



# 09 2013 10 2013 11 2013 12 2013



#### EUROSYSTEM











### MONTHLY BULLETIN OCTOBER 2013

#### © European Central Bank, 2013

#### Address

Kaiserstrasse 29 60311 Frankfurt am Main Germany

#### Postal address

Postfach 16 03 19 60066 Frankfurt am Main Germany

**Telephone** +49 69 1344 0

Website http://www.ecb.europa.eu

Fax +49 69 1344 6000

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

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

The cut-off date for the statistics included in this issue was 1 October 2013.

ISSN 1561-0136 (print) ISSN 1725-2822 (epub) ISSN 1725-2822 (online) EU catalogue number QB-AG-13-010-EN-C (print) EU catalogue number QB-AG-13-010-EN-E (epub) EU catalogue number QB-AG-13-010-EN-N (online)



### CONTENTS

E	EDITORIAL	5
EC	ECONOMIC AND MONETARY DEVELOPMENTS	
1	The external environment of the euro area	7
2	2 Monetary and financial developments	14
	Box 1 Stylised facts of money and credit over the business cycle	18
	Box 2 Review of the risk control framework	2 5
3	3 Prices and costs	35
	Box 3 The anchoring of long-term inflation expectations in the euro area	40
4	4 Output, demand and the labour market	43
	Box 4 How has macroeconomic uncertainty in the euro area evolved recently?	44
AF	ARTICLES	
С	Commodity prices and their role in assessing euro area growth and inflation	53
R	Reference interest rates: role, challenges and outlook	69
El	EURO AREA STATISTICS	S I
AI	ANNEXES	
С	Chronology of monetary policy measures of the Eurosystem	1
Pı	Publications produced by the European Central Bank	v
G	Glossary	VII





### **ABBREVIATIONS**

COUNTRIES		LU	Luxembourg
BE	Belgium	HU	Hungary
BG	Bulgaria	MT	Malta
CZ	Czech Republic	NL	Netherlands
DK	Denmark	AT	Austria
DE	Germany	PL	Poland
EE	Estonia	РТ	Portugal
IE	Ireland	RO	Romania
GR	Greece	SI	Slovenia
ES	Spain	SK	Slovakia
FR	France	FI	Finland
HR	Croatia	SE	Sweden
IT	Italy	UK	United Kingdom
CY	Cyprus	JP	Japan
LV	Latvia	US	United States
LT	Lithuania		
OTHERS			
BIS	Bank for International Settlemen	nts	
b.o.p.	balance of payments	1115	
BPM5	IMF Balance of Payments Manu	ual (5th edition)	
CD	certificate of deposit		
c.i.f.	cost, insurance and freight at the	e importer's horde	r
CPI	Consumer Price Index		/1
ECB	European Central Bank		
EER	effective exchange rate		
EMI	European Monetary Institute		
EMU	Economic and Monetary Union		
ESA 95	European System of Accounts 1	005	
ESCB	European System of Central Bar		
EU	European Union	liks	
EUR	euro		
-		ardar	
f.o.b.	free on board at the exporter's b	order	
GDP	gross domestic product	D.:	
HICP	Harmonised Index of Consumer		
HWWI	Hamburg Institute of Internation		
ILO	International Labour Organizati	on	
IMF	International Monetary Fund		
MFI	monetary financial institution		
NACE	statistical classification of ecor	nomic activities in	n the European Union
NCB	national central bank		
OECD	Organisation for Economic Co-	operation and Dev	velopment
PPI	Producer Price Index		
SITC Rev. 4	Standard International Trade Cla		ion 4)
ULCM	unit labour costs in manufacturi	0	
ULCT	unit labour costs in the total eco	nomy	

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.

1



### **EDITORIAL**

Based on its regular economic and monetary analyses, the Governing Council decided at its meeting on 2 October to keep the key ECB interest rates unchanged. Incoming information and analysis have further underpinned the Governing Council's 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 aim of maintaining inflation rates below, but close to, 2% over the medium term. At the same time, real GDP growth in the second quarter was positive, after six quarters of negative output growth, and confidence indicators up to September confirm the expected gradual improvement in economic activity from low levels. The monetary policy stance continues to be 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 gradual recovery in economic activity. Looking ahead, the monetary policy stance will remain accommodative for as long as necessary, in line with the forward guidance provided in July. The Governing Council confirms that it expects the key ECB interest rates to remain at present or lower levels for an extended period of time. This expectation continues to be based on an unchanged overall subdued outlook for inflation extending into the medium term, given the broad-based weakness in the 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 medium-term outlook for price stability. With regard to money market conditions, the Governing Council will remain particularly attentive to developments which may have implications for the stance of monetary policy and is ready to consider all available instruments.

With regard to the economic analysis, following six quarters of negative output growth, euro area real GDP rose, quarter on quarter, by 0.3% in the second quarter of 2013, also supported by temporary factors related to unusually adverse weather conditions in some euro area countries earlier this year. Developments in industrial production data point to somewhat weaker growth at the beginning of the third quarter, while survey-based confidence indicators up to September have improved further from low levels, overall confirming the Governing Council's previous expectations of a gradual recovery in economic activity. Looking ahead, output is expected to recover at a slow pace, in particular owing to a gradual improvement in domestic demand supported by the accommodative monetary policy stance. Euro area economic activity should, in addition, benefit from a gradual strengthening of external demand for exports. Furthermore, the overall improvements in financial markets seen since last summer appear to be gradually working their way through to the real economy, as should the progress made in fiscal consolidation. In addition, real incomes have benefited recently from generally lower inflation. This being said, unemployment in the euro area remains high, and the necessary balance sheet adjustments in the public and private sectors will continue to weigh on economic activity.

The risks surrounding the economic outlook for the euro area continue to be on the downside. Developments in global money and financial market conditions and related uncertainties may have the potential to negatively affect economic conditions. Other downside risks include higher commodity prices in the context of renewed geopolitical tensions, weaker than expected global demand and slow or insufficient implementation of structural reforms in euro area countries.

According to Eurostat's flash estimate, and broadly in line with expectations, euro area annual HICP inflation decreased in September 2013 to 1.1%, from 1.3% in August. On the basis of current futures prices for energy, annual inflation rates are expected to remain at such low levels in the coming months. Taking the appropriate medium-term perspective, underlying price pressures are

expected to remain subdued, reflecting the broad-based weakness in aggregate demand and the modest pace of the recovery. Medium to long-term inflation expectations continue to be 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 in particular to higher commodity prices as well as stronger than expected increases in administered prices and indirect taxes, and downside risks stemming from weaker than expected economic activity.

Turning to the monetary analysis, data for August indicate that the underlying growth of broad money (M3) and, in particular, credit remained subdued. Annual growth in M3 continued to be broadly stable at 2.3% in August, compared with 2.2% in July. Annual growth in M1 remained strong but decreased to 6.8% in August, from 7.1% in July. Net capital inflows into the euro area continued to be the main factor supporting annual M3 growth, while the annual rate of change of loans to the private sector remained weak. The annual growth rate of loans to households (adjusted for loan sales and securitisation) stood at 0.4% in August, 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) was -2.9% in August, compared with -2.8% in July. Weak loan dynamics for non-financial corporations continue to reflect primarily their lagged relationship with the business cycle, 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. 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 declines further and that the resilience of banks is strengthened where needed. Further decisive steps to establish a banking union will help to accomplish this objective.

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.

As regards fiscal policies, euro area countries should not unravel their efforts to reduce deficits and put high government debt ratios on a downward path. The draft budgetary plans that countries will now deliver for the first time under the "two-pack" regulations need to provide for sufficiently far-reaching measures to achieve the fiscal targets for 2014. Governments must also decisively strengthen efforts to implement the needed structural reforms in product and labour markets. These reforms are required not only to help countries to regain competitiveness and to rebalance within the euro area, but also to create more flexible and dynamic economies that generate sustainable economic growth and employment.

This issue of the Monthly Bulletin contains two articles. The first article identifies recent changes in the nature of commodity price movements and analyses their potential implications for the assessment of the economic outlook for the euro area. The second article reviews the role of reference interest rates such as the EURIBOR in the euro area and summarises the ECB's views on the current debate on possible options to reform these rates, as well as the initiatives taken in this respect by the official sector, including the Eurosystem.



### I THE EXTERNAL ENVIRONMENT OF THE EURO AREA

Global growth remains subdued overall, albeit diverse across regions. Recent developments seem to confirm the change in the underlying growth dynamics in favour of advanced economies. Indeed, in most major non-euro area advanced economies the outlook for growth has been firming up, although some factors continue to restrain growth in the medium term. By contrast, growth in emerging market economies appears to have lost some momentum, although it is expected to continue contributing significantly to global activity. Global inflationary pressures have remained contained. Inflation in advanced economies was broadly stable in August, while recent developments have been more mixed in emerging markets.

#### I.I GLOBAL ECONOMIC ACTIVITY AND TRADE

Global growth remains subdued overall, albeit diverse across regions. The latest surveys point towards a more favourable outlook for the global economy in the third quarter and some firming-up of the growth momentum in advanced economies. The global Purchasing Managers' Index (PMI) for all-industry output increased to 55.2 in August, from 54.0 in July, with both services and manufacturing sector components contributing to this expansion. Recent data for global manufacturing output up to September point to an ongoing expansion in this sector. Excluding the euro area, the all-industry output PMI strengthened to 56.0 in August, from 54.8 in July (see Chart 1). Other data releases, particularly of hard data, have been more mixed for both advanced and emerging market economies at the start of the third quarter. Following strong GDP growth in the second quarter, activity in the United States may lose some momentum in the near term, while short-term prospects look more robust in Japan and the United Kingdom. Growth momentum appears to be recovering somewhat in China, although other emerging countries have experienced a slowdown in economic activity following the tightening of global financial conditions in recent months.

Forward-looking global indicators generally seem to confirm the ongoing modest recovery. The new orders component of the global all-industry PMI excluding the euro area increased in August. By contrast, global manufacturing new export orders (excluding the euro area) stood very close to 50 in September, suggesting that global trade dynamics remain weak. The OECD's composite leading indicators, designed to anticipate turning points in economic activity relative to trend, also pointed to an improvement in overall growth prospects in the OECD area in July, but signalled diverging growth patterns across major economies (see Chart 2). The composite leading indicators anticipate improvements in growth in most major OECD countries, including the United States, the United Kingdom and Japan. By contrast, in large emerging economies, they point to a stabilisation (in the case of China and Russia) or a slowdown in momentum (in Brazil and India). Overall, these developments seem to be confirm a change in the underlying dynamics in favour of advanced economies.



#### ECONOMIC AND MONETARY DEVELOPMENTS

The external environment of the euro area The global outlook continues to be surrounded by considerable uncertainty and the balance of risks for world activity remains tilted to the downside. Recent developments in global money and financial market conditions and related uncertainties may have the potential to negatively affect economic conditions. At the same time, there is a risk that renewed geopolitical tensions could lead to higher commodity prices, and that global demand turns out to be weaker than expected.

#### **I.2 GLOBAL PRICE DEVELOPMENTS**

Overall, global inflation remains contained. In the OECD area, consumer price inflation was 1.7% year on year in August 2013, compared with 2.0% in July 2013 (see Table 1). This decline was driven by markedly lower energy price inflation. Excluding food and energy, the OECD annual inflation rate remained broadly stable at 1.6% in August. The decline in annual headline inflation was



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.

observed in the majority of OECD countries, with the exception of Japan, where it increased, while developments in large emerging economies were more mixed, with declines in China and Brazil and increases in India and, to some extent, Russia. In a number of countries, however, inflation remained above the targets announced by the respective monetary authorities.

Turning to energy price developments, after having reached a peak of USD 116 per barrel at the end of August, Brent crude oil prices declined by 7%. On 1 October, oil prices stood at USD 108 per barrel, which is 4% lower than one year ago.

(annual percentage changes)										
	2011	2012		2013						
			Mar.	Apr.	May	June	July	Aug		
OECD	2.9	2.3	1.6	1.3	1.5	1.8	2.0	1.		
United States	3.2	2.1	1.5	1.1	1.4	1.8	2.0	1.		
Japan	-0.3	0.0	-0.9	-0.7	-0.3	0.2	0.7	0		
United Kingdom	4.5	2.8	2.8	2.4	2.7	2.9	2.8	2		
China	5.4	2.6	2.1	2.4	2.1	2.7	2.7	2		
Memo item:										
OECD core inflation <sup>1)</sup>	1.7	1.8	1.6	1.4	1.5	1.5	1.5	1		

#### Table | Price developments in selected economies

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

The external environment of the euro area

The recent decline in oil prices was due to receding geopolitical tensions, a recovery in global oil supply from the unexpected disruptions in August and a seasonal slowdown in oil demand growth. Diplomatic efforts to avert a military strike on Syria have put downward pressure on prices. At the same time, a gradual recovery in North Sea supply maintenance-related disruptions, as from well as strong growth in supply from North America, helped to ease the generally tight supply/demand balance in the third quarter of 2013. Recovery in supply from Libya, Nigeria and Iraq is also expected to further ease supply-side pressures on prices, although geopolitical tensions may persist in these countries and in the neighbouring region. On the demand side, the seasonal decline in refinery demand from its peak in July is likely to continue and could even accelerate in the fourth quarter of 2013. This would further dampen the



pressures on prices towards the end of the year. Looking ahead, market participants expect lower oil prices over the medium term, with December 2014 futures prices trading at 100 USD per barrel.

Amid some volatility, prices of non-energy commodities were, on aggregate, broadly stable in the course of September (see Chart 3). While prices of most food commodities, such as cereals and soybeans, declined, owing to favourable supply prospects, developments in metal prices were mixed. In aggregate terms, the price index for non-energy commodities (denominated in US dollars) was about 10% lower at the end of September 2013 compared with the same period a year earlier.

#### **1.3 DEVELOPMENTS IN SELECTED ECONOMIES**

#### **UNITED STATES**

In the United States, real GDP growth accelerated in the second quarter of 2013. According to the third and final estimate by the Bureau of Economic Analysis, real GDP increased at an annualised quarterly rate of 2.5%, up from 1.1% in the first quarter. Real GDP growth was the same as reported in the second estimate, as the impact of downward revisions to the contribution from inventories and net trade was fully offset by upward revisions to personal spending, private investment and government expenditure. Real GDP growth in the second quarter was sustained by gains in personal consumption expenditure, although these gains were slower compared with the first quarter, and by strong private fixed investment, both non-residential and residential. The change in inventories added an annualised 0.4 percentage point to growth. By contrast, government consumption continued to be a drag on activity, although the decline in the second quarter of 2013 was relatively small, following two consecutive quarters of substantial declines. The contribution of net exports to GDP growth was slightly negative, reflecting buoyant export and import growth.

Recent data releases suggest that growth could have slowed somewhat in the third quarter, owing particularly to the loss of some momentum in private consumption and exports. Real private consumption growth was sluggish in July and August, amid subdued income growth and higher mortgage rates. Furthermore, consumer confidence declined in September, suggesting that consumption started on a weak footing in the second half of 2013. Job creation has also lost some of its gains over the last few months, with the increase of 169,000 jobs in August relative to July being considerably below the previous six-month average of 200,000 jobs a month. In addition, there have been significant downward revisions to the data in the previous two months. At the same time, the unemployment rate fell further to 7.3%. However, this was due exclusively to a decline in the labour force participation rate. The widening in the external trade deficit in July, with a contraction in exports, suggests that the strong momentum in exports recorded in the second quarter of the year might not have been maintained in the third quarter, given the continuing subdued external environment. The housing market recovery appears to be fairly robust, with home sales in July and house prices in August continuing to be on an upward trend. Nevertheless, while hard data suggest that the economy might have slowed in the third quarter, business survey data in August and September have remained very strong. Increasing political uncertainty might weigh on the recovery in the short term, particularly if the partial government shutdown since 1 October were to last for a longer period.

Annual CPI inflation declined by 0.5 percentage point to 1.5% in August, as the strong positive base effect of energy prices in the previous month petered out, leaving energy prices practically unchanged in year-on-year terms (+4.7% in July). Food price inflation remained stable at 1.4%, whereas core inflation increased slightly to 1.8%, from 1.7% in July, on account of an acceleration in shelter and medical services prices. Looking ahead, both headline and core inflation should remain contained, as there are few indications so far that inflationary pressures are building up. Moreover, considerable spare capacity in the economy is expected to keep underlying price pressures low.

On 18 September 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 will be appropriate for at least as long as (i) the unemployment rate remains above 6.5%; (ii) inflation between one and two years ahead is not projected to be above 2.5%; and (iii) longer-term inflation expectations continue to be well anchored. The Committee also decided to wait for more evidence that progress in economic activity and labour market conditions would be sustained before adjusting the pace of its asset purchases. Consequently, the FOMC announced that it would continue to purchase additional agency mortgage-backed securities at a rate of USD 40 billion per month and longer-term Treasury securities at a rate of USD 45 billion per month.

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

(percentage changes)								
		Annu	Quarterly growth rates					
	2011	2012	2012	2013	2013	2012	2013	2013
			Q4	Q1	Q2	Q4	Q1	Q2
United States	1.8	2.8	2.0	1.3	1.6	0.0	0.3	0.6
Japan	-0.6	2.0	0.3	0.1	1.3	0.3	1.0	0.9
United Kingdom	1.1	0.1	-0.2	0.2	1.3	-0.3	0.4	0.7
China	9.3	7.7	7.9	7.7	7.5	1.9	1.6	1.7

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

Monthly Bulletin October 2013

The external environment of the euro area

#### JAPAN

The Japanese economy continued to expand at a robust pace. According to the final release of the national accounts, quarter-on-quarter GDP growth in the second quarter of 2013 was revised upwards to 0.9%, from 0.6%, owing to both private and public stronger investment. Both sentiment and hard indicators suggest a continued robust growth momentum. On the domestic side, industrial production in August contracted by just 0.7% on a monthly basis, following a 3.4% expansion the previous month. Meanwhile, real exports and imports of goods increased in August by 6.4% and 1.3% month on month, respectively. Recent consumer and business confidence indicators were also positive, with the overall PMI diffusion index for manufacturing increasing to 52.5 in September, from 52.2 in the previous month.

Consumer price inflation has maintained its gradual upward trend since the beginning of the year, with the headline index moving into positive territory in June 2013. Annual consumer price inflation increased to 0.9% in August, from 0.7% in the previous month, largely owing to higher energy prices. Accordingly, annual core consumer price inflation (excluding food, beverages and energy) also picked up, but to a lesser extent, from -0.1% to 0% in August.

At its latest monetary policy meeting on 5 September 2013, the Bank of Japan decided to keep its target for the monetary base unchanged.

#### **UNITED KINGDOM**

In the United Kingdom, real GDP increased by 0.7% quarter on quarter in the second quarter of 2013, and the strength of the main survey indicators in August and September suggests that robust growth will continue in the short term. In the medium term, however, the pace of growth is likely to moderate. The need for private and public sector balance sheet adjustment, as well as weak household real income dynamics, will continue to constrain domestic demand for some time, while prospects for export growth remain relatively modest. The labour market situation has continued to improve gradually, with the unemployment rate falling by 0.1 percentage point to 7.7% in the three months to July and employment growth remaining steady. Buoyed by recent policy measures, both activity and price indicators have picked up further in the housing market, but credit growth dynamics have remained weak.

Annual CPI inflation has been relatively high in recent months. In August 2013 the headline inflation rate declined by 0.1 percentage point to 2.7%, owing mainly to lower inflation in transport services. Looking ahead, it is expected that inflationary pressures will be contained by existing spare capacity in labour and capital utilisation in the medium term. However, rises in administered and regulated prices, as well as the need for companies to restore their profit margins, could put some upward pressure on inflation. At its meeting on 4 September 2013, the Bank of England's Monetary Policy Committee kept the policy rate at 0.5% and the size of its asset purchase programme at GBP 375 billion.

#### **CHINA**

In China, recent data releases for survey indicators and hard data point to a moderate recovery in the growth momentum in the near term. Growth in industrial production, fixed asset investment, retail sales and exports accelerated in August, although import growth weakened somewhat. In September, both the Markit and official manufacturing PMIs, which were already above the neutral threshold of 50 in August, improved slightly. The growth rates of money supply and loans remained high. Total financing to the economy accelerated to 20.2% in August, driven by a sharp increase in non-bank credit. Inflationary pressures remained moderate, with annual consumer price

inflation decelerating slightly to 2.6% in August from 2.7% in July. House prices continued to rise in August, with price increases reported in 69 out of 70 surveyed cities. In the medium term, the necessary economic rebalancing in the financial and real sectors might shift the Chinese economy onto a somewhat lower growth trajectory.

#### **I.4 EXCHANGE RATES**

Source: ECB

ECB Monthly Bulletin October 2013

Overall, the exchange rate of the euro has, over the past month, appreciated against the currencies of its main trading partners. On 1 October 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 0.7% above its level at the beginning of the month and 5.3% above the level recorded a year earlier



(see Chart 4 and Table 3). Movements in exchange rates were largely related to developments in interest rate expectations, as well as changing expectations about the economic outlook for the euro area relative to other major economies.

In bilateral terms, over the past month the euro appreciated against most major currencies, including the US dollar (by 2.6%) and the Japanese yen (by 1.2%), but depreciated against the pound sterling (by 1.6%). During this period the euro also strengthened against the currencies of most major emerging economies in Asia, as well as against the currencies of some large commodity-exporting countries.

(daily data; units of currency ]	ber euro; percentage changes) Weight in the effective	Change in the exchange ra	te of the euro
	exchange rate of the euro	as at 1 October 2013 wit	
	(EER-21)	2 September 2013	1 October 2
EER-21		0.7	
Chinese renminbi	18.6	2.7	
US dollar	16.8	2.6	
Pound sterling	14.8	-1.6	
Japanese yen	7.1	1.2	
Swiss franc	6.4	-0.5	
Polish zloty	6.1	-0.6	
Czech koruna	5.0	-0.1	
Swedish krona	4.7	-1.0	
Korean won	3.9	0.5	
Hungarian forint	3.2	-1.3	
Danish krone	2.6	0.0	
Romanian leu	2.0	0.6	
Croatian kuna	0.6	0.5	

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

The external environment of the euro area

With regard to the currencies of other EU Member States, the exchange rate of the euro increased slightly vis-à-vis the Croatian kuna and the Romanian leu, while it depreciated against the Czech koruna, the Hungarian forint, the Polish zloty and the Swedish krona. The currencies participating in ERM II remained broadly stable against the euro, trading at, or close to, their respective central rates.



### **2 MONETARY AND FINANCIAL DEVELOPMENTS**

#### 2.1 MONEY AND MFI CREDIT

Annual M3 growth increased marginally in August 2013, after having declined in the three previous months. This notwithstanding, underlying monetary dynamics remain subdued. On the component side, M1 annual growth decreased but, owing to the low opportunity costs of holding liquid instruments, still remained the main contributor to M3 growth. On the counterpart side, annual growth in broad money was mostly supported by continued net 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 remained weak, mainly reflecting low levels of demand, although supply constraints also continued to restrict credit in a number of countries.

#### THE BROAD MONETARY AGGREGATE M3

The annual growth rate of M3 increased marginally to 2.3% in August 2013, up from 2.2% in July, after having declined for three consecutive months (see Chart 5). August data saw another positive flow for the broad monetary aggregate, although not as strong as in the previous month. Developments in August, as in July, were mainly driven by marked inflows for overnight deposits.

On the component side, M1 remained the main contributor to annual M3 growth. The contribution from other short-term deposits (M2 minus M1) was almost zero, while that from marketable instruments (M3 minus M2) remained strongly negative. With regard to M1, these developments continue to reflect the low opportunity costs of holding the most liquid instruments. For M3 minus M1, they continue, in part, to signal an ongoing search for yield by the money-holding sector, with shifts of funds from higher yielding instruments in M3 towards less liquid, riskier assets outside M3.

On the counterpart side, money creation was again supported by an increase in the MFIs' net external asset position, resulting from the ongoing net capital inflows into the euro area. Moreover, outflows from longer-term financial liabilities, in particular net redemptions of MFI longer-term

Chart 5 M3 growth

debt securities, were also supportive of M3 growth. By contrast, significant net redemptions of loans to the private sector continued to dampen money creation.

The volume of euro area MFIs' main assets contracted further in August, continuing the deleveraging observed since spring 2012. The month-on-month decline in August was driven mainly by reductions in the holdings of debt securities issued by MFIs and external assets and, to a lesser extent, by net redemptions in loans to the private sector and inter-MFI loans. By contrast, MFI holdings of government debt securities increased. Euro area MFIs' reliance on Eurosystem liquidity provision decreased in August, thereby continuing the downward trend observed since August 2012. Increases in the deposits included in M3 in a number of stressed countries remain consistent with a further reduction in financial fragmentation.



ECB Monthly Bulletin October 2013

Monetary and financial developments

#### MAIN COMPONENTS OF M3

As regards the components of M3, the annual growth rate of M1 decreased to 6.8% in August 2013, down from 7.1% in July. As in July, this development masks a strong monthly inflow for overnight deposits, which was mostly driven by the household sector and, to a lesser extent, by the non-financial corporation sector. Overall, the ongoing strong dynamics of overnight deposits remain mainly driven by the money-holding sector's continued preference for liquid instruments, against the backdrop of relatively low opportunity costs of holding narrow money.

The annual growth rate of short-term deposits other than overnight deposits (M2 minus M1) increased to 0.4% in August, up from 0.2% in July, despite registering a strong monthly outflow. This mainly reflected an increase in the annual growth of short-term time deposits (i.e. deposits with an agreed maturity of up to two years) to -4.5% in August, up from -5.4% in July. By contrast, the annual growth of short-term savings deposits (i.e. deposits redeemable at notice of up to three months) continued to moderate, standing at 4.8% in August, down from 5.3% in July.

The annual growth rate of marketable instruments (M3 minus M2) was less negative than in the previous month, standing at -16.3% in August after -17.7% in July. This reflected less negative annual growth rates of money market fund shares/units and short-term debt securities (i.e. debt securities with maturities of up to two years). However, the annual growth rates of these instruments remained strongly negative. By contrast, annual growth in repurchase agreements again became more negative.

Generally, the low remuneration of short-term deposits other than overnight deposits and marketable instruments and a reduction in investor risk aversion have led the money-holding sector to shift funds from low-yielding monetary assets towards riskier assets outside M3 in search of higher returns. This has been visible in the household sector's increased investment in equity and bond funds in the first months of the year and more recently.

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 in August, to 3.9% from 4.1% in July. The decrease was mainly driven by a slight moderation in the annual growth of M3 deposits held by households, despite another strong monthly inflow for overnight deposits for this sector, and outflows from M3 deposits held by non-monetary financial intermediaries other than insurance corporations and pension funds (OFIs). The annual growth of M3 deposits held by non-financial corporations also declined marginally, despite a significant monthly inflow. At the country level, the annual growth rates of M3 deposits remained heterogeneous in August, but improvements could be seen especially in Spain and in Italy, contributing to a further reduction in financial fragmentation.

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

The annual growth rate of MFI credit to euro area residents remained negative at -0.5% in August, unchanged from July (see Table 4). The monthly flow in August was only slightly negative, after sizeable outflows in July and June. The annual growth of credit to the general government moderated marginally to 2.1% in August, from 2.2% in July, while that of credit to the private sector was unchanged at -1.2%.

Euro area MFIs increased their holdings of government debt securities in August, but this development was partly offset by a decline in loans granted to the general government. The purchases of government bonds were relatively broadly-based across countries and were concentrated on the

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

	Outstanding amounts		1	Annual grov	wth rates		
	as a percentage of M3 <sup>1)</sup>	2012 Q3	2012 Q4	2013 Q1	2013 Q2	2013 July	201 Au
M1	54.1	4.6	6.2	6.8	8.1	7.1	6
Currency in circulation	9.0	5.3	3.0	1.7	2.7	2.4	2
Overnight deposits	45.1	4.5	6.9	7.9	9.3	8.1	7
M2-M1 (=other short-term deposits)	39.0	1.3	1.6	1.3	0.2	0.2	0
Deposits with an agreed maturity							
of up to two years	17.4	-0.9	-1.8	-3.7	-5.8	-5.4	-4
Deposits redeemable at notice							
of up to three months	21.6	3.5	4.8	6.0	5.8	5.3	4
M2	93.1	3.2	4.2	4.3	4.6	4.1	4
M3-M2 (=marketable instruments)	6.9	1.9	-2.3	-8.5	-15.0	-17.7	-10
M3	100.0	3.0	3.6	3.2	2.9	2.2	1
Credit to euro area residents		0.9	0.5	0.0	-0.1	-0.5	-(
Credit to general government		9.2	8.3	4.2	3.3	2.2	
Loans to general government		1.5	1.9	-0.8	-2.6	-5.7	-(
Credit to the private sector		-1.0	-1.3	-1.0	-1.0	-1.2	-
Loans to the private sector		-0.6	-0.8	-0.8	-1.1	-1.9	-1
Loans to the private sector adjusted							
for sales and securitisation <sup>2)</sup>		-0.1	-0.4	-0.4	-0.6	-1.4	-
Longer-term financial liabilities							
(excluding capital and reserves)		-4.3	-5.1	-5.1	-4.6	-4.0	_4

Source: ECB.

As at the end of the last month available. Figures may not add up due to rounding.
 Adjusted for the derecognition of loans from the MFI statistical balance sheet owing to their sale or securitisation.

government bonds issued by other Member States, whereby the search for yield was the most likely motivation in many cases. At the same time, MFIs in a number of countries reduced their holdings of domestic government bonds, often reflecting subdued issuance activity.

Credit to the private sector registered a further monthly outflow in August, on account of continued net redemptions in loans to the private sector. By contrast, MFIs again slightly increased their holdings of private sector debt securities. This development most probably still reflects genuine purchases of private sector securities, as MFIs reduced their holdings of securities issued by financial vehicle corporations related to securitisation activities, and may in part signal a shift from loans to large corporations towards holdings of such corporations' debt securities.

The annual growth rate of loans to the private sector originated by MFIs (i.e. adjusted for sales and securitisation) declined marginally to -1.5% in August, down from -1.4% in July. Private sector loan growth thus remained at its lowest year-on-year level since the start of the third stage of EMU in 1999. Loans to the private sector registered further monthly net redemptions in August. The negative monthly flow was, however, substantially smaller than those observed in the previous three months. The decline in monthly net redemptions was mostly explained by markedly lower negative flows in loans to OFIs and, to a lesser extent, by somewhat smaller redemptions in loans to non-financial corporations.

The annual growth rate of loans to non-financial corporations adjusted for sales and securitisation further declined marginally in August, to -2.9% down from -2.8% in July (see Table 5). This decline reflected continued significant monthly net redemptions of €11 billion in August. The three-month flow stood at -  $\in$  41 billion in August, which is slightly less negative than the three-month flow up to July and June (-€49 billion in both months). The net redemptions in August were relatively broadly



Monetary and financial developments

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

	Outstanding amount	Annual growth rates							
	as a percentage	2012	2012	2013	2013	2013	2013		
	of the total <sup>1)</sup>	Q3	Q4	Q1	Q2	July	Aug.		
Non-financial corporations	41.5	-0.8	-1.9	-2.5	-3.0	-3.7	-3.8		
Adjusted for sales and securitisation <sup>2)</sup>	-	-0.5	-1.4	-1.4	-2.0	-2.8	-2.9		
Up to one year	24.6	-0.4	-1.3	0.6	-0.8	-3.7	-4.4		
Over one and up to five years	17.5	-3.8	-5.2	-5.9	-6.4	-5.8	-5.3		
Over five years	57.9	0.0	-1.0	-2.7	-2.9	-3.0	-3.2		
Households <sup>3)</sup>	49.2	0.2	0.4	0.5	0.2	0.1	0.1		
Adjusted for sales and securitisation <sup>2)</sup>	-	1.0	0.8	0.4	0.3	0.4	0.4		
Consumer credit <sup>4)</sup>	11.2	-2.4	-2.9	-3.2	-3.4	-2.6	-2.6		
Lending for house purchase <sup>4)</sup>	73.3	0.7	1.1	1.4	1.1	0.7	0.7		
Other lending	15.5	-0.5	-0.6	-1.0	-0.9	-0.9	-0.7		
Insurance corporations and pension funds	0.9	-9.1	-4.2	6.1	12.2	14.4	12.1		
Other non-monetary financial intermediaries	8.4	-2.8	-1.4	-0.1	-0.2	-5.7	-6.1		

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.

Adjusted for the derecognition of loans from the MFI statistical balance sheet owing to their sale or securitisation. As defined in the ESA 95. Adjusted for the
 As defined in the

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

based across the large euro area countries and were primarily concentrated in short-term loans. The annual growth of loans to households adjusted for sales and securitisation remained unchanged in August at 0.4%, broadly the level observed since the turn of the year. The August flow was moderately positive on account of other lending and lending for house purchase.

Overall, the general profile of loan developments appears to be in line with the patterns observed during previous major slowdowns and recessions (see also Box 1). The ongoing weakness in loans to the private sector continues to reflect net redemptions in loans to non-financial corporations and subdued inflows for loans to households. Loans are dampened by (i) a very low demand for external financing (in the context of subdued fixed investment activity, working capital needs and housing market prospects in some countries); (ii) potential balance sheet adjustment by nonfinancial corporations and households; and (iii) the non-financial corporations' substitution, in some countries, of MFI borrowing with market-based financing and retained earnings. At the same time, in stressed countries, fragmentation and capital shortages continued to weigh on loan supply.

The annual growth rate of longer-term financial liabilities (excluding capital and reserves) declined to -4.4% in August, down from -4.0% in July, thus supporting M3 growth. The monthly flow also remained negative, reflecting further net redemptions in longer-term MFI debt securities. The decline in the money-holding sector's holdings of MFI debt securities reflects funding and regulatory considerations. First, the ongoing deleveraging supports the reduction in market-based funding. Second, changes in liquidity regulation are encouraging banks to replace debt funding with deposit funding. The monthly inflow for longer-term deposits remained modestly negative in August, concealing that households have continued to place funds in longer-term deposits in some countries in recent months. Capital and reserves increased again in August.

The net external asset position of euro area MFIs increased further by  $\notin 23$  billion in August, after having increased by  $\notin 7$  billion in July. The continued capital inflows into the euro area that have been observed since July 2012 are the main factor supporting positive M3 growth, thereby counteracting the negative contribution from the net redemptions in loans to the private sector. In the 12 months up to August, the net external asset position of euro area MFIs improved by  $\notin 281$  billion, compared with an improvement of  $\notin 269$  billion in the 12 months up to July (see Chart 6).

Overall, the latest monetary data support the view that the underlying dynamics of money and particularly credit growth remain subdued. The data also confirm that financial fragmentation in the euro area has continued to recede, while still remaining substantial. More specifically, a number of countries under stress reported further positive monthly flows into their M3 deposits in August and continued to reduce their recourse to Eurosystem funding.



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

#### Box I

#### STYLISED FACTS OF MONEY AND CREDIT OVER THE BUSINESS CYCLE

Over the past three decades, the growth rates of MFI loans to the private sector and the narrow monetary aggregate M1 have displayed relatively robust relationships with the business cycle. In annual growth rate terms, real M1 tends to lead real GDP fluctuations, while MFI loans to non-financial corporations tend to lag the business cycle and MFI loans to households tend to lead slightly, or follow a coincident pattern relative to, developments in real GDP.<sup>1</sup> These relationships to the business cycle tend to be stronger with reference to turning points than to the amplitude of growth. This box revisits the dynamic relationship between these monetary variables and the business cycle in the light of the pick-up in real GDP growth in the second quarter of 2013. It finds that the stylised facts remain valid and explains which forces are currently behind developments in loans and M1. At the same time, some uncertainty characterises these stylised facts, and various factors might lead to deviations from historical regularities.

#### Stylised facts for real M1 growth

Annual M1 growth deflated by the GDP deflator has exhibited strong fluctuations in recent years (see Chart A). Notably, after the decline from 11.8% in the third quarter of 2009 to 0.3% in

1 See also the box entitled "Loans to the non-financial private sector over the business cycle in the euro area", *Monthly Bulletin*, ECB, October 2009, and the box entitled "The informational content of real M1 growth for real GDP growth in the euro area", *Monthly Bulletin*, ECB, October 2008.



Monetary and financial developments

the second quarter of 2011 it started a rebound towards the turn of the year 2011/12, climbing steadily thereafter. It stood at 6.9% in the second quarter of 2013. These developments are broadly in line with the observation that, on average, peaks and troughs in the annual growth rate of real M1 lead corresponding turning points in the annual growth of real GDP by three to four quarters. This relationship is explained mainly by M1 held by the non-financial private sector (see the table). As regards the most recent turning point, using this measure alone corrects for the rise in M1 holdings of large investment funds and other financial intermediaries between autumn 2011 and early 2012 that was driven by liquidity buffer considerations during periods of stress. If such factors are eliminated, the trough in the annual growth rate of real M1 held by the non-financial private sector occurs approximately one year ahead of the turn in the real economy, i.e. in line with historical regularities. In general, this reflects the fact



Sources: ECB, Eurostat, ECB estimates and Centre for Economic Policy Research (CEPR).

Notes: The latest observation is for the second quarter of 2013. Shaded areas delimit recessions according to the chronology of the CEPR Business Cycle Dating Committee for the euro area. Real series have been derived by deflating nominal series with the GDP deflator.

### Stylised facts of narrow money and loans to the private sector in the euro area, 1990-2013

Variable	Average	Standard	Correlation w	ith real GDP	Lead/lag (+/-)
	annual growth rate	deviation relative to real GDP	Maximum correlation (percentages)	Lead/lag (+/-) (quarters)	of turning point relative to real GDP (quarters)
Real GDP	1.6	1.9			
Real M1	4.8	1.9	64	+4	+4
Real M1 held by the non-financial					
private sector 1)	4.6	1.8	68	+4	+4
Real M1 held by households 1)	4.5	1.9	57	+4	+4
Real M1 held by non-financial					
corporations 1)	5.1	2.2	71	+3	+3
Real M1 held by financial institutions <sup>1)</sup>	9.8	5.2	52	+3	+3
Real private sector loans	4.4	1.7	61	-2	-1
Real non-financial corporation loans	4.0	2.3	70	-3	-3
Real non-financial corporation loans					
with a maturity of up to one year	1.9	3.5	83	-3	-2
Real non-financial corporation loans					
with a maturity of over one year	4.7	2.2	51	-3	-3
Real household loans	4.6	1.4	62	0	+2
Real house purchase loans	5.4	1.7	74	+1	+2
Real consumer credit loans	2.6	1.9	56	0	+4
Real other household loans	1.3	1.4	38	0	-1
Real financial institution loans	6.0	6.1	29	-8	-5

Sources: ECB, Eurostat, ECB estimates and ECB calculations.

1) Data are for the period from the first quarter of 1992 to the second quarter of 2013. Notes: All series other than those covered by footnote 1 are for the period between the first quarter of 1990 and the second quarter of 2013. Real series have been derived by deflating nominal series with the GDP deflator. The last column shows the average lead (+) or lag (-) of the peaks and troughs of the monetary and loan series relative to real GDP, identified via the Bry-Boschan algorithm applied to the annual growth rates



that changes in money can lead to changes in private sector portfolios and in yields on financial and real assets, which in turn affect real spending decisions owing to the imperfect substitutability of different assets.

The close link between the turning points in real M1 growth and real GDP growth is also reflected in the dynamic correlation between the two variables (see Chart B). In addition, Chart B confirms that the leading indicator property of M1 is mainly due to the nonfinancial private sector, with both households and non-financial corporations contributing (see also the table).

#### Stylised facts for real private sector loans

Marked cyclical fluctuations also characterise the annual growth rate of real loans to the private sector, although with differences across the main components. Indeed, the annual growth rate of real household loans, which tends to move broadly in line with the business cycle, stabilised in the second quarter of 2013, after falling between the first quarter of 2011 and the first quarter of 2013 (see Chart C). The strong relationship between household loan growth and the business cycle is largely due to loans for house purchase, which are the main component of household loans. Loans for house purchase exhibit a strong correlation with real GDP growth and lead the cycle slightly, by one quarter on average (see Chart D). By contrast, the annual growth rate of loans to non-financial corporations deflated by the GDP deflator, which tends to lag the business cycle by about one year, declined continuously between the last quarter of 2011 and the second quarter of 2013. The strong relationship between real GDP and real loans to non-financial corporations is due mainly to the short-term loan component, i.e. loans with a maturity of up to one year, although the longer-term component is also correlated with the cycle and displays a similar lag (see also the table).



Sources: ECB, Eurostat, ECB estimates and ECB calculations. Notes: Data are for the period between the first quarter of 1990 (except for the sectoral M1 components, which start in the first quarter of 1992) and the second quarter of 2013. Real series have been derived by deflating nominal series with the GDP deflator.

#### Chart C Real household loan growth, real non-financial corporation loan growth and real GDP growth



Sources: ECB, Eurostat and Centre for Economic Policy Research (CEPR). Notes: The latest observation is for the second quarter of 2013

Notes: The latest observation is for the second quarter of 2015. Shaded areas delimit recessions according to the chronology of the CEPR Business Cycle Dating Committee for the euro area. Real series have been derived by deflating nominal series with the GDP deflator.

20 ECB Monthly Bulletin October 2013

Monetary and financial developments

Chart D Correlation between real growth in household loans, real growth in non-financial corporation loans, sub-components of the two series, and real GDP growth for different leads/lags

(correlation between annual percentage changes; percentages)



## Chart E Total financing of non-financial corporations and contributions



Sources: ECB, Eurostat and ECB calculations. Notes: Data are for the period between the first quarter of 1990 and the second quarter of 2013. Real series have been derived by deflating nominal series with the GDP deflator.

Sources: ECB and Eurostat. Note: Data are taken from the euro area accounts.

The lagging pattern of loans to non-financial corporations over the business cycle may have several explanations. For example, during recoveries firms can first finance investment expenditure using their internal funds – as cash flows improve during a recovery – and only later turn to external financing. In addition, especially larger firms may prefer to finance themselves by issuing corporate bonds when capital market conditions are favourable, rather than through increased bank borrowing, in part to limit their exposure to the banking sector. Such behaviour has recently been observed in some euro area countries, although the quantitative impact of this substitution on aggregate euro area loan demand has been modest (see Chart E). Moreover, on the supply side, during a recovery banks may prefer to increase their lending to households before they increase lending to firms, as household loans, notably those for house purchase, are better collateralised.

If historical regularities hold, and assuming that the annual growth rate of real GDP reached a trough in either the fourth quarter of 2012 or the first quarter of 2013, then the second quarter of 2013 may represent the start of a recovery in household loan growth, while non-financial corporation loan growth may continue to fall in the second half of the year and start to recover only in early 2014.

#### Conclusion

The cyclical pattern of money and credit indicators provides useful insights for the assessment of the growth outlook for the euro area economy. Indeed, the leading indicator properties of real narrow money growth for turning points in real GDP growth are robust, which also holds true for the most recent recovery. Moreover, when assessing whether the banking sector is supporting the recovery, rather than delaying it, the lag of growth in loans to non-financial corporations relative to real GDP growth has to be borne in mind. In this respect, it is useful to consider developments in all sources of finance for firms, including internal sources and recourse to the capital market, to assess possible substitution effects.

At the same time, these relationships are not perfectly stable and specific factors can imply deviations from historical regularities. At present, four main special factors may affect these relationships at the euro area level. First, the high indebtedness of various sectors in some countries implies a longer and more extensive deleveraging process than usual. Second, regarding external sources of funding for non-financial corporations, the higher than usual substitution of corporate bond issuance for bank loans may imply a structural shift towards other sources of finance. Third, regarding internal sources of funding, euro area firms have accumulated higher than usual cash holdings, potentially indicating a change in their attitude to financing. Fourth, changes in regulatory requirements for banks may reinforce the move away from bank loans and towards other sources of corporate finance, at least for larger companies. In addition, the still significant level of financial and economic fragmentation in the euro area continues to weigh on loan supply in stressed countries.

#### 2.2 SECURITIES ISSUANCE

In July 2013 debt securities issuance by euro area residents contracted in annual terms, at a slightly higher pace than in the previous month. However, year-on-year growth of debt securities issued by non-financial corporations, although declining further, remained at historically high levels. The annual growth rate of issuance of quoted shares decreased marginally in July, but remained high in the case of MFIs.

#### **DEBT SECURITIES**

In July 2013 the annual growth rate of debt securities issued by euro area residents remained negative at -0.8%, decreasing further from -0.1% in the previous month (see Table 6). Developments

#### Table 6 Securities issued by euro area residents

	Amount outstanding		I	Annual grov	vth rates <sup>1)</sup>	rates <sup>1)</sup>				
	(EUR billions)	2012	2012	2013	2013	2013	201			
Issuing sector	2013 July	Q3	Q4	Q1	Q2	June	Jul			
Debt securities	16,577	3.7	2.9	0.8	-0.1	-0.1	-0.			
MFIs	5,091	3.5	1.2	-3.3	-6.3	-7.2	-8			
Non-monetary financial corporations	3,249	0.9	0.4	0.7	-0.4	0.7	1			
Non-financial corporations	1,041	11.0	12.9	13.4	11.5	10.0	9			
General government	7,196	4.3	4.1	2.6	3.6	3.7	3			
of which:										
Central government	6,527	3.5	3.6	2.6	4.0	4.4	4			
Other general government	669	12.8	9.1	2.4	-0.6	-2.6	-4			
Quoted shares	4,888	1.0	1.0	0.8	0.6	1.2	1			
MFIs	452	5.6	5.2	3.0	2.5	7.6	7			
Non-monetary financial corporations	405	2.9	2.6	2.6	2.6	2.6	1			
Non-financial corporations	4,031	0.3	0.4	0.5	0.2	0.4	(			

Source: ECB.

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



Monetary and financial developments

across sectors were mixed. The annual growth rate of debt securities issued decreased from 10.0% in June to 9.6% in July in the case of non-financial corporations (NFCs), and from -7.2% to -8.7% in that of MFIs. Moreover, the annual growth rate of debt securities issued by the general government decreased to 3.2%, from 3.7% in June. By contrast, debt securities issuance by non-monetary financial corporations gained momentum, with the growth rate standing at 1.2% in July, 0.5 percentage point higher than in June.

The faster annual pace of decline in overall debt securities issuance in July was attributable to a more pronounced contraction in issuance of short-term debt securities (-10.1%, from -9.4% in June) and to a lower annual growth rate of long-term debt securities issuance (0.2%, after 0.8% in June). Refinancing activity remained concentrated on issuance in the long-term segment of the market, notably at fixed rates. Nonetheless, the annual growth rate

Chart 7 Sectoral breakdown of debt securities issued by euro area residents (six-month annualised growth rates: seasonally adjusted) total MFIs non-monetary financial corporations non-financial corporations general government 70 70 60 60 50 50 40 40 30 30 20 20 10 10 0 0 -10 -10 -20 -20 1999 2001 2003 2005 2007 2009 2011 2013 Source: ECB.

of issuance of fixed rate long-term debt securities edged down to 3.2% in July (from 3.6% in June). The annual rate of growth in issuance of floating rate long-term debt securities remained negative, as it has been over the past 12 months, and decreased by a further 0.7 percentage point to -8.6% in July.

Looking at short-term trends, the annualised sixmonth growth rate of debt securities issuance in July stood at -1.2%, 0.4 percentage point lower than that in June (see Chart 7). Over the same period, the corresponding rate increased from 1.7% to 2.3% in the case of non-monetary financial corporations, and decreased from 5.6% to 4.8% in that of the general government. At the same time, the annualised six-month growth rate of debt securities issued declined from 5.5% to 4.9% in the case of NFCs, and from -10.9% to -11.6% in the case of MFIs.

#### **QUOTED SHARES**

In July 2013 the annual growth rate of quoted shares issued by euro area residents decreased slightly to 1.1%, from 1.2% in the previous month (see Chart 8). The annual rate of growth in equity issuance by NFCs fell by 0.1 percentage point, to 0.3%, and that of non-monetary financial institutions declined by 0.8 percentage point, to 1.9%. Conversely, the annual rate of





growth in equity issuance rose by 0.3 percentage point, to 7.9% for MFIs, accompanying the need to consolidate their capital base further, notably in some countries under stress.

#### 2.3 MONEY MARKET INTEREST RATES

While overnight money market interest rates remained broadly stable in September, the money market yield curve flattened. In the ninth maintenance period of the year, which began on 11 September, the EONIA remained at 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 continued early repayment of funds borrowed in the three-year longer-term refinancing operations (LTROs).

Unsecured money market interest rates remained broadly stable in September 2013. On 1 October the one-month, three-month, six-month and twelve-month EURIBOR stood at 0.13%, 0.23%, 0.34% and 0.54% respectively, i.e. 1 basis point lower for the six-month and twelve-month maturities while unchanged for the shorter maturities. Consequently, the spread between the twelve-month and one-month EURIBOR – an indicator of the slope of the money market yield curve – decreased by 1 basis point to stand at 41 basis points on 1 October (see Chart 9).

The three-month EONIA swap rate stood at 0.10% on 1 October, the same level as observed on 4 September. Thus, the spread between the three-month EURIBOR and the three-month EONIA swap rate was also unchanged.

The interest rates implied by the prices of three-month EURIBOR futures maturing in December 2013 and March, June and September 2014 decreased by 3, 6, 10 and 14 basis points

respectively in comparison with the levels seen on 4 September, standing at 0.26%, 0.31%, 0.37% and 0.42% on 1 October.

Between 4 September and the end of the eighth maintenance period of 2013 on 10 September, the EONIA continued to stand at levels around 0.07% amid high levels of excess liquidity. Since the start of the ninth maintenance period the EONIA has been trading at levels between 0.07% and 0.08% (see Chart 10). At the end of the month on 30 September the EONIA spiked at 0.18%.

Between 4 September and 1 October the Eurosystem conducted several refinancing operations. In the main refinancing operations of the ninth maintenance period, conducted on 10, 17, 24 September and 1 October, the Eurosystem allotted  $\notin$ 97.2 billion,  $\notin$ 96.2 billion,  $\notin$ 97.0 billion and  $\notin$ 94.5 billion respectively. The Eurosystem also conducted two LTROs in



24 ECB Monthly Bulletin October 2013

Monetary and financial developments

September, both as fixed rate tender procedures with full allotment, namely a special-term refinancing operation with a maturity of one maintenance period on 10 September (in which  $\in$ 3.4 billion was allotted) and a three-month LTRO on 25 September (in which  $\in$ 8.6 billion was allotted).

The Eurosystem also conducted four oneweek liquidity-absorbing operations on 10, 17, 24 September and 1 October 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.

Counterparties opted to repay, on a weekly basis, additional funds that were borrowed in the three-year LTROs allotted on 21 December 2011 and 29 February 2012 before maturity. As of 1 October, a total of  $\in$ 342.1 billion had been repaid since 30 January 2013. Out of the total



repayments,  $\notin 221.3$  billion related to the LTRO allotted on 21 December 2011, and the remaining  $\notin 120.8$  billion related to the LTRO allotted on 29 February 2012. Thus, of the  $\notin 523$  billion of net liquidity originally injected through the two three-year LTROs, around 65% has been repaid so far.

Excess liquidity remained stable in the eighth maintenance period of 2013, averaging  $\in$ 248.8 billion, which compares to  $\in$ 247.8 billion on average in the seventh maintenance period. Intra-maintenance period fluctuations of excess liquidity were mostly driven by autonomous factors, in particular higher absorption by government deposits. While average daily recourse to the deposit facility decreased to  $\in$ 79.2 billion, down from  $\in$ 82.6 billion in the previous maintenance period, average current account holdings in excess of reserve requirements increased from  $\in$ 165.1 billion to  $\in$ 169.6 billion. During the ninth maintenance period of the year, excess liquidity declined to stand at  $\in$ 221 billion on 1 October, owing mostly to an increase in the liquidity absorbed by government deposits and some further LTRO repayments. Box 2 briefly presents the risk control framework and the latest review.

#### Box 2

#### **REVIEW OF THE RISK CONTROL FRAMEWORK**

To maintain an adequate risk protection of the Eurosystem, the ECB regularly adjusts the eligibility rules and haircuts applied when accepting collateral in the Eurosystem's monetary policy operations. While eligibility rules guarantee that the Eurosystem requirement of high credit standards for all eligible assets is met, an adequate valuation and the application of a haircut

protect the Eurosystem from other sources of risk that could materialise during the liquidation of the pool of collateral after the default of a counterparty. The haircut provides the central bank with a buffer to protect it against losses if the counterparty fails to pay back the loan.

In general, the calibration of haircuts is based on the principles of protection, consistency, simplicity and transparency. In particular, it aims to ensure the equivalence of risk across different types of assets, i.e. that the loss in the value of collateral that the Eurosystem might expect to incur – albeit with low probability – in an adverse scenario is the same for the different asset types. For example, the risk connected with the liquidation of a triple-B-rated covered bond is very different from that associated with the sale of a triple-A-rated government bond – all other factors being equal, the relative secondary market liquidity of the two asset classes differs, as do the risk of a default of the issuer and the volatility of market prices, etc. Accordingly, the haircuts applicable to such covered bonds are higher than those applicable to government bonds in order to align the residual risks inherent in the collateral upon liquidation.

#### **Risk components for determining haircuts**

Haircuts need to cover various sources of risk to collateral that could materialise between the default of a counterparty and the sale of the collateral: such risks emanate from market liquidity conditions, price volatility and even from the possibility of a default on the part of the issuer of the asset. The Eurosystem also takes into account further risks such as exchange rate risk, valuation uncertainty and retention risk, as shown in stylised form in the chart. Following a thorough analysis of these risks on the basis of a broad set of data covering a long time span, which prevents changes to the framework from being pro-cyclical, the Eurosystem regularly revises the schedule of haircuts applicable to collateral accepted in its monetary policy operations. The latest review led to, in particular, changes in the haircut schedule that were announced



6 Monthly Bulletin October 2013

Monetary and financial developments

on 18 July 2013 and to changes in the treatment of the retained covered bonds and asset-backed securities (ABSs).<sup>1</sup>

#### Changes for retained covered bonds

Covered bonds that are pledged as collateral by the issuer, also referred to as "retained" covered bonds, entail additional risk in the case of the default of the counterparty. In fact, the implicit guarantee of the issuer is lost and only the underlying cover pool guarantees for the value of the asset. Accordingly, following the latest review of the risk control framework, the Eurosystem announced the introduction of a valuation markdown of 8% for retained covered bonds in credit quality steps 1 and 2, and one of 12% for retained covered bonds in credit quality step 3.

#### **Changes for asset-backed securities**

In order to increase the transparency of the ABSs accepted as collateral for monetary policy operations, the Eurosystem recently introduced the reporting of information at a loan-by-loan level as an eligibility requirement for ABSs involving any one of six types of underlying assets (loans to small and medium-sized enterprises (SMEs), residential mortgage-backed securities (RMBSs), car loans, leasing receivables, consumer finance and commercial mortgage-backed securities (CMBSs)). Moreover, a number of further requirements were introduced, such as the mandatory notification of planned modifications to an ABS, as well as additional close-link and servicing provisions for ABSs accepted within the scope of the temporary measures. Given that these adjustments have diminished the risks stemming from these securities, the Eurosystem relaxed the eligibility criteria for ABSs, also with a view to bringing them into line with the eligibility criteria of other types of assets. In particular, it replaced the requirement of at least two single-A ratings, reflecting their improved transparency and standardisation. Furthermore, the haircuts applicable to these ABSs were reduced.

Overall, the changes announced on 18 July serve to strengthen the risk control framework and enhance the protection of the Eurosystem, while also improving the framework's overall consistency and expanding the list of collateral accepted within the scope of the Eurosystem's permanent collateral framework.

1 See the press release of 18 July 2013 (available on the ECB's website at: www.ecb.europa.eu).

#### 2.4 BOND MARKETS

In September 2013 bond market developments were influenced mainly by developments in the United States, in particular by the Federal Reserve System's decision of 18 September to leave the volume of its bond purchases unchanged. US long-term government bond yields first rose early in the month, and then declined sharply. In the euro area, AAA-rated long-term government bond yields showed similar but somewhat less pronounced changes. Uncertainty about future bond market developments ended the review period lower in both the United States and the euro area. Intra-euro area sovereign bond yield spreads narrowed for most countries. Financial indicators of long-term inflation expectations remained fully consistent with price stability.

Between the end of August and 1 October, AAA-rated long-term euro area government bond yields declined by around 10 basis points to stand at around 2.0% (see Chart 11). In the United States, long-term government bond yields declined by more than 10 basis points over the same period, standing at around 2.7% on 1 October. In Japan, ten-year government bond yields declined by around 5 basis points and stood at around 0.7% at the end of the review period.

In early September, AAA-rated long-term euro area government bond yields increased slightly, reflecting positive data releases in the United States (see below) and receding geopolitical uncertainties about the Syrian crisis. Later in the month, while euro area data releases were mixed, euro area bond yields declined significantly on account of negative data from the United States, which increased market expectations regarding a continuation in the central bank's accommodative monetary policy. These expectations were confirmed by the Federal Reserve System's decision



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, Germany and the Netherlands.

of 18 September not to start the tapering-off its asset purchases. This decision triggered a further decline in bond yields, not only in the United States, but also in the euro area.

In the United States, developments in long-term bond yields reflected the same factors as those cited for the euro area. However, since most of the factors affected the US economy and financial markets more directly, the movements in long-term US bond yields were more marked than those in the euro area. While US bond yields increased in early September, they declined even more sharply thereafter, notably in response to negative labour market data and the decision of the Federal Reserve System to leave the volume of its bond purchases unchanged. Later in the month, market attention focused on the uncertainty regarding the US federal budget and, all in all, long-term US bond yields ended the review period below their end-August levels.

Investor uncertainty about near-term bond market developments, as measured by the implied volatility extracted from options on bond prices, fluctuated widely in the first half of the review period, primarily reflecting the aforementioned geopolitical tensions and changing market expectations ahead of the meeting of the Federal Open Market Committee (FOMC) on 18 September (see Chart 12). After the FOMC meeting, however, implied-volatility declined both in the euro area and in the United States, to stand at 5.9% and 6.1% respectively at the end of the period under consideration.

In the period under review, both long-term bond yields and their spreads vis-à-vis overnight indexed swap (OIS) rates declined in most euro area countries. The compression of spreads was stronger in the stressed segments of the euro area government bond market, which continued to benefit



Monetary and financial developments

### Chart 12 Implied government bond market volatility

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



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

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



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. Sources: Thomson Reuters and ECB calculations. Note: Real rates have been computed as a GDP-weighted average of separate real rates for France and Germany.

most from the improved economic outlook. However, domestic uncertainties also influenced bond market developments in some euro area Member States in September.

The aforementioned developments in nominal yields on long-term euro area government bonds can also be interpreted in terms of market expectations of real yields and inflation. Developments in real yields, as measured by the yields on inflation-linked government bonds,<sup>1</sup> mimicked those in nominal bonds, as described earlier. Real ten-year yields declined by around 5 basis points to stand below 0.4%, while the real yields on five-year bonds fell by a similar order of magnitude to around -0.4% (see Chart 13). As a result, real long-term forward interest rates in the euro area (five-year forward rates five years ahead) also declined to around 1.1%.

Financial market indicators of long-term inflation expectations in the euro area remained broadly unchanged in September. The five-year and ten-year break-even inflation rates implied by inflation-linked bonds decreased slightly to stand at around 1.3% and 1.8% respectively, as a result of the fact that nominal yields declined slightly more sharply than real yields. The five-year forward break-even inflation rates five years ahead remained broadly unchanged at around 2.3% at the end of the period under review (see Chart 14). The long-term inflation swap rate likewise remained broadly

1 The real yield on inflation-linked euro area government bonds is calculated as the GDP-weighted average yield on French and German inflation-linked government bonds. For more details, see the box entitled "Estimating real yields and break-even inflation rates following the recent intensification of the sovereign debt crisis" in *Monthly Bulletin*, ECB, December 2011.





unchanged at 2.2% over the review period. These developments suggest that inflation expectations remained broadly unchanged in the period under review. Overall, with due consideration of the inflation risk premium, market-based indicators suggest that inflation expectations remain fully consistent with price stability.<sup>2</sup>

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 downwards, thereby contributing to the declines observed in government bond yields.

In the period under review, the spreads of investment-grade corporate bonds issued by non-financial and financial corporations in the euro area (relative to the Merrill Lynch EMU AAA-rated government bond index) remained broadly unchanged, while corporate bond spreads for most rating classes remained below the levels recorded at the beginning of the year.

<sup>2</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, October 2012.



Monetary and financial developments

#### 2.5 INTEREST RATES ON LOANS AND DEPOSITS

In August 2013, MFI lending rates on most loans to households and non-financial corporations declined somewhat. MFI lending rates on loans to households for house purchase edged down in the case of short maturities, while they increased slightly in that of long maturities. Lending rates for both small and large loans to non-financial corporations decreased across all maturities. The spreads between the rates on small and large loans to non-financial corporations remained broadly stable at elevated levels in August.

In August 2013, MFI interest rates on short-term deposits declined, both for non-financial corporations and for households. Short-term lending rates on loans to households for house purchase edged down by 4 basis points, to 2.8% in August, while those on consumer credit remained basically unchanged at the July level of 5.6%. With respect to non-financial corporations, short-term interest rates on large loans (defined as loans of more than  $\in 1$  million) decreased by 13 basis points to 2.1% and those on small loans (i.e. loans of up to  $\in 1$  million) declined by 14 basis points to 3.7% (see Chart 16). Accordingly, the spread between short-term interest rates on large

loans remained broadly unchanged at 162 basis points in August. The magnitude of the spread nonetheless illustrates that financing conditions remain persistently tighter for small and medium-sized enterprises than for large firms.

Overall, given that the three-month EURIBOR remained broadly unchanged in August, the spread between short-term MFI interest rates on loans to households and the three-month money market rate declined to 257 basis points, while the corresponding spread for short-term interest rates on large loans to non-financial corporations narrowed to 187 basis points (see Chart 17).

Taking a longer-term perspective, short-term MFI interest rates on loans to households for house purchase and those on loans to non-financial corporations have both declined by about 70 basis points since the beginning of 2012. The declines reflect mainly 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.

Turning to longer maturities, MFI interest rates on long-term deposits from households declined marginally, namely by 2 basis points

#### Chart 16 Short-term MFI interest rate and a short-term market rate

#### (percentages per annum; rates on new business)



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



### 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







to 2.1% in August. Instead, rates on long-term deposits of non-financial corporations remained unchanged at 1.8%. In the case of loans, interest rates on long-term loans to households for house purchase increased by 7 basis points to 3.0%, while those on large loans to non-financial corporations decreased by 8 basis points to 3.0% (see Chart 18). Long-term rates on small loans to non-financial corporations declined by 4 basis points to 3.2% in August. Hence, the spread between long-term rates on small loans and those on large loans widened slightly from 21 basis points in July to 25 basis points in August, standing 10 basis points below the average recorded over the period since 2003. As the yields on AAA-rated seven-year government bonds rose by about 20 basis points, to 1.5%, in August, the spread between long-term lending rates and the yields on such bonds narrowed in the case of both housing loans and loans to non-financial corporations.

The spread between long-term lending rates and the yields on AAA-rated seven-year government bonds fluctuated, in the course of 2013, between 170 and 250 basis points in the case of loans to non-financial corporations, and between 140 and 210 basis points in the case of loans to households. To a large extent, these fluctuations mirrored the movements in yields on AAA-rated government bonds. The recent narrowing of the spreads reflects primarily the decline in long-term lending rates stemming from the pass-through of past cuts in key ECB interest rates, from the lasting positive effects of the ECB's non-standard measures and from the Governing Council's decision on forward guidance on key ECB interest rates.

Monetary and financial developments

#### 2.6 EQUITY MARKETS

Between the end of August and 1 October 2013, stock prices in the euro area increased by more than 7%. In the United States, stock prices rose somewhat less, by around 4%. Despite rather mixed data releases in September, stock market developments in both areas were supported by the decline of geopolitical tensions in the Middle East and by the decision of the Federal Reserve System to continue with the current pace of asset purchases. Stock market uncertainty, as measured by implied volatility, decreased further over the period under review.

Positive market sentiment continued to support stock prices in major markets in September. Between the end of August and 1 October 2013, stock prices in the euro area, as measured by the broad-based Dow Jones EURO STOXX index, increased by more than 7%. Over the same period, stock prices in the United States, as measured by the Standard & Poor's 500 index, rose by around 4% (see Chart 19), while stock prices in Japan, as measured by the Nikkei 225 index, increased by 8%.

Amid somewhat mixed data releases, stock prices in both economic areas were supported by the prospects of a diplomatic solution to the conflict in Syria, as well as by reduced expectations of a near-term withdrawal of monetary policy accommodation in the United States. The Federal Reserve System's announcement that it would continue with the current pace of asset purchases confirmed those expectations on 18 September.

In the euro area, the improvement in stock prices was broadly spread across all sectors. With gains of almost 8%, financial stock prices outperformed the overall index, with the banking sector possibly benefitting from the support that the European Parliament expressed with regard to the single supervisory mechanism in early September. Non-financial stock prices rose by more than 6%. The best-performing sectors were utilities and telecommunications.

In the United States, the negative effects of weak September labour market data were compensated for by reduced expectations regarding the extent to which the Federal Reserve might taper-off its asset purchases in the near future. This led to an increase in major US indices in the early part of the period under review. In the wake of the decision of the Federal Open Market Committee (FOMC) on 18 September, major indices increased further. The gains in both financial and non-financial stock prices were very similar over the review period as a whole.



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 Japan, stock prices rose by 8%, with financials increasing somewhat more. Market optimism about the prospects for economic growth after the upward revision of the growth figures for the second quarter of the year and the improvement in industrial confidence, as well as the policy measures taken to counter deflation, continued to support stock markets.

Stock market uncertainty in the euro area, as measured by implied volatility, decreased further from around 20% to 16% at the end of the period under review (see Chart 20). In the United States, it decreased from around 15% to less than 14%. In both areas, stock market uncertainty was back to the levels prevailing in early May this year, before the Federal Reserve System announced its intention to consider a reduction of the pace of its asset purchases. Implied volatility in Japan declined as well, but remained somewhat elevated in comparison with previous years.

#### 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 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.

Prices and costs

#### 3 PRICES AND COSTS

According to Eurostat's flash estimate, and broadly in line with expectations, euro area annual HICP inflation decreased in September 2013 to 1.1%, from 1.3% in August. On the basis of current futures prices for energy, annual inflation rates are expected to remain at these low levels in the coming months. Taking the appropriate medium-term perspective, underlying price pressures are expected to remain subdued, reflecting the broad-based weakness in aggregate demand and the modest pace of the recovery. Medium to long-term inflation expectations continue to be 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 was 1.1% in September 2013, down from 1.3% in August. The decline in the inflation rate reflects decreases in the annual rates of change in almost all components. Services price inflation increased in September.

Euro area annual HICP inflation declined considerably in 2013, owing primarily to a marked decrease in energy price inflation from the elevated levels seen in 2012 and 2011. Underlying inflationary pressures, as measured by various HICP exclusion-based measures, have also eased during 2013, in an environment of weak economic activity. At the same time, increases in indirect taxes and administered prices have been keeping 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 0.9% drop in energy price inflation in September. In August the annual rate of change of the energy component fell to -0.3%, from 1.6% in July, as a strong downward base effect masked a month-on-month increase of 0.5%. The decline in the annual rate of change of the energy component was driven by a fall in the annual rate of change in car fuel prices, which was only partially offset by a rise in the annual rate of change in electricity prices.

According to Eurostat's flash estimate, total food inflation, which refers to inflation in both processed and unprocessed food prices, decreased to 2.6% in September. No official information

Table 7 Price developments									
(annual percentage changes, unless otherwise indicated)									
	2011	2012	2013 Apr.	2013 May	2013 June	2013 July	2013 Aug.	2013 Sep.	
HICP and its components <sup>1)</sup>									
Overall index	2.7	2.5	1.2	1.4	1.6	1.6	1.3	1.1	
Energy	11.9	7.6	-0.4	-0.2	1.6	1.6	-0.3	-0.9	
Food	2.7	3.1	2.9	3.2	3.2	3.5	3.2	2.6	
Unprocessed food	1.8	3.0	4.2	5.1	5.0	5.1	4.4		
Processed food	3.3	3.1	2.1	2.1	2.1	2.5	2.5		
Non-energy industrial goods	0.8	1.2	0.8	0.8	0.7	0.4	0.4	0.3	
Services	1.8	1.8	1.1	1.5	1.4	1.4	1.4	1.5	
Other price indicators									
Industrial producer prices	5.8	3.0	-0.2	-0.2	0.3	0.2			
Oil prices (EUR per barrel)	79.7	86.6	79.3	79.2	78.3	81.9	82.6	83.0	
Non-energy commodity prices	12.2	0.5	-3.5	-4.8	-7.4	-12.2	-12.8		

Sources: Eurostat, ECB and ECB calculations based on Thomson Reuters data. 1) HICP inflation and its components (excluding unprocessed food and processed food) in September 2013 refer to Eurostat's flash estimates.


is available with regard to the breakdown of the food components for this month. Unprocessed food price inflation eased from 5.1% in July – the highest rate in more than a decade – to 4.4% in August. This decline was largely determined by a downward base effect, while the monthly rate of change in seasonally adjusted terms was flat. The recent spike in this component was attributable to high fruit and vegetables prices following poor weather conditions. The August data show a marked easing in the annual rate of change for vegetable prices, whereas fruit price inflation remained at historically high levels. Conversely, processed food inflation remained unchanged at 2.5% in August, as tobacco price increases were offset by broad-based declines in the annual rates of change of other sub-components.

HICP inflation excluding food and energy stood at 1.0% in September, down from 1.1% in August, 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, which have developed differently over recent months. According to Eurostat's flash estimate, non-energy industrial goods price inflation decreased to 0.3% in September, down from 0.4% in August. The low level of non-energy industrial goods inflation over the summer months was partially driven by higher than usual discounts for clothing and footwear during the summer sales. In addition, non-energy industrial goods price inflation was kept low by a broad weakening in durable goods inflation over recent months, as well as a sizeable downward base effect for pharmaceutical products in Spain in July. Services price inflation was estimated at 1.5% in September, up from 1.4% in August as well as in June and July. The unchanged inflation rate from June to August masked increases in the annual rate of change of travel related services, which were counterbalanced by declines in the annual rate of change in a broad set of other detailed components, notably communication services.

36 ECB Monthly Bulletin October 2013

#### ECONOMIC AND MONETARY DEVELOPMENTS

Prices and costs

#### **3.2 INDUSTRIAL PRODUCER PRICES**

No new data have become available on industrial producer prices at the euro area level since the September issue of the Monthly Bulletin was published. Available country data suggest that the annual rate of change in euro area producer prices (excluding construction) will most likely decrease and become negative again in August 2013, following positive annual inflation rates in June and July. This decrease is attributable to a downward base effect in the energy component. In July, industrial producer price inflation (excluding construction) was 0.2% year on year, marginally down from June (Table 7 and Chart 23). This decrease reflected marginal declines in all sub-components. Excluding construction and energy, the annual rate of change in industrial producer prices remained unchanged at 0.6% compared with the previous month.

The latest information derived from both the PMI and the European Commission surveys indicates further contained pipeline pressures for HICP non-energy industrial goods prices and moderate pressures for HICP processed food prices. With regard to the PMI (see Chart 23), the input price index for the manufacturing sector increased from 49.9 in August to 51.0 in September and the output price index rose from 49.6 to 50.3. Both indices increased to just above the 50 mark, signalling rising prices, but they nonetheless remain below their long-term average level. Forward-looking European Commission survey data on selling price expectations for total industry remained unchanged in September reflecting stable selling price expectations in the capital and consumer goods industries, while selling price expectations in the intermediate goods industries increased.



FCF

#### 3.3 LABOUR COST INDICATORS

As evidenced by latest data releases, domestic cost pressure stemming from labour cost indicators moderated in the first half of 2013 (see Table 8 and Chart 24).

Wage growth slowed down at the aggregate euro area level in the second 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 divergences at the country level. While nominal wages and unit labour costs are growing very little or are even declining in some euro area countries, wage growth remains relatively robust in others. As total hours worked rebounded strongly in the second quarter of 2013, hourly labour productivity as well as wage growth measured per hour dropped considerably. By contrast,



annual growth in labour productivity per person employed increased to 0.5% year on year in the second quarter of 2013, after remaining constant in the previous quarter.

At the aggregate euro area level, the annual rate of growth in compensation per employee decreased to 1.5% in the second quarter of 2013, from 1.8% in the previous quarter. As compensation per employee grew at a slower pace than productivity, unit labour costs declined from 1.9% in the first quarter of 2013 to 1.0% in the second quarter.

Euro area negotiated wages grew at 1.7%, year on year, in the second quarter of 2013, down from 2.0% in the previous quarter. Preliminary data on negotiated wages for the third quarter of 2013 suggest a continued moderation of this wage indicator in line with weak labour market developments. The annual rate of change in hourly labour costs slowed down considerably by 0.8 percentage point, owing to the marked increase in hours worked. This deceleration in hourly wage growth was observed in the non-business economy, which is dominated by changes in the

#### Table 8 Labour cost indicators

	2011	2012	2012	2012	2012	2012	201.
			Q2	Q3	Q4	Q1	Q
Negotiated wages	2.0	2.1	2.2	2.2	2.2	2.0	1.
Hourly labour cost index	2.2	1.8	2.1	1.9	1.6	1.7	0.
Compensation per employee	2.1	1.7	1.8	1.9	1.5	1.8	1
Memo items:							
Labour productivity	1.3	0.0	0.3	-0.1	-0.2	0.0	0
Unit labour costs	0.8	1.7	1.6	2.0	1.7	1.9	1

Sources: Eurostat, national data and ECB calculations.

#### ECB Monthly Bulletin October 2013

Prices and costs



government sector, as well as in the business economy sector. Within the business economy sector, annual hourly labour cost growth fell strongly in the industrial sector, somewhat less in the services sector, and only marginally in the construction sector. Overall, wages and salaries grew at a much 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

On the basis of current futures prices for energy, annual inflation rates are expected to remain at low levels in the coming months. Taking the appropriate medium-term perspective, underlying price pressures are expected to remain subdued, reflecting the broad-based weakness in aggregate demand and the modest pace of the recovery. Medium to long-term inflation expectations continue to be firmly anchored in line with price stability. Box 3 examines the anchoring of long-term inflation expectations in the euro area and assesses the link between long-term inflation expectations and developments in actual inflation and in short-term inflation expectations. The analysis shows that, historically, agents are responsive to the ECB's track record of inflation performance, when forming and revising their long-term inflation expectations and look through short-term movements in past and expected inflation.

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

#### THE ANCHORING OF LONG-TERM INFLATION EXPECTATIONS IN THE EURO AREA

Long-term inflation expectations in the euro area have remained quite stable over recent years. The average five-year ahead expectation in the Survey of Professional Forecasters (SPF) has remained between around 1.9% and 2.0%, moving only at the second decimal. At the same time, headline HICP inflation has been subject to fairly large fluctuations (see Chart A). A weak nexus between long-term inflation expectations and actual inflation can be seen as one indication of anchored expectations. Against this background, this box assesses the link between long-term inflation expectations and developments in actual inflation and in shortterm inflation expectations.

#### The link with actual inflation developments

Data available for the period of Monetary Union point to a relatively weak link between long-term inflation expectations surveyed in a particular guarter and the latest actual inflation rate known at the time of the survey. More specifically, a linear fit between longterm inflation expectations and actual HICP inflation produces a relatively flat slope (demonstrating a weak link between the two variables), and reflects a low statistical fit for the estimated relationship (see Chart B). Both the link and fit increase with the length of the moving averages of past inflation used in explaining long-term inflation expectations (similar results are obtained when using underlying, rather than headline inflation). For instance, the slope increases significantly when a 20-quarter moving average is used and is highest when using the cumulative average inflation rate, which measures the cumulative average of annual inflation rates calculated for each quarter in the period from the first quarter of 1999 to the third quarter of 2013. The cumulative average inflation rate can be

# Chart A Long-term inflation expectations and HICP inflation

#### (annual percentage changes; Q1 2001 to Q3 2013)



Sources: Eurostat, ECB and SPF. Note: For HICP inflation, the value for the third quarter of 2013 includes the flash estimate for September 2013.

## Chart B Link between long-term inflation expectations and HICP inflation measures

#### (percentages; Q1 2001 to Q3 2013)

x-axis: HICP inflation (actual 20-quarter moving average and cumulative average since Q1 1999), with a lag of one quarter y-axis: long-term inflation expectations (SPF)

- cumulative average HICP inflation
- 20-quarter moving average of headline HICP inflation
- actual headline HICP inflation



Source: ECB calculations

Note: The variables have been standardised by subtracting their mean and dividing by their standard deviation.

Prices and costs

seen as a proxy for the track record – and the resulting credibility – of the ECB's monetary policy in terms of the inflation outcome.

The relationship between long-term inflation expectations and the cumulative average inflation rate over time is shown in Chart C. The September 2013 ECB staff macroeconomic projections for the euro area expect an HICP inflation rate of 1.5% in 2013 and 1.3% in 2014, implying a further slight moderation in cumulative average inflation to below 2% at the end of 2014. On the basis of the historical relationship between this average and longerterm inflation expectations, the latter are likely to decline somewhat further over the projection horizon, while remaining in the range between 1.9% and 2.0%.

#### The link with short-term inflation expectations

The absence of a link between long-term inflation expectations and short-term actual



Sources: SPF and ECB calculations. Notes: The blue dot represents the cumulative inflation value for 2014 based on the September 2013 ECB staff macroeconomic projection. The red dot represents a regression-based forecast for five-year ahead expectations. For HICP inflation, the value for the third quarter of 2013 includes the flash estimate for September 2013

2007

2009

2011

2013



1.6

1.5

2001

2003

2005

Sources: ECB and SPF. Notes: Each data point represents the change in the short-term (x-axis) and long-term (y-axis) inflation expectations of a particular panellist from one survey round to the next. The bars next to the x-axis and y-axis comprise histograms of revisions to one-year ahead and five-year ahead inflation expectations respectively.

1.6

15

inflation developments suggests that agents look through transitory influences on inflation, such as those stemming from commodity price shocks, when forming their long-term inflation expectations. This assertion can be confirmed by considering the link between short-term and long-term inflation expectations: if long-term expectations are well anchored, then five-year ahead inflation expectations should not be correlated with revisions to one-year ahead inflation expectations.

The link between short-term and long-term expectations is assessed on the basis of the individual responses of panellists in the SPF. Each data point in Chart D represents the change in expectations of a particular panellist from one round to the next.<sup>1</sup> The line fitted to the data points is almost horizontal, implying that participants do not revise, on average, their long-term inflation expectations when they reassess their shorter-term projections.<sup>2</sup> This is also reflected in the very different shape of the distribution of revisions to short-term expectations from that of the distribution of revisions to longer-term expectations.

Overall, the analysis presented in this box for the euro area supports the notion that in forming and revising their long-term inflation expectations, agents look through short-term movements in past and expected inflation, but take into account the track record of inflation performance.

- 1 The sample spans the period from the first quarter of 2001 to the third quarter of 2013 and, for consistency, includes only those participants that provided the one-year ahead and five-year ahead expectations in consecutive survey rounds.
- 2 The slope of the linear fit in Chart D is 0.02. The average absolute correlation across SPF participants between revisions to one-year ahead inflation forecasts and revisions to long-term inflation forecasts is somewhat higher but still relatively small, standing at 0.33. It captures the extent to which long-term inflation expectations move in response to changes in shorter-term inflation expectations, irrespective of whether these changes are upwards or downwards.

2 ECB Monthly Bulletin October 2013

#### **ECONOMIC** AND MONETARY **DEVELOPMENTS**

Output. demand and the labour market

#### **OUTPUT, DEMAND AND THE LABOUR MARKET** 4

Following six quarters of negative output growth, euro area real GDP rose, quarter on quarter, by 0.3% in the second quarter of 2013, also supported by temporary factors related to unusually adverse weather conditions in some euro area countries earlier this year. Developments in industrial production data point to somewhat weaker growth at the beginning of the third quarter, while survey-based confidence indicators up to September have improved further from low levels, overall confirming previous expectations of a gradual recovery in economic activity. Looking ahead, output is expected to recover at a slow pace, in particular owing to a gradual improvement in domestic demand supported by the accommodative monetary policy stance. Euro area economic activity should, in addition, benefit from a gradual strengthening of external demand for exports. Furthermore, the overall improvements in financial markets seen since last summer appear to be gradually working their way through to the real economy, as should the progress made in fiscal consolidation. In addition, real incomes have benefited recently from generally lower inflation. This being said, unemployment in the euro area remains high, and the necessary balance sheet adjustments in the public and private sectors will continue to weigh on economic activity. 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 rose by 0.3% in the second quarter of 2013, after having contracted by 0.2% in the first quarter (see Chart 26). Both domestic demand and net trade contributed to growth in the second quarter. At the same time, changes in inventories made a small negative contribution to growth. The increase in GDP in the second quarter is partly attributable to temporary factors related to weather conditions in the first half of the year. In the second quarter of 2013 output still stood slightly less than 3% below its pre-recession peak in the first quarter of 2008. Box 4 looks at various

measures of macroeconomic uncertainty and concludes that uncertainty in the euro area has declined recently.

Private consumption rose by 0.2%, quarter on quarter, in the second quarter of 2013, following six consecutive quarters of falling consumer spending. This most likely reflects rising consumption of retail goods and passenger cars. By contrast, consumption of services is likely to have declined compared with the first quarter.

With regard to the short-term outlook, available information tends, on balance, to suggest broadly stable developments in private consumption. In July the volume of retail sales rose by 0.1%, month on month, to stand at the same level as the average reading recorded for the second quarter of 2013, when they increased by 0.3% quarter on quarter. New car registrations in the euro area stood in July and August on average 0.3% below their average level in the second quarter, when they rose, quarter on quarter, by 2.9%.





FCF



#### Box 4

#### HOW HAS MACROECONOMIC UNCERTAINTY IN THE EURO AREA EVOLVED RECENTLY?

High macroeconomic uncertainty – through its likely adverse effect on the spending decisions of both consumers and firms – is considered to be one of the main factors contributing to the protracted weakness of euro area activity in recent years.<sup>1</sup> Quantifying uncertainty is challenging, as it is not an observable variable but relates to subjective perceptions. It can only be gauged indirectly, and this can be done using various sources.

This box describes recent developments in macroeconomic uncertainty by examining a number of measures of uncertainty compiled from a set of diverse sources, namely: (1) measures of economic agents' perceived uncertainty about the future economic situation based on surveys, (2) measures of uncertainty or of risk aversion based on financial market indicators and (3) measures of economic policy uncertainty.

Starting with the measures of uncertainty related to future economic outcomes, the following three sets of indicators are considered:

 The degree of disagreement about the projections for activity among professional forecasters measured as the standard deviation of the projections from Consensus Economics for annual real GDP growth in the current calendar year and the following calendar year. Forecast disagreement is a popular measure of uncertainty and is available on a monthly basis.

It should, however, be interpreted with some caution.<sup>2</sup> The range of disagreement among forecasters has tended to be higher in periods of recession or weak growth, notably during the 2008-09 recession (see Chart A). More recently, the dispersion of views on the economic prospects for the euro area has narrowed and appears to be broadly in line with pre-crisis levels.

 "Aggregate uncertainty" from the ECB's Survey of Professional Forecasters (SPF). The SPF provides another dimension for measuring forecast uncertainty, as respondents give both a point estimate and a probability distribution around it, which highlights the individual uncertainty of a given forecaster. To obtain a broad measure of uncertainty, it is possible to calculate "aggregate uncertainty", which

ECB Monthly Bulletin October 2013





1 For a discussion of the macroeconomic impact of uncertainty, see, for example, Haddow, A., Hare, C., Hooley, J. and Shakir, T., "Macroeconomic uncertainty: what is it, how can we measure it and why does it matter?", *Quarterly Bulletin*, Vol. 53, No 2, Bank of England, 2013 Q2.

2 For a discussion of uncertainty over a longer time span using primarily data on disagreement among forecasters, see the box entitled "Uncertainty and the economic prospects for the euro area" in the August 2009 issue of the Monthly Bulletin.

#### ECONOMIC AND MONETARY DEVELOPMENTS

Output, demand and the labour market

combines both disagreement among forecasters (see the first set of indicators) and individual uncertainty.<sup>3</sup> In this box, forecasters' uncertainty is measured by the average variance of the aggregate probability distribution surrounding the projections for GDP, HICP and unemployment over four time horizons (current year, one year ahead, two years ahead and long term). Given that the SPF is only available quarterly, the measure can only be calculated at this frequency. Chart B shows the average uncertainty over all variables and horizons, with the shaded areas denoting the full range of individual measures. According to these measures, uncertainty has increased significantly since late 2008 and remains high.

• An indicator capturing the uncertainty of private households and enterprises based on the European Commission's Business and Consumer Surveys.<sup>4</sup> This survey entails some forward-looking questions and respondents can choose between various answers.<sup>5</sup> The heterogeneity of responses, which reflects the dispersion of expectations, is used as a measure of uncertainty. The advantages of this indicator are its monthly availability for all euro area countries and the fact that it aims to measure uncertainty directly at the level of agents who make consumption and investment decisions. Chart C shows that uncertainty among households increased markedly in late 2007 and early 2008. After declining in 2009,



Chart B Aggregate uncertainty of professional forecasters<sup>1)</sup>



(standard deviations from the mean; quarterly data)



Sources: European Commission Business and Consumer Surveys and ECB staff calculations.

3 For a discussion of this measure of uncertainty, see the box entitled "Measuring perceptions of macroeconomic uncertainty" in the January 2010 issue of the Monthly Bulletin.

- 4 See Balta, N., Valdés Fernández, I. and Ruscher, E., "Assessing the impact of uncertainty on consumption and investment", Section I, *Quarterly Report on the Euro Area*, Vol. 12, No 2, European Commission, 2013.
- 5 For industrial firms: "How do you expect your production to develop over the next three months?", with three possible answers ("increases", "remains unchanged", "decreases"); for consumers: "How do you expect the financial position of your household to change over the next 12 months?" and "How do you expect the general economic situation in this country to develop over the next 12 months?", with six possible answers ("gets a lot better")<sup>6</sup>... worse", "gets a little better")<sup>6</sup>... worse", "stays the same", "don't know").

Sources: The ECB's Survey of Professional Forecasters (SPF) and ECB staff calculations. 1) Measured as average variance of the aggregate probability distribution surrounding the projections for GDP, HICP and

distribution surrounding the projections for GDP, HICP and unemployment over four time horizons (current year, one year ahead, two years ahead, long term).

it rose again in 2010-11 and remained high until mid-2013. Businesses' uncertainty about future production increased even more strongly during the 2008-09 recession, but it has recently returned to a level close to its historical average.

Financial market uncertainty or risk aversion measures can be derived from two types of financial market indicators.<sup>6</sup> First, various spreads of asset returns, compared with riskfree assets, could be used; second, measures of implied volatility can also be derived. For example, the option-implied volatility of the exchange rate may provide an indication of companies' uncertainty about future export receipts or the costs of imports. This box uses a set of financial market indicators (implied bond and stock market volatility, implied euro/US dollar volatility and CDS spreads over government bond yields) and a number

# Chart D Financial market uncertainty in the euro area



of systemic stress indicators (exchange rate volatility, equity market volatility, bond market volatility, money market volatility, financial intermediation and a composite systemic stress indicator). In order to mitigate problems related to specific measures, Chart D shows both an average of these measures and their full range. Financial market uncertainty rose sharply during the 2008-09 recession, and again in 2011, but has receded significantly since mid-2012.

Developments in economic policy uncertainty might be illustrated by a recently developed indicator.<sup>7</sup> This measure of uncertainty is an index based on the following underlying components: the newspaper coverage of policy-related economic uncertainty (i.e. the frequency of references to economic and policy uncertainty in ten leading European newspapers) and the disagreement among forecasters as regards the outlook for inflation and budget balances (i.e. a measure of the dispersion of forecasts for each of these two variables in the Consensus Economics survey). These components are aggregated using weights of 50% for the former and 25% for each of the dispersion measures. Data are available for the European Union as a whole, as well as for the five largest EU economies. In this box, a proxy for the euro area is constructed by aggregating the results for Germany, France, Italy and Spain, using GDP weights. Economic policy uncertainty rose significantly during the 2008-09 recession and has moderated somewhat since mid-2011, although it remains above its average pre-crisis level (see Chart E).

The various measures of uncertainty show a significant negative correlation with key macroeconomic variables, such as quarterly growth rates of real GDP, total investment, private consumption and, in particular, total employment. None of the above measures is a perfect proxy for uncertainty and each has disadvantages, as they concern only specific types of economic agents, specific aspects of the economy or specific sources of uncertainty. For this reason,

<sup>7</sup> Baker, S., Bloom, N. and Davis, S., "Measuring economic policy uncertainty", Chicago Booth Research Paper No 13-02, 2013.



<sup>6</sup> See, for example, Popescu, A. and Smets, F., "Uncertainty, risk-taking and the business cycle in Germany", CESifo Economic Studies, Vol. 56, 4/2010.

#### ECONOMIC AND MONETARY DEVELOPMENTS

Output, demand and the labour market









(standard deviations from the mean; quarterly data)



Sources: Consensus Economics, European Commission, ECB financial market database, Baker, Bloom and Davis (2013) and ECB staff calculations. Note: The principal component and the ranges are all based on the full set of individual measures.

it is useful to look at a set of different measures of uncertainty in order to achieve a more representative picture. Furthermore, different sources of uncertainty are not easy to disentangle. For example, forecasts of professional forecasters obviously incorporate expectations of future economic policies, and different beliefs about these policies or their impact can result in disagreement or individual uncertainty. In the same way, financial market-based measures of uncertainty may also be affected by policy uncertainty.

The set of measures described in this box is likely to give a useful indication of the overall degree of uncertainty in the euro area economy. Moreover, while there is some variation among the different measures of uncertainty, they do tend to move together, pointing to the existence of an uncertainty component common to all measures. For this reason, the individual sets of series, as well as the overall set of series, can also be combined using principal component analysis. This is a common statistical technique, which extracts from a set of variables a subset of variables, called principal components, explaining most of the variation of the original dataset.

Chart F shows the range of all considered measures of uncertainty, together with the first principal component that is used as a single summary indicator of uncertainty. Following the outbreak of the financial crisis in 2008, all uncertainty measures showed very similar developments: they rose sharply, with most of them peaking at more than two standard deviations above their respective means in the last quarter of 2008 or in the first quarter of 2009. After falling back somewhat in the course of 2009 and 2010, all indices then rose again in the second half of 2011, against the background of the intensification of the euro area debt crisis.

More recently, the various sets of uncertainty measures have fallen, even though there was a widening of the range around the summary indicator. While financial market uncertainty has

declined significantly and has been below its long-term average since the fourth quarter of 2012, economic policy uncertainty still remains somewhat higher than its pre-crisis average level. Finally, most measures capturing economic agents' perceived uncertainty about the future economic situation have fallen somewhat, albeit remaining at elevated levels.

Overall, the latest developments in the various uncertainty measures suggest that uncertainty in the euro area has declined, which should support economic activity over time. However, it appears that uncertainty in financial markets fell earlier and more significantly than uncertainty about the economic outlook or policy.

Survey data on the retail sector for the third quarter of 2013 suggest that consumption of retail goods remained broadly unchanged (see Chart 27). The Purchasing Managers' Index (PMI) for the retail sector rose from 46.7 in the second quarter to 49.5 in the third quarter. By remaining close to 50, it points to stable sales between the second and third quarters. Moreover, although the European Commission's indicator on confidence in the retail sector rose strongly in the third quarter, it still remains somewhat below its long-term average. Although consumer confidence improved further between the second and third quarters, it is still slightly below its long-term average and thus consistent with ongoing soft dynamics in consumer spending. The indicator on expected major purchases declined somewhat in the third quarter, suggesting that consumers continue to be cautious in deciding whether or not to purchase durable goods.

Gross fixed capital formation rebounded in the second quarter of 2013, rising by 0.3% quarter on quarter, following eight consecutive quarters of decline. With regard to the components of investment in the second quarter, both non-construction and, albeit to a lesser extent, construction investment – each accounting for around half of total investment – displayed positive growth rates on a quarterly basis.

Incoming data on fixed investment provide somewhat mixed signals. Industrial production of capital goods – an indicator of future nonconstruction investment – declined in July 2013, by 2.6% month on month. In the same month capital goods production stood around 2% below its average level in the second quarter of 2013, when it rose by 1.4% on a quarterly basis. While this represents a slow start to the third quarter, strong monthly volatility of production data, particularly in the summer months, calls for a cautious assessment. More timely survey results, which already cover the three months of the third quarter of 2013, paint a somewhat more optimistic picture.

# 



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.

Percentage balances; seasonally and mean-adjusted.
Purchasing Managers' Index; deviations from an index value of 50.

48 ECB Monthly Bulletin October 2013

#### ECONOMIC AND MONETARY DEVELOPMENTS

Output, demand and the labour market

The European Commission's industrial confidence indicator rose between the second and third quarters of 2013, while the manufacturing PMI showed an improvement, reaching an average quarterly reading above the no-growth threshold of 50 for the first time since the second quarter of 2011.

In July 2013 construction production rose further, by 0.3% month on month, following an increase of 0.9% in the previous month. As a result, in July, production in construction stood 1.2% above the average level for the second quarter. However, the construction confidence indicator, published by the European Commission, was still well below its historical average in the third quarter, while the PMI for construction in the euro area stood below 50 in July and August, pointing to continued muted developments in the construction sector.

Euro area trade returned to positive growth in the second quarter of 2013 following two consecutive quarterly declines. Data on euro area trade for the third quarter provide mixed signals. The value of exports and imports of goods declined on a monthly basis in July and the levels stand below the averages for the second quarter. According to short-term indicators, prices in July were broadly stable, indicating that in volume terms trade was subdued. However, more recent survey data show a better picture. The PMI new export orders index for the third quarter was consistently above the expansion threshold of 50 and stood at the highest level since the second quarter of 2011. In addition, the European Commission survey indicator for export order books was also better than it was in the second quarter. Together these indicators suggest that euro area trade will improve gradually towards the end of the year, in line with a moderate expansion of global economic activity.

#### 4.2 SECTORAL OUTPUT

In the second quarter of 2013 real value added increased by 0.3% quarter on quarter, owing to developments in industry excluding construction and services. Value added in construction contracted further in the second quarter.

With regard to developments in the third quarter of 2013, production in the industrial sector (excluding construction) declined by 1.5%, month on month, in July. As a result, production stood in July more than 1% below its average level in the second quarter. This is a depressed start to the third quarter and a worsening compared with the quarterly increase of 0.6% in the second quarter of the year (see Chart 28). Meanwhile, the ECB indicator on euro area industrial new orders (excluding heavy transport equipment) declined by 0.8%, month on month, in July, following a smaller increase in June. The level of orders therefore stood some 0.5% below its level in the second quarter, when it rose by 0.7% on a quarterly basis. Survey data, which are available up to September, point towards a continued small expansion of industrial sector output in the third quarter (see Chart 29). For example, the PMI manufacturing output index rose between the second and third quarters of 2013, reaching a level above the expansion/contraction threshold of 50.

Production in construction rose by 0.3% in July, increasing to 1.2% above the level reached in the second quarter of the year. However, further weak results from more timely surveys point to a feeble underlying growth momentum, consistent with ongoing weakness in the construction sector.



The PMI index of activity in business services increased between the second and third quarters of 2013, reaching a level slightly above 50, indicating a small increase in output in the services sector in the third quarter. Other business surveys, such as those of the European Commission, paint a similar picture.

#### 4.3 LABOUR MARKET

Employment declined again in the second quarter of 2013, while more recent data suggest that the unemployment rate has broadly stabilised at a high level. Survey data have improved, but point nonetheless to further job losses in the third quarter of 2013.

In the second quarter of 2013 the level of employment fell for the eighth consecutive quarter, by 0.1% quarter on quarter (see Table 9). At the sectoral level, the latest decline reflects employment cuts in the industrial sector, while employment remained unchanged in the services sector. By contrast, hours worked rebounded, rising by 0.6% quarter on quarter in the second quarter. Although survey results have recently improved, they still point to continued weak labour market developments in the third quarter of 2013 (see Chart 30).

Productivity per person employed rose by 0.5% in annual terms in the second quarter of 2013, which is higher than in the previous quarter of last year (see Chart 31). The latest increase was concentrated in services and construction, while productivity remained broadly stable in the



#### **ECONOMIC** AND MONETARY **DEVELOPMENTS**

Output, demand and the labour market

### Table 9 Employment growth

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

	Persons							Hours		
	Annua	l rates	Quarterly rates			Annual rates		Quarterly rates		
	2011	2012	2012 Q4	2013 Q1	2013 Q2	2011	2012	2012 Q4	2013 Q1	2013 Q2
Whole economy of which:	0.3	-0.7	-0.3	-0.4	-0.1	0.3	-1.5	-0.7	-0.9	0.6
Agriculture and fishing	-1.9	-1.9	-0.8	-1.6	1.5	-3.1	-2.9	-0.7	-0.4	0.7
Industry	-1.1	-2.1	-0.9	-0.8	-0.6	-0.8	-3.4	-1.1	-1.5	0.9
Excluding construction	0.1	-1.0	-0.6	-0.5	-0.3	0.8	-2.1	-0.8	-1.1	1.3
Construction	-3.8	-4.7	-1.6	-1.7	-1.2	-3.9	-6.1	-1.9	-2.4	0.0
Services	0.8	-0.2	-0.1	-0.3	0.0	0.8	-0.8	-0.6	-0.7	0.6
Trade and transport	0.7	-0.8	-0.4	-0.3	-0.1	0.5	-1.7	-1.1	-0.7	0.6
Information and communication	1.3	1.2	0.7	-0.2	0.2	1.4	0.5	-0.1	-0.2	0.8
Finance and insurance	-0.4	-0.4	-0.1	-0.2	-0.3	-0.3	-0.9	-0.7	-0.5	0.3
Real estate activities	0.5	-0.3	-0.6	-0.7	0.4	1.2	-1.1	-1.5	-0.9	1.2
Professional services	2.5	0.7	-0.3	-0.6	0.3	2.8	0.3	-0.7	-0.9	0.7
Public administration	0.3	-0.3	0.1	-0.1	0.0	0.5	-0.6	0.2	-0.6	0.5
Other services <sup>1)</sup>	0.1	0.7	-0.2	0.0	-0.1	0.1	-0.1	-0.8	-0.5	0.1

Sources: Eurostat and ECB calculations. 1) Also includes household services, the arts and activities of extraterritorial organisations.

industrial sector excluding construction. Reflecting the sharp increase in hours worked in the second quarter, the annual growth rate of hourly labour productivity declined by 0.9 percentage point to 0.3% between the first and second quarters. Looking ahead, the PMI productivity index points to positive, albeit moderate, productivity growth in the third quarter of 2013.

The unemployment rate, which declined in July for the first time since February 2011, remained unchanged at 12.0% in August. However, the number of unemployed declined in August, month on





month, for the third month in a row. The latest reading for the unemployment rate is 4.7 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

Developments in industrial production data point to somewhat weaker growth at the beginning of the third quarter, while survey-based confidence indicators up to September have improved further from low levels, overall confirming previous expectations of a gradual recovery in economic activity. Looking ahead, output is expected to recover at a slow pace, in particular owing to a gradual improvement in domestic demand supported by the accommodative monetary policy stance. Euro area economic activity should, in addition, benefit from a gradual strengthening of external demand for exports. Furthermore, the overall improvements in financial markets seen since last summer appear to be gradually working their way through to the real economy, as should the progress made in fiscal consolidation. In addition, real incomes have benefited recently from generally lower inflation. This being said, unemployment in the euro area remains high, and the necessary balance sheet adjustments in the public and private sectors will continue to weigh on economic activity.

The risks surrounding the economic outlook for the euro area continue to be on the downside. Developments in global money and financial market conditions and related uncertainties may have the potential to negatively affect economic conditions. Other downside risks include higher commodity prices in the context of renewed geopolitical tensions, weaker than expected global demand and slow or insufficient implementation of structural reforms in euro area countries.





### COMMODITY PRICES AND THEIR ROLE IN ASSESSING EURO AREA GROWTH AND INFLATION

Over the past decade commodity prices have witnessed stronger upward trends, greater comovement and higher volatility. It is likely that these features have mainly reflected the increased alignment of developments in commodity markets with those in global economic activity (in particular in the case of emerging economies). The changed nature of commodity price developments has potential implications for the assessment of the euro area's economic outlook. In particular, assumptions made with respect to this outlook for the future development of commodity prices may be surrounded by more uncertainty than previously. Overall, it is always necessary to conduct a careful analysis of the underlying factors driving commodity prices in order to assess the implications for medium-term price stability and to determine the appropriate monetary policy response to changes in commodity prices.

#### **I** INTRODUCTION

Developments in international commodity prices play an important role in the assessment of both the outlook for euro area inflation and the risks to price stability in the medium term. This assessment entails the need to identify the nature of commodity price movements, the channels through which they affect the economy and their relative importance. The purpose of this article is to identify recent changes in the nature of commodity price movements and their potential implications for assessing the outlook for economic growth and inflation in the euro area if these changes were to become permanent.

To this end, the article is structured as follows. Section 2 reviews the pattern of commodity price movements and discusses factors that may explain any changes in this pattern. There is some evidence of a stronger trend increase in commodity prices since the early 2000s coupled with higher volatility and stronger co-movement across individual commodity prices. Changes in global demand for commodities, in particular the increasing role of emerging economies as importers of commodities, may account for these changes. Section 3 describes what the changed nature of commodity price movements implies for the assessment of the economic outlook for the euro area. These implications range from arriving at adequate assumptions for future commodity prices in the context of macroeconomic projections to the consideration of a wider set of channels through which commodity price developments may influence domestic activity and inflation. Changes in the nature of commodity price developments and their impact on the economy may also have implications for the conduct of monetary policy. Section 4 concludes.

#### 2 COMMODITY PRICES IN THE 2000S: WHAT HAS CHANGED?

After a period of relatively stable developments until the early 2000s, there was a broad-based increase in international commodity prices (see Chart 1). Taking 2003 as a dividing line between these two periods, the aggregate commodity price index – comprising energy, food and metals – increased by, on average, 0.6% in annual terms in the ten years up to 2003, while it has increased by, on average, 10% per annum in the ten years since then.<sup>1</sup> The change in commodity price dynamics is visible across all categories of commodities, although it has been somewhat more pronounced for energy and metals than for food. The same pattern prevails when looking at commodity prices relative to global output price or consumer price developments. Obviously, changes in real or

<sup>1</sup> The year 2003 is often chosen in the literature as the point after which oil prices started to follow an upward path, driven by unexpected strong growth in oil demand (see, for example, Kilian, L. and Hicks, B., "Did Unexpectedly Strong Economic Growth Cause the Oil Price Shock of 2003-2008?", *Journal of Forecasting*, Vol. 32, Issue No 5, August 2013, pp. 385-394).





relative commodity price trends over the period since 2003 cannot be taken as firm indications of truly secular trends. After recovering from the lows reached following the 2008 financial crisis, commodity prices broadly stabilised again amid some volatility since mid-2010.

Commodity prices have also become more volatile over the past decade (see Chart 2). Approximating volatility by rolling standard deviations, there was an upward shift in average volatility in the period after 2003. Again, this is a feature that is visible across all categories of commodities, and it prevails when looking beyond the particularly high volatility recorded in 2008. Overall, the fact that both changes in medium-term trends and more short-run volatility were discerned in the data marks a difference compared with historical commodity price behaviour.

Explaining such changes in trends and volatility is arduous as - by nature - international commodity prices are driven by a large range of supply and demand-related factors in the global economy. At the same time, some of these factors may have a greater bearing on trends than on volatilities, or vice versa. Similarly, some factors may be more relevant for price movements of specific commodities, while others tend to influence prices of all commodities alike. Such distinctions can help in identifying relevant factors.

With regard to the common trend across prices of different commodities in the 2000s, this is likely to reflect demand factors that stem from broad macroeconomic conditions in the world economy. In particular, as the demand for commodities tends to be closely related to global production and income developments, the strong economic growth in emerging economies such as China and India gave rise to more persistent upward pressures on commodity prices.<sup>2</sup> Industrialisation tends to go

2 On the relevance of demand from emerging economies in explaining the development of oil prices between 2003 and 2008, see, for example, Kilian, L. and Hicks, B., loc. cit.





Notes: Data are weighted by purchasing power parity. The last observation is that for the first quarter of 2013

hand in hand with a higher commodity intensity in production, and improvements in income levels tend to coincide with commodity-impacting changes in consumption patterns, such as preferences related to transportation, housing or diet.

In the ten years up to 2003 emerging economies accounted for, on average, around half of global real GDP growth, while their share in the period since then has risen to four-fifths (see Chart 3). The relationship with commodity consumption can be exemplified by the case of oil. In 2003 non-OECD countries accounted for somewhat less than 40% of total oil consumption, while ten years later, this figure already stood at almost 50% (see Chart 4). In addition, energy intensity is higher in emerging markets than in the euro area. For example, total primary energy use per unit of GDP was 12% in the euro area in 2010, compared with 14% in Brazil, 18% in India and 26% in China.

In combination with a somewhat lagging supply, the significant increases in emerging economies' demand for commodities caused the prices of energy, food and metals to increase in parallel between 2003 and 2008. In the case of oil, these sharp and unexpectedly strong increases in demand reduced the spare capacity of OPEC countries as the supply of oil accommodated that higher demand. A decline in global growth and the subsequent drop in commodity demand after the financial crisis also explain why commodity prices plunged in 2008. Given the relatively swift recovery in demand for commodities from emerging economies, commodity prices recovered relatively quickly from early 2009.

In addition to the aforementioned demand factors, supply-side factors also had an impact on the trend in commodity prices. In the case of energy commodities such as oil or gas, these supply-side

Commodity prices and their role in assessing euro area growth and inflation



factors relate mainly to technological advances, for example "fracking",<sup>3</sup> that allow a greater degree of substitution between energy sources and effectively provide a backstop to scarcity-related trends in prices of individual energy commodities.

As regards the higher volatility of commodity prices in the period since 2003, one explanation is the impact of the global recession, but other factors could also be at play. For instance, many supply-side factors have a commodity-specific nature and tend to account for volatility and one-off movements in prices, rather than for medium-term trend developments. Where energy commodities are concerned, such supply-side factors can be changes in, and disruptions to, production as a result of, for example, political instability in energy-exporting countries or decisions by OPEC countries with regard to the management of spare capacity. In the case of food commodities, supply-side factors are frequently related to abrupt changes in weather conditions and their possible consequences in the form of droughts or floods. Finally, in the case of metal commodities, supplies depend on, among other factors, technological progress and events such as strikes in the relevant mining sector. Examples of such supply-side factors can be found throughout the 2000s, but there is no clear evidence that their impact on the respective commodity prices was any different from that in earlier periods.

Yet another factor that might increase the volatility of commodity prices relates to changes in the price elasticity of commodity supply or demand, although its importance in explaining commodity price volatility in general is still unclear. In the case of oil, however, there is empirical evidence that variations in the price elasticities of oil demand and supply create periods of elevated oil price

<sup>3</sup> Fracking or hydraulic fracturing is a technique for oil and gas extraction whereby a mixture of water, sand and chemicals is pumped into shale or tight formations at ultra-high pressure, creating small fractures that free up oil and gas. This technique has led to a boom in the production of shale gas and oil, primarily in the United States. This shale gas and oil production revolution, in contrast to many other supply-side developments, has mainly had an impact on the medium-term trend development of oil prices.



Commodity prices and their role in assessing euro area growth and inflation

volatility. This, in turn, can reflect the structure of production, possible recourse to alternative sources or spare capacity, the management of commodity stocks and inventories and, more generally, the impact of macroeconomic uncertainty.<sup>4</sup>

Finally, increases in the very short-term volatility of commodity prices may be related to what is known as "financialisation". This refers to the increased use of commodities as financial assets and to the active management of these assets in futures markets, which might affect, for example, oil price fluctuations at very short horizons.<sup>5</sup> Investment in commodities has increased over the 2000s. The empirical verdict is still out on the relevance of financialisation in explaining commodity price volatility and on the direction in which it works. However, there seems to be some evidence that financialisation has caused a stronger correlation between the short-term movements in prices of different types of commodities.<sup>6</sup>

Overall, over the past ten years commodity prices have exhibited some changes in behaviour. In particular, strong demand for commodities from emerging market economies appears to have resulted in the prices of different types of commodity moving in a more synchronised fashion – both with regard to higher shorter-term volatility and the overall rate of increase.<sup>7</sup> If shocks to commodity prices tend to occur more simultaneously, the consequences for inflation and economic growth in commodity-importing countries such as the euro area may be amplified.

#### 3 THE CHANGED NATURE OF COMMODITY PRICE MOVEMENTS: WHAT IMPLICATIONS DOES THIS HAVE FOR THE ASSESSMENT OF THE EURO AREA'S ECONOMIC OUTLOOK?

Movements in commodity prices play an important role in the assessment of the economic outlook for the euro area. This relates, first, to the technical assumptions on future commodity price developments, as they are typically used as so-called exogenous variables in forecasts and projections. Second, it relates to the direct and indirect effects that movements in commodity prices have in the underlying analytical frameworks and, third, to the conduct of monetary policy. Changes in the nature of commodity price movements, as witnessed over the past ten years, may have implications for the reliability of the assumptions, the analytical frameworks used for gauging future developments and the conduct of monetary policy.

<sup>4</sup> See Van Robays I., "Macroeconomic uncertainty and the impact of oil shocks", Working Paper Series, No 1479, ECB, Frankfurt am Main, October 2012 for an empirical analysis where declines in the price elasticity of oil supply and demand caused by greater macroeconomic uncertainty, as measured by volatility in GDP growth, leads to higher oil price volatility. Everything else being equal, a lower price elasticity in the supply of commodities implies a more marked effect on prices in the event of a commodity demand shock. These two factors, i.e. larger shocks and a changed price elasticity of supply and demand, might explain volatility in commodity prices over the economic growth cycle.

<sup>5</sup> See, for example, "Report of the G20 Study Group on Commodities", November 2011.

<sup>6</sup> For an overview, see Kilian, L., Fattouh, B. and Mahadeva, L., "The Role of Speculation in Oil Markets: What Have We Learned So Far?", *The Energy Journal*, Vol. 34, No 3, July 2013, pp. 7-33. Stronger commodity price co-movement can, for example, be explained by the increased popularity of commodity index funds, which simultaneously track movements in prices of different types of commodity. In this respect, it has been shown that prices of non-energy commodities, in particular those included in commodity index funds, have become increasingly correlated with oil prices since the early 2000s (see Tang, K. and Xiong, W., "Index Investment and the Financialization of Commodities", *Financial Analysts Journal*, Vol. 68, No 6, November/December 2012, pp.54-74).

<sup>7</sup> This stronger general co-movement can be captured in markedly higher pair-wise correlations of commodity prices. In the period from 1992 to 2003 the correlation was negative (-0.37) between energy and food, marginally positive (0.08) between energy and metal and somewhat more positive (0.56) between food and metal. By contrast, in the period from 2003 to 2013 the correlations between the different pairs of commodity prices were all between 0.85 and 0.93. A caveat to these calculations is that the second period includes the recession of 2008 and 2009, when there was a strong demand-driven decline in all commodity prices which dominates the rest of the sample.

#### 3.1 IMPLICATIONS FOR THE TECHNICAL ASSUMPTIONS MADE IN PROJECTIONS

The Eurosystem staff projections assume that commodity prices evolve in line with the prices set in futures markets. In the case of oil, the *h*-period forecast of the price of oil is derived from the price of the oil futures contract at maturity *h*, based on the assumption that the futures price is equal to the expected spot price of oil. However, the futures prices of risky assets such as oil can deviate from the expected spot price as a result of a risk premium component. Moreover, unlike classic financial assets, storable commodities carry additional costs, such as storage costs, and benefits, such as holding physical inventories for consumption, normally referred to as the convenience yield. Typically, the risk premium and the convenience yield components are larger than the cost component, which causes oil futures prices to be lower than current oil prices and to follow a slightly downward sloping path (see Chart 5).<sup>8</sup>

As long as movements in oil prices tend to be very short-lived and fluctuate around some recent, relatively stable level, the assumption based on futures prices tends to imply relatively small errors. By contrast, when oil price developments are characterised by (piecewise) trends and volatility that includes swings that, despite extending over several quarters, are unexpected, the assumption based on the futures prices observed in recent history can quickly become outdated.<sup>9</sup> In this respect, the



Chart 5 Futures prices for Brent crude oil



Note: The futures curves reflect the assumptions in the biannual Eurosystem staff projections made at the time.

- 8 This situation, whereby the futures contract of oil is traded at a lower price than the spot contract in the oil market, is referred to as "backwardation". If the reverse occurs, when spot prices are higher than futures prices because of, for example, high storage costs, the oil market is in "contango".
- 9 Alquist and Kilian show that the inaccuracy of the futures-based prediction is driven by the variability of the spread between the futures and the spot price, see Alquist, R. and Kilian, L., "What do we learn from the price of crude oil futures", *Journal of Applied Econometrics*, Vol. 25(4), February 2010, pp. 539-573.

#### ECB Monthly Bulletin October 2013

Notes: The forecasting error is the percentage deviation of the actual oil price from the one-year-ahead projection made for the second and fourth quarter of each calendar year. A positive error thus denotes an underestimation of the actual oil price. See also the article "An assessment of Eurosystem staff macroeconomic projections", *Monthly Bulletin*, ECB, May 2013.

Commodity prices and their role in assessing euro area growth and inflation

pronounced movements in oil prices in response to the global growth cycle in the period between 2007 and 2011 were not anticipated by oil futures. These errors in projecting oil prices (see Chart 6) contributed significantly to the overall error in projections of HICP inflation. Overall, since 1999 oil price assumptions implied a marked downward bias, resulting in a downside bias also in inflation projection errors by Eurosystem staff.<sup>10</sup>

Futures prices are also used by Eurosystem staff as assumptions for the projection of both food commodity prices and prices of non-energy hard commodities such as metals. In the case of the latter, however, this assumption only applies to the first part of the projection horizon, while prices of non-energy hard commodities further out are assumed to evolve in line with global economic activity. This switch reflects the lack of depth in the futures markets for these commodities at longer horizons and the risk that prices are determined by only a few contracts and trades. At the same time, given the stronger co-movement that commodity prices in general have had with global economic activity and, in particular, with the contribution from emerging economies, a stronger link of assumptions regarding future commodity prices with those relating to global economic activity might reflect the changed nature of commodity price movements also in the case of oil and food. Where energy commodities are concerned, the substitution of different types of energy can also lead to relative price changes. For example, fracking technologies can increase the demand for gas relative to that for oil, thereby putting downward pressure on oil prices. While such factors could be reflected by making commodity prices endogenous to the system and thereby including demand-side factors, it is not straightforward to find a model that significantly improves the out-ofsample forecast performance compared to futures prices.

In the case of food commodity prices, developments in international prices are used by Eurosystem staff to derive predictions of so-called EU farm-gate prices, which are in turn used as the assumptions for food commodity prices that are relevant in the context of the EU's Common Agricultural Policy. EU farm-gate prices tend to move closely in line with international commodity prices when prices are above the intervention level determined in the context of this policy (see Box 1). The general upward trend in commodity prices since 2003 has led to levels of international food commodity prices that are well above the intervention levels, and has thus strengthened the impact of global food commodity-related assumptions on the economic outlook for the euro area.

10 For more details, see the article "An assessment of Eurosystem staff macroeconomic projections", *Monthly Bulletin*, ECB, Frankfurt am Main, May 2013.

#### Box I

### FOOD COMMODITIES AND THE COMMON AGRICULTURAL POLICY

In 2007-08 global food commodity prices rose sharply. Consumer prices of food in Europe were visibly affected. The magnitude of this effect came as a surprise. In the past, consumer prices of food within Europe had generally moved modestly in response to movements in international food commodity prices. The Common Agricultural Policy (CAP) had largely shielded them from world market developments. This box looks at the design of the CAP, and at the effects that changes to it can have on the pass-through of international food commodity prices.

Designed around 1960 to secure food supplies and the income of farmers, the CAP relies, among other measures, on "intervention prices". If the price of a product falls below the intervention price, the product is bought into publicly-funded inventories at the intervention price. This system therefore has the potential to ensure relatively high prices within the European Union when compared with marketdetermined prices, but it can also depress world market prices if excess supplies are exported, possibly with the help of subsidies.

European farm-gate prices, which follow the intervention prices, were generally higher than international food commodity prices and also more stable than the latter until 2007 (see the example of skimmed milk powder in the chart). They have been found to better explain developments in consumer prices of food both in the euro area and in individual euro area countries than international commodity quotations.<sup>1</sup>





Over time, adaptions to the CAP measures meant that world market prices had greater influence. Among other things, intervention prices were reduced, while world prices rose. This caused European farm-gate prices to be somewhat lower than in the past, although they remained higher than world market prices. Thus, when world market prices started to increase sharply at the end of 2006, intervention prices provided no effective limit and European farm-gate prices moved more or less in parallel with international commodity prices.<sup>2</sup> A similar picture has been observed since the end of 2009. As can be expected when markets become more open, prices along the European food supply chain have also become less stable.<sup>3</sup> At the same time, publicly-funded inventories have been reduced.

In the light of the changed situation, some supply-restricting measures under the CAP were suspended. Moreover, it was announced that others would be phased out over the longer term. Intervention prices are still in place, but they stand at rather low levels. Thus, even though there are still some differences, European farm-gate prices have been more closely synchronised with international commodity quotations since the end of 2006, with European consumer prices of food consequently also moving more in line with international food commodity prices since then.

- 2 For a discussion of the causes of the increase in world food prices, see the box entitled "What accounts for the global surge in food prices", *Monthly Bulletin*, ECB, Frankfurt am Main, June 2008.
- 3 In its evaluation of CAP measures in the dairy sector, the European Commission came to the conclusion that there was greater volatility in EU milk producer prices after the reduction of intervention prices than previously (see "Evaluation of CAP measures applied to the dairy sector, final report", European Commission – Directorate-General for Agriculture and Rural Development, November 2011). In the study undertaken by the National Bank of Belgium (see footnote 1), it was also found that the frequency of adjustments to Belgian consumer prices of certain food products had increased significantly since mid-2007.



<sup>1</sup> See Annex D in "Processed food: inflation and price levels", *Economic Review – Special Edition*, National Bank of Belgium, April 2008, pp. 53-72, and Jiménez-Rodríguez, R., Ferrucci, G. and Onorante L., "Food price pass-through in the euro area: the role of asymmetries and non-linearities", *Working Paper Series*, No 1168, ECB, Frankfurt am Main, April 2010.

#### 3.2 IMPLICATIONS FOR THE ANALYTICAL FRAMEWORKS

When assessing the impact of shocks to commodity prices on the economic outlook, it should be borne in mind that macroeconomic models tend to imply a clear-cut and differential reaction of output growth and inflation to changes in international commodity prices: an upward shock leads to higher inflation and lower output. For instance, Eurosystem macroeconomic models imply that a permanent increase of 10% in oil prices (denominated in US dollars) has a cumulative upward impact of about <sup>1</sup>/<sub>2</sub> percentage point on euro area HICP inflation over a three-year horizon (with the oil price level also playing a role), and a cumulative downward impact of around <sup>1</sup>/<sub>4</sub> percentage point on euro area real GDP growth.<sup>11</sup>

It should be noted that such a countermovement of inflation and economic growth is not always observed in practice. The actual movement of the various variables will depend, inter alia, on the extent to which the commodity price movements intrinsically come together with movements in global growth. If oil prices are driven by stronger global growth, their movement may be associated with increases in euro area growth, even if the rise in oil prices, all other things being equal, has a dampening effect on euro area growth.

Commodity price shocks can influence euro area economic growth and inflation via a number of different channels. These channels are often intertwined, as the impact on economic activity, for instance, tends to materialise predominantly through real incomes and thus through the impact of commodity prices on inflation (see Chart 7).

Direct effects on inflation occur, for instance, when commodity prices have an immediate bearing on consumer prices. This is most obvious in the case of energy commodities, where changes in oil and gas prices are transmitted more or less directly to consumer prices for fuel or heating. However, it also holds true for some food commodity prices, such as meat prices, that may directly affect consumer prices for unprocessed food. Indirect effects occur when commodity prices have an impact on consumer prices essentially via the production and distribution chain. Examples are the influence of energy commodity prices on consumer prices for transportation services via fuel prices or on consumer prices for non-energy industrial goods via producer prices for energy-intensive products such as chemicals. Similar considerations hold for the impact that food commodity prices have on consumer prices for processed food. So-called second-round effects capture the reactions of wage and price-setters to the direct and indirect effects of a commodity price shock, for instance, if they attempt to keep their real wages and profits unchanged. Such dynamics could cause higher inflation expectations and could thus transform temporary commodity price shocks into more persistent inflationary pressures.

The changed nature of commodity price movements in terms of stronger growth trends, greater comovement and higher volatility could alter these channels in several ways.

First, if commodity prices are subject to a trend, they will become a systematic component of inflation. As energy prices have risen relative to other prices over the past decade, the share of energy in the overall HICP is now higher than it was, for example, in the early 2000s (11.0% in 2013 compared with 8.4% in 2000). With a relatively low price elasticity of most commodity consumption, this results in an increasing importance of commodity prices for overall HICP inflation and, consequently, in an increasing relevance for monetary policy.

11 See "Energy markets and the euro area economy", Occasional Paper Series, No 113, ECB, Frankfurt am Main, June 2010.

ARTICLES

Commodity prices and their role in assessing euro area growth and inflation



Second, upward trends in, and the co-movement of, commodity prices may give rise to stronger second-round effects in terms of inflation expectations and knock-on effects for wage/price dynamics. For example, energy and food are frequently and out-of-pocket purchased items, the prices of which may at times have a stronger bearing on inflation perceptions and expectations.

Third, if the level of commodity prices ultimately moves up over time, the impact for the same percentage change in the price will possibly vary. In the case of energy prices, such level-dependent impacts are associated not only with the fact that the share of energy in the HICP tends to rise with the oil price, but also with the presence of fixed excise taxes in consumer energy prices that imply a larger direct impact of oil price changes on consumer prices at higher price levels (see Box 2).

Fourth, a trend and greater co-movement of commodity prices will amplify the price shocks for industries with broad-based commodity inputs and make it more difficult for them to absorb the overall cost pressures in their profit margins. For instance, industries engaged in energy-intensive manufacturing of metal products will be more strongly affected by a joint and possibly more persistent upward movement in prices of energy and metal commodities. Depending on the interlinkages between these industries and the rest of the economy, indirect effects and their spillovers will be more likely to occur.

Commodity prices and their role in assessing euro area growth and inflation

Finally, a higher volatility of commodity prices may increase the need for hedging instruments or inventories in importing countries, and could thus add an additional layer to commodity and material-related input costs.

#### Box 2

#### **OIL PRICE EFFECTS AND TAXES**

The most immediate and strongest impact of oil commodity prices on euro area inflation comes through their direct effects on energy prices. This box assesses the role that indirect taxes play in this impact. Given differences in their nature and structure, as well as in the degree of data availability, consumer prices are considered separately for oil products such as transport fuel – both petrol and diesel – and heating fuel.<sup>1</sup>

Consumer prices of fuel are generally subject to two forms of indirect taxes: (i) ad valoremtype taxes (generally value added tax – VAT), which is levied as a percentage (e.g. 20%); and (ii) excise or other taxes that are generally levied as a fixed amount per unit consumed (e.g. 50 cent per litre). Everything else being equal, higher excise-type taxes tend to reduce elasticity, i.e. the percentage response of consumer prices to a given percentage change in commodity prices.

Table A presents a stylised decomposition of consumer prices of liquid fuel, namely petrol, diesel and heating fuel, comparing the figures for 2012 with those recorded in 1999.<sup>2</sup> In 1999 indirect taxes accounted for most of the final consumer price (for around 70% in the case of transport fuel

- 1 For a detailed discussion of consumer prices of energy in the euro area, see Task Force of the Monetary Policy Committee of the European System of Central Banks, "Energy markets and the euro area macroeconomy", *Occasional Paper Series*, No 113, ECB, Frankfurt am Main, June 2010.
- 2 For a more detailed discussion, see the box entitled "Recent developments in consumer prices for oil products", *Monthly Bulletin*, ECB, Frankfurt am Main, October 2012.

(annual averages; cent per	litre unless	otherwi	se indicat	ed)								
	Tra	ransport fuel – petrol		Transport fuel – diesel			Heating fuel – gasoil					
	199	1999 2012		1999 2012		12	1999		2012			
	cent/l	%	cent/l	%	cent/l	%	cent/l	%	cent/l	%	cent/l	%
(1) Crude oil	10.7	12	55.0	33	10.7	16	55.0	37	10.7	35	55.0	55
(2) Pre-tax consumer	23.6	27	73.3	45	21.5	33	77.6	53	17.6	58	73.1	73
price incl. margins												
(3) Taxes	63.5	73	91.0	55	43.5	67	69.5	47	12.8	42	26.7	27
of which:												
Excise duties	50.0	57	63.4	39	33.4	51	45.1	31	8.2	27	10.2	10
VAT rate (%)	18.2		20.2		18.3		19.9		18.2		19.7	
VAT	13.4	15	27.6	17	10.1	15	24.4	17	4.7	15	16.4	16
(4) Final consumer price	87.1	100	164.3	100	65.0	100	147.1	100	30.5	100	99.8	100

#### Table A Decomposition of average euro area consumer prices of liquid fuel

Sources: Bloomberg, Thomson Reuters, the European Commission's weekly oil bulletin and ECB staff calculations.

and for 40% in that of heating fuel). Since then, although excise taxes per litre have increased in nominal terms (from 50.0 cent to 63.4 cent for petrol, from 33.4 cent to 45.1 cent for diesel and from 8.2 cent to 10.2 cent for heating fuel), they have remained more or less unchanged in real terms (i.e. deflated by overall HICP). As VAT is levied as a percentage, the amount of VAT levied can vary on account of a change in either the rate of VAT levied or the price. Thus, the amount of VAT levied would have

to crude o	l prices		
(percentages)			
	HICP Weight (2013)	1999	2012
Petrol	} 5.0	14	4
Diesel	J 5.0	19	4
Heating fuel	0.9	41	6

Source: ECB calculations.

increased substantially, even without a change in VAT rates, as a result of the increase in oil prices. However, over and beyond this, between 1999 and 2012 there was also an increase of 2 percentage points in the average rate of VAT applied to prices of petrol and diesel and an increase of 1 percentage point in that applied to heating fuel prices. Overall, taxes have risen for all types of fuel, but their share in the final selling price has declined.

In terms of their share in final consumer prices, indirect taxes still accounted for a substantial proportion of liquid fuel prices in 2012 (for, on average, approximately 50% of transport fuel prices across the euro area). Although there have been some increases in energy taxes, particularly in more recent years – reflecting fiscal pressures – they are not the main cause of the sharp increase in consumer prices of energy observed since 1999. For transport fuels, excise taxes have remained broadly unchanged in real terms since then, and owing to the marked increases in oil prices and the more modest increases in distribution costs and margins, their share in final consumer prices has declined substantially. Consequently, reflecting the fact that the elasticity of consumer prices with respect to energy commodity prices is mainly a function of the amount of non-ad valorem-type indirect taxes such as excise taxes and the response of margins, Table B illustrates that the estimated elasticity of consumers' liquid fuel prices with respect to crude oil prices rose significantly between 1999 and 2012.<sup>3</sup> This increase in the elasticity is due primarily to the increase in the level of oil prices.

3 A somewhat similar phenomenon has occurred in the case of consumer prices of gas and electricity, whereby the increase in the prices of commodity inputs as a percentage of the final consumer price has caused their elasticities to increase as well. For a more detailed discussion of consumer prices of gas and electricity, see the box entitled "Non-oil energy price developments", *Monthly Bulletin*, ECB, September 2008.

The impact of commodity price movements on economic activity, as measured by real GDP, materialises mainly via real income effects.<sup>12</sup> If the cost increases implied by higher commodity prices are buffered by profits and/or wages, entrepreneurial and/or household incomes will decline and typically have negative repercussions on investment and consumption. If the cost increases lead to higher output prices and if these dampen demand, producers will adjust the quantity of output, and the associated investment and employment levels. This, in turn, will again have effects on real incomes and real GDP.

12 A prominent real income effect for the economy as a whole is captured in the negative terms-of-trade effects implied by commodity price movements. However, this effect may be mitigated if the higher revenues in countries that export commodities are used for imports from countries that import commodities, an example of which would be what is known as "oil bill recycling" (see Box 3 of the article entitled "Oil prices – their determinants and impact on euro area inflation and the macroeconomy", *Monthly Bulletin*, ECB, August 2010).



Commodity prices and their role in assessing euro area growth and inflation

The transmission channel to economic activity can be modified in several ways owing to the changed nature of commodity prices.

First, investment in machinery may have been made in view of the marginal productivity of such investment, which may, in turn, depend on the level of energy commodity prices. If commodity prices are subject to a trend, a higher level may render energy-intensive investment unprofitable and lead to faster depreciation and scrapping, complementing income and demand-related effects on investment. In this respect, the ultimate impact of such depreciation on actual and potential output depends on the possibilities for countering high commodity prices either by reducing the intensity of energy use, by substituting one energy commodity for another or by replacing more energy-intensive investment with less energy-intensive investment.

Second, the increased co-movement of commodity prices may limit the possibilities available for replacing a given source of commodities with another. For instance, the prices of perceived backstop technologies such as biofuel or shale gas may move in the same way as established energy commodities (although possibly at a different level) and then imply responses in real income and activity to commodity price movements, also over longer horizons where substitution possibilities would normally loosen the link.

Third, the higher volatility of commodity prices may have a direct impact on firms' and households' perceptions of uncertainty regarding the general economic environment and, everything else being equal, result in a higher degree of apprehension in their decisions on investment and consumption.

Overall, given the stronger upward trend in commodity prices, it is likely that longer-term factors become more relevant for the impact on inflation and economic growth. In the case of inflation, this is due to the risk of a stronger link between commodity price developments and medium-term inflation expectations. In the case of economic growth, it is due to the possibility of reducing commodity intensity or resorting to alternative commodity inputs (see Box 3). The latter should become easier at higher prices, as the deployment of alternative sources would then be more profitable.

#### Box 3

#### **ENERGY INTENSITY IN EURO AREA OUTPUT**

Permanent increases in the relative price of commodities provide an incentive to reduce the intensity of use of such commodities in production and consumption. This box reviews developments in this intensity over past decades, using energy as an example.

The absolute use of oil products has decreased by 9% since 1970, while that of total energy products has increased by almost 50%. At the same time, the share of units of oil used in total output has declined by around 60%, while that of energy units has fallen by 40% (see chart).

However, this secular decline in the intensity of oil use took place at different speeds across the period under consideration. After the oil price shocks of the 1970s, the intensity declined rapidly

in the course of the 1980s, but levelled off during the period of relative oil price stability in the 1990s. The 2000s saw a renewed decline in intensity as oil prices embarked on a strong upward trend from 2003. The decoupling of the intensity of use of oil products from that of total energy products in the 1980s points to substitution processes in energy commodity use. While the decoupling stalled during the 1990s, there are signs that it may have resumed again in the 2000s in response to the increase in oil prices.

Overall, the data suggest that the impact of high and upward trending oil prices on economic growth in the euro area over longer horizons may partly be contained by adjusting the intensity of use of oil commodities. However, where commodity prices follow similar trends, the incentive to substitute one type of energy commodity for another depends on the relative level of the price per unit of the different energy commodities.



tons of oil equivalent divided by GDP. Total primary energy supply is defined as production plus imports minus exports adjusted for stock changes.

#### 3.3 IMPLICATIONS FOR MONETARY POLICY

Commodity price shocks have the typical features of supply shocks, whereby output and inflation move in the opposite direction. Supply shocks thus represent a far greater challenge for monetary policy than demand shocks, which are characterised by inflation and output moving in the same direction. This implies that, while a prompt monetary policy response to demand shocks can stabilise inflation and, at the same time, reduce economic fluctuations, the policy response to supply shocks may require a more gradual response in order to avoid unnecessary volatility in real activity. However, such a gradual response is only warranted as long as inflation expectations remain well anchored.

There are several classification systems that can be helpful when thinking about the appropriate policy response to commodity price shocks. One is based on the likely features of the shock itself, i.e. whether it will be short-lived or will last for a prolonged period of time, or even contain a trend component. Assessing this requires detailed knowledge of the structural features of commodity markets and of the likely evolution of related global supply and demand conditions.

Short-lived shocks or other one-off changes in the level of commodity prices may not necessarily call for a policy response, as medium and long-term inflation expectations may be more likely to remain well-anchored, especially in the case of strong central bank credibility with respect to ensuring price stability. However, the presence of a trend component in shocks to commodity prices may require a different monetary policy response. Such longer-lasting supply shocks may have a systematic impact on inflation and could affect inflation expectations, meaning that monetary policy should respond to them.



Commodity prices and their role in assessing euro area growth and inflation

The contribution of the energy component – which captures the unavoidable direct impact of oil price movements – to euro area HICP inflation explains roughly one-quarter of average HICP inflation recorded over the period since 2003, even though the weight of energy in that measure of inflation is only one-tenth. The implicit relative price increase curtailed the scope for price increases in the domestic economy, calling for a monetary policy stance that appropriately counterbalances the permanent effect on inflation over the medium term.

The ECB's monetary policy strategy incorporates some features that specifically help to address the challenge raised by commodity price shocks. The first feature is the quantitative definition of price stability, which provides an anchor for inflation expectations. The ECB defines price stability in terms of headline



inflation, which takes movements in commodity prices into account, and hence has to explain its policy response in terms of this indicator. The second feature is its medium-term orientation, whereby the duration of the period over which price stability should be maintained is not predefined, but rather reflects the nature and persistence of the shocks that hit the euro area. In addition, the risk assessment of the outlook for price developments conducted by the Governing Council at its monetary policy meetings explicitly takes into consideration the uncertainty involved in deriving assumptions for future commodity price developments.

With its medium-term orientation, the ECB's monetary policy strategy looks through fluctuations in the HICP inflation rate caused by short-term changes in commodity prices. Medium-term inflation expectations in the euro area since 1999 have remained well anchored, notwithstanding sizeable fluctuations in HICP inflation rates (see Chart 8), reflecting the high degree of credibility of the ECB with respect to the achievement of its primary objective. This stability in inflation expectations in turn prevented short-term gyrations in commodity prices from becoming entrenched through second-round effects in wage and price setting.

Finally, other policy areas can support the conduct of a monetary policy that is geared to maintaining price stability in the presence of commodity price shocks. Fiscal policies need to avoid having a budgetary policy stance that is too accommodative, as this could have a destabilising effect, delaying structural adjustment and prolonging inflationary pressures. Structural policy also has to play its part. Structural reforms, particularly those related to the flexibility of the labour and product markets, would facilitate the economy's adjustment in the event of commodity price shocks.

#### 4 CONCLUSIONS

Over the past decade commodity prices have increased sharply and have become more volatile. At the same time, commodity markets have increasingly been influenced by global demand conditions, resulting in stronger correlations across commodity prices. This implies that shocks to commodity prices now occur in a more synchronised fashion. These changes, if they persist, may have implications for inflation and growth in commodity-importing countries such as the euro area. They also require a careful analysis in order to determine the appropriate monetary policy response.

This article reviewed the implications of the changed nature of commodity price movements for the assessment of the economic outlook in the euro area. Conventional assumptions for commodity prices that are based on futures prices may become outdated more quickly when commodity prices are subject to unexpected trends and high volatility. The marked changes in commodity prices observed over the past decade have shown that futures prices have generally under-predicted actual prices and have thereby contributed significantly to the overall error in HICP inflation projections.

The ECB's economic analysis has to take into account uncertainties in the outlook implied by the specific nature of commodity price shocks. The quantitative definition of price stability, which provides an anchor for inflation expectations, and the medium-term orientation of monetary policy, whereby the length of the period covered reflects the nature and persistence of the shocks that hit the euro area, are features in the ECB's monetary policy strategy that specifically help to address the challenges raised by the changing nature of commodity price shocks. In addition, the risk analysis to the staff projections conducted by the Governing Council has regularly pointed to risks to commodity prices as being relevant for the setting of monetary policy. Overall, benefiting from these features of its strategy, despite the upward trend in commodity prices in recent years, the ECB's Governing Council has successfully maintained inflation rates on average close to 2% in the period since 1999.



### REFERENCE INTEREST RATES: ROLE, CHALLENGES AND OUTLOOK

Reference interest rates are frequently used interest rates that link payments in financial contracts to standard money market interest rates. They serve as benchmarks for determining payments on wholesale and retail loans, on floating rate notes and on derivatives contracts aimed at managing interest rate risk. They are also entrenched in the global financial system via their usage in the valuation of financial instruments and as a basis for performance measurement. This article reviews the role traditionally played by reference rates, with a particular focus on the role that EURIBOR plays in the monetary policy transmission mechanism in the euro area. Based on the recent evidence of manipulation of reference interest rates and declining activity in the underlying market, the article summarises the ECB's views on the current debate on the possible options to reform these reference rates, as well as the initiatives taken by the ECB to establish commonly agreed principles that will strengthen the existing governance framework and to develop a next generation of reference rates that are better anchored to observable transactions and more representative of the underlying market conditions. It also presents some preliminary results of the transaction data collection exercise that was carried out by EURIBOR-EBF and supported by the ECB in order to assess the scope for a transaction-based reference rate that could act as a credible substitute for EURIBOR. The article concludes that, while the reforms already implemented or to be introduced represent significant progress in terms of strengthening the governance framework, restoring credibility and reducing the risks of manipulation, further steps need to be taken to explore alternative reference rates that are more transaction-based and that could be a potential substitute for the current reference rates. The article also concludes that reference interest rates reflecting banks' unsecured funding costs will continue to play an important role, although they will probably need to be complemented by alternative reference rates so that users can choose reference rates that better match their needs.

#### I INTRODUCTION

Reference interest rates (in particular TIBOR<sup>1</sup>, LIBOR<sup>2</sup> and EURIBOR<sup>3</sup> are interest rates that link payments in a financial contract to standard money market interest rates. Given the growing importance of these reference interest rates within the financial community over time, the transmission of monetary policy is significantly influenced by the link between key reference interest rates and the central banks' key policy interest rate. Since the 1990s reference interest rates based on unsecured interbank lending and borrowing have become dominant, as they facilitate the management of banks' funding risks owing to the role that banks play in credit channeling. This has made reference rates an essential tool in the transmission of monetary policy decisions along the yield curve, thereby affecting the investment decisions of many economic agents.

The allegations that have emerged since 2012 relating to the manipulation of key reference rates such as TIBOR, LIBOR and EURIBOR have triggered a widespread debate on the appropriateness of the process used to set reference interest rates. Yet this debate is supplemented by a more fundamental question on the continuous representativeness of the interest rates used at present, given the ongoing decline in the underlying market volumes and higher concentration. The ECB believes that there is significant scope to reform these reference rates further. Taking into account

#### ARTICLES

Reference interest rates: role, challenges and outlook

<sup>1</sup> TIBOR stands for "Tokyo interbank offered rate". Since 1995 it has been administered by the Japanese Bankers' Association. For further information, see http://www.zenginkyo.or.jp/en/tibor/the\_jba\_tibor/index.html

<sup>2</sup> LIBOR stands for "London interbank offered rate". It has thus far been administered by the British Bankers' Association, but its administration will be transferred to NYSE Euronext Rates Administration Limited by early 2014. For further information, see http://www.bbalibor.com/news

<sup>3</sup> EURIBOR stands for "euro interbank offered rate". Since 1999 it has been administered by EURIBOR-EBF. For further information, see www.euribor-ebf.eu

the importance of these reference rates in the implementation and transmission of monetary policy, any reform should distinguish between short-term, governance-enhancing measures aimed at immediately increasing market confidence in these rates and more medium to long-term measures aimed at making reference rates more transaction-based and more representative.

The aim of this article is thus threefold. First, to recall the purpose and role of reference interest rates such as EURIBOR in the euro area and their importance from a monetary policy perspective (see Section 2). Second, to explain the background behind the current debate on the appropriateness and representativeness of the reference interest rates (see Section 3). Third, to present the various initiatives taken by the official sector, including the Eurosystem, to enhance the integrity of current reference interest rates and to encourage the adoption of more transaction-based ones (see Section 4). In conclusion, the article draws some conclusions on what has been achieved thus far and the tasks that lie ahead (see Section 5).

#### 2 TRADITIONAL ROLE OF REFERENCE RATES

To understand the importance and social value of reference interest rates such as TIBOR, LIBOR and EURIBOR, it is first essential to recapitulate the evolution of banks' funding over time, which in the 1990s gradually moved from a bank-based financial system towards a market-based financial system. Reference interest rates, such as LIBOR or EURIBOR's predecessors in the euro's legacy currencies, were initially created in the late 1980s in the context of syndicated loans as a more transparent and cost-efficient way for banks to pass on their funding costs to their customers by adding a spread to a reference rate representative of their marginal funding costs. The standardisation of the pass-through rate in financial contracts also led to the emergence of derivatives, initially in the form of forward rate agreements (FRAs) and then swaps. These derivatives allowed banks to offer fixed rate loans while hedging their variable funding costs.

#### 2.1 ROLE, NATURE AND CALCULATION OF REFERENCE RATES

Reference interest rates are snapshot assessments of certain market rates. Traditionally their role has been to determine the pay-offs of standardised financial contracts by applying a formula to the value of one or more underlying asset or price.

Based on the ESMA-EBA Principles for Benchmark-Setting Processes in the EU,<sup>4</sup> several different roles in the rate-setting process can be identified. First, there is the so-called reference rate administrator, which is the legal entity that sponsors the creation and operation of the reference rate. It is also responsible for the calculation of the reference interest rate, as well as the methodologies and governance of the rate-setting process. Second, there are the contributors, i.e. the legal entities which contribute to the reference data used in the reference rate calculation process. Third, there is the calculation agent, which is the legal entity that calculates the reference rate based on the data submitted by the contributors. This entity may coincide with the administrator or be a third party to which the administrator has assigned this role. Finally, there is the publisher, which is the legal entity that makes the reference rate values available via publicly accessible media.

Based on the data used to calculate the reference interest rates, a distinction can be made between transaction-based reference rates, which are based on the rates applied to actual transactions, and

4 For further information, see www.esma.europa.eu/system/files/2013-659\_esma-eba\_principles\_for\_benchmark-setting\_processes\_in\_ the\_eu.pdf



Reference interest rates: role, challenges and outlook

quote-based reference interest rates, which are based on estimates of the rates at which transactions can be executed. Depending on the data submitted, unsecured market reference rates can be further differentiated between reference rates for lending and borrowing.

For example, in the specific case of the euro area and EURIBOR, EURIBOR-EBF<sup>5</sup> is the benchmark administrator, while Thomson Reuters is the calculation agent and publisher that uses data submitted by a panel of contributing banks. EURIBOR is a quote-based reference rate and is calculated as a trimmed mean after the elimination of the top and bottom 15% of the contributions. Contributions are based on the following definition: "EURIBOR® is the rate at which Euro interbank term deposits are offered by one prime bank to another prime bank within the EMU zone, and is published at 11:00 a.m. (CET) for spot value (T+2)."<sup>6</sup> It does not necessarily refer to the interbank lending rates of the contributing bank, but rather to those at which euro interbank term deposits are offered by one prime bank within the euro area.<sup>7</sup>

TIBOR, administered by the Japanese Bankers Association, is based on quotes the panel of contributing banks provide on the basis of what "they deem to be prevailing market rates, assuming transactions between prime banks". There are two types of TIBOR rate, namely the Japanese Yen TIBOR and the Euroyen TIBOR, depending on whether the quotes provided refer to the Japanese unsecured call market or the Japanese offshore market.

In contrast with EURIBOR and TIBOR, LIBOR, which has so far been administered by the British Bankers' Association (BBA)<sup>8</sup> and is calculated and published by Thomson Reuters, is based on the answers provided by a panel of banks to the question: "At what rate could you borrow funds, were you to do so by asking for and then accepting inter-bank offers in a reasonable market size just prior to 11 a.m.?". Therefore, submissions are based on the lowest perceived rate at which a bank on a certain currency panel could access the interbank money market and obtain sizeable funding for a given maturity. LIBOR refers to the estimated borrowing costs charged to contributing banks and may therefore have a stronger signalling effect on the creditworthiness of these banks. Such signalling effects may have increased the incentives to manipulate individual submissions during the financial crisis.

The euro overnight index average (EONIA) is a transaction-based interest rate used for the euro area overnight segment of the money market. It is calculated by the ECB, with EURIBOR-EBF as the benchmark administrator and Thomson Reuters as the publisher, as a weighted average of the interest rates on unsecured overnight lending transactions denominated in euro reported by a panel of contributing banks. The ECB's role as the calculating agent of EONIA stems from the high level of confidentiality required for the handling of the submissions of individual bank transaction data, as well as the need to ensure that the data are treated with the utmost confidentiality by an impartial third party. The transaction-based nature of the submission minimises the extent of the subjectivity implicit in quote-based systems, reduces the risk of manipulation – although it does not eliminate it – and facilitates the ex post validation process.

<sup>5</sup> EURIBOR-EBF is an international non-profit-making association that was founded in 1999 with the launch of the euro. Its members are the national banking associations of those EU Member States that have adopted the euro.

<sup>6</sup> See http://www.euribor-ebf.eu/euribor-org/about-euribor.html

<sup>7</sup> The concept of a prime bank has recently been clarified in the Code of Conduct as "a credit institution of high creditworthiness for short-term liabilities, which lends at competitive market related interest rates and is recognised as active in euro-denominated money market instruments while having access to the Eurosystem's (open) market operations." The concept of an interbank deposits has also been clarified in the Code of Conduct as "a cash deposit between two credit institutions, maturing by one year from inception."

<sup>8</sup> On 9 July 2013 the board of the BBA voted unanimously to approve the transfer of the administration of LIBOR to NYSE Euronext Rates Administration Limited. The BBA will hand over the administration of LIBOR to that entity following approval by the United Kingdom's Financial Control Authority. The transition to the new administrator is expected to be completed in early 2014.
#### 2.2 RELEVANCE OF REFERENCE RATES FOR EURO AREA MARKETS

Through hedging activities (via swap and FRA contracts), there is a close link between cash (spot and term) deposit interest rates and the derivatives segments of the money market. Transactions in the cash and derivatives segments of the money market (in the euro area and other jurisdictions) are conducted mainly over the counter (OTC), which makes it difficult to trace the rates and volumes of the transactions made. This, in turn, increases the importance of having a reliable benchmark reference on a term that is representative of the funding conditions for financial contracts (retail loans, wholesale banking activities, syndicated loans) as well as OTC financial derivatives (FRAs, short and long-term swaps, swaptions) and exchange-traded financial derivatives (futures contracts and options on those futures contracts).<sup>9</sup>

In the case of the euro area, EONIA is the usual reference interest rate for euro overnight indexed swaps (OISs). EURIBOR serves as a pricing benchmark for variable rate loans and mortgages, and is the reference rate for most interest rate swaps (IRSs) and other OTC-traded derivatives, such as FRAs, and exchange-traded short-term interest rate futures contracts. The creation and trading of these instruments has developed rapidly on account of their potential for leveraging and hedging interest rate risk.<sup>10</sup>

According to the latest data available from the BIS, at the end of 2012 the notional amount<sup>11</sup> outstanding of single-currency OTC interest rate derivatives (FRAs, swaps and options) was USD 489.7 trillion.<sup>12</sup> Of this total, the largest shares by currency were the notional amounts referenced to euro interest rates (equivalent to USD 187.4 trillion, of which USD 137.6 trillion were IRSs, USD 25.6 trillion FRAs and USD 24.2 trillion interest rate options), which were greater than the amounts referenced to US dollar rates (USD 148.7 trillion). There is broad consensus in the market that the main reference rate underlying euro interest rates is EURIBOR, although there is no mention of this in the BIS data. With regard to exchange-traded interest rate derivatives, data published by Euronext show that the total notional amount of the three-month EURIBOR futures contracts traded on the LIFFE exchange in London in 2012 amounted to €178.7 trillion and that of EURIBOR options on futures was €70.7 trillion. These contracts are primarily, although not exclusively, used by banks to hedge a significant part of their balance sheet against interest rate risk while performing their maturity transformation function.

However, the traditional role of reference interest rates based on the unsecured interbank market is currently being challenged by the developments that have occurred since the onset of the financial crisis. First, the relationship between market reference rates and the individual cost of funding has been significantly weakened, as the latter reflects more frequently country-specific or bank-specific factors. Second, in terms of banks' funding, there has been a gradual, albeit significant, shift from the unsecured to the secured segment. In this regard, declining volumes and the higher concentration have called into question the representativeness of reference interest rates.<sup>13</sup> These developments may undermine the benefits of using reference rates or lead banks to charge higher spreads on

<sup>13</sup> See also the discussion in Brousseau, V., Chailloux, A. and Durré, A., "Fixing the Fixings: What Road to a More Representative Money Market Benchmark?", *IMF Working Paper*, No. 13/131, May 2013.



<sup>9</sup> For a full description of the LIBOR-type fixings, see Gyntelberg, J. and Wooldridge, P.D., "Interbank rate fixings during the recent turmoil", *Quarterly Review*, BIS, March 2008.

<sup>10</sup> Options now exist on both IRSs and futures contracts, which are the starting point of the price formation mechanism of market-implied volatilities for euro interest rates.

<sup>11</sup> The notional value is the nominal amount of the asset, reference rate or index underlying a derivative financial instrument. It is different from the market value that results from the netting of the respective obligations of the buyer and of the seller of the contract, which represents the replacement cost of a given contract transacted at a given price at any point in time.

<sup>12</sup> BIS data covering the G10 countries since the end of June 1998, as well as Australia and Spain from December 2011.

#### ARTICLES

Reference interest rates: role, challenges and outlook

market reference rates to compensate for adverse changes in their own refinancing costs and hedge their basis risk.

The volatility of banks' credit risk premia has also highlighted the credit risk component embedded in these rates, making them less appropriate as a proxy for risk-free rates, as they used to be perceived. In turn, the growing awareness of the credit risk component embedded in traditional unsecured market reference interest rates has pushed up demand for reference interest rates, such as OISs, to be as risk-free as possible and not to reflect the term, liquidity and credit risk premia embedded in traditional unsecured market reference interest rates. In particular, such OIS rates have increasingly been seen as more appropriate for evaluating centrally cleared standardised OTC derivatives and OTC derivative positions based on comprehensive collateralisation arrangements.

### 2.3 IMPORTANCE OF REFERENCE INTEREST RATES FROM THE MONETARY POLICY PERSPECTIVE

From the ECB's perspective, EURIBOR and EONIA are of crucial importance for the efficient functioning of both the euro area and the international financial system. Their role has evolved over time, together with their standardisation and the increased liquidity and availability of financial instruments referring to them. Monetary policy decisions and market expectations of the future path of policy rates are directly reflected in the interest rates that serve as a reference for highly liquid and standardised derivative products, such as FRAs, futures and IRSs. In turn, these form the basis for the pricing of various, usually less liquid, marketable debt instruments, thus influencing financing and credit conditions.

Given the crucial role of EONIA and EURIBOR in the formation of both euro money market interest rates and market expectations regarding the future values of short-term interest rates, they also play an essential role in the interest rate channel, which transmits the monetary policy stance along the yield curve. Over time, they have therefore gained a social function and are now a public good. Both interest rates help to ensure a homogeneous pricing benchmark for the entire money market yield curve across the euro area.

Today, the existing reference interest rates for the unsecured market are still used as a standard in the financial industry, despite the decreasing turnover in the underlying market. As reported in the table, almost 60% of total loans to non-financial corporations in the euro area were floating rate loans at the end of March 2012; their interest rates were hence referenced mostly to EURIBOR. At the same time, the proportion of floating rate loans in total loans to households was lower, at 40%, although it had been rising over time. It is also interesting to note that these average figures for the euro area conceal significant differences between countries.

Share of floating rate loans in total loans for the euro area										
(data as of March 2012; percentages)										
	EA	AT	BE	DE	EE	ES	FI	FR	GR	
Non-financial corporations	56	72	54	37	78	65	82	38	69	
Households	40	63	19	11	89	89	93	16	52	
	IE	IT	LU	MT	NL	РТ	SI	SK	CY	
Non-financial corporations	61	77	69	82	60	76	82	75	52	
Households	59	72	74	94	21	94	76	26	32	

Source: MFI balance sheet item statistics

Notes: Floating rate loans include short-term (less than one year) and long-term floating rate loans. All floating rate loans are pooled together with no distinction of reference rates, such that the breakdown of these loans by reference rate is not known



Therefore, the social value of the pricing of reference interest rates appears even higher, since it affects not only the relationships between financial investors at the very short end of the yield curve, but also the relationships between banks and economic agents.

#### **3 RECENT DEBATE ON REFERENCE INTEREST RATES**

The evidence and allegations of manipulation of reference rates, as well as the structural market changes that have occurred or have been gathering pace since the start of the financial crisis, have highlighted the need to change current rules and practices with regard to the determination of reference rates and move towards a more regulated approach, given that they are widely recognised as a public good.

Given the role of reference interest rates in the monetary policy transmission mechanism, as described in Section 2.3, it is also appropriate for the public sector to define which role it should play in (i) the development of commonly agreed principles to strengthen governance frameworks that enhance the reliability and integrity of reference interest rates; and (ii) the development of reference interest rates that are more representative of market conditions and which better match market participants' individual needs.

#### 3.1 GOVERNANCE ISSUES SURROUNDING THE RATE-SETTING PROCESS

A comprehensive review of all governance issues surrounding the rate-setting process has been undertaken in various jurisdictions and in several fora. The UK Treasury's Wheatley Review of LIBOR, the ESMA-EBA's Principles for Benchmark-Setting Processes in the EU, the IOSCO's Principles for Financial Benchmarks, the European Commission's forthcoming proposals for the regulation of benchmarks, as well its current proposals for a regulation on market abuse and for a directive on criminal sanctions for market abuse,<sup>14</sup> are all examples of initiatives to address, inter alia, the need to ensure that reference interest rates are adequately governed, administered and regulated in order to appropriately guard against market abuse or systematic errors.

The principles embedded in these initiatives define a sound framework for the submission process at the level of contributors, and, with regard to governance, minimise conflicts of interest within rate administrator bodies, by retaining the expertise but reducing the influence of the banking community through the involvement of other stakeholders. These principles also recommend minimum standards for calculation agents, publishers and users, as well as a stricter sanctioning regime. The timely, consistent and effective implementation of these principles should significantly limit the opportunity for abuse and improve rate-setting practices. In this respect, EURIBOR-EBF took steps to review the EURIBOR governance process and implement the recommendations set out in the joint ESMA-EBA review. These include (i) enlarging the composition of the EURIBOR Steering Committee to include non-bank stakeholders; (ii) consulting stakeholders on the number of EURIBOR tenors, with a view to preserving only those with the highest utilisation and the highest underlying transaction volume; and (iii) reviewing the key terms in the EURIBOR definition to enhance clarity. While further work needs to be undertaken in order to implement the ESMA-EBA's recommendations, these governance-enhancing actions are a major step in the right direction.

<sup>14</sup> See "Amended proposal for a Regulation of the European Parliament and of the Council on insider dealing and market manipulation (market abuse) (submitted in accordance with Article 293(2) TFEU) (COM(2012) 421 final)"; and "Amended proposal for a Directive of the European Parliament and of the Council on criminal sanctions for insider dealing and market manipulation (submitted in accordance with Article 293(2) TFEU) (COM(2012) 420 final)".



### ARTICLES

Reference interest rates: role, challenges and outlook

### 3.2 REPRESENTATIVENESS OF REFERENCE INTEREST RATES

However, in addition to the reform of the governance framework for the rate-setting process, there is the broader question as to whether the dominance of reference interest rates based on unsecured interbank markets reflecting a common bank credit risk is still appropriate today.

In this regard, it is interesting to note that the shift from unsecured to secured interbank borrowing and lending started even before the onset of the financial crisis and accelerated thereafter (see the chart).

Unsecured interbank markets have shrunk considerably, particularly for longer maturities. Therefore, the remaining market turnover is currently concentrated only within the shortest maturities, as confirmed by the results of the

data collection exercise undertaken by the ECB (see the box). Changes to the liquidity regulations, such as the introduction of the Liquidity Coverage Ratio (LCR) and the Capital Requirements Directive (CRD IV), which are aimed at reducing and better managing liquidity and counterparty credit risks, provide further incentives to shift from unsecured to secured interbank markets and to limit unsecured interbank activity to shorter maturities. Moreover, the dispersion of bank credit risk has increased sharply, implying that the true refinancing costs of banks deviate from – and are likely to be much more volatile than – the lending rates between prime banks referenced to EURIBOR, which used to be seen as a proxy for a risk-free rate.

The contraction in volumes of unsecured interbank markets, as well as the other structural changes described in Section 2.2, call into question the continuous representativeness of the current reference interest rates for the segmented and heterogeneous borrowing conditions in the unsecured interbank market. The challenge is to identify the necessary design changes to such unsecured market reference rates in order to preserve and enhance their representativeness. In fact, in spite of these developments, reference interest rates reflecting banks' unsecured funding costs and incorporating a generic bank credit risk premium are very likely to remain necessary for some users as a benchmark of the "true" costs at which banks can obtain wholesale market liquidity and not – as in the secured market – exchange cash for another asset. Another challenge is how to facilitate greater diversity in the use of reference rates that better match users' needs. This would require a greater availability of reference rates that do not incorporate a bank credit risk premium, but which instead are more similar to risk-free rates or reflect a sovereign risk premium.<sup>15</sup>

15 An example of a reference rate that reflects a sovereign risk premium is the TEC 10 index ("*Taux de l'échéance constant à 10 ans*") in France. The index value represents the yield to maturity of a fictitious OAT ("*obligation assimilable du Trésor*", namely French public bond) with a constant maturity of precisely ten years. It is based on primary dealers' quotes at 10 a.m. on the secondary market for two OAT benchmark issues that are closest to ten-year maturity. The four highest prices and the four lowest prices are eliminated, and the average of the remaining prices is converted into an equivalent yield to maturity for each OAT. The TEC 10 daily reference value is then calculated by linear interpolation of the equivalent average yield of the two OATs.



Aggregated average daily turnover of the euro money market

(index: aggregated average daily turnover volume in 2002 = 100)

Source: Euro money market study, ECB, December 2012.



#### 3.3 ROLE OF PUBLIC AUTHORITIES AND CENTRAL BANKS

Given the importance of reference interest rates in the economy and their role as a public good, the Economic Consultative Committee of the BIS established a working group<sup>16</sup> to study issues relating to the use and production of reference interest rates from the perspective of central banks, and encouraged public authorities and central banks to support the reliability, integrity, robustness and representativeness of reference rates. In particular, it recommended that central banks become involved in the reform of reference interest rates by (i) ensuring an appropriate governance framework to uphold the reliability and integrity of reference rates; and (ii) facilitating market choices in a changing financial system.

#### **4** CONTRIBUTION OF THE ECB TO THE DEBATE

The ECB believes that the systemic relevance of reference rates justifies actively involving central banks in the reform process. To uphold the reliability, integrity and representativeness of key euro area reference interest rates, the ECB has actively participated in the consultations on reference interest rates launched by the European Commission, the ESMA-EBA and the IOSCO.<sup>17</sup> These initiatives complement each other: the ESMA-EBA and Commission's initiatives are broader in scope, although limited to the EU, while the IOSCO's principles are narrower and focused on financial market benchmarks, and apply at the international level. Notwithstanding this role of central banks, the ECB believes that choosing reference rates that better reflect end-user needs is ultimately the responsibility of the users themselves.

The ECB's initiatives can be summarised as follows: (i) participation in public consultations of regulators; (ii) public reminders to banks to act responsibly and assume collective responsibility to safeguard the functioning of key reference rates, thus preventing potential disruption to the functioning of financial markets while the regulatory framework is being refined; and (iii) acting as a catalyst for private market initiatives to assess the options for reforming the current reference rates, in particular EURIBOR.

The views of the ECB on the governance issues and options for reforming current reference interest rates in order to preserve and enhance their representativeness are described in the next two subsections.

#### 4.1 OPTIONS FOR REGULATION AND GOVERNANCE REFORM

In its reply to the European Commission's public consultation, the ECB recommended adequately defining the principles and procedures for the four key processes surrounding the computation of EURIBOR: (i) rate submission at the level of the panel bank to ensure that rates are accurate and conflicts of interest are prevented; (ii) rate calculation with a better definition of the responsibilities of the calculation agent and the legal responsibilities of all parties involved in case of suspect/ unusual quotes; (ii) benchmark administration to ensure the independence of the administrator from the banking community and a greater diversity of its members with more clearly defined

<sup>16</sup> See http://www.bis.org/publ/othp19.htm

<sup>17</sup> See European Commission's public consultation on the regulation of indices – Eurosystem's response, ECB, Frankfurt am Main, 14 November 2012; Eurosystem's response to IOSCO's consultation report on financial benchmarks, ECB, Frankfurt am Main, 11 February 2013; and Eurosystem's response to the EBA and ESMA's public consultation on the principles for benchmark-setting processes in the EU, ECB, Frankfurt am Main, 11 February 2013.

### ARTICLES

Reference interest rates: role, challenges and outlook

responsibilities; and (iv) ex post validation by independent entities to validate the quality of the contributions and of the rate submission process.

On 8 February 2013 the ECB also welcomed the European Commission's intention to regulate systemically important reference interest rates and to include in its forthcoming legislative proposal the power to compel mandatory submissions for systemically important reference interest rates, in order to ensure an appropriate level of bank participation.<sup>18</sup> In particular, the ECB believes that it is crucial that banks remain in, or join, the EURIBOR and EONIA panels to prevent potential disruptions to the functioning of the financial markets, as well as to ensure an appropriate level of rate representativeness while the regulatory framework is being refined. In the same vein, the ECB welcomed on 31 May 2013 EURIBOR-EBF's decision to introduce separate EONIA and EURIBOR panels with a view to encouraging banks to join or rejoin the respective panels according to their level of activity and knowledge of market segments.<sup>19</sup>

While supporting these initiatives and expressing the hope that they are adopted and enter into force quickly, the ECB, in its responses to the IOSCO's and the ESMA-EBA's consultations, also laid down certain criteria that the regulatory process and the governance reforms should meet.

Regulatory requirements and supervisory practices should be commensurate with the identified risks to avoid placing unnecessary or excessive burdens on rate contributors. An appropriate balance should be found between a sound production process with adequate controls and safeguards on the one hand and cost efficiency on the other.

Practices across national jurisdictions should be harmonised. The ECB considers that LIBOR, EURIBOR and other systemically important reference interest rates should be regulated, given their role as a public good. However, in order to be both efficient and effective, regulation and supervision needs to be based on principles introduced in a consistent manner at the international level. Non-harmonised regulation, different interpretations of the same laws and principles and unaligned actions by national supervisors could lead to an uneven playing field, decreasing incentives for voluntary participation and potentially encouraging regulatory arbitrage.

Methodological changes should be appropriate and timely. The ECB welcomes the resolve to strengthen the methodology for the production of reference rates through a more precise definition of their constituent elements and through more representative and transparent data compilation procedures. However, the choice of appropriate and detailed changes to the methodologies should be left to private reference rate administrators and the timeline of any changes should be based on a realistic time frame, also considering the current state of financial markets and the lack of obvious alternatives to the current reference rates.

### 4.2 OPTIONS TO ENHANCE THE REPRESENTATIVENESS OF REFERENCE INTEREST RATES

The ECB believes that a shift towards a more transaction-based approach to calculating the current reference interest rates would increase their representativeness, while also enhancing their credibility and integrity. The merits of and the best method for shifting towards a more transaction and market-based reference interest rate for an unsecured money market need careful consideration.

<sup>18</sup> See ECB welcomes the European Commission's intention to regulate systemically important reference rates, ECB, Frankfurt am Main, 8 February 2013.

<sup>19</sup> See ECB welcomes the introduction of separate EONIA and EURIBOR panels and encourages banks' participation, ECB, Frankfurt am Main, 31 May 2013.

Acting as a catalyst for private market initiatives, the ECB conducted a data collection exercise on behalf of EURIBOR-EBF (see the box) in order to be able to better assess the feasibility of such a shift and its modalities. The exercise confirmed that the significant structural and conjunctural contraction in unsecured, interbank money market volumes is limiting unsecured turnover to shorter maturities. While the turnover for these shorter maturities is limited and raises challenges in terms of establishing a purely transaction-based reference rate, further measures could be taken to increase the underlying turnover. These include a widening of the corridor around standard tenors to capture non-standard transactions and the inclusion of further bank liabilities that play an important role in banks' overall wholesale funding costs. Such measures are currently being investigated with the help of a further data collection exercise also being conducted by the ECB on behalf of EURIBOR-EBF.

Furthermore, while there are significant differences between transaction-based rates and the quotebased EURIBOR, the data collection exercise, although not aimed at assessing the accuracy of EURIBOR, showed that past EURIBOR fixings were broadly in line with the results that could be derived from transaction-based rate calculations.

#### Box

#### MAIN FINDINGS OF THE DATA COLLECTION EXERCISE AND THE DESIGN OF A NEW REFERENCE RATE

In February 2013, the ECB, in cooperation with EURIBOR-EBF, initiated a data collection exercise aimed at assessing the feasibility of a transaction-based euro money market reference rate and its modalities. As an impartial player in the money markets, the ECB offered to collect, on behalf of EURIBOR-EBF, daily transaction data from participating banks and to undertake an analysis that would form the basis of further assessment by EURIBOR-EBF and participating banks. During the second quarter of 2013, the ECB collected data from 59 European banks representing current and previous EURIBOR panel members. The scope of the data collection was set deliberately wide to capture banks' unsecured borrowing and lending volumes beyond interbank transactions. On the borrowing side, the data collected included funding through interbank deposits, deposits from other financial but not credit institutions, deposits from the official sector and deposits from the issuance of short-term securities. On the lending side, data on interbank lending and investment via the purchase of short-term securities issued by other banks and non-financial corporations were collected. The reference period was from 3 January 2012 to 28 February 2013, which was considered long enough to be able to draw significant conclusions while remaining cost-efficient. Among the participating banks, 50 are based in the euro area while the remaining nine are based in other EU and EFTA countries. In terms of credit quality, three-quarters of the banks are of medium and high credit quality (of a P-1 and P-2 investment grade respectively, when using Moody's short-term rating equivalents). The purpose of this box is thus to recap the main findings of this data collection exercise conducted by the ECB on behalf of EURIBOR-EBF.

The analysis was conducted taking into account the following five characteristics that the new reference rate would need to have in order to meet the principles laid down by the International Organization of Securities Commissions (IOSCO) and the Bank for International Settlements (BIS). Each of these characteristics was further qualified to assess conformity with the above-mentioned principles:



### ARTICLES

Reference interest rates: role, challenges and outlook

- (a) Robustness and resiliency: there should be an adequate daily volume and number of contributors. If not, there should be a suitable and credible fall-back mechanism.
- (b) Representativeness: the new rate needs to be representative of the market it intends to measure – the wholesale senior unsecured bank credit market. The level and correlation of the rate in relation to other relevant market rates, as well as the representativeness of the test panel of the targeted market, are useful indicators.
- (c) Usability: in order to be adopted by the market, a reference rate needs to be available on a daily basis, have a simple computation mechanism, a relatively low volatility and predictable behaviour in relation to the underlying credit.
- (d) Reliability: the new reference rate should allow minimum scope for manipulation, both through its governance and computational mechanism.
- (e) Transparency: the determination of the rate needs to be sufficiently transparent in order to be credible and meet governance standards.

Therefore, a sufficient transaction volume is considered a fundamental attribute of a robust reference rate. In this respect, several observations can be drawn from the ECB's data collection as reported in Table A, which displays the average daily volume data at various maturities (or tenors) and for both borrowing and lending transactions with different counterparty sectors. First, the daily volumes for each type of transaction considered individually are small. The volumes in the interbank market confirm the results of the ECB's annual euro money market survey, namely that interbank activity is concentrated within short tenors, with few volumes beyond one week. The other most active tenors are one and three-month tenors, although volumes are low on both the borrowing generally has the highest daily turnover below €300 million. Second, interbank borrowing generally has the highest daily turnover among the wholesale funding transaction types considered. Third, funding via the issuance of short-term fixed rate securities plays an important role in unsecured bank term funding: beyond two months, the average daily issuance of short-term securities exceeds the daily turnover in the other borrowing types. Finally, even by aggregating all borrowing or lending transactions, the average daily turnover the period

#### Table A Average daily volumes, January 2012 to February 2013

(EUR millions)							
	one-week	one-month	two-month	three-month	six-month	nine-month	one-year
Deposits from credit institutions	1,317	299	41	184	58	16	55
Deposits from other financials	1,153	217	50	117	33	25	25
Deposits from official sector	802	259	69	246	26	13	11
Short-term securities	314	217	148	545	119	41	81
All borrowing	3,527	939	230	1,083	210	37	142
Lending to banks (Deposits)	929	202	111	167	33	28	31
Lending to banks (Short-term paper)	30	108	46	69	24	84	106
Lending to non-financials (Short-term paper)	60	138	29	67	28	8	11
All lending	972	396	120	248	50	27	46

Note: Daily averages are calculated for the days with turnover activity and non-zero contributions.

are around  $\notin$ 3 billion for one-week transactions,  $\notin$ 1 billion for one and three-month transactions and less than  $\notin$ 250 million for longer tenors; aggregated volumes on the lending side are even lower.

The evidence reported in both Table A and Chart A highlights the difficulty of building a transaction-based reference rate that is a direct substitute for EURIBOR based on unsecured interbank lending volumes alone and for all tenors. Chart A (a) illustrates that, while for one-week maturities there is market activity every day, for the one and three-month tenors there are no transactions on 2% and 13% of business days respectively (see Charts A (c) and (e)). While there are important methodological differences between EURIBOR and the aggregate rate computed on the basis of the lending data collected in this exercise, Chart A also shows that EURIBOR rates broadly followed the evolution of average interbank lending rates (see Charts A (a), (c) and (e)). This exercise also suggests that counterparty credit standing plays an important role in the aggregate interbank lending levels. Indeed, while the levels of average interbank lending rates with a maturity of less than three months are above those of EURIBOR, for longer tenors they are below EURIBOR, as borrowers are likely to be of a higher credit quality.

Charts A (b), (d) and (f) show, in perspective, the volume and rate developments of the three most active borrowing tenors and the relationship with EURIBOR during the period under

	Dimensions	Tenors	January 2012 to February 2013	July 2012 to February 2013
	Volume suffiency	one-week	€ 3.5 billion	€ 2.9 billion
	(daily average)	one-month and three-month	€ 09-1.1 billion	€ 0.6-0.8 billion
	Volume distribution	one-week	1% of days daily volume < € 1 billion 1% of days daily volume < € 0.25 billion	1% of days daily volume <€ 1 billion 1% of days daily volume <€ 0.25 billion
Robustness/resiliency	(% of days in which daily volume < a threshold)	one-month and three-month	~25%-30% of days daily volume < 0.50 billion 10% of days daily volume <€ 0.25 billion	~40%-50% of days daily volume < 0.5 billion ~10%-15% of days daily volume <€ 0.25 billion
(All borrowings)	Volume concentration (% of days in which one or two contributors	one-week	<1%	1%
	account for 80% or more of the daily volume)	one-month and three-month	~15%-20%	~20%-30%
	Contributor sufficiency	one-week	27	24
	(daily average)	one-month and three-month	16-17	14
	Contributor distribution	one-week	Number of contributors equal or above 15 every day	Number of contributors equal or above 15 every day
	(% of days in which number of contributors < a threshold)	one-month and three-month	3%-5% of days <10 contributors ~15%-20% of days <15 contributors	5%-8% of days <10 contributors ~30%-35% of days <15 contributors

#### Table B Summary of the results of robustness tests for all borrowing transactions

ECB Monthly Bulletin October 2013

#### ARTICLES

Reference interest rates: role, challenges and outlook

review. The test results show that the aggregated borrowing rates are lower than EURIBOR for all tenors. While there are differences between aggregated borrowing levels and EURIBOR, Charts A (b), (d) and (f) show that aggregated borrowing levels mostly track EURIBOR rates. They also show that some divergences occur in a fast-changing rate environment, for example at the beginning of 2012, when, for the one-week tenor, borrowing rates adjusted downwards more quickly than EURIBOR rates.

Chart B shows the computational results of the data collection exercise when aggregating the daily turnover of various transactions on the borrowing side for various maturities. Several observations can also be made. First, the percentage of zero transaction volumes mostly occurred at longer maturities (or tenors), as reported in Chart B (a). Second, Charts B (b) and (c) – illustrating the average rate (computed as a median) spread to EURIBOR – shows that the average rates for the most active tenors were relatively close to each other and the spread to EURIBOR was limited for most of the borrowing transaction types. Chart B (d) shows that, in general, there is potential to aggregate borrowing data across different transaction types without causing significant additional rate volatility. Such volatility could arise as a result of daily changes in the sectoral composition if borrowing levels across different transaction types are significantly different and, as is the case in the current transaction analysis, if some transaction types are more represented than others in the daily rate computation.

Table B summarises the robustness characteristics of aggregated borrowing for the three most active tenors. Several results can be highlighted. First, the daily turnover decreased by about 30% following the ECB's deposit rate cut to zero in July 2012 (the second period of the test), since banks attracted fewer deposits at the lower interest rate levels. For the one-week tenor, these interest rate levels were close to zero or even negative in the case of higher rated banks. Second, the daily volumes are frequently low for tenors beyond one week, dropping below  $\in 0.5$  billion for a significant number of days. This volume distribution deteriorates significantly in the second period. Third, while in more than four out of five days the number of contributors for the three tenors is higher than 15, in many cases a small number of contributors accounts for most of the volume: for the one and three-month tenors, one or two contributors account for at least 80% of the daily volume approximately 15%-20% of the time. The volume concentration increases significantly in the second period.

The definition of the reference rate and the composition of the bank panel are key determinants of rate characteristics, such as the level of the rate itself and its volatility. The differentiation of credit profiles among panel banks results in different composite borrowing rates when different rate computational methodologies are used. Charts B (c) and (d) show that, for all borrowing, computing the rate as a median of individual contributions – as opposed to using other data aggregation methodologies, such as the volume-weighted average (VWAR), the weighted trimmed mean or the trimmed mean – results in lower rate levels and volatility of rate spread relative to EURIBOR. This is explained by the fact that the median measures the borrowing rate for the typical bank in the sample, which is predominantly higher rated. The test panel heterogeneity has a greater impact for lower volume tenors (Chart B (d)), where daily rates are at times more significantly impacted by contributions which are not necessarily representative of the borrowing rates of most panel banks. Looking ahead, the trade-offs between the representativeness of the rate according to its definition, usability and reliability could be further considered in the reference rate design, together with measures that could increase the volume while also addressing panel heterogeneity.



82 Monthly Bulletin October 2013

### ARTICLES



0.2

0.1

0.0

-0.1

-0.2

-0.3

-0.4

0.45

0.40

0.35

0.30

0.25

0.20

0.15

0.10

0.05

0.00



Chart B Main findings of the data collection exercise, January 2012 to February 2013

The ECB also considers it desirable that market participants can choose from a range of reliable and representative reference rates that reflect different needs and purposes. In the view of the ECB, reference rates representing the OIS derivatives market, sovereign risk or the secured money market segment, for example, could prove to be valid alternatives, coexist with EURIBOR and fulfil some of the purposes for which EURIBOR is currently used by some users. However, it is unlikely that these alternative reference rates would fully eliminate the need for reference rates that reflect banks' unsecured cost of funding for all users. As long as unsecured funding (also in terms of the issuance of short-term securities) still forms a significant part of a bank's funding, there is likely to be a need among some users for reference rates that allow banks to pass on their marginal borrowing costs.

### **5** CONCLUSIONS

The allegations and evidence of the manipulation of key reference interest rates have called into question the adequacy of their current governance framework and methodology on which they are based. In order to re-establish their credibility – while preserving their benchmark role in the economy – the aim of the policy response that the ECB has strongly supported has been

to immediately restore the credibility of systemically important reference rates by addressing significant deficiencies in their governance framework.

In the ECB's view, such governance reforms are necessary short-term measures that need to be complemented by further initiatives aimed at enhancing the reliability, representativeness and resilience of reference rates in the medium term. The ECB, along with other central banks, is of the view that reference interest rates reflecting banks' unsecured funding costs will continue to play an important role. Reference rates would continue to allow banks to pass on their wholesale unsecured funding costs to customers and better manage their liquidity and asset and liability positions. Therefore, the ECB strongly supports market initiatives aimed at identifying more transactionbased reference rates that could viably complement or substitute for EURIBOR. The solutions are not obvious and thus require careful assessment to take into account the structural changes taking place in the money markets, as well as longer lead times. The collection of transaction data by EURIBOR-EBF supported by the ECB is a valuable opportunity to assess the extent to which a transaction-based rate could be calculated and, if so, what form it could take. The ECB also supports facilitating market choices in a changing financial system so that users can choose reference rates that better match their needs. Notwithstanding the role of public authorities in the reference rate regulation process, and the interest that regulators and central banks have in upholding the credibility, reliability and representativeness of reference rates, the choice of reference rates that better reflect end-user needs is ultimately the responsibility of the users themselves.

The design of the new reference rate needs to take into account the sound principles for reference rates put forward by the IOSCO and the ESMA-EBA. Reference rates need to be designed in a manner that it is representative of the market they intend to measure. The design should also ensure that the scope for manipulation is minimised or that any attempt at manipulation can be reliably detected. Finally, the success of a new reference rate depends on the extent to which it is embraced by users. Therefore, the ECB strongly encourages market participants to be actively involved in the rate design process, in order to ensure that the resulting rate meets market needs.

Under these circumstances, it could be appropriate, from a policy perspective, to consider encouraging the adoption of a more representative reference interest rate, reflecting active and liquid transactions in the interbank market, which remains resilient in times of stress.

Systemically important reference interest rates such as EURIBOR and EONIA are of particular importance in terms of credit provision to the euro area economy and for the implementation of the single monetary policy. Therefore, it is crucial that their continuity is assured at all times, while more long-term reform solutions aimed at making reference rates such as EURIBOR more transaction-based are being assessed. This means, for EURIBOR and EONIA, that banks contributing to these rates remain in their respective panels and, preferably, that more banks join them, including those banks that recently left them. Furthermore, the public and private sectors should work together to review the appropriateness of the current contingency arrangements and enhance them to prepare for circumstances in which the provision of systemically important reference rates is destabilised.

Finally, the greater clarity that the ESMA-EBA's principles and the forthcoming draft regulation of the European Commission have introduced into the rate-setting process should make it easier for banks to continue contributing to the rate-setting process by reducing risks and uncertainty while options for more structural changes in the reference rate definition are further assessed. Transition issues will need to be examined in detail, but this will be better dealt with once a consensus has been reached on the design of more stable reference rates.

EURO AREA STATISTICS





# **CONTENTS**<sup>1</sup>

	EURO AREA OVERVIEW	
	Summary of economic indicators for the euro area	S 5
1	MONETARY POLICY STATISTICS	
÷.,	1.1 Consolidated financial statement of the Eurosystem	<b>S6</b>
	1.2 Key ECB interest rates	S7
	1.3 Eurosystem monetary policy operations allotted through tender procedures	\$8
	1.4 Minimum reserve and liquidity statistics	S 9
2	MONEY, BANKING AND OTHER FINANCIAL CORPORATIONS	61.0
	<ul><li>2.1 Aggregated balance sheet of euro area MFIs</li><li>2.2 Consolidated balance sheet of euro area MFIs</li></ul>	S   0
	<ul><li>2.2 Consolidated balance sheet of euro area MFIs</li><li>2.3 Monetary statistics</li></ul>	S     S   2
	2.5 Monetary statistics 2.4 MFI loans: breakdown	S   5
	2.4 MFT loans. breakdown 2.5 Deposits held with MFIs: breakdown	SI7
	2.5 Deposits field with Wirks: breakdown 2.6 MFI holdings of securities: breakdown	S20
	2.7 Currency breakdown of selected MFI balance sheet items	S 2 I
	2.8 Aggregated balance sheet of euro area investment funds	\$22
	<ul><li>2.9 Aggregated balance sheet of euro area investment funds</li><li>2.9 Securities held by investment funds broken down by issuer of securities</li></ul>	S23
	2.10 Aggregated balance sheet of euro area financial vehicle corporations	S24
	2.11 Aggregated balance sheet of euro area insurance corporations and pension funds	S 2 5
	2.11 Aggregated bulance sheet of early area insurance corporations and pension failed	
3	EURO AREA ACCOUNTS	
	3.1 Integrated economic and financial accounts by institutional sector	<b>S26</b>
	3.2 Euro area non-financial accounts	\$30
	3.3 Households	\$32
	3.4 Non-financial corporations	\$33
	3.5 Insurance corporations and pension funds	<b>S34</b>
4	FINANCIAL MARKETS	
	4.1 Securities other than shares by original maturity, residency of the issuer and currency	\$35
	4.2 Securities other than shares issued by euro area residents, by sector of the issuer and instrument type	\$36
	4.3 Growth rates of securities other than shares issued by euro area residents	\$38
	4.4 Quoted shares issued by euro area residents	<b>S40</b>
	4.5 MFI interest rates on euro-denominated deposits from and loans to euro area residents	<b>S42</b>
	4.6 Money market interest rates	S 4 4
	4.7 Euro area yield curves	S 4 5
	4.8 Stock market indices	<b>S46</b>
5	PRICES, OUTPUT, DEMAND AND LABOUR MARKETS	
	5.1 HICP, other prices and costs	S47
	5.2 Output and demand	\$50
	5.3 Labour markets	<b>S</b> 54
6	GOVERNMENT FINANCE	
	6.1 Revenue, expenditure and deficit/surplus	\$56
	6.2 Debt	\$57
	6.3 Change in debt	\$58
	For further information, please contact us at: statistics@ecb.europa.eu. See the ECB's Statistical Data Warehouse in the "Statistics" section of the http://sdw.ecb.europa.eu) for longer runs and more detailed data.	ECB's website

	6.4	Quarterly revenue, expenditure and deficit/surplus	\$59
		Quarterly debt and change in debt	\$60
7	EXT	ERNAL TRANSACTIONS AND POSITIONS	
	7.1	Summary balance of payments	S 6 1
	7.2	Current and capital accounts	\$62
	7.3	Financial account	<b>S64</b>
	7.4	Monetary presentation of the balance of payments	\$70
	7.5	Trade in goods	S7 I
8	EXC	HANGE RATES	
	8.1	Effective exchange rates	\$73
	8.2	Bilateral exchange rates	\$74
9	DEV	ELOPMENTS OUTSIDE THE EURO AREA	
	9.1	Economic and financial developments other EU Member States	\$75
	9.2	Economic and financial developments in the United States and Japan	\$76
	LIST	OF CHARTS	\$77
	TECI	HNICAL NOTES	\$79
	GEN	ERAL NOTES	\$87

Conventi	Conventions used in the tables						
"_"	data do not exist/data are not applicable						
""	data are not yet available						
""	nil or negligible						
"billion"	109						
(p)	provisional						
s.a.	seasonally adjusted						
n.s.a.	non-seasonally adjusted						





# **EURO AREA OVERVIEW**

#### 1. Monetary developments and interest rates 1)

	<b>M1</b> <sup>2)</sup>	M2 <sup>2)</sup>	<b>M3</b> <sup>2),3)</sup>	M3 <sup>2),3)</sup> 3-month moving average (centred)	euro area	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	/	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	1.2	0.58	1.72
2012 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	1.5	0.20	1.76
2013 01	8.1	4.6	2.9	-	-0.0	0.2	0.21	2.14
Q2 Q3	0.1	4.0	2.9	-	-1.1	0.2	0.21	2.05
	•	•	•	-	•	•	0.22	2.03
2013 Apr.	8.7	4.9	3.2	2.9	-0.9	-0.1	0.21	1.55
May	8.3	4.7	2.9	2.8	-1.2	0.1	0.20	1.84
June	7.6	4.3	2.4	2.5	-1.6	0.9	0.21	2.14
July	7.1	4.1	2.2	2.3	-1.9	2.1	0.22	1.95
Aug.	6.8	4.0	2.3	2.5	-2.0	2.1	0.23	2.17
Sep.			2.5	•	-2.0		0.23	2.05
Sep.	•	•		•	•	•	0.22	2.05

### 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
2.7 2.5	5.8 3.0	2.2 1.8	1.5 -0.6	3.2 -2.4	80.6 78.6	0.3 -0.7	10.1 11.4
1.9 1.4 1.3	1.2 0.0	1.7 0.9	-1.0 -0.5	-2.3 -1.1	77.5 77.9	-1.0 -1.0	12.0 12.1
1.2 1.4 1.6 1.6 1.3	-0.2 -0.2 0.3 0.2	- - - - -	- - - - -	-0.9 -1.9 -0.4 -2.1	77.5	- - - -	12.1 12.1 12.1 12.0 12.0
	1 2.7 2.5 1.9 1.4 1.3 1.2 1.4 1.6	producer prices           1         2           2.7         5.8           2.5         3.0           1.9         1.2           1.4         0.0           1.3         .           1.2         -0.2           1.4         0.0           1.3         .           1.6         0.2           1.3         .	producer prices         labour costs           1         2         3           2.7         5.8         2.2           2.5         3.0         1.8           1.9         1.2         1.7           1.4         0.0         0.9           1.3         .         .           1.2         -0.2         -           1.4         0.2         -           1.6         0.3         -           1.6         0.2         -           1.3         .         .	producer prices         labour costs         (s.a.)           1         2         3         4           2.7         5.8         2.2         1.5           2.5         3.0         1.8         -0.6           1.9         1.2         1.7         -1.0           1.4         0.0         0.9         -0.5           1.3         .         .         .           1.2         -0.2         -         -           1.4         -0.2         -         -           1.6         0.2         -         -           1.3         .         .         .         -           1.3         .         .         .         .           1.3         .         .         .         .           1.3         .         .         .         .	producer prices         labour costs         (s.a.)         production excluding construction           1         2         3         4         5           2.7         5.8         2.2         1.5         3.2           2.5         3.0         1.8         -0.6         -2.4           1.9         1.2         1.7         -1.0         -2.3           1.4         0.0         0.9         -0.5         -1.1           1.3         .         .         .         .           1.2         -0.2         -         -         -0.9           1.4         -0.2         -         -         -0.9           1.4         -0.2         -         -         -0.9           1.4         -0.2         -         -         -0.9           1.4         -0.2         -         -         -0.9           1.4         -0.2         -         -         -0.4           1.6         0.3         -         -         -           1.3         .         -         -         -           1.3         .         -         -         -	producer prices         producer costs         production (s.a)         production excluding construction         utilisation in manufacturing (%)           1         2         3         4         5         6           2.7         5.8         2.2         1.5         3.2         80.6           2.5         3.0         1.8         -0.6         -2.4         78.6           1.9         1.2         1.7         -1.0         -2.3         77.5           1.4         0.0         0.9         -0.5         -1.1         77.9           1.3         .         .         .         .         .         .           1.2         -0.2         -         -         -0.9         77.5           1.4         -0.2         -         -         -0.4         -           1.6         0.2         -         -         -0.4         -           1.6         0.2         -         -         -2.1         78.3           1.3         .         -         -         -         -	$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$

#### 3. External statistics

(EUR billions, unless otherwise indicated)

	Balance of payments (net transactions)			Reserve assets (end-of-period		external debt	Effective exchange rate of the euro: EER-21%		USD/EUR exchange rate
	Current and		Combined	positions)		(as a % of GDP)	(index: 1999 (	Q1 = 100)	Ŭ
	capital	Goods	direct and		position				
	accounts		portfolio		(as a % of GDP)		Nominal	Real (CPI)	
	1	2	investment	4	5	(	7	0	0
	1	2	3	4	3	0	/	8	9
2011	26.0	6.8	133.9	667.1	-13.9	121.3	103.4	100.6	1.3920
2012	137.5	98.9	26.3	689.4	-13.1	126.0	97.9	95.1	1.2848
2012 Q4	72.5	36.2	44.9	689.4	-13.1	126.0	97.9	95.2	1.2967
2013 Q1	34.2	32.5	-13.0	687.8	-12.4	127.3	100.8	98.0	1.3206
	58.1	52.7	53.6	564.3			100.9	98.4	1.3062
Q2 Q3							101.9	99.4	1.3242
2013 Apr.	17.9	16.3	-5.3	640.0	-	-	100.5	98.0	1.3026
May	11.6	17.3	39.5	621.4	-	-	100.6	98.2	1.2982
June	28.5	19.1	19.5	564.3	-	-	101.6	99.0	1.3189
July	28.8	20.5	-43.4	588.7	-	-	101.5	99.0	1.3080
Aug.				613.0	-	-	102.2	99.7	1.3310
Sen						-	102.0	99.5	1 3348

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.

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. 3)

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. For a definition of the trading partner groups and other information, please refer to the General Notes. 6)





# **MONETARY POLICY STATISTICS**

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

#### 1. Assets

	30 August 2013	6 September 2013	13 September 2013	20 September 2013	27 September 2013
Gold and gold receivables	319,969	319,969	319,969	319,969	319,969
Claims on non-euro area residents in foreign currency	249,648	251,420	251,016	250,695	249,991
Claims on euro area residents in foreign currency	23,960	23,151	23,735	22,654	22,701
Claims on non-euro area residents in euro	22,304	22,273	22,308	23,136	23,256
Lending to euro area credit institutions in euro	790,549	786,512	779,495	775,417	767,304
Main refinancing operations	97,126	95,621	97,170	96,249	97,027
Longer-term refinancing operations	693,292	688,642	682,257	678,922	670,156
Fine-tuning reverse operations	0	0	0	0	0
Structural reverse operations	0	0	0	0	0
Marginal lending facility	131	2,249	67	246	120
Credits related to margin calls	0	0	0	0	0
Other claims on euro area credit institutions in euro	79,674	75,181	77,097	76,116	81,277
Securities of euro area residents in euro	603,118	604,244	604,275	604,043	600,114
Securities held for monetary policy purposes	250,139	250,139	250,087	249,768	246,703
Other securities	352,979	354,104	354,188	354,275	353,410
General government debt in euro	28,356	28,361	28,361	28,361	28,361
Other assets	243,062	245,564	243,870	246,198	245,072
Total assets	2,360,639	2,356,675	2,350,127	2,346,591	2,338,044

#### 2. Liabilities

	30 August 2013	6 September 2013	13 September 2013	20 September 2013	27 September 2013
Banknotes in circulation	919,379	920,395	919,259	916,731	917,734
Liabilities to euro area credit institutions in euro	533,479	539,639	537,798	515,072	502,175
Current accounts (covering the minimum reserve system)	272,260	269,181	275,819	274,478	258,760
Deposit facility	70,569	79,934	71,425	50,060	52,870
Fixed-term deposits	190,500	190,500	190,500	190,500	190,500
Fine-tuning reverse operations	0	0	0	0	0
Deposits related to margin calls	149	24	53	34	45
Other liabilities to euro area credit institutions in euro	5,565	6,303	6,292	6,053	6,187
Debt certificates issued	0	0	0	0	0
Liabilities to other euro area residents in euro	108,765	94,559	94,492	112,793	119,620
Liabilities to non-euro area residents in euro	135,006	136,406	131,977	134,766	134,871
Liabilities to euro area residents in foreign currency	1,840	1,662	2,999	2,578	2,502
Liabilities to non-euro area residents in foreign currency	5,762	6,554	5,521	4,437	3,801
Counterpart of special drawing rights allocated by the IMF	54,240	54,240	54,240	54,240	54,240
Other liabilities	221,504	221,819	222,451	224,822	221,815
Revaluation accounts	284,680	284,680	284,680	284,680	284,680
Capital and reserves	90,419	90,419	90,419	90,420	90,419
Total liabilities	2,360,639	2,356,675	2,350,127	2,346,591	2,338,044

Source: ECB.



With effect from: 1)	Deposit fa	ncility	Ma	ain refinancing operatio	ns	Marginal lendin	g facility
			Fixed rate tenders	Variable rate tenders			
			Fixed rate	Minimum bid rate			
-	Level	Change	Level	Level	Change	Level	Change
	1	2	3	4	5	6	7
1999 1 Jan.	2.00	-	3.00	-	-	4.50	-
4 2)	2.75	0.75	3.00	-		3.25	-1.25
22	2.00	-0.75 -0.50	3.00	-		4.50	1.25 -1.00
9 Apr. 5 Nov.	1.50 2.00	-0.50	2.50 3.00	-	-0.50 0.50	3.50 4.00	-1.00
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 28 <sup>3)</sup>	3.25 3.25	0.50	4.25	4.25	0.50	5.25 5.25	0.50
1 Sep.	3.25 3.50	0.25	-	4.25	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	-		-0.50	3.75	-0.50
2003 7 Mar. 6 June	1.50 1.00	-0.25 -0.50	-	2.50 2.00	-0.25 -0.50	3.50 3.00	-0.25 -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. 13 Dec.	2.25 2.50	0.25 0.25	-	3.25 3.50	0.25 0.25	4.25 4.50	0.25 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> 15 <sup>5)</sup>	3.25	0.50		-		4.25	-0.50
15 <sup>3</sup> / <sub>12</sub> Nov.	3.25 2.75	-0.50	3.75 3.25	-	-0.50 -0.50	4.25 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 9 Nov.	0.75 0.50	0.25 -0.25	1.50 1.25	-	0.25 -0.25	2.25 2.00	0.25 -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
	100	5120	0115		5125		- 120

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 1) and marginal lending facilities and to the main refinancing operations (with changes effective from the first main refinancing operation following the Governing Council decision), unless otherwise indicated.

2) On 22 December 1998 the ECB announced that, as an exceptional measure between 4 and 21 January 1999, a narrow corridor of 50 basis points would be applied between the interest rates for the marginal lending facility and the deposit facility, aimed at facilitating the transition to the new monetary regime by market participants. 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

3) variable rate tenders. The minimum bid rate refers to the minimum interest rate at which counterparties may place their bids.

4) As of 9 October 2008 the ECB reduced the standing facilities corridor from 200 basis points to 100 basis points around the interest rate on the main refinancing operations. The standing facilities corridor was restored to 200 basis points as of 21 January 2009.

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 5) 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.



#### Eurosystem monetary policy operations allotted through tender procedures 1), 2) 1.3

#### 1. Main and longer-term refinancing operations <sup>3)</sup>

1. Main and longer t		, operations						
Date of settlement	Bids (amount)	Number of participants	Allotment (amount)	Fixed rate tender procedures	V	ariable 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 refin	ancing operations				
2013 19 June	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
10	102,064	70	102,064	0.50	-	-	-	7
17	104,427	73	104,427	0.50	-	-	-	7
24	102,302	76	102,302	0.50	-	-	-	7
31	109,163	78	109,163	0.50	-	-	-	7
7 Aug.	99,413	73	99,413	0.50	-	-	-	7
14	97,561	71	97,561	0.50	-	-	_	7
21	97,729	64	97,729	0.50	-	-	-	7
28	97,126	63	97,126	0.50	-	-	-	7
4 Sep.	95,621	66	95,621	0.50	_	-	_	7
11	97,170	70	97,170	0.50	_	-	_	7
18	96,249	79	96,249	0.50	-	_	_	7
25	97,027	74	97,027	0.50	-	-	-	7
	,		,	financing operations 5)				
2012 10 4	5 150	17	0	0.1				20
2013 10 Apr.	5,159	17	5,159	0.75	-	-	-	28
25	2,977	40	2,977	0.53	-	-	-	98
8 May	5,230	17	5,230	0.50	-	-	-	98 35 91
30	5,830	36	5,830	0.50	-	-	-	91
12 June	3,591	20	3,591	0.50	-	-	-	28 91
27	9,477	50	9,477	0.50	-	-	-	91
10 July	3,536	21	3,536	0.50	-	-	-	28
1 Aug. <sup>6)</sup>	2,683	43	2,683		-	-	-	91
7	3,910	24	3,910	0.50	-	-	-	35
29 6)	6,823	38	6,823		-	-	-	91
11 Sep.	3,430	23	3,430	0.50	-	-	-	28
26 6)	8,607	51	8,607		-	-	-	84
1 Other tenden anon	ationa							

#### 2. Other tender operations

Date of settlement	Type of operation	Bids (amount)	Number of participants	Allotment (amount)	Fixed rate tender procedures			ate tender dures		Running for () days
					Fixed rate	Minimum bid rate	Maximum bid rate	Marginal rate 4)	Weighted average rate	
						Dia Taic	olu laic	Tate 9	average rate	
	1	2	3	4	5	6	7	8	9	10
2013 19 June	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		91	195,000	-	-	0.50	0.13	0.09	7
	Collection of fixed-term deposits		105	195,500	-	-	0.50	0.13	0.09	7
17	Collection of fixed-term deposits	239,283	102	195,500	-	-	0.50	0.12	0.10	7
24	Collection of fixed-term deposits		106	195,500	-	-	0.50	0.14	0.11	7
31	Collection of fixed-term deposits		112	195,500	-	-	0.50	0.20	0.13	7
7 Aug.	Collection of fixed-term deposits		123	192,500	-	-	0.50	0.13	0.11	7
14	Collection of fixed-term deposits		126	192,500	-	-	0.50	0.12	0.10	7
21	Collection of fixed-term deposits		123	192,500	-	-	0.50	0.11	0.10	7
	Collection of fixed-term deposits		123	190,500	-	-	0.50	0.13	0.11	7
4 Sep.	Collection of fixed-term deposits		133	190,500	-	-	0.50	0.10	0.09	7
	Collection of fixed-term deposits		128	190,500	-	-	0.50	0.09	0.08	7
18	Collection of fixed-term deposits	272,916	122	190,500	-	-	0.50	0.09	0.08	7
25	Collection of fixed-term deposits	248,472	116	190,500	-	-	0.50	0.19	0.11	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. 1)

2) 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 3) 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.

4)

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 5) in these operations, on any day that coincides with the settlement day of a main refinancing operation.

6) 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. Reserve base of credit institutions subject to reserve requirements

Reserve	Total	Liabilities to which a positive res	serve coefficient is applied 1)	Liabilities to which	h a 0% reserve coeff	icient is applied
as at (end of period):		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
2013 Mar.	18,689.6	9,951.8	626.1	2,580.0	1,382.3	4,149.5
Apr.	18,676.1	9,928.0	626.5	2,574.1	1,437.0	4,110.5
May	18,639.0	9,884.9	610.0	2,571.8	1,496.7	4,075.6
June	18,577.4	9,948.3	593.5	2,531.5	1,426.0	4,078.1
July	18,343.4	9,826.4	596.3	2,515.3	1,422.1	3,983.3

#### 2. Reserve maintenance

Maintenance period	reserves	Credit institutions' current accounts	Excess reserves	Deficiencies	Interest rate on minimum reserves
ending on:	1	2	3	4	5
2009 2010 2011 2012	210.2 211.8 207.7 106.4	211.4 212.5 212.2 509.9	1.2 0.7 4.5 403.5	0.0 0.5 0.0 0.0	1.00 1.00 1.25 0.75
2013 7 May 11 June 9 July 6 Aug. 10 Sep. 8 Oct.	104.9 105.3 105.1 104.5 104.9 103.8	322.2 300.3 286.5 269.6 274.5	217.3 195.0 181.4 165.1 169.6	0.0 0.0 0.0 0.0 0.0	0.75 0.50 0.50 0.50 0.50

#### 3. Liquidity

Maintenance period ending on:		Liquidity	-providing fact Monetary po		ns of the Euro	osystem	Liquidi	ty-absorbing	factors		Credit institutions' current accounts	Base money
	Eurosystem's net assets in gold and foreign currency	Main refinancing operations	Longer-term refinancing operations	Marginal lending facility	Other liquidity- providing operations <sup>2)</sup>	Deposit facility	Other liquidity- absorbing operations 3)	Banknotes in circulation	Central government deposits with the Eurosystem	Other factors (net)		
	1	2	3	4	5	6	7	8	9	10	11	12
2009 2010 2011 2012	407.6 511.1 622.1 708.0	55.8 179.5 238.0 74.0	593.4 336.3 389.0 1,044.1	0.7 1.9 4.4 1.6	24.6 130.4 260.3 277.3	65.7 44.7 253.7 231.8	9.9 70.8 200.5 208.5	775.2 815.9 869.4 889.3	150.1 94.4 63.8 121.1	-130.2 -79.1 -85.9 144.5	211.4 212.5 212.2 509.9	1,052.3 1,073.1 1,335.3 1,631.0
2013 9 Apr. 7 May 11 June 9 July 6 Aug. 10 Sep.	656.8 657.3 656.0 615.9 532.3 531.8	123.7 113.0 104.7 108.8 104.5 97.5	782.9 749.9 728.4 708.0 698.6 692.3	0.5 0.9 0.5 1.3 0.2 0.4	269.1 265.7 259.9 256.4 255.0 251.1	133.8 114.5 90.5 92.1 82.6 79.2	205.5 204.3 199.4 195.0 195.5 191.7	889.2 897.1 904.1 909.3 917.6 920.4	89.7 82.5 83.1 92.5 97.1 72.6	168.7 166.2 172.3 115.1 28.2 34.7	346.0 322.2 300.3 286.5 269.6 274.5	1,369.1 1,333.8 1,294.9 1,287.9 1,269.8 1,274.2

Source: ECB.
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.
Includes liquidity provided under the Eurosystem's covered bond purchase programmes and the Eurosystem's Securities Markets Programme.
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	Lo	ans to euro a	rea resident	is		ngs of securi issued by eu			Money market fund	Holdings of shares/ other equity	External assets	Fixed assets	Remaining assets 3)
		Total	General government	Other euro area residents	MFIs	Total	General government	Other euro area residents	MFIs	shares/ units <sup>2)</sup>	issued by euro area residents			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
							Eurosystem							
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
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
Q2	4,399.4	2,572.6	15.1	1.2	2,556.3	741.7	588.8	25.3	127.5	-	23.6	665.0	8.3	388.4
2013 May	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
June	4,399.4	2,572.6	15.1	1.2	2,556.3	741.7	588.8	25.3	127.5	-	23.6	665.0	8.3	388.4
July	4,364.2	2,508.6	15.0	1.2	2,492.4	737.8	586.7	25.9	125.2	-	23.9	693.9	8.3	391.6
Aug. (p)	4,353.7	2,485.8	15.0	1.2	2,469.5	730.1	579.4	25.9	124.8	-	24.0	711.3	8.3	394.2
						MFIs exc	luding the Eu	irosystem						
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	32,697.6	17,992.9	1,153.4	11,042.6	5,796.9	4,901.6	1,627.0	1,423.3	1,851.3	66.8	1,227.8	4,044.0	214.6	4,249.9
2013 Q1	32,760.3	17,778.9	1,124.3	11,043.0	5,611.6	4,937.7	1,704.1	1,408.8	1,824.9	64.0	1,234.1	4,051.5	210.1	4,484.0
Q2	32,008.7	17,529.6	1,101.8	10,978.7	5,449.1	4,960.9	1,785.2	1,407.2	1,768.5	50.9	1,246.3	4,001.7	209.5	4,009.8
2013 May	32,476.9	17,584.0	1,109.4	10,990.0	5,484.6	4,982.9	1,766.5	1,421.2	1,795.2	59.2	1,269.1	4,074.1	208.9	4,298.7
June	32,008.7	17,529.6	1,101.8	10,978.7	5,449.1	4,960.9	1,785.2	1,407.2	1,768.5	50.9	1,246.3	4,001.7	209.5	4,009.8
July	31,695.6	17,418.4	1,105.3	10,897.6	5,415.5	4,915.8	1,752.9	1,405.8	1,757.0	52.1	1,249.4	3,942.2	210.1	3,907.6
Aug. <sup>(p)</sup>	31,543.9	17,385.0	1,090.3	10,771.2	5,523.6	4,893.1	1,754.8	1,402.6	1,735.8	57.9	1,223.6	3,949.5	210.2	3,824.6

#### 2. Liabilities

	Total	Currency in	1	Deposits of euro	o area residents		Money market	Debt securities	Capital and	External liabilities	Remaining liabilities 3)
		circulation	Total	Central government	Other general government/ other euro area residents	MFIs	fund shares/ units <sup>4)</sup>	issued 5)	reserves		
	1	2	3	4	5	6	7	8	9	10	11_
					Eurosystem						
2011 2012	4,700.4 5,287.6	913.6 938.2	2,609.0 3,062.2	63.8 81.4	12.1 64.5	2,533.1 2,916.4	-	0.0 0.0	481.3 536.1	284.3 298.7	412.2 452.4
2013 Q1 Q2	4,675.5 4,399.4	921.9 936.8	2,500.3 2,350.7	93.4 107.9	38.0 45.7	2,368.9 2,197.1	- -	0.0 0.0	539.6 421.4	268.2 241.3	445.5 449.3
2013 May June July Aug. <sup>(p)</sup>	4,489.5 4,399.4 4,364.2 4,353.7	931.0 936.8 944.3 945.3	2,378.0 2,350.7 2,281.6 2,250.3	97.4 107.9 114.7 81.3	57.7 45.7 50.6 46.3	2,222.8 2,197.1 2,116.3 2,122.7	- - -	0.0 0.0 0.0 0.0	483.9 421.4 449.5 469.1	251.8 241.3 232.9 229.4	444.9 449.3 455.8 459.5
				MFI	s excluding the Eu	irosystem					
2011 2012	33,533.5 32,697.6	-	17,312.0 17,201.9	195.5 170.8	10,752.1 10,869.2	6,364.4 6,161.9	570.6 534.7	5,008.2 4,849.2	2,229.1 2,343.9	3,805.2 3,490.9	4,608.3 4,277.0
2013 Q1 Q2	32,760.3 32,008.7	-	17,118.9 17,074.6	208.9 236.7	11,016.7 11,085.2	5,893.3 5,752.8	523.6 486.8	4,733.2 4,590.9	2,348.0 2,392.6	3,526.5 3,407.1	4,510.0 4,056.7
2013 May June July Aug. <sup>(p)</sup>	32,476.9 32,008.7 31,695.6 31,543.9	- - -	17,059.9 17,074.6 16,948.5 16,949.5	216.8 236.7 203.8 181.5	11,036.2 11,085.2 11,006.2 10,952.5	5,806.8 5,752.8 5,738.6 5,815.5	514.8 486.8 487.1 502.2	4,645.9 4,590.9 4,537.7 4,506.3	2,377.0 2,392.6 2,406.1 2,388.9	3,499.4 3,407.1 3,362.4 3,339.8	4,380.0 4,056.7 3,953.8 3,857.3

Source: ECB.

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

Amounts issued by euro area residents.
 Amounts issued with a maturity of up to two years and held by non-euro area residents are included in external liabilities.



Money, banking and other financial corporations

# **2.2 Consolidated balance sheet of euro area MFIs** I) (EUR billions; outstanding amounts at end of period; transactions dur

#### 1. Assets

	Total	Loans to	euro area res	idents		ecurities other y euro area res		Holdings of shares/ other equity	External assets	Fixed assets	Remaining assets 2)
		Total	General government	Other euro area residents	Total	General government	Other euro area residents	other euro area			
	1	2	3	4	5	6	7	8	9	10	11
					Outstand	ding amounts					
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	26,247.0	12,213.9	1,170.3	11,043.6	3,629.1	2,195.3	1,433.7	767.0	4,843.9	222.9	4,570.3
2013 Q1	26,566.0	12,185.3	1,141.2	11,044.2	3,728.0	2,294.7	1,433.3	784.7	4,843.3	218.2	4,806.4
Q2	25,927.6	12,096.8	1,116.9	10,979.9	3,806.6	2,374.0	1,432.5	792.5	4,666.7	217.7	4,347.3
2013 May	26,368.4	12,116.6	1,125.4	10,991.2	3,800.3	2,353.5	1,446.8	810.2	4,797.3	217.1	4,626.9
June	25,927.6	12,096.8	1,116.9	10,979.9	3,806.6	2,374.0	1,432.5	792.5	4,666.7	217.7	4,347.3
July	25,678.3	12,019.1	1,120.3	10,898.8	3,771.3	2,339.6	1,431.7	785.6	4,636.1	218.4	4,247.8
Aug. <sup>(p)</sup>	25,468.8	11,877.7	1,105.3	10,772.4	3,762.7	2,334.2	1,428.5	781.4	4,660.8	218.5	4,167.6
					Tra	nsactions					
2011	993.1	60.3	-55.6	115.9	127.7	151.8	-24.1	-29.9	-37.2	7.8	864.3
2012	85.5	-37.2	-4.7	-32.5	113.0	183.6	-70.5	38.6	-153.6	-14.0	138.6
2013 Q1	-72.7	-8.7	-29.6	20.9	99.9	100.1	-0.2	18.4	8.3	-3.5	-187.2
Q2	-443.2	-68.3	-23.6	-44.7	79.8	79.6	0.2	9.1	0.9	-0.3	-464.5
2013 May	-305.2	-41.9	-25.6	-16.3	58.3	52.0	6.3		0.0	-1.0	-314.8
June	-340.0	-11.9	-8.0	-3.9	23.4	36.4	-13.0		-57.8	0.7	-282.3
July	-253.5	-71.3	2.3	-73.7	-40.2	-39.8	-0.4		-30.0	0.7	-100.7
Aug. <sup>(p)</sup>	-156.5	-47.8	-15.0	-32.8	-8.2	-4.7	-3.5		-16.0	0.1	-81.6

### 2. Liabilities

	Total	Currency in circulation	Deposits of central government	Deposits of other general government/ other euro area residents	Money market fund shares/ units <sup>3)</sup>	Debt securities issued 4)	Capital and reserves	External liabilities	Remaining liabilities <sup>2)</sup>	Excess of inter-MFI liabilities over inter-MFI assets
	1	2	3	4	5	6	7	8	9	10
					Outstanding an	nounts				
2011	26,718.7	857.5	259.3	10,764.3	520.4	3,006.1	2,219.1	4,089.5	5,020.5	-17.9
2012	26,247.0	876.8	252.1	10,933.7	467.9	2,853.6	2,395.9	3,789.6	4,729.4	-52.0
2013 Q1	26,566.0	867.5	302.3	11,054.8	459.6	2,775.9	2,414.4	3,794.7	4,955.5	-58.8
Q2	25,927.6	885.9	344.6	11,130.9	435.9	2,694.9	2,336.6	3,648.4	4,506.0	-55.5
2013 May	26,368.4	879.6	314.3	11,093.9	455.6	2,721.9	2,377.7	3,751.2	4,824.9	-50.7
June	25,927.6	885.9	344.6	11,130.9	435.9	2,694.9	2,336.6	3,648.4	4,506.0	-55.5
July	25,678.3	892.8	318.5	11,056.8	435.0	2,655.4	2,368.0	3,595.3	4,409.7	-53.0
Aug. <sup>(p)</sup>	25,468.8	894.2	262.8	10,998.8	444.3	2,645.8	2,391.8	3,569.2	4,316.8	-55.0
					Transactio	ns				
2011	993.1	49.1	-0.8	168.1	-29.0	49.9	141.4	-200.0	860.6	-46.1
2012	85.5	19.5	-5.1	187.0	-18.2	-124.5	155.4	-254.1	147.8	-22.4
2013 Q1	-72.7	-9.3	50.2	115.5	7.6	-65.7	24.6	-25.7	-172.7	2.8
Q2	-443.2	18.4	42.3	85.5	-23.5	-67.9	50.1	-105.6	-438.5	-4.0
2013 May	-305.2	4.9	62.6	19.8	-3.4	-26.8	11.5	-77.8	-288.0	-7.9
June	-340.0	6.3	30.3	39.7	-19.6	-26.7	38.6	-92.6	-306.9	-9.2
July	-253.5	6.9	-26.1	-70.1	-0.8	-33.3	-2.5	-26.6	-103.7	2.7
Aug. <sup>(p)</sup>	-156.5	1.4	-55.7	18.5	9.2	-11.9	7.0	-49.0	-91.1	15.1

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.



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

	M1	M2 M2-M1	M3	M3-M2		M3 3-month moving average (centred)	Longer-term financial liabilities	Credit to general government	Credit t	o other euro are	ea residents <sup>3)</sup> Loans adjusted for sales and securitisation <sup>5)</sup>	Net external assets 4)
	1	2	3	4	5	6	7	8	9	10	11	12
						Outstandin	ig amounts					
2011 2012	4,806.8 5,109.3	3,802.6 3,884.9	8,609.3 8,994.3	894.1 792.5	9,503.5 9,786.8	-	7,678.9 7,569.2	3,165.2 3,406.1	13,283.4 13,055.8	11,016.6 10,856.5	-	927.3 1,037.0
2013 Q1 Q2	5,203.7 5,264.7	3,885.8 3,873.2	9,089.5 9,137.9	718.7 681.2	9,808.2 9,819.1	-	7,563.5 7,389.5	3,430.6 3,455.3	13,048.5 12,934.3	10,830.5 10,702.8	-	1,061.5 1,007.3
2013 May June July Aug. <sup>(p)</sup>	5,268.3 5,264.7 5,301.8 5,339.7	3,862.8 3,873.2 3,870.7 3,849.2	9,131.1 9,137.9 9,172.5 9,188.9	702.0 681.2 681.6 678.7	9,833.0 9,819.1 9,854.1 9,867.6	- - -	7,477.4 7,389.5 7,377.6 7,388.1	3,466.6 3,455.3 3,449.0 3,453.7	12,985.7 12,934.3 12,880.9 12,867.7	10,755.6 10,702.8 10,652.0 10,639.3	- - -	1,067.0 1,007.3 1,040.6 1,081.5
						Transa	actions					
2011 2012	91.7 309.7	70.3 78.7	162.0 388.4	-7.5 -55.3	154.5 333.1	-	211.6 -117.0	95.8 184.5	48.9 -102.4	103.7 -70.2	130.3 -16.2	162.3 99.0
2013 Q1 Q2	91.1 67.0	0.5 -10.7	91.6 56.3	-45.0 -37.2	46.5 19.0	-	-1.9 -31.5	24.8 25.5	13.7 -92.0	-5.8 -108.1	0.0 -100.2	64.3 82.5
2013 May June July Aug. <sup>(p)</sup>	40.1 -2.5 38.7 36.9	-15.4 9.1 -1.1 -23.1	24.7 6.6 37.6 13.7	-9.1 -20.6 -0.7 -2.1	15.6 -14.0 36.9 11.6	- - -	-0.9 -5.2 -37.3 -8.0	23.9 4.9 -12.7 5.4	-18.0 -37.1 -50.7 -10.1	-33.7 -45.4 -43.4 -10.6	-27.7 -43.7 -35.5 -7.9	67.5 2.8 7.4 23.1
						Growt	h rates					
2011 2012	1.9 6.4	1.9 2.1	1.9 4.5	-0.9 -6.5	1.7 3.5	1.7 3.6	2.9 -1.5	3.2 5.8	0.4 -0.8	0.9 -0.6	1.2 -0.1	162.3 99.0
2013 Q1 Q2	7.1 7.6	0.5 0.1	4.2 4.3	-13.9 -17.3	2.6 2.4	3.0 2.5	-1.2 -1.0	3.5 2.7	-0.9 -1.1	-0.7 -1.6	-0.3 -1.0	180.5 281.6
2013 May June July Aug. <sup>(p)</sup>	8.3 7.6 7.1 6.8	0.0 0.1 0.2 0.4	4.7 4.3 4.1 4.0	-15.6 -17.3 -17.7 -16.3	2.9 2.4 2.2 2.3	2.8 2.5 2.3	-1.0 -1.0 -1.0 -1.2	3.3 2.7 2.2 2.1	-1.0 -1.1 -1.2 -1.2	-1.2 -1.6 -1.9 -2.0	-0.7 -1.0 -1.4 -1.5	268.7 281.6 268.9 280.6

# **C2 Counterparts** <sup>1</sup>) (annual growth rates; seasonally adjusted)





Source: ECB.

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

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.

Excludes reverse repos to central counterparties as of June 2010; transactions and growth rates are adjusted for this effect. Values in the section "growth rates" are sums of the transactions during the 12 months ending in the period indicated. Adjustment for the derecognition of loans on the MFI balance sheet on account of their sale or securitisation. 3)

4) 5)



## 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	with an agreed maturity of up	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	a maturity of	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
					Outstandi	ng amounts					
2011	844.2	3,962.6	1,841.6	1,961.0	147.4	536.8	209.9	2,815.7	115.3	2,543.5	2,204.4
2012	864.0	4,245.3	1,805.4	2,079.5	124.8	482.2	185.5	2,688.3	106.0	2,394.5	2,380.4
2013 Q1	869.1	4,334.6	1,784.3	2,101.5	122.1	458.7	138.0	2,632.2	100.8	2,409.8	2,420.7
Q2	879.3	4,385.4	1,750.4	2,122.8	116.9	438.0	126.3	2,561.9	96.6	2,402.1	2,328.9
2013 May	879.6	4,388.7	1,744.0	2,118.8	122.3	446.2	133.5	2,580.6	97.6	2,408.5	2,390.8
June	879.3	4,385.4	1,750.4	2,122.8	116.9	438.0	126.3	2,561.9	96.6	2,402.1	2,328.9
July	884.3	4,417.5	1,740.9	2,129.8	121.3	435.6	124.7	2,519.6	95.6	2,399.9	2,362.5
Aug. <sup>(p)</sup>	890.7	4,449.0	1,721.6	2,127.6	115.0	435.3	128.4	2,508.3	95.6	2,394.8	2,389.4
					Trans	actions					
2011	49.2	42.5	36.9	33.4	-16.7	-29.7	38.9	18.0	-2.5	55.9	140.2
2012	20.0	289.7	-35.8	114.5	-17.0	-20.0	-18.3	-105.3	-10.2	-156.1	154.6
2013 Q1	5.1	86.0	-21.5	22.0	-2.9	-7.6	-34.5	-56.7	-5.2	13.6	46.3
Q2	10.1	56.8	-32.3	21.6	-5.0	-20.4	-11.9	-56.9	-4.2	-6.5	36.2
2013 May	-0.4	40.5	-23.4	8.0	0.6	-5.4	-4.3	-18.3	-1.9	10.7	8.5
June	-0.3	-2.2	5.1	4.0	-5.4	-8.1	-7.1	-18.4	-1.0	-3.4	17.6
July	5.0	33.7	-8.7	7.6	4.5	-2.4	-2.9	-34.8	-1.0	-1.4	-0.2
Aug. <sup>(p)</sup>	6.4	30.5	-21.2	-1.9	-6.4	-0.4	4.7	-14.5	0.0	-3.4	10.0
					Grow	th rates					
2011	6.2	1.1	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	-3.7	-8.8	-6.1	6.9
2013 Q1	1.9	8.2	-5.2	5.9	-7.9	-6.7	-33.9	-4.2	-11.7	-4.9	7.0
Q2	2.1	8.8	-5.6	5.4	-9.3	-11.3	-36.7	-4.8	-14.8	-3.2	6.5
2013 May	2.6	9.6	-6.2	5.8	-6.0	-11.3	-32.3	-4.4	-14.4	-3.6	6.5
June	2.1	8.8	-5.6	5.4	-9.3	-11.3	-36.7	-4.8	-14.8	-3.2	6.5
July	2.4	8.1	-5.4	5.3	-6.5	-11.1	-40.1	-6.0	-14.9	-1.2	5.7
Aug. <sup>(p)</sup>	2.7	7.6	-4.5	4.8	-9.5	-10.1	-35.4	-6.5	-14.1	-1.6	5.9

## C3 Components of monetary aggregates 1)

C4 Components of longer-term financial liabilities <sup>1</sup>)



debt securities with a maturity of over 2 years deposits with an agreed maturity of over 2 years



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 counterpaties as of June 2010; transactions and growth rates are adjusted for this effect.



#### 3. Loans as counterpart to M3

J. Loans a	s counter pa											
	Insurance corporations and pension funds	financial inter-		Non-fina	ncial corpora	ations			H	ouseholds <sup>3)</sup>		
	Total	Total		tal oans adjusted for sales and ecuritisation <sup>4)</sup> 4	Up to 1 year 5	Over 1 and up to 5 years 6	Over 5 years 7		otal Loans adjusted for sales and securitisation <sup>4)</sup> 9	Consumer credit 10	Loans for house purchase	Other loans
					Outsta	anding amounts						
2011 2012	91.0 88.9	969.6 981.6	4,723.7 4,543.4	-	$1,147.7 \\ 1,132.6$	860.7 795.9	2,715.2 2,614.9	5,232.3 5,242.6	-	626.2 602.0	3,777.2 3,824.1	828.9 816.5
2013 Q1 Q2	92.5 93.4	978.5 929.3	4,508.9 4,445.5	-	1,134.9 1,109.2	778.5 770.0	2,595.6 2,566.3	5,250.5 5,234.6	-	593.2 586.5	3,843.1 3,840.0	814.2 808.1
2013 May June July Aug. <sup>(p)</sup>	93.0 93.4 95.7 96.8	955.8 929.3 901.6 897.6	4,465.9 4,445.5 4,424.0 4,411.5		1,113.1 1,109.2 1,094.4 1,084.6	774.3 770.0 772.3 772.1	2,578.6 2,566.3 2,557.3 2,554.9	5,240.8 5,234.6 5,230.6 5,233.4		591.2 586.5 588.2 586.1	3,838.2 3,840.0 3,832.9 3,837.4	811.5 808.1 809.5 809.9
					Т	ransactions						
2011 2012	1.3 -2.0	-37.1 13.2	58.0 -107.0	63.9 -61.4	24.0 6.9	-22.9 -51.3	56.8 -62.6	81.6 25.6	102.3 34.3	-11.6 -17.8	85.7 48.2	7.4 -4.9
2013 Q1 Q2	3.6 1.0	-3.4 -49.5	-15.7 -48.3	-6.2 -48.7	6.7 -24.4	-13.7 -5.6	-8.8 -18.2	9.8 -11.3	4.3 -2.9	-6.7 -5.4	17.2 -1.4	-0.7 -4.5
2013 May June July Aug. <sup>(p)</sup>	-2.4 0.4 2.4 1.0	-5.7 -28.7 -26.0 -4.4	-17.8 -12.4 -16.9 -11.6	-18.3 -11.7 -18.8 -10.9	-13.5 -2.5 -10.6 -9.6	2.1 -3.0 0.6 -0.2	-6.4 -7.0 -6.9 -1.8	-7.8 -4.7 -2.9 4.4	-1.2 -3.6 6.7 5.8	-1.8 -3.8 2.3 -1.9	-3.4 1.4 -7.0 4.5	-2.7 -2.3 1.8 1.7
					G	rowth rates						
2011 2012	1.5 -2.2	-3.8 1.3	1.2 -2.3	1.4 -1.3	2.1 0.6	-2.6 -6.0	2.1 -2.3	1.6 0.5	2.0 0.7	-1.8 -2.9	2.3 1.3	0.9 -0.6
2013 Q1 Q2	6.1 11.3	0.6 -3.2	-2.4 -3.3	-1.3 -2.3	1.6 -1.8	-6.3 -6.2	-2.9 -2.9	0.4 0.0	0.3 0.3	-3.5 -3.6	1.3 0.8	-0.9 -1.2
2013 May June July Aug. <sup>(p)</sup>	12.0 11.3 14.4 12.1	0.3 -3.2 -5.7 -6.1	-3.2 -3.3 -3.7 -3.8	-2.2 -2.3 -2.8 -2.9	-1.5 -1.8 -3.7 -4.4	-6.3 -6.2 -5.8 -5.3	-2.9 -2.9 -3.0 -3.2	0.2 0.0 0.1 0.1	0.3 0.3 0.4 0.4	-3.6 -3.6 -2.6 -2.6	1.0 0.8 0.7 0.7	-1.0 -1.2 -0.9 -0.7

corporations I)

C6 Loans to households I)

15

10

5

0

-5



Source: ECB.

1)

Data refer to the changing composition of the euro area. For further information, see the General Notes. Excludes reverse repos to central counterparties as of June 2010; transactions and growth rates are adjusted for this effect. 2)

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 I), 2) (EUR billions and annual growth rates

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

I. Loans to inflancial intermediaries and non-inflancial corporations Insurance corporations and pension funds Other financial intermediaries Non-financial corporations													
	1 year and up to 5 y					Other fina	ncial interm	ediaries		Non-	financial co	orporations	
	Total			Over 5 years		Total Reverse repos to central counterparties	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	11	12	13
						Outstanding a	mounts						
2012	81.6	64.2	4.5	12.9	1,169.6	196.2	599.6	229.5	340.5	4,538.9	1,124.1	794.7	2,620.0
2013 Q1 Q2	91.4 94.7	75.4 78.7	3.9 3.8	12.2 12.2	1,203.9 1,188.2	234.9 252.7	630.6 628.3	219.6 218.7	353.7 341.2	4,507.2 4,454.4	1,135.9 1,118.7	778.8 770.9	2,592.5 2,564.8
2013 June July Aug. <sup>(p)</sup>	94.7 97.2 99.7	78.7 81.3 83.6	3.8 3.6 3.6	12.2 12.3 12.5	1,188.2 1,131.2 1,038.0	252.7 223.0 141.8	628.3 578.1 490.8	218.7 216.6 214.9	341.2 336.5 332.3	4,454.4 4,434.3 4,401.7	1,118.7 1,100.4 1,074.4	770.9 773.3 771.4	2,564.8 2,560.6 2,555.9
						Transacti	ons						
2012	-1.7	0.6	-1.8	-0.5	51.9	38.7	21.1	13.1	17.7	-107.9	6.2	-51.4	-62.7
2013 Q1 Q2	9.9 3.3	11.2 3.3	-0.6 -0.1	-0.7 0.1	33.9 -16.0	38.6 17.8	30.9 -1.1	-4.8 -2.9	7.9 -12.0	-12.9 -37.6	16.2 -15.9	-12.2 -5.0	-16.9 -16.7
2013 June July Aug. <sup>(p)</sup>	-0.1 2.6 2.5	-0.1 2.6 2.3	-0.1 -0.1 0.0	0.1 0.1 0.2	-9.9 -55.3 -2.0	14.5 -29.7 10.5	-1.2 -49.6 1.1	-2.9 0.9 1.3	-5.7 -6.7 -4.4	-5.3 -15.5 -31.7	3.1 -14.1 -25.7	-3.8 0.7 -1.9	-4.7 -2.1 -4.1
						Growth ra	ates						
2012	-2.0	0.9	-28.6	-3.5	4.6	24.7	3.6	6.1	5.5	-2.3	0.5	-6.0	-2.3
2013 Q1 Q2	6.1 11.0	11.7 16.7	-27.7 -29.6	-8.8 -2.2	4.6 3.9	25.7 42.7	6.6 8.8	0.3 -0.7	4.1 -1.5	-2.4 -3.3	1.7 -1.8	-6.3 -6.2	-2.9 -2.9
2013 June July Aug. <sup>(p)</sup>	11.0 14.3 12.6	16.7 20.3 18.1	-29.6 -27.0 -31.3	-2.2 -1.4 -0.1	3.9 -3.4 -2.0	42.7 6.4 17.1	8.8 -4.9 -0.7	-0.7 0.3 -0.1	-1.5 -3.2 -5.5	-3.3 -3.7 -3.8	-1.8 -3.7 -4.4	-6.2 -5.8 -5.3	-2.9 -3.1 -3.2

#### 2. Loans to households <sup>3)</sup>

2. Loans to n														
	Total	Total         Up to         Over 1         Over 1           1 year         and up to         5 year				Loar	ns for hou	se purchase				Other loans	s	
		Total			Over 5 years	Total	Up to 1 year	Over 1 and up to 5 years	Over 5 years	,	Total Sole proprietors	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
						Outstanding a	amounts	•						
2012	5,252.5	604.3	136.4	175.2	292.7	3,830.9	14.4	56.6	3,760.0	817.3	419.4	139.8	80.7	596.9
2013 Q1 Q2	5,240.5 5,241.5	590.9 589.6	130.0 131.0	172.2 171.3	288.7 287.3	3,837.9 3,838.5	13.5 13.7	56.0 55.7	3,768.4 3,769.2	811.6 813.4	415.2 414.0	139.2 144.7	78.6 78.5	593.8 590.2
2013 June July Aug. <sup>(p)</sup>	5,241.5 5,234.9 5,231.8	589.6 589.6 586.1	131.0 130.1 128.8	171.3 171.8 170.8	287.3 287.7 286.5	3,838.5 3,836.6 3,837.1	13.7 12.7 12.6	55.7 56.1 56.0	3,769.2 3,767.8 3,768.5	813.4 808.7 808.6	414.0 413.3 412.3	144.7 141.1 140.0	78.5 78.6 78.7	590.2 589.0 590.0
						Transact	ions							
2012	25.0	-17.8	-3.2	-6.2	-8.4	47.8	0.2	0.2	47.4	-4.9	-5.7	-0.4	-6.9	2.3
2013 Q1 Q2	-10.0 5.6	-11.3 -0.1	-5.0 1.5	-3.5 -1.0	-2.7 -0.6	5.5 2.3	-0.6 0.2	-0.9 -0.3	6.9 2.4	-4.2 3.4	-4.1 -2.1	-0.8 3.7	-1.9 0.1	-1.6 -0.3
2013 June July Aug. <sup>(p)</sup>	11.4 -5.5 -1.6	0.2 0.6 -3.2	1.8 -0.7 -1.3	-1.4 0.3 -0.9	-0.3 1.0 -1.0	6.8 -1.7 0.4	0.1 -0.9 -0.1	-0.2 0.4 -0.1	6.9 -1.2 0.6	4.5 -4.3 1.3	-0.5 -0.7 -1.0	6.6 -3.7 -0.9	0.1 0.1 0.2	-2.2 -0.8 2.0
0						Growth r	ates							
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
2013 Q1 Q2	0.4 0.0	-3.5 -3.6	-2.7 -2.3	-4.2 -5.0	-3.4 -3.3	1.3 0.8	0.0 -0.1	-1.4 -2.1	1.4 0.9	-0.9 -1.2	-1.8 -1.6	-0.7 -1.1	-8.3 -7.2	0.1 -0.3
2013 June July Aug. <sup>(p)</sup>	0.0 0.1 0.1	-3.6 -2.6 -2.6	-2.3 -2.3 -2.0	-5.0 -4.2 -4.2	-3.3 -1.8 -1.8	0.8 0.7 0.7	-0.1 -7.7 -8.8	-2.1 -2.1 -2.3	0.9 0.8 0.8	-1.2 -0.9 -0.7	-1.6 -1.4 -1.5	-1.1 -0.3 0.2	-7.2 -5.6 -5.0	-0.3 -0.4 -0.2

Source: ECB.
MFI sector excluding the Eurosystem; sectoral classification is based on the ESA 95.
Data refer to the changing composition of the euro area. For further information, see the General Notes.
Including non-profit institutions serving households.

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

		G	eneral governmer	nt			Non-e	euro area reside	nts	
	Total	Central government	Other	general governme	nt	Total	Banks 3)		Non-banks	
		government	State government	Local government	Social security funds			Total	General government	Other
	1	2	3	4	5	6	7	8	9	10
				Outstand	ding amounts					
2011 2012	1,159.6 1,153.4	348.9 341.8	221.7 221.6	567.4 565.9	21.7 24.1	3,021.6 2,866.5	2,022.7 1,905.2	998.9 961.3	62.4 60.7	936.4 900.6
2012 Q3 Q4 2013 Q1 Q2 <sup>(p)</sup>	1,163.0 1,153.4 1,124.3 1,101.8	341.4 341.8 312.4 290.3	231.5 221.6 217.0 218.1	564.0 565.9 568.8 565.1	26.2 24.1 26.0 28.0	3,006.3 2,866.5 2,890.1 2,877.0	1,988.5 1,905.2 1,888.6 1,894.1	1,017.8 961.3 1,001.5 981.8	59.7 60.7 60.0 58.0	958.1 900.6 941.5 923.8
				Trai	nsactions					
2011 2012	-54.9 -3.6	-45.9 -4.1	-0.4 -4.9	14.6 2.9	-23.3 2.7	15.6 -130.7	-26.2 -102.4	41.6 -28.4	13.0 -1.0	28.7 -27.3
2012 Q3 Q4 2013 Q1 Q2 <sup>(p)</sup>	-7.9 -9.5 -29.5 -22.1	1.8 0.6 -29.5 -21.8	-9.5 -9.9 -4.5 1.1	-1.3 1.9 2.5 -3.7	1.1 -1.9 1.9 2.0	-54.9 -103.7 11.6 18.8	-59.9 -57.5 -26.2 26.5	5.0 -46.2 37.8 -8.9	2.3 1.9 -1.0 -1.3	2.7 -48.1 38.9 -7.6
				Gro	wth rates					
2011 2012	-4.5 -0.3	-11.6 -1.2	-0.2 -2.2	2.7 0.5	-51.6 12.3	0.6 -4.2	-1.1 -5.0	4.4 -2.9	26.7 -1.8	3.2 -2.9
2012 Q3 Q4 2013 Q1 Q2 <sup>(p)</sup>	1.7 -0.3 -1.1 -5.9	0.0 -1.2 -2.4 -14.4	2.8 -2.2 -3.5 -9.5	2.1 0.5 0.2 -0.1	6.9 12.3 9.5 12.7	-5.6 -4.2 -5.2 -4.2	-7.1 -5.0 -7.2 -5.7	-2.6 -2.9 -1.4 -1.2	-7.0 -1.8 0.1 3.1	-2.3 -2.9 -1.5 -1.4



# **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 1), 2)

#### 1. Deposits by financial intermediaries

1. Deposito	oy inia	iciai initei	meanarie	3											
		Insu	rance corpo	rations and	l pension fu	unds				Other f	inancial ii	ntermediari	es		
	Total	Overnight	With an maturi			emable tice of:	Repos	Total	Overnight	With an a maturit		Redeer at noti		R	epos
		-	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 counter-
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	parties 15
						Outst	anding am	ounts							
2011 2012	703.8 691.9	91.9 107.0	79.9 81.4	512.4 484.4	4.0 6.4	0.2 0.2	15.5 12.5	2,221.0 2,015.8	390.0 410.4	284.9 236.6	1,190.7 1,020.7	14.7 13.6		340.2 334.4	260.0 256.7
2013 Q1 Q2	697.4 678.8	114.2 104.2	83.3 78.0	480.3 479.4	7.9 7.9	0.3 0.3	11.5 9.0	2,110.8 2,123.7	442.4 455.6	237.8 230.7	1,016.0 994.0	15.0 16.9		399.3 426.3	314.1 343.4
2013 May June July Aug. <sup>(p)</sup>	696.3 678.8 683.4 675.4	112.4 104.2 108.9 103.8	82.6 78.0 80.4 81.1	481.3 479.4 475.0 472.9	8.3 7.9 8.3 8.4	0.3 0.3 0.3 0.4	11.6 9.0 10.5 8.8	2,086.6 2,123.7 2,049.6 1,967.6	444.0 455.6 435.4 435.8	231.8 230.7 232.5 235.1	997.8 994.0 986.8 977.9	15.4 16.9 17.5 16.8	0.2 0.2	397.3 426.3 377.2 301.6	310.2 343.4 287.5 217.2
						Т	ransactior	IS							
2011 2012	0.0 -12.1	11.5 15.6	4.2 2.6	-14.2 -27.6	1.1 2.0	-0.1 0.0	-2.6 -4.7	2.4 -177.1	28.8 23.5	-29.2 -49.5	5.7 -166.0	-2.6 -2.0	0.1 -0.3	-0.4 17.2	5.5 13.3
2013 Q1 Q2	6.9 -18.5	8.1 -9.8	1.9 -5.4	-4.3 -0.7	1.5 0.0	0.1 0.0	-0.4 -2.5	90.1 15.6	29.1 14.8	0.8 -6.9	-5.3 -21.3	1.5 1.8	-0.1 0.0	64.1 27.2	57.3 29.4
2013 May June July Aug. <sup>(p)</sup>	-6.3 -17.6 4.8 -8.5	-6.6 -8.2 4.7 -5.2	-0.5 -4.9 2.4 0.3	2.6 -1.6 -4.3 -2.6	0.1 -0.3 0.3 0.5	$\begin{array}{c} 0.0 \\ 0.0 \\ 0.0 \\ 0.1 \end{array}$	-2.0 -2.6 1.6 -1.7	0.8 38.5 -72.3 -5.4	-3.2 12.0 -19.4 0.1	0.3 -1.1 1.9 2.4	-7.6 -3.0 -6.4 -9.2	-0.4 1.5 0.6 -0.6	0.0 0.0 0.0 0.1	11.8 29.0 -49.0 1.8	10.4 33.2 -55.9 7.1
						C	browth rate	es							
2011 2012	0.0 -1.7	14.1 17.0	5.6 3.4	-2.7 -5.4	43.3 50.8	-	-13.1 -32.1	0.2 -8.0	8.1 6.0	-9.3 -17.4	0.4 -14.0	-10.0 -14.0	-	-0.2 4.3	2.1 4.2
2013 Q1 Q2	-1.9 -1.9	17.6 6.6	-2.4 -0.2	-4.9 -4.2	65.3 27.9	-	-40.0 -8.2	-3.7 -1.2	5.1 12.1	-11.4 -8.9	-11.4 -9.0	-9.6 12.4	-	17.2 11.5	20.3 16.3
2013 May June July Aug. <sup>(p)</sup>	-1.6 -1.9 -2.4 -2.3	9.8 6.6 3.8 5.1	-1.8 -0.2 -0.3 3.6	-4.2 -4.2 -4.6 -4.9	43.8 27.9 27.3 32.2	- - -	-13.9 -8.2 5.1 -15.5	-3.9 -1.2 -2.2 -1.6	8.0 12.1 4.8 5.3	-12.7 -8.9 -5.5 -1.7	-9.7 -9.0 -4.7 -5.9	-0.9 12.4 28.6 24.6	- - -	6.4 11.5 -2.0 1.6	7.4 16.3 -2.5 4.1



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>

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

			Non-fir	ancial corp	orations			Households 3)						
	Total	Overnight	With an agreed	maturity of:	Redeemable	at notice of:	Repos	Total	Overnight	With an agreed	maturity of:	Redeemable a	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
						Outstand	ling amo	unts						
2011	1,686.9	1,054.3	444.3	97.7	72.3	2.0		5,894.0	2,255.7	948.1	723.7	1,837.1	106.7	22.7
2012	1,764.1	1,150.8	408.3	106.8	85.4	2.0		6,119.1	2,346.4	979.1	747.8	1,937.3	98.0	10.4
2013 Q1	1,750.7	1,125.5	409.7	110.8	91.8	1.7		6,166.2	2,377.3	966.0	758.1	1,963.5	93.1	8.3
Q2	1,762.4	1,151.9	389.7	116.2	92.4	1.7		6,209.8	2,446.4	928.9	770.3	1,970.0	88.2	6.1
2013 May	1,761.5	1,146.4	392.0	115.6	92.6	1.6	10.6	6,188.0	2,410.0	942.5	768.7	1,970.7	89.4	6.7
June	1,762.4	1,151.9	389.7	116.2	92.4	1.7		6,209.8	2,446.4	928.9	770.3	1,970.0	88.2	6.1
July	1,763.9	1,148.5	392.6	117.3	93.3	1.9		6,211.2	2,450.4	920.9	774.9	1,971.0	87.1	6.9
Aug. (p)	1,786.6	1,164.6	395.8	117.5	94.7	1.8	12.3	6,222.3	2,464.7	914.8	778.1	1,971.3	86.8	6.6
							isactions							
2011	9.5	10.0	-4.6	8.8	-5.0	0.4	-0.2	139.0	7.4	42.4	55.3	43.6	-2.6	-7.0
2012	84.2	101.6	-35.5	12.9	9.5	0.0	-4.3	224.8	90.4	33.7	21.8	100.7	-9.6	-12.3
2013 Q1	-13.8	-25.9	1.6	4.2	6.4	-0.3	0.2	46.6	30.7	-12.5	9.5	26.0	-4.9	-2.1
Q2	15.8	29.7	-19.9	5.7	0.8	0.0	-0.5	45.9	69.8	-35.6	12.2	6.6	-4.9	-2.2
2013 May	10.5	17.5	-12.2	2.7	0.4	0.1	2.0	11.6	14.5	-9.4	6.1	2.8	-2.1	-0.2
June	1.4	6.0	-3.5	1.7	-0.2	0.0	-2.6	22.7	36.5	-13.5	2.3	-0.7	-1.2	-0.7
July	2.9	-2.9	3.2	1.1	1.4	0.2	-0.2	2.0	4.3	-7.7	4.5	1.2	-1.1	0.8
Aug. <sup>(p)</sup>	22.5	15.7	2.4	1.2	1.4	-0.1	2.0	11.1	14.0	-6.6	4.0	0.3	-0.3	-0.3
						Gro	wth rates							
2011	0.6	1.0	-1.0	10.0	-6.5	28.9	-3.4	2.4	0.3	4.7	8.3	2.4	-2.4	-23.6
2012	5.0	9.6	-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	9.7	-7.5	12.9	16.4	-22.8	-11.8	3.7	6.9	-2.6	2.4	5.2	-11.7	-58.3
Q2	5.7	8.9	-5.1	15.1	10.8	-4.2	-12.8	3.6	7.0	-3.8	3.1	4.9	-15.4	-57.7
2013 May	6.7	10.8	-6.0	14.5	12.8	-5.5	-3.6	3.9	7.5	-3.2	2.9	5.2	-15.0	-58.3
June	5.7	8.9	-5.1	15.1	10.8	-4.2	-12.8	3.6	7.0	-3.8	3.1	4.9	-15.4	-57.7
July	6.2	8.9	-3.3	12.8	13.1	22.3	-13.3	3.6	7.6	-4.6	3.6	4.6	-15.9	-50.8
Aug. <sup>(p)</sup>	6.4	8.3	-2.1	13.6	13.2	10.7	6.5	3.7	8.1	-5.0	3.9	4.2	-15.2	-49.9





## Total deposits and deposits included in M3 sector <sup>2</sup>) (annual growth received) CI2

non-financial corporations (total)

- . . . households (total)
- non-financial corporations (included in M3)<sup>4)</sup> households (included in M3)<sup>5)</sup> - -



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

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

Including non-profit institutions serving households. Covers deposits in columns 2, 3, 5 and 7. Covers deposits in columns 9, 10, 12 and 14.

2) 3) 4) 5)



Source: ECB.

## 2.5 Deposits held with MFIs: breakdown 1), 2)

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

		Ger	ieral governmen	ıt		Non-euro area residents					
	Total	Central government	Other	general governm	ent	Total	Banks <sup>3)</sup>		Non-banks		
			State government	Local government	Social security funds 5	6	7	Total	General government 9	Other 10	
	1	2	3	Outs	tanding amount		1	0	9	10	
2011 2012	442.0 449.1	195.5 170.8	48.6 62.8	112.6 111.7	85.4 103.8	3,153.6 2,891.8	2,175.0 2,013.9	978.6 877.9	44.3 38.7	934.3 839.2	
2012 Q3 Q4 2013 Q1	510.1 449.1 500.5	202.6 170.8 208.9 236.7	93.1 62.8 67.2 70.9	111.3 111.7 111.8 115.2	103.1 103.8 112.5 124.5	3,131.0 2,891.8 2,901.5 2,803.4	2,176.6 2,013.9 1,987.1 1,870.6	954.4 877.9 914.4 932.8	42.5 38.7 36.5 34.4	912.0 839.2 877.9 898.5	
Q2 <sup>(p)</sup>	547.1	230.7	70.9		Transactions	2,803.4	1,870.0	932.8	54.4	090.3	
2011 2012	17.1 -7.9	3.3 -22.6	0.6 -0.3	2.3 -0.4	10.8 15.6	-334.9 -242.6	-314.6 -138.5	-20.3 -104.1	-2.1 -5.1	-18.2 -98.9	
2012 Q3 Q4 2013 Q1 Q2 <sup>(p)</sup>	2.8 -61.5 50.3 46.8	11.8 -32.3 38.2 27.7	-5.5 -30.2 4.1 3.8	-0.9 0.4 0.1 3.3	-2.7 0.6 7.9 11.9	-93.1 -209.3 -2.2 -69.1	-101.2 -141.7 -32.8 -99.4	8.0 -67.6 30.6 30.3	1.1 -3.4 -2.0 -1.7	6.9 -64.3 32.6 32.0	
				(	Growth rates						
2011 2012	3.9 -1.4	1.3 -11.7	1.3 10.3	2.1 -0.4	14.6 18.3	-9.8 -7.6	-12.8 -6.4	-1.9 -10.6	-4.4 -11.9	-1.8 -10.5	
2012 Q3 Q4 2013 Q1 Q2 <sup>(p)</sup>	6.7 -1.4 3.6 7.5	-2.9 -11.7 9.7 23.7	45.5 10.3 -12.3 -28.2	1.1 -0.4 -1.5 2.6	14.1 18.3 13.0 16.7	-7.9 -7.6 -13.0 -11.6	-6.5 -6.4 -15.0 -16.5	-11.4 -10.6 -8.7 0.2	-16.4 -11.9 -33.1 -14.6	-11.2 -10.5 -7.2 0.8	

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



- 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. The term "banks" is used in this table to indicate institutions similar to MFIs which are resident outside the euro area. 3)



# **2.6** MFI holdings of securities: breakdown <sup>1</sup>), <sup>2</sup>) (EUR billions and annual growth rates; outstanding amounts and growth rates at end of period; transactions during period)

			5	Securities of	ther than sh	ares		Shares and other equity				
	Total	MF	Is	Gen govern		Other area res		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
					Out	standing am	ounts					
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	1,748.4	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	5,785.3	1,704.0	120.8	1,672.4	31.7	1,381.7	27.1	847.6	1,544.0	464.8	769.3	309.9
Q2	5,774.2	1,650.3	118.2	1,755.9	29.3	1,380.5	26.7	813.4	1,554.7	468.9	777.4	308.4
2013 May	5,818.2	5,774.2 1,650.3 118.2 1,755.9 29.3 1,380.5 26.7						835.3	1,583.4	474.7	794.4	314.3
June	5,774.2	5,719.6 1,639.6 117.4 1,724.3 28.7 1,378.4 27.5						813.4	1,554.7	468.9	777.4	308.4
July	5,719.6	5,697.6 1,624.9 110.9 1,723.4 31.4 1,375.2 27.4						803.9	1,560.5	479.2	770.2	311.1
Aug. <sup>(p)</sup>	5,697.6	Transactions						804.5	1,533.5	457.6	766.0	309.9
						Transaction	IS					
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	-67.5	-3.9	-46.2	49.9	6.6	38.0	5.3
2013 Q1	9.1	-59.2	17.8	78.8	-1.4	-17.6	3.4	-12.7	21.6	-9.9	18.0	13.6
Q2	7.5	-48.6	-4.0	83.3	-1.7	-0.7	0.0	-21.0	19.7	9.9	9.2	0.6
2013 May	41.4	-19.2	-1.0	52.2	-0.2	6.5	-0.4	3.5	13.6	15.3	-5.7	4.1
June	-23.7	-23.7	-0.2	31.2	-1.1	-11.7	-1.3	-17.0	-18.4	-2.3	-12.0	-4.0
July	-51.8	-11.4	1.2	-36.0	-0.2	-2.1	1.1	-4.4	-0.6	9.4	-12.0	2.0
Aug. <sup>(p)</sup>	-25.7	-14.4	-7.6	-0.4	2.5	-3.1	-0.3	-2.3	-25.8	-22.0	-3.1	-0.8
						Growth rate	s					
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
2013 Q1	-2.8	-7.5	20.9	8.7	-4.3	-6.2	4.8	-9.3	2.6	-3.3	5.0	6.5
Q2	-1.2	-7.6	21.0	10.4	-8.8	-3.5	7.7	-7.4	5.4	-1.3	8.1	9.7
2013 May	-1.6	-7.1	18.3	9.7	-6.1	-5.1	17.4	-6.9	4.4	-1.2	6.4	8.8
June	-1.2	-7.6	21.0	10.4	-8.8	-3.5	7.7	-7.4	5.4	-1.3	8.1	9.7
July	-1.1	-9.4	22.1	9.4	-13.3	-0.4	14.2	-6.3	4.6	0.3	5.7	9.3
Aug. <sup>(p)</sup>	-1.5	-10.8	7.3	9.5	2.5	0.5	12.9	-6.5	2.8	-4.1	5.3	7.9

CI4 MFI holdings of securities <sup>2</sup>)



Source: ECB.
 MFI sector excluding the Eurosystem; sectoral classification is based on the ESA 95.
 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** 1), 2) (percentages of total; outstanding amounts in EUR billions; end of period)

### 1. Loans, holdings of securities other than shares, and deposits

			MFI	[S <sup>3)</sup>			1			Non-M	IFIs			
	All	Euro <sup>4)</sup>		Non-eur	o currencie	s		All	Euro <sup>4)</sup>		Non-euro	o currencies		
	(outstanding amount)		Total					(outstanding amount)		Total				
	amount)			USD	JPY	CHF	GBP	amount)			USD	JPY	CHF	GBP
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	1					Lo To euro ar	oans							
2011 2012	6,153.8 5,796.9		-	-	-	- -	- -	12,322.7 12,196.0	96.2 96.4	3.8 3.6	1.9 1.7	0.3 0.2	1.1 0.9	0.4 0.5
2013 Q1 Q2 <sup>(p)</sup>	5,611.6 5,449.1	-	-	-	-	1	-	12,167.3 12,080.5	96.4 96.5	3.6 3.5	1.8 1.8	0.2 0.2	0.9 0.9	0.5 0.4
						o non-euro								
2011 2012	2,022.7 1,905.2	44.5 47.3	55.5 52.7	35.6 31.9	2.5 1.9	2.7 3.5	9.3 10.1	998.9 961.3	38.2 40.1	61.8 59.9	41.2 38.2	2.6 2.0	3.3 2.9	7.8 9.9
2013 Q1 Q2 <sup>(p)</sup>	1,888.6 1,894.1	45.8 44.2	54.2 55.8	33.1 35.8	2.2 2.1	3.1 2.8	9.7 9.4	1,001.5 981.8	39.4 39.6	60.6 60.4	39.4 39.3	2.6 2.6	2.6 2.6	8.9 9.1
	1							than shares						
						ued by euro								
2011 2012	1,852.0 1,851.3	95.3 94.4	4.7 5.6	2.5 2.7	0.1 0.1	0.3 0.4	1.5 2.0	2,913.1 3,050.2	98.2 98.1	1.8 1.9	1.0 1.2	0.2 0.1	0.1 0.1	0.4 0.4
2013 Q1 Q2 <sup>(p)</sup>	1,824.9 1,768.5	93.4 93.3	6.6 6.7	3.1 2.9	0.1 0.1	0.3 0.3	2.7 2.9	3,112.9 3,192.4	98.1 98.2	1.9 1.8	1.1 1.0	0.1 0.1	0.1 0.1	0.5 0.5
					Issue	d by non-ei	iro area r	esidents						
2011 2012	457.0 434.0	56.4 54.9	43.6 45.1	21.1 19.8	0.3 0.3	0.3 0.3	16.0 19.1	475.5 438.8	32.2 34.1	67.8 65.9	39.4 39.1	5.8 5.4	0.7 0.9	13.7 11.8
2013 Q1 Q2 <sup>(p)</sup>	419.0 406.2	55.4 55.2	44.6 44.8	22.2 21.0	0.2 0.2	0.3 0.2	15.9 16.9	428.6 407.3	32.8 34.7	67.2 65.3	41.8 40.5	4.6 4.8	1.0 0.9	10.6 10.4
	1						osits							
						By euro ar								
2011 2012	6,364.4 6,161.9	92.1 93.8	7.9 6.2	5.1 3.9	0.2 0.2	1.2 1.0	0.7 0.6	10,947.6 11,040.0	97.0 97.0	3.0 3.0	2.0 2.0	0.1 0.1	0.1 0.1	0.4 0.4
2013 Q1 Q2 <sup>(p)</sup>	5,893.3 5,752.8	93.3 93.1	6.7 6.9	4.2 4.4	0.2 0.2	1.1 1.0	0.6 0.6	11,225.7 11,321.9	96.9 96.9	3.1 3.1	2.1 2.1	0.1 0.1	0.1 0.1	0.4 0.4
					B	y non-euro								
2011 2012	2,175.0 2,013.9	59.2 58.3	40.8 41.7	25.6 27.7	2.1 1.6	1.8 1.0	7.2 7.3	978.6 877.9	56.1 52.3	43.9 47.7	30.0 31.4	2.0 1.9	1.5 1.2	5.1 6.3
2013 Q1 Q2 <sup>(p)</sup>	1,987.1 1,870.6	56.3 56.4	43.7 43.6	29.5 28.9	1.9 1.3	1.0 0.9	6.7 7.4	914.4 932.8	51.4 50.2	48.6 49.8	32.7 33.3	1.9 2.5	1.0 1.0	5.7 6.4

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

	All currencies	Euro <sup>4)</sup>		Non-eu	iro currencies		
	(outstanding amount)		Total				
	uniount)			USD	JPY	CHF	GBP
	1	2	3	4	5	6	7
2011 2012	5,236.8 5,068.3	82.0 81.8	18.0 18.2	9.4 9.6	1.7 1.6	2.0 1.9	2.6 2.5
2013 Q1 Q2 <sup>(p)</sup>	4,969.7 4,825.5	81.0 81.0	19.0 19.0	10.6 10.9	1.4 1.2	1.8 1.8	2.5 2.6

Source: ECB.

Data refer to the changing composition of the euro area. For further information, see the General Notes.
 For non-euro area residents, the term "MFIs" refers to institutions similar to euro area MFIs.
 Including items expressed in the national denominations of the euro.



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

# **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 2	Securities other than shares 3	Shares and other equity (excl. investment fund/ money market fund shares) 4	shares	Non-financial assets 6	Other assets (incl. financial derivatives) 7
			Outstar	nding amounts			
2013 Jan. Feb. Mar. Apr. May June July <sup>(p)</sup>	7,290.6 7,464.9 7,607.0 7,759.1 7,816.5 7,586.4 7,710.4	494.1 511.2 503.7 519.8 519.7 523.4 529.0	2,952.8 3,006.4 3,069.6 3,133.9 3,128.7 3,044.1 3,064.3	2,035.9 2,084.4 2,142.1 2,160.1 1,2,190.5 2,094.3 2,160.9	975.4 996.1 1,026.1 1,039.8 1,046.4 1,017.1 1,041.8	247.8 248.3 247.9 248.6 248.1 248.4 249.1	584.7 618.4 617.7 656.9 683.1 659.2 665.3
			Tra	ansactions			
2012 Q4 2013 Q1 Q2	42.7 227.3 150.9	-23.4 25.4 32.3	82.9 82.1 52.2	21.6 34.2 16.1	29.2 32.3 2.0	2.9 0.4 1.2	-70.4 52.9 47.1

## 2. Liabilities

	Total	Loans and deposits			Other liabilities		
		received	Total	Held by euro area	Investment funds	Held by non-euro area residents	(incl. financial derivatives)
	1	2	3	4	5	6	7
			Outstandin	g amounts			
2013 Jan.	7,290.6	153.0	6,625.3	4,849.7	770.5	1,775.7	512.3
Feb.	7,464.9	157.4	6,743.4	4,915.2	785.5	1,828.2	564.1
Mar.	7,607.0	158.1	6,890.1	5,000.8	814.2	1,889.3	558.8
Apr.	7,759.1	166.1	6,999.5	5,079.2	826.5	1,920.3	593.5
May	7,816.5	169.0	7,027.8	5,089.2	828.9	1,938.6	619.8
June	7,586.4	164.3	6,811.8	4,985.4	792.6	1,826.5	610.3
July (p)	7,710.4	165.1	6,943.5	5,095.0	818.0	1,848.5	601.8
			Transa	ctions			
2012 Q4	42.7	-5.8	124.9	64.4	32.9	60.6	-76.4
2013 Q1	227.3	9.4	159.7	95.6	31.1	64.1	58.2
Ž2	150.9	8.5	91.7	88.7	-7.9	3.0	50.6

### 3. Investment fund shares issued broken down by investment policy and type of fund

	Total			Funds by inve	estment policy			Funds	by type	Memo item: Money market
		Bond funds	Equity funds	Mixed funds	Real estate funds	Hedge funds	Other funds	Open-end funds	Closed-end funds	funds
	1	2	3	4	5	6	7	8	9	10
				(	Outstanding amo	unts				
2012 Dec.	6,560.8	2,378.2	1,705.1	1,597.7	320.4	141.2	418.2	6,477.2	83.5	914.7
2013 Jan. Feb. Mar. Apr. May June July <sup>(p)</sup>	6,625.3 6,743.4 6,890.1 6,999.5 7,027.8 6,811.8 6,943.5	2,371.2 2,406.9 2,447.1 2,504.0 2,496.8 2,413.3 2,432.2	1,750.3 1,792.0 1,840.7 1,853.8 1,873.6 1,780.8 1,845.0	1,620.2 1,645.6 1,685.4 1,716.0 1,721.7 1,683.0 1,722.1	322.8 325.5 327.6 330.0 331.0 330.8 332.6	140.0 143.7 150.3 151.6 153.9 153.5 151.8	420.8 429.7 438.9 444.1 450.7 450.5 459.9	6,539.8 6,657.8 6,804.0 6,913.2 6,939.4 6,724.4 6,855.8	85.6 85.6 86.1 86.4 88.4 87.5 87.7	898.6 903.0 912.1 901.5 894.7 855.9 850.7
					Transactions					
2013 Jan. Feb. Mar. Apr. May June July <sup>(p)</sup>	60.4 46.2 53.1 66.7 43.1 -18.0 57.9	22.5 13.9 18.6 39.1 24.2 -25.0 21.4	25.5 10.7 6.6 5.9 6.1 -11.4 16.0	13.3 15.8 19.8 17.6 6.3 10.3 17.1	$ \begin{array}{c} 1.9\\ 0.9\\ 0.7\\ 0.9\\ 1.6\\ 2.3\\ 1.7\\ \end{array} $	-1.2 -0.1 2.8 -0.7 0.9 1.1 -0.2	-1.7 5.1 4.5 3.9 3.9 4.8 1.9	59.5 46.2 52.5 66.6 43.0 -18.7 57.6	0.9 0.0 0.6 0.1 0.0 0.6 0.3	-2.9 -1.0 1.3 -0.9 -6.0 -37.0 0.6

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

#### 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		
	Outstanding amounts												
2012 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	3.069.6	1.632.9	407.4	752.7	245.2	8.2	219.3	1,436.6	332.6	563.4	16.0		
Q2 <sup>(p)</sup>	3,044.1	1,649.3	404.7	771.0	246.8	8.4	218.5	1,394.7	323.9	551.5	15.2		
	Transactions												
2012 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	82.1	18.9	-9.9	7.9	7.5	0.5	12.9	63.2	-1.0	32.8	-0.4		
Q2 <sup>(p)</sup>	52.2	26.2	-0.5	22.4	3.8	0.1	0.5	25.9	2.4	12.3	0.1		

## 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		
	Outstanding amounts												
2012 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	2,142.1	738.8	56.4	-	49.9	27.0	605.6	1,403.2	187.7	479.0	95.0		
Q2 <sup>(p)</sup>	2,094.3	738.5	58.9	-	51.2	28.2	600.2	1,355.7	182.1	481.3	109.7		
	Transactions												
2012 Q4	21.6	1.0	2.0	-	4.0	0.5	-5.6	20.6	0.7	6.4	4.5		
2013 Q1	34.2	-4.4	-0.5	-	-1.7	-1.2	-0.9	38.5	3.7	16.8	5.8		
Q2 <sup>(p)</sup>	16.1	-0.5	1.3	-	-1.5	0.2	-0.4	16.6	1.1	5.9	13.8		

#### 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	
	Outstanding amounts											
2012 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	1,026.1	888.7	74.5	-	814.2	-	-	137.5	32.5	43.5	0.6	
Q2 <sup>(p)</sup>	1,017.1	879.7	87.1	-	792.6	-	-	137.4	31.1	45.3	0.6	
	Transactions											
2012 Q4	29.2	29.5	-3.4	-	32.9	-	-	-0.3	1.2	0.6	0.0	
2013 Q1	32.3	33.2	2.0	-	31.1	-	-	-0.8	2.1	0.9	0.0	
Q2 <sup>(p)</sup>	2.0	4.1	11.9	-	-7.9	-	-	-2.1	-0.8	-0.1	0.0	

Source: ECB.

Other than money market funds. For further details, see the General Notes.
 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	Total		0	Securitised loans			Originated	Securities other than shares	Other securitised assets	Shares and other equity	Other assets
		ciums	Total			5			outside	Shures	455045	equity	
				ſ	MFIs	Other financial in- termediaries, insur-	Non- financial	General government					
				Γ	Remaining	ance corporations		government					
					on the MFI balance sheet 1)	and pension funds							
	1	2	3	4	5	6	7	8	9	10	11	12	13
						Outstanding am	ounts						
2012 Q2	2,161.8	307.7	1,459.7	1,150.9	513.2	154.1	22.9	4.4	127.4	209.3	85.2	33.4	66.4
Q3	2,084.5	303.4	1,399.8	1,087.6	476.1	158.7	23.9	4.4	125.3	195.7	86.3	31.4	68.0
Q4	2,051.3	285.5	1,380.7	1,065.6	469.8	163.4	24.9	4.0	122.8	199.6	88.4	30.4	66.6
2013 Q1	2,020.6	293.5	1,349.6	1,037.0	462.7	163.3	24.8	4.0	120.4	195.1	87.0	30.5	64.9
Q2	1,986.2	277.3	1,332.6	1,032.1	456.5	158.0	23.2	3.6	115.8	195.2	89.7	28.5	62.8
						Transaction	s						
2012 Q2	-81.4	-14.8	-49.4	-50.4	-	4.0	-0.7	-0.4	-1.9	-2.0	-1.3	-5.3	-8.5
Q3	-81.1	-3.8	-61.3	-64.2	-	4.5	0.5	0.0	-2.0	-14.9	1.3	-2.0	-0.4
Q4	-36.8	-17.6	-17.7	-21.1	-	4.7	1.2	-0.4	-2.0	2.7	2.4	-0.8	-5.8
2013 Q1	-29.9	8.1	-30.7	-28.0	-	-0.2	0.2	0.0	-2.7	-2.1	-1.2	0.1	-4.0
Q2	-34.0	-16.1	-16.2	-4.8	-	-5.2	-1.5	-0.4	-4.4	0.9	2.7	-2.0	-3.3

### 2. Liabilities

	Total	Loans and deposits received	D	ebt securities issued	L	Capital and reserves	Other liabilities
	1	2	Total 3	Up to 2 years 4	Over 2 years 5	6	7
			Outstar	nding amounts			
2012 Q2 Q3 Q4 2013 Q1 Q2	2,161.8 2,084.5 2,051.3 2,020.6 1,986.2	151.0 145.2 139.5 140.2 128.0	1,754.3 1,685.4 1,661.7 1,625.6 1,608.8	54.3 52.2 53.1 55.4 54.2	1,700.1 1,633.2 1,608.7 1,570.2 1,554.6	28.9 27.5 27.5 27.1 23.7	227.5 226.5 222.5 227.8 225.6
2012 Q2 Q3 Q4 2013 Q1 Q2	-81.4 -81.1 -36.8 -29.9 -34.0	-5.3 -5.6 -5.4 1.7 -11.7	-71.2 -71.0 -23.6 -34.1 -15.9	-4.6 -2.4 0.0 2.3 -1.1	-66.6 -68.6 -23.6 -36.4 -14.8	-5.8 -1.3 -0.1 -0.9 -3.2	1.0 -3.2 -7.6 3.5 -3.1

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

		5	Securitised loa	ns originated l	by euro area M	1FIs			S	Securities other than shares			
-	Total		Euro a	rea borrowing s	ector <sup>2)</sup>		Non-euro area	Total		Euro are	a residents	5	Non-euro area
		Households	Non- financial	Other financial	Insurance corporations	General government	borrowing sector		Total	MFIs	No	n-MFIs	residents
			corporations	intermediaries	and pension funds							Financial vehicle corporations	
	1	2	3	4	5	6	7	8	9	10	11	12	13
						Outstanding an	nounts						
2012 Q2	1,150.9	833.0	245.8	18.7	0.2	6.3	33.3	209.3	116.2	42.9	73.3	29.1	93.1
Q3	1,087.6	787.5	233.1	17.1	0.2	5.5	31.6	195.7	109.9	38.9	71.0	27.8	85.8
Q4	1,065.6	770.2	230.0	17.5	0.2	5.4	31.3	199.6	114.5	39.4	75.0	29.6	85.2
2013 Q1	1,037.0	750.9	226.6	14.9	0.2	5.4	28.9	195.1	110.9	36.9	74.1	30.0	84.2
Q2	1,032.1	762.1	221.4	15.0	0.2	5.1	28.3	195.2	113.1	38.8	74.2	29.9	82.2
						Transaction	18						
2012 Q2	-50.4	-48.5	-0.5	0.5	0.0	-0.1	0.3	-2.0	0.7	1.0	-0.2	-1.4	-2.8
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	-2.3	0.4	0.0	-0.1	0.3	2.7	5.3	1.0	4.3	1.8	-2.6
2013 Q1	-28.0	-19.1	-3.6	-2.3	0.0	0.0	-1.9	-2.1	-2.5	-2.5	0.0	-0.6	0.4
Q2	-4.8	10.9	-5.1	0.2	0.0	-0.3	-0.4	0.9	2.3	2.1	0.2	-0.1	-1.4
0 50													

Source: ECB.

Loans (to non-MFIs) securitised using euro area financial vehicle corporations which remain on the balance sheet of the relevant MFI, i.e. which have not been derecognised. 1) 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)



# **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 1 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 Q3	7,062.3	780.2	447.8	2,736.0	792.7	1,555.8	86.3	253.1	263.8	146.5
Q4	7,036.3	768.3	453.3	2,674.7	825.9	1,612.1	76.9	253.8	222.2	149.1
2011 Q1	7,139.8	769.6	456.4	2,735.9	843.8	1,621.7	76.6	261.7	223.5	150.4
Q2	7,155.4	772.7	463.9	2,747.2	842.6	1,623.9	79.8	254.1	222.2	148.9
Q3	7,154.4	789.7	462.9	2,772.6	788.2	1,581.1	87.6	255.4	268.7	148.4
Q4	7,164.5	782.5	472.6	2,731.4	793.8	1,616.0	91.3	253.4	273.6	150.0
2012 Q1	7,452.4	794.5	469.8	2,877.0	807.2	1,710.4	102.3	258.0	283.1	150.0
Q2	7,481.9	783.7	469.5	2,890.5	802.5	1,712.9	106.4	261.3	304.4	150.8
Q3	7,696.4	783.6	478.8	3,007.4	821.9	1,787.1	108.5	263.1	295.0	151.0
Q4	7,781.9	787.0	477.9	3,053.6	819.2	1,825.7	109.7	261.9	293.8	153.3
2013 Q1	7,917.5	792.7	479.8	3,091.4	836.0	1,901.1	114.3	264.8	283.1	154.1
Q2 <sup>(p)</sup>	7,858.8	769.0	482.4	3,078.1	837.4	1,890.6	101.1	264.0	281.0	155.3

#### 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 Q3	2,736.0	2,309.6	601.8	1,280.4	255.3	18.6	153.6	426.4
Q4	2,674.7	2,250.9	599.4	1,243.5	234.3	17.6	156.1	423.8
2011 Q1	2,735.9	2,318.7	625.2	1,286.3	236.2	17.2	153.7	417.1
Q2	2,747.2	2,330.0	630.6	1,289.7	235.4	16.8	157.5	417.2
Q3	2,772.6	2,353.0	637.0	1,312.4	227.7	16.9	159.0	419.5
Q4	2,731.4	2,307.7	635.5	1,267.4	224.0	16.5	164.3	423.8
2012 Q1	2,877.0	2,427.3	670.4	1,325.1	236.0	17.1	178.7	449.6
Õ2	2,890.5	2,423.5	675.7	1,309.5	238.4	17.0	183.0	467.0
Õ3	3,007.4	2,515.1	707.8	1,348.8	246.0	17.4	195.1	492.3
Q2 Q3 Q4	3,053.6	2,549.6	693.3	1,387.0	251.7	18.1	199.5	503.9
2013 Q1	3,091.4	2,596.6	727.9	1,388.5	255.0	17.5	207.7	494.8
O2 <sup>(p)</sup>	3.078.1	2,588.5	699.6	1.406.9	257.0	17.9	207.1	489.6

#### 3. Liabilities and net worth

					Liabilities					Net worth
	Total	Loans received	Securities	Shares and other equity		Insurance to	echnical reserves	8	Other	
			than shares	oner equity	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	receivable/ payable and financial derivatives	
	1	2	3	4	5	6	7	8	9	10
2010 Q3	6,877.4	276.1	39.2	441.4	5,941.9	3,223.4	1,908.5	809.9	178.9	185.0
Q4	6,871.7	250.3	40.3	451.7	5,960.8	3,260.7	1,889.6	810.4	168.6	164.6
2011 Q1	6,920.7	263.1	39.9	466.1	5,976.3	3,287.7	1,859.9	829.1	175.3	219.1
Q2	6,944.2	262.9	42.4	454.8	6,007.9	3,309.9	1,872.0	826.4	176.2	211.2
Q3	7,052.1	270.0	41.6	410.1	6,140.7	3,293.1	2,023.9	824.2	189.5	102.4
Q4	7,071.5	263.8	41.3	408.8	6,169.8	3,305.8	2,047.1	817.3	187.8	93.0
2012 Q1	7,229.8	272.2	44.4	439.1	6,283.3	3,343.3	2,103.0	836.9	190.8	222.6
Q2	7,300.8	281.3	43.3	421.2	6,350.1	3,345.4	2,169.4	835.2	205.0	181.1
Q3	7,374.7	292.8	44.9	452.8	6,388.7	3,391.9	2,163.4	833.4	195.5	321.8
Q4	7,474.0	267.1	48.8	482.7	6,455.2	3,427.2	2,201.8	826.2	220.1	307.9
2013 Q1	7,560.1	276.4	48.9	494.2	6,526.7	3,463.9	2,215.8	847.0	213.9	357.4
Q2 <sup>(p)</sup>	7,599.2	276.2	45.1	502.3	6,551.1	3,468.2	2,237.5	845.4	224.5	259.7

Source: ECB.





## **EURO AREA ACCOUNTS**

# 3.1 Integrated economic and financial accounts by institutional sector (EUR billions)

Uses	Euro	Households	Non-financial	Financial	General	Rest of
USES	area	Householus	corporations		government	the world
2013 Q1						
External account						
Exports of goods and services Trade balance <sup>1)</sup>						608 -47
Generation of income account						
Gross value added (basic prices) Taxes less subsidies on products						
Gross domestic product (market prices)						
Compensation of employees	1,116	110	707	57	242	
Other taxes less subsidies on production	21	8	5	5	4	
Consumption of fixed capital Net operating surplus and mixed income <sup>1</sup>	377 558	100 274	215 254	11 31	51 0	
Allocation of primary income account	550	214	204	51	0	
Net operating surplus and mixed income						
Compensation of employees						7
Taxes less subsidies on production						
Property income	627	32	249	281	65	114
Interest	336	30	58	183	65	48
Other property income	291	2	191	98	0	67
Net national income <sup>1</sup> )	1,960	1,596	109	33	222	
Secondary distribution of income account						
Net national income						
Current taxes on income, wealth, etc. Social contributions	258 437	219 437	31	8	0	1
Social controlutions Social benefits other than social transfers in kind	457	457	18	37	413	1
Other current transfers	205	70	24	49	62	10
Net non-life insurance premiums	46	35	10	1	1	2
Non-life insurance claims	47			47		1
Other	113	35	14	1	62	8
Net disposable income 1)	1,919	1,423	67	40	388	
Use of income account						
Net disposable income					10 -	
Final consumption expenditure	1,852	1,358			495 312	
Individual consumption expenditure Collective consumption expenditure	1,669 183	1,358			183	
Adjustment for the change in the net equity of households in pension fund reserves	105	0	1	14	0	0
Net saving/current external account <sup>1)</sup>	67	81	67	25	-107	-26
Capital account						
Net saving/current external account						
Gross capital formation	418	129	234	13	42	
Gross fixed capital formation	402	125	222	13	42	
Changes in inventories and acquisitions less disposals of valuables	16	4	12	0	0	
Consumption of fixed capital			-	0	2	
Acquisitions less disposals of non-produced non-financial assets	2 35	-1 8	7 0	0 2	-3 25	-2
Capital transfers Capital taxes	55 6	8	0	2	25	4
Other capital transfers	28	2	-1	2	25	4
Net lending (+)/net borrowing (-) (from capital account) <sup>1)</sup>	25	55	56	28	-114	-25
	0			0		0

Sources: ECB and Eurostat. 1) For details of the calculation of the balancing items, see the Technical Notes.



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

Resources	Euro area	Households	Non-financial corporations	Financial corporations	General government	Rest of the world
2013 (	21					
External account						
Imports of goods and services Trade balance						561
Generation of income account						
Gross value added (basic prices) Taxes less subsidies on products Gross domestic product (market prices) <sup>2)</sup> Compensation of employees Other taxes less subsidies on production Consumption of fixed capital <i>Net operating surplus and mixed income</i>	2,073 243 2,317	491	1,182	104	297	
Allocation of primary income account						
Net operating surplus and mixed income Compensation of employees Taxes less subsidies on production Property income Interest Other property income Net national income	558 1,121 264 645 330 315	274 1,121 234 54 179	254 103 33 70	31 284 234 50	0 264 24 8 15	2 1 97 54 43
Secondary distribution of income account						
Net national income Current taxes on income, wealth, etc. Social contributions	1,960 259 436	1,596	109	33 52	222 259 365	1 2
Social benefits other than social transfers in kind Other current transfers Net non-life insurance premiums	467 166 47	467 86	13	48 47	18	3 50 1
Non-life insurance claims Other Net disposable income	45 74	35 51	8 5	1 0	0 18	3 46
Use of income account						
Net disposable income Final consumption expenditure Individual consumption expenditure Collective consumption expenditure Adjustment for the change in the net equity of households in pension fund reserves	1,919	1,423	67	40	388	0
Net saving/current external account						
Capital account Net saving/current external account Gross capital formation	67	81	67	25	-107	-26
Gross fixed capital formation Changes in inventories and acquisitions less disposals of valuables Consumption of fixed capital Acquisitions less disposals of non-produced non-financial assets	377	100	215	11	51	
Capital transfers Capital transfers Other capital transfers	36 6 29	10 10	14 14	7	5 6 -1	3 0 3
Net lending (+)/net borrowing (-) (from capital account) Statistical discrepancy	23	10	14	,	-1	5

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-	Insurance corporations and pension	General govern- ment	Rest of the world
2013 Q1					mediaries	funds		
Opening balance sheet, financial assets								
Total financial assets		19,731	17,215	34,676	16,737	7,417	4,279	18,136
Monetary gold and special drawing rights (SDRs)		2041	0.155	490		005	7.40	0.005
Currency and deposits Short-term debt securities		7,041 47	2,157 81	11,240 553	2,234 388	805 68	748 37	3,335 612
Long-term debt securities		1,282	257	6,488	2,891	2,984	432	4,143
Loans		83	2,966	13,213	4,061	492	818	2,409
of which: Long-term		63	1,878	10,306	2,807	364	720	<i>.</i>
Shares and other equity		4,519	7,973	1,844	6,841	2,683	1,513	6,814
Quoted shares		777	1,101	367	2,157	408	210	•
Unquoted shares and other equity		2,344	6,488	1,176	3,578	410	1,131	•
Mutual fund shares Insurance technical reserves		1,399 6,210	384 175	300 3	1,106 0	1,865 235	173	. 276
Other accounts receivable and financial derivatives		549	3,606	845	321	151	726	547
Net financial worth		5.15	2,000	015	021	101	120	517
Financial account, transactions in financial assets								
Total transactions in financial assets		91	63	-717	370	123	80	189
Monetary gold and SDRs			00	0	2.0			0
Currency and deposits		39	-30	-847	114	9	31	-34
Short-term debt securities		-2	-14	5	29	-3	0	42
Long-term debt securities		-53	-2	28	84	47	-12	29
Loans		1	-11	28	29	5	16	25
of which: Long-term Shares and other equity		0 22	-13 92	-31 19	16 74	2 44	18 10	89
Quoted shares		-5	92 8	26	34	-4	-1	09
Unquoted shares and other equity		0	79	-4	12	2	9	
Mutual fund shares		27	5	-4	28	46	3	
Insurance technical reserves		63	5	0	0	12	0	-3
Other accounts receivable and financial derivatives		21	24	50	40	9	34	40
Changes in net financial worth due to transactions								
Other changes account, financial assets								
Total other changes in financial assets		100	275	-1	110	44	6	150
Monetary gold and SDRs		-	-	-4	2	2	2	1.4
Currency and deposits Short-term debt securities		-5 -5	7 0	9 12	2 -4	-2 1	2 0	14 -9
Long-term debt securities		-28	2	-29	-4	0	0	-9
Loans		0	13	-17	-39	0	-7	-9
of which: Long-term		0	10	-4	-39	-1	-9	
Shares and other equity		101	222	26	151	56	13	113
Quoted shares		21	47	4	113	9	-2	
Unquoted shares and other equity		60	172	24	18	4	9	
Mutual fund shares Insurance technical reserves		20 42	3 0	-1 0	20 0	44 -8	5 0	3
Other accounts receivable and financial derivatives		-5	30	3	2	-8 -2	-1	9
Other changes in net financial worth		5	50	5	-	2	1	,
Closing balance sheet, financial assets								
Total financial assets		19,922	17,553	33,958	17,217	7,585	4,365	18,474
Monetary gold and SDRs				485				
Currency and deposits		7,076	2,134	10,401	2,350	811	781	3,315
Short-term debt securities		40	66	570	413	66	37	646
Long-term debt securities Loans		1,200 84	258	6,487 13 224	2,973	3,032 496	420 827	4,201
of which: Long-term		63	2,967 1,874	13,224 10,271	4,051 2,784	490 365	728	2,425
Shares and other equity		4,642	8,286	1,888	7,067	2,783	1,536	7,015
Quoted shares		793	1,155	397	2,305	413	207	
Unquoted shares and other equity		2,403	6,739	1,197	3,608	416	1,149	
Mutual fund shares		1,446	392	295	1,154	1,955	180	
Insurance technical reserves		6,316	181	3	0	238	4	276
Other accounts receivable and financial derivatives Net financial worth		565	3,660	898	364	158	759	596
Source: ECB								

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 inter-	Insurance corporations and pension	General govern- ment	Rest of the world
2013 Q1					mediaries	funds		
Opening balance sheet, liabilities								
Total liabilities		6,827	26,674	33,629	16,416	7,387	10,529	16,239
Monetary gold and special drawing rights (SDRs)			22	04 510	27	0	201	0.007
Currency and deposits Short-term debt securities			32 83	24,513 634	37 101	0 3	281 670	2,697 295
Long-term debt securities			964	4,677	2,857	52	6,723	3,205
Loans		6,186	8,334	,	3,784	282	2,273	3,184
of which: Long-term		5,834	6,104		2,108	109	1,972	
Shares and other equity		8	13,292	2,620	9,594	466	4	6,202
Quoted shares Unquoted shares and other equity		8	3,747 9,545	403 1,304	234 3,015	133 332	0 4	
Mutual fund shares		0	9,040	913	6,345	552	4	
Insurance technical reserves		36	349	65	1	6,452	1	
Other accounts payable and financial derivatives		597	3,621	1,120	41	131	579	656
Net financial worth 1)	-1,407	12,904	-9,459	1,047	321	30	-6,250	
Financial account, transactions in liabilities								
Total transactions in liabilities		0	43	-732	366	113	193	214
Monetary gold and SDRs								
Currency and deposits			2	-694	-3	0	-10	-12
Short-term debt securities Long-term debt securities			9 14	-3 -101	26 4	0	21 173	3 32
Loans		-21	-14	-101	4 80	15	-22	55
of which: Long-term		-15	-21		15	1	-8	
Shares and other equity		0	40	4	186	1	0	119
Quoted shares			-13	0	0	0	0	
Unquoted shares and other equity		0	53	6	22 164	1	0	
Mutual fund shares Insurance technical reserves		0	1	-3 0	164	77	0	
Other accounts payable and financial derivatives		22	-9	63	74	20	32	17
Changes in net financial worth due to transactions <sup>1</sup> )	25	91	20	15	3	10	-114	-25
Other changes account, liabilities								
Total other changes in liabilities		-7	376	-48	181	50	-39	176
Monetary gold and SDRs								
Currency and deposits			0	18	0	0	0	8
Short-term debt securities			0 -2	1 -19	0 1	0	0 -38	-6 27
Long-term debt securities Loans		-3	-2 -13	-19	-18	-1	-38	-24
of which: Long-term		-1	-15		-10	0	0	-2-1
Shares and other equity		0	385	-38	166	13	0	157
Quoted shares			156	-23	7	3	0	
Unquoted shares and other equity		0	228	-15	-7	10	0	
Mutual fund shares Insurance technical reserves		0	0	0	166 0	37	0	
Other accounts payable and financial derivatives		-4	7	-11	32	0	-2	14
Other changes in net financial worth <sup>1</sup> )	22	107	-102	47	-71	-5	45	-26
Closing balance sheet, liabilities								
Total liabilities		6,820	27,093	32,849	16,963	7,550	10,684	16,629
Monetary gold and SDRs		0,020	21,090	- 2,0 . 9	10,000	.,200	,	10,029
Currency and deposits			33	23,837	33	0	271	2,694
Short-term debt securities			93	632	128	3	691	292
Long-term debt securities Loans		6,161	975 8,306	4,557	2,863 3,846	53 296	6,858	3,264
Loans of which: Long-term		5,817	8,306 6,076		3,846 2,111	296 110	2,251 1,963	3,215
Shares and other equity		8	13,717	2,586	9,946	480	4	6,477
Quoted shares			3,891	381	241	136	0	
Unquoted shares and other equity		8	9,827	1,295	3,030	343	4	
Mutual fund shares			0.10	911	6,675			
Insurance technical reserves Other accounts payable and financial derivatives		36	349	64	1	6,566	1 609	607
Net financial worth <sup>1)</sup>	-1,360	615 13,102	3,619 -9,541	1,172 1,109	148 253	151 35	-6,319	686
	-1,500	15,102	-7,5+1	1,109	200	55	0,017	



# **3.2 Euro area non-financial accounts** (EUR billions; four-quarter cumulated flows)

Uses	2009	2010	2011	2011 Q2- 2012 Q1	2011 Q3- 2012 Q2	2011 Q4- 2012 Q3	2012 Q1- 2012 Q4	2012 Q2- 2013 Q1
Generation of income account								
Gross value added (basic prices) Taxes less subsidies on products Gross domestic product (market prices) Compensation of employees Other taxes less subsidies on production Consumption of fixed capital <i>Net operating surplus and mixed income</i> <sup>1)</sup>	4,448 85 1,387 2,099	4,508 83 1,419 2,203	4,621 95 1,467 2,250	4,638 103 1,477 2,246	4,650 110 1,485 2,232	4,663 115 1,493 2,214	4,668 124 1,500 2,193	4,677 124 1,505 2,180
Allocation of primary income account								
Net operating surplus and mixed income Compensation of employees Taxes less subsidies on production Property income Interest Other property income Net national income <sup>1)</sup>	2,964 1,596 1,369 7,540	2,819 1,386 1,433 7,761	3,019 1,556 1,463 7,968	3,033 1,570 1,462 7,993	3,019 1,555 1,465 7,998	2,989 1,524 1,465 8,003	2,926 1,473 1,453 8,026	2,877 1,426 1,451 8,032
Secondary distribution of income account								
Net national income Current taxes on income, wealth, etc. Social contributions Social benefits other than social transfers in kind Other current transfers Net non-life insurance premiums Non-life insurance claims Other Net disposable income <sup>1</sup>	1,028 1,677 1,768 773 180 182 410 7,432	1,055 1,704 1,813 777 181 182 413 7,650	1,111 1,753 1,840 787 185 186 416 7,859	1,123 1,762 1,850 790 186 187 417 7,882	1,139 1,772 1,861 792 186 188 418 7,884	1,154 1,778 1,873 793 187 189 418 7,889	1,175 1,787 1,884 789 186 189 415 7,916	1,180 1,795 1,896 790 185 188 417 7,919
Use of income account								
Net disposable income Final consumption expenditure Individual consumption expenditure Collective consumption expenditure Adjustment for the change in the net equity of households in pension fund reserves Net saving <sup>1</sup> )	7,151 6,382 769 61 281	7,317 6,542 774 56 333	7,477 6,700 777 59 382	7,506 6,728 778 60 376	7,517 6,738 779 60 367	7,524 6,744 780 58 365	7,528 6,750 778 58 388	7,530 6,751 779 58 389
Capital account								
Net saving Gross capital formation Gross fixed capital formation Changes in inventories and acquisitions less disposals of valuables Consumption of fixed capital Acquisitions less disposals of non-produced non-financial assets Capital transfers	1,705 1,752 -48 1 184	1,785 1,762 22 1 222	1,870 1,825 44 0 176	1,852 1,822 30 0 171	1,820 1,808 12 1 177	1,789 1,791 -2 1 184	1,768 1,771 -3 0 197	1,737 1,742 -6 3 205
Capital taxes Other capital transfers Net lending (+)/net borrowing (-) (from capital account) <sup>1</sup> )	34 150 -28	25 197 -23	31 145 -10	30 141 10	29 148 42	29 155 81	26 171 131	263 26 179 167

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	2009	2010	2011	2011 Q2- 2012 Q1	2011 Q3- 2012 Q2	2011 Q4- 2012 Q3	2012 Q1- 2012 Q4	2012 Q2- 2013 Q1
Generation of income account				(-	(	•	(	
Gross value added (basic prices)	8,019	8,212	8,433	8,463	8,477	8,485	8,485	8,486
Taxes less subsidies on products	894	943	974	976	974	973	978	976
Gross domestic product (market prices) <sup>2)</sup>	8,914	9,154	9,407	9,439	9,450	9,458	9,463	9,462
Compensation of employees								
Other taxes less subsidies on production								
Consumption of fixed capital								
Net operating surplus and mixed income								
Allocation of primary income account								
Net operating surplus and mixed income	2,099	2,203	2,250	2,246	2,232	2,214	2,193	2,180
Compensation of employees	4,459	4,520	4,634	4,651	4,663	4,677	4,682	4,691
Taxes less subsidies on production	997	1,038	1,080	1,089	1,093	1,098	1,112	1,112
Property income Interest	2,950 1,551	2,819 1,337	3,023 1,504	3,040 1,521	3,029 1,513	3,004 1,490	2,965 1,447	2,926 1,404
Other property income	1,399	1,337	1,504	1,521	1,515	1,490	1,447	1,404
Net national income	1,000	1,102	1,515	1,019	1,010	1,011	1,510	1,522
Secondary distribution of income account								
Net national income	7,540	7,761	7,968	7,993	7,998	8,003	8,026	8.032
Current taxes on income, wealth, etc.	1,033	1,059	1,117	1,129	1,144	1,158	1,179	1,184
Social contributions	1,675	1,702	1,752	1,761	1,770	1,775	1,784	1,793
Social benefits other than social transfers in kind	1,762	1,807	1,834	1,844	1,855	1,867	1,878	1,890
Other current transfers	668	669	678	680	682	685	684	682
Net non-life insurance premiums	182	182	186	187	188	189	189	188
Non-life insurance claims Other	178 308	178 309	180 312	181 312	182 312	182 313	181 314	180 314
Net disposable income	508	309	512	512	512	515	514	514
Use of income account								
Net disposable income	7,432	7,650	7,859	7,882	7,884	7,889	7,916	7,919
Final consumption expenditure								
Individual consumption expenditure								
Collective consumption expenditure								
Adjustment for the change in the net equity of households	61	56	59	60	60	59	58	58
in pension fund reserves Net saving	01	50	39	00	00	39	58	30
Capital account								
Net saving	281	333	382	376	367	365	388	389
Gross capital formation Gross fixed capital formation	201	555	002	275	201	0.00	200	200
Changes in inventories and acquisitions less disposals of valuables								
Consumption of fixed capital	1,387	1,419	1,467	1,477	1,485	1,493	1,500	1,505
Acquisitions less disposals of non-produced non-financial assets								
Capital transfers	193	232	187	181	189	197	210	217
Capital taxes	34	25	31	30	29	29	26	26
Other capital transfers Net lending (+)/net borrowing (-) (from capital account)	159	207	155	151	160	168	184	191
the remains ( ) met borrowing (-) (from cupital account)								

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

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

(EUR billions; four-quarter cumulated flows; outstanding amour	its at end of perio	0u)						
	2009	2010	2011	2011 Q2- 2012 Q1	2011 Q3- 2012 Q2	2011 Q4- 2012 Q3	2012 Q1- 2012 Q4	2012 Q2- 2013 Q1
Income, saving and changes in net worth								
Compensation of employees (+)	4,459	4,520	4,634	4,651	4,663	4,677	4,682	4,691
Gross operating surplus and mixed income (+)	1,441	1,440	1,477	1,482	1,481	1,481	1,478	1,482
Interest receivable (+)	233	201	229	232	231	228	223	219
Interest payable (-)	146	124	146	146	142	137	130	125
Other property income receivable (+)	726	724	747	758	754	750	747	741
Other property income payable (-)	10	10	10	10	10	10	10	10
Current taxes on income and wealth (-) Net social contributions (-)	842 1,672	848 1,699	881 1,749	891 1,757	906 1,767	920 1,773	935 1,782	943 1,790
Net social benefits (+)	1,757	1,801	1,829	1,839	1,850	1,862	1,873	1,885
Net current transfers receivable (+)	72	71	70	69	70	68	70	70
= Gross disposable income	6,016	6,076	6,201	6,226	6,223	6,225	6,215	6,221
Final consumption expenditure (-)	5,156	5,293	5,439	5,463	5,471	5,474	5,479	5,476
Changes in net worth in pension funds (+)	60	55	58	60	60	58	58	57
= Gross saving	921	839	820	823	813	809	793	802
Consumption of fixed capital (-)	379	386	396	397	399	400	401	401
Net capital transfers receivable (+)	10	13	9	7	7	5	5	3
Other changes in net worth (+)	-126 426	805	-54 380	-88 345	-520 -99	-397 17	-233 164	-609 -204
= Changes in net worth	420	1,271	560	545	-99	17	104	-204
Investment, financing and changes in net worth								
Net acquisition of non-financial assets (+)	554	555	576	573	567	561	555	548
Consumption of fixed capital (-)	379	386	396	397	399	400	401	401
Main items of financial investment (+)		20	104	150	1/7	170	100	165
Short-term assets	6 121	38 118	124 118	156 155	167 164	170 175	189 224	165 226
Currency and deposits Money market fund shares	-40	-60	-21	-15	-13	-28	-33	-49
Debt securities <sup>1)</sup>	-75	-20	28	-15	-15	-28	-3	-49
Long-term assets	471	410	210	220	189	175	131	133
Deposits	81	58	55	53	45	29	12	9
Debt securities	0	-7	53	39	-7	-13	-94	-133
Shares and other equity	160	110	-11	29	53	58	92	114
Quoted and unquoted shares and other equity	118	101	38	67	88	59	55	35
Mutual fund shares	42	9	-50	-38	-35	-1	37	79
Life insurance and pension fund reserves	230	249	113	99	97	101	122	143
Main items of financing (-) Loans	107	114	86	69	40	19	15	3
of which: From euro area MFIs	65	147	81	34	13	1	25	21
Other changes in assets (+)	05		01		10	-	20	
Non-financial assets	-410	707	306	13	-344	-967	-884	-1,090
Financial assets	250	138	-415	-169	-223	514	595	412
Shares and other equity	82	45	-347	-267	-286	324	368	314
Life insurance and pension fund reserves	186	124	12	97	96	180	173	150
Remaining net flows (+)	40	-77	60	17	-17	-17	-4	32
= Changes in net worth	426	1,271	380	345	-99	17	164	-204
Balance sheet								
Non-financial assets (+)	25,291	26,167	26,654	26,472	26,404	26,117	25,923	25,528
Financial assets (+)	5 771	5.012	5.051	5.070	6.020	6.021	6.116	( 100
Short-term assets	5,771	5,813	5,951	5,978 5,755	6,029	6,031	6,116	6,132
Currency and deposits Money market fund shares	5,474 247	5,596 189	5,727 172	5,755 166	5,821 155	5,838 136	5,948 120	5,980 113
Debt securities <sup>1)</sup>	51	28	52	57	54	57	47	40
Long-term assets	11,596	12,121	11,924	12,272	12,187	12,436	12,684	12,832
Deposits	972	1,029	1,079	1,089	1,101	1,096	1,093	1,096
Debt securities	1,376	1,318	1,309	1,371	1,309	1,289	1,282	1,200
Shares and other equity	4,131	4,284	3,920	4,098	4,034	4,222	4,399	4,530
Quoted and unquoted shares and other equity	2,988	3,062	2,811	2,923	2,868	2,988	3,121	3,196
Mutual fund shares	1,143	1,222	1,110	1,175	1,166	1,234	1,278	1,333
Life insurance and pension fund reserves	5,117	5,490	5,615	5,713	5,742	5,830	5,911	6,007
Remaining net assets (+)	294	297	330	294	306	330	290	298
Liabilities (-) Loans	5,939	6,115	6,195	6,180	6,193	6,183	6,186	6,161
of which: From euro area MFIs	4,976	5,220	5,281	5,269	6,193 5,294	5,283	5,291	5,279
= Net worth	37,012	38,283	38,663	38,835	38,733	38,731	38,827	38,630
Sources: ECB and Eurostat.	,	,	,	-,	,	,	,-=.	,

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 flo

(EUR billions; four-quarter cumulated flows; outstanding amoun	its at end of perio	5a)						
	2009	2010	2011	2011 Q2- 2012 Q1	2011 Q3- 2012 Q2	2011 Q4- 2012 Q3	2012 Q1- 2012 Q4	2012 Q2- 2013 Q1
Income and saving	2005	2010	2011	2012 Q1	2012 Q2	2012 Q3	2012 Q4	2015 Q1
Gross value added (basic prices) (+)	4,519	4,669	4,829	4,848	4,857	4,863	4,867	4,863
Compensation of employees (-)	2,787	2,827	2,923	2,938	2,950	2,962	2,970	2,975
Other taxes less subsidies on production (-)	40	34	42	2,938	2,930	48	2,970	2,975
= Gross operating surplus (+)	1,691	1,808	1,863	1,866	1,860	1,854	1,846	1,837
Consumption of fixed capital (-)	782	800	830	837	842	847	852	856
= Net operating surplus (+)	910	1,008	1,033	1,029	1,018	1,006	994	981
Property income receivable (+)	528	560	576	574	573	570	563	562
Interest receivable	168	160	169	169	166	159	151	145
Other property income receivable	360	400	407	405	408	411	412	417
Interest and rents payable (-)	299	259	295	298	292	285	273	263
= Net entrepreneurial income (+)	1,139	1,309	1,314	1,306	1,299	1,292	1,284	1,280
Distributed income (-)	927	933	980	984	995	994	975	968
Taxes on income and wealth payable (-)	151	168	188	190	192	193	199	196
Social contributions receivable (+)	71	69	73	73	73	73	73	73
Social benefits payable (-)	68	69	69	69	70	70	70	70
Other net transfers (-)	47	45	49	49	48	49	48	48
= Net saving	16	163	101	86	67	59	65	71
Investment, financing and saving								
Net acquisition of non-financial assets (+)	70	155	202	185	162	136	113	91
Gross fixed capital formation (+)	901	933	989	991	988	980	969	950
Consumption of fixed capital (-)	782	800	830	837	842	847	852	856
Net acquisition of other non-financial assets (+)	-50	22	43	31	16	3	-3	-3
Main items of financial investment (+)								
Short-term assets	95	34	-28	4	7	32	68	50
Currency and deposits	88	68	6	16	16	39	77	85
Money market fund shares	38	-32	-46	-29	-24	-12	-2	-5
Debt securities <sup>1</sup> )	-31	-1	12	16	14	5	-7	-30
Long-term assets	130	415	480	445	357	288	197	180
Deposits	0	20	87	80	52 0	1	15	-16
Debt securities	24	4	-5	-16		-4	-8	-8
Shares and other equity	96	236 156	265 133	258 124	161 144	144 148	96 94	146 58
Other (mainly intercompany loans) Remaining net assets (+)	11 61	2	-22	-36	-12	40	94 65	58 66
Main items of financing (-)	01	2	-22	-30	-12	40	05	00
Debt	15	160	236	213	165	183	137	100
of which: Loans from euro area MFIs	-108	-17	73	-2	-43	-89	-143	-123
of which: Debt securities	90	66	49	73	90	105	115	103
Shares and other equity	240	217	226	232	213	181	168	139
Quoted shares	59	31	27	19	15	16	27	11
Unquoted shares and other equity	181	185	199	213	198	166	142	128
Net capital transfers receivable (-)	82	66	69	67	68	69	68	71
= Net saving	16	163	101	86	67	59	65	71
Financial balance sheet								
Financial assets								
Short-term assets	1,932	1,957	1,931	1,919	1,923	1,933	1,994	1,962
Currency and deposits	1,632	1,695	1,706	1,681	1,697	1,717	1,782	1,766
Money market fund shares	213	182	134	140	134	130	132	130
Debt securities <sup>1)</sup>	87	80	91	98	91	86	81	66
Long-term assets	10,239	10,703	10,679	11,079	10,979	11,311	11,440	11,750
Deposits	239	249	319	369	367	365	376	369
Debt securities	228	240	249	253	259	262	257	258
Shares and other equity	7,145	7,462	7,221	7,556	7,381	7,683	7,841	8,157
Other (mainly intercompany loans)	2,628	2,753	2,890	2,901	2,972	3,001	2,966	2,967
Remaining net assets	312	147	165	228	171	226	192	255
Liabilities								
Debt	9,213	9,482	9,632	9,670	9,745	9,792	9,729	9,724
of which: Loans from euro area MFIs	4,708	4,682	4,718	4,684	4,689	4,630	4,496	4,476
of which: Debt securities	815	883	886	943	969	1,025	1,047	1,068
Shares and other equity	12,425	12,977	12,299	12,830	12,442	12,892	13,292	13,717
Quoted shares	3,502	3,799	3,281	3,569	3,331	3,550	3,747	3,891
Unquoted shares and other equity	8,922	9,179	9,018	9,261	9,111	9,342	9,545	9,827
Sources: ECB and Eurostat.								

Sources: ECB and Eurostat.
 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)

$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	ems of financial investment (+) t-term assets rrency and deposits oney market fund shares bt securities <sup>1)</sup> t-term assets posits bt securities ans
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	ems of financial investment (+) t-term assets rrency and deposits oney market fund shares bt securities <sup>1)</sup> t-term assets posits bt securities ans
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	t-term assets rrency and deposits oney market fund shares bt securities <sup>1)</sup> t-term assets posits bt securities ans
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	rrency and deposits oney market fund shares bt securities <sup>1)</sup> (-term assets posits bt securities ans
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	oney market fund shares bt securities <sup>1)</sup> -tern assets posits bt securities ans
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	bt securities <sup>1)</sup> t-term assets posits bt securities ans
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	t-term assets posits bt securities ans
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	posits bt securities ans
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	b securities ans
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	ans
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	oted shares
Mutual fund shares234687074604465Remaining net assets (+)189-51-10-5-41Main items of financing (-)Debt securities5135137Loans-4711379-12Shares and other equity5732431Insurance technical reserves246281115104109124152Net equity of households in life insurance and pension fund reserves240262110102100112130Prepayments of insurance premiums and reserves for outstanding claims6195291222Changes in net financial worth due to transactions16-41820361846Other changes account199117-1054-11216171Other changes in financial assets (+)38-125146113153225Shares and other equity13-1-46-30-364066Insurance technical reserves16514113101102187178Net equity of households in life insurance and pension fund reserves1921301298103190183Prepayments of insurance premiums and reserves for outstanding claims-2811 <td< td=""><td></td></td<>	
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	
Debt securities5135137Loans-4711379-12Shares and other equity5732431Insurance technical reserves246281115104109124152Net equity of households in life insurance and pension fund reserves240262110102100112130Prepayments of insurance premiums and reserves for outstanding claims6195291222= Changes in net financial worth due to transactions16-41820361846Other changes accountUOther changes in financial assets (+) Shares and other equity199117-1054-11216171Other changes in liabilities (-) Shares and other equity13-1-46-30-364066Insurance technical reserves16514113101102187178Net equity of households in life insurance and pension fund reserves1921301298103190183Prepayments of insurance premiums and reserves for outstanding claims-2811130-3-5= Other changes in net financial worth60-24-487936141153	
Loans $-4$ 711379 $-12$ Shares and other equity5732431Insurance technical reserves246281115104109124152Net equity of households in life insurance and pension fund reserves240262110102100112130Prepayments of insurance premiums and reserves for outstanding claims6195291222= Changes in net financial worth due to transactions16-41820361846Other changes account $199$ 117-1054-11216171Other changes in financial assets (+) $38$ -125146113153225Other nassets38-125146113153225Other equity13-1-46-30-364066Insurance technical reserves1921301298103190183Prepayments of insurance premiums and reserves for outstanding claims-2811130-3-5= Other changes in net financial worth60-24-487936141153	ems of financing (-)
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	securities
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	s
Net equity of households in life insurance and pension fund reserves Prepayments of insurance premiums and reserves for outstanding claims $240$ $262$ $110$ $102$ $100$ $112$ $130$ Prepayments of insurance premiums and reserves for outstanding claims $6$ $19$ $5$ $2$ $9$ $112$ $222$ = Changes in net financial worth due to transactions $16$ $-4$ $18$ $20$ $36$ $18$ $46$ Other changes account $16$ $-4$ $18$ $20$ $36$ $18$ $46$ Other changes in financial assets (+) Shares and other equity $199$ $117$ $-105$ $4$ $-11$ $216$ $171$ Other changes in liabilities (-) Shares and other equity $13$ $-1$ $-46$ $-30$ $-36$ $40$ $66$ Insurance technical reserves $155$ $141$ $13$ $101$ $102$ $187$ $178$ Net equity of households in life insurance and pension fund reserves $192$ $130$ $12$ $98$ $103$ $190$ $183$ Prepayments of insurance premiums and reserves for outstanding claims $-28$ $111$ $1$ $3$ $0$ $-3$ $-5$ <b>= Other changes in net financial worth</b> $60$ $-24$ $-48$ $79$ $36$ $141$ $153$	
Prepariments of insurance premiums and reserves for outstanding claims $6$ 195291222= Changes in net financial worth due to transactions16-41820361846Other changes accountUnder the constraint of the constra	
outstanding claims6195291222= Changes in net financial worth due to transactions16-41820361846Other changes account $\overline{}$ Other changes in financial assets (+) Shares and other equity199117-1054-11216171Other net assets38-125146113153225Other changes in liabilities (-) Shares and other equity13-1-46-30-364066Insurance technical reserves16514113101102187178Net equity of households in life insurance and pension fund reserves outstanding claims-28111130-3-5= Other changes in net financial worth $\overline{}$	
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	
Other changes account         Image: Image in financial assets (+)           Other changes and other equity         199         117         -105         4         -11         216         171           Other net assets         38         -1         25         146         113         153         225           Other changes in liabilities (-)         38         -1         -46         -30         -36         40         66           Insurance technical reserves         165         141         13         101         102         187         178           Net equity of households in life insurance and pension fund reserves         192         130         12         98         103         190         183           Prepayments of insurance premiums and reserves for outstanding claims         -28         11         1         3         0        3         -5           = Other changes in net financial worth         60         -24         -48         79         36         141         153	
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	
Other net assets       38       -1       25       146       113       153       225         Other changes in liabilities (-)       Shares and other equity       13       -1       -46       -30       -36       40       66         Insurance technical reserves       165       141       13       101       102       187       178         Net equity of households in life insurance and pension fund reserves       192       130       12       98       103       190       183         Prepayments of insurance premiums and reserves for       -28       11       1       3       0      3      5 <b>= Other changes in net financial worth</b> 60       -24       -48       79       36       141       153	
Other changes in liabilities (-) Shares and other equity13-1-46-30-364066Insurance technical reserves16514113101102187178Net equity of households in life insurance and pension fund reserves Prepayments of insurance premiums and reserves for outstanding claims-2811130-3-5= Other changes in net financial worth60-24-487936141153	1 5
Shares and other equity       13       -1       -46       -30       -36       40       66         Insurance technical reserves       165       141       13       101       102       187       178         Net equity of households in life insurance and pension fund reserves       192       130       12       98       103       190       183         Prepayments of insurance premiums and reserves for outstanding claims       -28       11       1       3       0      3      5         = Other changes in net financial worth       60       -24       -48       79       36       141       153	
Insurance technical reserves16514113101102187178Net equity of households in life insurance and pension fund reserves1921301298103190183Prepayments of insurance premiums and reserves for outstanding claims-2811130-3-5= Other changes in net financial worth60-24-487936141153	
Net equity of households in life insurance and pension fund reserves Prepayments of insurance premiums and reserves for outstanding claims1921301298103190183= Other changes in net financial worth-2811130-3-5	
Prepayments of insurance premiums and reserves for outstanding claims $-28$ $11$ $1$ $3$ $0$ $-3$ $-5$ = Other changes in net financial worth $60$ $-24$ $-48$ $79$ $36$ $141$ $153$	
= Other changes in net financial worth         60         -24         -48         79         36         141         153	
	standing claims
Financial balance sheet	r changes in net financial worth
	ial balance sheet
Financial assets (+)	al assets (+)
Short-term assets         324         323         363         385         376         394         399	
Currency and deposits         195         190         193         208         195         200         209	
Money market fund shares         90         84         96         110         113         121         121	
Debt securities <sup>1</sup> )         39         49         74         66         68         74         68           Less two system         5600         6050         6050         6247         6550         6232	
Long-term assets         5,669         6,059         6,065         6,349         6,347         6,556         6,633         6           Deposits         613         607         612         611         609         605         595	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	•
Loans $434 467 478 477 488 492$	
Quoted shares 399 423 377 387 375 393 408	
Unquoted shares and other equity 413 417 420 434 438 440 410	
Mutual fund shares 1,342 1,508 1,519 1,626 1,627 1,699 1,744	
Remaining net assets (+) 222 245 266 257 269 266 254	
Liabilities (-)	ies (-)
Debt securities         42         43         46         49         48         50         55	
Loans 275 286 295 293 299 309 282	
Shares and other equity         437         442         400         431         413         442         466           1	
Insurance technical reserves 5,574 5,995 6,122 6,241 6,274 6,369 6,452 0	
Net equity of households in life insurance and pension fund reserves4,7955,1865,3085,4135,4465,5395,621Prepayments of insurance premiums and reserves	
for outstanding claims 778 808 814 828 828 829 831	1 5 1
= Net financial wealth $-112$ $-139$ $-169$ $-24$ $-42$ $46$ $30$	outstanding claims

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

		Fotal in euro 1)					By et	uro area resido	ents			
		rotar in curo			In euro				In all cu	rrencies		
	Outstanding amounts	Gross issues	Net issues	Outstanding amounts	Gross issues	Net issues	Outstanding amounts	Gross issues	Net issues	Annual growth rates	Seasonally a	djusted <sup>2)</sup>
										8	Net issues §	6-month
	1	2	3	4	5	6	7	8	9	10	11	12
						Total						
2012 July Aug. Sep.	17,115.1 17,097.2 17,080.2	891.3 752.8 809.9	-4.3 -20.1 -7.9	14,811.7 14,801.3 14,780.4	834.1 708.8 758.0	-8.0 -12.6 -11.8	16,757.1 16,704.0 16,655.5	958.4 800.9 844.5	29.3 -35.8 -24.0	4.0 3.6 3.5	46.5 -2.0 23.3	2.8 1.5 0.8
Oct. Nov. Dec.	17,077.2 17,108.7 17,027.4	817.9 720.9 631.6	-1.4 28.2 -115.4	14,787.4 14,818.6 14,734.3	778.8 681.2 591.8	8.6 27.9 -118.5	16,675.5 16,723.0 16,607.7	901.9 796.1 673.4	28.7 47.6 -135.2	3.2 2.9 1.7	13.3 -16.6 -32.6	1.1 1.1 0.4
2013 Jan. Feb. Mar. Apr. May June	17,018.1 17,028.3 16,957.8 16,953.2 17,024.3 16,966.4	816.5 706.3 683.4 756.7 711.7 600.9	-8.8 -4.4 -68.0 -4.9 72.3 -57.5	14,730.4 14,750.0 14,725.7 14,715.2 14,792.5 14,745.3	768.3 666.0 634.3 708.2 666.5 558.4	-3.4 4.7 -21.8 -10.7 78.5 -46.7	16,583.2 16,656.5 16,652.8 16,634.1 16,727.5 16,664.9	898.2 812.0 766.5 846.3 805.4 674.8	5.4 40.5 -18.8 -3.4 97.5 -56.9	1.2 0.5 -0.1 -0.1 0.1 -0.1	-17.5 -19.2 -15.2 -9.2 18.3 -18.5	-0.4 -0.6 -1.1 -1.3 -0.9 -0.7
July			-51.5	14,676.0	585.1	-68.1	16,577.0	719.7	-75.4	-0.1	-52.8	-1.2
						Long-term						
2012 July Aug. Sep. Oct. Nov. Dec.	15,640.0 15,631.6 15,646.9 15,673.7 15,728.1 15,687.5	264.9 147.0 256.1 237.3 219.9 197.3	-20.2 -10.2 23.4 27.1 53.7 -62.6	13,437.5 13,430.7 13,446.7 13,469.9 13,516.7 13,474.0	233.1 126.8 224.7 212.5 195.1 173.3	-28.3 -8.5 24.0 23.5 46.1 -64.6	15,129.3 15,092.6 15,094.6 15,126.3 15,183.5 15,116.6	271.7 142.1 251.5 249.8 223.3 193.0	0.0 -21.1 23.4 38.7 59.8 -76.0	3.9 3.9 4.1 3.8 3.6 2.7	35.6 20.5 66.1 28.8 2.7 -19.9	3.1 2.2 1.9 2.4 2.5 1.8
2013 Jan. Feb. Mar. Apr. May June July	15,682.9 15,686.0 15,628.8 15,627.6 15,697.4 15,681.2	257.1 229.8 246.6 247.4 255.4 207.7	-4.2 -6.6 -54.4 -1.5 71.0 -15.6	13,470.5 13,479.3 13,477.2 13,465.0 13,541.3 13,538.9 13,457.4	226.9 204.4 216.4 216.9 224.4 181.2 169.9	-3.1 -1.1 0.7 -12.3 77.6 -1.8 -80.6	15,082.6 15,134.0 15,148.7 15,135.5 15,222.7 15,205.2 15,104.8	259.7 244.4 249.9 248.8 261.9 200.2 192.0	-7.1 25.3 2.5 0.5 91.5 -12.5 -89.6	$2.2 \\ 1.4 \\ 0.9 \\ 0.9 \\ 1.1 \\ 0.8 \\ 0.2$	1.8 -31.1 8.0 -6.3 23.6 -5.4 -50.2	1.3 0.6 -0.1 -0.6 -0.3 -0.1 -0.8

C15 Total outstanding amounts and gross issues of securities other than shares issued by euro area residents

total gross issues (right-hand scale) .... total outstanding amounts (left-hand scale) outstanding amounts in euro (left-hand scale) Fride Martin 1 1998 1 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 1995 1996 1997

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

		c		ng amounts					Gross is	ssues 1)		
	Total	MFIs (including	Non-MFI co	orporations	General go	overnment	Total	MFIs (including	Non-MFI co	orporations	General go	overnment
		Eurosystem)	Financial corporations other than MFIs	Non-financial corporations	Central government	Other general government		Eurosystem)	Financial corporations other than MFIs	Non-financial corporations	Central government	Other general government
	1	2	3	4	5	6 Total	7	8	9	10	11	12
2011	16,422	5,525 5,427	3,173	882	6,217	625	1,001	609	99	62	191	39
2012 2012 Q3	16,608 16,655	5,427 5,559	3,226	1,001 981	6,268 6,299	684 699	956 868	587 538	82 64	67 64	187 177	32
2012 Q5 Q4 2013 Q1 Q2	16,608 16,653 16,665	5,427 5,286 5,145	3,226 3,223 3,245	1,001 1,030 1,037	6,268 6,425 6,559	684 690 678	790 826 776	463 439 408	74 81 65	64 61 67	164 212 202	26 25 32 34
2013 Apr.	16,634	5,244	3,247	1,043	6,410	691	846	470	63	69	202	43
May	16,727	5,204	3,265	1,042	6,532	685	805	404	75	62	230	33
June	16,665	5,145	3,245	1,037	6,559	678	675	350	56	69	175	25
July	16,577	5,091	3,249	1,041	6,527	669	720	392	58	65	178	27
July	10,577	5,051	0,213	1,011	0,027	Short-term	.20		20		110	
2011	1,595	702	103	79	634	77	748	511	48	53	107	29
2012	1,491	601	137	81	608	64	702	489	37	52	104	21
2012 Q3	1,561	667	104	89	625	77	646	455	25	48	100	17
Q4	1,491	601	137	81	608	64	568	392	27	46	88	16
2013 Q1	1,504	582	139	90	624	68	574	361	31	47	112	23
Q2	1,460	558	135	88	624	54	539	337	25	51	102	23
2013 Apr.	1,499	581	145	93	613	66	598	398	27	51	97	25
May	1,505	575	145	98	625	61	543	329	25	50	113	27
June	1,460	558	135	88	624	54	475	285	25	52	95	18
July	1,472	563	135	91	633	50	528	331	23	48	106	20
	,					Long-term <sup>2)</sup>						
2011	14,827	4,823	3,070	803	5,583	548	253	98	51	9	84	10
2012	15,117	4,826	3,090	920	5,660	621	254	99	45	16	83	12
2012 Q3	15,095	4,892	3,013	893	5,675	622	222	82	38	16	77	8
Q4	15,117	4,826	3,090	920	5,660	621	222	71	47	18	77	9
2013 Q1	15,149	4,704	3,084	939	5,801	621	251	78	50	14	100	9
Q2	15,205	4,587	3,111	949	5,934	624	237	71	39	16	101	10
2013 Apr.	15,136	4,663	3,102	949	5,797	624	249	72	36	18	105	18
May	15,223	4,629	3,119	943	5,906	624	262	76	51	12	118	6
June	15,205	4,587	3,111	949	5,934	624	200	65	32	17	80	7
July	15,105	4,529	3,113	950	5,893	619	192	61	36	16	72	7
July	15,105	1,525	0,110	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		h: Long-term f		01		10		
2011	9,988	2,764	1,115	706	4,994	408	150	54	12	8	70	7
2012	10,547	2,838	1,292	822	5,151	444	165	54	18	15	71	7
2012 Q3	10,473	2,860	1,242	795	5,134	442	139	37	14	15	68	4
Q4	10,547	2,838	1,292	822	5,151	444	142	36	21	17	64	6
2013 Q1	10,680	2,790	1,344	839	5,257	450	165	41	25	12	80	7
Q2	10,791	2,739	1,389	847	5,360	455	155	34	21	13	79	8
2013 Apr.	10,697	2,778	1,364	848	5,254	453	157	33	16	16	78	14
May	10,773	2,755	1,382	842	5,338	455	169	37	27	10	91	5
June	10,791	2,739	1,389	847	5,360	455	139	32	19	14	68	5
July	10,729	2,703	1,400	849	5,325	451	132	29	17	16	65	5
					-	Long-term va						
2011	4,341	1,789	1,806	94	513	139	85	37	32	1	11	3
2012	4,143	1,734	1,702	95	437	175	77	38	24	1	8	5
2012 Q3	4,177	1,767	1,671	93	467	179	72	40	23	1	4	4
Q4	4,143	1,734	1,702	95	437	175	70	30	25	1	10	4
2013 Q1	4,022	1,661	1,642	97	453	170	69	30	22	1	13	3
Q2	3,978	1,609	1,620	98	483	169	69	31	16	2	17	2
2013 Apr.	4,007	1,641	1,637	97	461	171	78	33	15	2	24	4
May	4,016	1,632	1,635	98	483	168	79	33	21	2	22	1
June	3,978	1,609	1,620	98	483	169	48	28	10	3	6	2
July	3,943	1,597	1,610	97	471	167	49	28	16	1	3	2

Source: ECB.
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.
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

#### 2. Net issues

			Non-seasonal	lly adjusted 1)					Seasonally	adjusted 1)		
	Total	MFIs (including	Non-MFI co	orporations	General go	overnment	Total	MFIs (including	Non-MFI co	orporations	General go	overnment
	1	Eurosystem)	Financial corporations other than MFIs 3	Non-financial corporations	Central government	Other general government 6	7	Eurosystem)	Financial corporations other than MFIs 9	Non-financial corporations 10	Central government	Other general government 12
	1	2		4		Total	1	0	2	10	11	12
2011 2012	51.2 23.1	22.3 -6.5	-3.6 3.1	3.8 10.4	23.2 13.1	5.6 3.1	-	-	-	-	-	-
2012 Q3 Q4 2013 Q1	-10.1 -19.6 9.0	-4.8 -39.5 -47.1	-21.2 26.2 -6.3	10.9 8.1 9.1	4.3 -9.5 51.9	0.8 -4.9 1.5	22.6 -12.0 -17.3	-3.1 -27.6 -61.8	-7.9 6.0 1.3	11.4 11.1 6.7	20.4 4.7 35.9	1.8 -6.2 0.7
Q2	12.4	-41.7	8.5	3.6	45.4	-3.3	-3.1	-40.6	7.7	2.4	30.4	-3.0
2013 Apr. May June July	-3.4 97.5 -56.9 -75.4	-33.6 -37.3 -54.2 -48.0	26.5 18.5 -19.6 6.2	14.9 -0.5 -3.8 5.7	-13.3 122.3 27.2 -31.3	2.2 -5.5 -6.5 -8.1	-9.2 18.3 -18.5 -52.8	-38.4 -50.8 -32.7 -56.5	12.1 9.1 2.0 8.0	8.4 -4.1 2.9 2.7	5.1 69.5 16.5 0.2	3.5 -5.5 -7.2 -7.2
						Long-term						
2011 2012	47.0 32.9	11.6 2.1	-2.3 1.1	2.8 10.2	31.0 15.3	3.9 4.2	-	-	-	-	-	-
2012 Q3 Q4 2013 Q1 Q2	0.7 7.5 6.9 26.5	-2.0 -17.1 -40.1 -34.0	-16.8 18.9 -5.7 9.9	13.5 10.5 6.1 4.2	3.4 -4.1 46.7 45.1	2.7 -0.7 0.0 1.4	40.7 3.9 -7.1 4.0	2.0 -6.7 -47.8 -40.1	-6.0 0.9 1.5 10.0	14.0 11.3 5.8 3.2	25.7 -1.5 34.9 31.0	5.0 -0.1 -1.5 -0.2
2013 Apr. May June July	0.5 91.5 -12.5 -89.6	-33.8 -30.3 -38.0 -54.0	20.9 17.8 -9.1 5.9	12.0 -5.4 6.1 3.0	-2.6 109.5 28.2 -40.4	3.9 -0.2 0.3 -4.2	-6.3 23.6 -5.4 -50.2	-39.2 -43.2 -37.8 -57.6	10.5 9.8 9.7 4.1	8.4 -4.6 5.8 3.4	11.6 61.9 19.6 0.2	2.4 -0.3 -2.7 -0.3

**Cl6** 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.



	Annual growth rates (non-seasonally adjusted)           Total         MFIs         Non-MFI corporations         General gover							6-mon	th seasonally a	djusted growt	h rates	
	Total	MFIs (including			e	overnment	Total	MFIs (including	Non-MFI cc	•	General go	
		Eurosystem)		Non-financial corporations	Central government	Other general government		Eurosystem)		Non-financial corporations	Central government	
	1	2	3	4	5	<u> </u>	7	8	9	10	11	12
2012 July	4.0 3.6	4.1 3.6	1.2 0.6	10.5 11.0	3.4 3.3	14.7 12.4	2.8 1.5	1.7 0.1	1.7 -1.0	12.4 12.8	1.9 1.9	14.3 7.5
Aug. Sep.	3.5	2.4	0.0	12.6	3.5 3.9	12.4	0.8	-2.3	-2.7	12.8	3.3	3.2
Oct.	3.2	2.0	0.0	12.8	3.8	10.9	1.1	-1.3	-3.8	13.6	3.7	3.4
Nov.	2.9	1.1	0.2	12.5	3.9	8.0	1.1	-0.7	-4.4	13.3	3.7	2.0
Dec.	1.7	-1.4	1.2	14.1	2.5	6.1	0.4	-3.3	-0.4	14.8	2.4	-3.8
2013 Jan.	1.2	-2.1	0.9	13.5	2.2	4.6	-0.4	-5.7	0.2	14.7	2.4	-4.0
Feb.	0.5	-4.2	0.8	13.2	2.6	0.3	-0.6	-8.3	2.7	13.7	3.3	-6.1
Mar.	-0.1	-5.9	-0.7	12.6	3.6	-0.8	-1.1	-9.4	1.4	11.2	3.9	-4.7
Apr. May	-0.1 0.1	-6.0 -6.3	-0.7 -0.5	12.3 10.8	3.5 4.5	0.4 -0.4	-1.3 -0.9	-10.5 -11.4	2.2 3.3	10.9 8.5	3.5 5.3	-2.7 -2.9
June	-0.1	-0.5	-0.3	10.8	4.3	-0.4	-0.9	-11.4	5.5 1.7	8.5 5.5	5.5 6.4	-2.9
July	-0.8	-8.7	1.2	9.6	4.1	-4.7	-1.2	-11.6	2.3	4.9	5.9	-5.6
						Long-term						
2012 July	3.9	2.2	1.2	9.8	5.4	12.1	3.1	1.8	1.0	11.9	3.2	13.8
Aug.	3.9	2.2	0.7	10.8	5.4	11.4	2.2	0.4	-1.0	12.1	3.4	8.1
Sep.	4.1	1.6	0.6	13.7	6.0	11.8	1.9	-1.5	-2.2	13.9	5.1	7.6
Oct. Nov.	3.8 3.6	1.7 1.6	0.0 0.1	14.1 14.1	5.7 5.2	10.7 9.5	2.4 2.5	-0.1 1.0	-3.1 -4.0	16.7 17.8	5.4 4.6	6.8 7.0
Dec.	2.7	0.5	0.5	14.1	3.2	9.3	2.5	-0.6	-1.0	17.8	2.6	4.9
2013 Jan.	2.2	-0.1	0.3	13.2	2.9	8.6	1.3	-2.0	-0.4	18.0	2.5	3.8
2015 Jan. Feb.	1.4	-0.1	-0.3	14.8	3.3	4.5	0.6	-2.0	-0.4 0.5	15.8	3.2	5.8 1.0
Mar.	0.9	-4.1	-0.9	12.9	4.3	2.9	-0.1	-6.6	0.5	11.9	3.6	-1.6
Apr.	0.9	-4.2	-1.0	13.9	4.3	3.2	-0.6	-8.2	1.1	11.0	3.3	-0.1
May	1.1	-4.6	-0.8	12.7	5.1	2.9	-0.3	-9.9	2.5	7.8	5.5	-1.0
June	0.8	-5.7	0.6	12.1	4.8	1.6	-0.1	-10.6	2.2	5.9	7.1	-1.7
July	0.2	-7.1	1.0	11.3	4.5	0.3	-0.8	-11.9	2.5	5.0	6.5	-3.1

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

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.



$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	(pero	centage char	iges)										
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$				Long-term	fixed rate					Long-term	variable rate		
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	-	Total		Non-MFI co	orporations	General g	overnment	Total		Non-MFI co	orporations	General go	overnment
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$				corporations other than			general			corporations other than			Other general government
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$		13	14		16	17			20		22	23	24
$\begin{array}{c c c c c c c c c c c c c c c c c c c $						In all	currencies cor	nbined					
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$													16.1
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	2012	5.4	4.4	2.3	10.5	5.9	7.3	-0.8	-0.2	-4.9	-0.8	6.6	23.3
$\begin{array}{c c c c c c c c c c c c c c c c c c c $													25.5
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$													20.3
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$													7.8 -0.8
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$													3.9
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $													0.7
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	Apr.	3.9			15.4	4.9	4.6				0.7		0.5
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$													-1.6
$\begin{array}{c c c c c c c c c c c c c c c c c c c $													-3.5
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	July	3.2	-4.9	8.4	12.8	5.0		-8.6	-9.6	-9.5	1.9	-4.2	-6.7
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$													
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $		6.5											15.3
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	2012	5.7	5.0	2.0	10.8	6.0	7.2	-0.5	2.1	-6.6	-1.9	6.3	22.9
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $													25.5
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Q4												20.5
2013 Feb.         3.8         -0.6         5.0         17.3         4.1         4.7         -8.0         -3.7         -14.1         -1.1         -6.4           Mar.         3.6         -3.3         5.3         16.6         5.0         3.6         -7.9         -5.1         -12.5         0.3         -5.7           Apr.         3.7         -3.1         5.9         17.4         4.8         4.6         -7.8         -5.2         -12.4         2.7         -4.6         -           May         3.6         -3.9         4.9         15.9         5.2         4.9         -7.7         -5.7         -13.2         3.0         0.8         -           June         3.3         -4.7         5.3         15.0         5.1         3.9         -8.3         -8.2         -11.7         5.5         -1.0         -	2013 Q1												7.9 -1.4
Mar.         3.6         -3.3         5.3         16.6         5.0         3.6         -7.9         -5.1         -12.5         0.3         -5.7           Apr.         3.7         -3.1         5.9         17.4         4.8         4.6         -7.8         -5.2         -12.4         2.7         -4.6         -           May         3.6         -3.9         4.9         15.9         5.2         4.9         -7.7         -5.7         -13.2         3.0         0.8         -           June         3.3         -4.7         5.3         15.0         5.1         3.9         -8.2         -11.7         5.5         -1.0         -													
Apr.         3.7         -3.1         5.9         17.4         4.8         4.6         -7.8         -5.2         -12.4         2.7         -4.6         -           May         3.6         -3.9         4.9         15.9         5.2         4.9         -7.7         -5.7         -13.2         3.0         0.8         -           June         3.3         -4.7         5.3         15.0         5.1         3.9         -8.3         -8.2         -11.7         5.5         -1.0         -													4.2
May         3.6         -3.9         4.9         15.9         5.2         4.9         -7.7         -5.7         -13.2         3.0         0.8         -           June         3.3         -4.7         5.3         15.0         5.1         3.9         -8.3         -8.2         -11.7         5.5         -1.0         -													0.4 -0.3
June 3.3 -4.7 5.3 15.0 5.1 3.9 -8.3 -8.2 -11.7 5.5 -1.0 -													-0.3
													-4.1
July 3.0 -5.9 5.9 14.6 5.1 4.1 -8.8 -9.7 -10.0 2.9 -4.5 -													-7.2

### 4.3 Growth rates of securities other than shares issued by euro area residents 1) (cont'd)

C18 Annual growth rates of short-term debt securities, by sector of the issuer, in all currencies combined (annual percentage changes)



Source: ECB.

 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>)

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

(outstanding amounts as at end of period)

		Total		MF	s	Financial corporations	other than MFIs	Non-financial c	orporations
	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 July Aug. Sep. Oct. Nov. Dec.	4,485.9 3,958.3 3,724.7 4,017.0 3,866.3 3,878.2	105.7 105.9 105.9 105.9 106.0 106.1	1.9 2.1 2.0 1.7 1.5 1.6	458.6 382.9 350.5 360.5 329.8 339.3	12.1 13.4 13.1 9.9 8.9 9.3	325.5 281.6 264.1 287.6 271.2 270.4	4.9 4.9 5.8 5.8 4.6 4.9	3,701.7 3,293.9 3,110.1 3,369.0 3,265.3	0.4 0.4 0.3 0.3 0.3 0.4
Dec. 2012 Jan. Feb. Mar. Apr. May June July Aug. Sep. Oct. Nov. Dec.	3,878.2 4,091.3 4,257.4 4,241.3 4,068.4 3,762.9 3,925.6 4,051.7 4,176.4 4,242.3 4,309.6 4,397.5 4,497.8	106.1 106.3 106.3 106.4 106.5 106.5 106.6 106.8 106.8 106.8 106.9 107.0 106.9 107.0	$ \begin{array}{c} 1.6 \\ 1.7 \\ 1.5 \\ 1.5 \\ 1.4 \\ 1.5 \\ 1.1 \\ 1.0 \\ 0.9 \\ 0.9 \\ 1.0 \\ 0.9 \\ 1.0 \\ 0.9 \\ 1.0 \\ 0.9 \\ 1.0 \\ 0.9 $	339.3 375.5 394.7 373.1 327.3 280.9 317.6 309.9 349.7 365.0 383.6 395.7 402.4	9.3 11.4 10.7 11.3 10.7 7.7 5.8 4.6 4.9 5.0 5.5 4.9	270.4 297.7 310.9 310.7 291.6 259.8 279.9 287.1 304.3 319.2 329.5 337.8 352.9	4.9 4.0 3.1 2.8 3.4 2.8 2.8 2.8 3.3 2.8 2.8 2.8 2.9 2.4 2.4 2.4 2.4	3,268.5 3,418.2 3,551.9 3,557.5 3,449.5 3,222.1 3,328.0 3,454.7 3,522.5 3,558.1 3,596.5 3,664.0 3,742.5	$\begin{array}{c} 0.4\\ 0.4\\ 0.3\\ 0.2\\ 0.4\\ 0.3\\ 0.3\\ 0.3\\ 0.3\\ 0.4\\ 0.4\\ 0.4\\ 0.5\\ \end{array}$
2013 Jan. Feb. Mar. Apr. May June July	4,644.2 4,629.2 4,632.1 4,731.5 4,852.6 4,651.5 4,887.7	107.3 107.1 106.9 106.8 107.1 107.9 108.0	0.9 0.8 0.5 0.3 0.5 1.2 1.1	441.6 416.1 380.4 410.8 443.0 418.8 451.6	2.7 2.7 2.2 0.9 1.9 7.6 7.9	365.5 359.1 363.4 383.7 396.5 382.3 405.4	2.5 2.7 2.6 2.7 2.5 2.6 1.9	3,837.1 3,854.0 3,888.3 3,936.9 4,013.1 3,850.4 4,030.8	$\begin{array}{c} 0.6 \\ 0.4 \\ 0.1 \\ 0.1 \\ 0.2 \\ 0.4 \\ 0.3 \end{array}$

**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 cor	porations othe	er than MFIs	Non-fir	nancial corpora	ations
	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 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	1.1	4.4	1.5	0.0	1.5	1.2	0.0	1.2	2.8	1.1	1.7
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
May	13.1	1.8	11.3	5.5	0.0	5.5	0.6	0.0	0.5	7.0	1.8	5.2
June	39.0	1.7	37.3	29.2	0.0	29.1	0.3	0.1	0.3	9.6	1.7	7.9
July	5.4	3.2	2.2	1.4	0.0	1.4	0.6	1.9	-1.4	3.5	1.2	2.2

### C20 Gross issues of quoted shares by sector of the issuer (EUR billions; transactions during the month; market values)



Source: ECB.



#### 1. Interest rates on deposits (new business)

			Deposits fr	om households	s		Depos	ations	Repos		
	Overnight	With a	n agreed matur	ty of:	Redeemable a	t notice of: 2)	Overnight	With a	n agreed maturi	ty 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 Sep. Oct. Nov. Dec.	0.42 0.41 0.40 0.39	2.80 2.74 2.73 2.73	2.83 2.56 2.46 2.59	2.43 2.50 2.35 2.25	1.65 1.62 1.61 1.59	1.78 1.73 1.65 1.59	0.46 0.45 0.43 0.42	1.11 1.05 1.03 1.08	2.37 2.18 2.03 1.92	2.53 2.21 2.21 2.16	1.41 1.50 1.12 1.53
2013 Jan. Feb. Mar. Apr. May June July Aug.	0.37 0.36 0.36 0.34 0.33 0.32 0.31 0.30	2.61 2.44 2.29 2.33 2.04 1.88 1.88 1.81	2.37 2.23 2.17 2.10 2.06 1.88 1.90 1.87	2.42 2.29 2.28 2.25 2.25 2.12 2.08 2.06	1.53 1.39 1.37 1.36 1.31 1.30 1.28 1.15	1.53 1.47 1.43 1.36 1.30 1.27 1.23 1.22	$\begin{array}{c} 0.39 \\ 0.40 \\ 0.40 \\ 0.38 \\ 0.38 \\ 0.38 \\ 0.36 \\ 0.37 \end{array}$	$ \begin{array}{r} 1.09\\ 1.05\\ 0.93\\ 0.96\\ 0.83\\ 0.83\\ 0.82\\ 0.70\\ \end{array} $	2.00 1.99 1.85 1.70 1.86 1.65 1.63 1.57	$2.16 \\ 2.08 \\ 1.99 \\ 1.90 \\ 1.98 \\ 1.77 \\ 1.78 \\ 1.76$	$ \begin{array}{r} 1.17\\ 0.63\\ 1.00\\ 0.68\\ 0.48\\ 0.72\\ 0.88\\ 0.60\\ \end{array} $

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

	Revolving loans and overdrafts	Extended credit card debt <sup>3)</sup>	(	Consumer ci	redit		L	ending for	house pur		Lending to so unincorpora			
			By initia	al rate fixatio	on	APRC <sup>4)</sup>	Ву	initial rate	fixation		APRC <sup>4)</sup>	By initia	al rate fixatio	on
			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 Sep. Oct. Nov. Dec.	8.14 8.04 7.96 7.94	16.96 16.97 16.95 16.93	5.78 5.62 5.62 5.36	6.18 6.13 6.09 6.05	7.62 7.67 7.67 7.55	7.25 7.15 7.13 6.94	2.92 2.88 2.87 2.87	3.27 3.24 3.18 3.25	3.21 3.15 3.14 3.25	3.49 3.49 3.40 3.45	3.45 3.42 3.35 3.41	3.23 3.24 3.33 3.15	4.48 4.25 4.23 4.12	3.31 3.33 3.23 3.01
2013 Jan. Feb. Mar. Apr. May	7.97 7.97 7.95 7.93 7.91	17.06 17.04 17.06 17.08 17.08	5.77 5.89 5.86 5.74 6.00	6.11 6.03 5.98 5.92 6.09	7.88 7.83 7.75 7.75 7.71	7.27 7.25 7.15 7.06 7.20	2.87 2.88 2.86 2.87 2.87	3.17 3.17 3.19 3.13 3.09	3.03 3.05 3.13 3.06 2.95	3.35 3.35 3.34 3.34 3.22	3.34 3.35 3.38 3.38 3.32	3.19 3.16 3.16 3.26 3.32	4.06 4.07 4.16 3.97 4.11	3.08 3.21 3.17 3.11 3.14
June July Aug.	7.84 7.75 7.73	17.04 16.96 17.02	5.85 5.63 5.64	6.02 6.12 6.15	7.56 7.63 7.64	7.07 7.13 7.14	2.82 2.84 2.80	2.99 2.97 3.00	2.87 2.90 2.97	3.16 3.17 3.18	3.25 3.28 3.31	3.10 3.19 3.00	4.08 3.75 4.06	3.01 3.18 3.15

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

	Revolving loans and overdrafts		Other loans by i	of up to E nitial rate		llion		Other loans of over EUR 1 million by initial rate fixation						
			Over 3 months		Over 3	Over 5	Over		Over 3 months		Over 3	Over 5	Over	
		and up to 3 months	and up to 1 year	and up to 3 years	and up to 5 years	and up to 10 years	10 years	and up to 3 months	and up to 1 year	and up to 3 years	and up to 5 years	and up to 10 years	10 years	
	1	2	3	4	5	6	7	8	9	10	11	12	13	
2012 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.	4.19	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.	4.17	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.	4.16	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	3.21	3.52	2.68	2.79	
June	4.11	4.54	4.60	4.40	4.34	3.56	3.41	2.05	2.60	3.01	2.96	2.71	3.12	
July	4.09	4.65	4.82	4.34	4.09	3.48	3.45	2.13	2.72	2.72	2.82	2.98	3.17	
Aug.	4.09	4.50	4.81	4.41	4.06	3.41	3.39	2.03	2.56	2.82	3.00	2.88	3.10	

Source: ECB.

 Data refer to the changing composition of the euro area. For further information, see the General Notes.
 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>), \*

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

		Depos	its from househo	olds		Deposits from	n non-financial co	rporations	Repos
	Overnight 2)	With an agreed	maturity of:	Redeemable at	notice of: 2),3)	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 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.	0.37	2.58	2.71	1.53	1.53	0.39	1.75	2.88	2.32
Feb.	0.36	2.58	2.75	1.39	1.47	0.40	1.72	2.93	1.99
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	2.41	2.67	1.31	1.30	0.38	1.57	2.79	1.62
June	0.32	2.36	2.67	1.30	1.27	0.38	1.51	2.80	1.72
July	0.31	2.28	2.64	1.28	1.23	0.36	1.46	2.77	1.66
Aug.	0.30	2.22	2.63	1.15	1.22	0.37	1.44	2.82	1.51

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

			Loans to h		Loans to non-financial corporations				
		ng for house purch ith a maturity of:	ase		r credit and other th a maturity of:	loans	Wi	th 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 8	Over 5 years
2012 Sep. Oct. Nov. Dec.	3.71 3.64 3.53 3.49	3.51 3.45 3.42 3.39	3.67 3.61 3.60 3.56	7.80 7.75 7.59 7.75	6.30 6.25 6.23 6.18	5.03 4.97 4.95 4.92	3.78 3.76 3.72 3.71	3.40 3.29 3.30 3.28	3.34 3.26 3.25 3.22
2013 Jan. Feb. Mar. Apr. May June July Aug.	3.46 3.45 3.50 3.49 3.47 3.50 3.51 3.51	3.36 3.35 3.36 3.33 3.30 3.29 3.24 3.22	3.52 3.51 3.49 3.49 3.49 3.40 3.43 3.40 3.37	7.76 7.77 7.79 7.74 7.62 7.61 7.58	6.21 6.24 6.21 6.19 6.14 6.18 6.18 6.15	4.89 4.91 4.89 4.88 4.86 4.87 4.84 4.84 4.82	3.73 3.72 3.68 3.67 3.65 3.62 3.62 3.62 3.61	3.26 3.26 3.25 3.25 3.24 3.24 3.26 3.26	3.17 3.19 3.16 3.15 3.13 3.14 3.14 3.12

C22

### C21 New deposits with an agreed maturity





with a floating rate and up to l

Source: ECB.

\* For the source of the data in the table and the related footnotes, please see page S42.



year's initial

			Euro area 1), 2)			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 2011 2012	0.44 0.87 0.23	0.57 1.18 0.33	0.81 1.39 0.58	1.08 1.64 0.83	1.35 2.01 1.11	0.34 0.34 0.43	0.23 0.19 0.19
2012 Q3 Q4 2013 Q1 Q2 Q3	0.13 0.08 0.07 0.08	0.16 0.11 0.12 0.12	0.36 0.20 0.21 0.21	0.63 0.37 0.34 0.31	0.90 0.60 0.57 0.51	0.43 0.32 0.29 0.28	0.19 0.19 0.16 0.16
Q3	0.09	0.13	0.22	0.34	0.54	0.26	0.15
2012 Sep. Oct. Nov. Dec.	0.10 0.09 0.08 0.07	0.12 0.11 0.11 0.11	0.25 0.21 0.19 0.19	0.48 0.41 0.36 0.32	0.74 0.65 0.59 0.55	0.39 0.33 0.31 0.31	0.19 0.19 0.19 0.19
2013 Jan. Feb. Mar. Apr. May June July Aug. Sep.	$\begin{array}{c} 0.07\\ 0.07\\ 0.07\\ 0.08\\ 0.08\\ 0.09\\ 0.09\\ 0.09\\ 0.08\\ 0.08\\ 0.08\end{array}$	0.11 0.12 0.12 0.12 0.11 0.12 0.13 0.13 0.13	$\begin{array}{c} 0.20\\ 0.22\\ 0.21\\ 0.21\\ 0.20\\ 0.21\\ 0.22\\ 0.23\\ 0.22\\ \end{array}$	$\begin{array}{c} 0.34\\ 0.36\\ 0.33\\ 0.32\\ 0.30\\ 0.32\\ 0.34\\ 0.34\\ 0.34\end{array}$	0.58 0.59 0.54 0.53 0.48 0.51 0.53 0.54 0.54	0.30 0.29 0.28 0.27 0.27 0.27 0.27 0.27 0.26 0.25	0.17 0.16 0.16 0.16 0.16 0.15 0.16 0.15 0.15



Source: ECB.

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.
 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 rate		Insta	antaneous for	ward rates				
	3 months	1 year 2	2 years 3	5 years 4	7 years 5	10 years 6	10 years - 3 months (spread) 7	10 years - 2 years (spread) 8	1 year 9	2 years	5 years	10 years
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 Q3	$\begin{array}{c} 0.02 \\ 0.06 \\ 0.04 \\ 0.03 \\ 0.02 \end{array}$	-0.01	0.07	0.76	1.29	1.94	1.92	1.87	0.00	0.36	2.10	3.75
Q4		-0.04	-0.01	0.58	1.09	1.72	1.66	1.74	-0.09	0.17	1.84	3.50
2013 Q1		0.00	0.07	0.65	1.12	1.76	1.72	1.69	0.01	0.29	1.83	3.60
Q2		0.11	0.30	1.05	1.54	2.14	2.11	1.84	0.27	0.73	2.35	3.78
Q3		0.07	0.22	0.94	1.45	2.05	2.03	1.84	0.17	0.60	2.25	3.74
2012 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. Feb. Mar. Apr. May June July Aug. Sep.	$\begin{array}{c} 0.07 \\ 0.03 \\ 0.04 \\ 0.03 \\ 0.02 \\ 0.03 \\ 0.01 \\ 0.02 \\ 0.02 \end{array}$	$\begin{array}{c} 0.15\\ 0.01\\ 0.00\\ -0.01\\ 0.03\\ 0.11\\ 0.04\\ 0.09\\ 0.07\\ \end{array}$	$\begin{array}{c} 0.32 \\ 0.10 \\ 0.07 \\ 0.04 \\ 0.13 \\ 0.30 \\ 0.18 \\ 0.27 \\ 0.22 \end{array}$	$\begin{array}{c} 0.99 \\ 0.74 \\ 0.65 \\ 0.54 \\ 0.75 \\ 1.05 \\ 0.88 \\ 1.06 \\ 0.94 \end{array}$	$1.45 \\ 1.24 \\ 1.12 \\ 0.96 \\ 1.22 \\ 1.54 \\ 1.36 \\ 1.58 \\ 1.45 \\ 1.45 \\ 1.45 \\ 1.58 \\ 1.45 \\ 1.58 \\ 1.45 \\ 1.58 \\ 1.45 \\ 1.58 \\ 1.45 \\ 1.58 \\ 1.58 \\ 1.45 \\ 1.58 \\ 1.45 \\ 1.58 \\ $	2.02 1.88 1.76 1.55 1.84 2.14 1.95 2.17 2.05	$ \begin{array}{r} 1.95\\ 1.86\\ 1.72\\ 1.52\\ 1.82\\ 2.11\\ 1.95\\ 2.16\\ 2.03\end{array} $	1.71 1.78 1.69 1.51 1.71 1.84 1.77 1.90 1.84	$\begin{array}{c} 0.28\\ 0.05\\ 0.01\\ -0.01\\ 0.08\\ 0.27\\ 0.14\\ 0.23\\ 0.17\end{array}$	$\begin{array}{c} 0.70 \\ 0.38 \\ 0.29 \\ 0.23 \\ 0.41 \\ 0.73 \\ 0.54 \\ 0.71 \\ 0.60 \end{array}$	2.18 1.99 1.83 1.58 1.95 2.35 2.14 2.43 2.25	3.62 3.72 3.60 3.28 3.62 3.78 3.59 3.78 3.78 3.74



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 average

	Bench	ımark			Dow Jo	ones EUR	O STOXX i Main indus	ndices 1) stry indices					United States	Japan
	Broad index	50	Basic materials	Consumer services	Consumer goods	Oil and gas	Financials	Industrials	Technology	Utilities	Telecoms	Health care	Standard & Poor's 500	Nikkei 225
	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 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
Q3	282.1	2,782.3	581.1	197.7	477.6	312.1	150.4	406.2	277.3	224.0	245.3	631.3	1,674.9	14,127.7
2012 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
July	272.4	2,686.5	569.6	193.1	465.9	298.7	142.0	389.5	268.1	215.1	231.5	642.5	1,668.7	14,317.5
Aug.	284.2	2,803.8	581.8	198.2	482.8	314.9	153.2	407.0	276.1	223.8	245.6	636.8	1,670.1	13,726.7
Sep.	290.6	2,864.6	592.8	202.3	485.0	323.9	156.8	423.6	288.6	234.1	260.0	613.1	1,687.2	14,372.1

**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

#### 1. Harmonised Index of Consumer Prices 1)

			Total			Tot	al (s.a.; perc	entage change	vis-à-vis prev	ious perio	d)		o item: red prices 2)
	Index: 2005 = 100		Total Total excl. unprocessed food and energy	Goods	Services	Total	Processed food	Unprocessed food	Non-energy industrial goods	Energy (n.s.a.)	Services	Total HICP excluding administered prices	Administered prices
% 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	87.7	12.3
	1	2	3	4	5	6	7	8	9	10	11	12	13
2009 2010 2011 2012	108.1 109.8 112.8 115.6	0.3 1.6 2.7 2.5	1.3 1.0 1.7 1.8	-0.9 1.8 3.3 3.0	2.0 1.4 1.8 1.8				- - -	- - -	- - -	0.1 1.6 2.6 2.3	1.7 1.7 3.6 3.8
2012 Q3 Q4 2013 Q1 Q2 Q3	115.7 116.7 116.4 117.5 117.3	2.5 2.3 1.9 1.4 1.3	1.7 1.6 1.5 1.3	3.1 2.7 2.0 1.5	1.8 1.7 1.7 1.3 1.4	0.5 0.4 0.4 0.1	0.3 0.7 0.6 0.5	1.1 1.6 0.6 1.5	0.1 0.3 0.1 0.1	1.2 -0.1 1.0 -1.8 1.0	0.5 0.3 0.4 0.2	2.3 2.0 1.7 1.3	4.0 4.1 3.1 2.2
2013 Apr. May June July Aug. Sep. <sup>3)</sup>	117.4 117.5 117.6 117.0 117.1 117.7	1.2 1.4 1.6 1.6 1.3 1.1	1.1 1.3 1.3 1.3 1.3	1.2 1.4 1.7 1.7 1.2	1.1 1.5 1.4 1.4 1.4 1.5	-0.2 0.2 0.1 0.2 0.1	0.1 0.2 0.2 0.4 0.2	0.6 0.8 0.7 0.2 0.0	0.0 0.0 -0.1 0.0	-1.0 -1.2 0.1 0.8 0.5 0.5	-0.5 0.5 0.2 0.2 0.2	1.0 1.3 1.5 1.6 1.3	2.3 2.2 2.1 1.7 1.9

			Goods	s						Services		
	Food (incl. al	coholic beverage	es and tobacco)		Industrial good	s	Hous	ing	Transport	Communication	Recreation	Miscellaneous
	Total	Processed food	Unprocessed food		Non-energy industrial goods			Rents			personal	
% of total in 2012	19.4	12.0	7.3	38.3	27.4	11.0	10.3	6.0	7.2		14.7	7.1
	14	15	16	17	18	19	20	21	22	23	24	25
2009 2010 2011	0.7 1.1 2.7	1.1 0.9 3.3	0.2 1.3 1.8	-1.7 2.2 3.7	0.6 0.5 0.8	-8.1 7.4 11.9	2.0 1.8 1.8	1.8 1.5 1.4	2.9 2.3 2.9	-1.0 -0.8 -1.3	2.1 1.0 2.0	2.1 1.5 2.1
2012 2012 Q3 Q4 2013 Q1 Q2 Q3	3.1 3.0 3.1 2.9 3.1 3.1	3.1 2.7 2.4 2.3 2.1	3.0 3.4 4.3 3.9 4.8	3.0 3.2 2.5 1.5 0.6	1.2 1.3 1.1 0.8 0.8 0.4	7.6 8.0 6.3 3.2 0.3 0.1	1.8 1.9 1.8 1.8 1.6	1.5 1.5 1.5 1.3	2.9 3.0 3.1 3.1 2.5	-3.2 -3.1 -3.8 -4.6 -4.5	2.2 2.2 2.1 2.8 2.0	2.0 1.9 1.9 0.7 0.9
2013 Apr. May June July Aug. Sep. <sup>3)</sup>	2.9 3.2 3.2 3.5 3.5 3.2 2.6	2.1 2.1 2.5 2.5	4.2 5.1 5.0 5.1 4.4	0.5 0.5 1.0 0.8 0.2	0.8 0.8 0.7 0.4 0.4 0.3	-0.4 -0.2 1.6 1.6 -0.3 -0.9	1.7 1.6 1.6 1.8 1.8	1.3 1.4 1.3 1.7 1.8	2.4 2.8 2.4 2.3 2.3	-4.8 -4.2 -4.6 -4.0 -4.3	1.5 2.2 2.4 2.1 2.2	0.8 1.0 0.9 0.8 0.8

Sources: Eurostat and ECB calculations.

 Data refer to the changing composition of the euro area. For further information, see the General Notes.
 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/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.



#### 2. Industry, construction and residential property prices

			Iı	ndustrial p	roducer prices ex	cluding cor	struction				Construct- ion 1)	Residential property
	Total (index:	1	`otal		Industry e	xcluding cor	struction	and energy		Energy		prices 2)
	2010 = 100)		Manu- facturing         Total         Intermediate goods         Capital goods         Consumer goods           Total         Durable         Non-durable									
			5		0		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								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	-3.4
2010	100.0	2.7	3.3	1.7	3.6	0.3	0.4	0.7	0.4	5.5	2.0	1.2
2011	105.8	5.8	5.4	3.9	5.9	1.5	3.3	1.9	3.4	11.0	3.3	1.3
2012	108.9	3.0	2.1	1.4	0.8	1.0	2.5	1.6	2.6	6.4	1.6	-1.7
2012 Q2	108.7	2.7	1.7	1.2	0.4	1.1	2.1	1.7	2.2	6.2	1.8	-1.2
Q3	109.3	2.7	1.9	1.1	0.3	0.9	2.3	1.5	2.4	6.1	1.4	-2.8
Q4	109.4	2.4	2.0	1.6	1.4	0.8	2.5	1.1	2.6	4.3	1.3	-2.2
2013 Q1	109.7	1.2	0.8	1.2	0.8	0.8	2.1	0.7	2.3	1.2	0.8	-2.9
Q2	108.7	0.0	-0.1	0.6	-0.4	0.6	1.9	0.7	2.1	-1.5	0.4	•
2013 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.	108.9	-0.2	-0.5	0.6	-0.3	0.6	1.8	0.7	1.9	-2.0	-	-
May	108.6	-0.2	-0.2	0.5	-0.5	0.6	1.9	0.8	2.1	-1.8	-	-
June	108.6	0.3	0.4	0.6	-0.4	0.6	2.1	0.7	2.3	-0.5	-	-
July	108.9	0.2	0.3	0.6	-0.5	0.5	2.0	0.6	2.2	-0.6	-	-

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

	Oil prices 3) (EUR per	Non-energy commodity prices           Import-weighted <sup>4)</sup> Use-weighted <sup>5)</sup>									GDP	deflators			
	barrel)	Impo	ort-weig	hted <sup>4)</sup>	Use	-weighte	ed 5)	Total (s.a.; index:	Total		Domesti	c demand		Exports 6)	Imports <sup>6)</sup>
		Total	Food	Non-food	Total	Food	Non-food	2005 = 100)		Total	Private consump- tion	Government consump- tion	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 2010 2011 2012 2012 Q3 Q4 2013 Q1 Q2 Q3	44.6 60.7 79.7 86.6 87.3 84.4 85.0 79.0 82.5	-18.5 44.6 12.2 0.5 5.3 4.4 -3.0 -5.2 -12.7	-8.9 21.4 22.4 1.1 10.4 6.0 -2.4 -4.1 -18.7	-23.1 57.9 7.7 0.3 2.7 3.7 -3.3 -5.8 -9.4	-18.0 42.1 12.8 2.6 7.8 7.0 -1.6 -4.3 -12.0	-11.4 27.1 20.7 6.4 16.0 10.2 0.0 -2.1 -14.4	-22.8 54.5 7.5 -0.3 1.6 4.5 -2.8 -6.2 -10.0	107.2 108.0 109.4 110.8 110.9 111.4 111.9 112.5	0.9 0.8 1.2 1.3 1.3 1.4 1.6 1.8	-0.2 1.5 2.1 1.6 1.5 1.3 1.3 1.3	-0.4 1.6 2.5 2.1 2.0 1.8 1.5 1.5	2.1 0.8 0.8 1.1 1.4 0.6 1.8 1.2	-0.3 0.8 1.7 1.1 0.9 0.8 0.5 0.6	-3.4 3.1 3.6 1.6 1.6 1.4 0.3 0.2	-6.3 5.0 5.8 2.4 2.3 1.6 -0.4 -0.9
2013 Apr. May June July Aug. Sep.	79.3 79.2 78.3 81.9 82.6 83.0	-3.5 -4.8 -7.4 -12.2 -12.9 -12.9	-3.1 -3.3 -5.8 -16.7 -20.5 -18.9	-3.7 -5.5 -8.2 -9.8 -8.7 -9.7	-2.0 -4.0 -6.9 -11.8 -12.2 -12.1	0.3 -1.5 -4.8 -13.4 -15.9 -13.7	-3.8 -6.0 -8.6 -10.3 -8.9 -10.7	- - - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - - -

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).

Brent Blend (for one-month forward delivery).
Refers to prices expressed in euro. Weighted according to the structure of euro area imports in the period 2004-06.
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.



Prices, output, demand and labour markets

4. Unit labour costs, compensation per labour input and labour productivity

	Total (index:	Total					By econom	ic activity				
	2005 = 100)		Agriculture, forestry and fishing	Manufactu- ring, energy and utilities	Construction	Trade, transport, accommoda- tion and food	Information and commu- nication	Finance and insurance	Real estate	Professional, business and support services	Public admi- nistration, education, health and social	Arts, enter- tainment and other services
	1	2	3	4	5	services 6	7	8	9	10	work 11	12
				· · ·	Ĩ	Unit labour cos		0		10		
2011 2012	110.5 112.4	0.8 1.7	0.1 4.2	0.5 2.6	1.3 2.8	0.8 1.6	0.8 3.3	0.4 1.5	0.8 0.4	2.8 2.4	0.3 0.6	1.3 2.1
2012 Q3	112.6	2.0	5.8	2.4	2.1	1.7	3.3	0.9	1.1	2.7	1.2	2.7
Q4 2013 Q1	113.2 113.8	1.7 1.9	6.7 2.1	2.8 3.5	3.9 2.2	2.0 2.2	5.2 3.8	-0.8 -0.9	-0.3 -1.3	2.0 2.0	-0.5 0.6	3.2 1.2
2010 Q2	113.5	1.0	1.4	2.4	-0.6	1.9	2.8	0.1	-2.6	1.6	-0.2	0.8
						ensation per e						
2011 2012	114.3 116.2	2.1 1.7	2.5 1.2	3.4 2.5	3.5 3.1	1.6 1.8	2.8 2.5	1.5 1.2	2.5 1.5	3.0 2.5	1.1 1.0	1.7 1.6
2012 Q3	116.5	1.9	1.2	2.7	3.2	1.7	2.6	0.7	1.5	2.2	1.4	1.3
Q4 2013 Q1	116.9 117.9	1.5 1.8	1.8 2.5	2.8 3.0	3.5 3.0	1.4 1.2	2.3 1.6	1.2 1.8	1.6 1.2	1.6 1.9	0.0 1.4	1.7 0.7
Q2	118.0	1.5	1.7	2.4	1.8	1.5	1.1	1.0	0.8	2.3	0.9	1.1
					Labour produ	activity per per	son employed	2)				
2011 2012	103.4	1.3	2.5	2.9	2.2	0.9	2.0	1.1	1.7	0.1	0.8	0.4
2012 2012 Q3	103.4 103.5	-0.1	-2.8	-0.1	0.4	0.2	-0.8	-0.4	0.5	-0.6	0.4	-0.5
2012 Q3 Q4	103.3	-0.2	-4.4	0.5	-0.3	-0.6	-2.8	2.0	2.0	-0.4	0.5	-1.4
2013 Q1 Q2	103.6 104.0	0.0 0.5	0.4 0.3	-0.4 0.0	0.7 2.4	-1.0 -0.3	-2.0 -1.7	2.8 0.9	2.5 3.6	-0.1 0.7	0.9 1.0	-0.5 0.3
Q2	104.0	0.5	0.5	0.0		nsation per ho		0.9	5.0	0.7	1.0	0.5
2011	115.9	2.0	2.0	2.6	4.0	1.8	2.6	1.1	1.8	2.6	0.9	1.7
2012	119.0	2.6	3.3	3.6	5.0	2.6	3.2	1.7	1.7	2.7	1.3	2.5
2012 Q3	119.2	2.7	2.7	4.1	5.1	2.4	3.1	1.2	1.7	2.3	1.8	2.1
Q4 2013 Q1	119.9 121.4	2.2 3.1	3.9 3.8	3.8 4.7	5.0 5.7	2.3 2.5	2.8 2.3	2.0 2.9	2.1 2.7	2.0 2.6	$0.0 \\ 2.0$	2.8 2.0
Q2	120.7	1.4	2.0	1.2	1.2	1.7	0.8	1.4	1.3	2.4	0.6	1.8
						y labour produ						
2011 2012	105.5 106.4	1.3 0.8	3.7 -1.8	2.2 1.0	2.4 1.9	1.1 1.0	1.8 -0.1	0.9 0.1	0.9 1.9	-0.1 0.4	0.6 0.7	0.4 0.3
2012 Q3	106.4	0.7	-3.8	1.7	2.7	0.5	-0.4	0.3	1.0	-0.4	0.7	-0.6
Q4 2013 Q1	106.6 107.4	0.6 1.2	-3.9 0.2	1.1 1.3	0.9 3.3	0.4 -0.1	-1.9 -1.3	2.8 4.0	3.1 4.0	0.2 0.8	0.6 1.5	-0.4 1.1
2013 Q1 Q2	107.4	0.3	-0.2	-1.0	1.7	-0.1	-2.0	1.0	4.0	0.7	0.7	0.9

#### 5. Labour cost indices 3)

	Total (index:	Total	By c	component	For selec	cted economic activ	vities	Memo item: Indicator
	2008 = 100)		Wages and salaries		Mining, manufacturing and energy		Services	of negotiated wages <sup>4)</sup>
% of total in 2008		100.0	75.2	24.8	32.4	9.0	58.6	
	1	2	3	4	5	6	7	8
2011 2012	106.6 108.6	2.2 1.8	2.0 1.9	2.9 1.6	3.1 2.4	2.5 2.3	2.5 2.1	2.0 2.1
2012 Q3 Q4 2013 Q1 Q2	106.0 114.9 102.4 113.7	1.9 1.6 1.7 0.9	2.1 1.6 1.8 1.1	1.7 1.4 1.4 0.1	2.8 2.6 3.1 1.8	2.6 2.0 0.9 0.7	2.0 2.0 1.4 0.8	2.2 2.2 2.0 1.7

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).
Compensation (at current prices) per employee divided by labour productivity per person employed.
Total GDP and value added by economic activity (volumes) per labour input (persons employed and hours worked).
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		D	omestic demand			Exte	rnal balance 1)	
		Total	Private consumption	Government consumption	Gross fixed capital formation	Changes in inventories 2)	Total	Exports 1)	Imports 1)
	1	2	3	4	5	6	7	8	9
				Current prices	(EUR billions)				
2009	8,921.8	8,803.9	5,135.3	1,988.2	1,730.6	-50.3	117.8	3,287.1	3,169.2
2010 2011	9,168.4 9,423.7	9,046.0 9,293.4	5,271.4 5,418.8	2,016.2 2,029.6	1,737.5 1.795.6	20.9 49.4	122.4 130.3	3,786.6 4,173.0	3,664.2 4,042.7
2011	9,484.6	9,233.7	5,453.2	2,039.0	1,744.6	-3.0	250.8	4,344.5	4,093.7
2012 Q2	2,369.9	2,308.7	1,360.4	510.3	436.1	1.9	61.2	1,085.2	1,024.1
Q3	2,374.9	2,306.3	1,362.7	510.5	435.2	-2.2	68.7	1,097.2	1,028.6
Q4	2,372.7	2,299.8	1,363.3	510.2	430.8	-4.4	72.9	1,090.9	1,018.0
2013 Q1 Q2	2,381.4 2,400.6	2,303.4 2,315.6	1,366.3 1,373.1	514.8 518.1	421.5 423.3	0.8 1.1	78.0 85.0	1,079.6 1,095.7	1,001.6 1,010.7
Q2	2,400.0	2,515.0	1,373.1		ge of GDP	1.1	83.0	1,095.7	1,010.7
2012	100.0	97.4	57.5	21.5	18.4	0.0	2.6		
2012	100.0	97.4		-linked volumes (pr			2.0	-	
			Chair	quarter-on-quarter					
2012 Q2	-0.3	-0.9	-0.6	-0.3	-1.9			1.1	-0.2
Q3	-0.5	-0.3	-0.0	-0.3	-0.4	-	-	0.6	0.2
Õ4	-0.5	-0.6	-0.5	0.1	-1.2	-	-	-0.5	-0.9
2013 Q1	-0.2	-0.2	-0.2	0.0	-2.2	-	-	-1.0	-1.1
Q2	0.3	0.1	0.2	0.4	0.3	-	-	1.6	1.4
				•	ntage changes				
2009	-4.4	-3.7	-1.0	2.6	-12.8	-	-	-12.5	-11.0
2010 2011	2.0 1.5	1.2 0.7	1.0 0.3	0.6 -0.1	-0.4 1.6	-	-	11.7 6.4	10.1 4.3
2011 2012	-0.6	-2.2	-1.4	-0.1	-3.9			2.5	-1.1
2012 Q2	-0.5	-2.4	-1.3	-0.7	-3.7	-	_	3.4	-0.8
Õ3	-0.7	-2.5	-1.7	-0.6	-3.9	-	-	2.8	-1.2
Q4	-1.0	-2.3	-1.5	-0.7	-4.5	-	-	2.0	-0.9
2013 Q1	-1.0	-2.0	-1.3	-0.4	-5.6	-	-	0.1	-1.9
Q2	-0.5	-1.0	-0.6	0.3	-3.5	-	-	0.7	-0.4
2012 02	-0.3	-0.8	-0.3	er-on-quarter perce -0.1	-0.4	GDP; percentage poir	0.6		
2012 Q2 Q3	-0.3 -0.1	-0.8 -0.3	-0.3	-0.1 0.0	-0.4 -0.1	-0.1 -0.2	0.8	-	-
04 04	-0.1	-0.5	-0.3	0.0	-0.1	-0.2	0.2	-	-
2013 Q1	-0.2	-0.2	-0.1	0.0	-0.4	0.4	0.0	-	-
Q2	0.3	0.1	0.1	0.1	0.0	-0.1	0.2	-	-
			contributions to	annual percentage	changes in GDP; [	percentage points			
2009	-4.4	-3.7	-0.5	0.5	-2.7	-0.9	-0.7	-	-
2010	2.0	1.2	0.6	0.1	-0.1	0.6	0.7	-	-
2011 2012	1.5 -0.6	0.7 -2.2	0.2 -0.8	0.0 -0.1	0.3 -0.7	0.2 -0.5	0.9 1.6	-	-
	-0.5	-2.2	-0.8	-0.2	-0.7	-0.5	1.8		
2012 Q2 Q3	-0.5 -0.7	-2.4 -2.4	-0.8 -1.0	-0.2 -0.1	-0.7 -0.7	-0.7 -0.6	1.8 1.8	-	-
04 04	-0.7	-2.4	-0.8	-0.2	-0.9	-0.4	1.3	-	-
2013 Q1	-1.0	-1.9	-0.8	-0.1	-1.0	0.0	0.9	-	-
Q2	-0.5	-1.0	-0.3	0.1	-0.6	-0.1	0.5	-	-

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.



#### EURO AREA STATISTICS

Prices, output, demand and labour markets

# 5.2 Output and demand (quarterly data seasonally adjusted; annual data unadjusted)

#### 2. Value added by economic activity

					Gross val	ue added (bas	ic prices)					Taxes less subsidies
	Total	Agriculture, forestry and fishing	Manufactu- ring, 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	nistration, education,	Arts, enter- tainment and other services	on products
	1	2	3	4	5 Current p	6 prices (EUR bil	7 lions)	8	9	10	11	12
2009 2010 2011 2012	8,028.5 8,226.9 8,450.9 8,507.5	124.0 136.2 141.2 143.8	1,464.5 1,578.7 1,640.4 1,642.1	530.2 498.4 500.9 490.2	1,532.5 1,547.9 1,589.9 1,602.3	370.1 370.4 372.0 367.8	421.4 438.2 436.5 429.7	902.8 917.7 964.7 981.5	806.4 826.5 860.1 878.5	1,581.7 1,612.6 1,637.1 1,657.5	294.8 300.2 308.1 314.1	893.3 941.5 972.7 977.0
2012 Q2 Q3 Q4 2013 Q1 Q2	2,125.8 2,130.6 2,129.6 2,140.2 2,154.1	35.3 36.0 37.0 37.1 37.2	411.1 412.8 409.8 410.9 414.9	123.1 122.2 120.9 120.2 120.3	399.7 400.9 402.3 401.9 404.3	92.3 91.9 90.8 89.9 89.7	108.4 106.2 106.7 109.0 110.2	244.3 245.8 247.9 248.9 251.0	218.7 220.5 221.0 221.8 224.0	415.0 415.5 413.9 420.8 422.3	78.0 78.8 79.2 79.7 80.2	244.1 244.3 243.1 241.1 246.4
					percent	age of value ad	lded					
2012	100.0	1.7	19.3	5.8	18.8	4.3	5.1	11.5	10.3	19.5	3.7	-
				Chain		es (prices for th arter percentag		ar)				
2012 Q2 Q3 Q4	-0.2 -0.1 -0.4	-1.7 -1.5 -0.3	-0.2 0.0 -1.6	-1.3 -1.0 -1.6	-0.4 -0.5 -0.9	-0.2 0.1 -0.9	0.8 0.1 1.0	0.1 0.3 0.5	-0.3 0.3 -0.3	0.1 0.0 0.5	-0.6 0.1 0.3	-1.1 -0.2 -1.0
2013 Q1 Q2	-0.1 0.3	0.8 -0.4	-0.2 0.4	-1.1 -0.3	-0.3 0.4	-0.5 0.0	-0.4 -1.0	0.0 0.5	0.5 0.5	$\begin{array}{c} 0.0\\ 0.4 \end{array}$	0.2 0.0	-0.3 0.7
					annual j	percentage cha	nges					
2009 2010 2011 2012	-4.4 2.0 1.7 -0.5	1.3 -3.0 0.5 -4.7	-12.9 9.5 3.0 -1.1	-8.0 -5.7 -1.7 -4.4	-5.1 0.7 1.6 -0.6	2.9 1.9 3.3 0.4	0.4 0.2 0.6 -0.8	0.4 -0.1 2.1 0.8	-7.9 2.3 2.7 0.8	1.5 1.3 1.1 0.1	-0.6 0.4 0.5 0.2	-4.2 1.4 0.1 -2.0
2012 Q2 Q3 Q4 2013 Q1 Q2	-0.3 -0.6 -0.8 -0.8 -0.4	-4.2 -6.1 -6.6 -2.7 -1.3	-0.9 -0.8 -1.4 -2.0 -1.5	-3.8 -3.9 -5.3 -4.9 -4.0	-0.2 -0.9 -1.6 -2.1 -1.3	1.1 0.4 -1.2 -1.5 -1.3	-0.8 -0.7 1.2 1.6 -0.3	0.7 0.7 0.9 1.0 1.4	0.9 0.8 0.1 0.2 1.0	0.0 -0.2 0.3 0.7 0.9	0.3 0.1 -0.1 0.0 0.6	-2.1 -1.9 -2.2 -2.7 -0.9
			contribution	is to quarter-o	on-quarter per	centage change	es in value add	led; percenta	ge points			
2012 Q2 Q3 Q4 2013 Q1 Q2	-0.2 -0.1 -0.4 -0.1 0.3	0.0 0.0 0.0 0.0 0.0	0.0 0.0 -0.3 0.0 0.1	-0.1 -0.1 -0.1 -0.1 0.0	-0.1 -0.1 -0.2 -0.1 0.1	$\begin{array}{c} 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \end{array}$	0.0 0.0 0.1 0.0 -0.1	0.0 0.0 0.1 0.0 0.1	$\begin{array}{c} 0.0\\ 0.0\\ 0.0\\ 0.0\\ 0.1\end{array}$	0.0 0.0 0.1 0.0 0.1	0.0 0.0 0.0 0.0 0.0	- - - -
					nual percentag	ge changes in v	alue added; p	ercentage poi				
2009 2010 2011 2012	-4.4 2.0 1.7 -0.5	0.0 0.0 0.0 -0.1	-2.6 1.7 0.6 -0.2	-0.5 -0.4 -0.1 -0.3	-1.0 0.1 0.3 -0.1	0.1 0.1 0.1 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.2 0.1	-0.8 0.2 0.3 0.1	0.3 0.3 0.2 0.0	0.0 0.0 0.0 0.0	-
2012 Q2 Q3 Q4 2013 Q1 Q2	-0.3 -0.6 -0.8 -0.8 -0.4	-0.1 -0.1 -0.1 0.0 0.0	-0.2 -0.1 -0.3 -0.4 -0.3	-0.2 -0.2 -0.3 -0.3 -0.2	0.0 -0.2 -0.3 -0.4 -0.3	0.0 0.0 -0.1 -0.1 -0.1	0.0 0.0 0.1 0.1 0.0	0.1 0.1 0.1 0.1 0.2	$\begin{array}{c} 0.1 \\ 0.1 \\ 0.0 \\ 0.0 \\ 0.1 \end{array}$	$0.0 \\ 0.0 \\ 0.1 \\ 0.1 \\ 0.2$	0.0 0.0 0.0 0.0 0.0	- - - -

Sources: Eurostat and ECB calculations.



### 5.2 Output and demand

#### **3. Industrial production**

	Total				Indu	stry excluding o	construction	n				Construction
	-	Total (s.a.; index:	Т	otal		Industry ex	cluding cor	nstruction a	nd energy		Energy	
		2010 = 100		Manu- facturing	Total	Intermediate goods	Capital goods	(	Consumer go	ods		
				Incluring		20045	goods	Total	Durable	Non-durable		
% of total in 2010	100.0	79.4	79.4	68.3	67.7	26.7	23.2	17.8	2.3	15.5	11.7	20.6
	1	2	3	4	5	6	7	8	9	10	11	12
2010	4.0	100.0	7.3	7.7	7.7	10.0	8.9	2.8	2.7	2.9	3.9	-7.8
2011	2.1	103.2	3.2	4.4	4.5	3.8	8.2	0.8	0.6	0.8	-4.7	-2.1
2012	-3.0	100.8	-2.4	-2.6	-2.7	-4.4	-1.1	-2.4	-4.5	-2.1	-0.2	-5.4
2012 Q3	-2.7	101.2	-2.2	-2.3	-2.5	-4.2	-0.8	-2.2	-5.4	-1.8	0.0	-4.7
Q4	-3.3	99.2	-3.1	-3.4	-3.6	-4.9	-3.3	-2.0	-5.1	-1.6	-0.3	-4.4
2013 Q1	-2.9	99.4	-2.3	-2.8	-2.9	-3.6	-3.7	-0.9	-4.5	-0.5	0.1	-5.7
Q2	-1.7	100.0	-1.1	-1.0	-1.1	-2.1	-0.2	-0.6	-4.0	0.0	-1.0	-4.1
2013 Mar.	-2.6	100.0	-1.6	-3.1	-3.4	-4.1	-3.6	-2.4	-1.8	-2.6	8.9	-7.6
Apr.	-2.0	100.1 99.6	-0.9	-0.8	-0.9 -2.1	-2.4 -2.6	0.4	-0.3 -0.9	-4.6	0.5 -0.1	-0.7	-6.4
May June	-2.1 -1.0	100.2	-1.9 -0.4	-2.0 -0.1	-2.1	-2.0	-2.4 1.2	-0.9	-6.1 -1.6	-0.1	-0.2 -2.0	-3.7 -2.7
July	-1.8	98.7	-2.1	-2.1	-0.2	-1.2	-3.3	-0.5	-3.9	-0.7	-2.8	-1.2
July	110	,,,,,	2.1.			ercentage chang			00	011	210	
2013 Mar.	0.0		0.7	0.1	0.2	0.1	0.3	0.0	1.8	0.0	3.8	-1.6
Apr.	0.0	-	0.7	0.1	0.2	0.0	1.5	0.0	-1.8	0.0	-1.7	-1.0
May	-0.5	-	-0.4	-0.5	-0.4	0.6	-1.9	0.3	-2.1	0.6	-0.1	0.8
June	0.5	-	0.6	0.9	1.0	0.3	2.0	0.4	4.3	-0.4	-1.6	0.9
July	-1.0	-	-1.5	-1.5	-1.6	-0.7	-2.6	-1.3	-2.2	-0.9	-1.6	0.3

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

	Indicator or new or		Industrial (	urnover		Re	tail sales	(including au	tomotive	fuel)			New passeng registrati	
	Manufa	cturing	Manufac (current j		Current prices			Const	ant prices					
	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			Household equipment	Fuel	Total (s.a.; thousands) <sup>2)</sup>	Total
% of total in 2010		100.0	100.0	100.0	100.0	100.0	100.0	40.1	51.1	9.4	11.9	8.8		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
2010 2011 2012	100.0 108.6 104.6	17.7 8.6 -3.7	100.0 109.2 108.7	10.3 9.1 -0.5	2.1 1.8 0.5	100.0 99.7 98.0	0.6 -0.3 -1.7	0.3 -1.0 -1.2	1.4 0.5 -1.7	2.2 1.3 -4.2	0.2 -0.2 -2.6	-3.0 -3.3 -5.2	843 838 743	-8.5 -1.1 -11.0
2012 Q3 Q4 2013 Q1 Q2	104.7 103.2 102.8 103.6	-2.9 -2.3 -2.3 -1.4	109.2 107.2 106.8 106.6	-0.7 -1.7 -2.7 -1.8	0.8 -0.8 -1.2 -0.2	98.2 96.8 97.1 97.3	-1.4 -2.7 -2.0 -0.7	-0.8 -2.0 -1.7 -1.7	-1.4 -2.8 -2.2 0.1	-2.6 -4.7 -3.6 2.3	-1.9 -4.3 -4.6 -3.1	-4.6 -5.7 -3.6 -0.9	721 709 688 708	-12.7 -14.2 -11.3 -7.2
2013 Apr. May June July Aug.	102.6 103.5 104.6 103.2	-2.6 -2.0 0.3 -1.6	106.6 106.4 106.8 105.8	-1.9 -2.7 -0.9 -1.7	-0.7 0.5 -0.4 -0.5	96.8 97.9 97.2 97.4	-1.1 0.1 -1.1 -1.3	-2.5 -0.8 -1.8 -0.6	0.1 0.6 -0.3 -1.6	3.3 0.5 3.0	-3.6 -1.9 -3.8	0.3 -0.4 -2.5 -4.9	709 703 712 703 708	-6.5 -8.0 -7.2 -0.1 -4.1
					month-on-	month percente	ige chang	es (s.a.)						
2013 Apr. May June July Aug.		-1.1 0.9 1.0 -1.3	- - - -	-0.6 -0.2 0.4 -1.0	-0.1 1.2 -0.5 0.2	- - -	0.0 1.1 -0.7 0.1	-1.5 1.2 -0.5 1.0	1.0 0.8 -0.6 -0.4	2.5 0.9 1.3	-0.1 1.0 -1.0	0.6 0.3 0.6 -1.0	- - - -	1.3 -0.9 1.2 -1.2 0.8

0.8
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).
1) 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.
2) Arrende and excepted and the function of the function

2) Annual and quarterly figures are averages of monthly figures in the period concerned.



Prices, output, demand and labour markets

#### 5.2 Output and demand

#### 5. Business and Consumer Surveys

	Economic sentiment		Man	ufacturing ind	lustry			Consum	ner confidence	indicator	
	indicator <sup>2)</sup> (long-term			lence indicator		Capacity utilisation 3)	Total <sup>4)</sup>	Financial situation	Economic situation	Unemployment situation	Savings over next
	average = 100)	Total <sup>4)</sup>	Order books	Stocks of finished products	Production expectations	(%)		over next 12 months	over next 12 months	over next 12 months	12 months
	1	2	3	4	5	6	7	8	9	10	11
2009	80.7	-28.7	-56.6	14.8	-14.9	71.0	-24.8	-7.0	-26.1	55.3	-10.7
2010	101.1	-4.5	-24.2	1.0	11.6	77.1	-14.2	-5.3	-12.3	31.2	-8.0
2011	101.8	0.2	-6.4	2.3	9.4	80.6	-14.5	-7.4	-18.1	23.2	-9.1
2012	90.4	-11.7	-24.3	6.8	-4.0	78.6	-22.3	-11.2	-27.6	38.4	-12.0
2012 Q3	87.4	-14.9	-28.6	8.1	-8.1	77.7	-23.8	-11.8	-30.4	40.7	-12.4
Q4	86.8	-15.4	-32.0	6.8	-7.4	77.4	-26.2	-12.9	-31.7	46.3	-13.7
2013 Q1	90.1	-12.2	-29.6	5.4	-1.6	77.5	-23.7	-11.4	-27.3	42.6	-13.3
Q2	89.8	-12.6	-30.9	6.1	-0.9	77.9	-20.9	-10.2	-24.9	35.9	-12.8
Q3	94.9	-8.4	-25.0	4.5	4.4		-16.0	-8.0	-16.8	29.8	-9.3
2013 Apr.	88.6	-13.7	-33.5	6.3	-1.4	77.5	-22.2	-10.9	-26.4	37.9	-13.7
May	89.5	-13.0	-30.9	6.2	-1.9	-	-21.8	-10.3	-26.8	36.5	-13.7
June	91.3	-11.2	-28.4	5.9	0.7	-	-18.8	-9.5	-21.5	33.3	-11.0
July	92.5	-10.6	-27.8	5.5	1.5	78.3	-17.4	-8.9	-20.9	30.4	-9.4
Aug.	95.3	-7.8	-23.8	4.4	4.6	-	-15.6	-8.0	-15.8	30.4	-8.2
Sep.	96.9	-6.7	-23.3	3.7	7.1	-	-14.9	-7.2	-13.6	28.6	-10.3

	Construction	n confidence	indicator	Reta	ail trade confid	lence indicator		Ser	vices confide	ence indicator	
	Total <sup>4)</sup>	Order books	Employment expectations	Total <sup>4)</sup>	Present business situation	Volume of stocks	Expected business situation	Total 4)	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	-28.4	-34.9	-22.0	-15.2	-18.9	14.2	-12.6	-6.9	-11.9	-7.8	-1.1
2012 Q3	-29.4	-36.6	-22.2	-16.8	-21.8	14.5	-14.1	-10.6	-15.8	-11.7	-4.2
Õ4	-32.7	-40.2	-25.2	-16.0	-21.3	11.4	-15.4	-11.1	-15.4	-13.0	-5.0
2013 Q1	-29.1	-37.0	-21.2	-16.2	-24.4	10.7	-13.6	-7.8	-12.7	-9.0	-1.8
Q2	-31.9	-38.8	-24.9	-16.6	-24.7	11.1	-13.9	-10.0	-14.6	-13.4	-2.0
Q3	-31.5	-40.2	-22.9	-10.5	-16.7	8.6	-6.2	-5.4	-8.3	-8.7	0.7
2013 Apr. May June July Aug.	-31.1 -33.0 -31.5 -32.6 -33.2	-38.7 -39.8 -38.0 -41.3 -41.9	-23.5 -26.2 -25.1 -23.8 -24.6	-18.4 -16.7 -14.6 -14.0 -10.6	-26.4 -25.9 -21.9 -21.1 -17.8	12.1 11.0 10.2 10.3 8.3	-16.8 -13.2 -11.6 -10.4 -5.6	-11.1 -9.3 -9.6 -7.8 -5.2	-16.0 -13.2 -14.7 -11.6 -7.6	-14.8 -12.9 -12.5 -10.4 -8.4	-2.7 -1.7 -1.5 -1.3 0.5
Sep.	-28.8	-37.4	-20.2	-7.0	-11.3	7.1	-2.6	-3.3	-5.6	-7.4	3.0

Source: European Commission (Economic and Financial Affairs DG).

1) Difference between the percentages of respondents giving positive and negative replies.

Directice between the percentages of respondents giving positive and negative repres.
 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.
 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 employn	nent status					By economi	c activity				
	Total	Employees	Self- employed	Agriculture, forestry and fishing	Manufactu- ring, energy and utilities	Construc- tion	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		8	9	10	11	12	13
						Persons	employed						
							thousands)						
2012	146,203	124,966	21,238	4,979	22,962	9,484	35,933	4,045	4,060	1,282	18,262	34,378	10,820
							al persons emp	-					
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
2010	0.5	0.5	0.4	1.0			entage change		1.0	0.1	2.0	1.0	
2010 2011	-0.5 0.3	-0.5	-0.4 -0.2	-1.0 -1.9	-2.9 0.1	-3.9 -3.8	-0.5 0.7	-1.7 1.3	-1.0 -0.4	0.1	2.0 2.5	1.0 0.3	0.6 0.1
2012	-0.7	0.3 -0.7	-0.1	-1.9	-1.0	-4.7	-0.8	1.2	-0.4	0.5 -0.3	0.7	-0.3	0.7
2012 Q3	-0.6	-0.8	0.5	-1.8	-1.1	-5.0	-0.9	1.1	-0.5	0.2	1.3	-0.4	1.5
Q4 2013 Q1	-0.7 -1.0	-0.9 -1.0	-0.1 -1.0	-2.1 -3.1	-1.4 -1.6	-5.0 -5.6	-1.0 -1.1	1.6 0.6	-0.8 -1.2	-1.1 -1.5	0.5 0.3	-0.2 -0.2	1.4 0.5
Q2	-1.0	-1.0	-0.6	-1.7	-1.5	-6.2	-1.0	0.4	-1.2	-2.1	0.3	-0.1	0.3
					quart	er-on-quarte	r percentage c	hanges					
2012 Q3	-0.1	-0.1	-0.2	-0.8	-0.1	-1.9	-0.2	-0.3	-0.7	-1.2	0.8	-0.1	0.6
Q4 2013 Q1	-0.3 -0.4	-0.4 -0.5	-0.1 -0.3	-0.8 -1.6	-0.6 -0.5	-1.6 -1.7	-0.4 -0.3	0.7 -0.2	-0.1 -0.2	-0.6 -0.7	-0.3 -0.6	0.1 -0.1	-0.2 0.0
Q2	-0.1	-0.1	0.0	1.5	-0.3	-1.2	-0.1	0.2	-0.3	0.4	0.3	0.0	-0.1
							s worked						
							(millions)						
2012	229,533	184,662	44,871	9,926	36,041	16,501	59,723	6,478	6,391	1,969	28,417	48,898	15,190
2012	100.0	80.5	19.5	4.3	<i>pe</i> 15.7	rceniage of 1 7.2	otal hours wo 26.0	2.8	2.8	0.9	12.4	21.3	6.6
2012	100.0	80.5	19.5	4.3	15./		20.0 entage change		2.8	0.9	12.4	21.5	0.0
2010	0.0	0.1	-0.5	-1.2	-0.4	-4.0	-0.3	-0.9	-0.6	1.2	2.7	0.9	0.3
2011	0.3	0.5	-0.7	-3.1	0.8	-3.9	0.5	1.4	-0.3	1.2	2.8	0.5	0.1
2012	-1.5	-1.5	-1.3	-2.9	-2.1	-6.1	-1.7	0.5	-0.9	-1.1	0.3	-0.6	-0.1
2012 Q3 Q4	-1.3 -1.6	-1.6 -1.6	-0.3 -1.6	-2.4 -2.9	-2.4 -2.5	-6.5 -6.2	-1.4 -2.0	0.8 0.7	-1.0 -1.6	-0.3 -2.1	1.2 -0.1	-0.8 -0.2	0.7 0.4
2013 Q1	-2.2	-2.2	-2.0	-3.0	-3.3	-8.0	-2.0	-0.2	-2.3	-2.9	-0.6	-0.8	-1.1
Q2	-0.7	-0.9	-0.3	-1.1	-0.5	-5.5	-0.9	0.7	-1.2	-2.5	0.3	0.2	-0.3
2012.02	0.0	0.0	0.0	0.7		-	r percentage c		0.2	1.2	1.0	0.1	1.0
2012 Q3 Q4	0.2	0.0 -0.6	0.8	-0.7 -0.7	0.1 -0.8	-1.3 -1.9	0.3	0.2 -0.1	-0.3 -0.7	-1.3 -1.5	1.2 -0.7	0.1 0.2	1.0 -0.8
2013 Q1 Q2	-0.9 0.6	-0.9 0.6	-0.8 1.0	-0.4 0.7	-1.1 1.3	-2.4	-0.7 0.6	-0.2 0.8	-0.5 0.3	-0.9 1.2	-0.9 0.7	-0.6 0.5	-0.5 0.1
Q2	0.0	0.0	1.0	0.7			er person emp		0.5	1.2	0.7	0.3	0.1
					110		thousands)	loyeu					
2012	1,570	1,478	2,113	1,994	1,570	1,740	1,662	1,602	1,574	1,536	1,556	1,422	1,404
2012	1,070	1,170	2,110	1,551	1,070		entage change		1,571	1,000	1,000	1,122	1,101
2010	0.5	0.6	0.0	-0.2	2.5	-0.1	0.2	0.8	0.5	1.1	0.7	0.0	-0.3
2011	0.0	0.2	-0.5 -1.2	-1.2	0.7	-0.2	-0.2	0.2	0.2	0.8	0.2	0.2	0.0
2012 2012 Q3	-0.8	-0.8	-1.2	-1.0	-1.1	-1.5	-0.8	-0.8	-0.5	-0.8	-0.3	-0.3	-0.8
Q4	-0.8	-0.7	-1.5	-0.8	-1.1	-1.3	-1.0	-0.9	-0.8	-1.1	-0.6	-0.1	-1.0
2013 Q1 Q2	-1.2 0.2	-1.2 0.2	-1.1 0.4	0.1 0.6	-1.7 1.0	-2.5 0.7	-0.9 0.1	-0.7 0.3	-1.1 0.0	-1.4 -0.4	-0.9 0.0	-0.6 0.3	-1.6 -0.6
Q2	0.2	0.2	0.4	0.0			0.1 r percentage c		0.0	-0.4	0.0	0.3	-0.0
2012 Q3	0.3	0.1	1.1	0.1	0.2	0.5	0.5	0.5	0.4	-0.1	0.4	0.2	0.3
Q4	-0.4	-0.2	-1.2	0.1	-0.2	-0.3	-0.8	-0.8	-0.6	-0.9	-0.4	0.1	-0.6
2013 Q1 Q2	-0.4 0.7	-0.4 0.6	-0.5 1.0	1.2 -0.8	-0.7 1.6	-0.7	-0.4 0.8	0.0 0.6	-0.3 0.5	-0.2 0.8	-0.3 0.4	-0.5 0.5	-0.5 0.1
-	aalaulatiana	based on Eu		-0.0	1.0	1.2	0.0	0.0	0.5	0.0	0.4	0.5	0.1

Source: ECB calculations based on Eurostat data.
 Data for employment are based on the ESA 95.



Prices, output, demand and labour markets

#### 2. Unemployment and job vacancies 1)

						employment					Job vacancy rate <sup>2)</sup>
	To	tal		Ву	age 3)			By ge	nder <sup>4)</sup>		
-	Millions	% of labour force	A	dult	Yo	uth	Ν	Iale	Fe	male	-
			Millions	% of labour force	Millions	% of labour force	Millions	% of labour force	Millions	% of labour force	% of total posts
% of total in 2010	100.0		79.5		20.5		54.0		46.0		
	1	2	3	4	5	6	7	8	9	10	11
2009 2010 2011 2012	15.052 15.930 16.031 18.059	9.6 10.1 10.2 11.4	11.767 12.653 12.826 14.578	8.4 8.9 9.0 10.1	3.286 3.277 3.206 3.481	20.3 20.9 20.9 23.1	8.145 8.602 8.542 9.696	9.4 10.0 9.9 11.2	6.907 7.328 7.489 8.363	9.8 10.3 10.5 11.6	1.4 1.5 1.7 1.6
2012 Q2 Q3 Q4 2013 Q1 Q2	17.901 18.326 18.779 19.103 19.194	11.3 11.5 11.8 12.0 12.1	14.453 14.802 15.194 15.527 15.679	10.1 10.3 10.5 10.8 10.9	3.447 3.523 3.585 3.575 3.515	22.9 23.4 23.9 24.0 23.8	9.632 9.846 10.075 10.257 10.276	11.1 11.4 11.7 11.9 11.9	8.268 8.480 8.704 8.845 8.918	11.4 11.7 12.0 12.2 12.2	1.7 1.4 1.6 1.5
2013 Mar. Apr. May June July Aug.	19.125 19.176 19.212 19.194 19.183 19.178	12.0 12.1 12.1 12.1 12.1 12.0 12.0	15.582 15.639 15.705 15.694 15.704 15.722	10.8 10.8 10.9 10.9 10.9 10.9	3.543 3.538 3.508 3.500 3.479 3.457	23.9 23.9 23.7 23.8 23.8 23.8 23.7	10.259 10.266 10.286 10.277 10.247 10.228	11.9 11.9 11.9 11.9 11.9 11.9 11.9	8.866 8.910 8.926 8.917 8.937 8.950	12.2 12.2 12.3 12.2 12.3 12.2 12.3 12.3	

### C28 Employment - persons employed and hours worked



### 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.

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. Rates are expressed as a percentage of the labour force for the relevant gender. 3)

4)





## **GOVERNMENT FINANCE**

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

#### 1. Euro area - revenue

	Total					Curre	ent revenue					Capital	revenue	Memo item:
		Γ	Direct			Indirect		Social			Sales	ſ	Capital	Fiscal
			taxes	Households	Corporations	taxes	Received by EU	contributions	Employers H	Employees			taxes	burden 2)
							institutions							
	1	2	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 e	xpenditure					Capital ex			Memo item:
		Total	Compensation		Interest	Current transfers	Social	Subsidies			Investment	Capital transfers	Paid by EU	Primary expenditure 3)
			of employees	consumption		transfers	payments	Subsidies	Paid by EU			transfers	institutions	expenditures
	1	2	3	4	5	6	7	8	institutions 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 (	-)/surplu	ıs (+)		Primary deficit (-)/			0	Government	consumption 4)			
	Total	Central	State	Local	Social		Total						Collective	Individual
		gov.	gov.	gov.	security	-		Compensation			Consumption		consumption	consumption
					funds			of employees	consumption	in kind		(minus)		
										via market	capital			
	1	2	3	4	5	6	7	8	9	producers 10		12	13	14
	1	4	5	T	5	0	/		,					
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>)

	<b>BE</b>	<b>DE</b>	<b>EE</b>	<b>IE</b>	<b>GR</b>	<b>ES</b>	<b>FR</b>	<b>IT</b>	<b>CY</b>	<b>LU</b>	<b>MT</b>	<b>NL</b>	<b>AT</b>	<b>PT</b>	<b>SI</b>	<b>SK</b>	<b>FI</b>
	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.

Comprises total expenditure minus interest expenditure.
 Comprises total expenditure minus interest expenditure.
 Corresponds to final consumption expenditure (P.3) of general government in the ESA 95.
 Includes settlements under swaps and forward rate agreements.



### 6.2 Debt 1)

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

	Total		Financial in	struments		Holders							
		Currency and	Loans	Short-term securities	Long-term securities		Other creditors 3)						
		deposits				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: 4)				0	Driginal matu	rity	ŀ	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
	1	2	3	4	5	6	7	8	9	10	11	12	13
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

	<b>BE</b>	DE	<b>EE</b>	<b>IE</b>	GR	<b>ES</b>	<b>FR</b>	<b>IT</b>	<b>CY</b>	<b>LU</b>	<b>MT</b>	<b>NL</b>	<b>AT</b>	<b>PT</b>	<b>SI</b>	<b>SK</b>	<b>FI</b>
	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.
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.

Includes residents of euro area countries other than the country whose government has issued the debt.
 Excludes debt held by general government in the country whose government has issued it.



### 6.3 Change in debt 1)

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

	Total	Sour		Financial	instruments		Holders					
		Borrowing requirement <sup>2)</sup>	Valuation effects 3)	Other changes in volume <sup>4)</sup>	Currency and deposits	Loans	Short-term securities	Long-term securities	Domestic creditors <sup>5)</sup>	MFIs	Other financial corporations	Other creditors <sup>6)</sup>
	1	2	3	4	5	6	7	8	9	10	11	12
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 7											
			Total		Transactio	ons in mair	n financial asse	ts held by ger	neral government	İ	Valuation effects	Exchange	Other changes in	Other <sup>8)</sup>	
				Total	Total Currency Loans Securities <sup>9</sup> Shares and rate										
					and			other	Privatisations	Equity		effects			
					deposits			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.

Data are partially estimated. Annual change in gross nominal consolidated debt is expressed as a percentage of GDP, i.e.  $[debt(t) - debt(t-1)] \div GDP(t)$ . Intergovernmental lending in the context of the financial crisis is consolidated. The borrowing requirement is by definition equal to transactions in debt. 1)

2)

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.

Includes residents of euro area countries other than the country whose government has issued the debt. The difference between the annual change in gross nominal consolidated debt and the deficit as a percentage of GDP. Mainly composed of transactions in other assets and liabilities (trade credits, other receivables/payables and financial derivatives). 6) 7) 8) 9)

Excluding financial derivatives.



## 6.4 Quarterly revenue, expenditure and deficit/surplus 1)

	Total			Current revenue	e			Capital re	venue	Memo item:
			Direct taxes	Indirect taxes	Social contributions	Sales	Property income		Capital taxes	Fiscal burden <sup>2)</sup>
	1	2	3	4	5	6	7	8	9	10
2007 Q1	42.2	41.9	10.4	12.8	14.7	2.2	0.9	0.4	0.3	38.3
Q2	45.8	45.4	13.0	13.0	15.0	2.2	1.4	0.4	0.3	41.2
Q3	43.6	43.2	12.3	12.4	14.8	2.2	0.7	0.5	0.3	39.7
Q4	49.2	48.7	14.8	13.8	15.7	2.5	1.0	0.6	0.3	44.6
2008 Q1	42.4	42.1	10.9	12.3	14.8	2.2	1.1	0.3	0.2	38.2
Q2	45.3	45.0	12.9	12.4	15.1	2.3	1.5	0.4	0.3	40.6
Q3	43.4	43.0	12.2	12.0	15.0	2.3	0.8	0.4	0.3	39.5
Q4	48.8	48.3	13.9	13.4	16.4	2.6	1.1	0.5	0.3	43.9
2009 Q1	42.5	42.3	10.4	12.0	15.6	2.4	1.1	0.1	0.2	38.2
Q2	45.4	44.8	11.8	12.5	15.7	2.5	1.4	0.6	0.5	40.5
Q3	42.8	42.5	10.9	12.0	15.5	2.5	0.7	0.3	0.3	38.7
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	38.1
Q2	45.1	44.7	11.9	12.6	15.4	2.6	1.3	0.5	0.3	40.2
Q3	43.0	42.6	10.9	12.5	15.2	2.5	0.7	0.3	0.3	38.9
Q4	48.5	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
Q2	45.3	45.0	12.1	12.7	15.4	2.5	1.5	0.3	0.3	40.4
Q3	43.7	43.4	11.4	12.5	15.3	2.5	0.8	0.3	0.3	39.5
Q4	49.2	48.2	13.3	13.4	16.7	2.8	1.0	1.0	0.4	43.8
2012 Q1	43.3	43.2	10.9	12.6	15.4	2.4	1.0	0.2	0.2	39.1
Q2	46.2	45.8	12.6	12.8	15.6	2.5	1.4	0.3	0.3	41.3
Q3	44.7	44.3	11.9	12.6	15.5	2.6	0.8	0.4	0.3	40.4
Q4	50.6	49.9	14.2	13.9	16.9	2.8	1.0	0.7	0.3	45.3
2013 Q1	43.9	43.7	11.2	12.6	15.7	2.5	1.0	0.2	0.3	39.7

### 1. Euro area - quarterly revenue

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

	Total			Curren	ıt expendi	ture			Сарі	tal expenditu	ire	Deficit (-)/ surplus (+)	Primary deficit (-)/
	-	Total	Compensation of employees	Intermediate consumption	Interest	Current transfers	Social benefits	Subsidies		Investment	Capital transfers	Sur plus (1)	surplus (+)
	1	2	3	4	5	6	7	8	9	10	11	12	13
2007 Q1	44.9	41.4	9.9	4.5	2.9	24.1	20.7	1.1	3.5	2.3	1.2	-2.6	0.3
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
Q3	44.6	41.0	9.6	4.8	2.9	23.8	20.6	1.2	3.6	2.6	0.9	-1.0	1.9
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	45.4	41.8	9.9	4.5	3.0	24.4	20.8	1.2	3.6	2.3	1.2	-3.0	0.0
Q2	46.0	42.4	10.2	5.0	3.3	23.9	20.8	1.1	3.6	2.6	1.0	-0.6	2.7
Q3	45.7	42.1	9.8	5.0	3.0	24.4	21.2	1.2	3.7	2.7	1.0	-2.4	0.6
Q4	51.4	46.7	11.2	6.3	2.9	26.3	22.3	1.4	4.6	2.9	1.7	-2.5	0.4
2009 Q1	49.3	45.5	10.7	5.1	2.8	26.9	22.9	1.3	3.8	2.6	1.2	-6.9	-4.1
Q2	50.7	46.5	11.1	5.5	3.0	26.9	23.3	1.3	4.2	2.8	1.3	-5.3	-2.3
Q3	50.1	46.0	10.6	5.5	2.8	27.1	23.5	1.3	4.1	2.9	1.1	-7.2	-4.4
Q4	54.7	49.8	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
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
Q3	50.4	45.2	10.3	5.4	2.7	26.8	23.1	1.3	5.2	2.6	2.6	-7.4	-4.7
Q4	53.4	48.7	11.4	6.6	2.9	27.7	23.6	1.5	4.7	2.7	2.0	-4.9	-2.0
2011 Q1	48.5	45.4	10.4	5.0	2.9	27.2	23.1	1.3	3.1	2.1	1.0	-5.6	-2.7
Q2	48.5	45.3	10.6	5.3	3.2	26.2	22.8	1.2	3.3	2.3	0.9	-3.3	0.0
Q3	48.0	44.6	10.1	5.2	2.9	26.4	22.9	1.2	3.5	2.3	1.1	-4.4	-1.5
Q4	52.6	48.7	11.2	6.5	3.2	27.7	23.6	1.5	3.9	2.5	1.7	-3.4	-0.2
2012 Q1	48.1	45.5	10.3	4.9	3.0	27.3	23.3	1.2	2.7	1.9	0.8	-4.8	-1.8
Q2	49.1	45.8	10.5	5.3	3.3	26.7	23.2	1.2	3.3	2.1	1.2	-3.0	0.3
Q3	48.5	44.9	10.0	5.3	2.9	26.7	23.4	1.2	3.6	2.2	1.4	-3.9	-1.0
Q4	53.9	48.8	11.0	6.5	3.2	28.1	24.1	1.4	5.0	2.3	2.8	-3.3	-0.1
2013 Q1	48.8	46.1	10.4	4.9	2.8	27.9	23.8	1.2	2.7	1.8	1.1	-4.9	-2.1

Sources: ECB calculations based on Eurostat and national data.
The concepts "revenue", "expenditure" and "deficit/surplus" are based on the ESA 95. Transactions between the EU budget and entities outside the government sector are not included. Otherwise, except for different data transmission deadlines, the quarterly data are consistent with the annual data.
The fiscal burden comprises taxes and social contributions.


### 6.5 Quarterly debt and change in debt 1) (as a percentage of GDP)

#### 1. Euro area - Maastricht debt by financial instrument

	Total		Financial in	struments	
	1	Currency and deposits 2	Loans 3	Short-term securities	Long-term securities 5
2010 Q2 Q3 Q4	82.9 83.0 85.4	2.4 2.4 2.4	13.5 13.4 15.4	7.8 7.9 7.3	59.2 59.3 60.2
2011 Q1 Q2 Q3 Q4	86.3 87.2 86.8 87.3	2.4 2.4 2.4 2.4 2.4	15.2 15.0 15.1 15.4	7.4 7.5 7.8 7.4	61.2 62.3 61.4 62.1
2012 Q1 Q2 Q3 Q4	88.2 89.9 89.9 90.7	2.5 2.5 2.5 2.5 2.6	15.8 16.7 16.5 17.4	7.6 7.3 7.2 6.8	62.3 63.4 63.6 63.9
2013 Q1	92.3	2.6	16.9	7.0	65.7

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

	Change in debt	Deficit (-)/ surplus (+)				Deficit-de	bt adjustment				Memo item:
		1 ()	Total	Transacti	ons in main fina	ncial assets he	ld by general go	vernment	Valuation effects and other changes	Other	Borrowing requirement
				Total	Currency and deposits	Loans	Securities	Shares and other equity	in volume		1
	1	2	3	4	5	6	7	8	9	10	11
2010 Q2	7.7	-4.5	3.2	3.3	2.0	1.1	-0.2	0.4	-0.1	0.0	7.7
Q3	2.7	-7.4	-4.7	-2.9	-2.3	-0.6	-0.1	0.1	0.0	-1.8	2.8
Q4	11.6	-4.9	6.7	5.6	-0.4	1.6	4.4	0.0	0.0	1.1	11.6
2011 Q1	6.9	-5.6	1.3	0.7	2.1	-0.8	-0.6	-0.1	0.2	0.4	6.7
Q2	6.0	-3.3	2.8	2.6	2.8	0.6	-0.3	-0.5	0.1	0.1	5.9
Q3	0.7	-4.4	-3.6	-3.7	-3.7	-0.4	0.2	0.2	0.5	-0.4	0.3
Q4	3.2	-3.4	-0.2	-0.6	-0.3	-0.2	-0.1	0.1	-0.1	0.5	3.3
2012 Q1	5.1	-4.8	0.3	3.8	4.2	0.0	-0.4	0.0	-3.9	0.4	8.9
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	-3.3	-0.2	-0.7	-2.9	0.5	0.1	1.6	-1.3	1.8	4.4
2013 Q1	6.4	-4.9	1.5	1.6	1.7	-0.2	-0.3	0.4	-0.2	0.1	6.6

C30 Deficit, borrowing requirement and change in debt







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)

		Cu	rrent accou	ınt		Capital	Net lending/			Financial	account			Errors and
	Total	Goods	Services	Income	Current transfers	account	borrowing to/from rest of the world (columns 1+6)	Total	Direct investment	Portfolio investment	Financial derivatives	Other investment	Reserve assets	omissions
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
2010 2011 2012	3.5 14.9 122.4	17.2 6.8 98.9	56.5 73.2 92.2	38.9 42.1 38.5	-109.2 -107.2 -107.2	5.7 11.2 15.1	9.2 26.0 137.5	9.1 -42.7 -146.8	-88.8 -118.7 -64.1	119.5 252.5 90.4	18.4 -5.3 17.8	-29.5 -161.0 -176.8	-10.5 -10.2 -14.1	-18.3 16.6 9.3
2012 Q2 Q3 Q4 2013 Q1 Q2	18.3 40.8 66.1 32.5 53.7	25.7 30.3 36.2 32.5 52.7	26.3 27.0 22.3 18.9 27.4	-8.6 13.0 21.6 22.7 1.1	-25.1 -29.4 -14.0 -41.6 -27.5	1.4 4.0 6.4 1.7 4.4	19.8 44.9 72.5 34.2 58.1	-19.5 -41.6 -87.8 -37.8 -59.2	-15.2 -4.9 -40.4 -23.6 -11.9	96.7 -14.8 85.3 10.7 65.5	-8.0 2.8 28.3 9.3 3.4	-84.0 -24.6 -158.0 -34.1 -115.0	-9.0 -0.1 -3.0 0.0 -1.2	-0.3 -3.2 15.3 3.5 1.1
2012 July Aug. Sep. Oct. Nov. Dec.	21.8 8.8 10.2 15.0 22.4 28.6	14.5 5.6 10.2 10.5 14.0 11.8	9.9 7.9 9.1 7.0 5.7 9.5	5.2 5.9 1.9 6.4 7.5 7.6	-7.9 -10.6 -11.0 -8.8 -4.8 -0.3	0.7 1.6 1.7 2.4 2.3 1.7	22.4 10.5 11.9 17.4 24.7 30.4	-17.5 -7.7 -16.4 -19.0 -34.3 -34.5	2.5 12.6 -20.0 -7.7 11.1 -43.8	4.8 -19.1 -0.5 60.4 18.3 6.6	-1.7 6.2 -1.7 10.3 7.4 10.6	-23.6 -5.9 4.9 -79.3 -70.0 -8.7	0.5 -1.6 1.0 -2.6 -1.0 0.7	-5.0 -2.8 4.5 1.5 9.6 4.1
2013 Jan. Feb. Mar. Apr. May June July	-4.2 11.9 24.8 16.6 9.3 27.8 26.6	-2.3 11.9 22.9 16.3 17.3 19.1 20.5	4.7 6.4 7.8 7.5 8.2 11.8 10.7	6.7 9.2 6.8 2.4 -7.5 6.3 4.8	-13.2 -15.6 -12.7 -9.5 -8.7 -9.3 -9.4	0.1 1.2 0.4 1.3 2.3 0.7 2.3	-4.0 13.1 25.2 17.9 11.6 28.5 28.8	-3.9 -9.0 -24.9 -18.5 -9.8 -30.9 -27.3	-10.0 11.0 -24.6 -6.9 0.2 -5.3 -2.7	24.7 -18.4 4.4 1.5 39.2 24.8 -40.8	5.0 3.0 1.2 -3.4 -7.2 13.9 -0.5	-18.8 -7.2 -8.1 -9.7 -41.5 -63.8 16.4	-4.8 2.6 2.2 -0.1 -0.6 -0.6 0.3	7.9 -4.1 -0.3 0.6 -1.8 2.3 -1.6
						12-moi	nth cumulated	transaction	\$					
2013 July	198.0	157.6	96.4	58.0	-114.0	18.1	216.1	-236.1	-86.1	101.2	44.9	-291.7	-4.5	20.1
							d transactions	1	0 5					
2013 July	2.1	1.7	1.0	0.6	-1.2	0.2	2.3	-2.5	-0.9	1.1	0.5	-3.1	0.0	0.2

**C32 Euro area b.o.p.: current account** (seasonally adjusted; 12-month cumulated transactions as a percentag **C33 Euro area b.o.p.: direct and portfolio investment** (12-month cumulated transactions as a percentage of GDP)



net direct investment net portfolio investment



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

$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	count	Capital acco							t account	Currei						
1         2         3         4         5         6         7         8         9         10         11         12         13         14           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           2011         2,985.1         2.970.2         14.9         1,787.9         1,781.1         581.5         508.4         502.2         479.1         94.5         6.6         201.7         27.8         25.4           2012         3,150.0         3,027.6         122.4         1.918.3         1,819.4         626.0         533.8         507.6         469.1         98.1         6.8         205.3         26.2         29.0           2012 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           Q3         789.7         748.9         40.8         480.1         449.8         167.2         140.2         122.1         112.2         17.3         1.9         46.7				transfers	Current		ie	Incon	es	Servio	ods	Goo		Total		
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Debit	Credit	ebit	D	redit	С	Debit	Credit	Debit	Credit	Debit	Credit	Net	Debit	Credit	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	15	14	remit- tances		remit- tances	10	9	8	7	6	5	4	3	2	1	
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	14.7 14.2 13.9	25.4	27.8	201.7	6.6	94.5	479.1	521.2	508.4	581.5	1,781.1	1,787.9	14.9	2,970.2	2,985.1	2011
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	4.3 2.9 4.4 4.2 2.8	7.0 10.8 5.8	6.6 6.7	46.7 47.5 69.6	1.9 1.7	17.3 33.5 28.0	112.2 106.3 97.6	125.1 127.9 120.4	140.2 139.2 126.1	167.2 161.5 145.0	449.8 453.3 438.5	480.1 489.5 471.0	40.8 66.1 32.5	748.9 746.3 731.8	789.7 812.4 764.3	Q3 Q4 2013 Q1
2012 Q4         793.8         751.3         42.6         483.7         451.5         158.6         135.3         126.2         112.5         25.3         -         52.0         -         -           2013 Q1         793.5         734.8         58.8         483.5         440.2         158.7         132.9         125.5         108.0         25.7         -         53.7         -         -           Q2         800.7         739.0         61.7         486.8         438.2         160.0         135.9         128.7         111.9         25.3         -         53.0         -         -           2013 May         265.4         245.4         20.0         163.0         144.7         52.6         46.1         41.6         37.1         8.2         -         17.6         -         -	0.8 1.0 0.8	1.7	- - -	16.8		7.5	42.3	48.6	45.0	56.8	142.2	161.3	27.8	246.3	274.1	June
2013 Q1 Q2         793.5 800.7         734.8 739.0         58.8 61.7         483.5 486.8         440.2 438.2         158.7 160.0         132.9 135.9         125.5 128.7         108.0 111.9         25.7 25.3         -         53.7 53.0         -         -           2013 May         265.4         245.4         20.0         163.0         144.7         52.6         46.1         41.6         37.1         8.2         -         17.6         -         -								d	ally adjus	Seaso						
				53.7	-	25.7	108.0	125.5	132.9	158.7	440.2	483.5	58.8	734.8	793.5	2013 Q1
June         207.0         247.3         19.8         100.4         148.1         54.5         43.0         43.5         36.4         8.9         -         17.8         -         -           July         258.7         241.8         16.9         154.5         141.0         52.1         43.6         42.8         39.3         9.3         -         17.9         -         -	-	-	- -	17.8		8.9	36.4	43.5	45.0	54.3	148.1	160.4	19.8	247.3	267.0	June
12-month cumulated transactions								sactions	nulated tra	emonth cur	12					
2013 July 3,181.2 2,977.2 204.0 1,936.4 1,777.3 634.6 538.2 508.0 450.2 102.2 - 211.5 -	-	-	-	211.5	-	102.2	450.2	508.0	538.2	634.6	1,777.3	1,936.4	204.0	2,977.2	3,181.2	2013 July
12-month cumulated transactions as a percentage of GDP						>	ge of GDI	a percenta <sub>l</sub>	sactions as	ulated tran	month cum	12-				
2013 July 33.4 31.2 2.1 20.3 18.7 6.7 5.6 5.3 4.7 1.1 - 2.2	-	-	-	2.2	-	1.1	4.7	5.3	5.6	6.7	18.7	20.3	2.1	31.2	33.4	2013 July

### **C34 Euro area b.o.p.: goods** (seasonally adjusted; 12-month cumulated tra

### **C35 Euro area b.o.p.: services** (seasonally adjusted; 12-month cumulated tran





Source: ECB.



External transactions and positions

### 7.2 Current and capital accounts (EUR billions)

### 2. Income account

(transactions)

	Comper of emp								Investmer	nt income						
	Credit	Debit	Tota	al			Direct in	nvestment				Portfolio i	nvestment		Other inve	stment
			Credit	Debit		Equ	ity		Det	ot	Equ	iity	Deb	t	Credit	Debit
					earnings earnings			ebit	Credit	Debit	Credit	Debit	Credit	Debit		
					[	Reinv. earnings earnings										
	1	2	3	4	5	-	7		9	10	11	12	13	14	15	16
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	13.2	478.9	455.9	233.4	51.1	153.7	24.1	25.5	24.0	42.4	104.1	98.5	118.8	79.2	55.3
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	3.3	120.4	103.0	61.9	12.7	34.1	-15.3	6.9	7.3	8.0	20.7	24.7	27.9	18.9	12.9
2013 Q1	7.1	2.4	113.3	95.2	57.3	24.5	32.4	15.5	6.2	5.3	7.5	17.6	24.6	28.2	17.6	11.7

### **3. Geographical breakdown** (cumulated transactions)

	Total	1	EU Memt	oer States	outside t	he euro area		Brazil	Canada	China	India	Japan	Russia	Switzer- land	United States	Other
		Total	Den-	Sweden	United	Other EU	EU									
			mark		Kingdom	countries 1)	insti-									
2012 Q2 to							tutions									
2013 Q1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
								Cre	dits							
Current account	3,157.9	1,001.0	54.6	90.9	481.8	309.3	64.3	62.4	46.8	151.6	39.4	72.2	123.7	251.4	420.3	989.2
Goods	1,921.2	590.8	35.3	57.2	253.3	244.8	0.2	32.9	23.1	117.7	29.4	44.7	90.6	134.7	227.3	630.0
Services	630.4	190.1	12.3	17.4	118.9	34.7	6.8	10.3	10.5	22.1	7.4	15.3	21.4	62.1	95.5	195.8
Income	506.3	155.2	6.1	14.0	98.4	26.7	10.1	18.8	12.3	11.1	2.4	11.3	11.2	45.2	90.3	148.4
Investment income	477.5	147.5	5.3	13.9	96.7	25.9	5.7	18.7	12.2	11.1	2.4	11.3	11.1	30.2	88.7	144.3
Current transfers	100.0	65.0	1.0	2.3	11.2	3.2	47.3	0.4	0.9	0.7	0.2	0.8	0.5	9.4	7.1	15.1
Capital account	29.4	25.4	0.0	0.0	2.4	0.7	22.2	0.1	0.0	0.0	0.0	0.0	0.2	0.9	0.4	2.4
								De	ebits							
Current account	3,000.1	947.6	48.8	88.8	419.6	279.9	110.3	38.1	31.4	-	34.6	95.2	155.9	210.5	395.3	-
Goods	1,796.5	507.2	29.9	50.4	201.0	225.8	0.0	28.7	13.9	201.9	26.0	46.1	137.8	107.4	149.4	578.2
Services	535.9	154.2	9.0	14.6	91.3	39.0	0.3	5.6	7.1	15.5	6.8	9.7	11.1	48.3	110.4	167.1
Income	457.7	160.2	8.8	21.9	114.9	9.9	4.6	2.4	8.3	-	0.9	38.8	6.2	45.0	128.8	-
Investment income	444.6	153.1	8.7	21.8	113.3	4.6	4.6	2.4	8.1	-	0.7	38.7	6.0	44.5	127.6	-
Current transfers	210.1	126.0	1.1	1.9	12.3	5.3	105.4	1.3	2.0	4.1	1.0	0.6	0.9	9.9	6.6	57.6
Capital account	15.9	4.0	0.1	0.1	3.2	0.5	0.2	0.2	0.1	0.4	0.2	0.0	0.1	0.6	3.5	6.8
								1	Net							
Current account	157.8	53.5	5.8	2.1	62.2	29.4	-46.0	24.3	15.4	-	4.8	-23.0	-32.2	40.9	25.0	-
Goods	124.7	83.6	5.4	6.8	52.2	19.0	0.2	4.2	9.1	-84.2	3.4	-1.3	-47.2	27.3	77.9	51.8
Services	94.5	35.9	3.3	2.8	27.6	-4.3	6.4	4.7	3.4	6.6	0.6	5.7	10.2	13.8	-14.9	28.7
Income	48.6	-4.9	-2.8	-7.9	-16.5	16.8	5.4	16.3	4.0	-	1.5	-27.5	5.1	0.3	-38.4	-
Investment income	32.9	-5.6	-3.5	-7.9	-16.6	21.3	1.1	16.4	4.1	-	1.7	-27.4	5.1	-14.3	-38.9	-
Current transfers	-110.1	-61.1	-0.1	0.4	-1.2	-2.1	-58.1	-0.9	-1.1	-3.4	-0.7	0.2	-0.3	-0.5	0.5	-42.6
Capital account	13.5	21.4	0.0	0.0	-0.9	0.2	22.0	-0.2	0.0	-0.4	-0.2	0.0	0.1	0.4	-3.1	-4.4
a EGD																

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

J		Total <sup>1)</sup>		as	Total 5 a % of GD	Р		rect tment		tfolio tment	Net financial derivatives		her tment	Reserve assets
	Assets	Liabilities	Net	Assets	Liabilities	Net	Assets	Liabilities	Assets	Liabilities	ucrivatives	Assets	Liabilities	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
					Outstanding a									
2009 2010 2011	13,739.1 15,216.8 15,843.0	15,225.6 16,479.1 17,152.6	-1,486.4 -1,262.3 -1,309.6	154.0 166.0 168.1	170.7 179.7 182.0	-16.7 -13.8 -13.9	4,412.8 4,946.7 5,564.7	3,532.5 3,908.6 4,392.0	4,340.9 4,907.3 4,762.6	6,863.8 7,470.9 7,628.4	-1.3 -32.6 -24.3	4,527.2 4,807.6 4,876.7	4,829.3 5,099.5 5,132.3	459.6 587.8 663.4
2012 Q3 Q4 2013 Q1	16,469.2 16,587.8 16,993.9	17,596.5 17,827.3 18,171.3	-1,127.3 -1,239.6 -1,177.4	173.8 174.9 179.3	185.7 188.0 191.7	-11.9 -13.1 -12.4	5,645.1 5,830.0 5,919.9	4,254.9 4,421.6 4,457.6	5,187.8 5,266.7 5,523.6	8,122.4 8,316.4 8,558.5	-21.2 -19.5 -31.4	4,923.7 4,821.2 4,894.0	5,219.2 5,089.3 5,155.2	733.8 689.4 687.8
					C	hanges to	outstanding	amounts						
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 2011 2012	1,477.7 626.2 744.7	1,253.5 673.6 674.7	224.2 -47.3 70.1	16.1 6.6 7.9	13.7 7.1 7.1	2.4 -0.5 0.7	533.9 618.0 265.4	376.1 483.3 29.7	566.4 -144.7 504.1	607.1 157.5 688.0	-31.2 8.3 4.8	280.4 69.1 -55.5	270.2 32.8 -43.0	128.2 75.6 26.0
2012 Q4 2013 Q1	118.5 406.1	230.8 344.0	-112.3 62.1	4.9 17.5	9.5 14.8	-4.6 2.7	185.0 89.8	166.7 36.0	78.8 256.9	194.0 242.1	1.7 -11.9	-102.5 72.8	-130.0 65.9	-44.4 -1.5
							ansactions							
2009 2010 2011 2012	-89.4 657.7 583.2 429.9	-74.4 666.8 540.6 283.0	-15.0 -9.1 42.7 146.8	-1.0 7.2 6.2 4.5	-0.8 7.3 5.7 3.0	-0.2 -0.1 0.5 1.5	352.9 362.4 447.0 268.4	285.9 273.6 328.4 204.3	96.0 134.2 -55.9 184.1	342.8 253.7 196.6 274.5	-19.0 -18.4 5.3 -17.8	-514.7 169.0 176.6 -19.0	-703.1 139.5 15.6 -195.8	-4.6 10.5 10.2 14.1
2012 Q4	-3.5	-91.3	87.8	-0.1	-3.8	3.6	70.0	29.6	79.7	165.0	-28.3	-127.9	-285.9	3.0
2013 Q1 Q2	227.0 15.1	189.2 -44.1	37.8 59.2	9.8 0.6	8.1 -1.8	1.6 2.5	65.9 15.2	42.3 3.3	105.6 13.0	116.3 78.5	-9.3 -3.4	64.7 -10.9	30.6 -125.9	0.0 1.2
2013 Mar. Apr. May June July	8.2 139.4 -10.9 -113.4 -1.5	-16.7 120.9 -20.7 -144.3 -28.8	24.9 18.5 9.8 30.9 27.3				24.9 12.9 -0.1 2.3 9.1	0.3 6.1 0.2 -3.0 6.5	31.3 41.9 18.0 -46.9 25.7	35.7 43.4 57.3 -22.1 -15.1	-1.2 3.4 7.2 -13.9 0.5	-44.5 81.2 -36.6 -55.4 -36.6	-52.6 71.4 -78.2 -119.1 -20.2	-2.2 0.1 0.6 0.6 -0.3
July	-1.5	-20.0	21.3	-	-	- Otl	9.1 her changes	0.5	23.1	-13.1	0.5	-30.0	-20.2	-0.5
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 2012	43.0 314.9	133.0 391.6	-90.0 -76.7	0.5 3.3	1.4 4.1	-1.0 -0.8	170.9 -3.0	154.9 -174.6	-88.8 320.0	-39.2 413.5	3.0 22.6	-107.5 -36.5	17.2 152.8	65.4 11.8
					Other c	hanges due	e to exchang	e rate chan	ges					
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 2011	537.3 221.9	325.5 172.3	211.8 49.6	5.9 2.4	3.5 1.8	2.3 0.5	165.6 64.0	50.1 23.0	199.0 87.9	115.1 60.1	:	159.8 62.4	160.3 89.1	12.9 7.6
2012	-	-	188.7			2.0	-	-	-	-		-	-	16.7
							s due to prie							
2009 2010	634.8 300.8	492.7 153.8	142.1 147.0	7.1 3.3	5.5 1.7	1.6 1.6	147.4 47.0	29.4 2.1	423.5 165.1	463.4 151.8	18.2 -12.8	•	·	45.8 101.5
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
2012	-	-	568.0	•	•	6.0	-	-	-	-	22.6	•	•	30.0
2009	8.4	25.5	-17.1	0.1	0.3	r cnanges a -0.2	ue to other 2.0	adjustment. -48.3	24.0	124.6		-64.4	-50.8	46.9
2009	-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 2012	263.6 -820.6	211.6 -407.8	52.0 -412.8	2.8 -8.7	2.2 -4.3	0.6 -4.4	202.4 -201.3	131.9 -217.9	232.5 -391.2	151.5 182.3	•	-169.9 -215.0	-71.9 -372.2	-1.5 -13.1
2012	-020.0		-+12.0	-0.7			of outstandin		-371.2	102.5	•	-215.0	-312.2	-13.1
2008	3.0	3.6	-				9.2	3.7	-0.2	3.9		-0.2	3.3	1.0
2009 2010	-0.7 4.6	-0.5 4.3	-				8.9 7.9	8.8 7.5	2.4 3.0	5.6 3.6		-10.1 3.7	-12.5 2.8	-1.3 2.0
2010	3.9	3.3	-				9.1	8.5	-1.2	2.6		3.8	0.4	1.6
2012 Q4	2.7 2.2	1.7 1.0	-				4.8 4.5	4.7 3.8	3.8 3.1	3.5 4.3		-0.4 -0.8	-3.8	2.1 1.8
2013 Q1 Q2	2.2 1.9	0.4				:	4.5 3.6	5.8 2.8	5.1 4.6	4.5 4.7	•	-0.8	-6.5 -8.0	0.6

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 resid	ent units a	broad				Ву	y non-resid	ent units in	the euro ar	ea	
	Total		uity capital vested earn	nings		ther capital ter-company	y loans)	Total		quity capita invested ear			Other capital	
		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
					Oustanding	amounts (in	nternational	investment j	position)					
2010 2011	4,946.7 5,564.7	3,825.3 4,230.1	275.3 287.6	3,550.0 3,942.5	1,121.4 1,334.6	17.0 13.5	1,104.4 1,321.0	3,908.6 4,392.0	2,940.6 3,337.2	90.4 92.6	2,850.3 3,244.6	968.0 1,054.7	14.7 11.2	953.2 1,043.5
2012 Q4 2013 Q1	5,830.0 5,919.9	4,376.0 4,461.4	289.1 283.8	4,086.9 4,177.6	1,454.1 1,458.5	13.5 14.6	1,440.6 1,443.9	4,421.6 4,457.6	3,154.5 3,203.5	108.3 110.8	3,046.2 3,092.7	1,267.1 1,254.1	11.3 12.2	1,255.8 1,241.9
						Tı	ransactions							
2010 2011 2012	362.4 447.0 268.4	231.2 380.7 208.0	21.2 22.5 -1.1	210.0 358.2 209.1	131.2 66.3 60.4	1.6 -3.5 0.3	129.6 69.8 60.1	273.6 328.4 204.3	294.8 332.5 201.2	8.8 5.1 6.6	286.0 327.4 194.6	-21.2 -4.1 3.1	-7.7 -0.9 0.6	-13.5 -3.3 2.5
2012 Q4 2013 Q1 Q2	70.0 65.9 15.2	58.9 58.5 12.0	-0.2 -0.9 2.2	59.1 59.4 9.8	11.2 7.4 3.2	0.2 1.1 -0.8	$11.0 \\ 6.4 \\ 4.0$	29.6 42.3 3.3	52.7 41.1 4.9	1.3 3.3 0.9	51.4 37.8 4.1	-23.2 1.2 -1.7	-0.6 0.7 0.2	-22.6 0.5 -1.9
2013 Mar. Apr. May June	24.9 12.9 -0.1 2.3	7.1 10.5 8.6 -7.1	-0.8 2.0 0.1 0.2	7.8 8.5 8.5 -7.3	17.8 2.4 -8.7 9.4	0.1 -0.6 -0.9 0.7	17.7 3.1 -7.8 8.7	0.3 6.1 0.2 -3.0	10.6 2.2 2.9 -0.1	1.2 0.5 -0.1 0.5	9.3 1.6 3.0 -0.6	-10.3 3.9 -2.7 -2.8	-0.6 1.4 0.1 -1.3	-9.6 2.5 -2.8 -1.5
July	2.3 9.1	3.7	-0.2	3.9	5.4	-0.3	5.7	6.5	14.4	0.5	13.7	-2.8	-0.1	-7.8
						G	rowth rates							
2010 2011	7.9 9.1	6.4 10.1	8.9 8.4	6.2 10.2	13.2 6.0	10.6 -21.4	13.3 6.4	7.5 8.5	11.0 11.3	11.1 5.7	11.0 11.5	-2.5 -0.6	-37.9 -7.6	-1.8 -0.5
2012 Q4 2013 Q1 Q2	4.8 4.5 3.6	4.9 4.7 3.7	-0.4 -0.1 0.9	5.3 5.1 4.0	4.4 3.9 3.1	1.4 2.0 4.3	4.5 3.9 3.1	4.7 3.8 2.8	6.3 5.6 4.4	7.2 8.1 7.4	6.2 5.5 4.3	0.5 -0.6 -1.1	6.0 19.1 19.6	0.5 -0.7 -1.3

### **C36 Euro area international investment position** (outstanding amounts at end of period; as a percentage of GDP)

**C37 Euro area direct and portfolio investment position** (outstanding amounts at end of period; as a percentage of GDP)





Source: ECB.



# **7.3 Financial account** (EUR billions and annual growth rates; outstanding amounts and growth rates at end of period; transactions during period)

### 3. Portfolio investment assets

	Total			Equity	7						Debt inst	ruments				
								В	onds and	notes			Mone	y market in	struments	
		Total	Mł	FIs	Non	-MFIs	Total	MI	FIs	Non	-MFIs	Total	М	FIs	Non	-MFIs
			ſ	Euro- system		General government		[	Euro- system		General government			Euro- system		General government
	1	2	3	4	5	6 utstanding an	7	8 ernationa	9 1 investm	10 ent positio	11 n)	12	13	14	15	16
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 Q4 2013 Q1	5,266.7 5,523.6	1,947.5 2,141.8	70.7 88.2	2.8 3.1	1,876.7 2,053.5	42.4 48.3	2,852.4 2,915.8	674.9 655.7	15.6 16.6	2,177.5 2,260.1	97.8 98.3	466.8 466.0	288.0 279.9	53.8 51.1	178.8 186.0	1.5 0.5
							Tra	nsactions	\$							
2010 2011 2012	134.2 -55.9 184.1	77.3 -70.8 58.3	4.1 -15.7 4.9	-0.2 -0.2 0.1	73.2 -55.1 53.4	1.7 -7.3 0.0	103.0 -15.7 123.4	-126.3 -55.1 -39.5	-0.8 0.3 -0.9	229.3 39.4 162.8	51.5 -3.0 -8.0	-46.1 30.6 2.5	-64.9 24.3 -18.0	-11.7 10.5 2.3	18.8 6.4 20.5	-1.9 0.2 0.2
2012 Q4 2013 Q1 Q2	79.7 105.6 13.0	59.7 62.1 8.1	10.1 13.9 2.3	0.0 0.1 0.0	49.6 48.3 5.9	0.9 3.4	38.5 35.0 -16.4	7.1 -15.6 -19.1	0.5 1.1 -6.3	31.5 50.6 2.7	-3.5 0.7	-18.5 8.5 21.2	-20.6 4.5 12.7	5.6 0.6 19.9	2.1 3.9 8.5	0.3 -0.2
2013 Mar. Apr. May June July	31.3 41.9 18.0 -46.9 25.7	27.2 17.3 9.2 -18.4 10.6	12.4 -0.1 4.6 -2.2 2.2	0.1 0.0 0.0 0.0 0.0	14.9 17.4 4.6 -16.2 8.4		6.7 5.7 5.6 -27.6 14.0	-2.4 -9.8 -1.0 -8.3 -2.6	0.4 -6.4 0.1 0.0 0.4	9.1 15.5 6.5 -19.3 16.6		-2.7 18.8 3.3 -0.9 1.1	0.2 11.3 3.8 -2.4 3.0	-3.4 15.5 1.1 3.3 0.4	-2.8 7.6 -0.5 1.5 -1.9	
							Gro	wth rates	6							
2010 2011	3.0 -1.2	4.9 -4.1	5.6 -20.3	-5.1 -6.0	4.8 -3.4	4.8 -15.9	4.1 -0.6	-13.6 -7.0	-4.9 2.2	14.7 2.2	124.1 -3.1	-10.3 7.5	-17.9 8.0	-25.4 26.6	22.3 6.1	-91.7 120.7
2012 Q4 2013 Q1 Q2	3.8 3.1 4.6	3.2 5.2 7.1	8.0 21.4 39.7	2.8 5.8 5.2	3.0 4.6 6.0	-0.2 13.0	4.6 3.6 3.3	-5.5 -6.6 -5.6	-5.5 4.8 -33.9	8.5 7.2 6.2	-7.8 -6.0	0.6 -6.7 2.7	-5.5 -12.0 -1.5	3.4 12.8 63.0	12.4 3.4 10.5	37.9 55.1

### 4. Portfolio investment liabilities

	Total		Equity					Debt instr	uments			
						Bonds a	nd notes		Ν	Ioney market	instrument	s
		Total	MFIs	Non-MFIs	Total	MFIs	Noi	n-MFIs	Total	MFIs	Non	-MFIs
								General government				General government
	1	2	3	4	5	V	7	8	9	10	11	12
				Outstanding	g amounts (inte	ernational inv	estment pos	ition)				
2010 2011	7,470.9 7,628.4	3,175.5 3,042.7	665.8 556.9	2,509.7 2,485.7	3,841.4 4,142.3	1,189.9 1,273.5	2,651.5 2,868.7	1,648.3 1,772.1	454.0 443.5	69.5 87.2	384.6 356.2	347.4 316.5
2012 Q4 2013 Q1	8,316.4 8,558.5	3,499.3 3,648.9	539.4 523.6	2,959.8 3,125.3	4,353.0 4,415.9	1,181.4 1,184.9	3,171.6 3,231.0	1,963.4 2,009.6	464.2 493.7	90.6 94.5	373.6 399.2	301.0 326.3
					Trai	nsactions						
2010 2011 2012	253.7 196.6 274.5	123.1 78.7 154.4	-13.1 19.5 -18.3	136.2 59.2 172.8	175.1 165.4 120.4	55.8 78.5 -52.7	119.3 87.0 173.2	186.8 89.1 154.8	-44.5 -47.5 -0.3	15.0 2.2 3.4	-59.5 -49.7 -3.8	-38.9 -37.5 -25.5
2012 Q4 2013 Q1 Q2	165.0 116.3 78.5	95.7 51.9 78.1	-10.4 -7.8 -15.4	106.1 59.7 93.5	44.0 31.3 -6.8	-5.1 -1.1 -13.0	49.1 32.4 6.2	32.0 45.4	25.3 33.2 7.3	8.1 13.7 21.0	17.2 19.5 -13.7	-7.3 24.5
2013 Mar. Apr. May June July	35.7 43.4 57.3 -22.1 -15.1	15.0 11.6 51.1 15.4 6.5	-2.9 -1.6 2.0 -15.8 2.6	17.9 13.2 49.1 31.2 3.9	10.7 27.9 2.9 -37.7 -37.9	-12.4 0.8 -0.2 -13.6 -20.4	23.1 27.1 3.1 -24.1 -17.6	- - -	9.9 3.9 3.2 0.2 16.3	2.7 5.0 1.6 14.4 2.4	7.3 -1.1 1.7 -14.3 13.9	- - -
					Gro	wth rates						
2010 2011	3.6 2.6	4.3 2.5	-2.0 3.1	6.2 2.2	4.9 4.4	4.9 6.9	4.8 3.3	12.4 5.5	-8.8 -9.1	18.5 5.2	-13.4 -12.1	-9.8 -10.9
2012 Q4 2013 Q1 Q2	3.5 4.3 4.7	4.8 5.0 7.3	-3.4 -6.2 -7.0	6.5 7.3 10.1	2.9 3.7 2.7	-4.2 -2.6 -2.3	6.0 6.3 4.7	8.7 9.9	-0.1 4.9 4.9	3.5 14.6 27.7	-1.0 2.5 -0.5	-7.7 -2.2
Source: ECB.												



### 7.3 Financial account (EUR billions and annual growth rate

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

### 5. Other investment assets

	Total		Eurosystem		(exclu	MFIs ding Eurosy	ystem)		Gene govern				Other se	ectors	
		Total	Loans/ currency and	Other assets	Total	Loans/ currency and	Other assets		Trade credits	Loans/c and de			Trade credits	and d	currency eposits
	1	2	deposits 3	4	5	deposits 6	7	8	9	10	Currency and deposits 11	12	13	14	Currency and deposits 15
				C	Outstanding	g amounts (ii	nternational	investmen	t position)						
2010 2011	4,807.6 4,876.7	32.9 35.7	32.2 35.4	0.7 0.3	2,972.0 3,067.6	2,932.7 3,006.6	39.4 61.0	161.9 162.8	7.6 6.7	115.4 116.4	19.8 30.2	1,640.7 1,610.6		1,279.5 1,214.6	441.6 506.9
2012 Q4 2013 Q1	4,821.2 4,894.0	40.1 33.0	39.9 32.7	0.3 0.3	2,923.3 2,954.5	2,853.2 2,884.5	70.1 70.0	166.2 152.4	5.1 5.1	121.4 107.4	29.2 23.5	1,691.5 1,754.1		1,227.3 1,249.9	580.9 606.1
						Ti	ransactions								
2010 2011 2012	169.0 176.6 -19.0	-2.9 -2.7 10.7	-2.8 -2.8 10.7	0.0 0.1 0.0	10.1 50.4 -121.3	1.3 20.6 -130.5	8.9 29.9 9.2	41.5 4.4 4.7	-0.3 -0.2 -1.6	41.1 4.2 6.4	4.9 10.3 -1.0	120.3 124.4 86.8	8.7 8.1 8.9	87.8 91.2 61.7	53.6 47.7 28.4
2012 Q4 2013 Q1 Q2	-127.9 64.7 -10.9	5.8 -6.9 -11.2	5.8 -6.9	0.0 0.0	-114.5 11.8 20.1	-107.2 12.6	-7.3 -0.8	18.4 -11.0 -4.7	0.1 -0.2	17.9 -11.0	4.2 -5.1 -0.1	-37.7 70.8 -15.0	-1.1 0.4	-23.3 44.0	-24.5 26.2 5.6
2013 Mar. Apr. May June July	-44.5 81.2 -36.6 -55.4 -36.6	-6.6 -3.1 -5.2 -2.9 3.4	- - - -	- - -	-39.3 65.0 -1.7 -43.1 -34.3		- - -	-1.3 1.4 -3.9 -2.2 -4.7	- - -		-1.7 1.9 -1.4 -0.6 -2.7	2.7 17.9 -25.8 -7.1 -1.0	- - -	- - -	12.4 22.2 -7.9 -8.6 0.2
						G	rowth rates								
2010 2011	3.7 3.8	-12.7 -5.4	-12.5 -5.5	-9.9 40.4	0.4 1.8	0.1 0.8	23.6 76.6	33.9 3.0	-3.1 -3.2	53.7 4.2	32.8 51.5	7.8 7.8	4.2 3.8	7.3 7.4	13.0 11.1
2012 Q4 2013 Q1 Q2	-0.4 -0.8 -1.9	31.2 5.2 -25.8	31.5 5.2	-0.7 -1.0	-3.9 -4.6 -3.9	-4.3 -5.1	15.6 25.0	3.1 3.1 -4.0	-23.5 -25.1	5.8 5.3	-3.3 -1.9 -20.0	5.5 5.8 2.4	4.3 -2.1	5.2 6.6	5.9 5.0 2.7

### 6. Other investment liabilities

	Total		Eurosyste	m	(exclu	MFIs ding Euros	ystem)			neral nment			Other s	ectors	
		Total	Loans/ currency and deposits	Other liabilities	Total	Loans/ currency and deposits	Other liabilities	Total	Trade credits	Loans	Other liabilities	Total	Trade credits	Loans	Other liabilities
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
					Out	standing am	ounts (interr	national inv	vestment po	sition)					
2010 2011	5,099.5 5,132.3	269.1 411.3	266.1 408.5	3.0 2.8	3,491.0 3,208.3	3,445.0 3,140.6	46.0 67.6	148.0 223.9	0.0 0.1	141.8 217.1	6.2 6.8	1,191.5 1,288.8	202.7 224.0	842.1 871.7	146.7 193.2
2012 Q4 2013 Q1	5,089.3 5,155.2	428.9 398.6	428.0 397.8	0.9 0.9	2,958.0 2,977.2	2,875.1 2,893.6	83.0 83.6	227.4 224.3	0.1 0.1	219.8 217.5	7.5 6.8	1,475.0 1,555.0	230.2 233.9	1,013.3 1,046.4	231.5 274.7
							Trans	actions							
2010 2011 2012	139.5 15.6 -195.8	9.4 135.1 19.0	6.8 135.3 20.9	2.6 -0.2 -1.8	-8.7 -289.1 -238.7	-14.6 -327.7 -255.9	5.9 38.7 17.2	65.1 74.1 4.4	0.0 0.0 0.0	64.6 74.1 3.4	0.5 0.0 1.0	73.7 95.4 19.5	15.9 10.4 4.6	31.6 65.2 3.2	26.2 19.9 11.7
2012 Q4 2013 Q1 Q2	-285.9 30.6 -125.9	-0.2 -33.2 -21.5	0.2 -33.2	-0.3 0.0	-216.4 0.6 -93.0	-219.1 1.3	2.7 -0.7	-5.6 -0.4 1.2	0.0 0.0	-5.9 -0.1	0.3 -0.3	-63.8 63.6 -12.6	1.1 2.2	-42.6 25.8	-22.2 35.6
2013 Mar. Apr. May June July	-52.6 71.4 -78.2 -119.1 -20.2	-0.7 -1.1 -11.3 -9.1 -5.2	- - -	- - -	-47.6 54.6 -58.6 -89.0 -24.6	- - -	- - -	-0.3 -1.7 -0.6 3.6 0.9	- - -	- - -	- - -	-4.0 19.6 -7.6 -24.6 8.7	- - -	- - - -	- - -
							Growt	h rates							
2010 2011	2.8 0.4	3.6 50.4	2.6 51.0	:	-0.2 -8.3	-0.3 -9.6	15.5 89.7	78.8 50.5		83.7 52.6	5.8 0.2	6.4 8.2	8.8 5.1	3.7 7.9	17.8 13.7
2012 Q4 2013 Q1 Q2	-3.8 -6.5 -8.0	4.8 18.3 -8.3	5.2 19.0	•	-7.4 -12.5 -12.1	-8.1 -13.3	25.6 31.5	2.0 -1.4 -3.9		1.6 -1.7	15.4 11.0	1.5 1.5 0.6	2.1 -0.2	0.3 0.2	6.5 8.7

Source: ECB.



## 7.3 Financial account (EUR billions and annual growth r

#### 7. Reserve assets 1)

							Reserve a	issets								Memo items	
	Total	Monet	ary gold	SDR holdings	Reserve				Foreigr	exchang	e			Other claims	Other foreign	Pre- determined	SDR allo-
		In EUR billions	In fine troy ounces	nordings	in the IMF	Total	Currency deposit With		T-+-1		urities	Maraa	Financial derivatives	ciumis	currency assets	short-term net drains	cations
			(millions)				monetary authorities and the BIS	banks	Total	Equity	and	Money market instruments				on foreign currency	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
					0	outstand	ing amounts (	(internat	ional invo	estment p	osition)						
2009 2010 2011	462.4 591.2 667.1	266.1 366.2 422.1	347.180 346.962 346.846	50.8 54.2 54.0	10.5 15.8 30.2	134.9 155.0 160.9	11.7 7.7 5.3	8.1 16.0 7.8	115.2 131.3 148.1	0.5 0.5 0.8	92.0 111.2 134.1	22.7 19.5 13.3	-0.1 0.0 -0.4	0.0 0.0 0.0	32.1 26.3 97.4	-24.2 -24.4 -86.0	51.2 54.5 55.9
2012 Q3 Q4 2013 Q1	733.8 689.4 687.8	476.4 437.2 432.7	346.827 346.693 346.696	53.8 52.8 52.5	34.2 31.9 32.4	168.9 166.8 169.6	5.4 6.1 5.3	8.2 8.8 10.0	155.2 151.3 154.4	0.2 0.2 0.2	136.1 130.9 132.6	18.9 20.2 21.6	0.2 0.6 -0.1	0.5 0.6 0.6	39.9 32.8 31.2	-39.5 -35.0 -35.8	56.2 55.0 55.1
2013 July Aug.	588.7 613.0	343.3 365.3	346.674 346.674	50.7 50.9	31.4 30.8	162.5 165.2	7.8 6.5	5.0 5.9	149.5 152.6	0.2 0.2	131.9 135.8	17.3 16.6	0.2 0.1	0.9 0.9	26.3 23.3	-28.6 -27.9	53.8 53.2
								Fransact									
2010 2011 2012	10.5 10.2 14.1	0.0 0.1 0.0	-	-0.1 -1.6 -0.3	4.9 12.9 3.4	5.6 -1.2 10.3	-5.4 -2.3 0.8	6.6 -8.3 1.2	4.3 9.3 8.0	0.0 0.1 -0.4	10.6 15.9 -0.7	-6.3 -6.8 9.1	0.0 0.1 0.4	0.0 0.0 0.7	-	-	-
2012 Q4 2013 Q1 Q2	3.0 0.0 1.2	0.0 0.0	-	0.3 -0.5	-1.5 0.3	4.2 0.2	0.6 -1.1	1.0 0.8	2.4 0.9	0.0 0.0	-0.5 -0.8	2.9 1.7	0.1 -0.5	0.1 0.0	-	-	- -
								Growth 1									
2009 2010 2011	-1.3 2.0 1.6	-0.9 0.0 0.0		-2.6 -0.1 -3.0	45.5 46.7 82.3	-4.4 3.7 -1.2	41.1 -43.3 -30.0	-21.3 75.9 -52.7	-7.3 3.6 6.9	1.0 -5.2 27.4	-12.8 10.3 14.3	25.3 -24.5 -45.2	-	-	-	-	- - -
2012 Q4 2013 Q1 Q2	2.1 1.8 0.6	0.0 0.0	- -	-0.5 -0.9	11.1 7.5	6.6 6.2	15.1 -4.1	15.2 30.5	5.6 5.6	-53.5 -50.1	-0.6 -0.4	82.8 68.3	-	-	-	- -	- -

### 8. Gross external debt

	Total			By ins	strument			By sec	tor (excluding	direct investme	ent)
		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 (int	ernational inve	stment position)				
2009 2010 2011	10,341.7 10,919.2 11,421.3	4,469.0 4,696.9 4,637.9	525.7 454.0 443.5	3,523.2 3,841.4 4,142.3	176.9 202.7 224.0	184.9 201.9 270.4	1,462.1 1,522.3 1,703.3	1,966.1 2,143.7 2,312.6	253.4 271.0 411.3	4,579.8 4,750.4 4,569.0	2,080.3 2,231.8 2,425.2
2012 Q3 Q4 2013 Q1	11,939.1 11,947.9 12,096.5	4,661.4 4,536.2 4,555.3	434.6 464.2 493.7	4,324.5 4,353.0 4,415.9	230.5 230.2 233.9	327.3 322.9 366.0	1,960.8 2,041.5 2,031.7	2,453.3 2,491.7 2,560.2	432.0 428.9 398.6	4,504.5 4,229.9 4,256.6	2,588.4 2,755.9 2,849.3
				Outstan	ding amoun	ts as a percenta	ge of GDP				
2009 2010 2011	115.9 119.2 121.3	50.1 51.3 49.2	5.9 5.0 4.7	39.5 41.9 44.0	2.0 2.2 2.4	2.1 2.2 2.9	16.4 16.6 18.1	22.0 23.4 24.6	2.8 3.0 4.4	51.3 51.9 48.5	23.3 24.4 25.7
2012 Q3 Q4 2013 Q1	126.0 126.0 127.3	49.2 47.8 48.0	4.6 4.9 5.2	45.6 45.9 46.5	2.4 2.4 2.5	3.5 3.4 3.9	20.7 21.5 21.4	25.9 26.3 27.0	4.6 4.5 4.2	47.5 44.6 44.8	27.3 29.1 30.0

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.



External transactions and positions

**7.3 Financial account** (EUR billions; outstanding amounts at end of period; transactions during period)

### 9. Geographical breakdown

	Total		EU Mem	ber State	s outside t	he euro ar	ea	Canada	China	Japan	Switzer- land	United States	Offshore financial	Interna- tional	Other countries
		Total	Denmark	Sweden		Other EU countries 1)	EU institutions					States	centres	organisa- tions	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
2011					(	Dutstanding	amounts (ir	nternation	al invest	ment pos	ition)				
Direct investment	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	,	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		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	,	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
Portfolio investment assets	4,762.6	· ·	84.5	199.5	1,005.5	99.4	148.0	100.7	52.5	208.0		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		73.6	157.9	729.6 629.5	86.2 83.8	147.9 144.2	61.6 56.8	3.9 2.7	117.6 46.3	22.2	1,004.0 828.0	169.1	33.8 32.7	452.0 405.1
Bonds and notes	2,592.9 466.3	1,050.8	68.5 5.1	124.8 33.0	100.1	03.0 2.4	3.7	4.8	1.2	40.5 71.3	15.4 6.9	828.0 175.9	155.1 13.9	1.0	403.1
Money market instruments Other investment	-255.6	-287.7	45.5	-30.0	-154.0	2.4 71.4	-220.6	-10.1	-13.5	10.9	-75.1	63.8	82.5	-71.6	40.9
Assets	4,876.7		92.3	-30.0	1,777.6	182.7	-220.0	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	10.3	1.8	3.2	2.3	2.57.4	8.5	2.4	30.7	49.3
MFIs	3.103.3		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		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		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
2012 Q2 to 2013 Q1							Cumulated	l transactio	ons						
Direct investment	84.1	46.1	-7.6	-11.0	50.1	14.6	0.0	-8.1	6.1	-1.6	5.5	-39.3	14.7	0.1	60.8
Abroad	254.4	113.5	-7.0	-11.0	81.8	14.0	0.0	-0.1	7.2	4.3	-2.5	-39.5	-4.9	0.0	96.7
Equity/reinvested earnings	200.8	119.4	1.9	16.4	88.2	12.9	0.0	7.9	6.0	1.7	-7.1	29.0	-17.1	0.0	61.0
Other capital	53.5	-5.9	-0.1	-1.9	-6.4	2.6	0.0	-2.8	1.2	2.7	4.7	5.9	12.1	0.0	35.7
In the euro area	170.2	67.4	9.3	25.5	31.8	0.9	0.0	13.2	1.1	6.0	-7.9	74.2	-19.6	0.0	35.9
Equity/reinvested earnings	178.3	35.3	11.0	18.8	3.8	1.8	0.0	16.4	0.9	6.7	7.3	91.1	-0.7	0.0	21.3
Other capital	-8.1	32.1	-1.7	6.7	28.0	-0.9	0.0	-3.2	0.2	-0.7	-15.3	-16.9	-18.9	0.0	14.6
Portfolio investment assets	165.2	-37.5	7.0	7.4	-72.2	7.3	13.0	7.3	3.0	12.4	-6.7	68.5	-14.2	-1.4	133.7
Equity	99.6	30.9	1.4	3.2	25.4	0.9	0.0	3.3	3.0	10.6	3.7	30.9	-11.1	0.0	28.4
Debt instruments	65.5	-68.4	5.6	4.2	-97.6	6.5	13.0	4.0	0.0	1.8	-10.3	37.6	-3.1	-1.4	105.3
Bonds and notes	100.0	-40.1	3.7	3.2	-68.6	7.7	13.9	1.6	0.1	-4.1	-1.6	39.8	-1.9	-1.8	108.0
Money market instruments	-34.5	-28.3	1.8	1.0	-29.0	-1.3	-0.9	2.4	0.0	5.9	-8.8	-2.3	-1.1	0.4	-2.7
Other investment	300.7	251.1	-20.7	9.9	291.5	-22.9	-6.7	4.1	32.6	-20.7	0.0	17.4	-4.4	-17.1	37.8
Assets	-40.2	-17.4	-5.2	10.2	-4.5	-17.3	-0.6	5.0	3.0	-23.3	8.1	-11.5	-34.6	0.5	30.0
General government	4.6	2.8	1.3	0.2	1.2	-0.4	0.6	0.1	-0.1	-1.3	0.4	0.7	0.6	0.1	1.2
MFIs	-140.8	-54.9	-9.0	6.0	-34.0	-16.6	-1.3	0.3	6.2	-18.9	10.5	-28.3	-44.6	0.4	-11.5
Other sectors	96.0	34.7	2.6	4.1	28.3	-0.3	0.1	4.7	-3.2	-3.1	-2.9	16.1	9.4	0.0	40.3
Liabilities	-340.9	-268.4	15.6	0.3	-296.0	5.6	6.1	1.0	-29.6	-2.6	8.1	-28.9	-30.2	17.6	-7.8
General government	-3.1	-20.8	0.1	0.3	-27.1	0.0	5.8	0.3	0.0	0.0	-0.1	-3.6	-0.1	20.0	1.2
MFIs	-365.3	-234.2	12.6	1.9	-250.0	3.6	-2.4	-5.8	-29.5	-4.6	-8.4	-36.7	-36.9	-3.0	-6.1
Other sectors	27.5	-13.4	2.8	-1.9	-19.0	2.0	2.7	6.5	-0.1	2.0	16.6	11.4	6.8	0.6	-2.9

Source: ECB. 1) Excluding Croatia.



	Total	Current and				Transactions b	y non-MFI	s			Financial derivatives	Errors and
		capital account	Direct inve	stment		Portfolio in	vestment		Other inv	/estment	derivatives	omissions
		balance	By resident	By non- resident	А	ssets	Liał	bilities	Assets	Liabilities		
	1	2	units abroad 3	units in euro area 4	Equity 5	Debt instruments 6	Equity 7	Debt instruments 8	9	10	11	12
2010 2011 2012	-207.0 80.0 130.3	7.8 26.0 137.5	-339.3 -428.0 -269.2	272.2 324.1 197.0	-73.0 55.1 -53.4	-248.0 -45.8 -183.3	136.2 59.2 172.8	59.8 37.3 169.4	-160.9 -128.8 -91.5	138.6 169.6 23.9	18.3 -5.3 17.8	-18.8 16.6 9.3
2012 Q2 Q3 Q4 2013 Q1 Q2	13.7 48.0 113.8 31.8 128.2	19.8 44.9 72.5 34.2 58.1	-67.5 -50.9 -70.1 -65.8 -13.8	49.2 44.0 28.8 38.4 2.2	19.1 -6.0 -49.6 -48.3 -5.9	-16.7 -48.2 -33.6 -54.5 -11.2	9.6 26.6 106.1 59.7 93.5	47.6 28.5 66.2 51.8 -7.5	-46.7 -13.3 19.2 -59.8 19.7	7.7 22.8 -69.4 63.2 -11.3	-8.0 2.8 28.3 9.3 3.4	-0.3 -3.2 15.3 3.5 1.1
2012 July Aug. Sep. Oct. Nov. Dec.	12.8 25.5 9.7 8.8 66.4 38.6	22.4 10.5 11.9 17.4 24.7 30.4	-15.8 -24.4 -10.7 -11.7 -15.6 -42.9	20.0 38.2 -14.1 6.2 23.1 -0.5	3.5 -0.2 -9.4 -8.7 -8.3 -32.6	-19.2 -15.6 -13.4 -12.3 -21.2 -0.1	-0.2 3.2 23.7 41.6 24.9 39.6	10.8 3.4 14.2 5.1 37.8 23.3	-28.4 10.3 4.8 -27.1 -6.9 53.2	26.2 -3.3 -0.1 -13.6 -9.1 -46.6	-1.7 6.2 -1.7 10.3 7.4 10.6	-5.0 -2.8 4.5 1.5 9.6 4.1
2013 Jan. Feb. Mar. Apr. May June July	43.1 -33.1 21.7 4.9 66.9 56.4 15.5	-4.0 13.1 25.2 17.9 11.6 28.5 28.8	-15.7 -24.6 -25.6 -11.6 -0.7 -1.4 -9.7	4.1 34.6 -0.3 4.1 0.2 -2.1 5.9	-16.6 -16.8 -14.9 -17.4 -4.6 16.2 -8.4	-21.0 -27.2 -6.3 -23.1 -6.0 17.8 -14.7	38.2 3.6 17.9 13.2 49.1 31.2 3.9	17.5 4.0 30.4 26.1 4.8 -38.4 -3.6	-12.5 -46.0 -1.4 -19.3 29.8 9.3 5.7	40.1 27.4 -4.3 17.9 -8.2 -21.0 9.6	5.0 3.0 1.2 -3.4 -7.2 13.9 -0.5	7.9 -4.1 -0.3 0.6 -1.8 2.3 -1.6
2013 July	324.5	216.1	-194.4	99.3	12-month -121.7	cumulated tran. -143.0	sactions 290.0	124.5	0.0	-11.3	44.9	20.1

## 7.4 Monetary presentation of the balance of payments <sup>1</sup>) (EUR billions; transactions)

C38 Main b.o.p. items mirroring developments in MFI net external transactions <sup>(1)</sup> (EUR billions; 12-month cumulated transactions)



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



External transactions and positions

### 7.5 Trade in goods

### 1. Values and volumes by product group $^{1)} \label{eq:volume}$

(seasonally adjusted, unless otherwise indicated)

	Total (	n.s.a.)		E	xports (f.o	<b></b> .)				Impo	rts (c.i.f.)		
				Total			Memo item:		Tota	ıl		Memo item	is:
	Exports	Imports	Г	Intermediate	Capital	Consumption	Manufacturing		Intermediate	Capital	Consumption	Manufacturing	Oil
	1	2	3	4	5	6	7	8	9	10	11	12	13
				Values	(EUR billi	ons; annual pe	ercentage changes	s for colum	ns 1 and 2)				
2011 2012	13.0 7.4	13.3	1,748.1	879.2 928.5	353.8 384.9	474.5	1,426.7	1,761.4	1,127.8	240.2 244.7	367.3	1,104.8	324.3
		1.7	1,875.6			516.3	1,524.8	1,788.1	1,146.4		368.7	1,091.6	360.6
2012 Q3	7.5	0.4	474.7	233.2	96.8	132.0	387.2	447.9	285.1	61.4	92.8	273.6	90.3
Q4	5.7	1.0	468.2	231.0	96.4	128.5	379.5	439.1	279.7	58.8	91.7	268.6	89.8
2013 Q1	1.3 1.8	-5.1 -3.1	474.4	234.2 228.3	96.1 96.7	133.4	383.9 385.2	436.0	275.7	59.5 58.6	90.6 90.4	268.5 266.4	86.1 83.4
Q2			474.5			132.2		432.4	271.3				
2013 Feb.	-1.2	-6.9	156.0	76.8	31.4	44.0	125.5	145.3	92.1	19.1	30.0	86.5	29.0
Mar.	0.1	-10.0	161.0	79.6	33.1	45.0	131.3	142.9	90.3	19.5	30.1	90.5	27.4
Apr.	9.0	1.7	159.7	77.1	33.1	44.4	127.7	144.6	91.0	19.9	30.1	88.0	28.3
May	-0.1	-5.4	156.4	75.3	31.7	43.4	130.0	142.9	89.5	19.4	30.0	90.4	27.6
June	-2.9 2.7	-5.6 0.0	158.4 155.9	75.9	31.9	44.5	127.5 126.6	144.9 144.8	90.8	19.4	30.3	88.0 88.4	27.5
July	2.7	0.0	155.9	•	•	•				•	•	88.4	•
				Volume inc	lices (200	0 = 100; annua	al percentage char	iges for co	lumns 1 and 2)				
2011	7.6	3.2	148.6	143.3	153.4	155.5	145.3	126.4	119.5	136.2	144.6	133.5	102.6
2012	3.6	-3.1	153.0	146.1	160.8	161.2	150.2	122.3	116.0	130.0	137.9	127.1	103.6
2012 Q2	4.0	-3.1	153.2	145.5	162.3	161.9	151.0	123.4	116.7	133.0	138.8	129.5	103.3
Q3	3.1	-5.5	154.0	146.3	159.3	163.4	151.3	121.2	114.7	129.5	136.4	125.7	104.9
Q4	2.6	-2.3	151.9	144.8	161.1	160.4	149.0	120.2	114.2	125.2	136.3	124.5	104.4
2013 Q1	0.5	-4.2	155.7	148.7	159.4	167.2	151.7	120.5	114.5	124.3	135.9	125.5	100.8
2012 Dec.	-6.0	-7.2	149.6	141.9	159.0	158.5	146.8	118.0	112.6	122.2	133.7	122.9	101.5
2013 Jan.	3.9	2.1	154.0	147.4	157.2	165.7	150.6	123.0	115.9	132.4	137.4	128.2	105.2
Feb.	-1.2	-5.8	154.8	147.1	156.0	167.3	148.7	120.0	115.0	122.0	135.6	121.7	100.0
Mar.	-0.8	-8.7	158.5	151.7	164.9	168.5	156.0	118.6	112.6	118.7	134.8	126.5	97.3
Apr.	8.5	3.2	156.8	147.4	163.3	167.6	150.5	120.2	115.0	123.2	135.0	122.0	103.9
May	0.1	-3.1	153.0	144.9	156.1	162.2	154.2	119.4	114.0	120.9	133.3	126.7	104.2

#### 2. Prices <sup>2)</sup>

(annual percentage changes, unless otherwise indicated)

		Indus	strial producer	export p	rices (f.o.b.)	) <sup>3)</sup>				Industrial im	port pric	es (c.i.f.)		
	Total (index:			Total			Memo item:	Total (index:			Total			Memo item:
	2010 = 100)		Intermediate goods	Capital goods	Consumer goods	Energy	Manufac- turing	2010 = 100)		Intermediate goods	Capital goods	Consumer goods	Energy	
% of total	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
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
2011 2012	104.1 106.8	4.1 2.6	5.6 1.0	1.3 1.8	1.5 2.2	23.0 9.7	3.8 2.4	108.2 111.4	8.1 3.0	4.8 0.0	-0.7 1.5	3.6 2.5	25.5 7.2	3.5 1.8
2012 Q4 2013 Q1 Q2	106.6 106.5 105.8	1.6 0.0 -0.9	0.6 -0.5 -1.6	1.2 0.4 0.1	2.0 1.3 1.1	3.7 -4.3 -8.4	1.6 0.0 -0.8	110.5 110.2 108.4	1.2 -1.4 -2.7	0.4 -0.9 -2.1	0.5 -0.6 -1.1	2.0 0.9 0.4	2.0 -3.9 -5.9	1.3 -0.5 -1.3
2013 Feb. Mar. Apr. May June July	106.5 106.5 106.1 105.8 105.4 105.7	0.1 -0.3 -0.9 -1.0 -0.9 -1.1	-0.6 -0.6 -1.3 -1.8 -1.8 -1.7	0.2 0.6 0.6 0.2 -0.4 -0.6	1.2 1.4 1.4 1.1 0.7 0.6	-2.4 -8.4 -11.8 -9.3 -3.6 -5.5	0.0 -0.3 -0.8 -0.7 -0.7 -1.0	110.3 110.3 109.0 108.3 107.8 108.9	-1.3 -2.2 -3.1 -2.9 -2.0 -2.3	-1.2 -1.0 -1.5 -2.1 -2.8 -2.8	-0.9 0.3 -0.3 -1.2 -1.8 -2.7	0.8 1.2 1.1 0.6 -0.3 -0.7	-2.9 -6.9 -8.9 -6.6 -1.9 -2.1	-0.6 -0.3 -0.9 -1.4 -1.7 -2.0

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

2) 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 othe

### 3. Geographical breakdown

8	Total	EU Mem	ber States	outside the	euro area	Russia	Switzer- land	Turkey	United States		Asia		Africa	Latin America	Other countries
		Denmark	Sweden	United Kingdom	Other EU countries		Iunu		Suites		China	Japan		linerieu	countries
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
							Exports (1	f.o.b.)							
2011 2012	1,748.1 1,875.6	32.9 34.0	60.5 59.1	213.5 230.3	241.6 245.1	79.9 90.0	109.2 116.4	56.8 59.4	200.6 224.0	405.6 439.4	115.6 120.7	39.4 44.7	112.3 126.2	84.6 97.3	150.8 154.3
2012 Q1 Q2 Q3 Q4	465.1 467.6 474.7 468.2	8.4 8.6 8.5 8.6	15.0 14.9 14.9 14.4	56.5 57.1 58.3 58.4	61.3 61.3 61.6 60.9	22.1 22.8 22.8 22.4	29.4 29.2 29.1 28.7	14.6 14.5 15.1 15.2	55.7 56.0 58.4 54.0	108.5 109.1 110.4 111.3	31.4 30.4 29.8 29.1	10.6 11.4 11.6 11.2	31.1 31.5 31.2 32.4	23.6 24.5 24.5 24.8	39.0 38.2 40.0 37.1
2013 Q1 Q2	474.4 474.5	8.6 8.5	14.5 14.5	58.6 59.2	61.9 61.1	23.2 22.6	28.2 27.5	15.6 15.6	55.5 54.8	111.2 110.0	29.6 29.9	11.0 10.7	34.3 33.2	25.0 24.7	37.9 42.8
2013 Feb. Mar. Apr. May June July	156.0 161.0 159.7 156.4 158.4 155.9	2.8 2.9 2.8 2.9 2.9 2.9	4.6 4.7 4.8 5.0 4.7	18.9 20.1 19.0 20.2 20.0	20.4 20.6 20.0 20.5 20.6	7.6 7.6 7.7 7.3 7.5	8.9 9.6 9.2 9.3 8.9 9.6	5.1 5.1 5.3 5.1 4.9	17.6 19.7 18.4 18.7 17.7 17.7	35.4 38.8 36.7 37.3 36.0 36.4	9.3 10.1 10.0 10.0 9.8 10.1	3.5 3.8 3.5 3.6 3.6 3.6 3.6	11.5 11.2 11.0 11.1 11.0 11.2	7.8 8.9 8.0 8.6 8.1 8.4	15.3 11.8 17.1 9.7 16.0
							tage share o								
2012	100.0	1.8	3.2	12.3	13.1	4.8	6.2 Imports (	3.2	11.9	23.4	6.4	2.4	6.7	5.2	8.2
2011 2012	1,761.4 1,788.1	29.9 29.0	53.2 52.9	166.9 168.0	226.8 229.9	138.7 143.2	81.6 81.0	35.0 33.9	140.8 150.3	553.5 538.8	218.5 213.6	52.6 48.5	129.1 157.0	91.2 92.8	114.6 111.4
2012 Q1 Q2 Q3 Q4	452.2 448.9 447.9 439.1	7.2 7.3 7.3 7.2 7.2	13.3 13.1 13.7 12.9	42.6 41.3 42.5 41.7	57.4 57.0 57.8 57.6	37.6 35.0 33.8 36.8	20.1 19.7 21.2 20.0	8.4 8.4 8.4 8.6	37.7 37.7 39.0 35.9	137.9 137.5 132.9 130.5	53.2 55.9 53.4 51.0	12.6 12.5 12.1 11.2	39.7 38.5 39.3 39.6	23.9 23.2 23.2 23.2 22.5	26.4 30.3 28.8 25.9
2013 Q1 Q2	436.0 432.4	7.5 7.2	13.3 13.4	41.8 40.7	58.0 57.3	38.7 34.2	20.2 20.5	8.8 8.7	35.5 37.3	127.4 126.8	51.7 50.7	10.7 10.6	38.5 36.3	21.2 20.2	25.1 29.7
2013 Feb. Mar. Apr. May June July	145.3 142.9 144.6 142.9 144.9 144.8	2.5 2.5 2.4 2.4 2.4	4.3 4.6 4.4 4.5 4.5	13.7 13.9 13.1 14.1 13.5	18.9 19.6 18.9 19.2 19.3	12.8 12.7 12.2 11.5 10.5 11.6	6.3 6.8 6.3 7.1 7.1 7.0	2.9 2.9 2.9 2.9 2.9 2.9 3.0	11.7 11.9 12.3 12.6 12.5 12.6	41.2 41.9 42.4 43.3 41.1 42.5	16.5 17.5 16.4 17.8 16.5 16.9	3.5 3.5 3.5 3.6 3.4 3.4	12.9 12.2 12.6 11.7 12.0 11.9	6.9 7.1 6.6 6.9 6.8 6.8	11.2 6.7 10.7 6.7 12.4
2012	100.0	1.6	2.0	0.4	10.0		tage share a	•		20.1	11.0		0.0		( )
2012	100.0	1.6	3.0	9.4	12.9	8.0	4.5 Balan	1.9 ce	8.4	30.1	11.9	2.7	8.8	5.2	6.2
2011 2012	-13.3 87.5	3.0 5.0	7.2 6.2	46.6 62.3	14.7 15.2	-58.9 -53.1	27.5 35.5	21.7 25.5	59.8 73.7	-147.9 -99.4	-102.9 -92.9	-13.2 -3.8	-16.9 -30.8	-6.5 4.6	36.2 42.9
2012 Q1 Q2 Q3 Q4	12.9 18.6 26.8 29.2	1.1 1.3 1.1 1.4	1.8 1.7 1.2 1.5	13.9 15.8 15.9 16.7	3.9 4.2 3.8 3.3	-15.5 -12.2 -11.0 -14.4	9.3 9.5 8.0 8.7	6.2 6.2 6.6 6.6	18.0 18.3 19.3 18.1	-29.4 -28.4 -22.4 -19.2	-21.9 -25.6 -23.6 -21.9	-2.0 -1.2 -0.6 0.0	-8.6 -7.0 -8.1 -7.1	-0.3 1.3 1.3 2.3	12.6 7.9 11.2 11.2
2013 Q1 Q2	38.4 42.1	1.2 1.3	1.2 1.1	16.8 18.5	3.9 3.9	-15.6 -11.5	8.0 7.0	6.8 6.8	20.0 17.5	-16.2 -16.8	-22.1 -20.8	0.3 0.1	-4.3 -3.1	3.8 4.5	12.7 13.1
2013 Feb. Mar. Apr. May June July	10.7 18.0 15.1 13.5 13.5 11.1	0.4 0.3 0.4 0.4 0.4	0.3 0.1 0.4 0.5 0.3	5.2 6.2 5.9 6.0 6.5	1.5 1.0 1.2 1.4 1.3	-5.2 -5.1 -4.6 -3.8 -3.2 -4.1	2.5 2.7 3.0 2.2 1.8 2.6	2.2 2.2 2.2 2.4 2.2 1.9	6.0 7.8 6.1 6.1 5.2 5.1	-5.8 -3.1 -5.7 -6.0 -5.1 -6.1	-7.2 -7.4 -6.4 -7.8 -6.6 -6.7	0.0 0.3 0.0 0.0 0.2 0.3	-1.4 -1.0 -1.6 -0.6 -1.0 -0.7	1.0 1.8 1.5 1.7 1.3 1.5	4.0 5.0 6.4 3.1 3.7

Source: Eurostat. 1) Excluding Croatia.





### **EXCHANGE RATES**

## 8.1 Effective exchange rates I) (period averages; index: 1999 Q1=100)

			<b>EER-21</b>				<b>EER-40</b>	
	Nominal	Real CPI 2	Real PPI	Real GDP deflator 4	Real ULCM <sup>2)</sup>	Real ULCT 6	Nominal 7	Real CPI 8
2010 2011 2012	103.6 103.4 97.9	101.5 100.6 95.1	98.0 97.6 92.1	96.5 95.0 89.7	112.3 110.7 105.0	97.9 96.2 90.5	111.5 112.2 107.1	98.1 97.6 92.5
2012 Q3 Q4 2013 Q1 Q2 Q3	95.9 97.9 100.8 100.9 101.9	93.3 95.2 98.0 98.4 99.4	90.5 92.7 95.3 96.3 97.4	87.8 89.5 92.1 92.6	103.1 103.5 106.8 106.7	89.1 89.3 92.5 92.0	105.0 107.4 110.2 110.6 112.9	90.8 92.6 94.7 95.2 97.0
2012 Sep. Oct. Nov. Dec.	97.2 97.8 97.3 98.7	94.4 95.0 94.6 96.0	91.4 92.1 92.1 93.8	- - -	- - -	- - -	106.6 107.3 106.7 108.3	91.9 92.4 92.0 93.3
2013 Jan. Feb. Mar. Apr.	100.4 101.7 100.2 100.5	97.7 98.8 97.6 98.0	95.2 96.0 94.9 95.8	- - -	- - -	- - -	109.9 111.2 109.5 109.8	94.6 95.5 94.2 94.5
May June July Aug. Sep.	100.6 101.6 101.5 102.2 102.0	98.2 99.0 99.0 99.7 99.5	96.1 97.1 97.0 97.7 97.4				110.0 112.0 112.0 113.4 113.3	94.7 96.3 96.2 97.4 97.3
2013 Sep.	-0.2	-0.2	Percentage change -0.3	versus previous moi - versus previous ye	-	-	-0.1	-0.1
2013 Sep.	4.9	5.4	6.5	-	-	-	6.3	5.8

## **C39 Effective exchange rates** (monthly averages; index: 1999 Q1=100)

### **C40 Bilateral exchange rates** (monthly averages; index: 1999 Q1=100)



Source: ECB.
For a definition of the trading partner groups and other information, please refer to the General Notes.
ULCM-deflated series are available only for the EER-20 trading partner group.



## 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 Roma- nian leu	Swedish krona	Pound sterling	New Turkish lira
	1	2	3	4	5	6	7	8	9	10	11	12
2010 2011	1.9558 1.9558	25.284 24.590	7.4473 7.4506	7.2891 7.4390	0.7087 0.7063	3.4528 3.4528	275.48 279.37	3.9947 4.1206	4.2122 4.2391	9.5373 9.0298	$0.85784 \\ 0.86788$	1.9965 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
2013 Q1 Q2 Q3	1.9558 1.9558 1.9558	25.565 25.831 25.853	7.4589 7.4555 7.4580	7.5838 7.5566 7.5459	0.6996 0.7009 0.7025	3.4528 3.4528 3.4528	296.50 295.53 297.96	4.1558 4.1982 4.2477	4.3865 4.3958 4.4410	8.4965 8.5652 8.6798	0.85111 0.85056 0.85453	2.3577 2.4037 2.6092
2013 Mar. Apr. May June July Aug. Sep.	1.9558 1.9558 1.9558 1.9558 1.9558 1.9558 1.9558 1.9558	25.659 25.841 25.888 25.759 25.944 25.818 25.789	7.4553 7.4553 7.4536 7.4576 7.4579 7.4579 7.4580 7.4579	7.5909 7.6076 7.5684 7.4901 7.5061 7.5372 7.5985	0.7013 0.7006 0.7002 0.7019 0.7024 0.7027 0.7026	3.4528 3.4528 3.4528 3.4528 3.4528 3.4528 3.4528 3.4528	303.01 298.67 292.38 295.70 294.90 299.46 299.75	4.1565 4.1359 4.1799 4.2839 4.2745 4.2299 4.2371	4.3923 4.3780 4.3360 4.4803 4.4244 4.4371 4.4633	8.3470 8.4449 8.5725 8.6836 8.6609 8.7034 8.6758	0.85996 0.85076 0.84914 0.85191 0.86192 0.85904 0.84171	2.3453 2.3406 2.3739 2.5028 2.5274 2.6125 2.6952
oep:	10000	201100				e versus previo		112071		010720	0101171	210702
2013 Sep.	0.0	-0.1	0.0	0.8	0.0	0.0	0.1	0.2	0.6	-0.3	-2.0	3.2
				Pe	rcentage chan	ge versus previ	ous year					
2013 Sep.	0.0	4.2	0.1	2.3	0.9	0.0	5.5	2.5	-0.9	2.2	5.4	16.3

	Australian	Brazilian	Canadian	Chinese	Hong Kong	Indian	Indonesian	Israeli	Japanese	Malaysian
	dollar	real	dollar	yuan renminbi	dollar	rupee 1)	rupiah	shekel	yen	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
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
Q3	1.4465	3.0304	1.3760	8.1111	10.2696	82.3565	14,115.14	4.7459	131.02	4.2904
2013 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
July	1.4279	2.9438	1.3619	8.0234	10.1455	78.1762	13,189.17	4.7153	130.39	4.1746
Aug.	1.4742	3.1170	1.3853	8.1477	10.3223	83.9480	14,168.72	4.7610	130.34	4.3631
Sep.	1.4379	3.0345	1.3817	8.1690	10.3504	85.2678	15,073.16	4.7636	132.41	4.3410
				Percentage ch	ange versus prev	ious month				
2013 Sep.	-2.5	-2.6	-0.3	0.3 Percentage el	0.3 hange versus pre	1.6	6.4	0.1	1.6	-0.5
2013 Sep.	16.2	16.4	9.8	0.5	3.8	21.7	22.7	-6.1	31.8	9.6

	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
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 Q3	16.2956	1.5920	7.6114	54.620	41.3464	1.6311	12.3996	1,467.08	1.2315	39.031	1.3062
Q3	17.1005	1.6612	7.9303	57.813	43.4394	1.6795	13.2329	1,469.03	1.2348	41.675	1.3242
2013 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
July	16.6893	1.6590	7.8837	56.698	42.8590	1.6595	12.9674	1,473.35	1.2366	40.714	1.3080
Aug.	17.1996	1.6829	7.9386	58.471	43.9748	1.6941	13.4190	1,485.93	1.2338	42.072	1.3310
Sep.	17.4471	1.6406	7.9725	58.346	43.5144	1.6860	13.3287	1,446.60	1.2338	42.312	1.3348
				Percentage c	hange versus pr	evious month					
2013 Sep.	1.4	-2.5	0.4	-0.2	-1.0	-0.5	-0.7	-2.6	0.0	0.6	0.3
				Percentage of	change versus p	revious year					
2013 Sep.	4.8	4.4	7.8	8.8	7.7	6.5	25.1	0.1	2.1	6.2	3.8
CECD											

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 HICP	6	7	8	9	10	11
2011 2012	3.4 2.4	2.1 3.5	2.7 2.4	2.2 3.4	4.2 2.3	4.1 3.2	3.9 5.7	3.9 3.7	5.8 3.4	1.4 0.9	4.5 2.8
2013 Q1 Q2	2.1 1.1	1.7 1.5	0.9 0.5	4.2 2.3	0.4 -0.1	2.2 1.4	2.7 1.9	1.3 0.5	4.8 4.4	0.6 0.3	2.8 2.7
2013 June July	1.2 0.0	1.6 1.4	0.6 0.4	2.2 2.7	0.2 0.5	1.3 0.6	2.0 1.7	0.2 0.9 0.9	4.5 3.4	0.5 0.8	2.9 2.8 2.7
Aug.	-0.7	1.2	0.1 General	2.4 government def	-0.1 icit (-)/surplu	0.5 s (+) as a percer	1.6 ntage of GDP	0.9	2.6	0.8	2.1
2010 2011 2012	-3.1 -2.0 -0.8	-4.8 -3.3 -4.4	-2.5 -1.8 -4.0		-8.1 -3.6 -1.2	-7.2 -5.5 -3.2	-4.3 4.3 -1.9	-7.9 -5.0 -3.9	-6.8 -5.6 -2.9	0.3 0.2 -0.5	-10.2 -7.8 -6.3
		25.0		neral governme	-					22.1	
2010 2011 2012	16.2 16.3 18.5	37.8 40.8 45.8	42.7 46.4 45.8	•	44.4 41.9 40.7	37.9 38.5 40.7	81.8 81.4 79.2	54.8 56.2 55.6	30.5 34.7 37.8	39.4 38.4 38.2	79.4 85.5 90.0
							um; period avera	-			
2013 Mar. Apr. May June July	3.54 3.47 3.36 3.40 3.46	1.98 1.82 1.67 2.14 2.23	1.59 1.42 1.45 1.72 1.77	4.32 4.34 4.38 4.63 4.91	3.17 3.15 3.10 3.17 3.25	4.15 3.95 3.54 3.54 3.54	6.38 5.65 5.08 6.02 5.78	3.93 3.50 3.28 3.95 3.97	5.86 5.46 5.23 5.43 5.26	1.92 1.66 1.79 2.05 2.16	1.65 1.46 1.62 1.96 2.09
Aug.	3.51	2.40	1.94	5.04	3.25	3.65	6.31	4.30	5.04	2.34	2.29
2013 Mar. Apr.	1.23	0.49 0.47	0.27 0.26	h interest rate as 1.17 1.03	0.47 0.44	0.47 0.62	- 4.57	3.48 3.29	5.10 4.31	1.25 1.24	0.51 0.51
May June July Aug.	1.21 1.20 1.18 1.09	0.46 0.46 0.46 0.46	0.24 0.26 0.27 0.27	1.14 1.71 2.22 1.91	0.41 0.39 0.33 0.29	0.74 0.73 0.55 0.41	4.71 4.48 4.36 3.92	2.86 2.69 2.70 2.70	3.83 4.20 4.27 3.66	1.20 1.22 1.20 1.20	0.51 0.51 0.51 0.51
					Real GDI						
2011 2012	1.8 0.8	1.8 -1.2	1.1 -0.4	0.0 -2.0	5.5 5.5	6.0 3.7	1.6 -1.7	4.5 1.9	2.3 0.4	2.9 1.0	1.1 0.1
2012 Q4 2013 Q1 Q2	0.6 0.4 0.2	-1.6 -2.4 -1.3	-0.4 -0.8 0.6	-2.0 -1.0 -0.8	5.6 5.7 4.7	3.4 4.1 4.2	-2.5 -0.5 0.1	0.8 0.7 1.1	0.8 2.3 1.4	1.8 1.3 0.1	-0.2 0.2 1.3
				ent and capital a			-				
2011 2012	1.4 0.1	-2.3 -1.1	5.9 5.9	-0.8 0.0	0.0 0.5	-1.2 2.0	2.8 3.6	-3.0 -1.5	-3.9 -3.0	6.3 5.9	-1.1 -3.5
2012 Q4 2013 Q1 Q2	-1.6 -4.7 6.0	0.8 1.6 -0.5	6.2 3.1 8.2	-6.1 -14.3	2.6 0.3 3.0	3.6 -2.5 9.2	3.9 5.9 6.1	-0.9 -1.6 3.9	-1.0 2.1 3.0	5.6 6.5 5.0	-3.0 -3.8
						ercentage of GI					
2011 2012	94.3 94.9	59.6 60.5	183.2 182.9	104.1 101.9	145.0 136.4	77.4 75.4	148.0 128.0	72.3 71.1	77.2 75.2	200.0 190.8	419.6 383.7
2012 Q4 2013 Q1 Q2	94.9 93.8 92.9	60.5 62.1 63.1	182.9 185.1	101.9 102.7	136.4 138.8 137.8	75.4 74.1 70.2	128.0 132.3 126.9	71.1 72.7 74.0	75.2 74.8 73.5	190.8 194.5 197.3	383.7 392.1
2011	2.5	0.5	-0.1	0.7	Unit labour c 2.1	osts 0.7	1.8	1.1	0.7	0.2	1.4
2011 2012	-0.5	3.2	1.6	1.2	2.9	1.9	4.8	1.1 0.9	6.8	2.9	3.0
2012 Q4 2013 Q1 Q2	0.3 12.9 13.0	3.3 1.1 1.1	1.4 1.7 0.8	0.9 3.5 1.2	1.2 1.2 3.5	0.6 -1.2 2.1	4.2 2.1	-0.1 2.8	7.1 1.2 3.4	3.6 2.4 1.0	2.3 0.4 2.3
2011	11.2	(7		ed unemployme				0.6	7.4	7.0	0.0
2011 2012	11.3 12.3	6.7 7.0	7.6 7.5	13.5 15.9	16.4 14.9	15.4 13.4	11.0 10.9	9.6 10.1	7.4 7.0	7.8 8.0	8.0 7.9
2013 Q1 Q2	12.9 12.9	7.2 7.0	7.1 6.8	17.0 16.9	12.6 11.4	12.6 11.9	10.9 10.4	10.6 10.5	7.1 7.4	8.1 8.0	7.8 7.7
2013 June July Aug.	12.9 13.0 13.0 ropean Commissio	6.9 6.9 6.9	6.7 6.7 6.6	17.0 16.9 16.9	11.4	11.9 12.2 12.3	10.4 10.2	10.5 10.4 10.3	7.5 7.5 7.5	7.9 7.8 8.0	7.7

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



	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 4)	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	Govern- ment debt <sup>®</sup> as a % of GDP
	1	2	3	4	5	6	7	8	9	10	11
					United States						
2009	-0.4	-2.0	-2.8	-13.6	9.3	8.0	0.69	4.17	1.3948	-11.9	73.3
2010	1.6	-1.2	2.5	6.6	9.6	2.5	0.34	3.57	1.3257	-11.4	82.1
2011 2012	3.2 2.1	2.0 1.1	1.8 2.8	3.6 4.2	8.9 8.1	7.3 8.5	0.34 0.43	2.10 1.88	1.3920 1.2848	-10.2 -8.7	86.0 90.0
2012 Q3 Q4	1.7 1.9	-0.4 4.3	3.1 2.0	3.9 3.3	8.0 7.8	7.0 7.5	0.43 0.32	1.77 1.88	1.2502 1.2967	-8.6 -8.5	88.7 90.0
2013 Q1	1.7	1.7	1.3	2.5	7.0	7.1	0.29	2.09	1.3206	-0.5	
Q2	1.4	1.5	1.6	1.9	7.6	6.9	0.28	2.82	1.3062		
Q3							0.26	2.91	1.3242		
2013 May	1.4	-	-	2.1	7.6	6.9	0.27	2.40	1.2982	-	-
June	1.8	-	-	2.0	7.6	6.8	0.27	2.82	1.3189	-	-
July	2.0	-	-	1.4	7.4	7.0	0.27	2.91	1.3080	-	-
Aug. Sep.	1.5	-	_	2.9	7.3	6.8	0.26 0.25	3.11 2.91	1.3310 1.3348	_	-
					Ionon	•	0.25	2.71	1.5540		
	1.0				Japan				100.01		
2009 2010	-1.3 -0.7	0.3 -4.8	-5.5 4.7	-21.9 15.6	5.1 5.1	2.7 2.8	0.47 0.23	1.42 1.18	130.34 116.24	-8.8 -8.3	180.1 188.3
2010	-0.7 -0.3	-4.8 0.8	-0.6	-2.8	5.1 4.6	2.8 2.7	0.23	1.18	110.24	-8.3 -8.9	204.4
2012	0.0	-2.3	2.0	0.6	4.0	2.5	0.19	0.84	102.49	-0.9	204.4
2012 Q3	-0.4	-0.8	0.4	-3.9	4.3	2.4	0.19	0.78	98.30		
Q4	-0.2	-1.1	0.3	-6.0	4.2	2.3	0.19	0.84	105.12	•	
2013 Q1	-0.6	-0.5	0.1	-7.8	4.2	2.9	0.16	0.70	121.80		
Q2 Q3	-0.3		0.9	-3.1	4.0	3.5	0.16	1.02	129.07		
Q3	•	•	•	•	•	•	0.15	0.88	131.02	•	•
2013 May	-0.3	-	-	-1.1	4.1	3.5	0.16	1.05	131.13	-	-
June	0.2	-	-	-4.7	3.9	3.8	0.15	1.02	128.40	-	-
July	0.7 0.9	-	-	1.9 -0.2	3.8	3.7 3.8	0.16 0.15	1.01 0.93	130.39 130.34	-	-
Aug. Sep.	0.9				•	3.8	0.15	0.93	130.34	-	-
sep.	· ·			•	·	•	0.15	0.00	152.41		

### **9.2 Economic and financial developments in the United States and Japan** (annual percentage changes, unless otherwise indicated)

Real gross domestic product



euro area7



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).
Seasonally adjusted. The data for the United States refer to the private non-agricultural business sector.
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.

Period averages; M2 for the United States, M2+CDs for Japan. 3)

Percentages per annum. For further information on the three-month interbank deposit rate, see Section 4.6. 4)

5)

For more information, see Section 8.2. General government debt consists of deposits, securities other than shares and loans outstanding at nominal value and is consolidated within 6)

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.





### LIST OF CHARTS

C1	Monetary aggregates	S I 2
C2	Counterparts	S I 2
C3	Components of monetary aggregates	S   3
C4	Components of longer-term financial liabilities	S   3
C5	Loans to other financial intermediaries and non-financial corporations	S I 4
C6	Loans to households	S I 4
C7	Loans to government	S I 6
C8	Loans to non-euro area residents	S I 6
C9	Total deposits by sector (financial intermediaries)	S I 7
	Total deposits and deposits included in M3 by sector (financial intermediaries)	S I 7
C11	Total deposits by sector (non-financial corporations and households)	S I 8
C12	Total deposits and deposits included in M3 by sector (non-financial corporations and households)	S I 8
C13	Deposits by government and non-euro area residents	S I 9
C14	MFI holdings of securities	S 2 0
C15	Total outstanding amounts and gross issues of securities other than shares issued by euro area residents	S 3 5
C16	Net issues of securities other than shares: seasonally adjusted and non-seasonally adjusted	\$37
C17	Annual growth rates of long-term debt securities, by sector of the issuer, in all currencies combined	\$38
C18	Annual growth rates of short-term debt securities, by sector of the issuer, in all currencies combined	\$39
C19	Annual growth rates for quoted shares issued by euro area residents	S40
C20	Gross issues of quoted shares by sector of the issuer	S 4 I
C21	New deposits with an agreed maturity	S 4 3
C22	New loans with a floating rate and up to 1 year's initial rate fixation	S 4 3
C23	Euro area money market rates	S 4 4
C24	3-month money market rates	S 4 4
C25	Euro area spot yield curves	S 4 5
C26	Euro area spot rates and spreads	S 4 5
C27	Dow Jones EURO STOXX broad index, Standard & Poor's 500 and Nikkei 225	S46
C28	Employment – persons employed and hours worked	S 5 5
C29	Unemployment and job vacancy rates	S 5 5
C30	Deficit, borrowing requirement and change in debt	S 6 0
C31	Maastricht debt	S 6 0
C32	Euro area b.o.p: current account	S 6 I
C33	Euro area b.o.p: direct and portfolio investment	S 6 I
C34	Euro area b.o.p: goods	<b>S62</b>
C35	Euro area b.o.p: services	<b>S62</b>
C36	Euro area international investment position	S 6 5
C37	Euro area direct and portfolio investment position	S 6 5
	Main b.o.p. items mirroring developments in MFI net external transactions	\$70
	Effective exchange rates	\$73
	Bilateral exchange rates	\$73
	Real gross domestic product	\$76
	Consumer price indices	\$76





### **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  $D_1$  days), where  $D_1+D_2+\ldots+D_i=D$ , the applicable annualised rate ( $R_{LTRO}$ ) is calculated as:

c) 
$$R_{LTRO} = \frac{D_1 R_{1,MRO} + D_2 R_{2,MRO} + \dots + D_i R_{i,MRO}}{D}$$

#### SECTIONS 2.1 TO 2.6

### **CALCULATION OF TRANSACTIONS**

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

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

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

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

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

where  $L_{t-3}$  is the amount outstanding at the end of month t-3 (the end of the previous quarter) and, for example,  $C_t^Q$  is the reclassification adjustment in the quarter ending in month t.

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

### **CALCULATION OF GROWTH RATES FOR MONTHLY SERIES**

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

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

The base of the index (for the non-seasonally adjusted series) is currently set as December 2010 = 100. Time series for the index of adjusted outstanding amounts are available on the ECB's website (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) 
$$a_{t} = \left[\prod_{i=0}^{11} \left(1 + \frac{F_{t-i}^{M}}{L_{t-1-i}}\right) - 1\right] \times 100$$

h) 
$$a_t = \begin{pmatrix} I_t \\ I_{t-12} \end{pmatrix} \times 100$$

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<sup>M</sup><sub>i</sub> can be calculated as:

i) 
$$a_t^{\mathrm{M}} = \begin{pmatrix} I_t \\ I_{t-1} \end{pmatrix} \times 100$$

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 is defined as in g) or h) above.

S 80 Honthly Bulletin October 2013

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

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'

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.

<sup>1</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).

<sup>2</sup> 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.

<sup>3</sup> 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 of notional stocks in month t is defined as:

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

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:

1) 
$$a_{t} = \left[\prod_{i=0}^{11} \left(1 + \frac{N_{t-i}^{M}}{L_{t-1-i}}\right) - 1\right] \times 100$$
  
m)  $a_{t} = \left(\frac{I_{t}}{I_{t-12}} - 1\right) \times 100$ 

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

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



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) 
$$a_t = \left[\prod_{i=0}^{5} \left(1 + \frac{N_{t-i}^M}{L_{t-1-i}}\right) - 1\right] \times 100$$

q) 
$$a_t = \left(\frac{I_t}{I_{t-6}} - 1\right) \times 100$$

#### TABLE I 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

4 For details, see "Seasonal adjustment of monetary aggregates and HICP for the euro area", ECB (August 2000) and the "Monetary and financial statistics" sub-section of the "Statistics" section of the ECB's website (www.ecb.europa.eu).



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:

$$\mathbf{r}) \qquad a_t = \left(\prod_{i=t-3}^t \left(1 + \frac{F_i}{L_{i-1}}\right) - 1\right) \times 100$$

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). 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.

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 1 October 2013.

Unless otherwise indicated, all data series relate to the group of 17 countries that are members of the euro area (the Euro 17) 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 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 statistics based on the balance sheet of the MFI sector ("monetary statistics"), rates of change are compiled from chain-linked indices, with the new composition introduced by the linking factor at the point of enlargement. Thus, if a country joins the euro

area in January of a given year, the factors contributing to the chain-linked indices 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. For further details on monetary statistics, refer to the "Manual on MFI balance sheet statistics", available in the "Statistics" section of the ECB's website.

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

Monthly Bulletin October 2013

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.

1 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  $\notin$ 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 (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, real estate funds, hedge funds and other funds) and by type (i.e. into open-end funds and closed-end funds). Section 2.9 provides further details on the main types of asset held by euro area investment funds. This section contains a geographical breakdown of the issuers of securities held by investment funds, as well as breaking issuers down by economic sector where they are resident in the euro area.

Since December 2008 harmonised statistical information has been collected and compiled on the basis of Regulation ECB/2007/8<sup>3</sup> concerning statistics on the assets and liabilities of investment funds. Further information on these investment fund statistics can be found in the "Manual on investment fund statistics" (ECB, May 2009).

OJ L 15, 20.01.2009, p. 14.
 OJ L 211, 11.08.2007, p. 8.

S 90 Nonthly Bulletin October 2013 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, the balancing item of the financial 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 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 AAArated 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 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

<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.



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, 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.

- 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.

<sup>6</sup> OJ L 162, 5.6.1998, p. 1.
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.

#### **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

13 OJ L 172, 12.7.2000, p. 3. 14 OJ L 179, 9.7.2002, p. 1.



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 (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 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

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.

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" (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-21 group of trading partners is composed of the 11 non-euro area EU Member States plus Australia, Canada, China, Hong Kong, Japan, Norway,

Singapore, South Korea, Switzerland and the United States. The EER-20 group excludes Croatia. The EER-40 group comprises the EER-21 plus the following countries: Algeria, Argentina, Brazil, Chile, 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 (CPIs), producer price indices (PPIs), gross domestic product deflators and unit labour costs, both for the manufacturing sector (ULCM) and for the total economy (ULCT). ULCM-deflated EERs are available only for the EER-20.

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. However, data shown in this table on current and capital accounts and gross external debt follow the respective national concept and do not include special-purpose vehicles. The data for the United States and Japan contained in Section 9.2 are obtained from national sources.



# ANNEXES

# CHRONOLOGY OF MONETARY POLICY MEASURES OF THE EUROSYSTEM'

#### 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.

1 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, 4 JULY, I AUGUST, 5 SEPTEMBER AND 2 OCTOBER 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

The ECB also publishes brochures and information materials on a variety of topics, such as the euro banknotes and coins, as well as seminar and conference proceedings.

For a complete list of documents (in PDF format) published by the ECB and the European Monetary Institute, the ECB's forerunner from 1994 to 1998, please visit the ECB's website at http://www.ecb.europa.eu/pub/. Language codes indicate the languages in which each publication is available.

Unless otherwise indicated, hard copies can be obtained or subscribed to free of charge, stock permitting, by contacting info@ecb.europa.eu



# 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).

**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 moneyissuing 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.



Monthly Bulletin October 2013

