



EUROPEAN CENTRAL BANK

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MONTHLY BULLETIN 07 | 2013

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MONTHLY BULLETIN  
JULY

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## MONTHLY BULLETIN JULY 2013

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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
HR	Croatia	FI	Finland
IT	Italy	SE	Sweden
CY	Cyprus	UK	United Kingdom
LV	Latvia	JP	Japan
LT	Lithuania	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 4 July to keep the key ECB interest rates unchanged. Incoming information has confirmed the previous assessment. Underlying price pressures in the euro area are expected to remain subdued over the medium term. In keeping with this picture, monetary and, in particular, credit dynamics remain subdued. Inflation expectations for the euro area continue to be firmly anchored in line with the Governing Council's aim of maintaining inflation rates below, but close to, 2% over the medium term. At the same time, recent confidence indicators based on survey data have shown some further improvement from low levels. The monetary policy stance is geared towards maintaining the degree of monetary accommodation warranted by the outlook for price stability and promoting stable money market conditions. It thereby provides support to a recovery in economic activity later in the year and in 2014. Looking ahead, the monetary policy stance will remain accommodative for as long as necessary. The Governing Council expects the key ECB interest rates to remain at present or lower levels for an extended period of time. This expectation is based on the overall subdued outlook for inflation extending into the medium term, given the broad-based weakness in the real economy and subdued monetary dynamics. In the period ahead, the Governing Council will monitor all incoming information on economic and monetary developments and assess any impact on the outlook for price stability.

Regarding the economic analysis, real GDP declined by 0.3% in the first quarter of 2013, following a contraction of 0.6% in the last quarter of 2012. At the same time, labour market conditions remain weak. Recent developments in cyclical indicators, particularly those based on survey data, indicate some further improvement from low levels. Looking ahead to later in the year and to 2014, euro area export growth should benefit from a gradual recovery in global demand, while domestic demand should be supported by the accommodative monetary policy stance as well as the recent gains in real income owing to generally lower inflation. Furthermore, notwithstanding recent developments, the overall improvements in financial markets seen since last summer should work their way through to the real economy, as should the progress made in fiscal consolidation. This being said, the remaining necessary balance sheet adjustments in the public and private sectors will continue to weigh on economic activity. Overall, euro area economic activity should stabilise and recover in the course of the year, albeit at a subdued pace.

The risks surrounding the economic outlook for the euro area continue to be on the downside. The recent tightening of global money and financial market conditions and related uncertainties may have the potential to negatively affect economic conditions. Other downside risks include the possibility of weaker than expected domestic and global demand and slow or insufficient implementation of structural reforms in euro area countries.

As stated in previous months, annual inflation rates are expected to be subject to some volatility throughout the year owing particularly to base effects. According to Eurostat's flash estimate, euro area annual HICP inflation was 1.6% in June 2013, up from 1.4% in May. This increase reflected an upward base effect relating to energy price developments 12 months earlier. However, underlying price pressures are expected to remain subdued over the medium term, reflecting the broad-based weakness in aggregate demand and the modest pace of the recovery. Medium-term inflation expectations remain firmly anchored in line with price stability.

The risks to the outlook for price developments are expected to be still broadly balanced over the medium term, with upside risks relating to stronger than expected increases in administered prices and indirect taxes, as well as higher commodity prices, and downside risks stemming from weaker than expected economic activity.

Turning to the monetary analysis, recent data confirm the subdued monetary and, in particular, credit dynamics. Annual growth in broad money (M3) decreased in May to 2.9%, from 3.2% in April. Moreover, annual growth in M1 decreased to 8.4% in May, from 8.7% in April. The annual rate of change of loans to the private sector remained negative. While the annual growth rate of loans to households (adjusted for loan sales and securitisation) remained at 0.3% in May, broadly unchanged since the turn of the year, the annual rate of change of loans to non-financial corporations (adjusted for loan sales and securitisation) weakened further to -2.1% in May, from -1.9% in April. As in April, strong monthly net redemptions in May were concentrated in short-term loans, possibly reflecting reduced demand for working capital against the background of weak order books in early spring. More generally, weak loan dynamics continue to reflect primarily the current stage of the business cycle, heightened credit risk and the ongoing adjustment of financial and non-financial sector balance sheets.

Since the summer of 2012 substantial progress has been made in improving the funding situation of banks and, in particular, in strengthening the domestic deposit base in a number of stressed countries. This has contributed to reducing reliance on Eurosystem funding, as reflected in the ongoing repayments of the three-year longer-term refinancing operations (LTROs). In order to ensure an adequate transmission of monetary policy to the financing conditions in euro area countries, it is essential that the fragmentation of euro area credit markets continues to decline further and that the resilience of banks is strengthened where needed. Further decisive steps for establishing a Banking Union will help to accomplish this objective. In particular, the future Single Supervisory Mechanism and a Single Resolution Mechanism are crucial elements for moving towards re-integrating the banking system and therefore require swift implementation.

To sum up, the economic analysis indicates that price developments should remain in line with price stability over the medium term. A cross-check with the signals from the monetary analysis confirms this picture.

With regard to other economic policies, the Governing Council notes the initiatives taken by the European Council of 27-28 June 2013 in the areas of youth unemployment, investment and financing of small and medium-sized enterprises, as well as the European Council's endorsement of the country-specific recommendations of the 2013 European semester. The Governing Council stresses that implementation of these recommendations is essential to contribute to a sustainable recovery in the euro area. Moreover, the new European governance framework for fiscal and economic policies should be applied in a steadfast manner and much more determined efforts should be pursued to carry forward structural reforms to foster growth and employment. In this respect, the Governing Council deems it particularly important to target competitiveness and adjustment capacities in labour and product markets. Finally, the Governing Council welcomes the setting-out of a number of steps towards the completion of the Banking Union as moves in the right direction, but also urges that they be implemented swiftly.

This issue of the Monthly Bulletin contains two articles. The first article reviews changes introduced in the Eurosystem's collateral framework in response to the various stages of the financial crisis and illustrates how they have affected the size and composition of both eligible and used Eurosystem collateral. The second article presents evidence on recent and longer-term trends in trade protectionism and assesses the impact on trade protectionism of the financial crisis.

Box I

**THE GOVERNING COUNCIL'S FORWARD GUIDANCE ON THE KEY ECB INTEREST RATES**

Following its meeting on 4 July 2013 the Governing Council of the ECB communicated that it expects the key ECB interest rates to remain at present or lower levels for an extended period of time. The Governing Council's expectation is based on the overall subdued outlook for inflation extending into the medium term, given the broad-based weakness in the real economy and subdued monetary dynamics. The monetary policy stance remains geared towards maintaining the degree of monetary policy accommodation that is appropriate given the current outlook for price stability and towards the need to promote stable money market conditions.

This box explains the rationale for the Governing Council's decision to provide forward guidance on the key ECB interest rates and describes the modalities for providing it.

**Rationale for forward guidance**

Throughout the first half of 2013 euro money market interest rates displayed significant volatility. More recently a sustained upward trend in money market rates has led to a restriction in money market credit conditions, so that part of the amount of monetary accommodation that was introduced when the Governing Council last changed the monetary policy stance has been de facto withdrawn. For example, forward rates based on overnight index swaps – an important measure of market expectations about the evolution of overnight interest rates – shifted upwards by some 20 to 30 basis points at intermediate to medium-term horizons between 2 May and 3 July (see the chart). The drift was most pronounced in late June.

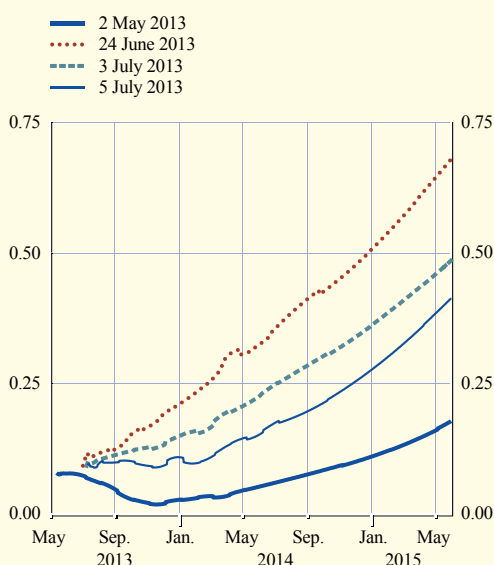
While several factors may have contributed to these developments, the increased volatility in money market rates has made expectations regarding the stance of monetary policy excessively vulnerable to shocks that are disconnected from the underlying economic and monetary conditions on which the intended stance is calibrated.

In these circumstances precise communication about the monetary policy orientation of the Governing Council, conditional on its assessment of the outlook for price stability and how it expects the outlook to evolve as the underlying conditions change, can promote more stable money market conditions and anchor market expectations more firmly.

The assessment that the monetary policy stance should remain accommodative for an extended period of time is consistent with the expectation that price developments should

**Forward rates based on overnight index swaps**

(percentages per annum; daily data)



Sources: Thomson Reuters and ECB calculations.



remain subdued over the medium term. This expectation is based on the regular economic and monetary analyses conducted by the Governing Council within its two-pillar analytical framework.

As regards the economic analysis, price pressures over the medium term are currently assessed to be low owing to the broad-based subdued trend in aggregate demand in an environment of weak labour market conditions and low capacity utilisation. A cross-check with the monetary analysis confirms this picture. Underlying monetary dynamics, as reflected in the slow growth of broad monetary aggregates and very weak credit developments, remain unsupportive. Specifically, the improvement in bank funding conditions which has been observed since the turn of the year has not yet led to increased dynamism in the provision of loans to the non-financial private sector. The ongoing balance sheet adjustments in the public and private sectors, while reflecting necessary corrections, will continue to weigh on economic activity.

Based on this assessment, the Governing Council currently expects the key ECB interest rates to remain at present or lower levels for an extended period of time. The path of the key ECB interest rates remains conditional on the outlook for inflation and will be reviewed over time within the analytical framework provided by the ECB's monetary policy strategy. Within that framework, in the period ahead the Governing Council will monitor all incoming information on economic and monetary developments and assess any impact on the outlook for price stability. The chart shows that after the Governing Council's communication on 4 July the forward rates based on overnight index swaps have declined appreciably.

### **Modalities of forward guidance**

The Governing Council's forward guidance has three main elements.

First, it has been provided before exhausting the scope for further reductions in the key ECB interest rates. The uncertainty surrounding the expected conditional path of monetary policy can be reduced, independently of the level of the very short-term interest rates. In fact, the key ECB interest rates can be reduced further if warranted by the evolving outlook for price stability.

Second, forward guidance is consistent with but not directly linked to the decision taken by the Governing Council on 2 May to extend the horizon for the fixed rate tender procedure with full allotment until July 2014. The latter decision was intended to ensure that banks will continue to have unimpaired access to central bank liquidity – and thus to a stable source of funding – even in conditions of renewed financial turbulence and a drying-up of private funding. This form of forward reassurance can be provided – and has been provided in the past – independently of the level of the key ECB interest rates.

Third, and most importantly, forward guidance is fully consistent with the ECB's mandate and with its monetary policy strategy. In particular:

- the Governing Council has specified that its expected path for the key ECB interest rates is based on the outlook for inflation extending into the medium term. This is in line with the ECB's primary objective of maintaining price stability and with the Governing Council's aim of accomplishing inflation rates that, over the medium term, are below, but close to, 2%.

- The extended period of time over which the Governing Council currently expects the key ECB interest rates to remain at present or lower levels is a flexible horizon which does not pre-specify an end-date but is conditional on the Governing Council's assessment of the economic fundamentals that determine underlying inflation.
- The underlying conditions upon which the expectation regarding the key ECB interest rates is based reflect the ECB's approach to organising, evaluating and cross-checking the information relevant for assessing risks to price stability. A scenario of subdued inflation will continue to warrant keeping the key ECB interest rates at very low levels for as long as broad-based subdued trends in aggregate demand and persistently weak monetary and credit trends prevail.

At the current juncture, forward guidance contributes to the ECB's pursuit of its mandate of maintaining price stability effectively, within the framework and in full respect of its strategy. After the Governing Council's decision on forward guidance, price stability is expected to be maintained in the medium term and to be reflected in medium to long-term inflation expectations.



# ECONOMIC AND MONETARY DEVELOPMENTS

## I THE EXTERNAL ENVIRONMENT OF THE EURO AREA

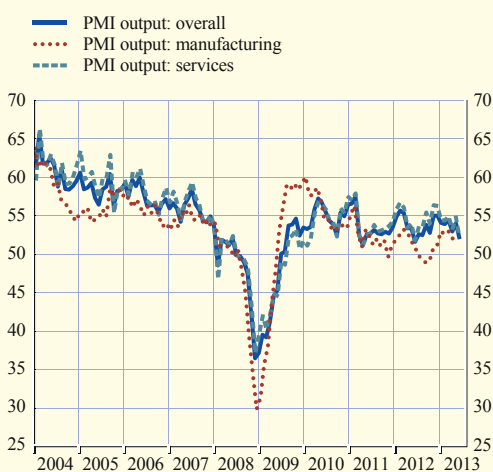
The global economy continues to expand at a slow pace. Despite recent volatility in financial markets in advanced and emerging economies, the global recovery is expected to continue, and is likely to remain modest and fragile, with persistent diversity in growth prospects across regions. While consumer prices picked up slightly in a number of advanced economies in May, overall inflation remains contained. Developments in consumer prices in emerging markets have been mixed in recent months.

### I.1 GLOBAL ECONOMIC ACTIVITY AND TRADE

The global economic recovery remains modest and diverse across regions. While sentiment indicators softened slightly in June, hard data have been rather mixed. The Purchasing Managers' Index (PMI) for all-industry output stood at 51.4 in June, down from 52.9 in May, driven mainly by the services sector. Looking at quarterly averages, the index declined in the second quarter of 2013 compared with the first quarter. Excluding the euro area, the all-industry output PMI declined to 52.0 in June, from 54.0 in May (see Chart 1). In advanced economies, while growth has begun to gain some traction in a few countries, overall the recovery is likely to remain uneven and moderate, with activity still expected to accelerate only gradually, as the pace of growth is restrained by ongoing balance sheet repair, fiscal tightening and continuing tight credit conditions. Meanwhile, prospects in emerging markets have softened somewhat recently, but growth is expected to recover gradually following a slight slowdown earlier this year, and thereby make a significant contribution to global economic activity. Nevertheless, as discussed in Box 2, prospects in some central and eastern European countries remain constrained, as the combination of private sector deleveraging and structural changes in banks' funding models has restrained lending activity, and remains a key hurdle to a durable economic recovery in the region.

Chart 1 Global PMI (excluding the euro area)

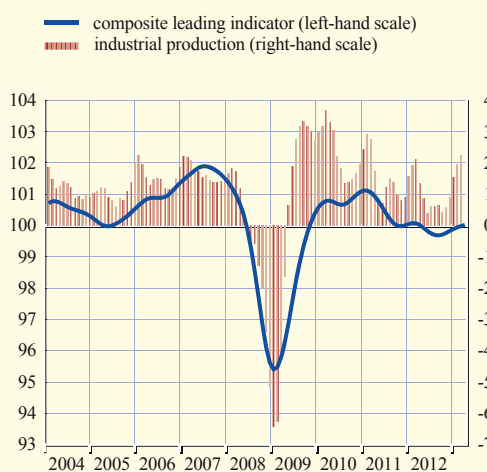
(seasonally adjusted monthly data)



Source: Markit.

Chart 2 Composite leading indicator and industrial production

(left-hand scale: normalised index average=100; right-hand scale: three month-on-three month percentage changes)



Sources: OECD and ECB calculations.

Notes: The composite leading indicator refers to the OECD countries plus Brazil, China, India, Indonesia, Russia and South Africa. The horizontal line at 100 represents the trend of economic activity. Industrial production refers to the same sample excluding Indonesia.

**Box 2**

**BANK FUNDING AND LENDING ACTIVITY IN CENTRAL AND EASTERN EUROPE**

Since the global crisis hit central and eastern Europe the external liabilities of banks in this region have been falling. This development has also been visible in a reduction, in an environment of subdued loan growth, of the exposure of (mostly western European) parent banks to their subsidiaries and branches operating in the region. This box takes stock of this process, assesses its impact on the economies under review and discusses the outlook. The focus is on the period from December 2008 until May 2013 (the latest data available) and the group of seven central and eastern European EU Member States that were outside the euro area in that period.

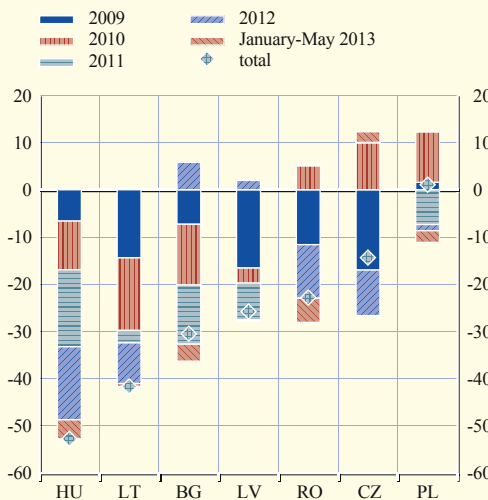
The average cumulative reduction in the external liabilities of banks in this country group was substantial in the period under consideration (-27%). The differences across individual countries were major, however, ranging from a decline by more than half in Hungary to no reduction at all in Poland (see Chart A). In most cases, the bulk of the reduction in banks' external liabilities occurred in 2009-10, but in some countries (especially Hungary) a significant decline was still taking place in 2012. In the first five months of 2013 there was no significant further decline in external liabilities other than in Romania, Hungary and Bulgaria.

This process has been the outcome of several factors.<sup>1</sup> It is first and foremost the legacy of the boom-bust cycle in several countries of the region, but also stems from the ongoing change in the

<sup>1</sup> For a related discussion of factors driving banks' deleveraging see the special feature entitled "EU bank deleveraging – driving forces and strategies", *Financial Stability Review*, ECB, June 2012 and the box entitled "Deleveraging by euro area banks", *Financial Stability Review*, ECB, May 2013.

**Chart A External liabilities of MFIs**

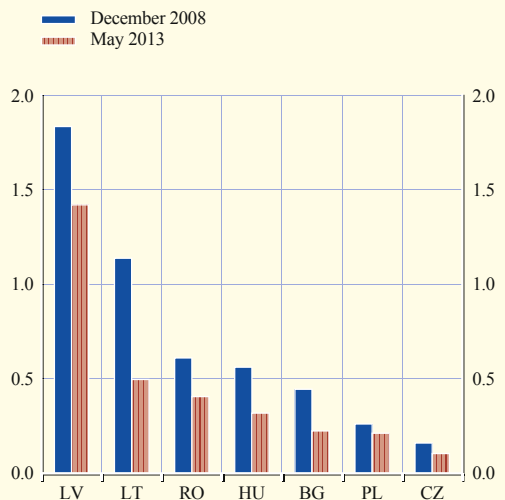
(total: percentage change between May 2013 and December 2008; periods: contribution to percentage change in percentage points)



Source: ECB.

**Chart B MFIs' deposit mix**

(external deposits in EUR per euro of domestic deposits)



Source: ECB.  
Note: Includes all sectors in the economy.

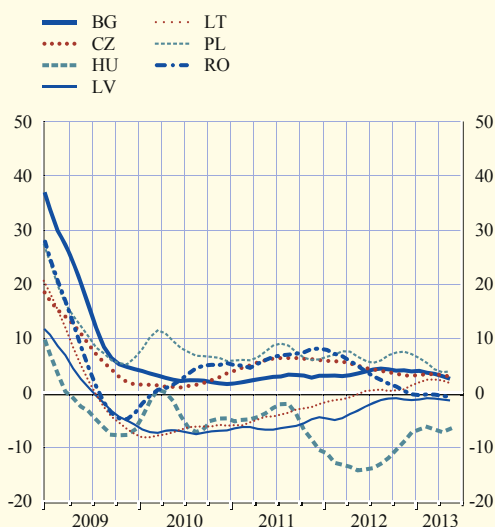
banks' funding model. Regarding the latter development, the centralised funding model that had prevailed before the crisis – with parent banks funding the lending of their central and eastern European subsidiaries – is being replaced by increasing reliance on local sources of funding, such as domestic deposits. Chart B shows that in all seven countries under review banks' reliance on external deposits as a source of funding has declined relative to domestic deposits. External deposits comprise all deposits from abroad, including (i) deposits provided by parent banks and (ii) deposits of foreign non-MFI private sector agents ("non-resident deposits"). In Latvia, non-resident deposits constitute around half the non-MFI deposit base and have increased markedly in the past two years, thus partly offsetting a reduction of deposits by (mainly) Scandinavian parent banks. In May 2013, external deposits ranged between around 150% of domestic deposits in Latvia and 10% in the Czech Republic.

The interplay of these structural changes with the need to reduce indebtedness in the private sector has resulted in subdued private sector loan growth. Annual growth in loans to the non-MFI private sector has now been weak or negative for around four years (see Chart C). There are significant differences across the countries concerned, with Hungary experiencing the largest contraction and the Baltic States a gradual improvement. While some countries have been able to expand their economic activity in the absence of credit growth, the sustainability of such recoveries depends on credit growth normalising again.<sup>2</sup> It remains, therefore, a challenge to promote credit

2 See, for example, Bijsterbosch, M. and Dahlhaus, T., "Determinants of credit-less recoveries", *Working Paper Series*, No 1358, ECB, Frankfurt am Main, June 2011.

Chart C Loans to the non-MFI private sector

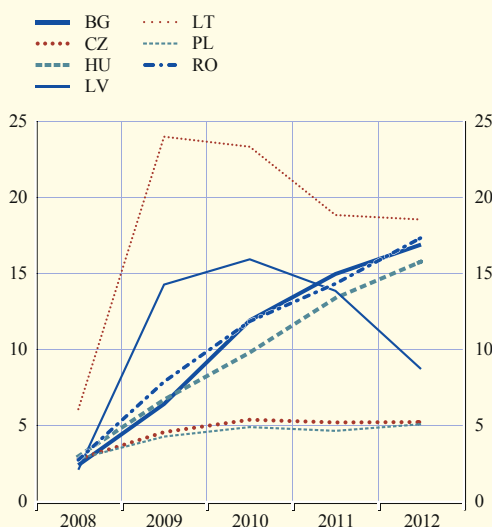
(three-month moving average of annual rates of change in percentages)



Source: ECB.

Chart D Non-performing loans

(as a percentage of total gross loans)



Source: IMF Financial Soundness Indicators.  
Notes: End-of-year data. Data for 2012 correspond to the third quarter of 2012 for Lithuania, Poland and Romania, and to the second quarter of 2012 for Bulgaria.

conditions that can underpin a sustainable recovery in output while, at the same time, not fuelling unsustainable credit booms such as those witnessed in the years preceding the crisis.

According to the European Investment Bank's most recent bank lending survey for the region, a key factor constraining credit supply was high levels of non-performing loans.<sup>3</sup> The quality of the banks' loan portfolios has recently improved in some countries, but the share of non-performing loans in the total loan portfolio remains generally high in all countries except the Czech Republic and Poland (see Chart D). Analysis carried out in the context of the European Bank Coordination Initiative, also known as the "Vienna Initiative", has concluded that non-performing loans can be a serious drag on credit supply.<sup>4</sup> They drive up banks' funding costs and interest margins and drain bank profits and capital. On the credit demand side, lacklustre consumer confidence, weak housing market prospects and sluggish investment dynamics seem to dampen demand for new loans.

Looking ahead, considerable uncertainties remain concerning the credit outlook, especially in countries where the banking system is confronted with a high and rising share of non-performing loans, as well as in the countries characterised by policy uncertainty. A key challenge for policy-makers thus remains to ensure a more rapid resolution of non-performing loans, which seem to be acting as a significant hurdle for the supply of credit and a durable economic recovery in the region.

3 See *CESEE Deleveraging Monitor*, European Bank Coordination (or "Vienna") Initiative, 30 April 2013, including the European Investment Bank's central, eastern and south-eastern Europe (CESEE) bank lending survey, available at <http://vienna-initiative.com>.

4 See the report of the Working Group on NPLs in Central, Eastern and South-Eastern Europe, European Bank Coordination (or "Vienna") Initiative, March 2012.

Forward-looking global indicators softened in June but continue to point to a modest pace of expansion in the second half of 2013. The new orders component of the global (excluding the euro area) all-industry PMI fell in June to 51.8 from 53.9 in May, and overall the average of the index in the second quarter was lower than in the first three months of 2013. In addition, the global manufacturing new export orders index (excluding the euro area) declined considerably in June to 48.4, falling below the neutral growth threshold of 50 for the first time in four months, and suggesting continued subdued momentum in global trade. In April 2013 the OECD's composite leading indicator, designed to anticipate turning points in economic activity relative to trend, improved for the eighth successive month and continues to suggest that growth is gaining momentum in the OECD area as a whole (see Chart 2). The individual country indicators continued to point to diverging patterns across the major economies.

The outlook for the global economy continues to be surrounded by considerable uncertainty and the balance of risks to world activity remains tilted to the downside. The recent tightening of global money and financial market conditions and related uncertainties may have the potential to negatively affect economic conditions. Other downside risks include the possibility of weaker than expected global demand, spillovers from slow or insufficient implementation of structural reforms in the euro area, geopolitical issues, and imbalances in major industrialised countries, which could have an impact on developments in global commodities and financial markets.

## 1.2 GLOBAL PRICE DEVELOPMENTS

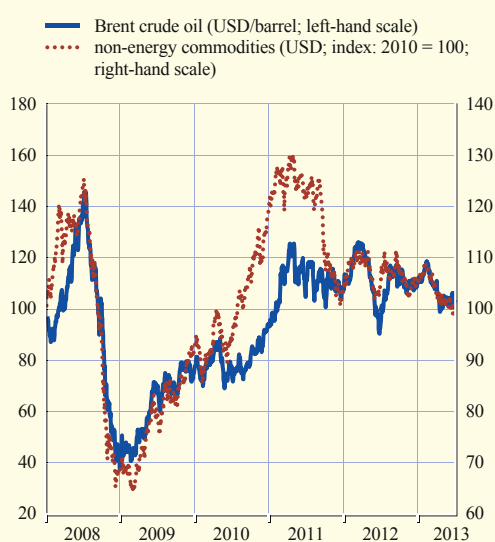
In the majority of advanced economies, inflation picked up slightly in May following a series of declines since the beginning of the year. In the OECD area, annual headline consumer price inflation rose to 1.5% in May from 1.3% in April. Excluding food and energy, inflation in the OECD area also increased to 1.5% in May. The slight increase in annual headline inflation was observed in the majority of the OECD countries. Meanwhile, annual inflation in the large emerging economies showed mixed developments in May. It picked up in India, Russia and Turkey, but slowed down in China, South Africa and Indonesia (see Table 1).

Turning to energy price developments, Brent crude oil prices increased slightly between early June and 3 July 2013 (see Chart 3), trading at around USD 104 per barrel on the latter date.

Oil prices have continued to trade within a band of USD 100-106 per barrel since late April, as geopolitical concerns have offset downward pressures on prices resulting from sluggish macroeconomic conditions. Looking ahead, upward pressures on oil prices may prevail in the third quarter of 2013 as the International Energy Agency expects the seasonal jump in oil demand to be steeper than normal given that new refinery capacity in non-OECD countries will become operational. Over the medium term, market participants expect slightly lower prices, with December 2014 futures prices trading at USD 98 per barrel.

Over the course of June 2013, prices of non-energy commodities decreased by 1.9% on aggregate (see Chart 3). The decline was especially concentrated in non-ferrous metals, which, according to some market commentators, were particularly affected by weakening growth prospects in China. In aggregate terms, the price index for non-energy commodities (denominated in US dollars) was about 4.0% lower at the end of June 2013 compared with the same period a year earlier.

Chart 3 Main developments in commodity prices



Sources: Bloomberg and HWWI.

Table 1 Price developments in selected economies

(annual percentage changes)

	2011	2012	2012 Dec.	2013				
				Jan.	Feb.	Mar.	Apr.	May
OECD	2.9	2.3	1.9	1.7	1.8	1.6	1.3	1.5
United States	3.2	2.1	1.7	1.6	2.0	1.5	1.1	1.4
Japan	-0.3	0.0	-0.1	-0.3	-0.6	-0.9	-0.7	-0.3
United Kingdom	4.5	2.8	2.7	2.7	2.8	2.8	2.4	2.7
China	5.4	2.6	2.5	2.0	3.2	2.1	2.4	2.1
Memo item: OECD core inflation <sup>1)</sup>	1.7	1.8	1.6	1.5	1.6	1.6	1.4	1.5

Sources: OECD, national data, BIS, Eurostat and ECB calculations.  
 1) Excluding food and energy.



### I.3 DEVELOPMENTS IN SELECTED ECONOMIES

#### UNITED STATES

In the United States, real GDP growth accelerated in the first quarter of 2013. According to the third estimate by the Bureau of Economic Analysis, real GDP increased at an annualised quarter-on-quarter rate of 1.8% in the first quarter of 2013, up from 0.4% in the previous three months. In the third estimate, annualised real GDP growth was revised down by 0.6 percentage point, owing mainly to significant downward revisions to personal consumption expenditure. In contrast to the fourth quarter of 2012, the acceleration in GDP growth was driven largely by strong personal consumption expenditure, which grew at its fastest rate in two years, and by a pick-up in inventories. Private fixed investment also contributed positively to real GDP growth, despite growth slowing down sharply in the non-residential segment. Government spending contracted further. Moreover, the contribution from net exports turned negative, with exports declining more than imports. Real disposable personal income declined significantly, driving the personal savings rate down to its lowest post-crisis level of 2.5%, compared with 5.3% in the final quarter of 2012.

The latest economic indicators for the United States have been broadly positive, suggesting that the economy is likely to have continued expanding in the second quarter, although at a slower pace compared with the first quarter, mostly on account of the impact of the government spending cuts. Job creation increased in May by 175,000 relative to April, but the unemployment rate edged higher to 7.6%, as the labour force participation rate increased. Consumer spending rose in May, and consumer confidence indicators in June were generally supportive regarding the outlook for private consumption. Housing market indicators continued to improve solidly, with rising sales and strong residential construction activity in May, and sustained price increases in April. On the other hand, industrial production was flat in May, failing to recover from the decline in April, and business confidence surveys in the second quarter of 2013 confirmed a slowdown in both the services and manufacturing sectors.

Annual CPI inflation increased by 0.3 percentage point to 1.4% in May, up from 1.1% in April, the lowest rate of change in almost a year. This increase in year-on-year consumer price inflation was to some extent explained by a less pronounced fall in energy prices, while food price growth slowed slightly to 1.4%, from 1.5% in April. Core inflation remained stable at 1.7%, supported by price increases in shelter and transportation services.

On 19 June 2013 the Federal Open Market Committee (FOMC) decided to keep the target range for the federal funds rate at 0% to 0.25%, and anticipated that exceptionally low levels

**Table 2 Real GDP growth in selected economies**

	(percentage changes)								
	Annual growth rates					Quarterly growth rates			
	2011	2012	2012 Q3	2012 Q4	2013 Q1	2012 Q3	2012 Q4	2013 Q1	
United States	1.8	2.2	2.6	1.7	1.6	0.8	0.1	0.4	
Japan	-0.5	1.9	0.3	0.4	0.2	-0.9	0.3	1.0	
United Kingdom	1.1	0.2	0.1	0.0	0.3	0.7	-0.2	0.3	
China	9.3	7.8	7.4	7.9	7.7	2.1	2.0	1.6	

Sources: National data, BIS, Eurostat and ECB calculations.

for the federal funds rate will be appropriate at least as long as the unemployment rate remains above 6.5%, inflation between one and two years ahead is not projected to be above 2.5%, and longer-term inflation expectations continue to be well anchored. The FOMC decided to continue purchasing additional agency mortgage-backed securities at a pace of USD 40 billion per month and longer-term Treasury securities at a pace of USD 45 billion per month. The FOMC also stated that later in the year it could slow down the current pace of asset purchases, should the economy continue to improve as expected. Finally, the FOMC stated that it expects its asset purchase programme to end in mid-2014.

## JAPAN

According to the second preliminary release of national accounts data, real GDP growth in Japan was revised to 1.0% in the first quarter of 2013, in quarter-on-quarter seasonally-adjusted terms, up from the 0.9% estimated in the first release and from the 0.3% growth recorded in the previous quarter. Despite some mixed data releases and substantial volatility in financial markets, positive growth is likely to have continued into the second quarter. In May, industrial production grew solidly by 2.0% month on month, while private consumption decreased for the first time in five months and was notably weaker than market expectations. Meanwhile, real exports of goods declined in May by 0.5% month on month, whereas real imports of goods increased by 0.9%. According to customs clearance trade data, the nominal, seasonally-adjusted trade deficit widened in May to stand at about JPY 821 billion. The latest economic sentiment indicators for business and consumer confidence remain positive. According to the Bank of Japan's Tankan survey, the sentiment index for large manufacturing firms improved in June. Confidence indicators for small and medium-sized enterprises also increased, standing in June above their expansion thresholds after having lagged behind the improving sentiment levels of consumers and large firms.

Annual consumer price inflation increased to -0.3% in May compared with -0.7% in the previous month, partly driven by strong increases in energy prices. However, other price components also rose, resulting in an increase in annual core consumer price inflation, which excludes fresh food and energy, to -0.3% in May from -0.6% in April. At its latest monetary policy meeting on 10 and 11 June 2013, the Bank of Japan decided to keep its target for the monetary base unchanged. As part of the three-pronged reform package, the Japanese cabinet approved "Basic Policies for Economic and Fiscal Management and Reform", which largely consist of targets to increase potential growth and private investment.

## UNITED KINGDOM

In the United Kingdom, the economic recovery is set to gradually gather pace. Private and public sector balance sheet adjustment has progressed steadily, but this process, together with tight credit conditions and weak household real income growth, is still likely to constrain domestic demand for some time. Labour markets have remained relatively resilient, with the unemployment rate hovering just below 8%, while housing market activity has shown some signs of picking up. Industrial production continued to increase in April, while retail sales volumes rebounded strongly in May, pointing to a continuation of the economic recovery at the beginning of the second quarter of 2013. Looking ahead, the improvement in the main survey indicators in May and June suggests that the recovery will strengthen somewhat in the short term.

Annual CPI inflation has remained relatively high amidst some volatility in recent months. This volatility has mainly been due to one-off factors. In May 2013, the headline inflation rate increased

by 0.3 percentage point to 2.7%, while CPI inflation excluding energy and unprocessed food increased by 0.2 percentage point to 2.5%. Looking ahead, it is expected that inflationary pressures will be contained by existing spare capacity in labour and capital utilisation in the medium term, although upward pressures due to rises in administered and regulated prices, as well as the pound sterling's depreciation earlier this year, could cause some persistence in inflation. At its meeting on 4 July 2013, the Bank of England's Monetary Policy Committee maintained the policy rate at 0.5% and the size of its asset purchase programme at GBP 375 billion.

## CHINA

Recent data releases both for survey indicators and hard data point to weakening growth in China. Both the Markit and official manufacturing PMIs declined in June, with the latter remaining just above the threshold of 50. New export orders were considerably weaker. The Markit new export orders sub-index dropped by 4.9 points to 44.0, its lowest level since April 2009, on the back of a weak external environment. Meanwhile, industrial production declined marginally in May, as did fixed-asset investment. Trade growth showed a sharp decline in May, partly reflecting a month-on-month decline in exports to and via Hong Kong, which are widely believed to have been overstated in recent months. Retail sales continued to grow in May. Housing prices rose by 5.3% year on year in May, with price increases reported in 69 out of 70 surveyed cities. Since bottoming out in May 2012, housing prices have risen by a cumulative 7.0%. The growth rates of overall money supply and loans remain high, despite declining marginally in May. Inflationary pressures remain subdued in China, with annual consumer price inflation decelerating to 2.1% in May.

In late June, China's money market rates spiked owing to a number of technical reasons and worries about financial stability risks, but receded from record highs after the People's Bank of China provided targeted liquidity injections. On 25 and 26 June, the People's Bank of China issued two press releases urging banks to improve their risk and liquidity management, signalling that it would only relax monetary policy if the tensions threatened market stability.

## EU ENLARGEMENT

On 1 July 2013 Croatia became the 28th Member State of the European Union. Box 3 describes Croatia's current economic situation and lists the challenges that lie ahead for the new Member State if it is to benefit from the EU accession.

### Box 3

#### CROATIA JOINS THE EUROPEAN UNION

Croatia became the 28th Member State of the European Union on 1 July 2013. From an economic perspective, the accession of Croatia to the EU has the potential to contribute positively to the country's economic growth and welfare, and to that of the Union as a whole, by, for example, creating new trade and investment opportunities. In particular, more inward foreign direct investment (FDI) in the tradable sector would be a key ingredient in the expansion of Croatia's investment activities and export base through a better integration into the pan-European production chain. A full and efficient absorption of EU structural and cohesion funds would also be helpful, to the extent that these transfers are invested to enhance the production capacity of the country, rather than financing public and private consumption. Compliance with the reformed

economic, fiscal and financial governance of the EU would also provide a key anchor for the pursuit of sustainable growth in a stable macroeconomic and financial environment. To fully exploit these potential benefits, however, a number of conditions would need to be fulfilled, some of which are mentioned at the end of this box.

Croatia's GDP accounts for only 0.34% of EU28 GDP and, with 4.3 million inhabitants, its population for 0.84% of the EU28 population. Therefore, the statistical macroeconomic features of the EU economy as a whole have not changed significantly as a result of the enlargement. In 2012, Croatia's GDP per capita in purchasing power parity (PPP) terms stood at 61% of the EU27 average, the third lowest when ranked alongside EU countries. The country made progress in income convergence towards the EU average until 2008, but this trend reversed thereafter owing to the prolonged economic recession.

The output of Croatia has expanded less than that of most regional peers over the past decade. This holds true both for periods before and after the crisis. In 2013, the Croatian economy is projected to experience negative growth for the fifth consecutive year, although the pace of economic contraction has eased somewhat. Real GDP has cumulatively contracted by around 11 percentage points since the outbreak of the crisis in 2008. In the period 2004-2008, annual real GDP growth averaged at 4.1% and was largely driven by an unsustainable expansion of domestic demand, spurred by rapid debt accumulation. The transition towards a more sustainable growth model has yet to be accomplished, despite some progress made in the implementation of reforms.

Croatia's economic structure is broadly similar to that prevailing in the other EU Member States. It is characterised by the high share of the services sector, which accounts for 70% of gross value added. Manufacturing represents around 15% of the economy. The relative weight of the agricultural sector, at 5%, is above the EU average (1.7%). The single most important industry in Croatia is tourism, with a GDP share of about 20%. Croatia is an open economy and the EU is its key trading partner, accounting for 61% of total trade. However, Croatia's export performance has been relatively subdued over the last decade as its export market shares in terms of world exports to both the EU and the rest of the world declined.

In contrast to several other EU Member States in central and eastern Europe, Croatia has a history of relatively low and stable inflation, averaging 2.8% over the last decade. After HICP inflation temporarily picked up to 3.4% in 2012 – primarily owing to hikes in VAT and rises in administered, food and energy prices – it declined to 1.8% in May 2013, reflecting the fading of such effects. The price level of final consumption by households (including indirect taxes) stood at 71% of the EU27 average in 2012 and was the third highest among the non-euro area EU countries in central and eastern Europe.

Unemployment is high and the participation rate is low. Reflecting the prolonged recession, the unemployment rate more than doubled after 2008, reaching 18.3% in the first quarter of 2013. This is the third highest rate of unemployment in the EU. The participation rate, at 60.5%, is the lowest in the EU, reflecting factors such as rigid labour market regulations and generous social benefits.

The current account has improved considerably since the trough reached in 2008 (-8.9% of GDP), and it was in balance in 2012. The process of external adjustment was initially driven by an improvement in the balance of trade in goods. More recently, the rising surplus stemming from trade in services – mostly tourism, but also other business services – has been the dominating

## Key economic features of Croatia and the enlarged EU

		2012	
		EU28	Croatia
<b>Population and economic activity</b>			
Total population <sup>1)</sup>	(millions)	508.5	4.3
GDP	(EUR billions)	12,945.4	43.9
GDP per capita (PPP)	(EU28=100)	100	61
GDP (share of world GDP) <sup>2)</sup>	(percentages)	19.5	0.09
<b>Prices and costs</b>			
HICP inflation	(average annual percentage change)	2.6	3.4
Gross wages and salaries	(average annual percentage change)	2.3	0.5
Unit labour costs	(average annual percentage change)	1.8	1.2
<b>Sectors of production<sup>3)</sup></b>			
Agriculture, fishing, forestry	(percentage of total)	1.7	4.5
Industry (including construction)	(percentage of total)	24.6	25.1
Services (including non-market services)	(percentage of total)	73.7	70.4
<b>External trade<sup>4)</sup></b>			
Exports of goods and services	(percentage of GDP)	44.8	43.4
Imports of goods and services	(percentage of GDP)	42.8	42.7
Current account balance	(percentage of GDP)	0.9	-0.1
<b>Labour market</b>			
Labour force participation rate	(percentage of working age population)	71.7	60.5
Unemployment rate	(percentage of labour force)	10.5	15.9
Employment rate	(percentage of working age population)	63.2	49.5
<b>General government<sup>5)</sup></b>			
Balance	(percentage of GDP)	-4.0	-3.8
Revenue	(percentage of GDP)	45.4	36.8
Expenditure	(percentage of GDP)	49.4	40.6
Gross debt outstanding	(percentage of GDP)	86.8	53.7
<b>Monetary and financial indicators</b>			
Credit to the private sector	(percentage of GDP)	140.5	80.6
Stock market capitalisation	(percentage of GDP)	60.5	38.7

Sources: Eurostat, European Commission, ECB, IMF, Zagreb Stock Exchange and ECB calculations.

Notes: Comparisons between Croatia and the EU28 are based on a conversion of national data into EUR using the average nominal HRK/EUR exchange rate prevailing in the corresponding periods, unless the data were already available in EUR.

1) Annual average.

2) GDP shares based on purchasing power parity (PPP) valuation of country GDPs.

3) Based on real gross value added.

4) National accounts data. EU data are compiled on the basis of transactions with residents of countries outside the EU (i.e. excluding intra-EU flows) and data for Croatia reflect transactions of Croatia with the rest of the world (i.e. including intra-EU flows).

5) General government data have not been formally validated by Eurostat.

factor. Croatia's external position remains vulnerable, however, with a large stock of net external liabilities, standing at 88.5% of GDP in 2012.

Croatia's government debt is estimated to have nearly doubled since 2008, and to have stood at 53.7% of GDP in 2012. The fiscal deficit is estimated to have decreased to 3.8% of GDP in 2012, from 5.7% in 2011. The implementation of a clear and sustainable fiscal consolidation strategy is required, including reforms of the pension and health care systems.

The financial system of Croatia is bank-based. The banking industry is dominated by foreign ownership, which accounts for over 90% of total banking sector assets, mostly from the rest of the EU. Strong credit growth, mainly in credit denominated in or indexed to foreign currency, was a salient feature of banking developments in the run-up to the global crisis. The subsequent economic downturn and the process of balance sheet deleveraging have led

to a marked fall in credit. Despite the strong adjustment on the flow side, however, the ratio of private sector credit to GDP still stood at close to 81% in 2012. In this context, the rising non-performing loans (14% of total loans at the end of 2012) are the main source of concern with regard to financial stability.

Looking ahead, Croatia needs to implement a number of important measures and reforms to fully reap the benefits of EU accession. By attracting capital and growth-enhancing investment, improving competitiveness, strengthening the absorption of EU funds, and pursuing counter-cyclical macroeconomic policies and sound micro- and macro-prudential policies, Croatia has the potential to resume the catching-up process and resume income convergence. Above all, further structural reforms are needed, including those aimed at improving the efficiency of the public sector, raising labour force participation, increasing flexibility in the labour market, improving the institutional and business environment, and combating the informal economy. It is of the utmost importance that such reforms are stepped up now that EU accession has taken place. Only in this manner will participation in the EU act as a catalyst for Croatia to evolve towards a more prosperous economy. In achieving this aim, a lot will depend on political will, social cohesion and a fruitful partnership with the European institutions and the other Member States.

#### 1.4 EXCHANGE RATES

Over the past month the euro remained broadly unchanged against the currencies of most of its trading partners. On 3 July 2013 the nominal effective exchange rate of the euro, as measured against the currencies of 21 of the euro area's most important trading partners, stood 0.1% above its level at the beginning of June, and 4.2% above the level a year earlier (see Chart 4 and Table 3).

In bilateral terms, over the past month the euro depreciated slightly against most major currencies, including the US dollar (by 0.4%), the Japanese yen (by 1.2%) and the pound sterling (by 0.3%), amid changing expectations about future inflation differentials and interest rate developments. During this period, the euro broadly appreciated against the currencies of other EU Member States, as well as against the currencies of major emerging economies and commodity-exporting countries, including the Australian dollar (by 6.1%), the Canadian dollar (by 1.6%) and the Norwegian krone (by 4.5%).

The currencies participating in ERM II remained broadly stable against the euro, trading at, or close to, their respective central rates.

Chart 4 Nominal effective exchange rate of the euro

(daily data; index: Q1 1999 = 100)



Source: ECB.

Note: The nominal effective exchange rate of the euro is calculated against the currencies of 21 of the most important trading partners of the euro area.

**Table 3 Euro exchange rate developments**

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

	Weight in the effective exchange rate of the euro (EER-21)	Change in the exchange rate of the euro as at 3 July 2013 with respect to	
		3 June 2013	3 July 2012
EER-21		0.1	4.2
Chinese renminbi	18.6	-0.4	-0.5
US dollar	16.8	-0.4	3.1
Pound sterling	14.8	-0.3	5.8
Japanese yen	7.1	-1.2	28.5
Swiss franc	6.4	-1.4	2.3
Polish zloty	6.1	1.6	3.0
Czech koruna	5.0	1.0	1.8
Swedish krona	4.7	1.6	-0.3
Korean won	3.9	1.1	3.8
Hungarian forint	3.2	-0.2	3.0
Danish krone	2.6	0.1	0.4
Romanian leu	2.0	0.9	-0.1
Croatian kuna	0.6	-0.9	-0.3

Source: ECB.

Note: The nominal effective exchange rate is calculated against the currencies of 21 of the most important trading partners of the euro area.

## 2 MONETARY AND FINANCIAL DEVELOPMENTS

### 2.1 MONEY AND MFI CREDIT

*Annual M3 growth weakened in May 2013, mostly reflecting base effects. M3 growth was mainly driven by the continued preference for liquidity, which led to further strong inflows into overnight deposits in May. On the counterpart side, annual growth in broad money was mainly supported by strong capital inflows into the euro area and reductions in longer-term financial liabilities. By contrast, MFI lending to the euro area non-financial private sector weakened, mainly reflecting low levels of demand, although supply constraints remained in a number of countries.*

#### THE BROAD MONETARY AGGREGATE M3

The annual growth rate of M3 declined to 2.9% in May 2013, down from 3.2% in April, mainly reflecting base effects (see Chart 5). On the component side, the strong monthly inflow into overnight deposits offset the outflows for marketable instruments (i.e. M3 minus M2) and short-term deposits other than overnight deposits (i.e. M2 minus M1). Moreover, the data also conceal some further strengthening of deposit bases in most of the stressed countries in the euro area. In the majority of those countries, deposit growth exceeded that seen in other euro area countries in May. This resulted in further reductions in the cross-country heterogeneity of deposit growth.

On the counterpart side, strong support for the monthly inflow for M3 in May came from an increase in the MFIs' net external asset position, resulting from the ongoing capital inflows into the euro area and negative monthly flows in longer-term financial liabilities owing to significant net redemptions in longer-term MFI debt securities. Additional support came from MFI purchases of domestic government bonds in some euro area countries and purchases of private sector securities. By contrast, M3 growth was dampened by strong net redemptions of loans to the private sector, as it had been in April.

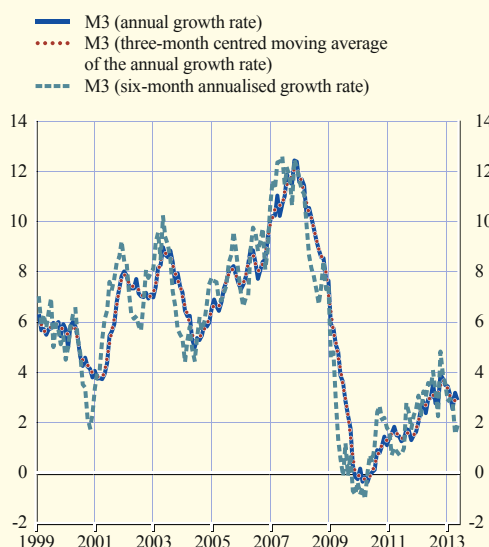
The volume of euro area MFIs' main assets contracted further in May, continuing the deleveraging observed since spring 2012. The month-on-month decline in May was driven mainly by further reductions in inter-MFI loans, holdings of debt securities issued by euro area MFIs and external assets. Those developments were partly offset by increases in holdings of government bonds. Overall, excess central bank liquidity declined further in May, mainly on account of MFIs' early repayments of the two three-year longer-term refinancing operations (LTROs) and a reduction in financial fragmentation.

#### MAIN COMPONENTS OF M3

As regards the components of M3, the annual growth rate of M1 remained strong, but decreased to 8.4% in May 2013, down from 8.7% in April. This growth moderation reflected base effects. In fact, a large monthly inflow for overnight deposits was observed

Chart 5 M3 growth

(percentage changes; adjusted for seasonal and calendar effects)



Source: ECB.



in May. Most of that inflow was on account of an increase in the deposits placed by households and non-financial corporations that was broadly based across countries. The continued inflow into overnight deposits reflects a strong preference for liquidity and can be attributed to the low opportunity costs of holding these deposits in an environment of low interest rates.

The annual growth rate of short-term deposits other than overnight deposits declined to 0.0% in May, down from 0.1% in April. This reflected a further contraction in short-term time deposits (i.e. deposits with an agreed maturity of up to two years) and a moderation in the annual growth rate of short-term savings deposits (i.e. deposits redeemable at notice of up to three months). As a result of this development, M1 was the only main component that positively contributed to annual broad money growth in May.

The annual growth rate of marketable instruments further declined sharply, standing at -15.7% in May, down from -13.9% in April. This reflected monthly outflows from money market funds/shares, net redemption of short-term MFI debt securities (i.e. debt securities with maturities of up to two years) and a zero net flow of repurchase agreements. The continuing outflows from money market fund shares/units are probably related to the low return on these instruments and a reduction in the risk aversion of the money-holding sector and find their counterpart in strong inflows into equity and bond funds. The net redemption of short-term MFI debt securities in May was relatively widespread across countries. When viewed in conjunction with the net redemption of longer-term MFI debt securities, this continues to suggest that euro area banks have reduced their recourse to market-based funding. This can also be observed in the context of banks' deleveraging efforts, the strengthening of their deposit bases, regulatory incentives and ample availability of central bank liquidity.

The annual growth rate of M3 deposits – which include repurchase agreements and represent the broadest component of M3 for which a timely sectoral breakdown is available – decreased marginally to stand at 4.7% in May, down from 4.8% in April. This was driven by small declines in the contributions of deposits held by the general government, insurance corporations and pension funds and non-monetary financial intermediaries other than insurance corporations and pensions funds (OFIs). By contrast, the contribution of deposits held by households and non-financial corporations increased, reflecting the aforementioned preference for liquidity. The contribution of non-financial corporations has been increasing since mid-2012. The annual growth rate of this sector's M3 deposits increased to 6.4% in May, the highest rate since 2008. At the country level, data for May reveal improvements in the deposit bases of banks operating in stressed countries (with the exception of Cyprus and Slovenia), pointing to improved confidence in the banking sectors of those countries.

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

The annual growth rate of MFI credit to euro area residents declined to -0.2% in May 2013, down from 0.0% in April (see Table 4). The annual growth rate of credit to general government grew at an annual rate of 3.2%, down from 3.5% in April. A considerable monthly inflow was observed for credit to general government, driven mainly by sizeable purchases of domestic government bonds by MFIs in a number of euro area countries.

The annual growth rate of credit to the private sector stood at -1.0% in May, after -0.9% in April, mainly on account of strong redemptions of loans to non-financial corporations that were relatively widespread geographically. The annual growth rate of MFI loans to non-financial corporations (adjusted for sales and securitisation) decreased to -2.1% in May, down

Table 4 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					
		2012 Q2	2012 Q3	2012 Q4	2013 Q1	2013 Apr.	2013 May
<b>M1</b>	<b>53.7</b>	<b>2.8</b>	<b>4.6</b>	<b>6.2</b>	<b>6.8</b>	<b>8.7</b>	<b>8.4</b>
Currency in circulation	8.9	5.6	5.3	3.0	1.7	3.4	2.6
Overnight deposits	44.7	2.3	4.5	6.9	7.8	9.8	9.7
<b>M2-M1 (=other short-term deposits)</b>	<b>39.2</b>	<b>2.6</b>	<b>1.3</b>	<b>1.6</b>	<b>1.3</b>	<b>0.1</b>	<b>0.0</b>
Deposits with an agreed maturity of up to two years	17.7	2.4	-0.9	-1.8	-3.7	-6.1	-6.2
Deposits redeemable at notice of up to three months	21.5	2.7	3.5	4.8	6.0	5.9	5.7
<b>M2</b>	<b>92.9</b>	<b>2.7</b>	<b>3.2</b>	<b>4.2</b>	<b>4.3</b>	<b>4.9</b>	<b>4.7</b>
<b>M3-M2 (=marketable instruments)</b>	<b>7.1</b>	<b>3.0</b>	<b>1.9</b>	<b>-2.3</b>	<b>-8.5</b>	<b>-13.9</b>	<b>-15.7</b>
<b>M3</b>	<b>100.0</b>	<b>2.7</b>	<b>3.1</b>	<b>3.6</b>	<b>3.2</b>	<b>3.2</b>	<b>2.9</b>
<b>Credit to euro area residents</b>		<b>1.4</b>	<b>0.9</b>	<b>0.5</b>	<b>0.0</b>	<b>0.0</b>	<b>-0.2</b>
Credit to general government		8.6	9.2	8.3	4.2	3.5	3.2
Loans to general government		-1.7	1.5	1.9	-0.8	-0.9	-3.2
Credit to the private sector		-0.3	-1.0	-1.3	-1.0	-0.9	-1.0
Loans to the private sector		-0.1	-0.6	-0.8	-0.8	-0.9	-1.1
Loans to the private sector adjusted for sales and securitisation <sup>2)</sup>		0.4	-0.1	-0.4	-0.3	-0.5	-0.7
<b>Longer-term financial liabilities (excluding capital and reserves)</b>		<b>-2.4</b>	<b>-4.3</b>	<b>-5.1</b>	<b>-5.1</b>	<b>-5.0</b>	<b>-4.3</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.

from -1.9% in April (see Table 5), with sizeable net redemptions in May, similar to those observed in April (€18 billion in each of the two months). Among other factors, these developments could reflect reduced demand for working capital against the background of weak order books in early spring, as the decline was particularly pronounced for short-term loans. The annual growth rate of

Table 5 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					
		2012 Q2	2012 Q3	2012 Q4	2013 Q1	2013 Apr.	2013 May
<b>Non-financial corporations</b>	<b>41.5</b>	<b>0.1</b>	<b>-0.8</b>	<b>-1.9</b>	<b>-2.5</b>	<b>-3.0</b>	<b>-3.1</b>
<i>Adjusted for sales and securitisation<sup>2)</sup></i>	-	0.3	-0.5	-1.4	-1.4	-1.9	-2.1
Up to one year	25.0	0.3	-0.4	-1.3	0.7	-0.6	-1.4
Over one and up to five years	17.3	-3.1	-3.8	-5.2	-5.9	-6.7	-6.3
Over five years	57.7	1.0	0.0	-1.0	-2.7	-2.8	-2.9
<b>Households<sup>3)</sup></b>	<b>48.7</b>	<b>0.4</b>	<b>0.2</b>	<b>0.4</b>	<b>0.5</b>	<b>0.4</b>	<b>0.2</b>
<i>Adjusted for sales and securitisation<sup>2)</sup></i>	-	1.4	1.0	0.8	0.4	0.3	0.3
Consumer credit <sup>4)</sup>	11.3	-2.1	-2.4	-2.9	-3.2	-3.2	-3.5
Lending for house purchase <sup>4)</sup>	73.2	0.9	0.7	1.1	1.4	1.2	1.0
Other lending	15.5	0.3	-0.5	-0.6	-1.0	-0.8	-1.0
<b>Insurance corporations and pension funds</b>	<b>0.9</b>	<b>-5.3</b>	<b>-9.1</b>	<b>-4.2</b>	<b>6.1</b>	<b>15.9</b>	<b>12.0</b>
<b>Other non-monetary financial intermediaries</b>	<b>8.9</b>	<b>-3.4</b>	<b>-2.8</b>	<b>-1.4</b>	<b>-0.1</b>	<b>0.6</b>	<b>0.2</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.

MFI loans to households (adjusted for sales and securitisation) remained unchanged at 0.3%. The monthly flows were small, reflecting modest redemptions in lending for house purchases and consumer credit.

Overall, growth in loans to the non-financial private sector remains subdued in the euro area, with both supply and demand factors weighing on the pace of loan growth. Weak economic activity and persistently high levels of economic uncertainty continue to be reflected in weak demand for bank loans. At the same time, the fragmentation of financial markets, although receding in recent months, as well as credit supply constraints are curbing credit growth. Finally, the still high level of indebtedness for both households and non-financial corporations in a number of countries is also weighing on loan growth.

The annual growth rate of longer-term financial liabilities (excluding capital and reserves) remained negative at -4.3% in May, slightly improving from -5.0% in April. The monthly flow was negative, reflecting net redemptions in longer-term debt securities, which added to the net redemptions observed in short-term MFI debt securities. By contrast, long-term deposits registered monthly inflows, countering the strong negative flows observed in April. Capital and reserves increased further in May.

The net external asset position of euro area MFIs increased by €60 billion in May (see Chart 6), following continuous inflows since July 2012 (with two months of relatively small outflows). Strong capital inflows to the euro area, observed since July 2012, are currently the main factor supporting M3 growth. Over the 12 months up to May the net external asset position of euro area MFIs increased by €261 billion, compared with an increase of €205 billion over the 12 months to April.

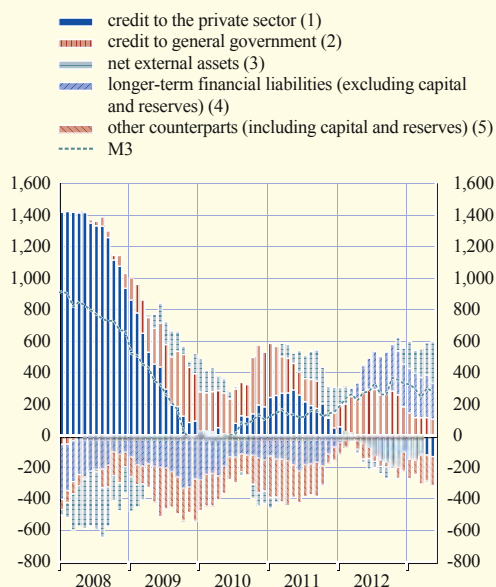
Overall, data for the first five months of 2013 support the view that the underlying dynamics of money and particularly credit growth remain subdued. The latest monetary data also suggest that financial fragmentation in the euro area, while still substantial, has receded in recent months.

## 2.2 SECURITIES ISSUANCE

*In April 2013 the annual growth rate of debt securities issued by euro area residents continued to decline to -0.3%. However, the year-on-year growth of debt securities issued by non-financial corporations, although moderating further, remained buoyant. The annual growth rate of issuance of quoted shares likewise edged down in April, as compared with the preceding month.*

**Chart 6 Counterparts of M3**

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



Source: ECB.

Notes: M3 is shown for reference only ( $M3 = 1+2+3-4+5$ ).

Longer-term financial liabilities (excluding capital and reserves) are shown with an inverted sign, since they are liabilities of the MFI sector.

Table 6 Securities issued by euro area residents

Issuing sector	Amount outstanding (EUR billions) 2013 April	Annual growth rates <sup>1)</sup>					
		2012 Q2	2012 Q3	2012 Q4	2013 Q1	2013 March	2013 April
<b>Debt securities</b>	<b>16,699</b>	<b>4.2</b>	<b>3.7</b>	<b>2.8</b>	<b>0.8</b>	<b>-0.2</b>	<b>-0.3</b>
MFIs	5,251	3.6	3.5	1.2	-3.2	-5.8	-5.9
Non-monetary financial corporations	3,317	2.5	0.9	0.3	0.5	-0.9	-1.5
Non-financial corporations	1,030	9.3	10.8	12.6	13.2	12.4	12.2
General government	7,100	4.7	4.3	4.1	2.6	3.2	3.2
<i>of which:</i>							
Central government	6,409	3.8	3.5	3.6	2.6	3.6	3.5
Other general government	691	14.3	12.8	9.1	2.4	-0.8	0.4
<b>Quoted shares</b>	<b>4,726</b>	<b>1.4</b>	<b>1.0</b>	<b>1.0</b>	<b>0.8</b>	<b>0.5</b>	<b>0.3</b>
MFIs	411	10.1	5.6	5.2	3.0	2.2	0.9
Non-monetary financial corporations	384	3.1	2.9	2.6	2.6	2.6	2.7
Non-financial corporations	3,930	0.3	0.3	0.4	0.5	0.1	0.1

Source: ECB.

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

## DEBT SECURITIES

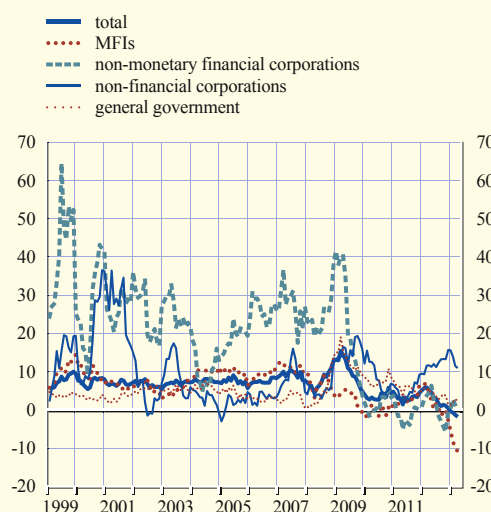
In April 2013 the annual growth rate of debt securities issued by euro area residents declined to -0.3%, after -0.2% in the previous month (see Table 6). The annual growth rate of debt securities issued decreased from 12.4% to 12.2% in the case of non-financial corporations (NFCs), while it fell from -0.9% to -1.5% for non-monetary financial corporations, and from -5.8% to -5.9% in the case of MFIs. The annual growth rate of debt securities issued by the general government remained unchanged at 3.2%.

The slowdown in overall debt security issuance was attributable to a more pronounced contraction of short-term debt securities issuance (from -9.1% in March 2013 to -9.2% in April) and to a decline in the annual growth rate of long-term debt securities issuance from 0.8% in March to 0.7% in April. Refinancing activity remained concentrated on issuance in the long-term segment of the market, notably at fixed rates. The annual growth rate of issuance of fixed rate long-term debt securities increased to 3.7% in April, from 3.6% in March. At the same time, issuance of floating rate long-term debt securities contracted further to -7.7% on an annual basis in March, from -7.5% the preceding month.

Looking at short-term trends, the slowdown in debt issuance activity was more pronounced than suggested by the annual growth rates of issuance by MFIs and NFCs (see Chart 7). The six-month annualised growth rate of total debt securities issuance declined from a peak of 1.3% in October 2012 to -1.8% in April 2013. In April, as compared with March 2013, this rate declined from -9.9% to -10.9% in the case

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

(six-month annualised growth rates; seasonally adjusted)



Source: ECB.

of MFIs and from 11.4% to 10.9% in that of NFCs. Over the same period, the growth rate recorded for issuance by non-monetary financial corporations increased from 1.2% to 1.4%

### QUOTED SHARES

In April 2013 the annual growth rate of quoted shares issued by euro area residents declined to 0.3% from 0.5% in the previous month (see Table 6 and Chart 8). The annual rate of growth in equity issuance declined to 0.9% for MFIs, increased slightly to 2.7% for non-monetary financial corporations and remained unchanged at 0.1% for NFCs.

### 2.3 MONEY MARKET INTEREST RATES

*While overnight money market interest rates remained stable between early June and the beginning of July, the money market yield curve steepened significantly, reflecting expectations of increases in overnight interest rates in the euro area money markets. In the sixth maintenance period of the year, which began on 12 June, the EONIA remained at historically low levels, reflecting the low key ECB interest rates, as well as the amount of excess liquidity in the overnight money market, which remained high despite the ongoing repayment of funds borrowed in the two three-year longer-term refinancing operations (LTROs).*

Especially at longer maturities, unsecured money market interest rates increased in June 2013. On 3 July the one-month, three-month, six-month and twelve-month EURIBOR stood at 0.12%, 0.22%, 0.34% and 0.53% respectively, i.e. 1, 2, 4 and 5 basis points higher than the levels observed on 5 June. Consequently, the spread between the twelve-month and one-month EURIBOR – an indicator of the slope of the money market yield curve – increased by 4 basis points to stand at 41 basis points on 3 July (see Chart 9).

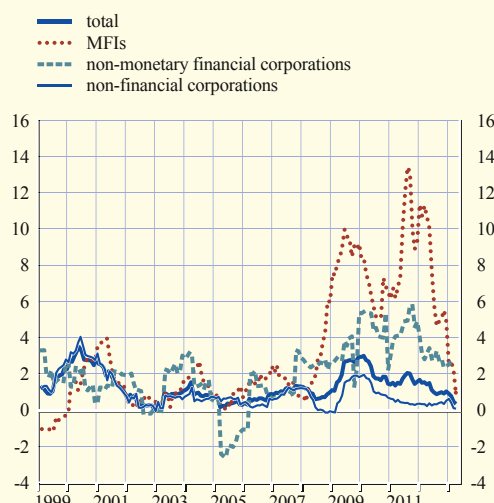
The three-month EONIA swap rate stood at 0.11% on 3 July, 4 basis points higher than on 5 June. Thus, the spread between the three-month EURIBOR and the three-month EONIA swap rate decreased by 2 basis points.

The interest rates implied by the prices of three-month EURIBOR futures maturing in September and December 2013 and March and June 2014 increased by 8, 11, 13 and 14 basis points respectively in comparison with the levels seen on 5 June, standing at 0.28%, 0.34%, 0.42% and 0.48% on 3 July.

Between 5 June and the end of the fifth maintenance period of 2013 on 11 June, the EONIA continued to stand at levels around 0.08% amid continued high levels of excess liquidity. Similar levels were observed in the sixth maintenance period. On 28 June the EONIA spiked at 0.21% (see Chart 10).

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

(annual growth rates)

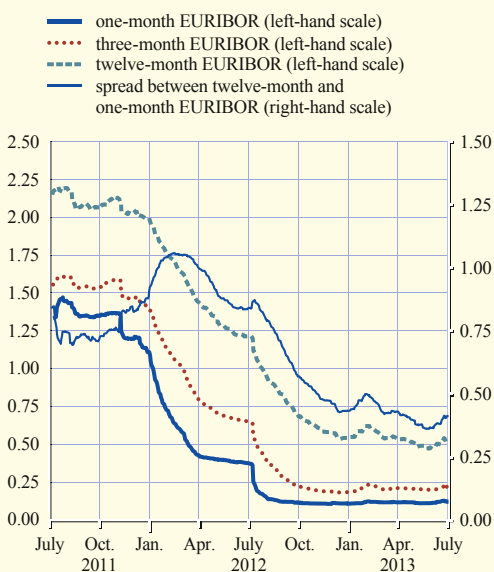


Source: ECB.

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

Chart 9 Money market interest rates

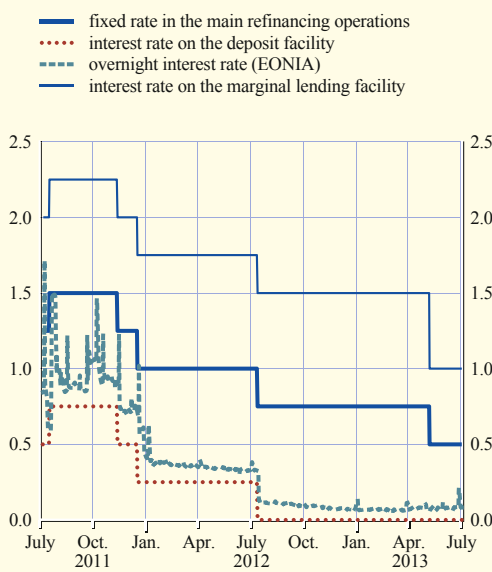
(percentages per annum; spread in percentage points; daily data)



Sources: ECB and Thomson Reuters.

Chart 10 ECB interest rates and the overnight interest rate

(percentages per annum; daily data)



Sources: ECB and Thomson Reuters.

Between 5 June and 3 July the Eurosystem conducted several refinancing operations. In the main refinancing operations of the sixth maintenance period, conducted on 11, 18, 25 June and 2 July, the Eurosystem allotted €108.3 billion, €102.0 billion, €117.3 billion and €107.7 billion respectively. The Eurosystem also conducted two LTROs in June, both as fixed rate tender procedures with full allotment, namely a special-term refinancing operation with a maturity of one maintenance period on 11 June (in which €3.6 billion was allotted) and a three-month LTRO on 26 June (in which €9.5 billion was allotted). Moreover, counterparties opted to repay, on a weekly basis, funds borrowed in the three-year LTROs allotted on 21 December 2011 and 29 February 2012 before maturity. As at 3 July, a total of €309.5 billion had been repaid since 30 January 2013, with €207.8 billion relating to the LTRO allotted on 21 December 2011 and €101.7 billion relating to the LTRO allotted on 29 February 2012. Thus, of the €523 billion of net liquidity originally injected in the two three-year LTROs, around 59% has been repaid so far (see Box 4).

The Eurosystem also conducted four one-week liquidity-absorbing operations on 11, 18, 25 June and 2 July as variable rate tender procedures with a maximum bid rate of 0.50%. With these operations, the Eurosystem absorbed all of the liquidity associated with bond holdings under the Securities Markets Programme.

Having reached record levels in the second quarter of 2012 (at levels around €800 billion), excess liquidity declined further in the fifth maintenance period of 2013 (falling from €331.87 billion on average in the previous maintenance period to €285.5 billion), continuing the declining trend which started in the third quarter of 2012. The main factors contributing to the decrease in the fifth maintenance period were the early repayment of funds allotted in the two three-year LTROs, an increase in the liquidity absorbed by autonomous factors and a slight reduction in recourse to the main refinancing operations (for a longer-term analysis of factors driving excess liquidity

see Box 4). While average daily recourse to the deposit facility decreased to €90.5 billion, down from €114.5 billion in the previous maintenance period, average current account holdings in excess of reserve requirements decreased from €217.3 billion to €195 billion. On 3 July, during the sixth maintenance period of the year, excess liquidity further declined to stand at €267.2 billion, owing to an increase in the liquidity absorbed by autonomous factors and the early repayment of funds.

#### Box 4

### EARLY REPAYMENTS OF FUNDS RAISED THROUGH THREE-YEAR LONGER-TERM REFINANCING OPERATIONS: DEVELOPMENTS SINCE FEBRUARY 2013

Since 25 January and 22 February 2013 counterparties have been able to make early repayments of funds obtained in the first and second three-year longer-term refinancing operations (LTROs) respectively. Box 3 in the February 2013 issue of the Monthly Bulletin described in detail the modalities for, and the market reaction to, the first repayments.<sup>1</sup> This box describes the Eurosystem's experience with early repayments so far and briefly discusses new evidence concerning banks' motives behind early repayment decisions, including repayments of the second LTRO funds. The box also provides an analysis of the impact of repayments on conditions in euro area money markets since March 2013 by gauging the effects of repayment flows on excess liquidity and EONIA forward rates.

#### Repayments between 25 January and 27 June 2013

Since 25 January 2013 banks have had the option of repaying funds borrowed in the three-year LTROs on a weekly basis. Out of a total of €1,018.7 billion borrowed in the two three-year LTROs, aggregate repayments between 25 January and 27 June 2013 amounted to €205.8 billion and €101.7 billion from the first and second three-year LTROs respectively. This reflects an early payback of about 59% of the initial net injection of central bank liquidity in the market.<sup>2</sup>

As the size of the two operations differed by only €30 billion, the larger repayments of funds from the first LTRO appear to mainly reflect a preference to retain funds with higher remaining maturity; this factor is of particular relevance for counterparties that obtained funds in both operations.

#### Economic factors behind early repayment decisions: further evidence

Repayment decisions have been affected by general trends in market-based funding conditions across Member States as well as by bank-specific factors. In order to shed more light on the latter, the ECB conducted a survey among a sample of counterparties that had borrowed in the three-year LTROs. The results are in line with the preliminary assessment of the economic factors driving early repayment decisions as set out in Box 3 in the February 2013 issue of the Monthly Bulletin. According to the new survey evidence, banks predominantly based their repayment decisions on considerations relating to their funding position, which has improved

1 See the box entitled "Early repayment of funds raised through three-year longer-term refinancing operations: economic rationale and impact on the money market" *Monthly Bulletin*, ECB, February 2013.

2 The initial net injection is computed as the difference between the increase in liquidity provision under the LTROs and the decrease of liquidity provision under the other operations (especially the main refinancing operations).

in line with the better conditions in euro area financial markets that have been observed since mid-2012. In the survey, the majority of the banks that repaid (in full or in part) mentioned the availability of competitive market funding and the need for lower liquidity buffers as their main reasons for repayment. Furthermore, banks that did not repay stated that the attractiveness of Eurosystem financing in terms of pricing, or simply the desire to maintain liquidity buffers, were their main reasons for retaining the funds obtained in the LTROs.

Motivations related to signalling of financial strength seem to have played only a minor role in banks' repayment decisions, according to the survey. This evidence underscores the success of the LTROs as an effective measure to support bank lending and liquidity in the euro area money market.

### Impact on euro area money markets

The overall increase in excess liquidity due to the funds allotted under the two operations has contributed to keeping very short-term money market rates at a small margin above the deposit rate. Excess liquidity stood on average at €258.1 billion in the maintenance period of November 2011, just before the first three-year LTRO was allotted, and increased to €775.6 billion in the maintenance period of March 2012, immediately after the second three-year LTRO was allotted.

In general, if excess liquidity remains above a certain threshold, estimated to be in the range of €100 billion to €200 billion, short-term money market rates are expected to stay slightly above the deposit rate.<sup>3</sup> Given the importance of the three-year operations for the overall level of excess liquidity, early repayments could therefore be expected to have a potential to change market expectations of future excess liquidity and thereby affect the money market term structure.

The announcement of the first repayments on 25 January 2013 was a case in point. While markets expected repayments of around €100 billion, actual repayments were €137.2 billion. As a consequence, average expected EONIA rates in the months ahead rose sharply. Moreover, due to the non-linearity of the relationship between excess liquidity and EONIA, relatively small changes in expected weekly repayments can trigger a significant steepening of the money market forward curve. Indeed, the reaction to this larger than expected repayment suggested that markets had interpreted the event as indicative of a faster than expected early repayment schedule going forward. Such faster than expected repayments were associated with rising expected short-term money market rates as the volume of excess liquidity was seen as declining faster toward the aforementioned range of €100 billion to €200 billion (see Chart A, right-hand panel).

However, this increase in forward rates was short-lived, due to the subsequent observed repayment pattern. Following the first repayment, the path of subsequent repayments was more moderate and relatively stable. As a result, in the context of this stable repayment pattern, autonomous factors turned out to be more important in determining short-term fluctuations in excess liquidity. New repayments hence ceased to significantly change expectations of future excess liquidity.

<sup>3</sup> See the box referred to in footnote 1.

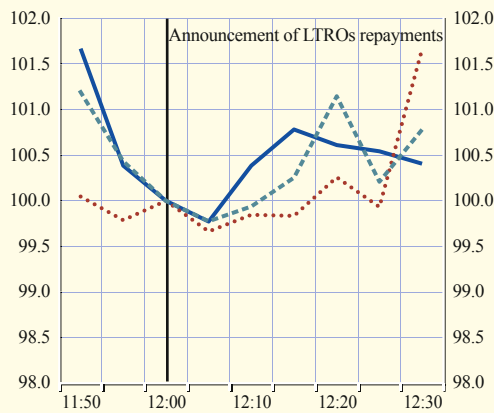


**Chart A Effect of LTROs repayment announcements on EONIA forward rates**

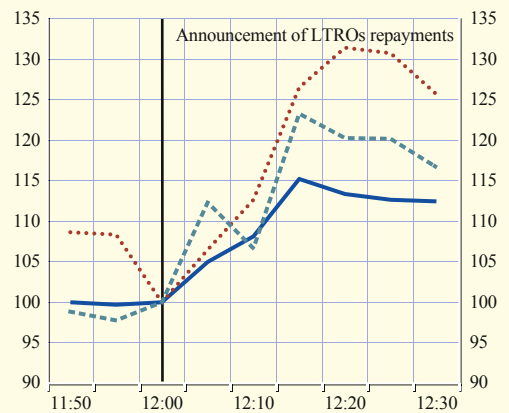
x-axis: time  
y-axis: index (100 = 12:00)

— three months ahead  
... six months ahead  
- - - nine months ahead

**a) 1 March to 21 June 2013 (averages)**



**b) 25 January 2013**



Sources: Thomson Reuters and ECB calculations.

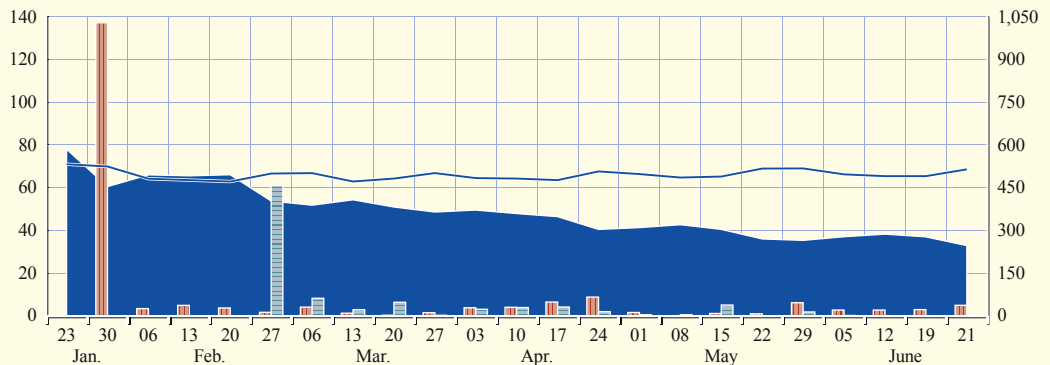
Chart B below depicts the evolution of repayments, autonomous factors and the level of excess liquidity and provides the following key insights. First, banks heavily used the first opportunity to repay their funds, on 25 January and on 22 February 2013 for the two operations respectively. On these two days, counterparties repaid around 64% of the total repayments accumulated so

**Chart B Excess liquidity, early repayments and autonomous factors**

(EUR billions)

x-axis: settlement dates

— excess liquidity (right-hand scale)  
■ amount repaid of first LTRO (left-hand scale)  
■ amount repaid of second LTRO (left-hand scale)  
— total autonomous factors (right-hand scale)



Source: ECB.

Note: The dates on the horizontal axis refer to the ECB announcements of actual repayments.

far. Excluding these relatively large repayments, the weekly average of repayments amounts to just €5.2 billion. Second, the chart illustrates that, except for the large initial repayments, a considerable fraction of the variation in excess liquidity is due to variations in autonomous factors. Since January 2013 autonomous have factors increased by around €21 billion.

In light of the rather stable repayment pattern following the large initial repayments of each operation, market expectations of future levels of excess liquidity have stabilised. This can also be inferred from the limited overall impact of announcements regarding the weekly repayments on money market interest rates.

Chart A plots the average effects of the announcements of LTRO repayments on EONIA forward rates at three different horizons. These effects are calculated by taking the average of the intraday movement in EONIA forward rates – during the 30-minute interval after the ECB's announcement on actual amounts repaid (which is published on the ECB website on the last working day of each week at 12 a.m. CET) – for each weekly repayment since March 2013. The absence of any other regular data releases or events scheduled at the time of these announcements ensures that changes in EONIA forward rates occurring during the narrow time window shortly after the announcement of repayments are likely to be entirely driven by changes in expectations concerning future levels of excess liquidity.

A comparison of the average announcement effect since March 2013 with the actual change in the EONIA forward curve that took place on 25 January 2013 shows that, after some initial volatility, subsequent early repayments played only a minor role in driving the evolution of forward money market rates. This may suggest that – with the exception of the first repayment on 25 January 2013 – market participants have been overall quite successful in anticipating the repayment flows and have adjusted quickly to them.

To sum up, a substantial amount of the funds borrowed in the two three-year LTROs has been repaid. Higher than expected repayments (especially the first repayment which was announced on 25 January 2013) led to a short-lived surge in expected short-term money market rates. However, these developments later reversed and changes in money market rates have been driven by factors unrelated to repayment shocks since then.

## 2.4 BOND MARKETS

*Between the end of May and 3 July 2013, yields on AAA-rated long-term government bonds in the euro area increased by 20 basis points to stand at around 2.0%. In the United States, long-term government bond yields rose by around 40 basis points over the same period, standing at around 2.5% on 3 July. The marked increases in both areas took place amid discussions about a tapering-off of quantitative easing in the United States. Economic data releases were slightly on the positive side of expectations in the euro area, although they still point to weak growth dynamics. In the United States, economic releases were also on the positive side of expectations, thereby continuing the recent trend. Over the period under review, uncertainty about future bond market developments increased in both the United States and the euro area. Finally, intra-euro area sovereign bond yield spreads widened moderately, while market-based indicators of long-term inflation expectations remained consistent with price stability.*

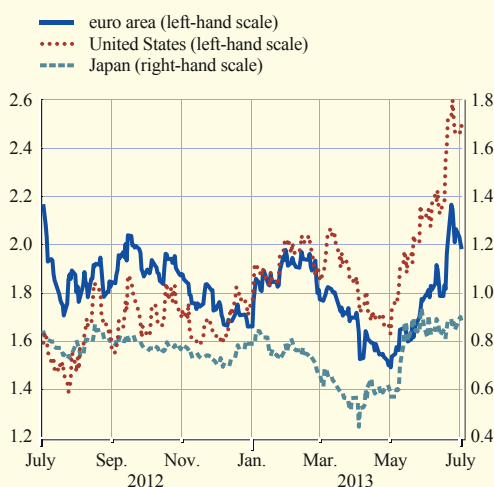
Between the end of May and 3 July, yields on AAA-rated long-term government bonds in the euro area increased by around 20 basis points to stand at around 2.0% (see Chart 11). In the United States, long-term government bond yields increased by around 40 basis points, standing at around 2.5% on the same date. In Japan, ten-year government bond yields were broadly unchanged and stood at around 0.9% on 3 July.

The sharp increases in long-term government bond yields in both the euro area and the United States marked a continuation of the upward trend that had started at the beginning of May when markets began to consider that the Federal Reserve might taper-off its quantitative easing programme in the near future. It appears that market participants extrapolated expected changes in the monetary stance in the United States to the euro area where forward overnight rates (see Chart 15) and AAA-rated government bond yields increased in parallel. However, the increase in these euro area interest rates may also have been supported by some domestic signals of a slightly improved economic outlook. In particular, a number of data releases in some euro area countries, including the results of surveys of consumer confidence, purchasing manager indices (PMIs) and business sentiment, were slightly better than expected, although they remained at low levels.

In the United States, the sharp increase in long-term government bond yields was consistent with the fact that, on average, economic releases were on the positive side of expectations. The Federal Reserve revised its projections on unemployment downwards and announced that it would be appropriate to moderate the pace of its purchases under the quantitative easing programme later this year, if the economy were to progress broadly as forecast. As already mentioned, this was a major factor behind developments in the bond markets in the period under review.

**Chart 11 Long-term government bond yields**

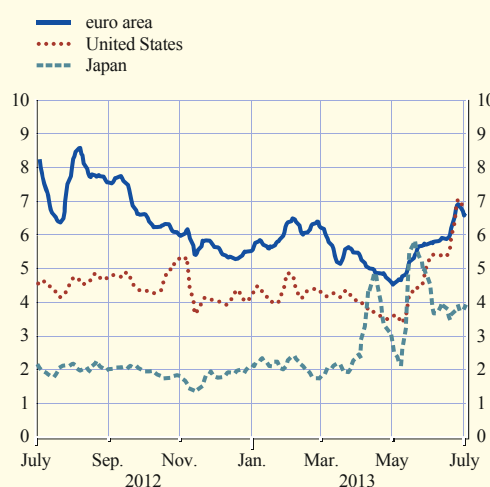
(percentages per annum; daily data)



Sources: EuroMTS, ECB, Bloomberg and Thomson Reuters.  
Notes: Long-term government bond yields refer to ten-year bonds or to the closest available bond maturity. The euro area bond yield is based on the ECB's data on AAA-rated bonds, which currently include bonds from Austria, Finland, France, Germany and the Netherlands.

**Chart 12 Implied government bond market volatility**

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



Source: Bloomberg.  
Notes: Implied government bond market volatility is a measure of uncertainty surrounding the short term (up to three months) for German and US ten-year government bond prices. It is based on the market values of related traded options contracts. Bloomberg uses implied volatility of the closest to at-the-money strikes for both puts and calls using near-month expiry futures.

Investor uncertainty about near-term bond market developments, as measured by option-implied volatility, increased in both the euro area and the United States, to 7.0% and 7.1% respectively at the end of the period under review. These levels are the highest levels observed in 2013. In the euro area, implied volatility ended the review period only slightly higher than the average level of 2012, while the level in the United States was markedly higher.

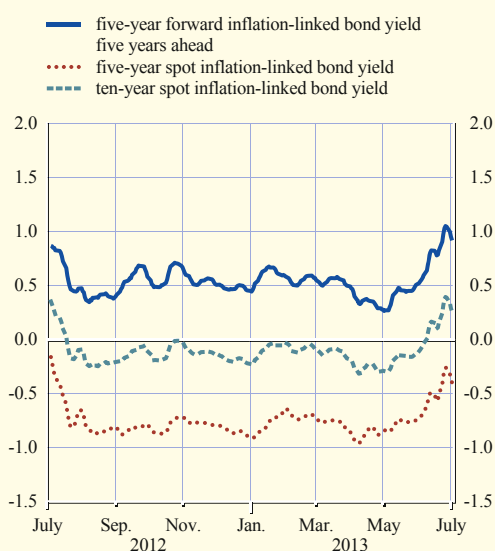
In the period under review, yields generally increased in the stressed segments of the euro area government bond market, and spreads vis-à-vis AAA-rated government bonds widened slightly.

Nominal yields on long-term euro area government bonds can be broken down into market expectations of real yields and inflation. In this regard, the real yields on ten-year AAA-rated inflation-linked euro area government bonds increased sharply during the review period, from -0.1% to 0.2%, while the real yields on corresponding bonds with five-year maturity increased in a similar order of magnitude, namely by 30 basis points to around -0.5% (see Chart 13). As a result, implied forward real interest rates in the euro area (five-year forward five years ahead) rose from 0.5% to 0.8%.

Regarding market indicators of long-term inflation expectations in the euro area, the five-year forward break-even inflation rates five years ahead implied by inflation-linked bonds decreased by 13 basis points to stand at around 2.4% at the end of the period under review (see Chart 14).

**Chart 13 Euro area zero coupon inflation-linked bond yields**

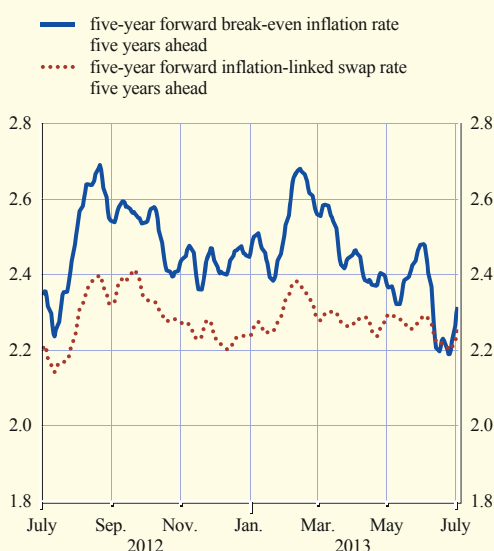
(percentages per annum; five-day moving averages of daily data; seasonally adjusted)



Sources: Thomson Reuters and ECB calculations.  
Notes: Since the end of August 2011 real rates have been 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 14 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.

To some extent, this decline can be linked to technical market factors. Against that background, corresponding inflation swap forward rates were broadly unchanged at around 2.3% at the end of the review period. Overall, market-based indicators suggest that inflation expectations remain firmly anchored in line with price stability.<sup>1</sup> Box 5 briefly presents the information content of inflation options.

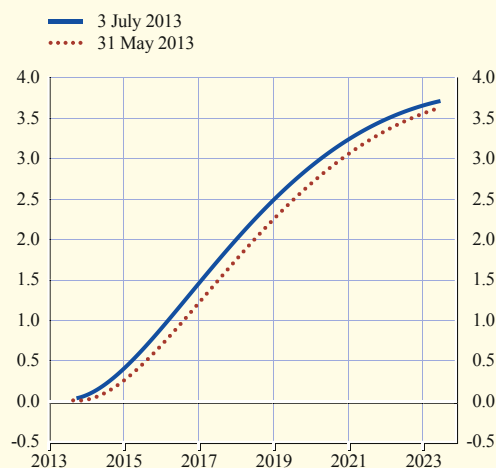
Long-term euro area government bond yields can also be broken down into expectations of future short-term interest rates, e.g. overnight interest rates, and risk premia (see Chart 15). In this regard, the term structure of implied forward overnight interest rates in the euro area shifted upwards across all maturities in the period under consideration. As mentioned earlier, these developments partly reflected spillovers from the United States.

In the period under review, the spreads on investment-grade corporate bonds issued by non-financial and financial corporations in the euro area generally increased slightly (relative to the Merrill Lynch EMU AAA-rated government bond index) across rating classes. Overall, corporate bond spreads for most rating classes ended the review period at around the average level recorded since the start of the year.

<sup>1</sup> For a more thorough analysis of the anchoring of long-term inflation expectations, see the article entitled “Assessing the anchoring of longer-term inflation expectations” in *Monthly Bulletin*, ECB, July 2012.

**Chart 15 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.

## Box 5

### THE INFORMATION CONTENT OF INFLATION OPTIONS

Monitoring inflation expectations is crucial for monetary policy. All central banks use a wide range of indicators to collect information, not only on the most likely inflation outcome, but also on the risks surrounding that baseline scenario. This box shows the relevance and limitations of using information from financial options to gauge inflation outcomes. Specifically, it shows that inflation options contain useful, high-frequency information on inflation concerns among market participants. Yet, without specific information on the degree of risk premia and other technical factors, using inflation options to gauge the probability of a certain inflation outcome is problematic. Such probabilities may be better measured via surveys, although these are only available at a lower frequency.

An inflation option can be either a cap or a floor. An inflation cap (floor) is a financial asset that offers protection against inflation being higher (lower) than a given rate of inflation, and can therefore be used by investors to insure against such inflation outcomes. Traded inflation options have a somewhat complex structure. In terms of their design, inflation caps (floors) consist of a series of consecutive caplets (floorlets), each related to the same rate of inflation (the option strike) and with a maturity of one year. An inflation caplet works in a manner similar to that of an equity call option or an interest rate cap:<sup>1</sup> the buyer pays the seller a premium up front (the option price) and, in exchange, the seller pays the buyer the difference between actual inflation in a given period (e.g. one year in the case of a year-on-year option) and a pre-specified rate of inflation (the strike rate) multiplied by the notional amount if the actual inflation rate is higher than the strike rate. In other words, inflation options offer protection against inflation being higher than the strike rate. A floorlet works in the same way if inflation is lower than the strike rate.

In the euro area, inflation caps and floors are traded for several maturities and for several different strikes, normally from -2% to 5%. Unfortunately, although it has grown significantly in recent years, liquidity in this market remains limited and trades are often concentrated on a few strikes. Nonetheless, subject to the crucial assumption of risk-neutrality,<sup>2</sup> one can use options prices to extract so-called risk-neutral probability densities for future inflation outcomes.<sup>3</sup> It is important to note, however, that option-implied risk-neutral probability densities are not equivalent to the actual probabilities of inflation perceived by market players, because they incorporate a risk premia component, as market participants are in reality risk averse. In this context, it should be borne in mind that a change in option-implied probabilities may reflect not only a change in actual probabilities of inflation perceived by investors, but also a change in the risk premia. Risk aversion is likely to have been particularly high since the beginning of the financial crisis and, in particular, the premia paid for some of the lowest and highest rates of inflation have probably been elevated. Some recent research on US and UK inflation options suggests that this has been the case in both of these markets.<sup>4</sup>

Chart A shows the time series of risk-neutral probability density functions implied by five-year (year-on-year) inflation options, which, according to market intelligence, are the most liquid maturity. Specifically, it depicts the option-implied mean inflation rate (as the solid line) and the option-implied variability in the form of different percentiles for implied inflation outcomes. It follows that the option-implied variability (the “width” of the percentiles) has increased and become more volatile since the beginning of the financial crisis. This may reflect increased uncertainty about inflation or increased risk premia. However, since August 2012 the option-implied variability has been on a declining path.

To exemplify the possible role of risk aversion, Chart B compares the cumulative option-implied probability mass assigned to deflation with the same probability mass obtained from the ECB’s

1 Analogously, an inflation floor is similar to an equity put option or an interest rate floor.

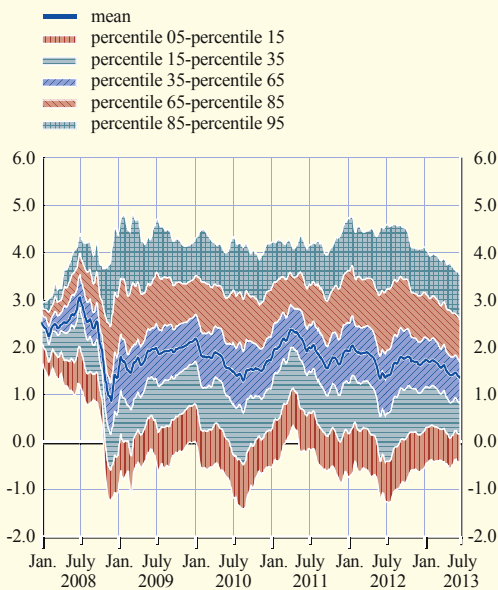
2 Risk neutrality is a standard assumption used in financial analysis for derivative pricing.

3 For a description of the methodology employed here, see de Vincent-Humphreys, R. and Puigvert Gutiérrez, J.M., “A quantitative mirror on the EURIBOR market using implied probability density functions,” *Working Paper Series*, No 1281, ECB, December 2010. For a description of different methods for deriving implied densities, see also Andersen, A.B. and Wagener, T., “Extracting risk neutral probability densities by fitting implied volatility smiles: some methodological points and an application to the 3M EURIBOR futures option prices”, *Working Paper Series*, No 198, ECB, December 2002.

4 See Kitsul, Y. and Wright, J.H., “The economics of options-implied inflation density functions”, *NBER Working Paper Series*, No 18195, updated version, National Bureau of Economic Research, 2013; and Smith, T., “Option-implied probability distributions for future inflation”, *Quarterly Bulletin*, Q3, Bank of England, 2012.

**Chart A Risk-neutral inflation probability densities implied by five-year inflation cap and floor prices**

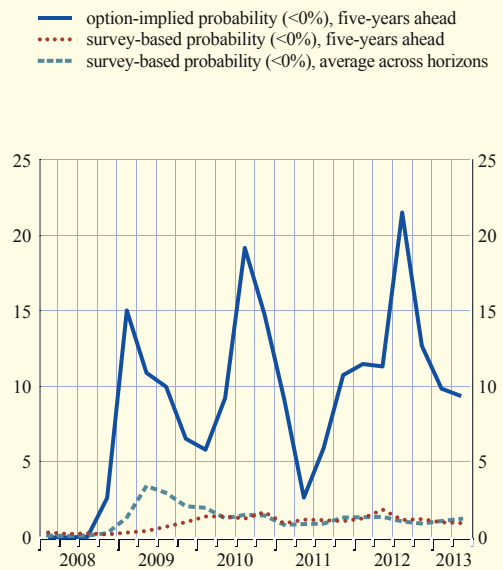
(implied quantiles in percentages per annum; January 2008 – June 2013; daily data; five-day moving averages)



Sources: Royal Bank of Scotland and ECB calculations.

**Chart B Option-implied and survey-based probability of deflation**

(percentages; quarterly data; Q1 2008 – Q2 2013)



Source: ECB calculations.

Survey of Professional Forecasters (SPF).<sup>5</sup> Every quarter, the SPF asks respondents to assign probability to the event of inflation falling within some pre-specified intervals, i.e. for a density forecast in the form of a histogram. Averaged across respondents, one obtains a probability density that may be seen as representing the actual probability density perceived by economic agents (irrespective of the degree of inflation risk aversion).

It follows that the option-implied probability of deflation is higher than the SPF-based probability. For instance, the option-implied probability of deflation was volatile and averaged 9% over the sample as a whole, while the SPF-probability of deflation was stable and only averaged 1%. Overall, the correlation between deflation probabilities based on the two measures is below 0.5 over the sample as a whole. Averaging the deflation probabilities over short horizons (one year and two years ahead) and the longer horizon (five years ahead), or considering short horizon expectations in isolation to control for the potential influence of inflation risks over such horizons, does not help to reconcile the deflation probabilities derived from the two measures. Option-implied densities also assign significantly higher probability to high inflation (i.e. higher than 4%) than survey forecasts. Overall, this confirms that the option-implied probabilities for extreme inflation outcomes are substantially biased by risk premia.

Moreover, in addition to the assumption of risk-neutrality, some technical assumptions on the shape of the density are needed to estimate the option-implied probabilities, which have an

5 For a non-technical description of the ECB's SPF, see Garcia, J.A., "An introduction to the ECB's Survey of Professional Forecasters", *Occasional Paper Series*, No 8, ECB, September 2003. For a detailed report of the most recent survey round, see the box entitled "Results of the Survey of Professional Forecasters for the second quarter of 2013", *Monthly Bulletin*, ECB, May 2013.

impact on the quantitative results. Such assumptions are needed because the inflation options market, although growing rapidly, is marked by limited liquidity and is still in a somewhat premature state of development. In the same vein, the fact that trades are concentrated on the extreme inflation outcomes complicates the estimation of option-implied probabilities for moderate inflation outcomes.

Irrespective of these technical challenges and the fact that it is normally not possible to interpret option-implied probabilities as characterising the actual probability distribution of inflation, option-implied probabilities still offer relevant, high-frequency information on the joint effect of inflation risk aversion and actual inflation probabilities. For instance, if the risk-neutral probability of a certain extreme inflation outcome decreases, this generally suggests reduced fears of that inflation outcome in the market, either because the actual probability of the outcome has declined in the view of the market or because the market has become less risk averse. Moreover, the information content of inflation options is very likely to continue to grow in the future as the inflation option market deepens.

## 2.5 INTEREST RATES ON LOANS AND DEPOSITS

*In April 2013, MFI lending rates on loans to households for house purchase remained broadly unchanged in the case of short maturities and declined slightly in that of long maturities. Conversely, both short-term and long-term lending rates increased for loans to non-financial corporations. The spreads between the rates on small and large loans to non-financial corporations declined in April, but remained at elevated levels.*

In April 2013, MFI interest rates on short-term deposits declined marginally in the case of both non-financial corporations and households. MFI lending interest rates on loans to households remained stable, while those on loans to non-financial corporations increased. Short-term lending rates on loans to households for house purchase remained unchanged at 2.9% in April, while those on consumer credit declined from 5.8% in March to 5.7% in April. Where non-financial corporations are concerned, short-term interest rates on large loans (defined as loans of more than €1 million) increased by about 10 basis points in April, to 2.2%, and those on small loans (i.e. loans of up to €1 million) rose in the same order of magnitude, to 3.9% (see Chart 16). Accordingly, the spread between short-term interest rates on small loans to non-financial corporations and the corresponding interest rates on large loans remained constant at 165 basis points in April. The magnitude of the spread suggests that financing conditions remain persistently tighter for small and medium-sized enterprises than for large firms (see also Box 6, entitled “Small and medium-sized enterprises in the euro area: economic importance and financing conditions”).

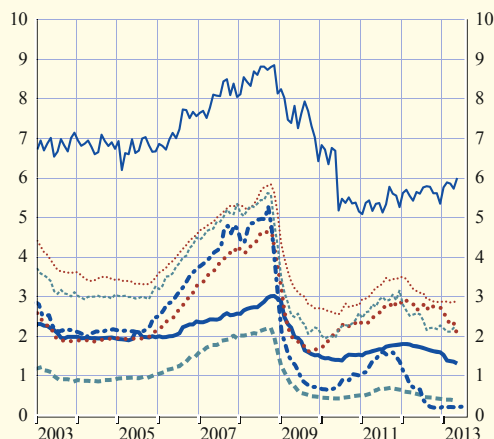
Overall, given that the EURIBOR remained broadly unchanged in April, the spread between short-term MFI interest rates on loans to households and the three-month money market rate remained stable at around 270 basis points, while the corresponding spread vis-à-vis non-financial corporations increased by about 10 basis points, to 200 basis points (see Chart 17).



**Chart 16 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



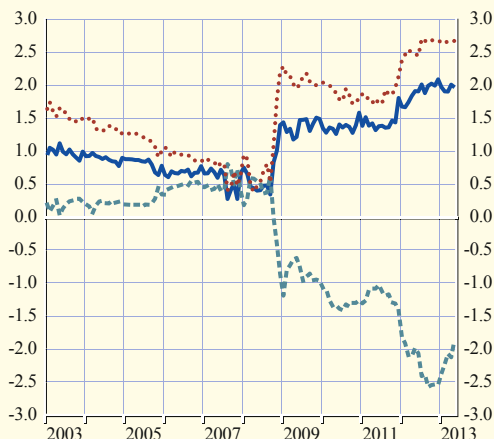
Source: ECB.

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 17 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).

Taking a longer-term perspective, short-term MFI interest rates on loans to households for house purchase have declined by about 60 basis points since the beginning of 2012, while those on large loans to non-financial corporations have decreased by around 70 basis points. In particular, these developments reflect the gradual pass-through of the reductions of key ECB interest rates since November 2011, and the effects of the non-standard measures implemented or announced by the ECB over that period. Indeed, the decline in short-term lending rates is partly related to the significant improvement of both banks' funding costs and their access to funding over the period.

Turning to longer maturities, MFI interest rates on long-term deposits from households remained unchanged at 2.3% in April, while those on long-term deposits of non-financial corporations decreased by 10 basis points, to 1.9%. In the case of loans, interest rates on long-term loans to households for house purchase declined by about 5 basis points to 3.1%, while those on large long-term loans to non-financial corporations increased by about 15 basis points, to 3% (see Chart 18). Long-term rates on small loans to non-financial corporations, by contrast, decreased to 3.4% in April, from 3.5% in the previous month. Hence, the spread between long-term rates on small loans and those on large loans contracted from 64 basis points in March to 43 basis points in

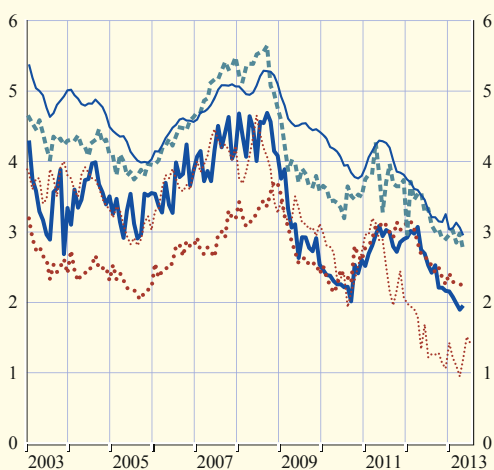
April. However, it remained above the historical average recorded over the period since 2003 (30 basis points). As the yields on AAA-rated seven-year government bonds declined by about 15 basis points, to 0.9% in April, the spread between long-term lending rates and the yields on such bonds widened in the case of both housing loans and loans to non-financial corporations.

Taking a longer perspective, the spread between long-term lending rates and the yields on AAA-rated seven-year government bonds had fluctuated around 150 and 250 basis points in the course of 2012. In 2013, however, these spreads increased steadily from about 160 basis points in January to about 220 basis points in April. This reflects a sharper decline in the yields on AAA-rated government bonds than in long-term MFI lending rates. At the same time, the decline in long-term lending rates also reflected both the pass-through of past cuts in key ECB interest rates and the benefits arising from the ECB's non-standard measures, such as the two three-year longer-term refinancing operations (LTROs) of December 2011 and February 2012, as well as the benefits emanating from the announcement of Outright Monetary Transactions (OMTs) in the summer of 2012.

**Chart 18 Long-term MFI interest rates and a long-term market rate**

(percentages per annum; rates on new business)

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



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).

**Box 6**

**SMALL AND MEDIUM-SIZED ENTERPRISES IN THE EURO AREA: ECONOMIC IMPORTANCE AND FINANCING CONDITIONS**

This box reviews the key role played by small and medium-sized enterprises (SMEs) in the euro area economy as well as the financial situation and financing conditions that SMEs currently face across euro area countries.

**The role of SMEs in the economy**

SMEs are a keystone of the euro area economy, as evidenced by the fact that they represent the vast majority of firms (99.8%). Table A provides a few economic indicators which show the importance of SMEs in the euro area economy, breaking the category down into medium-sized firms (those with between 50 and 249 employees), small firms (between 10 and 49 employees)

**Table A Importance of SMEs in the euro area economy**

(as a percentage of total business economy, unless otherwise indicated; average for 2008-13)

Category	Number of employees	Percentage of firms	Employment	Value added	Productivity
Large firms	≥ 250	0.2	30	40	131
SMEs	< 250	99.8	70	60	87
Medium-sized	50 - 249	1.0	17	18	110
Small	10 - 49	6.7	22	20	91
Micro	0 - 9	92.0	31	22	71

Sources: European Commission 2012 Annual Report on European SMEs.

Notes: Data for 2011-13 are estimates. Productivity is measured as value added in nominal terms per employee and 100% is equal to the total productivity of the business economy.

and micro firms (up to 9 employees).<sup>1</sup> It shows that a very large proportion of SMEs are micro firms. SMEs also account for a large share of employment and value added in the euro area, with their share in the total business economy amounting to 70% and 60% respectively. Both shares are higher than those in the United States, where SMEs account for around 50% of both business employment and value added. Among SMEs, micro firms make the largest contribution to employment, whereas for value added micro, small and medium-sized firms each contribute about one-fifth of the total value added of the business economy. However, labour productivity, measured as value added in nominal terms per employee,<sup>2</sup> is relatively low for micro firms (71% of overall business productivity) and high for large firms (131%). These apparent productivity divergences may reflect differences in labour skills and capital intensity, as well as factors not related to either input, such as technological dynamism. SMEs also play a less dominant role for euro area activity in terms of investment flows per person employed, which are around one-third lower in SMEs than in large firms. This suggests that SMEs make up around 50% of total business investment.

The economic importance of SMEs – in terms of employment and value added shares – is considerably above the euro area average in Greece, Spain, Italy and Portugal. These countries also have a high share of micro firms compared with the euro area average (see Table B). At the

**Table B Importance of SMEs across euro area countries**

(as a percentage of total business economy, unless otherwise indicated; average for 2008-13)

	euro area	BE	DE	EE	IE	GR	ES	FR	IT	CY	LU	MT	NL	AT	PT	SI	SK	FI
SME employment	70	67	62	78	70	85	76	64	80	82	68	76	65	68	79	70	58	62
SME value added	60	61	54	73	52	70	66	59	69	76	71	65	63	61	68	63	53	57
Percentage of micro firms	92	94	83	87	89	97	94	93	95	92	88	95	91	87	94	93	78	92
Productivity of micro firms	71	69	79	74	69	61	70	94	64	75	158	77	79	75	59	73	81	86

Sources: European Commission 2012 Annual Report on European SMEs.

Notes: Data for 2011-13 are estimates. Productivity is measured as value added in nominal terms per employee and 100% is equal to the total productivity of the business economy.

1 SMEs are often simply defined as companies with fewer than 250 employees, whereas the official definition of SMEs used in the EU is more detailed; for more information, see [http://ec.europa.eu/enterprise/policies/sme/files/sme\\_definition/sme\\_user\\_guide\\_en.pdf](http://ec.europa.eu/enterprise/policies/sme/files/sme_definition/sme_user_guide_en.pdf). According to the official definition, micro firms are those that have fewer than ten workers and turnover or assets of less than €2 million. The corresponding figures for small firms are 50 workers and €10 million; for medium-sized firms 250 workers, €50 million of turnover and €43 million of assets. Firms with figures above these levels are classified as large.

2 Labour productivity is often measured by value added in nominal terms per employee in micro-based databases, rather than by volume of production per employee, which is the more standard measure of labour productivity in economics and in macroeconomic series.

same time, the productivity of micro firms in Greece, Italy and Portugal is comparatively low: they account for about 60% of total business productivity, compared with 71% for the euro area as a whole.

It is important to bear in mind that SMEs are a heterogeneous group of firms. Nine out of ten SMEs are micro firms, which typically have different characteristics from other SMEs. In addition, SMEs might belong to a group and thus not behave economically as independent SMEs. Furthermore, SMEs are often tightly integrated into the supply chain, alongside large corporations, and can hence benefit from privileged access to suppliers and to customer funding. Recent research shows that idiosyncratic shocks to a single firm can have sizeable aggregate business cycle effects, in particular if that firm is strongly interconnected with other firms in the economy, because input-output linkages generate co-movement between firms (network model). For both statistical (granular approach) and organisational (network model) reasons, large firms may in fact play a much bigger role in aggregate economic fluctuations than entailed by their mere share in employment or value added.<sup>3</sup>

### Financial situation of SMEs in the euro area

SMEs display some idiosyncratic features in their financing structure. They turn to banks for their external financing more often than large firms do, and they are generally more likely to experience difficulty in obtaining funds. There are structural reasons for this: notably, SMEs are more opaque than other firms and their corporate capabilities more difficult to assess for creditors (i.e. owing to asymmetric information between lenders and borrowers), because their financial statements are less informative and their credit histories are usually shorter. These characteristics are compounded by fixed costs in external assessment and monitoring. All this leads to higher transaction costs for SMEs.

According to the most recently available data on individual firms, which go back to 2011,<sup>4</sup> about one-third of euro area SMEs are not financially indebted, with the proportion rising to 38% for micro firms and 40% for young firms.<sup>5</sup> Among the indebted SMEs, leverage ratios – defined as the sum of short and long-term debt over total assets – are higher than in the case of large firms. As leverage typically decreases as firms' age and assets (or sales) increase, the evidence confirms the commonly held view that young and small companies face larger obstacles to borrowing funds and that, once they borrow, they rely heavily on bank debt to finance their business. Structurally, SMEs also tend to be less profitable than large firms and to have considerably higher cash holdings, suggesting that SMEs need to build up liquidity buffers more than large firms.

These factors explain why credit sources tend to dry up more rapidly for small firms than for large companies during economic downturns, thereby disrupting the business and investment

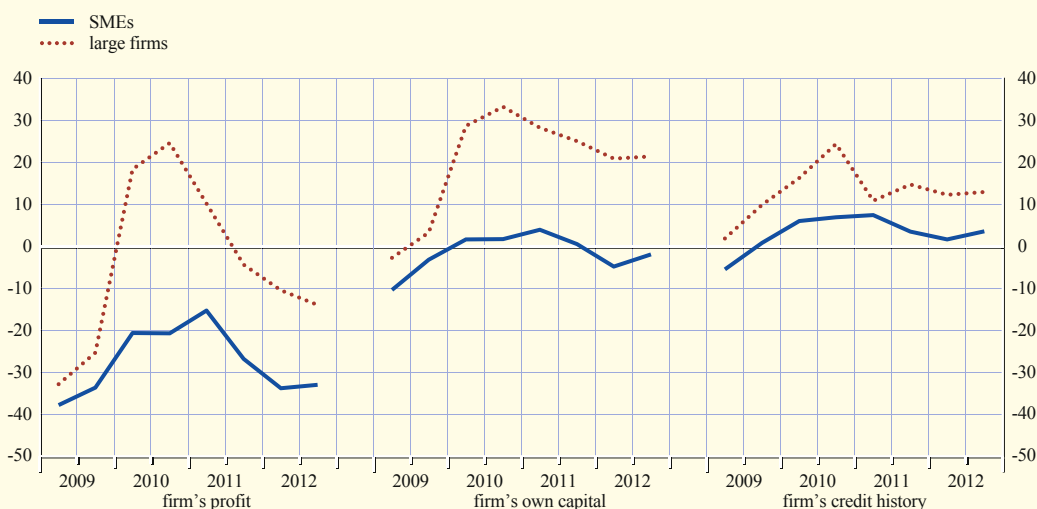
3 For more details on the network model, see Acemoglu, D., V.M. Carvalho, A. Ozdaglar, and A. Tahbaz-Salehi, "The Network Origins of Aggregate Fluctuations", *Econometrica*, 80(5), pp. 1977-2016, 2012; for details on the granular model, see Gabaix, X., "The Granular Origins of Aggregate Fluctuations", *Econometrica*, 79(3), pp. 733-772, 2011. For empirical evidence on Germany, see Wagner, J., "The German Manufacturing Sector is a Granular Economy", *University of Lüneburg Working Paper Series in Economics*, No 219, 2011, and for empirical evidence on France, see di Giovanni, J., A.A. Levchenko and I. Méjean, "Firms, Destinations, and Aggregate Fluctuations", *CEPR Discussion Paper*, No 9168, 2012.

4 These figures are based on the Bureau van Dijk Amadeus database. After data filtering, an unbalanced panel of approximately 2.5 million firms was obtained.

5 See "Corporate finance and economic activity in the euro area: Structural Issues Report 2013", *Occasional Paper Series*, ECB, forthcoming. The classification is based on the ceilings defined by the European Commission, as described in footnote 1. Young firms are defined as those that are less than three years old.

**Chart A Change in financial health of euro area SMEs versus large firms**

(over the past six months; net percentages of respondents)



Source: ECB (SAFE).

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

activities as well as the demand for labour of these firms to a greater extent. This has indeed been the case during the recent crisis in the euro area: according to evidence from the ECB's survey on the access to finance of small and medium-sized enterprises in the euro area (SAFE),<sup>6</sup> the profits and own capital of euro area SMEs have developed less favourably than those of large firms (see Chart A).

### Financing conditions of SMEs in the euro area

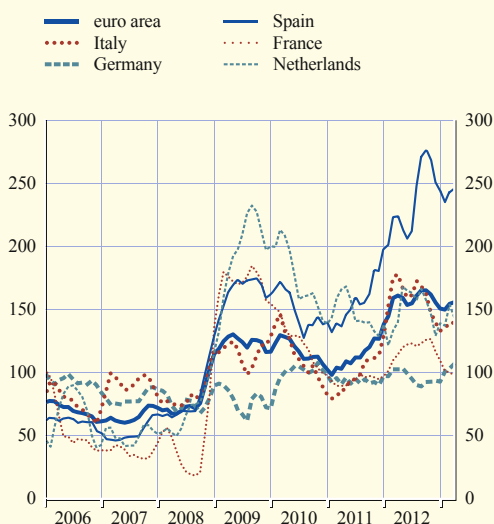
In addition to the deterioration in SMEs' financial situation during the crisis, SMEs in some countries are encountering difficulties in accessing finance owing to the fragmentation of the financial and banking markets. Sovereign spreads and macroeconomic weakness, in addition to borrowers' risk, are likely to influence financing costs. The fragmentation of euro area financing conditions is an impediment to the investment and growth opportunities of SMEs in particular, as they are traditionally highly dependent on banks.

A simple comparison between interest rates on small loans (assumed to be granted mainly to SMEs) and those on large loans shows that SMEs were paying on average around 150 basis points more than large euro area companies in April 2013 (see Chart B). Differences across countries remain considerable: in the same period the spread for Spanish SMEs was 250 basis points, while that for German SMEs was around 100 basis points. Looking at developments over time, spreads remained substantially higher for SMEs in Italy and Spain than before the start of the financial crisis, although they have declined since the last quarter of 2012. Hence, the general economic situation characterised by bank funding fragmentation and subdued loan dynamics in some jurisdictions constitutes a challenging environment for SMEs.

<sup>6</sup> The results of this survey are published biannually on the ECB's website.

**Chart B Spread between bank lending rates on small and large loans to non-financial corporations**

(basis points; three-month moving averages)

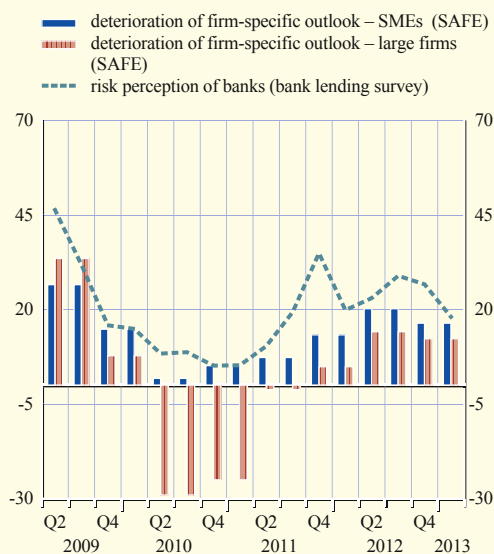


Source: ECB (MIR statistics).

Notes: Lending rates have been aggregated using new business volumes. Small loans are loans of up to €1 million, while large loans are those above €1 million.

**Chart C Firm-specific factors affecting the availability of external financing and risk perception of banks**

(net percentages)



Sources: ECB (bank lending survey and SAFE), ECB calculations.

Notes: See notes to Chart A. Risk perceptions of banks, as reported in the bank lending survey, are computed as the unweighted average of “general economic activity” and “industry-specific risk”. “Firm-specific outlook” refers to changes in the sales, profitability or business plan of firms, as reported in the SAFE. SAFE data are biannual, so figures are reported twice, once for each of the two quarters covered by the survey. Negative values indicate an improvement.

Given the deterioration in SMEs’ financial situation in an environment of weak economic activity, divergent bank funding conditions and banks’ adjustments of their balance sheets, banks have generally been taking a more selective approach to supplying loans in order to preserve the quality of the assets side of their own balance sheets.

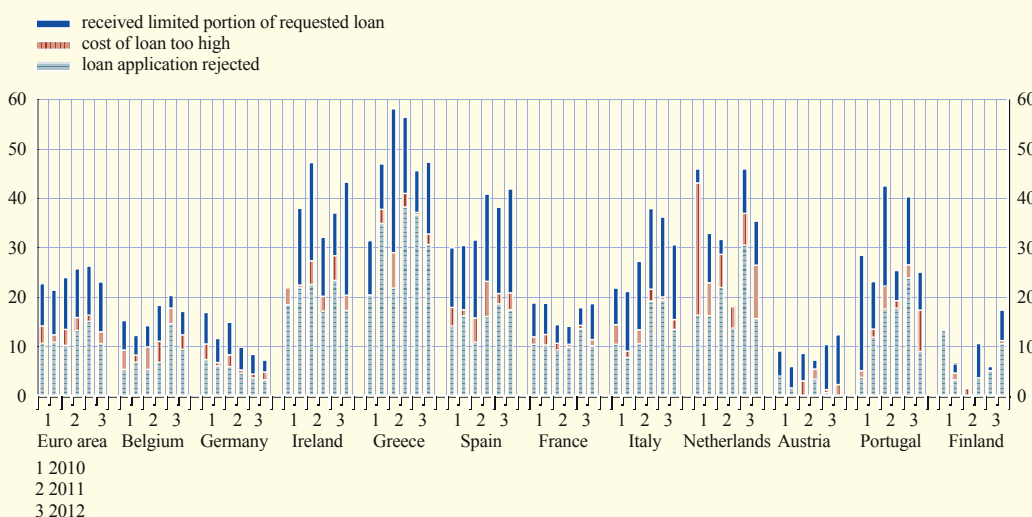
As shown in Chart C, banks’ risk perceptions, as reported in the euro area bank lending survey, concerning overall economic activity as well as industry and firm-specific developments have played an increasing role in the net tightening of credit standards on loans to enterprises since 2009. This evidence is mirrored by the results of the SAFE, with participants reporting that the firm-specific outlook, in particular of SMEs, continues to weigh on the availability of external financing (in terms of sales, profitability and business plan).

Against this background, SMEs typically experience greater obstacles than large firms in obtaining bank loans. An indicator of the obstacles faced in obtaining bank loans can be constructed on the basis of the SAFE questions regarding the outcome of bank loan applications by SMEs. The indicator is constructed by adding together the percentage of SMEs that applied for a bank loan<sup>7</sup> but were rejected, the percentage that received only a portion of the amount for which they had applied, and the percentage that did not take up a loan because borrowing costs

7 On average, between 2009 and 2012 23% of all euro area SMEs applied for a bank loan.

**Chart D Obstacles experienced by SMEs in obtaining bank loans in selected euro area countries**

(percentage of respondents)



Source: ECB (SAFE).

Base: SMEs that applied for a bank loan.

Note: Total financing obstacles are defined as the sum of the percentages of SMEs which applied for a bank loan but were rejected, which received only a limited part of the amount for which they had applied, or which did not take up the loan because borrowing costs were too high. The chart refers only to those SMEs that applied for a bank loan.

were too high.<sup>8</sup> This indicator shows that nearly one-quarter of euro area SMEs that applied for a bank loan during the period from 2009 to March 2013 faced some sort of financing obstacle (see Chart D).

In most countries, the most common form of obstacle was the rejection of a loan application, followed by receipt of a limited portion of the funds requested, whereas only a limited number of SMEs turned down a loan owing to high borrowing costs. At the same time, the level and pattern of financing obstacles have been heterogeneous across euro area countries. For instance, in the last survey wave (referring to the period from October 2012 to March 2013) financing obstacles were reported by SMEs to be very high in Greece, Ireland and Spain (with more than 40% of firms that had applied for a bank loan encountering obstacles), moderate in Belgium, France and Finland (less than 20%) and low in Germany and Austria (around 10%), reflecting the considerable heterogeneity in borrowing conditions.

As SMEs are often unable to switch from bank credit to other sources of external finance, they are more likely to be affected by outright rationing of credit provision than large firms. Difficulties in borrowing, which affect not only SMEs' day-to-day activities, but also their ability to grow, could easily transform liquidity constraints into solvency risk.

### Conclusion

SMEs play an important role for the euro area economy in terms of employment and value added. Their economic importance is even greater in the euro area countries experiencing more

<sup>8</sup> A broad definition of financing obstacles may also include discouraged borrowers, i.e. firms that do not apply for a bank loan owing to fear of rejection.

acute financial tensions. At present, in many parts of the euro area, SMEs are experiencing greater difficulty in obtaining bank loans than large firms and have to pay higher financing costs. Access to finance remains challenging, in particular for young SMEs and SMEs in stressed euro area countries.

All in all, the difficulties encountered by SMEs point to the importance of structural policies to support SME financing. In this context, the European Commission and the European Investment Bank (EIB) are exploring joint risk-sharing instruments which would combine EU budget resources with the lending capacity of the EIB and the European Investment Fund, as well as resources from national promotional banks, to finance special activities in EU priority areas. Overall, the Eurosystem is willing to contribute to efforts to support SME financing, in particular in view of the impaired transmission of monetary policy. At the same time, while central banks can help to ensure funding and maintain price stability, thereby contributing to sustainable economic growth, fiscal consolidation by euro area governments as well as structural reforms to restore competitiveness in product and labour markets are urgently needed in order to increase the rate of sustainable economic growth.

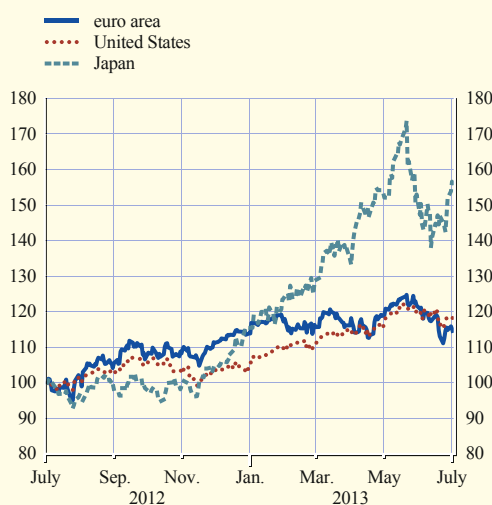
## 2.6 EQUITY MARKETS

*Between the end of May and 3 July 2013, stock prices decreased by 6% in the euro area. In the United States, stock prices decreased less markedly, namely by 1% over the same period. Stock market developments in both areas were driven primarily by discussions about the tapering-off of quantitative easing in the United States. Economic data releases were slightly on the positive side of expectations in the euro area, although they still point to weak growth dynamics. In the United States, economic releases were also on the positive side of expectations, thereby continuing the recent trend. Stock market uncertainty, as measured by implied volatility, increased over the period under review.*

Between the end of May and 3 July 2013, stock prices in the euro area, as measured by the broad-based Dow Jones EURO STOXX index, decreased by 6%. Over the same period, stock prices in the United States, as measured by the Standard & Poor's 500 index, fell only slightly, by 1% (see Chart 19). In the euro area, stock prices of companies in the non-financial sector decreased by 5%, while prices of those in the financial sector declined by 10%. In the United States, stock prices for both the financial sector and the non-financial sector decreased slightly. Over the same period, stock prices in Japan, as measured by the Nikkei 225 index, rose by around 2%.

Chart 19 Stock price indices

(index: 1 July 2012 = 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.



In the euro area, releases of business sentiment indicators continued to point to a slightly improving economic outlook, although growth dynamics still remain weak. However, over the period as a whole, the main focus of market participants was on the future stance of monetary policies. Equity prices declined more sharply towards the end of the period under review, upon intensified perceptions of a more imminent tapering-off of quantitative easing in United States. Also towards the end of the period, concerns about financial stability in China contributed somewhat to the decline in stock prices.

In the United States, stock prices declined after the Federal Reserve announced that it would be appropriate to moderate the pace of its purchases under the quantitative easing programme later this year, if the economy were to progress as forecast, but they subsequently rebounded amid economic releases that were, on average, on the positive side of expectations.

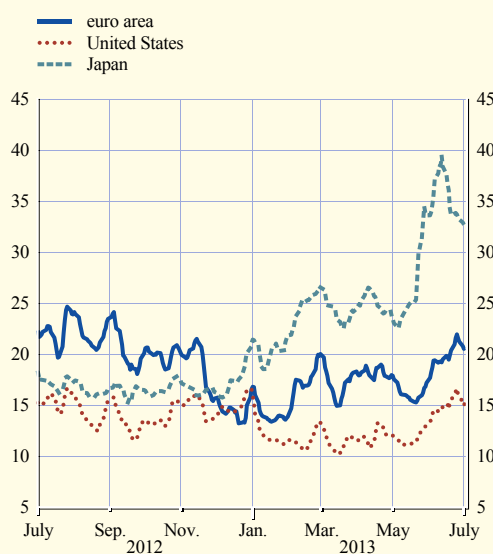
In Japan, stock prices increased by 2% against the background of continued high volatility. The Japanese stock market continues to perform better than markets in Europe and the United States this year, showing an increase of 35% over the year to date. The high volatility in financial markets in these three areas spilled over to emerging markets, where stock prices declined sharply.

Stock market uncertainty in the euro area, as measured by implied volatility, increased by 3 percentage points to stand at 21% at the end of the period under review. In the United States, it increased by 1 percentage point to stand at 15%. In both areas, stock market uncertainty reached the highest levels this year, but remains close to the average levels recorded in 2012 (see Chart 20).

Developments in sectoral sub-indices of the euro area equity markets were relatively similar in the period under review, with prices decreasing in all sectors. The most marked decreases in prices were registered in the financial sector and in the utilities sector. Developments in China, as well as uncertainty with respect to emerging market economies, exerted downward pressure on commodity prices. This contributed to an underperformance of share prices in the oil and gas sector, and in the basic materials sector.

**Chart 20 Implied stock market volatility**

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



Source: Bloomberg.

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

## 3 PRICES AND COSTS

As stated in previous months, annual inflation rates are expected to be subject to some volatility throughout the year owing particularly to base effects. According to Eurostat's flash estimate, euro area annual HICP inflation was 1.6% in June 2013, up from 1.4% in May. This increase reflected an upward base effect relating to energy price developments 12 months earlier. However, underlying price pressures are expected to remain subdued over the medium term, reflecting the broad-based weakness in aggregate demand and a modest pace of recovery. Medium-term inflation expectations remain firmly anchored in line with price stability. The risks to the outlook for price developments are expected to be still broadly balanced over the medium term.

### 3.1 CONSUMER PRICES

According to Eurostat's flash estimate, headline HICP inflation rose to 1.6% in June 2013, from 1.4% in May, reflecting a renewed increase in energy price inflation owing mainly to an upward base effect related to energy price developments 12 months earlier. This increase in energy price inflation more than offset the declines in non-energy industrial goods and services price inflation, while annual food price inflation remained unchanged.

Euro area annual HICP inflation declined between October 2012 and April 2013. It fell to below 2.0% in February 2013 and to 1.2% in April, its lowest level since February 2010. In May 2013 it rose to 1.4%. This was due, in particular, to a rebound in services prices related to the unwinding of the Easter effect and an increase in food prices. Underlying inflationary pressures, as measured by various HICP exclusion-based measures, have remained broadly stable despite overall subdued demand conditions. Increases in indirect taxes and administered prices have continued to keep inflation rates elevated in some euro area countries.

Looking at the main components of the HICP in more detail, Eurostat's flash estimate points to a 1.6% increase in energy price inflation in June 2013 on account of an upward base effect. Annual energy price inflation was negative in the previous two months. In May, it was -0.2%, up from -0.4% in April, as a result of a further month-on-month decrease in energy prices being more than offset by an upward base effect. The higher annual rate of change in May, the last month for which

**Table 7 Price developments**

(annual percentage changes, unless otherwise indicated)

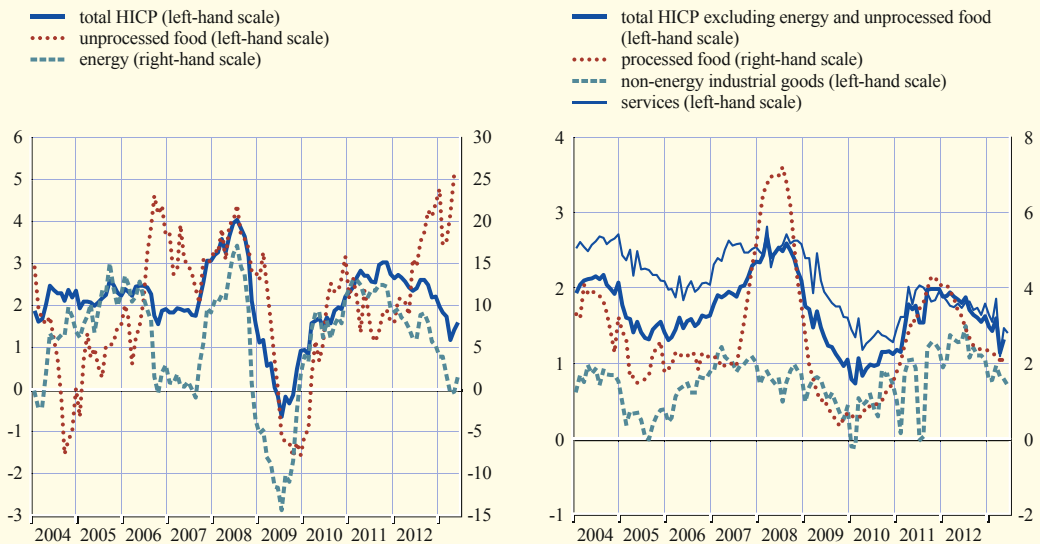
	2011	2012	2013 Jan.	2013 Feb.	2013 Mar.	2013 Apr.	2013 May	2013 June
<b>HICP and its components<sup>1)</sup></b>								
Overall index	2.7	2.5	2.0	1.8	1.7	1.2	1.4	1.6
Energy	11.9	7.6	3.9	3.9	1.7	-0.4	-0.2	1.6
Food	2.7	3.1	3.2	2.7	2.7	2.9	3.2	3.2
Unprocessed food	1.8	3.0	4.8	3.5	3.5	4.2	5.1	.
Processed food	3.3	3.1	2.3	2.3	2.2	2.1	2.1	.
Non-energy industrial goods	0.8	1.2	0.8	0.8	1.0	0.8	0.8	0.7
Services	1.8	1.8	1.6	1.5	1.8	1.1	1.5	1.4
<b>Other price indicators</b>								
Industrial producer prices	5.8	2.9	1.7	1.3	0.6	-0.2	-0.1	.
Oil prices (EUR per barrel)	79.7	86.6	84.2	86.7	84.2	79.3	79.2	78.3
Non-energy commodity prices	12.2	0.5	-3.7	-3.6	-1.6	-3.5	-4.8	-7.3

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

1) HICP inflation and its components (excluding unprocessed food and processed food) in June 2013 refer to Eurostat's flash estimates.

Chart 21 Breakdown of HICP inflation: main components

(annual percentage changes; monthly data)



Source: Eurostat.

a detailed breakdown of the energy component is available, reflects an increase in the still negative annual rate of change in the price of car fuels, which exceeded the impact of lower annual rates of increase in the prices of electricity and gas.

According to Eurostat's flash estimate, total food inflation, which refers to inflation in both processed and unprocessed food prices, remained unchanged at 3.2% in June. No official information is available with regard to the breakdown of the food components for this month. Unprocessed food inflation rose to 5.1% in May – its highest level in more than a decade – from 4.2% in April. This increase was due mainly to a surge in the annual rates of change in the prices of fruit and vegetables. By contrast, processed food inflation remained unchanged at 2.1% in the same month.

HICP inflation excluding food and energy stood at 1.2% in June, unchanged from May, according to Eurostat's flash estimate. Excluding these two volatile components, HICP inflation consists of two main components, namely non-energy industrial goods and services. Non-energy industrial goods price inflation was estimated to have decreased to 0.7% in June, down from 0.8% in May and April. Non-energy industrial goods inflation has been hovering at around 0.8% since the beginning of the year, with the exception of March, when it increased to 1.0%. This increase in March was largely attributable to a sharp increase in the annual rates of change in the prices of garments and shoes following the winter sales. Services price inflation was estimated at 1.4% in June, after having risen to 1.5% in May from 1.1% in April. The increase in May reflected the expected unwinding of the calendar effect stemming from the timing of the Easter holidays, which had led to a sharp decline in services inflation in April. Since the beginning of 2013 services inflation has stood at 1.5% on average.

The ECB has recently published the results of the Eurosystem Household Finance and Consumption Survey (HFCS). The survey covers data on both the real and nominal stock of dwellings. Dwellings

represent the most important part of households' portfolios. This is because they are, first, a source of essential services to the households and, second, in value terms, the single largest asset of the household sector and the main collateral for household debt. Box 7 presents new data on the dwelling stock in the euro area collected by the Eurosystem HFCS.

**Box 7****DWELLING STOCK IN THE EURO AREA – NEW DATA FROM THE EUROSISTEM HOUSEHOLD FINANCE AND CONSUMPTION SURVEY**

Dwellings represent the most important part of households' portfolios. This is because they are, first, a source of essential services to the households and, second, in value terms, the single largest asset of the household sector and the main collateral for household debt. Consequently, central banks have a keen interest in understanding the evolution of the dwelling stock both in real terms, i.e. as an investment in future housing services, and in monetary terms given the consequent wealth effects on consumption, debt capacity and the financial fragility of households.

This box presents new data on both the real and nominal stock of dwellings collected by the Eurosystem Household Finance and Consumption Survey (HFCS), the results of which were recently published by the ECB.<sup>1</sup> The HFCS has collected information on assets, claims, liabilities and income from about 62,000 households with a set of coordinated and well-designed surveys carried out in all euro area countries other than Estonia and Ireland during the period 2008-10. The HFCS data permit an analysis of wealth and consumption at the level of individual households and their members. In this box, only data on the dwelling stock are presented, aggregated at the country and euro area level.

Compared with census data, the HFCS offers information about the real capital stock, which, importantly, is also linked to information on ownership. Compared with national accounts on the value of residential capital stock, the HFCS offers complementary information on the total value of dwelling stock and the level of dwelling prices based on households' self-assessments.<sup>2</sup> Self-assessed values can differ substantially from values in the national accounts. Arguably, these self-assessed values, whether right or wrong, can influence the economic decisions of households.

**Real dwelling stock and ownership structure**

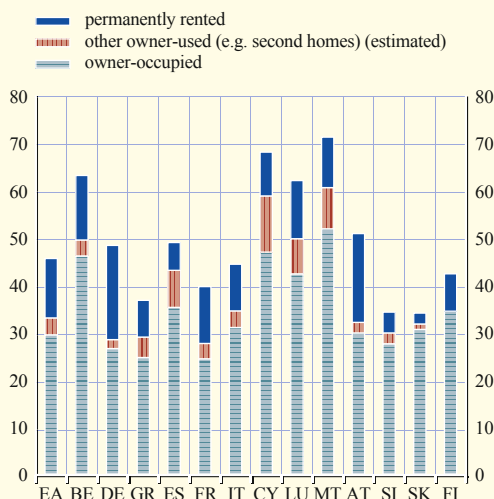
Based on the HFCS data, the total number of square metres of dwellings used by the household sector in each country is estimated. For ease of comparisons, all figures are normalised in per person terms. Clearly, this measure of dwelling stock does not adjust for issues of quality, location or age of the capital stock, all of which will therefore be reflected in the house price per square metre. Nevertheless, the square metre index is one of the most standard and comparable

1 See "The Eurosystem household finance and consumption survey – Results from the first wave", *Statistics Paper Series*, No 2, ECB, April 2013.

2 For more details, see Chapter 1.4 of "The Eurosystem household finance and consumption survey – Methodological report for the first wave", *Statistics Paper Series*, No 1, ECB, April 2013.

**Chart A Size of dwellings used by private households**

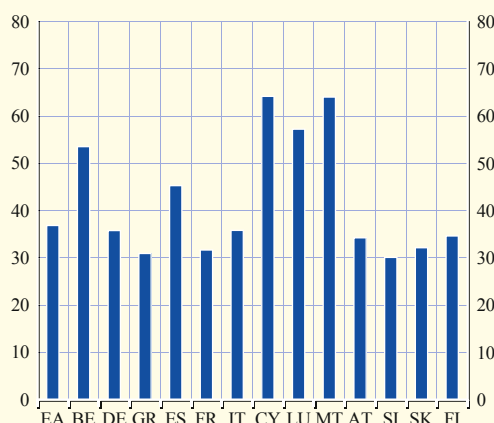
(square metres, per person)



Sources: HFCS and ECB estimates.  
Notes: In the case of Finland, data for other owner-used dwellings are not available. Data are not available for the Netherlands or Portugal. The size of other owner-used dwellings is estimated, assuming the same price per square metre as for owner-occupied dwellings.

**Chart B Size of dwellings owned by private households (estimated)**

(square metres, per person)



Sources: HFCS and ECB estimates.  
Note: Data are not available for the Netherlands or Portugal.

measures available and gives a reasonably good idea of the real housing stock across locations and countries (an alternative measure used in censuses and also available in the HFCS is the number of housing units).

Chart A shows the total square metres per person used by resident households. The bottom part of each bar shows the square metres of owner occupied dwellings, in the middle are the square metres for other dwellings used by their owners (e.g. second homes) and at the top those permanently rented by households.<sup>3</sup> All values are divided by the respective population. Data on the real stock of capital are missing in the HFCS for the Netherlands and Portugal, and the weighted average euro area figure is calculated only for the available country data.

For almost half of the countries, including all the largest ones, the per person dwellings stock is of a very similar size, between approximately 40 and 50m<sup>2</sup> per person (including second and vacant homes). The euro area average (weighted by population) is 46m<sup>2</sup> per person. In four countries, namely Belgium, Cyprus, Luxembourg and Malta, the estimated dwelling space per person exceeds 60m<sup>2</sup>, while, at the other end of the distribution, households in Greece, Slovenia and Slovakia use less than 40m<sup>2</sup> per person.

<sup>3</sup> The second component, referring to second homes, etc., is an estimate that contains potentially a wider margin of error. The estimate is based on the HFCS values of property for own use (other than main residence) divided by the average price per square metre of owner-occupied dwellings in the same country, also calculated from the HFCS. In Finland, these dwellings cannot be distinguished from owner-occupied dwellings. Note that this category of property also includes properties located in a country other than the one in which the respective household is resident.

These rather small differences in average dwelling space, at least in the largest countries, hide significant cross-country variation in the ownership and typology of dwellings. For example, in Germany and Austria, there are relatively many permanently rented dwellings. In Spain, Cyprus, Luxembourg and Malta, on the other hand, apart from high home ownership, there are also relatively more properties for other own use, such as second or vacant homes. Typology of dwellings and ownership structure matter, particularly when households react to shocks such as sharp house price fluctuations.

Chart B provides some further information on the ownership structure of dwellings. The chart only includes a very approximate estimate of dwellings that are owned by households. Rented dwellings that are owned by the public sector at large, non-profit institutions, the corporate sector or, less likely, other foreign owners, are excluded.<sup>4</sup> A comparison of the two charts suggests that ownership structures of dwellings vary significantly across countries. In particular, in Austria, a very significant part of the (rented) dwelling stock is estimated to be owned by sectors other than the resident household sector, possibly by the public sector and non-profit institutions, but also potentially by the corporate sector.

A comparison of Charts A and B also highlights the difference between the dwelling wealth of the household sector and the dwelling wealth of a country (which comprises all resident sectors). The difference between the two can be substantial and varies from country to country, possibly as a result of different housing policies. The dwelling wealth of a country, not that of the household sector, is the relevant measure if what is of interest is the stream of housing services households can enjoy both now and in the future from the accumulated dwelling stock (irrespective of who owns that stock).

### House prices and the value of dwellings

As regards house prices and the nominal value of dwellings owned by households, Chart C shows the estimated house price per square metre for owner-occupied dwellings (red dots) and the per person total value of dwellings owned by households (the latter is the equivalent of Chart B but in monetary terms). Both charts are based on households' own assessments in the HFCS.

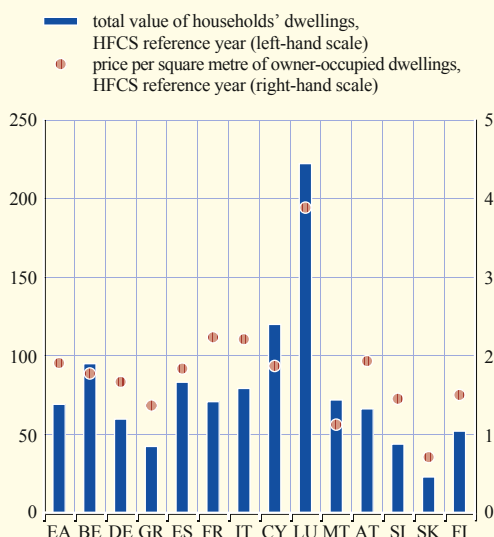
For the euro area, the (population) weighted average price per square metre of owner-occupied dwellings is estimated to be €1,900. There is substantial dispersion around this price, even for the larger countries such as Germany, Spain, France and Italy with similar dwelling stocks per person. In France, the estimate is €2,230, 35% higher than in Germany (€1,660), with Spain and Italy somewhere in between. Cross-country house price dispersion is even larger when including all euro area countries.

These differences in prices are reflected in the total value of the balance sheets of households. Given the importance of dwellings in households' portfolios, the resulting differences in the value of portfolios due to house prices often tend to dominate all other factors. As a consequence,

<sup>4</sup> The estimate of the stock of rented dwellings owned by the resident household sector is based on a reasoning similar to that followed for second homes, i.e. by dividing the total value of the respective homes (taken from the HFCS) by the average price per square metre of owner-occupied dwellings (also HFCS data). The estimate is potentially subject to error. For example, if the price per square metre is systematically lower for rented dwellings than for owner-occupied dwellings, the rented stock in Chart B could be higher in all countries. Furthermore, the dwelling stock owned by households may be underestimated if the wealthiest few households that own several dwellings are not correctly captured by the survey.

**Chart C Total per person value of households' dwellings and price per square metre of owner-occupied dwellings**

(euro; thousands)

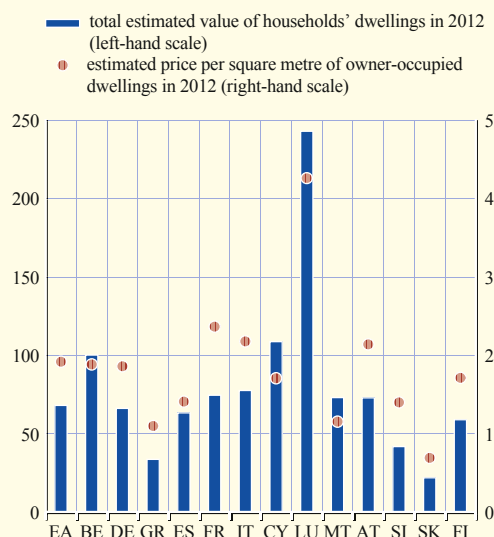


Source: HFCS.

Notes: The price per square metre of owner-occupied dwellings is not available for the Netherlands or Portugal. In the case of Finland, the total value of households' dwellings refers to the value of owner-occupied dwellings. The total value of households' dwellings includes: i) the value of owner-occupied dwellings, ii) the value of other owner-used dwellings (e.g. second homes) and iii) rented dwellings owned by households.

**Chart D Total estimated per person value of households' dwellings in 2012 and estimated price per square metre of owner-occupied dwellings in 2012**

(euro; thousands)



Sources: HFCS and ECB estimates based on national sources for Residential Property Price Indices (RPPI).

Notes: The prices and values for 2012 are estimated using the cumulated RPPI growth rates from the HFCS reference year up to 2012. Indices for existing dwellings (houses and flats) were used in the case of Belgium, Germany, Spain, France, Slovakia and Finland, for dwellings (new and existing houses and flats) in the case of Italy, Cyprus, Malta, Austria and Slovenia and for all flats (new and existing) in the case of Greece and Luxembourg. The Netherlands and Portugal are excluded since the price per square metre of owner-occupied dwellings is not available in the HFCS.

a substantial part of the differences in the gross and net balance sheet wealth of the household sector across countries is attributable to different house price levels.

It is important to note in this respect that the dwelling wealth shown in Chart C is based on paper value, i.e. it cannot be monetised for the household sector as a whole. This is because the vast majority of transactions affecting existing dwellings take place between households that are resident in the same country. Therefore, for the household sector as a whole, dwelling capital is non-tradable and very largely not recoverable, while a single household can sell its dwelling assets.

Thus, house price fluctuations may have important distributional effects within the household sector but they do not affect the sector's overall position. Typically, high house prices may benefit house owners that wish to "trade down" at the expense of other resident households, such as first-time buyers or young households "trading up". The household sector as a whole, however, is hardly better or worse off when house prices are high (or low), even though the value of its balance sheet may differ as a result.

Even with this proviso, house price fluctuations may have significant balance sheet effects on economic activity and the decisions of households. They affect the collateral value of the

main asset on the balance sheet of single households and consequently also their debt capacity. They can have significant distributional effects and can also affect households' expectations.

Chart D shows an estimate of prices per square metre of dwellings and the per person total value of dwellings owned by the household sector in 2012. The estimates use the HFCS square metre prices, "updating" them with the available house price index for each country.<sup>5</sup> In the period since the fieldwork of the survey, the house price index fell in Greece and Spain by over 20%, while it increased by more than 10% in Germany and Austria. The other countries experienced weaker house price dynamics. Given the importance of dwellings in households' portfolios, the effects of such house price fluctuations on the value of households' balance sheets could be huge. For example, the implied fall in the nominal dwelling wealth of Spanish households, other things being the same, would have been the equivalent of almost two years' gross income. Whether "real" or "notional", capital gains or losses of such magnitude are bound to affect the debt capacity, decisions and expectations of the household sector, as well as the distribution of wealth within the household sector of any country.

### Conclusions

The HFCS offers information on real and nominal dwelling stock and ownership structures for a large number of euro area countries within a coherent framework. This structural information is useful when considering how house price fluctuations and other macroeconomic shocks are transmitted to economic activity or the channels through which these shocks may affect financial stability. It is also of great value when analysing other issues, such as the distribution of wealth, the access of households to housing services or issues related to residential fixed investment. The publication of the HFCS data is expected to give an impetus to research and analysis in all of these fields and to allow more consistent cross-country studies.

<sup>5</sup> This example of course mixes data from self-assessments with statistical information from transactions and should therefore be considered with caution.

## 3.2 INDUSTRIAL PRODUCER PRICES

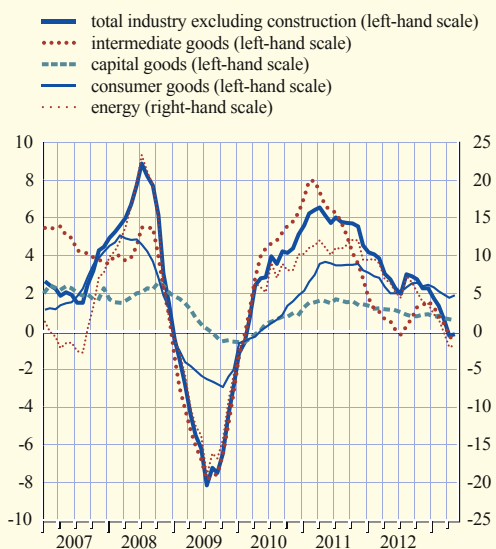
In the course of 2012 and the first months of 2013, pipeline pressures in the supply chain receded further (see Table 7 and Chart 22). The volatility in industrial producer price inflation during the second half of 2012 was due largely to the energy component, which is heavily influenced by developments in oil prices. Producer price inflation started to fall as of October 2012, as oil prices declined gradually. The PPI (excluding construction) fell by 0.1% year on year in May 2013, marginally up from April. This small increase reflects those in the annual inflation rates of energy and consumer goods components which more than offset a further decline in the annual rate of change in the intermediate goods component. Producer prices in the capital goods industries remained unchanged. Excluding construction and energy, the annual rate of change in industrial producer prices decreased to 0.5% in May, from 0.6% in the previous month.

Pipeline pressures for HICP non-energy industrial goods inflation remained subdued at the later stages of the production chain. Annual producer price inflation for non-food consumer goods industries increased marginally to 0.7% in May. Having declined significantly in the months up to March, the Purchasing Managers' Index (PMI) retail index for the cost of goods for non-food stores increased considerably to 57.3, while the PMI index for profit margins in non-food stores dropped to 38.5 in June. These indices are at and well below their long-run average, respectively. At the



**Chart 22 Breakdown of industrial producer prices**

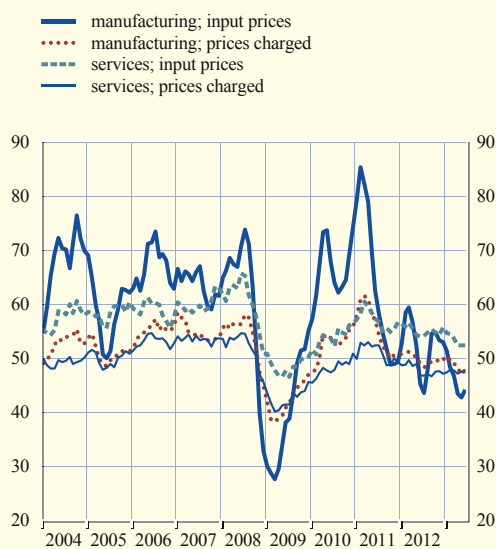
(annual percentage changes; monthly data)



Sources: Eurostat and ECB calculations.

**Chart 23 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.

earlier price formation stages, pressures have eased somewhat, as the annual rate of change in the intermediate goods component of the PPI, intermediate goods import prices and commodity prices became more negative. Only the annual rate of change in crude oil prices in euro turned slightly positive in June.

Pipeline pressures for HICP food price inflation at the later pricing stages have remained broadly unchanged but below previous elevated levels. The annual rate of change in the food component of the PPI interrupted its downward trend that started at the beginning of the year, increasing from 2.9% in April to 3.1% in May. Data from the PMI survey point to input prices for food stores rising at a higher pace in June than in May, but more moderately than in March and April. Moreover, profit margins diminished in June at a rate broadly similar to that of May. Earlier in the pricing chain, the annual rate of change in EU farm gate prices remained unchanged in May, after increasing in April. However, international food commodity prices in euro terms exhibited year-on-year declines in June for the third month in a row.

Headline indices from both the PMI and European Commission surveys indicate subdued pipeline pressures. With regard to the PMI (see Chart 23), the input price index for the manufacturing sector increased from 42.8 in May to 44.1 in June, while the output price index fell barely from 47.6 to 47.5. Both indices remain below the threshold value of 50, thus signalling falling prices. Forward-looking European Commission survey data on selling price expectations for total industry increased marginally in June, as selling price expectations increased in all industries. Overall, producer prices and price survey data confirm subdued pipeline pressures for HICP non-energy industrial goods prices and stable moderate pressures for HICP food prices.

**Table 8 Labour cost indicators**

(annual percentage changes, unless otherwise indicated)

	2011	2012	2012 Q1	2012 Q2	2012 Q3	2012 Q4	2013 Q1
Negotiated wages	2.0	2.1	2.0	2.2	2.2	2.2	2.0
Hourly labour cost index	2.1	1.5	1.4	1.7	1.7	1.3	1.6
Compensation per employee	2.1	1.7	2.0	1.8	1.9	1.4	1.8
<i>Memo items:</i>							
Labour productivity	1.2	0.1	0.4	0.3	0.0	-0.2	-0.2
Unit labour costs	0.9	1.6	1.6	1.5	1.9	1.6	2.0

Sources: Eurostat, national data and ECB calculations.

### 3.3 LABOUR COST INDICATORS

The latest releases of labour cost indicators suggest that domestic pressures on prices stemming from labour remained subdued in the first quarter of 2013 (see Table 8 and Chart 24).

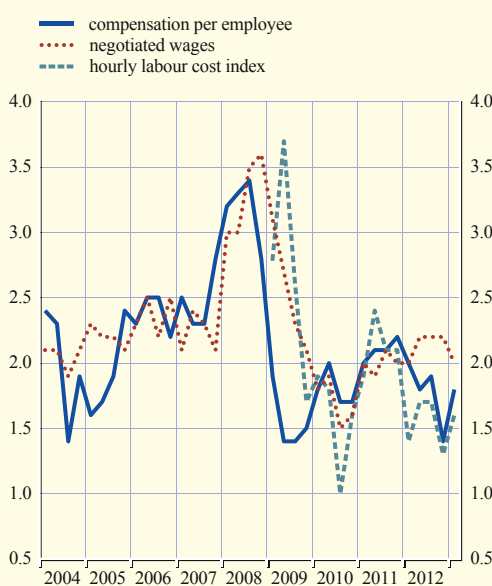
Wage growth measured both by hours and per person picked up moderately at the euro area level in the first quarter of 2013. This development was more pronounced in the public sector than in the private sector. At the same time, labour cost indicators exhibited significant divergence at the country level. While nominal wages and unit labour costs are growing very little or even declining in some euro area countries, wage growth remains robust in others. As total hours worked declined considerably further in the first quarter of 2013, hourly labour productivity growth in the euro area increased somewhat. By contrast, annual labour productivity growth per person employed remained unchanged at -0.2%.

At the aggregate euro area level, the annual rate of growth in compensation per employee increased to 1.8% in the first quarter of 2013, from 1.4% in the previous quarter. Part of this recent increase reflects wage developments in the public sector, where salaries rose again after the impact of one-off salary cuts in some countries in the context of their fiscal consolidation efforts dropped out. Growth in compensation per employee in the private sector was slightly higher. As compensation per employee grew at a faster pace than productivity, unit labour costs rose further, from 1.6% in the fourth quarter of 2012 to 2.0% in the first quarter of 2013.

Euro area negotiated wages grew at 2.0% in the first quarter of 2013, down from 2.2% in the previous quarter. Preliminary data on negotiated wages for the second quarter of 2013 suggest a continued moderation of this wage indicator. The annual rate of change in hourly labour costs increased, from 1.3% in the fourth quarter

**Chart 24 Selected labour cost indicators**

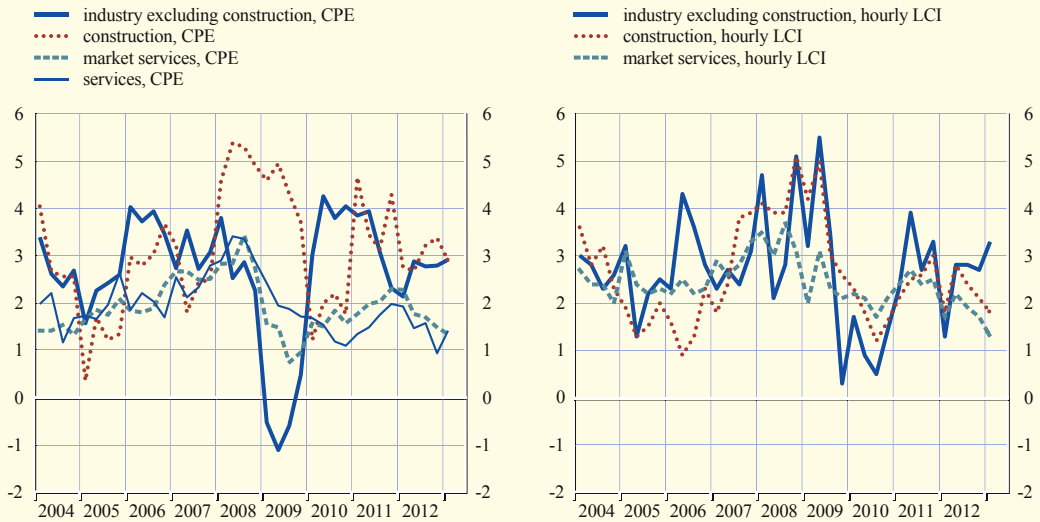
(annual percentage changes; quarterly data)



Sources: Eurostat, national data and ECB calculations.

**Chart 25 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.

of 2012 to 1.6% in the first quarter of 2013, owing to a decline in hours worked. This acceleration reflected, primarily, developments in the non-business economy, which are dominated by changes in the government sector, whereas wage growth in the business economy remained stable. Overall, wages and salaries grew at a faster rate than the non-wage component of euro area hourly labour costs, exhibiting a similar pattern to that observed in the previous quarter.

### 3.4 THE OUTLOOK FOR INFLATION

As stated in previous months, annual inflation rates are expected to be subject to some volatility throughout the year, owing particularly to base effects. However, underlying price pressures are expected to remain subdued over the medium term, reflecting the broad-based weakness in aggregate demand and a modest pace of recovery. Medium-term inflation expectations remain firmly anchored in line with price stability.

The risks to the outlook for price developments are expected to be still broadly balanced over the medium term, with upside risks relating to stronger than expected increases in administered prices and indirect taxes, as well as higher commodity prices, and downside risks stemming from weaker than expected economic activity.

## 4 OUTPUT, DEMAND AND THE LABOUR MARKET

Real GDP declined by 0.3% in the first quarter of 2013, following a contraction of 0.6% in the last quarter of 2012. At the same time, labour market conditions remain weak. Recent developments in cyclical indicators, particularly those based on survey data, indicate some further improvement from low levels. Looking ahead to later in the year and to 2014, euro area export growth should benefit from a gradual recovery in global demand, while domestic demand should be supported by the accommodative monetary policy stance as well as the recent gains in real income owing to generally lower inflation. Furthermore, notwithstanding recent developments, the overall improvements in financial markets seen since last summer should work their way through to the real economy, as should the progress made in fiscal consolidation. This being said, the remaining necessary balance sheet adjustments in the public and private sectors will continue to weigh on economic activity. Overall, euro area economic activity should stabilise and recover in the course of the year, albeit at a subdued pace. The risks surrounding the economic outlook for the euro area continue to be on the downside.

### 4.1 REAL GDP AND DEMAND COMPONENTS

Real GDP declined by 0.3% in the first quarter of 2013, having contracted by 0.6% in the last quarter of 2012 (see Chart 26). Together with a fall in exports, weak domestic demand continued to make a negative contribution. However, the fall in exports was less pronounced than the fall in imports, so the net contribution of external trade to GDP growth was slightly positive. In the first quarter of 2013, output stood more than 3% below its pre-recession peak in the first quarter of 2008.

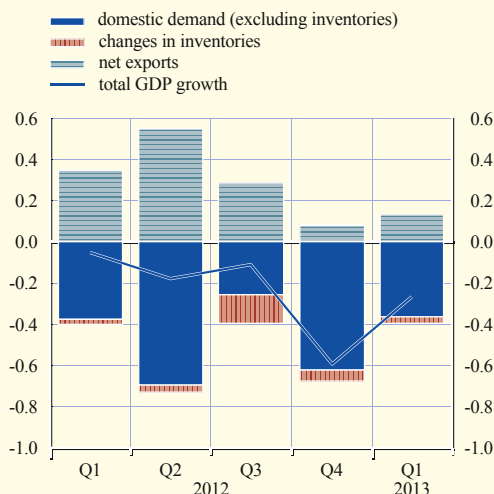
Private consumption displayed flat growth, quarter on quarter, in the first quarter of 2013, following five consecutive quarters of declining consumer spending. This most likely reflects the growth in the consumption of retail goods, which was offset by a fall in car purchases. Consumption of services is likely to have remained broadly unchanged compared with the fourth quarter of 2012.

With regard to the short-term outlook, available information tends, on balance, to suggest a continuation of broadly stable developments in private consumption. In May 2013, the volume of retail sales rose by 1.0%, month on month, to stand on average in the first two months of the second quarter 0.1% above the average level recorded for the first quarter, when they increased by 0.3% quarter on quarter. New car registrations in the euro area declined, month on month, by 1.0% in May, following three months of increases. Nevertheless, in April and May registrations stood, on average, 2.9% above their average level in the first quarter, when they declined, quarter on quarter, by 3.0%.

Survey data on the retail sector for the second quarter of 2013 suggest that the consumption of retail goods remained weak (see Chart 27). The Purchasing Managers' Index (PMI) for the retail sector rose from 44.7 in the first quarter

Chart 26 Real GDP growth and contributions

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



Sources: Eurostat and ECB calculations.

to 46.7 in the second quarter. However, by remaining below 50, it points to a decline in sales in the second quarter. Moreover, although the European Commission's indicator on confidence in the retail sector rose in June, in the second quarter it stood, on average, at the same level as in the previous quarter. At the same time, consumer confidence improved markedly between May and June, and has therefore increased for seven consecutive months. Confidence is nonetheless still below its long-term average, and is thus consistent with ongoing soft dynamics in consumer spending. The indicator on expected major purchases remained unchanged at a low level in the second quarter, suggesting that consumers continue to be cautious in deciding whether or not to purchase durable goods.

Gross fixed capital formation contracted further in the first quarter of 2013, by 1.9% quarter on quarter. Investment has fallen for eight consecutive quarters, with a cumulative fall of more than 8% since the first quarter of 2011. With regard to the components of investment in the first quarter, both non-construction and construction investment – each accounting for

around half of total investment – dropped further on a quarterly basis. The level of fixed investment is expected to broadly stabilise in the second quarter, to some extent reflecting the unwinding of the negative effect of the adverse winter weather on construction activity in the first quarter.

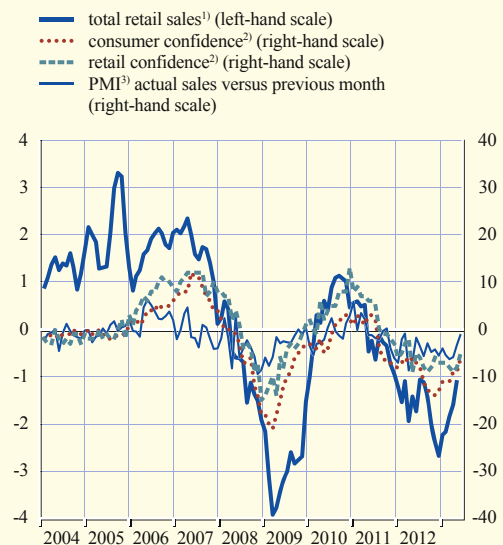
Industrial production of capital goods – an indicator of future non-construction investment – rose further in April 2013, by 2.7% month on month. In the same month, capital goods production stood almost 4% above its average level in the first quarter of 2013, when it contracted by 0.1% on a quarterly basis. More timely survey results, which already cover the three months of the second quarter of 2013, point towards a stabilisation of the level of non-construction investment activity, albeit at a low level. The European Commission's industrial confidence indicator was flat between the first and second quarters of 2013, while the manufacturing PMI showed a small improvement, although it remained below the theoretical no-growth threshold of 50.

In April 2013 construction production increased by 2.0% month on month, following a decline of 1.8% in the previous month. As a result, in April, production in construction stood 0.8% above the average level for the first quarter. However, the construction confidence indicator, published by the European Commission, was still well below its historical average in the second quarter, while the PMI for construction in the euro area stood significantly below 50 in April and May, pointing to continued muted developments in the construction sector.

Available data suggest that, following two consecutive quarter-on-quarter contractions, euro area trade remained subdued in the second quarter of 2013. Customs data for April point to a small

**Chart 27 Retail sales, confidence and PMI in the retail trade and household sectors**

(monthly data)



Sources: Eurostat, European Commission Business and Consumer Surveys, Markit and ECB calculations.  
 1) Annual percentage changes; three-month moving averages; working day-adjusted; including fuel.  
 2) Percentage balances; seasonally and mean-adjusted.  
 3) Purchasing Managers' Index; deviations from an index value of 50.

decline in euro area export and import values of goods compared with March. However, according to short-term indicators, prices may have also declined, indicating that developments in volume terms may have been broadly flat. Survey indicators have been broadly stable at low levels since the beginning of 2013, amid some monthly volatility. The PMI for new export orders and the European Commission's survey on export order books stood marginally below first quarter levels in the second quarter of the year, pointing to continued weak euro area foreign demand. Overall, euro area trade is expected to grow marginally in the second quarter, before accelerating gradually in line with a moderate strengthening of global activity and euro area domestic demand. As reported in Box 8, there was a notable adjustment in 2012 in the current account of euro area countries with pronounced pre-crisis deficits.

Box 8

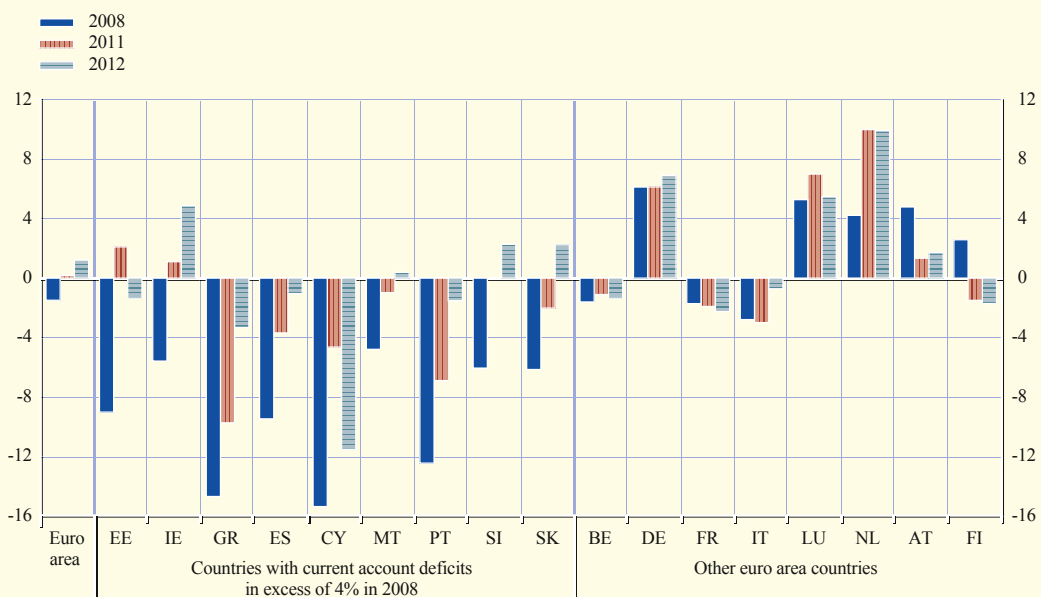
PROGRESS IN THE CURRENT ACCOUNT ADJUSTMENT IN THE EURO AREA IN 2012

This box discusses the current account developments in the euro area in 2012.<sup>1</sup> In the euro area as a whole, the gradual improvement in the current account balance continued in 2012, resulting in a moderate surplus of 1.2% of GDP (see Chart A). This development partly reflected the ongoing external adjustment in those euro area countries that had recorded pronounced current account deficits prior to the financial crisis.

1 For a comprehensive assessment of the ongoing adjustment process in the euro area, see the article entitled "Country adjustment in the euro area: Where do we stand?", *Monthly Bulletin*, ECB, Frankfurt am Main, May 2013.

Chart A Current account balance

(as a percentage of GDP)



Sources: Eurostat and ECB.

In fact, most of the countries with pronounced pre-crisis current account deficits saw further current account improvements in 2012. The largest correction was recorded in Greece, where the deficit narrowed to 3.4% of GDP. At 6.5 percentage points, the correction registered in Greece between 2011 and 2012 was larger than that seen over the entire period between 2008 and 2011. Meanwhile, the current account deficits in Spain and Portugal narrowed to 1.1% and 1.5% respectively in 2012, from the sizeable levels seen in 2008. Ireland, Malta, Slovenia and Slovakia, which had also registered pronounced pre-crisis current account deficits, recorded surpluses in 2012. Most notably, the current account surplus in Ireland (as a percentage of GDP) was the fourth largest in the euro area, following a rapid adjustment facilitated by flexible labour and product markets. Estonia, which had also witnessed a frontloaded current account correction in the aftermath of the financial crisis, moved from a surplus back to a small deficit in 2012. Among the countries with pronounced pre-crisis current account deficits, Cyprus stood out, with the current account deficit widening to 11.7% in 2012, largely due to a deterioration in the income account. This deterioration, in turn, partly reflected exposure to the Greek economy, including the so-called Private Sector Involvement (PSI) that took place in 2012. However, despite the improvements in the current account deficits, between 2008 and 2012, in most euro area countries with pronounced pre-crisis current account deficits, net foreign liabilities generally remained at elevated levels.<sup>2</sup>

Turning to the other euro area countries, the deterioration in external positions continued in France and Finland in 2012. The current account deficits in these countries, although still of moderate size, are now among the largest in the euro area. At the same time, relatively small changes were observed in countries with pronounced pre-crisis current account surpluses. The surplus in Germany increased from 6.2% in 2011 to 7.0% in 2012, while the surplus in the Netherlands remained virtually unchanged at 10.1%. In Luxembourg, the current account surplus narrowed somewhat.

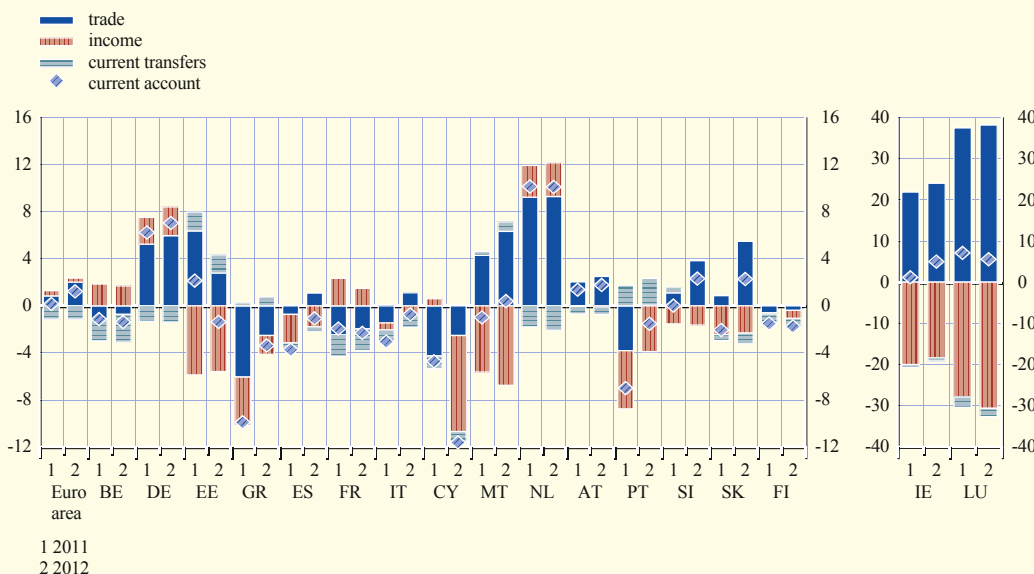
The current account improvements seen in 2012 in countries with pronounced pre-crisis deficits were mainly driven by the trade balance (see Chart B). In most of these countries, trade with the rest of the world is now close to balance or in surplus. In the IMF/EU programme countries, improvements in the income balance on the back of lower interest payments on foreign liabilities also contributed significantly to the current account correction in 2012. The largest improvement in the income balance was seen in Greece – partly due to the PSI.

Taking a closer look at the developments in the trade balance, import compression continued to be an important driver of the current account adjustment in countries with pronounced pre-crisis deficits, particularly in Greece and Portugal (see Chart C). However, solid export growth also contributed to the current account correction in several countries with pronounced pre-crisis deficits, particularly in Slovakia and Ireland. Compared with 2011, overall trade dynamics were, nonetheless, rather subdued in all euro area countries against the backdrop of weak demand at home and abroad. According to national accounts data, euro area exports and imports of goods and services grew, in nominal terms, by 4.5% and 1.6% in 2012 respectively, compared to an expansion of around 10% in 2011.

<sup>2</sup> See the box entitled “Net foreign liabilities in selected euro area countries”, *Monthly Bulletin*, ECB, Frankfurt am Main, April 2013.

Chart B Main components of the current account balance

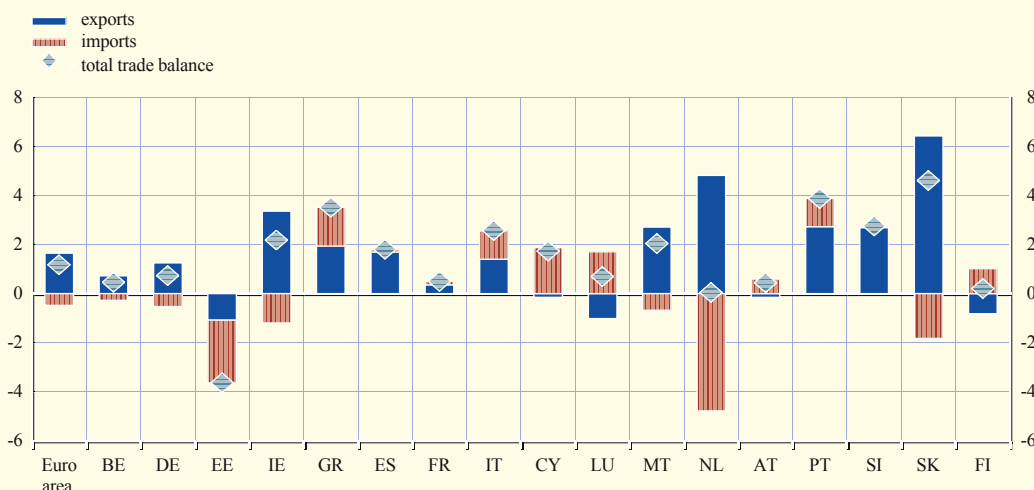
(as a percentage of GDP)



Sources: Eurostat and ECB.

Chart C Contribution of exports, imports and trade balance to the change in the current account balance in 2012 compared with 2011

(in percentage points of GDP)



Sources: Eurostat and ECB.

In summary, external adjustment in countries with pronounced pre-crisis deficits progressed further in 2012. More recent data suggest that the current account correction continued in the first quarter of 2013. Notwithstanding this, considerable adjustment requirements remain in these countries, given the need to reduce net external liabilities to more sustainable levels.



## 4.2 SECTORAL OUTPUT

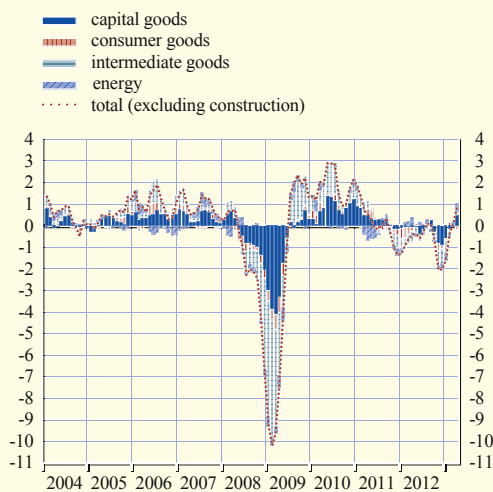
In the first quarter of 2013, real value added shrank further by 0.2% quarter on quarter, owing to particularly weak developments in industry and construction. Value added in services also contracted in the first quarter, albeit to a lesser extent.

With regard to developments in the second quarter of 2013, production in the industrial sector (excluding construction) increased by 0.4% month on month in April, having therefore increased for three consecutive months. As a result, production in April stood more than 1% above its average level in the first quarter. This is an improvement on the quarterly increase of 0.1% in the first quarter of the year (see Chart 28). Meanwhile, euro area industrial new orders (excluding heavy transport equipment) declined by 0.1% month on month in April, following a larger increase in March. The level of orders therefore stood some 0.5% above the level in the first quarter, when it declined by 0.7% on a quarterly basis. Box 9 introduces the new indicator on industrial new orders which has been developed by the ECB following Eurostat's discontinuation of the previously published indicator. Survey data, which are available up to June, point towards some stabilisation in the level of industrial sector output, albeit at a low level, in the second quarter (see Chart 29). For example, although the PMI manufacturing output index rose between the first and the second quarters of 2013, it was still below the expansion/contraction threshold of 50.

Production in construction rose by 2.0% in April, to stand 0.8% above the level reached in the first quarter of the year. However, further weak results from more recent surveys point to a feeble underlying growth momentum, consistent with ongoing weakness in the construction sector.

**Chart 28 Industrial production growth and contributions**

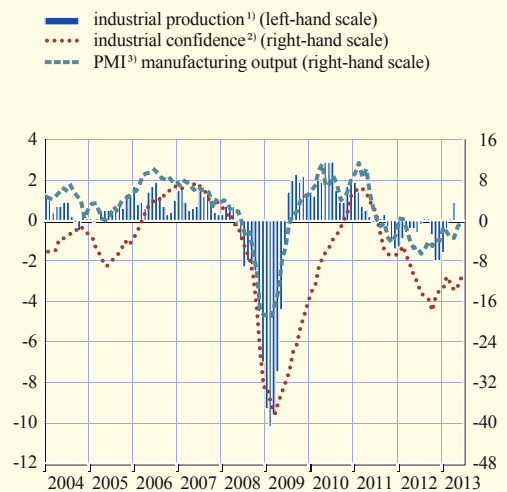
(growth rate and percentage point contributions; monthly data; seasonally adjusted)



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

**Chart 29 Industrial production, industrial confidence and PMI manufacturing output**

(monthly data; seasonally adjusted)



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

The PMI index of activity in business services was broadly unchanged between the first and second quarters of 2013, thus remaining below 50, indicating a further small decline in output in the services sector in the second quarter. Other business surveys, such as those of the European Commission, worsened somewhat in the second quarter, therefore painting a slightly more pessimistic picture.

**Box 9****INTRODUCING THE ECB INDICATOR ON EURO AREA INDUSTRIAL NEW ORDERS**

Eurostat, the Statistical Office of the European Union, discontinued the provision of euro area industrial new orders statistics as of the reporting period of March 2012. In order to fill this data gap, the ECB has developed a new monthly indicator on euro area industrial new orders. This box describes the methodological approach behind the compilation of this indicator, as well as its use for economic analysis.

**The ECB's approach to estimating euro area industrial new orders**

The ECB, in close cooperation with national central banks and national statistical institutes of those euro area countries that have continued with the data collection of industrial new orders at a national level, has established regular monthly data transmissions of the remaining official national series for the compilation of euro area aggregates. Furthermore, a common modelling framework has been developed for those countries that no longer report new orders at the national level in order to derive estimates. As model determinants, the official statistics on industrial turnover and the results from the European Commission's harmonised business opinion surveys, as well as the Markit's Purchasing Managers' Index surveys have been used. Emphasis has, therefore, been placed on ensuring that the information comes from a broad range of sources, which helps to enhance the robustness of the model-based proxy for industrial new orders. In summary, the model estimates have proven to provide solid results (out-of-sample and in real time), explaining about 50% of the variation in the month-on-month growth and about 98% at the index level of total euro area new orders. The ECB indicator on euro area industrial new orders is based on a combination of these continued official statistics, collected nationally, and estimates yielded by the model.<sup>1</sup>

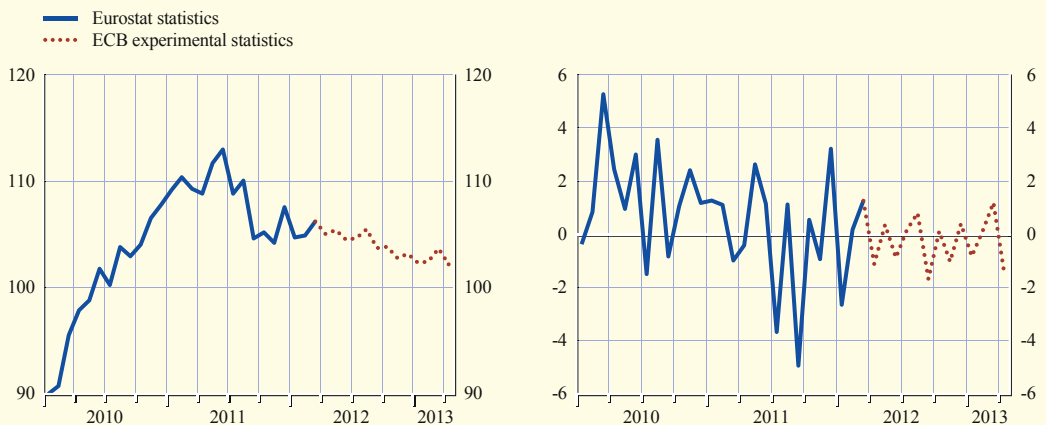
**The extended series for the euro area**

The euro area series consist of the official data as released by Eurostat for the period up to March 2012 and, from April 2012 onwards, they are based on national data and the model estimates (see Chart A). The ECB indicator for euro area industrial new orders is an aggregate of national results, using a weighting scheme based on Eurostat weights for industrial turnover indices for the base year 2010. The next monthly observation for the euro area is calculated only once the new official national data cover at least 60% of the aggregated euro area level, which is typically achieved around 55 days after the end of the reference month (i.e. close to the timing observed for the official statistics prior to being discontinued).

<sup>1</sup> For a comprehensive description of the modelling framework and the test results, see de Bondt, G. J., Dieden, H.C., Muzikarova, S. and Vincze, I., "Introducing the ECB indicator on euro area industrial new orders", *ECB Occasional Paper*, No 149, ECB, June 2013.

## Chart A ECB indicator on euro area industrial new orders

(index level 2010=100, left panel; month-on-month growth rate, right panel)



Sources: ECB experimental statistics based on national data, Eurostat and ECB calculations.

The release of the ECB indicator on euro area industrial new orders provides results for total new orders, total new orders excluding heavy transport equipment, as well as breakdowns for the main industrial groupings, i.e. capital goods, intermediate goods and consumer goods. The latter is further divided into durable and non-durable consumer goods. Another breakdown provided is across the origin of orders: domestic and non-domestic, with the non-domestic orders being further divided into those from the rest of the euro area and those from outside the euro area. As a source, all series are described as “ECB experimental statistics based on national data” and are available in the ECB’s Statistical Data Warehouse. Furthermore, the ECB indicator on total euro area new orders is also included in the Statistical Annex of the ECB Monthly Bulletin (Table 5.2.4 on Page S 52) and the ECB Statistics Pocket Book (Table 3.3 on Page 11).

### Usefulness of euro area industrial new orders for economic analyses

The ECB indicator on euro area industrial new orders is useful for the monitoring and analysis of economic developments in the euro area for at least three main reasons: first, new orders have historically displayed leading properties for the business cycle; second, they have proved useful for cross-checking data on industrial production, especially in times of heightened uncertainty; and, third, they contain unique information on the origin of demand.

First, industrial new orders have traditionally played an important role in the construction of leading indicators. For example, new orders for capital goods served as one of the inputs for the US Conference Board’s euro area Leading Economic Index. The OECD has also deployed new orders for some euro area countries, for example, Germany, in their composite leading indicator for the growth cycle. In principle, new orders provide signals of current demand and future production, as there is often a lead time between the placement of an order and the delivery of the product. Formal empirical analyses show that the ECB indicator on euro area industrial new orders lead industrial production, whereas this is not the case the other way round. This finding holds across all main industrial groupings, with the exception of non-durable consumer goods.

The latter is not surprising, as orders for non-durable consumer goods have, by nature, a very short production time.

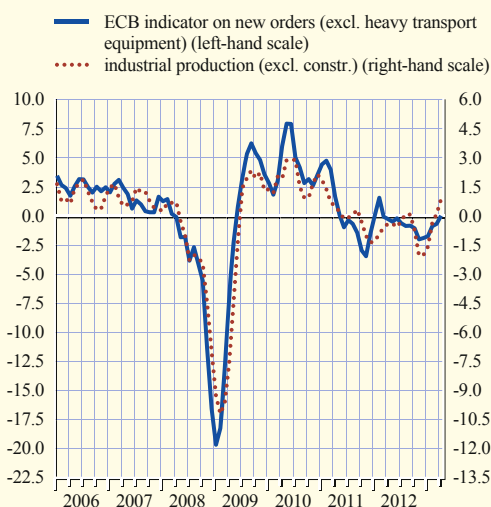
Second, monitoring of industrial new orders is also useful for cross-checking developments in industrial production in real time. In particular, owing to statistical revisions, which are sometimes quite substantial, an assessment of industrial production data in real time is not always straightforward. Information on industrial new orders can be of help in this respect, as illustrated in Chart B, which plots the series of three-month on three-month growth rates of new orders excluding heavy transport equipment against the series of the same growth rates in industrial production excluding construction. The lead time of new orders with regard to production during the period of the “free fall” in late 2008 and the recovery in early 2009 is noteworthy. Turning to recent months, the growth rates in the ECB indicator on euro area industrial new orders has picked up less strongly than industrial production growth in the first four months of 2013.

The third contribution made by the indicator on industrial new orders in the economic analysis of the euro area is that – unlike industrial production data – it provides valuable information on the origins of demand (i.e. domestic or foreign), as illustrated in Chart C. Such information is unique and instrumental to the comprehensive monitoring of the euro area economy, as developments across origins can deviate. The chart shows that in recent months, the developments in non-domestic orders have been decidedly more encouraging than those in domestic orders, and that non-domestic orders are at relatively high levels.

With the release of the ECB indicator on euro area industrial new orders, a monthly indicator, which is useful to analyse and monitor economic developments in detail, has now been restored.

**Chart B ECB indicator on euro area total industrial new orders excluding heavy transport equipment and industrial production excluding construction**

(three-month on three-month growth rates)



Sources: ECB experimental statistics based on national data, Eurostat and ECB calculations.  
Note: The ECB indicator is based on Eurostat data up to March 2012 and on national data and model estimates from April 2012 onwards.

**Chart C ECB indicator on euro area industrial new orders by origin**

(index level 2010=100)



Sources: ECB experimental statistics based on national data, Eurostat and ECB calculations.  
Note: The ECB indicator is based on Eurostat data up to March 2012 and on national data and model estimates from April 2012 onwards.

Looking ahead, maintaining the quality of this indicator is essential and will depend much on the availability of high quality and timely monthly national statistics collected by the national statistical institutes. The ECB will closely monitor the information content of the indicator as well as the signals it provides in the future.

### 4.3 LABOUR MARKET

The protracted ongoing weakness in economic activity is weighing on euro area labour markets. Employment declined again in the first quarter of 2013 and more recent data have shown that the unemployment rate has continued to rise, reaching an all-time high in May. Survey data point to further job losses in the second quarter of 2013.

In the first quarter of 2013, the level of employment fell for the seventh consecutive quarter, by 0.5% quarter on quarter (see Table 9). At the sectoral level, the latest decline reflects mostly employment cuts in the industrial sector and, to a lesser extent, the services sector. Hours worked declined even more sharply, by 0.9% quarter on quarter in the first quarter. In year-on-year terms, hours worked have declined by 2.2%, which is more than twice the drop in headcount employment. This difference most likely reflects firms' efforts to maintain their work forces until demand recovers. The latest survey results point to continued weak labour market developments in the second quarter of 2013 (see Chart 30).

Productivity per person employed fell by 0.2% in annual terms in the first quarter of 2013, which is the same rate as in the fourth quarter of last year (see Chart 31). Latest developments mask a decline in productivity growth for industry excluding construction, which was offset by higher productivity growth for construction and, albeit to a lesser extent, services. Reflecting the sharp decline in hours worked in the first quarter, the annual growth rate of hourly labour productivity rose by 0.5 percentage point to 1.1% between the fourth quarter of 2012 and the first quarter

**Table 9 Employment growth**

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

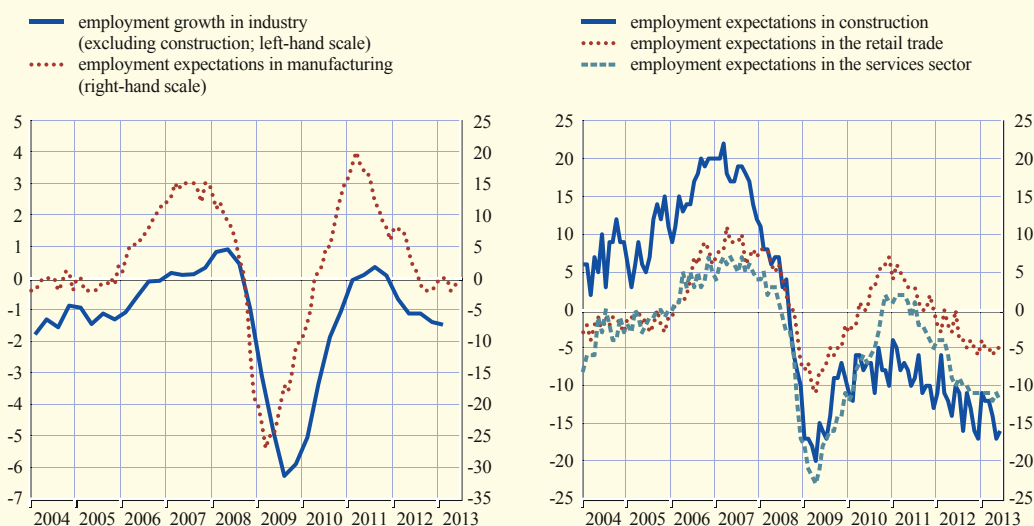
	Persons					Hours				
	Annual rates		Quarterly rates			Annual rates		Quarterly rates		
	2011	2012	2012 Q3	2012 Q4	2013 Q1	2011	2012	2012 Q3	2012 Q4	2013 Q1
Whole economy	0.3	-0.7	-0.1	-0.3	-0.5	0.3	-1.3	0.1	-0.7	-0.9
<i>of which:</i>										
Agriculture and fishing	-2.1	-1.6	-0.6	-0.7	-1.5	-2.8	-2.2	-0.7	-0.5	-0.7
Industry	-1.1	-2.2	-0.5	-0.9	-0.8	-0.7	-3.3	-0.5	-1.1	-1.5
Excluding construction	0.1	-1.1	0.0	-0.6	-0.5	0.9	-2.0	0.0	-0.7	-1.2
Construction	-3.8	-4.8	-1.7	-1.6	-1.6	-3.9	-6.1	-1.6	-2.0	-2.2
Services	0.8	-0.1	0.1	-0.1	-0.3	0.9	-0.6	0.4	-0.5	-0.7
Trade and transport	0.8	-0.8	-0.1	-0.4	-0.3	0.6	-1.4	0.2	-1.0	-0.6
Information and communication	1.3	1.5	-0.3	1.1	-0.2	1.4	1.4	0.6	0.2	-0.3
Finance and insurance	-0.4	-0.7	-0.8	0.2	0.0	-0.3	-0.8	-0.1	-0.6	-0.6
Real estate activities	3.1	0.4	-1.2	0.6	-1.4	3.8	-0.4	-0.2	-1.8	-1.7
Professional services	2.7	0.7	0.8	-0.2	-0.7	2.8	0.5	0.8	-0.6	-0.9
Public administration	0.3	-0.3	-0.1	-0.1	-0.2	0.4	-0.5	0.1	0.1	-0.9
Other services <sup>1)</sup>	0.0	0.6	0.7	-0.1	0.0	0.0	-0.1	1.2	-0.7	-0.7

Sources: Eurostat and ECB calculations.

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

Chart 30 Employment growth and employment expectations

(annual percentage changes; percentage balances; seasonally adjusted)



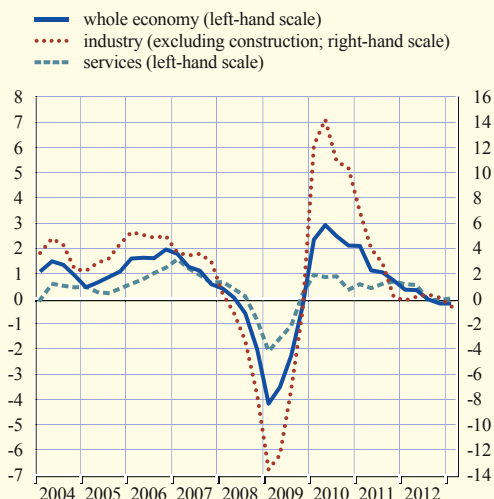
Sources: Eurostat and European Commission Business and Consumer Surveys.  
Note: Percentage balances are mean-adjusted.

of 2013. Looking ahead, the latest readings of the PMI productivity index suggest continued muted productivity developments in the second quarter of 2013.

The unemployment rate edged up by 0.1 percentage point from the downwardly revised result for April to stand at 12.2% in May. This increase follows three months of stable developments.

Chart 31 Labour productivity per person employed

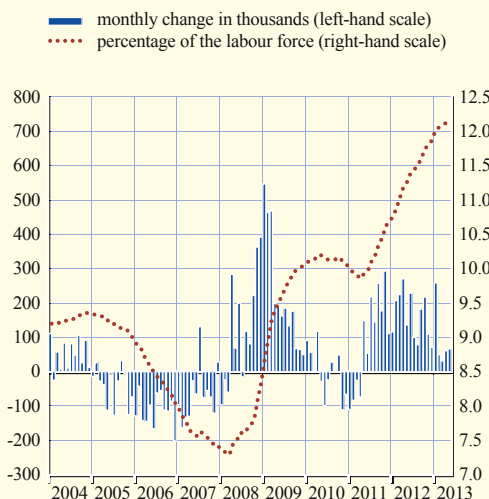
(annual percentage changes)



Sources: Eurostat and ECB calculations.

Chart 32 Unemployment

(monthly data; seasonally adjusted)



Source: Eurostat.

The latest outcome is 4.9 percentage points higher than in March 2008, when unemployment was at a cyclical low before the onset of the financial crisis (see Chart 32).

#### 4.4 THE OUTLOOK FOR ECONOMIC ACTIVITY

Recent developments in cyclical indicators, particularly those based on survey data, indicate some further improvement from low levels. Looking ahead to later in the year and to 2014, euro area export growth should benefit from a gradual recovery in global demand, while domestic demand should be supported by the accommodative monetary policy stance as well as the recent gains in real income owing to generally lower inflation. Furthermore, notwithstanding recent developments, the overall improvements in financial markets seen since last summer should work their way through to the real economy, as should the progress made in fiscal consolidation. This being said, the remaining necessary balance sheet adjustments in the public and private sectors will continue to weigh on economic activity. Overall, euro area economic activity should stabilise and recover in the course of the year, albeit at a subdued pace.

The risks surrounding the economic outlook for the euro area continue to be on the downside. The recent tightening of global money and financial market conditions and related uncertainties may have the potential to negatively affect economic conditions. Other downside risks include the possibility of weaker than expected domestic and global demand and slow or insufficient implementation of structural reforms in euro area countries.

## ARTICLES

# THE EUROSISTEM COLLATERAL FRAMEWORK THROUGHOUT THE CRISIS



*The global financial crisis has been a driver of change in most, if not all, areas of the financial world and thus has also called for Eurosystem policy responses in the context of its collateral framework. During the various phases of the ongoing financial crisis, the Eurosystem has drawn on the flexibility of its collateral framework, either by means of temporary measures or by implementing changes to the standard Eurosystem collateral framework, in order to avoid widespread collateral constraints in its continued efforts to support bank lending and liquidity in the euro area money market. This article reviews the ways in which Eurosystem collateral policies have been changed on several occasions as a direct consequence of the crisis in order to address and mitigate market malfunctions in a timely manner, but also in response to modifications to the Eurosystem risk control framework, echoing, to some extent, the lessons learned during the financial crisis. Moreover, this article illustrates the ways in which the ECB's actions have affected developments in the size and composition of Eurosystem collateral in terms of both eligible and used<sup>1</sup> assets.*

### I INTRODUCTION: THE EUROSISTEM'S OPEN MARKET OPERATIONS AND ITS COLLATERAL FRAMEWORK

The Eurosystem has a number of instruments available for the implementation of monetary policy within the euro area. Within its set of instruments, open market operations represent the key instruments used by the ECB. They comprise reverse transactions, outright transactions, the issuance of ECB debt certificates, foreign exchange swaps and the collection of fixed-term deposits. Of these, liquidity-providing reverse transactions are by far the most important. They consist of lending central bank money to banks with a fixed maturity, at a certain interest rate, and include, for example, the main refinancing operations (MROs) as well as longer-term refinancing operations (LTROs).<sup>2</sup>

All Eurosystem credit operations, which include open market operations as well as the use of the marginal lending facility and intraday credit, need to be based on adequate collateral, as defined by Article 18.1 of the Statute of the ESCB. The concept of adequate collateral has two dimensions: first, it implies that the Eurosystem should be protected from incurring losses in its credit operations; second, it requires that sufficient collateral be available to a broad set of counterparties so that they can obtain the necessary amount of liquidity from the Eurosystem.

In order to be considered eligible to collateralise Eurosystem liquidity-providing reverse transactions, marketable assets as well as non-marketable assets must fulfil a number of eligibility criteria. The eligibility criteria for these two asset classes, which are uniform to all Eurosystem credit operations across the euro area, are laid down in the document entitled “The implementation of monetary policy in the euro area: General documentation on Eurosystem monetary policy instruments and procedures” (Guideline ECB/2011/14, as amended, and commonly referred to as the “General Documentation” or the “standard Eurosystem collateral framework”). Notably, the type of asset, the place of issuance, the type and residence of issuers/debtors/guarantors, the denomination and the credit quality of the asset/ issuer/debtor/guarantor are crucial elements for determining the eligibility of Eurosystem collateral.

<sup>1</sup> The words “use”, “pledge”, “post”, “mobilise” are used interchangeably in this article to refer to collateral that is posted with the Eurosystem, which does not, however, necessarily mean that credit is drawn against it.

<sup>2</sup> Foreign exchange swap operations have been used by the Eurosystem since the onset of the financial turmoil in view of the tensions observed in the foreign exchange market and in order to provide foreign-denominated funding to its counterparties. Outright transactions, on the other hand, were introduced by the Eurosystem in 2009 and 2010. These outright transactions were conducted in the form of the covered bond purchase programme (CBPP), which aimed at reviving the covered bond market, and the Securities Market Programme (SMP), which aimed at ensuring depth and liquidity in those euro area government bond market segments that were dysfunctional. Finally, fixed-term deposits were introduced in May 2010 in order to reabsorb the liquidity injected through the SMP. ECB debt certificates have, until now, not yet been issued.



When implementing monetary policy operations via liquidity-providing reverse transactions, the Eurosystem is exposed to risk factors such as counterparty default as well as to the credit, market and liquidity risk associated with this collateral. These risk factors are mitigated by a set of risk control measures that are calibrated to bring the exposure of the Eurosystem to acceptable levels. Such measures include requiring counterparties to submit adequate collateral by maintaining high credit standards for these assets, evaluating the submitted collateral on a daily basis, and applying appropriate valuation haircuts and mark-downs. Moreover, in order to also ensure that marketable and non-marketable assets comply with the same credit standards, a Eurosystem credit assessment framework (ECAAF) was set up, which relies on various credit assessment sources. The risk control measures applied by the Eurosystem, which include procedures and rules establishing and monitoring the Eurosystem's requirement of "high credit standards" for all eligible collateral, are also outlined in the above-mentioned General Documentation.

Compared to other major central banks, the Eurosystem has, since its inception, been accepting a broad range of assets as collateral in all its credit operations. This breadth is due to the historical, structural and institutional differences reflected in the wide range of collateral frameworks in place across national central banks prior to the introduction of the "Single List"<sup>3</sup>. The varied market size, legal characteristics and stage of development of euro area financial market segments have also played a role in shaping the Eurosystem collateral framework.

The fact that the Eurosystem had already operated with very large reverse transactions before the onset of the crisis, together with the fact that access to Eurosystem open market operations is granted to a large pool of counterparties, has been key in supporting the implementation of monetary policy during times of financial stress. While adjusting the frequency and maturity of liquidity-providing operations, notably in order to address the impaired functioning of the euro area money market during the financial crisis,<sup>4</sup> the Eurosystem has also been altering and expanding the eligibility criteria for collateral, either by means of temporary measures or by implementing changes to the standard Eurosystem collateral framework, in order to avoid widespread collateral constraints. At the same time, the Eurosystem has continued to regularly review its risk control measures in order to ensure that the Eurosystem continues to be adequately protected in a changing market environment, while still making sufficient eligible collateral available to banks.

Section 2 of this article focuses on the major changes which the Eurosystem introduced to its collateral framework in response to the various stages of the crisis, but also as a direct consequence of modifications to the Eurosystem risk control framework. Section 3 focuses on developments in eligible collateral in the euro area, that is to say, marketable and non-marketable assets that fulfil the eligibility criteria, as laid down in the General Documentation. It also illustrates developments in terms of used collateral for Eurosystem credit operations, that is to say, the collateral actually posted with the Eurosystem. Section 4 concludes.

3 The Eurosystem developed a single framework for eligible collateral common to all Eurosystem credit operations (also referred to as the "Single List"). On 1 January 2007, this single framework replaced the two-tier system that had been in place since the start of Stage Three of Economic and Monetary Union. The single framework covers marketable and non-marketable assets that fulfil uniform euro area-wide eligibility criteria, as specified by the Eurosystem.

4 More detailed information on the ECB's non-standard monetary policy measures can be found, for example, in the box entitled "Non-standard measures in 2011", *Annual Report*, ECB, 2011. Moreover, a detailed description of the ECB's non-standard measures and the response to the financial crisis can be found in the document entitled "The ECB's non-standard measures – impact and phasing-out", *Monthly Bulletin*, ECB, July 2011, and in "The ECB's response to the financial crisis", *Monthly Bulletin*, ECB, October 2010, as well as in "The implementation of monetary policy since August 2007", *Monthly Bulletin*, ECB, July 2009.

## 2 THE EUROSISTEM COLLATERAL FRAMEWORK – CHANGES IN COLLATERAL ELIGIBILITY REQUIREMENTS AND RISK CONTROL MEASURES

In response to the financial market tensions that began in August 2007, the Eurosystem, similarly to several other central banks, adjusted its day-to-day liquidity-providing activities. Besides adjusting its open market operations, the Eurosystem has also changed its collateral framework over the past six years in order to preserve and increase collateral availability. In addition, modifications were introduced, which were not necessarily a direct consequence of the crisis but rather echoed other more general changes to the euro area, such as Member States joining the euro area, the consequences of the lessons learned during the various phases of the financial crisis, and the improvements in the methodological framework that were introduced in the context of the Eurosystem's regular risk control framework review. The remainder of this section summarises the major changes to the Eurosystem collateral and risk control framework by distinguishing between the measures that were implemented by virtue of the temporary framework, as laid down in the document entitled "Guideline of the ECB of 20 March 2013 on additional temporary measures relating to Eurosystem refinancing operations and eligibility of collateral and amending Guideline ECB/2007/9 (recast) (ECB/2013/4)", and those implemented by virtue of the standard framework. The effects in terms of the developments in eligible and posted collateral with the Eurosystem are analysed in Section 3.

### TEMPORARY MEASURES INTRODUCED SINCE MID-2008

The period of financial turmoil, defined as the period since August 2007 when severe tensions emerged in interbank markets worldwide, turned into a global financial crisis following the collapse of the US financial institution Lehman Brothers on 15 September 2008.<sup>5</sup> The sharp deterioration of conditions in the euro area money market that began in September 2008 led to a rapid increase in the provision of refinancing by the Eurosystem to the euro area banking sector. Hence, in October 2008, the Eurosystem reacted by announcing measures to expand the collateral framework and thus enhance the provision of liquidity. More specifically, on 15 October 2008, the Governing Council decided to expand – initially until the end of 2009 – the list of eligible Eurosystem collateral on a temporary basis, owing to the additional demand for collateral associated with the introduction of fixed-rate, full allotment tender procedures in all its refinancing operations as well as to the step-up in the provision of term-liquidity in US dollars.<sup>6</sup> These temporary collateral measures were introduced in two stages.

First, as of 22 October 2008, the credit threshold for marketable and non-marketable assets was lowered from "A-" to "BBB-", together with a flat haircut add-on, with the exception of asset-backed securities (ABSs), for which the minimum credit quality threshold of "A-" remained in force. In addition, the Eurosystem also started to accept – as collateral for Eurosystem credit operations – debt instruments issued by credit institutions, including certificates of deposit, which were traded on certain non-regulated markets deemed acceptable by the ECB. Subordinated marketable debt instruments, provided they were protected by an acceptable guarantee and fulfilled all other eligibility criteria, as well as fixed-term deposits held with the Eurosystem, also became eligible in October 2008. At the second stage, from 14 November 2008, the Eurosystem also accepted marketable debt instruments issued and denominated in certain foreign currencies,

5 As defined in "The ECB's response to the financial crisis", *Monthly Bulletin*, ECB, October 2010, the crisis can be broken down into four distinct phases: financial turmoil (as of 9 August 2007); intensification of the financial crisis (starting with the collapse of Lehman Brothers on 15 September 2008); temporary improvements in financial market conditions with a phasing-out of some non-standard measures (end-2009 and early 2010); and the sovereign debt crisis (early May 2010).

6 In December 2007, the Governing Council decided to take joint action with the Federal Reserve by offering US-dollar funding to Eurosystem counterparties.

provided that the issuer was established in the European Economic Area (EEA) and also that the instruments were issued and held/settled in the euro area. In order to fulfil its statutory obligation to ensure that the Eurosystem balance sheet remains protected against financial risk, the ECB applied specific risk control measures (such as valuation mark-downs) to the enlarged set of collateral.

As some of these temporary measures proved to be necessary beyond the end of 2009,<sup>7</sup> owing to the continued high level of liquidity needs, two of them were transformed into the Eurosystem standard collateral framework over the course of 2010. First, the Governing Council decided on 8 April 2010 to keep the minimum credit quality threshold for assets in the Eurosystem collateral framework at the investment level, i.e. BBB-/Baa3. Second, fixed-term deposits from eligible Eurosystem counterparties were added to the list of eligible assets as of 1 January 2011. Other measures, which were introduced in the context of the temporary expansion of the list of eligible Eurosystem collateral in September 2008, were no longer needed. The respective assets were thus removed from the list of eligible collateral as of 1 January 2011.

However, significant deteriorations observed in euro area sovereign bond markets in the second half of 2011 led the ECB to introduce a number of additional non-standard monetary policy measures. In its continued efforts to support bank lending and liquidity in the euro area money market, thus encouraging banks to continue lending to households and non-financial corporations, the Governing Council announced additional enhanced credit support measures following its meeting on 8 December 2011. More specifically, the Governing Council decided, in connection with other non-standard monetary policy measures, to increase collateral availability by: (i) reducing the rating threshold for certain ABSs; and (ii) allowing NCBs, as a temporary solution, to accept as collateral additional performing credit claims (i.e. bank loans) that satisfy specific eligibility criteria. The first measure became effective with the relevant legal acts published on 19 December 2011 and the Governing Council approved the eligibility criteria for additional credit claims (referred to as the ACC framework) on 9 February 2012.<sup>8</sup>

The further temporary expansion of the list of eligible collateral was prompted by concerns that the access of some banks to additional refinancing operations, and in particular to the two three-year LTROs, which were conducted in December 2011 and February 2012, might be restricted by a lack of eligible collateral. While it was expected that, after applying the eligibility criteria and haircut schedules specified in the respective ACC framework, the NCBs authorising the use of the ACC framework would be able to accept ACCs for an estimated aggregate value of around €200 billion, this amount did not, however, materialise in the course of 2012.

As a further consequence of the ongoing financial crisis and in order to further support the provision of credit to households and non-financial corporations, the Governing Council decided to implement additional measures to improve the access of the banking sector to Eurosystem operations. On 20 June 2012, it reduced the rating threshold and amended the eligibility requirements for certain types of ABSs, thus further broadening the scope of the measures introduced in December 2011. Moreover, the temporary measures aimed at accepting marketable debt instruments denominated in currencies other than the euro were reintroduced by virtue of the relevant legal act on 17 October 2012, as announced in September 2012.

<sup>7</sup> The overall volume of marketable assets eligible as a result of the temporary measures to expand the list of eligible collateral was estimated to have amounted to around €1.4 trillion at the end of 2009.

<sup>8</sup> Further information on the ACC framework can be found in Box 2 entitled "Implementation of new collateral rules and reserve requirements", *Monthly Bulletin*, ECB, February 2012.

Finally, it should be recalled that the Governing Council decided to suspend the minimum requirements for credit quality thresholds for certain marketable instruments issued or fully guaranteed by the central governments of euro area Member States under an EU/IMF programme, if the respective Member State complied with the conditionality of the financial support and/or macroeconomic programme. Since the Eurosystem contributes to devising and monitoring these programmes, it is indeed in a good position to assess the credit risks related to the public debt in question. Hence, over the past few years, the Eurosystem has also undertaken measures to reduce the role that credit ratings play in its collateral and risk control framework in order to avoid mechanistic approaches that could have otherwise led to abrupt and significant changes to the eligibility of certain financial instruments.

### STANDARD MEASURES INTRODUCED SINCE MID-2008

As the Eurosystem has always accepted a broad range of marketable and non-marketable assets as collateral, availability of collateral was not a constraint during the initial phase of the financial crisis in 2007 or much of 2008. Hence, the main modifications to the Eurosystem collateral framework that were announced in September 2008 resulted from the conduct of the Eurosystem's biennial review of the adequacy of the risk control framework, which ensures, on a regular basis, that the Eurosystem remains adequately protected against financial risks across time. The review, which was finalised in 2008, introduced refinements reflecting, *inter alia*, improvements in the methodological framework, the assessment of market and liquidity risk characteristics of eligible assets, the actual use of eligible assets by counterparties and new developments in financial instruments.<sup>9</sup>

During the subsequent periodical review in 2010, the Eurosystem introduced a number of additional adjustments to its eligibility criteria and risk control framework based on an updated assessment of the risk characteristics of eligible assets and the actual use of eligible assets by counterparties. More specifically, and as already indicated earlier, the Eurosystem decided to keep the minimum credit threshold for marketable and non-marketable assets in the Eurosystem collateral framework at the investment grade level (i.e. BBB-/Baa3) beyond the end of 2010. Hence, the ECB announced, in April 2010, and published in July 2010, a schedule of graduated valuation haircuts to the assets rated in the BBB+ to BBB – range (or equivalent), which replaced the flat haircut add-on which was, until then, uniformly applied to such assets. The new haircuts were aimed at striking a balance between collateral adequacy and sufficiency by keeping the Eurosystem protected against financial risk, while not implying an undue decrease in the collateral available to counterparties. Additional amendments stemming from the 2010 review exercise were also introduced to the standard framework on that occasion.<sup>10</sup>

Moreover, in April 2010, the Eurosystem launched the step-wise practical establishment of loan-level information requirements for potential application in respect of ABSs in its collateral framework. As the Eurosystem is the main recipient of ABSs, the requirement aimed at increasing market transparency vis-à-vis the assets included in pools underlying these securities, therefore, contributed to better informed risk assessments, and helped to restore confidence in the ABS markets. The ABS loan-level data reporting initiative is regarded by the Eurosystem as an important building block in leading the ABS market along the path towards standardisation and simpler structures, and thus made an essential contribution towards restoring normal market functioning.

<sup>9</sup> These changes to the risk control framework for Eurosystem credit operations were reflected in the updated version of the General Documentation, which was published on 4 February 2011. An updated consolidated version of the General Documentation, which came into force on 1 January 2012, was published by the ECB on 21 September 2011.

<sup>10</sup> See the ECB Press Release entitled "ECB reviews risk control measures in its collateral framework", 28 July, 2010.

Therefore, the Eurosystem decided, in December 2010, to establish loan-by-loan information requirements for ABSs as a permanent eligibility requirement in the Eurosystem collateral framework.<sup>11</sup>

In July 2012, the mandatory provisions of the loan-by-loan information for ABSs, including specific details relating to the reporting requirements, were announced. These provisions and requirements were introduced by means of amending the General Documentation in November 2012. These amendments also included modifications, which aimed at streamlining and strengthening the existing collateral and risk control framework for Eurosystem operations, such as the reporting requirements related to the loan-level data for ABSs, the streamlining of coupon types for eligible marketable instruments, as well as some specific technical changes to ABSs, covered bonds and the ECAF. These changes to the General Documentation came into force on 3 January 2013.

Finally, in March 2013, the Governing Council adopted Decision ECB/2013/6, which prevents, as of 1 March 2015, the use as collateral in Eurosystem monetary policy operations of uncovered government-guaranteed bank bonds that have been issued by the counterparty itself or an entity closely linked to it, as well as covered bonds with such bank bonds in their cover pool. This decision, which aims to ensure the equal treatment of counterparties in Eurosystem monetary policy operations and to simplify the relevant legal provisions, follows the measures implemented on 3 July 2012, which limited counterparties' use of uncovered government-guaranteed bank bonds that they themselves issued.

To conclude, while quite a number of the mentioned changes to the Eurosystem collateral framework were responses to financial market volatility, with some of the temporary measures having been explicitly incorporated into the standard Eurosystem collateral framework, several other modifications also resulted from regular periodic reviews and updates to make the Eurosystem collateral and risk control framework consistent with developments in its operating environment, i.e. the euro area financial system. The table annexed to this article summarises the major changes to the Eurosystem collateral and risk control framework in further detail.

### **3 DEVELOPMENTS IN ELIGIBLE COLLATERAL AND COLLATERAL POSTED WITH THE EUROSISTEM**

#### **DEVELOPMENTS IN ELIGIBLE COLLATERAL IN THE EURO AREA**

The financial crisis, as well as the response to it by the Eurosystem, has drastically affected the collateral landscape which, over the past six years, has developed in terms of both volume and composition. On aggregate, the total nominal value outstanding of all eligible marketable assets increased by more than 46% between the onset of the financial crisis in 2007 and the end of 2012 (see Chart 1).<sup>12</sup> In terms of composition, the distribution by asset class remained fairly stable throughout the same time period, consisting mainly of central and regional government bonds (40-50%), followed by uncovered bank bonds (slightly below 20%) and covered bonds (somewhat above 10%). ABSs, corporate bonds, and other marketable assets represented, individually, less than 10% on average (6.1%, 10% and 7.4% respectively) at the end of 2012. By contrast with marketable assets, non-marketable assets

<sup>11</sup> Following the general decision announced on 16 December 2010 to establish loan-by-loan information requirements for ABSs in the Eurosystem collateral framework, it was announced in April 2011 that the Governing Council intended to introduce these requirements for commercial mortgage-backed securities (CMBSs) and small and medium-size enterprise (SME) transactions accepted in the Eurosystem collateral framework in 2012.

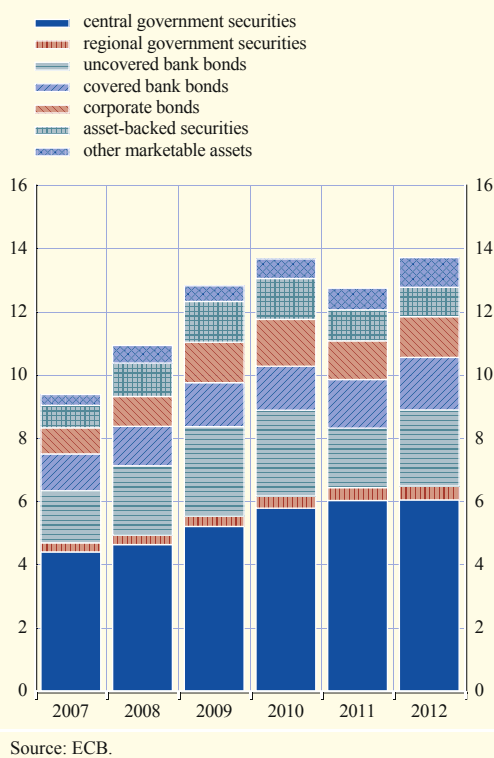
<sup>12</sup> On 6 July 2012, the Governing Council of the ECB decided that the ECB would henceforth publish information on collateral on a quarterly basis. This data is available on the ECB's website.

usually only become known to the Eurosystem upon submission as eligible collateral. Hence, the volume of potentially eligible non-marketable assets (such as “bank loans”, which are also referred to as “credit claims”) is not systematically and precisely measured by the Eurosystem. Thus, the remaining section focuses mainly on developments in eligible marketable assets in the euro area.

The Eurosystem accepts a wide range of marketable assets as collateral in all its credit operations, including assets from financial and non-financial private sector entities.<sup>13</sup> Central and regional government securities have traditionally been the most highly represented asset class, also within the Eurosystem collateral framework, owing to sufficiently large supplies of actively traded domestic government bonds across the different euro area jurisdictions, as well as relatively easy-to-implement risk control measures. Between 2007 and 2011, the volume of this asset class increased by 37% (or €1.75 trillion) and thus accounted for 52% of the total increase until the end of 2011. Since 2011, the volume of eligible central and regional government securities has remained fairly stable.

Chart 1 Eligible marketable assets

(EUR trillion; nominal amounts; averages of end-of-month data)



As discussed in Section 2, the Governing Council decided to implement a set of temporary as well as permanent measures to expand the collateral framework in order to enhance the provision of liquidity by ensuring the effective transmission of the Eurosystem’s monetary policy, and thus contributing to the increase in eligible assets between 2007 and 2010.

The average volume of eligible uncovered bank bonds, which, after central and regional government bonds, represent the second largest asset class in terms of eligible collateral, fluctuated between 2008 and 2011 for the following reasons. First, as a result of the temporary measures introduced in October 2008, this asset class possessed one feature unique to its class, that of accepting bonds listed on certain non-regulated markets<sup>14</sup> as eligible collateral. This measure was, however, discontinued in 2011 and then reimplemented on a permanent basis as part of the standard Eurosystem collateral framework on 1 January 2012. Second, some euro area governments launched schemes guaranteeing securities issued by credit institutions in order to support their banking systems and address the funding problems of liquidity-constrained solvent banks. These bonds became eligible when they were issued in late 2008 and most of them matured with the expiry of the state guarantees during the course of 2010. These two developments may justify the decrease seen in this asset class during the course of 2010 and 2011, while the increase observed

<sup>13</sup> In this context, it should be noted that under the Eurosystem’s collateral policy due respect must be given to Article 124 of the Treaty on the Functioning of the European Union, which prohibits privileged access for the public sector to financial institutions, such that any discrimination between public and private assets shall be precluded.

<sup>14</sup> The list of non-regulated markets accepted by the ECB can be found on the ECB’s website.

in 2012 was, in addition to the issues highlighted above, partly due to the issuance of uncovered bank bonds under government guarantee still in practice in Italy until the end of June 2012.

The volume of eligible ABSs and corporate bonds almost doubled between 2007 and 2010 (from €0.7 trillion to €1.3 trillion and from €0.8 trillion to €1.5 trillion respectively). In terms of ABSs, the increase in issuances occurred despite the observed market impairments, owing to the fact that the originator of an ABS is allowed to use the issued security as collateral (for further details, see Box 1). Consequently, additional restrictive measures were implemented by the Eurosystem between 2009 and 2011 as a way of mitigating risks relating to the eligibility of ABSs, which included more stringent rating requirements (i.e. the second-best rating rule was applied to all ABSs regardless of their date of issue, as of 1 March 2011) and further clarification of the eligibility criteria for ABSs, both of which are thus mirrored in the reduced average volume of eligible ABSs in 2011.

#### Box 1

#### IMPACT OF THE IMPAIRMENT OF THE ABS MARKET ON THE USE OF COLLATERAL

For the purpose of this box, the ABS market has been used to illustrate the way in which market developments and the Eurosystem's rules on eligible collateral as well as its risk control measures can affect the use of collateral. It clearly illustrates how the use of ABSs as collateral with the Eurosystem increased as the depth of the market decreased to negligible volumes.

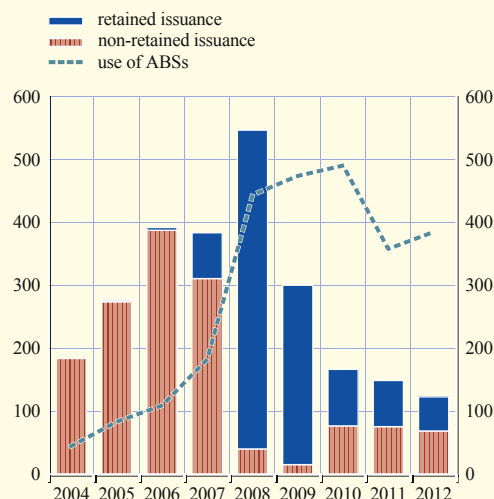
The chart depicts a striking increase in the use of ABSs, for which the following two main factors can be identified.

On the one hand, at the onset of the crisis in 2007, the volume of ABSs newly issued on the market began to decrease, which revealed the first signs of weakness of this formerly booming market. In 2008, the market collapsed and primary market activity remained somewhat silent thereafter. As a result, and owing to the difficulties in placing primary deals on the market, a significant volume of newly issued ABSs remained on the balance sheet of their originators (commonly referred to as "retained issuance"). In order to refund these issuances, some originators had no choice but to pledge these assets with the central bank as collateral for Eurosystem credit operations.

On the other hand, counterparties in need of additional funding and in shortage of collateral retained ABS transactions with the

#### Issuance and use of European asset-backed securities (including mortgage-backed securities)

(EUR billions)



Sources: ECB, Dealogic.

sole purpose of collateralising Eurosystem reverse transactions. This practice, also known as “originate-to-repo”, enables counterparties to free up their balance sheet by indirectly repoing their outstanding credit claims, which would not necessarily be eligible otherwise. For example, claims in US dollars (ineligible) could be packaged in an ABS transaction denominated in euro. The tight regional restrictions, as well as operational burdens to mobilise credit claims, could also be overcome in such a deal. The Eurosystem remains protected against such risks, as the eligibility criteria and risk control measures take into account the specificities of ABS transactions (applying more stringent rating requirements as well as higher haircuts compared to other marketable assets).

The chart also illustrates that, since 2010, the use of ABSs has decreased, while non-retained issuance activities have recovered slightly.

Although total issuance of covered bonds in the euro area shrank by 27% in 2012 compared to 2011, the volume of eligible covered bonds increased almost continuously from a level of €1.2 trillion in 2007 to around €1.7 trillion by the end of 2012. The factors underlying this development are manifold. First, as a result of the introduction of the covered bond purchase programme (CBPP)<sup>15</sup> by the Eurosystem in July 2009, increasing numbers of euro area countries adopted regulations underlying covered bond issuances. These new covered bonds were often Eurosystem eligible collateral. Second, since covered bonds can be used as collateral by their issuer, they were often considered by banks as a good alternative to ABSs in order to mobilise loans as collateral, as, generally speaking, lower haircuts are applied to covered bonds than to ABSs. Thus, at the end of 2012, covered bank bonds represented the third largest asset class in terms of eligible collateral, with the weight of retained deals increasing from 26% in 2011 to 43% in 2012.

#### DEVELOPMENTS IN COLLATERAL POSTED WITH THE EUROSISTEM

Similarly to the volume of eligible assets, the volume of used collateral has risen significantly over the past six years, though for different reasons, as discussed further in this section. The average value of marketable and non-marketable assets posted by counterparties as collateral for Eurosystem credit operations increased, on average, by around 16% per annum between 2007 and 2012 (see Chart 2). In particular, following the onset of the financial market turmoil in August 2007, the volume of collateral posted with the Eurosystem increased substantially, with an annual average increase of approximately 38% in 2008 and 25% in 2009. The decrease observed between 2009 and 2010 mainly reflected the fact that counterparties had, on average, lower liquidity needs throughout 2010. However, despite decreased liquidity needs, counterparties kept, on aggregate, similarly large volumes of collateral with the Eurosystem.<sup>16</sup>

In absolute terms, the total amount of collateral posted by Eurosystem counterparties, after valuation and the application of haircuts, increased from €1.1 trillion in 2007 to almost €2.5 trillion in 2012. In 2009 and 2010, this amount already reached over €2.0 trillion, but decreased to €1.8 trillion in 2011. However, in October 2011, two LTROs of approximately 12 and 13 months were announced,

<sup>15</sup> More information on the CBPP can be found in the monthly CBPP reports published between August 2009 and June 2010; and in the paper entitled “The impact of the Eurosystem’s covered bond purchase programme on the primary and secondary markets”, *Occasional Paper Series*, No 122, ECB, January 2011. Moreover, it should be noted that from November 2011 to October 2012, the ECB conducted a second covered bond purchase programme (CBPP2), which had a target amount of €40 billion. The programme ended with cumulative purchases amounting to €16 billion (below the target), with 37% of this total acquired on the primary market.

<sup>16</sup> The share of collateral used to cover credit from monetary policy operations, therefore, increased to significantly higher levels than in preceding years. This suggests that a shortage of collateral has not been a systemic constraint on the Eurosystem’s counterparties at the aggregate level.



and in December 2011, the first three-year LTRO was conducted, in which an amount of €489 billion was allotted. In order to collateralise these operations, counterparties once again posted more collateral over the course of the last quarter of 2011. The monthly average of the total collateral posted for the fourth quarter of 2011 was €2.0 trillion. The increase seen in late 2011 continued in 2012, in particular owing to the second three-year LTRO executed in February 2012. This resulted in an increase in the average amount of collateral posted, of around 35% in 2012, compared with 2011.

The composition of collateral posted has also changed significantly over recent years (see Charts 2 and Chart 3). At the asset class level, the use of central and regional government bonds doubled, from €230 billion in 2007 to €458 billion in 2012. Rating downgrades and falling prices for peripheral euro area government securities resulted in a reduction of the collateral base for the private repo and interbank markets, which consequently led to an increase in central and regional government securities deposited with the Eurosystem as collateral over the last two years.

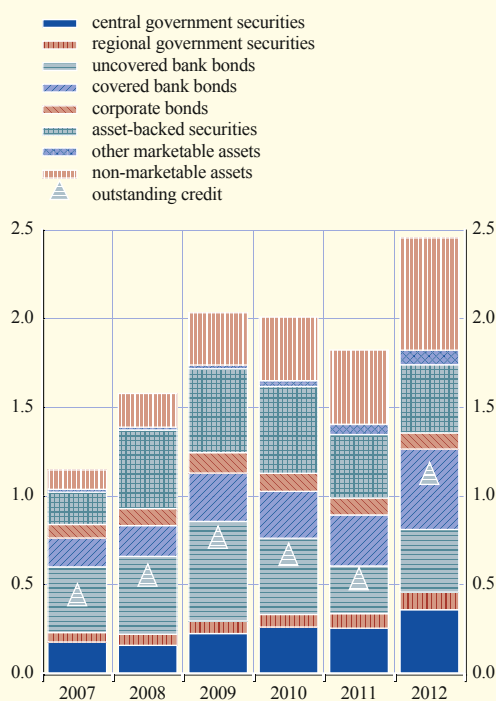
The value of uncovered bank bonds used started off at €371 billion in 2007 and reached a peak of €562 billion in 2009, before decreasing to €354 billion by 2012. Similarly to eligible amounts, the use of this asset class decreased significantly in 2011, owing to the end of the 2008 temporary measures (which were phased out on 1 January 2011), declines in asset prices, various rating downgrades, and hence a generally difficult environment for issuing new uncovered bank bonds. One year later, on 1 January 2012, the permanent removal of the eligibility requirement stating that debt instruments issued by credit institutions, other than covered bank bonds, were only eligible if they were admitted to trading on a regulated market, resulted, once again, in an increase in collateral of this asset type.

Covered bonds, on the other hand, increased more consistently during the period under review, namely from €163 billion in 2007 to €454 billion in 2012. Hence, covered bonds have not only grown in importance as a source of direct funding for many financial institutions in the euro area, but they have also come to be used increasingly as collateral in Eurosystem credit operations. The use of ABSs increased from €182 billion to €490 billion between 2007 and 2010, before decreasing to €385 billion in 2012. The use of corporate bonds and other marketable assets remained contained during the same period, with an increase from €93 billion in 2007 to €173 billion in 2012.

The use of non-marketable assets increased steadily from €109 billion in 2007 to €633 billion in 2012. It should be noted that this asset category encompasses credit claims mobilised under the standard framework as well as under the ACC framework. Moreover, the use of fixed-term

**Chart 2 Use of collateral by asset type and outstanding credit**

(EUR trillions; after valuation and haircuts; averages of end-of-month data)



Source: ECB.

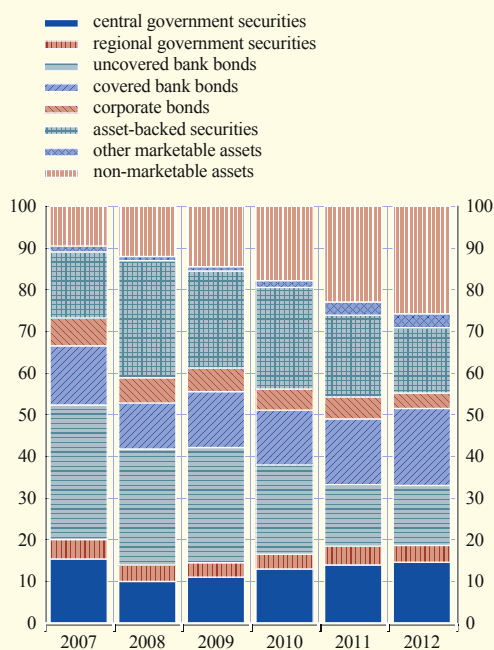
deposits, which became a permanent eligible asset on 1 January 2011, after having previously been accepted on a temporary basis, also contributed to a substantial increase in non-marketable assets posted by counterparties as collateral for Eurosystem credit operations over the last two years.

In terms of the relative weighting of each asset class in the total collateral pool, some of the shares remained stable from 2007 to 2012, while others shifted considerably (see Chart 3). Indeed, central and regional government securities, covered bonds, and corporate bonds remained around the respective averages of 16%, 14% and 5% of the total collateral posted. Conversely, the share of uncovered bank bonds decreased from 32% to 14% in the same period, while non-marketable assets jumped from 10% to 26%. As far as ABSs are concerned, their share increased from 16% in 2007 to 28% in 2008. Subsequently, the share of ABSs in the total collateral pool remained between 20% and 24%, on average, between 2009 and 2011, and stood at a level of 14% in 2012.

In 2007, there was a mix between pooled and earmarked collateral within the Eurosystem. Nowadays, collateral is generally posted in a so-called pooling system, where counterparties simply pledge a basket or pool of assets, without assigning them to a specific liquidity-providing operation.<sup>17</sup> As such, counterparties may have significant amounts of collateral posted and very little credit outstanding.<sup>18</sup> Conversely, if counterparties manage their collateral pool very effectively, they may consistently present low over-collateralisation.<sup>19</sup> Under the current fixed-rate, full allotment regime, because counterparties systematically receive the amounts they bid, the decision on how much collateral to pledge mainly depends on a trade-off or arbitrage between refinancing channels. As such, the development in the use of collateral mainly depends on the behaviour and conditions of Eurosystem counterparties. Box 2 analyses, more specifically, the developments in the average haircut applied to the collateral used by counterparties in Eurosystem monetary policy operations, along with the developments in the credit risk profile of pledged collateral, and details the main decisions concerning collateral taken by the ECB since mid-2008.

Chart 3 Use of collateral by asset type

(percentages; average of end-of-month data)



Source: ECB.

17 In an earmarking system, the collateral delivered for Eurosystem credit operations is earmarked to specific loans or reverse transactions.

18 In aggregate terms, as seen in Chart 2, the amount of total collateral posted was significantly higher than the credit drawn against it.

19 The tendency to pledge extra collateral is, among other factors, also related to costs and other factors (such as precautionary or supervisory factors). Moreover, some counterparties prefer to pledge extra collateral if the same collateral pool is also used for intraday credit.

Box 2

**DEVELOPMENTS IN AVERAGE HAIRCUTS APPLIED BY THE EUROSYSTEM**

The developments in the average haircuts mainly reflect changes in the eligibility criteria, which allowed counterparties to pledge with the Eurosystem collateral assets with a riskier profile than that accepted under the standard framework prior to 2008.

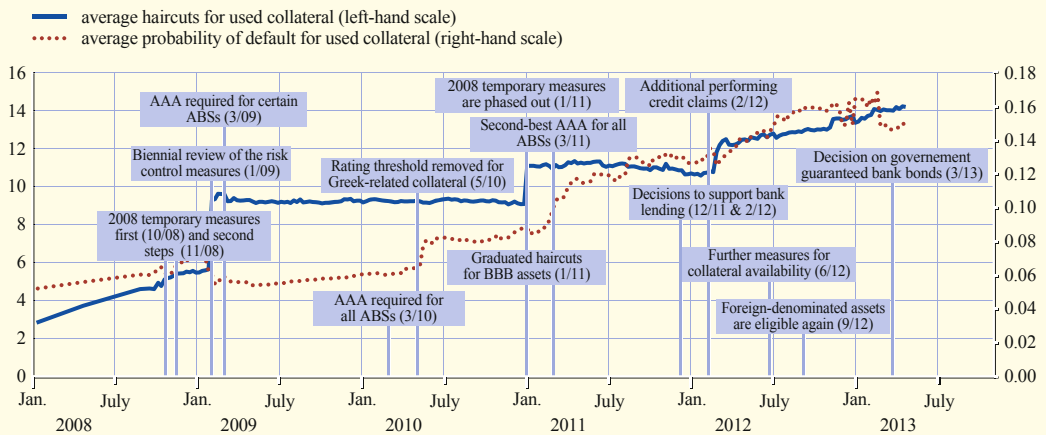
Chart A shows the developments, since 2008, in the average haircut applied to the collateral used by counterparties in Eurosystem monetary policy operations, as the set of eligible collateral was gradually expanded. The average is weighted by the amount of each asset used, after valuation and before the application of haircuts. Chart A also outlines the main decisions taken by the ECB on collateral during the period shown.

The temporary measures introduced in October and November 2008 helped to enhance the availability of collateral and thus the provision of liquidity by the Eurosystem to the banking sector. Higher haircuts or haircut add-ons were applied to the temporarily eligible new collateral in order to mitigate the risk associated with the acceptance of such collateral, which was generally riskier than that accepted under the standard framework. Moreover, and as already announced in September 2008, higher haircuts were applied to some marketable assets, as of 1 February 2009, to reflect a revised estimate of risk, generated in connection with the periodic review of the risk control framework. Thus, when compared to pre-crisis times, the average haircut had increased by around 3.6 percentage points at the beginning of 2009 to around 9.2%. During the remainder of 2009 and in early 2010, when financial markets showed signs of temporary improvements, the average haircut remained close to that level.

When tensions re-emerged in 2010, the Eurosystem announced, in April 2010, that it would continue, beyond the end of 2010, applying a minimum credit threshold to marketable and

**Chart A Average haircuts applied to the collateral used by counterparties in Eurosystem monetary policy operations (weighted by the amount of collateral used, after valuation and before the application of haircuts)<sup>1</sup>**

(percentages)



Source: ECB.

1) Average haircuts for used assets are calculated as follows:

$$\frac{\Sigma (\text{Amount used after valuation and before haircuts} * \text{valuation haircuts})}{\Sigma (\text{Amount used after valuation and before haircuts})}$$

non-marketable assets at the investment grade level (i.e. BBB-/Baa3), except in the case of asset-backed securities (ABSs). This permanent change to the standard framework, which did not have a discernible impact on the average haircut, was linked to the introduction of graduated valuation haircuts for lower-rated assets as of 1 January 2011, which aimed at ensuring risk equivalence across eligible collateral assets.

Some of the temporary measures introduced in October 2008 were phased out as of 1 January 2011. This reduced the total amount of outstanding eligible collateral and led some counterparties to use riskier assets, with higher haircuts, as collateral. As a result, the average haircut increased by around 2.0 percentage points to 11.1%.

At the end of 2011 and in the course of 2012, additional measures were taken by the Eurosystem in order to preserve and increase collateral availability, together with other measures to support bank lending and liquidity in the euro money market. This included a temporary expansion of the eligibility criteria for ABSs and the acceptance of additional performing credit claims that satisfied specific eligibility criteria. Once again, higher haircuts were applied to the additional accepted collateral in order to mitigate the increased balance sheet risk.<sup>1</sup> In early 2013, average haircuts stood at around 14%.

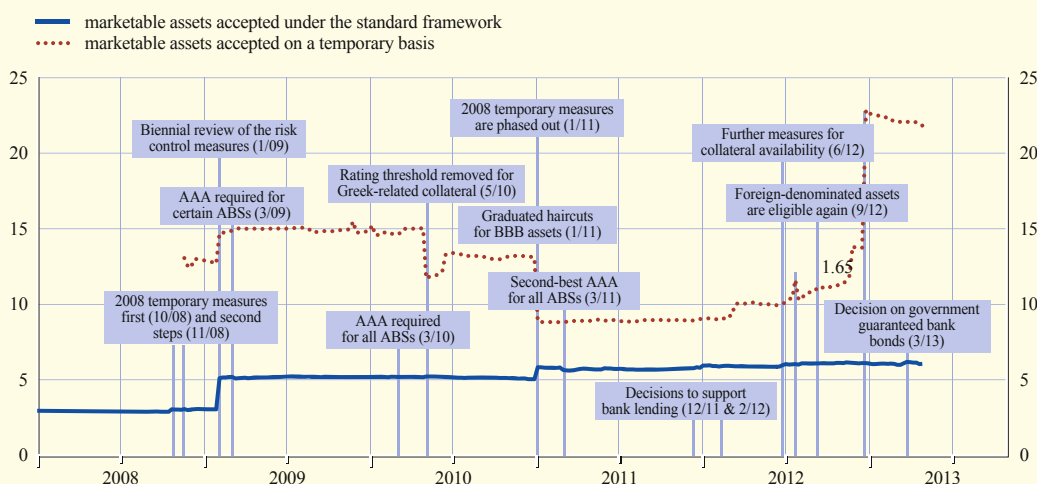
Changes in average haircuts thus reflect two factors: (i) changes in the ECB's assessment of risks, which led to changes in the applicable haircuts; and (ii) changes in the composition of the collateral used by counterparties, reflecting the counterparties' business decisions and (permanent or temporary) changes in the Eurosystem's eligibility rules for collateral, including changes related to non-standard monetary policy measures. In order to disentangle these two effects, it is useful to consider how the average haircuts applied to eligible marketable collateral (as opposed to used collateral) has developed over time (see Chart B).

Chart B reveals that the average haircut applied to the set of marketable assets, which are eligible under the standard framework, was subject to some increases each time the haircut schedule was revised. The chart also shows that higher haircuts were applied to the marketable assets, including additional ABSs, which became eligible on a temporary basis. The drop in the average haircut observed in May 2010, for example, is due to the classification of assets issued or guaranteed by the Greek government in the group of assets accepted on a temporary basis owing to the temporary nature of the rating waiver for such assets. These Greek government-linked assets lost their eligibility as collateral for Eurosystem credit operations in July 2012, as shown in the chart. In December 2012, however, the Governing Council of the ECB decided that marketable debt instruments issued or fully guaranteed by the Greek government – that fulfilled all other eligibility criteria – once again constituted eligible collateral for the purposes of Eurosystem credit operations, subject to special, higher haircuts, as reflected in the observed average haircut increase at the end of 2012. In addition, credit claims, which are not shown in Chart B, are also subject to higher haircuts and their usage has increased over recent years, in particular, but not only, on the back of the acceptance of the additional credit claims. Thus, the increase in the average haircut for used collateral observed in Chart A can primarily be attributed to changes in the composition of the assets used by counterparties as collateral, including, in particular, the use by counterparties of the assets which became eligible on a temporary basis.

<sup>1</sup> In addition, haircut add-ons or valuation mark-downs are, for example, applied by the Eurosystem for foreign currency-denominated collateral in order to compensate for the foreign exchange risk. Moreover, the responsibility resulting in the acceptance of certain marketable and non-marketable assets is borne, for some of these assets, by the specific NCB authorising their use.

**Chart B Average haircuts applied by the Eurosystem, weighted by the nominal value outstanding of all eligible marketable assets for Eurosystem credit operations<sup>1</sup>**

(percentages)



Source: ECB.

1) Average haircuts for eligible assets are calculated as follows:

$$\frac{\sum (\text{Nominal of all eligible assets} * \text{valuation haircuts})}{\sum (\text{Nominal of all eligible assets})}$$

When analysing the average haircuts applied to the collateral used by Eurosystem counterparties in monetary policy operations, it is important to isolate the effects of changes in the haircuts applied by the Eurosystem to specific assets, on the one hand, from, on the other, the effects of changes in the composition of used collateral. The latter may reflect changes in collateral eligibility rules and risk control measures but also changes in banks' business activities and structural changes in financial markets. The box shows that recent changes in the average haircuts applied to used collateral reflect, in large part, the acceptance of new collateral, under temporary measures, to which higher haircuts are applied by the Eurosystem.

#### 4 CONCLUSION

The Eurosystem collateral framework has become an important tool in supporting the efforts towards the restoration of market functioning in the euro area. This is due to both its flexibility and its breadth in terms of the wide range of collateral accepted against its credit operations. On the one hand, rapid adjustments to the collateral framework have also allowed it to cope with additional demand for collateral owing to changes in financial market conditions. On the other hand, collateral decisions targeted at very specific market segments have further supported the provision of credit to households and non-financial corporations. The mitigation of risk, and thus the protection of the Eurosystem balance sheet, has continued to play an important role within the Eurosystem collateral framework throughout the various phases of the financial crisis, as illustrated in this article. These combined ECB actions have affected, to a varying degree, the developments in the size and composition of Eurosystem collateral in terms of both eligible and used assets. The ECB's actions have affected eligible and used collateral, in combination with the modifications to the Eurosystem risk control framework, all of which echoes, to some extent, the lessons the Eurosystem has learned during the various phases of the financial crisis.

## Annex Changes in Eurosystem collateral rules and risk control measures since mid-2008

Date of announcement	Measure	Date of implementation
4 September 2008	Biennial review of the risk control measures in Eurosystem credit operations	1 February 2009
15 October 2008	Measures to further expand the collateral framework and enhance the provision of liquidity (including technical specifications)	
17 October 2008	- Technical specifications for the temporary expansion of the collateral framework	20 October 2008
12 November 2008	- Further technical specifications for the temporary expansion of the collateral framework	22 October 2008
17 November 2008	- Further technical specifications for the temporary expansion of the collateral framework	17 November 2008
20 January 2009	Adjustment of risk control measures for newly issued asset-backed securities and for uncovered bank bonds	1 March 2009/1 March 2010
20 November 2009	ECB amends rating requirements for asset-backed securities in Eurosystem credit operations	1 March 2010 for new ABSs (and 1 March 2011 for all ABSs)
8 April 2010	ECB introduces graduated valuation haircuts for lower-rated assets in its collateral framework as of 1 January 2011	1 January 2011
3 May 2010	ECB announces change in eligibility of debt instruments issued or guaranteed by the Greek government	3 May 2010
28 July 2010	ECB reviews risk control measures in its collateral framework	1 January 2011
9 October 2010	New provisions for the framework for implementation of monetary policy in the euro area – ECB publishes an updated version of the General Documentation	10 October 2010
16 December 2010	ECB refines the framework for the implementation of monetary policy in the euro area – ECB publishes an updated version of the General Documentation	1 February 2011
16 December 2010	ECB introduces ABS loan-by-loan information requirements in the Eurosystem collateral framework	Within 18 months after announcement
4 February 2011	ECB publishes an updated version of the General Documentation	1 February 2011
18 February 2011	Acceptance of Coface rating tool for the purposes of the Eurosystem credit assessment framework	18 February 2011
31 March 2011	ECB announces the suspension of the rating threshold for debt instruments issued by the Irish government	31 March 2011
29 April 2011	ECB introduces loan-by-loan information requirements for CMBSs and SME transactions	Within 18 months after announcement
7 July 2011	ECB announces change in eligibility of debt instruments issued or guaranteed by the Portuguese government	7 July 2011
21 September 2011	ECB publishes an updated version of the General Documentation	1 January 2012
8 December 2011	ECB announces measures to support bank lending and money market activity	19 December 2011 (for ABSs) 9 February 2012 (for additional credit claims)
9 February 2012	ECB approves eligibility criteria for additional credit claims	9 February 2012
28 February 2012	Temporary suspension of eligibility of bonds issued or guaranteed by the Greek government as collateral in Eurosystem credit operations	28 February 2012
8 March 2012	Eligibility of bonds issued or guaranteed by the Greek government as collateral in Eurosystem credit operations	8 March 2012
21 March 2012	Acceptance of certain government-guaranteed bank bonds	23 March 2012
4 April 2012	Information requirement to address modifications to asset-backed securities; compliance of third party rating tools with the Basel II definition of default; and acceptance of credit reform rating AG as rating tool for the purpose of the ECAF	4 April 2012

## Annex Changes in Eurosystem collateral rules and risk control measures since mid-2008 (cont'd)

Date of announcement	Measure	Date of implementation
10 May 2012	Loan-level data templates for new classes of asset-backed securities	18 May 2012
22 June 2012	ECB takes further measures to increase collateral availability for counterparties	22 June 2012
3 July 2012	Measures relating to the eligibility of government-guaranteed bank bonds as Eurosystem collateral; compliance with the Basel II definition of default; acceptance of the third wave of national frameworks for additional credit claims; implementation of the loan-level data reporting requirements for asset-backed securities; enhanced transparency for data on operations	3 July 2012
20 July 2012	Collateral eligibility of bonds issued or guaranteed by the Greek government	25 July 2012
6 September 2012	Measures to preserve collateral availability, including changes in the eligibility for central government assets and expansion of the list of assets eligible to be used as collateral	10 October 2012 (adoption of legal acts for expanding the list of assets eligible to be used as collateral)
17 September 2012	Common Eurosystem Pricing Hub (CEPH)	21 September 2012
27 September 2012	Annual review of the list of acceptable non-regulated markets and issuers classified as agencies	27 September 2012
9 November 2012	Uniform minimum size threshold for the acceptance of credit claims as collateral was postponed	9 November 2012
27 November 2012	ECB announces rescheduling of loan-level data reporting requirements	3 January 2013 1 March 2013 1 January 2014
28 November 2012	ECB publishes amendments to the General Documentation	3 January 2013
19 December 2012	ECB announces change in eligibility of debt instruments issued or guaranteed by the Greek government	21 December 2012
19 December 2012	Acceptance of Banka Slovenije's credit assessment system for the purposes of the Eurosystem credit assessment framework	19 December 2012
22 March 2013	ECB announces changes to the use as collateral of certain uncovered government-guaranteed bank bonds	1 March 2015

# IS THERE A RISK OF A CREEPING RISE IN TRADE PROTECTIONISM?

## ARTICLES

Is there a risk of a creeping rise in trade protectionism?

*The protectionist response to the financial crisis is generally believed to have been muted, which appears surprising in the light of evidence of a counter-cyclical relationship between trade protectionism and business cycles in the pre-crisis period. Some observers have argued that structural shifts in the global trade landscape may have eliminated this counter-cyclical relationship. Others have pointed to an underestimation of protectionist activity since the financial crisis, owing to a change in the nature of contemporary trade policies, which, it is argued, have increasingly tended towards “murky” measures. This article sheds light on these issues by presenting evidence concerning recent and longer-term trends in trade protectionism, and by showing that, while the immediate response to the financial crisis was markedly protectionist, these pressures abated quickly and soon reverted to longer-term trends. However, this article also demonstrates that the relationship between trade protectionism and business cycles has continued to be counter-cyclical since the financial crisis, suggesting that the spectre of protectionism has not been banished. Thus, and especially in the light of the sluggish recovery in many advanced economies, ever more forceful efforts must be made to strengthen peer pressure, monitoring and international cooperation, in order to prevent a creeping rise in trade protectionism.*

## I INTRODUCTION

The sharp global economic downturn following the financial crisis and the sluggish recovery, in many advanced economies in particular, have nurtured fears that governments may resort to protectionist policies in order to support their economies by sheltering them from foreign competition. The Great Depression in the 1930s vividly illustrated that protectionist policies, especially in response to common shocks, are likely to trigger retaliation, pushing the global economy into an even deeper recession. While the creation of the General Agreement on Tariffs and Trade and its successor, the World Trade Organization (WTO), makes it unlikely that the world economy will see a repeat of the spiral into protectionism that occurred during the Great Depression, fears of a creeping rise in trade protectionism still persist, especially in the light of the sluggish recovery in many economies. Against this background, G20 leaders have repeatedly declared that they will refrain from erecting barriers to trade.<sup>1</sup>

In order to monitor global trends in trade policy following the financial crisis, various trade watchdogs have been created. However, these bodies have, to a certain extent, produced diverging assessments regarding the extent to which trade policies have been discriminatory.<sup>2</sup> Specifically, while Global Trade Alert (GTA) comes to the conclusion that attempts to refrain from protectionism have been a “débâcle”<sup>3</sup>, the reports released by the WTO and the European Commission claim that the protectionist response to the financial crisis has been muted.<sup>4</sup>

1 See, for instance, *Leaders' Statement – The Pittsburgh Summit*, G20, Pittsburgh, September 2009; *Statement of G20 Finance Ministers and Central Bank Governors – The Cannes Summit*, G20, Cannes, 8 August 2011; and *Communiqué – G20 Meeting of Finance Ministers and Central Bank Governors*, G20, Washington, April 2013.

2 See Bown, C., *Import protection update: antidumping, safeguards, and temporary trade barriers through 2011*, voxeu.org column, 18 August 2012, available at <http://www.voxeu.org>

3 See Evenett, S., *Débâcle: The 11<sup>th</sup> GTA Report on Protectionism*, Global Trade Alert, Centre for Economic Policy Research, London, June 2012.

4 The following academic studies draw the same conclusions: Kee, H., Neagu, C. and Nicita, A., “Is Protectionism on the Rise? Assessing National Trade Policies during the Crisis of 2008”, *Policy Research Working Paper*, No 5274, World Bank, April 2010; and Vandenbussche, H. and Viegelaan, C., “No Protectionist Surprises: EU Antidumping Policy Before and During the Great Recession”, *Discussion Paper*, No 2011-21, Institut de Recherches Économiques et Sociales, Université catholique de Louvain, Louvain-la-Neuve, May 2011.



In the light of the firmly established empirical evidence for a counter-cyclical relationship between trade protectionism and business cycles in the pre-crisis period<sup>5</sup>, a muted protectionist response to the financial crisis may appear surprising. Based on historical evidence, one would have expected a pronounced protectionist response to the global recession triggered by the financial crisis, as well as to the sluggish recovery observed, in particular, in many advanced economies. Against this background, limited protectionist activity would raise the question of whether the relationship between trade protectionism and business cycles continues to be counter-cyclical, or whether recessions have ceased to give rise to calls for support against foreign competition. On the one hand, structural shifts in the global trade landscape (such as the increasing vertical fragmentation of supply chains across countries as a result of globalisation, the proliferation of trade agreements and the narrowing of policy space owing to WTO rules and regulations) may have eliminated the counter-cyclical relationship between trade protectionism and business cycles. On the other hand, it could also be the case that one-off factors, such as favourable exchange rate movements, have temporarily offset demands for protectionism. Moreover, it has also been argued that recourse to protectionism since the financial crisis has been underestimated, because trade policies nowadays consist of more subtle and difficult-to-detect state measures.<sup>6</sup> In particular, it has been argued that governments have increasingly resorted to non-traditional, “murky” protectionism, which consists of state measures that exploit legitimately created policy space in international trade agreements (such as health and safety regulations), or domestic policies that are beyond the reach of these agreements. The common thread running through these two types of state measure is that they (at least potentially) discriminate against foreign producers.

The remainder of this article is structured as follows. Section 2 presents and discusses the findings of various trade watchdogs concerning recent trends in trade protectionism. Section 3 presents an in-depth analysis of the most comprehensive database of trade policy measures implemented since the financial crisis. It demonstrates that, while there was a notably protectionist response in the immediate aftermath of the financial crisis, protectionist pressures quickly abated. Section 4 puts recent trends in trade protectionism into historical perspective, and shows that trade policies have reverted to pre-crisis trends. Section 5 presents empirical evidence showing that the relationship between trade protectionism and business cycles continues to be counter-cyclical.

## 2 TRADE WATCHDOGS' ASSESSMENTS OF TRENDS IN PROTECTIONISM

Existing assessments of trends in trade protectionism since the financial crisis are mainly based on the following three report series: the WTO's “Report on G20 Trade Measures”<sup>7</sup>, the European Commission's “Report on Potentially Trade Restrictive Measures” and GTA's “GTA Report on Protectionism”.

5 See, for example: Knetter, M. and Prusa, T., “Macroeconomic factors and antidumping filings: evidence from four countries”, *Journal of International Economics*, Vol. 61, No 1, October 2003, pp. 1-17; Irwin, D., “The Rise of US Anti-dumping Activity in Historical Perspective”, *The World Economy*, Vol. 28, No 5, May 2005, pp. 651-668; and Bown, C. and Crowley, M., “Import protection, business cycles, and exchange rates: Evidence from the Great Recession”, *Journal of International Economics*, Vol. 90, No 1, May 2013, pp. 50-64.

6 See Evenett, S. and Baldwin, R. (eds.), *The collapse of global trade, murky protectionism, and the crisis: recommendations for the G20*, Centre for Economic Policy Research, London, March 2009; and Evenett, S. and Wermelinger, M., “Chapter I – A snapshot of contemporary protectionism: how important are the murkier forms of trade discrimination?”, *Rising Non-Tariff Protectionism and Crisis Recovery: A study by the Asia-Pacific Research and Training Network on Trade*, United Nations Economic and Social Commission for Asia and the Pacific, 2010, pp. 8-26.

7 The WTO publishes an additional report on trade-related developments covering trade-related measures implemented by all WTO members and observers. The key findings of this second report are consistent with those of the WTO's “Report on G20 Trade Measures”.

The WTO reports focus on traditional trade policy measures, such as tariffs adjusted in line with WTO commitments and trade defence measures (antidumping, safeguards and countervailing duties) that are consistent with WTO rules and regulations. In its latest report, the WTO states that the rate of implementation of trade-restrictive measures in G20 economies has been broadly stable since the financial crisis, and that it even slowed between May and October 2012 (the period covered by the latest report). Overall, the WTO concludes that the “world has so far avoided a serious protectionist breakout” since the financial crisis.<sup>8</sup> Nevertheless, it also emphasises that the accumulation of trade-restrictive measures remains a concern, and that the ongoing weakness of the world economy might undermine policy-makers’ determination to resist trade protectionism.

The European Commission reports monitor trade-related measures implemented by the EU’s main trading partners (in the most recent report, the number of monitored trading partners has reached 31). The reports consider both traditional trade policy measures, such as tariffs and trade defence measures, and non-traditional, “murky” state measures. While acknowledging that “major recourse to trade protectionism has to a large extent been avoided” in recent years, the latest report warns that “the risk of protectionism is still present”.<sup>9</sup> In particular, the report reveals that, in the eight months prior to May 2012 (the publication date of the latest report), the EU’s trading partners accelerated “the pace of introduction of new measures”.<sup>10</sup>

The GTA reports monitor a wide range of both traditional and non-traditional trade policy measures that have been implemented by more than 140 countries since the end of 2008, including tariffs, trade defence measures and technical barriers to trade, as well as state aid and bailout measures. The three most recent GTA reports conclude with rather negative assessments of trade policy since the financial crisis. They suggest that protectionist pressures are “mounting”<sup>11</sup>, and that governments have not honoured their pledges to refrain from erecting trade barriers, as there has been a steady stream of newly implemented trade-restrictive measures since 2008.<sup>12</sup>

In summary, while all three trade watchdogs share the concern that the sluggish global economic recovery increases the risk that governments might resort to trade-restrictive policies, their assessments diverge with respect to the intensity of protectionist activity since the financial crisis.<sup>13</sup> Specifically, while the WTO and Commission reports conclude that trade policy during the recovery from the financial crisis has not been particularly protectionist, the GTA report is significantly less sanguine. Unfortunately, all reports suffer from peculiarities that compromise the validity of their assessments. For example, the WTO reports focus on WTO-consistent trade policy measures and ignore “murky” protectionism. The Commission reports only consider the EU’s main trading partners but not the EU itself, despite the fact that the latter accounts for a significant share of world trade and trade policies. Finally, the GTA reports do not account for the fact that the underlying data suffer from a reporting lag bias (see box), which blurs the analysis of the intensity of protectionist pressures over time. In addition, none of the reports compare their findings concerning recent trends in protectionist policies with longer-term trends from the pre-crisis period. Against this background and using GTA data, the next section presents an in-depth analysis of trends in trade policy since the start of the financial crisis.

8 See *Report on G20 Trade Measures*, World Trade Organization, May 2012.

9 See *Ninth Report on Potentially Trade Restrictive Measures*, Directorate General for Trade, European Commission, 6 June 2012.

10 *ibid.*

11 See Evenett, S., *Trade Tensions Mount: The 10<sup>th</sup> GTA Report*, Global Trade Alert, Centre for Economic Policy Research, London, November 2011.

12 See Evenett, S., *Débâcle: The 11<sup>th</sup> GTA Report on Protectionism*, *op. cit.*; and Evenett, S., *Protectionism’s Quiet Return: GTA’s Pre-G8 Summit Report*, Global Trade Alert, Centre for Economic Policy Research, London, June 2013.

13 See Bown, C., *op. cit.*

### 3 GLOBAL TRADE ALERT DATA

GTA is an independent initiative that was created in 2008 in order to monitor global trade policy, and that has since established a comprehensive database on trade policy measures. For each newly implemented trade policy measure reported in its database, GTA provides information on the following: trade policy measure category; whether the measure is trade-restrictive or trade-liberalising; date of implementation; date reported in the GTA database; duration for which the measure will be in place; and countries, sectors and product lines affected. As of April 2013, the GTA database contains information on around 2,600 trade policy measures that have been implemented by more than 140 countries since 2008. The data are collected by regional GTA nodes that monitor trade policies in their region. In addition to the regional nodes, third parties are also encouraged to report the implementation of trade policy measures.<sup>14</sup>

Importantly, GTA also monitors the implementation of “murky” measures, i.e. policy measures that possibly abuse policy space granted under WTO rules, or that are beyond the latter’s reach, in order to discriminate against foreign producers. This is the key factor that makes the GTA database

**Table I Number of trade-related measures and percentage of total measures per category in the Global Trade Alert database**

Category	Number of trade-restrictive measures	Percentage of all trade-restrictive measures	Number of trade-liberalising measures	Percentage of all trade-liberalising measures
<b>“Murky” measures</b>				
Bailout/state aid measure	457	22.1	3	0.5
Consumption subsidy	10	0.5	3	0.5
Intellectual property protection	3	0.1	1	0.2
Investment measure	90	4.4	76	12.9
Local content requirement	45	2.2	2	0.3
Migration measure	92	4.5	52	8.8
Non-tariff barrier	171	8.3	23	3.9
Other service sector measure	24	1.2	7	1.2
Public procurement	52	2.5	2	0.3
Sanitary and phytosanitary measure	18	0.9	4	0.7
State trading enterprise	7	0.3	0	0.0
State-controlled company	27	1.3	1	0.2
Sub-national government measure	5	0.2	0	0.0
Technical barrier to trade	19	0.9	14	2.4
Trade finance	32	1.5	0	0.0
	1,052	50.9	188	31.9
<b>Traditional measures</b>				
Competitive devaluation	6	0.3	0	0.0
Export subsidy	63	3.0	3	0.5
Export taxes or restrictions	131	6.3	41	7.0
Import ban	49	2.4	6	1.0
Import subsidy	8	0.4	4	0.7
Quota (including tariff rate quotas)	34	1.6	11	1.9
Tariff measure	274	13.3	318	54.1
Trade defence measure	449	21.7	17	2.9
	1,014	49.0	400	68.1
<b>Total</b>	<b>2,066</b>		<b>588</b>	

Source: Global Trade Alert.

Notes: The data cover 143 countries from the fourth quarter of 2008 to the first quarter of 2013. The table only presents those measures for which GTA provides the date of implementation.

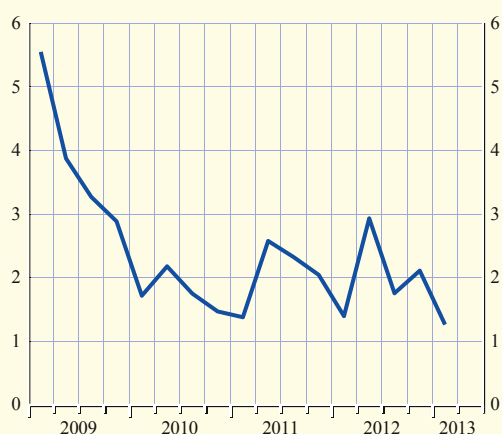
<sup>14</sup> Note, however, that third-party reporting may lead to an overestimation of protectionist activity by countries that communicate their trade policy in a more transparent manner.

the most comprehensive source of information on trade policy measures implemented since the financial crisis. Table 1 presents the number of newly implemented trade policy measures for each category reported in the GTA database as of April 2013, and illustrates that “murky” protectionism has been a quantitatively important dimension of trade policy since the financial crisis.<sup>15</sup>

Unfortunately, a descriptive analysis of recent trends in trade protectionism using GTA data is not straightforward. As described in the box, the time series variation in the GTA data is distorted owing to reporting lags, which blur the comparison of the number of newly implemented trade-related measures over time.<sup>16</sup> One way to address this distortion is to consider the ratio between newly implemented trade-restrictive measures and newly implemented trade-liberalising measures in each quarter (see Chart 1).<sup>17</sup> This metric suggests that the immediate response to the financial crisis was, in fact, notably protectionist: at the height of the financial crisis, the number of newly implemented trade-restrictive measures was substantially larger than the corresponding number of trade-liberalising measures. This spike was primarily due to the widespread use of bailout and state aid measures, which accounted for 40% of all trade-restrictive measures implemented at the height of the financial crisis (about 75% of these bailout measures were implemented in advanced economies). However, protectionist activity quickly subsided after the immediate spike, and has been broadly stable since then (see Chart 1).

Regarding the distribution of protectionist trade policies across countries, the GTA data suggest that G20 economies accounted for the bulk of trade-restrictive measures implemented since the

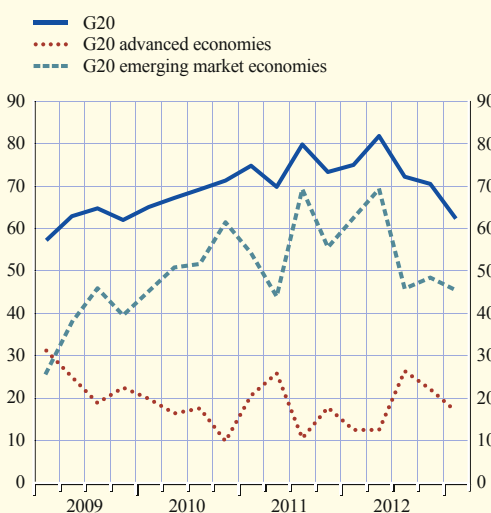
**Chart 1 Ratio between newly implemented trade-restrictive measures and newly implemented trade-liberalising measures**



Sources: Global Trade Alert and ECB staff calculations.

**Chart 2 Proportion of total trade-restrictive measures implemented by G20 economies**

(percentages)



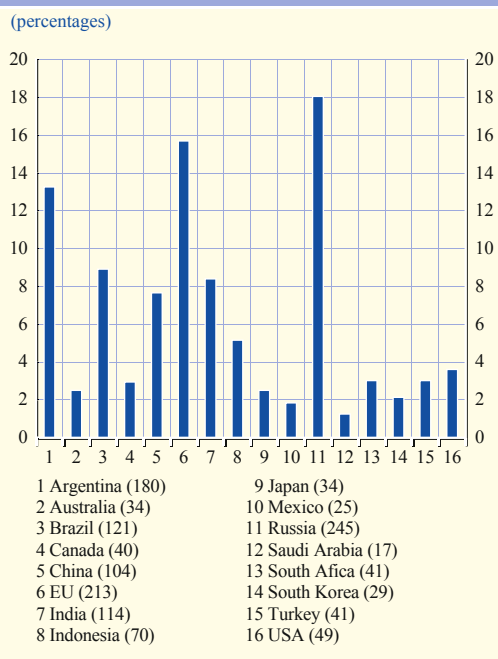
Sources: Global Trade Alert and ECB staff calculations.

<sup>15</sup> See also Evenett, S. and Baldwin, R. (eds.), *op. cit.*; and Evenett, S. and Wermelinger, M., *op. cit.*

<sup>16</sup> When evaluating protectionist pressures, both the trade watchdogs' reports and the academic literature (such as Knetter, M. and Prusa, T., *op. cit.* or Bown, C. and Crowley, M., *op. cit.*) typically only consider the number of newly implemented trade-restrictive measures, rather than the proportion of a country's total trade volume affected by them. This is due to missing information concerning the potentially heterogeneous impact of different trade policy measures on actual trade flows, the lack of sufficiently disaggregated trade flow data and the difficulties in identifying affected products.

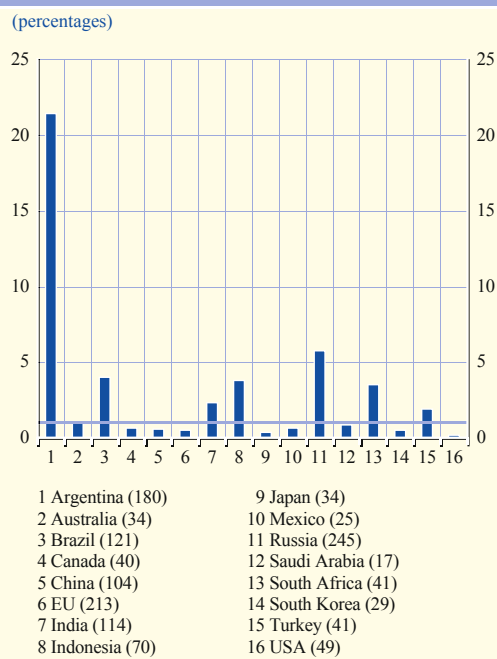
<sup>17</sup> The number of newly implemented trade-restrictive measures includes the number of expiring trade-liberalising measures (and vice versa).

**Chart 3 G20: proportion of the total number of newly implemented trade restrictive measures accounted for by individual countries**



Sources: Global Trade Alert and ECB staff calculations.  
 Note: The numbers in parentheses represent the number of trade restrictive measures implemented by that country since 2009.

**Chart 4 G20: ratio between each country's share of newly implemented trade-restrictive measures and its share of total G20 imports**



Sources: Global Trade Alert and ECB staff calculations.  
 Notes: The solid horizontal line is drawn at the value of unity. The numbers in parentheses represent the number of trade restrictive measures implemented by that country since 2009.

financial crisis, ranging from 60% to 80% of all measures implemented globally (see Chart 2). Within the G20, emerging market economies (EMEs) have been responsible for the majority of the trade-restrictive measures implemented since 2009, with the first quarter of 2009 being a brief exception that largely reflects the widespread recourse to bailout and state aid measures by advanced economies, as stated above.

At the level of individual G20 countries, the EU and a few EMEs (in particular Argentina and Russia) have been among the most active in erecting trade barriers since the financial crisis (see Chart 3). However, relating a country's share of newly implemented trade-restrictive measures to its share of total G20 imports shows that only G20 EMEs stand out as having contributed disproportionately to crisis-era protectionism (see Chart 4).<sup>18</sup> Specifically, while Argentina, Brazil, India, Indonesia, Russia, South Africa and Turkey account for 60% of all trade-restrictive measures implemented since 2009 and reported by GTA, they only account for 13% of G20 imports.<sup>19</sup> By contrast, G20 EU countries (France, Germany, Italy and the United Kingdom), Japan and the United States only account for 22% of trade-restrictive measures implemented since 2009 and reported by GTA, while their share of G20 imports amounts to 59%.

18 The proportion of G20 imports accounted for by EU countries is calculated by adding together the proportion of imports accounted for by France, Germany, Italy and the United Kingdom.

19 Almost all trade-restrictive measures implemented by Argentina refer to non-tariff barriers, in particular trade defence measures and the introduction of reference prices for imported products. For Russia, the bulk of the trade-restrictive measures are bailout, state aid and tariff measures (the latter were implemented prior to Russia's WTO accession in August 2012).

## Box

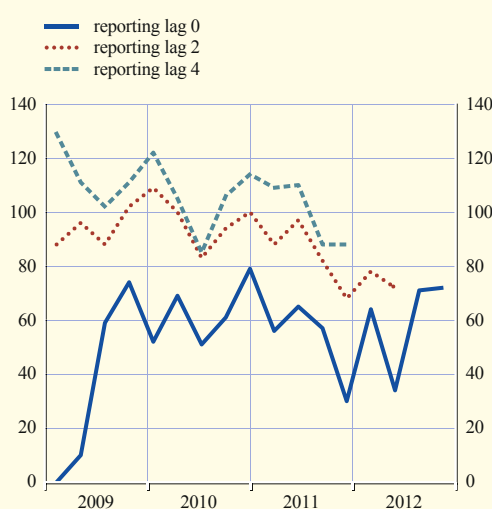
## ADDRESSING REPORTING LAGS IN THE GTA DATASET

Since national governments are not required to report to GTA when they implement a trade policy measure, GTA must carry out its own data gathering. As a result, the implementation of a trade-related measure may be detected and reported by GTA with a time lag, which blurs the comparison of the number of trade policy measures that were implemented at two different points in time. For example, it is unclear whether a decline in the number of newly implemented trade-restrictive measures in the raw GTA data is due to weakening protectionist momentum, or the fact that by April 2013 the GTA staff have had far less time to detect and report trade-restrictive measures that were implemented in 2013 than to detect those that were implemented in 2009. The problem of reporting lags in the GTA data can be addressed by considering the number of newly implemented trade-restrictive measures reported by GTA up to a fixed reporting lag.

The chart plots the number of trade-restrictive measures that were implemented in period  $t$  and reported in the GTA database in period  $t+h$ . For example, the solid line depicts trade-restrictive measures that were detected by GTA in the same quarter in which they were implemented (i.e. at reporting lag zero,  $h=0$ ). The dashed line reflects the number of measures that were detected by GTA no more than four quarters after they were implemented. Specifically, no trade-restrictive measures were both implemented and also reported by GTA in the first quarter of 2009, that is, with a reporting lag of zero.<sup>1</sup> By contrast, by the first quarter of 2010 (i.e. up to a reporting lag of four) GTA had reported approximately 125 trade-restrictive measures that were implemented in the first quarter of 2009.

<sup>1</sup> In the first quarter of 2009, GTA was a relatively new initiative, so it is likely that data gathered at the beginning of 2009 were incomplete. This would explain the absence of reported trade-restrictive measures at reporting lag zero for the beginning of 2009.

Number of newly implemented trade-restrictive measures at fixed reporting lags



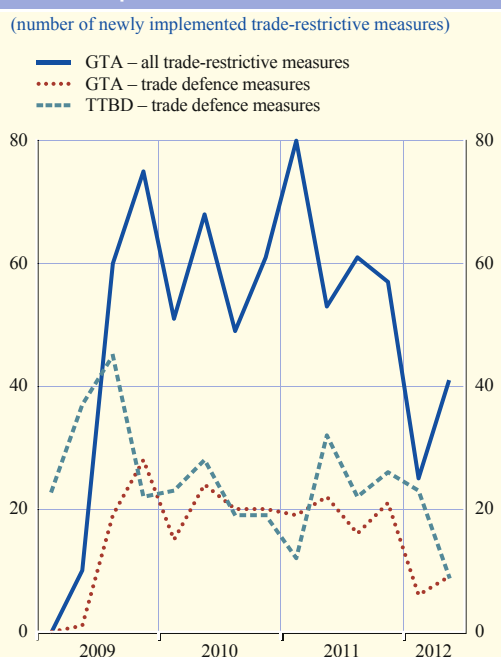
Sources: Global Trade Alert and ECB staff calculations.

#### 4 RECENT TRENDS FROM A HISTORICAL PERSPECTIVE

Since the GTA database does not cover the period prior to 2009, it cannot be used to assess whether recent trends in trade policy are a continuation of longer-term trends, or whether they constitute a move towards more protectionist trade policies. In order to put recent and longer-term trends in trade protectionism into perspective, this section makes use of the data contained in the World Bank's Temporary Trade Barriers Database (TTBD)<sup>20</sup>. The TTBD documents trade defence policies of most G20 economies, and includes records for the pre-crisis period. If trends in trade defence policy are sufficiently correlated with trends in overall trade policy, including “murky”

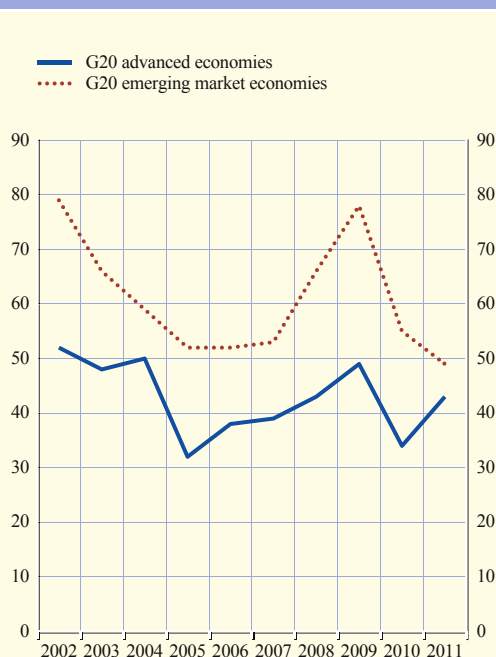
<sup>20</sup> See Bown, C., *Temporary Trade Barriers Database*, World Bank, Washington, DC, 2010, available at <http://www.worldbank.org>

**Chart 5 Trade defence measures reported in the GTA database and the TTBD, and all trade-restrictive measures reported in the GTA database**



Sources: Global Trade Alert and Temporary Trade Barriers Database.  
Note: Only GTA measures with a reporting lag of zero are included (see the box for more information).

**Chart 6 Number of newly implemented trade defence measures in TTBD data**



Source: Bown, C., Temporary Trade Barriers Database, op. cit.  
Notes: Trade defence measures comprise antidumping investigations, countervailing duties and safeguards. G20 advanced economies include Canada, EU countries, South Korea and the United States. G20 emerging market economies include Argentina, Brazil, China, India, Indonesia, Mexico, South Africa and Turkey.

measures, the TTBD may be used as a proxy for overall protectionist pressures in the pre-crisis period. Descriptive analysis suggests that the dynamics of trade defence measures reported in the TTBD data can indeed be used to draw conclusions about general trends in trade protectionism. Moreover, Chart 5 shows that there is both a strong correlation between the TTBD data and the number of newly implemented trade defence measures reported in the GTA database, and also between the dynamics of trade defence measures reported in the GTA data and the trend in newly implemented trade-restrictive measures across all categories.

A comparison of recent and longer-term trends in trade protectionism based on TTBD data suggests that the rate of implementation of trade-restrictive measures has not accelerated since the financial crisis, compared with the pre-crisis period. Following a temporary spike in 2008 and 2009, and consistent with the picture emerging from the analysis of the GTA data, the total number of temporary trade barriers implemented by G20 economies quickly fell. Importantly, the analysis of the TTBD data also suggests that protectionist activity reverted to longer-term trends in 2010 and 2011 (see Chart 6). Regarding differences in the implementation of temporary trade barriers across G20 advanced economies and G20 EMEs, the TTBD data suggest that G20 EMEs accounted for the bulk of protectionist policies over the period under review, which is again consistent with the picture portrayed by the GTA data analysed in Section 3.

## 5 GROWTH, COMPETITIVENESS AND TRADE PROTECTIONISM SINCE THE FINANCIAL CRISIS<sup>21</sup>

Empirical studies of the period prior to the financial crisis have found that governments erected more trade barriers whenever their economies experienced weaker growth and suffered losses in price competitiveness. Moreover, governments tended to impose more trade-restrictive measures vis-à-vis economies that were experiencing their own business cycle downturns.<sup>22</sup> The limited protectionist activity during the recovery from the 2008/09 recession documented in the previous two subsections raises the question as to whether this relationship has continued to hold true over recent years, or whether structural changes have led to a breakdown of this relationship.

On the one hand, the absence of a pronounced and persistent protectionist response to the financial crisis (by contrast with the short-lived spike apparent in the GTA and TTBD data) might reflect the disappearance of this relationship, owing to structural shifts in the global trade landscape, for example.<sup>23</sup> On the other hand, it could be the case that the demand for protectionist trade policies has been dampened temporarily despite widespread weak growth, possibly owing to cyclical factors such as favourable exchange rate developments in hard-hit economies, fiscal stimulus packages and adequate social safety nets.

In order to analyse whether the relationship between trade protectionism, growth and competitiveness has continued to hold true since the financial crisis, this section again makes use of the GTA database of trade-related measures. As described in Section 3, the GTA data cover a wide array of trade policies beyond traditional tariff and trade defence measures, in particular “murky” protectionist policies. The sample used covers the period from the first quarter of 2009 to the second quarter of 2012 and includes trade-restrictive measures implemented by G20 economies.<sup>24</sup> The empirical model relates the number of trade-restrictive measures implemented by each G20 economy against a trading partner to the corresponding real bilateral exchange rate, real domestic GDP growth and the trading partner’s real GDP growth.<sup>25,26</sup>

The results for the baseline specification are presented in the first column of Table 2. The estimated elasticities suggest that the relationship between growth, competitiveness and protectionist activity remained valid during the period under review. A one percentage point appreciation (increase) in the real bilateral exchange rate was typically associated with a 1.0% increase in the number of newly implemented trade-restrictive measures, while a one percentage point reduction in GDP growth of the implementing G20 country led to a 4.4% increase in the number of newly implemented trade-restrictive measures. At the same time, the trade policies of G20 economies were unrelated to their trading partners’ GDP growth. This result contrasts with the evidence for the period prior to the financial crisis, according to which governments erected more trade barriers

21 This section is based on Georgiadis, G. and Gräß, J., “Growth, competitiveness and trade protectionism during the Great Recession”, mimeo.

22 See Knetter, M. and Prusa, T., op. cit.; Irwin, D., op. cit.; and Bown, C. and Crowley, M., op. cit.

23 See also: Bown, C. and Crowley, M., “Emerging Economies, Trade Policy, and Macroeconomic Shocks”, *Working Paper Series*, No 2012-18, Federal Reserve Bank of Chicago, Chicago, January 2013; Gawande, K., Hoekman, B. and Cui, Y., “Determinants of Trade Policy Responses to the 2008 Financial Crisis”, *Policy Research Working Paper*, No 5862, World Bank, October 2011; and Dadush, U., Shimelse, S. and Odell, R., “Is Protectionism Dying?”, *The Carnegie Papers*, Carnegie Endowment for International Peace, May 2011.

24 Measures implemented after the second quarter of 2012 are removed in order to limit the possible impact on the empirical results of reporting lags in the GTA data.

25 Owing to the count nature of the dependent variable, a negative binomial regression model is estimated. For a similar approach, see Knetter, M. and Prusa, T., op. cit.; Bown, C. and Crowley, M., “Import protection, business cycles, and exchange rates: Evidence from the Great Recession”, op. cit.; and Bown, C. and Crowley, M., “Emerging Economies, Trade Policy, and Macroeconomic Shocks”, op. cit.

26 Period-specific dummy variables are used to control for distortions arising from reporting lags in the time series variation of the GTA data.



**Table 2 Estimated elasticities of newly implemented trade-restrictive measures with respect to selected business cycle variables**

(percentages)

	G20 versus G20 and non-G20	G20 advanced economies versus G20 and non-G20	G20 emerging market economies versus G20 and non-G20	G20 versus G20	G20 versus non-G20
Real bilateral exchange rate	1.0%***	1.3%***	0.8%***	0.7%***	1.2%***
GDP growth of implementing economy	-4.4%***	-11.3%***	-3.1%***	-4.7%***	-4.4%***
GDP growth of affected economy	0.0%	-0.4%	0.1%	-0.5%	0.2%

Sources: Global Trade Alert and ECB calculations.  
 Note: \*, \*\* and \*\*\* indicate that the level of significance of the corresponding elasticities are 1%, 5% and 10% respectively.

against economies experiencing a decline in growth.<sup>27</sup> This change in policy may partly explain the limited recourse to trade protectionism since 2008/09. Finally, the results suggest that the documented relationship between trade protectionism, growth and competitiveness also applies to non-traditional, “murky” trade policies that go beyond traditional tariff and trade defence measures, at least during the period under review.<sup>28, 29</sup>

Refinements to the baseline specification shed light on the question of whether trade policy responses to growth and competitiveness dynamics since the financial crisis have differed across implementing and affected country groups. The findings for the samples that are split by implementing country group suggest that the relationship between trade protectionism, growth and competitiveness has continued to hold true during the recovery from the 2008/09 recession, both for G20 advanced economies and G20 EMEs (see the second and third columns of Table 2). However, trade policies of G20 advanced economies have responded significantly more strongly to the domestic economy than those of G20 EMEs. In G20 advanced economies, a one percentage point appreciation (increase) in the real bilateral exchange rate was typically associated with a 1.3% increase in the number of newly implemented trade-restrictive measures, compared with a more modest increase of 0.8% in G20 EMEs. The same can be seen in the response to a one percentage point reduction in the GDP growth of the implementing country. For G20 advanced economies, this led to an 11.3% increase in the number of newly implemented trade-restrictive measures, while for G20 EMEs it only led to a 3.1% increase.<sup>30, 31</sup>

Regarding differences in G20 economies’ trade policies across affected trading partners, refinements to the baseline specification suggest that the relationship between trade protectionism, growth and competitiveness has continued to hold true during the recovery from the 2008/09 recession, regardless of whether or not the affected trading partner is a G20 economy (see the fourth and fifth columns of Table 2). Quantitative differences in the elasticities imply,

27 See Crowley, M., “Cyclical Dumping and US Antidumping Protection: 1980-2001”, *Working Paper Series*, No 2007-21, Federal Reserve Bank of Chicago, Chicago, January 2011; and Bown, C. and Crowley, M., “Import protection, business cycles, and exchange rates: Evidence from the Great Recession”, op. cit.

28 Sensitivity results suggest that the relationship holds true even when changes are made to the dependent variable used, in particular: (i) restricting the dependent variable to trade defence measures only; (ii) excluding trade defence measures; and (iii) replacing the number of newly implemented trade-restrictive measures with the difference between the number of trade-restrictive and trade-liberalising measures implemented in each quarter.

29 For both the real bilateral exchange rate and domestic GDP growth, these elasticities are quantitatively similar to estimates for the pre-crisis period in the academic literature (see, for example, Knetter, M. and Prusa, T., op. cit.; and Bown, C. and Crowley, M., “Import protection, business cycles, and exchange rates: Evidence from the Great Recession”, op. cit.).

30 The differences are statistically significant.

31 It should be noted that this result is consistent with the findings in Section 3. While trade policies of G20 advanced economies were more sensitive to the business cycle, G20 EMEs implemented more trade-restrictive measures overall.

however, that G20 trade policies were less responsive to competitiveness dynamics when implementing trade-restrictive measures against other G20 economies than against non-G20 economies. In response to a one percentage point appreciation in the real bilateral exchange rate, there was a 0.7% increase in the number of trade-restrictive measures implemented by G20 economies against other G20 economies. By contrast, the same loss in competitiveness resulted in a 1.2% increase in the number of newly implemented trade-restrictive measures vis-à-vis non-G20 economies.<sup>32</sup>

## 6 CONCLUSION

The Great Depression in the 1930s demonstrated that a sharp and widespread economic downturn may lead to an extensive protectionist policy response. Moreover, these protectionist policies are widely believed to have triggered retaliatory action, which further deepened the economic recession. Against this background, as early as 2008 G20 leaders expressed their concern about countries resorting to trade protectionism and appealed for restraint. An analysis of trade policies implemented since 2009, based on the comprehensive GTA database (which includes information on “murky” protectionism in addition to traditional trade policies), suggests that the initial response to the financial crisis was markedly protectionist. However, the move towards protectionism quickly abated after the peak of the financial crisis, and a comparison of short and longer-term trends in trade protectionism based on TTBD data suggests that protectionist activity has, in fact, reverted to its longer-term trend. Moreover, the G20 accounts for a large proportion of newly implemented trade-restrictive measures, and a few G20 EMEs in particular account for a disproportionately large number of trade-restrictive policies. Taken together, these findings suggest that the global economy has avoided a protectionist spiral despite the sluggish economic recovery and high levels of unemployment, in particular in many advanced economies.

However, the finding of moderate protectionist activity during the recovery from the 2008/09 recession does not imply that trade policy is unrelated to the business cycle. In fact, the empirical evidence presented in this article shows that the spectre of protectionism has not been banished. Similarly to the period prior to the financial crisis, governments have continued to erect more trade barriers whenever their economies experienced weaker growth and suffered losses in competitiveness. Nevertheless, the empirical evidence is encouraging, as it suggests that international cooperation at the level of the G20 may have succeeded in limiting protectionist trade policies among its members. This may have been facilitated by the fact that there was a common will to address the downturn with stimulus packages. Unfortunately, the longer the two-speed recovery from the 2008/09 recession persists, with G20 EMEs returning to pre-crisis growth trajectories and advanced economies lagging behind, the more difficult it may become to maintain the cooperative spirit for limiting protectionism within the G20. Thus, ever more forceful efforts must be made by all relevant international institutions and bodies to strengthen peer pressure, monitoring and international cooperation.

32 The difference is statistically significant.



# 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
2011	2.1	2.3	1.5	-	2.2	0.6	1.39	2.65
2012	4.0	3.1	2.9	-	-0.2	1.1	0.58	1.72
2012 Q3	4.6	3.2	3.1	-	-0.6	0.9	0.36	1.94
Q4	6.2	4.2	3.6	-	-0.8	0.8	0.20	1.72
2013 Q1	6.8	4.3	3.2	-	-0.8	1.7	0.21	1.76
Q2	.	.	.	-	.	.	0.21	2.14
2013 Jan.	6.5	4.4	3.4	3.3	-0.9	1.9	0.20	2.02
Feb.	7.0	4.3	3.1	3.0	-0.8	1.7	0.22	1.88
Mar.	7.1	4.2	2.5	2.9	-0.7	0.8	0.21	1.76
Apr.	8.7	4.9	3.2	2.9	-0.9	0.1	0.21	1.55
May	8.4	4.7	2.9	.	-1.1	.	0.20	1.84
June	.	.	.	.	.	.	0.21	2.14

### 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
2011	2.7	5.8	2.1	1.5	3.2	80.6	0.3	10.2
2012	2.5	2.9	1.5	-0.6	-2.4	78.5	-0.7	11.4
2012 Q4	2.3	2.4	1.3	-0.9	-3.1	77.3	-0.7	11.8
2013 Q1	1.9	1.2	1.6	-1.1	-2.3	77.5	-1.0	12.1
Q2	1.4	.	.	.	.	.	.	.
2013 Jan.	2.0	1.7	-	-	-2.5	77.5	-	12.0
Feb.	1.8	1.3	-	-	-3.2	-	-	12.1
Mar.	1.7	0.6	-	-	-1.4	-	-	12.1
Apr.	1.2	-0.2	-	-	-0.6	77.5	-	12.1
May	1.4	-0.1	-	-	.	-	-	12.2
June	1.6	.	-	-	.	-	-	.

### 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)	
2011	26.0	6.8	133.9	667.1	-13.9	121.2	103.4	100.7	1.3920
2012	131.1	100.6	7.4	689.4	-7.5	123.8	97.8	95.5	1.2848
2012 Q3	44.9	30.3	-19.7	733.8	-11.9	125.9	95.9	93.7	1.2502
Q4	66.1	37.9	26.0	689.4	-12.0	123.8	97.8	95.5	1.2967
2013 Q1	34.5	33.9	6.4	687.8	.	.	100.7	98.3	1.3206
Q2	.	.	.	.	.	.	100.8	98.3	1.3062
2013 Jan.	-4.9	-2.7	20.8	675.3	-	-	100.4	98.0	1.3288
Feb.	13.1	12.0	-6.5	671.8	-	-	101.6	99.1	1.3359
Mar.	26.2	24.7	-7.9	687.8	-	-	100.2	97.9	1.2964
Apr.	16.7	16.9	-9.3	640.0	-	-	100.4	97.9	1.3026
May	.	.	.	621.4	-	-	100.5	98.1	1.2982
June	.	.	.	.	-	-	101.6	99.1	1.3189

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

## I.1 Consolidated financial statement of the Eurosystem

(EUR millions)

### 1. Assets

	31 May 2013	7 June 2013	14 June 2013	21 June 2013	28 June 2013
<b>Gold and gold receivables</b>	435,315	435,315	435,315	435,315	319,968
<b>Claims on non-euro area residents in foreign currency</b>	255,100	255,147	255,616	256,239	247,607
<b>Claims on euro area residents in foreign currency</b>	27,320	28,167	29,320	29,316	27,541
<b>Claims on non-euro area residents in euro</b>	19,935	18,917	18,339	18,349	18,070
<b>Lending to euro area credit institutions in euro</b>	824,113	821,899	821,785	815,645	822,689
Main refinancing operations	103,191	103,019	108,332	102,040	117,310
Longer-term refinancing operations	720,897	717,817	713,247	710,059	705,350
Fine-tuning reverse operations	0	0	0	0	0
Structural reverse operations	0	0	0	0	0
Marginal lending facility	24	1,063	206	3,545	29
Credits related to margin calls	0	0	0	0	0
<b>Other claims on euro area credit institutions in euro</b>	91,534	90,204	94,982	92,437	92,068
<b>Securities of euro area residents in euro</b>	605,593	604,251	605,956	606,895	609,453
Securities held for monetary policy purposes	259,004	256,638	256,450	256,450	256,830
Other securities	346,589	347,614	349,507	350,445	352,623
<b>General government debt in euro</b>	29,012	29,012	29,012	29,012	28,408
<b>Other assets</b>	261,526	263,686	260,359	262,113	264,619
<b>Total assets</b>	<b>2,549,449</b>	<b>2,546,600</b>	<b>2,550,684</b>	<b>2,545,321</b>	<b>2,430,423</b>

### 2. Liabilities

	31 May 2013	7 June 2013	14 June 2013	21 June 2013	28 June 2013
<b>Banknotes in circulation</b>	905,246	906,905	906,647	906,272	911,032
<b>Liabilities to euro area credit institutions in euro</b>	556,066	578,012	594,802	557,504	563,994
Current accounts (covering the minimum reserve system)	273,354	280,024	309,815	279,536	276,329
Deposit facility	85,640	100,881	89,957	82,964	92,180
Fixed-term deposits	197,000	197,000	195,005	195,000	195,000
Fine-tuning reverse operations	0	0	0	0	0
Deposits related to margin calls	72	107	25	5	485
<b>Other liabilities to euro area credit institutions in euro</b>	6,580	6,748	6,436	6,808	7,055
<b>Debt certificates issued</b>	0	0	0	0	0
<b>Liabilities to other euro area residents in euro</b>	135,235	106,782	99,709	134,422	135,334
<b>Liabilities to non-euro area residents in euro</b>	151,551	153,092	145,176	146,818	141,610
<b>Liabilities to euro area residents in foreign currency</b>	2,457	1,294	3,119	4,220	3,986
<b>Liabilities to non-euro area residents in foreign currency</b>	6,007	7,724	6,320	5,952	4,910
<b>Counterpart of special drawing rights allocated by the IMF</b>	55,145	55,145	55,145	55,145	54,240
<b>Other liabilities</b>	235,705	234,510	236,941	230,703	233,189
<b>Revaluation accounts</b>	406,635	406,635	406,635	406,635	284,680
<b>Capital and reserves</b>	88,823	89,754	89,754	90,842	90,392
<b>Total liabilities</b>	<b>2,549,449</b>	<b>2,546,600</b>	<b>2,550,684</b>	<b>2,545,321</b>	<b>2,430,423</b>

Source: ECB.

**1.2 Key ECB interest rates**

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

With effect from: <sup>b)</sup>	Deposit facility		Main refinancing operations			Marginal lending facility	
			Fixed rate tenders	Variable rate tenders			
	Level	Change	Fixed rate	Minimum bid rate	Change	Level	Change
			Level	Level			
	1	2	3	4	5	6	7
1999 1 Jan.	2.00	-	3.00	-	-	4.50	-
4 <sup>2)</sup>	2.75	0.75	3.00	-	...	3.25	-1.25
22	2.00	-0.75	3.00	-	...	4.50	1.25
9 Apr.	1.50	-0.50	2.50	-	-0.50	3.50	-1.00
5 Nov.	2.00	0.50	3.00	-	0.50	4.00	0.50
2000 4 Feb.	2.25	0.25	3.25	-	0.25	4.25	0.25
17 Mar.	2.50	0.25	3.50	-	0.25	4.50	0.25
28 Apr.	2.75	0.25	3.75	-	0.25	4.75	0.25
9 June	3.25	0.50	4.25	-	0.50	5.25	0.50
28 <sup>3)</sup>	3.25	...	-	4.25	...	5.25	...
1 Sep.	3.50	0.25	-	4.50	0.25	5.50	0.25
6 Oct.	3.75	0.25	-	4.75	0.25	5.75	0.25
2001 11 May	3.50	-0.25	-	4.50	-0.25	5.50	-0.25
31 Aug.	3.25	-0.25	-	4.25	-0.25	5.25	-0.25
18 Sep.	2.75	-0.50	-	3.75	-0.50	4.75	-0.50
9 Nov.	2.25	-0.50	-	3.25	-0.50	4.25	-0.50
2002 6 Dec.	1.75	-0.50	-	2.75	-0.50	3.75	-0.50
2003 7 Mar.	1.50	-0.25	-	2.50	-0.25	3.50	-0.25
6 June	1.00	-0.50	-	2.00	-0.50	3.00	-0.50
2005 6 Dec.	1.25	0.25	-	2.25	0.25	3.25	0.25
2006 8 Mar.	1.50	0.25	-	2.50	0.25	3.50	0.25
15 June	1.75	0.25	-	2.75	0.25	3.75	0.25
9 Aug.	2.00	0.25	-	3.00	0.25	4.00	0.25
11 Oct.	2.25	0.25	-	3.25	0.25	4.25	0.25
13 Dec.	2.50	0.25	-	3.50	0.25	4.50	0.25
2007 14 Mar.	2.75	0.25	-	3.75	0.25	4.75	0.25
13 June	3.00	0.25	-	4.00	0.25	5.00	0.25
2008 9 July	3.25	0.25	-	4.25	0.25	5.25	0.25
8 Oct.	2.75	-0.50	-	-	-	4.75	-0.50
9 <sup>4)</sup>	3.25	0.50	-	-	-	4.25	-0.50
15 <sup>5)</sup>	3.25	...	3.75	-	-0.50	4.25	...
12 Nov.	2.75	-0.50	3.25	-	-0.50	3.75	-0.50
10 Dec.	2.00	-0.75	2.50	-	-0.75	3.00	-0.75
2009 21 Jan.	1.00	-1.00	2.00	-	-0.50	3.00	...
11 Mar.	0.50	-0.50	1.50	-	-0.50	2.50	-0.50
8 Apr.	0.25	-0.25	1.25	-	-0.25	2.25	-0.25
13 May	0.25	...	1.00	-	-0.25	1.75	-0.50
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
2012 11 July	0.00	-0.25	0.75	-	-0.25	1.50	-0.25
2013 8 May	0.00	...	0.50	-	-0.25	1.00	-0.50

Source: ECB.

- From 1 January 1999 to 9 March 2004, the date refers to the deposit and marginal lending facilities. For main refinancing operations, changes in the rate are effective from the first operation following the date indicated. The change on 18 September 2001 was effective on that same day. From 10 March 2004 onwards, the date refers 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.
- On 22 December 1998 the ECB announced that, as an exceptional measure between 4 and 21 January 1999, a narrow corridor of 50 basis points would be applied between the interest rates for the marginal lending facility and the deposit facility, aimed at facilitating the transition to the new monetary regime by market participants.
- On 8 June 2000 the ECB announced that, starting from the operation to be settled on 28 June 2000, the main refinancing operations of the Eurosystem would be conducted as variable rate tenders. The minimum bid rate refers to the minimum interest rate at which counterparties may place their bids.
- As of 9 October 2008 the ECB reduced the standing facilities corridor from 200 basis points to 100 basis points around the interest rate on the main refinancing operations. The standing facilities corridor was restored to 200 basis points as of 21 January 2009.
- On 8 October 2008 the ECB announced that, starting from the operation to be settled on 15 October, the weekly main refinancing operations would be carried out through a fixed rate tender procedure with full allotment at the interest rate on the main refinancing operations. This change overrode the previous decision (made on the same day) to cut by 50 basis points the minimum bid rate on the main refinancing operations conducted as variable rate tenders.

### 1.3 Eurosystem monetary policy operations allotted through 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								
2013 27 Mar.	123,239	75	123,239	0.75	-	-	-	7
3 Apr.	124,876	74	124,876	0.75	-	-	-	7
10	119,347	70	119,347	0.75	-	-	-	7
17	116,368	70	116,368	0.75	-	-	-	7
24	110,407	71	110,407	0.75	-	-	-	8
2 May	105,011	70	105,011	0.75	-	-	-	6
8	110,290	65	110,290	0.50	-	-	-	7
15	103,844	64	103,844	0.50	-	-	-	7
22	103,399	62	103,399	0.50	-	-	-	7
29	103,192	63	103,192	0.50	-	-	-	7
5 June	103,020	70	103,020	0.50	-	-	-	7
12	108,332	70	108,332	0.50	-	-	-	7
19	102,040	73	102,040	0.50	-	-	-	7
26	117,310	99	117,310	0.50	-	-	-	7
3 July	107,696	78	107,696	0.50	-	-	-	7
Longer-term refinancing operations <sup>5)</sup>								
2013 16 Jan.	10,455	19	10,455	0.75	-	-	-	28
31	3,713	46	3,713	0.75	-	-	-	84
13 Feb.	7,759	16	7,759	0.75	-	-	-	28
28	8,328	36	8,328	0.69	-	-	-	91
13 Mar.	4,208	19	4,208	0.75	-	-	-	28
28	9,113	46	9,113	0.61	-	-	-	91
10 Apr.	5,159	17	5,159	0.75	-	-	-	28
25 <sup>6)</sup>	2,977	40	2,977	-	-	-	-	98
8 May	5,230	17	5,230	0.50	-	-	-	35
30 <sup>6)</sup>	5,830	36	5,830	-	-	-	-	91
12 June	3,591	20	3,591	0.50	-	-	-	28
27 <sup>6)</sup>	9,477	50	9,477	-	-	-	-	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
2013 27 Mar.	Collection of fixed-term deposits	225,224	64	205,500	-	-	0.75	0.24	0.06	7	
3 Apr.	Collection of fixed-term deposits	270,436	72	205,500	-	-	0.75	0.07	0.04	7	
10	Collection of fixed-term deposits	287,542	91	206,000	-	-	0.75	0.06	0.04	7	
17	Collection of fixed-term deposits	264,416	82	206,000	-	-	0.75	0.05	0.04	7	
24	Collection of fixed-term deposits	253,820	77	202,500	-	-	0.75	0.14	0.05	8	
2 May	Collection of fixed-term deposits	255,806	79	202,500	-	-	0.75	0.10	0.05	6	
8	Collection of fixed-term deposits	267,807	95	201,000	-	-	0.50	0.08	0.05	7	
15	Collection of fixed-term deposits	249,425	95	201,000	-	-	0.50	0.08	0.05	7	
22	Collection of fixed-term deposits	254,150	96	201,000	-	-	0.50	0.08	0.06	7	
29	Collection of fixed-term deposits	235,125	89	197,000	-	-	0.50	0.15	0.07	7	
5 June	Collection of fixed-term deposits	276,043	106	197,000	-	-	0.50	0.09	0.07	7	
12	Collection of fixed-term deposits	278,426	101	195,000	-	-	0.50	0.08	0.07	7	
19	Collection of fixed-term deposits	251,866	102	195,000	-	-	0.50	0.08	0.07	7	
26	Collection of fixed-term deposits	215,280	83	195,000	-	-	0.50	0.45	0.18	7	
3 July	Collection of fixed-term deposits	239,734	91	195,000	-	-	0.50	0.13	0.09	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.
- For the operations settled on 22 December 2011 and 1 March 2012, after one year counterparties have the option to repay any part of the liquidity that they have been allotted in these operations, on any day that coincides with the settlement day of a main refinancing operation.
- 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.

## 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 (end of period):	Total	Liabilities to which a positive reserve coefficient is applied <sup>1)</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
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	18,970.0	9,790.9	687.7	2,781.2	1,303.5	4,406.8
2012	18,564.7	9,971.7	637.5	2,583.9	1,163.1	4,208.4
2012 Dec.	18,564.7	9,971.7	637.5	2,583.9	1,163.1	4,208.4
2013 Jan.	18,558.8	9,900.6	636.4	2,569.8	1,259.2	4,192.8
Feb.	18,689.3	9,899.3	635.7	2,562.3	1,368.4	4,223.7
Mar.	18,689.6	9,951.8	626.1	2,580.0	1,382.3	4,149.5
Apr.	18,676.3	9,928.1	626.5	2,574.1	1,437.0	4,110.6

## 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
2009	210.2	211.4	1.2	0.0	1.00
2010	211.8	212.5	0.7	0.5	1.00
2011	207.7	212.2	4.5	0.0	1.25
2012	106.4	509.9	403.5	0.0	0.75
2013 12 Feb.	105.4	466.3	360.8	0.0	0.75
12 Mar.	105.6	403.0	297.3	0.0	0.75
9 Apr.	104.9	346.0	241.1	0.0	0.75
7 May	104.9	322.2	217.3	0.0	0.75
11 June	105.3	300.3	195.0	0.0	0.50
9 July	105.1	.	.	.	.

## 3. Liquidity

Maintenance period ending on:	Liquidity-providing factors					Liquidity-absorbing factors					Credit institutions' current accounts	Base money			
	Eurosystème's net assets in gold and foreign currency	Monetary policy operations of the Eurosystem				Deposit facility	Other liquidity-absorbing operations <sup>3)</sup>	Banknotes in circulation	Central government deposits with the Eurosystem	Other factors (net)					
1		Main refinancing operations	Longer-term refinancing operations	Marginal lending facility	Other liquidity-providing operations <sup>2)</sup>						2	3	4	5	6
2009	407.6	55.8	593.4	0.7	24.6	65.7	9.9	775.2	150.1	-130.2	211.4	1,052.3			
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			
2012	708.0	74.0	1,044.1	1.6	277.3	231.8	208.5	889.3	121.1	144.5	509.9	1,631.0			
2013 15 Jan.	683.9	78.2	1,036.8	3.7	276.8	238.4	206.6	903.5	100.1	141.7	489.0	1,630.9			
12 Feb.	656.5	127.5	960.3	0.3	273.4	184.3	207.8	883.5	90.8	185.5	466.3	1,534.1			
12 Mar.	655.7	130.5	843.2	0.9	269.9	145.3	205.5	880.5	78.8	187.1	403.0	1,428.8			
9 Apr.	656.8	123.7	782.9	0.5	269.1	133.8	205.5	889.2	89.7	168.7	346.0	1,369.1			
7 May	657.3	113.0	749.9	0.9	265.7	114.5	204.3	897.1	82.5	166.2	322.2	1,333.8			
11 June	656.0	104.7	728.4	0.5	259.9	90.5	199.4	904.1	83.1	172.3	300.3	1,294.9			

Source: ECB.

1) 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.

2) Includes liquidity provided under the Eurosystem's covered bond purchase programmes and the Eurosystem's Securities Markets Programme.

3) 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
<b>Eurosystem</b>														
2011	4,700.4	2,780.5	18.0	1.0	2,761.5	717.2	556.9	10.1	150.2	-	20.3	779.2	8.1	395.0
2012	5,287.6	3,351.2	16.9	1.0	3,333.3	723.1	568.3	10.5	144.3	-	23.4	799.9	8.3	381.8
2012 Q4	5,287.6	3,351.2	16.9	1.0	3,333.3	723.1	568.3	10.5	144.3	-	23.4	799.9	8.3	381.8
2013 Q1	4,675.5	2,727.4	16.9	1.2	2,709.4	747.5	590.6	24.6	132.4	-	23.9	791.7	8.2	376.7
2013 Feb.	4,821.0	2,886.9	16.9	1.0	2,869.0	732.6	589.0	12.1	131.5	-	23.7	784.5	8.1	385.2
Mar.	4,675.5	2,727.4	16.9	1.2	2,709.4	747.5	590.6	24.6	132.4	-	23.9	791.7	8.2	376.7
Apr.	4,648.1	2,749.4	15.9	1.2	2,732.3	744.3	588.8	25.3	130.1	-	24.2	744.2	8.2	377.8
May <sup>(p)</sup>	4,489.5	2,612.9	15.9	1.2	2,595.8	741.4	587.1	25.5	128.7	-	24.3	723.2	8.2	379.5
<b>MFIs excluding the Eurosystem</b>														
2011	33,533.5	18,476.5	1,159.6	11,163.1	6,153.8	4,765.1	1,395.9	1,517.3	1,852.0	50.2	1,212.0	4,253.5	232.3	4,543.9
2012	32,694.1	17,995.1	1,153.2	11,044.9	5,796.9	4,901.6	1,627.0	1,423.3	1,851.4	66.8	1,227.8	4,044.3	214.6	4,243.9
2012 Q4	32,694.1	17,995.1	1,153.2	11,044.9	5,796.9	4,901.6	1,627.0	1,423.3	1,851.4	66.8	1,227.8	4,044.3	214.6	4,243.9
2013 Q1	32,756.1	17,781.1	1,124.3	11,045.8	5,611.1	4,936.0	1,704.1	1,406.9	1,825.0	64.0	1,234.1	4,051.5	210.1	4,479.3
2013 Feb.	32,824.9	17,857.9	1,118.7	11,036.5	5,702.7	4,933.5	1,672.6	1,406.6	1,854.3	63.3	1,229.4	4,040.1	211.5	4,489.2
Mar.	32,756.1	17,781.1	1,124.3	11,045.8	5,611.1	4,936.0	1,704.1	1,406.9	1,825.0	64.0	1,234.1	4,051.5	210.1	4,479.3
Apr.	32,907.9	17,745.2	1,135.0	11,012.4	5,597.8	4,951.4	1,721.6	1,414.5	1,815.3	56.5	1,260.2	4,074.7	210.0	4,609.8
May <sup>(p)</sup>	32,474.6	17,588.9	1,109.4	10,993.5	5,486.0	4,981.6	1,765.9	1,420.7	1,795.0	57.9	1,268.3	4,066.4	208.9	4,302.6

### 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
<b>Eurosystem</b>											
2011	4,700.4	913.6	2,609.0	63.8	12.1	2,533.1	-	0.0	481.3	284.3	412.2
2012	5,287.6	938.2	3,062.2	81.4	64.5	2,916.4	-	0.0	536.1	298.7	452.4
2012 Q4	5,287.6	938.2	3,062.2	81.4	64.5	2,916.4	-	0.0	536.1	298.7	452.4
2013 Q1	4,675.5	921.9	2,500.3	93.4	38.0	2,368.9	-	0.0	539.6	268.2	445.5
2013 Feb.	4,821.0	905.4	2,684.6	82.7	53.8	2,548.1	-	0.0	518.7	270.1	442.3
Mar.	4,675.5	921.9	2,500.3	93.4	38.0	2,368.9	-	0.0	539.6	268.2	445.5
Apr.	4,648.1	927.1	2,510.1	71.8	66.5	2,371.8	-	0.0	500.6	264.9	445.4
May <sup>(p)</sup>	4,489.5	931.0	2,378.0	97.4	57.7	2,222.8	-	0.0	483.9	251.8	444.9
<b>MFIs excluding the Eurosystem</b>											
2011	33,533.5	-	17,312.0	195.5	10,752.1	6,364.4	570.6	5,008.2	2,230.8	3,803.4	4,608.3
2012	32,694.1	-	17,204.1	170.8	10,871.5	6,161.9	534.7	4,849.2	2,346.3	3,488.7	4,271.1
2012 Q4	32,694.1	-	17,204.1	170.8	10,871.5	6,161.9	534.7	4,849.2	2,346.3	3,488.7	4,271.1
2013 Q1	32,756.1	-	17,119.8	208.9	11,017.6	5,893.3	523.8	4,733.3	2,349.6	3,525.1	4,504.5
2013 Feb.	32,824.9	-	17,093.0	208.9	10,909.5	5,974.6	529.2	4,793.2	2,338.3	3,536.4	4,534.8
Mar.	32,756.1	-	17,119.8	208.9	11,017.6	5,893.3	523.8	4,733.3	2,349.6	3,525.1	4,504.5
Apr.	32,907.9	-	17,102.4	180.0	11,008.2	5,914.2	512.6	4,695.1	2,359.8	3,563.9	4,674.1
May <sup>(p)</sup>	32,474.6	-	17,061.2	216.8	11,036.4	5,808.0	513.0	4,645.8	2,377.9	3,497.7	4,378.9

Source: ECB.

- 1) Data refer to the changing composition of the euro area. For further information, see the General Notes.
- 2) Amounts issued by euro area residents. Amounts issued by non-euro area residents are included in external assets.
- 3) 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 1	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 8	External assets 9	Fixed assets 10	Remaining assets <sup>2)</sup> 11
		Total 2	General government 3	Other euro area residents 4	Total 5	General government 6	Other euro area residents 7				
<b>Outstanding amounts</b>											
2011	26,718.7	12,341.7	1,177.6	11,164.1	3,480.2	1,952.8	1,527.4	741.0	5,032.7	240.4	4,882.7
2012	26,243.4	12,216.0	1,170.1	11,045.9	3,629.0	2,195.3	1,433.7	767.0	4,844.2	222.9	4,564.3
2012 Q4	26,243.4	12,216.0	1,170.1	11,045.9	3,629.0	2,195.3	1,433.7	767.0	4,844.2	222.9	4,564.3
2013 Q1	26,562.1	12,188.1	1,141.2	11,047.0	3,726.2	2,294.7	1,431.4	784.7	4,843.2	218.2	4,801.7
2013 Feb.	26,498.1	12,173.0	1,135.6	11,037.4	3,680.3	2,261.5	1,418.7	775.8	4,824.6	219.6	4,824.7
Mar.	26,562.1	12,188.1	1,141.2	11,047.0	3,726.2	2,294.7	1,431.4	784.7	4,843.2	218.2	4,801.7
Apr.	26,702.5	12,164.5	1,151.0	11,013.6	3,750.2	2,310.4	1,439.8	815.4	4,819.0	218.2	4,935.2
May <sup>(p)</sup>	26,367.8	12,120.0	1,125.3	10,994.7	3,799.2	2,353.0	1,446.2	811.1	4,789.7	217.1	4,630.7
<b>Transactions</b>											
2011	993.1	60.3	-55.6	115.9	127.7	151.8	-24.1	-29.9	-37.2	7.8	864.3
2012	79.9	-37.1	-4.9	-32.2	113.0	183.6	-70.5	38.6	-153.2	-14.0	132.6
2012 Q4	-409.7	-98.6	-9.9	-88.7	22.7	-22.3	45.0	15.1	-96.7	-4.1	-248.1
2013 Q1	-75.3	-8.1	-29.4	21.3	97.7	99.9	-2.2	18.3	7.4	-3.5	-187.1
2013 Feb.	80.9	-45.5	-39.0	-6.5	46.1	43.8	2.3	-5.7	-10.5	-1.3	97.8
Mar.	-3.7	12.9	5.5	7.3	41.6	29.6	12.0	10.0	-42.1	-1.4	-24.7
Apr.	207.7	-13.8	9.9	-23.7	0.4	-7.2	7.6	28.4	59.5	0.0	133.1
May <sup>(p)</sup>	-307.7	-41.1	-25.5	-15.6	54.8	48.1	6.7	-5.4	-9.6	-1.0	-305.5

**2. Liabilities**

	Total 1	Currency in circulation 2	Deposits of central government 3	Deposits of other general government/other euro area residents 4	Money market fund shares/units <sup>3)</sup> 5	Debt securities issued <sup>4)</sup> 6	Capital and reserves 7	External liabilities 8	Remaining liabilities <sup>2)</sup> 9	Excess of inter-MFI liabilities over inter-MFI assets 10
2011	26,718.7	857.5	259.3	10,764.3	520.4	3,006.1	2,220.8	4,087.7	5,020.5	-17.9
2012	26,243.4	876.8	252.1	10,936.0	467.9	2,853.5	2,398.3	3,787.3	4,723.5	-52.0
2012 Q4	26,243.4	876.8	252.1	10,936.0	467.9	2,853.5	2,398.3	3,787.3	4,723.5	-52.0
2013 Q1	26,562.1	867.5	302.3	11,055.6	459.9	2,775.9	2,415.9	3,793.3	4,950.0	-58.3
2013 Feb.	26,498.1	855.8	291.6	10,963.3	465.9	2,807.3	2,379.7	3,806.5	4,977.0	-49.1
Mar.	26,562.1	867.5	302.3	11,055.6	459.9	2,775.9	2,415.9	3,793.3	4,950.0	-58.3
Apr.	26,702.5	874.7	251.8	11,074.7	456.1	2,749.6	2,391.4	3,828.8	5,119.5	-44.1
May <sup>(p)</sup>	26,367.8	879.6	314.3	11,094.1	455.0	2,722.1	2,380.4	3,749.5	4,823.9	-51.0
<b>Transactions</b>										
2011	993.1	49.1	-0.8	168.0	-29.0	49.9	141.4	-200.0	860.6	-46.0
2012	79.9	19.5	-5.1	187.3	-18.2	-124.6	156.1	-254.6	141.9	-22.4
2012 Q4	-409.7	10.1	-42.9	94.7	-22.8	-64.6	47.5	-214.8	-231.6	14.8
2013 Q1	-75.3	-9.3	50.3	114.0	7.5	-67.1	32.0	-25.1	-173.2	-4.4
2013 Feb.	80.9	-1.2	5.6	29.2	6.3	-13.9	6.8	0.0	62.4	-14.2
Mar.	-3.7	11.7	10.7	85.2	-6.0	-39.0	19.7	-53.0	-23.4	-9.7
Apr.	207.7	7.2	-50.6	25.0	-3.7	-13.6	5.4	64.8	160.4	12.8
May <sup>(p)</sup>	-307.7	4.9	62.5	18.9	-0.8	-26.6	8.8	-79.4	-287.5	-8.4

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>

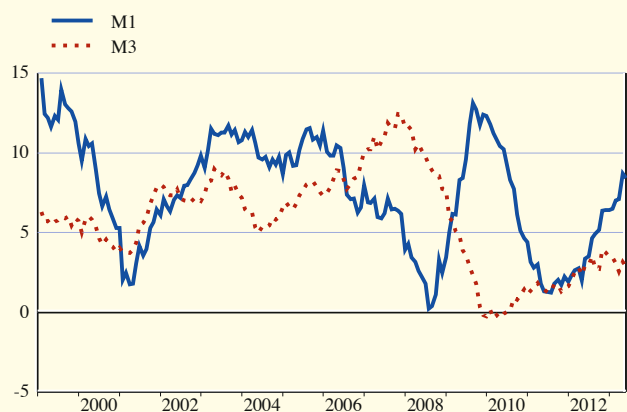
(EUR billions and annual growth rates; seasonally adjusted; outstanding amounts and growth rates at end of period; transactions during period)

### 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 <sup>3)</sup>		Net external assets <sup>4)</sup>		
	M2		M3-M2	Loans				Loans adjusted for sales and securitisation <sup>5)</sup>				
	M1	M2-M1										
	1	2	3	4	5	6	7	8	9	10	11	12
Outstanding amounts												
2011	4,803.1	3,802.6	8,605.6	894.1	9,499.8	-	7,680.6	3,165.2	13,283.4	11,016.6	-	929.1
2012	5,105.4	3,884.9	8,990.3	792.5	9,782.9	-	7,571.6	3,405.9	13,058.2	10,858.9	-	1,039.6
2012 Q4	5,105.4	3,884.9	8,990.3	792.5	9,782.9	-	7,571.6	3,405.9	13,058.2	10,858.9	-	1,039.6
2013 Q1	5,204.1	3,885.8	9,089.9	719.0	9,808.9	-	7,563.1	3,430.7	13,049.3	10,833.2	-	1,062.9
2013 Feb.	5,173.8	3,888.0	9,061.7	747.8	9,809.5	-	7,531.5	3,399.4	13,016.3	10,826.2	-	1,006.0
Mar.	5,204.1	3,885.8	9,089.9	719.0	9,808.9	-	7,563.1	3,430.7	13,049.3	10,833.2	-	1,062.9
Apr.	5,233.1	3,878.2	9,111.3	709.4	9,820.7	-	7,500.8	3,451.6	13,008.6	10,795.5	-	1,021.4
May <sup>(p)</sup>	5,284.4	3,864.3	9,148.7	700.9	9,849.6	-	7,475.7	3,466.1	12,989.6	10,759.1	-	1,061.1
Transactions												
2011	89.5	70.3	159.8	-7.5	152.3	-	211.6	95.8	48.9	103.7	130.3	162.3
2012	307.6	78.7	386.3	-55.3	330.9	-	-116.4	184.3	-102.2	-69.9	-15.9	99.9
2012 Q4	84.4	36.8	121.2	-34.8	86.4	-	-20.1	-0.5	-2.7	-39.1	-5.4	105.5
2013 Q1	95.4	0.5	95.8	-44.9	50.9	-	2.3	24.8	12.1	-5.4	0.5	62.8
2013 Feb.	47.5	-8.7	38.9	-18.2	20.7	-	0.8	-0.1	-7.1	-4.0	6.1	-14.5
Mar.	26.5	-3.9	22.6	-27.7	-5.0	-	4.9	27.6	31.2	4.9	4.1	36.0
Apr.	32.5	-6.6	26.0	-8.8	17.1	-	-19.0	-1.7	-34.0	-28.1	-28.0	12.9
May <sup>(p)</sup>	51.2	-14.0	37.2	-8.8	28.4	-	-3.9	20.1	-16.5	-33.1	-27.0	59.6
Growth rates												
2011	1.9	1.9	1.9	-0.9	1.6	1.7	2.9	3.2	0.4	0.9	1.2	162.3
2012	6.4	2.1	4.5	-6.5	3.5	3.6	-1.5	5.8	-0.8	-0.6	-0.1	99.9
2012 Q4	6.4	2.1	4.5	-6.5	3.5	3.6	-1.5	5.8	-0.8	-0.6	-0.1	99.9
2013 Q1	7.1	0.5	4.2	-13.9	2.5	2.9	-1.2	3.5	-0.9	-0.7	-0.3	180.0
2013 Feb.	7.0	0.8	4.3	-8.8	3.1	3.0	-1.6	3.6	-1.1	-0.8	-0.4	143.8
Mar.	7.1	0.5	4.2	-13.9	2.5	2.9	-1.2	3.5	-0.9	-0.7	-0.3	180.0
Apr.	8.7	0.1	4.9	-13.9	3.2	2.9	-1.4	3.5	-0.9	-0.9	-0.5	205.0
May <sup>(p)</sup>	8.4	0.0	4.7	-15.7	2.9	.	-0.9	3.2	-1.0	-1.1	-0.7	261.1

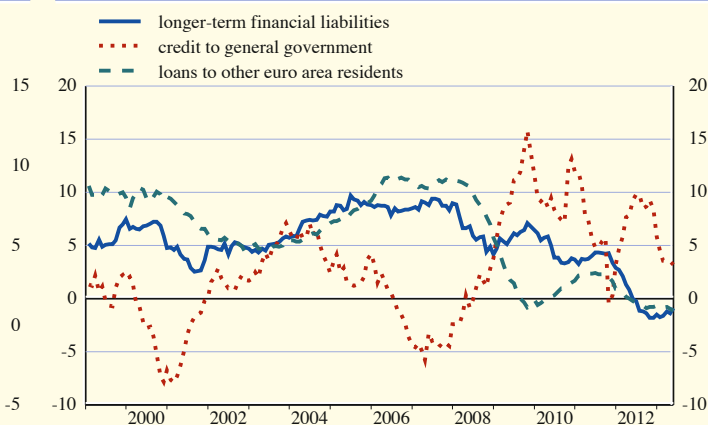
### C1 Monetary aggregates <sup>1)</sup>

(annual growth rates; seasonally adjusted)



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

(annual growth rates; seasonally adjusted)



Source: ECB.

- 1) Data refer to the changing composition of the euro area. For further information, see the General Notes.
- 2) Monetary liabilities of MFIs and central government (post office, treasury, etc.) vis-à-vis non-MFI euro area residents excluding central government. For definitions of M1, M2 and M3, see glossary.
- 3) Excludes reverse repos to central counterparties as of June 2010; transactions and growth rates are adjusted for this effect.
- 4) Values in the section "growth rates" are sums of the transactions during the 12 months ending in the period indicated.
- 5) 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>**

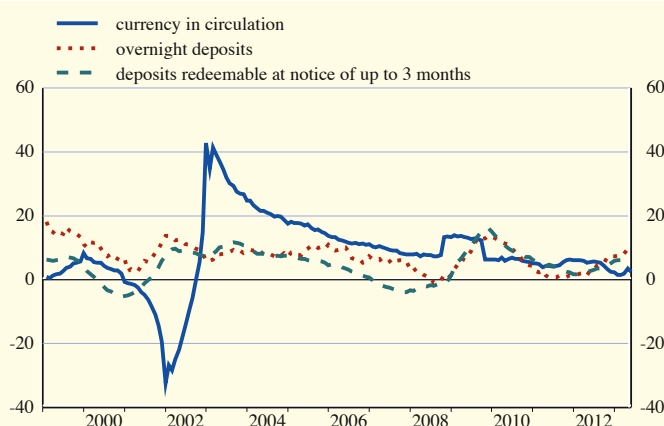
(EUR billions and annual growth rates; seasonally adjusted; outstanding amounts and growth rates at end of period; transactions during period)

**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 <sup>2)</sup>	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
<b>Outstanding amounts</b>											
2011	844.2	3,958.9	1,841.6	1,961.0	147.4	536.8	209.9	2,815.7	115.3	2,543.5	2,206.1
2012	864.0	4,241.4	1,805.4	2,079.5	124.8	482.2	185.5	2,688.2	106.0	2,394.5	2,382.8
2012 Q4	864.0	4,241.4	1,805.4	2,079.5	124.8	482.2	185.5	2,688.2	106.0	2,394.5	2,382.8
2013 Q1	869.1	4,335.0	1,784.3	2,101.5	122.2	458.9	137.9	2,632.1	100.8	2,407.9	2,422.3
2013 Feb.	865.6	4,308.2	1,790.7	2,097.2	126.0	466.9	155.0	2,660.4	102.3	2,388.1	2,380.7
Mar.	869.1	4,335.0	1,784.3	2,101.5	122.2	458.9	137.9	2,632.1	100.8	2,407.9	2,422.3
Apr.	880.0	4,353.0	1,767.5	2,110.7	121.6	448.7	139.1	2,598.5	99.5	2,395.3	2,407.6
May <sup>(p)</sup>	879.6	4,404.8	1,745.3	2,119.0	121.7	445.7	133.6	2,580.6	97.6	2,404.1	2,393.4
<b>Transactions</b>											
2011	49.2	40.4	36.9	33.4	-16.7	-29.7	38.9	18.0	-2.5	55.8	140.2
2012	20.0	287.6	-35.8	114.5	-17.0	-20.0	-18.3	-105.3	-10.2	-156.1	155.3
2012 Q4	-1.9	86.2	-1.0	37.9	0.5	-11.6	-23.6	-11.9	-4.1	-37.0	32.9
2013 Q1	5.1	90.3	-21.5	22.0	-2.8	-7.7	-34.5	-58.0	-5.2	11.7	53.8
2013 Feb.	2.4	45.2	-17.3	8.6	-3.8	2.2	-16.6	-7.3	-1.7	-3.2	12.9
Mar.	3.5	23.0	-8.1	4.2	-4.0	-7.9	-15.7	-37.1	-1.5	18.5	25.0
Apr.	10.9	21.6	-15.8	9.3	-0.4	-10.1	1.7	-21.6	-1.3	-11.5	15.4
May <sup>(p)</sup>	-0.5	51.7	-22.3	8.2	0.1	-2.8	-6.1	-16.3	-1.9	8.5	5.8
<b>Growth rates</b>											
2011	6.2	1.0	2.1	1.7	-9.7	-5.1	29.0	0.7	-2.1	2.3	6.9
2012	2.4	7.3	-1.9	5.8	-11.6	-4.0	-9.5	-3.8	-8.8	-6.1	6.9
2012 Q4	2.4	7.3	-1.9	5.8	-11.6	-4.0	-9.5	-3.8	-8.8	-6.1	6.9
2013 Q1	1.9	8.2	-5.2	5.9	-7.8	-6.7	-33.9	-4.2	-11.7	-5.0	7.3
2013 Feb.	1.5	8.2	-4.7	6.1	-9.3	-3.4	-21.5	-3.7	-10.8	-6.6	7.0
Mar.	1.9	8.2	-5.2	5.9	-7.8	-6.7	-33.9	-4.2	-11.7	-5.0	7.3
Apr.	3.4	9.8	-6.1	5.9	-6.8	-9.2	-29.9	-4.7	-13.3	-5.1	7.3
May <sup>(p)</sup>	2.6	9.7	-6.2	5.7	-6.5	-11.5	-32.1	-4.5	-14.5	-3.7	7.0

**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) Excludes repurchase agreements with central counterparties as of June 2010; transactions and growth rates are adjusted for this effect.



## 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)

### 3. Loans as counterpart to M3

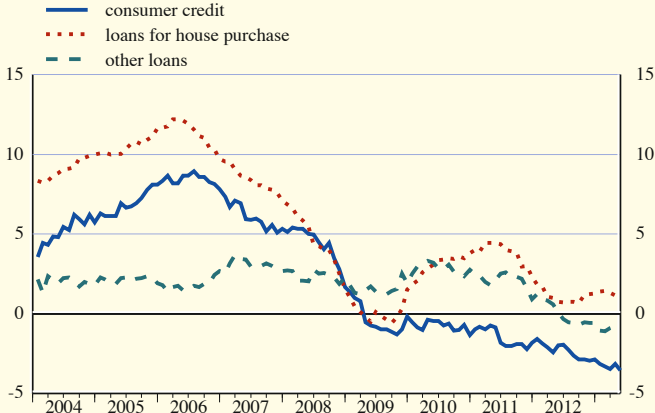
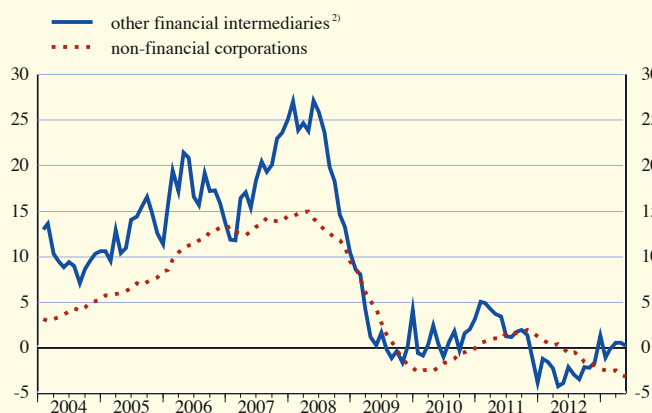
	Insurance corporations and pension funds		Non-financial corporations				Households <sup>3)</sup>					
	Total	Total	Total	Loans adjusted for sales and securitisation <sup>4)</sup>	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Total	Loans adjusted for sales and securitisation <sup>4)</sup>	Consumer credit	Loans for house purchase	Other loans
<b>Outstanding amounts</b>												
2011	91.0	969.6	4,723.7	-	1,147.7	860.7	2,715.2	5,232.3	-	626.2	3,777.2	828.9
2012	88.9	981.7	4,545.6	-	1,134.8	795.9	2,614.9	5,242.7	-	602.0	3,824.1	816.5
2012 Q4	88.9	981.7	4,545.6	-	1,134.8	795.9	2,614.9	5,242.7	-	602.0	3,824.1	816.5
2013 Q1	92.5	978.5	4,511.7	-	1,137.7	778.5	2,595.5	5,250.5	-	593.2	3,843.1	814.1
2013 Feb.	92.5	973.4	4,511.7	-	1,132.1	783.8	2,595.8	5,248.7	-	596.7	3,838.5	813.5
Mar.	92.5	978.5	4,511.7	-	1,137.7	778.5	2,595.5	5,250.5	-	593.2	3,843.1	814.1
Apr.	95.4	961.8	4,489.4	-	1,130.2	772.5	2,586.8	5,248.9	-	592.5	3,842.4	813.9
May <sup>(p)</sup>	93.1	955.4	4,469.4	-	1,116.3	774.5	2,578.6	5,241.2	-	591.3	3,838.2	811.6
<b>Transactions</b>												
2011	1.3	-37.1	58.0	63.9	24.0	-22.9	56.8	81.6	102.3	-11.6	85.7	7.4
2012	-2.0	13.2	-106.8	-61.3	7.1	-51.3	-62.6	25.7	34.3	-17.8	48.2	-4.8
2012 Q4	2.0	20.7	-66.2	-32.9	0.7	-19.0	-47.9	4.5	4.8	-1.7	9.0	-2.8
2013 Q1	3.6	-3.4	-15.3	-5.8	7.2	-13.7	-8.8	9.7	4.3	-6.7	17.3	-0.8
2013 Feb.	-0.4	2.9	-8.3	3.6	5.5	-5.1	-8.8	1.9	0.0	-2.9	5.6	-0.8
Mar.	0.0	3.4	0.3	-2.4	5.4	-5.4	0.2	1.2	2.2	-3.0	3.4	0.8
Apr.	2.9	-15.1	-17.3	-17.9	-8.2	-4.5	-4.5	1.4	2.2	0.3	0.5	0.6
May <sup>(p)</sup>	-2.3	-6.0	-17.2	-17.7	-13.3	2.1	-6.1	-7.5	-0.9	-1.7	-3.3	-2.6
<b>Growth rates</b>												
2011	1.5	-3.8	1.2	1.4	2.1	-2.6	2.1	1.6	2.0	-1.8	2.3	0.9
2012	-2.2	1.3	-2.3	-1.3	0.6	-6.0	-2.3	0.5	0.7	-2.9	1.3	-0.6
2012 Q4	-2.2	1.3	-2.3	-1.3	0.6	-6.0	-2.3	0.5	0.7	-2.9	1.3	-0.6
2013 Q1	6.2	0.6	-2.4	-1.3	1.7	-6.3	-2.9	0.4	0.3	-3.5	1.3	-0.9
2013 Feb.	9.4	-0.2	-2.6	-1.4	0.8	-5.9	-3.0	0.5	0.4	-3.3	1.4	-1.1
Mar.	6.2	0.6	-2.4	-1.3	1.7	-6.3	-2.9	0.4	0.3	-3.5	1.3	-0.9
Apr.	15.9	0.6	-3.0	-1.9	-0.6	-6.7	-2.8	0.4	0.3	-3.2	1.2	-0.8
May <sup>(p)</sup>	12.0	0.2	-3.1	-2.1	-1.4	-6.3	-2.9	0.2	0.3	-3.5	1.0	-1.0

### C5 Loans to other financial intermediaries and non-financial corporations <sup>1)</sup>

(annual growth rates; seasonally adjusted)

### C6 Loans to households <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) Excludes reverse repos to central counterparties as of June 2010; transactions and growth rates are adjusted for this effect.
- 3) Including non-profit institutions serving households.
- 4) Adjusted 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)

## 1. 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													
2012	81.6	64.2	4.5	12.9	1,169.7	196.2	599.7	229.5	340.5	4,541.1	1,126.4	794.7	2,620.0
2012 Q4	81.6	64.2	4.5	12.9	1,169.7	196.2	599.7	229.5	340.5	4,541.1	1,126.4	794.7	2,620.0
2013 Q1	91.5	75.4	3.9	12.2	1,203.9	234.9	630.6	219.6	353.7	4,510.0	1,138.7	778.9	2,592.4
2013 Mar.	91.5	75.4	3.9	12.2	1,203.9	234.9	630.6	219.6	353.7	4,510.0	1,138.7	778.9	2,592.4
Apr.	94.5	78.3	4.1	12.1	1,192.6	227.9	623.9	220.8	347.9	4,487.6	1,132.7	773.1	2,581.8
May <sup>(p)</sup>	94.8	78.8	3.8	12.1	1,195.5	238.1	629.6	219.3	346.6	4,471.3	1,120.3	776.3	2,574.7
Transactions													
2012	-1.7	0.6	-1.8	-0.5	52.0	38.7	21.2	13.1	17.7	-107.7	6.4	-51.4	-62.7
2012 Q4	-8.2	-7.6	-1.2	0.6	-24.8	-25.5	-25.9	3.7	-2.6	-67.5	-4.7	-21.3	-41.4
2013 Q1	9.9	11.2	-0.6	-0.7	33.9	38.6	30.8	-4.8	7.9	-12.5	16.7	-12.2	-17.0
2013 Mar.	0.8	1.8	-0.3	-0.8	5.7	-1.4	8.0	-0.7	-1.6	-0.7	5.0	-3.4	-2.4
Apr.	3.1	2.9	0.2	-0.1	-9.7	-7.0	-5.9	1.5	-5.3	-17.4	-6.7	-4.3	-6.4
May <sup>(p)</sup>	0.3	0.5	-0.2	0.1	3.3	10.2	5.9	-1.4	-1.3	-13.5	-11.8	3.2	-5.0
Growth rates													
2012	-2.0	0.9	-28.6	-3.5	4.6	24.7	3.6	6.1	5.5	-2.3	0.6	-6.0	-2.3
2012 Q4	-2.0	0.9	-28.6	-3.5	4.6	24.7	3.6	6.1	5.5	-2.3	0.6	-6.0	-2.3
2013 Q1	6.1	11.7	-27.5	-8.8	4.6	25.7	6.6	0.3	4.1	-2.4	1.7	-6.3	-2.9
2013 Mar.	6.1	11.7	-27.5	-8.8	4.6	25.7	6.6	0.3	4.1	-2.4	1.7	-6.3	-2.9
Apr.	15.7	24.5	-24.4	-9.4	5.2	29.8	8.6	1.5	1.7	-3.0	-0.6	-6.7	-2.8
May <sup>(p)</sup>	11.9	19.5	-30.0	-8.6	5.1	31.6	9.1	1.8	0.5	-3.1	-1.3	-6.2	-2.9

2. 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														
2012	5,252.6	604.3	136.4	175.2	292.7	3,830.9	14.4	56.6	3,759.9	817.4	419.4	139.8	80.7	596.9
2012 Q4	5,252.6	604.3	136.4	175.2	292.7	3,830.9	14.4	56.6	3,759.9	817.4	419.4	139.8	80.7	596.9
2013 Q1	5,240.4	590.9	130.0	172.2	288.7	3,837.9	13.5	56.0	3,768.4	811.5	415.1	139.2	78.5	593.8
2013 Mar.	5,240.4	590.9	130.0	172.2	288.7	3,837.9	13.5	56.0	3,768.4	811.5	415.1	139.2	78.5	593.8
Apr.	5,237.8	591.1	130.2	172.4	288.6	3,836.2	13.6	56.0	3,766.6	810.4	413.9	140.1	78.3	592.0
May <sup>(p)</sup>	5,231.9	590.4	129.3	173.1	288.0	3,831.4	13.6	55.9	3,761.9	810.2	414.5	137.7	79.1	593.4
Transactions														
2012	25.1	-17.8	-3.2	-6.2	-8.4	47.8	0.2	0.2	47.4	-4.9	-5.7	-0.3	-6.9	2.3
2012 Q4	11.7	-0.6	2.4	-1.5	-1.6	14.1	0.1	-0.3	14.3	-1.7	2.7	1.6	-2.0	-1.3
2013 Q1	-10.0	-11.2	-5.0	-3.5	-2.7	5.5	-0.6	-0.9	6.9	-4.3	-4.2	-0.8	-1.9	-1.6
2013 Mar.	1.5	-0.9	-1.7	0.2	0.6	3.0	-0.4	-0.4	3.9	-0.6	-1.5	0.9	-0.4	-1.2
Apr.	0.4	1.2	0.6	0.4	0.2	-0.5	0.1	0.0	-0.6	-0.3	-1.2	-0.7	-0.1	0.5
May <sup>(p)</sup>	-5.7	-1.3	-0.8	0.0	-0.5	-4.0	0.0	-0.1	-3.8	-0.5	-0.2	-2.3	0.1	1.7
Growth rates														
2012	0.5	-2.8	-2.2	-3.4	-2.8	1.3	1.3	0.3	1.3	-0.6	-1.4	-0.3	-7.8	0.4
2012 Q4	0.5	-2.8	-2.2	-3.4	-2.8	1.3	1.3	0.3	1.3	-0.6	-1.4	-0.3	-7.8	0.4
2013 Q1	0.4	-3.5	-2.7	-4.2	-3.4	1.3	0.0	-1.4	1.4	-0.9	-1.8	-0.7	-8.4	0.1
2013 Mar.	0.4	-3.5	-2.7	-4.2	-3.4	1.3	0.0	-1.4	1.4	-0.9	-1.8	-0.7	-8.4	0.1
Apr.	0.4	-3.2	-2.6	-3.9	-2.9	1.2	0.5	-1.9	1.2	-0.8	-1.8	-0.7	-8.2	0.3
May <sup>(p)</sup>	0.2	-3.5	-3.5	-4.0	-3.3	1.0	0.1	-2.0	1.1	-1.0	-1.6	-2.2	-7.8	0.3

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>

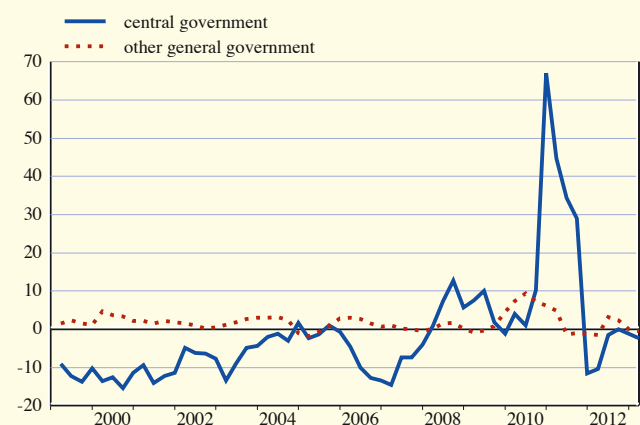
(EUR billions and annual growth rates; not seasonally adjusted; outstanding amounts and growth rates at end of period; transactions during period)

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

	General government					Non-euro area residents				
	Total	Central government	Other general government			Total	Banks <sup>3)</sup>	Non-banks		
			State government	Local government	Social security funds			Total	General government	Other
	1	2	3	4	5	6	7	8	9	10
Outstanding amounts										
2011	1,159.6	348.9	221.7	567.4	21.7	3,021.6	2,022.7	998.9	62.4	936.4
2012	1,153.2	341.8	221.6	565.7	24.1	2,866.9	1,908.0	958.8	60.7	898.1
2012 Q2	1,169.9	339.6	240.1	565.1	25.1	3,087.0	2,064.0	1,023.0	58.0	964.9
Q3	1,163.0	341.4	231.5	564.0	26.2	3,006.3	1,988.5	1,017.8	59.7	958.1
Q4	1,153.2	341.8	221.6	565.7	24.1	2,866.9	1,908.0	958.8	60.7	898.1
2013 Q1 <sup>4)</sup>	1,124.3	312.4	217.0	568.8	25.7	2,890.1	1,892.3	997.8	60.1	937.7
Transactions										
2011	-54.9	-45.9	-0.4	14.6	-23.3	15.6	-26.2	41.6	13.0	28.7
2012	-3.8	-4.1	-4.9	2.7	2.4	-130.3	-102.3	-28.0	-1.0	-27.0
2012 Q2	34.9	19.5	16.1	-1.8	1.1	-14.1	-3.3	-10.8	-3.0	-7.7
Q3	-7.7	1.8	-9.3	-1.3	1.1	-54.9	-59.9	5.0	2.3	2.7
Q4	-9.7	0.6	-9.9	1.7	-2.1	-103.4	-57.4	-45.9	1.9	-47.8
2013 Q1 <sup>4)</sup>	-29.3	-29.5	-4.5	2.7	1.5	11.1	-25.4	36.6	-1.0	37.6
Growth rates										
2011	-4.5	-11.6	-0.2	2.7	-51.6	0.6	-1.1	4.4	26.7	3.2
2012	-0.3	-1.1	-2.2	0.5	11.2	-4.2	-5.0	-2.8	-1.8	-2.9
2012 Q2	1.8	-1.5	7.2	2.0	-6.6	-1.9	-1.6	-2.5	-8.5	-2.2
Q3	1.7	0.0	2.7	2.1	6.9	-5.6	-7.1	-2.6	-7.0	-2.3
Q4	-0.3	-1.1	-2.2	0.5	11.2	-4.2	-5.0	-2.8	-1.8	-2.9
2013 Q1 <sup>4)</sup>	-1.1	-2.4	-3.4	0.2	7.0	-5.2	-7.1	-1.4	0.2	-1.6

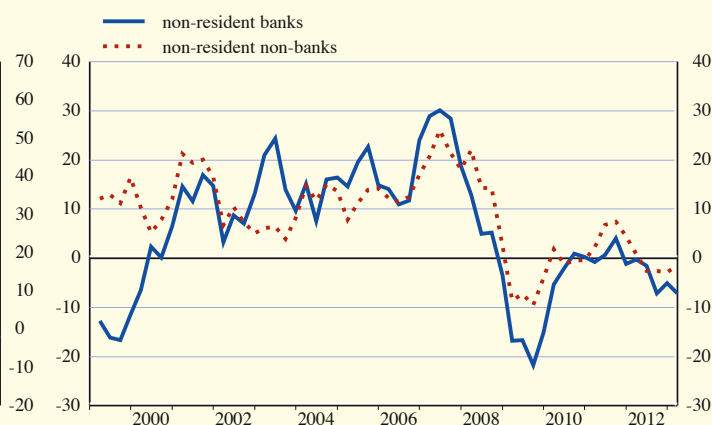
### C7 Loans to government <sup>2)</sup>

(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>

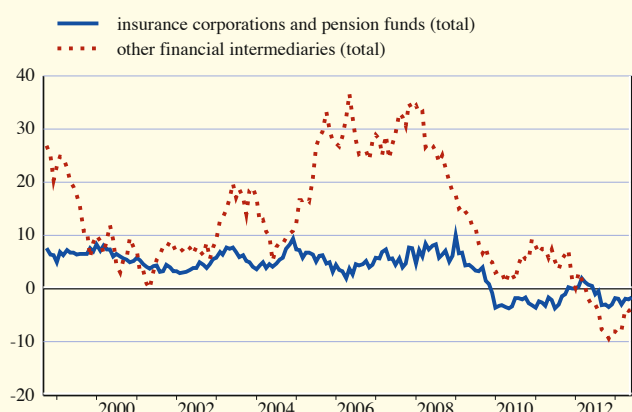
(EUR billions and annual growth rates; outstanding amounts and growth rates at end of period; transactions during period)

### 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		With central counterparties
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
<b>Outstanding amounts</b>															
2011	703.8	91.9	79.9	512.4	4.0	0.2	15.5	2,221.0	390.0	284.9	1,190.7	14.7	0.5	340.2	260.0
2012	692.0	107.1	81.4	484.4	6.4	0.2	12.5	2,015.7	410.3	236.6	1,020.7	13.6	0.3	334.4	256.7
2012 Q4	692.0	107.1	81.4	484.4	6.4	0.2	12.5	2,015.7	410.3	236.6	1,020.7	13.6	0.3	334.4	256.7
2013 Q1	697.5	114.3	83.3	480.3	7.9	0.3	11.4	2,108.6	442.3	237.7	1,014.1	15.0	0.2	399.2	314.1
2013 Feb.	700.0	115.5	82.1	482.1	7.1	0.4	12.7	2,054.1	430.1	235.5	1,002.2	14.6	0.2	371.5	287.9
Mar.	697.5	114.3	83.3	480.3	7.9	0.3	11.4	2,108.6	442.3	237.7	1,014.1	15.0	0.2	399.2	314.1
Apr.	702.7	119.2	82.8	478.7	8.1	0.3	13.5	2,083.1	447.5	231.0	1,003.1	15.8	0.2	385.4	299.8
May <sup>(p)</sup>	696.1	112.6	82.7	480.7	8.3	0.3	11.5	2,084.3	444.2	231.8	995.8	15.5	0.2	396.9	310.5
<b>Transactions</b>															
2011	0.0	11.5	4.2	-14.2	1.1	-0.1	-2.6	2.4	28.8	-29.2	5.7	-2.6	0.1	-0.4	5.5
2012	-12.0	15.7	2.6	-27.6	2.0	0.0	-4.7	-177.2	23.4	-49.5	-166.0	-2.0	-0.3	17.2	13.3
2012 Q4	-1.6	5.2	3.2	-10.7	-0.3	0.0	1.0	-91.1	-21.5	-1.2	-14.7	0.2	0.0	-53.9	-40.8
2013 Q1	6.8	8.1	1.9	-4.3	1.5	0.1	-0.5	88.0	29.1	0.7	-7.2	1.5	-0.1	64.0	57.3
2013 Feb.	-5.7	-5.0	-0.5	-1.3	0.3	0.0	0.7	15.1	1.8	-3.2	-11.7	0.4	0.0	27.8	29.5
Mar.	-1.8	-0.4	1.1	-1.8	0.7	-0.1	-1.3	49.7	9.5	1.6	10.7	0.4	0.0	27.6	26.0
Apr.	5.3	5.0	-0.4	-1.6	0.2	0.0	2.1	-23.4	5.9	-6.3	-10.0	0.7	0.0	-13.7	-14.2
May <sup>(p)</sup>	-6.5	-6.6	-0.1	2.0	0.2	0.0	-2.0	0.5	-3.4	0.4	-7.7	-0.3	0.0	11.5	10.7
<b>Growth rates</b>															
2011	0.0	14.1	5.6	-2.7	43.3	-	-13.1	0.2	8.1	-9.3	0.4	-10.0	-	-0.2	2.1
2012	-1.7	17.1	3.4	-5.4	50.8	-	-32.1	-8.1	6.0	-17.4	-14.0	-14.0	-	4.3	4.2
2012 Q4	-1.7	17.1	3.4	-5.4	50.8	-	-32.1	-8.1	6.0	-17.4	-14.0	-14.0	-	4.3	4.2
2013 Q1	-1.8	17.7	-2.4	-4.9	65.3	-	-40.4	-3.8	5.1	-11.5	-11.6	-9.6	-	17.2	20.3
2013 Feb.	-3.0	8.5	-4.1	-5.0	60.6	-	-30.8	-7.7	5.8	-15.8	-14.6	-3.0	-	4.9	6.4
Mar.	-1.8	17.7	-2.4	-4.9	65.3	-	-40.4	-3.8	5.1	-11.5	-11.6	-9.6	-	17.2	20.3
Apr.	-2.0	14.2	-3.2	-5.1	62.2	-	-28.0	-4.2	10.6	-15.0	-11.8	-4.0	-	11.3	14.0
May <sup>(p)</sup>	-1.7	10.0	-1.8	-4.3	43.5	-	-14.3	-4.0	7.9	-12.8	-9.8	-0.6	-	6.3	7.5

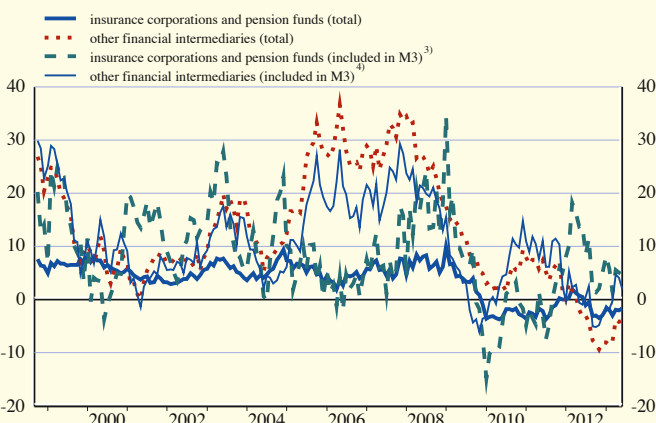
### C9 Total deposits by sector <sup>2)</sup>

(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>

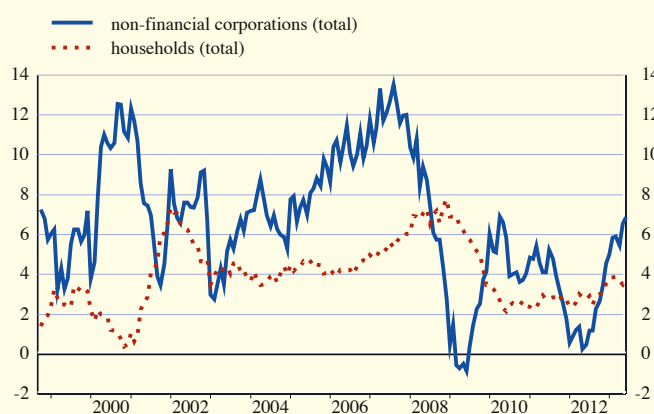
(EUR billions and annual growth rates; outstanding amounts and growth rates at end of period; transactions during period)

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

	Non-financial corporations							Households <sup>3)</sup>						
	Total	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	2	3	4	5	6	7	8	9	10	11	12	13	14
<b>Outstanding amounts</b>														
2011	1,686.9	1,054.3	444.3	97.7	72.3	2.0	16.3	5,894.0	2,255.7	948.1	723.7	1,837.1	106.7	22.7
2012	1,766.4	1,153.1	408.2	106.8	85.4	2.0	10.9	6,119.2	2,346.5	979.1	747.8	1,937.3	98.0	10.4
2012 Q4	1,766.4	1,153.1	408.2	106.8	85.4	2.0	10.9	6,119.2	2,346.5	979.1	747.8	1,937.3	98.0	10.4
2013 Q1	1,753.3	1,128.1	409.8	110.8	91.8	1.7	11.1	6,166.5	2,377.4	966.0	758.1	1,963.5	93.1	8.5
2013 Feb.	1,723.0	1,103.1	403.6	110.1	90.5	1.8	13.9	6,150.8	2,358.0	976.8	753.3	1,959.9	94.3	8.7
Mar.	1,753.3	1,128.1	409.8	110.8	91.8	1.7	11.1	6,166.5	2,377.4	966.0	758.1	1,963.5	93.1	8.5
Apr.	1,754.4	1,131.7	404.9	112.9	92.2	1.5	11.1	6,176.2	2,395.2	952.1	762.4	1,967.9	91.5	7.2
May <sup>4)</sup>	1,766.7	1,151.9	392.4	114.8	92.7	1.6	13.1	6,185.4	2,407.4	943.4	767.7	1,970.6	89.4	6.9
<b>Transactions</b>														
2011	9.4	10.0	-4.6	8.7	-5.0	0.4	-0.2	139.0	7.4	42.4	55.3	43.6	-2.6	-7.0
2012	84.4	101.9	-35.5	12.9	9.5	0.0	-4.3	224.9	90.4	33.8	21.8	100.7	-9.6	-12.3
2012 Q4	68.5	59.3	7.9	2.0	-0.9	0.2	-0.2	104.8	50.9	12.6	1.2	45.3	-2.9	-2.3
2013 Q1	-13.5	-25.6	1.7	4.2	6.4	-0.3	0.1	46.9	30.7	-12.5	9.5	26.0	-4.9	-1.9
2013 Feb.	-0.1	-9.5	5.3	2.1	2.2	0.0	-0.1	19.1	20.6	-5.3	2.4	5.2	-1.9	-1.9
Mar.	29.6	24.0	6.2	1.0	1.3	-0.1	-2.9	14.8	18.9	-11.1	4.8	3.5	-1.2	-0.2
Apr.	3.7	5.8	-4.7	2.2	0.5	-0.2	0.1	10.6	18.4	-13.6	4.4	4.5	-1.6	-1.4
May <sup>4)</sup>	12.6	20.2	-12.1	1.9	0.5	0.1	2.0	9.2	12.2	-8.7	5.3	2.8	-2.1	-0.3
<b>Growth rates</b>														
2011	0.6	1.0	-1.0	9.9	-6.5	28.9	-3.4	2.4	0.3	4.7	8.3	2.4	-2.4	-23.6
2012	5.0	9.7	-8.0	13.4	13.0	-1.4	-26.5	3.8	4.0	3.6	3.0	5.5	-8.9	-54.2
2012 Q4	5.0	9.7	-8.0	13.4	13.0	-1.4	-26.5	3.8	4.0	3.6	3.0	5.5	-8.9	-54.2
2013 Q1	5.4	9.8	-7.5	12.9	16.4	-22.8	-12.6	3.7	6.9	-2.6	2.4	5.2	-11.7	-57.3
2013 Feb.	5.9	10.9	-8.6	12.2	17.6	-14.4	7.8	3.9	6.3	-0.1	2.2	5.4	-10.9	-58.4
Mar.	5.4	9.8	-7.5	12.9	16.4	-22.8	-12.6	3.7	6.9	-2.6	2.4	5.2	-11.7	-57.3
Apr.	6.5	11.0	-6.5	13.3	15.8	-15.8	-12.8	3.5	6.7	-3.4	2.4	5.3	-13.4	-59.2
May <sup>4)</sup>	6.9	11.0	-6.0	14.6	12.7	-6.1	-4.2	3.8	7.3	-3.3	2.8	5.2	-15.0	-57.4

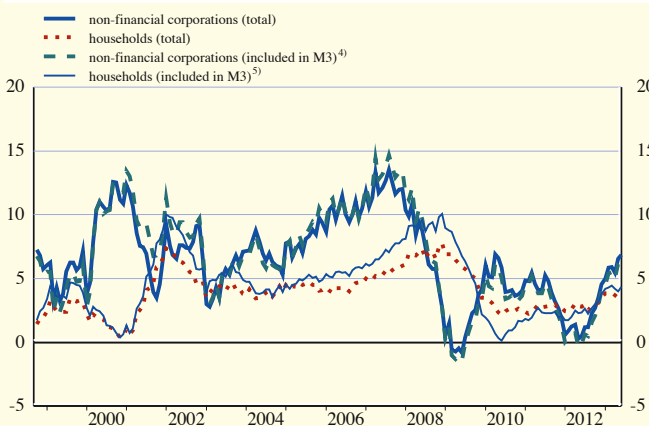
### C11 Total deposits by sector <sup>2)</sup>

(annual growth rates)



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

(annual growth rates)



Source: ECB.

- 1) MFI sector excluding the Eurosystem; sectoral classification is based on 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>**

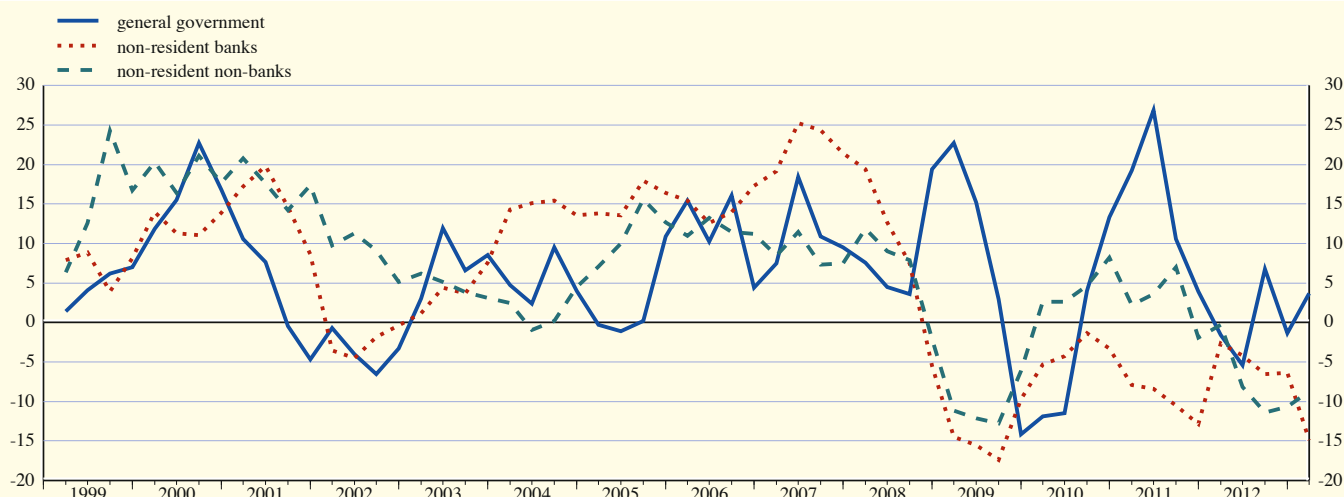
(EUR billions and annual growth rates; outstanding amounts and growth rates at end of period; transactions during period)

**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										
2011	442.0	195.5	48.6	112.6	85.4	3,153.6	2,175.0	978.6	44.3	934.3
2012	449.0	170.8	62.8	111.7	103.8	2,891.3	2,013.9	877.4	38.7	838.6
2012 Q2	507.3	190.9	98.4	112.3	105.7	3,243.5	2,290.3	953.2	41.6	911.6
Q3	510.1	202.6	93.1	111.3	103.1	3,131.0	2,176.6	954.4	42.5	912.0
Q4	449.0	170.8	62.8	111.7	103.8	2,891.3	2,013.9	877.4	38.7	838.6
2013 Q1 <sup>(p)</sup>	500.6	208.9	67.2	111.9	112.6	2,901.9	1,989.4	913.9	36.5	877.4
Transactions										
2011	17.1	3.3	0.6	2.3	10.8	-334.9	-314.6	-20.3	-2.1	-18.2
2012	-7.9	-22.6	-0.3	-0.4	15.5	-243.1	-138.5	-104.6	-5.1	-99.5
2012 Q2	25.0	0.8	18.9	-1.3	6.7	-133.6	-76.4	-57.3	-13.9	-43.3
Q3	2.8	11.8	-5.5	-0.9	-2.7	-93.1	-101.2	8.0	1.1	6.9
Q4	-61.5	-32.3	-30.2	0.4	0.6	-209.8	-141.6	-68.2	-3.4	-64.8
2013 Q1 <sup>(p)</sup>	50.5	38.3	4.1	0.2	8.0	-1.6	-30.4	30.2	-2.4	32.6
Growth rates										
2011	3.9	1.3	1.3	2.1	14.6	-9.8	-12.8	-1.9	-4.4	-1.8
2012	-1.4	-11.7	10.3	-0.4	18.2	-7.6	-6.4	-10.7	-11.9	-10.6
2012 Q2	-5.4	-27.4	51.5	0.8	17.7	-5.3	-4.2	-8.2	-16.3	-7.8
Q3	6.7	-2.9	45.5	1.1	14.0	-7.9	-6.5	-11.4	-16.4	-11.2
Q4	-1.4	-11.7	10.3	-0.4	18.2	-7.6	-6.4	-10.7	-11.9	-10.6
2013 Q1 <sup>(p)</sup>	3.6	9.7	-12.3	-1.4	12.9	-13.0	-14.9	-8.8	-33.9	-7.3

**C13 Deposits by government and non-euro area residents <sup>2)</sup>**

(annual growth rates)



Source: ECB.

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

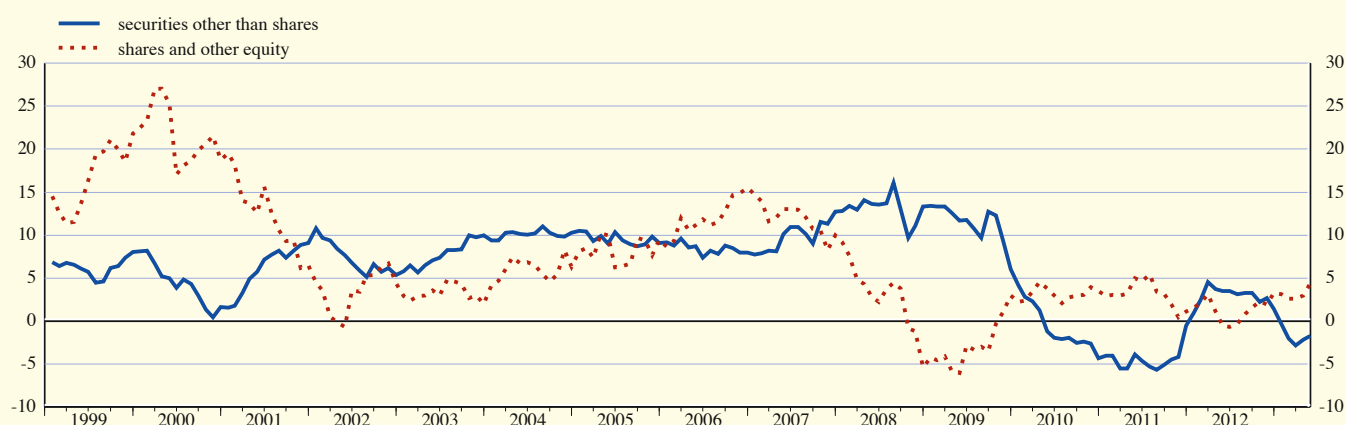
## 2.6 MFI holdings of securities: breakdown <sup>1), 2)</sup>

(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>												
2011	5,697.6	1,764.2	87.8	1,373.0	22.9	1,489.0	28.3	932.5	1,507.4	484.0	728.0	295.4
2012	5,774.4	1,748.5	102.9	1,594.2	32.8	1,399.6	23.6	872.8	1,528.5	475.7	752.1	300.7
2012 Q4	5,774.4	1,748.5	102.9	1,594.2	32.8	1,399.6	23.6	872.8	1,528.5	475.7	752.1	300.7
2013 Q1	5,783.6	1,704.2	120.8	1,672.4	31.7	1,379.8	27.1	847.6	1,544.0	464.8	769.3	309.9
2013 Feb.	5,772.2	1,735.6	118.7	1,640.8	31.8	1,382.5	24.1	838.7	1,527.7	468.9	760.6	298.3
Mar.	5,783.6	1,704.2	120.8	1,672.4	31.7	1,379.8	27.1	847.6	1,544.0	464.8	769.3	309.9
Apr.	5,784.3	1,698.9	116.5	1,690.8	30.8	1,385.9	28.5	832.9	1,570.7	460.5	799.7	310.5
May <sup>(p)</sup>	5,816.4	1,679.7	115.2	1,735.4	30.5	1,392.2	28.5	834.9	1,582.8	472.9	795.3	314.5
<b>Transactions</b>												
2011	-29.2	45.1	7.8	-2.6	5.5	-24.8	-0.1	-60.1	17.0	60.2	-31.5	-11.7
2012	82.5	-17.8	15.9	191.7	10.5	-67.6	-3.9	-46.3	49.9	6.6	37.9	5.3
2012 Q4	-24.7	-40.6	-0.2	-12.0	1.6	46.4	-1.9	-17.9	17.8	-8.6	14.9	11.5
2013 Q1	6.5	-59.3	17.8	78.6	-1.4	-19.6	3.4	-13.0	21.4	-9.9	17.9	13.5
2013 Feb.	-1.6	-20.0	-1.7	19.6	-0.6	0.5	0.9	-0.3	-11.7	-7.4	-6.0	1.7
Mar.	-4.6	-32.7	-0.2	30.5	-0.7	-2.9	2.4	-1.0	19.1	-2.3	9.9	11.5
Apr.	-10.5	-6.8	-3.2	1.7	-0.5	5.2	1.7	-8.6	25.8	-2.7	28.3	0.2
May <sup>(p)</sup>	37.8	-19.5	-0.9	48.2	-0.2	6.6	-0.1	3.7	12.1	13.4	-5.3	3.9
<b>Growth rates</b>												
2011	-0.5	2.7	7.7	-0.2	33.7	-1.6	-0.8	-6.2	1.1	13.8	-4.1	-3.8
2012	1.5	-1.0	18.1	14.1	47.7	-4.6	-14.2	-4.9	3.3	1.3	5.2	1.8
2012 Q4	1.5	-1.0	18.1	14.1	47.7	-4.6	-14.2	-4.9	3.3	1.3	5.2	1.8
2013 Q1	-2.8	-7.5	20.9	8.7	-4.3	-6.3	4.8	-9.3	2.6	-3.3	5.0	6.5
2013 Feb.	-2.0	-5.7	28.7	9.6	2.3	-6.9	-0.3	-8.3	2.6	-2.2	5.4	3.7
Mar.	-2.8	-7.5	20.9	8.7	-4.3	-6.3	4.8	-9.3	2.6	-3.3	5.0	6.5
Apr.	-2.1	-6.7	18.6	8.6	-7.0	-5.7	17.9	-7.8	3.0	-4.0	5.9	6.9
May <sup>(p)</sup>	-1.7	-7.2	18.0	9.6	-6.1	-5.2	18.8	-7.0	4.4	-1.5	6.6	8.6

## 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>														
2011	6,153.8	-	-	-	-	-	12,322.7	96.2	3.8	1.9	0.3	1.1	0.4	
2012	5,796.9	-	-	-	-	-	12,198.1	96.4	3.6	1.7	0.2	0.9	0.5	
2012 Q4	5,796.9	-	-	-	-	-	12,198.1	96.4	3.6	1.7	0.2	0.9	0.5	
2013 Q1 <sup>(p)</sup>	5,611.1	-	-	-	-	-	12,170.0	96.4	3.6	1.8	0.2	0.9	0.5	
<i>To non-euro area residents</i>														
2011	2,022.7	44.5	55.5	35.6	2.5	2.7	9.3	998.9	38.2	61.8	41.2	2.6	3.3	7.8
2012	1,908.0	47.3	52.7	31.8	1.9	3.5	10.3	958.8	40.2	59.8	38.3	2.0	2.9	9.7
2012 Q4	1,908.0	47.3	52.7	31.8	1.9	3.5	10.3	958.8	40.2	59.8	38.3	2.0	2.9	9.7
2013 Q1 <sup>(p)</sup>	1,892.3	45.7	54.3	33.1	2.2	3.1	9.8	997.8	39.4	60.6	39.5	2.6	2.6	8.8
<b>Holdings of securities other than shares</b>														
<i>Issued by euro area residents</i>														
2011	1,852.0	95.3	4.7	2.5	0.1	0.3	1.5	2,913.1	98.2	1.8	1.0	0.2	0.1	0.4
2012	1,851.4	94.4	5.6	2.7	0.1	0.4	2.0	3,050.2	98.1	1.9	1.2	0.1	0.1	0.4
2012 Q4	1,851.4	94.4	5.6	2.7	0.1	0.4	2.0	3,050.2	98.1	1.9	1.2	0.1	0.1	0.4
2013 Q1 <sup>(p)</sup>	1,825.0	93.4	6.6	3.1	0.1	0.3	2.7	3,111.0	98.1	1.9	1.1	0.1	0.1	0.5
<i>Issued by non-euro area residents</i>														
2011	457.0	56.4	43.6	21.1	0.3	0.3	16.0	475.5	32.2	67.8	39.4	5.8	0.7	13.7
2012	434.0	54.9	45.1	19.8	0.3	0.3	19.1	438.8	34.1	65.9	39.1	5.4	0.9	11.8
2012 Q4	434.0	54.9	45.1	19.8	0.3	0.3	19.1	438.8	34.1	65.9	39.1	5.4	0.9	11.8
2013 Q1 <sup>(p)</sup>	419.0	55.4	44.6	22.2	0.2	0.3	15.9	428.7	32.8	67.2	41.8	4.6	1.0	10.6
<b>Deposits</b>														
<i>By euro area residents</i>														
2011	6,364.4	92.1	7.9	5.1	0.2	1.2	0.7	10,947.6	97.0	3.0	2.0	0.1	0.1	0.4
2012	6,161.9	93.8	6.2	3.9	0.2	1.0	0.6	11,042.3	97.0	3.0	2.0	0.1	0.1	0.4
2012 Q4	6,161.9	93.8	6.2	3.9	0.2	1.0	0.6	11,042.3	97.0	3.0	2.0	0.1	0.1	0.4
2013 Q1 <sup>(p)</sup>	5,893.3	93.3	6.7	4.2	0.2	1.1	0.6	11,226.5	96.9	3.1	2.1	0.1	0.1	0.4
<i>By non-euro area residents</i>														
2011	2,175.0	59.2	40.8	25.6	2.1	1.8	7.2	978.6	56.1	43.9	30.0	2.0	1.5	5.1
2012	2,013.9	58.3	41.7	27.7	1.6	1.0	7.3	877.4	52.3	47.7	31.3	1.9	1.2	6.3
2012 Q4	2,013.9	58.3	41.7	27.7	1.6	1.0	7.3	877.4	52.3	47.7	31.3	1.9	1.2	6.3
2013 Q1 <sup>(p)</sup>	1,989.4	56.5	43.5	29.4	1.9	1.0	6.6	913.9	51.2	48.8	32.6	1.9	1.0	5.7

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

	All currencies (outstanding amount)	Euro <sup>4)</sup>					
		Total	Non-euro currencies				
			USD	JPY	CHF	GBP	
1	2	3	4	5	6	7	
2011	5,236.8	82.0	18.0	9.4	1.7	2.0	2.6
2012	5,068.3	81.8	18.2	9.6	1.6	1.9	2.5
2012 Q4	5,068.3	81.8	18.2	9.6	1.6	1.9	2.5
2013 Q1 <sup>(p)</sup>	4,969.7	81.0	19.0	10.6	1.4	1.8	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							
2012 Oct.	7,059.3	494.6	2,906.2	1,913.3	933.5	246.0	565.7
Nov.	7,145.7	495.0	2,940.2	1,939.7	945.8	245.9	579.2
Dec.	7,179.8	475.0	2,968.2	1,986.0	962.8	247.2	540.5
2013 Jan.	7,289.9	494.0	2,952.5	2,035.6	975.3	247.8	584.7
Feb.	7,462.0	511.0	3,005.4	2,083.2	995.6	248.3	618.4
Mar.	7,603.8	504.3	3,068.4	2,141.0	1,025.3	247.9	616.9
Apr. <sup>(p)</sup>	7,737.0	517.1	3,129.3	2,153.0	1,035.1	247.9	654.6
Transactions							
2012 Q3	129.5	24.8	66.0	0.1	15.2	0.9	22.5
Q4	41.9	-23.9	82.9	21.6	29.2	2.9	-70.8
2013 Q1	227.0	27.0	81.6	34.0	31.8	0.4	52.2

### 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							
2012 Oct.	7,059.3	149.4	6,391.8	4,678.1	726.9	1,713.7	518.1
Nov.	7,145.7	152.8	6,465.4	4,736.2	739.9	1,729.1	527.6
Dec.	7,179.8	146.9	6,560.8	4,797.7	757.5	1,763.1	472.2
2013 Jan.	7,289.9	152.7	6,624.9	4,849.6	770.4	1,775.2	512.3
Feb.	7,462.0	157.2	6,740.8	4,913.6	785.3	1,827.3	564.0
Mar.	7,603.8	157.8	6,887.6	4,998.1	813.6	1,889.5	558.5
Apr. <sup>(p)</sup>	7,737.0	162.9	6,991.2	5,064.8	824.2	1,926.4	582.9
Transactions							
2012 Q3	129.5	21.7	81.6	29.8	29.3	51.8	26.2
Q4	41.9	-6.3	124.9	64.4	32.9	60.6	-76.7
2013 Q1	227.0	10.9	159.2	88.8	30.7	70.3	57.0

### 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										
2012 Sep.	6,350.1	2,277.4	1,653.1	1,551.4	316.7	140.1	411.4	6,267.1	83.0	944.5
Oct.	6,391.8	2,323.7	1,645.6	1,556.8	318.5	137.8	409.4	6,308.9	82.9	947.6
Nov.	6,465.4	2,354.0	1,665.7	1,574.4	319.8	136.6	414.9	6,382.2	83.2	947.5
Dec.	6,560.8	2,378.2	1,705.1	1,597.7	320.4	141.2	418.2	6,477.2	83.5	912.9
2013 Jan.	6,624.9	2,371.1	1,750.4	1,620.0	322.8	139.9	420.5	6,539.3	85.5	896.9
Feb.	6,740.8	2,406.8	1,792.1	1,645.5	325.5	143.6	427.4	6,655.3	85.6	901.2
Mar.	6,887.6	2,447.1	1,840.8	1,685.0	327.6	150.2	436.9	6,801.5	86.1	910.6
Apr. <sup>(p)</sup>	6,991.2	2,499.5	1,852.8	1,715.4	329.3	150.6	443.6	6,905.4	85.8	898.0
Transactions										
2012 Oct.	37.9	30.5	1.2	6.2	1.9	-1.3	-0.6	38.1	-0.2	6.4
Nov.	33.4	27.9	-1.6	6.5	0.3	-1.8	2.2	33.3	0.2	1.3
Dec.	53.6	17.9	18.2	11.4	0.7	3.9	1.5	52.8	0.8	-29.5
2013 Jan.	60.2	22.5	25.7	13.2	1.9	-1.3	-1.8	59.3	0.9	-2.9
Feb.	45.9	13.8	10.7	15.8	0.9	-0.1	4.8	45.9	0.0	-0.9
Mar.	53.1	18.7	6.6	19.4	0.7	2.8	4.9	52.5	0.6	1.2
Apr. <sup>(p)</sup>	57.9	34.8	3.3	15.7	0.6	-0.6	4.1	57.8	0.1	-3.0

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>											
2012 Q2	2,731.1	1,507.6	412.5	697.2	208.0	5.0	184.8	1,223.6	315.1	467.5	17.8
Q3	2,857.7	1,568.9	414.5	713.9	232.7	6.0	201.8	1,288.7	323.8	493.8	18.3
Q4	2,968.2	1,623.6	416.1	747.1	241.6	7.7	211.0	1,344.6	332.2	510.2	16.2
2013 Q1 <sup>(p)</sup>	3,068.4	1,631.6	407.1	752.7	245.2	8.2	218.3	1,436.8	332.7	563.4	16.0
<b>Transactions</b>											
2012 Q3	66.0	19.3	-7.2	-4.4	18.4	0.5	12.0	46.8	0.3	28.8	-0.4
Q4	82.9	30.4	-3.1	22.1	3.5	1.2	6.6	52.5	7.8	16.5	-1.3
2013 Q1 <sup>(p)</sup>	81.6	8.8	-10.1	7.8	2.3	0.5	8.3	72.8	0.1	38.2	-0.3

**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>											
2012 Q2	1,818.1	639.6	45.5	-	39.1	21.9	533.1	1,178.5	163.7	392.3	78.2
Q3	1,920.3	685.5	52.8	-	45.1	24.1	563.4	1,234.8	172.0	412.5	72.1
Q4	1,986.0	721.7	60.8	-	50.9	27.6	582.3	1,264.3	175.6	407.8	78.1
2013 Q1 <sup>(p)</sup>	2,141.0	737.7	56.4	-	49.8	27.0	604.6	1,403.3	187.7	478.9	95.0
<b>Transactions</b>											
2012 Q3	0.1	-3.2	0.6	-	3.5	-0.5	-6.6	3.3	-0.7	4.6	-3.9
Q4	21.6	1.0	2.0	-	4.0	0.5	-5.6	20.6	0.7	6.4	4.5
2013 Q1 <sup>(p)</sup>	34.0	-4.7	-0.5	-	-1.7	-1.2	-1.2	38.7	3.7	16.9	5.8

**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>											
2012 Q2	881.9	744.4	79.6	-	664.8	-	-	137.5	24.9	43.6	0.6
Q3	926.2	792.5	75.1	-	717.4	-	-	133.7	27.4	41.3	0.6
Q4	962.8	829.6	72.1	-	757.5	-	-	133.2	28.9	41.3	0.6
2013 Q1 <sup>(p)</sup>	1,025.3	887.9	74.3	-	813.6	-	-	137.4	32.5	43.5	0.6
<b>Transactions</b>											
2012 Q3	15.2	22.4	-6.9	-	29.3	-	-	-7.2	1.0	-2.7	0.1
Q4	29.2	29.5	-3.4	-	32.9	-	-	-0.3	1.2	0.6	0.0
2013 Q1 <sup>(p)</sup>	31.8	32.7	2.0	-	30.7	-	-	-0.9	2.1	0.9	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	
<b>Outstanding amounts</b>													
2012 Q1	2,234.0	321.8	1,506.1	1,198.5	551.6	150.4	23.6	4.8	128.8	210.4	86.4	38.1	71.1
Q2	2,159.2	306.7	1,459.6	1,150.9	513.2	154.0	22.9	4.4	127.4	208.8	85.2	33.0	65.8
Q3	2,082.0	302.8	1,398.8	1,087.6	476.1	158.3	23.4	4.4	125.1	195.2	86.3	31.1	67.9
Q4	2,047.6	284.6	1,379.5	1,065.6	469.8	162.9	24.3	4.0	122.6	199.1	88.4	30.2	65.7
2013 Q1	2,018.7	293.4	1,348.5	1,038.4	461.5	162.0	24.4	4.0	119.7	194.6	87.0	30.7	64.6
<b>Transactions</b>													
2012 Q1	-52.9	-6.5	-27.1	-19.1	-	-4.9	0.3	0.0	-3.3	-13.2	-2.2	-1.0	-3.0
Q2	-81.9	-14.8	-49.4	-50.4	-	4.0	-0.7	-0.4	-1.9	-2.0	-1.3	-5.3	-9.1
Q3	-80.9	-3.8	-61.6	-64.2	-	4.2	0.5	0.0	-2.0	-14.9	1.3	-2.0	0.1
Q4	-38.6	-17.8	-17.9	-21.1	-	4.5	1.1	-0.4	-2.0	2.2	2.4	-0.8	-6.7
2013 Q1	-31.1	7.7	-30.5	-28.9	-	1.4	0.2	0.0	-3.2	-1.9	-1.3	0.1	-5.3

### 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	
<b>Outstanding amounts</b>							
2012 Q1	2,234.0	155.7	1,821.6	59.0	1,762.6	34.8	221.9
Q2	2,159.2	150.6	1,753.3	54.3	1,699.0	28.6	226.7
Q3	2,082.0	145.2	1,683.4	52.2	1,631.2	27.3	226.2
Q4	2,047.6	139.8	1,658.2	53.1	1,605.1	27.4	222.1
2013 Q1	2,018.7	141.6	1,622.1	55.5	1,566.6	27.0	228.1
<b>Transactions</b>							
2012 Q1	-52.9	1.1	-55.4	-8.0	-47.4	-0.9	2.2
Q2	-81.9	-5.3	-71.1	-4.6	-66.5	-5.8	0.4
Q3	-80.9	-5.7	-71.4	-2.4	-68.9	-1.3	-2.6
Q4	-38.6	-5.4	-25.4	0.0	-25.4	0.0	-7.7
2013 Q1	-31.1	1.7	-34.2	2.4	-36.6	-0.9	2.3

### 3. Holdings of securitised loans originated by euro area MFIs and securities other than shares

	Securitized loans originated by euro area MFIs						Securities other than shares						
	Total	Euro area borrowing sector <sup>2)</sup>					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	
<b>Outstanding amounts</b>													
2012 Q1	1,198.5	879.5	246.0	18.2	0.2	6.4	32.4	210.4	115.1	41.4	73.7	30.2	95.3
Q2	1,150.9	833.0	245.8	18.7	0.2	6.3	33.3	208.8	115.6	42.6	73.0	29.1	93.1
Q3	1,087.6	787.5	233.1	17.1	0.2	5.5	31.6	195.2	109.4	38.7	70.7	27.8	85.8
Q4	1,065.6	770.2	230.2	17.5	0.2	5.4	31.1	199.1	114.4	39.4	75.0	29.6	84.8
2013 Q1	1,038.4	751.5	227.1	14.9	0.2	5.4	29.2	194.6	109.2	36.2	73.0	29.6	85.4
<b>Transactions</b>													
2012 Q1	-19.1	-10.4	-8.2	0.3	0.0	-0.2	0.6	-13.2	-6.0	-0.7	-5.3	-0.5	-7.3
Q2	-50.4	-48.5	-0.5	0.5	0.0	-0.1	0.3	-2.0	0.7	0.9	-0.3	-1.4	-2.7
Q3	-64.2	-47.0	-12.6	-1.0	0.0	-0.8	-1.8	-14.9	-6.9	-4.3	-2.6	-1.1	-8.0
Q4	-21.1	-17.8	-2.1	0.4	0.0	-0.1	0.1	2.2	5.2	0.9	4.3	1.8	-3.0
2013 Q1	-28.9	-20.8	-3.0	-2.3	0.0	0.0	-1.9	-1.9	-4.0	-2.6	-1.5	-2.2	-2.2

Source: ECB.

- 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.
- Excludes securitisations of inter-MFI loans.

## 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
2010 Q2	6,885.8	781.8	439.0	2,645.8	776.8	1,515.0	88.3	251.0	241.9	146.2
Q3	7,061.0	780.2	447.4	2,734.7	792.6	1,555.5	86.1	253.1	264.9	146.5
Q4	7,034.7	768.3	453.1	2,672.9	825.7	1,611.4	76.9	253.8	223.6	149.0
2011 Q1	7,137.3	769.2	454.7	2,733.7	842.7	1,623.2	76.2	261.7	225.2	150.8
Q2	7,153.6	772.1	462.4	2,744.6	840.7	1,626.9	79.3	254.1	223.9	149.5
Q3	7,153.7	789.2	461.8	2,770.0	785.9	1,583.1	88.5	255.5	270.7	149.1
Q4	7,162.9	781.8	471.2	2,730.8	794.9	1,614.6	91.3	253.4	274.2	150.7
2012 Q1	7,449.6	793.1	468.4	2,873.5	809.0	1,716.8	98.3	255.1	284.8	150.6
Q2	7,477.0	782.4	468.3	2,884.7	805.5	1,717.3	102.9	258.1	306.4	151.5
Q3	7,696.2	782.5	478.8	3,000.2	825.7	1,792.7	106.5	259.9	298.1	151.9
Q4	7,787.8	786.2	481.1	3,042.4	828.2	1,837.3	105.7	258.7	294.9	153.4
2013 Q1 <sup>(p)</sup>	7,996.9	790.3	483.9	3,130.1	859.4	1,911.7	111.5	261.4	294.2	154.4

### 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
2010 Q2	2,645.8	2,223.6	583.2	1,227.2	245.5	16.2	151.5	422.2
Q3	2,734.7	2,307.9	601.5	1,279.8	254.5	18.6	153.5	426.9
Q4	2,672.9	2,249.3	599.0	1,242.6	234.2	17.5	155.9	423.6
2011 Q1	2,733.7	2,317.2	624.0	1,285.8	236.6	17.2	153.6	416.4
Q2	2,744.6	2,328.4	629.1	1,290.0	235.5	16.8	157.1	416.2
Q3	2,770.0	2,349.1	640.1	1,305.2	227.1	16.9	159.8	420.9
Q4	2,730.8	2,307.0	635.5	1,266.7	223.9	16.5	164.3	423.8
2012 Q1	2,873.5	2,423.5	665.6	1,329.1	231.5	17.0	180.3	450.0
Q2	2,884.7	2,420.7	666.9	1,315.7	234.5	16.8	186.7	464.0
Q3	3,000.2	2,506.0	696.8	1,347.0	243.6	17.4	201.2	494.3
Q4	3,042.4	2,534.0	676.0	1,384.3	246.8	17.9	208.9	508.4
2013 Q1 <sup>(p)</sup>	3,130.1	2,614.2	698.4	1,430.7	251.9	17.6	215.7	515.9

### 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
2010 Q2	6,710.7	251.1	39.5	431.7	5,796.2	3,156.9	1,826.1	813.2	192.2	175.2
Q3	6,873.6	276.2	38.6	441.4	5,938.5	3,220.7	1,908.4	809.4	178.9	187.4
Q4	6,867.6	250.3	39.6	451.7	5,957.4	3,257.8	1,889.6	809.9	168.6	167.1
2011 Q1	6,914.0	262.7	39.4	466.2	5,970.6	3,283.7	1,861.0	825.9	175.2	223.3
Q2	6,935.8	262.1	42.0	455.0	6,000.7	3,304.6	1,874.1	822.0	176.0	217.8
Q3	7,044.7	269.5	41.0	410.4	6,134.4	3,286.5	2,026.6	821.3	189.3	109.1
Q4	7,065.9	263.8	40.9	409.2	6,164.0	3,297.9	2,050.4	815.7	188.1	96.9
2012 Q1	7,228.9	271.8	45.0	438.9	6,281.7	3,339.7	2,108.6	833.4	191.5	220.6
Q2	7,296.3	279.1	43.7	420.9	6,346.4	3,340.9	2,172.1	833.4	206.2	180.7
Q3	7,373.4	290.3	45.3	452.7	6,388.2	3,388.8	2,163.6	835.8	196.9	322.9
Q4	7,478.9	267.3	49.7	481.0	6,459.4	3,422.4	2,200.7	836.3	221.5	309.0
2013 Q1 <sup>(p)</sup>	7,588.5	280.7	49.6	495.0	6,535.6	3,472.0	2,201.4	862.2	227.6	408.4

Source: ECB.



## EURO AREA ACCOUNTS

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

(EUR billions)

Uses	Euro area	Households	Non-financial corporations	Financial corporations	General government	Rest of the world
<b>2012 Q4</b>						
<b>External account</b>						
Exports of goods and services						641
<i>Trade balance</i> <sup>1)</sup>						-56
<b>Generation of income account</b>						
Gross value added (basic prices)						
Taxes less subsidies on products						
Gross domestic product (market prices)						
Compensation of employees	1,254	128	793	65	268	
Other taxes less subsidies on production	34	13	10	5	6	
Consumption of fixed capital	376	101	213	11	51	
<i>Net operating surplus and mixed income</i> <sup>1)</sup>	506	260	224	22	-2	
<b>Allocation of primary income account</b>						
Net operating surplus and mixed income						7
Compensation of employees						
Taxes less subsidies on production						
Property income	662	34	255	295	78	111
Interest	359	31	61	190	78	51
Other property income	302	3	194	106	0	60
<i>Net national income</i> <sup>1)</sup>	2,075	1,697	89	39	250	
<b>Secondary distribution of income account</b>						
Net national income						
Current taxes on income, wealth, etc.	345	265	69	12	0	1
Social contributions	483	483				1
Social benefits other than social transfers in kind	495	1	18	36	440	1
Other current transfers	201	72	26	50	53	11
Net non-life insurance premiums	46	34	11	1	1	2
Non-life insurance claims	47			47		1
Other	108	38	16	2	53	8
<i>Net disposable income</i> <sup>1)</sup>	2,049	1,462	10	41	537	
<b>Use of income account</b>						
Net disposable income						
Final consumption expenditure	1,940	1,383			557	
Individual consumption expenditure	1,723	1,383			340	
Collective consumption expenditure	217				217	
Adjustment for the change in the net equity of households in pension fund reserves	15	0	1	14	0	0
<i>Net saving/current external account</i> <sup>1)</sup>	109	94	9	27	-21	-56
<b>Capital account</b>						
Net saving/current external account						
Gross capital formation	430	141	221	13	55	
Gross fixed capital formation	453	141	245	13	55	
Changes in inventories and acquisitions less disposals of valuables	-24	0	-24	0	0	
Consumption of fixed capital						
Acquisitions less disposals of non-produced non-financial assets	0	-1	1	0	0	0
Capital transfers	84	10	3	3	68	11
Capital taxes	7	6	1	0		0
Other capital transfers	77	4	2	3	68	11
<i>Net lending (+)/net borrowing (-) (from capital account)</i> <sup>1)</sup>	63	57	22	58	-75	-63
Statistical discrepancy	0	-7	7	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	2012 Q4					
	Euro area	Households	Non-financial corporations	Financial corporations	General government	Rest of the world
<b>External account</b>						
Imports of goods and services						585
<i>Trade balance</i>						
<b>Generation of income account</b>						
Gross value added (basic prices)	2,170	502	1,241	103	323	
Taxes less subsidies on products	256					
Gross domestic product (market prices) <sup>2)</sup>	2,425					
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	506	260	224	22	-2	
Compensation of employees	1,257	1,257				3
Taxes less subsidies on production	304				304	-14
Property income	670	214	119	312	25	102
Interest	354	54	41	248	11	57
Other property income	317	160	78	64	14	46
<i>Net national income</i>						
<b>Secondary distribution of income account</b>						
Net national income	2,075	1,697	89	39	250	
Current taxes on income, wealth, etc.	345				345	1
Social contributions	483	1	19	51	411	1
Social benefits other than social transfers in kind	493	493				3
Other current transfers	177	91	15	48	23	35
Net non-life insurance premiums	47			47		1
Non-life insurance claims	45	35	9	1	0	3
Other	85	56	6	0	23	31
<i>Net disposable income</i>						
<b>Use of income account</b>						
Net disposable income	2,049	1,462	10	41	537	
Final consumption expenditure						
Individual consumption expenditure						
Collective consumption expenditure						
Adjustment for the change in the net equity of households in pension fund reserves	15	15				0
<i>Net saving/current external account</i>						
<b>Capital account</b>						
Net saving/current external account	109	94	9	27	-21	-56
Gross capital formation						
Gross fixed capital formation						
Changes in inventories and acquisitions less disposals of valuables						
Consumption of fixed capital	376	101	213	11	51	
Acquisitions less disposals of non-produced non-financial assets						
Capital transfers	90	13	25	35	17	5
Capital taxes	7				7	0
Other capital transfers	83	13	25	35	10	5
<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
2012 Q4								
<b>Opening balance sheet, financial assets</b>								
Total financial assets		19,363	17,055	35,464	16,041	7,271	4,121	17,879
Monetary gold and special drawing rights (SDRs)				530				
Currency and deposits		6,926	2,073	11,783	2,236	801	816	3,576
Short-term debt securities		58	86	573	421	73	34	618
Long-term debt securities		1,310	307	6,378	2,733	2,909	421	4,128
Loans		77	3,092	13,424	3,806	487	686	2,195
<i>of which: Long-term</i>		57	1,915	10,411	2,639	361	601	.
Shares and other equity		4,268	7,761	1,780	6,529	2,624	1,435	6,528
Quoted shares		735	1,042	351	2,063	390	201	.
Unquoted shares and other equity		2,150	6,346	1,140	3,393	432	1,056	.
Mutual fund shares		1,383	374	289	1,073	1,801	178	.
Insurance technical reserves		6,147	177	3	0	240	4	266
Other accounts receivable and financial derivatives		578	3,558	993	316	138	725	567
<i>Net financial worth</i>								
<b>Financial account, transactions in financial assets</b>								
Total transactions in financial assets		81	115	-699	235	56	117	-66
Monetary gold and SDRs				0				0
Currency and deposits		110	87	-460	-74	-1	-69	-211
Short-term debt securities		-12	-5	-20	-23	-6	3	-2
Long-term debt securities		-52	-4	-5	119	29	4	65
Loans		0	-42	-148	162	4	125	-23
<i>of which: Long-term</i>		0	-10	-72	116	3	110	.
Shares and other equity		30	24	49	78	29	45	84
Quoted shares		-1	-5	20	28	10	4	.
Unquoted shares and other equity		22	20	15	24	2	49	.
Mutual fund shares		8	9	14	27	17	-8	.
Insurance technical reserves		33	-1	0	0	1	0	5
Other accounts receivable and financial derivatives		-26	56	-115	-28	0	8	16
<i>Changes in net financial worth due to transactions</i>								
<b>Other changes account, financial assets</b>								
Total other changes in financial assets		181	136	-116	94	57	20	15
Monetary gold and SDRs				-23				
Currency and deposits		-1	-3	-80	-1	1	0	-32
Short-term debt securities		3	-1	-1	-5	0	0	-9
Long-term debt securities		33	8	39	27	28	7	14
Loans		0	-27	-66	7	0	0	22
<i>of which: Long-term</i>		0	-22	-32	2	0	5	.
Shares and other equity		101	179	14	74	28	13	45
Quoted shares		24	95	-1	57	6	4	.
Unquoted shares and other equity		57	81	17	2	-2	7	.
Mutual fund shares		20	3	-2	15	24	2	.
Insurance technical reserves		43	0	0	0	0	0	2
Other accounts receivable and financial derivatives		2	-20	0	-8	0	0	-27
<i>Other changes in net financial worth</i>								
<b>Closing balance sheet, financial assets</b>								
Total financial assets		19,626	17,306	34,649	16,370	7,383	4,258	17,827
Monetary gold and SDRs				508				
Currency and deposits		7,035	2,157	11,244	2,161	800	747	3,333
Short-term debt securities		48	80	552	394	67	37	607
Long-term debt securities		1,291	312	6,412	2,879	2,966	433	4,207
Loans		77	3,023	13,210	3,974	491	812	2,194
<i>of which: Long-term</i>		57	1,882	10,307	2,757	363	716	.
Shares and other equity		4,399	7,965	1,843	6,681	2,681	1,493	6,657
Quoted shares		758	1,131	370	2,148	406	209	.
Unquoted shares and other equity		2,229	6,448	1,173	3,419	432	1,111	.
Mutual fund shares		1,412	386	301	1,114	1,843	173	.
Insurance technical reserves		6,222	175	3	0	240	4	273
Other accounts receivable and financial derivatives		554	3,594	878	280	138	733	556
<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	MFIs	Other financial intermediaries	Insurance corporations and pension funds	General government	Rest of the world
2012 Q4								
<b>Opening balance sheet, liabilities</b>								
Total liabilities		6,807	26,187	34,393	15,725	7,296	10,199	16,058
Monetary gold and special drawing rights (SDRs)								
Currency and deposits			31	25,170	32	0	275	2,702
Short-term debt securities			91	696	72	3	704	298
Long-term debt securities			927	4,697	2,783	46	6,522	3,211
Loans		6,188	8,462		3,530	301	2,067	3,221
<i>of which: Long-term</i>		5,840	6,189		1,882	106	1,756	.
Shares and other equity		8	12,761	2,582	9,199	438	4	5,934
Quoted shares			3,550	367	214	117	0	.
Unquoted shares and other equity		8	9,211	1,273	2,852	320	4	.
Mutual fund shares				942	6,133			.
Insurance technical reserves		36	348	67	1	6,384	1	.
Other accounts payable and financial derivatives		575	3,567	1,182	108	124	627	692
<i>Net financial worth <sup>1)</sup></i>	-1,291	12,557	-9,132	1,071	316	-25	-6,078	
<b>Financial account, transactions in liabilities</b>								
Total transactions in liabilities		31	87	-715	195	54	192	-4
Monetary gold and SDRs								
Currency and deposits			1	-564	4	0	6	-65
Short-term debt securities			-8	-58	37	0	-34	-2
Long-term debt securities			29	-43	81	3	62	23
Loans		15	-67		-27	-27	201	-18
<i>of which: Long-term</i>		11	-61		-28	3	212	.
Shares and other equity		0	56	21	171	-1	0	92
Quoted shares			14	6	2	0	0	.
Unquoted shares and other equity		0	42	37	42	-1	0	.
Mutual fund shares				-22	127			.
Insurance technical reserves		0	1	1	0	36	0	.
Other accounts payable and financial derivatives		16	75	-72	-73	43	-43	-33
<i>Changes in net financial worth due to transactions <sup>1)</sup></i>	63	51	29	16	40	2	-75	-63
<b>Other changes account, liabilities</b>								
Total other changes in liabilities		-13	337	-64	88	37	135	-112
Monetary gold and SDRs								
Currency and deposits			0	-95	0	0	0	-21
Short-term debt securities			0	-4	-1	0	-1	-8
Long-term debt securities			1	10	13	1	137	-5
Loans		-11	-47		7	0	4	-17
<i>of which: Long-term</i>		-10	-35		14	0	4	.
Shares and other equity		0	390	16	63	26	0	-41
Quoted shares			183	32	18	16	0	.
Unquoted shares and other equity		0	207	-6	-32	10	0	.
Mutual fund shares				-10	77			.
Insurance technical reserves		0	0	0	0	43	0	.
Other accounts payable and financial derivatives		-2	-6	9	6	-33	-6	-20
<i>Other changes in net financial worth <sup>1)</sup></i>	-149	194	-201	-52	6	19	-115	126
<b>Closing balance sheet, liabilities</b>								
Total liabilities		6,824	26,611	33,614	16,007	7,387	10,526	15,942
Monetary gold and SDRs								
Currency and deposits			32	24,511	37	0	281	2,616
Short-term debt securities			83	634	108	3	670	289
Long-term debt securities			956	4,664	2,878	51	6,721	3,229
Loans		6,192	8,347		3,510	273	2,273	3,185
<i>of which: Long-term</i>		5,840	6,093		1,868	109	1,972	.
Shares and other equity		8	13,208	2,619	9,433	463	4	5,985
Quoted shares			3,747	404	234	134	0	.
Unquoted shares and other equity		8	9,461	1,304	2,862	328	4	.
Mutual fund shares				911	6,337			.
Insurance technical reserves		36	349	68	1	6,463	1	.
Other accounts payable and financial derivatives		588	3,636	1,119	41	133	577	639
<i>Net financial worth <sup>1)</sup></i>	-1,377	12,802	-9,304	1,035	363	-4	-6,268	

Source: ECB.



### 3.2 Euro area non-financial accounts

(EUR billions; four-quarter cumulated flows)

Uses	2008	2009	2010	2011 Q1- 2011 Q4	2011 Q2- 2012 Q1	2011 Q3- 2012 Q2	2011 Q4- 2012 Q3	2012 Q1- 2012 Q4
<b>Generation of income account</b>								
Gross value added (basic prices)								
Taxes less subsidies on products								
Gross domestic product (market prices)								
Compensation of employees	4,464	4,448	4,508	4,625	4,641	4,652	4,665	4,669
Other taxes less subsidies on production	94	86	83	96	104	112	117	127
Consumption of fixed capital	1,361	1,387	1,418	1,466	1,476	1,484	1,491	1,497
<i>Net operating surplus and mixed income</i> <sup>1)</sup>	2,357	2,099	2,204	2,243	2,240	2,226	2,210	2,190
<b>Allocation of primary income account</b>								
Net operating surplus and mixed income								
Compensation of employees								
Taxes less subsidies on production								
Property income	3,949	2,964	2,823	2,986	3,011	3,003	2,980	2,951
Interest	2,386	1,596	1,384	1,543	1,561	1,549	1,523	1,482
Other property income	1,563	1,369	1,439	1,443	1,450	1,454	1,457	1,469
<i>Net national income</i> <sup>1)</sup>	7,801	7,541	7,753	7,926	7,962	7,974	8,001	8,003
<b>Secondary distribution of income account</b>								
Net national income								
Current taxes on income, wealth, etc.	1,145	1,028	1,055	1,111	1,123	1,140	1,155	1,177
Social contributions	1,672	1,677	1,704	1,755	1,763	1,773	1,780	1,789
Social benefits other than social transfers in kind	1,652	1,768	1,813	1,842	1,852	1,863	1,875	1,886
Other current transfers	773	773	777	785	787	790	792	787
Net non-life insurance premiums	188	180	181	184	186	186	187	186
Non-life insurance claims	190	182	182	186	187	188	189	188
Other	395	411	413	414	415	416	415	412
<i>Net disposable income</i> <sup>1)</sup>	7,699	7,433	7,641	7,816	7,850	7,859	7,887	7,891
<b>Use of income account</b>								
Net disposable income								
Final consumption expenditure	7,138	7,151	7,316	7,473	7,499	7,507	7,513	7,518
Individual consumption expenditure	6,403	6,382	6,542	6,697	6,722	6,730	6,734	6,741
Collective consumption expenditure	735	769	774	776	777	777	778	777
Adjustment for the change in the net equity of households in pension fund reserves	70	61	56	59	60	61	60	60
<i>Net saving</i> <sup>1)</sup>	561	282	325	344	351	352	374	374
<b>Capital account</b>								
Net saving								
Gross capital formation	2,072	1,705	1,786	1,867	1,852	1,821	1,792	1,769
Gross fixed capital formation	2,010	1,753	1,762	1,827	1,826	1,812	1,796	1,777
Changes in inventories and acquisitions less disposals of valuables	62	-48	24	40	26	9	-4	-9
Consumption of fixed capital								
Acquisitions less disposals of non-produced non-financial assets	1	1	1	0	0	1	1	0
Capital transfers	152	184	222	175	170	176	185	196
Capital taxes	24	34	25	31	30	29	29	26
Other capital transfers	128	150	197	144	140	147	156	171
<i>Net lending (+)/net borrowing (-) (from capital account)</i> <sup>1)</sup>	-142	-28	-34	-46	-15	25	86	115

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	2008	2009	2010	2011 Q1- 2011 Q4	2011 Q2- 2012 Q1	2011 Q3- 2012 Q2	2011 Q4- 2012 Q3	2012 Q1- 2012 Q4
<b>Generation of income account</b>								
Gross value added (basic prices)	8,276	8,020	8,214	8,430	8,460	8,474	8,483	8,483
Taxes less subsidies on products	946	894	942	974	976	972	972	976
Gross domestic product (market prices) <sup>2)</sup>	9,222	8,914	9,156	9,404	9,436	9,447	9,455	9,459
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	2,357	2,099	2,204	2,243	2,240	2,226	2,210	2,190
Compensation of employees	4,473	4,459	4,520	4,637	4,654	4,665	4,677	4,682
Taxes less subsidies on production	1,047	997	1,039	1,080	1,089	1,094	1,098	1,114
Property income	3,873	2,950	2,812	2,951	2,991	2,992	2,996	2,969
Interest	2,330	1,551	1,338	1,495	1,515	1,511	1,494	1,458
Other property income	1,544	1,399	1,474	1,456	1,475	1,481	1,502	1,512
<i>Net national income</i>								
<b>Secondary distribution of income account</b>								
Net national income	7,801	7,541	7,753	7,926	7,962	7,974	8,001	8,003
Current taxes on income, wealth, etc.	1,154	1,033	1,059	1,118	1,129	1,144	1,158	1,180
Social contributions	1,670	1,675	1,703	1,753	1,762	1,772	1,778	1,787
Social benefits other than social transfers in kind	1,644	1,762	1,806	1,836	1,846	1,856	1,868	1,879
Other current transfers	672	668	668	676	677	679	682	680
Net non-life insurance premiums	190	182	182	186	187	188	189	188
Non-life insurance claims	185	178	178	180	181	182	183	181
Other	297	308	308	310	309	309	310	310
<i>Net disposable income</i>								
<b>Use of income account</b>								
Net disposable income	7,699	7,433	7,641	7,816	7,850	7,859	7,887	7,891
Final consumption expenditure								
Individual consumption expenditure								
Collective consumption expenditure								
Adjustment for the change in the net equity of households in pension fund reserves	70	61	56	59	60	61	60	60
<i>Net saving</i>								
<b>Capital account</b>								
Net saving	561	282	325	344	351	352	374	374
Gross capital formation								
Gross fixed capital formation								
Changes in inventories and acquisitions less disposals of valuables								
Consumption of fixed capital	1,361	1,387	1,418	1,466	1,476	1,484	1,491	1,497
Acquisitions less disposals of non-produced non-financial assets								
Capital transfers	161	193	232	185	180	188	197	209
Capital taxes	24	34	25	31	30	29	29	26
Other capital transfers	137	159	207	154	150	159	168	184
<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)

	2008	2009	2010	2011 Q1- 2011 Q4	2011 Q2- 2012 Q1	2011 Q3- 2012 Q2	2011 Q4- 2012 Q3	2012 Q1- 2012 Q4
<b>Income, saving and changes in net worth</b>								
Compensation of employees (+)	4,473	4,459	4,520	4,637	4,654	4,665	4,677	4,682
Gross operating surplus and mixed income (+)	1,525	1,441	1,439	1,476	1,481	1,481	1,482	1,479
Interest receivable (+)	347	233	201	228	233	232	231	226
Interest payable (-)	251	146	124	145	146	143	139	132
Other property income receivable (+)	787	726	725	745	757	754	749	748
Other property income payable (-)	10	10	10	10	10	10	10	10
Current taxes on income and wealth (-)	873	842	848	882	894	909	924	940
Net social contributions (-)	1,668	1,672	1,699	1,750	1,758	1,768	1,775	1,784
Net social benefits (+)	1,639	1,757	1,801	1,831	1,841	1,851	1,863	1,873
Net current transfers receivable (+)	69	72	71	70	68	69	68	70
<b>= Gross disposable income</b>	<b>6,038</b>	<b>6,017</b>	<b>6,077</b>	<b>6,201</b>	<b>6,225</b>	<b>6,221</b>	<b>6,222</b>	<b>6,212</b>
Final consumption expenditure (-)	5,232	5,155	5,292	5,435	5,457	5,463	5,465	5,471
Changes in net worth in pension funds (+)	70	60	56	58	59	60	59	59
<b>= Gross saving</b>	<b>876</b>	<b>922</b>	<b>840</b>	<b>824</b>	<b>827</b>	<b>818</b>	<b>816</b>	<b>800</b>
Consumption of fixed capital (-)	375	379	385	395	398	400	401	402
Net capital transfers receivable (+)	0	10	13	9	8	7	6	6
Other changes in net worth (+)	-1,053	-93	812	-44	-145	-621	-420	-420
<b>= Changes in net worth</b>	<b>-553</b>	<b>460</b>	<b>1,281</b>	<b>393</b>	<b>291</b>	<b>-195</b>	<b>2</b>	<b>-16</b>
<b>Investment, financing and changes in net worth</b>								
Net acquisition of non-financial assets (+)	648	554	558	577	577	572	566	561
Consumption of fixed capital (-)	375	379	385	395	398	400	401	402
Main items of financial investment (+)								
Short-term assets	449	6	38	124	148	159	171	192
Currency and deposits	437	121	118	118	155	165	176	226
Money market fund shares	-3	-40	-59	-21	-22	-20	-27	-30
Debt securities <sup>1)</sup>	15	-74	-20	28	15	14	22	-3
Long-term assets	64	450	406	223	238	204	152	99
Deposits	-25	71	57	55	52	43	26	10
Debt securities	31	6	-11	55	41	-11	-26	-122
Shares and other equity	-75	143	110	-1	45	74	51	90
Quoted and unquoted shares and other equity	69	117	101	45	78	100	69	65
Mutual fund shares	-144	26	9	-46	-33	-26	-18	25
Life insurance and pension fund reserves	133	230	249	115	100	98	101	122
Main items of financing (-)								
Loans	257	107	120	84	68	39	19	15
<i>of which: From euro area MFIs</i>	83	65	147	81	34	13	1	26
Other changes in assets (+)								
Non-financial assets	296	-393	723	271	-37	-408	-903	-915
Financial assets	-1,427	300	133	-376	-191	-264	452	472
Shares and other equity	-1,166	99	36	-346	-302	-350	247	241
Life insurance and pension fund reserves	-235	186	123	23	108	107	184	171
Remaining net flows (+)	49	29	-72	53	23	-20	-17	-9
<b>= Changes in net worth</b>	<b>-553</b>	<b>460</b>	<b>1,281</b>	<b>393</b>	<b>291</b>	<b>-195</b>	<b>2</b>	<b>-16</b>
<b>Balance sheet</b>								
Non-financial assets (+)	25,346	25,128	26,025	26,478	26,243	26,140	25,933	25,721
Financial assets (+)								
Short-term assets	5,777	5,772	5,814	5,952	5,969	6,022	6,032	6,117
Currency and deposits	5,321	5,474	5,596	5,726	5,755	5,822	5,839	5,949
Money market fund shares	320	246	189	172	156	145	135	120
Debt securities <sup>1)</sup>	136	52	29	53	57	54	58	48
Long-term assets	10,794	11,596	12,112	11,964	12,268	12,160	12,372	12,575
Deposits	908	960	1,018	1,073	1,082	1,092	1,087	1,086
Debt securities	1,328	1,387	1,327	1,339	1,389	1,332	1,310	1,291
Shares and other equity	3,857	4,132	4,277	3,925	4,072	3,982	4,133	4,279
Quoted and unquoted shares and other equity	2,892	2,988	3,049	2,802	2,873	2,790	2,885	2,987
Mutual fund shares	965	1,144	1,228	1,123	1,199	1,192	1,248	1,291
Life insurance and pension fund reserves	4,701	5,117	5,490	5,627	5,725	5,753	5,843	5,920
Remaining net assets (+)	295	302	309	345	314	316	341	302
Liabilities (-)								
Loans	5,806	5,932	6,112	6,199	6,183	6,197	6,188	6,192
<i>of which: From euro area MFIs</i>	4,914	4,968	5,213	5,281	5,269	5,294	5,283	5,291
<b>= Net worth</b>	<b>36,406</b>	<b>36,866</b>	<b>38,147</b>	<b>38,540</b>	<b>38,610</b>	<b>38,440</b>	<b>38,490</b>	<b>38,524</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)

	2008	2009	2010	2011 Q1- 2011 Q4	2011 Q2- 2012 Q1	2011 Q3- 2012 Q2	2011 Q4- 2012 Q3	2012 Q1- 2012 Q4
<b>Income and saving</b>								
Gross value added (basic prices) (+)	4,758	4,519	4,672	4,829	4,848	4,857	4,862	4,865
Compensation of employees (-)	2,841	2,787	2,827	2,927	2,941	2,952	2,963	2,970
Other taxes less subsidies on production (-)	46	41	35	42	44	48	49	53
<b>= Gross operating surplus (+)</b>	<b>1,870</b>	<b>1,691</b>	<b>1,810</b>	<b>1,859</b>	<b>1,862</b>	<b>1,856</b>	<b>1,850</b>	<b>1,842</b>
Consumption of fixed capital (-)	765	782	800	830	836	840	845	848
<b>= Net operating surplus (+)</b>	<b>1,106</b>	<b>910</b>	<b>1,011</b>	<b>1,029</b>	<b>1,026</b>	<b>1,016</b>	<b>1,005</b>	<b>994</b>
Property income receivable (+)	629	528	565	552	557	565	579	578
Interest receivable	239	168	160	169	171	171	168	164
Other property income receivable	390	360	405	383	386	394	410	414
Interest and rents payable (-)	427	299	259	291	294	289	283	274
<b>= Net entrepreneurial income (+)</b>	<b>1,308</b>	<b>1,139</b>	<b>1,316</b>	<b>1,290</b>	<b>1,289</b>	<b>1,291</b>	<b>1,301</b>	<b>1,298</b>
Distributed income (-)	1,009	927	951	975	976	989	990	995
Taxes on income and wealth payable (-)	235	151	168	188	187	189	189	196
Social contributions receivable (+)	68	71	69	74	74	74	74	74
Social benefits payable (-)	66	68	69	70	70	70	71	71
Other net transfers (-)	48	47	45	47	47	47	47	47
<b>= Net saving</b>	<b>17</b>	<b>16</b>	<b>152</b>	<b>84</b>	<b>82</b>	<b>71</b>	<b>78</b>	<b>64</b>
<b>Investment, financing and saving</b>								
Net acquisition of non-financial assets (+)	367	71	157	199	183	161	137	114
Gross fixed capital formation (+)	1,073	902	933	991	992	989	982	972
Consumption of fixed capital (-)	765	782	800	830	836	840	845	848
Net acquisition of other non-financial assets (+)	58	-50	24	38	27	12	0	-10
Main items of financial investment (+)								
Short-term assets	61	96	43	-26	-4	-1	19	56
Currency and deposits	14	88	68	6	16	16	38	77
Money market fund shares	33	39	-23	-43	-35	-30	-24	-14
Debt securities <sup>1)</sup>	15	-31	-2	11	15	13	5	-7
Long-term assets	598	132	439	452	448	371	306	202
Deposits	34	0	20	87	45	21	-27	-3
Debt securities	-24	25	5	-1	-5	11	12	9
Shares and other equity	323	96	251	232	251	164	128	99
Other (mainly intercompany loans)	265	11	163	134	157	175	193	98
Remaining net assets (+)	-18	57	-22	-44	-25	-5	71	67
Main items of financing (-)								
Debt	633	14	152	218	216	168	196	102
of which: Loans from euro area MFIs	391	-107	-17	74	-1	-42	-89	-143
of which: Debt securities	46	90	61	50	74	92	106	115
Shares and other equity	281	240	245	210	238	220	187	198
Quoted shares	-7	59	31	27	19	15	16	26
Unquoted shares and other equity	288	181	214	184	218	205	172	172
Net capital transfers receivable (-)	74	82	66	69	67	67	69	68
<b>= Net saving</b>	<b>17</b>	<b>16</b>	<b>152</b>	<b>84</b>	<b>82</b>	<b>71</b>	<b>78</b>	<b>64</b>
<b>Financial balance sheet</b>								
Financial assets								
Short-term assets	1,849	1,934	1,968	1,944	1,920	1,923	1,929	1,992
Currency and deposits	1,538	1,632	1,696	1,706	1,682	1,698	1,717	1,782
Money market fund shares	192	214	192	147	141	135	126	130
Debt securities <sup>1)</sup>	118	88	81	91	97	90	86	80
Long-term assets	9,492	10,245	10,752	10,698	11,198	11,087	11,390	11,545
Deposits	246	236	245	336	360	358	355	375
Debt securities	218	240	254	268	299	300	307	312
Shares and other equity	6,388	7,141	7,444	7,134	7,558	7,367	7,635	7,835
Other (mainly intercompany loans)	2,640	2,628	2,809	2,961	2,980	3,062	3,092	3,023
Remaining net assets	278	298	96	104	190	125	199	166
Liabilities								
Debt	9,247	9,206	9,478	9,638	9,679	9,755	9,828	9,735
of which: Loans from euro area MFIs	4,856	4,701	4,675	4,719	4,686	4,691	4,631	4,499
of which: Debt securities	695	815	877	886	936	965	1,018	1,040
Shares and other equity	11,186	12,421	12,948	12,190	12,767	12,354	12,761	13,208
Quoted shares	2,953	3,502	3,799	3,281	3,569	3,331	3,550	3,747
Unquoted shares and other equity	8,233	8,919	9,150	8,909	9,199	9,022	9,211	9,461

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)

	2008	2009	2010	2011 Q1- 2011 Q4	2011 Q2- 2012 Q1	2011 Q3- 2012 Q2	2011 Q4- 2012 Q3	2012 Q1- 2012 Q4
<b>Financial account, financial transactions</b>								
<b>Main items of financial investment (+)</b>								
Short-term assets	69	-47	-16	49	88	76	59	49
Currency and deposits	57	-33	-9	14	29	15	3	16
Money market fund shares	12	0	-17	11	47	48	45	39
Debt securities <sup>1)</sup>	1	-14	11	24	12	13	10	-6
Long-term assets	130	292	292	146	87	88	101	179
Deposits	5	15	-5	7	-4	-5	-15	-17
Debt securities	78	102	181	54	27	42	74	125
Loans	20	8	32	9	6	0	13	13
Quoted shares	-12	-51	-2	-12	-16	-13	-15	-4
Unquoted shares and other equity	14	-14	11	15	10	15	8	7
Mutual fund shares	25	233	75	72	63	49	36	55
Remaining net assets (+)	14	12	10	-51	-57	-18	-14	-45
<b>Main items of financing (-)</b>								
Debt securities	5	5	1	3	5	1	3	6
Loans	30	-4	7	6	-3	1	4	-12
Shares and other equity	8	5	7	2	1	3	2	0
Insurance technical reserves	127	246	281	115	103	109	124	150
Net equity of households in life insurance and pension fund reserves	124	240	262	110	100	98	109	126
Prepayments of insurance premiums and reserves for outstanding claims	2	6	19	5	3	11	15	24
<b>= Changes in net financial worth due to transactions</b>	43	4	-9	19	11	32	13	38
<b>Other changes account</b>								
<b>Other changes in financial assets (+)</b>								
Shares and other equity	-546	200	113	-108	-6	-26	192	184
Other net assets	46	44	1	18	138	109	146	221
<b>Other changes in liabilities (-)</b>								
Shares and other equity	-171	12	-1	-49	-31	-36	42	68
Insurance technical reserves	-253	165	141	25	115	115	191	177
Net equity of households in life insurance and pension fund reserves	-246	193	130	23	111	115	193	182
Prepayments of insurance premiums and reserves for outstanding claims	-8	-28	11	2	4	0	-3	-5
<b>= Other changes in net financial worth</b>	-76	66	-26	-66	49	4	106	160
<b>Financial balance sheet</b>								
<b>Financial assets (+)</b>								
Short-term assets	376	324	313	350	382	372	387	388
Currency and deposits	224	195	190	193	208	195	200	210
Money market fund shares	98	90	74	84	107	110	113	111
Debt securities <sup>1)</sup>	54	39	49	74	66	68	73	67
Long-term assets	5,097	5,665	6,058	6,060	6,301	6,303	6,507	6,617
Deposits	599	611	605	608	609	606	601	591
Debt securities	2,290	2,468	2,638	2,659	2,787	2,803	2,909	2,966
Loans	431	434	467	477	476	476	487	491
Quoted shares	384	397	421	376	386	373	390	406
Unquoted shares and other equity	419	413	417	427	432	433	432	432
Mutual fund shares	974	1,341	1,510	1,514	1,610	1,612	1,688	1,731
Remaining net assets (+)	237	214	238	251	241	253	253	245
<b>Liabilities (-)</b>								
Debt securities	36	42	43	46	48	48	49	54
Loans	281	270	282	285	285	290	301	273
Shares and other equity	419	437	443	396	427	408	438	463
Insurance technical reserves	5,164	5,575	5,997	6,136	6,254	6,287	6,384	6,463
Net equity of households in life insurance and pension fund reserves	4,364	4,796	5,188	5,321	5,423	5,456	5,551	5,630
Prepayments of insurance premiums and reserves for outstanding claims	800	778	809	815	830	831	834	834
<b>= Net financial wealth</b>	-190	-120	-155	-202	-90	-105	-25	-4

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

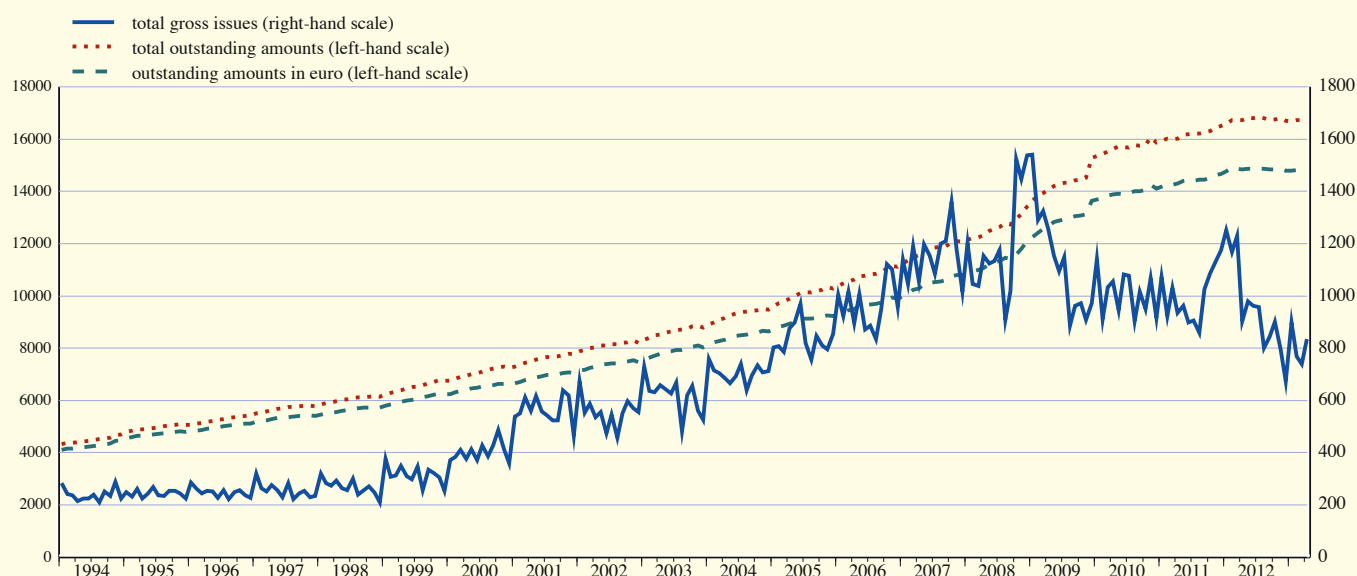
### 4.1 Securities other than shares by original maturity, residency of the issuer and currency

(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								
	Outstanding amounts	Gross issues	Net issues	In euro			In all currencies					
				Outstanding amounts	Gross issues	Net issues	Outstanding amounts	Gross issues	Net issues	Annual growth rates	Seasonally adjusted <sup>2)</sup>	
1	2	3	4	5	6	7	8	9	10	Net issues 11	6-month growth rates 12	
<b>Total</b>												
2012 Apr.	17,128.0	839.1	-35.4	14,836.3	801.2	-8.5	16,720.2	904.6	-2.0	4.3	-8.5	5.0
May	17,169.4	919.0	42.7	14,877.7	866.6	42.6	16,823.3	980.1	59.6	4.0	-2.0	4.6
June	17,175.3	932.7	6.5	14,875.7	871.4	-1.2	16,792.0	961.5	-18.3	3.7	13.6	3.0
July	17,170.4	890.6	-4.6	14,867.0	833.4	-8.3	16,843.7	957.7	29.0	3.9	56.4	2.9
Aug.	17,152.5	752.3	-20.3	14,856.5	708.3	-12.7	16,790.7	800.4	-35.9	3.6	-5.5	1.6
Sep.	17,136.1	810.1	-7.1	14,835.4	758.1	-12.0	16,740.8	843.6	-25.6	3.4	30.6	1.0
Oct.	17,132.9	817.4	-1.7	14,842.2	778.3	8.4	16,760.2	901.0	28.1	3.1	17.4	1.3
Nov.	17,164.3	721.3	29.0	14,873.2	681.6	28.8	16,807.6	796.5	48.5	2.8	-24.4	1.1
Dec.	17,091.3	630.5	-107.1	14,797.3	590.8	-110.1	16,700.9	672.3	-126.7	1.7	-36.5	0.4
2013 Jan.	17,081.7	816.3	-9.1	14,793.2	768.2	-3.7	16,676.3	898.0	5.1	1.2	-13.6	-0.4
Feb.	17,105.9	680.7	9.6	14,826.8	640.4	18.8	16,740.7	768.4	31.8	0.4	-32.3	-0.7
Mar.	17,042.1	660.3	-61.4	14,809.3	611.3	-15.0	16,736.7	740.4	-19.1	-0.2	-20.0	-1.3
Apr.	.	.	.	14,784.0	697.5	-25.6	16,698.8	834.9	-22.9	-0.3	-28.7	-1.8
<b>Long-term</b>												
2012 Apr.	15,626.4	188.7	-22.6	13,429.5	175.0	-11.2	15,074.1	206.5	1.5	4.1	-8.3	4.9
May	15,676.9	233.0	50.4	13,479.2	208.6	49.4	15,182.0	244.3	68.2	4.0	15.3	4.7
June	15,711.2	278.6	35.4	13,516.9	246.2	39.0	15,190.8	261.9	20.6	3.8	13.9	3.5
July	15,691.0	264.9	-20.2	13,488.6	233.1	-28.3	15,211.2	271.7	-0.1	3.9	38.1	3.0
Aug.	15,682.6	147.0	-10.3	13,481.7	126.8	-8.6	15,174.6	142.0	-21.2	3.8	20.6	2.1
Sep.	15,698.7	256.7	24.2	13,497.6	225.3	23.9	15,175.4	251.2	21.9	4.0	79.6	2.1
Oct.	15,725.3	237.3	26.9	13,520.6	212.5	23.3	15,206.6	249.4	38.2	3.8	35.4	2.7
Nov.	15,779.7	220.3	54.2	13,567.3	195.5	46.5	15,263.9	223.7	60.3	3.6	-7.8	2.4
Dec.	15,746.7	197.2	-54.9	13,532.3	173.3	-57.0	15,204.8	193.0	-68.3	2.7	-20.9	1.9
2013 Jan.	15,742.5	257.0	-3.9	13,529.2	226.9	-2.7	15,171.4	259.7	-6.8	2.2	8.0	1.5
Feb.	15,777.7	221.8	23.6	13,570.2	196.5	29.2	15,231.9	220.6	32.8	1.5	-26.6	0.9
Mar.	15,702.1	223.7	-72.9	13,549.7	193.6	-17.6	15,221.3	225.3	-22.7	0.8	-24.6	-0.5
Apr.	.	.	.	13,523.7	206.4	-26.3	15,190.0	237.4	-18.0	0.7	-26.1	-1.3

### 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												
2011	16,512	5,526	3,270	874	6,217	625	1,000	609	99	62	191	39
2012	16,701	5,434	3,324	990	6,268	684	955	588	81	67	187	32
2012 Q2	16,792	5,591	3,280	939	6,285	698	949	584	80	71	183	30
Q3	16,741	5,560	3,212	970	6,299	699	867	538	63	63	177	26
Q4	16,701	5,434	3,324	990	6,268	684	790	463	73	64	164	25
2013 Q1	16,737	5,293	3,313	1,017	6,425	690	802	439	59	60	212	32
2013 Jan.	16,676	5,398	3,303	994	6,298	683	898	516	55	65	224	38
Feb.	16,741	5,361	3,321	1,006	6,373	679	768	434	49	48	214	23
Mar.	16,737	5,293	3,313	1,017	6,425	690	740	367	71	68	197	36
Apr.	16,699	5,251	3,317	1,030	6,409	691	835	469	53	69	202	43
Short-term												
2011	1,599	702	106	79	634	77	748	511	48	53	107	29
2012	1,496	601	140	81	610	64	701	489	37	52	104	21
2012 Q2	1,601	678	120	97	624	83	711	498	33	58	102	20
Q3	1,565	667	106	89	626	77	646	455	25	48	100	17
Q4	1,496	601	140	81	610	64	568	392	26	46	88	16
2013 Q1	1,515	582	151	90	624	68	567	361	24	47	112	23
2013 Jan.	1,505	599	137	84	624	60	638	420	23	49	124	23
Feb.	1,509	592	146	90	621	60	548	357	26	42	106	18
Mar.	1,515	582	151	90	624	68	515	307	24	51	105	29
Apr.	1,509	581	156	93	612	66	597	398	27	51	97	25
Long-term <sup>2)</sup>												
2011	14,913	4,823	3,164	795	5,583	548	253	98	51	9	84	10
2012	15,205	4,833	3,184	909	5,658	621	254	99	45	15	83	12
2012 Q2	15,191	4,913	3,160	842	5,661	615	238	86	48	13	81	10
Q3	15,175	4,893	3,106	881	5,673	622	222	82	38	16	77	8
Q4	15,205	4,833	3,184	909	5,658	621	222	71	47	18	77	9
2013 Q1	15,221	4,710	3,162	927	5,801	621	235	78	34	13	100	9
2013 Jan.	15,171	4,798	3,166	910	5,674	623	260	97	33	16	100	15
Feb.	15,232	4,769	3,175	916	5,752	620	221	77	24	6	108	5
Mar.	15,221	4,710	3,162	927	5,801	621	225	61	47	18	92	7
Apr.	15,190	4,670	3,162	937	5,797	624	237	71	26	18	105	18
of which: Long-term fixed rate												
2011	10,018	2,764	1,150	700	4,994	408	150	54	12	8	70	7
2012	10,572	2,838	1,327	813	5,149	444	164	54	18	15	71	7
2012 Q2	10,409	2,877	1,245	749	5,101	438	148	42	21	12	68	6
Q3	10,498	2,860	1,278	787	5,132	442	139	37	14	15	68	4
Q4	10,572	2,838	1,327	813	5,149	444	143	36	21	17	64	6
2013 Q1	10,689	2,790	1,363	830	5,257	450	159	41	19	12	80	7
2013 Jan.	10,587	2,825	1,343	814	5,157	449	193	63	21	15	81	13
Feb.	10,649	2,816	1,355	819	5,209	449	130	33	12	5	76	4
Mar.	10,689	2,790	1,363	830	5,257	450	154	28	25	15	83	2
Apr.	10,709	2,779	1,384	839	5,254	453	157	34	16	16	78	14
of which: Long-term variable rate												
2011	4,393	1,790	1,860	91	513	139	85	37	32	1	11	3
2012	4,201	1,740	1,757	92	437	175	77	38	24	1	8	5
2012 Q2	4,323	1,769	1,803	89	486	175	77	38	24	1	9	4
Q3	4,229	1,768	1,724	91	466	179	72	41	23	1	4	4
Q4	4,201	1,740	1,757	92	437	175	69	30	25	1	10	4
2013 Q1	4,084	1,667	1,700	94	453	170	60	30	13	1	13	3
2013 Jan.	4,144	1,720	1,725	92	434	172	46	28	9	1	7	2
Feb.	4,143	1,704	1,720	93	457	169	80	39	10	1	29	1
Mar.	4,084	1,667	1,700	94	453	170	53	22	20	2	4	5
Apr.	4,052	1,646	1,680	95	461	171	69	32	7	2	24	4

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

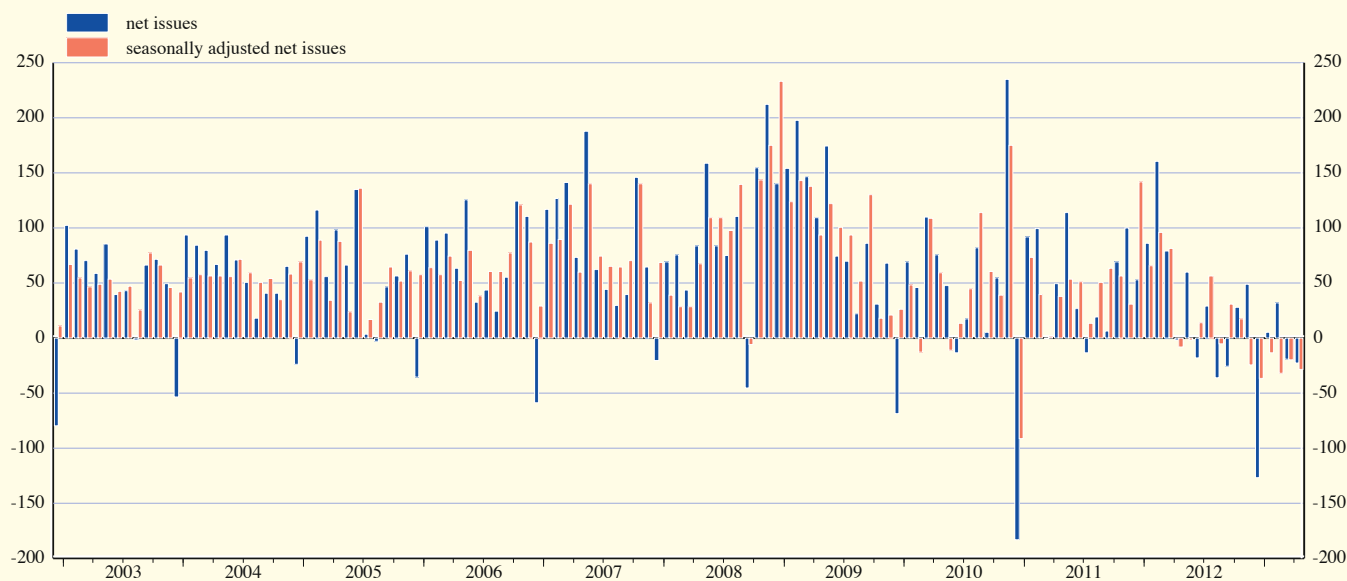
(EUR billions unless otherwise indicated; transactions during the period; nominal values)

### 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											
2011	51.2	22.3	-3.6	3.7	23.2	5.6	-	-	-	-	-	-
2012	23.5	-5.9	3.1	10.1	13.1	3.1	-	-	-	-	-	-
2012 Q2	13.1	-19.7	-5.9	10.1	27.8	0.7	1.0	-14.2	-8.5	7.7	13.4	2.7
Q3	-10.9	-4.6	-21.8	10.5	4.3	0.8	27.2	0.2	-7.9	11.8	20.7	2.3
Q4	-16.7	-37.3	27.1	7.9	-9.5	-4.9	-14.5	-26.4	6.4	11.7	2.0	-8.3
2013 Q1	5.9	-47.1	-9.0	8.8	51.9	1.5	-22.0	-67.8	0.2	6.2	38.0	1.4
2013 Jan.	5.1	-20.1	-16.1	8.5	32.2	0.6	-13.6	-34.4	-0.4	4.8	8.1	8.3
Feb.	31.8	-46.1	0.3	9.3	73.5	-5.1	-32.3	-85.7	8.3	5.8	47.1	-7.8
Mar.	-19.1	-75.2	-11.3	8.6	50.0	8.9	-20.0	-83.2	-7.4	8.0	58.8	3.7
Apr.	-22.9	-33.4	7.0	14.8	-13.5	2.2	-28.7	-32.6	1.4	8.0	-10.3	4.8
	Long-term											
2011	47.1	11.6	-2.3	2.8	31.0	3.9	-	-	-	-	-	-
2012	33.1	2.7	1.2	9.9	15.1	4.2	-	-	-	-	-	-
2012 Q2	30.1	-7.5	-5.4	5.7	33.6	3.8	7.0	-13.1	-7.2	3.2	21.5	2.7
Q3	0.2	-1.8	-17.2	13.1	3.4	2.7	46.1	4.9	-5.5	14.9	26.3	5.5
Q4	10.1	-15.0	19.5	10.4	-4.1	-0.7	2.2	-1.5	-0.4	11.8	-6.7	-1.0
2013 Q1	1.1	-40.2	-11.2	5.8	46.7	0.0	-14.4	-55.0	-1.1	5.1	38.2	-1.6
2013 Jan.	-6.8	-20.7	-13.4	6.0	17.5	3.8	8.0	-22.9	3.8	7.3	13.2	6.6
Feb.	32.8	-36.5	-4.6	3.3	75.0	-4.3	-26.6	-70.1	0.5	0.7	49.4	-7.2
Mar.	-22.7	-63.3	-15.6	8.2	47.6	0.4	-24.6	-72.1	-7.5	7.2	52.1	-4.3
Apr.	-18.0	-33.5	2.0	12.1	-2.6	3.9	-26.1	-35.8	-3.0	7.9	1.5	3.3

### 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.



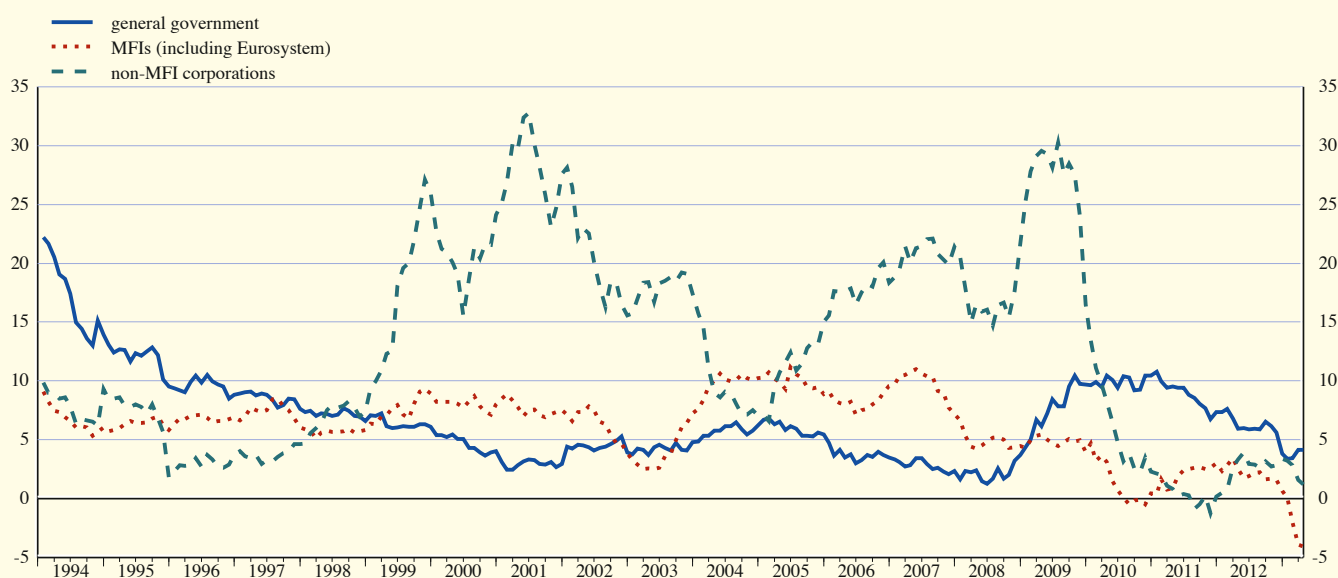
### 4.3 Growth rates of securities other than shares issued by euro area residents <sup>1)</sup>

(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												
2012 Apr.	4.3	4.1	2.6	9.5	3.7	15.7	5.0	4.7	4.4	11.6	3.5	18.5
May	4.0	2.9	3.2	9.1	3.8	12.6	4.6	2.3	6.3	11.3	4.0	14.1
June	3.7	3.3	1.4	10.5	3.5	11.7	3.0	0.2	2.7	12.0	2.8	19.2
July	3.9	4.1	1.1	10.3	3.4	14.7	2.9	1.7	1.4	11.2	2.3	15.4
Aug.	3.6	3.6	0.6	10.8	3.3	12.4	1.6	0.5	-1.6	12.3	2.1	9.0
Sep.	3.4	2.4	0.4	12.4	3.9	10.9	1.0	-1.5	-2.9	13.2	3.3	4.4
Oct.	3.1	2.0	-0.1	12.5	3.8	10.8	1.3	-0.6	-4.4	13.3	4.2	3.6
Nov.	2.8	1.1	0.1	12.2	3.9	8.0	1.1	0.0	-5.7	13.3	3.8	2.2
Dec.	1.7	-1.3	1.2	13.9	2.5	6.1	0.4	-2.8	-0.3	15.6	2.2	-5.1
2013 Jan.	1.2	-1.9	0.9	13.3	2.2	4.6	-0.4	-5.4	0.4	15.6	2.0	-4.8
Feb.	0.4	-4.0	0.6	13.1	2.6	0.3	-0.7	-8.3	2.8	13.9	3.1	-7.4
Mar.	-0.2	-5.8	-0.9	12.4	3.6	-0.8	-1.3	-9.9	1.2	11.4	3.8	-5.8
Apr.	-0.3	-5.9	-1.5	12.2	3.5	0.4	-1.8	-10.9	1.4	10.9	2.9	-2.8
Long-term												
2012 Apr.	4.1	2.5	2.4	7.1	5.4	11.7	4.9	3.0	3.5	10.7	5.5	14.4
May	4.0	1.7	3.1	7.0	5.5	10.6	4.7	1.5	5.5	9.2	5.9	11.9
June	3.8	1.9	1.5	8.7	5.4	10.7	3.5	0.9	2.2	10.1	4.4	14.2
July	3.9	2.2	1.2	9.6	5.3	12.1	3.0	1.3	0.9	10.3	3.6	13.8
Aug.	3.8	2.2	0.6	10.6	5.3	11.4	2.1	0.3	-1.4	11.6	3.6	8.6
Sep.	4.0	1.6	0.6	13.4	6.0	11.8	2.1	-1.0	-2.4	13.5	5.2	8.5
Oct.	3.8	1.7	0.0	13.7	5.7	10.7	2.7	0.5	-3.6	16.8	5.9	7.0
Nov.	3.6	1.6	0.1	13.8	5.2	9.5	2.4	1.8	-5.2	18.7	4.6	7.2
Dec.	2.7	0.7	0.5	15.0	3.3	9.2	1.9	0.4	-1.1	20.1	2.1	4.5
2013 Jan.	2.2	0.0	0.3	14.6	2.8	8.6	1.5	-1.2	-0.2	19.3	2.0	3.8
Feb.	1.5	-2.0	0.0	13.8	3.3	4.5	0.9	-4.3	1.5	16.2	2.9	0.5
Mar.	0.8	-3.9	-1.3	12.7	4.3	2.9	-0.5	-6.8	-0.3	11.9	3.3	-2.5
Apr.	0.7	-4.1	-2.0	13.8	4.3	3.2	-1.3	-8.5	-0.5	10.7	2.7	-0.4

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

(annual percentage changes)



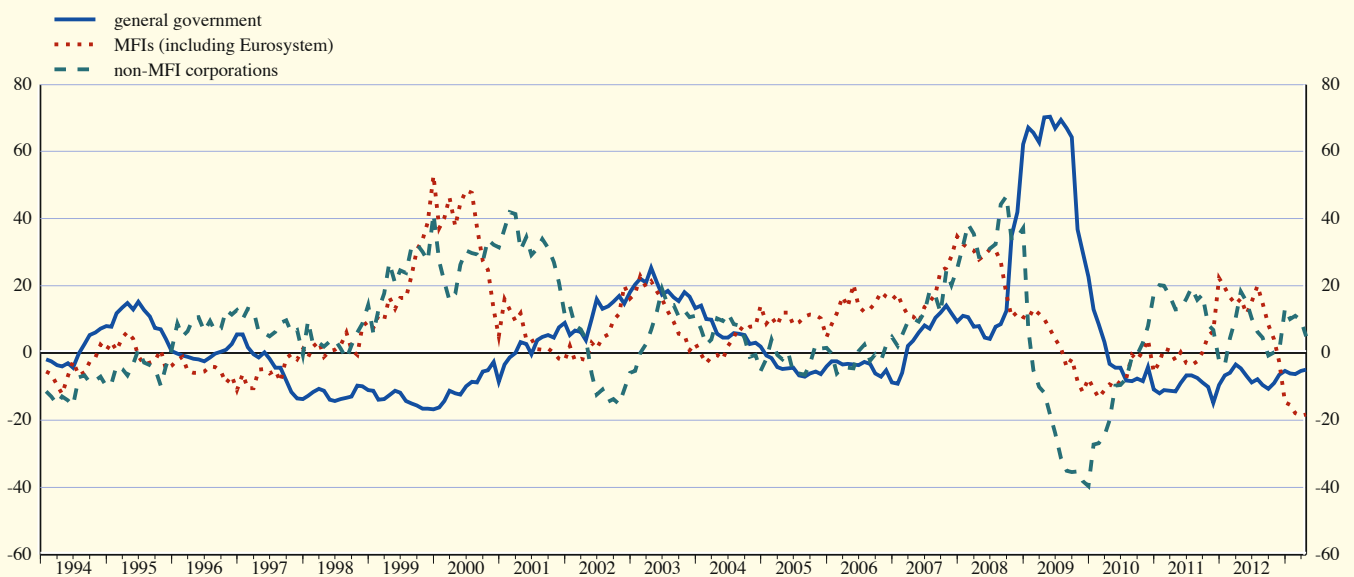
Source: ECB.

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												
2011	6.4	4.8	3.6	6.3	7.8	7.7	-0.8	-1.4	-5.8	-2.1	22.3	16.1
2012	5.4	4.4	2.2	10.3	5.8	7.3	-0.8	-0.2	-4.8	-1.1	6.6	23.3
2012 Q2	5.2	4.9	1.8	8.1	5.6	6.7	0.4	-0.4	-2.4	-1.8	8.1	25.9
Q3	5.0	4.0	1.2	11.0	5.5	6.9	-0.1	-0.2	-3.5	0.0	6.6	25.5
Q4	5.7	3.5	3.8	15.1	5.9	6.8	-3.3	-0.6	-7.9	-1.4	-2.4	20.3
2013 Q1	4.4	0.9	5.6	15.5	4.3	6.0	-6.3	-3.8	-9.6	-1.5	-7.6	7.8
2012 Nov.	6.0	3.6	4.8	15.1	6.2	6.8	-4.1	-0.2	-8.8	-2.1	-6.4	17.6
Dec.	5.2	3.3	5.2	16.4	4.6	6.6	-5.2	-2.5	-8.7	-2.1	-8.6	16.7
2013 Jan.	4.8	2.3	5.8	16.1	4.2	7.5	-6.0	-2.7	-9.4	-1.7	-10.4	11.6
Feb.	3.9	0.0	5.2	15.1	4.0	5.1	-6.5	-4.4	-9.8	-1.2	-5.7	3.9
Mar.	3.6	-2.6	6.1	14.3	5.0	4.1	-7.5	-6.0	-10.6	-1.0	-5.0	0.7
Apr.	3.7	-2.5	6.5	15.2	4.8	4.6	-7.7	-6.0	-11.4	0.6	-3.9	0.5
In euro												
2011	6.5	4.0	3.6	6.7	8.1	7.3	-0.4	0.1	-6.6	-3.1	22.2	15.3
2012	5.7	5.0	2.0	10.8	5.9	7.2	-0.5	2.1	-6.5	-1.9	6.3	22.9
2012 Q2	5.5	5.4	1.5	8.5	5.7	6.5	0.7	2.0	-4.2	-3.1	7.9	25.3
Q3	5.3	4.9	0.7	11.4	5.5	6.4	0.2	2.6	-5.8	-0.1	6.3	25.5
Q4	5.8	3.9	3.3	16.4	5.9	6.3	-3.3	1.5	-10.0	-1.7	-2.9	20.5
2013 Q1	4.3	0.6	4.4	17.7	4.3	5.3	-6.4	-2.5	-11.0	-1.2	-8.4	7.9
2012 Nov.	6.1	3.8	3.9	16.8	6.3	6.3	-4.2	1.9	-11.0	-2.0	-7.2	17.6
Dec.	5.2	3.4	4.3	18.0	4.6	5.9	-5.1	-0.6	-10.1	-2.1	-9.2	16.9
2013 Jan.	4.7	2.3	4.6	18.3	4.2	6.4	-6.2	-1.3	-10.9	-1.6	-11.2	11.4
Feb.	3.7	-0.5	4.1	17.4	4.0	4.7	-6.8	-3.4	-11.3	-1.2	-6.4	4.2
Mar.	3.5	-3.3	4.9	16.6	4.9	3.6	-7.2	-4.8	-11.1	0.3	-5.7	0.4
Apr.	3.7	-3.0	5.1	17.5	4.8	4.6	-7.4	-4.9	-11.8	2.8	-4.6	-0.3

**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)

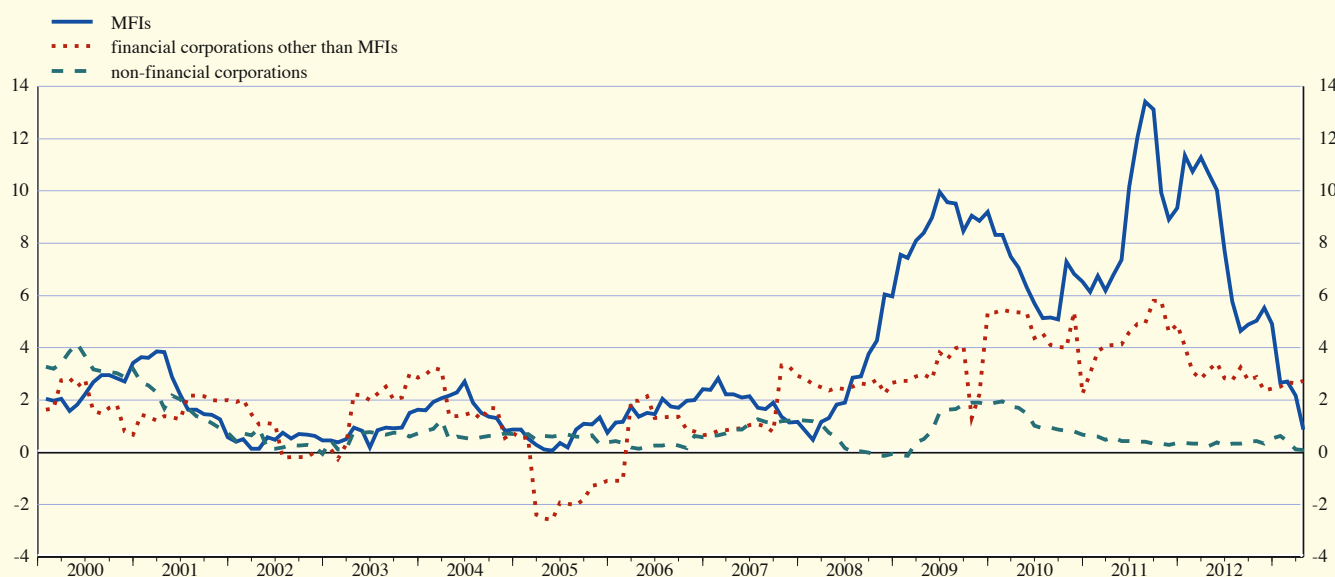
##### 1. Outstanding amounts and annual growth rates

(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
2011 Apr.	4,874.7	105.0	1.5	497.3	6.8	371.5	4.1	4,005.9	0.6
May	4,758.4	105.0	1.5	475.8	7.4	356.2	4.1	3,926.5	0.4
June	4,703.3	105.5	1.7	491.5	10.2	350.5	4.6	3,861.3	0.4
July	4,485.9	105.7	1.9	458.6	12.1	325.5	4.9	3,701.7	0.4
Aug.	3,958.3	105.9	2.1	382.9	13.4	281.6	4.9	3,293.9	0.4
Sep.	3,724.7	105.9	2.0	350.5	13.1	264.1	5.8	3,110.1	0.3
Oct.	4,017.0	105.9	1.7	360.5	9.9	287.6	5.8	3,369.0	0.3
Nov.	3,866.3	106.0	1.5	329.8	8.9	271.2	4.6	3,265.3	0.3
Dec.	3,878.3	106.1	1.6	339.3	9.3	270.4	4.9	3,268.6	0.4
2012 Jan.	4,091.3	106.3	1.7	375.5	11.4	297.7	4.0	3,418.2	0.4
Feb.	4,257.4	106.3	1.5	394.7	10.7	310.9	3.1	3,551.9	0.3
Mar.	4,241.3	106.4	1.5	373.1	11.3	310.7	2.8	3,557.5	0.3
Apr.	4,068.4	106.5	1.4	327.3	10.7	291.6	3.1	3,449.5	0.2
May	3,762.9	106.5	1.5	280.9	10.0	259.8	3.4	3,222.1	0.4
June	3,925.6	106.6	1.1	317.6	7.7	279.9	2.8	3,328.0	0.3
July	4,051.7	106.8	1.0	309.9	5.8	287.1	2.8	3,454.7	0.3
Aug.	4,176.4	106.8	0.9	349.7	4.6	304.3	3.3	3,522.5	0.3
Sep.	4,242.3	106.9	0.9	365.0	4.9	319.2	2.8	3,558.1	0.4
Oct.	4,309.6	107.0	1.0	383.6	5.0	329.5	2.9	3,596.5	0.4
Nov.	4,397.5	106.9	0.9	395.7	5.5	337.8	2.4	3,664.0	0.3
Dec.	4,497.8	107.2	1.0	402.4	4.9	352.9	2.4	3,742.5	0.5
2013 Jan.	4,644.2	107.3	0.9	441.6	2.7	365.6	2.5	3,837.1	0.6
Feb.	4,629.2	107.1	0.8	416.1	2.7	359.1	2.7	3,854.0	0.4
Mar.	4,632.6	106.9	0.5	381.0	2.2	363.4	2.6	3,888.3	0.1
Apr.	4,725.6	106.8	0.3	411.4	0.9	383.7	2.7	3,930.5	0.1

#### 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

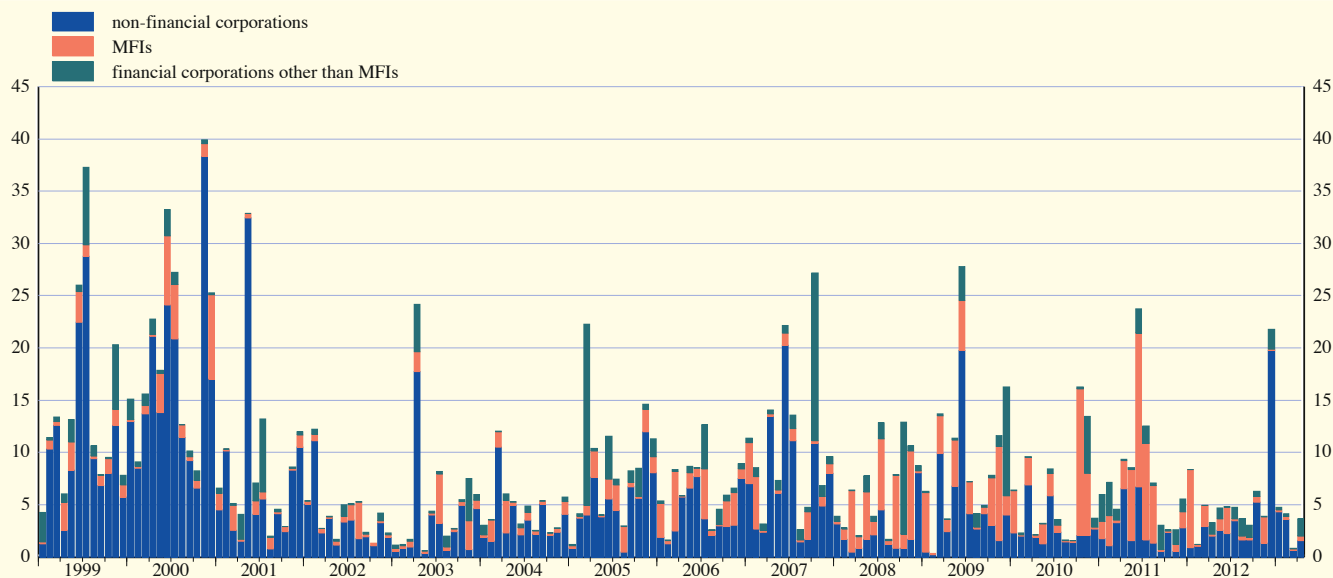
(EUR billions; market values)

### 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
2011 Apr.	9.3	0.6	8.8	2.7	0.0	2.7	0.1	0.0	0.1	6.5	0.6	5.9
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	12.5	0.7	11.8	9.3	0.0	9.3	1.6	0.0	1.6	1.6	0.7	0.9
Aug.	7.1	1.0	6.1	5.5	0.0	5.5	0.3	0.2	0.1	1.3	0.8	0.5
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.	2.4	0.4	2.0	0.0	0.0	0.0	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	0.6	1.5	-1.0
Dec.	5.5	1.0	4.5	1.5	0.0	1.5	1.2	0.0	1.2	2.8	1.0	1.8
2012 Jan.	8.4	0.4	7.9	7.5	0.0	7.5	0.0	0.1	-0.1	0.9	0.3	0.6
Feb.	1.1	1.4	-0.3	0.0	0.0	0.0	0.0	0.2	-0.2	1.0	1.2	-0.1
Mar.	4.9	0.7	4.3	2.0	0.0	2.0	0.0	0.1	-0.1	2.9	0.6	2.3
Apr.	3.1	0.3	2.8	0.0	0.0	0.0	1.1	0.0	1.1	2.0	0.3	1.7
May	4.7	1.8	2.9	1.1	0.0	1.1	1.0	0.1	1.0	2.5	1.7	0.8
June	4.8	1.2	3.6	2.6	0.0	2.6	0.0	0.1	-0.1	2.2	1.1	1.1
July	4.7	0.3	4.4	0.2	0.0	0.2	1.1	0.0	1.1	3.5	0.3	3.2
Aug.	3.7	1.8	1.8	0.4	0.0	0.4	1.6	0.1	1.5	1.6	1.7	-0.1
Sep.	2.9	0.5	2.3	0.1	0.0	0.1	1.2	0.1	1.0	1.7	0.4	1.3
Oct.	6.3	1.8	4.5	0.5	0.0	0.5	0.5	0.1	0.4	5.3	1.7	3.6
Nov.	3.9	5.9	-2.0	2.5	0.0	2.5	0.1	0.1	0.0	1.3	5.8	-4.5
Dec.	21.6	11.4	10.2	0.0	0.5	-0.5	1.8	0.0	1.8	19.7	10.8	8.9
2013 Jan.	4.6	0.3	4.3	0.0	0.0	0.0	0.2	0.1	0.1	4.3	0.2	4.1
Feb.	4.2	11.4	-7.2	0.3	0.0	0.3	0.3	0.0	0.3	3.6	11.4	-7.8
Mar.	0.7	10.6	-9.9	0.0	0.1	-0.1	0.0	0.3	-0.3	0.6	10.1	-9.4
Apr.	3.6	5.9	-2.3	0.4	5.2	-4.8	1.7	0.0	1.6	1.6	0.7	0.9

### 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
2012 June	0.47	2.72	2.73	2.64	1.73	1.89	0.52	1.11	2.32	2.69	0.98
July	0.45	2.80	2.89	2.62	1.70	1.86	0.47	1.14	2.01	2.53	1.26
Aug.	0.44	2.66	2.76	2.51	1.68	1.82	0.46	1.10	2.12	2.42	1.01
Sep.	0.42	2.80	2.83	2.43	1.65	1.78	0.46	1.11	2.37	2.53	1.41
Oct.	0.41	2.74	2.56	2.50	1.62	1.73	0.45	1.05	2.18	2.21	1.50
Nov.	0.40	2.73	2.46	2.35	1.61	1.65	0.43	1.03	2.03	2.21	1.12
Dec.	0.39	2.73	2.59	2.25	1.59	1.59	0.42	1.08	1.92	2.16	1.53
2013 Jan.	0.38	2.61	2.37	2.42	1.53	1.53	0.40	1.09	2.00	2.16	1.17
Feb.	0.36	2.44	2.23	2.29	1.39	1.48	0.40	1.05	1.99	2.08	0.63
Mar.	0.36	2.29	2.17	2.28	1.37	1.43	0.40	0.93	1.85	1.99	1.00
Apr.	0.34	2.33	2.10	2.25	1.36	1.36	0.38	0.96	1.70	1.90	0.68
May	0.33	2.05	2.06	2.25	1.31	1.30	0.38	0.84	1.86	1.96	0.48

### 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
2012 June	8.25	17.06	5.61	6.28	7.73	7.27	3.10	3.48	3.46	3.69	3.65	3.61	4.73	3.71
July	8.15	17.01	5.76	6.26	7.82	7.37	3.09	3.40	3.31	3.62	3.58	3.64	4.45	3.49
Aug.	8.12	16.96	5.79	6.28	7.67	7.37	2.94	3.33	3.21	3.52	3.48	3.43	4.45	3.32
Sep.	8.14	16.96	5.78	6.18	7.62	7.25	2.92	3.27	3.21	3.49	3.45	3.23	4.48	3.31
Oct.	8.04	16.97	5.62	6.13	7.67	7.15	2.88	3.24	3.15	3.49	3.42	3.24	4.25	3.33
Nov.	7.96	16.95	5.62	6.09	7.67	7.13	2.87	3.18	3.14	3.40	3.35	3.33	4.23	3.23
Dec.	7.94	16.93	5.35	6.05	7.55	6.94	2.87	3.25	3.25	3.45	3.41	3.15	4.12	3.01
2013 Jan.	7.97	17.06	5.76	6.11	7.87	7.26	2.87	3.17	3.03	3.35	3.34	3.19	4.06	3.08
Feb.	7.97	17.04	5.89	6.03	7.81	7.24	2.88	3.17	3.05	3.35	3.35	3.16	4.07	3.21
Mar.	7.95	17.06	5.86	5.98	7.73	7.14	2.86	3.19	3.13	3.34	3.38	3.16	4.16	3.17
Apr.	7.92	17.08	5.73	5.92	7.73	7.05	2.87	3.13	3.06	3.34	3.38	3.26	3.97	3.11
May	7.90	17.08	6.00	6.09	7.69	7.19	2.87	3.09	2.95	3.22	3.32	3.31	4.11	3.14

### 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
2012 June	4.39	4.81	5.03	4.58	4.76	4.41	4.16	2.44	3.20	3.44	3.04	3.34	3.22
July	4.29	4.86	5.17	4.58	4.56	4.13	4.12	2.23	3.31	3.62	3.13	3.19	3.50
Aug.	4.20	4.84	4.95	4.31	4.50	3.92	3.88	2.05	2.96	3.08	3.21	3.16	3.01
Sep.	4.18	4.69	4.75	4.26	4.45	3.88	3.93	2.15	2.57	2.93	2.73	2.95	3.06
Oct.	4.21	4.74	4.89	4.29	4.31	3.79	3.94	2.12	2.91	3.30	3.01	2.93	3.20
Nov.	4.17	4.65	4.82	4.16	4.31	3.79	3.78	2.11	2.68	3.76	3.26	2.90	2.91
Dec.	4.18	4.62	4.55	4.24	4.24	3.68	3.51	2.17	2.79	2.84	3.32	2.79	3.01
2013 Jan.	4.21	4.68	4.70	4.03	4.16	3.62	3.68	2.09	2.88	3.32	4.29	2.92	3.02
Feb.	4.20	4.70	4.69	4.05	4.25	3.70	3.66	2.02	2.85	3.13	4.42	2.93	3.14
Mar.	4.16	4.56	4.71	4.11	4.25	3.75	3.61	2.00	2.91	3.07	4.06	2.85	2.85
Apr.	4.15	4.78	4.73	4.16	4.07	3.62	3.58	2.14	2.77	3.21	4.16	3.00	2.94
May	4.11	4.76	4.76	4.12	4.12	3.61	3.48	2.10	2.71	3.19	3.52	2.68	2.79

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)

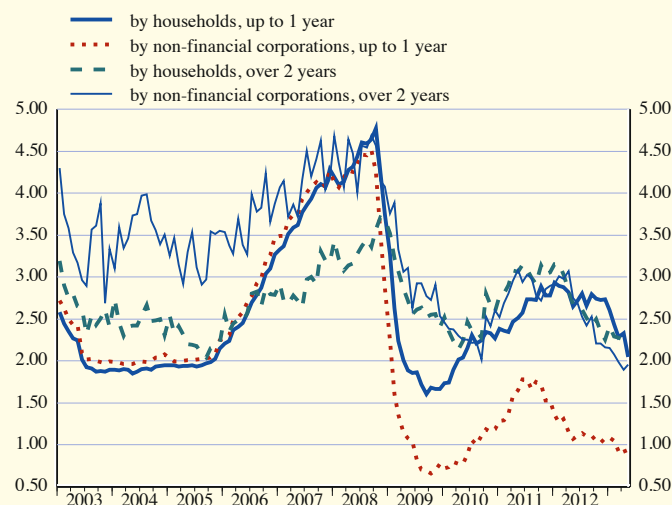
**4. Interest rates on deposits (outstanding amounts)**

	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
2012 June	0.47	2.73	2.82	1.73	1.89	0.52	1.93	3.08	2.48
July	0.45	2.72	2.78	1.70	1.86	0.47	1.89	3.04	2.47
Aug.	0.44	2.70	2.78	1.68	1.82	0.46	1.84	3.01	2.45
Sep.	0.42	2.69	2.79	1.65	1.78	0.46	1.82	3.02	2.61
Oct.	0.41	2.67	2.74	1.62	1.73	0.45	1.78	2.95	2.55
Nov.	0.40	2.66	2.75	1.61	1.65	0.43	1.79	2.96	2.54
Dec.	0.39	2.64	2.73	1.59	1.59	0.42	1.80	2.91	2.65
2013 Jan.	0.38	2.59	2.69	1.53	1.53	0.40	1.76	2.86	2.33
Feb.	0.36	2.58	2.75	1.39	1.48	0.40	1.72	2.93	2.00
Mar.	0.36	2.53	2.70	1.37	1.43	0.40	1.65	2.89	2.18
Apr.	0.34	2.47	2.70	1.36	1.36	0.38	1.60	2.83	1.99
May	0.33	2.42	2.67	1.31	1.30	0.38	1.57	2.78	1.62

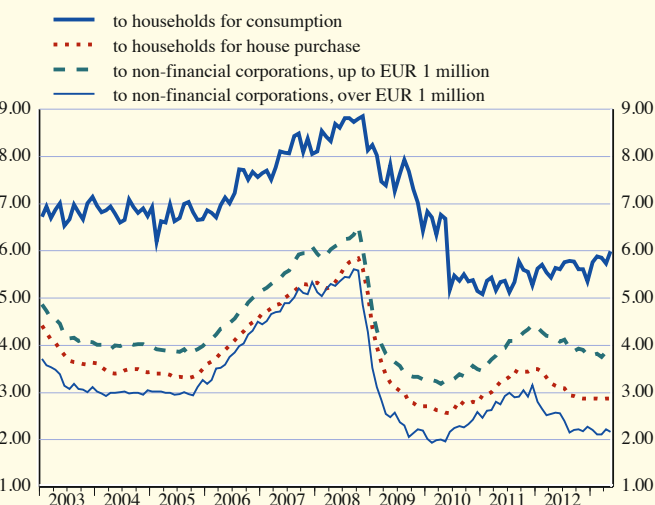
**5. Interest rates on loans (outstanding amounts)**

	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
2012 June	3.86	3.60	3.76	7.83	6.30	5.14	3.96	3.53	3.46
July	3.77	3.55	3.72	7.78	6.26	5.08	3.89	3.47	3.40
Aug.	3.73	3.52	3.67	7.77	6.23	5.05	3.81	3.41	3.36
Sep.	3.71	3.51	3.67	7.80	6.30	5.03	3.78	3.40	3.34
Oct.	3.64	3.45	3.61	7.75	6.25	4.97	3.76	3.29	3.26
Nov.	3.53	3.42	3.60	7.59	6.23	4.95	3.72	3.30	3.25
Dec.	3.49	3.39	3.56	7.75	6.18	4.92	3.71	3.28	3.22
2013 Jan.	3.46	3.35	3.55	7.75	6.21	4.90	3.75	3.29	3.21
Feb.	3.45	3.35	3.51	7.77	6.24	4.91	3.72	3.26	3.19
Mar.	3.50	3.36	3.49	7.79	6.21	4.89	3.68	3.25	3.16
Apr.	3.49	3.33	3.49	7.74	6.19	4.88	3.66	3.25	3.15
May	3.46	3.30	3.46	7.65	6.14	4.86	3.65	3.24	3.13

**C21 New deposits with an agreed maturity**  
(percentages per annum excluding charges; period averages)



**C22 New loans with a floating rate and up to 1 year's initial rate fixation**  
(percentages per annum excluding charges; period averages)



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)

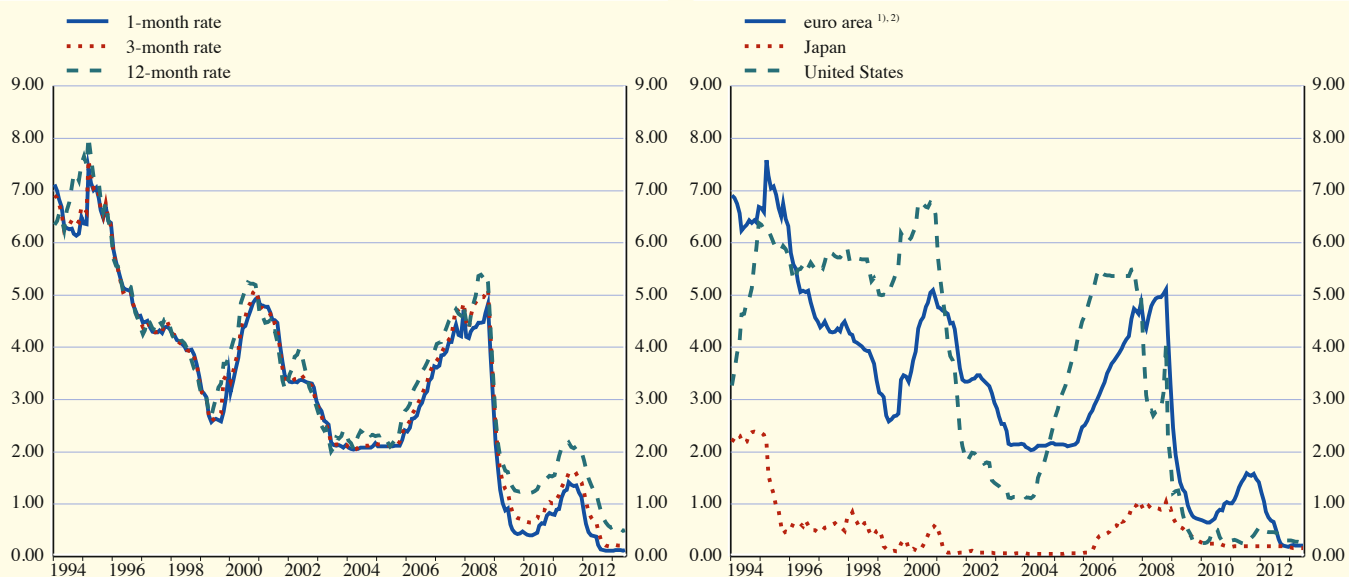
	Euro area <sup>1),2)</sup>					United States	Japan
	Overnight deposits (EONIA)	1-month deposits (EURIBOR)	3-month deposits (EURIBOR)	6-month deposits (EURIBOR)	12-month deposits (EURIBOR)	3-month deposits (LIBOR)	3-month deposits (LIBOR)
	1	2	3	4	5	6	7
2010	0.44	0.57	0.81	1.08	1.35	0.34	0.23
2011	0.87	1.18	1.39	1.64	2.01	0.34	0.19
2012	0.23	0.33	0.58	0.83	1.11	0.43	0.19
2012 Q2	0.34	0.39	0.69	0.98	1.28	0.47	0.20
Q3	0.13	0.16	0.36	0.63	0.90	0.43	0.19
Q4	0.08	0.11	0.20	0.37	0.60	0.32	0.19
2013 Q1	0.07	0.12	0.21	0.34	0.57	0.29	0.16
Q2	0.08	0.12	0.21	0.31	0.51	0.28	0.16
2012 June	0.33	0.38	0.66	0.93	1.22	0.47	0.20
July	0.18	0.22	0.50	0.78	1.06	0.45	0.20
Aug.	0.11	0.13	0.33	0.61	0.88	0.43	0.19
Sep.	0.10	0.12	0.25	0.48	0.74	0.39	0.19
Oct.	0.09	0.11	0.21	0.41	0.65	0.33	0.19
Nov.	0.08	0.11	0.19	0.36	0.59	0.31	0.19
Dec.	0.07	0.11	0.19	0.32	0.55	0.31	0.18
2013 Jan.	0.07	0.11	0.20	0.34	0.58	0.30	0.17
Feb.	0.07	0.12	0.22	0.36	0.59	0.29	0.16
Mar.	0.07	0.12	0.21	0.33	0.54	0.28	0.16
Apr.	0.08	0.12	0.21	0.32	0.53	0.28	0.16
May	0.08	0.11	0.20	0.30	0.48	0.27	0.16
June	0.09	0.12	0.21	0.32	0.51	0.27	0.15

### 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.

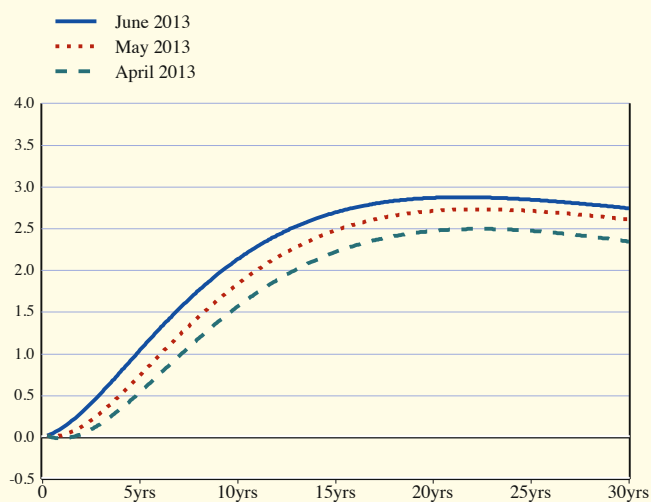
**4.7 Euro area yield curves <sup>1)</sup>**

(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 year	2 years	5 years	7 years	10 years	10 years - 3 months (spread)	10 years - 2 years (spread)	1 year	2 years	5 years	10 years
	1	2	3	4	5	6	7	8	9	10	11	12
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
2012	0.06	-0.04	-0.01	0.58	1.09	1.72	1.66	1.74	-0.09	0.17	1.84	3.50
2012 Q2	0.04	0.08	0.27	1.17	1.73	2.32	2.27	2.05	0.20	0.76	2.69	3.82
Q3	0.02	-0.01	0.07	0.76	1.29	1.94	1.92	1.87	0.00	0.36	2.10	3.75
Q4	0.06	-0.04	-0.01	0.58	1.09	1.72	1.66	1.74	-0.09	0.17	1.84	3.50
2013 Q1	0.04	0.00	0.07	0.65	1.12	1.76	1.72	1.69	0.01	0.29	1.83	3.60
Q2	0.03	0.11	0.30	1.05	1.54	2.14	2.11	1.84	0.27	0.73	2.35	3.78
2012 June	0.04	0.08	0.27	1.17	1.73	2.32	2.27	2.05	0.20	0.76	2.69	3.82
July	0.00	-0.09	-0.02	0.71	1.25	1.87	1.87	1.89	-0.11	0.26	2.12	3.52
Aug.	0.03	-0.05	0.01	0.75	1.29	1.91	1.88	1.90	-0.08	0.30	2.17	3.55
Sep.	0.02	-0.01	0.07	0.76	1.29	1.94	1.92	1.87	0.00	0.36	2.10	3.75
Oct.	0.01	-0.01	0.09	0.78	1.31	1.95	1.94	1.86	0.02	0.39	2.13	3.72
Nov.	0.04	-0.02	0.04	0.65	1.15	1.80	1.76	1.76	-0.03	0.27	1.91	3.60
Dec.	0.06	-0.04	-0.01	0.58	1.09	1.72	1.66	1.74	-0.09	0.17	1.84	3.50
2013 Jan.	0.07	0.15	0.32	0.99	1.45	2.02	1.95	1.71	0.28	0.70	2.18	3.62
Feb.	0.03	0.01	0.10	0.74	1.24	1.88	1.86	1.78	0.05	0.38	1.99	3.72
Mar.	0.04	0.00	0.07	0.65	1.12	1.76	1.72	1.69	0.01	0.29	1.83	3.60
Apr.	0.03	-0.01	0.04	0.54	0.96	1.55	1.52	1.51	-0.01	0.23	1.58	3.28
May	0.02	0.03	0.13	0.75	1.22	1.84	1.82	1.71	0.08	0.41	1.95	3.62
June	0.03	0.11	0.30	1.05	1.54	2.14	2.11	1.84	0.27	0.73	2.35	3.78

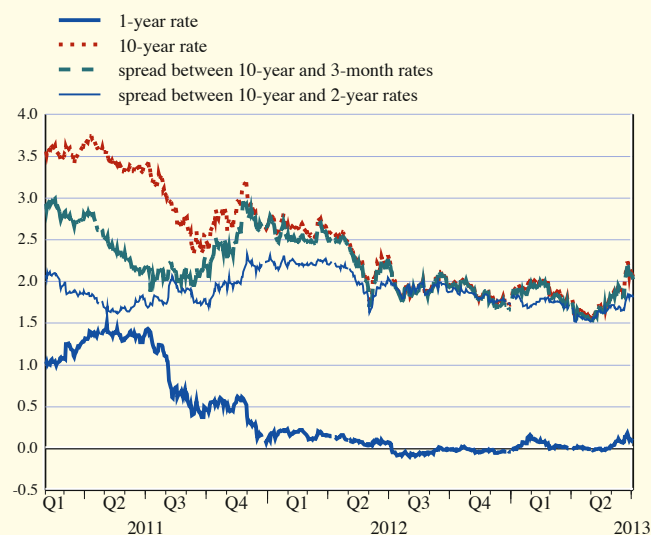
**C25 Euro area spot yield curves <sup>2)</sup>**

(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.



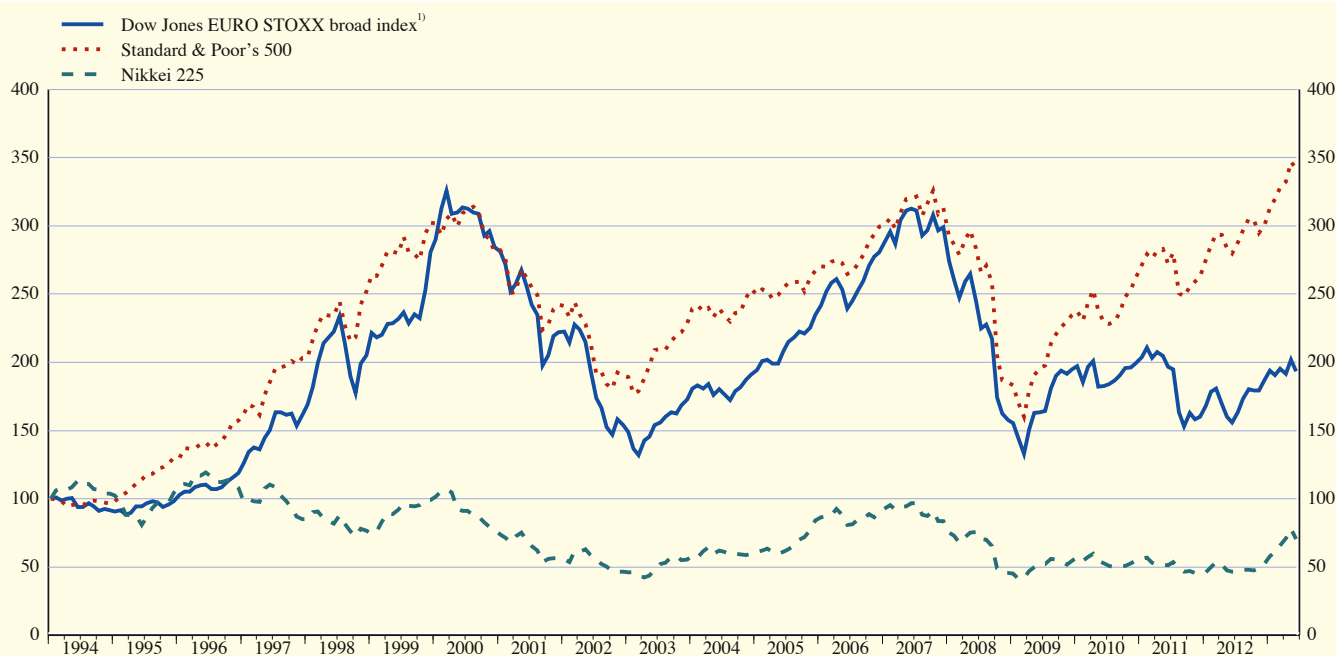
## 4.8 Stock market indices

(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	
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
2012	239.7	2,411.9	503.7	151.9	385.7	307.2	122.1	330.2	219.2	235.9	268.5	523.3	1,379.4	9,102.6
2012 Q2	224.0	2,226.2	472.5	140.8	370.7	285.3	108.2	311.6	207.4	223.4	261.9	493.2	1,349.7	9,026.5
Q3	238.7	2,400.9	505.9	152.7	392.3	307.8	117.2	327.7	215.9	234.0	265.6	548.5	1,400.9	8,886.4
Q4	252.0	2,543.3	536.8	163.6	407.4	310.5	133.0	347.7	231.6	232.0	245.4	570.7	1,418.1	9,208.6
2013 Q1	268.2	2,676.6	568.7	181.2	443.1	309.8	144.1	378.1	257.2	222.9	241.3	600.1	1,514.0	11,457.6
Q2	271.8	2,696.1	574.6	188.6	458.8	303.7	141.5	383.0	259.3	226.1	239.3	653.6	1,609.5	13,629.3
2012 June	216.2	2,152.7	453.1	137.4	358.3	275.1	104.0	298.4	198.0	215.4	250.4	498.9	1,323.5	8,638.1
July	226.5	2,258.4	479.1	145.8	379.4	290.4	106.5	313.9	204.4	224.3	257.3	534.2	1,359.8	8,760.7
Aug.	240.5	2,424.5	509.4	154.6	399.7	313.0	116.8	330.3	220.8	231.8	265.7	552.5	1,403.4	9,949.9
Sep.	250.1	2,530.7	531.4	158.2	398.1	321.0	129.5	339.8	223.0	247.2	274.6	559.7	1,443.4	8,948.6
Oct.	248.7	2,503.5	528.4	159.1	398.3	311.7	130.2	340.2	219.9	241.9	255.9	567.6	1,437.8	8,827.4
Nov.	248.7	2,514.0	526.1	162.8	403.8	308.0	131.2	343.7	230.6	226.9	239.0	563.3	1,394.5	9,059.9
Dec.	259.7	2,625.6	559.5	170.0	422.7	312.0	138.5	361.5	246.8	225.8	240.2	583.1	1,422.3	9,814.4
2013 Jan.	269.1	2,715.3	568.4	176.4	434.1	319.7	148.6	373.9	255.3	228.5	251.7	588.6	1,480.4	10,750.9
Feb.	264.7	2,630.4	561.0	180.7	439.1	301.4	143.2	372.7	256.0	218.5	231.1	586.7	1,512.3	11,336.4
Mar.	270.8	2,680.2	576.6	187.2	457.1	307.4	140.1	388.2	260.6	221.0	240.2	626.1	1,550.8	12,244.0
Apr.	265.9	2,636.3	560.9	187.0	449.8	299.6	136.0	374.1	250.5	225.2	238.6	650.8	1,570.7	13,224.1
May	280.2	2,785.8	590.1	192.5	472.0	315.0	147.5	392.7	267.1	232.0	248.7	668.7	1,639.8	14,532.4
June	268.3	2,655.8	571.1	185.9	453.0	294.9	140.4	381.3	259.5	220.4	229.2	639.2	1,618.8	13,106.6

## 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 2012	100.0	100.0	81.7	57.7	42.3	100.0	12.0	7.3	27.4	11.0	42.3	87.9	12.3
	1	2	3	4	5	6	7	8	9	10	11	12	13
2009	108.1	0.3	1.3	-0.9	2.0	-	-	-	-	-	-	0.1	1.7
2010	109.8	1.6	1.0	1.8	1.4	-	-	-	-	-	-	1.6	1.7
2011	112.8	2.7	1.7	3.3	1.8	-	-	-	-	-	-	2.6	3.6
2012	115.6	2.5	1.8	3.0	1.8	-	-	-	-	-	-	2.3	3.8
2012 Q2	115.9	2.5	1.8	3.0	1.8	0.5	0.6	0.7	0.3	1.0	0.5	2.3	3.5
Q3	115.7	2.5	1.7	3.1	1.8	0.5	0.4	1.1	0.1	1.2	0.5	2.3	4.0
Q4	116.7	2.3	1.6	2.7	1.7	0.4	0.7	1.5	0.3	-0.1	0.3	2.0	4.1
2013 Q1	116.4	1.9	1.5	2.0	1.7	0.4	0.6	0.5	0.1	1.0	0.4	1.7	3.1
Q2	117.5	1.4	.	.	1.3	.	.	.	.	-1.8	.	.	.
2013 Jan.	115.7	2.0	1.5	2.2	1.6	0.2	0.2	0.3	0.0	1.3	0.0	1.8	3.1
Feb.	116.1	1.8	1.4	2.1	1.5	0.2	0.2	-0.3	0.1	1.2	0.1	1.7	3.1
Mar.	117.5	1.7	1.6	1.7	1.8	0.1	0.2	0.3	0.1	-0.6	0.3	1.5	3.1
Apr.	117.4	1.2	1.1	1.2	1.1	-0.3	0.1	0.5	0.0	-1.0	-0.5	1.0	2.3
May	117.5	1.4	1.3	1.4	1.5	0.2	0.2	0.8	0.0	-1.2	0.5	1.3	2.2
June <sup>3)</sup>	117.6	1.6	.	.	1.4	.	.	.	.	0.1	.	.	.

	Goods						Services					
	Food (incl. alcoholic beverages and tobacco)			Industrial goods			Housing	Transport	Communication	Recreation and personal	Miscellaneous	
	Total	Processed food	Unprocessed food	Total	Non-energy industrial goods	Energy						Rents
% of total in 2012	19.4	12.0	7.3	38.3	27.4	11.0	10.3	6.0	7.2	3.1	14.7	7.1
	14	15	16	17	18	19	20	21	22	23	24	25
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
2012	3.1	3.1	3.0	3.0	1.2	7.6	1.8	1.5	2.9	-3.2	2.2	2.0
2012 Q2	3.0	3.5	2.3	2.9	1.3	7.2	1.7	1.4	2.7	-3.1	2.2	2.0
Q3	3.0	2.7	3.4	3.2	1.3	8.0	1.9	1.5	3.0	-3.1	2.2	1.9
Q4	3.1	2.4	4.3	2.5	1.1	6.3	1.8	1.5	3.1	-3.8	2.1	1.9
2013 Q1	2.9	2.3	3.9	1.5	0.8	3.2	1.8	1.5	3.1	-4.6	2.8	0.7
Q2	3.1	.	.	.	0.8	0.3	.	.	.	.	.	.
2013 Jan.	3.2	2.3	4.8	1.7	0.8	3.9	1.8	1.5	3.3	-4.0	2.5	0.7
Feb.	2.7	2.3	3.5	1.7	0.8	3.9	1.8	1.5	3.0	-4.8	2.5	0.7
Mar.	2.7	2.2	3.5	1.2	1.0	1.7	1.8	1.5	3.0	-5.0	3.4	0.8
Apr.	2.9	2.1	4.2	0.5	0.8	-0.4	1.7	1.3	2.4	-4.8	1.5	0.8
May	3.2	2.1	5.1	0.5	0.8	-0.2	1.6	1.4	2.8	-4.2	2.2	1.0
June <sup>3)</sup>	3.2	.	.	.	0.7	1.6	.	.	.	.	.	.

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: 2010 = 100)	Total		Industry excluding construction and energy						Energy		
		Manu- facturing	Total	Intermediate goods	Capital goods	Consumer goods						
						Total	Durable	Non-durable				
% of total in 2010	100.0	100.0	75.4	68.1	27.5	18.7	21.9	2.2	19.7	31.9		
	1	2	3	4	5	6	7	8	9	10	11	12
2009	97.4	-4.8	-5.1	-2.8	-5.4	0.4	-2.1	1.2	-2.5	-10.9	0.3	-3.3
2010	100.0	2.7	3.3	1.7	3.6	0.3	0.4	0.7	0.4	5.5	2.0	1.0
2011	105.8	5.8	5.4	3.9	5.9	1.5	3.3	1.9	3.4	11.0	3.3	1.0
2012	108.9	2.9	2.1	1.4	0.8	1.0	2.5	1.6	2.6	6.4	1.6	-2.1
2012 Q1	108.3	4.0	3.0	1.8	1.3	1.2	2.9	2.1	3.0	9.3	2.0	-1.1
Q2	108.7	2.7	1.7	1.2	0.4	1.1	2.1	1.7	2.2	6.1	1.8	-1.9
Q3	109.3	2.6	1.9	1.1	0.3	0.9	2.3	1.5	2.4	6.0	1.4	-2.9
Q4	109.4	2.4	2.0	1.6	1.4	0.8	2.5	1.1	2.6	4.2	1.3	-2.4
2013 Q1	109.7	1.2	0.8	1.2	0.8	0.8	2.1	0.7	2.3	1.2	1.0	.
2012 Dec.	109.2	2.3	1.7	1.7	1.6	0.9	2.4	1.0	2.6	3.6	-	-
2013 Jan.	109.6	1.7	1.2	1.5	1.3	0.8	2.3	0.8	2.5	2.2	-	-
Feb.	109.8	1.3	1.0	1.3	0.8	0.8	2.1	0.6	2.3	1.6	-	-
Mar.	109.6	0.6	0.2	1.0	0.4	0.7	1.9	0.6	2.1	-0.3	-	-
Apr.	108.8	-0.2	-0.5	0.6	-0.3	0.6	1.8	0.7	1.9	-2.1	-	-
May	108.6	-0.1	-0.2	0.5	-0.5	0.6	1.9	0.7	2.0	-1.8	-	-

### 3. Commodity prices and gross domestic product deflators

	Oil prices <sup>3)</sup> (EUR per barrel)	Non-energy commodity prices						Total (s.a.; index: 2005 = 100)	Total	GDP deflators				Exports <sup>6)</sup>	Imports <sup>6)</sup>
		Import-weighted <sup>4)</sup>			Use-weighted <sup>5)</sup>					Domestic demand					
		Total	Food	Non-food	Total	Food	Non-food			Total	Private consumption	Government consumption	Gross fixed capital formation		
% of total	100.0	35.0	65.0	100.0	45.0	55.0									
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
2009	44.6	-18.5	-8.9	-23.1	-18.0	-11.4	-22.8	107.2	0.9	-0.1	-0.4	2.1	-0.3	-3.5	-6.3
2010	60.7	44.6	21.4	57.9	42.1	27.1	54.5	108.0	0.8	1.5	1.7	0.7	0.9	3.1	5.0
2011	79.7	12.2	22.4	7.7	12.8	20.7	7.5	109.3	1.2	2.1	2.5	0.8	2.1	3.6	5.7
2012	86.6	0.5	1.1	0.3	2.6	6.4	-0.3	110.8	1.3	1.7	2.1	1.0	1.1	1.5	2.4
2012 Q2	84.6	-1.1	-3.4	0.1	1.1	4.1	-1.2	110.6	1.3	1.7	2.1	1.2	1.1	1.4	2.3
Q3	87.3	5.3	10.4	2.7	7.8	16.0	1.6	111.0	1.3	1.7	2.1	1.3	0.9	1.6	2.4
Q4	84.4	4.4	6.0	3.7	7.0	10.2	4.5	111.3	1.3	1.5	1.8	0.4	0.7	1.2	1.6
2013 Q1	85.0	-3.0	-2.4	-3.3	-1.6	0.0	-2.8	112.0	1.6	1.4	1.3	1.5	0.5	0.1	-0.4
Q2	79.0	-5.2	-4.0	-5.8	-4.3	-2.0	-6.2	.	.	.	.	.	.	.	.
2013 Jan.	84.2	-3.7	-3.4	-3.9	-1.6	0.2	-3.1	-	-	-	-	-	-	-	-
Feb.	86.7	-3.6	-3.4	-3.7	-2.4	-1.3	-3.2	-	-	-	-	-	-	-	-
Mar.	84.2	-1.6	-0.4	-2.2	-0.7	1.2	-2.2	-	-	-	-	-	-	-	-
Apr.	79.3	-3.5	-3.1	-3.7	-2.0	0.3	-3.8	-	-	-	-	-	-	-	-
May	79.2	-4.8	-3.3	-5.5	-4.0	-1.5	-6.0	-	-	-	-	-	-	-	-
June	78.3	-7.3	-5.7	-8.2	-6.9	-4.8	-8.6	-	-	-	-	-	-	-	-

Sources: Eurostat, ECB calculations based on Eurostat data (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
<b>Unit labour costs<sup>1)</sup></b>												
2011	110.5	0.9	-2.9	0.0	0.9	0.8	2.1	0.6	4.2	2.9	0.4	1.3
2012	112.3	1.6	2.1	2.6	2.5	1.6	2.9	1.1	0.6	1.9	0.5	2.2
2012 Q2	112.1	1.5	1.5	2.7	1.7	1.0	2.1	0.7	1.2	1.5	0.7	1.5
Q3	112.4	1.9	3.1	2.4	2.2	1.9	2.8	1.0	0.7	2.7	1.1	2.5
Q4	113.0	1.6	3.5	2.7	3.9	2.0	4.3	1.0	-0.9	2.0	-0.5	2.9
2013 Q1	113.9	2.0	0.7	3.6	2.2	1.4	3.2	0.8	-1.0	2.3	1.2	1.5
<b>Compensation per employee</b>												
2011	114.3	2.1	2.0	3.3	3.9	1.6	2.6	1.3	2.3	2.9	1.1	1.7
2012	116.2	1.7	1.3	2.6	2.9	1.5	2.1	1.3	1.1	2.1	0.9	1.8
2012 Q2	116.1	1.8	1.3	2.9	2.7	1.6	2.1	0.9	0.7	2.3	1.0	1.7
Q3	116.5	1.9	1.1	2.8	3.2	1.7	2.1	1.1	0.5	2.2	1.4	1.4
Q4	116.8	1.4	1.1	2.8	3.4	1.4	1.9	1.5	1.4	1.5	0.1	1.7
2013 Q1	117.8	1.8	1.9	2.9	2.9	1.1	1.3	1.9	0.8	1.9	1.5	0.7
<b>Labour productivity per person employed<sup>2)</sup></b>												
2011	103.4	1.2	5.0	3.3	3.0	0.9	0.5	0.7	-1.8	0.1	0.7	0.4
2012	103.5	0.1	-0.8	-0.1	0.5	0.0	-0.8	0.2	0.5	0.2	0.4	-0.4
2012 Q2	103.6	0.3	-0.1	0.2	1.0	0.6	0.0	0.2	-0.5	0.8	0.3	0.2
Q3	103.6	0.0	-1.9	0.3	1.0	-0.2	-0.7	0.1	-0.2	-0.5	0.3	-1.1
Q4	103.3	-0.2	-2.3	0.1	-0.5	-0.6	-2.3	0.5	2.3	-0.4	0.6	-1.2
2013 Q1	103.5	-0.2	1.2	-0.6	0.7	-0.3	-1.9	1.1	1.7	-0.4	0.3	-0.8
<b>Compensation per hour worked</b>												
2011	115.8	1.9	0.5	2.4	4.4	1.8	2.5	1.1	1.6	2.7	1.0	1.7
2012	118.6	2.4	3.1	3.6	4.7	2.2	2.1	1.4	1.6	2.2	1.0	2.5
2012 Q2	118.8	2.6	2.4	4.1	4.9	2.4	1.8	0.9	0.3	2.2	1.3	2.5
Q3	118.9	2.6	2.4	4.0	5.1	2.5	1.9	1.1	0.5	2.2	1.7	1.9
Q4	119.5	2.1	3.6	3.9	4.9	2.1	2.1	2.1	3.9	1.9	0.0	2.7
2013 Q1	121.1	3.1	3.8	4.8	5.8	2.3	1.9	3.3	3.8	2.6	2.3	2.0
<b>Hourly labour productivity<sup>2)</sup></b>												
2011	105.4	1.2	5.8	2.5	3.1	1.0	0.4	0.6	-2.5	-0.1	0.6	0.4
2012	106.1	0.7	-0.2	0.9	1.8	0.6	-0.7	0.2	1.2	0.4	0.6	0.3
2012 Q2	106.5	1.1	0.2	1.3	2.8	1.3	0.0	0.2	-0.2	0.9	0.6	1.0
Q3	106.2	0.5	-1.7	1.5	2.5	0.2	-1.0	0.0	0.5	-0.5	0.5	-0.5
Q4	106.3	0.6	-1.6	1.2	0.7	0.2	-1.8	1.0	4.1	0.2	0.6	-0.1
2013 Q1	107.0	1.1	1.1	1.3	3.3	0.6	-1.1	2.3	3.8	0.7	1.2	0.7

**5. Labour cost indices<sup>3)</sup>**

	Total (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
2011	106.5	2.1	2.0	2.8	3.1	2.6	2.5	2.0
2012	108.2	1.5	1.7	1.2	2.4	2.3	1.9	2.1
2012 Q2	112.0	1.7	1.9	1.3	2.8	2.8	2.2	2.2
Q3	105.7	1.7	1.9	1.2	2.8	2.4	1.9	2.2
Q4	114.4	1.3	1.4	0.9	2.7	2.1	1.7	2.2
2013 Q1	102.1	1.6	1.7	1.4	3.3	1.8	1.3	2.0

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, forestry and fishing. 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>								
2009	8,922.3	8,804.1	5,134.2	1,988.2	1,730.7	-49.1	118.2	3,285.4	3,167.2
2010	9,174.6	9,053.9	5,272.2	2,016.7	1,740.4	24.5	120.7	3,768.7	3,648.0
2011	9,425.0	9,292.9	5,414.3	2,030.9	1,800.9	46.8	132.1	4,149.3	4,017.2
2012	9,489.8	9,240.5	5,455.3	2,043.5	1,741.2	0.5	249.3	4,327.8	4,078.5
2012 Q1	2,368.8	2,321.1	1,364.4	510.3	444.6	1.7	47.7	1,067.0	1,019.3
Q2	2,372.9	2,312.6	1,361.2	511.5	436.4	3.5	60.3	1,082.0	1,021.7
Q3	2,378.2	2,307.9	1,363.9	511.2	433.7	-1.0	70.4	1,096.8	1,026.4
Q4	2,371.1	2,299.2	1,363.5	510.5	428.3	-3.0	71.9	1,085.6	1,013.7
2013 Q1	2,379.2	2,301.8	1,365.2	515.1	420.5	1.0	77.3	1,073.8	996.5
	<i>percentage of GDP</i>								
2012	100.0	97.4	57.5	21.5	18.3	0.0	2.6	-	-
	<i>Chain-linked volumes (prices for the previous year)</i>								
	<i>quarter-on-quarter percentage changes</i>								
2012 Q1	-0.1	-0.4	-0.2	-0.1	-1.3	-	-	0.8	0.0
Q2	-0.2	-0.7	-0.5	-0.3	-1.8	-	-	1.5	0.3
Q3	-0.1	-0.4	-0.1	-0.1	-0.8	-	-	0.8	0.2
Q4	-0.6	-0.7	-0.6	0.0	-1.5	-	-	-0.9	-1.2
2013 Q1	-0.3	-0.4	0.0	-0.2	-1.9	-	-	-0.9	-1.2
	<i>annual percentage changes</i>								
2009	-4.4	-3.8	-1.0	2.6	-12.7	-	-	-12.4	-11.1
2010	2.0	1.3	1.0	0.8	-0.3	-	-	11.2	9.7
2011	1.5	0.6	0.2	-0.1	1.4	-	-	6.3	4.2
2012	-0.6	-2.2	-1.3	-0.4	-4.3	-	-	2.7	-0.8
2012 Q1	-0.1	-1.6	-1.1	-0.2	-2.8	-	-	2.6	-0.9
Q2	-0.5	-2.3	-1.2	-0.4	-4.1	-	-	3.7	-0.5
Q3	-0.7	-2.5	-1.6	-0.4	-4.5	-	-	3.2	-0.8
Q4	-0.9	-2.3	-1.5	-0.5	-5.3	-	-	2.2	-0.6
2013 Q1	-1.1	-2.2	-1.3	-0.5	-5.9	-	-	0.5	-1.9
	<i>contributions to quarter-on-quarter percentage changes in GDP; percentage points</i>								
2012 Q1	-0.1	-0.4	-0.1	0.0	-0.2	0.0	0.3	-	-
Q2	-0.2	-0.7	-0.3	-0.1	-0.3	0.0	0.5	-	-
Q3	-0.1	-0.4	-0.1	0.0	-0.2	-0.1	0.3	-	-
Q4	-0.6	-0.7	-0.4	0.0	-0.3	-0.1	0.1	-	-
2013 Q1	-0.3	-0.4	0.0	0.0	-0.3	0.0	0.1	-	-
	<i>contributions to annual percentage changes in GDP; percentage points</i>								
2009	-4.4	-3.7	-0.6	0.5	-2.7	-0.9	-0.7	-	-
2010	2.0	1.3	0.6	0.2	-0.1	0.6	0.7	-	-
2011	1.5	0.6	0.1	0.0	0.3	0.2	0.9	-	-
2012	-0.6	-2.1	-0.8	-0.1	-0.8	-0.5	1.6	-	-
2012 Q1	-0.1	-1.6	-0.7	0.0	-0.5	-0.4	1.5	-	-
Q2	-0.5	-2.3	-0.7	-0.1	-0.8	-0.7	1.8	-	-
Q3	-0.7	-2.4	-0.9	-0.1	-0.8	-0.6	1.8	-	-
Q4	-0.9	-2.2	-0.8	-0.1	-1.0	-0.2	1.3	-	-
2013 Q1	-1.1	-2.2	-0.7	-0.1	-1.1	-0.3	1.0	-	-

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	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
<i>Current prices (EUR billions)</i>												
2009	8,028.4	124.0	1,461.4	531.7	1,537.8	369.8	421.3	902.0	803.9	1,581.6	295.0	893.9
2010	8,232.7	135.9	1,568.6	499.5	1,579.5	369.2	438.8	912.3	819.1	1,610.0	299.8	941.9
2011	8,451.4	144.8	1,642.0	505.7	1,627.8	368.7	436.8	942.9	847.4	1,629.5	305.7	973.6
2012	8,511.8	150.3	1,647.7	493.2	1,641.5	364.9	431.7	959.3	865.9	1,645.5	311.8	977.9
2012 Q1	2,125.9	36.9	410.8	125.4	409.2	92.3	109.8	237.5	215.6	410.8	77.5	242.9
Q2	2,128.3	37.0	412.0	124.0	409.0	91.6	108.9	239.6	216.2	412.6	77.4	244.6
Q3	2,132.8	37.6	414.6	122.7	410.5	91.1	107.1	240.6	217.3	412.9	78.4	245.4
Q4	2,125.9	38.6	411.1	121.1	412.7	90.1	106.0	241.6	216.9	409.3	78.6	245.2
2013 Q1	2,138.3	38.8	411.8	120.3	412.4	89.2	109.6	242.8	218.0	416.5	78.9	240.9
<i>percentage of value added</i>												
2012	100.0	1.8	19.4	5.8	19.3	4.3	5.1	11.3	10.2	19.3	3.7	-
<i>Chain-linked volumes (prices for the previous year)</i>												
<i>quarter-on-quarter percentage changes</i>												
2012 Q1	-0.1	-1.6	0.4	-1.5	-0.1	0.0	-0.5	0.2	0.4	-0.2	0.1	0.1
Q2	-0.1	-0.5	-0.2	-1.3	-0.2	0.1	-0.2	0.2	-0.1	0.3	-0.4	-0.7
Q3	-0.1	-1.4	0.2	-1.2	-0.4	0.0	-0.2	0.2	0.2	-0.1	0.3	-0.2
Q4	-0.5	-0.3	-1.7	-1.6	-0.8	-0.5	0.1	0.3	-0.5	0.4	0.2	-1.1
2013 Q1	-0.2	0.8	-0.4	-0.9	0.2	-0.5	0.1	-0.4	0.2	-0.5	-0.4	-0.6
<i>annual percentage changes</i>												
2009	-4.4	1.2	-13.4	-8.1	-4.5	2.9	0.4	0.4	-7.9	1.5	-0.6	-4.2
2010	2.1	-3.1	8.9	-5.6	2.2	2.0	0.4	-0.6	1.5	1.2	0.1	1.5
2011	1.7	2.8	3.4	-1.0	1.7	1.8	0.3	1.3	2.7	0.9	0.4	0.2
2012	-0.5	-2.4	-1.1	-4.3	-0.8	0.7	-0.6	0.8	0.9	0.1	0.2	-1.7
2012 Q1	0.0	-0.1	-0.8	-3.8	0.1	1.3	-0.2	1.0	1.9	0.2	0.5	-1.4
Q2	-0.3	-1.7	-1.0	-3.7	-0.4	1.3	-0.3	0.7	1.0	0.0	0.2	-2.0
Q3	-0.6	-3.4	-0.8	-4.1	-1.1	0.8	-1.0	0.7	0.7	-0.2	0.3	-1.5
Q4	-0.8	-3.7	-1.3	-5.4	-1.6	-0.3	-0.7	0.9	0.0	0.3	0.2	-2.0
2013 Q1	-1.0	-1.3	-2.1	-4.9	-1.2	-0.8	-0.2	0.4	-0.2	0.0	-0.4	-2.6
<i>contributions to quarter-on-quarter percentage changes in value added; percentage points</i>												
2012 Q1	-0.1	0.0	0.1	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-
Q2	-0.1	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-
Q3	-0.1	0.0	0.0	-0.1	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	-
Q4	-0.5	0.0	-0.3	-0.1	-0.2	0.0	0.0	0.0	0.0	0.1	0.0	-
2013 Q1	-0.2	0.0	-0.1	-0.1	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	-
<i>contributions to annual percentage changes in value added; percentage points</i>												
2009	-4.4	0.0	-2.6	-0.5	-0.9	0.1	0.0	0.0	-0.8	0.3	0.0	-
2010	2.1	0.0	1.6	-0.4	0.4	0.1	0.0	-0.1	0.2	0.2	0.0	-
2011	1.7	0.0	0.7	-0.1	0.3	0.1	0.0	0.1	0.3	0.2	0.0	-
2012	-0.5	0.0	-0.2	-0.3	-0.2	0.0	0.0	0.1	0.1	0.0	0.0	-
2012 Q1	0.0	0.0	-0.2	-0.2	0.0	0.1	0.0	0.1	0.2	0.0	0.0	-
Q2	-0.3	0.0	-0.2	-0.2	-0.1	0.1	0.0	0.1	0.1	0.0	0.0	-
Q3	-0.6	-0.1	-0.2	-0.2	-0.2	0.0	-0.1	0.1	0.1	0.0	0.0	-
Q4	-0.8	-0.1	-0.3	-0.3	-0.3	0.0	0.0	0.1	0.0	0.1	0.0	-
2013 Q1	-1.0	0.0	-0.4	-0.3	-0.2	0.0	0.0	0.0	0.0	0.0	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 2010	Total (s.a.; index: 2010 = 100)	Total		Industry excluding construction and energy						Energy	
			Manufacturing	Total	Intermediate goods	Capital goods	Consumer goods					
							Total	Durable	Non-durable			
1	2	3	4	5	6	7	8	9	10	11	12	
	100.0	79.4	79.4	68.3	67.7	26.7	23.2	17.8	2.3	15.5	11.7	20.6
2010	4.0	100.0	7.3	7.7	7.7	10.0	8.9	2.9	2.7	2.9	3.9	-7.9
2011	2.1	103.2	3.2	4.4	4.5	3.8	8.2	0.8	0.6	0.9	-4.7	-2.1
2012	-3.0	100.8	-2.4	-2.6	-2.7	-4.3	-1.1	-2.5	-4.4	-2.3	-0.2	-5.4
2012 Q2	-3.1	101.1	-2.3	-2.8	-2.9	-4.4	-1.2	-3.1	-4.4	-2.9	2.1	-6.1
Q3	-2.7	101.2	-2.2	-2.3	-2.5	-4.2	-0.8	-2.3	-5.3	-1.9	0.0	-4.7
Q4	-3.3	99.1	-3.1	-3.4	-3.6	-4.8	-3.3	-2.0	-4.9	-1.6	-0.3	-4.4
2013 Q1	-2.8	99.2	-2.3	-2.7	-2.9	-3.8	-3.5	-0.5	-4.6	0.0	-0.2	-5.3
2012 Dec.	-2.6	99.3	-2.0	-2.4	-2.8	-4.8	-1.7	-0.5	-2.7	-0.4	-0.3	-4.2
2013 Jan.	-3.7	98.7	-2.5	-2.7	-2.9	-4.1	-3.9	0.8	-7.3	2.0	-1.1	-9.6
Feb.	-2.4	99.0	-3.2	-2.5	-2.7	-3.1	-3.9	-0.1	-5.0	0.4	-6.8	2.3
Mar.	-2.4	100.0	-1.4	-2.9	-3.2	-4.1	-3.0	-2.0	-2.0	-2.2	8.2	-7.3
Apr.	-1.6	100.3	-0.6	-0.3	-0.5	-2.8	1.6	0.3	-6.2	1.6	-1.7	-6.6
<i>month-on-month percentage changes (s.a.)</i>												
2012 Dec.	0.5	-	0.6	1.0	1.0	0.2	0.9	2.0	1.8	2.1	-1.4	-0.2
2013 Jan.	-0.8	-	-0.6	-0.7	-0.6	0.0	-1.8	0.0	-1.9	0.0	0.0	-2.4
Feb.	0.4	-	0.3	0.1	-0.1	-0.1	0.9	-1.4	0.7	-1.5	1.7	0.3
Mar.	0.2	-	0.9	0.4	0.4	0.2	1.2	0.0	1.7	-0.1	3.4	-1.8
Apr.	0.5	-	0.4	1.0	0.8	0.0	2.7	0.1	-2.7	0.7	-1.5	2.0

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

	Indicator on industrial new orders <sup>1)</sup>		Industrial turnover		Retail sales (including automotive fuel)							New passenger car registrations		
	Manufacturing		Manufacturing (current prices)		Current prices	Constant prices						Total (s.a.; thousands) <sup>2)</sup>	Total	
	Total (s.a.; index: 2010 = 100)	Total	Total (s.a.; index: 2010 = 100)	Total	Total	Total (s.a.; index: 2010 = 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	
% of total in 2010	100.0	100.0	100.0	100.0	100.0	100.0	100.0	40.1	51.1	9.4	11.9	8.8		
2010	100.0	17.7	100.0	10.3	2.1	100.0	0.6	0.3	1.4	2.2	0.2	-3.0	843	-8.5
2011	108.6	8.6	109.2	9.1	1.8	99.7	-0.3	-1.0	0.5	1.3	-0.2	-3.3	838	-1.1
2012	104.5	-3.7	108.7	-0.5	0.5	98.0	-1.8	-1.3	-1.7	-4.2	-2.6	-5.1	743	-11.0
2012 Q2	105.0	-5.6	108.6	-0.8	0.5	98.1	-1.7	-1.3	-1.8	-7.3	-2.1	-5.0	768	-6.8
Q3	104.6	-3.0	109.2	-0.7	0.8	98.2	-1.4	-0.8	-1.5	-2.7	-2.0	-4.4	721	-12.7
Q4	103.3	-2.3	107.2	-1.7	-0.8	96.8	-2.7	-2.0	-2.8	-4.7	-4.4	-5.4	709	-14.2
2013 Q1	102.8	-2.3	106.8	-2.6	-1.1	97.1	-1.8	-1.6	-2.0	-3.9	-4.4	-3.4	688	-11.3
2013 Jan.	102.3	-2.3	106.7	-2.1	-0.8	97.4	-1.8	-1.9	-1.1	-1.8	-3.9	-5.8	665	-14.2
Feb.	102.4	-2.3	106.5	-2.9	-0.9	97.1	-1.7	-2.5	-1.7	0.1	-3.6	-2.5	698	-8.8
Mar.	103.7	-2.4	107.3	-2.7	-1.5	96.9	-2.0	-0.5	-3.2	-9.8	-5.5	-1.9	700	-10.9
Apr.	102.1	-2.7	107.2	-1.7	-0.6	96.7	-1.0	-2.5	0.3	2.8	-3.8	0.3	711	-6.5
May	.	.	.	.	0.5	97.7	-0.1	-1.5	0.8	.	.	-1.9	704	-8.0
<i>month-on-month percentage changes (s.a.)</i>														
2013 Jan.	-	-0.8	-	-0.7	0.8	-	1.0	0.7	1.6	0.3	1.5	-1.3	-	-9.1
Feb.	-	0.1	-	-0.1	-0.2	-	-0.3	-0.3	-0.7	0.3	-1.1	-0.9	-	4.9
Mar.	-	1.2	-	0.7	-0.1	-	-0.2	0.8	-0.8	-4.5	-0.9	1.0	-	0.3
Apr.	-	-1.5	-	-0.1	-0.3	-	-0.2	-1.3	0.8	2.4	-0.1	0.4	-	1.6
May	-	.	-	.	1.1	-	1.0	0.9	0.9	.	.	-1.9	-	-1.0

Sources: Eurostat, except columns 1 and 2 in Table 4 (which show ECB experimental statistics based on national data) and columns 13 and 14 in Table 4 (which show ECB calculations based on data from the European Automobile Manufacturers' Association).

- For further details, see de Bondt, G.J., Dieden, H.C., Muzikarova, S. and Vincze, I., "Introducing the ECB indicator on euro area industrial new orders", *Occasional Paper Series*, No 149, ECB, Frankfurt am Main, June 2013.
- 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
2009	80.7	-28.8	-56.6	14.8	-14.9	70.9	-24.8	-7.0	-26.1	55.3	-10.7
2010	101.0	-4.6	-24.4	1.0	11.5	77.0	-14.2	-5.3	-12.3	31.2	-8.0
2011	101.7	0.2	-6.6	2.3	9.4	80.6	-14.5	-7.4	-18.1	23.2	-9.1
2012	90.4	-11.7	-24.5	6.8	-4.0	78.5	-22.3	-11.3	-27.6	38.4	-12.0
2012 Q2	92.3	-10.5	-22.0	6.5	-3.0	79.0	-19.5	-10.3	-24.2	32.3	-10.9
Q3	87.4	-14.9	-28.6	8.1	-8.1	77.6	-23.8	-11.8	-30.4	40.7	-12.4
Q4	86.8	-15.4	-32.1	6.8	-7.4	77.3	-26.2	-13.0	-31.7	46.3	-13.7
2013 Q1	90.1	-12.3	-29.7	5.4	-1.6	77.5	-23.7	-11.4	-27.3	42.6	-13.4
Q2	89.8	-12.7	-31.0	6.1	-0.9	.	-21.0	-10.3	-24.9	35.9	-12.9
2013 Jan.	89.7	-13.4	-30.9	5.2	-4.0	77.5	-23.9	-11.7	-28.9	42.7	-12.4
Feb.	90.4	-11.1	-27.8	5.1	-0.4	-	-23.6	-11.2	-26.4	43.2	-13.7
Mar.	90.1	-12.3	-30.3	6.0	-0.5	-	-23.5	-11.4	-26.7	42.0	-14.1
Apr.	88.6	-13.8	-33.6	6.3	-1.5	77.5	-22.3	-11.0	-26.4	37.9	-13.8
May	89.5	-13.0	-31.0	6.1	-1.9	-	-21.9	-10.3	-26.8	36.6	-13.8
June	91.3	-11.2	-28.5	5.9	0.7	-	-18.8	-9.5	-21.5	33.3	-11.0
	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
2009	-33.1	-42.1	-24.1	-15.5	-21.4	9.8	-15.4	-16.1	-21.2	-18.0	-9.3
2010	-28.7	-39.4	-18.2	-4.1	-6.6	7.2	1.6	4.0	1.5	3.1	7.3
2011	-26.2	-33.9	-18.5	-5.4	-5.6	11.1	0.6	5.3	2.2	5.3	8.3
2012	-28.7	-35.1	-22.3	-15.2	-18.9	14.2	-12.6	-6.9	-11.9	-7.7	-1.1
2012 Q2	-27.2	-32.3	-22.1	-14.4	-18.2	14.8	-10.4	-4.5	-10.1	-4.8	1.3
Q3	-29.7	-36.9	-22.5	-16.8	-21.8	14.5	-14.1	-10.6	-15.8	-11.7	-4.2
Q4	-33.0	-40.5	-25.5	-16.0	-21.3	11.4	-15.4	-11.1	-15.3	-12.9	-5.0
2013 Q1	-29.5	-37.5	-21.7	-16.2	-24.4	10.7	-13.7	-7.8	-12.6	-8.9	-1.8
Q2	-32.5	-39.4	-25.6	-16.5	-24.7	11.0	-13.8	-9.9	-14.6	-13.3	-1.9
2013 Jan.	-28.5	-36.3	-20.8	-15.5	-23.0	11.4	-12.1	-7.9	-12.4	-9.4	-1.8
Feb.	-29.7	-37.7	-21.8	-16.1	-25.0	10.2	-13.3	-8.5	-14.3	-9.6	-1.5
Mar.	-30.4	-38.4	-22.4	-17.1	-25.3	10.5	-15.6	-7.0	-11.2	-7.8	-2.1
Apr.	-31.7	-39.2	-24.1	-18.4	-26.4	12.1	-16.8	-11.1	-16.0	-14.7	-2.6
May	-33.6	-40.4	-26.8	-16.7	-26.0	11.0	-13.2	-9.2	-13.1	-12.8	-1.7
June	-32.2	-38.6	-25.8	-14.4	-21.8	10.0	-11.5	-9.5	-14.7	-12.5	-1.4

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 since 1990.
- 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
<b>Persons employed</b>													
<i>levels (thousands)</i>													
2012	146,197	125,044	21,153	4,991	22,922	9,489	35,931	4,076	4,053	1,322	18,225	34,365	10,822
<i>percentage of total persons employed</i>													
2012	100.0	85.5	14.5	3.4	15.7	6.5	24.6	2.8	2.8	0.9	12.5	23.5	7.4
<i>annual percentage changes</i>													
2010	-0.5	-0.5	-0.4	-1.0	-2.9	-3.8	-0.6	-1.4	-0.9	-0.1	1.6	1.0	0.8
2011	0.3	0.4	-0.4	-2.1	0.1	-3.8	0.8	1.3	-0.4	3.1	2.7	0.3	0.0
2012	-0.7	-0.7	-0.3	-1.6	-1.1	-4.8	-0.8	1.5	-0.7	0.4	0.7	-0.3	0.6
2012 Q2	-0.8	-0.8	-0.6	-1.5	-1.1	-4.7	-1.0	1.3	-0.5	1.2	0.2	-0.3	0.1
Q3	-0.6	-0.8	0.2	-1.5	-1.1	-5.1	-0.9	1.5	-1.1	0.9	1.2	-0.5	1.3
Q4	-0.7	-0.8	-0.3	-1.4	-1.4	-5.0	-1.0	2.1	-1.2	-1.3	0.5	-0.3	1.4
2013 Q1	-1.0	-1.0	-0.9	-2.5	-1.5	-5.5	-1.0	1.1	-1.2	-1.4	0.2	-0.3	0.4
<i>quarter-on-quarter percentage changes</i>													
2012 Q2	-0.1	0.0	-0.5	0.3	-0.4	-0.8	-0.1	0.5	-0.7	0.6	0.3	0.0	-0.2
Q3	-0.1	-0.1	0.1	-0.6	0.0	-1.7	-0.1	-0.3	-0.8	-1.2	0.8	-0.1	0.7
Q4	-0.3	-0.3	-0.4	-0.7	-0.6	-1.6	-0.4	1.1	0.2	0.6	-0.2	-0.1	-0.1
2013 Q1	-0.5	-0.5	-0.1	-1.5	-0.5	-1.6	-0.3	-0.2	0.0	-1.4	-0.7	-0.2	0.0
<b>Hours worked</b>													
<i>levels (millions)</i>													
2012	230,222	185,189	45,033	10,036	36,090	16,552	59,918	6,562	6,416	2,029	28,410	49,005	15,204
<i>percentage of total hours worked</i>													
2012	100.0	80.4	19.6	4.4	15.7	7.2	26.0	2.9	2.8	0.9	12.3	21.3	6.6
<i>annual percentage changes</i>													
2010	0.0	0.1	-0.4	-1.2	-0.4	-3.9	-0.3	-0.8	-0.4	0.9	2.5	1.0	0.5
2011	0.3	0.6	-0.7	-2.8	0.9	-3.9	0.6	1.4	-0.3	3.8	2.8	0.4	0.0
2012	-1.3	-1.3	-1.0	-2.2	-2.0	-6.1	-1.4	1.4	-0.8	-0.4	0.5	-0.5	-0.1
2012 Q2	-1.5	-1.5	-1.3	-1.9	-2.3	-6.4	-1.6	1.3	-0.6	1.0	0.1	-0.6	-0.8
Q3	-1.2	-1.4	-0.1	-1.7	-2.3	-6.4	-1.3	1.8	-1.0	0.2	1.2	-0.7	0.7
Q4	-1.5	-1.5	-1.5	-2.1	-2.5	-6.1	-1.8	1.6	-1.7	-3.0	-0.2	-0.3	0.3
2013 Q1	-2.2	-2.2	-2.0	-2.4	-3.3	-8.0	-1.8	0.3	-2.4	-3.3	-0.8	-1.1	-1.1
<i>quarter-on-quarter percentage changes</i>													
2012 Q2	-0.8	-0.8	-0.5	-0.6	-1.5	-2.5	-0.4	-0.1	-1.2	0.3	-0.2	-0.5	-1.0
Q3	0.1	0.0	0.5	-0.7	0.0	-1.6	0.2	0.6	-0.1	-0.2	0.8	0.1	1.2
Q4	-0.7	-0.5	-1.3	-0.5	-0.7	-2.0	-1.0	0.2	-0.6	-1.8	-0.6	0.1	-0.7
2013 Q1	-0.9	-1.0	-0.6	-0.7	-1.2	-2.2	-0.6	-0.3	-0.6	-1.7	-0.9	-0.9	-0.7
<b>Hours worked per person employed</b>													
<i>levels (thousands)</i>													
2012	1,575	1,481	2,129	2,011	1,574	1,744	1,668	1,610	1,583	1,535	1,559	1,426	1,405
<i>annual percentage changes</i>													
2010	0.5	0.6	0.0	-0.2	2.5	-0.1	0.2	0.6	0.5	1.1	0.8	0.1	-0.3
2011	0.0	0.2	-0.2	-0.7	0.7	-0.1	-0.2	0.1	0.1	0.7	0.2	0.1	0.0
2012	-0.6	-0.6	-0.7	-0.6	-1.0	-1.3	-0.7	-0.1	-0.1	-0.8	-0.2	-0.2	-0.7
2012 Q2	-0.7	-0.7	-0.7	-0.4	-1.2	-1.8	-0.7	0.0	0.0	-0.3	-0.1	-0.4	-0.9
Q3	-0.6	-0.7	-0.3	-0.2	-1.2	-1.4	-0.4	0.3	0.1	-0.6	0.0	-0.2	-0.6
Q4	-0.8	-0.7	-1.2	-0.8	-1.1	-1.2	-0.8	-0.5	-0.5	-1.7	-0.7	0.0	-1.1
2013 Q1	-1.2	-1.3	-1.0	0.1	-1.9	-2.6	-0.8	-0.8	-1.2	-2.0	-1.0	-0.8	-1.5
<i>quarter-on-quarter percentage changes</i>													
2012 Q2	-0.7	-0.8	0.0	-0.9	-1.1	-1.7	-0.3	-0.6	-0.5	-0.4	-0.5	-0.5	-0.8
Q3	0.2	0.2	0.4	0.0	0.0	0.1	0.4	0.9	0.7	1.0	0.1	0.2	0.5
Q4	-0.3	-0.2	-0.9	0.2	-0.2	-0.4	-0.6	-0.9	-0.8	-2.4	-0.4	0.2	-0.6
2013 Q1	-0.5	-0.5	-0.6	0.8	-0.6	-0.6	-0.3	-0.1	-0.6	-0.3	-0.2	-0.7	-0.6

Source: ECB calculations based on Eurostat data.

1) Data for employment are based on the ESA 95.

## 5.3 Labour markets

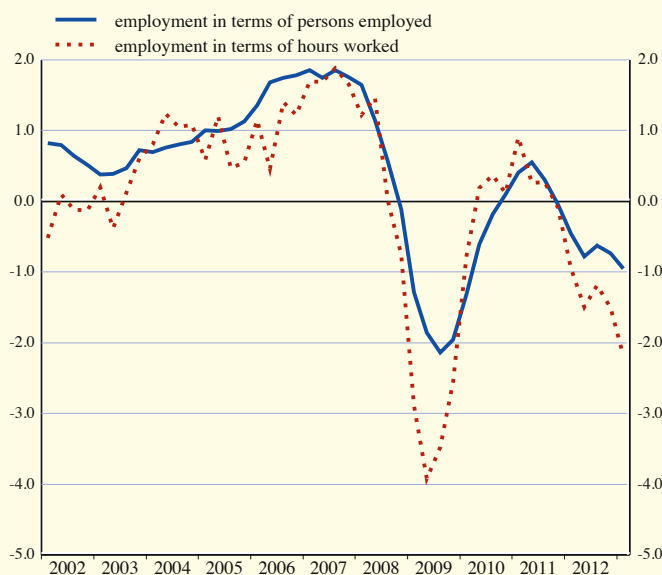
(seasonally adjusted, unless otherwise indicated)

### 2. Unemployment and job vacancies<sup>1)</sup>

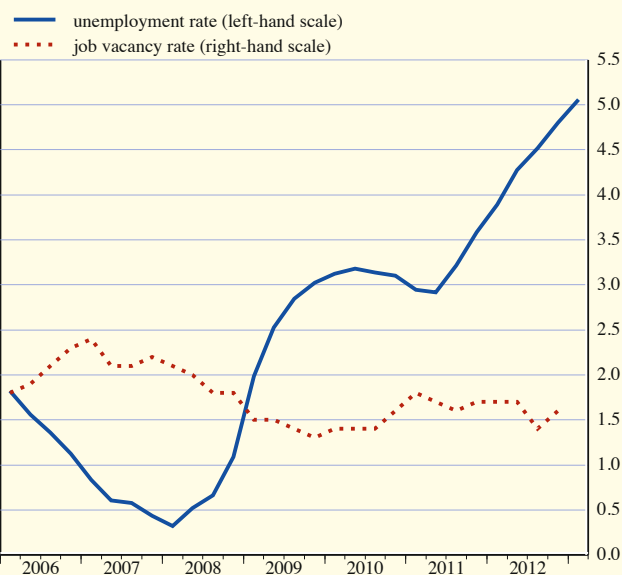
	Unemployment										Job vacancy rate <sup>2)</sup>
	Total		By age <sup>3)</sup>				By gender <sup>4)</sup>				
	Millions	% of labour force	Adult		Youth		Male		Female		
			Millions	% of labour force	Millions	% of labour force	Millions	% of labour force	Millions	% of labour force	
% of total in 2010	100.0	79.4		20.6		54.0		46.0		% of total posts	
	1	2	3	4	5	6	7	8	9	10	11
2009	15.054	9.6	11.767	8.4	3.287	20.3	8.146	9.4	6.908	9.8	1.4
2010	15.935	10.1	12.654	8.9	3.281	20.9	8.604	10.0	7.331	10.3	1.5
2011	16.036	10.2	12.823	9.0	3.213	20.9	8.546	9.9	7.490	10.5	1.7
2012	18.069	11.4	14.581	10.1	3.489	23.1	9.704	11.2	8.365	11.6	1.6
2012 Q1	17.255	10.9	13.875	9.7	3.380	22.2	9.246	10.7	8.009	11.1	1.7
Q2	17.912	11.3	14.450	10.1	3.462	22.9	9.643	11.1	8.269	11.4	1.7
Q3	18.324	11.5	14.802	10.3	3.522	23.4	9.850	11.4	8.473	11.7	1.4
Q4	18.786	11.8	15.195	10.5	3.591	23.9	10.077	11.7	8.709	12.0	1.6
2013 Q1	19.174	12.1	15.561	10.8	3.613	24.1	10.288	11.9	8.885	12.2	.
2012 Dec.	18.871	11.9	15.271	10.6	3.600	24.0	10.127	11.7	8.744	12.0	-
2013 Jan.	19.130	12.0	15.489	10.7	3.641	24.2	10.264	11.9	8.866	12.2	-
Feb.	19.180	12.1	15.557	10.8	3.623	24.2	10.299	11.9	8.881	12.2	-
Mar.	19.211	12.1	15.636	10.9	3.576	24.0	10.302	11.9	8.909	12.3	-
Apr.	19.273	12.1	15.702	10.9	3.570	24.0	10.328	12.0	8.945	12.3	-
May	19.340	12.2	15.785	11.0	3.555	23.9	10.375	12.0	8.965	12.3	-

### 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

## GOVERNMENT FINANCE

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

#### 1. Euro area – revenue

	Total		Current revenue									Capital revenue		Memo item: Fiscal burden <sup>2)</sup>
	1	2	Direct taxes		Indirect taxes	Social contributions		Sales	Capital taxes		12	13		
			Households	Corporations		Employers	Employees		Capital taxes	Capital taxes				
	3	4	5	6	7	8	9	10	11	12	13	14		
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	45.0	12.3	8.7	3.4	13.4	0.3	15.3	8.0	4.5	2.3	0.3	0.3	41.3
2007	45.3	45.1	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	44.9	12.5	9.1	3.2	12.9	0.3	15.3	8.1	4.5	2.3	0.2	0.3	40.9
2009	44.9	44.6	11.6	9.2	2.3	12.8	0.3	15.8	8.3	4.5	2.5	0.3	0.4	40.6
2010	44.8	44.5	11.5	8.9	2.5	12.9	0.3	15.7	8.2	4.5	2.6	0.3	0.3	40.4
2011	45.3	45.0	11.9	9.1	2.7	13.0	0.3	15.7	8.2	4.5	2.6	0.3	0.3	40.9
2012	46.2	46.0	12.4	9.6	2.7	13.3	0.3	15.9	8.3	4.7	2.6	0.2	0.3	41.8

#### 2. Euro area – expenditure

	Total		Current expenditure						Capital expenditure				Memo item: Primary expenditure <sup>3)</sup>	
	1	2	Compensation of employees	Intermediate consumption	Interest	Current transfers	Social payments		Subsidies	Paid by EU institutions	Investment	Capital transfers		Paid by EU institutions
							7	8						
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
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	47.3	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	51.3	47.0	11.1	5.7	2.9	27.4	24.3	1.8	0.4	4.3	2.8	1.4	0.0	48.4
2010	51.0	46.6	10.9	5.7	2.8	27.2	24.2	1.8	0.4	4.4	2.6	1.8	0.0	48.1
2011	49.5	46.0	10.6	5.5	3.0	26.9	23.9	1.7	0.4	3.5	2.3	1.2	0.0	46.5
2012	49.9	46.2	10.5	5.5	3.1	27.1	24.3	1.6	0.4	3.7	2.1	1.6	0.1	46.9

#### 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
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	-2.3	-0.3	-0.2	0.2	0.5	20.5	10.5	5.0	5.2	1.9	2.3	8.0	12.5
2006	-1.4	-1.5	-0.1	-0.2	0.4	1.5	20.3	10.3	5.0	5.3	1.9	2.3	7.9	12.5
2007	-0.7	-1.2	0.0	0.0	0.6	2.3	20.1	10.1	5.0	5.2	1.9	2.3	7.7	12.3
2008	-2.1	-2.3	-0.2	-0.2	0.5	0.9	20.6	10.3	5.2	5.4	1.9	2.3	8.0	12.7
2009	-6.4	-5.2	-0.5	-0.3	-0.4	-3.5	22.4	11.1	5.7	5.9	2.1	2.5	8.6	13.7
2010	-6.2	-5.1	-0.7	-0.3	-0.1	-3.4	22.1	10.9	5.7	5.9	2.1	2.6	8.4	13.6
2011	-4.1	-3.3	-0.7	-0.2	0.0	-1.1	21.6	10.6	5.5	5.8	2.1	2.6	8.2	13.4
2012	-3.7	-3.4	-0.3	0.0	0.0	-0.6	21.6	10.5	5.5	5.9	2.1	2.6	8.2	13.4

#### 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
2009	-5.6	-3.1	-2.0	-13.9	-15.6	-11.2	-7.5	-5.5	-6.1	-0.8	-3.7	-5.6	-4.1	-10.2	-6.2	-8.0	-2.5
2010	-3.8	-4.1	0.2	-30.8	-10.7	-9.7	-7.1	-4.5	-5.3	-0.9	-3.6	-5.1	-4.5	-9.8	-5.9	-7.7	-2.5
2011	-3.7	-0.8	1.2	-13.4	-9.5	-9.4	-5.3	-3.8	-6.3	-0.2	-2.8	-4.5	-2.5	-4.4	-6.4	-5.1	-0.8
2012	-3.9	0.2	-0.3	-7.6	-10.0	-10.6	-4.8	-3.0	-6.3	-0.8	-3.3	-4.1	-2.5	-6.4	-4.0	-4.3	-1.9

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

- 1) 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 settlements under swaps and forward rate agreements.

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

(as a percentage of GDP)

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

	Total	Financial instruments				Holders				
		Currency and deposits	Loans	Short-term securities	Long-term securities	Domestic creditors <sup>2)</sup>				Other creditors <sup>3)</sup>
						Total	MFIs	Other financial corporations	Other sectors	
1	2	3	4	5	6	7	8	9	10	
2003	69.2	2.1	12.5	5.1	49.6	40.2	20.5	11.3	8.4	29.1
2004	69.7	2.2	12.2	4.8	50.5	38.7	19.7	11.2	7.9	30.9
2005	70.5	2.4	12.3	4.5	51.3	37.0	19.0	11.3	6.8	33.5
2006	68.7	2.5	11.9	4.0	50.3	34.9	19.1	9.3	6.5	33.7
2007	66.4	2.2	11.3	3.9	48.9	32.7	17.8	8.6	6.3	33.6
2008	70.2	2.3	11.6	6.5	49.8	33.2	18.4	7.9	6.9	37.0
2009	80.0	2.5	12.7	8.3	56.5	37.4	21.4	9.2	6.8	42.6
2010	85.4	2.4	15.4	7.3	60.2	40.5	24.3	10.6	5.6	44.9
2011	87.3	2.4	15.4	7.4	62.1	42.8	24.7	11.3	6.9	44.5
2012	90.7	2.6	17.4	6.8	63.9	46.6	26.5	12.4	7.7	44.0

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

	Total	Issued by: <sup>4)</sup>				Original maturity			Residual maturity			Currencies	
		Central gov.	State gov.	Local gov.	Social security funds	Up to 1 year	Over 1 year	Variable interest rate	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Euro or participating currencies	Other currencies
2003	69.2	56.7	6.5	5.1	1.0	7.9	61.4	5.0	14.9	26.1	28.3	68.4	0.9
2004	69.7	56.7	6.6	5.1	1.3	7.7	61.9	4.7	14.7	26.3	28.6	68.7	1.0
2005	70.5	57.2	6.7	5.2	1.4	7.8	62.8	4.6	14.8	25.8	29.9	69.4	1.1
2006	68.7	55.4	6.5	5.3	1.4	7.3	61.4	4.3	14.3	24.2	30.1	67.9	0.7
2007	66.4	53.5	6.3	5.3	1.4	7.1	59.2	4.2	14.5	23.6	28.2	65.8	0.5
2008	70.2	56.9	6.7	5.3	1.3	10.0	60.2	4.9	17.7	23.5	29.1	69.3	1.0
2009	80.0	64.8	7.7	5.8	1.7	12.0	68.0	5.0	19.5	27.3	33.2	78.8	1.2
2010	85.4	69.2	8.3	5.9	1.9	13.0	72.3	5.1	21.2	29.3	34.9	84.2	1.2
2011	87.3	70.7	8.5	5.9	2.2	12.6	74.7	6.0	20.8	30.4	36.1	85.6	1.7
2012	90.7	73.6	8.9	6.0	2.3	11.7	78.9	7.0	20.6	32.1	37.9	88.7	2.0

### 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
2009	95.7	74.5	7.2	64.8	129.7	53.9	79.2	116.4	58.5	15.3	66.4	60.8	69.2	83.7	35.0	35.6	43.5
2010	95.5	82.4	6.7	92.1	148.3	61.5	82.4	119.3	61.3	19.2	67.4	63.1	72.0	94.0	38.6	41.0	48.6
2011	97.8	80.4	6.2	106.4	170.3	69.3	85.8	120.8	71.1	18.3	70.3	65.5	72.5	108.3	46.9	43.3	49.0
2012	99.6	81.9	10.1	117.6	156.9	84.2	90.2	127.0	85.8	20.8	72.1	71.2	73.4	123.6	54.1	52.1	53.0

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

- 1) 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	Other financial corporations	
	1	2	3	4	5	6	7	8	9	10	11	12
2004	3.2	3.3	-0.1	0.0	0.2	0.1	-0.1	2.9	0.2	0.0	0.3	3.0
2005	3.3	3.1	0.2	0.0	0.3	0.5	-0.1	2.6	-0.4	0.0	0.5	3.7
2006	1.6	1.5	0.1	0.0	0.2	0.2	-0.3	1.5	-0.3	1.1	-1.4	1.9
2007	1.2	1.2	0.0	0.0	-0.1	0.0	0.1	1.2	-0.4	-0.4	-0.3	1.6
2008	5.3	5.2	0.1	0.0	0.1	0.5	2.7	2.0	1.3	1.0	-0.5	4.1
2009	7.3	7.5	-0.2	0.0	0.1	0.7	1.6	4.9	3.0	2.3	1.0	4.3
2010	7.6	7.7	-0.1	0.0	0.0	3.0	-0.7	5.2	4.1	3.5	1.6	3.4
2011	4.2	4.0	0.1	0.0	0.0	0.4	0.2	3.5	3.4	1.0	1.0	0.8
2012	4.0	5.4	-1.4	0.0	0.2	2.1	-0.5	2.2	4.1	2.0	1.2	-0.2

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

Change in debt	Deficit (-) / surplus (+)	Deficit-debt adjustment <sup>7)</sup>												Other <sup>8)</sup>
		Total	Transactions in main financial assets held by general government							Valuation effects	Exchange rate effects	Other changes in volume		
			Total	Currency and deposits	Loans	Securities <sup>9)</sup>	Shares and other equity	Privatisations	Equity injections					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	
2004	3.2	-2.9	0.3	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	0.8	0.6	0.3	0.0	0.1	0.1	-0.3	0.2	0.2	0.0	0.0	0.0
2006	1.6	-1.4	0.2	0.2	0.3	-0.1	0.2	-0.2	-0.4	0.1	0.1	0.0	0.0	-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	7.3	-6.4	0.9	1.0	0.3	0.0	0.3	0.4	-0.3	0.5	-0.2	0.0	0.0	0.1
2010	7.6	-6.2	1.4	1.8	0.0	0.5	1.0	0.2	0.0	0.2	-0.1	0.0	0.0	-0.3
2011	4.2	-4.1	0.0	-0.3	0.2	-0.2	-0.2	-0.1	-0.1	0.2	0.1	0.0	0.0	0.2
2012	4.0	-3.7	0.2	1.4	0.3	0.6	-0.1	0.6	-0.1	0.3	-1.4	0.0	0.0	0.3

Source: ECB.

- 1) Data 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) The difference between the annual change in gross nominal consolidated debt and the deficit as a percentage of GDP.
- 8) Mainly composed of transactions in other assets and liabilities (trade credits, other receivables/payables and financial derivatives).
- 9) 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	Capital taxes	8	
2006 Q4	49.0	48.4	14.4	14.0	15.8	2.4	0.9	0.6	0.3	44.5
2007 Q1	42.3	41.9	10.4	12.9	14.8	2.2	0.9	0.4	0.3	38.3
2007 Q2	45.8	45.4	13.0	13.0	15.0	2.2	1.4	0.4	0.3	41.2
2007 Q3	43.6	43.1	12.3	12.4	14.7	2.2	0.7	0.5	0.3	39.6
2007 Q4	49.3	48.7	14.8	13.8	15.7	2.5	1.0	0.6	0.3	44.6
2008 Q1	42.4	42.1	10.8	12.3	14.8	2.2	1.1	0.3	0.2	38.2
2008 Q2	45.3	44.9	12.9	12.4	15.1	2.3	1.5	0.4	0.3	40.6
2008 Q3	43.4	43.1	12.2	12.0	15.0	2.3	0.8	0.4	0.3	39.5
2008 Q4	48.8	48.3	13.9	13.4	16.3	2.6	1.1	0.5	0.3	43.9
2009 Q1	42.4	42.3	10.4	12.0	15.6	2.4	1.1	0.1	0.2	38.2
2009 Q2	45.3	44.7	11.8	12.5	15.7	2.5	1.4	0.6	0.5	40.5
2009 Q3	42.9	42.6	11.0	12.0	15.5	2.5	0.7	0.3	0.3	38.8
2009 Q4	48.7	47.8	13.0	13.6	16.4	2.7	1.0	0.8	0.5	43.5
2010 Q1	42.2	42.0	10.1	12.2	15.5	2.4	0.9	0.2	0.3	38.0
2010 Q2	45.1	44.6	11.8	12.6	15.4	2.6	1.3	0.5	0.3	40.2
2010 Q3	43.0	42.7	10.9	12.5	15.3	2.5	0.7	0.3	0.3	39.0
2010 Q4	48.6	47.8	13.2	13.4	16.4	2.8	1.0	0.7	0.3	43.3
2011 Q1	42.9	42.7	10.6	12.5	15.3	2.5	1.0	0.3	0.3	38.7
2011 Q2	45.2	44.9	12.0	12.7	15.4	2.5	1.5	0.3	0.3	40.3
2011 Q3	43.7	43.4	11.4	12.5	15.3	2.5	0.8	0.3	0.3	39.6
2011 Q4	49.3	48.3	13.4	13.4	16.7	2.8	1.0	1.1	0.4	43.8
2012 Q1	43.4	43.2	10.9	12.6	15.4	2.5	1.0	0.2	0.2	39.1
2012 Q2	46.1	45.8	12.6	12.8	15.6	2.6	1.4	0.3	0.3	41.3
2012 Q3	44.7	44.3	12.0	12.6	15.5	2.6	0.8	0.4	0.3	40.4
2012 Q4	50.6	49.9	14.2	13.9	16.9	2.9	1.0	0.7	0.3	45.3

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		Investment	Capital transfers		
								7	8				
2006 Q4	49.5	44.6	10.8	5.9	2.8	25.0	21.3	1.3	4.9	2.7	2.2	-0.5	2.3
2007 Q1	44.9	41.4	9.9	4.5	2.9	24.1	20.7	1.1	3.5	2.3	1.2	-2.7	0.2
2007 Q2	45.0	41.6	10.0	4.8	3.2	23.6	20.6	1.1	3.4	2.5	0.9	0.8	4.0
2007 Q3	44.6	41.0	9.6	4.8	2.9	23.8	20.5	1.1	3.6	2.6	0.9	-1.0	1.9
2007 Q4	49.3	44.7	10.8	5.9	2.9	25.1	21.2	1.5	4.5	2.8	1.7	0.0	2.9
2008 Q1	45.5	41.9	9.9	4.5	3.0	24.4	20.8	1.2	3.6	2.3	1.2	-3.1	0.0
2008 Q2	46.0	42.4	10.2	5.0	3.3	23.9	20.8	1.1	3.6	2.6	1.0	-0.7	2.6
2008 Q3	45.7	42.0	9.8	4.9	3.0	24.4	21.2	1.1	3.7	2.7	1.0	-2.3	0.6
2008 Q4	51.3	46.7	11.2	6.3	2.9	26.3	22.2	1.4	4.6	2.9	1.7	-2.5	0.4
2009 Q1	49.4	45.6	10.7	5.1	2.8	26.9	23.0	1.3	3.8	2.6	1.2	-6.9	-4.1
2009 Q2	50.7	46.5	11.1	5.5	3.0	26.9	23.3	1.3	4.2	2.8	1.3	-5.4	-2.4
2009 Q3	50.0	46.0	10.5	5.5	2.8	27.1	23.5	1.3	4.1	2.9	1.1	-7.1	-4.3
2009 Q4	54.6	49.7	11.8	6.7	2.8	28.4	24.0	1.5	4.9	3.0	1.9	-6.0	-3.2
2010 Q1	50.4	46.5	10.8	5.1	2.7	27.9	23.6	1.4	3.9	2.4	1.5	-8.2	-5.5
2010 Q2	49.6	46.1	11.0	5.5	3.0	26.7	23.2	1.3	3.5	2.5	1.1	-4.5	-1.5
2010 Q3	50.4	45.2	10.2	5.4	2.7	26.8	23.2	1.3	5.2	2.6	2.6	-7.4	-4.7
2010 Q4	53.4	48.7	11.5	6.6	2.9	27.7	23.6	1.5	4.7	2.7	2.0	-4.8	-1.9
2011 Q1	48.6	45.5	10.5	5.0	2.9	27.2	23.1	1.3	3.1	2.1	0.9	-5.6	-2.8
2011 Q2	48.5	45.3	10.6	5.3	3.2	26.2	22.8	1.2	3.2	2.3	0.9	-3.3	-0.1
2011 Q3	48.1	44.6	10.1	5.3	2.9	26.4	23.0	1.2	3.5	2.3	1.1	-4.3	-1.5
2011 Q4	52.6	48.6	11.2	6.5	3.2	27.7	23.6	1.5	3.9	2.5	1.7	-3.3	-0.1
2012 Q1	48.2	45.5	10.3	4.9	3.0	27.3	23.3	1.2	2.7	1.9	0.8	-4.8	-1.8
2012 Q2	49.2	45.8	10.5	5.3	3.3	26.7	23.2	1.1	3.3	2.1	1.2	-3.0	0.3
2012 Q3	48.6	44.9	10.0	5.3	2.9	26.7	23.4	1.1	3.7	2.2	1.5	-3.9	-1.0
2012 Q4	53.7	48.7	11.0	6.5	3.2	28.0	24.1	1.4	5.0	2.2	2.8	-3.1	0.1

Sources: ECB calculations based on Eurostat and national data.

- 1) 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.  
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

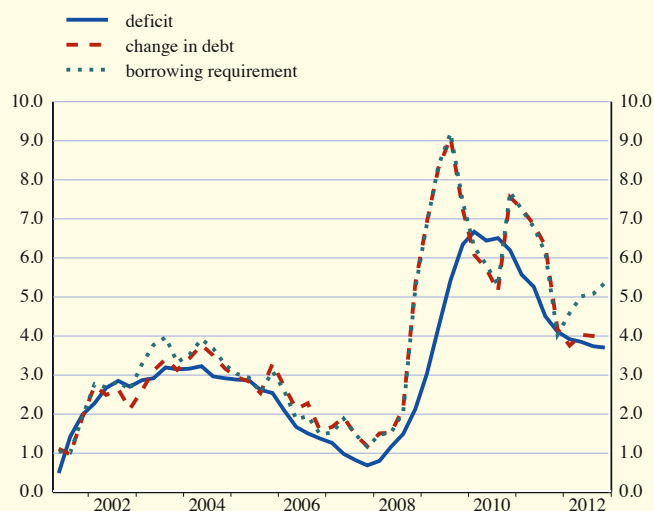
	Total 1	Financial instruments			
		Currency and deposits 2	Loans 3	Short-term securities 4	Long-term securities 5
2010 Q1	81.6	2.4	12.9	8.2	58.2
Q2	82.9	2.4	13.5	7.8	59.2
Q3	83.0	2.4	13.4	7.9	59.2
Q4	85.4	2.4	15.4	7.3	60.2
2011 Q1	86.3	2.4	15.2	7.4	61.2
Q2	87.2	2.4	15.0	7.5	62.3
Q3	86.8	2.4	15.2	7.8	61.4
Q4	87.3	2.4	15.4	7.4	62.1
2012 Q1	88.2	2.5	15.8	7.6	62.3
Q2	89.9	2.5	16.7	7.3	63.4
Q3	90.0	2.5	16.5	7.2	63.7
Q4	90.7	2.6	17.4	6.8	63.9

### 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	
2010 Q1	8.1	-8.2	-0.1	0.8	0.9	-0.1	-0.3	0.3	-0.4	-0.5	8.5
Q2	7.7	-4.5	3.2	3.3	2.0	1.1	-0.2	0.4	-0.1	-0.1	7.7
Q3	2.7	-7.4	-4.6	-2.9	-2.3	-0.6	-0.1	0.1	0.0	-1.7	2.8
Q4	11.6	-4.8	6.8	5.6	-0.4	1.6	4.4	0.0	0.0	1.2	11.6
2011 Q1	6.9	-5.6	1.2	0.7	2.1	-0.8	-0.6	-0.1	0.2	0.4	6.7
Q2	6.0	-3.3	2.7	2.6	2.8	0.6	-0.3	-0.5	0.1	0.0	5.9
Q3	0.7	-4.3	-3.6	-3.7	-3.7	-0.4	0.2	0.2	0.5	-0.3	0.3
Q4	3.2	-3.3	-0.1	-0.6	-0.3	-0.2	-0.1	0.1	-0.1	0.6	3.3
2012 Q1	5.1	-4.8	0.3	3.8	4.2	0.0	-0.4	0.0	-3.8	0.3	9.0
Q2	7.1	-3.0	4.1	3.8	1.6	1.1	0.4	0.7	-0.5	0.8	7.6
Q3	0.6	-3.9	-3.3	-1.3	-1.7	0.6	-0.4	0.1	0.0	-2.0	0.6
Q4	3.0	-3.1	-0.1	-0.7	-2.9	0.5	0.1	1.6	-1.4	2.0	4.4

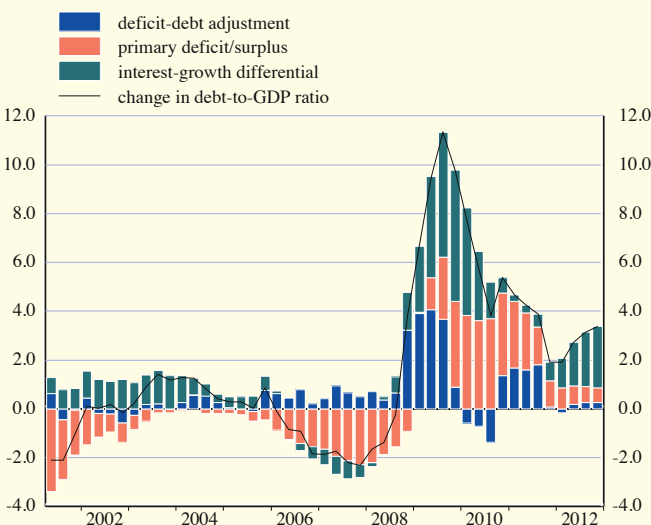
### C30 Deficit, borrowing requirement and change in debt

(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) Intergovernmental lending in the context of the financial crisis is consolidated.



## EXTERNAL TRANSACTIONS AND POSITIONS

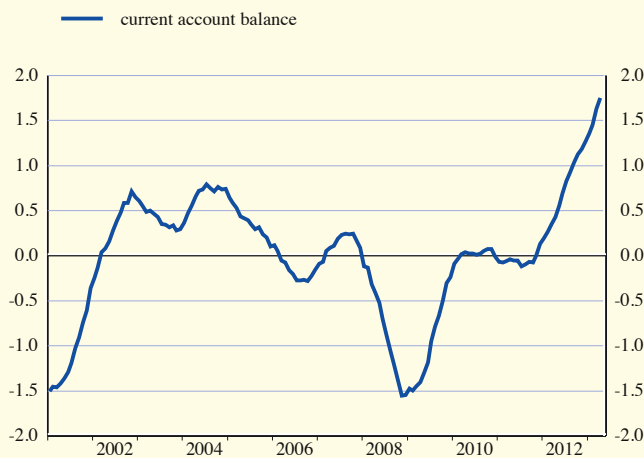
### 7.1 Summary balance of payments <sup>1)</sup>

(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
2010	3.5	17.2	56.5	38.9	-109.2	5.7	9.2	9.1	-88.8	119.5	18.4	-29.5	-10.5	-18.3
2011	14.9	6.8	73.2	42.1	-107.2	11.2	26.0	-42.7	-118.7	252.5	-5.3	-161.0	-10.2	16.6
2012	116.0	100.6	90.9	32.2	-107.8	15.1	131.1	-133.2	-44.8	52.3	5.6	-132.1	-14.1	2.1
2012 Q1	-2.8	6.8	16.6	12.5	-38.7	3.2	0.4	2.0	-3.6	-76.8	-5.3	89.8	-2.1	-2.4
Q2	18.3	25.7	26.3	-8.6	-25.1	1.4	19.8	-19.5	-15.2	96.7	-8.0	-84.0	-9.0	-0.3
Q3	40.8	30.3	27.0	13.0	-29.4	4.0	44.9	-41.6	-4.9	-14.8	2.8	-24.6	-0.1	-3.2
Q4	59.6	37.9	21.0	15.3	-14.6	6.5	66.1	-74.2	-21.2	47.2	16.1	-113.3	-3.0	8.1
2013 Q1	30.8	33.9	17.9	16.9	-38.0	3.7	34.5	-44.2	-25.4	31.7	15.9	-66.6	0.2	9.7
2012 Apr.	2.9	4.4	7.6	0.1	-9.1	0.2	3.2	-2.4	-2.6	3.4	1.7	-2.0	-3.0	-0.7
May	-2.8	7.4	8.9	-10.8	-8.2	1.4	-1.4	-0.4	3.5	30.1	-7.5	-25.0	-1.5	1.7
June	18.2	13.9	9.9	2.1	-7.7	-0.2	18.0	-16.7	-16.1	63.2	-2.2	-57.0	-4.5	-1.3
July	21.8	14.5	9.9	5.2	-7.9	0.7	22.4	-17.5	2.5	4.8	-1.7	-23.6	0.5	-5.0
Aug.	8.8	5.6	7.9	5.9	-10.6	1.6	10.5	-7.7	12.6	-19.1	6.2	-5.9	-1.6	-2.8
Sep.	10.2	10.2	9.1	1.9	-11.0	1.7	11.9	-16.4	-20.0	-0.5	-1.7	4.9	1.0	4.5
Oct.	12.8	10.6	6.9	4.3	-9.0	2.4	15.2	-15.6	-15.1	44.4	6.3	-48.6	-2.6	0.4
Nov.	20.3	15.1	5.2	5.3	-5.2	2.3	22.6	-28.9	21.4	23.3	7.6	-80.2	-1.0	6.3
Dec.	26.5	12.2	9.0	5.8	-0.4	1.8	28.3	-29.7	-27.6	-20.5	2.2	15.5	0.7	1.4
2013 Jan.	-5.6	-2.7	5.2	4.7	-12.8	0.7	-4.9	1.5	-8.3	29.0	6.7	-21.3	-4.7	3.4
Feb.	11.5	12.0	6.2	7.5	-14.2	1.6	13.1	-19.0	-2.4	-4.1	5.9	-21.0	2.6	5.9
Mar.	24.9	24.7	6.5	4.8	-11.0	1.4	26.2	-26.6	-14.6	6.8	3.4	-24.3	2.2	0.4
Apr.	15.3	16.9	7.5	2.1	-11.2	1.4	16.7	-16.0	-6.4	-2.8	-3.3	-3.4	-0.1	-0.7
<i>12-month cumulated transactions</i>														
2013 Apr.	162.0	140.3	92.2	38.7	-109.2	16.7	178.8	-193.0	-70.5	154.6	21.9	-290.0	-9.0	14.2
<i>12-month cumulated transactions as a percentage of GDP</i>														
2013 Apr.	1.7	1.5	1.0	0.4	-1.2	0.2	1.9	-2.0	-0.7	1.6	0.2	-3.1	-0.1	0.1

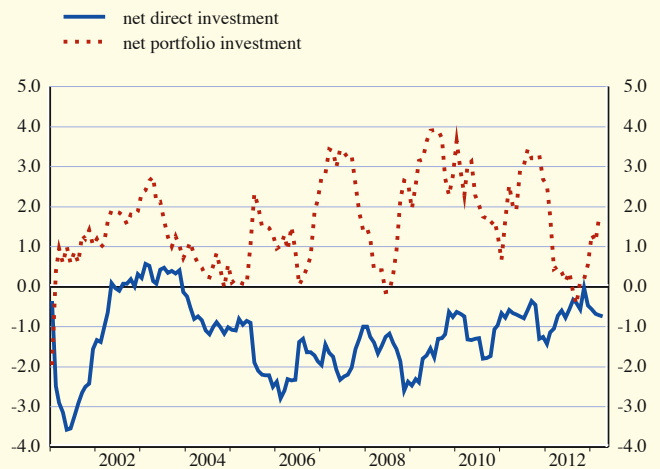
### C32 Euro area b.o.p.: current account

(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

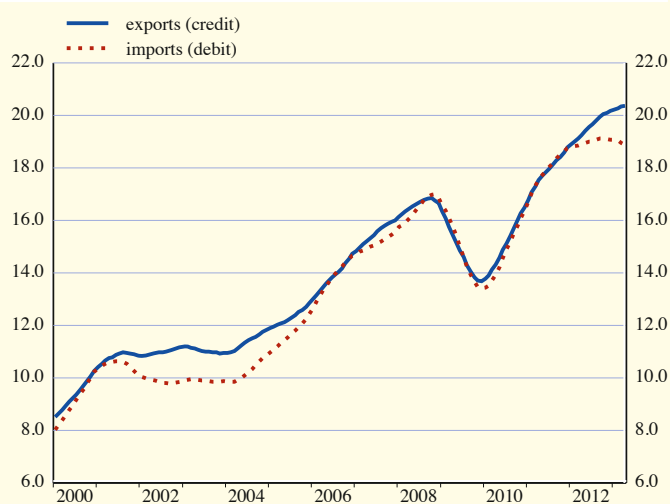
(EUR billions; transactions)

### 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	
2010	2,710.8	2,707.3	3.5	1,576.9	1,559.6	543.9	487.5	502.8	463.9	87.1	6.3	196.3	27.1	20.3	14.7
2011	2,985.1	2,970.2	14.9	1,787.9	1,781.1	581.5	508.4	521.2	479.1	94.5	6.6	201.7	27.8	25.4	14.2
2012	3,142.2	3,026.2	116.0	1,916.9	1,816.2	624.6	533.7	503.2	471.0	97.5	6.8	205.3	26.2	29.0	13.8
2012 Q1	756.4	759.3	-2.8	468.1	461.4	140.6	124.0	121.6	109.0	26.1	1.6	64.8	6.3	5.4	2.2
Q2	791.5	773.1	18.3	480.5	454.8	156.8	130.4	133.0	141.6	21.2	1.6	46.3	6.6	5.8	4.3
Q3	789.7	748.9	40.8	480.1	449.8	167.2	140.2	125.1	112.2	17.3	1.9	46.7	6.6	7.0	2.9
Q4	804.5	744.9	59.6	488.1	450.2	160.1	139.1	123.5	108.2	32.9	1.7	47.5	6.7	10.8	4.3
2013 Q1	763.2	732.4	30.8	472.5	438.5	144.1	126.2	117.4	100.5	29.2	.	67.2	.	6.0	2.3
2013 Feb.	247.4	235.8	11.5	152.2	140.3	46.2	40.0	37.1	29.6	11.8	-	26.0	-	2.3	0.7
Mar.	268.4	243.5	24.9	168.8	144.1	50.0	43.5	43.2	38.5	6.4	-	17.4	-	2.1	0.7
Apr.	265.0	249.7	15.3	165.3	148.3	51.1	43.6	42.1	40.0	6.5	-	17.8	-	2.3	0.9
	Seasonally adjusted														
2012 Q3	794.5	759.6	34.8	484.4	455.8	157.3	135.0	127.8	117.3	24.9	-	51.5	-	-	-
Q4	785.8	749.5	36.3	481.9	449.4	157.1	135.2	121.8	114.0	25.0	-	51.0	-	-	-
2013 Q1	792.0	736.1	55.8	485.3	439.9	157.9	133.0	122.2	110.9	26.5	-	52.3	-	-	-
2013 Feb.	261.3	246.7	14.6	160.0	148.5	52.9	44.5	39.9	36.5	8.5	-	17.2	-	-	-
Mar.	268.6	242.7	25.9	164.5	142.0	53.3	44.9	41.7	38.5	9.1	-	17.3	-	-	-
Apr.	267.9	248.4	19.5	163.5	145.3	53.3	45.1	43.4	39.0	7.7	-	19.0	-	-	-
	12-month cumulated transactions														
2013 Apr.	3,168.9	3,002.4	166.5	1,936.9	1,794.7	630.7	538.3	500.9	461.0	100.4	-	208.4	-	-	-
	12-month cumulated transactions as a percentage of GDP														
2013 Apr.	33.4	31.6	1.8	20.4	18.9	6.6	5.7	5.3	4.9	1.1	-	2.2	-	-	-

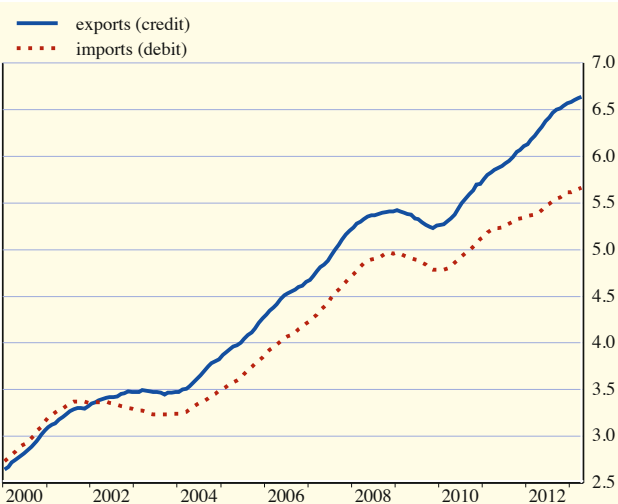
### C34 Euro area b.o.p.: goods

(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
2010	25.1	12.4	477.7	451.5	245.8	48.6	154.7	45.2	23.4	24.3	28.8	84.0	102.1	123.8	77.6	64.7
2011	27.1	13.0	494.1	466.1	248.9	25.6	154.0	53.2	24.7	23.0	35.3	97.6	103.3	127.0	81.9	64.6
2012	28.6	13.3	474.6	457.7	229.1	45.9	155.7	33.0	25.3	23.8	42.3	104.0	98.6	119.1	79.3	55.1
2011 Q4	7.0	3.4	127.0	109.7	66.1	1.7	35.5	-2.2	7.2	7.1	7.1	18.4	25.6	32.8	21.0	15.9
2012 Q1	6.9	2.5	114.7	106.5	55.4	23.1	36.8	17.5	5.7	5.4	8.9	16.8	24.2	32.3	20.6	15.3
Q2	7.2	3.5	125.8	138.1	59.1	-0.4	44.2	8.0	6.3	5.8	15.6	45.4	24.7	28.7	20.1	14.1
Q3	7.1	3.9	118.0	108.2	56.9	15.7	38.7	13.9	6.7	5.5	9.9	21.2	24.9	29.8	19.5	13.0
Q4	7.5	3.4	116.0	104.8	57.7	7.5	36.1	-6.4	6.7	7.1	8.0	20.6	24.7	28.2	19.0	12.7

### 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 <sup>1)</sup>	EU institutions									
2012 Q1 to 2012 Q4	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Credits																
<b>Current account</b>	3,142.2	1,004.8	54.3	91.4	486.0	310.1	63.0	63.4	47.7	153.8	40.6	72.1	121.7	250.6	417.5	970.0
Goods	1,916.9	592.1	35.2	58.2	253.5	245.1	0.2	33.1	22.8	119.8	30.2	44.5	90.0	136.1	228.3	619.8
Services	624.6	188.1	12.3	17.1	117.6	34.3	6.8	10.4	10.8	22.4	7.5	15.8	20.8	62.3	94.6	192.0
Income	503.2	161.1	5.8	13.9	103.8	27.5	10.1	19.5	13.1	11.0	2.6	10.9	10.4	43.3	87.7	143.5
Investment income	474.6	153.3	5.0	13.8	102.1	26.7	5.7	19.5	13.0	10.9	2.6	10.9	10.3	28.3	86.1	139.7
Current transfers	97.5	63.5	0.9	2.2	11.1	3.2	46.0	0.4	0.9	0.7	0.2	0.8	0.5	8.9	6.9	14.7
<b>Capital account</b>	29.0	24.9	0.0	0.0	2.9	0.6	21.3	0.0	0.0	0.0	0.0	0.0	0.2	0.9	0.4	2.5
Debits																
<b>Current account</b>	3,026.2	949.8	49.5	89.1	422.9	280.3	108.0	39.1	31.3	-	34.6	98.3	154.4	213.3	406.9	-
Goods	1,816.2	509.3	29.9	50.7	202.5	226.2	0.0	29.8	14.2	203.8	26.0	47.9	136.4	108.3	152.1	588.5
Services	533.7	154.5	9.4	14.4	91.6	38.8	0.3	5.9	7.1	15.4	6.7	9.9	11.1	48.0	111.0	164.0
Income	471.0	163.1	9.1	22.2	116.8	10.0	4.9	2.1	7.9	-	1.0	39.8	6.0	47.2	137.4	-
Investment income	457.7	155.9	9.0	22.1	115.1	4.7	4.9	2.0	7.7	-	0.8	39.6	5.9	46.6	136.1	-
Current transfers	205.3	122.9	1.1	1.8	12.1	5.2	102.8	1.3	2.0	4.4	1.0	0.6	0.8	9.8	6.5	55.8
<b>Capital account</b>	13.8	2.0	0.1	0.1	1.2	0.5	0.2	0.2	0.1	0.3	0.3	0.0	0.1	0.5	3.6	6.8
Net																
<b>Current account</b>	116.0	55.0	4.8	2.4	63.1	29.8	-45.0	24.3	16.4	-	6.0	-26.2	-32.7	37.3	10.5	-
Goods	100.6	82.8	5.3	7.5	51.0	18.8	0.2	3.3	8.7	-84.0	4.3	-3.4	-46.4	27.8	76.2	31.4
Services	90.9	33.6	3.0	2.7	26.0	-4.5	6.4	4.5	3.7	6.9	0.8	5.9	9.7	14.3	-16.4	28.0
Income	32.2	-2.0	-3.3	-8.3	-13.0	17.5	5.1	17.4	5.2	-	1.6	-28.9	4.4	-3.8	-49.6	-
Investment income	16.9	-2.6	-4.0	-8.3	-13.0	22.0	0.8	17.5	5.3	-	1.8	-28.8	4.5	-18.3	-50.1	-
Current transfers	-107.8	-59.4	-0.1	0.4	-1.0	-2.0	-56.7	-0.9	-1.1	-3.7	-0.8	0.1	-0.3	-0.9	0.4	-41.1
<b>Capital account</b>	15.1	22.9	0.0	0.0	1.7	0.1	21.2	-0.2	0.0	-0.3	-0.3	0.0	0.1	0.4	-3.2	-4.3

Source: ECB.

1) Excluding Croatia.

## 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>														
2009	13,739.1	15,225.6	-1,486.4	154.0	170.6	-16.7	4,412.8	3,532.5	4,340.9	6,863.8	-1.3	4,527.2	4,829.3	459.6
2010	15,216.8	16,479.1	-1,262.3	165.9	179.6	-13.8	4,946.7	3,908.6	4,907.3	7,470.9	-32.6	4,807.6	5,099.5	587.8
2011	15,843.0	17,152.6	-1,309.6	168.1	182.0	-13.9	5,564.7	4,392.0	4,762.6	7,628.4	-24.3	4,876.7	5,132.3	663.4
2012 Q2	16,516.8	17,695.2	-1,178.3	174.4	186.8	-12.4	5,868.8	4,607.8	5,032.9	7,818.2	-27.5	4,941.2	5,269.1	701.5
Q3	16,469.2	17,596.5	-1,127.3	173.7	185.6	-11.9	5,645.1	4,254.9	5,187.8	8,122.4	-21.2	4,923.7	5,219.2	733.8
Q4	16,342.6	17,482.5	-1,139.9	172.2	184.2	-12.0	5,656.5	4,262.5	5,270.1	8,276.1	-16.7	4,721.5	4,943.9	711.3
<b>Changes to outstanding amounts</b>														
2009	504.2	387.6	116.6	5.7	4.3	1.3	497.0	272.5	513.7	896.9	-0.9	-591.0	-781.8	85.4
2010	1,477.7	1,253.5	224.2	16.1	13.7	2.4	533.9	376.1	566.4	607.1	-31.2	280.4	270.2	128.2
2011	626.2	673.6	-47.3	6.6	7.1	-0.5	618.0	483.3	-144.7	157.5	8.3	69.1	32.8	75.6
2012	499.6	-100.3	600.0	5.3	-1.1	6.3	91.8	-129.5	507.5	647.7	7.5	-155.1	-618.6	47.9
2012 Q3	-47.6	-98.7	51.0	-2.0	-4.2	2.2	-223.7	-352.9	155.0	304.2	6.3	-17.5	-49.9	32.3
Q4	-126.6	-114.0	-12.6	-5.2	-4.7	-0.5	11.4	7.6	82.2	153.7	4.4	-202.2	-275.3	-22.5
<b>Transactions</b>														
2009	-89.4	-74.4	-15.0	-1.0	-0.8	-0.2	352.9	285.9	96.0	342.8	-19.0	-514.7	-703.1	-4.6
2010	657.7	666.8	-9.1	7.2	7.3	-0.1	362.4	273.6	134.2	253.7	-18.4	169.0	139.5	10.5
2011	583.2	540.6	42.7	6.2	5.7	0.5	447.0	328.4	-55.9	196.6	5.3	176.6	15.6	10.2
2012	425.9	292.7	133.2	4.5	3.1	1.4	237.5	192.7	184.6	236.8	-5.6	-4.7	-136.8	14.1
2012 Q3	68.8	27.2	41.6	2.9	1.2	1.8	52.6	47.7	40.0	25.2	-2.8	-21.0	-45.7	0.1
Q4	-7.5	-81.6	74.2	-0.3	-3.4	3.1	39.2	18.0	80.1	127.3	-16.1	-113.7	-226.9	3.0
2013 Q1	172.6	128.5	44.2	7.4	5.5	1.9	53.6	28.2	91.3	123.1	-15.9	43.8	-22.8	-0.2
2012 Dec.	-90.2	-119.9	29.7	-	-	-	25.4	-2.1	43.7	23.2	-2.2	-156.4	-141.0	-0.7
2013 Jan.	89.6	91.1	-1.5	-	-	-	9.0	0.7	27.4	56.5	-6.7	55.2	33.9	4.7
Feb.	67.5	48.5	19.0	-	-	-	14.8	12.4	39.7	35.7	-5.9	21.4	0.4	-2.6
Mar.	15.5	-11.1	26.6	-	-	-	29.8	15.1	24.2	31.0	-3.4	-32.8	-57.1	-2.2
Apr.	130.8	114.9	16.0	-	-	-	12.4	6.0	41.2	38.3	3.3	74.0	70.6	0.1
<b>Other changes</b>														
2008	-1,174.6	-972.6	-202.0	-12.7	-10.5	-2.2	-149.2	-81.4	-808.6	-816.1	-56.2	-184.3	-75.1	23.7
2009	593.6	462.0	131.6	6.7	5.2	1.5	144.1	-13.4	417.6	554.1	18.2	-76.3	-78.7	90.0
2010	819.9	586.7	233.3	8.9	6.4	2.5	171.5	102.5	432.2	353.5	-12.8	111.4	130.7	117.7
2011	43.0	133.0	-90.0	0.5	1.4	-1.0	170.9	154.9	-88.8	-39.2	3.0	-107.5	17.2	65.4
<b>Other changes due to exchange rate changes</b>														
2008	-49.7	28.1	-77.8	-0.5	0.3	-0.8	-25.0	-33.8	6.6	41.8	.	-40.6	20.1	9.3
2009	-49.3	-56.1	6.8	-0.6	-0.6	0.1	-5.3	5.6	-29.8	-34.5	.	-11.6	-27.2	-2.7
2010	537.3	325.5	211.8	5.9	3.5	2.3	165.6	50.1	199.0	115.1	.	159.8	160.3	12.9
2011	221.9	172.3	49.6	2.4	1.8	0.5	64.0	23.0	87.9	60.1	.	62.4	89.1	7.6
<b>Other changes due to price changes</b>														
2008	-1,003.0	-976.3	-26.7	-10.9	-10.6	-0.3	-159.3	-60.7	-809.5	-915.6	-56.2	.	.	22.0
2009	634.8	492.7	142.1	7.1	5.5	1.6	147.4	29.4	423.5	463.4	18.2	.	.	45.8
2010	300.8	153.8	147.0	3.3	1.7	1.6	47.0	2.1	165.1	151.8	-12.8	.	.	101.5
2011	-442.5	-250.9	-191.6	-4.7	-2.7	-2.0	-95.5	0.0	-409.2	-250.9	3.0	.	.	59.3
<b>Other changes due to other adjustments</b>														
2008	-120.1	-19.3	-100.8	-1.3	-0.2	-1.1	35.1	25.2	-5.7	50.8	.	-141.8	-95.3	-7.7
2009	8.4	25.5	-17.1	0.1	0.3	-0.2	2.0	-48.3	24.0	124.6	.	-64.4	-50.8	46.9
2010	-18.2	107.4	-125.6	-0.2	1.2	-1.4	-41.2	50.3	68.1	86.6	.	-48.4	-29.5	3.3
2011	263.6	211.6	52.0	2.8	2.2	0.6	202.4	131.9	232.5	151.5	.	-169.9	-71.9	-1.5
<b>Growth rates of outstanding amounts</b>														
2008	3.0	3.6	-	.	.	.	9.2	3.7	-0.2	3.9	.	-0.2	3.3	1.0
2009	-0.7	-0.5	-	.	.	.	8.9	8.8	2.4	5.6	.	-10.1	-12.5	-1.3
2010	4.6	4.3	-	.	.	.	7.9	7.5	3.0	3.6	.	3.7	2.8	2.0
2011	3.9	3.3	-	.	.	.	9.1	8.5	-1.2	2.6	.	3.8	0.4	1.6
2012 Q3	2.5	1.7	-	.	.	.	6.4	7.3	1.2	0.2	.	-0.8	-0.6	2.7
Q4	2.7	1.7	-	.	.	.	4.2	4.4	3.8	3.0	.	-0.1	-2.7	2.1
2013 Q1	1.8	0.7	.	.	.	.	3.7	3.3	2.9	3.9	.	-0.9	-6.3	1.7

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
<b>Outstanding amounts (international investment position)</b>														
2010	4,946.7	3,825.3	275.3	3,550.0	1,121.4	17.0	1,104.4	3,908.6	2,940.6	90.4	2,850.3	968.0	14.7	953.2
2011	5,564.7	4,230.1	287.6	3,942.5	1,334.6	13.5	1,321.0	4,392.0	3,337.2	92.6	3,244.6	1,054.7	11.2	1,043.5
2012 Q3	5,645.1	4,195.2	294.5	3,900.7	1,449.9	13.0	1,436.9	4,254.9	3,035.2	98.9	2,936.3	1,219.7	11.9	1,207.8
Q4	5,656.5	4,177.6	291.1	3,886.5	1,478.9	12.9	1,466.0	4,262.5	3,054.0	100.4	2,953.6	1,208.5	11.0	1,197.5
<b>Transactions</b>														
2010	362.4	231.2	21.2	210.0	131.2	1.6	129.6	273.6	294.8	8.8	286.0	-21.2	-7.7	-13.5
2011	447.0	380.7	22.5	358.2	66.3	-3.5	69.8	328.4	332.5	5.1	327.4	-4.1	-0.9	-3.3
2012	237.5	183.9	-0.5	184.4	53.6	0.2	53.4	192.7	169.8	6.3	163.6	22.8	0.6	22.2
2012 Q3	52.6	30.7	1.5	29.1	21.9	0.1	21.8	47.7	38.0	2.0	36.0	9.7	1.7	8.0
Q4	39.2	34.8	0.4	34.4	4.4	0.1	4.3	18.0	21.4	1.0	20.4	-3.4	-0.6	-2.8
2013 Q1	53.6	38.8	-0.8	39.6	14.8	1.2	13.6	28.2	23.2	1.2	22.0	5.0	2.6	2.4
2012 Dec.	25.4	18.8	0.9	18.0	6.6	-0.2	6.8	-2.1	3.1	-0.3	3.4	-5.2	0.3	-5.5
2013 Jan.	9.0	18.6	0.1	18.4	-9.6	0.8	-10.4	0.7	5.1	0.3	4.8	-4.4	1.8	-6.2
Feb.	14.8	9.3	0.3	9.0	5.6	0.3	5.3	12.4	5.3	0.4	4.9	7.1	0.8	6.3
Mar.	29.8	11.0	-1.2	12.1	18.8	0.1	18.7	15.1	12.8	0.5	12.3	2.3	0.0	2.3
Apr.	12.4	10.5	2.0	8.5	1.9	-0.6	2.6	6.0	2.1	0.5	1.6	3.8	1.4	2.4
<b>Growth rates</b>														
2010	7.9	6.4	8.9	6.2	13.2	10.6	13.3	7.5	11.0	11.1	11.0	-2.5	-37.9	-1.8
2011	9.1	10.1	8.4	10.2	6.0	-21.4	6.4	8.5	11.3	5.7	11.5	-0.6	-7.6	-0.5
2012 Q3	6.4	7.2	-0.5	7.8	3.7	4.6	3.7	7.3	8.8	7.3	8.9	2.3	16.0	2.2
Q4	4.2	4.4	-0.2	4.7	4.0	0.6	4.0	4.4	5.2	6.8	5.1	2.1	6.0	2.1
2013 Q1	3.7	3.7	0.2	4.0	3.9	2.2	3.9	3.3	4.0	5.8	3.9	1.4	38.9	1.0

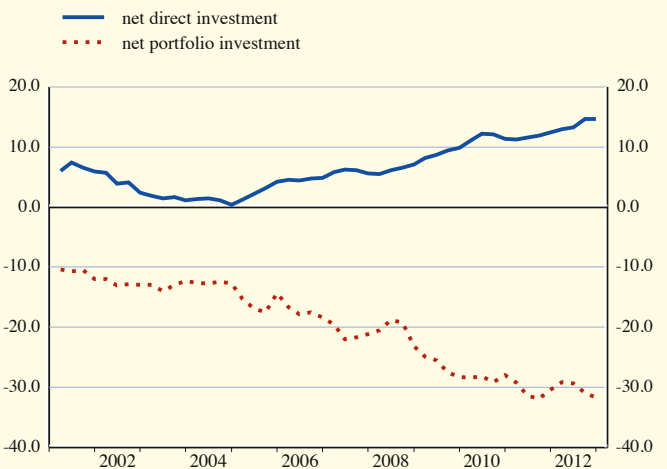
**C36 Euro area international investment position**

(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

	3. Portfolio investment assets															
	Total	Equity					Debt instruments									
		Total	MFIs		Non-MFIs		Bonds and notes					Money market instruments				
				Euro-system	General government		General government	Total	MFIs	Euro-system	General government	Total	MFIs	Euro-system	General government	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
	Outstanding amounts (international investment position)															
2010	4,907.3	1,907.7	81.2	3.6	1,826.5	47.6	2,579.3	807.6	15.6	1,771.7	74.5	420.3	316.3	41.7	104.0	0.2
2011	4,762.6	1,703.4	62.5	3.1	1,640.8	39.6	2,592.9	725.7	16.0	1,867.2	94.2	466.3	300.6	57.5	165.7	0.5
2012 Q3	5,187.8	1,877.1	58.8	2.8	1,818.3	41.4	2,816.8	675.9	15.1	2,140.9	102.5	494.0	318.2	55.1	175.7	0.4
Q4	5,270.1	1,949.3	75.8	2.8	1,873.5	42.4	2,854.8	675.5	15.6	2,179.3	98.3	466.0	287.1	54.0	178.9	0.7
	Transactions															
2010	134.2	77.3	4.1	-0.2	73.2	1.7	103.0	-126.3	-0.8	229.3	51.5	-46.1	-64.9	-11.7	18.8	-1.9
2011	-55.9	-70.8	-15.7	-0.2	-55.1	-7.3	-15.7	-55.1	0.3	39.4	-3.0	30.6	24.3	10.5	6.4	0.2
2012	184.6	58.6	5.4	0.1	53.2	0.0	123.9	-39.5	-0.9	163.3	-7.7	2.1	-17.9	2.3	20.0	0.2
2012 Q3	40.0	4.4	-1.7	0.0	6.0	0.8	34.4	-10.0	-0.4	44.4	0.0	1.1	-2.6	2.8	3.7	-0.2
Q4	80.1	60.0	10.6	0.0	49.3	0.9	39.0	7.1	0.5	32.0	-3.1	-18.9	-20.5	5.6	1.7	0.3
2013 Q1	91.3	63.0	17.6	0.1	45.4	.	17.1	-12.7	1.2	29.8	.	11.3	-2.2	0.5	13.5	.
2012 Dec.	43.7	41.8	8.9	0.0	32.9	.	11.7	5.5	0.2	6.1	.	-9.7	-4.0	1.3	-5.7	.
2013 Jan.	27.4	19.5	2.0	0.0	17.5	.	6.0	-6.4	1.0	12.4	.	1.9	-2.8	2.9	4.7	.
Feb.	39.7	16.8	1.6	0.0	15.2	.	12.5	-4.6	-0.3	17.1	.	10.4	2.7	1.2	7.7	.
Mar.	24.2	26.7	14.0	0.1	12.7	.	-1.4	-1.7	0.5	0.3	.	-1.1	-2.1	-3.6	1.1	.
Apr.	41.2	16.7	-0.1	0.0	16.8	.	5.4	-9.8	-6.4	15.2	.	19.1	11.3	15.6	7.8	.
	Growth rates															
2010	3.0	4.9	5.6	-5.1	4.8	4.8	4.1	-13.6	-4.9	14.7	124.1	-10.3	-17.9	-25.4	22.3	-91.7
2011	-1.2	-4.1	-20.3	-6.0	-3.4	-15.9	-0.6	-7.0	2.2	2.2	-3.1	7.5	8.0	26.6	6.1	120.7
2012 Q3	1.2	-2.3	-20.3	-5.9	-1.5	-4.7	2.1	-9.3	-17.0	6.6	-6.3	9.5	7.6	-5.0	11.5	-21.6
Q4	3.8	3.2	8.8	2.8	3.0	-0.2	4.7	-5.5	-5.5	8.5	-7.5	0.5	-5.5	3.4	12.1	37.9
2013 Q1	2.9	5.2	26.1	6.8	4.4	.	3.0	-6.2	5.5	6.2	.	-6.2	-13.9	12.6	8.5	.

### 4. Portfolio investment liabilities

	4. Portfolio investment liabilities												
	Total	Equity			Debt instruments								
		Total	MFIs		Bonds and notes			Money market instruments					
				MFIs	Non-MFIs	Total	MFIs	Non-MFIs	Total	MFIs	Non-MFIs	Total	MFIs
1	2	3	4	5	6	7	8	9	10	11	12		
	Outstanding amounts (international investment position)												
2010	7,470.9	3,175.5	665.8	2,509.7	3,841.4	1,189.9	2,651.5	1,648.3	454.0	69.5	384.6	347.4	
2011	7,628.4	3,042.7	556.9	2,485.7	4,142.3	1,273.5	2,868.7	1,772.1	443.5	87.2	356.2	316.5	
2012 Q3	8,122.4	3,363.3	544.5	2,818.8	4,324.5	1,220.8	3,103.7	1,913.8	434.6	77.2	357.4	308.0	
Q4	8,276.1	3,447.0	536.6	2,910.4	4,375.7	1,208.1	3,167.7	1,959.7	453.4	85.0	368.5	299.6	
	Transactions												
2010	253.7	123.1	-13.1	136.2	175.1	55.8	119.3	186.8	-44.5	15.0	-59.5	-38.9	
2011	196.6	78.7	19.5	59.2	165.4	78.5	87.0	89.1	-47.5	2.2	-49.7	-37.5	
2012	236.8	116.3	-18.8	135.1	125.8	-46.5	172.3	147.1	-5.3	2.1	-7.4	-27.4	
2012 Q3	25.2	21.8	-4.8	26.6	45.0	-8.4	53.3	60.0	-41.6	-16.8	-24.9	-12.6	
Q4	127.3	57.5	-10.9	68.4	49.4	1.1	48.2	24.3	20.4	6.8	13.6	-9.2	
2013 Q1	123.1	68.3	2.6	65.7	18.8	-16.5	35.3	.	36.0	5.9	30.1	.	
2012 Dec.	23.2	14.1	-11.1	25.2	2.9	-5.4	8.3	.	6.2	3.7	2.5	.	
2013 Jan.	56.5	28.9	-6.0	34.9	14.0	3.1	10.9	.	13.6	2.9	10.7	.	
Feb.	35.7	13.2	6.9	6.3	0.8	-2.4	3.2	.	21.7	11.1	10.7	.	
Mar.	31.0	26.3	1.8	24.5	4.0	-17.2	21.2	.	0.7	-8.0	8.7	.	
Apr.	38.3	10.5	-1.5	12.0	24.6	0.0	24.7	.	3.2	4.8	-1.6	.	
	Growth rates												
2010	3.6	4.3	-2.0	6.2	4.9	4.9	4.8	12.4	-8.8	18.5	-13.4	-9.8	
2011	2.6	2.5	3.1	2.2	4.4	6.9	3.3	5.5	-9.1	5.2	-12.1	-10.9	
2012 Q3	0.2	1.9	3.1	1.3	1.1	-5.8	4.2	6.5	-17.2	-8.7	-19.3	-22.9	
Q4	3.0	3.6	-3.5	5.1	3.0	-3.7	6.0	8.3	-1.1	2.0	-2.0	-8.3	
2013 Q1	3.9	4.4	-4.4	6.2	3.5	-3.4	6.4	.	4.5	4.9	4.3	.	

Source: ECB.

### 7.3 Financial account

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

#### 5. Other investment assets

	Total	Eurosystem			MFIs (excluding Eurosystem)			General government			Other sectors				
		Total	Loans/ currency and deposits	Other assets	Total	Loans/ currency and deposits	Other assets	Trade credits	Loans/currency and deposits	Currency and deposits	Trade credits	Loans/currency and deposits	Currency and deposits		
														1	2
Outstanding amounts (international investment position)															
2010	4,807.6	32.9	32.2	0.7	2,972.0	2,932.7	39.4	161.9	7.6	115.4	19.8	1,640.7	213.3	1,279.5	441.6
2011	4,876.7	35.7	35.4	0.3	3,067.6	3,006.6	61.0	162.8	6.7	116.4	30.2	1,610.6	228.4	1,214.6	506.9
2012 Q3	4,923.7	37.3	37.0	0.3	3,086.0	3,000.8	85.2	147.2	5.1	103.0	25.1	1,653.2	263.7	1,159.7	517.0
2012 Q4	4,721.5	40.1	39.9	0.3	2,920.3	2,849.9	70.4	167.6	5.1	121.5	29.2	1,593.5	263.4	1,126.6	502.3
Transactions															
2010	169.0	-2.9	-2.8	0.0	10.1	1.3	8.9	41.5	-0.3	41.1	4.9	120.3	8.7	87.8	53.6
2011	176.6	-2.7	-2.8	0.1	50.4	20.6	29.9	4.4	-0.2	4.2	10.3	124.4	8.1	91.2	47.7
2012	-4.7	10.7	10.7	0.0	-123.8	-130.2	6.3	5.0	-1.6	6.4	-1.0	103.4	10.9	76.7	33.5
2012 Q3	-21.0	6.2	6.2	0.0	-40.5	-47.5	7.0	-9.0	-1.5	-7.7	-4.9	22.4	-7.0	15.0	11.2
2012 Q4	-113.7	5.8	5.8	0.0	-117.1	-106.9	-10.2	18.7	0.1	17.8	4.1	-21.1	0.9	-8.2	-19.4
2013 Q1	43.8	-6.2	.	.	8.4	.	.	-11.4	.	.	-5.2	53.1	.	.	25.4
2012 Dec.	-156.4	3.1	.	.	-113.0	.	.	2.3	.	.	0.6	-48.8	.	.	-16.3
2013 Jan.	55.2	-1.4	.	.	61.3	.	.	-9.1	.	.	-6.3	4.4	.	.	4.2
Feb.	21.4	1.5	.	.	-8.8	.	.	-0.9	.	.	2.8	29.6	.	.	12.2
Mar.	-32.8	-6.4	.	.	-44.1	.	.	-1.5	.	.	-1.7	19.1	.	.	9.0
Apr.	74.0	-3.1	.	.	65.0	.	.	2.2	.	.	1.9	9.9	.	.	15.5
Growth rates															
2010	3.7	-12.7	-12.5	-9.9	0.4	0.1	23.6	33.9	-3.1	53.7	32.8	7.8	4.2	7.3	13.0
2011	3.8	-5.4	-5.5	40.4	1.8	0.8	76.6	3.0	-3.2	4.2	51.5	7.8	3.8	7.4	11.1
2012 Q3	-0.8	-8.1	-8.2	-1.0	-5.0	-5.6	28.1	5.1	-24.4	9.4	47.0	7.1	4.7	7.8	7.6
2012 Q4	-0.1	31.2	31.5	-0.7	-4.0	-4.3	11.3	3.2	-23.5	5.8	-3.4	6.5	5.0	6.6	6.9
2013 Q1	-0.9	7.1	.	.	-4.8	.	.	3.1	.	.	-2.3	6.0	.	.	6.6

#### 6. Other investment liabilities

	Total	Eurosystem			MFIs (excluding Eurosystem)			General government			Other sectors				
		Total	Loans/ currency and deposits	Other liabilities	Total	Loans/ currency and deposits	Other liabilities	Total	Trade credits	Loans	Other liabilities	Total	Trade credits	Loans	Other liabilities
Outstanding amounts (international investment position)															
2010	5,099.5	269.1	266.1	3.0	3,491.0	3,445.0	46.0	148.0	0.0	141.8	6.2	1,191.5	202.7	842.1	146.7
2011	5,132.3	411.3	408.5	2.8	3,208.3	3,140.6	67.6	223.9	0.1	217.1	6.8	1,288.8	224.0	871.7	193.2
2012 Q3	5,219.2	432.0	430.8	1.3	3,206.5	3,125.1	81.4	231.5	0.1	224.7	6.7	1,349.2	230.4	880.8	237.9
2012 Q4	4,943.9	428.9	428.0	0.9	2,966.2	2,882.7	83.5	228.5	0.1	221.3	7.2	1,320.3	229.4	862.2	228.7
Transactions															
2010	139.5	9.4	6.8	2.6	-8.7	-14.6	5.9	65.1	0.0	64.6	0.5	73.7	15.9	31.6	26.2
2011	15.6	135.1	135.3	-0.2	-289.1	-327.7	38.7	74.1	0.0	74.1	0.0	95.4	10.4	65.2	19.9
2012	-136.8	19.0	20.9	-1.8	-226.9	-244.1	17.2	4.6	0.0	3.8	0.7	66.4	4.3	12.8	49.3
2012 Q3	-45.7	21.0	21.3	-0.3	-89.5	-93.2	3.7	-4.5	0.0	-4.7	0.2	27.4	-3.5	15.6	15.2
2012 Q4	-226.9	-0.2	0.2	-0.3	-204.5	-207.2	2.7	-5.4	0.0	-5.5	0.1	-16.9	0.8	-33.1	15.4
2013 Q1	-22.8	-33.0	.	.	-4.2	.	.	-0.1	.	.	.	14.6	.	.	.
2012 Dec.	-141.0	10.2	.	.	-126.5	.	.	-12.0	.	.	.	-12.7	.	.	.
2013 Jan.	33.9	-22.1	.	.	37.0	.	.	2.0	.	.	.	17.0	.	.	.
Feb.	0.4	-10.3	.	.	5.1	.	.	-1.9	.	.	.	7.5	.	.	.
Mar.	-57.1	-0.6	.	.	-46.2	.	.	-0.3	.	.	.	-10.0	.	.	.
Apr.	70.6	-1.1	.	.	54.6	.	.	-1.7	.	.	.	18.7	.	.	.
Growth rates															
2010	2.8	3.6	2.6	.	-0.2	-0.3	15.5	78.8	.	83.7	5.8	6.4	8.8	3.7	17.8
2011	0.4	50.4	51.0	.	-8.3	-9.6	89.7	50.5	.	52.6	0.2	8.2	5.1	7.9	13.7
2012 Q3	-0.6	36.6	37.4	.	-7.4	-8.2	37.1	9.1	.	8.9	19.0	7.2	1.7	8.2	5.8
2012 Q4	-2.7	4.8	5.2	.	-7.0	-7.7	25.7	2.0	.	1.8	11.5	5.2	2.0	1.4	25.0
2013 Q1	-6.3	18.3	.	.	-12.3	.	.	-1.2	.	.	.	2.0	.	.	.

Source: ECB.

## 7.3 Financial account

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

### 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)																	
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	16.0	131.3	0.5	111.2	19.5	0.0	0.0	26.3	-24.4	54.5
2011	667.1	422.1	346.846	54.0	30.2	160.9	5.3	7.8	148.1	0.8	134.1	13.3	-0.4	0.0	97.4	-86.0	55.9
2012 Q2	701.5	440.3	346.825	54.3	33.4	173.0	5.1	8.6	159.7	0.6	137.4	21.7	-0.4	0.4	51.5	-41.9	56.9
Q3	733.8	476.4	346.827	53.8	34.2	168.9	5.4	8.2	155.2	0.2	136.1	18.9	0.2	0.5	39.9	-39.5	56.2
Q4	705.5	453.4	346.693	52.8	31.9	166.8	6.1	8.8	151.3	0.2	130.9	20.2	0.6	0.6	32.8	-35.0	55.0
2013 Apr.	640.0	389.6	346.696	51.6	31.9	166.1	6.0	8.3	151.6	0.2	131.2	20.2	0.2	0.7	35.2	-40.3	54.4
May	621.4	371.7	346.696	51.5	31.3	166.1	4.4	8.2	153.5	0.2	133.4	20.0	0.1	0.7	26.1	-30.1	54.4
Transactions																	
2010	10.5	0.0	-	-0.1	4.9	5.6	-5.4	6.6	4.3	0.0	10.6	-6.3	0.0	0.0	-	-	-
2011	10.2	0.1	-	-1.6	12.9	-1.2	-2.3	-8.3	9.3	0.1	15.9	-6.8	0.1	0.0	-	-	-
2012	14.1	0.0	-	-0.3	3.4	10.3	0.8	1.2	8.0	-0.4	-0.7	9.1	0.4	0.7	-	-	-
2012 Q3	0.1	0.0	-	0.0	2.4	-2.4	-0.5	-0.2	-1.7	-0.3	1.2	-2.6	0.0	0.1	-	-	-
Q4	3.0	0.0	-	0.3	-1.5	4.2	0.6	1.0	2.4	0.0	-0.5	2.9	0.1	0.1	-	-	-
2013 Q1	-0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Growth rates																	
2009	-1.3	-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	46.7	3.7	-43.3	75.9	3.6	-5.2	10.3	-24.5	-	-	-	-	-
2011	1.6	0.0	-	-3.0	82.3	-1.2	-30.0	-52.7	6.9	27.4	14.3	-45.2	-	-	-	-	-
2012 Q3	2.7	0.0	-	-1.7	30.0	6.8	-6.1	-25.4	9.7	-53.5	6.9	41.2	-	-	-	-	-
Q4	2.1	0.0	-	-0.5	11.1	6.6	15.1	15.2	5.6	-53.5	-0.6	82.8	-	-	-	-	-
2013 Q1	1.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

### 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	Eurosystem	MFIs (excluding Eurosystem)	Other sectors
	1	2	3	4	5	6	7	8	9	10	11
Outstanding amounts (international investment position)											
2009	10,341.7	4,469.0	525.7	3,523.2	176.9	184.9	1,462.1	1,966.1	253.4	4,579.8	2,080.3
2010	10,919.2	4,696.9	454.0	3,841.4	202.7	201.9	1,522.3	2,143.7	271.0	4,750.4	2,231.8
2011	11,421.3	4,637.9	443.5	4,142.3	224.0	270.4	1,703.3	2,312.6	411.3	4,569.0	2,425.2
2012 Q2	11,768.7	4,733.0	471.1	4,141.1	238.6	297.6	1,887.4	2,384.2	413.4	4,632.7	2,451.0
Q3	11,939.1	4,661.4	434.6	4,324.5	230.5	327.3	1,960.8	2,453.3	432.0	4,504.5	2,588.4
Q4	11,745.6	4,394.2	453.4	4,375.7	229.4	320.3	1,972.5	2,487.9	428.9	4,259.2	2,597.0
Outstanding amounts as a percentage of GDP											
2009	115.9	50.1	5.9	39.5	2.0	2.1	16.4	22.0	2.8	51.3	23.3
2010	119.1	51.2	5.0	41.9	2.2	2.2	16.6	23.4	3.0	51.8	24.3
2011	121.2	49.2	4.7	44.0	2.4	2.9	18.1	24.5	4.4	48.5	25.7
2012 Q2	124.3	50.0	5.0	43.7	2.5	3.1	19.9	25.2	4.4	48.9	25.9
Q3	125.9	49.2	4.6	45.6	2.4	3.5	20.7	25.9	4.6	47.5	27.3
Q4	123.8	46.3	4.8	46.1	2.4	3.4	20.8	26.2	4.5	44.9	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 <sup>1)</sup>	EU institutions	8	9	10	11	12	13	14	15
<b>2011</b>	Outstanding amounts (international investment position)														
<b>Direct investment</b>	1,172.7	260.7	-10.6	-13.0	11.4	274.1	-1.3	84.4	73.2	-22.1	125.2	40.0	-146.5	-0.3	758.2
Abroad	5,564.7	1,541.1	28.7	142.2	1,049.2	321.1	0.0	183.8	85.1	74.5	526.0	1,082.9	487.1	0.0	1,584.3
Equity/reinvested earnings	4,230.1	1,128.4	23.9	78.5	776.0	249.9	0.0	146.2	68.4	53.7	394.6	743.1	402.2	0.0	1,293.5
Other capital	1,334.6	412.8	4.7	63.7	273.2	71.1	0.0	37.5	16.6	20.8	131.4	339.8	84.9	0.0	290.7
In the euro area	4,392.0	1,280.4	39.2	155.2	1,037.8	47.0	1.3	99.4	11.9	96.6	400.8	1,042.9	633.5	0.4	826.0
Equity/reinvested earnings	3,337.2	1,052.4	26.1	142.6	855.5	27.0	1.2	83.4	6.3	76.9	236.0	789.1	370.2	0.1	722.7
Other capital	1,054.7	228.0	13.2	12.6	182.2	20.0	0.0	16.0	5.6	19.7	164.8	253.8	263.3	0.3	103.3
<b>Portfolio investment assets</b>	4,762.6	1,536.9	84.5	199.5	1,005.5	99.4	148.0	100.7	52.5	208.0	124.3	1,557.1	384.9	35.2	763.0
Equity	1,703.4	341.8	10.9	41.6	275.9	13.2	0.1	39.1	48.7	90.4	102.0	553.1	215.8	1.4	311.0
Debt instruments	3,059.2	1,195.1	73.6	157.9	729.6	86.2	147.9	61.6	3.9	117.6	22.2	1,004.0	169.1	33.8	452.0
Bonds and notes	2,592.9	1,050.8	68.5	124.8	629.5	83.8	144.2	56.8	2.7	46.3	15.4	828.0	155.1	32.7	405.1
Money market instruments	466.3	144.3	5.1	33.0	100.1	2.4	3.7	4.8	1.2	71.3	6.9	175.9	13.9	1.0	46.9
<b>Other investment</b>	-255.6	-287.7	45.5	-30.0	-154.0	71.4	-220.6	-10.1	-13.5	10.9	-75.1	63.8	82.5	-71.6	45.2
Assets	4,876.7	2,159.9	92.3	91.0	1,777.6	182.7	16.3	26.8	46.1	99.5	257.4	763.5	588.8	36.7	898.0
General government	162.8	63.9	1.5	4.1	44.3	1.3	12.7	1.8	3.2	2.3	1.0	8.5	2.4	30.4	49.3
MFIs	3,103.3	1,497.4	71.9	49.7	1,225.7	147.2	2.9	14.7	20.9	80.2	130.1	473.3	439.6	5.7	441.4
Other sectors	1,610.6	598.7	19.0	37.2	507.7	34.2	0.7	10.2	22.0	17.0	126.3	281.6	146.8	0.6	407.4
Liabilities	5,132.3	2,447.6	46.8	121.0	1,931.6	111.3	236.9	36.8	59.6	88.6	332.5	699.7	506.3	108.3	852.8
General government	223.9	118.2	0.1	0.4	53.5	0.1	64.1	0.1	0.1	0.1	1.2	33.2	1.4	66.6	3.1
MFIs	3,619.5	1,758.6	36.4	84.8	1,436.3	86.2	115.0	24.8	30.8	61.4	256.7	416.0	414.0	38.8	618.3
Other sectors	1,288.8	570.8	10.3	35.8	441.8	25.0	57.8	11.9	28.8	27.0	74.6	250.4	91.0	3.0	231.4
<b>2012 Q1 to 2012 Q4</b>	Cumulated transactions														
<b>Direct investment</b>	44.8	71.6	0.6	6.7	50.6	13.7	0.0	-6.3	6.7	-3.2	2.7	-82.9	-6.6	0.0	62.8
Abroad	237.5	125.0	5.6	4.8	98.5	16.0	0.0	11.1	8.5	1.6	-6.9	12.4	-5.4	0.0	91.3
Equity/reinvested earnings	183.9	126.8	2.4	5.8	106.9	11.7	0.0	4.7	6.1	-1.2	-13.7	15.1	-17.7	0.0	63.8
Other capital	53.6	-1.9	3.2	-1.0	-8.4	4.3	0.0	6.3	2.3	2.8	6.8	-2.7	12.3	0.0	27.5
In the euro area	192.7	53.3	5.0	-1.9	48.0	2.3	0.0	17.4	1.8	4.8	-9.6	95.3	1.2	0.0	28.5
Equity/reinvested earnings	169.8	22.6	9.2	-3.7	11.8	5.2	0.0	15.5	1.5	5.1	4.0	86.6	11.5	0.0	23.0
Other capital	22.8	30.7	-4.2	1.7	36.2	-2.9	0.0	1.9	0.2	-0.3	-13.6	8.7	-10.3	0.0	5.5
<b>Portfolio investment assets</b>	184.6	34.4	10.2	18.5	-20.9	4.3	22.3	5.4	2.5	9.5	-1.3	26.9	-20.2	-2.6	130.0
Equity	58.6	22.3	2.9	4.1	15.3	0.0	0.0	4.4	2.6	7.9	2.0	4.1	-12.1	0.0	27.4
Debt instruments	126.0	12.1	7.3	14.5	-36.2	4.2	22.3	1.0	-0.1	1.6	-3.3	22.8	-8.0	-2.6	102.6
Bonds and notes	123.9	6.2	6.0	18.0	-48.8	5.9	25.0	0.7	-0.2	-7.0	0.9	31.8	-5.7	-2.7	99.9
Money market instruments	2.1	5.9	1.3	-3.6	12.6	-1.7	-2.7	0.2	0.1	8.6	-4.2	-9.0	-2.3	0.0	2.7
<b>Other investment</b>	132.1	166.1	-33.9	-2.5	225.5	-20.8	-2.2	12.5	-2.9	-5.1	-13.4	24.4	-10.0	-11.7	-27.7
Assets	-4.7	57.1	-12.7	-0.7	84.5	-14.0	0.0	6.0	1.2	-7.5	8.3	-40.2	-40.6	0.2	10.8
General government	5.0	0.4	-0.5	0.3	-0.5	0.4	0.7	0.0	-0.1	-1.2	0.4	3.2	0.8	0.0	1.4
MFIs	-113.1	19.6	-12.8	0.6	51.1	-18.6	-0.7	1.2	3.8	-6.1	10.9	-70.3	-44.4	-0.1	-27.7
Other sectors	103.4	37.0	0.5	-1.6	33.9	4.3	0.0	4.9	-2.5	-0.2	-3.0	26.8	3.1	0.2	37.2
Liabilities	-136.8	-109.0	21.1	1.9	-141.0	6.8	2.2	-6.5	4.1	-2.5	21.7	-64.6	-30.6	11.9	38.6
General government	4.6	-15.6	0.2	0.3	-27.5	0.0	11.4	0.1	0.0	0.0	-0.3	-2.4	-0.1	21.8	1.2
MFIs	-207.8	-112.9	20.1	1.0	-127.3	6.4	-13.1	-8.6	3.9	-6.2	-20.1	-67.8	-35.7	-9.9	49.5
Other sectors	66.4	19.5	0.8	0.6	13.7	0.4	4.0	2.0	0.2	3.8	42.1	5.6	5.2	0.1	-12.1

Source: ECB.

1) Excluding Croatia.



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

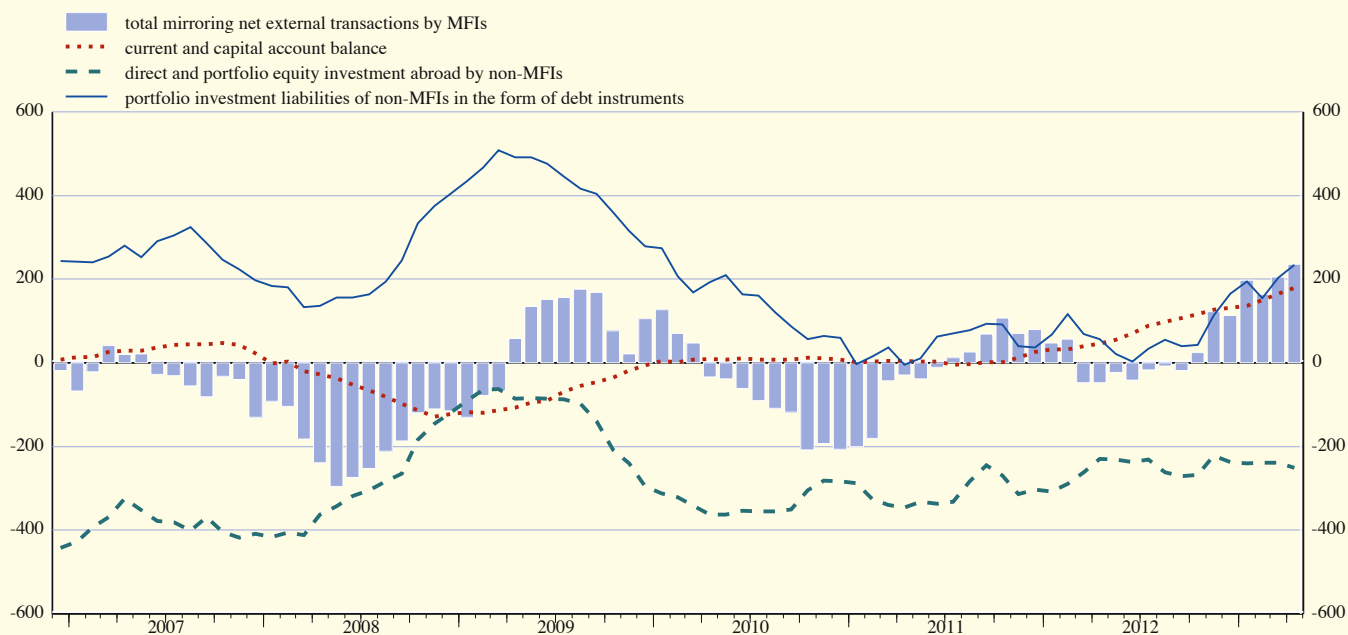
(EUR billions; transactions)

### 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	
2010	-207.0	7.8	-339.3	272.2	-73.0	-248.0	136.2	59.8	-160.9	138.6	18.3	-18.8
2011	80.0	26.0	-428.0	324.1	55.1	-45.8	59.2	37.3	-128.8	169.6	-5.3	16.6
2012	113.0	131.1	-237.8	185.8	-53.2	-183.3	135.1	164.9	-108.3	71.0	5.6	2.1
2012 Q1	-45.2	0.4	-80.7	74.9	-16.8	-84.8	30.5	27.1	-50.7	62.7	-5.3	-2.4
Q2	13.7	19.8	-67.5	49.2	19.1	-16.7	9.6	47.6	-46.7	7.7	-8.0	-0.3
Q3	48.0	44.9	-50.9	44.0	-6.0	-48.2	26.6	28.5	-13.3	22.8	2.8	-3.2
Q4	96.4	66.1	-38.7	17.6	-49.3	-33.6	68.4	61.8	2.4	-22.3	16.1	8.1
2013 Q1	46.5	34.5	-53.2	24.3	-45.4	-43.2	65.7	65.3	-41.7	14.4	15.9	9.7
2012 Apr.	-24.8	3.2	-26.8	23.2	-1.8	-9.7	-6.2	-8.3	5.0	-4.3	1.7	-0.7
May	24.1	-1.4	-18.4	21.0	8.3	-7.3	0.0	36.8	-29.4	20.3	-7.5	1.7
June	14.3	18.0	-22.3	5.1	12.5	0.2	15.7	19.1	-22.3	-8.2	-2.2	-1.3
July	12.8	22.4	-15.8	20.0	3.5	-19.2	-0.2	10.8	-28.4	26.2	-1.7	-5.0
Aug.	25.5	10.5	-24.4	38.2	-0.2	-15.6	3.2	3.4	10.3	-3.3	6.2	-2.8
Sep.	9.7	11.9	-10.7	-14.1	-9.4	-13.4	23.7	14.2	4.8	-0.1	-1.7	4.5
Oct.	4.8	15.2	-9.8	-2.7	-8.2	-12.1	25.9	2.9	-23.6	10.5	6.3	0.4
Nov.	62.2	22.6	-4.1	22.4	-8.3	-21.1	17.3	48.2	-20.6	-8.1	7.6	6.3
Dec.	29.5	28.3	-24.8	-2.1	-32.9	-0.5	25.2	10.7	46.5	-24.7	2.2	1.4
2013 Jan.	41.3	-4.9	-8.1	-1.4	-17.5	-17.1	34.9	21.6	4.7	19.0	6.7	3.4
Feb.	-21.1	13.1	-14.3	11.2	-15.2	-24.8	6.3	13.9	-28.7	5.7	5.9	5.9
Mar.	26.3	26.2	-30.8	14.6	-12.7	-1.3	24.5	29.9	-17.6	-10.3	3.4	0.4
Apr.	5.9	16.7	-11.1	4.1	-16.8	-23.0	12.0	23.0	-12.1	17.0	-3.3	-0.7
<i>12-month cumulated transactions</i>												
2013 Apr.	235.2	178.8	-194.6	116.1	-96.7	-155.0	188.5	234.5	-116.5	44.0	21.9	14.2

### 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)												
2011	13.0	13.3	1,746.0	880.4	353.2	474.3	1,426.7	1,762.6	1,129.2	241.1	367.6	1,104.9	324.3
2012	7.4	1.7	1,870.7	928.1	384.4	515.8	1,525.0	1,791.0	1,147.5	244.6	367.7	1,091.7	360.2
2012 Q2	8.1	1.4	467.1	230.5	96.6	128.7	383.0	448.7	287.5	62.2	91.1	276.2	89.9
Q3	7.5	0.5	473.9	233.3	96.6	131.8	386.9	448.8	285.5	61.9	92.8	274.0	90.2
Q4	5.7	0.8	466.4	230.9	96.3	129.1	379.2	439.3	280.9	58.8	91.4	268.1	89.3
2013 Q1	1.2	-5.1	475.6	235.1	95.5	133.2	383.6	436.4	278.3	58.7	90.3	267.7	85.3
2012 Nov.	5.6	0.0	157.1	77.7	32.8	43.2	127.1	146.8	93.4	19.4	30.3	89.1	29.7
Dec.	-3.0	-5.3	153.8	75.6	32.0	42.8	125.2	143.7	91.9	19.3	30.0	88.5	28.6
2013 Jan.	5.3	1.9	157.0	78.1	31.4	44.3	127.2	148.1	93.5	20.7	30.5	91.2	29.4
Feb.	-1.1	-6.9	157.2	77.7	31.2	44.3	125.5	145.0	93.8	19.0	30.0	86.3	28.7
Mar.	-0.1	-9.9	161.4	79.3	33.0	44.6	130.9	143.3	91.0	19.0	29.9	90.2	27.2
Apr.	9.1	1.2	160.1	.	.	.	126.8	144.0	.	.	.	86.7	.
	Volume indices (2000 = 100; annual percentage changes for columns 1 and 2)												
2011	7.5	3.5	148.6	143.3	153.4	155.5	145.3	126.4	119.5	136.2	144.6	133.5	102.6
2012	3.3	-3.1	153.0	145.9	160.6	161.1	150.2	122.3	115.9	129.9	137.8	127.2	103.5
2012 Q2	3.6	-3.1	153.2	145.2	161.8	161.5	151.2	123.2	116.5	132.3	138.5	129.7	103.5
Q3	2.9	-5.5	154.0	146.2	159.1	163.2	151.4	121.4	114.8	129.2	136.4	125.9	104.8
Q4	2.4	-2.6	152.0	144.9	160.7	160.4	148.9	120.2	114.2	125.3	135.9	124.4	104.0
2013 Q1	0.1	-4.5	155.6	148.1	158.8	167.0	151.3	120.5	114.4	123.7	135.7	125.2	100.0
2012 Oct.	11.0	2.9	152.2	146.1	158.4	160.9	150.0	121.9	115.2	130.4	140.3	127.0	106.6
Nov.	2.1	-3.6	153.9	146.2	164.7	161.6	149.8	120.7	114.6	123.5	134.1	123.7	104.2
Dec.	-5.9	-7.5	150.0	142.2	158.9	158.6	146.9	118.1	112.7	122.1	133.2	122.6	101.2
2013 Jan.	3.6	1.8	153.9	147.5	156.8	165.7	150.0	122.9	115.9	131.4	136.9	127.9	104.3
Feb.	-1.4	-6.2	154.5	147.0	155.5	167.3	149.0	120.0	115.0	121.8	135.4	121.6	98.9
Mar.	-1.4	-8.8	158.4	149.8	164.0	167.9	155.0	118.6	112.4	117.9	134.7	126.2	96.7

### 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: 2010 = 100)	Total				Memo item: Manufacturing	Total (index: 2010 = 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
	100.0	100.0	30.1	42.0	18.5	9.4	96.4	100.0	100.0	29.0	25.4	23.3	22.4	80.4
2011	104.3	4.3	5.7	1.3	1.5	23.0	3.9	108.4	8.4	5.3	-0.7	3.5	25.5	3.8
2012	107.2	2.8	1.3	1.8	2.2	9.8	2.7	111.8	3.2	0.8	1.4	2.8	7.2	1.8
2012 Q3	107.8	3.1	0.7	2.1	2.5	11.0	3.0	112.5	3.6	1.0	2.4	3.7	7.4	2.4
Q4	107.2	1.9	0.8	1.2	2.0	3.7	1.9	110.9	1.2	0.7	0.4	2.1	2.0	1.2
2013 Q1	107.0	0.2	-0.4	0.4	1.4	-4.1	0.2	110.8	-1.1	-0.9	-0.1	1.0	-3.8	-0.3
2012 Nov.	107.4	2.1	0.9	1.3	2.1	3.4	2.0	111.1	1.3	0.8	0.6	2.4	1.6	1.3
Dec.	106.7	1.2	0.7	0.9	1.7	0.1	1.2	110.3	0.4	0.4	-0.2	1.6	0.4	0.6
2013 Jan.	106.9	0.4	-0.1	0.3	1.4	-1.6	0.3	110.6	-0.5	-0.4	-0.9	0.8	-1.5	-0.4
Feb.	107.0	0.2	-0.5	0.2	1.3	-2.2	0.2	110.9	-0.9	-1.1	-0.4	0.9	-2.8	-0.4
Mar.	107.1	0.0	-0.6	0.7	1.4	-8.1	0.0	110.9	-1.9	-1.2	0.8	1.2	-6.8	-0.2
Apr.	106.6	-0.6	-1.2	0.7	1.4	-11.3	-0.5	109.1	-3.3	-2.1	-0.1	0.9	-9.8	-0.9

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 <sup>1)</sup>					China	Japan				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
<b>Exports (f.o.b.)</b>															
2011	1,746.0	32.9	60.5	213.5	241.6	79.9	109.2	56.8	200.6	405.6	115.7	39.4	112.3	84.6	148.7
2012	1,870.7	34.0	59.2	230.7	245.1	90.1	116.5	59.4	223.6	439.4	120.7	44.7	126.2	97.3	149.3
2011 Q4	447.7	8.3	14.3	54.2	60.5	20.7	28.3	13.5	52.4	106.2	30.7	10.5	28.6	22.4	38.4
2012 Q1	463.3	8.4	15.0	56.6	61.4	22.1	29.4	14.6	55.4	108.6	31.4	10.6	31.2	23.6	37.0
Q2	467.1	8.6	14.9	57.2	61.1	22.9	29.2	14.6	56.0	109.0	30.3	11.4	31.4	24.5	37.7
Q3	473.9	8.5	14.9	58.3	61.6	22.8	29.2	15.0	58.3	110.4	29.8	11.6	31.2	24.5	39.4
Q4	466.4	8.6	14.4	58.5	61.0	22.4	28.7	15.2	54.0	111.4	29.1	11.2	32.4	24.7	35.2
2013 Q1	475.6	8.7	14.5	58.6	62.0	23.2	28.3	15.6	55.6	111.3	29.6	11.0	34.3	25.0	38.4
2012 Nov.	157.1	2.9	4.9	19.4	20.4	7.7	10.0	5.3	18.1	37.8	9.9	3.8	10.7	8.2	11.8
Dec.	153.8	2.9	4.6	19.5	19.8	7.0	9.1	4.9	17.6	37.4	9.5	3.5	11.0	8.3	11.8
2013 Jan.	157.0	2.9	5.1	19.5	21.0	8.0	9.8	5.4	18.3	37.0	10.2	3.7	11.5	8.2	10.2
Feb.	157.2	2.9	4.6	19.0	20.4	7.6	8.9	5.1	17.7	35.4	9.3	3.5	11.5	7.9	16.3
Mar.	161.4	2.9	4.7	20.1	20.7	7.6	9.6	5.2	19.7	38.8	10.1	3.8	11.2	9.0	11.9
Apr.	160.1	.	.	.	.	7.6	9.2	5.1	18.4	36.7	10.0	3.5	11.1	8.0	.
<b>Percentage share of total exports</b>															
2012	100.0	1.8	3.2	12.3	13.1	4.8	6.2	3.2	12.0	23.5	6.5	2.4	6.7	5.2	8.0
<b>Imports (c.i.f.)</b>															
2011	1,762.6	29.9	53.2	166.8	226.8	138.8	81.6	35.0	140.8	553.5	218.5	52.6	129.2	91.2	115.8
2012	1,791.0	29.0	52.7	168.3	229.8	143.1	81.0	33.8	150.3	538.5	213.7	48.5	156.9	92.5	115.1
2011 Q4	440.1	7.6	12.8	42.2	57.5	35.5	20.4	8.5	35.8	135.9	52.7	12.9	31.2	23.6	29.2
2012 Q1	454.2	7.2	13.2	42.6	57.4	37.6	20.0	8.4	37.8	137.8	53.2	12.5	39.7	23.8	28.6
Q2	448.7	7.3	13.1	41.1	56.9	35.0	19.8	8.4	37.7	137.4	55.9	12.6	38.5	23.1	30.5
Q3	448.8	7.3	13.7	42.7	57.9	33.7	21.2	8.4	39.1	133.1	53.6	12.1	39.3	23.2	29.1
Q4	439.3	7.1	12.8	41.7	57.6	36.8	19.9	8.6	35.7	130.3	51.0	11.2	39.5	22.4	26.8
2013 Q1	436.4	7.4	13.2	42.0	58.4	38.8	20.1	8.8	35.4	127.1	51.5	10.6	38.6	21.1	25.4
2012 Nov.	146.8	2.5	4.2	13.9	19.2	12.0	6.9	2.9	11.8	43.0	16.8	3.8	13.4	7.5	9.5
Dec.	143.7	2.2	4.1	14.0	18.9	12.2	6.2	2.9	11.5	43.3	17.3	3.6	12.7	7.4	8.2
2013 Jan.	148.1	2.5	4.3	14.3	19.6	13.3	7.0	2.9	11.9	44.2	17.6	3.7	13.4	7.2	7.6
Feb.	145.0	2.4	4.3	13.8	19.0	12.8	6.3	2.9	11.7	41.2	16.5	3.5	13.0	6.9	10.8
Mar.	143.3	2.5	4.6	14.0	19.8	12.8	6.8	2.9	11.8	41.8	17.5	3.5	12.2	7.1	7.0
Apr.	144.0	.	.	.	.	12.1	6.2	2.9	12.0	42.1	16.3	3.4	12.5	6.5	.
<b>Percentage share of total imports</b>															
2012	100.0	1.6	2.9	9.4	12.8	8.0	4.5	1.9	8.4	30.1	11.9	2.7	8.8	5.2	6.4
<b>Balance</b>															
2011	-16.6	3.0	7.3	46.6	14.7	-58.9	27.5	21.7	59.8	-147.9	-102.9	-13.2	-16.9	-6.5	32.9
2012	79.7	5.0	6.4	62.4	15.3	-53.0	35.5	25.6	73.3	-99.2	-93.0	-3.7	-30.7	4.8	34.2
2011 Q4	7.6	0.7	1.4	11.9	3.0	-14.8	7.9	5.1	16.6	-29.7	-22.0	-2.5	-2.5	-1.2	9.1
2012 Q1	9.1	1.2	1.8	14.0	4.0	-15.5	9.4	6.2	17.6	-29.1	-21.8	-2.0	-8.6	-0.2	8.4
Q2	18.4	1.3	1.8	16.1	4.2	-12.2	9.4	6.2	18.3	-28.4	-25.6	-1.2	-7.0	1.4	7.2
Q3	25.1	1.2	1.2	15.6	3.8	-11.0	7.9	6.6	19.2	-22.7	-23.7	-0.6	-8.1	1.3	10.2
Q4	27.1	1.4	1.6	16.8	3.3	-14.4	8.8	6.6	18.3	-18.9	-21.8	0.0	-7.0	2.3	8.4
2013 Q1	39.2	1.3	1.2	16.6	3.6	-15.6	8.1	6.9	20.3	-15.8	-21.9	0.4	-4.3	3.9	13.0
2012 Nov.	10.3	0.4	0.7	5.4	1.2	-4.3	3.1	2.4	6.4	-5.2	-6.9	0.0	-2.7	0.7	2.3
Dec.	10.1	0.7	0.5	5.4	0.9	-5.2	2.8	2.0	6.1	-5.9	-7.8	0.0	-1.7	0.9	3.6
2013 Jan.	8.9	0.5	0.8	5.3	1.3	-5.2	2.8	2.4	6.4	-7.1	-7.4	0.1	-1.9	1.0	2.7
Feb.	12.2	0.4	0.3	5.2	1.4	-5.2	2.6	2.2	6.0	-5.8	-7.1	0.0	-1.4	1.0	5.5
Mar.	18.1	0.4	0.1	6.1	0.9	-5.2	2.8	2.3	7.9	-2.9	-7.4	0.3	-1.0	1.9	4.9
Apr.	16.1	.	.	.	.	-4.5	3.0	2.2	6.4	-5.3	-6.2	0.0	-1.5	1.5	.

Source: Eurostat.

1) Excluding Croatia.



## 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	
2010	103.6	101.6	98.3	96.9	109.5	98.5	111.5	98.1	
2011	103.4	100.7	97.7	95.2	108.2	96.5	112.2	97.6	
2012	97.8	95.5	93.4	89.9	103.7	91.2	107.1	92.8	
2012 Q2	98.2	95.9	93.5	90.3	104.2	91.6	107.5	93.2	
Q3	95.9	93.7	91.9	87.9	101.5	89.4	105.0	91.2	
Q4	97.8	95.5	93.9	89.7	103.8	91.1	107.4	92.9	
2013 Q1	100.7	98.3	96.5	92.2	106.7	93.8	110.2	94.9	
Q2	100.8	98.3	96.0	.	.	.	110.6	95.0	
2012 June	97.2	94.8	92.5	-	-	-	106.7	92.4	
July	95.3	93.2	91.1	-	-	-	104.3	90.6	
Aug.	95.2	93.1	91.3	-	-	-	104.5	90.6	
Sep.	97.2	95.0	93.3	-	-	-	106.6	92.5	
Oct.	97.8	95.5	93.8	-	-	-	107.3	92.8	
Nov.	97.2	94.9	93.2	-	-	-	106.7	92.3	
Dec.	98.7	96.2	94.6	-	-	-	108.3	93.5	
2013 Jan.	100.4	98.0	96.3	-	-	-	109.9	94.8	
Feb.	101.6	99.1	97.4	-	-	-	111.2	95.7	
Mar.	100.2	97.9	95.8	-	-	-	109.5	94.4	
Apr.	100.4	97.9	95.9	-	-	-	109.8	94.4	
May	100.5	98.1	95.7	-	-	-	110.0	94.6	
June	101.6	99.1	96.4	-	-	-	112.0	96.2	
	<i>Percentage change versus previous month</i>								
2013 June	1.0	1.0	0.7	-	-	-	1.8	1.8	
	<i>Percentage change versus previous year</i>								
2013 June	4.5	4.5	4.3	-	-	-	5.0	4.1	

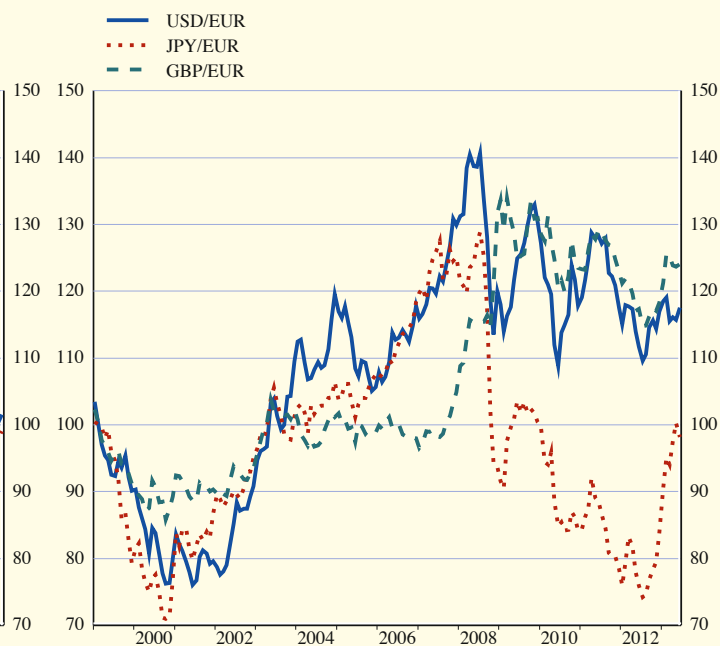
### C39 Effective exchange rates

(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	Croatian kuna	Latvian lats	Lithuanian litas	Hungarian forint	Polish zloty	New Romanian leu	Swedish krona	Pound sterling	New Turkish lira
	1	2	3	4	5	6	7	8	9	10	11	12
2010	1.9558	25.284	7.4473	7.2891	0.7087	3.4528	275.48	3.9947	4.2122	9.5373	0.85784	1.9965
2011	1.9558	24.590	7.4506	7.4390	0.7063	3.4528	279.37	4.1206	4.2391	9.0298	0.86788	2.3378
2012	1.9558	25.149	7.4437	7.5217	0.6973	3.4528	289.25	4.1847	4.4593	8.7041	0.81087	2.3135
2012 Q4	1.9558	25.167	7.4590	7.5290	0.6963	3.4528	283.25	4.1123	4.5288	8.6230	0.80740	2.3272
2013 Q1	1.9558	25.565	7.4589	7.5838	0.6996	3.4528	296.50	4.1558	4.3865	8.4965	0.85111	2.3577
Q2	1.9558	25.831	7.4555	7.5566	0.7009	3.4528	295.53	4.1982	4.3958	8.5652	0.85056	2.4037
2012 Dec.	1.9558	25.214	7.4604	7.5334	0.6965	3.4528	285.79	4.0956	4.4899	8.6512	0.81237	2.3439
2013 Jan.	1.9558	25.563	7.4614	7.5746	0.6978	3.4528	294.01	4.1424	4.3835	8.6217	0.83271	2.3543
Feb.	1.9558	25.475	7.4598	7.5868	0.6999	3.4528	292.73	4.1700	4.3839	8.5083	0.86250	2.3738
Mar.	1.9558	25.659	7.4553	7.5909	0.7013	3.4528	303.01	4.1565	4.3923	8.3470	0.85996	2.3453
Apr.	1.9558	25.841	7.4553	7.6076	0.7006	3.4528	298.67	4.1359	4.3780	8.4449	0.85076	2.3406
May	1.9558	25.888	7.4536	7.5684	0.7002	3.4528	292.38	4.1799	4.3360	8.5725	0.84914	2.3739
June	1.9558	25.759	7.4576	7.4901	0.7019	3.4528	295.70	4.2839	4.4803	8.6836	0.85191	2.5028
<i>Percentage change versus previous month</i>												
2013 June	0.0	-0.5	0.1	-1.0	0.2	0.0	1.1	2.5	3.3	1.3	0.3	5.4
<i>Percentage change versus previous year</i>												
2013 June	0.0	0.5	0.3	-0.7	0.7	0.0	0.7	-0.3	0.4	-2.1	5.7	9.6
	Australian dollar	Brazilian real	Canadian dollar	Chinese yuan renminbi	Hong Kong dollar	Indian rupee <sup>1)</sup>	Indonesian rupiah	Israeli shekel	Japanese yen	Malaysian ringgit		
	13	14	15	16	17	18	19	20	21	22		
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		
2012	1.2407	2.5084	1.2842	8.1052	9.9663	68.5973	12,045.73	4.9536	102.49	3.9672		
2012 Q4	1.2484	2.6671	1.2850	8.1036	10.0506	70.2047	12,473.53	4.9853	105.12	3.9632		
2013 Q1	1.2714	2.6368	1.3313	8.2209	10.2428	71.5390	12,789.08	4.8969	121.80	4.0699		
Q2	1.3203	2.6994	1.3368	8.0376	10.1383	73.0046	12,784.60	4.7407	129.07	4.0088		
2012 Dec.	1.2527	2.7264	1.2984	8.1809	10.1679	71.6946	12,643.37	4.9570	109.71	4.0075		
2013 Jan.	1.2658	2.6993	1.3189	8.2698	10.3027	72.0716	12,837.99	4.9706	118.34	4.0413		
Feb.	1.2951	2.6354	1.3477	8.3282	10.3608	71.9342	12,933.75	4.9359	124.40	4.1403		
Mar.	1.2537	2.5694	1.3285	8.0599	10.0588	70.5579	12,590.61	4.7769	122.99	4.0309		
Apr.	1.2539	2.6060	1.3268	8.0564	10.1110	70.7738	12,664.51	4.7164	127.54	3.9686		
May	1.3133	2.6414	1.3257	7.9715	10.0766	71.4760	12,673.13	4.7223	131.13	3.9200		
June	1.3978	2.8613	1.3596	8.0905	10.2349	77.0284	13,033.31	4.7865	128.40	4.1488		
<i>Percentage change versus previous month</i>												
2013 June	6.4	8.3	2.6	1.5	1.6	7.8	2.8	1.4	-2.1	5.8		
<i>Percentage change versus previous year</i>												
2013 June	11.4	11.5	5.6	1.5	5.3	9.8	10.2	-1.8	29.4	4.1		
	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	
	23	24	25	26	27	28	29	30	31	32	33	
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	
2012	16.9029	1.5867	7.4751	54.246	39.9262	1.6055	10.5511	1,447.69	1.2053	39.928	1.2848	
2012 Q4	16.7805	1.5751	7.3664	53.387	40.3064	1.5855	11.2766	1,414.42	1.2080	39.778	1.2967	
2013 Q1	16.7042	1.5823	7.4290	53.769	40.1518	1.6345	11.8264	1,433.09	1.2284	39.361	1.3206	
Q2	16.2956	1.5920	7.6114	54.620	41.3464	1.6311	12.3996	1,467.08	1.2315	39.031	1.3062	
2012 Dec.	16.8664	1.5777	7.3503	53.796	40.3114	1.6009	11.3179	1,411.41	1.2091	40.187	1.3119	
2013 Jan.	16.8760	1.5877	7.3821	54.105	40.1847	1.6326	11.6957	1,417.69	1.2288	39.924	1.3288	
Feb.	16.9872	1.5929	7.4232	54.355	40.3342	1.6546	11.8796	1,452.82	1.2298	39.839	1.3359	
Mar.	16.2322	1.5657	7.4863	52.813	39.9332	1.6164	11.9169	1,430.31	1.2266	38.264	1.2964	
Apr.	15.8895	1.5348	7.5444	53.649	40.7995	1.6120	11.8592	1,460.89	1.2199	37.857	1.3026	
May	15.9776	1.5774	7.5589	53.693	40.6842	1.6219	12.1798	1,444.56	1.2418	38.667	1.2982	
June	17.0716	1.6682	7.7394	56.658	42.6490	1.6613	13.2088	1,498.33	1.2322	40.664	1.3189	
<i>Percentage change versus previous month</i>												
2013 June	6.8	5.8	2.4	5.5	4.8	2.4	8.4	3.7	-0.8	5.2	1.6	
<i>Percentage change versus previous year</i>												
2013 June	-2.2	3.9	2.6	5.9	3.6	3.7	25.7	2.7	2.6	2.6	5.3	

Source: ECB.

1) 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	Croatia	Latvia	Lithuania	Hungary	Poland	Romania	Sweden	United Kingdom
	1	2	3	4	5	6	7	8	9	10	11
<b>HICP</b>											
2011	3.4	2.1	2.7	2.2	4.2	4.1	3.9	3.9	5.8	1.4	4.5
2012	2.4	3.5	2.4	3.4	2.3	3.2	5.7	3.7	3.4	0.9	2.8
2012 Q4	2.8	2.9	2.1	4.4	1.6	3.0	5.5	2.8	4.7	1.0	2.7
2013 Q1	2.1	1.7	0.9	4.2	0.4	2.2	2.7	1.3	4.8	0.6	2.8
2013 Mar.	1.6	1.5	0.7	3.4	0.3	1.6	2.3	1.0	4.4	0.5	2.8
Apr.	0.9	1.7	0.4	3.1	-0.4	1.4	1.8	0.8	4.4	0.0	2.4
May	1.0	1.2	0.6	1.8	-0.2	1.5	1.8	0.5	4.4	0.3	2.7
<b>General government deficit (-)/surplus (+) as a percentage of GDP</b>											
2010	-3.1	-4.8	-2.5	.	-8.1	-7.2	-4.3	-7.9	-6.8	0.3	-10.2
2011	-2.0	-3.3	-1.8	.	-3.6	-5.5	4.3	-5.0	-5.6	0.2	-7.8
2012	-0.8	-4.4	-4.0	.	-1.2	-3.2	-1.9	-3.9	-2.9	-0.5	-6.3
<b>General government gross debt as a percentage of GDP</b>											
2010	16.2	37.8	42.7	.	44.4	37.9	81.8	54.8	30.5	39.4	79.4
2011	16.3	40.8	46.4	.	41.9	38.5	81.4	56.2	34.7	38.4	85.5
2012	18.5	45.8	45.8	.	40.7	40.7	79.2	55.6	37.8	38.2	90.0
<b>Long-term government bond yield as a percentage per annum; period average</b>											
2012 Dec.	3.44	1.92	1.07	4.54	3.24	4.00	6.44	3.88	6.65	1.51	1.60
2013 Jan.	3.27	1.96	1.61	4.29	3.21	3.97	6.23	3.91	5.90	1.80	1.82
Feb.	3.25	2.01	1.73	4.28	3.22	4.06	6.29	3.99	5.72	2.00	1.92
Mar.	3.54	1.98	1.59	4.32	3.17	4.15	6.38	3.93	5.86	1.92	1.65
Apr.	3.47	1.82	1.42	4.34	3.15	3.95	5.65	3.50	5.46	1.66	1.46
May	3.36	1.67	1.45	4.38	3.10	3.54	5.08	3.28	5.23	1.79	1.62
<b>3-month interest rate as a percentage per annum; period average</b>											
2012 Dec.	1.39	0.50	0.28	1.68	0.53	0.70	-	4.26	5.79	1.37	0.52
2013 Jan.	1.27	0.50	0.30	1.58	0.50	0.53	5.80	4.03	5.71	1.21	0.51
Feb.	1.23	0.50	0.33	1.31	0.49	0.47	-	3.80	5.60	1.19	0.51
Mar.	1.23	0.49	0.27	1.17	0.47	0.47	-	3.48	5.10	1.25	0.51
Apr.	1.22	0.47	0.26	1.03	0.44	0.62	4.57	3.29	4.31	1.24	0.51
May	1.21	0.46	0.24	1.14	0.41	0.74	4.71	2.86	3.83	1.20	0.51
<b>Real GDP</b>											
2011	1.8	1.8	1.1	0.0	5.5	5.9	1.6	4.5	2.3	3.7	1.1
2012	0.8	-1.2	-0.4	-2.0	5.6	3.7	-1.7	1.9	0.4	0.7	0.2
2012 Q3	0.7	-1.4	0.0	-2.3	5.4	3.8	-1.8	1.7	-0.5	0.3	0.1
Q4	0.6	-1.6	-0.4	-2.6	5.8	3.1	-2.4	0.7	1.2	1.5	0.0
2013 Q1	0.4	-2.4	-0.7	.	6.0	4.1	-0.3	0.5	2.2	1.7	0.3
<b>Current and capital account balance as a percentage of GDP</b>											
2011	1.4	-2.3	5.9	.	0.0	-1.3	3.1	-2.9	-4.0	6.9	-1.1
2012	0.0	-1.1	5.8	.	1.3	1.7	4.4	-1.3	-2.6	6.8	-3.5
2012 Q3	9.8	-4.4	7.8	.	4.8	2.7	5.8	-0.8	-3.9	7.1	-4.4
Q4	-1.7	0.8	6.1	.	3.5	4.9	5.3	-1.0	-0.9	6.6	-3.0
2013 Q1	-4.3	1.9	2.3	.	1.1	-2.8	5.2	-2.0	2.2	7.7	-3.8
<b>Gross external debt as a percentage of GDP</b>											
2011	94.1	59.6	183.2	.	145.0	77.8	147.7	71.7	77.2	195.3	419.6
2012	94.8	60.5	182.3	.	136.2	75.4	128.0	70.9	74.6	189.8	384.3
2012 Q3	96.5	60.1	187.2	.	139.2	78.8	128.8	70.8	78.0	202.6	388.4
Q4	94.8	60.5	182.3	.	136.2	75.4	128.0	70.9	74.6	189.8	384.3
2013 Q1	93.4	62.2	.	.	138.6	73.8	132.0	72.6	74.9	194.2	392.5
<b>Unit labour costs</b>											
2011	3.0	0.5	-0.1	0.7	2.1	-0.1	1.8	0.5	0.7	-0.6	1.3
2012	0.2	3.2	1.6	1.2	2.8	2.0	4.8	.	6.8	3.2	3.2
2012 Q3	1.0	2.2	1.5	1.9	3.2	1.7	5.1	1.4	9.1	3.7	3.4
Q4	1.2	3.3	1.3	1.8	1.0	0.4	4.0	.	7.1	3.9	2.4
2013 Q1	12.3	1.2	1.9	.	0.6	0.1	0.4	.	0.7	2.1	1.7
<b>Standardised unemployment rate as a percentage of labour force (s.a.)</b>											
2011	11.3	6.7	7.6	13.5	16.3	15.3	11.0	9.6	7.4	7.8	8.0
2012	12.3	7.0	7.5	15.9	14.8	13.3	10.9	10.1	7.0	8.0	7.9
2012 Q4	12.6	7.2	7.3	17.5	13.8	13.2	10.9	10.4	6.7	8.1	7.7
2013 Q1	12.8	7.2	7.1	16.8	12.4	12.5	10.9	10.6	7.1	8.2	7.8
2013 Mar.	12.9	7.2	6.9	16.6	12.4	12.3	10.6	10.7	7.2	8.3	7.7
Apr.	12.8	7.2	7.0	16.6	.	12.5	10.5	10.7	7.3	8.3	.
May	12.7	7.2	6.8	16.5	.	11.7	.	10.7	7.5	7.9	.

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

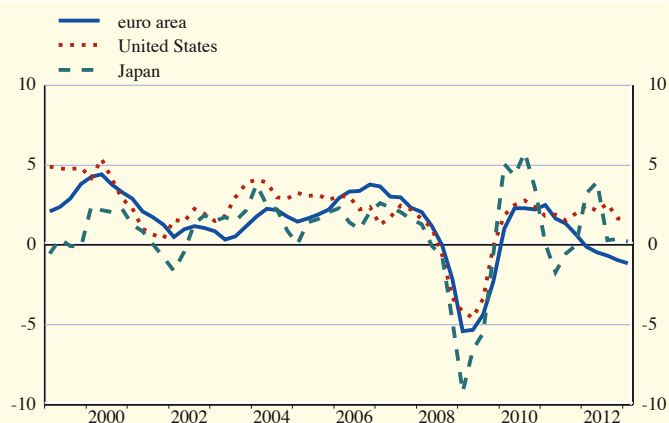
## 9.2 Economic and financial developments in the United States and Japan

(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	Government deficit (-)/ surplus (+) as a % of GDP	Government debt <sup>6)</sup> as a % of GDP
	1	2	3	4	5	6	7	8	9	10	11
United States											
2009	-0.4	-1.4	-3.1	-13.6	9.3	8.0	0.69	4.17	1.3948	-11.9	73.3
2010	1.6	-1.1	2.4	6.6	9.6	2.5	0.34	3.57	1.3257	-11.4	82.1
2011	3.2	1.9	1.8	3.6	8.9	7.3	0.34	2.10	1.3920	-10.2	86.0
2012	2.1	1.1	2.2	4.2	8.1	8.5	0.43	1.88	1.2848	-8.7	90.0
2012 Q2	1.9	0.5	2.1	5.2	8.2	9.6	0.47	1.83	1.2814	-8.8	88.2
Q3	1.7	0.1	2.6	3.9	8.0	7.0	0.43	1.77	1.2502	-8.6	88.7
Q4	1.9	3.8	1.7	3.3	7.8	7.5	0.32	1.88	1.2967	-8.5	90.0
2013 Q1	1.7	1.1	1.6	2.6	7.7	7.1	0.29	2.09	1.3206	.	.
Q2	.	.	.	.	.	.	0.28	2.82	1.3062	.	.
2013 Feb.	2.0	-	-	2.5	7.7	6.9	0.29	2.05	1.3359	-	-
Mar.	1.5	-	-	2.8	7.6	6.9	0.28	2.09	1.2964	-	-
Apr.	1.1	-	-	1.8	7.5	7.1	0.28	1.92	1.3026	-	-
May	1.4	-	-	2.2	7.6	6.9	0.27	2.40	1.2982	-	-
June	.	-	-	.	.	.	0.27	2.82	1.3189	-	-
Japan											
2009	-1.3	0.3	-5.5	-21.9	5.1	2.7	0.47	1.42	130.34	-8.8	180.1
2010	-0.7	-4.8	4.7	16.6	5.1	2.8	0.23	1.18	116.24	-8.3	188.3
2011	-0.3	0.8	-0.5	-2.5	4.6	2.7	0.19	1.00	110.96	-8.9	204.4
2012	0.0	-2.3	1.9	-0.3	4.4	2.5	0.19	0.84	102.49	.	.
2012 Q2	0.1	-4.2	3.9	5.3	4.4	2.4	0.20	0.84	102.59	.	.
Q3	-0.4	-0.9	0.3	-4.6	4.3	2.4	0.19	0.78	98.30	.	.
Q4	-0.2	-1.2	0.4	-5.9	4.2	2.3	0.19	0.84	105.12	.	.
2013 Q1	-0.6	.	0.2	-7.7	4.2	2.9	0.16	0.70	121.80	.	.
Q2	.	.	.	.	.	.	0.16	1.02	129.07	.	.
2013 Feb.	-0.7	-	-	-10.5	4.3	2.9	0.16	0.74	124.40	-	-
Mar.	-0.9	-	-	-6.7	4.1	3.0	0.16	0.70	122.99	-	-
Apr.	-0.7	-	-	-2.3	4.1	3.2	0.16	0.76	127.54	-	-
May	-0.3	-	-	.	.	3.4	0.16	1.05	131.13	-	-
June	.	-	-	.	.	.	0.15	1.02	128.40	-	-

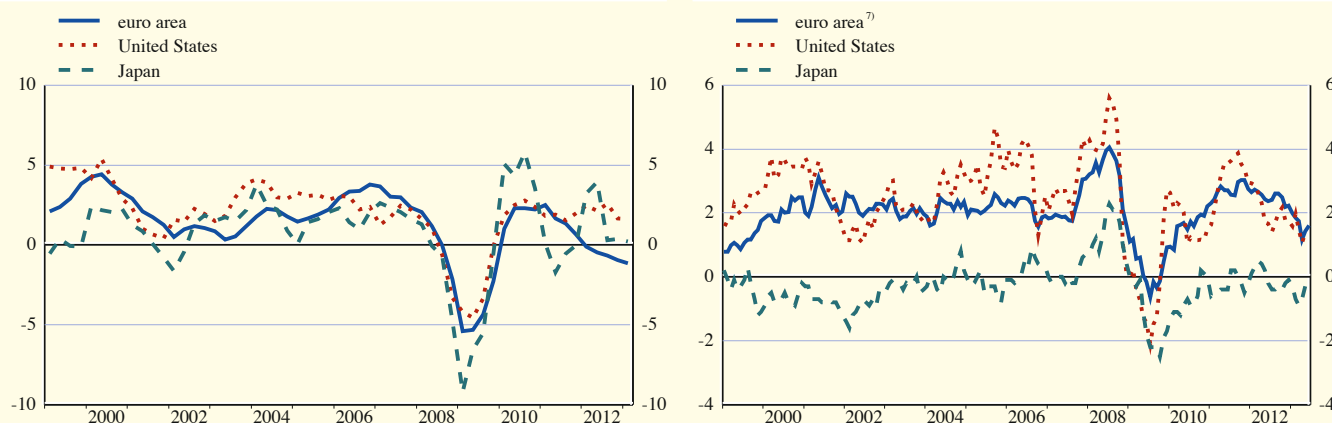
### C41 Real gross domestic product

(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 include estimates for the three prefectures most affected by the earthquake in that country. Data collection was 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) General government debt consists of deposits, securities other than shares and loans outstanding at nominal value and is consolidated within the general government sector (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:

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

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:

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

The base of the index (for the non-seasonally adjusted series) is currently set as December 2010 = 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.

## 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.

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 2010) generally differs from 100, reflecting the seasonality of that month.

## 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:

$$k) \quad I_t = I_{t-1} \times \left( 1 + \frac{N_t}{L_{t-1}} \right)$$

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 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 S81). 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

<sup>4</sup> 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)).

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 3 July 2013.

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. Estonia joined in 2011, bringing the number of euro area countries to 17. From October 2012, the euro area statistics also include the European Stability Mechanism, an international organisation resident in the euro area for statistical purposes.

### 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, Croatia, 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.

<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>).

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 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

<sup>2</sup> OJ L 15, 20.01.2009, p. 14.

<sup>3</sup> OJ L 211, 11.08.2007, p. 8.

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.

## 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,

<sup>4</sup> OJ L 15, 20.01.2009, p. 1.

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 17 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 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

<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.

includes seasonally adjusted HICP data, which are compiled by the ECB, and experimental HICP-based indices of administered prices.

Industrial producer prices (Table 2 in Section 5.1), industrial production, 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 5 of Section 5.1) on the basis of non-harmonised, national-definition data.

Unit labour cost components (Table 4 in Section 5.1), GDP and its components (Tables 1 and 2 in Section 5.2), GDP deflators (Table 3 in Section 5.1) and employment statistics (Table 1 in Section 5.3) are 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,

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.

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.

the updated statistical classification of economic activities. The publication of euro area national accounts data applying this new classification began in December 2011.

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), including 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 annual deficit and debt data for the euro area aggregates may therefore differ from those published by the European Commission. 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 non-seasonally adjusted 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 by the Member States under Regulation (EC) No 501/2004 and Regulation (EC) No 222/2004 and data provided by the NCBs.

<sup>13</sup> OJ L 172, 12.7.2000, p. 3.

## 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.

On 9 December 2011 the ECB Guideline on the statistical requirements of the European Central Bank in the field of external statistics (ECB/2011/23)<sup>17</sup> was adopted by the Governing Council of the ECB. This legal act lays down new reporting requirements in the field of external statistics, which mainly reflect methodological changes introduced in the sixth edition of the IMF’s Balance of Payments and International Investment Position Manual (BPM6). The ECB will begin publishing the euro area’s b.o.p., i.i.p. and international reserves statistics in accordance with Guideline ECB/2011/23 and the BPM6 in 2014, with backdata. 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

14 OJ L 179, 9.7.2002, p. 1.

15 OJ L 354, 30.11.2004, p. 34.

16 OJ L 159, 20.6.2007, p. 48.

17 OJ L 65, 3.3.2012, p. 1.

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 and international organisations (which, with the exception of the ECB and the European Stability Mechanism, are considered to be outside the euro area for statistical purposes, regardless of their physical location) as well as offshore centres. 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.

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 134 ("Revisiting the effective exchange rates of the euro" by Martin Schmitz, Maarten De Clercq, Michael Fidora, Bernadette Lauro and Cristina Pinheiro, June 2012), which can be downloaded from the ECB's website.

The bilateral rates shown in Section 8.2 are monthly averages of those published daily as reference rates for these currencies. The most recent rate for the Icelandic krona is 290.0 per euro and refers to 3 December 2008.

## 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 EUROSISTEM<sup>1</sup>



### 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.

<sup>1</sup> The chronology of monetary policy measures taken by the Eurosystem between 1999 and 2010 can be found in the ECB's Annual Report for the respective years.



#### **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.

### **8 MARCH, 4 APRIL AND 3 MAY 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.

### **6 JUNE 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 decides on the details as regards the tender procedures and modalities to be applied in its refinancing operations up to 15 January 2013, notably to continue its fixed rate tender procedures with full allotment.

### **5 JULY 2012**

The Governing Council of the ECB decides to decrease the interest rate on the main refinancing operations by 25 basis points to 0.75%, starting from the operation to be settled on 11 July 2012. In addition, it decides to decrease the interest rates on both the marginal lending facility and the deposit facility by 25 basis points, to 1.50% and 0.00% respectively, both with effect from 11 July 2012.

### **2 AUGUST 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 0.75%, 1.50% and 0.00% respectively.



#### **6 SEPTEMBER 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 0.75%, 1.50% and 0.00% respectively. It also decides on the modalities for undertaking Outright Monetary Transactions (OMTs) in secondary markets for sovereign bonds in the euro area.

#### **4 OCTOBER AND 8 NOVEMBER 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 0.75%, 1.50% and 0.00% respectively.

#### **6 DECEMBER 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 0.75%, 1.50% and 0.00% respectively. It also decides on the details as regards the tender procedures and modalities to be applied in its refinancing operations up to 9 July 2013, notably to continue its fixed rate tender procedures with full allotment.

#### **10 JANUARY, 7 FEBRUARY, 7 MARCH AND 4 APRIL 2013**

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 0.75%, 1.50% and 0.00% respectively.

#### **2 MAY 2013**

The Governing Council of the ECB decides to decrease the interest rate on the main refinancing operations by 25 basis points to 0.50%, starting from the operation to be settled on 8 May 2013. In addition, it decides to decrease the interest rate on the marginal lending facility by 50 basis points to 1.00%, with effect from 8 May 2013, and to keep the interest rate on the deposit facility unchanged at 0.00%. It also decides on the details as regards the tender procedures and modalities to be applied in its refinancing operations up to 8 July 2014, notably to continue its fixed rate tender procedures with full allotment.

#### **6 JUNE AND 4 JULY 2013**

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 0.50%, 1.00% and 0.00% respectively.



## 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

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## GLOSSARY

This glossary contains selected items that are frequently used in the Monthly Bulletin. A more comprehensive and detailed glossary can be found on the ECB's website ([www.ecb.europa.eu/home/glossary/html/index.en.html](http://www.ecb.europa.eu/home/glossary/html/index.en.html)).

**Autonomous liquidity factors:** liquidity factors that do not normally stem from the use of monetary policy instruments. Such factors are, for example, banknotes in circulation, government deposits with the central bank and the net foreign assets of the central bank.

**Balance of payments (b.o.p.):** a statistical statement that summarises, for a specific period of time, the economic transactions of an economy with the rest of the world.

**Bank lending survey (BLS):** a quarterly survey on lending policies that has been conducted by the Eurosystem since January 2003. It addresses qualitative questions on developments in credit standards, terms and conditions of loans and loan demand for both enterprises and households to a predefined sample group of banks in the euro area.

**Borrowing requirement (general government):** net incurrence of debt by the general government.

**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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