391	-10.2	83.0
Q3	3.8	0.5	1.5	4.2	9.1	9.1	0.30	2.18	1.4127	-9.7	84.9
Q4	3.3	1.3	1.6	4.3	8.7	9.5	0.48	2.10	1.3482	.	.
2011 Sep.	3.9	-	-	4.4	9.0	9.6	0.35	2.18	1.3770	-	-
Oct.	3.5	-	-	4.7	8.9	9.4	0.41	2.37	1.3706	-	-
Nov.	3.4	-	-	4.2	8.7	9.6	0.48	2.30	1.3556	-	-
Dec.	3.0	-	-	4.0	8.5	9.6	0.56	2.10	1.3179	-	-
2012 Jan.	.	-	-	.	8.3	.	0.57	1.97	1.2905	-	-
Japan											
2008	1.4	1.2	-1.1	-3.4	4.0	2.1	0.93	1.21	152.45	-1.9	162.9
2009	-1.3	2.8	-5.5	-21.9	5.1	2.7	0.47	1.42	130.34	-8.8	180.0
2010	-0.7	-2.6	4.5	16.6	5.1	2.8	0.23	1.18	116.24	-8.4	188.4
2011	-0.3	.	.	-3.5	.	2.7	0.19	1.00	110.96	.	.
2010 Q4	-0.3	-1.3	3.3	6.0	5.0	2.5	0.19	1.18	112.10	.	.
2011 Q1	-0.5	1.2	0.0	-2.6	4.7	2.5	0.19	1.33	112.57	.	.
Q2	-0.4	1.2	-1.7	-6.9	4.6	2.8	0.20	1.18	117.41	.	.
Q3	0.1	.	-0.8	-2.1	4.4	2.8	0.19	1.04	109.77	.	.
Q4	-0.3	.	.	-2.8	.	3.0	0.20	1.00	104.22	.	.
2011 Sep.	0.0	-	-	-3.3	4.1	2.7	0.19	1.04	105.75	-	-
Oct.	-0.2	-	-	0.0	4.5	2.8	0.19	1.04	105.06	-	-
Nov.	-0.5	-	-	-4.2	4.5	3.0	0.20	1.10	105.02	-	-
Dec.	-0.2	-	-	-4.2	.	3.1	0.20	1.00	102.55	-	-
2012 Jan.	.	-	-	.	.	.	0.20	0.98	99.33	-	-

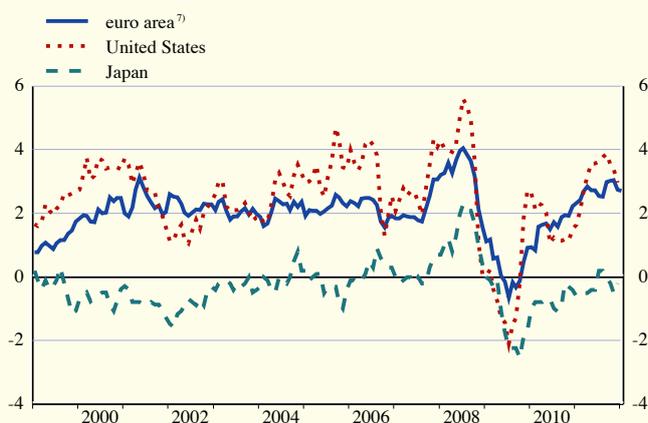
### C41 Real gross domestic product

(annual percentage changes; quarterly data)



### C42 Consumer price indices

(annual percentage changes; monthly data)



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); Thomson 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) Japanese data from March to August 2011 exclude the three prefectures most affected by the earthquake in that country. These are reinstated as of September 2011.

3) Period averages; M2 for the United States, M2+CDs for Japan.

4) Percentages per annum. For further information on the three-month interbank deposit rate, see Section 4.6.

5) For more information, see Section 8.2.

6) Gross consolidated general government debt (end of period).

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



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## TECHNICAL NOTES

### 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:

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

### SECTION 1.3

#### CALCULATION OF INTEREST RATES ON INDEXED LONGER-TERM REFINANCING OPERATIONS

The interest rate on an indexed longer-term refinancing operation (LTRO) is equal to the average of the minimum bid rates on the main refinancing operations (MROs) over the life of that LTRO. According to this definition, if an LTRO is outstanding for  $D$  number of days and the minimum bid rates prevailing in MROs are  $R_{1, MRO}$  (over  $D_1$  days),  $R_{2, MRO}$  (over  $D_2$  days), etc., until  $R_{i, MRO}$  (over  $D_i$  days), where  $D_1 + D_2 + \dots + D_i = D$ , the applicable annualised rate ( $R_{LTRO}$ ) is calculated as:

$$c) R_{LTRO} = \frac{D_1 R_{1, MRO} + D_2 R_{2, MRO} + \dots + D_i R_{i, MRO}}{D}$$

### 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:

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

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

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

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 can 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:

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

The base of the index (for the non-seasonally adjusted series) is currently set as December 2008 = 100. Time series for the index of adjusted outstanding amounts are available on the ECB's website ([www.ecb.europa.eu](http://www.ecb.europa.eu)) in the "Monetary and financial statistics" 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  $t$  – can be calculated using either of the following two formulae:

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

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

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 h) by dividing the index for December 2002 by the index for December 2001.

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

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

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 g) or h) 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:

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

The annual growth rate in the four quarters ending in month  $t$  (i.e.  $a_t$ ) can be calculated using formula h).

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

The approach used is based on multiplicative decomposition using X-12-ARIMA.<sup>2</sup> The seasonal adjustment may include a day-of-the-week adjustment, and for some series it is carried out indirectly by means of a linear combination of components. This is the case for M3, which is 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 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.

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

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 of 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 2008) generally differs from 100, reflecting the seasonality of that month.

## SECTIONS 3.1 TO 3.5

### EQUALITY OF USES AND RESOURCES

In Section 3.1 the data conform to a basic accounting identity. For non-financial transactions, total uses equal total resources for each transaction category. This accounting identity is also reflected in the financial account – 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 Sections 3.1, 3.2 and 3.3 are computed as follows.

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

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 defined only 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 the net equity of households in pension fund reserves (resources minus uses) minus final consumption expenditure (uses). For the rest of the world, the 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 the balancing items computed from the capital account and the financial account.

Changes in net financial worth (wealth) due to transactions are computed as total transactions in financial assets minus total transactions in liabilities, whereas other changes in net financial worth (wealth) are calculated as (total) other changes in financial assets minus (total) other changes in liabilities.

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).

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) and other changes in non-financial assets.

The net worth (wealth) of households is calculated as the sum of the non-financial assets and net financial worth (wealth) of households.

#### SECTIONS 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 can 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 month  $t$ , the index  $I_t$  of notional stocks in month  $t$  is defined as:

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

As a base, the index is set equal to 100 in December 2008. The growth rate  $a_t$  for month  $t$ , corresponding to the change in the 12 months ending in month  $t$ , can be calculated using either of the following two formulae:

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

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

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 instead of an “F”. This is to show that the method used to obtain “net issues” for securities issues statistics

differs from that used to calculate equivalent “transactions” for the monetary aggregates.

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

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

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:

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

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 calculations are based on financial transactions, which exclude reclassifications, revaluations and 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 is based on multiplicative decomposition using X-12-ARIMA. The seasonal adjustment of total securities issues 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 seasonal factors are then applied to the outstanding amounts, from which seasonally

4 For details, see “Seasonal adjustment of monetary aggregates and HICP for the euro area”, ECB (August 2000) and the “Monetary and financial statistics” sub-section of the “Statistics” section of the ECB’s website ([www.ecb.europa.eu](http://www.ecb.europa.eu)).

adjusted net issues are derived. Seasonal factors are revised at annual intervals or as required.

As in formulae l) and m), the growth rate  $a_t$  for month  $t$ , corresponding to the change in the six months ending in month  $t$ , can be calculated using either of the following two formulae:

$$p) \quad a_t = \left[ \prod_{i=0}^5 \left( 1 + \frac{N_{t-i}^M}{L_{t-1-i}} \right) - 1 \right] \times 100$$

$$q) \quad a_t = \left( \frac{I_t}{I_{t-6}} - 1 \right) \times 100$$

#### TABLE 1 IN SECTION 5.1

##### SEASONAL ADJUSTMENT OF THE HICP<sup>4</sup>

The approach used is based on multiplicative decomposition using 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.

#### TABLE 2 IN SECTION 7.1

##### SEASONAL ADJUSTMENT OF THE BALANCE OF PAYMENTS CURRENT ACCOUNT

The approach used is based on multiplicative decomposition, using X-12-ARIMA or TRAMO-SEATS depending on the item. The raw data for goods, services, income and current transfers are pre-adjusted in order to take into account significant working day effects. The working day adjustment for goods and services takes account of national public holidays. The seasonal adjustment of 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 biannual intervals or as required.

#### 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:

$$r) \quad a_t = \left( \prod_{i=t-3}^t \left( 1 + \frac{F_i}{L_{i-1}} \right) - 1 \right) \times 100$$

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 in the “Data services” sub-section include subscriptions 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 Governing Council of the ECB’s first meeting of the month. For this issue, the cut-off date was 8 February 2012.

Unless otherwise indicated, all data series including observations for 2011 relate to the “Euro 17” (i.e. the euro area including Estonia) for the whole time series. For interest rates, monetary statistics, the HICP and reserve assets (and, for consistency reasons, the components and counterparts of M3 and the components of the HICP), euro area statistical series take into account the changing composition of the euro area.

The composition of the euro area has changed a number of times over the years. When the euro was introduced in 1999, the euro area comprised the following 11 countries (the Euro 11): Belgium, Germany, Ireland, Spain, France, Italy, Luxembourg, the Netherlands, Austria, Portugal and Finland. Greece then joined in 2001, forming the Euro 12. Slovenia joined in 2007, forming the Euro 13; Cyprus and Malta joined in 2008, forming the Euro 15; and Slovakia joined in 2009, forming the Euro 16. Finally, Estonia joined in 2011, bringing the number of euro area countries to 17.

### EURO AREA SERIES WITH A FIXED COMPOSITION

Aggregated statistical series for fixed compositions of the euro area relate to a given fixed composition for the whole time series, regardless of the composition at the time to which the statistics relate. For example, aggregated series are calculated for the Euro 17 (i.e. aggregating the data of all 17 countries currently in the euro area) for all years, despite the fact that the euro area has only had this composition since 1 January 2011. Unless otherwise indicated, the ECB’s Monthly Bulletin provides statistical series for the current composition.

### EURO AREA SERIES WITH A CHANGING COMPOSITION

Aggregated statistical series with a changing composition take into account the composition of the euro area at the time to which the statistics relate. For example, euro area statistical series with a changing composition aggregate the data of the Euro 11 for the period up to the end of 2000, the Euro 12 for the period from 2001 to the end of 2006, and so on. With this approach, each individual statistical series covers all of the various compositions of the euro area.

For the HICP, as well as monetary aggregates and their counterparts, annual rates of change are compiled from chain-linked indices, with joining countries’ series linked to the euro area series in the December index. Thus, if a country joins the euro area in January of a given year, annual rates of change relate to the previous composition of the euro area up to and including December of the previous year, and the enlarged composition of the euro area thereafter. Percentage changes are calculated on the basis of a chain-linked index, taking account of the changing composition of the euro area. Absolute changes for monetary aggregates and their counterparts (transactions) refer to the composition of the euro area at the time to which the statistics relate.

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, pre-1999 data<sup>1</sup> 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, 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 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 wording “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 for which the monthly assessment of the monetary policy stance is scheduled. They end on the day preceding the corresponding settlement day in the following month. Annual/quarterly observations refer to averages for 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. Liabilities vis-à-vis other credit institutions subject to the ESCB’s minimum reserve system, the ECB and participating national central banks 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 which are held by the institutions mentioned above, it may deduct a certain percentage of these liabilities from its reserve base. The percentage used to calculate the reserve base was 10% until November 1999 and has been 30% since that date.

Table 2 in Section 1.4 contains average data for completed maintenance periods. First, the reserve requirement of each individual credit institution is calculated by applying the reserve ratios for the corresponding categories of liability 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). Current account holdings (column 2) are the

<sup>1</sup> Data on monetary statistics in Sections 2.1 to 2.8 are available for periods prior to January 1999 on the ECB’s website (<http://www.ecb.europa.eu/stats/services/downloads/html/index.en.html>) and in the SDW (<http://sdw.ecb.europa.eu/browse.do?node=2018811>).

aggregate average daily current account holdings of credit institutions, including those that serve to fulfil reserve requirements. Excess reserves (column 3) are the average current account holdings over the maintenance period in excess of the required reserves. 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 requirements. 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 euro area credit institutions' current account holdings with the Eurosystem in euro. All amounts are derived from the consolidated financial statement of the Eurosystem. Other liquidity-absorbing operations (column 7) exclude the issuance of debt certificates initiated by NCBs in Stage Two of EMU. Net other factors (column 10) represent the netted remaining items in the consolidated financial statement of the Eurosystem. 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). Base money (column 12) is calculated as the sum of the deposit facility (column 6), banknotes in circulation (column 8) and credit institutions' current account holdings (column 11).

## **MONEY, BANKING AND OTHER FINANCIAL CORPORATIONS**

Chapter 2 shows balance sheet statistics for MFIs and other financial corporations. Other financial corporations comprise investment funds (other than money market funds, which are part of the MFI sector), financial vehicle corporations, insurance corporations and pension funds.

Section 2.1 shows the aggregated balance sheet of the MFI sector, i.e. the sum of the harmonised balance sheets of all MFIs resident in the euro area. MFIs comprise central banks, credit institutions as defined under EU 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 credit 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 of MFIs in the euro area. Owing to a small amount of 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 in 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 analysis, broken down by sector, type and original maturity, of loans granted by MFIs other than the Eurosystem (i.e. the banking system) resident in the euro area. Section 2.5 provides analysis, broken down 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, broken down by type of issuer. Section 2.7 shows a quarterly currency breakdown for selected MFI balance sheet items.

Sections 2.2 to 2.6 also provide growth rates based on those transactions in the form of annual percentage changes.

Since 1 January 1999 statistical information has been collected and compiled on the basis of various ECB regulations concerning the balance sheet of the monetary financial institution sector. Since July 2010 this has been carried out on the basis of Regulation ECB/2008/32<sup>2</sup>. Detailed sector definitions are set out in the third edition of the “Monetary financial institutions and markets statistics sector manual – Guidance for the statistical classification of customers” (ECB, March 2007).

Section 2.8 shows outstanding amounts and transactions on the balance sheet of euro area investment funds (other than money market funds, which are included in the MFI balance sheet statistics). An investment fund is a collective investment undertaking that invests capital raised from the public in financial and/or non-financial assets. A complete list of euro area investment funds is published on the ECB’s website. The balance sheet is aggregated, so investment funds’ assets include their holdings of shares/units issued by other investment funds. Shares/units issued by investment funds are also broken down by investment policy (i.e. into bond funds, equity funds, mixed funds, real estate funds, hedge funds and other funds) and by type (i.e. into open-end funds and closed-end funds). Section 2.9 provides further details on the main types of asset held by euro area investment funds. This section contains a geographical breakdown of the issuers of securities held by investment funds, as well as breaking issuers down by economic sector where they are resident in the euro area.

Since December 2008 harmonised statistical information has been collected and compiled on the basis of Regulation ECB/2007/8<sup>3</sup>

concerning statistics on the assets and liabilities of investment funds. Further information on these investment fund statistics can be found in the “Manual on investment fund statistics” (ECB, May 2009).

Section 2.10 shows the aggregated balance sheet of financial vehicle corporations (FVCs) resident in the euro area. FVCs are entities which are set up in order to carry out securitisation transactions. Securitisation generally involves the transfer of an asset or pool of assets to an FVC, with such assets reported on the FVC’s balance sheet as securitised loans, securities other than shares, or other securitised assets. Alternatively, the credit risk relating to an asset or pool of assets may be transferred to an FVC through credit default swaps, guarantees or other such mechanisms. Collateral held by the FVC against these exposures is typically a deposit held with an MFI or invested in securities other than shares. FVCs typically securitise loans which have been originated by the MFI sector. FVCs must report such loans on their statistical balance sheet, regardless of whether the relevant accounting rules allow the MFI to derecognise the loans. Data on loans which are securitised by FVCs but remain on the balance sheet of the relevant MFI (and thus remain in the MFI statistics) are provided separately. These quarterly data are collected under Regulation ECB/2008/30<sup>4</sup> as of December 2009.

Section 2.11 shows the aggregated balance sheet of insurance corporations and pension funds resident in the euro area. Insurance corporations cover both the insurance and reinsurance sectors, while pension funds include entities which have autonomy in terms of decision-making and keep a complete set of accounts (i.e. autonomous pension funds). This section also contains a geographical and sectoral breakdown of issuing counterparties for securities other than shares held by insurance corporations and pension funds.

2 OJ L 15, 20.01.2009, p. 14.

3 OJ L 211, 11.08.2007, p. 8.

4 OJ L 15, 20.01.2009, p. 1.

## 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. Non-seasonally adjusted data at 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.

In short, the sequence of accounts (transactions) comprises: (1) the generation of income account, which shows how 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 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 sectoral coverage of the financial account and the financial balance sheets is more detailed for the financial corporation sector, which is broken down 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 “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, as well as outstanding amounts in the financial and non-financial balance sheet accounts, presenting data in a more analytical manner. Sector-specific transactions and balancing items are arranged in a way that more clearly depicts the financing and investment decisions of households, while respecting the accounting identities 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, as well as outstanding amounts for the financial balance sheet accounts, presenting data in a more analytical manner.

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 those EU Member States that had adopted the euro at the time to which the statistics relate (i.e. a changing composition),

with the exception of statistics on securities issues (Sections 4.1 to 4.4), which relate to the Euro 16 for the whole time series (i.e. a fixed composition).

Statistics on securities other than shares and statistics on 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 from and loans to 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: (i) securities other than shares, excluding financial derivatives; and (ii) quoted shares. The former are presented in Sections 4.1, 4.2 and 4.3, while the latter 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 (i) a longer maturity, (ii) optional maturity dates, the latest of which is more than one year away, or (iii) 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 issue. Variable rate issues comprise all issues where the coupon is periodically refixed with reference to an independent interest rate or index. 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, broken down by original maturity, residency of the issuer and currency. It presents outstanding amounts, gross issues and net issues of securities other than shares, broken down into: (i) issues denominated in euro and issues in all currencies; (ii) issues by euro area residents and total issues; and (iii) total and long-term

maturities. 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 six-month annualised seasonally adjusted growth rates for total and long-term debt securities. Seasonally adjusted data are derived from the 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 correspond 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 the data on debt securities issued 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 of Section 4.2 consists of zero coupon bonds and revaluation effects.

Section 4.3 shows seasonally adjusted and non-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.

Columns 1, 4, 6 and 8 in Table 1 of Section 4.4 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).

Columns 3, 5, 7 and 9 in Table 1 of Section 4.4 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 issuer's 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. These MFI interest rate statistics replaced the ten transitional statistical series on euro area retail interest rates that had been published in the Monthly Bulletin as of 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 prior to January 1999, monthly, quarterly and yearly values are period averages. Overnight deposits are represented by end-of-period interbank deposit bid rates up to and including December 1998 and period averages for the euro overnight index average (EONIA) thereafter. As of January 1999, euro area interest rates on one, three, six and twelve-month deposits are euro interbank offered rates (EURIBOR); prior to that date, they are London interbank offered rates (LIBOR) where available. For the United States and Japan, interest rates on three-month deposits are represented by LIBOR.

Section 4.7 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>5</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 can 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 labour costs indices, GDP and expenditure components, value added by economic activity, industrial production, retail sales passenger car

<sup>5</sup> Svensson, L.E., "Estimating and Interpreting Forward Interest Rates: Sweden 1992-1994", CEPR Discussion Papers, No 1051. Centre for Economic Policy Research, London, 1994.

registrations and employment in terms of hours worked are working day-adjusted.

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 into 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>6</sup>. Since January 2009 the revised classification of economic activities (NACE Revision 2), as covered by Regulation (EC) No 1893/2006 of the European Parliament and of the Council of 20 December 2006 establishing the statistical classification of economic activities NACE Revision 2 and amending Council Regulation (EEC) No 3037/90, as well as certain EC Regulations on specific statistical domains<sup>7</sup>, has been applied in the production of short-term statistics. The breakdown by end use of product for industrial producer prices and industrial production is the harmonised sub-division of industry excluding construction (NACE Revision 2, sections B to E) into Main Industrial Groupings (MIGs) as defined by Commission Regulation (EC) No 656/2007 of 14 June 2007<sup>8</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 the sake of 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 as regards the compilation of the ECB commodity price indices, see 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>9</sup> and in the implementing Commission Regulation (EC) No 1216/2003 of 7 July 2003<sup>10</sup>. A breakdown of the labour cost indices 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

6 OJ L 162, 5.6.1998, p. 1.

7 OJ L 393, 30.12.2006, p. 1.

8 OJ L 155, 15.6.2007, p. 3.

9 OJ L 69, 13.3.2003, p. 1.

(Tables 1, 2 and 3 in Section 5.3) are derived from the ESA 95<sup>11</sup> quarterly national accounts. The ESA 95 was amended by Commission Regulation (EU) No 715/2010 of 10 August 2010<sup>12</sup> introducing NACE Revision 2, the updated statistical classification of economic activities. The publication of euro area national accounts data applying this new classification began in December 2011.

Industrial new orders (Table 4 in Section 5.2) measure the orders received during the reference period and cover industries working mainly on the basis of orders – in particular the textile, pulp and paper, chemical, metal, capital goods and durable consumer goods industries. The data are calculated on the basis of current prices.

Indices for turnover in industry and for the retail trade (Table 4 in Section 5.2) measure the turnover, including all duties and taxes (with the exception of VAT), invoiced during the reference period. Retail trade turnover covers all retail trade (excluding sales of motor vehicles and motorcycles), except automotive fuel. New passenger car registrations cover registrations of both private and commercial passenger cars.

Qualitative business and consumer survey data (Table 5 in Section 5.2) draw on the European Commission Business and Consumer Surveys.

Unemployment rates (Table 4 in Section 5.3) conform to International Labour Organization 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>13</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 within 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 Council Regulation (EC) No 479/2009 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>14</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

10 OJ L 169, 8.7.2003, p. 37.

11 OJ L 310, 30.11.1996, p. 1.

12 OJ L 210, 11.8.2010, p. 1.

13 OJ L 172, 12.7.2000, p. 3.

14 OJ L 179, 9.7.2002, p. 1.

by the Member States under Regulation (EC) No 501/2004 and Regulation (EC) No 222/2004 and data provided by the NCBs.

## EXTERNAL TRANSACTIONS AND POSITIONS

The concepts and definitions used in balance of payments 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>15</sup> and the amending ECB Guideline of 31 May 2007 (ECB/2007/3)<sup>16</sup>. Additional information regarding the methodologies and sources used in the euro area b.o.p. and i.i.p. statistics can be found in the ECB publication entitled “European Union balance of payments/international investment position statistical methods” (May 2007) and in the reports of the Task Force on Portfolio Investment Collection Systems (June 2002), the Task Force on Portfolio Investment Income (August 2003) and the Task Force on Foreign Direct Investment (March 2004), all of which can be downloaded from the ECB’s website. In addition, a report by the ECB/European Commission (Eurostat) Task Force on Quality looking at 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 and follows the basic principles of the ECB Statistics Quality Framework published in April 2008, 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 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, as of the February 2008 issue of the Monthly Bulletin, the tables in Section 7.3 have been restructured in order to allow the data on the 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.

Table 1 in Section 7.2 also contains seasonally adjusted data for the current account. Where appropriate, the adjustment also covers working day, leap year and/or Easter-related effects. Table 3 in Section 7.2 and Table 9 in Section 7.3 present a breakdown of the euro area b.o.p. and i.i.p. vis-à-vis major partner countries, both individually and 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, with the exception of the ECB, are considered to be outside the euro area for statistical purposes, regardless of their physical location) and, for some purposes, offshore centres and international organisations. The breakdown does not cover transactions or positions in portfolio investment liabilities, financial derivatives or international reserves. In addition, separate data are not provided for investment income payable to Brazil, mainland China, India or 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.

<sup>15</sup> OJ L 354, 30.11.2004, p. 34.

<sup>16</sup> OJ L 159, 20.6.2007, p. 48.

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, regarding 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 i.i.p. changes other than transactions, using 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 for the Eurosystem’s international reserves and related assets and liabilities are shown in Table 7 of Section 7.3. These figures are not fully comparable with

those in 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. By definition, the assets included in the Eurosystem’s international reserves take account of the changing composition of the euro area. Before countries join the euro area, the assets of their national central banks are included in portfolio investment (in the case of securities) or other investment (in the case of other assets). 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 27 September 2009. 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.

The euro area’s gross external debt statistics in Table 8 of Section 7.3 represent outstanding actual (rather than contingent) liabilities vis-à-vis non-euro area residents that require the payment of principal and/or interest by the debtor at one or more points in the future. Table 8 shows a breakdown of gross external debt by instrument and institutional sector.

Section 7.4 contains a monetary presentation of the euro area balance of payments, showing the transactions by non-MFIs that mirror the net external transactions by MFIs. Included in the transactions by non-MFIs are b.o.p. transactions for which a sectoral breakdown is not available. These concern the current and capital accounts (column 2) and financial derivatives (column 11). An up-to-date 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 contained in the 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 major trading partners both individually and 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 imported goods in external trade data.

Industrial import prices and industrial producer export prices (or industrial output prices for the non-domestic market) shown in Table 2 in Section 7.5 were introduced by Regulation (EC) No 1158/2005 of the European Parliament and of the Council of 6 July 2005 amending Council Regulation (EC) No 1165/98, which is the principal legal basis for short-term statistics. The industrial import price index covers industrial products imported from outside the euro area under sections B to E of the Statistical Classification of Products by Activity in the European Economic Community (CPA) and all institutional import sectors except households, governments and non-profit institutions. It reflects the cost, insurance and freight price excluding import duties and taxes, and refers to actual transactions in euro recorded at the point when ownership of the goods is transferred. The industrial producer export prices cover all industrial products exported directly by euro area producers to the extra-euro area market under sections B to E of NACE Revision 2. Exports from wholesalers and re-exports are not covered. The indices reflect the free on

board price expressed in euro and calculated at the euro area frontier, including any indirect taxes except VAT and other deductible taxes. Industrial import prices and industrial producer export prices are available by Main Industrial Grouping as defined by Commission Regulation (EC) No 656/2007 of 14 June 2007. For more details, see Box 11 in the December 2008 issue of the Monthly Bulletin.

## EXCHANGE RATES

Section 8.1 shows nominal and real effective exchange rate indices for the euro, which are calculated by the ECB on the basis of weighted averages of the euro's bilateral exchange rates against the currencies of the selected trading partners of the euro area. A positive change denotes an appreciation of the euro. Weights are based on trade in manufactured goods with those trading partners in the periods 1995-1997, 1998-2000, 2001-2003, 2004-2006 and 2007-2009 and are calculated to account for third-market effects. The EER indices are obtained by chain-linking the indicators based on each of these five sets of trade weights at the end of each three-year period. The base period of the resulting EER index is the first quarter of 1999. The EER-20 group of trading partners is composed of the 10 non-euro area EU Member States plus Australia, Canada, China, Hong Kong, Japan, Norway, Singapore, South Korea, Switzerland and the United States. The EER-40 group comprises the EER-20 plus 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 and unit labour costs, both for the manufacturing sector and for the total economy.

For more detailed information on the calculation of the EERs, see the relevant methodological note and ECB 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 data relating to the euro area. As a result, data on current and capital accounts and gross external debt include special-purpose vehicles. 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>



### 14 JANUARY AND 4 FEBRUARY 2010

The Governing Council of the ECB decides that the interest rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 1.00%, 1.75% and 0.25% respectively.

### 4 MARCH 2010

The Governing Council of the ECB decides that the interest rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 1.00%, 1.75% and 0.25% respectively. It also decides on the details as regards the tender procedures and modalities to be applied in its refinancing operations up to 12 October 2010, including a return to variable rate tender procedures in the regular three-month longer-term refinancing operations, starting with the operation to be allotted on 28 April 2010.

### 8 APRIL AND 6 MAY 2010

The Governing Council of the ECB decides that the interest rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 1.00%, 1.75% and 0.25% respectively.

### 10 MAY 2010

The Governing Council of the ECB decides on several measures to address severe tensions in financial markets. In particular, it decides to conduct interventions in the euro area public and private debt securities markets (Securities Markets Programme) and to adopt a fixed rate tender procedure with full allotment in the regular three-month longer-term refinancing operations in May and June 2010.

### 10 JUNE 2010

The Governing Council of the ECB decides that the interest rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 1.00%, 1.75% and 0.25% respectively. In addition, it decides to adopt a fixed rate tender procedure with full allotment in the regular three-month longer-term refinancing operations to be allotted during the third quarter of 2010.

### 8 JULY AND 5 AUGUST 2010

The Governing Council of the ECB decides that the interest rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 1.00%, 1.75% and 0.25% respectively.

### 2 SEPTEMBER 2010

The Governing Council of the ECB decides that the interest rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 1.00%, 1.75% and 0.25% respectively. It also decides on the details as regards the tender procedures and modalities to be applied in its refinancing operations up to 11 January 2011, notably the adoption of a fixed rate tender procedure with full allotment in the three-month longer-term refinancing operations.

### 7 OCTOBER AND 4 NOVEMBER 2010

The Governing Council of the ECB decides that the interest rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 1.00%, 1.75% and 0.25% respectively.

<sup>1</sup> The chronology of monetary policy measures taken by the Eurosystem between 1999 and 2009 can be found in the ECB's Annual Report for the respective years.

## **2 DECEMBER 2010**

The Governing Council of the ECB decides that the interest rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 1.00%, 1.75% and 0.25% respectively. It also decides on the details as regards the tender procedures and modalities to be applied in its refinancing operations up to 12 April 2011, notably to continue its fixed rate tender procedures with full allotment.

## **13 JANUARY AND 3 FEBRUARY 2011**

The Governing Council of the ECB decides that the interest rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 1.00%, 1.75% and 0.25% respectively.

## **3 MARCH 2011**

The Governing Council of the ECB decides that the interest rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 1.00%, 1.75% and 0.25% respectively. It also decides on the details as regards the tender procedures and modalities to be applied in its refinancing operations up to 12 July 2011, notably to continue its fixed rate tender procedures with full allotment.

## **7 APRIL 2011**

The Governing Council of the ECB decides to increase the interest rate on the main refinancing operations by 25 basis points to 1.25%, starting from the operation to be settled on 13 April 2011. In addition, it decides to increase the interest rates on both the marginal lending facility and the deposit facility by 25 basis points, to 2.00% and 0.50% respectively, both with effect from 13 April 2011.

## **5 MAY 2011**

The Governing Council of the ECB decides that the interest rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 1.25%, 2.00% and 0.50% respectively.

## **9 JUNE 2011**

The Governing Council of the ECB decides that the interest rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 1.25%, 2.00% and 0.50% respectively. It also decides on the details as regards the tender procedures and modalities to be applied in its refinancing operations up to 11 October 2011, notably to continue its fixed rate tender procedures with full allotment.

## **7 JULY 2011**

The Governing Council of the ECB decides to increase the interest rate on the main refinancing operations by 25 basis points to 1.50%, starting from the operation to be settled on 13 July 2011. In addition, it decides to increase the interest rates on both the marginal lending facility and the deposit facility by 25 basis points, to 2.25% and 0.75% respectively, both with effect from 13 July 2011.

## **4 AUGUST 2011**

The Governing Council of the ECB decides that the interest rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 1.50%, 2.25% and 0.75% respectively. It also decides on several measures to address renewed tensions in some financial markets. In particular, it decides that the Eurosystem will conduct a liquidity-providing supplementary longer-term refinancing operation with a maturity of approximately six months as a

fixed rate tender procedure with full allotment. It also decides on the details as regards the tender procedures and modalities to be applied in its refinancing operations up to 17 January 2012, notably to continue its fixed rate tender procedures with full allotment.

### 8 SEPTEMBER 2011

The Governing Council of the ECB decides that the interest rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 1.50%, 2.25% and 0.75% respectively.

### 6 OCTOBER 2011

The Governing Council of the ECB decides that the interest rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 1.50%, 2.25% and 0.75% respectively. It also decides on the details of its refinancing operations from October 2011 to 10 July 2012, notably to conduct two longer-term refinancing operations – one with a maturity of approximately 12 months in October 2011, and another with a maturity of approximately 13 months in December 2011 – and to continue to apply fixed rate tender procedures with full allotment in all of its refinancing operations. In addition, the Governing Council decides to launch a new covered bond purchase programme in November 2011.

### 3 NOVEMBER 2011

The Governing Council of the ECB decides to decrease the interest rate on the main refinancing operations by 25 basis points to 1.25%, starting from the operation to be settled on 9 November 2011. In addition, it decides to decrease the interest rates on both the marginal lending facility and the deposit facility by

25 basis points, to 2.00% and 0.50% respectively, both with effect from 9 November 2011.

### 8 DECEMBER 2011

The Governing Council of the ECB decides to decrease the interest rate on the main refinancing operations by 25 basis points to 1.00%, starting from the operation to be settled on 14 December 2011. In addition, it decides to decrease the interest rates on both the marginal lending facility and the deposit facility by 25 basis points, to 1.75% and 0.25% respectively, both with effect from 14 December 2011. It also decides to adopt further non-standard measures, notably: (i) to conduct two longer-term refinancing operations with a maturity of approximately three years; (ii) to increase the availability of collateral; (iii) to reduce the reserve ratio to 1%; and (iv) to discontinue, for the time being, the fine-tuning operations carried out on the last day of each maintenance period.

### 12 JANUARY 2012

The Governing Council of the ECB decides that the interest rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 1.00%, 1.75% and 0.25% respectively.

### 9 FEBRUARY 2012

The Governing Council of the ECB decides that the interest rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 1.00%, 1.75% and 0.25% respectively. It also approves specific national eligibility criteria and risk control measures for the temporary acceptance in a number of countries of additional credit claims as collateral in Eurosystem credit operations.





## **PUBLICATIONS PRODUCED BY THE EUROPEAN CENTRAL BANK**

The ECB produces a number of publications which provide information about its core activities: monetary policy, statistics, payment and securities settlement systems, financial stability and supervision, international and European cooperation, and legal matters. These include the following:

### **STATUTORY PUBLICATIONS**

- Annual Report
- Convergence Report
- Monthly Bulletin

### **RESEARCH PAPERS**

- Legal Working Paper Series
- Occasional Paper Series
- Research Bulletin
- Working Paper Series

### **OTHER/TASK-RELATED PUBLICATIONS**

- Enhancing monetary analysis
- Financial integration in Europe
- Financial Stability Review
- Statistics Pocket Book
- The European Central Bank: history, role and functions
- The international role of the euro
- The implementation of monetary policy in the euro area (“General Documentation”)
- The monetary policy of the ECB
- The payment system

The ECB also publishes brochures and information materials on a variety of topics, such as the euro banknotes and coins, as well as seminar and conference proceedings.

For a complete list of documents (in PDF format) published by the ECB and the European Monetary Institute, the ECB’s forerunner from 1994 to 1998, please visit the ECB’s website at <http://www.ecb.europa.eu/pub/>. Language codes indicate the languages in which each publication is available.

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)





## 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.

**Break-even inflation rate:** the spread between the yield on a nominal bond and that on an inflation-linked bond of the same (or as similar as possible) maturity.

**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.

**Collateral:** assets pledged or transferred in some form as a guarantee for the repayment of loans, as well as assets sold under repurchase agreements. Collateral used in Eurosystem reverse transactions must fulfil certain eligibility criteria.

**Current account:** a b.o.p. account that covers all transactions in goods and services, income and current transfers between residents and non-residents.

**Current transfers account:** a technical b.o.p. account in which the value of real resources or financial items is recorded when these are transferred without receiving anything in exchange. Current transfers cover all transfers that are not capital transfers.

**Debt (financial accounts):** loans taken out by households, as well as the loans, debt securities and pension fund reserves (resulting from employers' direct pension commitments on behalf of their employees) of non-financial corporations, valued at market prices at the end of the period.

**Debt (general government):** the gross debt (currency and deposits, loans and debt securities) 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 126(2) of the Treaty on the Functioning of the European Union 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 126(2) of the Treaty on the Functioning of the European Union 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 significant and persistent decline in the prices of a very broad set of consumer goods and services that becomes entrenched in expectations.

**Deposit facility:** a standing facility of the Eurosystem enabling eligible counterparties to make, on their own initiative, overnight deposits with the NCB in their respective jurisdiction. Deposits are remunerated at a pre-specified rate that normally provides a floor for overnight market interest rates.

**Disinflation:** a process of decelerating inflation that may lead to negative inflation rates of a temporary nature.

**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 EER indices of the euro are calculated against different groups of trading partners: the EER-20 comprises the ten non-euro area EU Member States and ten trading partners outside the EU, and the EER-40 encompasses the EER-20 and 20 additional countries. The weights used reflect the share of each partner country in the euro area's trade in manufactured goods 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.

**Enhanced credit support:** the non-standard measures taken by the ECB/Eurosystem during the financial crisis with a view to supporting financing conditions and credit flows above and beyond what could be achieved through reductions in key ECB interest rates alone.

**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, e.g. 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 what is known as a prime bank is willing to lend funds (denominated in euro) to another prime bank. The EURIBOR is computed daily, based on the rates of a sample of selected banks, for 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 on the Functioning of the European Union.

**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 whose currency is 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.

**Financial vehicle corporation (FVC):** an entity whose principal activity is to carry out securitisation transactions. An FVC typically issues marketable securities that are offered for sale to the general public, or sold in the form of private placements. These securities are backed by a portfolio of assets (typically loans) which are held by the FVC. In some cases, a securitisation transaction may involve a number of FVCs, where one FVC holds the securitised assets and another issues the securities backed by those assets.

**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.

**Fixed rate full-allotment tender procedure:** a tender procedure in which the interest rate is pre-specified by the central bank (fixed rate) and in which counterparties bid the amount of money they want to transact at that rate, knowing in advance that all their bids will be satisfied (full allotment).

**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).

**Gross external debt:** the outstanding amount of an economy's actual (i.e. non-contingent) current liabilities that require payment of principal and/or interest to non-residents at some point in the future.

**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.

**Income account:** a b.o.p. account that covers two types of transactions with non-residents, namely (i) those involving compensation of employees that is paid to non-resident workers (e.g., cross-border, seasonal, and other short-term workers) and (ii) those involving investment income receipts and payments on external financial assets and liabilities, with the latter including receipts and payments on direct investment, portfolio investment and other investment, as well as receipts on reserve assets.

**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.

**Insurance corporations and pension funds:** financial corporations and quasi-corporations that are engaged primarily in financial intermediation as the consequence of the pooling of risks.

**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 payment 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 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.

**Liquidity-absorbing operation:** an operation through which the Eurosystem absorbs liquidity in order to reduce excess liquidity, or to create a shortage of liquidity. Such operations can be conducted by issuing debt certificates or fixed-term deposits.

**Longer-term refinancing operation (LTRO):** an open market operation with a maturity of more than one week that is executed by the Eurosystem in the form of a reverse transaction. The regular monthly operations have a maturity of three months. During the financial market turmoil that started in August 2007, supplementary operations with maturities ranging from one maintenance period to 36 months were conducted, the frequency of which varied.

**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 (MRO):** 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 enabling eligible counterparties, on their own initiative, to receive overnight credit from the NCB in their jurisdiction at a pre-specified rate in the form of a reverse transaction. The rate on loans extended within the scope of the marginal lending facility normally provides an upper bound for overnight market interest rates.

**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 (i) the Eurosystem, (ii) resident credit institutions (as defined in EU law), (iii) other 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, as well as electronic money institutions that are principally engaged in financial intermediation in the form of issuing electronic money, and (iv) money market funds, i.e. collective investment undertakings that invest in short-term and low-risk instruments.

**Minimum bid rate:** the lower limit to the interest rates at which counterparties may submit bids in the variable tenders.

**Open market operation:** a financial market operation executed on the initiative of the central bank. These operations include reverse transactions, outright transactions as well as the issuance of fixed-term deposits or debt certificates or foreign exchange swaps. The open market operations can be liquidity providing or liquidity absorbing.

**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:** as defined by the Governing Council, 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 that is deemed to be compatible with price stability over the medium term.

**Reserve requirement:** the requirement for institutions to hold minimum reserves with the central bank over a 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.

**Reverse transaction:** an operation whereby the NCB buys or sells assets under a repurchase agreement or conducts credit operations against collateral.

**Securitisation:** a transaction or scheme whereby an asset or a pool of cash flow-producing assets, often consisting of loans (mortgages, consumer loans, etc.), is transferred from an originator (usually a credit institution) to a financial vehicle corporation (FVC). The FVC effectively converts these assets into marketable securities by issuing debt instruments with principal and interest serviced through the cash flows produced by the asset pool.

**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.

**Volatility:** the degree of fluctuation in a given variable.

**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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